Western Renewables Link

TECHNICAL REPORT

B Aboriginal Cultural Heritage Impact Assessment



Western Renewables Link
EES Technical Report B

Aboriginal Cultural Heritage Impact Assessment

IS311800-EES-AH-RPT-0008 | 1.0

13 June 2025

AusNet Transmission Group Pty Ltd

TC 0009372



Western Renewables Link

Project No: IS311800
Document Title: EES Technical Report B: Aboriginal Cultural Heritage Impact Assessment
Document No: IS311800-EES-AH-RPT-0008
Client Name: AusNet Transmission Group Pty Ltd
Document history and status:

Revision	Date	Revision details / status	Author	Reviewed	Approved
1.0	13/06/2025	For EES Exhibition	AM, JV	WA	SA

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This document is to be read in full. No excerpts are to be taken as representative of the findings without appropriate context.

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Glossary

Term	Definition
Aboriginal Ancestral Remains	Aboriginal Ancestral Remains are the whole or part of the body of an Aboriginal person from the past and are often referred to as Ancestors. Definition from State Government of Victoria (2022).
Aboriginal Heritage Act	*Aboriginal Heritage Act 2006*
Aboriginal Places	Aboriginal cultural heritage places
Aboriginal cultural heritage values	Aboriginal cultural heritage that encompasses both tangible (i.e., Aboriginal Places) and intangible (i.e., oral traditions, environmental and ecological knowledge).
the Commonwealth Act	The Aboriginal and Torres Strait Islander Heritage Protection Act 1984
Accumulation methodology	The layering of different datasets (criteria) to create the multi-criteria analysis map surface
ACHRIS	Aboriginal cultural heritage Register and Information System
Activity area	The area assessed by a Cultural Heritage Management Plan
AOI	Area of interest. Multiple alignment and design alternatives for the Project were explored within the area of interest. This required a require rigorous and transparent assessment and refinement in relation to opportunities for avoidance and/or minimisation of potentially significant effects to inform both project and statutory decision-making.
AusNet	AusNet Transmission Group Pty Ltd
AWRC	Australian Water Resources Council
BGLCAC	Barengi Gadjin Land Council Aboriginal Corporation
Commonwealth Act	*Aboriginal and Torres Strait Islander Heritage Protection Act 1984*
CHL	Commonwealth Heritage Listing
CHMP	Cultural Heritage Management Plan
CHS	Cultural Heritage Sensitivity
CMT	Culturally Modified Tree, this includes both scarred and ring trees.
Criteria/criterion	Principle or standard by which something may be decided. For the Multi Criteria Analysis (MCA) this represents the landscape features of the geographic region which may impact on the probability of identifying Aboriginal cultural heritage.
CVA	Cultural Values Assessment. An assessment completed in consultation with the Registered Aboriginal Party and Traditional Owner groups, largely targeting intangible heritage values
Data sources/sets	The spatial information used to map or express the chosen criteria.
DEECA	Department of Energy, Environment and Climate Action
DCCEEW	Australian Government Department of Climate Change, Energy, the Environment, and Water
DEDJTR	The former Victorian Government Department of Economic Development, Jobs, Transport and Resources (now Department of Jobs, Skills, Industry and Regions)
DTP	Department of Transport and Planning
DEM	Digital Elevation Model. A 3D computer graphics representation of elevation data. In this Project, the DEM was produced from LiDAR surveys.
DJAARA	Dja Dja Wurrung Clans Aboriginal Council
Djandak	Dja Dja Wurrung Enterprises, Trade as Djandak, a word meaning 'Djaara Country''

Term	Definition
EMAC	Eastern Maar Aboriginal Corporation
EES	Environment Effects Statement
Environment Effects Act	*Environment Effects Act 1978*
EPBC Act	Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*
EPRs	Environmental Performance Requirements
EVC	Ecological Vegetation Class
FFG Act	*Flora and Fauna Guarantee Act 1988* / *Flora and Fauna Guarantee Amendment Act 2019*
FP-SR	First Peoples State Relations (formerly Aboriginal Victoria)
Gariwerd	The Aboriginal name for the Grampians Ranges.
HAs	Heritage Advisors
km	kilometre
kV	kilovolt
Laydown areas	Sites at which equipment, material and supplies can be stored prior to delivery to construction sites.
LDAD	Low density artefact distribution
LGA	Local Government Area
LiDAR	Light Detection and Ranging. A method for determining ranges (variable distance) by targeting an object with a laser and measuring the time for the reflected light to return to the receiver. LiDAR can also be used to make digital 3-D representations of areas on the earth's surface and ocean bottom, due to differences in laser return times, and by varying laser wavelengths. LiDAR is commonly used to make high-resolution maps,
LUAA	Land Use Activity Agreement, also known as a Recognition and Settlement Agreement.
m	metre
MCA	Multi-Criteria Analysis. Method of evaluating many different criteria to guide decision making. MCA follows a logical, structured process so different factors can be identified and prioritised.
MCA surface	The surface of the map created for the predictive model.
mm	millimetre
MNES	Matters of National Environmental Significance
Native Title	Native title is the recognition by Australian law of Aboriginal and Torres Strait Islander people's traditional rights and interests in land and waters held under traditional law and custom. Native Title is governed by the *Native Title Act 1993*.
NOI	Notice of Intention to prepare a CHMP
OHS	Occupational Health and Safety
PAS	Potential Archaeological Sensitivity
Planning and Environment Act	*Planning and Environment Act 1987*
PMST	Protected Matters Search Tool
The Project	The Western Renewables Link

Term	Definition
Principal Contractor	During the construction stage, there will be multiple principal contractors and sub-contractors involved in the delivery of the different project components. This EES refers to Principal Contractor as a catch all term for the contractor responsible for the works.
Project Area	The Project Area encompasses all areas that would be used to support the construction and operational components of the Project considered in the EES. The Project Area is contained within the Project Land and encompasses the land required for the following: ▪ Permanent infrastructure: – Transmission tower structures – Upgrade and connection to the Bulgana Terminal Station – Connection to the Sydenham Terminal Station – An upgrade of Elaine Terminal Station – The new 500kV terminal station near Bulgana – Access tracks required for operation – The Proposed Route. ▪ Temporary construction areas and infrastructure: – Distribution line crossovers – Hurdles – Laydown areas – Stringing pads – Access tracks – Tower assembly areas – Workforce accommodation facilities.
Project Land	The Project Land encompasses all land parcels that could be used for the purpose of temporary Project construction and permanent operational components. The Project Land corresponds with the extent of the Specific Controls Overlay proposed in the draft Planning Scheme Amendment for the Project. This generally includes the entire land parcel intersected by a Project component.
Proposed Route	The Proposed Route is approximately 100 to 170m wide and encompasses the nominal future easement for the proposed new transmission line (including a buffer either side), and the terminal station areas. The Proposed Route is located within the Project Area.
Predictive modelling	A process which seeks to predict outcomes by analysing patterns.
Probability	The extent to which something is likely to happen, or in terms of the MCA the extent to which Aboriginal cultural heritage is likely to be present.
RAP	Registered Aboriginal Party
Road Management Act	*Road Management Act 2004*
Study Area/s	Study Areas (1 to 6) have been defined for this Cultural Heritage Impact Assessment and correspond to the boundaries of the relevant Registered Aboriginal Parties (RAPs). These form the activity areas for CHMPs being prepared for the Project, apart from two CHMPs that have been combined into a single Study Area (Area 4).
Terminal station	Terminal stations control the flow of power on transmission lines and reduce the voltage for supply to substations and large industrial customers.
TO groups / TOs	Traditional Owner groups
TRG	Technical Reference Group
UNESCO	United Nations Educational, Scientific and Cultural Organization

Term	Definition
VAHR	Victorian Aboriginal Heritage Register
WHL	World Heritage List
WRL	The Western Renewables Link (the Project)
WTOAC	Wadawurrung Traditional Owners Aboriginal Corporation
WWCHAC	Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation
220kV	220kV transmission line
500kV	500kV transmission line

Executive summary

The Western Renewables Link (the Project) proposes a new transmission line starting at Bulgana, near Stawell in Victoria's west, and extending approximately 190km to Sydenham in Melbourne's north-west. The Project will enable the connection of new renewable energy generated in western Victoria into the National Electricity Market and increase the Victorian transmission capacity. The Project is being delivered by AusNet Transmission Group Pty Ltd (AusNet).

This Aboriginal Cultural Heritage Impact Assessment forms part of the Environment Effects Statement (EES) for the Project in accordance with the *Environment Effects Act 1978*. This report and the methodology applied in preparing it respond to the EES scoping requirements (DTP 2023), with a view to assessing the potential direct, indirect, and cumulative impacts on Aboriginal cultural heritage values within the Project Land from Bulgana in western Victoria to Sydenham in Melbourne's north-west.

This assessment has been developed in tandem with Aboriginal Cultural Heritage Management Plans (CHMPs) and Cultural Values Assessments (CVAs) prepared for the Project and draws on material from the desktop and field assessments undertaken up to 5 June 2024. This culminates in a high-level predictive statement that is developed from the comprehensive review of known Cultural Heritage Places (Aboriginal Places), known cultural values, culturally sensitive landforms, prior archaeological studies, geology, geomorphology and land-use history. Through describing the extent, nature and significance of Aboriginal Places and areas that have the potential for Aboriginal cultural heritage, the assessment ranks significance and thus, evaluates impacts on Aboriginal cultural heritage values for the Project.

Overview

The impact assessment has been conducted across the Project Land, which extends from Bulgana in western Victoria to Sydenham in Melbourne's north-west. It consists of the 190km proposed transmission line route, upgrades to existing terminal stations and additional disturbance areas including laydown areas, stringing pads, distribution line crossovers and vehicle access tracks. For the purpose of this assessment, the Project Land has been split into six Study Areas (Areas 1 to 6). These areas correspond to the boundaries of the relevant Registered Aboriginal Parties (RAPs) and form the activity areas for CHMPs being prepared for the Project (with the exception of Area 4 which is subject to two CHMPs). The assessment of each area details the specific geomorphology, landform, and land use history, as well as cultural heritage and cultural values held by the relevant RAP or Traditional Owner group (TO). This impact assessment has been based upon a review and in-depth study of applicable legislation, policy and guidelines, and the results of ongoing archaeological assessments, geological and geomorphological information, environmental context, ethnographic records of Aboriginal people, and records of registered Aboriginal Places.

Existing conditions

Each of the six Study Areas within the Project Land contains landforms that are typically associated with Aboriginal cultural heritage values such as prominent waterways. Within the Project Land, running west to east from the Central Victorian Uplands, Goldfields and Victorian Volcanic Plains, these include the Wimmera River (Areas 1 to 3), Avoca River (Areas 3 and 4), Loddon River (Areas 4 and 5), Moorabool River (Area 4 and 5), Werribee River (Areas 5 and 6), and their tributaries. The Project Land also intersects with numerous wetlands and volcanic cones that are archaeologically and culturally sensitive. The largest mapped wetlands located within the Project Land are associated with water supply reservoirs, including Merrimu Reservoir and Pykes Creek Reservoir (Area 6), as well as Hepburn Lagoon (Area 4).

Aboriginal cultural heritage frequently occurs throughout the Project Land, primarily in the form of surface and subsurface artefact scatters (including low density artefact distributions, or LDADs). Culturally modified trees, or CMTs (including scarred trees and ring trees), earth features, quarries and stone features are also present. The desktop assessment identified 69 previously recorded Aboriginal Places excluding object collections, five of which occur where proposed infrastructure intersects the recorded Aboriginal Places' primary grid co-ordinates or site extent. The desktop assessment and collation of preliminary fieldwork results concluded that Aboriginal

Places will most likely be located on rises and hill slopes, hill crests and ridgelines and terraces, or in association with elevated landforms within 200m of watercourses past and present. Aboriginal Ancestral Remains (burials) have not previously been identified within the Project Land. Reviews of nearby or related studies found there is the potential for unregistered burial sites or mortuary trees to be located within the Project Land, especially near the confluence of waterways or on river or creek flats, terraces, or slopes within 200m of a major watercourse. Additional landscape features that have the potential for Aboriginal cultural heritage, outside of those associated with registered Aboriginal Places and waterways, include swamp and lake deposits, volcanic cones, and stony rises. Cultural landscapes identified as part of the CVAs include the Pyrenees Ranges landscape (Area 1), Hepburn Lagoon (Area 4), Wimmera River (Areas 1 and 3), Avoca River (Area 4), Werribee River (Area 5), and Mount Kororoit and Kororoit Creek (Area 6). Due to the location of these cultural landscapes within the Project Land and others near the Project Land (for example, the Sunbury Earth Rings), there is the potential for additional cultural landscapes that contain very high Aboriginal cultural heritage values to be identified within the Project Land.

Prior to commencing fieldwork, a Multi Criteria Analysis (MCA) of the Project Land was undertaken to assess and categorise the potential for tangible Aboriginal cultural heritage to be present within different landforms across the Project Land and the surrounding geographic region. The primary purpose of the model is to articulate expectations of the nature and distribution of Aboriginal cultural heritage in any area, regardless of whether and how much previous field assessment (i.e., archaeological survey or excavation) has been completed. The MCA was a staged process which was refined over the course of preparing this report. Criteria for the MCA were based on the findings of the desktop assessments and information from the CHMPs being prepared, and scores were weighted according to their perceived importance for Aboriginal archaeological site use and selection. The model has aided in broadening the understanding of the environmental variability across the Project Land, particularly across parts of the CHMP activity areas that have yet to undergo fieldwork. There are a number of hydrological, geomorphological and geological trends highlighted by the predictive model. For the westernmost portion of the Project Land (including Areas 1 to 4), the highest MCA scores that indicate a high potential for Aboriginal cultural heritage values are consistently associated with proximity to water. Though this is also apparent through the central and easternmost portions of the Project Land, key geological features (i.e., volcanic cones and stony rises) that are associated with high archaeological potential become more prominent.

Seven CHMPs are currently in preparation for the Project: CHMP numbers 17313 (Area 1), 17321 (Area 2), 17312 (Area 3), CHMPs 17311 (Area 4), 18101 (Area 4), 18108 (Area 5), and 18111 (Area 6). An additional two CHMPs were recently confirmed (20459 and 20436). These CHMPs will be created by splitting 18111 (Wurundjeri Woi-wurrung) and 18108 (Wadawurrung) each into two CHMP areas. This was done following consultation with the RAPs, in order to help facilitate the meeting of key construction milestones. Additional information and mapping showing the boundaries for the nine CHMPs is captured in Appendix N. The findings from the background research (CHMP desktop assessments), ground surveys (CHMP standard assessments), and test excavations (CHMP complex assessments) undertaken for these CHMPs inform this report.

Complex assessment fieldwork (subsurface testing) for these CHMPs was divided into two phases: Phase 1 fieldwork comprised targeted assessments for incorporation into the EES; Phase 2 fieldwork involved testing required to complete the CHMPs. Phase 1 fieldwork has almost been completed in the western portions of the Project Land (Areas 1 to 3) and Aboriginal Places have consistently been identified within high points close to water or on the floodplains of permanent waterways. The CHMP fieldwork for the Project is ongoing, and as a result the dataset presented in this report is not final. CHMP fieldwork is subject to land access availability and will be conducted as land access becomes available. The Impact Assessment draws on the results of extensive survey and test excavations completed to 5 June 2024 (refer to section 9.1.3.1).

Impact assessment key findings

The Impact Assessment has found that the Project will have a moderate impact on Aboriginal cultural heritage, while at the same time contributing to the state of knowledge on Aboriginal cultural heritage values within the Project Land and the broader region. Impacts to Aboriginal cultural heritage will be minimised and managed through the Environmental Performance Requirements (EPRs) and consultation process with the relevant regulatory bodies, RAPs, and TOs. The investigations used in this impact assessment (undertaken for CHMPs (in

preparation) and CVAs) have contributed additional archaeological data on the nature of Aboriginal occupation in the geographic region and confirmed the predictive statements developed in the CHMPs. The results of the investigation for the Project will have a positive impact by enabling future protection of Aboriginal Places, contributing to the archaeological knowledge base of western Victoria and informing future planning to prevent harm to Aboriginal Places. Close engagement with the RAPs and TOs will also improve knowledge sharing and build relationships for future work and for the protection of Aboriginal Places in previously inaccessible locations. This has already been established through comprehensive consultation and work alongside the RAPs and TO groups in the Project Land (see Section 5.6 and 5.7).

Some negative impacts to Aboriginal cultural heritage values are unavoidable if the Project is to proceed, given that construction will involve widespread ground disturbing activities and that the distribution of Aboriginal cultural heritage is also widespread. However, these impacts will be managed in accordance with the CHMP management conditions, once approved, as set out in EPR ACH1, and in consideration of the CVAs as set out in EPR ACH2. The Project design has been an iterative process with the cultural heritage assessments informing the design so as to avoid impacting as many Aboriginal Places and areas of sensitivity as possible. Assessments to inform the design have been completed in close consultation with RAPs to account for both tangible and intangible aspects of Aboriginal cultural heritage. In addition, the CHMPs being undertaken will further avoid and minimise harm by establishing mitigation requirements and specific management conditions through consultation with the RAPs and in accordance with the *Aboriginal Heritage Act 2006* (the Aboriginal Heritage Act).

The impact of the Project on known Aboriginal cultural heritage is assessed to be moderate. This is based on an analysis of each known impact on all Aboriginal cultural heritage values that have been identified for the Project to date, which has been informed through completion of the CVAs and desktop assessments, as well as CHMP standard assessment in all Study Areas and CHMP complex assessment in most Study Areas. The significance of Aboriginal cultural heritage values was assessed and weighted, and the level of physical impact by the Project design (i.e., complete or partial intersection) for each Aboriginal cultural heritage value was also considered during this assessment. Fieldwork for each CHMP is ongoing and has so far achieved the following coverage (up to 5 June 2024) as shown in Table ES-1:

Table ES-1. Fieldwork coverage as of 5 June 2024

CHMP Number	**Standard Assessment (%)** Calculated by determining percentage of completion of the total survey area	**Complex Assessment (%)** Calculated by determining percentage of the total coverage required for tower assembly areas in each CHMP
17313 (Area 1)	100	61.5
17321 (Area 2)	100	100
17312 (Area 3)	100	100
17311 (Area 4)	93.8	100
18101 (Area 4)	49.1	34.2
18108 (Area 5)	39	0
18111 (Area 6)	53.7	63.2

In addition to the 69 previously recorded places, assessments for the Project have identified a further 123 previously unregistered Aboriginal values across all six areas. These values include 47 LDADs and 55 artefact scatters, including sites with varying levels of significance (i.e., knapping floors and sites associated with rich cultural values), three of these artefact scatters are associated with earth features (hearths); 15 CMTs (13 scarred trees and two ring trees); and six cultural landscapes.

A total of 75 of these Aboriginal cultural heritage values (including five previously recorded) will be impacted by the Project, while an additional 10 Aboriginal cultural heritage values (subsurface deposits) have been impacted

through subsurface testing and will not be further impacted due to design changes. Although the majority of impacts fall within the nil to low impact rating, a weighted median has been applied to the dataset, so that the significance of each Aboriginal Place is considered and contributes to the final impact rating. This assessment recognises that Aboriginal cultural heritage values are not necessarily the same as their scientific significance. The social, historical, cultural and spiritual significance of these sites, have their own values, which have been considered when assessing overall significance of each Aboriginal cultural heritage value in this report. The assessment rating, which derived from the median within the progressive weighted totals, sits within the moderate range. Therefore, the Project is assessed to have a moderate impact on Aboriginal cultural heritage. Based on a review of additional construction projects within western Victoria, the cumulative impact of the Project is also considered to be moderate. As there are a number of key trends in the location and nature of Aboriginal Places across the Project Land, predictive statements have been developed for expected Aboriginal cultural values in areas where field assessments are incomplete. Based on these statements, it is expected that the magnitude of impact for the Project post completion of the CHMP fieldwork programs will not increase.

Impacts on tangible and intangible Aboriginal cultural heritage values have been and will continue to be avoided or minimised where possible as a result of the iterative design process and further mitigation will occur through the EPR, specifically the implementation of and compliance with the CHMPs prepared for the Project, thereby meeting the EES scoping requirements for the Project. This includes residual impacts and impacts to unknown Aboriginal cultural heritage values.

Appendix N provides an addendum to this report, capturing fieldwork and CHMP updates from the 6 June 2024 to 18 February 2025. This has been added to provide additional information and greater context for the assessment of impacts on Aboriginal cultural heritage values for the Project. The inclusion of the additional fieldwork results does not alter the magnitude of impact ranking, which remains moderate, nor do they significantly alter the understanding of the Project's impact to Aboriginal cultural heritage values.

Environmental Performance Requirements

Based on the Aboriginal Cultural Heritage Impact Assessment findings, two EPRs were developed for the Project:

ACH1: Comply with Cultural Heritage Management Plans

Implement and comply with Cultural Heritage Management Plans (CHMPs) sponsored by AusNet and approved for the Project under the *Aboriginal Heritage Act 2006*.

ACH2: Discuss and negotiate Cultural Values Assessment recommendations

AusNet must engage with each of the relevant RAPs and TOs, being Barengi Gadjin Land Council Aboriginal Corporation, Eastern Maar Aboriginal Corporation, Dja Dja Wurrung Clans Aboriginal Corporation, Wadawurrung Traditional Owners Aboriginal Corporation, and Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation, to address recommendations, where practicable, arising from each RAP or TOs Cultural Values Assessment to avoid or minimise impacts on intangible cultural heritage values for the Project.

The first EPR (ACH1) is to implement and comply with the CHMPs approved under the Aboriginal Heritage Act and seeks to avoid or minimise adverse effects on Aboriginal cultural heritage to the extent reasonably practicable for the operational stage of the Project.

As part of ongoing CHMP preparations, progressive refinement of the design has and will occur through micro-siting, as CHMP fieldwork progresses to avoid or minimise impacts to heritage values. To enable this, the heritage specialists provide AusNet with constraints mapping and spatial data, along with recommendations for design refinement or design infrastructure relocation.

CHMPs include management conditions and contingencies to preserve registered and unidentified Aboriginal Places and values. Management conditions and contingency measures will be contained in each CHMP to avoid or minimise harm to known and unknown Aboriginal Places. Where reasonably practicable, CHMPs will also mitigate and minimise harm where any residual impacts remain for the Project. Where impacts to specific

Aboriginal values have been avoided or minimised through design refinement, these are summarised in Table 9-2.

The possible mitigations strategies, including avoidance and harm minimisation, proposed as part of the CHMP process are listed below.

Prior to construction:

- Site induction
- Cultural heritage awareness training
- Pegging, fencing, or marking in other ways where works are restricted to protect Aboriginal Places
- Archaeological salvage works (excavation and surface artefact collection) of some registered Aboriginal Places and associated analysis and reporting where avoidance of harm is not possible.

During construction:

- Inspections by the RAP
- Ongoing checks to ensure compliance with the CHMPs
- Amendments to the CHMPs if the development footprint of the Project changes
- CHMPs' contingencies include procedures for the discovery of unknown Aboriginal cultural heritage. This includes high significance finds, such as Aboriginal Ancestral Remains, in accordance the 'Guide to Preparing a Cultural Heritage Management Plan' by First Peoples State Relations (FP-SR), including stop work instructions.

Post construction:

- Custody, curation and management of Aboriginal cultural heritage (artefacts) identified during the CHMP.

Operational stage of the Project:

- A hard copy of the CHMP to be available in site offices within the boundaries of the Project Land
- Notification and management procedure for unexpected finds
- Ongoing consultation with the relevant RAP or TO/FP-SR for the operational stage of the Project:
    - The RAP for Area 1 is the Barengi Gadjin Land Council Aboriginal Corporation
    - The RAP for Area 2 is the Eastern Maar Aboriginal Corporation, which will be evaluated by the Secretary to the Department of Premier and Cabinet, First Peoples State Relations (FP-SR), formerly Aboriginal Victoria
    - There is no appointed RAP for Area 3, therefore, ongoing consultation will be with FP-SR and the relevant TOs (Barengi Gadjin Land Council Aboriginal Corporation, Dja Dja Wurrung Clans Aboriginal Corporation, and Eastern Maar Aboriginal Corporation)
    - The RAP for Area 4 is the Dja Dja Wurrung Clans Aboriginal Corporation
    - The RAP for Area 5 is the Wadawurrung Traditional Owners Aboriginal Corporation
    - The RAP for Area 6 is the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation.

In addition to EPR ACH1, ongoing consultation should occur with each individual RAP/TO for the pre-construction, construction, operation, and decommissioning stage of the Project to manage and protect broad and specific intangible cultural heritage values as identified through the CVA process. Intangible values as identified in the CVAs do not necessarily meet the definition of Aboriginal Places under the Aboriginal Heritage Regulations, meaning they are outside of the scope of the CHMPs being prepared for the Project, and therefore require consultation through alternative processes, such as the registration of Aboriginal intangible heritage under section 79C of the Aboriginal Heritage Act. This pathway is also considered appropriate as some RAPs have noted in their CVAs prepared for the Project that their relevant CHMP will not address intangible values.

Mitigation measures for the management and protection of intangible values can be discussed and negotiated through and outside of the CHMP process, where practicable.

In efforts to protect, recognise, and document intangible values, AusNet commits to working with the RAP/TOs to submit intangible value registrations for specific intangible cultural heritage values as identified through the CVA process in accordance with Section 79C of the Aboriginal Heritage Act. Section 79C notes that a RAP or TO may apply for any Aboriginal intangible heritage to be recorded on the VAHR in the prescribed form, in consultation with and permission of the relevant RAPS/TOs. In doing so, AusNet seeks to assist TO communities in maintaining links to heritage and prevent loss of cultural knowledge. This commitment is consistent with the Burra Charter (Article 32), which states that records created of a place's intangible cultural heritage 'should be placed in a permanent archive and made publicly available, subject to requirements of security and privacy, and where this is culturally appropriate'.

Furthermore, AusNet commits to the recognition of RAP/TO cultural knowledge of places identified through the CVA process that contributes to intangible values, with consideration of the Project's needs. This includes opportunities for the interpretation, commemoration, and celebration of significant associations with a place, as culturally appropriate. This commitment is consistent with the Australia ICOMOS *Code on the ethics of co-existence in conserving significant places*.

In recognising the value that RAP/TO cultural knowledge brings to managing and protecting the land, AusNet also commits to consulting with the relevant RAP/TO groups where opportunities present for the joint management of environmental values (including mature remnant vegetation), maintaining water quality objectives, and rehabilitation goals. This includes the potential to tailor written agreements that define the working relationship, expectations and responsibilities in protecting intangible values. There is an opportunity for these to align with the management plans outlined in the EPRs (BD1-BD8) in EES Technical Report A: Biodiversity Impact Assessment and SW3 in EES Technical Report T: Surface Water Impact Assessment.

Additional mitigation measures for the management and protection of intangible values can be discussed and negotiated through and outside of the CHMP process, where practicable. The mitigations recommended through the CVA prepared for the Project are broadly summarised below:

Prior to construction:

- Ongoing consultation with each individual RAP/TO for the pre-construction stage of the Project to discuss and negotiate recommendations in the CVAs to avoid and/or minimise impact on intangible cultural heritage values.
- Efforts have been and will continue to be made to undertake design planning, including micro-siting, to avoid and/or minimise impact on waterways, areas of archaeological and cultural sensitivity, remnant vegetation, and native fauna so far as reasonably practicable.
- Efforts have been and will continue to be made to undertake design planning, including micro-siting, to avoid and/or minimise impact on six cultural landscapes (see Table 9-8) identified by the CVAs so far as reasonably practicable.

During construction:

- Ongoing consultation with each individual RAP/TO for the pre-construction stage of the Project to discuss and negotiate recommendations in the CVAs to avoid and/or minimise impact on intangible cultural heritage values.
- Efforts should be made to undertake construction to avoid and/or minimise impact on waterways, areas of archaeological and cultural sensitivity, remnant vegetation, and native fauna so far as reasonably practicable.
- Efforts should be made to undertake construction to avoid and/or minimise impact on six cultural landscapes (see Table 9-8) identified by the CVAs so far as reasonably practicable.

Operational stage of the Project:

- Ongoing consultation with each individual RAP/TO for the pre-construction stage of the Project to discuss and negotiate recommendations in the CVAs to avoid and/or minimise impact on intangible cultural heritage values.

Involvement of each individual RAP in opportunities for native revegetation and environmental management so far as reasonably practicable.

With the implementation of the proposed mitigation measures including the EPRs, the Project will meet the scoping requirements of the EES in respect of Aboriginal cultural heritage.

1. Introduction

1.1 Background

The Western Renewables Link (the Project) proposes a new electrical transmission line starting at Bulgana, near Stawell in Victoria's west, and extending approximately 190km to Sydenham in Melbourne's north-west. The Project will enable the connection of new renewable energy generated in western Victoria into the National Electricity Market and increase the Victorian transmission capacity. The Project is being delivered by AusNet Transmission Group Pty Ltd (AusNet).

The Project was originally referred to the former Minister for Planning under the *Environment Effects Act 1978* (Environment Effects Act) on 9 June 2020 by AusNet and it was determined that an Environment Effects Statement (EES) was required. On 22 August 2023, the Minister for Planning determined that the Project has the potential to cause significant environmental effects and that an EES was required to inform decision-makers in the granting of key approvals for the Project. In summary the key changes in the new proposed Project scope are:

- The urgent Sydenham Terminal Station Rebuild will be assessed and approved separately. While this is located within the Project Land, it has been assessed through a separate Cultural Heritage Management Plan (CHMP) (CHMP 19659) and its results are discussed in the existing conditions section of this report (Section 6 and Appendix E). A connection into the Sydenham Terminal Station forms part of the Western Renewables Link scope
- The 220kV portion of the transmission line is proposed to be uprated to 500kV
- The new terminal station north of Ballarat will no longer be required
- A new 500kV terminal station near Bulgana will be required, including a new 220kV connection to the existing Bulgana Terminal Station.

The Commonwealth Government's Department of Agriculture, Water and the Environment — now Department of Climate Change, Energy, the Environment, and Water (DCCEEW) — has also confirmed that the Project is a 'controlled action' and will require assessment and approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Commonwealth has determined that it will use the bilateral assessment agreement and rely on the Victorian Government's assessment process (EES) to inform an approval decision under the EPBC Act.

1.2 Purpose of this report

The purpose of this report is to assess the potential impacts on Aboriginal cultural heritage values associated with the Project and to define any Environmental Performance Requirements (EPRs) necessary to determine the environmental outcomes that the Project must meet, which will be achieved through the implementation of mitigation measures during construction, operation and decommissioning, and to address the EES evaluation objectives.

The specific objectives of the impact assessment are to:

- Characterise the known Aboriginal cultural heritage in the Project Land and identify the potential location and disturbance of Aboriginal Places and areas of cultural significance that could affect or be affected by the Project.
- Recommend appropriate measures to avoid, mitigate or manage potential Aboriginal cultural heritage impacts.

Aboriginal cultural heritage includes both tangible as well as intangible cultural heritage places and values. It is defined by the Aboriginal Heritage Act as Aboriginal Places, Aboriginal Objects, and Aboriginal Ancestral Remains. Aboriginal cultural heritage also encompasses intangible heritage values. This includes, although it is not limited to, landscapes, knowledge, and practices pertaining to and valued by Aboriginal people both past

and present. The information collected through Aboriginal cultural heritage assessments is culturally meaningful and connected to identity and Country for Aboriginal people. Aboriginal values in contemporary society are expressed by Rodney Carter, Chairperson for the Victorian Aboriginal Heritage Council, as follows:

> *"Our Cultural Heritage is best understood through demonstrating respect for Traditional Owners – our knowledge, our skills, our appreciation of our heritage. The practicing of our Culture and traditions makes us stronger and this strength offers all Victorians opportunities to value, understand and celebrate the unique Cultural Heritage we care for on behalf of all of us."*
>
> Rodney Carter (State Government of Victoria n.d.)

This Aboriginal Cultural Heritage Impact Assessment includes three separate data sources. First, a comprehensive review and synthesis of desktop research on previously registered Aboriginal Places, culturally sensitive landforms, prior archaeological studies, geology, geomorphology and land-use history (refer to Section 6). Second, a predictive model that assesses and categorises the potential for Aboriginal cultural heritage (specifically, archaeological values) to be present within different landforms (refer to Section 7). And third, preliminary results of fieldwork being carried out for the Project. This report has been developed in tandem with the CHMPs (numbers 17313, 17321, 17311, 17312, 18101, 18108, and 18111) required for the Project, and draws on results of the assessments undertaken to date for the CHMPs, including findings from the background research (desktop assessments), ground surveys (standard assessments), and test excavations (complex assessments) undertaken for each CHMP. Cultural Values Assessments (CVAs) for each of the Registered Aboriginal Party (RAP) areas for the Project have also been integrated into the assessment.

The CHMPs required for the Project have involved desktop assessments, extensive field survey, assessment of areas of archaeological potential based on the field survey, consultation with the respective RAPs/TOs and test excavations to test those areas of archaeological potential. In addition, control pits have been excavated to test the null hypothesis to these assumptions. The current impact assessment draws on the results of the fieldwork which have been completed up to 5 June 2024. Substantial survey and subsurface testing has been undertaken, although these CHMPs are currently in preparation and at varying levels of completion. The fieldwork coverage (standard and complex assessment) for the CHMPs is detailed in Table 9-1.

Clear trends in the data available for this impact assessment (derived from existing conditions analysis, predictive modelling, CVAs, and CHMP fieldwork results) provide an overarching understanding of Aboriginal cultural heritage values impacted by the Project and have been used to define predictive statements for areas of Project Land that have yet to undergo fieldwork. These predictive statements, as well as expected impact ratings, are described further in section 9.1.3. The predictive statements can be applied to areas where field assessments are incomplete, and based on these statements, it is expected that the magnitude of impact for the Project post completion of the CHMP fieldwork programs will not increase. Furthermore, the assessed potential impacts on Aboriginal cultural heritage values within the Project Land found that the Project will meet the evaluation objective in the scoping requirements as set out in Section 4.2 (Cultural Heritage) of the scoping requirements (DTP 2023):

Avoid, or minimise where avoidance is not possible, adverse effects on Aboriginal cultural heritage and historic heritage value.

1.3 Structure of the report

The report is structured in the following way:

- **Introduction** (this section) which provides background details for the Project and outlines the purpose and structure of the Aboriginal Cultural Heritage Impact Assessment.
- **EES scoping requirements** (Section 2) where the EES scoping requirements relevant to Aboriginal cultural heritage are set out, with cross references to where each component of the EES scoping requirements has been considered and addressed in the Aboriginal cultural heritage impact assessment.

- **Project description** (Section 3), where Project components and activities relevant to the assessment are explained including the locations and activities with the highest associated Aboriginal cultural heritage related impacts.
- **Legislation, policy and guidelines** (Section 4) which lists the Commonwealth, state, and other documents relevant to the assessment.
- **Method** (Section 5) where the approach applied to assess potential Aboriginal Cultural Heritage impacts associated with the Project is explained.
- **Existing conditions** (Section 6) which characterises the current and past physical, environmental, archaeological and social setting for the Project and gives the context for Aboriginal cultural heritage conditions and values.
- **Digital Predictive Modelling** (Section 7) which was used to assess and categorise the potential for Aboriginal cultural heritage to be present within different landforms and to articulate expectations regarding the nature and distribution of Aboriginal archaeological places.
- **Aboriginal Cultural Heritage assessments** (Section 8) where CHMP fieldwork data collected to date is presented; this is subsequently integrated into the Impact Assessment (Section 9).
- **Impact assessment** (Section 9), where initial and residual Aboriginal cultural heritage impacts during the construction, operation and decommissioning of the Project, including potential cumulative impacts from other nearby developments and projects, are evaluated.
- **Environmental Performance Requirements** (Section 10) which set out the environmental outcomes to be achieved through the implementation of mitigation measures during construction, operation and decommissioning. While some EPRs are performance based to allow flexibility in how they will be achieved, others include more prescriptive measures that must be implemented. Compliance with the EPRs will be required as a condition of the Project's approval.
- **Conclusion** (Section 11) where the objectives, methods, outcomes and recommendations of the assessment are presented.
- Appendices
    - Appendix A Geomorphic Land Systems
    - Appendix B EVCs
    - Appendix C Aboriginal Places
    - Appendix D Social Pinpoint Data
    - Appendix E Summaries of local Studies
    - Appendix F Predictive Modelling
    - Appendix G Areas of Potential Archaeological Sensitivity
    - Appendix H Fieldwork coverage
    - Appendix I Cultural Values Assessment [BGLCAC]
    - Appendix J Cultural Values Assessment [EMAC]
    - Appendix K Cultural Values Assessment [Djandak]
    - Appendix L Cultural Values Assessment [WTOAC]
    - Appendix M Cultural Values Assessment [WWCHAC]
    - Appendix N Addendum to the Aboriginal Cultural Heritage Impact Assessment

1.4 Related studies

This report should be read in conjunction with the following related technical reports, from which our assessment draws specific information:

- Technical Report A: Biodiversity Impact Assessment provides information on the ecology of the Project Land, which is relevant to the environmental context.
- Technical Report C: Historical Heritage Impact Assessment provides information on the history of the Project Land, which is relevant to the environmental context.
- Technical Report F: Social Impact Assessment provides information on the current use of the Project Land, which is relevant to the environmental context.
- Technical Report Q: Geology and Soils Impact Assessment provides information on the soils and geology of the Project Land, which is relevant to the environmental context.
- Technical Report T: Surface Water Impact Assessment provides information on the hydrology of the Project Land that is relevant to the environmental context.

Where these studies identified similar key issues that require consideration, reference has been made to the study in this report. Other reports in the EES may provide context but have not specifically been drawn on for this assessment.

2. EES scoping requirements

The Scoping Requirements – Western Renewables Link Environment Effects Statement set out in detail the matters to be investigated, assessed and documented in the EES for the Project and are referred to in this report as the EES scoping requirements.

2.1 EES evaluation objectives

The EES scoping requirements specify evaluation objectives which provide a framework to guide an integrated assessment of environmental effects of the Project, in accordance with the *Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978, Eighth edition, 2023*. The evaluation objectives identify desired outcomes in the context of key legislative and statutory policies, as well as the principles and objectives of ecologically sustainable development and environmental protection, including net community benefit.

The evaluation objective relevant to the Aboriginal cultural heritage assessment is set out in Section 4.2 (Cultural Heritage) of the scoping requirements:

> *Avoid, or minimise where avoidance is not possible, adverse effects on Aboriginal cultural heritage and historic heritage values.*

In order to meet the evaluation objective, it is necessary to understand the potential impact of the Project on Aboriginal cultural heritage values so that impacts can be appropriately avoided or mitigated. Understanding potential impacts requires an impact assessment, for which the starting point is a clear understanding of the existing conditions.

2.2 Assessment of specific environmental effects

The scoping requirements set out the key issues that the Project proposes to address to meet the evaluation objective, together with the features and values of the existing environment that are to be characterised – these are referred to as the 'existing conditions'. The scoping requirements also list potential effects of the Project and identify where mitigation measures may be required.

The scoping requirements pertaining to Aboriginal cultural heritage are set out in Section 4.2 (Cultural heritage) of the scoping requirements. These are reproduced in Table 2-1, together with directions to the reader as to where these items have been addressed in this report (and other reports as applicable). The scoping requirements for Cultural Heritage also refer to Historical Heritage, which are addressed in a separate Historical Heritage Impact Assessment.

Table 2-1: Cultural Heritage scoping requirements

Aspect	Scoping requirements	Relevant sections
Key issues	Potential for destruction or disturbance of sites or places of Aboriginal cultural heritage or historic heritage significance.	Sections 9, 9.6, 11.2 and 11.3 of this report.
	Potential for indirect impacts on sites or places of Aboriginal cultural heritage or historic heritage significance within or in the vicinity of the project area.	Sections 9, 9.6, 11.2 and 11.3 of this report.
	Potential impacts on or loss of intangible Aboriginal cultural heritage values associated with the project area and surrounds.	Sections 9, 9.6, 11.2 and 11.3 of this report.
Existing environment	Review and assess previous studies, registers, geomorphology, landform and land use history to identify areas of known Aboriginal cultural heritage and model areas with the potential to contain Aboriginal cultural heritage.	Sections 6.16 and 8 of this report.
	Describe the extent, nature and significance of any Aboriginal cultural heritage sites or areas of sensitivity potentially impacted by the project (including associated infrastructure or ancillary works) through consultation and investigations, ensuring adequate field assessments are conducted to verify the findings of any desktop studies.	Sections 6.7, 6.8, 8, 9, 9.6, 11.2 and 11.3 of this report.
	Identify any known or previously unidentified intangible Aboriginal cultural heritage values associated with the project area, including values associated with biodiversity, landscape or other elements.	Sections 6.8, 8.2.1.4, 8.2.2.4, 8.2.1.4, 8.2.2.4, 8.2.3.4, 8.2.4.4, 8.2.5.5, 8.2.6.3.7 of this report.
	Liaise with registered Aboriginal parties and other Traditional Owner groups (TOs) or representatives as appropriate to complement and supplement other investigations into additional values, Aboriginal Places or areas of high sensitivity.	Section 5.5.5 of this report.
	Review land use history, previous studies and registers and listings to identify areas of known historic heritage values and assess the potential for the project to contain unregistered historic heritage sites.	Sections 6.6 and 6.7.1.1 of this report, and the Historical Heritage Impact Assessment.
	Identify and document any known and previously unidentified places, objects, sites and landscapes of historic heritage significance within the project area and its vicinity, including any necessary field investigations to supplement past studies. Assessments are to be undertaken in accordance with the *Heritage Act 2017*, Heritage Victoria's Guidelines for Conducting Archaeological Surveys (2020) or updates and other guidance documents. Maps of site extents showing their proximity to proposed works should be provided.	Sections 6.7, 6.8, and 8 of this report, and the Historical Heritage Impact Assessment.
	In particular identify all places on the Victorian Heritage Register, Victorian Heritage Inventory and in Heritage Overlays in relevant planning schemes that could be affected by the project.	Sections 6.7, 6.8, and 8 of this report, and Historical Heritage Impact Assessment.
Mitigation measures	Where previously unknown heritage values are identified through project studies, consider potential for registration/listing or nomination for registration/listing under appropriate statutory systems.	Section 8.2 of this report.
	Describe and evaluate potential and proposed design and construction mitigation methods to avoid adverse effects on Aboriginal cultural heritage and historic heritage, and where avoidance is not possible, to minimise adverse effects.	Sections 9, 9.6 and 10 of this report.
	Develop management and contingency measures in accordance with the requirements for CHMPs under the *Aboriginal Heritage Act 2006*.	Section 10 of this report.
	Develop an archaeological management plan and chance finds procedure to manage historic heritage investigation/excavation etc, consistent with the Heritage Act and relevant protocols.	Section 10 of this report, and the Historical Heritage Impact Assessment

Aspect	Scoping requirements	Relevant sections
Likely effects	Assess the potential direct and indirect effects of the project on Aboriginal cultural heritage values, and whether they can be avoided.	Sections 8.2 and 9 of this report.
	Assess the potential direct and indirect effects of the project on sites and places of historical cultural heritage significance, having regard to the *Guidelines for Investigating Historical Archaeological Artefacts and Sites* (Heritage Victoria, 2015) or updates and other relevant guidance documents.	See Historical Heritage Impact Assessment.
	Assess the potential direct or indirect effects on any intangible Aboriginal cultural heritage values associated with the project area or its vicinity.	Sections 8.2 and 9 of this report.
	In assessing potential effects, have regard to potential aggregated effects on heritage values to the extent that multiple sites of heritage significance may represent associated values and may collectively contribute to significant values at a regional or broader level.	Section 9.6 of this report.
Performance criteria	Outline any proposed commitments to avoid, mitigate and manage residual effects on sites and places of Aboriginal cultural heritage significance (through draft CHMPs as appropriate).	Section 10 of this report.
	Outline any proposed commitments to avoid, mitigate and manage residual effects on sites and places of historical heritage significance, including site investigation and recording procedures (within the framework of applications for consent under the *Heritage Act 2017*).	See Historical Heritage Impact Assessment.

Note: several of the scoping requirements discuss Aboriginal and historical heritage collectively and therefore are presented as such in Table 2-1. However, impacts related to historical heritage places are presented separately in the Historical Heritage Impact Assessment.

3. Project description

3.1 Project overview

The Project aims to address the current constraints of the western Victorian transmission network by providing the additional capacity, reliability and security needed to drive the development of further renewable electricity generation in western Victoria. By doing so, the Project supports the transition from coal-generated electricity to renewables and the efficient connection of renewable electricity into the National Electricity Market. The Project comprises the construction and operation of a new approximately 190km overhead double circuit 500kV transmission line between Bulgana in Victoria's west and Sydenham in Melbourne's north-west. To support the connection of the new transmission line, the following works are proposed:

- The construction and operation of a new 500kV terminal station near Bulgana and a 220kV transmission line connection to the existing Bulgana Terminal Station
- Expansion of the existing Bulgana Terminal Station
- Connection works at the Sydenham Terminal Station including the modification of a bay and a bay extension with associated infrastructure
- Upgrade of the existing Elaine Terminal Station, through the diversion of an existing line
- Protection system upgrades at connected terminal stations.

The Project's main features are summarised in Figure 3-1 and the location is shown in Figure 3-2.

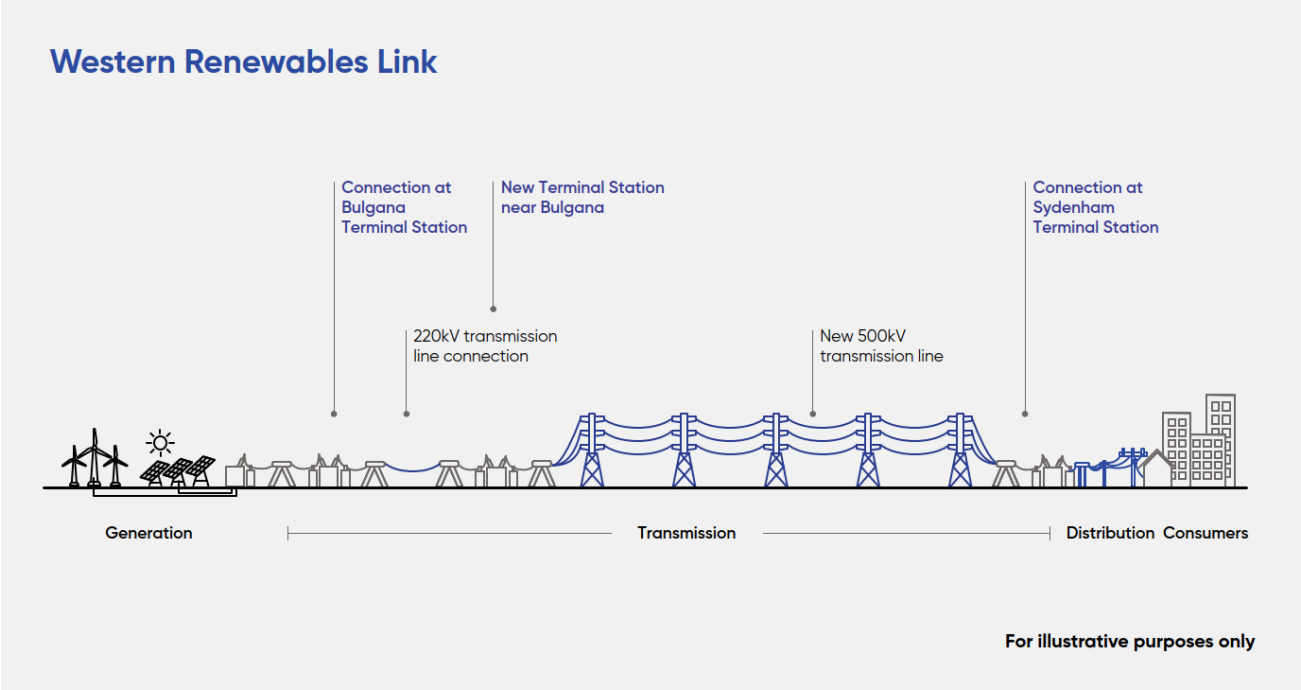


Figure 3-1: Western Renewables Link (Source: AusNet 2024)

The Project can be described by the following key terms:

- **Project Land**: The Project Land encompasses all land parcels that could be used for the purpose of temporary Project construction and permanent operational components The Project Land is shown in Figure 3-2.
- **Project Area**: The Project Area is contained within the Project Land and encompasses all areas that would be used to support the construction and operation of the Project. The Project Area is shown in Figure 3-2.

- **Proposed Route**: The Proposed Route is approximately 100 to 170m wide and encompasses the nominal future easement for the proposed new transmission line (including a buffer either side), and the terminal station areas. The Proposed Route is located within the Project Area.

The Proposed Route commences at the existing Bulgana Terminal Station with a 220kV transmission line connection to the new 500kV terminal station approximately 2.3km to the north-east. The Proposed Route then runs from the new 500kV terminal station to the north of the existing Ballarat to Horsham transmission line, where it runs parallel to the existing transmission line for approximately 60km. East of Lexton, the Proposed Route deviates from the Ballarat to Horsham transmission line, passing through the northern section of the Waubra Wind Farm between Mount Bolton and Mount Beckworth. Continuing east, the Proposed Route passes south of the Berry Deep Lead gold mining precinct and north of Allendale and Kingston. North of Kingston the Proposed Route turns south-east to Mount Prospect. From Mount Prospect to near Dean, the Proposed Route is adjacent to the existing Ballarat to Bendigo transmission line. Near Dean, the Proposed Route deviates from the existing transmission line to run south, then east through Bolwarrah, Bunding and Myrniong to Darley. The Proposed Route then continues eastward crossing Merrimu Reservoir north of Long Forest and along the northern boundary of MacPherson Park at Melton, connecting to the existing electricity network at the Sydenham Terminal Station.

The Project crosses six Local Government Areas (LGAs), namely:

- Shire of Northern Grampians
- Shire of Pyrenees
- City of Ballarat
- Shire of Hepburn
- Shire of Moorabool
- City of Melton.

For the purposes of this Aboriginal Cultural Heritage Impact Assessment, the assessed area of land is the boundary of the Project Land (Figure 3-2). This is divided into six Study Areas which correspond to the boundaries of the relevant RAPs (and form the activity areas for CHMPs being prepared for the Project). The Study Areas are further described in Section 5.2 and shown in Figure 5-1.

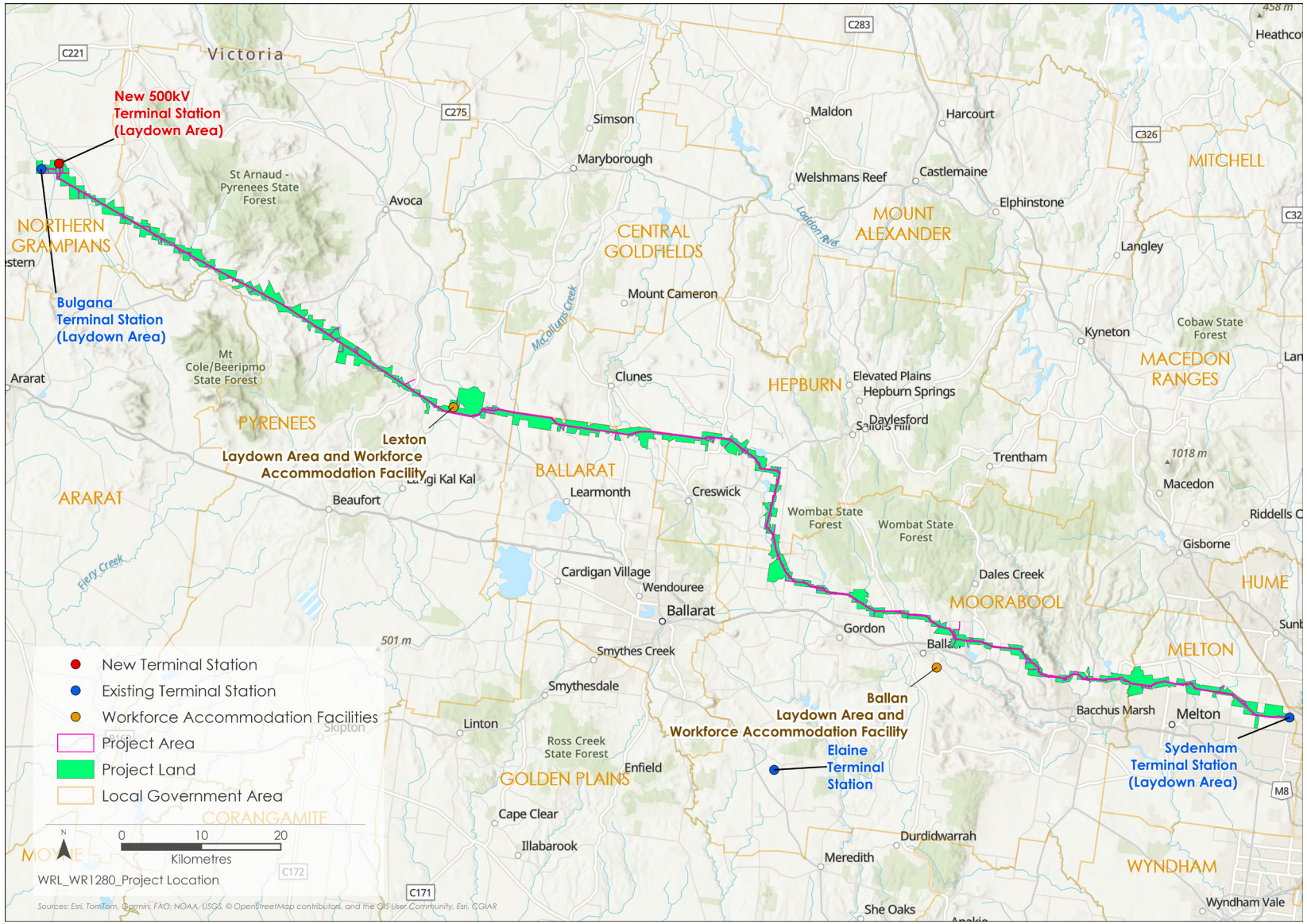


Figure 3-2: Project Land location (Source: Jacobs 2025).

3.2 Project infrastructure

The Project includes both permanent and temporary infrastructure, as described in sections 3.2.1 and 3.2.2. The Project has been progressively refined from an initial broad area of interest as described in EES Chapter 5: Project development.

3.2.1 Permanent infrastructure

The proposed Project includes the construction of infrastructure listed in Table 3-1. Further detail is provided in EES Chapter 6: Project Description.

Table 3-1: Project infrastructure – key components*

Double circuit lattice towers	418 double circuit towers.
Single circuit lattice towers	36 single circuit towers (18 sets of two side-by-side).
Approximate length of 500kV transmission line route	Approximately 190km, between Bulgana in Victoria's west to Sydenham in Melbourne's north-west.
Approximate length of 220kV transmission line route	Approximately 2.5km, between the existing Bulgana Terminal Station to the new terminal station.
Terminal Stations	A new 500kV terminal station and associated infrastructure near Bulgana to be connected to the existing Bulgana Terminal Station via a 220kV connection.
	Expansion of the existing Bulgana Terminal Station to support connection of the new 500kV terminal station near Bulgana.
	A connection to the Sydenham Terminal Station, including the modification of a 500kV bay and a new 500kV bay extension with associated infrastructure.**
	Relocation and diversion of existing 220kV transmission lines at Elaine Terminal Station.

* Note: These figures are approximate and subject to final detailed design, which will consider further landholder consultation and geotechnical, site and other investigations.

** Note: The rebuild of the Sydenham Terminal Station is subject to a separate approval (CHMP 19659).

For the safe and reliable operation of the transmission line, an easement is needed for the operation of the transmission line, and other related infrastructure to protect public safety and to provide access for maintenance and repair purposes. The transmission line easements will be typically between 70 and 100m wide for the Project.

The transmission line design requirements are specified by the Australian standard AS/NZS 7000:2016 Overhead Line Design and AusNet's Electricity Safety Management Scheme. Key assumptions and considerations of the transmission towers that will form part of the Project and have been used as the basis of this report are described below.

- Transmission towers (towers) support the overhead conductors (wires or lines) at the required height above the ground to meet regulations and safety requirements. The preferred tower configuration will be a galvanised steel lattice structure similar to those found elsewhere across Victoria and within the national network. The typical tower height for the Project is between 60 to 80m.
- Each tower has four footings which will typically be 1.8m in diameter and 9m deep. The four footings base width will be between 10 to 17m wide. During construction, ground disturbance around each tower will typically be no greater than 50 by 70m, to a maximum depth of 300mm.
- The spacing or span length between each tower is determined by the height from the ground that the conductors need to be to achieve the required ground clearance in the middle of the span. Typical span length is between 450 to 550m for the transmission line. Longer span lengths are possible over sensitive areas or to avoid impacts, however, longer spans require taller towers to provide safe ground clearances and wider easements to allow for greater sway of the conductors. Similarly, where it is difficult to achieve the

required ground clearance in the middle of the span, due to topography or obstacles, the tower span may be reduced.

- Each span comprises 26 conductors, made up of 12 conductors on each side of the tower cross arms and two ground wires across the top of the tower. Each conductor is approximately 32mm thick and made of aluminium wire strands with a steel core.

As part of the Project, the existing Bulgana Terminal Station will be upgraded to support the connection of the new 500kV terminal station into the existing 220kV switchyard. The new 500kV terminal station will support the connection of the Project transmission line and future connections. The new terminal station will require additional land to the north-east of the existing Bulgana Terminal Station.

Upgrades required at Elaine Terminal Station will involve the relocation of existing 220kV transmission lines and diversion of an existing 220kV line into the terminal station. The footprint of the terminal station will not change, and all new equipment will be approximately the same height and scale as existing structures and equipment at the Elaine Terminal Station.

Connection works are proposed at Sydenham Terminal Station. The existing Sydenham Terminal Station will be re-built through the Sydenham Terminal Station Rebuild Project, prior to the Project works. The Project will connect into Sydenham through the modification of a 500kV bay and new 500kV bay extension. The rebuild of the Sydenham Terminal Station is subject to a separate approval (CHMP 19659) and will not be considered as part of the activity for CHMP 18111 that overlaps with that portion of the Project Land.

3.2.2 Temporary infrastructure

During construction there will be additional work areas, including vehicle access tracks, temporary tower stringing pads, distribution line crossover points, potential hurdle locations, temporary laydown areas and workforce accommodation facilities. Temporary laydown areas associated with the terminal stations and the transmission line will be used to sort materials, pre-assemble Project components and store equipment, vehicles and other supplies that support construction activities. Temporary fencing, gates, security systems and lighting will also be installed at the laydown areas. The Project will establish five laydown areas; two of which will be located at existing terminal station sites (Bulgana and Sydenham), one at the new 500kV terminal station near Bulgana, and an additional two sites at intermediate locations between the stations south-east of Lexton and south-east of Ballan. The two intermediate laydown areas are required for the construction of the transmission line. The size of each site (including workforce accommodation facilities) will vary depending on storage requirements. The site south-east of Lexton will be up to approximately 12ha and the site south-east of Ballan will be up to approximately 24ha.

AusNet proposes to utilise temporary construction workforce accommodation facilities to accommodate construction workforce personnel. Two facilities are proposed; one in each of the western and eastern portions of the Project, co-located with each of the intermediate laydown areas. Each facility will have capacity for up to 350 personnel and will provide individual accommodation units, a communal kitchen and meals area, laundry, gym facilities, mobile and Wi-Fi boosters and serviced cleaning. The layouts of the proposed accommodation facilities will be determined by the Principal Contractor.

3.3 Summary of key Project activities

3.3.1 Construction

Construction of the Project will include preparatory activities (e.g., site investigations, establishment of laydown areas etc.), establishment of temporary infrastructure (such as water and wastewater infrastructure and power supplies), construction of towers and transmission line stringing works; construction works at terminal stations; site rehabilitation works; and pre-commissioning activities.

The overall construction duration of the Project is approximately two years. This schedule is dependent on adjustments required to deliver the Project and the granting of approvals within certain timeframes. For tower assembly and transmission line stringing, work will not be constant, with specialist crews following each other along the route doing specific jobs (clearing, site preparation, tower construction, conductor stringing, site

rehabilitation, etc). As each work crew leaves a site (or property) there may be days, weeks, or possibly months of inactivity until the next crew arrives. The cumulative duration of construction work at each tower (i.e., time on each property) will be approximately 9 to 22 weeks (over a two year period). Once construction is complete, site rehabilitation will occur and commissioning activities will include final inspections and other safety and pre-operational checks. Construction of the Project is anticipated to commence in late 2026 and be completed in late 2028.

Key activities associated with the construction of towers include:

- Site preparations, including necessary vegetation clearance
- Construction of vehicle access tracks and minor upgrades to existing roads and tracks
- Tower foundation construction
- Tower structure assembly and erection
- Transmission line stringing works
- Commissioning
- Site rehabilitation.

The works proposed at the new 500kV terminal station near Bulgana, the existing Bulgana Terminal Station and Sydenham Terminal Station will be constructed over a period of approximately 20 months, with key activities including:

- Site preparations, access and necessary vegetation clearance
- Earthworks
- Construction of footings, foundations and drainage systems
- Installation of structures and equipment
- Commissioning
- Landscaping and rehabilitation.

3.3.2 Operations

The operation and maintenance of transmission lines are subject to stringent regulatory controls to ensure public safety and the uninterrupted supply of electricity. All transmission line operators are required to comply with these controls and provide regular reports to the relevant authorities, including Energy Safe Victoria.

The key operation stage activities for the transmission line include:

- Scheduled inspections of the transmission line and easement (either by vehicle patrols or LiDAR/aerial surveys)
- Ongoing vegetation management to maintain safety clearances under the transmission line
- Tower maintenance inspections
- Repairs and maintenance to address issues found in above inspections.

While the terminal stations are operated remotely, staff are present at stations for inspections or maintenance. Routine inspections will occur bi-monthly, with personnel checking the overall condition of the terminal station's assets.

3.3.3 Decommissioning

The Project's transmission line is designed for a service life of 80 years, while the terminal station works have been designed for a minimum life of 45 years. The terminal station works will be maintained and upgraded to

enable the terminal stations to remain operational for the service life of the transmission line. At the end of the service life of the transmission line, the infrastructure will either be decommissioned or upgraded to extend its service life to maintain the security and reliability of the transmission network as determined by the network planner at that time. In the event of decommissioning, the key activities may involve:

- Lowering the overhead transmission line and ground wires to the ground and cutting them into manageable lengths to roll onto drums or reels for disposal as scrap metal
- Removing insulators and line hardware from structures at the site and disposal at an approved waste facility
- Dismantling towers in manageable sections, removing from the site and selling steel as scrap
- Excavation of footings below finish surface level
- Decommissioning and removal of terminal stations
- Easement restoration and rehabilitation, where required.

3.3.4 Activities relevant to Aboriginal cultural heritage

All Project activities built on the natural ground surface, as well as those that affect the natural ground surface, subsurface or remnant native vegetation, have the potential to impact on Aboriginal cultural heritage. The majority of the impacts are likely to occur during construction. Previously unidentified and known Aboriginal heritage values are vulnerable to all proposed impacts where ground disturbing works are taking place; this includes both tangible and intangible cultural heritage values. Specific to intangible Aboriginal cultural heritage values, Project related pre-construction, construction and operation stages have the potential to impact visual sight lines, intangible environmental values, and connections to Country.

The key activities which have the potential to impact Aboriginal cultural heritage have been identified from the summaries in Section 3.3 and are described in detail below.

3.3.4.1 Construction of access tracks

Access tracks are required to facilitate the transport of plant and equipment to the tower assembly area and other temporary construction areas (such as stringing pads). Tracks will typically be 4 to 6m wide (trafficable width) with a one metre allowance on either side for drainage and retaining batters, where required. At a very small number of locations – for example, where the access track is on a steep slope – the full width (trafficable width plus allowances) may need to extend to between10 to 15m. Where practicable, the Project will be using temporary access tracks. As the precise locations and alignments of the access tracks that will be temporary are currently unconfirmed, this assessment assumes all access tracks in the current design will be permanent and will cause impact to the ground surface.

The overarching principles for the selection and siting of access tracks are:

- Site assessment with landholders, wherever possible, to identify existing tracks that can be used or upgraded for the purposes of the Project
- Identifying access points that are closest to the nearest public road
- Minimising disturbance to ecological and cultural heritage values
- Avoiding or minimising waterway and drainage line crossings
- Avoiding steep slopes, waterlogged land and potentially unstable surfaces
- Avoiding interaction with potential acid sulphate soils and contaminated groundwater.

Existing tracks (such as those used for farm vehicles or for other projects) will be used and, if required, improved) and compacting the material using a roller. If ground conditions are good and can support heavy loads, minimal work will be required to prepare an appropriate access track. If upgrades to existing tracks are required, this will be done in consultation with landholders.

Where there is no suitable existing access track that can be used, a new access track may be built. Construction of these new tracks may involve:

- Removal of topsoil (up to 150mm) using graders or tracked bulldozers
- Stockpiling of topsoil for reuse
- Surface levelling using a roller
- Adding crushed rock
- Compaction rolling.

Construction methods using geofabric and crushed rock/road bases over existing ground surfaces will be used to avoid impacts to areas of Potential Archaeological Sensitivity (PAS), where possible. Where the terrain is steep or the ground is too wet, cut and fill construction methods* may be required; however, this will be avoided wherever possible. In wet weather, bog mats may be used to minimise ground disturbance.

Construction of new access tracks or widening of existing tracks has the potential to impact surface and below ground Aboriginal cultural heritage values.

3.3.4.2 Construction of tower assembly area

The construction of tower assembly areas includes the following key activities that that have the potential to impact Aboriginal cultural heritage:

- Geotechnical works
- Management of existing services
- Site preparation
- Construction of tower assembly areas where required
- Transmission tower assembly and erection.

As described in Section 3.2, to safely conduct this activity a 500kV tower requires an area typically no greater than 50 by 70m. This may vary slightly depending on the terrain, local constraints and/or the size of the tower.

Construction of tower assembly areas have the potential to impact surface and below ground Aboriginal cultural deposits.

3.3.4.3 Construction of terminal stations

Surfaces at the new 500kV terminal station site will be prepared using a cut and fill process to provide a level base at the site. The extent of the earthworks required will depend on geotechnical surveys of the terminal station site completed in advance of construction. The surface area of the terminal station will be capped with an all-weather road base material during the initial earthworks stage. Drainage works will comprise the installation of drains, pits and culverts necessary to control the flow of stormwater from the terminal station site.

The construction of the new 500kV terminal station includes the following key activities that that have the potential to impact Aboriginal cultural heritage:

- Geotechnical works
- Site preparation
- Earthworks
- Drainage works

* 'Cut and fill' removes earth from one place at a construction site and uses it to fill in another place to make the ground more level or create cuttings and embankments. It reduces the need to transport fill material to the construction site.

- Assembly and erection.

Construction of the terminal station, including earthworks and drainage works has the potential to impact surface and below ground Aboriginal cultural deposits.

3.3.4.4 Construction of distribution line crossovers

The construction of distribution line crossovers includes the following key activities that that have the potential to impact Aboriginal cultural heritage:

- Site preparation
- Trenching
- Assembly and erection of above ground hurdles
- Installation of underground assets.

Undergrounding distribution line crossovers involves trenching and has the potential to impact surface and below ground Aboriginal cultural deposits. Above ground installation of hurdles involves clearing, which has the potential to impact on surface Aboriginal cultural deposits.

3.3.4.5 Construction of laydown areas and workforce accommodation facilities

In addition to temporary access tracks (discussed in Section 3.3.4.1) and temporary tower assembly areas (discussed in Section 3.3.4.2), temporary laydown areas and workforce accommodation facilities are proposed as part of the Project.

Temporary laydown areas are required for the Project's construction. These areas will be used to sort materials, pre-assemble Project components and store equipment, vehicles and other supplies that support construction activities. They also provide facilities for construction personnel such as portable site offices and meeting rooms, lunchrooms, toilet blocks, water tanks, tool sheds, workshop spaces and car parking. Temporary walkways, secure chain-mesh fencing, gates, security systems and lighting will also be installed as part of these areas.

Two workforce accommodation facilities are proposed, co-located with each of the intermediate laydown areas. The size of each temporary laydown area (including workforce accommodation facilities) will vary depending on storage requirements as these areas need to accommodate large quantities of steel members and transmission line materials. The Lexton site will be approximately 12ha and the Ballan site will be up to approximately 24ha. The Lexton and Ballan laydown areas and accommodation facilities are depicted on Figure 3-2 and discussed in the results section for fieldwork for CHMP 18101 and CHMP 18108.

Construction of these laydown areas and workforce accommodation facilities typically involves:

- Removing topsoil using graders or tracked bulldozers (maximum depth of impact is 300mm.)
- Stockpiling of topsoil for reuse
- Surface levelling using a roller
- Adding crushed rock
- Compaction rolling.

Construction of laydown areas and workforce accommodation facilities including removal of topsoil has the potential to impact surface and below ground Aboriginal cultural deposits.

3.3.4.6 Operation and maintenance

The primary activities relevant to Aboriginal cultural heritage during the operation of the Project include:

- Maintaining clearance spaces, mitigation of risks posed by fire risks or of trees falling, and attaining 'self-managing' easements

- Repair and maintenance activities requiring vehicle access
- Development of easements that are more sustainable, are subject to minimal disturbance to significant vegetation and provide amenity for the community.

Operation and maintenance are not anticipated to have a significant additional impact on ground surfaces and potential Aboriginal material to that which occurred during the construction stage.

3.3.4.7 Decommissioning

The process of dismantling and removing the transmission lines will be a staged process, which will include the following activities relevant to Aboriginal cultural heritage:

- Excavation of the ground surrounding each tower assembly area, including the transmission tower leg/holding down bolts and encasing concrete.
- Breaking the concrete tower assembly area
- Cutting off the tower leg or holding down bolts and reinforcing steel below ground
- Backfilling the excavation and compacting with suitable (imported, if necessary) material.
- In specific situations, tower assembly areas may be cut off deeper (to avoid any potential interference with ploughing machinery) and backfilled with better quality soil.
- Easement restoration and rehabilitation, where required. This includes permanent access that occur outside the easement.

Decommissioning is not anticipated to have a significant additional impact on ground surfaces and potential Aboriginal material to that which occurred during the construction stage.

4. Legislation, policy and guidelines

This section provides an overview of key Commonwealth and state legislation relevant to Aboriginal cultural heritage matters, including identifying primary and likely secondary approval requirements for the Project. Relevant policies and guidelines that shape the implementation of legislation regarding Aboriginal cultural heritage are summarised in Section 4.3.

4.1 Commonwealth legislation

Table 4-1: Key Commonwealth legislation relevant to Aboriginal cultural heritage

Legislation	Relevance to this Impact Assessment
Environment Protection and Biodiversity Conservation Act 1999	
The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides the legal framework to protect and manage matters of national environmental significance (MNES), which include: world heritage properties; national heritage places; wetlands of international importance (Ramsar); listed threatened species and communities; listed migratory species; Commonwealth marine areas; the Great Barrier Reef Marine Park; nuclear actions; and water resources, in relation to coal seam gas and large coal mining development. Any project that is likely to have a significant impact on MNES, must be referred to the Commonwealth Minister for Environment via DCCEEW for a decision on whether the Project is a 'controlled action' requiring assessment and approval under the EPBC Act. EPBC Act provides for the protection of Indigenous Cultural Heritage sites where they have been included on the World Heritage List (WHL) and the Commonwealth Heritage List (CHL). It sets out the requirements for the management of heritage places on these lists. While the Project is considered a 'controlled action', the WHL and the CHL are not controlling provisions under the EPBC Act	The Project was referred to the Commonwealth Minister for the Environment, who determined that the Project is a 'controlled action' requiring assessment and approval under the EPBC Act before it can proceed. The Minister's referral decision (EPBC 2020/8741) issued on 2 September 2020 determined that the Project is a 'controlled action' due to its potential to have a significant impact on listed threatened species and communities, and further stipulates that the Project will be assessed under the bilateral (assessment) agreement between the Commonwealth and Victorian Governments. The proposed action referred was varied on 20 November 2024 to reflect the Project description. Under the Victorian *Environment Effects Act* 1978, the EES process is an accredited assessment process under the bilateral (assessment) agreement. There are no sites from the WHL and CHL within the Project Land.
Native Title 1993	
The *Native Title Act 1993* provides for the recognition and protection of Native Title, being Aboriginal and Torres Strait Islander people's traditional rights and interests in land and waters held under traditional law and custom; including standards and procedures for dealings affecting Native Title and the validation of acts and a mechanism for determining claims to Native Title.	A search of the Native Title Register (http://www.nntt.gov.au) has been undertaken as part of this Impact Assessment, to confirm whether any Native Title claims or determinations exist in respect of the Project Land. This search shows that a Native Title determination intersects Vances Crossing Road in Joel South (SPI: 2002\PP2806) within the Barengi Gadjin area to the west of the Project Land. The Native Title rights and interests are held in trust by the BGLCAC on behalf of the Wotjobaluk People as the common law holders. Native Title has not been determined to exist anywhere within the Project Land. The Project Land intersects active Native Title claims lodged by Wadawurrung (VC2022/002) and Boonwurrung (VC2020/001).

Legislation	Relevance to this Impact Assessment
Aboriginal and Torres Strait Islander Heritage Protection Act 1984	
The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (the Commonwealth Act) protects Aboriginal cultural property that is significant to Aboriginal people. Cultural property includes any places, objects and folklore that 'are of particular significance to Aboriginals in accordance with Aboriginal tradition'. This includes intangible cultural heritage values. The Commonwealth Act may apply to contemporary Aboriginal cultural property as well as ancient sites. The Commonwealth Act takes precedence over State cultural heritage legislation where there is conflict. Under section(s) 9 and 10 of the Commonwealth Act, the responsible Minister may make a declaration in situations where state or territory laws do not provide adequate protection of heritage places. The Commonwealth Minister for the Environment is responsible for administering this Act and can make declarations to protect these areas and objects from specific threats of injury or desecration. The Minister cannot make a declaration unless an Aboriginal person (or a person representing an Aboriginal person) has asked the Minister to protect an area or object.	Consultation with Aboriginal stakeholders during the CHMP process will minimise the risk of an application for a declaration being made to the Minister for the Project.

4.2 State legislation

Table 4-2: Key state legislation relevant to Aboriginal cultural heritage

Legislation	Relevance to this Impact Assessment
Environment Effects Act 1978	
The *Environment Effects Act 1978* (Environment Effects Act) provides for the assessment of projects that may have a significant effect on the environment by enabling the Minister administering the Act to decide that an EES should be prepared. An EES may be required where: ▪ There is a likelihood of regionally or State significant adverse environmental effects ▪ There is a need for an integrated assessment of social and economic effects of a project or relevant alternatives ▪ Normal statutory processes would not provide a sufficiently comprehensive, integrated, and transparent assessment. The process under the Environment Effects Act is not an approval process in itself; rather it is an assessment process that enables statutory decision-makers to make decisions about whether a project with potentially significant environmental effects should proceed.	On 22 August 2023, the Minister for Planning determined that the Project requires assessment through an EES under the Environment Effects Act, due to matters as set out in the Statement of Decision on Referral No. 2023R-04, and summarised below: ▪ The area of interest for the project supports significant environmental values and other social values, potential aggregate impacts on which are of at least regional significance. ▪ Multiple alignment and design alternatives for the project within the area of interest require rigorous and transparent assessment and refinement. ▪ An EES responds to community interest in project siting, alignment and design alternatives by providing appropriate opportunities for public input. The Minister for Planning issued the EES scoping requirements in November 2023 (Section 2), which have informed this assessment.
Aboriginal Heritage Act 2006	
The *Aboriginal Heritage Act 2006* (the Aboriginal Heritage Act) (and associated regulations) is the primary legislation regulating Aboriginal cultural heritage management in Victoria. Section 49 of the Aboriginal Heritage Act specifies that if an EES is required for an activity under the Environment Effects Act (that is, public works for the purpose of Section 3 of the Environment Effects Act), then a CHMP must also be prepared and approved for the activity area prior to commencing works.	The Project requires a CHMP/s, in accordance with s.49 of the Aboriginal Heritage Act. Impacts to Aboriginal cultural heritage values will therefore be identified and managed through the development and implementation of the CHMPs, which will be delineated by RAP areas: 1) Barengi Gadjin Land Council Aboriginal Corporation (CHMP 17313) 2) Eastern Maar Aboriginal Corporation (CHMP 17321) which will be evaluated FP-SR.

Legislation	Relevance to this Impact Assessment
	3) Dja Dja Wurrung Clans Aboriginal Corporation trading as Dja Dja Wurrung Clans Aboriginal Council (DJAARA), there are two CHMPs within the DJAARA RAP area (CHMP 17311 and CHMP 18101) 4) Wadawurrung Traditional Owners Aboriginal Corporation (CHMP 18108) 5) Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation (CHMP 18111) A CHMP will also be completed for the area where a RAP has not yet been appointed. This CHMP will be evaluated by FP-SR (CHMP 17312). Recently, an additional two CHMPs were confirmed (20459 and 20436). These CHMPs will be created by splitting 18111 (Wurundjeri Woi-wurrung) and 18108 (Wadawurrung) each into two CHMP areas. Additional information and mapping showing the boundaries for the nine CHMPs is captured in Appendix N.
Aboriginal Heritage Regulations 2018	
The *Aboriginal Heritage Regulations 2018* (the Aboriginal Heritage Regulations) provide for the protection of Aboriginal cultural heritage in Victoria in accordance with the Aboriginal Heritage Act. The Aboriginal Heritage Regulations state when a CHMP is required and define high impact activities and areas of Cultural Heritage Sensitivity (CHS). They also set standards and fees for the preparation of CHMPs.	CHMPs are required to be prepared and approved for the Project in accordance with s.49 of the Aboriginal Heritage Act on the basis that an EES is required for the Project.
Traditional Owner Settlement Act 2010	
The *Traditional Owner Settlement Act 2010* (TOS Act) provides for an out-of-court settlement of native title. The TOS Act allows the Victorian Government to recognise TOs and certain rights in Crown land. In return for entering into a settlement, TOs must agree to withdraw any Native Title claim, pursuant to the *Native Title Act 1993* (Cth) and not to make any future Native Title claims. The settlement can include entry into a Land Use Activity Agreements (LUAAs) or Recognition and Settlement Agreement. A LUAA allows TOs to comment on or consent to certain activities on public land — this replaces the future acts regime under the Native Title Act. The LUAA will underpin consultation with TOs about activities that may have a substantial impact on TO rights as recognised in a settlement. occurring on land subject to a settlement. The LUAA will specify exactly which activities will trigger its application and different activities will require different procedures to be followed (for further information, refer to Chapter 3).	According to the register of LUAAs, a LUAA has been established with DJAARA. The Eastern Maar TOs and the Victorian Government have agreed to negotiate a Recognition and Settlement Agreement. The Wotjobaluk Peoples (represented by the Barengi Gadjin Land Council Aboriginal Corporation [BGLCAC]) and the Victorian Government have also agreed to negotiate a Recognition and Settlement Agreement. As native title is not the focus of this report, Indigenous Land Use Activity Agreements and Recognition and Settlement Agreements will not be further elaborated on here but will be considered in Chapter 3 of the EES.
The Planning and Environment Act 1987	
The *Planning and Environment Act 1987* (the Planning and Environment Act) includes objectives for the conservation and enhancement of areas and places of cultural value. It also enables the creation of planning schemes and the Victoria Planning Provision, which give effect to and support the operation of the Aboriginal Heritage Act for the protection and conservation of places of Aboriginal cultural heritage significance.	Clause 15.03-2S of the Planning Policy Framework provides for the protection and conservation of places of Aboriginal cultural heritage significance. Specifically, to: ▪ Identify, assess and document places of Aboriginal cultural heritage significance, in consultation with relevant Registered Aboriginal Parties, as a basis for their inclusion in the planning scheme ▪ Provide for the protection and conservation of pre-contact and post-contact Aboriginal cultural heritage places

Legislation	Relevance to this Impact Assessment
	▪ Ensure that permit approvals align with the recommendations of any relevant Cultural Heritage Management Plan approved under the Aboriginal Heritage Act. Clause 15.03-2L of the Planning Policy Framework provides for the protection and conservation of Aboriginal cultural heritage across the Hepburn LGA (Area 4): to protect, conserve and enhance identified Aboriginal values; ensure those values are considered in land use and development and water management; and ensure works do not adversely impact site, vegetation, wetlands, and features of Aboriginal significance. This builds on Hepburn Shire Council's commitments in its Reconciliation Action Plan, 2018. DJAARA provided a detailed submission to the Hepburn Shire on 28 August 2020 on how the Planning Scheme can strengthen protection of significant sites and bring to the forefront the importance of the Dja Dja Wurrung in the history and the future of the Shire. Council supported these submissions and believed that some changes can be made to the Municipal Planning Strategy and Aboriginal Cultural Heritage Local Policy which were included in the post-exhibition version of the Amendment. Where a CHMP is required to be prepared under the Aboriginal Heritage Act, a planning permit cannot be issued until the CHMP is approved. As discussed in the Legislative Framework and Approval Requirements chapter of the EES [Refer to EES Chapter 3], a Planning Scheme Amendment is being prepared for the Project rather than individual permit applications. Section 4d of the Planning and Environment Act includes the objective 'To conserve and enhance those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value.' The Planning and Environment Act, and therefore the planning schemes, seek to protect and enhance Aboriginal cultural heritage values that may be within *and* outside the scope of the Aboriginal Heritage Act (for example, intangible values such as cultural landscapes).

4.3 Relevant policies, guidelines and standards

Table 4-3: Policy, guidelines and standards relevant to Aboriginal cultural heritage

Policy, Guidelines and Standards	Relevance to this Impact Assessment
***Guide to preparing a CHMP* (Aboriginal Victoria 2021)**	
The purpose of this Guide is to assist Sponsors and Heritage Advisors to carry out cultural heritage assessments and complete CHMPs in accordance with the requirements of the Aboriginal Heritage Act and the Aboriginal Heritage Regulations. The Guide may assist Heritage Advisors engaged to conduct a cultural heritage audit. This Guide: ▪ Provides general information about processes to be followed when preparing a CHMP ▪ Sets out minimum standards for the conduct of cultural heritage assessments ▪ Details the requirements for documenting and reporting on Aboriginal cultural heritage ▪ Outlines the processes for identifying Aboriginal heritage management measures,	This Guide has been and should continue to be followed for the preparation of the CHMPs that are required for the Project across both the RAP and non-RAP areas, so as to: ▪ Ensure that the CHMPs are written in accordance with both the Aboriginal Heritage Act and the Aboriginal Heritage Regulations. ▪ Allow for ease of evaluation of the CHMP by each RAP for those undertaken within RAP areas and by FP-SR for those undertaken in non-RAP areas. As preparation of the CHMPs have commenced for the Project, the results to date are included in this impact assessment.

Policy, Guidelines and Standards	Relevance to this Impact Assessment
with the primary objective of avoiding harm or minimising harm to Aboriginal cultural heritage.	
***Guide for Drafting Enforceable Conditions and Contingency Plans* (Aboriginal Victoria 2019a)**	
The Aboriginal Heritage Act provides blanket protection for Aboriginal cultural heritage in Victoria. Conditions and contingency plans are required to manage Aboriginal cultural heritage in CHMPs, cultural heritage permits and Aboriginal cultural heritage land management agreements. Conditions and contingency plans written in these documents confer legal obligations on the holder that are enforceable under this Act. Writing clear and enforceable conditions and contingency plans is crucial for the successful implementation of the agreed process for managing Aboriginal cultural heritage, and to avoid unintended harm to Aboriginal cultural heritage and potential disputes about interpretation or meaning. This Guide was developed in consultation with RAPs and a technical advisory group from the heritage field. It is a drafting tool for developing and assessing conditions and contingency plans to be enforceable under this Aboriginal Heritage Act.	This guide assists with the contingency plans under the Aboriginal Heritage Act, which will be part of the CHMPs required for the Project, in the following manner: ▪ Provides key considerations to avoid common pitfalls when writing conditions or contingency plans ▪ Can assist to assess enforceability by providing key criteria to test against ▪ Is not intended to be prescriptive or provide standardised conditions or contingency plans ▪ Aims to provide considerations to support the drafting of conditions and contingency plans ▪ Aims to improve the quality, enforceability and consistency in Aboriginal cultural heritage management. If the CHMPs require conditions and contingency plans to manage Aboriginal cultural heritage, these will be drafted in accordance with this Guide.
***Victorian Aboriginal Heritage Register Spatial Data Guidelines* (Aboriginal Victoria 2019c)**	
The CHMP process requires spatial data to be lodged with the Victorian Aboriginal Heritage Register (VAHR). Other reports or heritage investigations may also result in the production of spatial data, which should be lodged with the VAHR to assist in the management of Aboriginal cultural heritage. These guidelines detail the general spatial data requirements, what spatial data is to be lodged on the VAHR, provides a summary of spatial data files for CHMPs, and explains how FP-SR assesses spatial data.	Preparation of the CHMPs have commenced for the Project, in accordance with the Aboriginal Heritage Act, these guidelines will assist with: ▪ Ensuring that the correct spatial data is provided to FP-SR for each CHMP ▪ Ensuring that the data is lodged on the VAHR in the prescribed manner ▪ Providing FP-SR with spatial data in a manner that allows them to undertake their assessments in an easy and efficient way. As the CHMPs require spatial data to be lodged with the VAHR, these will be drafted in accordance with these Guidelines.
***Advisory Note: Geotechnical Testing* (Aboriginal Victoria 2018)**	
This Advisory Note describes relevant provisions of the Aboriginal Heritage Act and the obligation to protect Aboriginal cultural heritage when undertaking geotechnical investigations. This Advisory Note covers the following: ▪ The obligation to protect Aboriginal cultural heritage during geotechnical investigations ▪ Preliminary matters to be considered prior to undertaking geotechnical investigations ▪ What to do if Aboriginal cultural heritage is discovered before or during geotechnical investigations ▪ Where to find further information and advice.	As geotechnical works have been and will continue to be undertaken across the Project, this advisory note will, in accordance with the Aboriginal Heritage Act, assist with: ▪ Protecting Aboriginal cultural heritage during geotechnical investigations ▪ Allowing for the consideration of the impact of geotechnical investigations on Aboriginal cultural heritage ▪ Providing the steps involved should Aboriginal cultural heritage be discovered before or during geotechnical works. As geotechnical investigations will occur for the Project, these will be undertaken in accordance with this Advisory Note.
***Practice Note: Subsurface Testing* (DPC 2017)**	
This Practice Note has been prepared under section 143 of the Aboriginal Heritage Act. It provides	As several CHMPs have commenced across the Project, in accordance with Section 49 the Aboriginal Heritage Act, this practice note will assist with understanding:

Policy, Guidelines and Standards	Relevance to this Impact Assessment
guidance about subsurface testing as it relates to the preparation of a CHMP in accordance with the Aboriginal Heritage Act. The Practice Note covers: ▪ General information about CHMPs and consultation ▪ When a CHMP may include subsurface testing ▪ Why subsurface testing may be required ▪ Supervision of subsurface testing ▪ Developing a subsurface testing strategy and methodology ▪ How much subsurface testing is necessary ▪ Subsurface testing methods and their usefulness ▪ Considerations when analysing and reporting on subsurface testing ▪ Archaeological standards relevant to subsurface testing. Finally, a series of scenarios are presented as examples to illustrate the application of topics discussed in the Practice Note.	▪ How subsurface testing relates to the CHMP process, particularly during complex assessment ▪ What information should be provided in the CHMP through the subsurface testing ▪ Who must supervise subsurface testing ▪ How subsurface testing strategies and methodologies should be developed ▪ How much testing is necessary ▪ What subsurface testing methods are the most useful for each CHMP ▪ Undertaking proper archaeological practice for subsurface testing, in accordance with Regulation 61(3) ▪ How to analyse and report on the result of the subsurface testing. As the CHMPs have commenced for the Project, subsurface testing will be conducted in accordance with this Practice Note.
Practice Note: Salvage Excavation	
This Practice Note is prepared under section 143 of the Aboriginal Heritage Act. It provides guidance about salvage excavation as it relates to CHMPs required under the Aboriginal Heritage Act This Practice Note covers: ▪ What a CHMP is ▪ When a salvage excavation is required ▪ What the purpose of a salvage excavation is ▪ Who must supervise a salvage excavation ▪ What the role of a RAP is ▪ What needs to be considered in developing a salvage excavation strategy ▪ How a salvage excavation should be conducted ▪ What happens after a salvage excavation.	As the CHMPs have been commenced across the Project, in accordance with the Aboriginal Heritage Act, this Practice Note will assist with undertaking salvage excavation where it is not possible to avoid harm to Aboriginal cultural within the activity area of a CHMP for the Project. This practice note will assist with understanding: ▪ When a salvage excavation is required ▪ The purpose of the salvage excavation ▪ Who must supervise the salvage excavation ▪ What role the RAP plays in the salvage excavation ▪ What considerations are necessary when developing the salvage excavation strategy ▪ How to conduct the salvage excavation ▪ What happens after the salvage excavation has been completed. If the CHMPs require conditions and contingency plans to manage Aboriginal cultural heritage, any requirements for salvage excavation will be drafted in accordance with this Practice Note.
The Burra Charter	
The process for establishing cultural heritage significance is outlined in the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance, otherwise known as 'The Burra Charter' (Marquis - Kyle and Walker, 1992 - Marquis-Kyle, P., and Walker, M. (1992) The Illustrated Burra Charter, Australia ICOMOS. Sydney). The Burra Charter is based on preceding international charters formulated by ICOMOS (the International Council on Monuments and Sites). The Burra Charter defines cultural heritage significance as the aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Social value embraces the qualities for	When considering the overall Aboriginal cultural heritage significance of Aboriginal Places in Victoria a more holistic approach, which includes aesthetic, historic, scientific, social, or spiritual values. It is argued this is more appropriate to determine cultural heritage significance. As stated in the Guidelines to the Burra Charter regarding Cultural Significance (2002pp. 13) : 'Whatever may be considered the principal significance of a place, all other aspects of significance should be given consideration.' Therefore, in addition to the archaeological (scientific) significance of a Place, Aboriginal heritage studies must incorporate the aesthetic, historic, social and/or spiritual value of that Place in order to arrive at an overall statement of significance. These intangible values should be incorporated as part of the cultural significance of an Aboriginal Place to Aboriginal peoples. It is these principles that are reflected in the definition of cultural heritage significance in the Aboriginal Heritage Act (Section 4) as including 'archaeological,

Policy, Guidelines and Standards	Relevance to this Impact Assessment
which a Place has become a focus of spiritual, political, national or other cultural sentiment to a majority or minority group (Guidelines to the Burra Charter: Cultural Significance, pg. 11). This cultural sentiment therefore comes from the Aboriginal peoples themselves in relation to the Aboriginal Place(s) that is being assessed.	anthropological, contemporary, historical, scientific, social or spiritual significance' and 'significance in accordance with Aboriginal tradition'.

Each RAP and FP-SR will also have a series of fieldwork methodologies and CHMP policies that must be addressed. These are different for each organisation and are, in part, undocumented. As such, these are negotiated and addressed during the consultation process with each regulatory body.

5. Method

5.1 Overview

This section describes the method used to assess the Project's potential impacts on Aboriginal cultural heritage. Risk screening was applied to prioritise the key issues for impact assessment. Measures to avoid, minimise and manage potential effects have then been developed to address these impacts. The following sections outline the method adopted for the Aboriginal Cultural Heritage Impact Assessment.

5.2 Study Areas within the Project Land

The overall study area for the Aboriginal cultural heritage impact assessment is the boundary of the Project Land. The Project Land encompasses all land parcels that could be used for the purpose of temporary Project construction and permanent operational components based on the Proposed Route, as defined in Section 3.1.

The study area has then been divided into six Study Areas that align with RAP boundaries; these Study Areas and are shown in Figure 5-1.

Together, the Study Areas, equivalent to the CHMP activity areas, have the same footprint as the Project Land. Broader heritage values that relate to and/or intersect the Study Areas, including those presented in the CVAs (refer to Section 8.2), are also considered.

The six defined Study Areas (Areas) are:

- Area 1: Barengi Gadjin Land Council Aboriginal Corporation (BGLCAC)
- Area 2: Eastern Maar Aboriginal Corporation (EMAC)
- Area 3: Non-RAP area (represented by TOs BGLCAC, DJAARA, and EMAC)
- Area 4: Dja Dja Wurrung Clans Aboriginal Corporation (DJAARA)
- Area 5: Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC)
- Area 6: Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation (WWCHAC).

Table 5-1: Study Areas showing relevant LGAs and percentage of the Project Land.

Study Area	RAP	Local Government Area (LGA)	Size of Study Area (sq km)	Percentage of Project Land (%)
1	BGLCAC	Northern Grampians	19.96	9.27
2	EMAC	Pyrenees	11.83	5.49
3	Non-RAP	Pyrenees	14.99	6.95
4	DJAARA	Ballarat Hepburn Pyrenees	95.13	44.12
5	WTOAC	Moorabool Pyrenees Ballart	19.57	9.08
6	WWCHAC	Moorabool Melton	54.13	25.11
Total			215.61	100

CHMPs are currently being prepared for the Project in each of these Study Areas (noting that due to the size of the area, two CHMPs cover the DJAARA RAP area (Study Area 4) – for land located west (CHMP 17311) and east (CHMP 18101) of Beaufort-Lexton Road, Lexton).

All CHMPs across the six Study Areas are currently in preparation and at varying levels of completion. This means that survey and subsurface testing for this assessment is not complete, although it is at an advanced stage for most of the Study Areas, as detailed in Section 8.1.1. A full understanding of Aboriginal cultural heritage impacted by the Project will be obtained upon completion of the fieldwork required to inform these CHMPs. All impacts to Aboriginal cultural heritage, whether identified during fieldwork or encountered as unexpected finds during the Project, will be managed through the CHMP process, as required by the Act. This limitation is detailed in Sections 5.8 and the fieldwork coverage (standard and complex assessment) for the CHMPs is detailed in Table 9-1.

Despite this limitation, there are clear trends in the data available to this assessment (the culmination of the existing conditions analysis, MCA, completion of the CVAs and fieldwork results to date) that have been used to define predictive statements for areas of Project Land that have yet to undergo fieldwork. This is further detailed in Section 9.2.3.1 of this report.

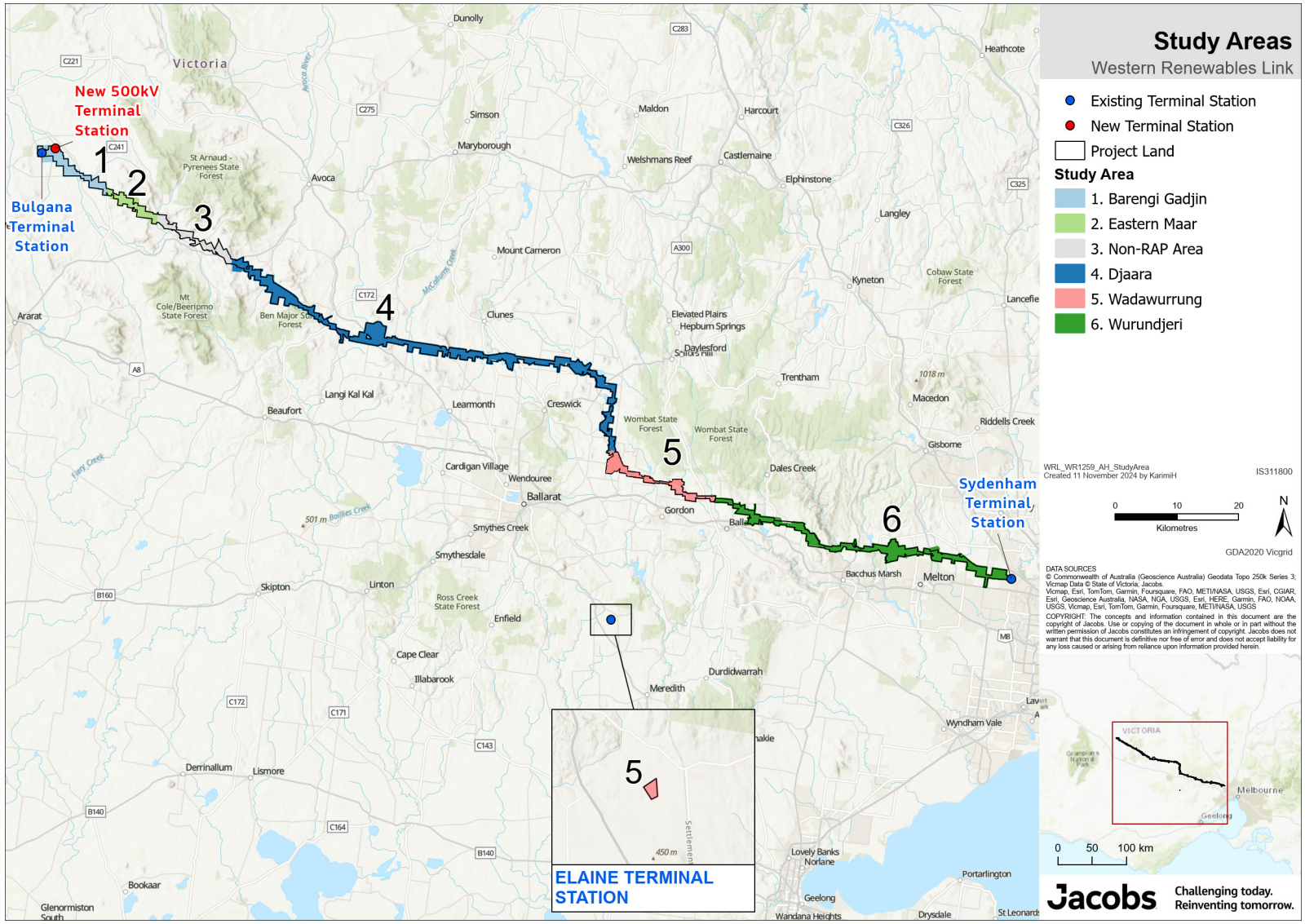


Figure 5-1: Study Areas for this Impact Assessment, showing RAP boundaries referenced throughout this report. Barengi Gadjin (CHMP 17313), Eastern Maar (CHMP 17321), Non-RAP Area (CHMP 17312), DJAARA (CHMPs 17311 and 18101), Wadawurrung (CHMP 18108), and Wurundjeri Woi-wurrung (CHMP 18111).

5.3 Existing conditions

The existing conditions assessment was used to characterise the current and past physical, ecological, archaeological and social environment. These conditions and values were also established for each of the Aboriginal cultural heritage Study Areas defined in Section 5.2.

Reporting on the existing conditions for Aboriginal cultural heritage is consistent with Section 4.2 of the EES scoping requirements and includes conditions that comprise a desktop assessment, including:

- A review of the Project Land
- A review of the proposed design and construction methodology
- A review of the environmental context
- A review of Social Pinpoint data for entries related to Aboriginal cultural heritage
- A review of contact and post-contact Aboriginal history
- A review of land use history
- A review of the VAHR search in each Study Area
- Review of previous cultural heritage assessments in each Study Area
- Consultation with key stakeholders (refer to Section 5.5.5)
- Incorporation of CHMP fieldwork data already obtained for the Project.
- Development of a predictive statement for Aboriginal cultural heritage for each Study Area

These existing conditions relevant to the Project Land are also described in Section 6.

5.4 Risk screening

A risk screening process was undertaken to identify the Aboriginal cultural heritage risks associated with the design, construction, operation and decommissioning of the Project and to provide for the appropriate level of investigation. The outcomes of the risk screening identified the key issues that were taken forward into the impact assessment phase (see Sections 8.1, 9.1, and 10.1).

5.5 Impact assessment method[1]

The method for the Aboriginal cultural heritage impact assessment included:

- Identifying key issues (as described in Section 5.4) to be addressed in the impact assessment.
- Identifying potential impacts of Project construction, operation, and decommissioning, including the likely extent, magnitude, and duration of changes to Aboriginal cultural heritage values, according to the impact ratings developed for this assessment.
- Potential impacts of the Project were measured against the existing conditions by assessing the significance of the impacts, taking into consideration mitigation measures. Mitigation measures to reduce the potential impacts have been recommended in accordance with the mitigation hierarchy (avoid, minimise, manage, rehabilitate and offset) and these have then informed the development of Environmental Performance Requirements (EPRs).

[1] Acknowledgement is owed to Dr. Michael Green for his contribution to the development of the Impact Assessment method.

- Identifying any other potential developments that could lead to cumulative impacts when considered together with the Project.
- Preparing EPRs to define the environmental outcomes to be achieved through the implementation of mitigation measures during construction, operation and decommissioning. While some EPRs are performance based to allow flexibility in how they will be achieved, others include more prescriptive measures that must be implemented. Compliance with the EPRs will be required as a condition of the Project's approval.
- Apply the relevant workforce accommodation facilities conditions from the draft Incorporated Document, to avoid, minimise and manage impacts associated with these sites.
- Determining the residual impacts associated with the construction, operation, and decommissioning of the Project, and evaluating their significance in accordance with the criteria described above.
- Section 5.5.3 outlines the specific ratings applied when assessing relevant aspects of potential impacts to Aboriginal cultural heritage. These criteria were used to assess the overall residual impact of Project activities on Aboriginal cultural heritage.

These steps are expanded in further detail below and across Sections 5.5.1, 5.5.2, and 5.5.3. The potential impacts of the Project on the existing conditions (known Aboriginal cultural heritage values), are determined for the EES by assessing the nature of the impacts on each kn1own Aboriginal cultural heritage value, with mitigation measures then proposed in response to those impacts.

The known Aboriginal cultural heritage values subject to the impact assessment were identified using the methodology described below.

In accordance with Section 49 of the Aboriginal Heritage Act, CHMPs are required (Part 4 Div 2 s49) for the Project. Seven CHMPs are in preparation across the Project Land: (CHMP numbers 17313, 17321, 17311, 17312, 18101, 18108, and 18111) and an additional two CHMPs were recently confirmed (20459 and 20436). These CHMPs will be created by splitting 18111 (Wurundjeri Woi-wurrung) and 18108 (Wadawurrung) each into two CHMP areas. This was done following consultation with the RAPs, in order to help facilitate the meeting of key construction milestones. Additional information and mapping showing the boundaries for the nine CHMPs is captured in Appendix N.

As the CHMP standard assessments (ground surveys) and complex assessments (sub-surface investigations) are not complete, further Aboriginal cultural heritage values, including locations with archaeological potential (PAS), may be identified subsequent to the EES. These will be subject to an impact assessment within each CHMP to determine how harm can be avoided or minimised and any management conditions required, as agreed to with the relevant Aboriginal stakeholders. Fieldwork coverage limitations in relation to the impact assessment method are discussed further in Section 8.1. Where possible, trends in the data available to this assessment (the culmination of the existing conditions analysis, MCA, completion of the CVAs and fieldwork results to date) that have been used to define high-level predictive statements for areas of Project Land that have yet to undergo fieldwork. This is further detailed in Section 9.2.3.1 of this report.

The methods employed in the development of the Aboriginal Cultural Heritage Impact Assessment for the Project involved the following key tasks.

5.5.1 Identification of known Aboriginal cultural heritage values

The Aboriginal cultural heritage values subject to the impact assessment include previously registered Aboriginal Places, identified Aboriginal Places that have not yet been registered, and known broader intangible Aboriginal values within the Project Land. The following method was used to identify known Aboriginal cultural heritage values in the Project Land:

- A review of relevant legislation, policy and guidelines, inclusive of the *Aboriginal Heritage Act* and the Aboriginal Heritage Regulations, the *Heritage Act*; the *Planning and Environment Act*; the Victorian Heritage

Inventory Heritage Overlays in relevant planning schemes (Section 4), the Burra Charter. This is undertaken to revise methods for determining levels scientific significance and levels of protection places are provided. Also to understand current understanding of areas of cultural heritage sensitivity and note RAP values and research questions.

- A desktop review of geological and environmental conditions for the Project Land and its vicinity (Section 6.1, Appendix A and Appendix B).
- A search of the VAHR to identify registered Aboriginal Places (Section 6.7.1 and Appendix C).
- A search of the Aboriginal Cultural Heritage Register and Information System (ACHRIS) to identify Historical References. Historical references are recorded on ACHRIS and are locations with Aboriginal associations in the post contact period that have been identified from a range of sources, primarily literature references. These may include the locations of corrobborees observed by European settlers, massacre sites and locations where Aboriginal people lived in the post contact period. The precise locations of some Historical References are not known (Section 6.7).
- A desktop review of background literature, including available ethnohistorical and historical information relating to Aboriginal people and post contact settlers in the geographic region and regional and local studies of Aboriginal cultural heritage (Section 6.2 - 6.6, Appendix D and Appendix E).
- A review of ethnohistorical and historical information and prior archaeological assessments to identify any known but unregistered Aboriginal Places (tangible and intangible) that may be present (Section 6.6, Appendix D and Appendix E).CVAs to identify broader tangible and intangible values through consultation with the relevant Aboriginal stakeholders, as well as relevant oral history and broader values incorporating landscapes, biodiversity, and contemporary values, and how places are interconnected through Country (Appendix I – Appendix M).
- RAP statements of significance
- The development of a preliminary site predictive model of Aboriginal Place types (tangible) within the Project Land for the purpose of better understanding patterns of occupation and use of the landscape by Aboriginal people using Multi Criteria Analysis (MCA) to determine high-priority areas that required access for field survey and/or archaeological subsurface testing (Section 7 and Appendix F).
- A review of the Project Land's land use history to provide an overview of the key periods of post-contact historical activity within the Project Land and the impacts these developments would have had on ground surfaces (Section 6.6.1).
- Consultation with relevant RAPs and TOs regarding any known but unregistered Aboriginal Places (tangible and intangible) that may be present (Section 5.6 and 8).
- Phase 1 targeted field assessments for incorporation into the EES (Phase 2 comprises the remainder of the assessment required to complete the CHMPs). Where possible, this included both standard assessment (survey) and complex assessment (sub-surface testing). High priority properties were determined through a combination of desktop assessment review, the MCA used for a predictive model, specialist input and RAP consultation. Phase 1 assessment included:
  - Phase 1 field surveys (CHMP standard assessments) undertaken to inform CHMPs being prepared for the Project that identified areas of PAS across the Project Land (Appendix G). The surveys in part examined the condition of previously registered Aboriginal Places and parts of the Project Land for evidence of Aboriginal cultural heritage. The latter involved examining surface exposures for Aboriginal cultural material, inspecting mature native trees for evidence of Aboriginal modification, and examining caves and rock shelters for evidence of Aboriginal occupation (Section 8).
  - Phase 1 archaeological test excavations (CHMP complex assessments) undertaken to inform CHMPs being prepared for the Project (Appendix H). Phase 1 complex assessment sought to investigate the stratigraphy of subsurface deposits and soil types at high-risk locations within the Project Land and identified Aboriginal cultural heritage that has yet to be registered on the VAHR (Section 8).
- The registration on the VAHR of all tangible Aboriginal cultural heritage values identified during field assessments for the impact assessment that have not yet been registered.

- The impact assessments conducted for other disciplines were drawn upon, where relevant, to inform this impact assessment and the CVAs, including biodiversity and habitat (such as threatened ecological communities and fauna species), landscape and visual amenity (such as areas covered by Significant Landscape Overlay and key vantage points in or close to the Project Land), and catchment values and hydrology (such as aquatic environments, surface water and groundwater quality, and stream flows).

5.5.2 Significance ranking of Aboriginal cultural heritage values

A significance ranking has been provided for each newly identified Aboriginal cultural heritage value from fieldwork and/or CVAs. Categories of cultural significance are informed by the Burra Charter (Section 4.3). Article 1.2 of the Burra Charter defines types of significance as aesthetic, historic, scientific, social and/or spiritual value. The cultural significance of a value to Aboriginal people can be a combination of these significance criteria and be subjective to individual Aboriginal communities and also individual persons.

Aesthetic values are defined as visual and non-visual aspects such as sounds, smells and other factors having a strong impact on human thoughts, feelings and attitudes. Many Aboriginal cultural heritage values have a perceived high aesthetic value due to the remoteness of many portions of the Project Land and proximity to waterways. However, this is also very subjective to the experience of an individual person with a place. In addition, there is a lack of established criteria that could be applied to an independent assessment of this criterion. Therefore, this significance assessment did not include an assessment of aesthetic value.

For the purposes of this study, the cultural heritage significance of a value was assessed using four of the five criteria: the historical, scientific, social, and spiritual values of each cultural heritage site. Definitions of the four criteria used in assessing cultural significance as outlined by Australia ICOMOS are summarised in Table 5-2.

Table 5-2: Cultural heritage significance assessment criteria (Australia ICOMOS, November 2013)

Criterion	Description
Historic	Intended to encompass all aspects of history—for example, the history of aesthetics, art and architecture, science, spirituality and society. It therefore often underlies other values. A place may have historic value because it has influenced, or has been influenced by, an historic event, phase, movement or activity, person or group of people. For any place the significance will be greater where the evidence of the association or event survives at the place, or where the setting is substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of such change or absence of evidence.
Scientific	Refers to the information content of a place, or its ability to reveal something about the past through scientific techniques such as archaeology. The relative scientific value of a place is likely to depend on the importance of the information or data involved, on its rarity, quality or representativeness, and its potential to contribute further important information about the place itself or a type or class of place or to address important research questions. To establish potential, it may be necessary to conduct some form of testing or sampling. For example, in the case of an archaeological site, this could be established by a test excavation.
Social	Refers to the associations that a place has for a particular Aboriginal group and the social or cultural meanings that it holds for them. Places of social significance are usually important in maintaining a community's integrity and sense *of place*; that is, a sense of belonging to a particular area as a distinctive cultural group (Hall and McArthur 1993:8). For many peoples, Aboriginal archaeological sites (e.g., burials) and post-contact sites (e.g., missions) have strong social significance. Archaeological sites with materials deemed to be markers of the prior presence of the cultural groups may also assume a strong social significance during land ownership disputes.

Criterion	Description
Spiritual	Refers to the intangible values and meanings embodied in or evoked by a place which give it importance in the spiritual identity, or the traditional knowledge, art and practices of a cultural group. Spiritual value may also be reflected in the intensity of aesthetic and emotional responses or community associations and be expressed through cultural practices and related places. The qualities of the place may inspire a strong and/or spontaneous emotional or metaphysical response in people, expanding their understanding of their place, purpose and obligations in the world, particularly in relation to the spiritual realm.

Each of these four criteria (historic, scientific, social and spiritual values) for each value were individually assessed and rated as being either low, moderate, or high according to the criteria set out below.

Table 5-3: Cultural heritage significance criteria ratings (based on Australia ICOMOS, November 2013)

Criterion	Definition	Significance rating
Historic	The place or value may be associated with an important event or theme in history, or a particular person or Aboriginal group important to the history of the local area, state or nation	Historical value was rated as follows: 1) Low: Aboriginal cultural heritage values that are not associated with any known historical event, person, or theme 2) Moderate: Aboriginal cultural heritage values that are associated with a moderately significant historical event, person, or theme at the local, regional, and/or national level 3) High: Aboriginal cultural heritage associated with a highly significant historical event, person, or theme at the local, regional, and/or national level.
Scientific	Using scientific techniques such as archaeology, the place of (if relevant) value has the potential to reveal new information or understandings about people, places, processes, or practices	Ratings for scientific value are mostly applied to archaeological sites, and consider: Site contents (e.g., size and patterning of a Place): 0 = no materials remaining 1 = small number of artefacts with limited diversity (0-10 artefacts) 2 = larger number but limited range of artefacts 3 = large and diverse range of artefacts Site condition: 0 = destroyed 1 = deteriorated 2 = fair to good 3 = excellent Site representativeness: 1 = common 2 = occasional 3 = rare The rating for overall significance is calculated based on the overall score for site contents, site condition, and site representativeness: 1) Low = overall score 1-3 2) Moderate = overall score 4-6 3) High = overall score 7 or greater.
Social	The place or value may be an important local marker or symbol or contribute to the identity of a particular Aboriginal group.	Social value was rated as follows: 1) Low: Aboriginal cultural heritage values that do not appear to have any clear social connection at the local, regional, and/or national level 2) Moderate: Aboriginal cultural heritage values that have a moderately significant social connection for an Aboriginal group at the local, regional, and/or national level 3) High: Aboriginal cultural heritage values that have a highly significant social connection for an Aboriginal group at the local, regional, and/or national level
Spiritual	The place or value may contribute to the spiritual identity or belief system of an Aboriginal group and/or may be important to maintaining the	Spiritual value was rated as follows: 1) Low: Aboriginal cultural heritage values that do not appear to have any clear spiritual connection with an Aboriginal group at the local, regional, and/or national level 2) Moderate: Aboriginal cultural heritage values that have a moderately significant spiritual connection for an Aboriginal group at the local, regional, and/or national level

Criterion	Definition	Significance rating
	spiritual health and wellbeing of a culture or group.	3) High: Aboriginal cultural heritage values that have a highly significant spiritual connection for an Aboriginal group at the local, regional, and/or national level

The scientific significance of tangible Aboriginal cultural heritage values in this assessment has been differentiated by low (1), moderate (2) and high (3) ratings. These criteria include the contents of the cultural heritage value, the condition of preservation of the value, and the representativeness of the value in terms of the regional cultural heritage value inventory.

The historic, social, and spiritual significance of tangible Aboriginal cultural heritage values in this assessment have been also differentiated by low (1), moderate (2) and high (3) ratings. These ratings were based on professional archaeological experience and do not necessarily reflect the views of TOs unless such information was obtained during consultation with the relevant Aboriginal stakeholders through the CVA and other consultation. It is also important to note that the spiritual significance of values for each known Aboriginal Place in the Project Land is rated as high as it refers to the intangible values and meanings inherent in a place and plays a pivotal role in cultural preservation and identity formation.

Equal weight was given to all four criteria when determining the overall significance of each tangible Aboriginal cultural heritage value. The overall significance ranking determined for each value was derived as an overall score across the four criteria, as follows:

- ≤ 6 – Low significance
- 7-8 – Moderate significance
- 9 – High significance
- ≥ 10 – Very High significance

The historic, social, scientific, and spiritual significance of intangible Aboriginal cultural heritage values has been consistently rated as low for historic significance and high for the three other criteria, resulting in an overall very high significance ranking in each case. Cultural landscapes are recorded relatively rarely and are typically associated with long term and intensive landscape utilisation linked to intangible values. Where a specific, defined, and named geographic feature has been identified through the CVA recommendations as requiring protection from harm or has been explicitly noted as having very high cultural significance, it has been categorised as a 'cultural landscape' within this impact assessment. It is noted that the term cultural landscape refers to a symbiosis between human behaviour and a geographic area, therefore can include many geographic features – this relationship is however difficult to quantify scientifically without relating it to particular definable features within the landscape. Unlike tangible Aboriginal values, overall significance rankings for intangible values always give weight to views, and may be assigned on the basis of confidential traditional knowledge.

The significance rankings for all Aboriginal cultural heritage values are tabulated in Section 8.2. These rankings are used in the assessment of impacts for the Project, as provided in Section 9.2.

5.5.3 Assessment of impacts

The method for determining the potential impact posed by the Project on known Aboriginal cultural heritage values involved the following analysis:

- An assessment of the nature of the Aboriginal cultural heritage values (tangible and intangible)
- An assessment of cultural heritage significance of these Aboriginal cultural heritage values using established, internationally recognised criteria developed by Australia ICOMOS (the Burra Charter), as well as the opinions of the relevant Aboriginal stakeholders. This will comprise the historical, scientific, social, or spiritual significance of the Aboriginal cultural heritage values. These are further defined in Section 8.1.3
- An assessment of the nature and type of impact proposed by the Project

- An assessment of the degree of direct or indirect impact from the Project activities on the Aboriginal cultural heritage values. This information is provided for each value (tangible and intangible) in Section 8.2
- An assessment of whether harm to these Aboriginal cultural heritage values could be avoided, minimised or mitigated through management measures
- An assessment of the residual Project impacts on these Aboriginal cultural heritage values after the implementation of recommended management measures.

Table 5-4: Impact of Project (i.e., intersecting infrastructure) at the time of assessment.

Description
Complete: Infrastructure intersects the entirety of the known boundary of the Aboriginal cultural heritage value.
Partial: Infrastructure intersects a major portion of the Aboriginal cultural heritage value.
Negligible: Infrastructure intersects only a minor portion of the Aboriginal cultural heritage value.

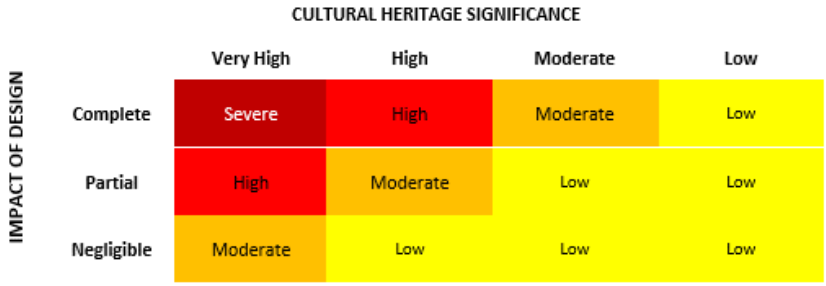


Figure 5-2: Impact magnitude ranking. Showing the impact of the Project and ranking of Aboriginal cultural heritage significance of sites. Nil impacts have been removed from this graphic.

The definition of the impact magnitude on known Aboriginal cultural heritage values ranges from nil to severe. From assessing the Aboriginal cultural heritage significance of each value, alongside the scale of impact (including impact of the design, and impact from archaeological discovery only), impact definitions have each been assigned a rating ranging from 0 (nil), 1 (low), 2 (moderate), 3 (high), or 4 (severe) (see Figure 5-2). These ratings are used in the assessment of impacts for the Project and their definitions are detailed in Table 5-5. This full assessment is provided in Section 9.2.

Table 5-5: Magnitude of impact definitions

Nil (0)	Low (1)	Moderate (2)	High (3)	Severe (4)
No impact or disturbance to a known Aboriginal cultural heritage value OR No measurable effect to a known Aboriginal cultural heritage value	A measurable but insignificant effect to a known Aboriginal cultural heritage value including minor disturbances such as surface vegetation clearance, with the exception of CMTs OR A measurable but insignificant effect to a known Aboriginal cultural heritage value including minimal loss of ground surfaces and substrates OR Low impact from discovery only. This has been added for	A measurable effect to a known Aboriginal cultural heritage value including partial loss of ground surfaces and substrates	A measurable effect to a known Aboriginal cultural heritage value including extensive and irreversible loss of ground surfaces and substrates OR A measurable effect to a known Aboriginal cultural heritage value including vegetation clearance; for example, resulting in the disturbance of CMTs	Extensive impact and irreversible loss to an Aboriginal cultural heritage value of exceptional value though a loss of ground surfaces and substrates as identified by the RAP and/or TOs, and/or First Peoples State Relations; for example, a burial

Nil (0)	Low (1)	Moderate (2)	High (3)	Severe (4)
	all subsurface deposits that have been identified via manual archaeological excavation but are no longer impacted by the design/ any infrastructure by the Project.			

The assessment of impact magnitude on known Aboriginal cultural heritage was supplemented by an assessment of overall impact; that is, the prior impacts and proposed impact of the Project on known Aboriginal cultural heritage and how this will contribute to overall impacts to Aboriginal Places in the wider region.

5.5.4 Recommendations for mitigating or reducing impacts

The assessment of impacts, particularly taking into account the nature and significance of known Aboriginal cultural heritage values and the views of Aboriginal stakeholders, informed the development of mitigation measures and EPRs.

The refinement of Project design and site selection have considered cultural heritage constraints. These factors were incorporated within the EES Attachment I: Project development and assessment of alternatives. Progressive refinement and design mitigations have occurred, and may occur further through micro-siting as fieldwork progresses, to avoid or minimise impacts to Aboriginal heritage values. To enable this, Jacobs has provided AusNet with detailed Aboriginal cultural heritage constraints mapping, along with recommendations for design refinement or design infrastructure relocation. This mapping details the extent of known Aboriginal cultural heritage, the assessed significance of that heritage, and recommendations for the avoidance of harm. This includes recommendations for the removal or relocation of infrastructure outside of the root protection zone of CMTs and within areas of PAS. Where the root protection zone of CMTs has been calculated, this zone has been used to calculate impacts; where the root protection zone is unknown, a 50m buffer has been applied to calculate impacts. Where alternative locations for design infrastructure cannot be provided for areas with the presence of, or potential for, Aboriginal cultural heritage, recommendations are made for harm minimisation, such as refinement of design including changes to tower assembly areas or stringing pad orientation. These progressive refinements and design mitigations are a key component of the ongoing consultation with the RAP and TOs, to avoid sites of high significance to the Aboriginal community as much as possible. Section 9.1 details examples of where design refinements recommended by Jacobs has minimised or avoided impacts to known heritage values within the Project Land.

CHMPs being prepared for the Project are the primary mechanism by which impacts on Aboriginal cultural heritage are to be managed. Each CHMP will specify mitigation measures (as management conditions in the CHMP) required for each Aboriginal value and when the mitigation measures need to take place (i.e., before, during and/or after the Project works take place). The mitigation measures will be developed as CHMP management conditions that require the approval of the relevant RAP or FP-SR.

5.5.5 Registered Aboriginal Parties

RAPs and TOs were consulted during the preparation of this impact assessment and to inform the development of the Project and understanding of its potential impacts. The boundaries of each RAP area are shown in Figure 5-3.

Table 5-6 lists specific engagement activities that have occurred in relation to Aboriginal cultural heritage, with more general engagement activities occurring at all stages of the Project. Feedback received during community consultation sessions is summarised in Section 5.9, relevant to the Aboriginal Cultural Heritage Impact Assessment.

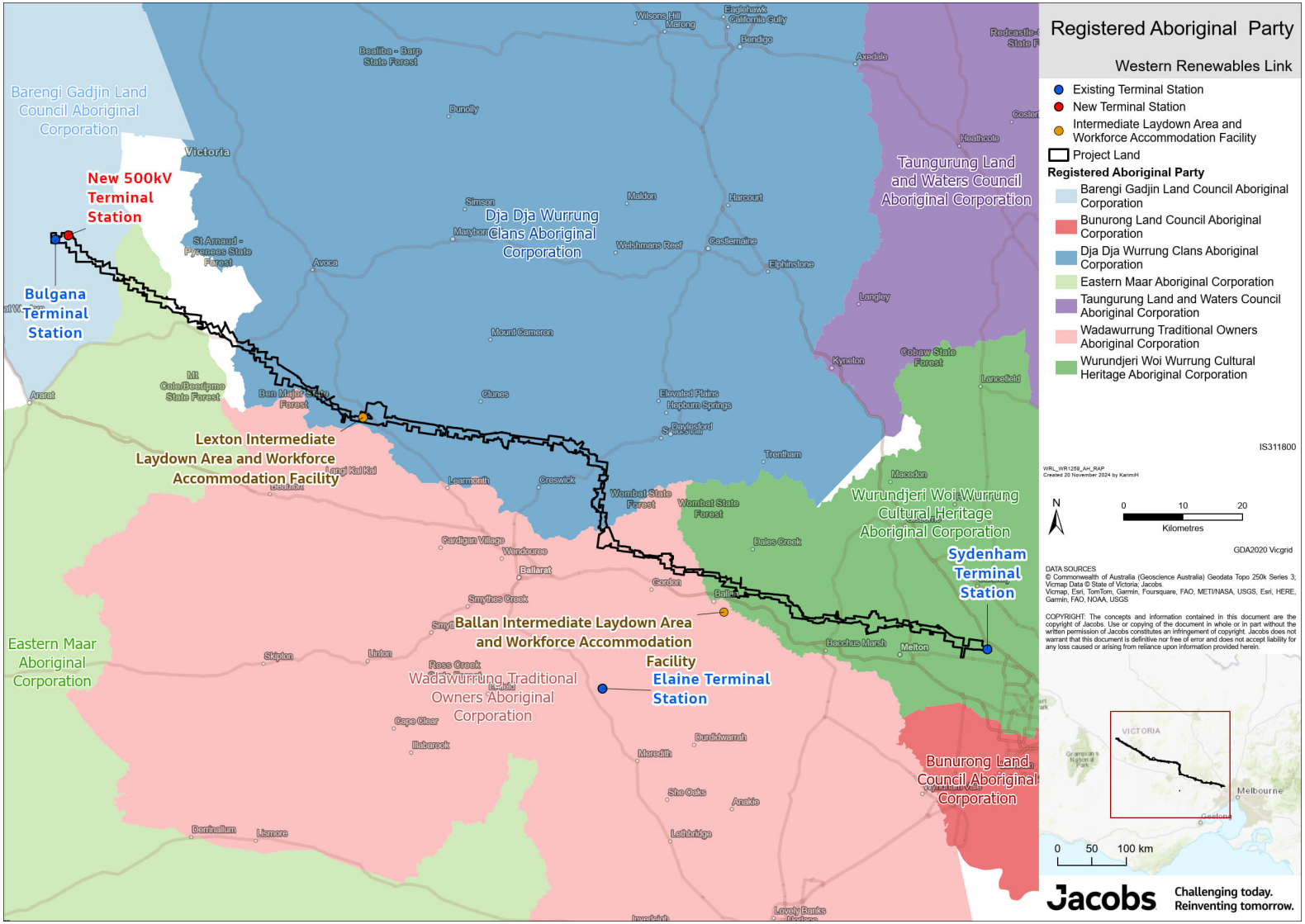


Figure 5-3: RAP boundaries, showing the Project Land boundary and associated terminal stations. Note that RAP boundaries correspond to the boundary of CHMPs, with the exception of CHMP 17311 and 18101. This boundary is shown within the Dja Dja Wurrung Clans Aboriginal Cooperation RAP area (Source: Jacobs, 2022).

5.6 Stakeholder engagement

Stakeholders and the community were consulted to support the preparation of this report and to inform the development of the Project and understanding of its potential impacts. Direct consultation with RAPs/ TOs and FP-SR occurs regularly and has been undertaken throughout the preparation of this assessment, the preparation of the CHMPs and in fieldwork organisation. This consultation will continue for the duration of the CHMP preparations, the construction stage, as well as the operational stage of the Project.

Table 5-6 lists specific engagement activities that have occurred in relation to Aboriginal cultural heritage, with more general engagement activities occurring at all stages of the Project. The majority of this engagement was undertaken as a part of the CHMP process. Feedback received during community consultation sessions is summarised in Section 5.7 relevant to the Aboriginal cultural heritage impact assessment.

The types of consultation undertaken include:

- **Pre-EES and CHMP Consultation**: In 2019 Biosis Pty Ltd, acting on behalf AEMO, undertook a high level options assessment due diligence for the proposed Project to understand potential effects on Aboriginal cultural heritage. As part of this assessment, a round of initial consultation was undertaken with TOs associated with the Proposed Route. In person meetings and discussions were conducted across western Victoria to solicit the feedback of TOs on a Proposed Route, including potential values present in the area and assessment options. The outcomes of this consultation were recorded in a confidential report delivered to AEMO.
- **Notice of Intent (NOI) submission**: Before the preparation of a CHMP commences and before any field assessment is conducted, an NOI is submitted to the Victorian Aboriginal Heritage Register (VAHR) and the evaluating authority (a RAP or FP-SR) for the CHMP.
- **CHMP Inception meetings**. These meetings are required as a part of the process for undertaking a CHMP. They are to introduce the evaluating authority (a RAP or FP-SR) to the Project, discuss the level of disturbance to any Aboriginal cultural heritage that may be present as a result of Project-related activities, and to discuss and agree on the appropriate methodology for fieldwork.
- **CHMP Standard Assessment Meeting**. These meetings might be required as a part of the process for undertaking a CHMP. The results of the completed pedestrian survey are shared with the evaluating authority (a RAP or FP-SR) and agreements are made as to any further assessment (such as subsurface testing and extent testing) that should be undertaken.
- **CHMP Complex Assessment Meeting**. These meetings might also be required as a part of the process for undertaking a CHMP. The results of the completed subsurface testing and extent testing, including the identification of any Aboriginal Places, are shared with the evaluating authority (a RAP or FP-SR) and discussion may include general and specific management conditions required for the activity in relation to Aboriginal Places.
- **Technical Reference Group (TRG) Meetings.** The TRG has been drawn from government agencies, regional authorities, registered Aboriginal parties or municipal councils that have a statutory or policy interest in the Project. These meetings allow the TRG to advise on matters that should be included in the scoping requirements for an EES, the need for and adequacy of technical reports, and the technical adequacy of the proposed EES and its response to the scoping requirements.
- **EES v CHMP Methodology Meetings**. These meetings were undertaken with the evaluating authority (a RAP or FP-SR) to discuss the level of field assessment required for the completion of this Impact Assessment and to agree on a methodology to ensure it could be undertaken in a manner consistent with the CHMP process.
- **EES Workshops.** These workshops were arranged to discuss the EES process and address questions or concerns from the TOs and Elders from the various RAP groups. Topics included expectations of engagement from the proponent, varied level of assessments and whether the RAP have concerns around

fieldwork gaps, as well as expectations around participation from TRG in reviewing EES documentation. All RAPs attended and participated in these workshops with the exception of WTOAC, who declined the offer.

- **Other Meetings** were undertaken relating to various matters, including the discussion of approaches for CVAs.
- **Fieldwork (including inductions and CVAs).** Fieldwork is required as a part of the process for preparing a CHMP. It is carried out with RAP and TO representatives throughout the life of each CHMP and includes detailed and comprehensive conversations on Country as well as participation in pedestrian surveys and subsurface excavation programs. Inductions have been undertaken as a part of the fieldwork days and separate to them. Site visits have also been undertaken with TO representatives, where relevant, during site visits on Country during the preparation of CVAs.

Engagement with RAPs and FP-SR up to and including 5 June 2024, with the addition of the EES workshops carried out in October 2024 is summarised in Table 5-6 below.

Table 5-6: Stakeholder engagement undertaken for Aboriginal cultural heritage

Stakeholder group	Inception meeting	Standard assessment meeting	Complex assessment meeting	TRG meetings	EES v CHMP Methodology meetings	EES Workshops	Other meetings	Fieldwork (inc. inductions)
Barengi Gadjin Land Council Aboriginal Corporation	25/08/2020 (CHMP17313) 01/09/2020 (CHMP 17312)	16/02/2021 (CHMP17313) 2/03/2021 (CHMP17312)	08/02/2023 (CHMP17313)	08/12/2020 (TRG#3) 17/02/2021 (TRG#4) 22/06/2022 (TRG#16) 21/09/2023 (TRG#20) 01/02/2024 (TRG#23)	01/07/2022	18/10/2024	07/09/2021 (CVA) 01/02/2022 (CVA) 24/08/2023 (220kV to 500kV uprate and design change overview) 11/04/2024 (new 500kV terminal station near Bulgana meeting - methodology)	October to November 2020; April to September 2021; February to September 2022; September 2023; November 2023; February to April 2024 28/09/2021 (CVA)
Eastern Maar Aboriginal Corporation	23/10/2020 (CHMP17321) 01/09/2020 (CHMP 17312)	04/03/2021 (CHMP 17321) 02/03/2021 (CHMP 17312)	12/04/2023 (CHMP17321)	08/12/2020 (TRG#3) 17/02/2021 (TRG#4) 22/06/2022 (TRG#16) 21/09/2023 (TRG#20) 01/02/2024 (TRG#23)	01/07/2022	18/10/2024	19/01/2022 (CVA) 14/04/2022 (CVA) 8/09/2022 (CVA) 24/08/2023 (220kV to 500kV uprate and design change overview)	October to November 2020; April to September 2021; March to September 2022; September to November 2023; January 2024 29/09/2021 (CVA)
Dja Dja Wurrung Clans Aboriginal Corporation	18/08/2020 (CHMP17311) 01/09/2020 (CHMP 17312) 19/08/2021 (CHMP18101)	16/02/2021 (CHMP 17311) 01/09/2020 (CHMP 17312)	18/10/2022 (CHMP 18101)	08/12/2020 (TRG#3) 17/02/2021 (TRG#4) 22/06/2022 (TRG#16) 21/09/2023 (TRG#20) 01/02/2024 (TRG#23)	01/07/2022	18/10/2024	28/01/2022 (CVA) 11/03/2022 (Briefing) 24/08/2023 (220kV to 500kV uprate and design change overview) 18/10/2024 (EES Workshop)	October to November 2020; April to December 2021; January to September 2022; January to June 2023, August to December 2023, and January to June 2024 29/09/2021 (CVA) 26-27/10/2021 (CVA)

Stakeholder group	Inception meeting	Standard assessment meeting	Complex assessment meeting	TRG meetings	EES v CHMP Methodology meetings	EES Workshops	Other meetings	Fieldwork (inc. inductions)
Wadawurrung Traditional Owners Aboriginal Corporation	09/08/2021 (CHMP 18108) 16/08/2021 (CHMP 18108)	28/04/2022 (CHMP 18108)		08/12/2020 (TRG#3) 17/02/2021 (TRG#4) 22/06/2022 (TRG#16) 21/09/2023 (TRG#20) 01/02/2024 (TRG#23)	01/07/2022 13/08/2021	-	11/10/2021 (Briefing) 18/10/2021 (Cultural Awareness Training) 14/01/2022; 04/02/2022; 11/02/2022, 18/02/2022; 21/02/2022; 14/04/2022; 22/04/2022, 27/04/2022; 22/04/2022, 29/07/2022; 05/08/2022, 12/08/2022; 26/08/2022; 02/09/2022; 16/09/2022; 07/10/2022; 14/10/2022; 21/10/2022; 20/12/2022; 13/01/2023; 27/01/2023; 10/02/2023; 24/02/2023; 10/03/2023; 24/03/2023; 07/04/2023; 21/04/2023; 05/05/2023; 19/05/2023; 02/06/203; 16/06/2023. 30/06/2023; 14/07/2023; 28/07/203; 07/08/2023; 21/08/2023; 04/09/2023; 18/09/2023; 02/10/2023; 16/10/2023; 30/10/2023; 02/04/2024; 24/04/2024; 08/05/2024; 05/06/2024 (Regular update meetings) (CVA/CHMP) 31/10/2023 (L1 - 220 to 500 kV uprate and design change overview)	January 2022 to January 2023; July 2023, and October to December 2023; January to February 2024; May to June 2024

Stakeholder group	Inception meeting	Standard assessment meeting	Complex assessment meeting	TRG meetings	EES v CHMP Methodology meetings	EES Workshops	Other meetings	Fieldwork (inc. inductions)
Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation.	13/08/2021 (CHMP 18111)	09/12/2021 (CHMP 18111)	17/05/2022 (CHMP 18111); 09/12/2022 (CHMP 18111)	08/12/2020 (TRG#3) 17/02/2021 (TRG#4) 22/06/2022 (TRG#16) 21/09/2023 (TRG#20) 01/02/2024 (TRG#23)	13/08/2021 01/07/2022	15/10/2024	16/03/2022 (CVA) 16/05/2022 (CVA) 20/06/2022 (CVA) 12/01/2023 (CVA) 05/04/2023 (Briefing) 27/06/2023 (Briefing) 10/08/2023 (L1 - 220 to 500 kV uprate and design change overview) 15/10/2024 (EES Workshop)	September to November 2021; January to December 2022, and January to October 2023 21/02/2022 (CVA) 16/03/22 (CVA)
First Peoples State Relations	01/09/2020 (CHMP 17312)	02/03/2021 (CHMP 17312)	12/04/2023 (CHMP 17321)	08/12/2020 (TRG#3) 17/02/2021 (TRG#4) 22/06/2022 (TRG#16) 21/09/2023 (TRG#20) 01/02/2024 (TRG#23)	01/07/2022	15/10/2024; 18/10/2024	26/09/2023 (L1 - 220 to 500 kV uprate and design change overview) 15/10/2024 (EES Workshop) 18/10/2024 (EES Workshop)	October to November 2020; April to September 2021; February to March 2022, July 2022; February 2023; August and September 2023

5.7 Community feedback

RAPs and TOs are stakeholders in the Project, and they represent the Aboriginal communities whom the Project will impact. As such, their consultation and feedback are detailed in Sections 5.6 and 8.2. In addition, consultation has been ongoing with the wider community throughout the design development and the EES process. Social Pinpoint data (Section 6.8.2) has also been assessed and considered in this Impact Assessment. This data encompasses contributions from the community that have been received via a range of engagement events, the Project website, email, and telephone hotline. Feedback was also received through community consultation sessions and the gathering of Social Pinpoint data provided by the community.

The Social Pinpoint data was collected via an online mapping tool, which asked stakeholders to provide feedback on what is important to individuals and communities in their local area. This information is general in nature and not specific to Aboriginal cultural heritage; however, this data can contain information relevant to Aboriginal cultural heritage values. The online mapping tool was available between June 2020 and October 2020 and in 2022.

5.8 Assumptions, limitations and uncertainties

The following assumptions and limitations apply to the Aboriginal Cultural Heritage Impact Assessment:

- As previously noted, multiple CHMPs are currently being prepared for the Project. Due to the size and complexity of the Project, this process is a lengthy and iterative one. Fieldwork for the CHMPs is ongoing, particularly across the easternmost portion of Area 4, and Areas 5 and 6 (Table 8-3), and on this basis, only results of fieldwork completed to date (up until 7 July 2024) have been incorporated into the impact assessment presented in Section 9.
- As CHMPs are not yet complete for the Project, unknown Aboriginal cultural heritage values may be identified within the Project Land following this assessment. Statutory authorisation for the management of unknown values in accordance with the conditions of the CHMPs is granted by the relevant authority (RAP or FP-SR).
- Land access has not been available to all private properties within the Project Land or as identified through preliminary assessments as requiring survey. Landholder permission could not be obtained for many properties within the Proposed Route to undertake the necessary field assessments. In some cases, where landholder permission has not been granted, access to these properties has been undertaken in accordance with AusNet's powers under section 93 of the *Electricity Industry Act 2000*.
- The fieldwork coverage for these areas within the Proposed Route, as discussed in Section 8.1.1, has been affected by RAP fieldwork requirements, cropping regimes and waterlogged land, and obtaining land access to complete assessments. As noted earlier, some high priority properties were not able to be accessed at this time due to high OH&S risks including unsafe vehicle access and landholder objections to attempting access in accordance with AusNet's powers under section 93 of the *Electricity Industry Act 2000.* This limitation has been discussed in detail during the life of the Project with the various RAP and TO groups.
- Where access has not been undertaken, a digital predictive model (see Section 7) has been developed to support an in-depth desktop evaluation as an alternative to standard assessment field surveys in certain areas with high OH&S risks associated with land access. This predictive modelling has been supported by consultation with the RAP groups through the CVA and during RAP meetings and this is presented in Section 9.1.3.
- Alternative approaches have been applied, where possible, to complement targeted field assessments and to ensure areas most likely to contain, or have the potential to contain, important Aboriginal cultural heritage values, are assessed (refer to Section 5.8).
- The VAHR contains information only on registered Aboriginal Places, usually those identified during archaeological fieldwork and research. A location should not be presumed to be free of Aboriginal cultural heritage if it does not appear on the Register.

- The interpretation of subsurface Aboriginal cultural heritage in this study is based on field observations from sampling locations using predictive modelling and hypotheses regarding Aboriginal land use. Aboriginal cultural heritage may exist in areas that were not investigated through archaeological subsurface testing due to it not fitting with understood predictive models. Control testing of the null hypothesises is undertaken to mitigate this risk.
- Residual impacts are assumed to have the same magnitude of impact rating as known Project impacts on Aboriginal cultural heritage values (refer to Figure 5-2).
- This assessment has been undertaken having regard to the Proposed Route provided by AusNet at the time of assessment.
- The impact assessment is based on the design information provided by AusNet on the Project (Project components and location of components) at the time of assessment. As such, impacts to Aboriginal cultural heritage values listed in Section 8 have only been discussed where they intersect the Project design. Much of the information and data used in this report is dynamic and constantly updated to incorporate new Project design information. The information is presumed to be accurate at the time of writing.
- This assessment does not account for future changes to the design or design mitigations to heritage values that may occur through micro-siting.

Jacobs has relied upon, and presumed to be accurate, any information (or confirmation of the absence thereof) provided by AusNet and/or from other sources. Gaps in completed fieldwork that would inform the Aboriginal Cultural Heritage Impact Assessment were discussed with the relevant RAPs and TO groups at EES workshops held in October 2024 (refer to Section 5.6). There were no concerns raised by the RAP and TO groups in attendance regarding fieldwork coverage in relation to this impact assessment and there have been no concerns raised following the workshops by the attendees, noting such gaps would be filled through the CHMP processes. Further mitigation measures may be identified during the preparation of the CHMPs. Discussion during these EES workshops noted the differences between EES and CHMP and the continued preparation of the CHMPs beyond the completion of the EES. All stakeholders participated in these workshops with the exception of WTOAC, who declined the invitation.

In other parts of this impact assessment there are further specific details about limitations and assumptions related to specific aspects of the assessment (such as Sections 7.6, 8.2.4.5, and 9.2.3.1.2).

6. Existing conditions

6.1 Environmental context

The Project Land traverses the western region of Victoria, from Bulgana in the west to Sydenham in the east, crossing a variety of geological and ecological zones. The following sections review the geology, climate, hydrology, and vegetation in the regions crossed by the Project Land, specifying where these conditions apply to each Study Area.

6.1.1 Geology and geomorphology

Two major (tier 1) geomorphic divisions are intersected by the Project Land: Western Uplands (Section 6.1.1.1) and Western Plains (Section 6.1.1.2). In accordance with the Victorian Geomorphological Framework, these are further subdivided into tier 2 and tier 3 divisions which are detailed in Technical Report Q: Geology and Soils Impact Assessment and summarised in Section 6.1.1.3. The three-tier divisions as they apply to the Project Land are summarised in Table 6-1; see also geomorphic divisions and land systems maps in Appendix A.

6.1.1.1 Western Uplands

The Western Uplands extend westwards from the Kilmore Gap to the Glenelg River at the Dundas Tableland and forms part of the Goldfields bioregion. The Western Uplands are a composite of low relief landscapes described as a broad, elongated and dome-like east-west drainage divide with an average elevation of only 300m (DEDJTR 2013a). The highest summit within this landscape comprises Mount William in the Grampians National Park, at an elevation of 1,167m above sea level. Remnants of a broad Mesozoic palaeosurface have been retained in the plateaus, such as Mount Alexander within the Goldfields bioregion. Localised dissection and tectonic activity have formed fault scarps and monoclines across the Western Uplands, leaving behind the dissected landscapes of the Brisbane and Blackwood Ranges, extensive gorges such as Lerderderg Gorge, and large valleys, including the Parwan Valley. Volcanic plains also occur within the Midlands part of the Western Uplands (also known as the Dissected Uplands), created by numerous and closely spaced scoria cones and their surrounding lava flows. The Goldfields bioregion is characterised by a series of low hills and rolling plains, with metamorphic and old volcanic rocks forming rugged slopes and ridges (Agriculture Victoria 2020a; 2020b; DEECA 2023b; 2023a).

The western and central sections of the Project Land are situated within the Dissected Uplands, which is characterised by various interwoven landforms that were uplifted during the Palaeogene and the late Neogene periods. This process produced undulating hills and broad valleys of Palaeozoic sedimentary rocks with granitic plutons. Volcanic eruptions filled the broad valleys to form elongated basalt plains, plus a variety of other volcanic landforms, during the Plio-Pleistocene era. The highest summit within the Dissected Uplands is that of Mount Buninyong, at 745m above sea level (Agriculture Victoria 2020a).

The Western Uplands is further divided into subdivisions or subunits, which are described in Table 6-1.

6.1.1.2 Western Plains

The Western Plains are part of the Newer Volcanic Province of south-eastern Australia. The Western Plains comprise low-lying undulating plains, with their landscapes being formed on some of the youngest rocks in Victoria, such as the stony rises. Much of the Western Plains comprises natural grasslands plain, bounded by the Western Uplands to the north and the coastline and the Otway Ranges to the south (Agriculture Victoria 2015). As with the Western Uplands, the Western Plains also include volcanic plains. Volcanic plains were generally formed from lobes of lava which flowed from the eruption points, overlapping to form a veneer of basalt lava flows (Agriculture Victoria 2016).

The Volcanic and Sedimentary plains were built up by sporadic volcanic eruptions over a period of about 5 million years and were formed by lava flows from various eruption points. These flows vary in thickness according to both the underlying topography and the present-day ground surface; they are interleaved in places

with pyroclastic deposits (scoria and tuff) and discontinuous buried palaeosoils of variable thickness. Drainage is generally poorly developed across the volcanic plains, with most lakes being formed in a shallow basin in the central region of the plains due to the uplift of the Otway Ranges and the disruption of drainage by volcanic eruptions. The fluctuating lake levels during the Pleistocene have resulted in lunette formations, which are particularly prominent in the Beeac-Eurack district north of Colac. Grasslands are common on the plains, and dense trees commonly mark young stony rise flows on the cones (Agriculture Victoria 2016).

The Western Plains are further divided into subdivisions or subunits, which are described in Table 6-1.

6.1.1.3 Conditions specific to the Project Land

According to EES Technical Report A: Geology and Soils Impact Assessment, there are four distinct geological and geomorphological conditions across the Project Land that intersect the Western Uplands and/or Western Plains geomorphic divisions. These are summarised below:

- **Bulgana to Lexton:** Within the Western Uplands geomorphic province, which is characterised by undulating hills and ridges formed by sedimentary rock units intersected by valleys filled with narrow creek valleys and broad low-lying areas. The existing and proposed Bulgana Terminal Stations feature terraces and floodplains.
- **Lexton to Ballan:** Within the Western Uplands geomorphic province, which is characterised by gently undulating hills formed by Tertiary lava flows with isolated steep hills associated with local volcanic eruption points. Conditions at the existing Elaine Terminal station features predominantly plateaux and rises of residual Cainozoic landscapes with hills, valley slopes and plains.
- **Ballan to Melton West:** Within the Western Uplands and Western Plains geomorphic provinces, which is characterised by undulating hills with steep hills ranges formed by sedimentary rock units with broad low-lying areas dominated by alluvium units.
- **Melton West to Sydenham:** Within the Western Plains geomorphic province, which is characterised by flat Tertiary Volcanic plains with low-lying areas associated with watercourse and drainage lines, inclusive of the existing Sydenham Terminal Station.

Table 6-1 lists which geomorphological units and subunits relate to each of the Study Areas defined in this report (see Section 5.2).

Table 6-1: Geomorphological units described throughout the Project Land (table adapted from Technical Report Q: Geology and Soils Impact Assessment)

Geomorphological Units			Geological location / Conditions	Related Study Area
Tier 1	**Tier 2**	**Tier 3**	**Location**	
Western Uplands	Dissected Uplands (formerly Midlands)	2.1.1 Ridges, escarpments, mountains on non-granitic Palaeozoic rocks	Sedimentary rock hills and ridgelines to the south of Glenlofty, hills to the south of Lexton	Area 1: BGLCAC Area 2: EMAC Area 4: DJAARA
			Steep slopes, ridges and peak of Castlemaine Group hills to the north of Bacchus Marsh	Area 6 WWCHAC
		2.1.2 Hills, valley slopes and plains on non-granitic Palaeozoic rocks	Sedimentary rock ridgeline to north-east of Mount Lonarch	Area 2: EMAC Area 4: DJAARA
			Granite hills in the west of section, lower slopes	Area 4: DJAARA
			Castlemaine Group hills, Haydens Hill (Bolwarrah)	Area 5: WTOAC
			Slopes, steep hills and low-lying areas comprising Bacchus Marsh Formation, Alluvium, Darley Gravel, Castlemaine Group Hills. Located at east Myrniong, north Bacchus Marsh and Coimadai (including Merrimu Reservoir).	Area 6: WWCHAC
			Bulgana Terminal Station	Area 1: BGLCAC
			Elaine Terminal Station	Area 5: WTOAC
		2.1.3 Ridges, escarpments, mountains on granitic Palaeozoic rocks	Ridges and peak of Mount Bolton and Mount Beckworth	Area 4: DJAARA
		2.1.4. Hills, valley slopes and plains on granitic Palaeozoic rocks	Slopes around granite hillside at Glenlogie	Area 3: Non-RAP Area Area 4: DJAARA
		2.1.5. Plateaux and rises of residual Cainozoic landscapes	Valleys and low points around rivers and creeks associated with Quaternary and Tertiary alluvial deposits.	Area 1: BGLCAC Area 2: EMAC Area 4: DJAARA
			Elaine Terminal Station	Area 5: WTOAC
		2.1.6 Eruption points and volcanic plains	Majority of Proposed Route - flat basalt plains with isolated volcanic eruption points	Area 4: DJAARA Area 5 WTOAC Area 6 WWCHAC
			Newer Volcanic Group plains with Older Volcanic Group valleys (Petland Hills), from Ballan to Myrniong.	Area 6: WWCHAC
		2.1.7. Terraces and floodplains	Valleys and low points around rivers and creeks associated with Quaternary and Tertiary alluvial deposits.	Area 1: BGLCAC Area 2 EMAC Area 3: Non-RAP Area

Geomorphological Units			Geological location / Conditions	Related Study Area
Tier 1	Tier 2	Tier 3	Location	
				Area 4: DJAARA
			Bulgana Terminal Station	Area 1: BGLCAC
			Wilson Reservoir	Area 5 WTOAC
Western Plains	Volcanic Plains	6.1.1 Eruption points: maars, scoria cones and lava shields, including associated ash and scoria deposits	Mount Kororoit.	Area 6: WWCHAC
		6.1.2 Stony rises	Flat basalt plains of north-east Melton West to Sydenham	Area 6: WWCHAC
			Sydenham Terminal Station	Area 6: WWCHAC
		6.1.3 Plains with poorly developed drainage and shallow regolith	Flat basalt plains of north-west Melton West	Area 6: WWCHAC
	Sedimentary Plains	6.2.5 Terraces and floodplains and coastal plains	Flat plain of Darley Gravel on the border of Long Forest and Melton LGA	Area 6: WWCHAC

6.1.2 Climate

The Project Land has a climate of cool, wet winters and warm summers, with the average rainfall varying across the Project Land. Climatic patterns are linked to variation and abundance of different species of flora and fauna. Rainfall also feeds rivers and creeks throughout the Project Land; whereby minor tributaries can act as a seasonal resource during wet seasons. The closest measurements taken in 2024 near the Proposed Route were 17.0 mm in May at Pyrenees (Ben Nevis), 27.4 mm in May at Lexton, 25.4 mm in May at Creswick, 58.7 mm in May at Pykes Creek Reservoir. Likewise, the mean maximum and minimum temperatures vary across the Project Land.

The mean temperatures recorded in 2024 at the closest recorded locations along the Proposed Route are 12.0-23.4°C in January and 6.5-12.9°C in May at Pyrenees (Ben Nevis), 12.7-24.5°C in January and 5.0-15.3°C in May at the Ballarat Aerodrome, and 14.8-25.9°C in January and 7.6-17.2°C in May at Melbourne Airport (Bureau of Meteorology 2023). These climatic conditions would have influenced Aboriginal occupation and settlement patterns and suggest that Aboriginal people would have focussed on permanent waterways in the region during the summer months for fishing and would have dispersed across the well-watered plains during the winter months for hunting. (Ellender and Weaver 1994, pp. 30-31). However, the climate and associated hydrology, geomorphology and ecology would have fluctuated significantly over the long timespans of Aboriginal occupation in the region.

6.1.3 Hydrology

Permanent water sources were important to pre-contact habitation and settlement. During the contact and post-contact period, waterbodies and waterways were a major focus of conflict, as they were valuable to incoming non-Aboriginal settlers as well as to Aboriginal people. Sufficient water was important in maintaining healthy landscapes and human populations (Barber and Woodward 2018). Additionally, permanent water sources are described as sites of shared memory and history (Toussaint *et al.* 2005). Visiting these places is not just a practical issue of finding water but also an occasion for remembering birthplaces, significant activities and the death of previous generations (Toussaint *et al.* 2005). As described in Technical Report T: Surface Water Impact Assessment, the Project Land crosses and borders several major rivers including:

- Wimmera River
- Avoca River
- Loddon River
- Moorabool River
- Werribee River
- Maribyrnong River

Portions of catchments intersected by the Project Land and the relevant Study Areas for each river are shown in Table 6-2 and Figure 6-1 – Figure 6-2. Note that rivers at the boundaries of RAP areas are listed as relevant to more than one RAP.

Table 6-2: Major river basins associated with the Project Land (table adapted from Techncial Report T: Surface Water Impact Assessment)

River Catchment	Portion of the Project Land	Relevant Study Area.
Wimmera-Avon Rivers	Approximately 35km of the Project Land.	Area 1: BGLCAC Area 2: EMAC Area 3: Non-RAP Area
Avoca River	Approximately 15km of the Project Land.	Area 3: Non-RAP Area Area 4: DJAARA
Loddon River	Approximately 68km of the Project Land.	Area 4: DJAARA Area 5: WTOAC
Moorabool River	Approximately 17km of the Project Land.	Area 4: DJAARA Area 5: WTOAC
Werribee River	Approximately 53km of the Project Land.	Area 5: WTOAC Area 6: WWCHAC
Maribyrnong River	Approximately 2km of the Project Land.	Area 6: WWCHAC

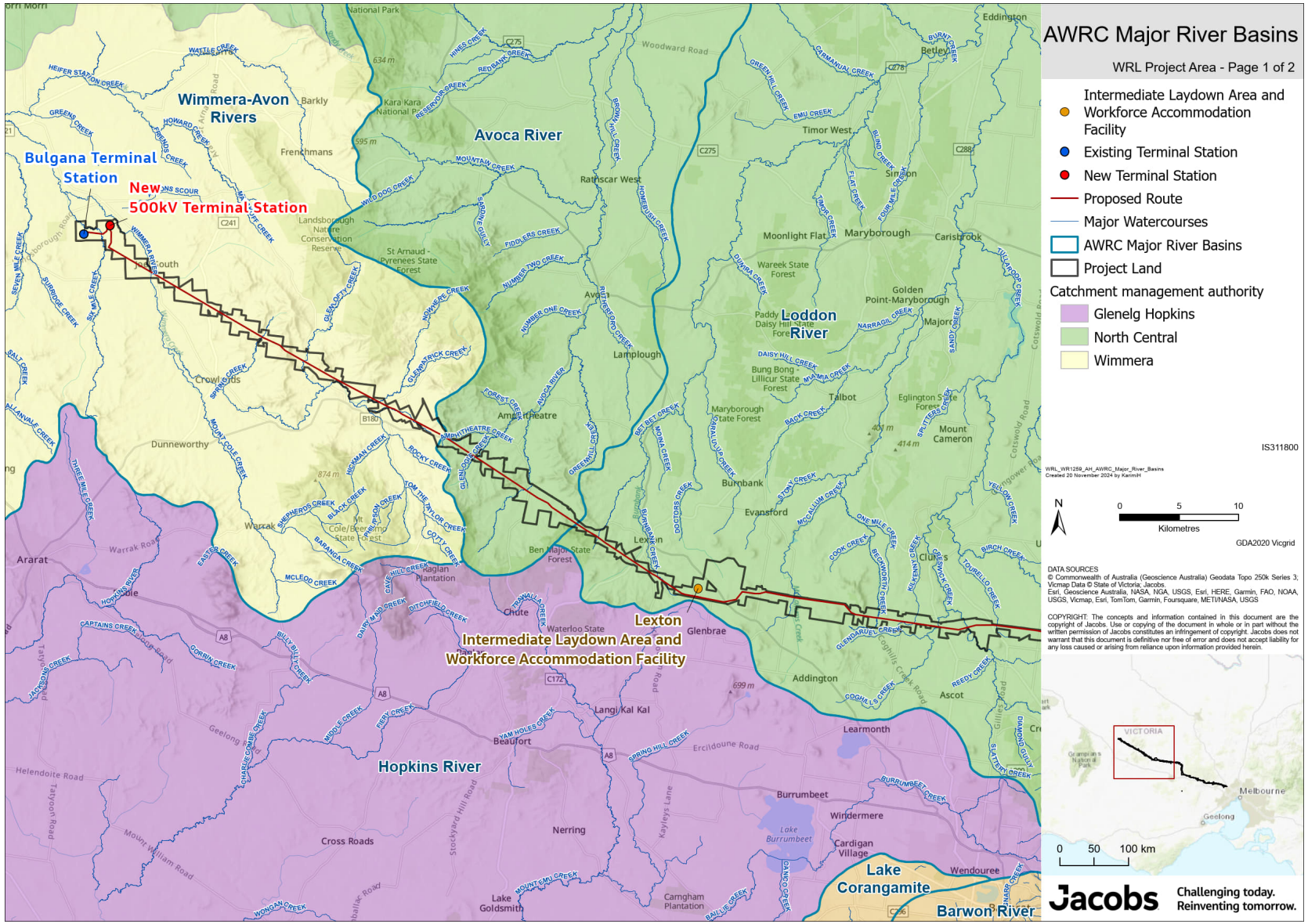


Figure 6-1: Australian Water Resources Council (AWRC) Major River Basins across the Project Land, page 1 of 2 (Source Jacobs, 2023).

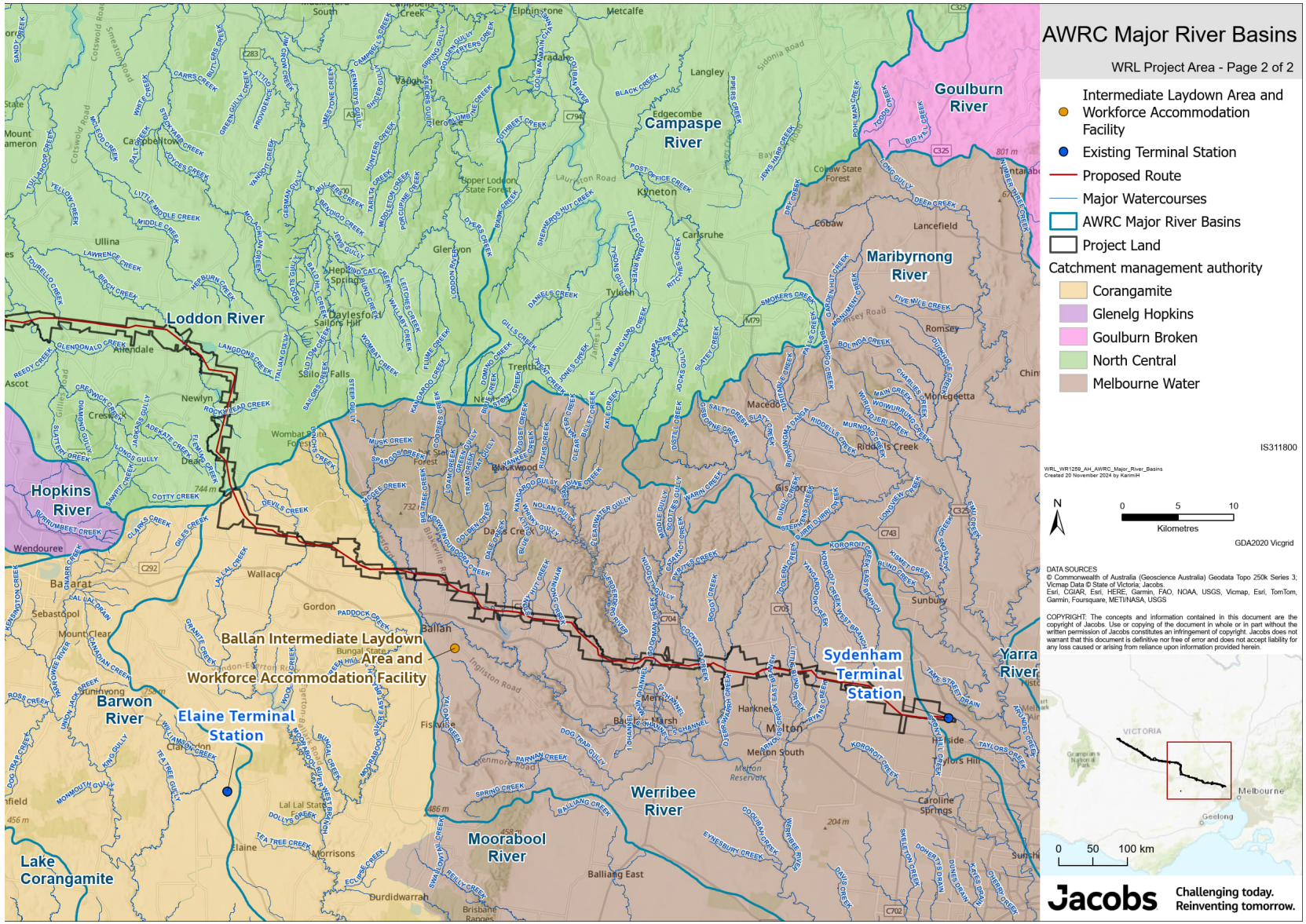


Figure 6-2: Australian Water Resources Council (AWRC) Major River Basins across the Project Land, page 2 of 2 (Source Jacobs, 2023).

There are also a large number of smaller creeks and streams associated with the catchment of these rivers.

The Project Land also intersects with numerous mapped current wetlands. As per Technical Report T: Surface Water Impact Assessment, the largest mapped wetlands located within the Project Land are associated with artificially created and naturally occurring water supply reservoirs, including Merrimu Reservoir (230 ha), Pykes Creek Reservoir (205 ha), and Hepburn Lagoon (112 ha).

The Surface Water Impact Assessment provides additional contextual information for the waterways across the Project Land.

6.1.4 Biodiversity

Key biodiversity values are considered in the context of important biodiversity drivers such as bioregions and broad habitat and vegetation types, including communities and species that populate the modern Ecological Vegetation Class (EVC), along with original (pre-1750) EVCs and details of the plants and vegetation that would have populated them (Appendix B).

The information relevant to Aboriginal cultural heritage in the Project Land has primarily been summarised from the Biodiversity Impact Assessment.

6.1.4.1 Bioregions

The majority of the Project Land is located in the following three bioregions as shown in Table 6-3:

- Central Victorian Uplands
- Goldfields
- Victorian Volcanic Plain.

Table 6-3: Bioregion descriptions

Bioregion	Bioregion description (DEECA 2023b)	EVCs in this Bioregion in the Project Land
Goldfields	Located in central Victoria, the Goldfields bioregion is dominated by dissected uplands (predominantly a northerly aspect) of Lower Palaeozoic deposits. Metamorphic rocks have formed steeply sloped peaks and ridges. A variety of relatively poor soils are dominant with yellow, grey and brown texture contrast soils (Chromosols and Sodosols) and minor occurrences of friable earths (Dermosols and Ferrosols). The climate is temperate with uncertain rainfall varying from 400-700mm per annum, usually higher in winter. Maximum temperatures range from 12 to 32 degrees Celsius, daily minima range from 2 – 15 degrees Celsius. Box Ironbark Forest, Heathy Dry Forest and Grassy Dry Forest ecosystems dominate the lower slopes or poorer soils. The granitic and sedimentary (with Tertiary colluvial aprons) terrain is dominated by Grassy Woodlands much of which has been cleared. Occasional low-lying corridors of alluvial valleys between the uplands are dominated by Low Rises Grassy Woodland and Alluvial Terraces Herb-rich Woodland ecosystems. A number of regionally important rivers transect the bioregion, mostly from south to north flowing into the Murray River, and include the Wimmera, Avoca, Loddon, Campaspe and Goulburn Rivers.	22 Grassy Dry Forest 23 Herb-rich Foothill Forest 47 Valley Grassy Forest 55 Plains Grassy Woodland 67 Alluvial Terraces Herb-rich Woodland 68 Creekline Grassy Woodland 70 Hillcrest Herb-rich Woodland 73 Rocky Outcrop Shrubland/Rocky Outcrop Herbland Mosaic 76 Grassy Woodland/Alluvial Terraces Herb-rich Woodland Mosaic 125 Plains Grassy Wetland 132 Plains Grassland 152 Alluvial Terraces Herb-rich Woodland/Plains Grassy Woodland Complex 175 Grassy Woodland 320 Grassy Dry Forest/Heathy Dry Forest Complex 641 Riparian Woodland

Bioregion	Bioregion description (DEECA 2023b)	EVCs in this Bioregion in the Project Land
		803 Plains Woodland896 Grassy Woodland/Heathy Dry Forest Complex
Central Victorian Uplands	Located in central Victoria, the Central Victorian Uplands is dominated by Lower Paleozoic deposits giving rise to dissected uplands at higher elevations, amongst granitic and sedimentary (with Tertiary colluvial aprons) terrain with metamorphic and old volcanic rocks, which have formed steeply sloped peaks and ridges. The less fertile hills support Grassy Dry Forest and Heathy Dry Forest ecosystems. Herb-rich Foothill Forest and Shrubby Foothill Forest ecosystems dominate on the more fertile outwash slopes. The granitic and sedimentary (with Tertiary colluvial aprons) terrain is dominated by Grassy Woodlands, much of which has been cleared. Lower lying valleys and plains are dominated by Valley Grassy Forest and Plains Grassy Woodland ecosystems.	18 Riparian Forest 20 Heathy Dry Forest 21 Shrubby Dry Forest 22 Grassy Dry Forest 23 Herb-rich Foothill Forest 47 Valley Grassy Forest 53 Swamp Scrub 55 Plains Grassy Woodland 64 Rocky Chenopod Woodland 68 Creekline Grassy Woodland71 Hills Herb-rich Woodland76 Grassy Woodland/Alluvial Terraces Herb-rich Woodland Mosaic 83 Swampy Riparian Woodland 132 Plains Grassland 152 Alluvial Terraces Herb-rich Woodland/Plains Grassy Woodland Complex 164 Creekline Herb-rich Woodland 175 Grassy Woodland198 Sedgy Riparian Woodland 320 Grassy Dry Forest/Heathy Dry Forest Complex 693 Plains Woodland/Plains Grassland Mosaic 851 Stream Bank Shrubland 894 Scoria Cone Woodland 896 Grassy Woodland/Heathy Dry Forest Complex
Victorian Volcanic Plain	Located in western Victoria, the Victorian Volcanic Plan is dominated by Cainozoic volcanic deposits. These deposits formed an extensive flat to undulating basaltic plain with stony rises, old lava flows, numerous volcanic cones and old eruption points, which is dotted with shallow lakes both salt and freshwater. Numerous volcanic cones dot the landscape with scoria cones being the most common (e.g., Mt Elephant, Mt Napier and Mt Noorat) although some basalt cones are present (e.g., Mt Cottrell). Soils are generally shallow reddish-brown to black loams and clays. They are fertile and high in available phosphorous. Older flows in the Cressy and Hamilton areas have allowed a greater development of deep soils. Dark saline soils occur around the margins of some lakes. The soils are variable ranging from red friable earths and acidic texture contrast soils (Ferrosols and Kurosols) on the higher fertile plain to scoraceous material, and support Plains Grassy Woodland and Plains Grassland ecosystems. Calcareous sodic texture contrast soils grading to yellow acidic earths (Chromosols and Sodosols to Dermosols), on the intermediate plain, and grey cracking clays (Vertosols) on the low plains, support Stony Knoll Shrubland, Plains Grassy Woodland and Plains Grassy Wetland ecosystems. On the stony rises (volcanic outcropping) the stony earths (Dermosols and Tenosols) support Stony Rises Herb-rich	18 Riparian Forest 22 Grassy Dry Forest 23 Herb-rich Foothill Forest 47 Valley Grassy Forest 53 Swamp Scrub 55 Plains Grassy Woodland 68 Creekline Grassy Woodland 71 Hills Herb-rich Woodland 83 Swampy Riparian Woodland 125 Plains Grassy Wetland 132 Plains Grassland 164 Creekline Herb-rich Woodland 175 Grassy Woodland 198 Sedgy Riparian Woodland 693 Plains Woodland/Plains Grassland Mosaic 851 Stream Bank Shrubland 894 Scoria Cone Woodland

Bioregion	Bioregion description (DEECA 2023b)	EVCs in this Bioregion in the Project Land
	Woodland, Basalt Shrubby Woodland and Herb-rich Foothill Forest ecosystems. Wetland formations include inland salt marshes, permanent and intermittent freshwater and saline/brackish lakes, permanent freshwater ponds and marshes and inland, subterranean karst wetlands. The region is characterised by a rainfall of 450 to 840mm per annum, with a relatively even distribution throughout the year. The main river systems include the Maribyrnong, Werribee, Moorabool, Barwon, Corangamite, Hopkins, Glenelg and Merri Rivers, and Mount Emu and Leigh Creeks.	

6.1.4.2 Pre-1750 EVCs

The Project Land is also host to a range of pre-1750 EVCs. This information is relevant to understanding the types of ecological resources utilised by Aboriginal people within the Project Land prior to European contact. As such, this information informs the predictive statement for Aboriginal Places. These are outlined in Table 6-4.

Table 6-4: Bioregions and pre-1750 EVC names relevant to the Project Land

EVCs	Area 1 BGLCAC	Area 2 EMAC	Area 3 Non-RAP	Area 4 DJAARA	Area 5 WTOAC	Area 6 WWCHAC
18 Riparian Forest						✓
20 Heathy Dry Forest						✓
21 Shrubby Dry Forest						✓
22 Grassy Dry Forest	✓	✓	✓	✓	✓	
23 Herb-rich Foothill Forest		✓		✓	✓	✓
47 Valley Grassy Forest		✓	✓			✓
53 Swamp Scrub				✓		
55 Plains Grassy Woodland			✓	✓	✓	✓
61 Box Ironbark Forest						
64 Rocky Chenopod Woodland						✓
67 Alluvial Terraces Herb-rich Woodland	✓	✓				
68 Creekline Grassy Woodland	✓	✓	✓	✓		✓
70 Hillcrest Herb-rich Woodland			✓	✓		
71 Hills Herb-rich Woodland				✓		
73 Rocky Outcrop Shrubland/Rocky Outcrop Herbland Mosaic			✓			
76 Grassy Woodland/Alluvial Terraces Herb-rich Woodland Mosaic	✓	✓	✓	✓		
83 Swampy Riparian Woodland					✓	✓
125 Plains Grassy Wetland				✓		✓
132 Plains Grassland				✓		✓
152 Alluvial Terraces Herb-rich Woodland/Plains Grassy Woodland Complex			✓			
164 Creekline Herb-rich Woodland				✓	✓	✓

EVCs	Area 1 BGLCAC	Area 2 EMAC	Area 3 Non-RAP	Area 4 DJAARA	Area 5 WTOAC	Area 6 WWCHAC
175 Grassy Woodland	✓		✓	✓		✓
178 Herb-rich Foothill Forest/Shrubby Foothill Forest Complex						
198 Sedgy Riparian Woodland					✓	
320 Grassy Dry Forest/Heathy Dry Forest Complex				✓		
641 Riparian Woodland	✓					
693 Plains Woodland/Plains Grassland Mosaic						✓
803 Plains Woodland	✓					
851 Stream Bank Shrubland				✓		✓
894 Scoria Cone Woodland				✓		
895 Escarpment Shrubland						
896 Grassy Woodland/Heathy Dry Forest Complex				✓		

6.1.4.3 Habitats

EES Technical Report A: Biodiversity Impact Assessment describes the key habitat types in the region of the Project Land, along with representative EVCs, as shown in Table 6-5. As per Section 6.1.4.2, this information indicates the types of resources utilised by Aboriginal people, and as such, informs the predictive statement for Aboriginal Places.

The pre-1750 EVC bioregions would have supported a wide range of fauna and flora in the past. The Project Land would thus have provided a range of not only plant life but animal resources for Aboriginal people that would have provided them with a plentiful range of foods. Trees such as River Red Gum, Yellow Box, Grey Box, Manna Gum and other Eucalypts would have been used for bark harvesting (for the purposes of making such items as canoes, shields, shelter, water containers, and bowls), while other plants would have been used for food, medicine, and other resource procurement (ANBG 2012a; 2012b; Nash 2004). Section 6.2.2 provides further information on ethno-historical resource gathering.

Table 6-5: Summary description of habitat types in the Project Land

Habitat type	Typical EVCs	General habitat characteristics
Forest habitat	Heathy Dry Forest (EVC 20), Shrubby Dry Forest (EVC 21), Grassy Dry Forest (EVC 22), Herb-rich Foothill Forest (EVC 23), Valley Grassy Forest (EVC 47), Box Ironbark Forest (EVC 61), Grassy Dry Forest/Heathy Dry Forest Complex (EVC 320), Grassy Woodland/Heathy Dry Forest Complex (EVC 896)	Forest habitats are characterised by a relatively closed eucalypt canopy and provide a diversity of niches for native fauna including arboreal and ground-dwelling mammals, birds, reptiles, and invertebrates. Forest habitats can support high numbers of large trees, including hollow-bearing trees, which are important for hollow-dependent mammals such as possums and gliders. Hollow-bearing trees in closed forest habitats are important nesting sites for owl species. Insectivorous birds can forage on the tree trunk and limbs, underneath the bark, on leaves, around flowers and in coarse woody debris and leaf litter at ground level. The Eucalypts provide an important source of food for nectar-feeding birds. On the ground, dense understorey vegetation and fallen logs present in forest systems provides important structural habitat for small mammals such as antechinus and bush rats.
Woodland habitat	Plains Grassy Woodland (EVC 55), Hillcrest Herb-rich Rocky Chenopod Woodland (EVC 64), Alluvial Terraces Herb-rich	Woodland habitats are characterised by an open canopy of Eucalypts, a sparse shrub layer, and a ground cover consisting of tussock grasses and other herbs. Woodland remnants provide valuable foraging and nesting habitat for a diversity of fauna species.

Habitat type	Typical EVCs	General habitat characteristics
	Woodland (EVC 67), Woodland (EVC 70), Hills Herb-rich Woodland (EVC 71), Rocky Outcrop Shrubland/Rocky Outcrop Herbland Mosaic (EVC 73), Grassy Woodland/Alluvial Terraces Herb-rich Woodland Mosaic (EVC 76), Alluvial Terraces Herb-rich Woodland/Plains Grassy Woodland Complex (EVC152), Grassy Woodland (EVC 175), Plains Woodland/Plains Grassland Mosaic (EVC 693), Plains Woodland (EVC 803), Scoria Cone Woodland (EVC 894), Grassy Woodland/Heathy Dry Forest Complex (EVC 896)	Many nomadic birds are attracted by mass-flowering of the Eucalypts, with Mistletoes providing another important foraging and feeding niche. Woodland habitats provide important habitat complexity with a closed canopy, shrub and ground layers providing a variety of foraging niches for woodland birds, including honeyeaters, scrub-wrens and whistlers. The more open woodland provides important habitats for a variety of reptiles that utilise woody debris and surface rocks for basking and shelter sites. Many skinks and snakes, particularly in the drier northern areas past Lexton are likely to support a high diversity of reptiles.
Grassland habitat	Plains Grassy Wetland in wetter areas (EVC 125), Plains Grassland (EVC 132), Plains Woodland/Plains Grassland Mosaic (EVC 693)	High-quality grasslands support critical habitats for many threatened grassland fauna. Where there have been lower levels of land use intensification, remnant grasslands can support important native grass species and areas with high grass biomass with surface rocks can support habitat for lizards, snakes and small mammals. Where there have been higher levels of land use intensification, and/or clearing of remnant vegetation, grasslands are dominated by exotic flora species, predominantly pasture grasses. Due to their highly modified nature, exotic grassland provides few resources for native fauna and therefore this habitat contains relatively few species. Species which commonly utilise introduced habitats of this nature include open ranging species such as kangaroos, ground-foraging birds such as the magpies, ravens and corellas, and some birds of prey. Scattered large trees and trees occurring at the transition between woodland and open agricultural land are often utilised by birds of prey. With the lack of suitable cover, exotic grasslands generally provide poor habitat for smaller birds and smaller native mammals, which rely on sheltering vegetative cover, and reptiles and frogs.
Riparian zones	Riparian Forest (EVC 18), Swamp Scrub (EVC 53), Creekline Grassy Woodland (EVC 68), Swampy Riparian Woodland (EVC 83), Creekline Herb-rich Woodland (EVC 164), Sedgy Riparian Woodland (EVC 198), Riparian Woodland (EVC 641), Stream Bank Shrubland (EVC 851)	Riparian zones occur along major and minor waterways, in some locations having intact canopy vegetation and in other locations occurring in cleared landscapes, which still retain some aquatic habitat values for birds, amphibians and fish. Riparian zones support important habitat types not found elsewhere in the landscape while providing essential biodiversity movement corridors. Riparian vegetation is also critical for supporting aquatic ecosystems by providing woody habitat, shade, stable banks, and by filtering out sediments and processing nutrients. The riparian zones within the Project Land have been subject to varying degrees of previous disturbance, though still provide important biodiversity values (e.g., specific native vegetation types and biodiversity movement corridors) within the already fragmented landscape of the surrounding regions. Habitats provided by the riparian zone are utilised by fauna species, including ground-dwelling and arboreal mammals, including various kangaroos and wallabies, wombats and echidnas, various possums, and bats. A vast suite of birds relies on riparian zones for dense habitat structure and nesting opportunities within the vastly cleared landscape habitat along with various frogs and reptiles.
Aquatic systems	EVCs listed under Riparian zones, as well as open waterways and waterbodies.	Aquatic systems include the major and minor waterways of the riparian zones, but primarily include wetlands and wet depressions across the landscape that provide important habitat for wetland and migratory birds as well as amphibians and fish. Aquatic systems are represented by Plains Grassy Wetland and Plains Sedgy Wetland, and also include wetlands occurring across agricultural land that consist of primarily exotic vegetation and pasture grasses that provide important fauna habitat.

Habitat type	Typical EVCs	General habitat characteristics
		Permanent and semi-permanent wetlands and waterbodies across the Project Land provide important refuges and foraging resources for a variety of waterbirds, including wetland migratory birds that seasonally move across the landscape. The low-lying areas of the volcanic plain contain seasonal wetlands supporting habitat for a variety of waterbirds including ibis, herons and ducks. Where permanent large reservoirs or waterbodies exist, large seasonal wetlands provide habitat for ducks, coots and swamphens. Many frog species rely on aquatic systems across the landscape.

6.2 Aboriginal occupation

6.2.1 Ethnohistory

Clans comprised the basic 'land owning' group in Aboriginal society (Clark 1990a, p. 8; Stanner 1965), but that 'owning' did not have the same definition as in modern society. In Victoria, clans were generally patrilineal (i.e., descent through the father) groups with territories defined by ritual and economic responsibilities. Clusters of neighbouring clans, which shared a common dialect and political and economic interests, and distinguished themselves from other clusters by the use of a language name (Barwick 1984).

At the time of European contact, the Project Land was occupied and utilised by clans from the Jadawadjali (or Jadawadjali) (Area 1), Djab wurrung (or Tjab wurrung) (Area 2), Dja Dja Wurrung (or Djadja wurrung) (Area 4), Wadawurrung (or Wada wurrung) (Area 5), and Woi wurrung (Area 6) (Clark 1990a) (Figure 6-3). Area 3 was known to be utilised by peoples of the Jadawadjali, Djab wurrung, and Dja Dja Wurrung clans.

6.2.1.1 Kulin Nation language groups

The Wurundjeri Woi wurrung, Wadawurrung (Wathaurung) and Dja Dja Wurrung language groups within the Project Land comprise part of the Kulin Nation. Neighbouring groups, including Bun wurrung (Bunurong), Daung wurrung (Taungurung) and Ngurai-illam-wurrung, also formed part of the Kulin Nation (Clark 1990b; Light 2012).

The Wurundjeri Woi-wurrung shared over 90 per cent common vocabulary with the Bunurong, 83 per cent with the Taungurung and 45 per cent with the Dja Dja Wurrung (Clark 1996).

6.2.1.1.1 Wurundjeri Woi-wurrung

The Wurundjeri Woi-wurrung language group is understood to have been divided into a number of clans, each of whom had their own land area. At the time of non-Aboriginal contact, the region of central Victoria from the Werribee River in the west and Mount Baw Baw Plateau and the Loch Valley in the east was occupied by clans from the Woi wurrung language group, who also occupied the basins of the Yarra and Maribyrnong Rivers. Today, the Wurundjeri Woi-wurrung people are represented by the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation. Their relationship the with the land extends back tens of thousands of years to when their creator spirit 'Bunjil', the Wedge-tailed eagle, formed their people, the land and all living things (Wurundjeri Tribe Land and Compensation Cultural Heritage Council 2013).

The Wurundjeri Woi-wurrung were composed of four clans, some with several known patrilines (i.e., a line of descent from a male ancestor to descendent). They occupied the Yarra and Maribyrnong watersheds, bounded on the north by the Dividing Range from Mt Baw Baw westward to Mt William near Lancefield and Mt Macedon in Macedon Regional Park, and on the west by the Werribee River (Barwick 1984, p. 105).

Each clan had a clan head, known as Ngurungaeta, who was still distinguished as such into the post-contact era. The Woi wurrung were linked by kinship ties across clans, and leadership was often inherited down patrilines (Tanner 2001, pp. 8-10). As part of the Kulin Nation, the Woi wurrung were associated with one of two moieties, one being Bunjil (Wedge Tail Eagle) and the other Waa (Crow). This system ensured that political, economic and social networks with neighbours in close and further regions were maintained as future partners were selected

from other social divisions or moieties (Tanner 2001, p. 7). By finding spouses from a clan of the opposite moiety, preferably from a distant location, loyalties and trade networks were extended and kinship ties united Kulin clans (Barwick 1984, p. 105).

6.2.1.1.2 Wadawurrung

The Wadawurrung language group occupied the land from Fiery Creek west of Beaufort to the coast between Werribee and Aireys Inlet (including Geelong) and from north of Ballarat southwards to Ferrers Creek at Cressy and the Barwon River south of Winchelsea (Clark 1990a, p. 311). The importance of 'Bunjil' (Wedge-tailed eagle) is widely documented by the Wadawurrung people, as the helper of the Creation Being (Uncle Bryon Powell and Tandop David Tournier 2019).

"…is a very special place. It's special for my ancestors and me. That's where Bunjil helped Creation Being. He gathered up the [red] clay from the mountain. He divided it into two on two sheets of bark and formed them into the shapes of men. He got his brother Palyang – Paylang has control of all the creeks and rivers and billabongs – and he began to thump water with his hands…" Uncle Bryon Powell and Tandop David Tournier (2019 p. 44)

The Wadawurrung clans shared a patrilineal form of moiety organisation with their eastern and northern neighbours, and clans belonged to either the Waa or Bunjil moieties (Clark 1990a, pp. 275-277). According to Richards (1909 cited in Clark 1990b), the Waa and Bunjil moieties could be distinguished on the basis of their hair, one being course and the other fine. Robinson (1841 cited in Clark 1990b) suggested that the Wadawurrung clans could be distinguished on the basis of their mortuary practices and facial and body markings at corroborees. Clan-heads were known as either Nourenit/Nare nit or Arweet. The Wadawurrung people are today represented by the Wadawurrung Traditional Owners Aboriginal Corporation.

According to Robinson (1841 cited in Clark 1990b), the Wadawurrung were the most powerful and influential people in the Western District. There appear to have been 27 separate Wadawurrung clans, each ranging from between 40 and 60 members, with a total population of between 1,080 and 1,620 people at the time of European contact. However, Dawson (1881 cited in Clark 1990b) speculates that clan sizes may actually have numbered 120, with a total population of 3,240 people.

Clark (1990b) estimates the actual figure to be in the order of between 1,620 and 3,240. Despite a dissimilar descent system, Wadawurrung intermarried with a number of matrilineal clans within different language groups, including the Gulidjan, Djab wurrung, and Djargurd wurrung language groups (Clark 1990a, pp. 275-277). The Wadawurrung language was linguistically closest to the Dja Dja Wurrung to the north and Woi wurrung, Bun wurrung and Daung wurrung to the east.

According to Clark (1990), the Wadawurrung clans were semi-sedentary, moving around clan estates utilising seasonally available resources.

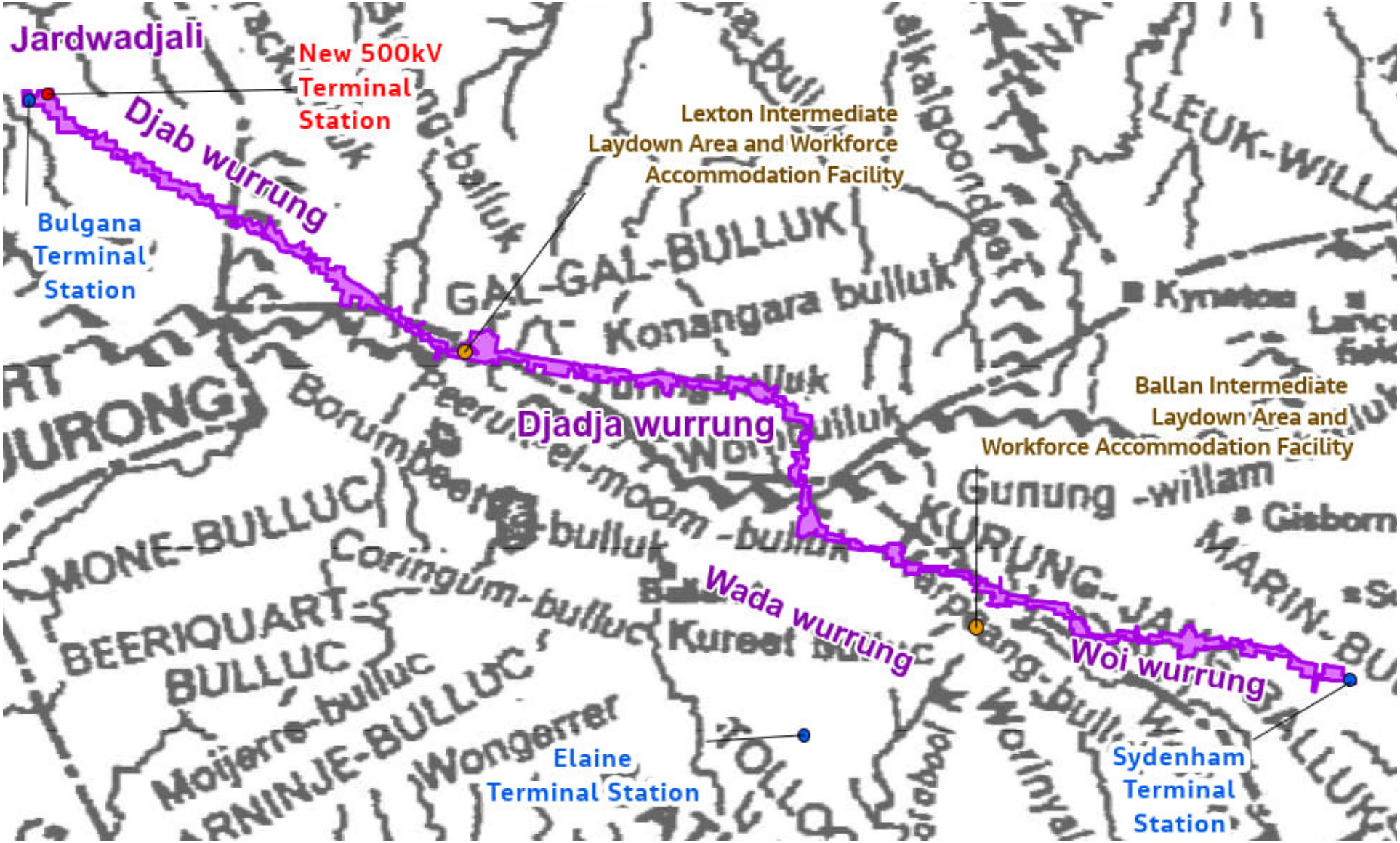


Figure 6-3: General regions associated with Aboriginal language groups, showing the Project Land (after Clark 1990a).

6.2.1.1.3 Dja Dja Wurrung

The Dja Dja Wurrung language group inhabited the country west of Kyneton to Boort, to just south of Charlton and bordered to the east by Mt Avoca through to Donald (Clark 1990a, p. 153). The Dja Dja Wurrung were members of the Eastern Kulin nation confederacy, as described by Howitt (1904). The Eastern Kulin nation adhered to social constructs based on patrilineal descent and a moiety which included Bunjil and Waa, which shaped the pattern of clan life. This system included rules for the intermarriage of specific clans and transcended local allegiances when Kulin peoples gathered together, such as for religious rituals or the settlement of disputes (Barwick 1984, p. 105). Today, the Dja Dja Wurrung people are represented by the Dja Dja Wurrung Clans Aboriginal Corporation trading as DJAARA.

Estimates place the Dja Dja Wurrung population at between 900 and 1,800 individuals prior to non-Aboriginal settlement (Tully 1997). The size of clan groups may have ranged between 30 and 150 individuals (Lourandos 1977, cited in Clark 1990a).

The Dja Dja Wurrung language group consisted of approximately 16 different clan groups. These clan groups were all closely related, occupied their own distinct land and married partners from different clans within the language group. As no one area contained all the necessary resources, clans would exchange various goods. The Wurn balug traded greenstone axe blanks and boomerangs, Burung balug traded possum skins, and the Wongarrergerrer gundidj traded fighting boomerangs. Other clan groups traded items including wattle gum, spinifex resin, grinding stones, and ochre (Tully 1997). The importance of the Wedge-tailed Eagle is widely recognised through oral traditions, song lines and spiritual connection to country for the Dja Dja Wurrung people.

"Bunjil and his brother Waa created the people and bestowed the moiety/kinship system for the people to have Eagle children and Crow (raven) children that would be unrelated. Once the Jaara, animals and plants were created, Bunjil taught the people how to behave on earth and the lore to follow. A part of these lessons was how to conduct the ceremonies that would ensure the continuation of life.

When Bunjil was satisfied with his work, he changed form into the Wedge-tailed Eagle and flew up into the sky to watch down on the earth. Today he is still looking down through the eyes of the Eagle and at night sits by his campfire in the sky known today as Jupiter." Rebecca Phillips (Descendant of Caroline Malcolm) (n.d.)

The first reference to the Dja Dja Wurrung language group is included in a letter from Edward Parker to George Augustus Robinson (Chief Protector of Aborigines in Port Phillip, 1839-1842), which mentioned the name 'Jajowrong' (Dja Dja Wurrung). Of the 16 Dja Dja Wurrung clans in 1842, Munangabum, clan head of the Liarga balug, was considered 'neyernneyerneet' or chieftain over most of the Dja Dja Wurrung people (Parker 1843, cited in Clark 1990a).

6.2.1.2 Jadawadjali

Traditional Jadawadjali Country comprises the land north of Stawell to the Grampians in the east, southwards along the Serra Range, along the Wannon River and Glenelg River in the south, then up to Tallagelra in the north-west, Mount Arapiles in the north, across to Lake Buloke in the north-east, and along Richardson River and past Navarre Hill in the south-east (Clark 1990a, p. 256). The Jadawadjali spoke three main dialects: Nundadjali (also referred to as Mukjarawaint, or Brapkut), spoken on the upper Glenelg at Carr's Plains and extending northerly towards Horsham; Jabbadjali or Yardwadjali, spoken around Horsham; and Jagwadjali, spoken towards Lake Buloke (Clark 1990a, p. 236).

The Jadawadjali and the Djab wurrung clans were members of what is referred to as 'a regional cultural bloc', which was maintained through intermarriage, common languages and mutual interests (Clark 1990a, p. 237). The Jadawadjali language group was also divided into a matrilineal form of moiety organisation, which was shared with their neighbours to the east, south and north-west, including the Djab wurrung. Individuals and clans

belonged to either the Gamadj or the Grugidj moieties. The Jadawadjali were known to marry the people of the Djab wurrung (Clark 1990a, p. 237).

6.2.1.3 Djab wurrung

The Djab wurrung inhabited the country extending from Salt Creek and Fiery Creek in the east to the Wannon River in the west and from the south near Mt Napier and Mount Rouse up as far north as Stawell (Clark 1990a, p. 108). The Djab wurrung spoke three main dialects, according to James Dawson in 1881 and Edward Stone Parker in 1843 (Clark 1990a, p. 91): Chaap wuurong (meaning the 'soft' or 'broad lip' dialect), Pirt pirt wurrung or Pirt kopan noot (meaning 'jump lip'), and Knen knen wurrung (possibly meaning 'clear speakers').

The language group was divided into social constructs based on matrilineal moieties, with both individuals and clans being of either the Gamadj (Gabadj or Kaputch; red-tailed black cockatoo or Banksian cockatoo) or the Grugidj (Krokitch, sulphur-crested cockatoo or long-billed corella) moiety, which shaped the pattern of clan life (Clark 1990a, pp. 57, 91; Clark 1995). Similar to the moieties of the Kulin Nation, this included rules for the intermarriage of specific clans, such as marriage always taking place across the moieties (Barwick 1984, p. 105). Despite speaking the different languages spoken amongst the Djab wurrung, records show they intermarried with people outside their language group. George Augustus Robinson's journals provide information about the Djab wurrung marriages, which included marriages into the Gal gal bulluk and Burong bulluk clans of the Dja Dja Wurrung language group, the Moperer conedeet clan of the Dhauwurd wurrung, the Larnaget and Morer morer berap clans of the Jadawadjali, the Burrumbeet bulluk, Moijere bulluk, Wongerrer bulluk, and the Moner bulluk clans of the Wadawurrung (Clark 1990a, p. 91). The Djab wurrung also fought with several language groups, including the nearby Djargurd wurrung and Gulidjan tribes, whom the Djab wurrung considered 'foreign' or 'wild men' (Clark 1990a, pp. 91-92).

During mid-summer, clans from the Djab wurrung, northern Dhauwurd wurrung, Girai wurrung and Wadawurrung would gather for a large ceremony and to hunt at Mirraewuae. Mirraewuae was a large marsh situated to the west of Hexham known for its emu and other game animals. In autumn, they would gather at Lake Bolac, possibly together with the Girai wurrung, to take advantage of the annual eel migration (Clark 1990a, pp. 91-92).

The Djab wurrung are known to have used mortuary trees wherein human remains and grave goods were placed within the hollow of a tree trunk or branch. This burial practice is believed to have been common in central west Victoria within the Djab Wurrung language group and is known archaeologically in south-western Victoria (i.e. Moysten tree: (Richards *et al.* 2004). The practice is believed to have continued until the middle of the 19th century. Robinson recorded the Djab Wurrung clans as 'putting their dead up trees', but his records were not specific about how this was achieved. Grave goods included items such as polished bone or bone necklaces and other goods buried with the deceased. Mortuary trees appear to primarily have been eucalyptus trees (Canning and St George 2012; Clark 1990a).

6.2.2 Resource gathering

The tribes of the Jadawadjali language group at the western end of the Project Land, were known to have six seasons associated with various weather patterns, plant flowering, fruiting, and animal behaviour: Ballambar (early summer), Kooyang (late summer), Gwangal moronn (autumn), Chunnup (winter), Larneuk (pre-spring), and Petyan (spring). The information below draws on publications from Bureau of Meteorology (2016) and Context (2020).

The Jadawadjali procured sweet nectar from flowering banksias in early summer on the plains, and water ribbons were cooked and eaten. They fished and trapped eels in late summer, living in stone huts for the eel harvest, and congregated in large groups. The Jadawadjali held great gatherings in the wetlands of Lake Lonsdale in autumn, where people would gather in villages, as it was a time of plentiful resources; food was often cooked in layered cooking ovens. During winter, the people moved to the high country, where they lived in rock shelters that afforded protection from the cold winter winds. Pre-spring was a time of harvest, with the tubers of the widely cultivated murnong (Yam Daisy, *Microseris lanceolata*) being gathered by the women; basket making was also

common during this season. Eggs, snakes, lizards, and frogs were plentiful during spring, and the tribes met for settling legal conflicts, corroborees, competitions, games, and trading.

The people of the Djab wurrung language group typically constructed earthen mounds, situated either on the bank of a stream or at a location with a good vantage point. When eels were in season in the autumn, the Djab wurrung moved to fishing grounds, such as Mount William Swamp in Gariwerd (the Aboriginal name for the Grampians) and Lake Bolac. Up to 1,000 people would gather to take advantage of the annual eel migration. In the upper reaches of the Wimmera River, at the large waterholes near Crowlands, the Aboriginal people would set up camp and collect, cook or bake, then eat large amounts of freshwater mussel, along with the root of the bulrush (Edmonds and Long 1997, pp. 21-22).

Each clan of the Dja Dja Wurrung language group had distinct summer and winter campsites, which allowed them to exploit a variety of resources that were locally available during different times of the year. This allowed for a system of regional specialisation, which led to a system of exchange that diversified the subsistence base across the Dja Dja Wurrung, with each clan producing and requiring different items. Other clans dealt in items, such as gum from the silver wattle, which is found in several EVCs of the Central Victorian Uplands and Victorian Volcanic Plain, and resin from Spinifex, a type of tussock grass found across many EVCs, along with food (Ward et al. 2015, p. 22).

People of the Wadawurrung language group are known to have relied on freshwater shellfish and cultivated root vegetables as a reliable food resource (Torquay Museum Without Walls Inc 2019). They also promoted grasslands through the use of fire stick farming during the winter months. Plant resources in the Wadawurrung diet included the murnong, the roots of the Milkmaids plant, Karawun (Spiny-headed Mat-rush), which is found in several EVCs of the Goldfields, Central Victorian Uplands and Victorian Volcanic Plain, Boyungkaal (Watercress), Barring-gootch (Native Raspberry), and Warrigal Cabbage. Game included wallaby, echidna, possum, quail, pigeon, parrot, goose, spoonbill, snake, lizard, along with other birds, mammals, and reptiles. Baskets were made from green rushes, such as Sword-sedge and Mat-rush, which are found across many bioregions, and from hair and other grasses. Rope was made from stringy bark while fishing nets were made from hair and bark cord (Torquay Museum Without Walls Inc 2019). Tree bark was used to shape bowls, basins, cradles, and canoes. Houses was made with stone or timber walls and turf rooves and were shaped like mounds, with the layout typically comprising larger buildings surrounding smaller ones (Pascoe 2003). Small bark huts were used by those travelling (Torquay Museum Without Walls Inc 2019).

Further inland towards the volcanic plains, important plants were utilised during resource gathering by the Wadawurrung people (Gott 1999). For the entirety of the basalt plains across Victoria, 550 species have been recorded (Willis 1964). The plains areas were a major source of tuberous use, whereby seeds were hardly used at all (Gott 1999). Wadawurrung Country encompassed signification ecological diversity including rainforests of the Otway Ranges to the woodlands of the Victorian Dividing Range. This allowed for a deep understanding of the diversity within their surrounding environment, including how and when plants mature for use as well as fruit ripening patterns (Dearnaley 2019). Sites used for resource gathering inland, were often selected from a number of criteria. This has been expanded further below:

"The main stream systems of the hinterland provided a range of freshwater fish and shellfish, including eels in almost unlimited quantities, aquatic birds and a diverse variety of plant foods. The grassy, volcanic plains were frequented by kangaroo and emu, bustards and brolgas and were colonised by a host of edible vegetables." Dearnaley (2019 p. 51)

The clans of the Woi wurrung language group were known to have camped in the higher areas of the land near rivers, which often flooded during the winter months. During the winter months, large communities set up permanent winter camps in these more-elevated areas, such as stony rises, being comprised of huts made of bark sheets. The Woi wurrung would travel to the mountain ranges in the wet winter months, with common foods including koalas, wombats, wallaby, ants, and grubs.

However, during the spring and summer months, people travelled more frequently and could move between nine and 16 kilometres a day while hunting food and gathering resources, or to visit sacred sites (Yarra City

Council 2019). During these warmer seasons, the murnong roots were harvested, birds' eggs were collected, and wildfowl and game were plentiful. Later in the summer, the Woi wurrung people visited fishing and eeling sites and camped for longer periods.

In the summer, the Woi wurrung would live on the rivers and coast, where they could undertake fishing, eeling, hunting of kangaroos, echidna and possum, and grass burning (Yarra City Council 2019). Temporary summer camps were established using a few boughs as windbreaks. In warmer months, people would travel to the mountain ranges, with a common plant food resourced during this season being the heart of the tree fern or hunt waterfowl and collect eggs on the plains.

The introduction of hard hooved grazing animals, such as sheep, cattle and pigs, saw a reduction in the amount of traditional foods for Aboriginal people. The introduced animals not only ate native plants but also compacted the soil, which made it difficult for native plants to recover (Cahir 2012b). The tubers of other plants, such as bracken fern (Austral bracken) found across the Central Victorian Uplands and Victorian Volcanic Plain EVCs, are also thought to have very high amounts of carbohydrate content and may have been a staple food for some people (Gott 1982).

The rivers within the Project Land are likely to have provided a variety of resources and thus would have been a focus for occupation at different times of the year. Resources would have included eels, freshwater mussels, fish and a variety of birds, reptiles and water plants. Harvesting these resources may have included trapping and weirs, which have not survived to the present day. Archaeological materials, including fish traps, have been noted along the banks and escarpments of Kororoit Creek and Werribee River (Melbourne Water 2009; Moloney 2007).

Camp sites may have varied in size and complexity with seasons. In the 19th century, William Thomas suggested that during warm weather, when people were moving frequently, they rarely made a shelter, but that during wet weather, shelters could be more substantial. William Hovell reports that the site of Aboriginal camps was often on high ground overlooking water (Hovell 1827). Aboriginal cultural heritage sites have also been recorded within floodplains, specifically towards Mildura (du Cros and Rhodes 1998; Porter 2006).

Beth Gott (1997) hypothesises that the Woi wurrung year was roughly divided into six seasons based on the availability of different resources. This involved:

- Late summer. This period was dominated by people burning off shrubs and tussock grasses. This encouraged the growth of pyrophylic plants such native orchids, found in the Damp Sands Herb-rich Woodland EVC of Central Victorian Uplands and the Victorian Volcanic Plain, and the Plains Grassland of the Victorian Volcanic Plain, and the murnong. Wattle gum, found across many EVCs of all Bioregions, was a staple food in this period. A number of plants are also in blossom at this time, including the mistletoe berries. Box and Creeping Mistletoe are also found across several EVCs of all bioregions. Due to dwindling water sources, eels are forced into shallower water and begin their migration to the sea with autumn rains and can be caught easily with spears and traps. People may have camped closer to permanent water sources at this time.
- Early winter. Fungi become available with the early winter rains and moths become active, and as a result, bats, birds, and gliders also become active. Kangaroo and wallabies fed on the new grass growth from the March burnings. People may have lived closer to the grasslands at this time to prey on grazing macropods.
- Deep winter. Water levels in river and wetland systems rise and cold weather makes exposed ground close to water sources unsafe and uncomfortable places to camp. People may have moved inland to sheltered uplands with ephemeral water sources where koalas, wombat and possum might be hunted. Possum skins, in particular, would have been an essential survival commodity at this time for making cloaks. Bulrush, which applies to several large wetland grass-like plants in the sedge family, and other plant tubers such as those of bracken fern (Austral bracken) may have provided the bulk of the diet.
- Early spring. Many plants, including wattles, yellow box and murrnong, begin to flower, and people may have moved closer to wetlands to target water fowl, which were beginning to nest. Bird eggs would have become a more important part of the diet as the nesting season progressed.

- True spring. Lilies, orchids, murrnong, and other flowering root vegetables may have become an important food source at this time of year. As temperatures warmed, reptiles such as snakes, turtles and lizards would have become more active. Frogs would begin breeding and migratory birds returned to Victoria. These animals may have been targeted at this time for food.
- High summer. The longest season of the year may have seen people begin to congregate around permanent water sources again, which were cooler than the plains. *Galaxias* sp. (native trout) migrate upstream and might be caught in large numbers at natural contractions in streams and rivers. Reducing water sources means that grazing animals are forced closer to the sources that remain. Tuberous root plants die back, but fruiting plants such as current bush, apple berry, and kangaroo apple are fruiting. The larvae of the lerp insect form a protective shell of honey dew, and this is discarded in summer as small sweet edible scales on the leaves of manna gums.

6.2.3 Contact and post contact history

Aboriginal People continued to live across the Project Land throughout the contact and post contact period. Their stories in this time period were often complex and marred by violence, illness and dispossession. Aboriginal history in this period is dominated by themes of contact with explorers, squatting, conflict and massacres.

6.2.3.1 Jadawadjali

The Jadawadjali were first encountered by Major Thomas Mitchell, Surveyor-General of New South Wales, during his 1836 expedition, and by Edward Henty's squatting party, who took up Muntham squatting run to the north-east of Casterton in 1836. In 1840, squatters took up land in the northern part of Jadawadjali Country when Robert Briggs, a lieutenant, established the Ledcourt squatting run near Lake Lonsdale. In the south, the dispossession of Aboriginal peoples from their land was particularly violent. The Whyte brothers, William, George, Pringle, James and John, who had taken up land near Pentland Hills, massacred the Konongwootong gundidj in March 1840 at their Konongwootong squatting run. Many of the Darkogang gundidj people at Muntham station had been killed by poisoning, the poison having been administered by one of Hentys' employees (Clark 1990a, p. 238; Clark 1995, pp. 33, 77, 145). When George Augustus Robinson met the Pobbiberer balug in July 1841, he was informed that they had disputes with the Pellerwin balug, another clan of the Jadawadjali near Mount Dundas, and the Galgal balug of the Dja Dja Wurrung language group near Mount Mitchell (Clark 1990a, pp. 270-271).

6.2.3.2 Djab wurrung

The earliest contact between the Djab wurrung and non-Aboriginal people was during Major Mitchell's expedition in 1836 (Clark 1995, p. 58). However, contact was more sustained with the arrival of squatters who settled within the region. The first settler, Mathew Gibson, grazed sheep between Mount William in Gariwerd (Grampians) and the Hopkins River. Two of the settlers, Collin Campbell and Charles Gray, were accepted into the Djab wurung. This was possibly an attempt by the Djab wurrung to understand the settlers and incorporate them into a reciprocal relationship (Clark 1990a, p. 94). The evidence suggests that both settlers had violence-free relationships with the local Aboriginal people. These men later became the local guardians in the 1860s. However, the relationship between the Djab wurrung and the other squatters within the region was less friendly. The continued encroachment on the traditional lands of the squatters and the very dry conditions exacerbated the tensions between the two groups, particularly between 1840 and 1842, with numerous clashes being documented (Clark 1990a, p. 94).

It was during the 1860s that the last known attempts by the Djab wurrung to perform traditional religious ceremonies were undertaken. By the 1870s, the Djab wurrung peoples dispersed and went to missions – those at Hamilton moved to Lake Condah, those at Wickliffe went to Framlingham, and those at Mount Cole moved to Framlingham or Coranderrk. Very few were able to remain at or near their traditional Country. Likewise, the Jadawadjali were also moved on to Framlingham, Lake Condah, and Ebenezer (Wilkie 2020, p. 26). By 1880, only seven Djab wurrung speakers remained living on their traditional lands (Clark 1995, p. 60).

6.2.3.3 Dja Dja Wurrung

Edward Stone Parker was Assistant Protector of Aboriginal peoples at Port Phillip from 1839 to 1849 (Fiddian et al. 2013, p. 29; Nelson 1974). During Parker's tenure, he was allocated the Loddon district from which to create a Protectorate. The Loddon district included Dja Dja Wurrung Country. The Loddon station initially attracted a large number of Dja Dja Wurrung people, but the territory was taken up by cattle and sheep farmers shortly after its establishment. As land was acquired for farming, some members of these clans were excluded from the lands where they traditionally exploited natural resources (Ward et al. 2015, p. 23).

During this time, Charles Carr was listed as the Honorary Correspondent at Anderson's Creek and became the Guardian of Aborigines in Avoca. However, under the Protectorate, people from different language groups were amalgamated, with Woi wurrung clans being put together with northern Dja Dja Wurrung clans from the Loddon and Avoca Rivers areas. Even after the Protectorates were decommissioned, the government grouped all Aboriginal peoples together on supervised mission stations and reserves (Ward et al. 2015, pp. 23-24).

In 1863, Thomas Dunolly (1856-1923) of the Dja Dja Wurrung, an Aboriginal rights activist, was forcibly moved from Mount Franklin to live at Coranderrk Aboriginal Reserve, located near Healesville. They joined the Woi wurrung people, who had been led there by William Barak, his cousin Simon Wonga, and a number of other Woi wurrung elders (Berelov and Freedman 2012, p. 39; Ward et al. 2015, pp. 23-24). Dunolly, along with a number of other Dja Dja Wurrung ancestors, lived at Coranderrk from the 1860s into the 1900s (Dja Dja Wurrung Clans 2016).

6.2.3.4 Wadawurrung

Coastal Wadawurrung clans were in contact with non-Aboriginal people from at least February 1802 when Lieutenant John Murray in the Lady Nelson mapped part of Swan Bay. In May 1802, Mathew Flinders camped at Indented Head where his party met with several Wadawurrung. The first known conflict with the Wadawurrung occurred in October 1803 when Lieutenant J.H. Tuckey met with several Aboriginal people (most probably from the Yawangi and Wadawurrung balug clans) while surveying near the You Yangs. Possibly two of the Aboriginal people were shot and killed, with others wounded (Clark 1990b, p. 277).

While not specific to the Study Area, there is a unique source of information about Wadawurrung People of the early 18th century. In 1803 the convict William Buckley escaped from a short-lived penal settlement at Sullivan Bay, near Sorrento, and ultimately made his way around Port Phillip Bay to Wadawurrung Country, where he was befriended and adopted by a Wadawurrung clan whose estate was the area around modern-day Geelong. He lived with them for over 31 years, until he revealed himself to a small group of Europeans and Sydney Aboriginal people at Indented Head in 1835. Buckley later recounted his life story while living in Tasmania, at the age of 72 (Morgan 1852).

In 1824, Hamilton Hume and William Hovell encountered several Wadawurrung individuals at Hovells Creek who showed some aggression to one of the members of the group. The Aboriginal people were reportedly more fearful of the explorers' animals than their weapons and subsequently began taking possessions from the party (Clark 1990b, pp. 279-280). In 1839, George Augustus Robinson was commissioned to form the Protectorate of Aborigines in the Port Phillip District. To aid him in this task, he was assigned four assistant protectors, each of whom was assigned a particular geographic region. The Wadawurrung language area was covered by Assistant Protectors E.S. Parker's and C.W. Sievwright's regions of jurisdiction, the majority being under the care of Sievwright, who had been allocated the Geelong or Western District in 1839.

In June 1860, the Victorian government established a Central board to watch over the interests of Aboriginal people. In relation to the Wadawurrung, three reserves were allocated, as were seven Local Guardians and three depots, specifically Geelong, Bacchus Marsh and Carngham. In 1862, a census of the Wadawurrung region revealed that 108 Aboriginal people remained. A state-wide census undertaken in 1872 documented a total of 65 Wadawurrung people (Clark 1990b).

Wadawurrung arrived at Coranderrk from the mid-1860s onwards, following their clan head, Balybalip. The group included two Aboriginal women, known as Queen Mary and Queen Rose, who were photographed there in 1876 and 1877 (Nanni and James 2013; Torquay Museum Without Walls Inc 2019).

6.2.3.5 Woi wurrung

One of the earliest contacts between the Woi wurrung and non-Aboriginal people comprised the kidnapping of nine Woi wurrung and Boon wurrung women as 'wives' by sealers in 1833, as reported by Derrimut, a Woi wurrung man, in 1836 (Broome 2005).

In 1863, William Barak, his cousin Simon Wonga, and a number of other Woi wurrung Elders brought over 40 Aboriginal people 50km southwards from Acheron to settle in the area between Watts River and Badger Creek (Berelov and Freedman 2012, p. 39). At their suggestion, Healesville was selected by Superintendent John Green as a 2,300 acre reserve for Aboriginal people in the same year, one of seven such reserves across Victoria (Victorian Places 2015c). The reserve comprised nine slab-and-bark huts for families, along with single bush huts (Berelov and Freedman 2012, p. 39). The Coranderrk population peaked at 148 people in 1878, with the reserve holding 23 homes, a church, school, workshop, store, hospital, kitchen, dairy, milking shed, fowl house, and pig house (Berelov and Freedman 2012, pp. 39-40). In 1884, the Coranderrk Aboriginal Reserve was officially made into a permanent reserve for Aboriginal peoples (Victorian Places 2015c).

6.2.3.6 Introduced Diseases and Diet

There were multiple broadscale impacts on Aboriginal populations following settlement and colonisation. These include the effects of introduced diseases and changed diets across Australia. Specific to Victoria, tuberculosis, venereal disease and influenza are believed to have caused high mortality rates amongst Aboriginal populations (Critchett 1990; Dowling 1997), though to a lesser extent, respiratory diseases including bronchitis, whooping cough and pneumonia were also recorded amongst Aboriginal populations in Victoria (Dowling 1997).

In 1840 and 1841, Chief Protector of Aborigines George Augustus Robinson documented contact with large groups of Aboriginal people throughout the central and western districts of the colony (Presland 1977). He noted a sharp decline in numbers among some of the Aboriginal populations and considered it to have been from a disease or diseases which had occurred 'about the time when the first white men came', probably in 1834 (Presland 1977). Critchett (1990) also argues the devastating impacts of smallpox, specifically among Aboriginal communities within western Victoria.

Changes in diet also caused ill health for Aboriginal people. Some changes were caused by restricted access to traditional food (through fenced off land, native animals being shot for sport, and the introduction of hoofed animals) (Yarra City Council 2019). This led to starvation in some cases, and in others, to the adoption of a European diet that included refined sugar, flour, and offal. Another cause of ill health and disease that was introduced to Aboriginal populations was alcohol and tobacco, which contributed to population decline (Goulding and Menis 2006). Issues with alcohol were made worse by the fact that spirits were the primary form of drink during this period.

6.2.3.7 Goldrush

The Victorian goldrush represented the second wave of dispossession for Aboriginal people, as new settlements spread across the interior of Victoria. Aboriginal people were displaced, their camping sites and hunting grounds were ruined, and the waterways were polluted (Cahir *et al.* 2020).

When gold was discovered in the region in the 1850s, a sudden influx of approximately 30,000 miners occurred. The remaining Djab wurrung people gained employment at nearby pastoral stations, as a number of those formerly working at the stations left to search for gold (Clark 1995, p. 60). Many of the Jadawadjali were also able to find work in the gold fields (Wilkie 2020, p. 26). However, many Djab wurrung still lived in the surrounding region and were supplied with foodstuffs and clothing from four main depots at Hamilton, Nareeb Nareeb station near Wickliffe, Buangor, and Ararat throughout the 1860s. The Jadawadjali also lived around

Gariwerd (Grampians), where they could gain employment on Country, and were provided with food and clothing by pastoralists in the region (Wilkie 2020, p. 26).

During the goldrush of the 1850s, the landscape was denuded of trees as the demand for timber greatly increased, and much of Dja Dja Wurrung land was cleared for agriculture to feed the rapidly expanding goldfield populations. This caused the Dja Dja Wurrung to be further disassociated from their traditional lands (Ward et al. 2015, pp. 23-24). The Dja Dja Wurrung, including those near Ballarat and around Bendigo, was one of the two most affected Aboriginal language groups during this period. Some members of the Dja Dja Wurrung, however, were able to find work in the goldfields, be it in policing, guiding, or finding gold (Cahir *et al.* 2020).

Along with the Dja Dja Wurrung, the Wadawurrung clans of the Ballarat region were also heavily affected during the Victorian goldrush. As with the Dja Dja Wurrung, however, some members of the Wadawurrung found opportunities on the goldfields as police or guides or in finding gold themselves (Cahir *et al.* 2020); the northern Wadawurrung were reported to have traded gold to shepherds prior to the gold rushes of 1851 (Cahir 2012a). There are also records from miners noting the presence of Aboriginal family groups on the goldfields. Local Aboriginal people also located food, bush medicine, and waterholes for horses and other stock for settlers on the goldfields, and one instance of a local Wadawurrung clan using their traditional skills for an arboriculturist in Linton (Cahir 2012a; Cahir *et al.* 2020). As for policing, the Native Police Corps originally recruited men from Woi wurrung and Bun wurrung clans in February 1842 before those of other language groups. They were the first police force on the Ballarat goldfields, arriving on 20 September 1851 (Cahir 2012a; Cahir *et al.* 2020). In 1876, a Wadawurrung elder from the Lal Lal area, known as Dicky, complained to some miners that they had 'robbed him of Lal Lal which was his inheritance'; he managed to collect several shillings as compensation (Cahir 2012a).

The closest gold mining area to Woi wurrung land comprised several hectares of gold workings on the east bank of Djerriwarrh Creek in Toolern Vale. Some alluvial mining also took place on Goodmans Creek diggings, particularly around Coimadai and Bullengarook (Whitworth 1870: iii, v, 15-16). Gold was also found in the mountains to the north-west of the Area 6, between Breakneck and Coimadai. Evidence for gold mining activities in the region includes holes, shafts, sluiced tailings, and other mining activity (McAlister *et al.* 2021: pp. 52, 93). The manipulation of watercourses in Woi wurrung Country occurred throughout this period. Despite laws established to protect Victoria's waterways by the 1860s, sludge thus continued to contaminate and change the land through combination of purposeful dumping and through poorly constructed, leaky reservoirs. Hannah Watts Park in Melton contained a reservoir which dates from 1876 to 1882. This was fed by a gravity pipe from a brick dam on Toolern Creek, which would feed the reservoir during times of flood. However, within a few years of its construction, the water was unsuitable for human consumption due to the sludge flowing down Toolern Creek and into the reservoir (Moloney *et al.* 2007: pp. 154-155). The people of the Woi wurrung were, as a result, dispossessed of Country as settlement spread across Victoria, and waterways were polluted by both the goldrush and non-Aboriginal settlement across much of Victoria (Cahir *et al.* 2020).

6.3 Contemporary Aboriginal demographics

Aboriginal people have continued to live in the region crossed by the Project Land. Data from the 2016 census shows that between 0.9 per cent and 1.9 per cent of people in the LGAs intersected by the Project Land identified as Indigenous (Table 6-6).

Table 6-6: Persons identifying as Indigenous as of the 2016 census

LGA	2016 population (Indigenous)	2016 population (Indigenous and non-Indigenous)	Per cent Indigenous
Northern Grampians	168	11,439	1.5
Pyrenees	133	7,238	1.9
Ballarat	1,470	101,686	1.4
Hepburn	150	15,330	1.0

LGA	2016 population (Indigenous)	2016 population (Indigenous and non-Indigenous)	Per cent Indigenous
Moorabool	368	31,818	1.2
Melton	1,286	135,443	0.9
Victoria	**47,788**	**5,926,624**	**0.8**

6.4 Registered Aboriginal Parties

RAPs are responsible for managing Aboriginal cultural heritage within their appointed areas. They are appointed by the Victorian Aboriginal Heritage Council, a statutory body made up of Victorian TOs, established under the Aboriginal Heritage Act. The TOs apply to become a RAP by submitting an application form and supporting materials to the Victorian Aboriginal Heritage Council (Aboriginal Victoria 2019b).

The RAPs for the study, listed in area from west to east (and north to south), comprise:

- Barengi Gadjin Land Council Aboriginal Corporation (BGLCAC)
- Eastern Maar Aboriginal Corporation (EMAC)
- Dja Dja Wurrung Clans Aboriginal Council (DJAARA)
- Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC)
- Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation (WWCHAC).

BGLCAC represents several TO groups, including the Jadawadjali people in Area 1. EMAC represents the Djab Wurrung people in Area 2. DJAARA represents the Dja Dja Wurrung people in Area 4, WTOAC represents the Wadawurrung people in Area 5, and WTOAC represents the Woi wurrung people in Area 6. There is no RAP for Area 3 (TOs from BGLCAC, EMAC, and DJAARA are consulted for this area).

6.5 Intangible cultural heritage

Intangible cultural heritage relates to cultural elements that are not physical but links the practices, representations, expressions, knowledge and skills to places, landmarks, landscape features or broader landscapes which groups and individuals recognise as part of their cultural heritage (UNESCO 2003).

Intangible cultural heritage may include, though is not limited to:

- Ceremony
- Creation stories
- Skills involved in the creation of cultural items
- Knowledge and skills associated with medicinal plant use
- Language
- Dance
- Song
- Post contact associations
- Other cultural expressions and cultural knowledge systems.

Intangible heritage differs from tangible cultural places, which may include physical cultural elements such as artefact scatters or paintings. Though typically associated with particular places and landforms, intangible cultural heritage landscapes identified through the CVAs prepared for the Project have been difficult to classify as oral histories are, by their nature, not easily accessible to researchers and will require ongoing consultation.

Even when this consultation is complete, some oral histories may not be included because of their sensitive nature or because TOs have elected not to share them. Although no specific intangible places have been noted in the Landscape and Visual Impact Assessment, several intangible values have been identified by Aboriginal Elders during the preparation of CVAs, including the importance of mature native vegetation, the importance of native fauna and the health of waterways and Country in general (see Sections 8.1.2, 8.2.1.4, 8.2.2.4, 8.2.3.4, 8.2.4.4, 8.2.5.5, and 8.2.6.3.7 for further details).

There are no historical references listed on the VAHR for the Project Land.

CVAs prepared for the Project, which discuss cultural values that have been able to be identified within the Project Land, are presented in Section 8.2 of this report. CVAs are discrete from the desktop assessment, as they entail a different methodology and were prepared in collaboration with the TOs.

6.6 Historical context

The historical context of the Project Land is addressed in the Historical Heritage Impact Assessment and as such, it is not replicated in full here. However, the land use histories associated with gold mining and settlement of townships are pertinent to understanding potential ground disturbances as well as the alteration of waterways, which has a direct impact on the preservation of Aboriginal cultural heritage. The historical context associated with gold mining and settlement histories is reviewed with reference to the Historical Heritage Impact Assessment and drawing on information from mining related impacts reported for the Project Land (Hil and Kurpiel 2020; 2021). The boundaries of the Project Land assessed by Hil and Kurpiel (2020; 2021; Figure 6-6) reflect a previous iteration of the Project; however, that assessment is considered to capture the landforms and historical mining related impacts relevant to the current boundaries. This information is used to inform the Impact Assessments for each Study Area.

6.6.1 Land use history

6.6.1.1 Gold mining

After the new Colony of Victoria was proclaimed on 1 July 1851 (Carroll 2005, p. 652), gold was discovered in Victoria. The news brought a wave of immigrants into the Colony and generated a vast amount of wealth. The influx of wealth and people were not without its complications, not least how a small settlement whose economy was based on wool growing could manage an increase in population from 29,000 people at Separation to 123,000 by 1854. The initial years were considered something of a crisis, but by 1854, the fervour had settled somewhat (Carroll 2005, p. 652).

To the westernmost portion of the Project Land, surrounding Study Areas 1 to 4 of this report, alluvial workings were set up along the banks of the Avoca River in 1853. Areas that were heavily impacted through gold mining include townships and surrounds of Amphitheatre and waterways, including Glenlogie Creek and the Avoca River (Figure 6-4). Within Area 4, mining operations included leads north of Elmhurst, east of Lexton, and south of Amphitheatre, of which all date to the 1920s (Figure 6-4). Creswick, Allendale, and Kingston were also principal gold mining areas throughout the mid-to-late 1800s and continued into the early 1900s (Figure 6-5). Within Area 5, Ballarat was also heavily impacted through gold mining activities since gold was discovered in the 1850s (Figure 6-5). The manipulation of watercourses throughout this period, including for gold mining races and sluicing, as well as through and irrigation, farming and grazing activities, have caused major changes to stream flow across the region (Ballinger and Westbrooke 2016, pp. 47, 53). This information is important to understanding the level of disturbance and preservation of Aboriginal cultural heritage.

The manipulation of watercourses as a result of gold mining activity was minimal in the easternmost portion of the Project Land through Area 6 (Figure 6-6) compared to that found closer to the Ballarat, Creswick and Ararat goldfields, but changes have still occurred to waterways across the landscape. These are detailed further below.

Impacts of Gold Mining on the Landscape

Gold mining had a considerable impact on the landscapes of central Victoria, where mining waste has affected approximately three quarters of the rivers and waterways in Victoria. Miners would tip their waste products into these rivers, which would flow through each water catchment area. Waste included the soil dug out of mining holes, made up of a toxic thick, semi-liquid slurry of sand, clay, gravel, tailings and water, which produced sludge (Lawrence and Davies 2019, pp. vi-vii, 11). As the volume of sludge in these waterways increased, the waterways filled, and the mining waste spread outwards from the watercourses covering vast tracts of land that until then had been productive agricultural and grazing country. The impact of mining sludge was not confined to the area in which it was produced. Any watercourse that was fed via any number of tributaries that ran through a mining area was affected. These impacts on the watercourses that run through the Project Land affected the land and its usability for agriculture and for the Aboriginal people who lived on the land.

By 1851, some of the major waterways that run through the landscape had been mapped. This included the Wimmera River, which flowed from Mount Cole and altered course around Horsham, intersecting Areas 1 to 3 (Figure 6-4). One of the tributaries of this river, to the east of Glenorchy, no longer exists. The Loddon River and its tributaries had also been mapped within Areas 4 and 5 (Figure 6-4 and Figure 6-5, respectively). The Loddon River flowed in a north-easterly direction towards Tarrengower. One of its unnamed tributaries ran north-west from Mount Cole to join the Loddon near Tarrengower, and a smaller tributary flowed through Burnbank (Lexton) to join a larger unnamed tributary to the north-east of the township. Deep Creek is the only other named waterway in the area, which had several tributaries of its own, situated to the east of Lexton (Area 4: Figure 6-4). Deep Creek also joined the Loddon River near Tarrengower. In the east, the waterways comprised Kororoit Creek, showing its east and west branches, and Toolern Creek, which was the only waterway shown running through Melton (Area 6: Figure 6-6). Toolern Creek was shown to be a tributary of the Werribee River, while Kororoit Creek ran to Hobsons Bay. These mapped waterways show minor differences in alignment compared to their current day alignments (Ham 1851).

By 1862, after the gold rush impacted the landscape of the western and central portions of the Project Land, significant changes to the waterways are evident in the available mapping. The Wimmera River, which ran between Crowlands and Glenorchy to the south of the roadway in 1851, was diverted by 1862. The new course of the Wimmera River ran northwards from Crowlands towards Landsborough, then turned west towards Glenorchy. Similarly, the Loddon River and its tributaries have changed course. Instead of the various tributaries meeting the Loddon River near Tarrengower, Deep Creek joined an unnamed waterway that rose at Mount Cole to the west of Eddington, and the confluence of this waterway with the Loddon River was to the north of Eddington. No waterways are evident on the map at Lexton; Deep Creek has changed course with a new waterway (Creswick Creek) joining it at Carisbrook. These significant changes to the waterways were the result of gold mining across the region. However, little had changed in regard to the watercourses in the east of the Project Land. The alignment of each of the waterways appears to have minor differences compared to that shown in 1851, but they are predominantly the same (Edward Stanford Ltd 1862).

By 1877, the western portion of the Project Land's landscape changed yet again, and the waterways aligned more with those seen today. The Wimmera River is predominantly the same as that shown in 1862, albeit with several smaller tributaries having been included in the more recent mapping, particularly around Everlsey and Elmhurst. A new waterway, the Avoca River, is shown running from Amphitheatre through Avoca before heading northwards; the Avoca River is a much older waterway and was attested to by *The Port Phillip Patriot and Morning Advertiser* (7 April 1846, p. 3) in 1846, but had not previously been mapped. Bet Bet Creek is also shown, east of the Avoca River, running through the township of Lexton and joining the Loddon River at Eddington. Additional named waterways to the east of Bet Bet Creek include Mount Cullums Creek and Deep Creek.

In the east, the waterways shown include Kororoit Creek, although it shows the split between its east and west branches as being to the south of the Project Land, and Toolern Creek, which again comprises the only waterway running through Melton. However, the Werribee River no longer curves in a south-east direction to the south of Melton before heading south to Werribee – it is shown as running in a generally straight alignment between

Exford and Werribee, with some of its more identifiable meanders (visible today and in both the 1851 and 1862 maps) not shown. As such, this map appears to be an unreliable reference in the identification of waterway changes relating to any impacts from gold mining (E Whitehead and Co 1877).

Sluicing also had a major impact, as it both removed land and produced slurry. The sluice-heads at Ararat provided more than ten million litres of water running through sluice boxes daily. At Maryborough, sluicing produced 8.4 million litres per day. The resultant slurry ended up in local waterways (Lawrence and Davies 2019, p. 81). The control of water and extraction of water was extremely important, with both individuals and companies gaining control over large volumes of water across Victoria (Lawrence and Davies 2019, p. 97). Dredging, which also occurred in rivers within the region, began in Australia during the late 1890s. Floating dredges would mechanically scoop up and extract gold from the riverbed, destroying riverbanks, the riverbed, and much adjacent farmland in the process. At Newstead, the Victoria Gold Dredging Company built a 1.6-kilometre-long artificial channel to divert the Loddon River to access the Loddon's riverbed and tore up approximately 190 hectares of land in the process. Creswick and Avoca both had dredging booms during the early 1900s, after the introduction of bucket dredges. All of this produced sludge (Lawrence and Davies 2019, pp. 61-62).

It is unsurprising that sludge accumulated in the streets of the township of Creswick, north of Ballarat, during the 1850s, making the streets impassable and causing serious damage to private property. Despite a petition to have the sludge problem solved in 1860, miners continued emptying sludge into the creeks and rivers. Mines in Maryborough emptied sludge into Bet Bet Creek, while those at Clunes flushed their waste down Deep (Tullaroop) Creek near its confluence with the Loddon River at Eddington. Layers of sludge and sand filled previously existing waterholes from eight to ten feet in depth, while floodplains were covered by up to half a metre of contaminated sludge. It also raised riverbeds, increasing the water level of waterways. Each time one of these rivers flooded, the sludge spread across the floodplains of the region, and the rivers became silted. Trees along the silted waterways, such as the Loddon, were killed by this mining discharge (Lawrence and Davies 2019, pp. 22, 65-66).

Although laws had been put in place by the 1860s in an attempt to protect Victoria's waterways (which included stipulations that miners within the Ararat region had to build embankments to capture and hold their sludge), miners and mining companies continued to discharge their debris into nearby waterways. Sludge thus continued to contaminate and change the land through a combination of purposeful dumping and through shoddily constructed, leaky reservoirs (Lawrence and Davies 2019, pp. 140-141). The Sludge Board, which was appointed by the state government in 1886, reported the following in 1887:

> *The injuries already inflicted, and which, unfortunately, in many cases, cannot be cured, consist in the filling up of the large clear waterholes in the creeks and rivers … the silting up of the river beds, causing the sludge to overflow on the adjacent lands, to the destruction of vegetation and fruit trees; the liability of horses and cattle going to water in the creeks being bogged in the slum and perishing there, or contracting disease by drinking the muddy and often mineralized water; the deterioration in the quality of the wool of sheep depasturing in the vicinity of the silted-up streams, by reason of the sand being blown into the fleeces by the wind, and the depreciation in the value of the lands affected. These, and the destruction of roads and bridges, are some of the evils arising.* (Lawrence and Davies 2019, pp. 168-169).

Since the 1860s, channelising was one of the core strategies that communities used in an attempt to battle sludge. This involved the construction of a sludge channel to divert the sludge away from places of community importance. The main objective was to move the sludge elsewhere, to areas with lower populations who were less likely to generate their own efforts to battle their sludge problems. This affected not only townships, but farmers, graziers, and Aboriginal people living on Country (Lawrence and Davies 2019, pp. 152, 168-169). Despite such efforts, the Loddon River was noted as being badly filled with sludge between the headwaters in the gold mining areas and the township of Eddington in the north (Lawrence and Davies 2019, pp. 152, 168-169).

Despite gold mining at Ararat comprising 1.8 per cent of the volume (492,482,000m^3) of alluvium and quartz tailings from 1859 to1891, the Wimmera River was the only major river catchment within the region to not be majorly impacted by sludge. During this period, it had a negligible sludge to the estimated background sediment

yields similar to the post-contact period. In comparison, the Avoca River had a ratio of 32 times the natural sediment yield, while the Loddon River, one of the most affected rivers in Victoria, had a ratio of 200 times the natural sediment yield (Davies et al. 2018, pp. 6-8).

Changes toward the end of the 1850s, after the disruption of the gold rushes, saw the newly increased population seeking a greater sense of security and access to land for farming. Throughout the 1860s and into the 1870s, a series of Acts were passed in the Victorian Parliament seeking to open more rural land up for settlement in the hope of creating a population of yeoman farmers.

The various Acts saw an increase in the population of the region. However, farm amalgamations and a move of population to towns and cities have seen a significant decrease in population since the 1960s (Ballinger R. and Westbrooke S. 2016). Prior to the depopulation of regional areas in the latter part of the Twentieth Century, the increase in population encouraged the development of towns and settlements.

It is important to note the changes throughout the landscape for multiple reasons, including:

- Channelisation of waterways has resulted in rivers and channels prior to the goldrush being re-routed. As such, Aboriginal cultural heritage is more likely to be associated with older and in some cases extinct palaeochannels, rather than its modern configuration.
- Accumulation of sludge throughout the waterways in western Victoria may have preserved natural alluvial profiles underneath, including any associated Aboriginal cultural heritage. This should be kept in mind during sub-surface investigation and testing as excavations through sludge may result in the recovery of in situ Aboriginal cultural heritage.
- Artefacts may have been relocated through the movement of sludge deposits across the landscape, this may result in the recovery of Aboriginal cultural heritage although not *in situ*.
- Mining activities have greatly altered the ground surface, in which some areas have been greatly disturbed. In areas where mining has taken place and topsoil or subsurface material has been removed and/or clearing has occurred, it is likely Aboriginal cultural heritage has been impacted or removed in these areas. This is particularly prevalent in areas associated with a waterway.

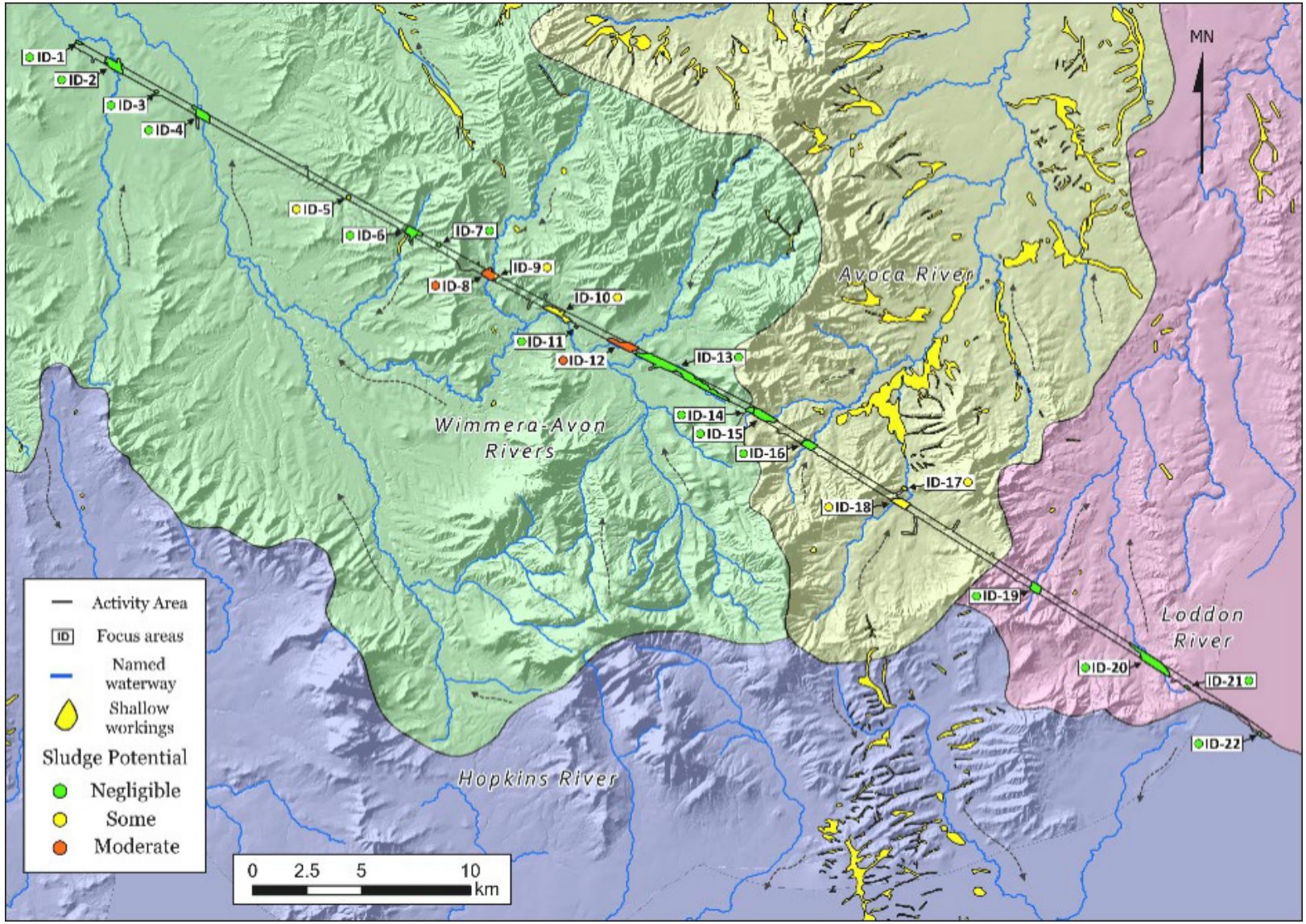


Figure 6-4: The former Project Land from Bulgana to Waubra showing areas of potential sludge accumulation (Source: Hil and Kurpiel (2020))

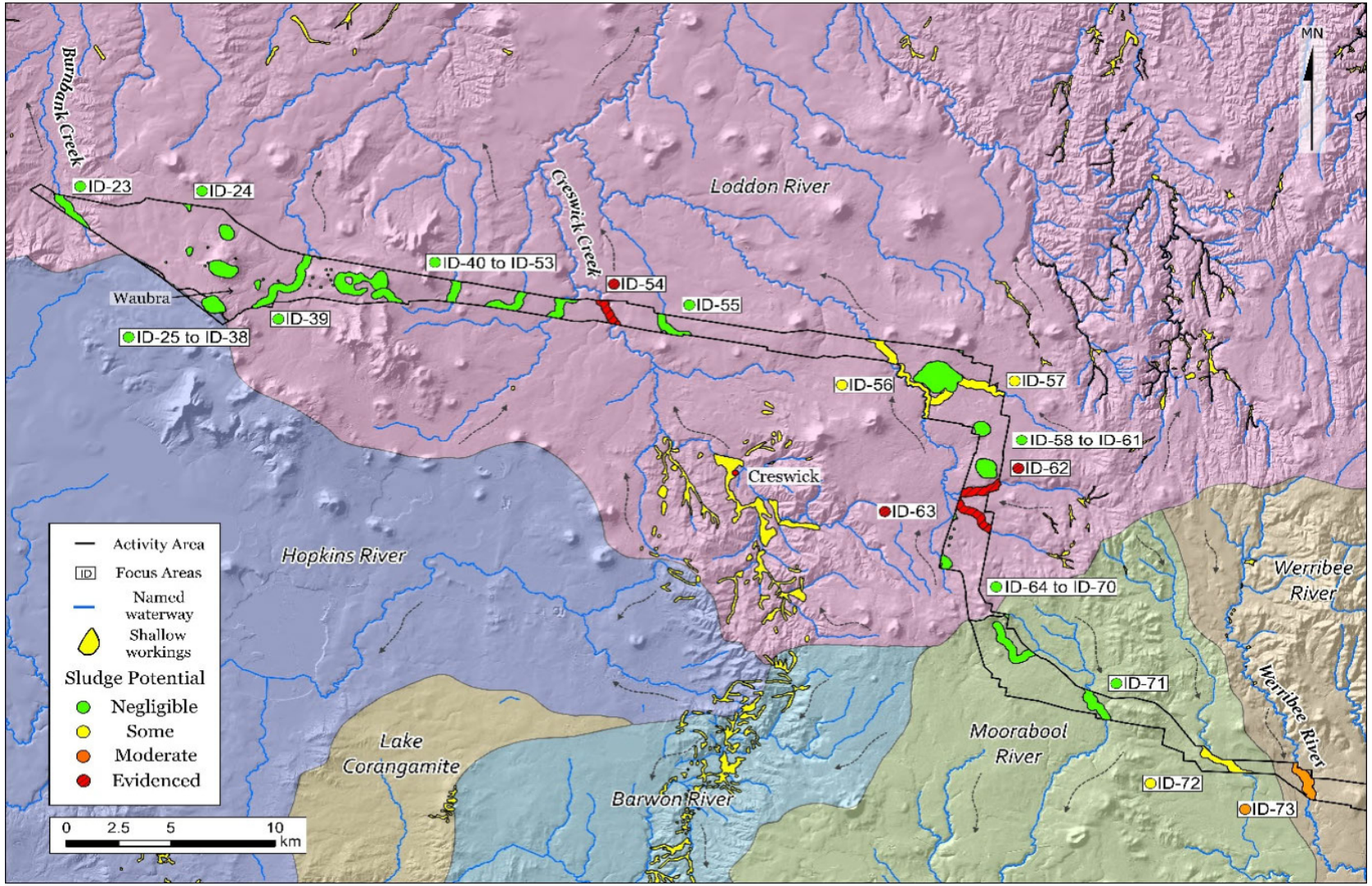


Figure 6-5: The former Project Land from Burnbank Creek to Werribee River showing areas of potential sludge accumulation (Source: Hil and Kurpiel (2021))

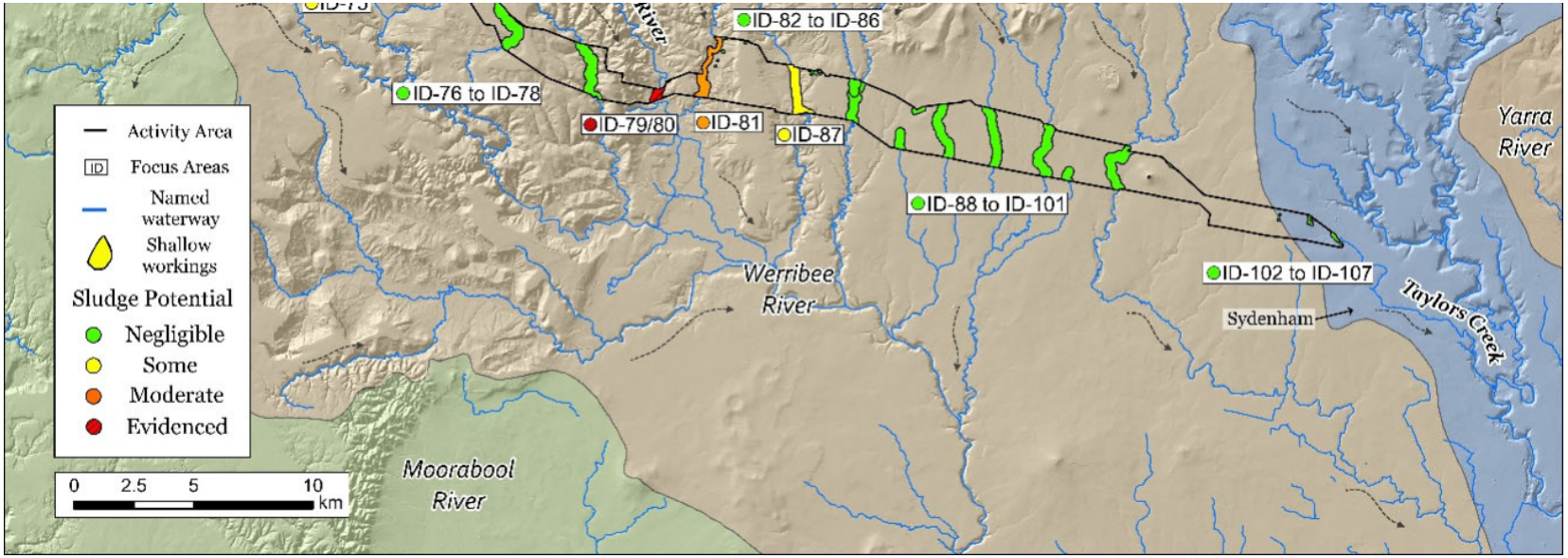


Figure 6-6: The former Project Land from Werribee River to Taylors Creek showing areas of potential sludge accumulation (Source: Hil and Kurpiel (2021))

6.6.1.2 Settlement in Study Areas 1 to 3 of the Project Land

Located in the western portion of the Project Land the township of Crowlands dates from the mid-1800s, with the opening of the first Crowlands Post Office in 1851. The area was known for its agricultural and pastoral activities. By 1870, the township had two hotels, the Travellers Rest and the Golden Fleece (Whitworth 1870, p. 104).

The township of Elmhurst, which abuts the southern edge of the western portion of the Project Land, was originally established in the 1860s, with the township having a hotel and two sawmills by 1865 (Victorian Places 2015). By 1903, Elmhurst was known for its pastoral, agricultural and mining activities; (Victorian Places 2015). The Glenpatrick and Nowhere Creek diggings were within 10km of the township (Whitworth 1870). The Amphitheatre township was established in the 1850s, with the post office opened on 22 June 1859 (Premier Postal Auctions 2005). By the 1870s, Chinese market gardens and several orchards had been established by former miners. Pastoral activities continued in the less fertile areas that were not taken up by market gardens and orchards. Mining in the area continued as late as the 1950s, with a large gold dredge working the Avoca River between 1951 and 1957 (Victorian Places 2015a).

6.6.1.3 Settlement in Study Area 4 and 5 of the Project Land

While diggings were established around Lexton, no gold mines were established there. Therefore, unlike other nearby goldrush villages such as Amphitheatre, Lexton continued to rely on agriculture and grazing. A Presbyterian school was opened there in 1855, followed by a Presbyterian church in 1857 (Victorian Places 2015d).

Waubra (originally known as Springs) was established in the late 1850s after farm selections were taken up in the former Burrumbeet run. In the surrounding area, large quantities of wheat, barley and potatoes were grown. Waubra Railway Station was opened on the railway line to Ballarat in 1888, prompting an official change of names from Springs to Waubra in the same year (Victorian Places 2015e). As with Lexton, this settlement relied on agriculture, but there were no diggings in the surrounding area (Whitworth 1870, p. 348).

Creswick was settled after gold was discovered on Creswick Creek in 1852. The layout of Creswick followed the Creswick Valley, with several urban subcentres with the Commissioner's Camp at one end and Creswick's Chinese camp at the opposite end. Shops and mine workings were strung out between the two. When the first purchases of land were granted by the government, the town centre was moved away from Creswick Creek, with the government buildings being constructed on higher ground. The township's population reached approximately 25,000 individuals in 1855 during the Creswick goldrush, before a slow decline began in the 1860s after the goldrush subsided. By 1881, there were less than 4,000 people working the goldfields at Creswick (Lester Tropman and Associates *et al.* 1990, pp. 8-9). However, deep lead mining stimulated the population across the region. With approximately 20 companies working the Seven Hills lead during the 1870s, the growth of several new townships in the Creswick area followed. These included Broomfield, Wallacetown, and Allendale (Lester Tropman and Associates *et al.* 1990, p. 15).

6.6.1.4 Settlement in Study Area 6 of the Project Land

The township of Melton was established in 1852 and functioned as a service centre for the surrounding rural districts, where much of the land was used for grazing and farming. Nearby small townships were located at Diggers Rest (the early 1850s) to the north-east, and Toolern Vale (1860s) to the north. These were established as the population expanded due to the goldrush spurring growth throughout the region (City of Melton 2016).

Due to the goldrush in the 1850s, the Selection Acts of the 1860s, and the Closer Settlements Scheme in the early 1900s, the landscape changed from extensive sheep runs to smaller mixed-use freehold farming (Bullers 2015, p. 7). Melton was proclaimed a road district on 16 September 1862 and became a Shire on 24 March 1871. In 1870, Melton was a postal town, which was situated on the road to Maddingley (now a suburb of Bacchus Marsh). The surrounding land was an agricultural and pastoral landscape. Between 1871 and the 1970s, the Melton Shire grew to include Braybrook, Bulla, and Keilor Shires (Victorian Places 2015b). The opening of

Sydenham (originally known as Keilor Road) Railway Station on the Sunbury railway line in 1859 ensured that travel to the goldfields by coach continued through Melton until after the Melbourne to Ballarat line was opened in 1884.

6.6.1.5 Impacts of settlement on the landscape

It is important to note the changes throughout the landscape for multiple reasons, including:

- Clearance of vegetation and robbing areas of stone has had a profound effect on the level of erosion taking place across the landscape. The massive increase in erosion has likely led to the displacement of artefacts and the re-routing of watercourses. Similarly, the construction of dams and other water infrastructure may have had a dramatic effect on the location and amount of water accessible in the landscape. Clearance of vegetation, in many cases, would have likely removed CMTs, including mortuary trees, from the landscape.
- Ploughing damages sites and displaces artefacts. Earth mounds and artefact scatters especially are known to be highly susceptible to damage from normal farming practices and often lead to the displacement of Place components and the destruction of tangible heritage. Likewise, the introduction of hoofed animals for pastoral activity fundamentally altered the soil pedology of Victoria, leading to dramatic changes in the vegetation and landscape.
- The construction of townships alters many natural processes, including drainage, erosion, wind breaks and fire regimes. The imposition of these structures in the landscapes can destroy tangible heritage but also breaks visual cues in Country and impacts the intangible values of a place, especially because areas favoured for towns by early settlers were often also favoured by Aboriginal people for camp and ceremony sites.

6.7 Register searches

6.7.1 Victorian Aboriginal Heritage Register

A search of the VAHR for Aboriginal Places previously recorded within the Project Land and within 50m of the Project Land was carried out on 3 June 2024 by Ashleigh Murszewski (Heritage Advisor, Jacobs).

This search identified 79 Aboriginal Places within the Project Land, including 10 Aboriginal Places which only have the component type listed as object collections. Object collections are not included in the following analysis as they either do not derive from the Project Land or they are already counted as other Aboriginal Place components. The count does not include Aboriginal Places registered on the VAHR as the result of fieldwork for the present Project (newly recorded Aboriginal Places are addressed in Sections 8.2), although it does include previously registered Aboriginal Places which have been reinspected for the present Project. Excluding object collections, there is a total of 69 Aboriginal Places in the Project Land comprised of 177 components, presented in Table 6-7. In addition to LDADs, two of these Aboriginal Places are multicomponent sites: one earth feature (mound) with an associated artefact scatter and a CMT with an associated artefact scatter. The majority of Aboriginal Places are recorded within 200m of a water source (including small, unnamed tributaries and water bodies). Maps of Aboriginal Places in the Project Land are provided in Appendix C.

Table 6-7 shows the frequency of Aboriginal Places and components in the Project Land. The most common Aboriginal Place types within the Project Land are artefact scatters (64 per cent) followed by Low Density Artefact Distributions (LDADs) (17 per cent), CMTs (12 per cent), earth features comprising a mound and two soil deposits (4 per cent), and two multicomponent sites featuring either an earth feature or a CMT with an associated artefact scatter (3 per cent). The most common components are LDADs (67 per cent), followed by artefact scatters (26 per cent), CMTs (5 per cent) and earth features (mounds and soil deposits) (2 per cent). The majority of sites that are LDADs are comprised of multiple components.

The classification of single and low-density artefact occurrences as LDADs was introduced to the VAHR in 2012. An LDAD is defined as the occurrence of stone artefacts at densities of up to 10 counted artefacts in any area of approximately 10m by 10m, or 100m^2, including within a single test pit of $\leq$ 1m^2. All previously recorded

artefact scatters within the geographic region that consist of 10 artefacts or fewer would now be classified as LDADs. Therefore, the frequency of LDADs is higher than is suggested by the data presented in Table 6-7.

Table 6-7: Summary of Aboriginal Places and components recorded within the Project Land. Note: these exclude all Aboriginal Places and components that have been recorded from fieldwork for the Project.

Aboriginal Place type	Aboriginal Places (no.)	Aboriginal Place components (no.)	Aboriginal Places percentage (%)	Aboriginal Place components (%)
Artefact Scatter	44	46	64	26
Earth Feature	3	4	4	2
Earth Feature (with Artefact Scatter)	1	n/a	1.5	
LDAD	12	118	17	67
CMT (Scarred Tree)	8	9	12	5
CMT (with Artefact Scatter)	1	n/a	1.5	
Total	69	177	100	100

Artefact scatters and LDADs that are located in the Project Land consist of stone artefacts from a variety of source materials and they may be found on the surface of the ground or sub-surface. The most commonly utilised lithic materials in the Project Land are quartz and silcrete, with smaller amounts of quartzite, tachylite, crystal quartz and chert also identified. These sites may also have components that are not stone, such as ochre, shell, hearths and faunal material. These registrations indicate that Aboriginal people were utilising the area and, depending on the types of tools identified, can provide information as to what kinds of activities were happening in a particular place.

Aboriginal people removed the bark from living trees to use for various purposes, resulting in CMTs (scarred trees). The scars are usually regular in shape, above ground level and may exhibit marks from the axe used to remove the bark. They are identified on a variety of trees: the species of the nine previously recorded scarred trees in the Project Land are two red gum, one grey box, one yellow box, on unspecified box, three 'other' gum trees and one uncertain species. Trees may also be scarred with toe holds for climbing, or with carvings. Aboriginal people also modified trees in other ways, such as by grafting branches together to create what are known as ring trees. There were no previously registered ring trees in the Project Land. According to Griffin and Cooper (2019) ring trees were used as markers (e.g., in Wotjobaluk cultural tradition), and that they signalled the boundaries of ceremonial grounds, cemeteries and burials, clan, totemic or religious boundaries; and Dreaming tracks or song lines, and this cultural tradition is shared amongst most of the TO groups in south-eastern Australia.

Earth features incorporate several different types of Aboriginal Place, such as earth mounds and hearths. Hearths are the remains of fires used for warmth and cooking by Aboriginal people, and they usually indicate repeated re-use of a location. Aboriginal earth mounds are places where Aboriginal people lived over long periods of time, resulting in the ground where they were settled being built up through use. Mounds often contain charcoal, burnt clay or stone heat retainers from cooking ovens, animal bones, shells, stone tools and, sometimes, Aboriginal Ancestral Remains (burials). There are no burials previously recorded in the Project Land, however there are a number of mortuary trees 30 to 35km south-west of the Project Land.

There are 10 object collections in the Project Land where these are the only component of the Aboriginal Place, plus several other object collections associated with other recorded artefact scatter components. Object collections comprise repatriated heritage items, private collections, heritage items held by various groups and other items.

6.7.1.1 Historical References

Historical references are locations which have an historical association with Aboriginal people, places or events, although they do not have statutory listing on the VAHR (however, 'Aboriginal Historical Places' registered on the VAHR do have statutory protection).

There are no Aboriginal historical references recorded within the Project Land. This does not indicate that none exist, only that they have not been recorded on the VAHR.

6.7.2 Heritage Overlay

The schedules to Clause 43.01 (Heritage Overlay) of the Northern Grampians, Pyrenees, Ballarat, Hepburn, Moorabool, and Melton planning schemes were reviewed and no Aboriginal cultural heritage places within the Project Land were identified.

6.8 Previous Aboriginal heritage studies

Previous archaeological research consists of regional studies, which assist in characterising the general pattern of archaeological site distribution across a broad region, and local studies, whose results – including recording of Aboriginal heritage, identification of sensitive landforms and appraisal of ground conditions and prior disturbance – assist our understanding of archaeological sensitivity and the extent and scope of prior investigation within the Project Land.

Note that this is not intended to be a comprehensive review of all archaeological work undertaken across the Project Land but rather seeks to identify broader archaeological trends that intersect the Project Land. There are several reports from the 1960s and 1970s that are not summarised in Section 6.8.1 as they are considered too broad to be of benefit or otherwise considered not to provide relevant contextual information. This section focuses on the regional studies that provide the most relevant contextual information for determining the nature of the Aboriginal heritage in the Project Land so that an accurate assessment of potential impact can be made. Local studies are summarised in each of the desktop assessments in Section 8.2, and so they have not been replicated. A summary of these reports is provided in Appendix E.

6.8.1 Regional studies

This table summarises the regional studies that provide the most relevant contextual information for determining the nature of the Aboriginal heritage in the Project Land so that an accurate assessment of potential impact can be made. Local studies are summarised in Appendix E.

Table 6-8: Summary of archaeological reports relevant to the Project Land

Author	Summary
McBryde and Watchman (1976)	This research paper assesses the exploitation of lithic resources of the landscape, and the role those lithic materials play in trade and exchange. Specifically, materials from Victoria's Cambrian greenstone belts are regarded as a highly prized material, known for their high-grade tool making ability. There are at least ten quarries in the Cambrian greenstone belts, which usually form in long, narrow outcrops of metamorphosed igneous rocks. Diabase, basalt, tuff, spilite, amphibolite and hornfels are also present. Quarries within the Mount William-Heathcote-Colbinabbin Belt include the Mount William quarry (near Lancefield) and two sites near Mount Camel. These are located directly north of Area 6. Western Victoria also contains two greenstone belts, where quarries have been identified at 'Berrambool' and 'Baronga' stations along the Hopkins River, directly to the south/ south-west of the Project Land. Axes from Mount William and Mount Camel quarries are widely dispersed, with more than half of the sample in this study located over 100km from their source. Concentrations of Mount William (near Lancefield) greenstone axes are associated with valleys in the central Victorian Rivers and to the Murray, as well as downstream from their tributaries. However, greenstone from quarries along the Hopkins River are typically within 100km from the source location. Though a more local distribution pattern, this perimeter still intersects with the westernmost portion of the Project Land.

Author	Summary
Frankel (1982)	The Sunbury Rings, circular earthen features built from scraping the soil in a circle and then piling that soil around the edge, are interpreted as ceremonial sites and are situated in the grounds of 'Rupertswood', owned by the Salesian College at Sunbury: Sunbury Ring AA (VAHR 7822-0097), Sunbury Ring G (VAHR 7822-0098), and Sunbury Ring N (VAHR 7822-0099). Though located outside the Project Land (being located approximately 10kms from Area 6), they are unique site types for the region. All the three rings are on the upper slopes of bedded sedimentary rock types, which rise approximately 50m above the river flats on the east of Jacksons Creek. The three rings are not evenly spaced. Two of them, Rings G and N, are 160m apart. The third ring, Ring AA, is further off, about 350m to the south-west of the central Ring G. They lie on the same contour but are hidden from one another by the shoulder of the hill. These hills are composed of sandstone and shale and have extensive views down the valley. Stumps and hollows in the cleared paddocks indicate that the area was once wooded, so that visibility would have likely been more restricted than present day. The area of the sites is part of the farmland worked by the Salesian College and is used for grazing sheep and cattle. The fact that the land has never been intensively cultivated or ploughed doubtless accounts for the survival of these sites. Since Frankel prepared this report, the surrounds of the Sunbury Rings have been affected by residential development and agricultural activity. No trace of any other earthworks or features have been noted in the immediate vicinity by either surface examination or from the air, which has been assessed using conventional and infrared photography. Both microcores and small flakes were excavated, indicating that stone was knapped within the circle (Ring G). It is possible that this, too, was associated with ceremonial activities, or in a ceremonial context, or even, perhaps, carving ritual objects which could only be manufactured on such occasions. Although earth rings are preserved in other parts of Australia, including NSW and QLD (McBryde 1974), the only comparable site archaeologically reported in Victoria was at Colac (Massola 1966).
Coutts (1985)	This work reports on the results of archaeological investigations in three separate study areas located in the central Western District of Victoria: incorporating the Warrnambool, Willaura and Ararat 1: 1000, 000 map sheets. The Ararat map sheet intersects the north-western portion of Area 1. The report includes site surveys and analysis of excavated data and aims to determine the types and varieties of Aboriginal Places that occur within the study areas, their relative frequencies of occurrence and their functions. The report also focuses on the cultural history of these areas. Specific to the Ararat map sheet, a total of 513 sites were recorded. The majority of these were mounds, lithic scatters and scarred trees. Though still nearby waterways, the majority of mounds (n=254) were located more than 200m from perennial streams, lakes, creeks and wetlands and contained varying amounts of charcoal, burnt basalt, stone tools, ochre, plant and animal products. To a lesser extent, Aboriginal Ancestral Remains (burials) were also found in association with mounds. Though typically singular, linear mounds along creeks and within margins of swamps or lakes were identified and are positioned on poorly draining soils. Lithic scatters (n=66) recorded during the survey were mostly associated with perennial sources of water and appear to be located in areas near mounds. The most common artefacts include burnt stone pebbles and quartz flakes. Coastal flint, grindstones, ground hatchet heads and backed blades were also identified. After mounds, scarred trees (n=161) were the most common type of site. A strong correlation between distribution and hydrological resources is apparent. Specific to the Project Land, scarred trees have been mapped along the Wimmera River. Rivers, swamps, lakes and creeks were all documented in association with scarred trees. Fish canals, axe grinding grooves, rock art sites and sources of stone or quarries were also identified. Sources of greenstone and basalt were common, where some of these locations were associated with scatters, flakes of greenstone and hatchet head blanks. The basic site types discovered were divided into two categories. ▪ Campsites including exposures (0.4 per cent), mounds (38.6 per cent), middens (14.3 per cent), lithic scatters (14.1 per cent), rock shelters (0.3 per cent) and fireplaces (1.2 per cent). ▪ Function specific sites including scarred trees (21.8 per cent), Aboriginal Ancestral Remains (burial) sites (0.7 per cent), quarries (1.4 per cent), axe grinding sites (0.1 per cent), stone arrangements (0.3 per cent), rock art sites (0.1 per cent), canal systems/ fish traps (0.4 per cent) and rock wells (0.1 per cent). Isolated artefacts were listed separately at 5.6 per cent. Broader predictions and conclusions were made regarding Aboriginal cultural heritage within the central Western District: ▪ Statistical analysis of these site types indicate that mounds and lithic scatters are typically observed in clusters or in proximity (less than 1 km apart). ▪ Large campsites occur in association with perennial and intermittent resources, particularly hydrological systems.

Author	Summary
	▪ Aboriginal Ancestral Remains (burials) may be found in association with mounds. ▪ Clusters of mounds also typically occur within the vicinity of scarred trees. ▪ No craters or saucer shaped depressions were observed during any of the surveys, therefore not expected within this broader region.
Du Cros (1989a)	An archaeological survey was undertaken for the western region of the Melbourne Metropolitan area for the Department of Conservation and Environment with an aim to further understand the archaeology of the Western Plains region, which intersects with Area 5. A sample survey methodology was employed as the best strategy to gain a representative sample of the landscape units within the study area and open eroded areas provided the best opportunity to identify sites. Landscape units surveyed comprised the following: volcanic plains, major rivers/creeks, hills and mountain ranges. Balliang Parwan plains was listed as one of the subunits that were surveyed, with an average ground surface visibility of 40 to 50 per cent. One survey area appears to have been located adjacent to the Project Land in the vicinity of the Ballan and Geelong – Bacchus Marsh Road intersection. The most common Aboriginal Place type recorded during the survey was artefact scatters, with the majority recorded within the major rivers/creeks landscape unit. The volcanic plains landscape unit contained the second highest number of artefact scatters. Scarred trees were recorded within the major rivers/creeks and volcanic plains landscape units. All scarred trees recorded on the plains were associated with swamps or minor creeks. Other site types recorded during the survey included a quarry, a stone arrangement, a freshwater shellfish midden and a contact campsite. The study concluded that Aboriginal Places occur on the extinct volcano/eruption points where a clear view of the surrounding plains is provided. It was also concluded that Aboriginal Places occur in association with swamps and small localised springs. The report noted that there is a local source of silcrete near the base of Bald Hill in East Balliang, which may have been exploited for stone material. However, the context of the silcrete source has been removed by ploughing. du Cros (1989b, p. 69-70) outlined a site prediction model based on the findings of the study for the Western Region as follows: ▪ Aboriginal Ancestral Remains (burials), artefact scatters, isolated artefacts and scarred trees will be found on river or creek flats, terraces or slopes within 100m of a major watercourse. ▪ Artefact scatters are also likely on points of vantage on the volcanic plains, such as eruption points (or extinct volcanoes or rises). ▪ Artefact scatters, isolated artefacts and scarred trees are likely to be found close to large or permanent swamps and lakes on the volcanic plains. ▪ Sources or outcrops or silcrete and metamorphic stone are likely to have been quarried by Aboriginal groups, if they were exposed 150 years or more ago. ▪ Shell middens are likely along the terraces of the major rivers i.e., Little River and Werribee River in places where no ploughing or disturbance has occurred. ▪ Stone arrangements are likely in areas which have experienced little in regard to rural activity in the west of the study area. These areas are also likely to contain well-preserved examples of artefact scatters, quarries and other archaeological sites which have not been disturbed by ploughing and clearing. ▪ Axe grinding grooves are likely elsewhere in the Werribee Gorge and possibly in nearby sandstone areas dissected by creeks. The ridge tops of the mountain ranges and saddles in particular where people could travel over the ranges are the most likely places for sites. Any water sources such as local springs, soaks, major rivers and creeks are the most probable places for site occurrences. Sites with extensive subsurface archaeological deposits containing Aboriginal Ancestral Remains (burials), hearths, faunal material and artefacts are most likely in areas with the best preservation. That is, in some sections of the major rivers where material has been covered by successive deposits of alluvium and in caves or rock shelters where soil is preserved from surface erosion. Contact sites are most likely to be located close to old homesteads or provisioning points. However, it is not unlikely that some Aboriginal groups wanting to avoid non-Aboriginal contact camped away from these places in remote and isolated places.
Bird and Frankel (1991)	This research provides an analysis of the ways in which primary archaeological data from western Victoria and south-east Australia has been used and explained. Instead of using a broad-scale model, changes were assessed at the local, short-term or even individual scale. Developments seen over the last few thousand years may be the latest in a continuous series of short-term responses to local conditions, which do not necessarily reflect broader regional patterns, or form part of continental trends.

Author	Summary
	Sites that have been discussed with some detail throughout this research paper in western Victoria are described briefly below. 'Stony rises' within the volcanic plains of western Victoria are well known for their potential to be associated with Aboriginal cultural heritage. They are associated with stone houses, which are small, generally circular low stone walls, and are best considered as footings for wood and bark superstructures. Earth mounds are also a relatively common feature of the volcanic plains of western Victoria. They appear as raised areas, characterised by blacker soil, often softer than the surrounding ground surface and are viewed on higher ground along rivers or around other water bodies. Mounds often appear as 'clusters' but where adjacent mounds have been dated, they may be separated in time by as much as 1,000 years so that clustering cannot be construed as evidence of large-scale settlements or sedentism. There is a change in the physical form of some open inland habitation sites from about 2,500 BP. This may be a local response to the wetter conditions of the last two millennia. There are two types of facilities in the western region of Victoria that were used to harvest eels and other fish. One form from the Lake Condah complex, developed around natural flow patterns along the edge of basalt lava-flows. The other form, historically documented at Mount William in the Grampians, and archaeologically traced near Toolondo, consists of earth cut channels and ditches. To add to this, fish traps have also been identified along Mason Creek near Mafeking (VAHR 7423-0532), which is located approximately 50km north-west of Area 1 and 2. Open inlands sites include all the inland habitation sites apart from shelters, stone houses and mounds. As archaeological features they take the form of lithic scatters (e.g., Lake Bolac), hearth stones (Berrambool), or, unique in Australia, a swamp site deposit of wooden artefacts (Wyrie Swamp). The archaeological evidence from late Holocene south-west Victoria and south-east South Australia reflects the variability and complexity of hunter-gatherer societies. Although focus was given to the Holocene, this is simply because there is currently no earlier evidence from this region, and not because it is believed that earlier periods were necessarily static or uniform. Similar local responses and dynamic and complex systems must also be expected in the Pleistocene and early Holocene both here and elsewhere in Australia.
du Cros (1991)	Du Cros continued her investigations of the Western Region with a more focused study of the Werribee Corridor, south of Area 5. This work included a desktop assessment and targeted pedestrian survey aimed at sampling different types of landforms. This was undertaken to further develop the regional site predictive model presented in the 1989 study. The sample areas were focused on the Werribee and Little rivers, and while the Project Land is approximately 10km to the north, there are similarities in landforms and traditional resources. The sample areas were chosen based on three criteria: ▪ Areas should be chosen where little or no archaeological survey has been already conducted so as to test the regional site prediction model further and refine it; ▪ Areas with good ground visibility should be chosen for sampling; and ▪ Information from local or long-time residents should be used in the fieldwork to locate sites. The field survey for this work was undertaken over 10 days and recorded 30 previously unrecorded sites. An estimated total of 1.07 per cent of the 210km^2 activity area was surveyed. The results were divided up into Volcanic Plains where five sites were identified: one artefact scatter and four isolated artefacts. Surface visibility was however identified as a limiting characteristic of the survey. The second area was the major river and creeks portion of the activity where there were eleven artefact scatters, with the remaining sites being two subsurface deposits eroding out of the riverbank of Little River, one stone arrangement, and one shellfish midden. Du Cros' site predictive statements were largely the same as her previous observations: ▪ Aboriginal Ancestral Remains (burials), artefact scatters, isolated artefacts and scarred trees will be found on river or creek flats, terraces or slopes within 100m of a major watercourse. ▪ Artefact scatters are likely on eruption points. ▪ Artefact scatters, isolated artefacts and scarred trees are likely close to large swamps and lakes. ▪ Shell middens are likely along the terraces of the major rivers. ▪ Stone arrangements may be found in areas of little or no disturbance. ▪ Subsurface deposits are likely in the river terraces of major rivers where little disturbance has occurred. Contact sites are most likely in places close to old homesteads and provisioning points.
Webb (1991)	Webb (1991) prepared a predictive archaeological assessment of the Melbourne to Adelaide Telecom Optical Fibre Cable Route for the Victorian section of the Project, taking in sections of the current geographic region around Ballarat, which included the proposed cable route from Deer Park to Ballarat. The geology for this section of the route comprises flat basalt plain in places overlain by Quaternary alluvium extending to the Brisbane Ranges. West of the Brisbane Ranges through to Ballarat are the midland plains comprised of basalt with more recent alluvial sediments containing some older

Author	Summary
	granite outcropping. The midland plains are generally dominated by open forest flora of messmate stringybark, and animals of dry open forest and grassy woodlands live in the region including echidna, wombat, koala, brush-tailed possum and eastern grey kangaroo. Permanent European settlement of the area occurred by the late 1830s to early 1840s, and with the discovery of gold in 1851, the area around Ballarat was heavily exploited until at least the 1870s when the land became increasingly selected for pastoralism. Land clearance occurred and timber was at high demand. Aboriginal Place types in the region include artefact scatters, scarred trees, quarries, ceremonial earth rings and rock arrangements, and Aboriginal Ancestral Remains (burials). Webb was unable to sample survey this section of the Proposed Route, and the route was looked at via moving vehicle. Webb concluded that most of the land between Deer Park and Ballarat is farmland that is heavily grassed with little visibility present. Webb recommended that the area be subject to sample survey.
Clark (1997)	Clark's study of the Box Ironbark Forests of Northern Victoria includes Areas 1 to 5, within its broader boundaries. This regional study assessed Aboriginal associations with the box ironbark forests of Victoria, stretching from Albury to Hamilton and including the Ballarat area. These forests were an important resource for Aboriginal communities, supplying wood and bark for implements, housing and ceremonial use; food plants; and animal food. Clark notes that gold mining activities and the associated demand for timber had a large impact on the forest and the landscape. Supported by an extensive ethnographic history, Clark emphasises the importance of this specific habitat to traditional Aboriginal life ways. One of the language groups who made extensive use of these forests was the Dja Dja Wurrung. As such, clan members of the activity area would have had access to these resources through kinship ties. The Box Ironbark Forest study showed a dominance of scarred tree sites, with these occurring along the margins of wetlands, lakes and natural drainage systems. The uses of the trees as a resource base were widespread and range from building, ceremonial, utensils or for preparation for a sweet beverage. Box and Ironbark species provided an extensive range of uses, including a sweet beverage, spears, canoes, boomerangs, shields, sculptures, bark huts and for ceremonial practices. Despite the multifarious use of woodland for Aboriginal people the archaeological record best records lithic sites as they are composed of the material that is best preserved. A large range of potential food and plant resources were also prolific in this habitat. This study highlights the complex relationship traditional Aboriginal people had with Box Ironbark Forests.
van Waarden (1994)	This study of the archaeological values of the Loddon River Catchment was part of a series commissioned by the Murray Darling Basin Commission for the first phase of the Southern Murray Basin Cultural Heritage Survey. The central portion of the Project Land passes through the southernmost part of this river catchment, and the study provides a synthesis of the knowledge that was available regarding this basin as of 1994. This is a comprehensive desktop study that reported on archaeology of the river basin. Environment: The Loddon River basin is made up of three geomorphic units, the Dissected Uplands, Murray Basin Plains and Volcanic Plains. The uplands are confined to the south of the basin and include a portion of the activity area at the eastern and western ends. The Murray Basin Plains are at the northern end of the basin and do not overlap the current activity area. The volcanic plains make up the central and part of the southern section of the basin and overlap with the central and western portions of the current activity area. Climate change since the last glacial maximum (approx. 20-17 thousand years ago) has slowly led to increasingly warm climates. The area is drier since the beginning of the Holocene and the courses of ancestral streams are still present in the landscape, often associated with billabongs and ox bow lakes. The vegetation communities present immediately prior to colonisation were largely in place by 10kya. Aboriginal Association: Aboriginal economies in the study area were influenced primarily by the socio/political structures of the individual groups and the local environment. These are the primary factors which influence site type and location. Important resources are centred around fresh water. Groups would occupy specific locations for varying periods of time based on local resource availability, and several base camps may have been established at different locations through the year. Archaeology: At the time of the study, 853 Aboriginal Places had been recorded in the Loddon River Basin, which was considered high compared to other parts of Victoria, but the report notes that this is likely to represent only a small percentage of the Places in the area. 46% of the Places were Mound Sites, scarred trees were 22% and surface artefact scatters were 16%, 5% of the Places were burials. Isolated artefacts, rock shelters/caves, section exposures, hearths, middens and rock wells were all 2% or less. These recordings are biased towards the northern part of the Basin, away from the current activity area, and reflect the fact that much more survey work has been carried out in certain areas rather than the true number and proportions of places in the region. Mounds are most likely to be identified on flood plains close to permanent water and are highly likely to be recognised as Aboriginal Places, although they were easily destroyed through historic farming practices. Mounds tend to occur in groups, including linear arrangements along banks or mounds facing each other on opposite side of a water body, and are often

Author	Summary
	within flood zones or on their margins. Mounds may represent camp locations and a distinguishing feature is the presence of clay ball heat retainers. The majority of scarred trees in the study area had slab removal scars (97%) with only a few toeholds or 'possum hole' scars. Scarring was identified mostly on box trees (80%) followed by red gums (12%). Aboriginal cultural scarring will only be found on trees that pre-date colonisation and thus will only occur in areas where the is remnant old growth native vegetation. Surface artefact scatters and isolated artefacts are primarily comprised of debitage and flaked pieces, with formal tools being relatively rare. The raw material utilised is mostly quartz, with small amounts of quartzite, basalt, silcrete and flint/chert also recorded. There appears to be no locational preference for raw material within the basin and quartz is found naturally occurring throughout the region. Stone artefacts are often present in mounds and surface scatters near permanent water may represent the location of destroyed mound sites, especially if clay ball fragments are also present. Fifty-two burials had been recorded in the Loddon River Basin, the vast majority along the Murray River and around Kow Swamp and none within the current activity area or geographic region. It is likely that further burial would be present in similar locations. The oldest date obtained from these Ancestral Remains is 13 kya at Kow Swamp. Over half of the burials are associated with mounds Sites and Land Management: Modern land use practices have dramatically affected site preservation and discovery in the study area. Relatively undisturbed sites are becoming increasingly rare in the region due to these practices which include: ▪ Agriculture; Land clearance, clear felling, levelling, ploughing, irrigation channel construction, and stone removal. Rabbits also continue to be a major threat to sites. ▪ River Regulation; irrigation and water management, reservoir construction, embankments and flood mitigation. ▪ Timber Harvesting; clear felling of trees, timber plantations. ▪ Extractive industries; excavation of land and riverbeds and banks, sand quarrying, sludge deposition, tree felling and deep lead mining practices. The report makes detailed site predictions for the geomorphic units identified. For the dissected uplands, sites are predicted to occur include artefact scatter and isolated artefacts, and scarred trees. Land disturbance due to mining is extensive in this area and may hamper site detection, but they will most likely be located on flattened ground along spurs, ridgelines and river terraces, particularly when they are associated with wetlands. Burials may occur in this unit although they are likely to be rare and restricted to areas with deeper loose soil or cached in rock ledges. The most likely site types in the volcanic plains are artefact scatter and mounds, rock arrangements have also been recorded. Land clearance for agriculture in this unit has had a particularly deleterious effect on Aboriginal Places and they are likely to be disturbed. Scarred trees may occur in remaining isolated stands of remnant native vegetation. Artefact scatters are likely to be associated with the north flowing streams that form corridors through the plains and like facilitated group movement. Burials are rare in this geomorphological unit.
Environment Conservation Council (2001)	The Victorian Government requested a report from the Environment Conservation Council to identify and evaluate the extent, condition, values and uses of the Box-Ironbark forests and woodland areas in northern Victoria and make recommendations on the balanced use of these areas; having regard to the economic and social value of any existing and proposed development or use of the land or resources. This report is primarily on the ecological and regulatory issues in play, but it contains a substantial section on Aboriginal resource use in this ecosystem, which would have occupied a large part of the activity area in pre-colonial times. The Box-Ironbark Forest occupied over three million hectares of northern and central Victoria, from the Great Dividing Range, north to the arid interior, meaning that the Project Land passes through its southern extent. Since colonisation these forests and woodlands have been extensively cleared for gold mining, agriculture, towns and wood products, only 17% of the original forest remains in fragmented parts. Although much of the ecosystem is changed, this would have been a dominant landscape in pre-colonial times, and the cultural association of Aboriginal people in the landscape remain strong. Aboriginal people utilised the Box-Ironbark forests and woodlands for a wide variety of purposes, including: ▪ Food and shelter ▪ Medicines ▪ Materials for canoes and other watercraft ▪ Materials for spears, shields, nulla nullas (clubs), boomerangs, and ▪ Materials for tools, dishes and other implements. There are also thousands of Aboriginal cultural places throughout the area, although most will not have been recorded due to the low level of survey in the region. These places include but are not limited to: ▪ Art sites

Author	Summary
	▪ Corroboree sites ▪ Meeting places ▪ Ceremonial sites ▪ Rock wells ▪ Grinding rocks ▪ Burial mounds ▪ Middens ▪ Scarred trees ▪ Artefacts and tools ▪ Massacre sites ▪ Missions and reserves. Many Aboriginal Places in the area of this forest will not have archaeological remains, although their importance may be noted in place names and oral histories. This report noted that no party of the Box-Ironbark forests have been adequately surveyed for Aboriginal Places of cultural values.
Vines *et al.* (2004)	Biosis Pty Ltd were commissioned by Stockland in order to address potential cultural heritage issues in the Melton East – Caroline Springs area as part of a project to plan the direction and development of the corridor. The study area covered some 5,500 hectares on the western edge of Melbourne, Victoria. At the time of the assessment, a total of 36 Aboriginal archaeological sites had been recorded in the study area. Most of these were situated along Kororoit Creek and its tributaries and near the Leakes Road- Western Freeway interchange. Vines et al. assessed the distribution of Aboriginal archaeological sites across the Melton East Growth Corridor and concluded that land within 100m of creeks, swamps and other watercourses will be sensitive for Aboriginal heritage values. They mapped the areas of higher archaeological sensitivity derived from their desktop review, which included Kororoit Creek and its tributaries approximately 480m from the current activity area. The study also found that other relatively undisturbed areas across the study area have potential for stone artefact scatters, but in much lower densities, representing what can be termed the "background archaeology" of Melbourne's western basalt plains. Over 40,000 years of utilisation of the grasslands for hunting and gathering means random discard, accidental loss, and tool maintenance during hunting forays over this period, have resulted in artefacts being scattered quite randomly across the entire landscape. This background archaeology may account for densities of 1 artefact per 10 square metres across the entire basalt plains. This compares with 1000 artefacts per square metre or more, on some of the most intensively occupied camp sites on Kororoit Creek. The assessment also found that a potential for historic sites exists across the study area for that project, particularly in reference to further dry stone walls, early pastoral settlement and evidence of the early 20th century closer settlement schemes on the Overnewton and Rockbank Estates.
Canning and St George (2012)	ACHM undertook a mortuary tree inspection on behalf of VicRoads as part of the Western Highway Duplication project. The Project Land was located between Beaufort and Stawell and was approximately 90km long, including off-ramps and access roads, and was, on average, 150m wide along the alignment. The closest portion of the activity area to the Project Land is near Great Western, approximately 21km to the south-west. A mortuary tree is a significant type of Aboriginal Place where Aboriginal Ancestral Remains and grave goods have been placed within the hollow of a tree trunk or branch as part of burial practices. It is believed that this practice was common in central west Victoria within the Djab wurrung language group (which encompasses the edge of the Grampians from Avoca north to Hamilton) and is thought to have continued into the contact period (post 1835) until the mid-nineteenth century. Non-Aboriginal explorers and settlers recorded the Djab wurrung clans as putting their dead up in tree hollows for three months, after which their bones were disarticulated. The head was then placed back into the hollow, while the bones were collected and put into a bag. However, practices relating to the burial, cremation and retention by relatives varies over time. Other than tree hollows containing human remains, mortuary trees are otherwise unmarked. ▪ Desktop research identified the following mortuary trees recorded in Victoria: ▪ Moyston Tree, which contained three individuals in a similar state of preservation; likely to have been placed in the tree around the same time. Contained one female, one male and one child, suggesting a nuclear family that died post-contact period. Also contained a polished bone item, believed to be a kangaroo fibula. This mortuary tree is located near Moyston, west of Ararat. ▪ Adelaide Hill (Moyston), which contained two individuals at very different stages of preservation; likely placed in the hollow at different times. One was clearly a more recent burial as the remains still contained hair on the skull, and the

Author	Summary
	possum skim wrapping was still intact. Believed to be a post-1835 burial, due to the high level of preservation of the remains and associated goods. ▪ Pleasant Creek (Stawell), which contained two intact possum bundles which indicate they were likely to have been placed around, or at the same time within the hollow. Believed to be a post-1835 burial, due to the high level of preservation of the remains and associated goods. ▪ Cathcart Mortuary Tree (approximately 5km east of Moyston), where there were several bones (including a decorated bone object made from a fibula, which may represent a strangling cord according to (Richards et al. 2012)) around the neck of the skeleton. ▪ Charlton (approximately 100km north-west of Bendigo), which contained a child burial (believed to be < 1 years old) which was buried with a number of non-Aboriginal items. ▪ Gorrinn (approximately 25km south-east of Moyston), which contained a single adult, likely to have been 40 plus years. Burial also contained basketry and fibre netting, both of which were preserved. Believed to be a post-1835 burial, due to the high level of preservation of the remains and associated goods. According to previous research into mortuary tree burial practices: ▪ Staged treatment of human remains, of which placement in tree hollows was a component. ▪ Foot and leg bones would often be distributed to relatives before re-internment within hollows. ▪ Male adults, female adults and children were all placed in hollows. ▪ There is evidence of consecutive placements in a single tree. ▪ There is also evidence of multiple simultaneous placements in a single hollow. ▪ Bones were often wrapped in possum skin or placed into a woven basket/netting bag for curation and/or placement in the hollow tree. ▪ Grave goods were occasionally included. The report noted that any mature gum that is at least several hundred years old has the potential to contain one or more Aboriginal Ancestral Remains. It is also possible that other tree species could have been used as mortuary trees. Based on this research, a total of 131 hollow trees along the proposed Western Highway upgrade alignment between Beaufort to Stawell were assessed for their potential as mortuary trees by a qualified arborist. No human remains were recorded within any of the hollows inspected. However, the report stated that human remains may exist within hollows in trees which have since closed over and would not be identified during their inspection.

6.8.2 Community engagement

In addition to consultation undertaken with specific stakeholders such as RAPs, TOs, FP-SR and local councils, consultation has been ongoing with the community throughout the design development and the EES process. Contributions from the community have been received via a range of engagement events, the Project website, email, and telephone hotline. Feedback was also received through community consultation sessions and the gathering of Social Pinpoint data provided by the community.

The Social Pinpoint data was collected via an online mapping tool, which asked stakeholders to provide feedback on what is important to individuals and communities in their local area as a part of the broader Aboriginal and non-Aboriginal community consultation for the Project. This information has not been altered from the original dataset, nor has it been validated or ground-truthed, but nonetheless it reflects the values that the broader community sees in the landscape. Some values recorded could be associated with Aboriginal cultural heritage, such as flora and fauna values and remembered histories of Aboriginal people in the landscape. The lack of specific information in this data limits its utility in this Impact Assessment.

Of relevance also to the Aboriginal Cultural Heritage Impact Assessment, EES Technical Report A: Biodiversity Impact Assessment notes social pin inputs for Wedge-tailed eagles and other birds of prey that might hold Aboriginal cultural values, particularly in the portion of the Proposed Route in proximity to the Wombat State Forest and Lerderderg State Park. These inputs are mapped in Technical Report A: Biodiversity Impact Assessment.

Social Pinpoint data is provided in Appendix D with values that are associated with Aboriginal cultural heritage marked Y and values that could potentially be associated with Aboriginal cultural heritage marked P.

7. Digital predictive modelling

7.1 Rationale for the predictive model

A digital predictive model was developed to assess and categorise the potential for Aboriginal cultural heritage (specifically, archaeological values) to be present within different landforms across the Project Land. The primary purpose of the model is to articulate expectations regarding the nature and distribution of Aboriginal archaeological places at any location within the Project Land. A detailed description of the methodology is provided from Appendix F.1 to Appendix F.9.

Prior to development, the main objective for completing the digital predictive model was to support an in-depth desktop evaluation as an alternative to standard assessment field surveys in certain areas with high OH&S risks associated with unsafe vehicle access or landholder objection to granting of land access to private property in accordance with AusNet's powers under section 93 of the *Electricity Industry Act 2000*. Heritage advisors and project managers were also able to use the model to identify areas of high archaeological potential to identify key locations that should be targeted during the initial fieldwork given land access issues across certain sections of the Project Land, as discussed in Section 5.8 and Section 8.1.1. The model was also used to estimate the level of assessment that would likely be required so that appropriate testing timeframes could be anticipated for these initial stages of the Project. The model did not look to map specific Aboriginal Place types for which we do not have sufficient data.

Predictive models are inherently iterative; they are constantly refined and therefore become more robust. It is therefore anticipated that this model will be critically analysed to understand any assumptions, gaps or limitations during subsequent CHMP assessment phases. The current predictive model is the third iteration and is informed by input from heritage advisors and fieldwork results.

7.2 Building the predictive model - methodology

A spatial multi criteria analysis (MCA) has been used for the predictive model (refer to Appendix F.1 to Appendix F.4). The objective of the MCA is to provide a clear and common understanding of the concepts, assumptions, decisions and implications used to create the predictive model. The MCA is built by defining a list of suitable criteria within the Project Land and larger geographic regions, which are largely based on landform characteristics. When a criterion is defined, the most appropriate mappable data set reflecting the expression of that criterion (landform) is chosen to build the map. Appendix F provides information on the data sets used to create the predictive model mapping shown in Section 7.7.

7.3 Overview of criteria

The model was developed from a scored MCA, in which a number of criteria were selected and scored to indicate the likelihood of Aboriginal heritage being present in the landscape (refer to Appendix F.6 and Appendix F.9). Heritage Advisors (including representatives from Jacobs Pty Ltd, AusNet, Andrew Long and Associates and Unearthed Heritage) participated in a workshop with spatial and GIS analysts on 6 August 2021. The workshop focused on defining a set of criteria that indicated higher or lower likelihoods of Aboriginal cultural heritage being present in an area, whereby features on the landscape of known Aboriginal Places was consulted.

The criteria considered in the analysis can be summarised into the following main groups:

- Geomorphology
- Geology
- Hydrology
- Topography.

The full list of criteria developed within the predictive model is detailed in Table 7-1 below. These criteria were based on the findings of the desktop assessments and information from the CHMPs being prepared, and were

weighted according to their perceived importance for Aboriginal archaeological site use and selection (refer to Sections 6.8, 8.2 and Appendix C). The final criteria defined for the predictive model are outlined in Table 7-1 and in Appendix F.

Table 7-1: Initial criteria for predictive model. Full list of data sources that were used for each criterion are provided in Appendix F.

ID	Description	Rationale	Potential
CR01a*	Major waterways considered permanent where the nature of the stream indicates a minimum catchment area of 1 square kilometre, which given the nature of the terrain would result in a suitable stream definition (distance to water – 0-100m)	Aboriginal cultural heritage is more likely to be identified within 0-100m of high order/permanent water sources, lagoons, swamps. It is expected that Aboriginal cultural heritage situated within proximity to water is more likely to represent intact, in situ, large, complex and archaeologically significant Places than those situated further away.	High
CR01b*	Description is as per CR01a (distance to water – 100 - 300m.)	Aboriginal cultural heritage is more likely to be identified within 100-300m of high order/permanent water sources, lagoons, swamps. It is expected that Aboriginal cultural heritage situated within proximity to water is more likely to represent intact, in situ, large, complex and archaeologically significant Places than those situated further away.	Moderate
CR02**	Paleo channels / Remnant waterways / Former springs (distance to water – 0 -500m.)	Aboriginal cultural heritage is more likely to be identified within proximity to high order/permanent water sources (within 500m). It is expected that Aboriginal cultural heritage situated within proximity to water is more likely to represent intact, in situ, large, complex and archaeologically significant Places than those situated further away. There is potential for the presence of former channels as the result of rerouting following gold mining activities.	No suitable data sources were available and as such was not included in the MCA.
CR03*	In addition to CRO1, designated waterways being named within the hydrology dataset (distance to water – 0 -100m.)	Aboriginal cultural heritage is more likely to be identified within proximity to high order/permanent water sources, lagoons, swamps, (within 100m). It is expected that Aboriginal cultural heritage situated within proximity to water is more likely to represent intact, in situ, large, complex and archaeologically significant Places than those situated further away.	Low
CR04a	Slope model – flat range: Greater than 1 degree to 5 degrees.	Evidence of Aboriginal presence in the landscape is more likely to occur on flatter terrain, as opposed to steep terrain within the landscape.	Moderate
CR04b	Slope model – moderate slope range: Greater than 5 degrees to 10 degrees	Evidence of Aboriginal presence in the landscape is more likely to occur on flatter terrain, as opposed to steeper terrain within the landscape.	Low
CR05a	Relief models –stony rises (where an area is 2m higher than the surrounding area)	Elevated areas such as stony rises have a high influence on the level of potential for Aboriginal cultural heritage to be identified. Stony rises, particularly within the volcanic plains of western Victoria are well known for their potential to be associated with Aboriginal cultural heritage, particularly subsurface and surface artefacts. *To avoid having the same multiplying factor added to the same area twice, CR05a and CR05b combined into CR05 for analysis*	High
CR05b	Volcanic/Scoria cones	Volcanic cones are prominent features throughout the western plains of Victoria and are phenomenologically significant sites across the landscape. Volcanic cones are associated with sites of social, cultural and spiritual significance and have a high influence on the level of potential for Aboriginal cultural heritage to be identified. *To avoid having the same multiplying factor added to the same area twice, CR05a and CR05b combined into CR05 for analysis*	High

ID	Description	Rationale	Potential
CR06	Relief models – ridgelines	Elevated areas such as terraces, hills, ridgelines, have a moderate influence on the level of potential for Aboriginal cultural heritage to be identified.	Moderate
CR07**	Viewsheds	Aboriginal cultural heritage is likely to be identified in areas with larger (>180 degree) viewsheds to key landform features and views along major waterways.	No suitable data sources were available and as such was not included in the MCA.
CR08	Remnant mature vegetation	Aboriginal cultural heritage (specifically CMTs) is more likely to be identified in areas with remnant mature vegetation.	Low
CR09**	Soil profiles/ mapping	Aboriginal cultural heritage is more likely to be identified in more permeable, deep, soil profiles. ***	No suitable data sources were available and as such was not included in the MCA.
CR10**	Quarry sources	Aboriginal cultural heritage is more likely to be identified in proximity (within 500m) to culturally significant resource locations. This includes quartz, silcrete and quartzite sources.	No suitable data sources were available and as such was not included in the MCA.
CR11a*	CMA Designated Waterways	Aboriginal cultural heritage is more likely to be identified within proximity to high order/permanent water sources, lagoons, swamps, (within 100m). It is expected that Aboriginal cultural heritage situated within proximity to water is more likely to represent intact, in situ, large, complex and archaeologically significant Places than those situated further away.	High
CR11b*	Description as per CR11a	Aboriginal cultural heritage is more likely to be identified within proximity to high order/permanent water sources, lagoons, swamps, (from 100-300m). It is expected that Aboriginal cultural heritage situated within proximity to water is more likely to represent intact, in situ, large, complex and archaeologically significant Places than those situated further away.	Moderate

** In the first iteration of the analysis, CR01 and CR03 were created. These criteria represent high value watercourses, sourced from a combination of LiDAR and the Vicmap Hydro layers, as per Table 7.1. Subsequently during the analysis, the "designated waterways" from the CMAs were obtained and used as additional criteria (see CR11a-b). To avoid duplication of scores and coverage gaps, the three criteria were combined, using the scoring as priority, where CR03 (low) would be superseded by CR11 (moderate-high) which would be superseded by CR01 (high), where they overlapped.*

*** indicates criteria for which there were no suitable data sources available and were therefore not included in the final MCA*

**** BGLCAC have noted that assessments in their RAP area have found Aboriginal cultural heritage in very shallow deposits.*

7.4 Scoring concept

The MCA has been built using the following scoring categorisations and scoring curve (see Table 7-2, Table 7-3 and Appendix F.3). The MCA considers potential from a likelihood context based on available data and archaeological experience. Table 7-2 shows the scoring rationale for each categorisation and Table 7-3 shows the value assigned from the cost curve for the analysis. For example, if a criterion is assigned a moderate category with a score of 2 based on the justification in Table 7-2, the assigned value for that criterion will be 3 in Table 7-3.

Table 7-2: Normalised score categorisation, taken from Appendix F.

Score	Category	Aboriginal cultural heritage – Potential
1	Low	Areas assigned low potential do not contain a highly utilised resource or preferred area of Aboriginal habitation in the past. Although sites may be present, they may comprise only one or two different site types and they are unlikely to be large and complex in nature.
2	Moderate	Areas assigned moderate potential demonstrate a resource or landform which may contain several archaeological site types. These sites are likely to demonstrate in situ cultural deposits and be complex in nature.
3	High	Areas of high potential have several intersecting resources or landforms which may contain a wide variety of archaeological sites. These sites are likely to demonstrate in situ cultural deposits and be large and complex in nature.

Table 7-3: Scoring Curve, taken from Appendix F.

Score	Category	Assigned Value (orders of magnitude)
1	Low	1
2	Moderate	3
3	High	5

7.5 Accumulation methodology

An accumulation methodology has been used for this MCA (see Figure 7-1 and Appendix F.4). Each criterion is allocated a score based on the scoring concepts and scoring curves provided above and these are accumulated to create the MCA surface. The MCA surface is an expression (accumulation or interaction) of each criterion in the predictive model.

The resulting MCA surface shown in maps in Appendix F has been expressed with a sliding scale of colour where locations predicted as having lower total probability for Aboriginal cultural heritage are expressed on one end of the colour spectrum (i.e., white) and locations predicted as having the highest probability for Aboriginal cultural heritage are expressed at the other end of the spectrum (i.e., red).

Areas of highest probability for containing Aboriginal cultural heritage are representative of multiple intersecting criteria (i.e., within 100m of a water source, on a stony rise in flat terrain).

In comparison, those areas of lower probability for containing Aboriginal cultural heritage are most likely representative of landforms that do not have other intersecting criteria, or are defined as having low potential (i.e., steep hillside). While these areas are considered to have lower potential to contain Aboriginal cultural heritage relative to areas at the highest end of the spectrum, the probability is not completely removed to acknowledge and reflect the fact that Aboriginal cultural heritage may be found anywhere in the landscape.

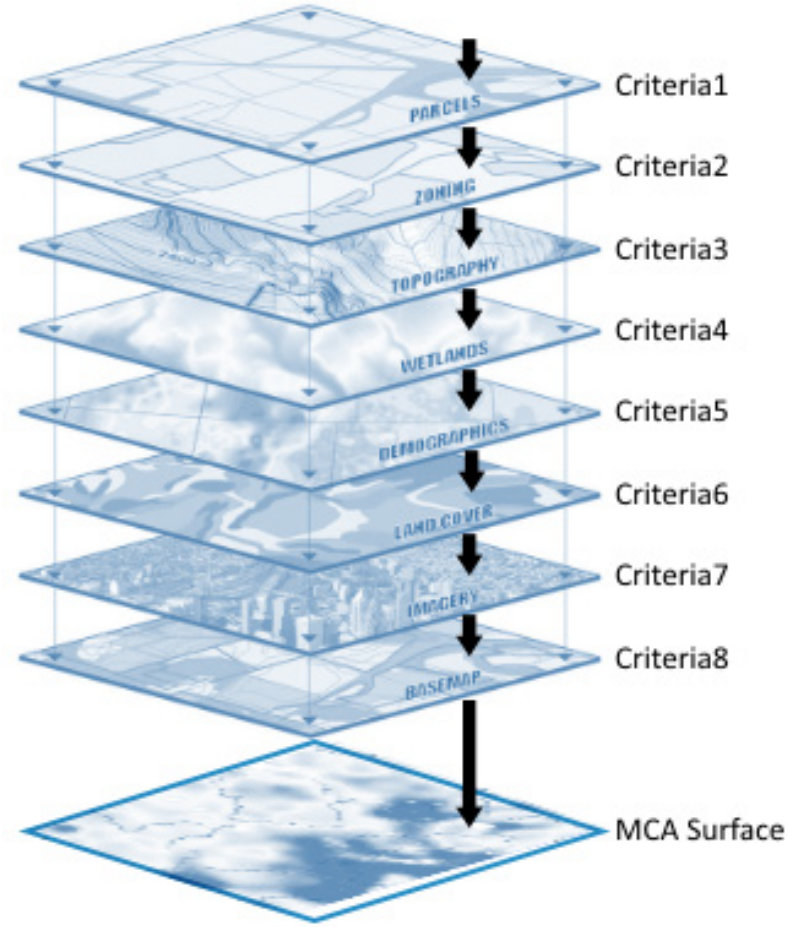


Figure 7-1: Accumulation methodology

Subsequently, if a particular area/landform has been expressed as having a lower value on the scoring curve and the MCA surface but is generally considered an area of high potential or has been allocated as having high potential in the scoring concept (i.e., within 100m of a waterway), this does not necessarily mean it has an overall low potential to contain Aboriginal cultural heritage. This merely reflects that only one criterion is present within this particular area compared to other portions of the greater geographic region which have several intersecting criteria of interest resulting in a higher score being expressed (i.e., expressed sensitivity in the MCA is relative and should be interpreted across the whole MCA rather than being interpreted on the single criterion basis).

Areas expressed as having the highest potential are of particular interest for further archaeological assessment as they are likely to reflect intersecting resource zones and preferred areas of habitation. The accumulation assessment methodology uses a standard algorithm (weighted sum) to aggregate the complexity scores for all criteria to generate a surface representing the total accumulative probability in each unit of analysis. The resulting surface provides a mechanism to identify locations with high or low total probability.

The accumulation formula for Figure 7-1 takes the form of:

$$MCA\ Surface = \sum_{n=1}^{8} C_n \times Weight_n$$

Where:
C = complexity score of criteria n
n= an instance of agreed criteria

Weighting between criteria is almost always subjective, and so must be based on defensible rationales. Given that the differentiation of probability between criteria was appropriately addressed using the initial categorisation, no weights were required in this instance.

7.6 Limitations and assumptions

There are a number of limitations that need to be acknowledged when interpreting the predictive model. These should be highlighted prior to discussing the results of the model and are listed below:

- The predictive model presents stacked criteria and shows presence of features within the set of the defined criteria only. As such, the predictive model should act as a tool and a first stage in the interpretive process for identification of features for specialists to analyse and contextualise further.
- The predictive model is used to aid in the identification of historic and prehistoric features, as well as palaeo-landforms, although is developed solely using modern data sources. Therefore, if landforms have been modified, either recently (i.e., due to mining activities) or have changed from their prehistoric form (i.e., due to natural geomorphological processes within the landscape), then these changes are not necessarily accounted for in the predictive model.
- Locally maintained datasets have the potential to be more positionally accurate or have a more extensive representation but may not have full and consistent coverage of the entire assessment area, which may create distortions in the results. Additionally, the positional accuracy of these datasets is unlikely to have a material impact given the 5m cell size of our analysis and proximity-based criteria.
- With respect to waterways, these datasets are modern local representations whose potential increased accuracy may not correspond with an equivalent improvement in decision making value of the mapped potential results. The local datasets also frequently include additional nuance and detail that does not materially improve the decision-making value of the mapped potential results and may introduce additional noise to the process.
- LiDAR was a critical input layer for several criteria, therefore where there were LiDAR coverage gaps in the Project Land no assessment was completed (Appendix F).
- In some cases, the spatial data available for integration into the MCA represents only a portion of the required constraint definition. For example, there is no complete dataset for CR08 Mature vegetation, and on this basis the EVC2005 data has been used to partially address this criterion.
- Available and suitable datasets are critical for integration into the model. As such, there were several criteria that were not able to be integrated into the model. For example, CR02 Paleo Channels/Remnant waterways/Former Springs.
- CR01, CR03 and CR11 comprise supplementary datasets to obtain a realistic representation of watercourses by importance. The criteria encompass catchment large watercourses, designated waterways, and supplementary waterways, respectively.
- Victorian geological, geomorphological and hydrological datasets in general are very broad scale and may not accurately reflect specific landform features at a localised level (i.e., accurately delineate stony rises).
- There are no exclusion-based criteria or exclusion zones within the MCA associated with sub-surface disturbances such as farming, mining, infrastructure, and development. As such, this type of disturbance is not accounted for in the predictive model. This means that while the model may predict that a particular

area has high potential to contain Aboriginal cultural heritage, the probability of identifying any Aboriginal cultural heritage at that location may be reduced due to the area being subject to surface and/or sub-surface disturbance.

- The predictive model only shows the likelihood of identifying Aboriginal Places and does not provide an indication of the density or type of Aboriginal Places that may be present.
- As the frequency of registered Aboriginal Places in the study area might be indicative of an absence of data rather than the presence or absence of Aboriginal Places, this VAHR data was omitted as a criterion from the MCA so as to not bias the results.
- Though predictive modelling is a useful tool to predict the likelihood of Aboriginal Places, it cannot replace ground-truthing and the consultation process on Country with members of the RAP and TO communities. This is particularly relevant to Area 5 and Area 6, where WTOAC and WWCHAC (respectively) advised that this predictive model would not be consulted for managing fieldwork priorities.

7.7 Discussion of results

The MCA was a staged process which was refined based on a review of the criteria and resulting surface at various stages. Specifically, there were several criteria that were revised or removed during the first two iterations after feedback from heritage advisors working across Areas 1 to 6 of the Project, informed by understanding of the areas and preliminary assessment results. It was also agreed among heritage advisors that ground disturbance was best represented as a layer that could be added after the analysis. As such, disturbance is not included in the MCA. The third and final iteration of the predictive model was launched on 16 December 2021 and is shown in full in the workbook in Appendix F.

The following criteria from Table 7-1 were revised, removed, or added after the list was constructed during the workshop in August 2021:

- There are several criteria for waterways and streams, therefore the Project team made the decision to dissolve rather than stack these criteria where they overlapped (this is not to be confused for when waterways overlap). Criteria relating to waterways (i.e., CR01, CR11, CR03) were combined into a single criterion output layer, CR11. The three separate data sources (refer to Table 7-1) for these waterways and streams criteria ensured that as many hydrological sources as possible were integrated into the model.

  The priority order for the dissolve is as follows:

  1) CR01a (high) then,
  2) CR11a (high) then,
  3) CR01b (moderate) then,
  4) CR11b (moderate) then,
  5) CR03 (low)

- CR02: Paleo channels / Remnant waterways / Former springs.

  There were no suitable modern sources available to integrate this data into the predictive model.

- CR06: Relief models – ridgelines

  As there were suitable existing data sources for CR06, slope calculations were used to define ridgelines for the MCA. Previous iterations incorrectly identified infrastructure and/or features that were accounted for in other criteria (i.e., river terraces [CR01]) as ridgeline when using these slope calculations. Due to this the score was downgraded from high to moderate in the MCA. It was not removed from the model as there are many cases where ridgelines were appropriately identified.

- CR07: Viewsheds

There were no suitable modern sources available to integrate this data into the predictive model.

- CR09: Soil profiles/ mapping

  There were no suitable modern sources available to integrate this data into the predictive model.

- CR10: Quarry sources

  There were no suitable modern sources available to integrate this data into the predictive model.

- CR11: CMA Designated Waterways

  After the first iteration, it was clear that not all waterways were being expressed in the predictive model as the dataset utilised was not a full hydrological model of the Project Land. The CMA designated waterways dataset was then chosen as a more accurate representation of this data, which aided in ensuring that all relevant waterbodies were incorporated.

The predictive model has aided in broadening an understanding of the environmental variability across the Project Land, particularly across CHMP activity areas that have yet to undergo any fieldwork due to land access issues. Working from west to east, there are a number of hydrological, geomorphological and geological trends clearly visible in reviewing the predictive model. For the westernmost portion of the Project Land (inc. Areas 1 to 4), the highest MCA scores (i.e., high potential for Aboriginal cultural heritage values to be located) are consistently associated with proximity to water (CR01, CR03 and CR11). Though this is also apparent through the central and easternmost portions of the Project Land, geological features within CR05a and CR05b start to appear as prominent features in the landscape. This corresponds to the boundary of the eruption points and volcanic plains geomorphic land systems south-east of Lexton within the Project Land (refer to Section 6.1.1, Figure 7-2 and Appendix A). The culmination of CR04, CR05a and CR05b with criteria pertaining to waterways reflects specialist knowledge and broadscale evidence in Victoria that Aboriginal cultural heritage is associated with terrain associated with stony rises, volcanic cones and waterways. Landforms that collectively have these criteria correlate with the highest MCA values for the Project Land and are concentrated in the eastern portion of Area 4, as well as Areas 5 and 6 (Figure 7-3).

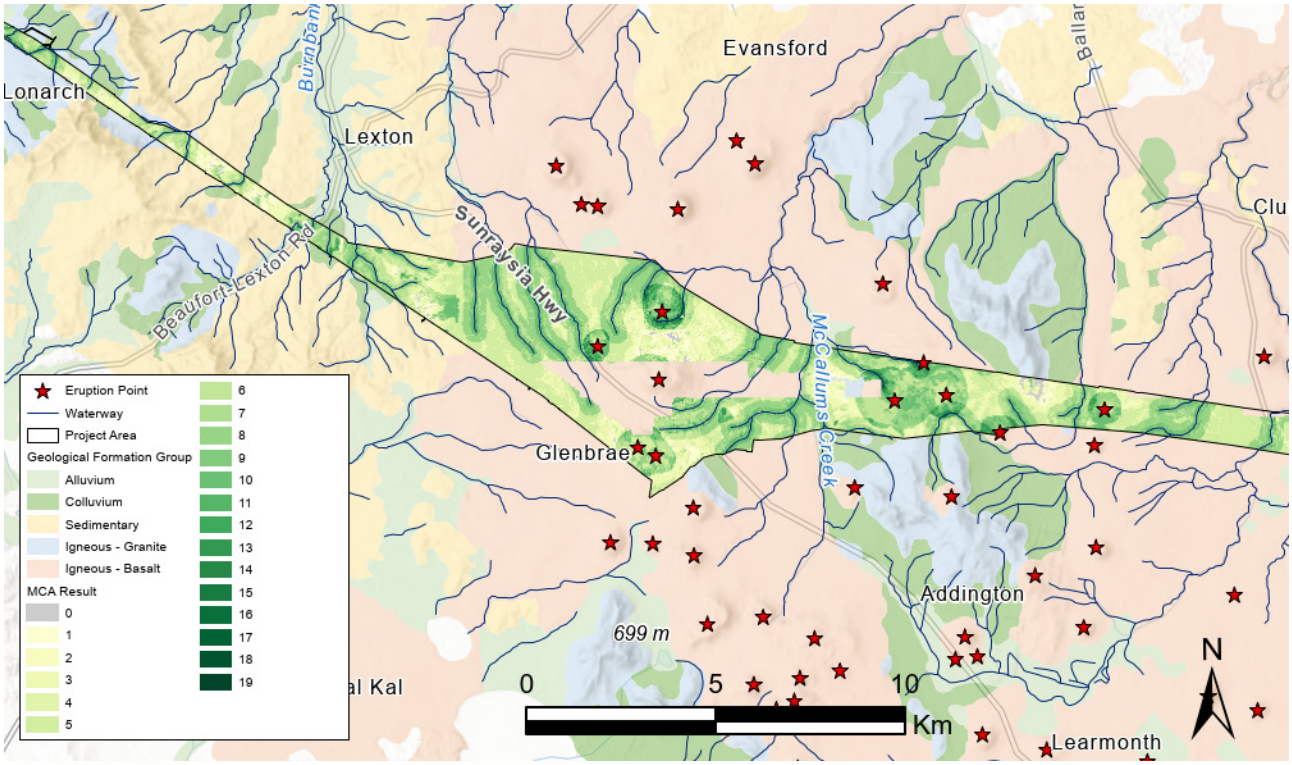


Figure 7-2: Image showing geological variation across the Project Land and correlation of Basalt plains and eruption points (right), and the interwoven Palaeozoic sedimentary lithotypes with granitic plutons (left) (note visual changes in the predictive model reflecting this change in geology)

As stated above, waterways (reflected in CR01, CR03 and CR11) are common across the entirety of the Project Land. These criteria have been given a high allocation as many previous studies demonstrate that Aboriginal cultural heritage is generally found within proximity to water. While we can highlight the resource itself and allocate a perceived appropriate buffer, the MCA cannot delineate features of these resources that may either make this location suitable or not suitable for habitation, camping, food collection etc. As such, deeply incised channels and seasonal drainage channels are included in the model irrespective of their suitability for Aboriginal occupation.

These instances are important to highlight as the predictive model is very large scale and as such, these micro landform features are not typically reflected in the MCA. Waterways are also highly dynamic landform features and, as such, are subject to constant changes (both seasonal and/or long-term broadscale changes). As such, the waterways criteria only provide data on the presence of waterways, not their nature or form. It was decided to still include minor waterways (CR03) in the MCA so that potentially important sites were not missed. However, it is important to remember that these constraints require further analysis (including both desktop review and fieldwork).

Similar constraints were recognised when reviewing slope criteria in the predictive model. CR04a (represented in Figure 7-3) adds a high multiplying score to terrain with a low slope (i.e., less than 5 degrees). This data was taken from the digital elevation model (DEM) and is useful to identify suitable campsite locations when overlapping with other criteria that have a greater potential for Aboriginal cultural heritage. For example, Figure 7-3 depicts CR01 overlain with CR05 and, when intersected with CR04, highlights the flattest terrain at the base of the volcanic cone (black arrow) as having the highest MCA score within this image. Without a slope criterion integrated into this model, there would be no differentiation between the slopes of the volcanic cone and the suitable campgrounds at the base of the volcanic cone near a prominent water source.

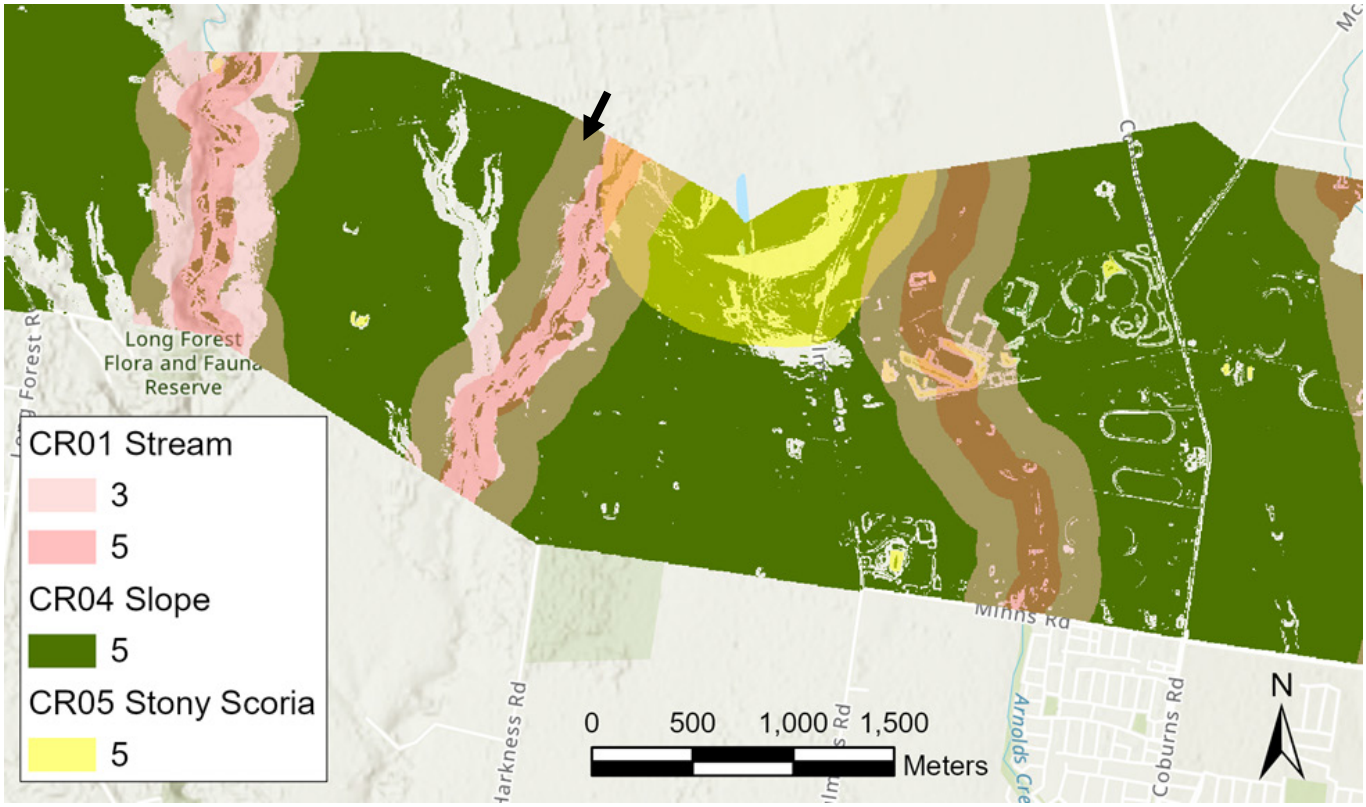


Figure 7-3: Culmination of criteria scores pertaining to presence of waterways and volcanic cones (labelled CR05 Stony Scoria) and slope. Intersecting zones (arrows) constitute the highest MCA scores across the Project Land.

CR04 adds a high score to flatter land surfaces, therefore, it also has the potential to inaccurately weight floodplains and flat areas prone to inundation as having high potential for Aboriginal cultural heritage. As such, fieldwork and, in some cases, additional desktop review is required to ascertain whether these areas, typically adjacent to waterways, have been incorrectly identified as having high potential in the MCA.

Lastly, relief models (ridgelines (CR 06)) were one of the more difficult criteria to integrate effectively into the MCA. There are many instances where the representation of this criterion was too broad and incorrectly captured areas with significant elevation changes that were not along a ridgeline. These included infrastructure (i.e., road and rail surrounded by treelines) and incised drainage channels (Figure 7-4). This example, along with the constraints addressed above, emphasises the relevance of reviewing, scrutinising and assessing the data being used to represent the criteria and how it is being expressed within the context of the predictive model to determine whether it is appropriate to include.

7.8 Application of predictive model

The predictive model has been used to categorise the potential for Aboriginal cultural heritage where gaps in field-based assessment exist and aid in the selection of high priority properties for field assessment to inform the EES (refer to Section 8.1). This model is particularly relevant for Areas 5 and 6, as well as the easternmost portion of Area 4, as a high percentage of standard assessment for the western portion of the Project Land (i.e., Areas 1 to 3 and the westernmost portion of Area 4) was completed prior to the development of the predictive model. The results of the MCA was presented to RAPs across the Project Land as part of Project consultation for the respective CHMPs. The MCA was also used to estimate the level of testing and time required to undertake high priority fieldwork. This has been the case for fieldwork across the entire Project Land, with the exception of Area 5 and Area 6, where WTOAC and WWCHAC (respectively) advised that this predictive model would not be consulted for managing fieldwork priorities. The fieldwork methodology in those two areas would instead comply with the fieldwork strategies agreed to during consultation and would target all areas of Project impact unless otherwise agreed to with the RAPs.

The predictive model does not replace ground-truthing and the consultation process on Country with members of the RAP and TO communities. As such, fieldwork is a core component of Aboriginal cultural heritage assessments and the results discussed in Section 8, and the model does not aim to replace systematic surveys. In specific circumstances where there is a clear OH&S risk for fieldwork, this model has been and will continue to be a valuable tool during the consultation process with the RAPs, TOs and FP-SR. If required, it has been called on to add further insights to the desktop evaluation as an alternative to initial stages of standard assessment ground surveys in situations where the latter is not possible, as discussed in Section 5.8, Section 7.1, and Section 8.1.1. For this report, the results of the predictive model have been discussed briefly in Section 9.2.3 to better understand the potential for Aboriginal cultural heritage values in areas of the Project Land that have yet to undergo CHMP fieldwork.

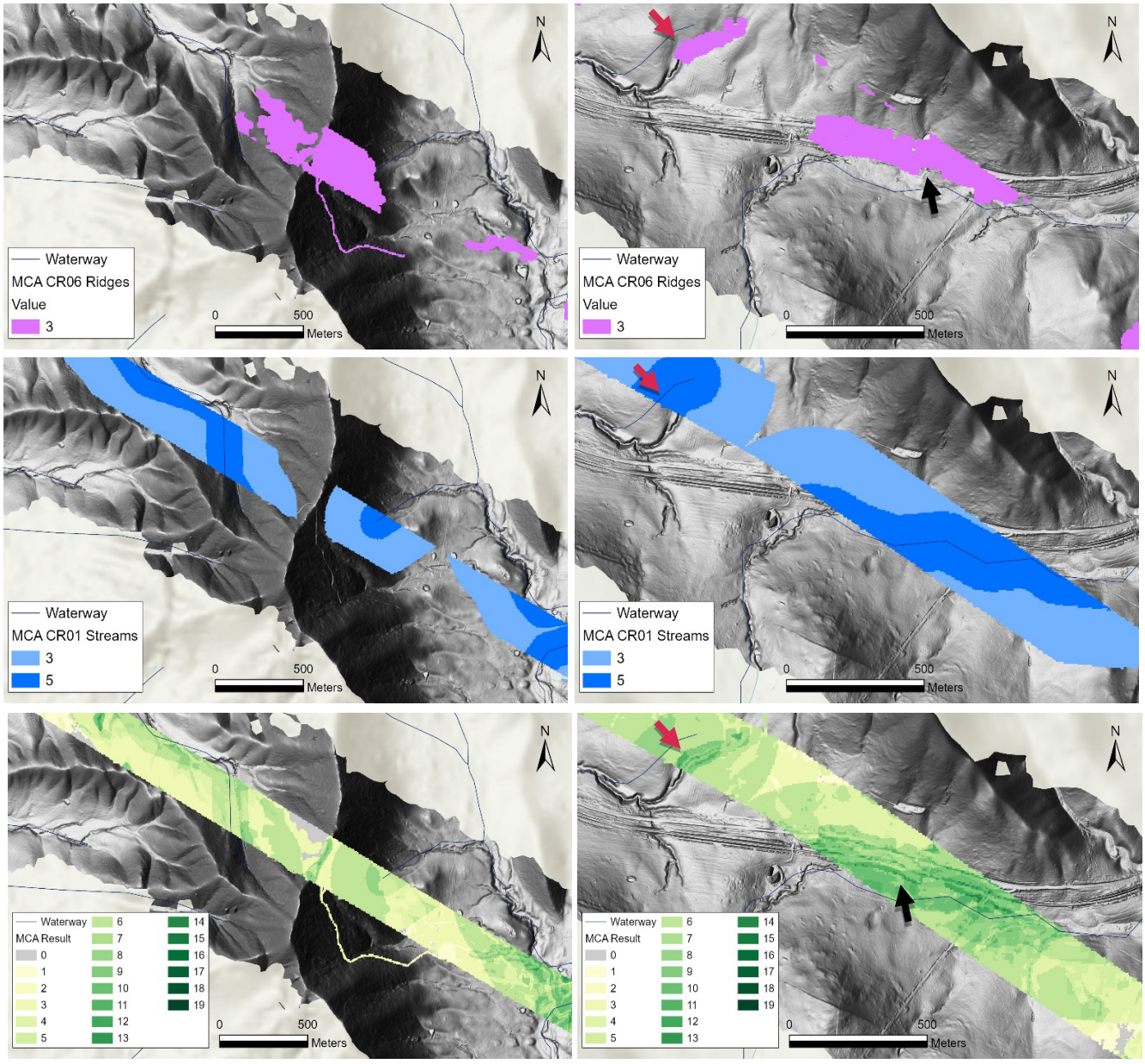


Figure 7-4: CR06 (top), CR01 (middle) and the predictive model (bottom) shown for two separate scenarios within the Project Land. Left: Ridgeline identified correctly in Area 2. Right: an example of where the representation of CR06 is too broad and has incorrectly captured areas that do not reflect the criteria. Examples shown include the Pyrenees Highway (black arrow) and drainage channels (red arrow) in Area 3.

8. Aboriginal cultural heritage assessments

8.1 Strategy

In accordance with Section 49 of the Aboriginal Heritage Act, CHMPs are required (Part 4 Div 2 s49) for the Project. Seven CHMPs are in preparation across the Project Land: (CHMP numbers 17313, 17321, 17311, 17312, 18101, 18108, and 18111) and an additional two CHMPs were recently confirmed (20459 and 20436). These CHMPs will be created by splitting 18111 (Wurundjeri Woi-wurrung) and 18108 (Wadawurrung) each into two CHMP areas. This was done following consultation with the RAPs, in order to help facilitate the meeting of key construction milestones. Additional information and mapping showing the boundaries for the nine CHMPs is captured in Appendix N. Findings hereafter in this report are referred to in association with their original CHMP boundaries pre- 5 June 2024.

As the CHMP standard assessments (ground surveys) and complex assessments (sub-surface investigations) are not complete, further Aboriginal cultural heritage values, including locations with archaeological potential, may be identified subsequent to the EES. These will be subject to assessment in accordance with each CHMP to determine how harm can be avoided or minimised and any management conditions required, as agreed to with the relevant Aboriginal stakeholders and FP-SR.

CHMP fieldwork data collected up until 5 June 2024 is presented in this section for integration into the Impact Assessment in Section 9.

8.1.1 Fieldwork for CHMPs

The following section describes fieldwork undertaken to date for the CHMPs and CVAs. RAPs for each CHMP are shown in Table 8-1.

Table 8-1: RAPs for each CHMP

Area	CHMP Number	RAP
1	17313	Barengi Gadjin Land Council Aboriginal Corporation
2	17321	Eastern Maar Aboriginal Corporation. As Eastern Maar Aboriginal Corporation have elected not to evaluate this CHMP, there will also be ongoing consultation with FP-SR.
3	17312	No appointed RAP. Ongoing consultation will be with FP-SR and the relevant TO groups (Barengi Gadjin Land Council Aboriginal Corporation, Dja Dja Wurrung Clans Aboriginal Corporation, and Eastern Maar Aboriginal Corporation).
4	17311 & 18101	Dja Dja Wurrung Clans Aboriginal Corporation
5	18108	Wadawurrung Traditional Owners Aboriginal Corporation
6	18111	Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation

To enable a detailed assessment of impacts for the EES, Jacobs developed a phased approach to field assessment that comprised:

- **Phase 1:** Comprises targeted assessments for incorporation into the EES. Where possible, this included both standard assessment (survey) (Appendix G) and complex assessment (sub-surface testing) (Appendix H). High priority properties were determined through a combination of desktop assessment review, the MCA for the predictive model, specialist input and RAP consultation. Phase 1 assessment included:
  - Standard assessment of all properties designated as high priority where there are no private property access constraints. This assessment involved a combination of systematic and opportunistic pedestrian survey. The methodology employed depended on the ground conditions encountered in different parts of the Project Land. Wherever possible, systematic survey was conducted by each team with field walkers spaced evenly apart at distances of 3 - 5 m, traversing the activity area parallel to its boundaries. Opportunistic survey was conducted where ground visibility is low or patchy, targeting areas where ground visibility is variable or generally higher.

- The ground surface was closely inspected for the presence of Aboriginal stone artefacts and other archaeological features such as hearth remains, shell and bone deposits, earth mounds, and Aboriginal Ancestral remains. The ground surface was also inspected for contour, soil colour and vegetation changes that might indicate the presence of existing disturbed land or areas of potential for subsurface archaeological deposits. All mature native trees were inspected for cultural scars, hollows that may potentially be used for mortuary practices, or other forms of cultural modification.
- Identification of areas of PAS during an initial survey in high priority properties (Appendix G).
- The locations of previously recorded Aboriginal Places were visited and printed VAHR Place Inspection Forms were completed onsite.
- Baseline subsurface testing in high priority properties where PAS overlaps with the proposed area of impact. This includes any infrastructure where ground disturbance works are proposed (including access tracks).
- Where impacts to areas of PAS intersecting access tracks can be avoided, subsurface testing may not be required as construction methods will use geofabric and crushed rock/road bases over existing ground surfaces, where possible.
- The commissioning of CVAs.
- This phase of assessment is complete for Areas 1 to 3. Phase 1 testing has been partially completed in Areas 4, 5 and 6. Portions not completed are due to RAP fieldwork requirements, inaccessible land parcels due to cropping regimes or waterlogged land, and private property access constraints. Some high priority properties were not able to be accessed at this time due to high OH&S risk.

- **Phase 2:** Comprises the remainder of the assessment required to complete the CHMPs. This phase includes standard assessment of all properties not accessed during Phase 1, where possible, identification of any remaining areas of PAS during survey, complex assessment of any new areas of PAS and completion of extent testing on high priority properties previously subject to complex assessment in Phase 1. Phase 2 has been completed for Area 2 and 3 only; however, it is near complete for Areas 1 and a portion of Area 4.
  - Areas of PAS were identified in the field during standard assessment in consultation with the RAP and TOs and subject to complex assessment where possible (Appendix H). No complex assessment fieldwork has occurred within Area 5 pending completion of a standard assessment as per the methodology agreed to with WTOAC.
  - PAS were identified during standard assessments through a combination of quantitative criteria such as elevation and distance to water and a phenomenological approach to evaluating landscape features. The experiences and knowledge of the RAP and TO groups present in the field were drawn upon. This information was considered along with known variables so as to determine the boundaries of areas that were more likely to be utilised by Aboriginal people in the past or to have more cultural significance and thus be areas of PAS.
  - Phase 2 testing has been completed where possible but has not been completed for the easternmost portion of Area 4 or for Areas 5 and 6 due to the RAP fieldwork requirement that standard assessment first be completed, inaccessible land parcels due to cropping regime or waterlogged land, and private property access constraints. Some high priority properties were not able to be accessed at this time due to high OH&S risk.

Percentage of fieldwork coverage across Areas 1 to 6 is provided in Table 8-2 and Appendix H. This information relates to percentage of properties that have been accessed, not the percentage of completion of Phase 1 or 2 testing. Status of Phase 1 and 2 testing is discussed within each Study Area across Section 8.2.

Table 8-2: Percentage of the length of the Proposed Route that has been accessed for each Cultural Heritage Management Plan.

Study Area	CHMP #	Length of Proposed Route in Study Areas (m)	Length of Study Area Coverage (m)	Percentage coverage for Study Area (%)
Area 1	17313	14246	14246	100
Area 2	17321	9817	9817	100
Area 3	17312	13307	13307	100
Area 4	17311	19156	17966	93.8
Area 4	18101	61798	30331	49.1
Area 5	18108	20131	7844	39.0
Area 6	18111	56266	30188	53.7

Further detail about the fieldwork coverage for each study area is available in Section 8.2.

Table 8-3: Percentage of fieldwork coverage for each Cultural Heritage Management Plan. Note: complex assessment coverage is for tower assembly areas only (i.e. access tracks, laydown areas etc. excluded).

Study Area	CHMP #	Standard Assessment Coverage of alignment within CHMP (%)	Complex Assessment Coverage of tower assembly areas (within PAS or control testing locations) (%)
Area 1	17313	100	61.5
Area 2	17321	100	100
Area 3	17312	100	100
Area 4	17311	93.8	100
Area 4	18101	49.1	34.2
Area 5	18108	39.0	0
Area 6	18111	53.7	63.2

Aboriginal cultural heritage is identified in consultation with the RAPs and/or TOs onsite and discussions around their nature, location and extent are also discussed post-fieldwork results meetings with the relevant RAP, TOs and FP-SR to inform their registration on the VAHR. This process is running concurrently with the CHMP fieldwork programs and many of these registrations have been submitted and approved. The status of their registration is provided in Section 8.2.1.5, 8.2.2.5, 8.2.3.5, 8.2.4.6, 8.2.5.6 and 8.2.6.5. Equally, there is a high a number of Aboriginal cultural heritage values where CHMP testing has been completed and their registration on the VAHR is currently in progress. For these values, including the Aboriginal cultural heritage values identified in the CVAs, their nature, location and extent has been fully incorporated into this assessment. Particularly in Areas 4 and 6, there are a number of Aboriginal Places within the Project Land for which CHMP fieldwork is ongoing, and as such the nature, location and extent of these Aboriginal Places is of a preliminary nature. Despite this, an understanding of the distribution of Aboriginal occupation is well developed, and this is summarised in Section 9.1.3.1.

Desktop-based assessments have been undertaken to complement targeted field assessments and prioritise assessment of areas that are most likely to contain, or which have the potential to contain, Aboriginal cultural heritage values. Appropriate assessment for the CHMPs will be completed in accordance with the applicable regulations and guidelines. As outlined in Section 5.8, a digital predictive model (see Section 7) was available to support an in-depth desktop evaluation for Aboriginal values that have the potential to be impacted, directly or indirectly, by the Project; this model served as an alternative to standard assessment field surveys in certain areas with high OH&S risks associated with land access. A cross examination of the predictive model with Aboriginal values identified through ground-truthing has helped validate the outcome of that approach in several areas. In addition, CVAs as described below have been prepared, which further complement field survey so as to assess direct and indirect impacts on or loss of intangible Aboriginal values. Where ground-truthing has

not yet been conducted, impacts to currently unknown Aboriginal cultural heritage values will be managed through the conditions of the CHMPs in preparation and the unexpected finds contingency plans of each CHMP in accordance with EPR ACH1.

8.1.2 Cultural Values Assessments

The purpose of a CVA is to identify and understand traditional and contemporary Aboriginal cultural heritage values and meanings held by the Indigenous community associated with the Project Land, and the ways in which these values can be interpreted in a meaningful and practical way so that they can then be factored into the impact assessment. A CVA has been completed for each RAP area in the Project Land, and as such there is a good understanding of intangible Aboriginal cultural heritage values across the Project. Visual impacts from the transmission line are also considered as part of the impact rating of cultural landscapes identified as part of the CVAs.

For areas assessed as having high cultural values to Aboriginal communities in the CVAs but where it was not possible to complete field assessments prior to the completion of this impact assessment due to access restrictions, an examination of these areas was undertaken using the predictive model. For each cultural landscape identified as part of the CVAs, corresponding high MCA scores used for the predictive model indicate a high potential for unregistered Aboriginal Places. As cultural landscapes are recorded relatively rarely and are typically associated with long-term and intensive utilisation, all known cultural landscapes identified as part of the CVA as requiring protection from harm or explicitly noted as having very high cultural significance have been given a corresponding high scientific ranking. This is supported by the high MCA values in the predictive model. Some cultural landscapes, such as the Wimmera River, might hold significance for more than one TO group but, while noted within the results for each area, are only counted once (at their first mention) within the following results.

The non-RAP area is covered in each of the CVAs produced for the BGLC, DJAARA, and EMAC RAP areas.

8.1.3 Significance ranking of Aboriginal cultural heritage values

A significance ranking for each newly identified Aboriginal cultural heritage value from fieldwork and/or CVAs was assessed using four criteria: the historic, scientific, social, and spiritual values of each cultural heritage site. Definitions for the four criteria used in the assessment of cultural significance are discussed in Section 5.5.2.

The significance rankings for all Aboriginal cultural heritage values are tabulated in the following section. These rankings are then used in the assessment of impacts for the Project, as provided in Section 9.2

8.2 Results

8.2.1 Area 1: BGLCAC

The activity area of CHMP 17313 extends south-east from the existing Bulgana Terminal Station and is located to the north-east of Black Range, across the Wimmera River and ending at the foothills of the Pyrenees Ranges. This area intersects the geomorphic land system from Six Mile Creek in the west to the Wimmera River to the east, where a significant portion of this alignment is within areas of CHS associated with these two waterways; although noting tangible and intangible cultural heritage is likely to be present across the entire activity area, not just within areas of CHS.

In total, 100% of the Proposed Route, including the new 500kV terminal station near Bulgana, has undergone standard assessment within Area 1. Outside the footprint of the new terminal station near Bulgana, testing at tower hardstands within areas of PAS and locations selected for control testing has been completed. This is approximately 28% of the tower assembly areas in CHMP 17313 (10 of the 36 tower assembly areas). Complex assessment has yet to commence within the new terminal station near Bulgana. As such, Phase 1 testing and the majority of Phase 2 testing has been completed for CHMP 17313 in Area 1 at the time of this assessment.

8.2.1.1 Desktop assessment

The Project Land in Area 1 is located within the Western Uplands geomorphic division, in the 'Non-granitic hills and valley slopes', 'Plateaux and rises', and 'Terraces and floodplains' geomorphic land systems. The overall elevation of the activity area ranges from approximately 220-270m above sea level.

BGLCAC's *Country Plan: Growing What* (2017) is a compilation of yarns from individual family groups, regional meetings and group gatherings to gather information from as many BGLCAC TOs as possible. Amongst the topics this document discusses are the creation story of Bunjil creating the world and the importance of following Bunjil's law, post-contact accounts, the importance of the natural landscape and vegetation, contemporary connection to Country, and priorities for BGLCAC peoples.

Prior to non-Aboriginal settlement and alteration of the landscape, much of the Project Land would have been favourable for Aboriginal occupation and resource procurement, given the availability of food and fresh water. While no major watercourses were mapped on Mitchell's 1836 survey within the area, the prior alignments of minor waterways and tributaries of larger watercourses stemming from the Pyrenees and other ranges would likely have been extant. Non-Aboriginal settlement and gold mining have had a major impact on prior watercourses, and the current Six Mile Creek and Wimmera River do not fully reflect their previous alignments. Gold mining processes have made significant changes to the landscape as a result of sluicing, dredging, and the channelisation of waterways. Sludge, the toxic by-product of gold mining, also changed the landscape. This can, and does, have an impact upon where archaeological deposits are identified within the landscape and the depth at which archaeological deposits may be found where mining activities have occurred. However, the results of a historical search of impacts on Six Mile Creek, the Wimmera River and the land between the two waterways indicated that the area and any Aboriginal cultural heritage within it had not been significantly affected by prior gold mining activities (Hil and Kurpiel 2020). A VAHR search and a review of relevant archaeological reports reveal that there are five Aboriginal Places comprising six components located within the activity area for CHMP 17313: Six Mile Bridge Tree (VAHR 7423-0754) is a scarred tree; Six Mile Creek-1 (VAHR 7523-0170) is an artefact scatter comprised of a single quartz core; Vance's 1 (VAHR 7523-0121) and Vance's 2 (VAHR 7523-0121) are artefact scatters, the latter of which contained a surface scatter of hammerstones, flakes, cores and other stone artefacts made from quartz, silcrete, and other raw materials; and Wimmera River Joel South LDAD 1 (VAHR 7523-0351) comprises two components within the Study Area. None of the previously identified Aboriginal Places are intersected by proposed infrastructure for the Project (detailed in Section 9.2.1).

The low number of identified Aboriginal Places on the VAHR is likely due to the lack of previous assessments undertaken within or near to the activity area rather than a lack of archaeological material. BGLCAC have also noted that the paucity of data in relation to intangible and tangible values across Area 1 is a direct result of colonisation and the fact that much Country is held as private agricultural land. This has limited the field investigations relative to the size of BGLCAC Country, the formal recording of Aboriginal values, or their registration on the VAHR.

The background review and VAHR search results informed the predictive statements developed for the CHMP, which indicates that Aboriginal Places will most commonly be found on rises and hill slopes, hill crests and ridgelines, and terraces, or associated with elevated landforms within 200m of prior watercourses. Aboriginal cultural material within the activity area is likely to be present as CMTs or stone artefacts. Stone artefacts are likely to be primarily of quartz, with silcrete being the next most common material available in the local area. Stone artefacts may be found on the surface or in subsurface deposits up to 300mm deep depending on the presence of alluvial deposit. The literature review of archaeological assessments within the region has shown that stone artefacts are likely to be found across numerous geomorphic landforms and CMTs are likely to be found near waterways. As such, there is a moderate to high potential for additional Aboriginal cultural heritage to be present within the activity area and a standard assessment was conducted.

The BGLCAC represents the TOs from the Wotjobaluk, Jaadwa, Jadawadjali, Wergaia and Jupagulk peoples of the of the Wotjobaluk Nations. The TOs for Area 1 are the Jadawadjali peoples.

8.2.1.2 Standard assessment

The standard assessment for CHMP 17313 recorded terrain typically comprising undulating rises and plains, as well as floodplains of Six Mile Creek, and floodplains and terraces of the Wimmera River moving eastward through the Project Land. As such, landforms are comprised of flat plains, waterways (tributaries, creeks and rivers), gently undulating low rises, and terraces and banks associated with Six Mile Creek, Wimmera River, Sheas and Glendu Creeks. The Proposed Route also crosses several additional minor unnamed waterways and drainage channels. The standard assessment has determined that the majority of the Project Land has been subjected to minimal ground disturbances, with the exception of underground assets (inc. NextGen fibre optic cable), culverts, dams, gravel tracks and the prior powerline alignment.

8.2.1.2.1 Previously registered Aboriginal Places

The CMT registered as VAHR 7423-0754, which had been previously identified in the road reserve of Vances Crossing Road, could not be relocated during the standard assessment ground survey. A previously recorded surface LDAD (VAHR 7523-0170) was also re-inspected, and though abundant natural quartz is present within the area, the Aboriginal Place could not be relocated during this assessment.

8.2.1.2.2 Newly identified Aboriginal Places

Two previously unidentified Aboriginal Places were recorded during the standard assessment for CHMP 17313. These comprise two CMTs on the banks of Six Mile Creek, associated with a proposed tower location. All other mature trees identified during the standard assessment were also inspected for Aboriginal cultural modification. Six areas of PAS (PAS – 01 to 06) were identified in consultation with the TOs during the standard assessment (Figure 8-1, Figure 8-2 and Figure 8-7). These include the banks and rises on either side of Six Mile Creek (Figure 8-3 and Figure 8-4), rises associated with pre-existing palaeochannels off the Wimmera River and the terraces of the Wimmera River, rises associated with Shea's Creek and elevated terrain abutting unnamed watercourses and prominent drainage channels.

A standard assessment of options for the new 500kV terminal station near Bulgana was carried out between July 2023 and May 2024. Five areas of PAS (PAS – 07 to 11) were identified in consultation with the TOs during this fieldwork (Figure 8-7). These include the banks and rises of Six Mile Creek, an unnamed tributary of Six Mile Creek, and the banks of the Wimmera River. All mature trees were also inspected for Aboriginal cultural heritage. Two previously unidentified Aboriginal Places were identified which comprised an artefact scatter and hearth associated with Six Mile Creek and a LDAD associated with elevated terrain abutting Six Mile Creek.

Further standard assessment through April 2024 to investigate the expanded activity area of CHMP17313 into the new 500kV terminal station near Bulgana and alignment identified four previously unidentified Aboriginal Places. These comprise two LDADs; one within elevated terrain within the access track immediately adjacent to a new tower location south of the new 500kV terminal station near Bulgana, and one LDAD within elevated terrain associated with an unnamed waterway. There were also two artefact scatters located: one along the western bank of Six Mile Creek and the second on the western bank of the Wimmera River.

Figure 8-1 to Figure 8-4 provide examples of the types of landforms encountered during the standard assessment through Area 1.



Figure 8-1: View west located on the side of a small rise facing the Wimmera River.



Figure 8-2: View south-east located on top of a low, gentle undulation approximately 50m from a minor waterway.



Figure 8-3: View west of flat adjacent to Six Mile Creek.



Figure 8-4:View east to Wimmera River from near new 500kV terminal station near Bulgana.

8.2.1.3 Complex assessment

Phase 1 of the complex assessment has been undertaken within all areas of PAS that were identified in the standard assessment. Aboriginal cultural heritage material was identified in four of the five areas of PAS tested during the complex assessment within various landforms within alluvial deposits at varying depths. This includes within the rises overlooking the Wimmera River and elevated terrain between the Wimmera River and its tributaries and adjacent to Shea's Creek. The soil profile within Area 1 consistently comprises silt and clay rich soils with fluctuations in the abundance of sand clasts within the topsoil (Figure 8-5 and Figure 8-6). Varying levels of natural quartz gravels were also common throughout test pits in the CHMP 17313 activity area. This type of deposit reflects the decomposition of the surrounding granite geology.

An extensive quartz artefact deposit (>100 artefacts) was identified during the complex assessment that is indicative of repeated visits and a possible knapping floor. Sandy clay topsoil throughout this area indicates some level of natural drainage within the area. This may have been part of the reason why it was chosen as a

repeated use area. Two additional artefact scatters were identified adjacent to the Wimmera River and an LDAD located nearby Shea's Creek.

Three control locations for complex assessment were chosen within the activity area. One of these was adjacent to a drainage channel and the other two were associated with the works required to connect the proposed new line to the existing Bulgana Terminal Station. No Aboriginal cultural heritage was recovered from these control testing locations (Figure 8-6).



Figure 8-5: Representative photograph of a positive test pit within an area of PAS for CHMP 17313.



Figure 8-6: Representative photograph of a negative control test pit within CHMP 17313.

Mapping of preliminary fieldwork is also shown in Figure 8-7. Additional information on Aboriginal cultural heritage values is provided in Section 8.2.1.4.

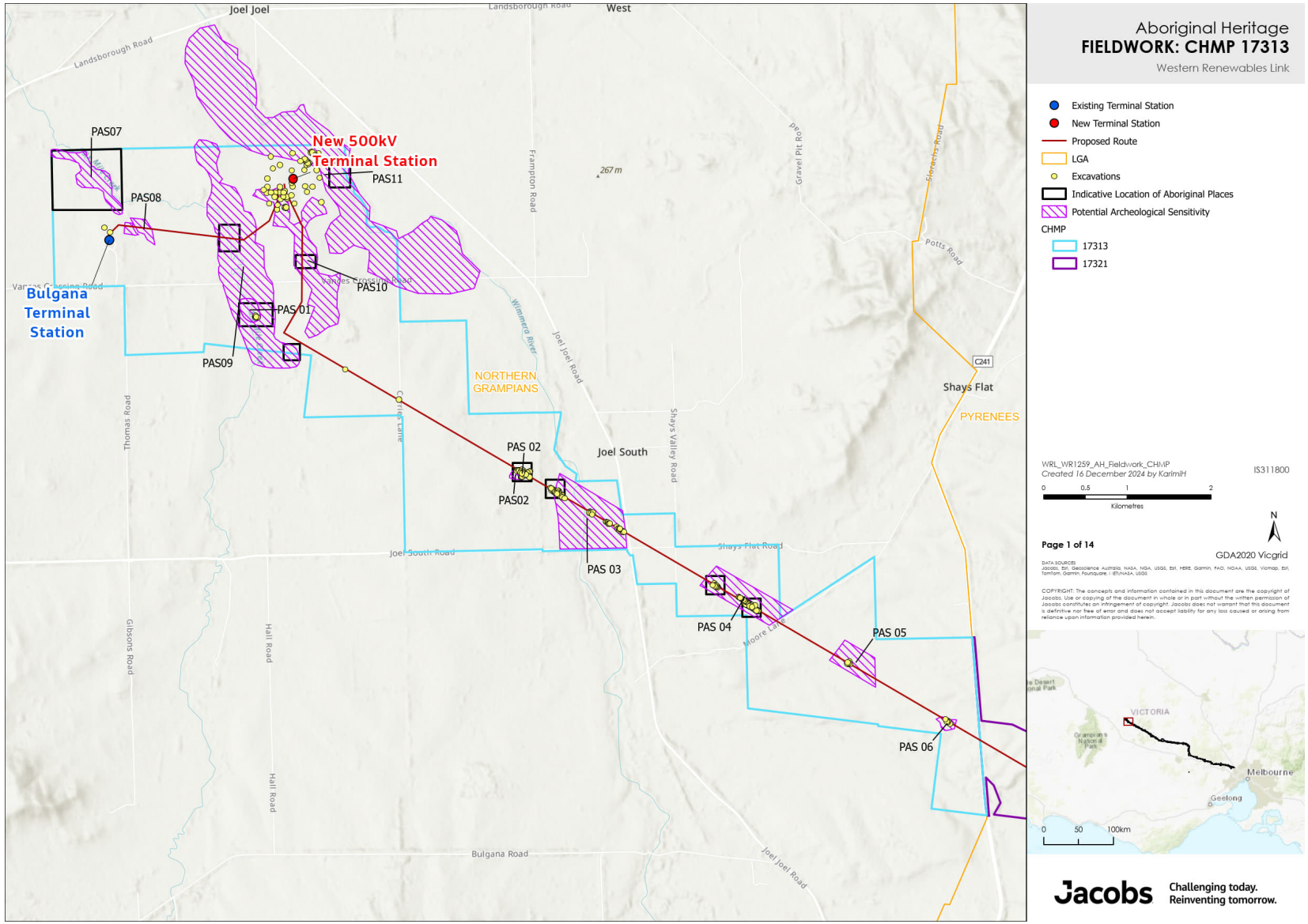


Figure 8-7: Fieldwork for CHMP 17313, BGLCAC RAP Area. Fieldwork mapping includes data from late 2020 to June 2024.

8.2.1.4 Cultural Values Assessment

A CVA for Area 1 was prepared by BGLCAC and facilitated by Jacobs. The work undertaken during the preparation of the CVA included an initial onsite workshop in the BGLCAC RAP area, which consisted of driving along public roads between Bulgana Terminal Station and Elmhurst to view the existing and proposed transmission route throughout this Country. Frequent stops were made for the Elders to view the areas and discuss the findings from the Project with the archaeologists. Ground conditions and land use for pastoral and agricultural purposes were observed, and potential impacts of the Project were included in these discussions. After the areas of the proposed activity were viewed, the Elders and archaeologists returned to Elmhurst Recreational Reserve to discuss possible and probable impacts on Aboriginal cultural heritage and Aboriginal cultural heritage values. A second workshop consisted of a visit to a culturally modified old growth tree that has a large internal cavity.

The CVA report is provided in Appendix I and should be read in full in conjunction with the below.

8.2.1.4.1 Traditional Owner consultation and field survey

The overarching sentiment from the first workshop on 7 September 2021 with BGLCAC is one of loss of cultural knowledge and displacement and disassociation from Country in the area surrounding and intersecting the Project Land. The TOs have a strong and purposeful intention to be increasingly active within project management as it concerns impacts on the land and impacts on the environment.

A great deal of cultural knowledge has been irrevocably lost from the collective memory of the Jadawadjali community. Following the preparation of the CVA, BGLCAC advised that while the forcible removal of TOs from Country, and the attempted genocide of Aboriginal People, has resulted in knowledge loss, their cultural obligations remain, and TOs remain deeply connected to Country and Culture. The Jadawadjali Elders and community take their cultural responsibilities seriously, including striving for greater care of the environment, managing endangered animal and plant species, reducing environmental impacts from construction activities, and having a strong desire to reintroduce Aboriginal fire management in appropriate areas.

Recommendations derived from the workshop include:

- The Elders' request for all mature trees within the Proposed Route to be avoided and protected from harm during construction activities.
- BGLCAC wishes to be actively involved in discussions with the proponent relating to removal of large, old growth trees during construction. The Elders would like any tree removed to be replaced by a new tree, to be located in a nearby area as a vegetation offset. The removal and replanting of trees within Jadawadjali Country should be discussed with and co-managed by BGLCAC in partnership with the proponent.
- The Jadawadjali people would like to see a greater concentration of waterway management and conservation as currently there are not many protective measures in place.
- The Jadawadjali wish to be actively consulted during the Project and be involved in creating ways to improve and manage land, including management during Project construction. The BGLCAC request for discussion with the proponent regarding all construction activities that will or are likely to impact on waterways.

The second workshop consisted of a visit to a culturally modified old growth tree that has a large internal cavity in Area 3. This tree has been modified by controlled burning in its interior. The Elders advised that the tree must be registered with the VAHR to provide a record of the location of the tree in relation to the Proposed Route and to assure that the tree will not be disturbed by the Project but protected. It was discussed and agreed by all present that a follow-up visit to provide additional Elders with an opportunity to inspect the tree is to take place as soon as reasonably possible.

The tree is located east of a tributary of the Wimmera River on a private property used for sheep grazing (Figure 8-27). Several other large, old trees are also present within the same paddock.

The interior of the tree is burned out and several large, unoccupied hornets/wasp nests are present within the hollow trunk. The entry appears to be a natural scar and the inner section of the scar appears to have regrowth. This likely regrowth is unburnt and may have been generated after the internal cavity fire event(s). The tree is a relatively short distance from a waterway on flat land in a small valley nestled between low elevation undulating hills.

If the tree is a birthing tree, both Elders doubt that cooking would be done within the tree's interior, but it is possible for a small fire for warmth could be brought in on a coolamon. Both Elders agreed that the tree has very high cultural significance and has high potential for other Aboriginal cultural heritage values. The Elders desired an excavation to confirm if the tree was or was not used as a shelter or if other cultural heritage may be present in sub-surface deposits. As the tree is outside known areas of impact, it was determined in consultation with FP-SR that any such excavation was not required for the CHMP complex assessment; however, there may be future opportunities to address any potential research questions through the CHMP conditions.

8.2.1.4.2 Environmental and cultural context

The Wimmera River is the largest waterway in the region and is the most significant waterway to the TOs, having the Aboriginal language name 'Barengi Gadjin', from where the BGLCAC receives its name. As well as acting as a pathway, including its tributaries providing branching corridors, within the wider area the river brought people into contact with other families and groups belonging to different clans and provided resources for all. The hills and outcrops present within the Study Area would have made it a very special place to live. It is known that the Pyrenees are within the outer range of Jadawadjali Country and crosses with neighbouring groups. The corridor to the Pyrenees is of interest and has Aboriginal cultural heritage value as it is known to be an old trading pathway (S. Harradine, pers comm, 7 Sept. 2021).

Songlines are present within the broader area that link Country through the Wimmera River from its headwaters near Elmhurst along its winding corridor westward through Horsham to Lake Hindmarsh and Lake Albacutya. The Wimmera River has links to the Dreaming through Giant Kangaroo and Giant Emu, the ancestral beings which formed the waterways (S. Harradine, pers comm, 7 Sept. 2021). The Wimmera River and its tributaries also acted as pathways that linked families and clans of different places and groups along their routes. Today this is reflected in terms of RAP areas and boundaries. Particular songlines follow these pathways and connect to the broader stories of the Jadawadjali.

Subsequent to the finalisation of the CVA, BGLCAC expressed that the importance of Wedge-tailed Eagles be emphasised in this assessment. Bunjil, the creator is documented heavily in the literature and is known widely as the Great Ancestor Spirit to the Wojulbauk Nations. The following statement has been taken from BGLCAC's *Country Plan: Growing What is Good* (2017).

"Bunjil the creator, made the land, waterholes, animals and plants and gave Wotjobaluk Peoples the responsibility to look after our Country and culture and keep it healthy and strong. Country heals us and connects us to our dreaming stories, to our ancestors and spirits."

In addition to the abovementioned cultural values, the report provided a number of recommendations for the Project including the avoidance of environmentally sensitive places and the support of and engagement with BGLCAC in managing the Study Area (see full list in Appendix I).

Three environmental features were highlighted as requiring special efforts to protect throughout the Project Land:

- **Mature Trees –** Old growth trees within the Proposed Route should be avoided and protected from harm during construction activities.

- **Vegetation –** Any tree removed should be replaced by a new tree in a nearby area as a vegetation offset and discussed with and co-managed by BGLCAC.
- **Waterways –** Management and conservation of waterway in response to factors including erosion from land clearing practices and depletion of water tables and a lack of water, specifically in relation to adverse effects to platypus.

8.2.1.5 Aboriginal cultural heritage

At the time of the preparation of this impact assessment, Aboriginal Heritage Places were identified in eight of the eleven areas of PAS during both standard and complex assessments. Collectively, artefact scatters are the most common Aboriginal Places recorded for CHMP 17313 (Figure 8-8 and Figure 8-9), followed by CMTs and LDADs. All Aboriginal Places are spatially associated with named and unnamed waterways. Surface and subsurface stone artefacts are typically made from quartz and include flakes, broken flakes, cores, and debitage (Figure 8-10 and Figure 8-11). The highest density quartz artefact scatter was identified during the complex assessment, with over 100 artefacts - consisting of flakes, flake fragments and flaked pieces - recovered from a single test pit. This may be indicative of repeated visits and a possible knapping floor. This terrain is adjacent to two separate ephemeral waterways. It is possible the waterways were spring-fed or retained large amounts of potable water in pools during dry periods.

The high quantity of quartz flakes is characteristic of Area 1, and similar majority-quartz artefact scatters occur throughout the region; this is consistent with the desktop assessment for this area that found that quartz makes up about 80 per cent of the previously recorded artefact assemblage. Field investigations have not identified a local source for the crystalline quartz or high-quality milky quartz in the assemblage. The locally available quartz that is present within the activity area is of poor quality, with a matrix of internal veins throughout the material, with the Shepparton Formation materials present throughout the geographical area. Based on these observations, it appears that the majority of quartz material may have been sourced from elsewhere.

All newly identified Aboriginal Places in Area 1 were artefact scatters, LDADs and CMTs. This is in line with the CHMP desktop assessment, which predicted that these would be the most commonly identified types of Aboriginal Places. The Aboriginal Places have been identified primarily on raised landforms close to permanent water, highlighting the sensitivity of these locations. More broadly, the assessment for the CHMP and the CVA illustrate the importance of the whole landscape as it relates to Aboriginal cultural heritage values; specifically intangible Aboriginal cultural heritage values, such as landscapes, biodiversity and contemporary values, and how places are interconnected through Country.

Below are the Aboriginal cultural heritage values tabulated in Table 8-4 and shown in Figure 8-7. The information in Table 8-4 results in the scientific significance rankings used alongside historical, social and spiritual significance to develop the overall significance rankings (refer to Table 8-5), which is used assessment of impacts for the Project, as provided in Section 9.2.

Table 8-4: List of Aboriginal cultural heritage values recorded during fieldwork for CHMP 17313 and BGLCAC CVA.

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
1	CMT (Scarred Tree)	Registered	Creek bank of Six Mile Creek.	Outside area of impact	Contents: 2 Condition: 1 Representativeness: 3	Identified during standard assessment. Expressed as high significance during assessment by BGLCAC. Rare type of scar and is a physical representation of a cultural practice

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
						(possum board for stretching and drying skins).
2	CMT (Scarred Tree)	Registered	Creek bank of Six Mile Creek.	Outside area of impact	Contents: 2 Condition: 1 Representativeness: 3	Identified during standard assessment. Expressed as high significance during assessment by BGLCAC. Rare type of scar and is a physical representation of a cultural practice (possum board for stretching and drying skins).
3	Artefact scatter (surface and subsurface)	Unregistered	Top of prominent rise overlooking the Wimmera River. Crest with palaeochannel is running north to south at location.	Partial intersection of proposed infrastructure (Tower/tower assembly/access track/distribution line)	Contents: 2 Condition: 2 Representativeness: 1	Identified during complex assessment.
4	Artefact scatter (surface and subsurface)	Unregistered	In between Wimmera River and adjacent tributary off the Wimmera River, located at the highpoint of the river terrace (running north south).	Partial intersection of proposed infrastructure (Tower/tower assembly/access track)	Contents: 3 Condition: 2 Representativeness: 3	Identified during complex assessment.
5	LDAD (subsurface)	Registered	Elevated landform adjacent to Shea's Creek.	Partial intersection of proposed infrastructure (Tower assembly)	Contents: 1 Condition: 1 Representativeness: 1	Identified during complex assessment.
6	Artefact scatter (subsurface knapping floor)	Unregistered	Elevated landform in between Shea's Creek and associated tributary.	Partial intersection of proposed infrastructure (Tower/tower assembly)	Contents: 3 Condition: 2 Representativeness: 3	Identified during complex assessment.

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
7	Cultural landscape	Unregistered	Wimmera River - crossing runs north south through the Project Land	Partial intersection of proposed infrastructure (all transmission line infrastructure elements/terminal station)	Contents: 3 Condition: 3 Representativeness: 3	Identified as having high cultural significance and intangible cultural heritage values and requiring protection in the CVA. These values have also been expressed by numerous field officers from BGLCAC while completing fieldwork surrounding the Wimmera River.
8	Cultural landscape	Unregistered	Pyrenees Ranges landscape. Includes elevated terrains and ridgelines throughout the Project Land.	Partial intersection of proposed infrastructure (all transmission line infrastructure elements)	Contents: 3 Condition: 3 Representativeness: 3	Identified as having high cultural significance and intangible cultural heritage values and requiring protection in the CVA.
9	Artefact scatter (surface) and earth features (hearths) (surface)	Unregistered	Adjacent to Six Mile Creek	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 3	Identified during standard assessment. Expressed as having high significance during assessment by BGLCAC, due to its association with Six Mile Creek as well as surrounding Aboriginal Places.
10	LDAD (surface)	Unregistered	Elevated landform adjacent to Six Mile Creek	Outside area of impact	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard assessment in relation to a new 500kV terminal station near Bulgana.
11	Artefact scatter (surface)	Unregistered	Adjacent to Wimmera River	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard assessment in relation to a new 500kV terminal station near Bulgana.

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
12	Artefact scatter (surface)	Unregistered	Adjacent to Six Mile Creek	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard assessment in relation to a new 500kV terminal station near Bulgana.
13	LDAD (surface)	Unregistered	Elevated landform between Six Mile Creek and Wimmera River	Complete intersection of proposed infrastructure (terminal station)	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard assessment in relation to a new 500kV terminal station near Bulgana.
14	LDAD (surface)	Unregistered	Elevated landform adjacent to unnamed tributary of Six Mile Creek	Outside area of impact	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard assessment in relation to a new terminal station near Bulgana.



Figure 8-8: View of south facing scar, east bank of Six Mile Creek.



Figure 8-9: View of north facing scar, east bank of Six Mile Creek.

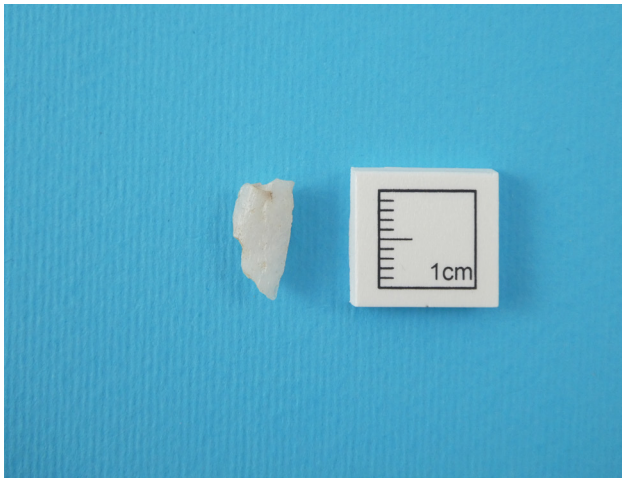


Figure 8-10: Representative photograph of a complete quartz flake recovered during excavations on CHMP 17313.



Figure 8-11: Representative photograph of a proximal flake recovered during excavations on CHMP 17313.

Table 8-5: Significance rankings of Aboriginal cultural heritage values recorded during fieldwork for CHMP 17313 and BGLCAC CVA.

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
1	CMT (Scarred Tree)	Creek bank of Six Mile Creek.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
2	CMT (Scarred Tree)	Creek bank of Six Mile Creek.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
3	Artefact scatter (surface and subsurface)	Top of prominent rise overlooking the Wimmera River.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
4	Artefact scatter (surface and subsurface)	In between Wimmera River and adjacent tributary off the Wimmera River, located at the highpoint of the river terrace.	Low (1)	High (3)	High (3)	High (3)	Very High (10)
5	LDAD (subsurface)	Elevated landform adjacent to Shea's Creek.	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
6	Artefact scatter (subsurface knapping floor)	Elevated landform in between Shea's Creek and associated tributary.	Low (1)	High (3)	High (3)	High (3)	Very High (10)

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
7	Cultural landscape	Wimmera River - crossing runs north south through the Project Land	High (3)	High (3)	High (3)	High (3)	Very High (13)
8	Cultural landscape	Pyrenees Ranges landscape. Includes elevated terrains and ridgelines throughout the Project Land.	Low (1)	High (3)	High (3)	High (3)	Very High (10)
9	Artefact scatter (surface) and earth features (hearths), (surface)	Near to Six Mile Creek	Low (1)	High (3)	High (3)	High (3)	Very High (10)
10	LDAD (surface)	Elevated landform adjacent to Six Mile Creek	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
11	Artefact scatter (surface)	Adjacent to Wimmera River	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
12	Artefact scatter (surface)	Adjacent to Six Mile Creek	Low (1)	Moderate (2)	Moderate (2)	High (3)	Moderate (8)
13	LDAD (surface)	Elevated landform between Six Mile Creek and Wimmera River	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
14	LDAD (surface)	Elevated landform adjacent to unnamed tributary of Six Mile Creek	Low (1)	Low (1)	Low (1)	High (3)	Low (6)

In summary, there are 14 Aboriginal cultural heritage values recorded during fieldwork for CHMP 17313 and the BGLCAC CVA. Of these, the significance rankings include four Aboriginal cultural heritage values ranked as having a low significance (IDs 5, 10, 13 and 14), five values ranked as having a moderate significance (IDs 1, 2, 3, 11 and 12), and five values ranked as having a very high significance (IDs 4, 6, 7 - 9). It should be noted that while the significance of these Places is very high, ID 7 has a higher overall score due to its historic significance, based on the critical importance of this waterway to the TOs and the relationship between the Barengi Gadjin (Wimmera River) and the corporation's name.

8.2.1.6 Summary Findings for Area 1

The fieldwork findings to date indicate that previously unrecorded Aboriginal cultural heritage is present within Area 1, consisting of artefact scatters, LDADs and CMTs. Surface and subsurface deposits are especially likely within 200m of waterways, typically within undulating rises and rises adjacent to floodplains and terraces. There

is also potential for CMTs to occur within these landforms, some of which may be of potential high significance. The CVA also concludes that the region holds a broad number of Aboriginal cultural heritage values to BGLCAC and recommends these values be protected through the avoidance of mature trees along the Proposed Route and consideration and detailed discussion with BGLCAC for any proposed impact on waterways within Area 1.

Complex assessment for CHMP 17313 has not yet been completed within Area 1. Although complex assessment has been completed at tower locations along the alignment south-east of the new 500kV terminal station near Bulgana, complex assessment has not commenced for the new 500kV terminal station near Bulgana and associated alignments.

It is highly likely that unknown Aboriginal cultural heritage is present within parts of the activity area at some locations that have yet to be tested (specifically the Bulgana Terminal Station). The impact on any unknown Aboriginal cultural heritage within the activity area will be managed through the CHMP process and consideration of CVA recommendations. The impact to tangible Aboriginal cultural heritage values is managed through the construction methodology being above ground for the Project and responsive to cultural heritage investigations; however, visual impacts associated with design infrastructure are possible on intangible Aboriginal cultural heritage values, such as landscapes and landscape features. These matters are further expanded in Section 9.

8.2.2 Area 2: EMAC

The activity area for CHMP 17321 extends across six landforms, including ridgelines and associated hillslopes (including foothills), undulating hills, incised gullies, creeks, and river terraces associated with the Wimmera River.

In total, 100% of the Proposed Route has undergone standard assessment within Area 2. In total, 100% of required Complex Assessment has been completed, including testing in areas of PAS and at selected control locations. The completed RAP endorsed testing program comprises excavations at 39% (nine of 23) of the tower assembly areas. As such, Phase 1 testing and Phase 2 testing is completed for CHMP 17321 in Area 2.

8.2.2.1 Desktop assessment

The desktop assessment identified that the area is located within the Western Uplands geomorphic division, in the 'Ridges, escarpments and mountains', 'Plateaux and rises', and 'Terraces and floodplains' geomorphic land systems. The overall elevation of the activity area ranges from approximately 270 to 540m above sea level.

Prior to the non-Aboriginal settlement and alteration of the landscape, much of the activity area would have been favourable for Aboriginal occupation and resource procurement, given the availability of food and fresh water. While no major watercourses were mapped on Mitchell's 1836 survey map within the activity area, the prior alignments of minor waterways and tributaries of larger watercourses stemming from the Pyrenees and other ranges would likely have been extant. Non-Aboriginal settlement and gold mining have had a major impact on all prior watercourses, and the current Glenlofty Creek and Spring Creek do not reflect their previous alignments. Gold mining processes have made significant changes to the landscape from sluicing, dredging, and the channelisation of waterways. Sludge, the toxic by-product of gold mining, also changed the landscape in two main ways: it shifted soil that was removed as part of the gold mining process; and may have moved Aboriginal cultural heritage material downstream as a result, or it could have capped the natural landscape as it spread across the floodplain, thereby protecting any subsurface Aboriginal cultural heritage. This will impact on where archaeological deposits are identified within the landscape and the depth at which archaeological deposits may be found.

The VAHR search and a review of relevant archaeological reports found 12 Aboriginal Places comprising 25components within the activity area for CHMP 17321. These include six CMTs (one with associated artefact scatter), three artefact scatters and two LDADs Spring Creek IA (VAHR 7523-0346) and Crowlands Windfarm LDAD 1 (VAHR 7523-0370), which consists of quartz artefacts (predominantly flakes, with a blade, and a core). Additionally, one multicomponent site; Warre Creek 1 (VAHR 7523-0347), contains 35 quartz artefacts and an

earth mound, situated on the 'plateaux and rises of residual Cainozoic landscapes' landform. One of the 11 previously recorded Aboriginal Places in Area 2– Warre Creek 2 (VAHR 7523-0348) - is intersected by proposed infrastructure for the Project (see Section 9.2.1).

The background review and VAHR search results informed the predictive statement for the CHMP, which indicates that Aboriginal Places would most commonly be found on rises, hill slopes, hill crests and ridgelines, and terraces, or associated with elevated landforms within 200m of prior watercourses. The literature review of archaeological assessments within the region shows that artefacts are likely to be found across numerous geomorphic land systems. There is a moderate-high potential for additional Aboriginal cultural heritage to be present.

8.2.2.2 Standard assessment

The standard assessment for CHMP 17321 identified numerous landforms favourable to Aboriginal occupation east and west of the ridgeline of the Pyrenees between Crowlands and Glenlofty due to the abundance of fresh flowing water, source material for stone tools, and gently undulating foothills, which made the overall area attractive for longer term occupation locations. The areas with the highest potential are those near waterways on the lower foothills of the Pyrenees.

There are frequent outcroppings of shale, quartz, and quartzite formations within the ridgeline. There is an absence of regolith from the toe of the ridgeline and across the ridge spine. Moderate to large nodules of quartz and quartzite and irregular shale exposures are present, with clay evident in some sections of mid-slope. The presence of surface quartz was consistent across the landscape, with exposures of quartz pebbles and angular blocks common along hill crests and hill slopes. Aboriginal activity in Area 2 is evidenced by the number of previously recorded Aboriginal Places. These include LDADs, an artefact scatter and CMTs within the activity area for CHMP 17321.

8.2.2.2.1 Previously registered Aboriginal Places

Previously recorded artefact scatters were not relocated during the standard assessment. Two registered CMTs were revisited during standard assessment (VAHR 7523-0345 and VAHR 7523-0210); both were reidentified. VAHR 7523-0345 was in good condition and VAHR 7523-0210 was found to be deteriorating and in poor condition (Figure 8-12: VAHR 7523-0345) reinspected during standard assessment. and Figure 8-13). Neither of these Aboriginal Places is likely to be impacted by the Project.

8.2.2.2.2 Newly identified Aboriginal Places

One previously unrecorded CMT was recorded near the northern boundary of the activity area at the eastern end of the Proposed Route (Figure 8-18). This CMT was located on elevated terrain nearby an unnamed waterway and an incised drainage channel. All other mature trees identified during the standard assessment were also inspected for Aboriginal cultural modification. The standard assessment also identified a previously unrecorded surface artefact scatter at the far eastern end of the activity area on elevated terrain within a valley floor adjacent to Glenlofty Creek.

Six areas of PAS (PAS 01– 05, and PAS 01-A) were identified in consultation with the TOs during the standard assessment (Figure 8-18). The areas of PAS were identified across various landforms, including undulating hills, crests, terraces, and flat plains, of which are all are in proximity to creek lines (including unnamed waterways). The majority of these were also in the valley floors between prominent hills and ridgelines associated with the Pyrenees Ranges (Figure 8-14 and Figure 8-15).

In general, the majority of the activity area has been subjected to minimal ground disturbances, with the exception of underground assets (inc. NextGen fibre optic cable), graded vehicle tracks that have been levelled by machinery, agricultural activities, and the prior powerline alignment. An area most likely exploited by historic mining activities is present north of the Proposed Route in the eastern portion of the surveyed area, near an unnamed tributary of Spring Creek. The ground surface in this area is rocky, with hollows and mounds of natural quartzite that may be signs of mining activity disturbed by rabbits. The area within the lower foothills has been

used for cropping and sheep grazing. Some erosion is present, and modifications have been made to the land from sheep farming.



Figure 8-12: VAHR 7523-0345) reinspected during standard assessment.



Figure 8-13: VAHR 7523-0210 re-inspection. Scar in poor condition.



Figure 8-14: Within an area of PAS within CHMP 17321. Section of the unnamed waterway which is a tributary of Wimmera River. A deep waterhole has been scoured out by natural processes.



Figure 8-15: Area of PAS within CHMP 17321, within a low rise overlooking an unnamed waterway to the south-east.

8.2.2.3 Complex assessment

Phase 1 of the complex assessment for CHMP 17321 examined all areas of PAS identified in the standard assessment. Of the six areas of PAS tested; five contained Aboriginal cultural heritage. These Aboriginal Places included LDADs or artefact scatters, primarily consisting of quartz, two CMTs and a single hearth that was uncovered during excavations (see further context in Table 8-6). One artefact scatter has also been recognised as a knapping floor.

Five control testing locations were selected, typically positioned adjacent to areas of PAS and within different landforms across the activity area. One LDAD and one artefact scatter was identified at two of these control

testing locations, both situated within 600m of a waterway on the eastern lower slopes and foothills of the Pyrenees ranges. Each Aboriginal Place was recovered within a single excavation trench (i.e., no additional artefacts were recovered during extent testing).

Soil profiles across the area were mostly shallow, with basal clay deposits emerging between 300 and 400mm, where the topsoil was also typically clay dominant throughout (Figure 8-16 and Figure 8-17). Less common soil profiles possessed a higher sandy content in closer proximity to waterways and, to a lesser extent, dense quartz and quartzite gravels along lower slopes of the ridges.



Figure 8-16: Representative photograph of a positive test pit within an area of PAS for CHMP 17321.



Figure 8-17: Representative photograph of a positive control test pit within CHMP 17321.

Complex assessment for CHMP 17321 has been completed within Area 2. Mapping of fieldwork is shown in Figure 8-18, below. Additional information on Aboriginal cultural heritage values is provided in Section 8.2.2.4.

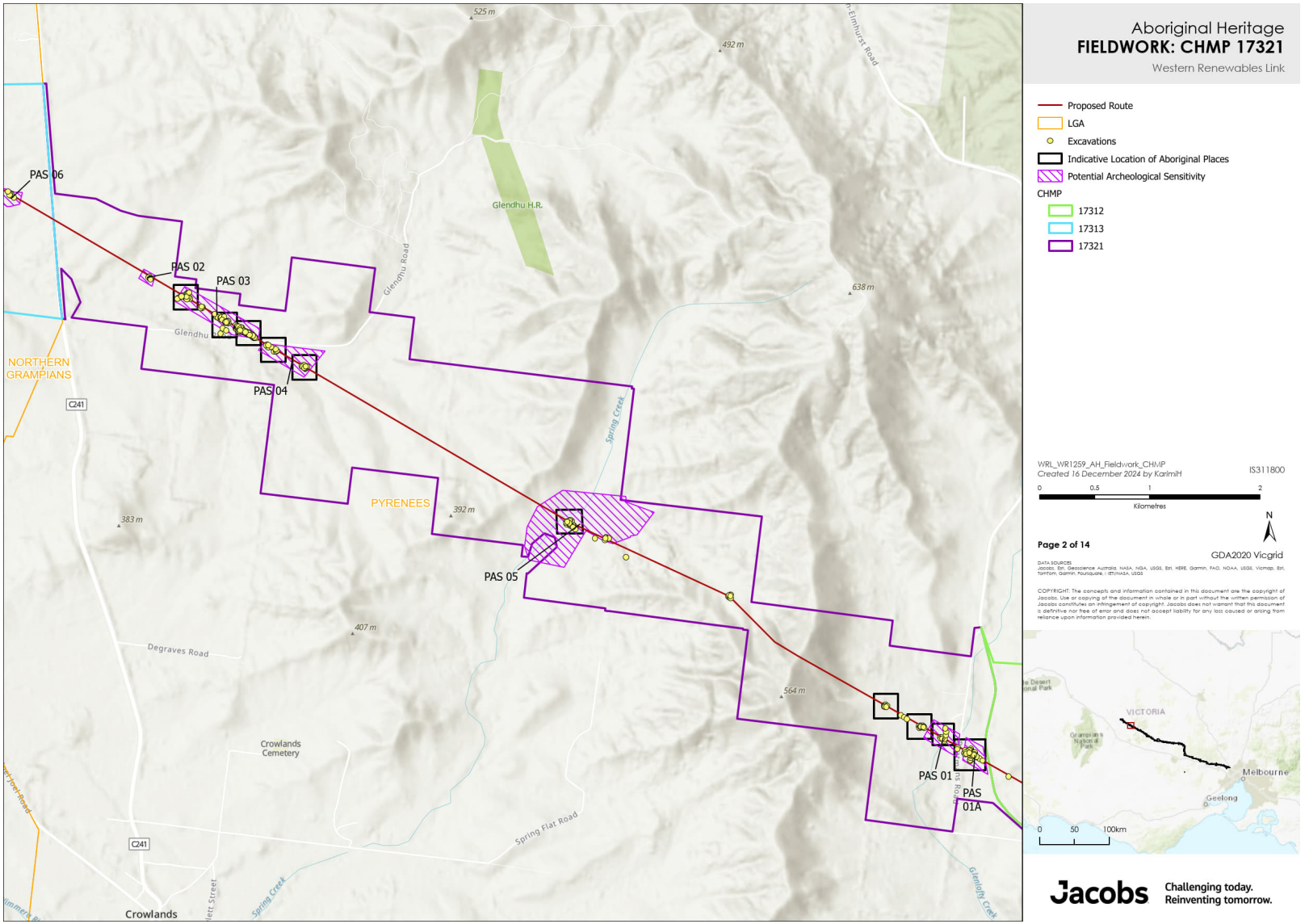


Figure 8-18: Fieldwork for CHMP 17321, EMAC RAP Area. Fieldwork mapping includes data from late 2020 to June 2024

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8.2.2.4 Cultural Values Assessment

A CVA for Area 2 was prepared by EMAC and facilitated by Unearthed Heritage Australia Ltd (UHA). The CVA was prepared with special attention paid to the Djab Wurrung language of the East Maar people and involved two key elements: 1) desktop and background consultative research undertaken by UHA and 2) the formulation of Project recommendations based on the findings of the assessment.

The full CVA report is provided in Appendix J.

While it was initially agreed that a CVA comprising an on-site visit and meeting with EMAC Elders followed by an in-house meeting would be an acceptable approach, EMAC noted that the involvement of EMAC and the community was hindered by the time constraints of the assessment and engagement overload. EMAC were, however, able to review drafts of the CVA and provide feedback to UHA regarding the content of the assessment.

8.2.2.4.1 Traditional Owner consultation

Introductory conversations and email correspondence took place between EMAC and UHA in October and November 2021. Scope options for the CVA were discussed at this time, along with the provision of preliminary maps.

A CVA inception meeting was held online on 19 January 2022 to discuss the Project requirements and scope options, including the possibility of the EMAC community sub-committee discussing the CVA at their next meeting. At a follow-up conversation on 10 February 2022, it was raised by EMAC that alternative pathways should be considered in the assessment preparation to avoid engagement fatigue and that a desktop only CVA might be necessary. A subsequent meeting was held on 12 April 2022 to discuss the format of the CVA document.

Following receipt of the draft CVA by EMAC on 29 April 2022, comments were returned to UHA on 14 June 2022. It was noted that the CVA should specifically focus on the Eastern Maar area rather than the broader region. Additional feedback received noted that EMAC would also contribute to the consultation section of the assessment and restated their preference for a desktop CVA. A final meeting was held on 8 September 2022 to discuss the CVA and a statement of significance and general recommendations were supplied by EMAC on 10 October 2022.

Further details regarding the consultation undertaken for this CVA are outlined in Table 1-1 of the CVA (Appendix J).

8.2.2.4.2 Environmental and cultural context

The environmental context of the Study Area was reviewed, with an emphasis on factors that may have influenced past human behaviour resulting in archaeological Place and formation processes and the distribution of Aboriginal cultural heritage Places. The key information relevant to Area 2 includes:

- Flora and fauna
- Geology
- Soils
- Geomorphology
- Aboriginal occupation of the area
- Post-contact land-use history. Additional detail regarding the contact and post-contact history is also discussed in Section 6.

Landscape characteristics of the EMAC area feature the following categories:

- Western extent of Great Dividing Range with high peaks of, generally, <900 m asl
- Hydrological resources. Specifically, Glenlofty Creek and Spring Creek, but more broadly in the region, the Wimmera River occurs and numerous other creeks and tributaries.
- Ridgelines
- Narrow alluvial valleys
- Rises
- Floodplains.

Volcanic cones that occur across western Victoria are sacred for the Eastern Maar People, and their lower volcanic craters (maars) served as resources for Aboriginal people due to the animals and birds attracted to those locations. In fact, some of the more recent volcanic eruptions would have been witnessed by Aboriginal people, and indeed, feature in Aboriginal folklore.

The pre-European settlement vegetation of the region would have provided abundant resources, including wood and bark for tools and bark huts, plants for medicinal purposes, and native foods, such as nuts, fruits, tubers, and seeds. Murnong in particular was a major plant resource of south-east Australian Aboriginal peoples.

The fauna within native land and aquatic habitats across the region would also have been exploited by Aboriginal people, in particular the Eastern Grey Kangaroo, Dingo, Rufous Bettong, Eastern Barred Bandicoot, Luaner or Eastern Quoll, emu, ducks, swans, and geese, and possibly the Bare-nosed Wombat, but also koalas, possums, wallabies, echidna, platypus, reptiles, woodland birds, insects, and freshwater fish, molluscs, and eels.

8.2.2.4.3 CVA recommendations (non-culturally sensitive)

EMAC has chosen to not disclose details about tangible and intangible cultural values or their significance.

Five non-sensitive (public) recommendations for the Project were provided by EMAC, including the avoidance of cultural and environmental impacts and requirement for provision of ongoing engagement and management opportunities to EMAC in relation to these matters (see full list in Section 4 of Appendix J).

There are two overarching cultural and environmental considerations specific to Area 2 that are highlighted within the recommendations:

- **Areas of archaeological and cultural sensitivity** - All works should be conducted with the intent to avoid harm to areas of Aboriginal archaeological and cultural sensitivity, including environmental protection. All affected values, according to current Project design or changes to design, are to be discussed with EMAC.

- **Vegetation** – EMAC has recommended that no mature trees are impacted and specific to CMTs, that EMAC should be consulted about any affected tangible or intangible values. More broadly, any environmental impacts caused by the Project should be reported to EMAC.

8.2.2.5 Aboriginal cultural heritage

Five of the six areas of PAS in CHMP 17321 contained Aboriginal cultural heritage, along with two separate locations chosen for control testing. LDADs are the most common Aboriginal Places recorded, followed by five artefact scatters, two CMTs and a hearth (Table 8-6, Figure 8-19, Figure 8-20 and Figure 8-21).

The scientific significance rankings presented in Table 8-6, are used in the overall significance rankings (refer to Table 8-7), which is used assessment of impacts for the Project (Section 9.2).

Table 8-6: List of Aboriginal cultural heritage values recorded during fieldwork for CHMP 17321.

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
1	Hearth and associated artefact scatter	Unregistered	Rise adjacent to drainage channel. Unnamed waterway at the catchment to the south.	Partial intersection of proposed infrastructure (Distribution line/access track)	Contents: 2 Condition: 3 Representativeness: 3	Identified during complex assessment.
2	LDAD (subsurface)	Unregistered	Elevated plain towards the base of prominent hills and rises. North of an unnamed waterway.	Outside area of impact	Contents: 1 Condition: 2 Representativeness: 1	Identified during complex assessment.
3	Artefact scatter (surface and subsurface)	Unregistered	Elevated plain towards the base of prominent hills and rises. North of an unnamed waterway.	Partial intersection of proposed infrastructure (Access track/stringing pad)	Contents: 2 Condition: 2 Representativeness: 1	Identified during complex assessment.
4	LDAD (subsurface)	Unregistered	Elevated plain towards the base of prominent hills and rises. North of an unnamed waterway.	Outside area of impact	Contents: 1 Condition: 2 Representativeness: 1	Identified during complex assessment.
5	Artefact scatter (subsurface)	Unregistered	Elevated plain towards the base of prominent hills and rises. East of an unnamed spring, south of an unnamed waterway.	Complete intersection of proposed infrastructure (Tower/tower assembly area)	Contents: 1 Condition: 2 Representativeness: 1	Identified during complex assessment.
6	Artefact Scatter (subsurface)	Unregistered	Elevated plain towards the base of prominent hills and rises. East bank of Spring Creek.	Partial intersection of proposed infrastructure (Tower/tower assembly area/access track)	Contents: 3 Condition: 2 Representativeness: 3	Identified during complex assessment.
7	LDAD (surface)	Unregistered	Elevated plain towards the base of prominent hills and rises. East of Spring Creek.	Outside area of impact	Contents: 1 Condition: 2 Representativeness: 3	Identified during complex assessment.
8	CMT (Scarred Tree)	Unregistered	Elevated landform between unnamed waterway and drainage channel	Outside area of impact	Contents: 2 Condition: 3 Representativeness: 1	Identified during standard assessment.
9	LDAD (subsurface)	Unregistered	Steep slope on Pyrenees Ranges. Overlooking valley to the east.	Complete intersection of proposed infrastructure (Tower)	Contents: 1 Condition: 1 Representativeness: 1	Identified during complex assessment.

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
10	LDAD (subsurface)	Unregistered	Mid-slope towards the base of the Pyrenees Ranges. Overlooking valley to the east.	Complete intersection of proposed infrastructure (Tower/tower assembly area)	Contents: 1 Condition: 1 Representative ness: 1	Identified during complex assessment.
11	Artefact scatter (subsurface)	Unregistered	Elevated plain at the foothills of the Pyrenees Ranges. On a rise directly adjacent to and west of Glenlofty Creek	Outside area of impact	Contents: 2 Condition: 2 Representative ness: 1	Identified during complex assessment.
12	Artefact scatter (subsurface)	Unregistered	Elevated plain at the foothills of the Pyrenees Ranges. On a rise directly adjacent to and east of Glenlofty Creek	Outside area of impact	Contents: 2 Condition: 2 Representative ness: 1	Identified during complex assessment.
13	Artefact scatter (surface and subsurface knapping floor)	Unregistered	Elevated plain at the foothills of the Pyrenees Ranges. On a rise east and south of Glenlofty Creek.	Partial intersection of proposed infrastructure (Tower/tower assembly area/access track)	Contents: 2 Condition: 3 Representative ness: 3	Identified during standard and complex assessment.
14	LDAD (surface)	Unregistered	Elevated plain east of the foothills of the Pyrenees Ranges. On a rise south of Glenlofty Creek.	Outside area of impact	Contents: 1 Condition: 1 Representative ness: 1	Identified during standard assessment.
15	CMT (Scarred Tree)	Unregistered	On a rise to the south and east of Glenlofty Creek.	Outside area of impact	Contents: 2 Condition: 1 Representative ness: 2	Identified during complex assessment.



Figure 8-19: Photograph of hearth excavated within CHMP 17321 activity area.



Figure 8-20: Representative photograph of a quartz flake identified in CHMP 17321 activity area.



Figure 8-21: Representative photograph of a CMT (Scarred Tree) within the CHMP 17321 activity area.

The LDADs and artefact scatters primarily comprise quartz artefacts. These include flakes and flaked pieces (Figure 8-20) and quartz cores. There were also two pieces of tachylite recovered during subsurface testing. In association with subsurface quartz artefacts and heat retainers, a hearth was also uncovered within a low rise at the base of surrounding hills to the north and south. Unnamed waterways and natural drainage channels at the bases of these hills were located within 100m and 250m respectively on either side of where the hearth was excavated.

Areas of PAS in which artefacts have been identified are in proximity to permanent waterways (~15 to 200m). This illustrates the importance of this resource for Aboriginal occupation. The presence of several LDADs across the activity area is indicative of intermittent or occasional use of parts of the area by Aboriginal people, as opposed to other locations within the activity area that have identified more extensive artefact scatters and the earth feature deposits (i.e., the hearth).

The newly identified Places have been identified primarily on raised landforms close to permanent water, highlighting the sensitivity of these locations. This is in line with the CHMP desktop assessment, which predicted that these landscapes would be the most identified Places, except for the earth feature, which is generally a rare Place type in the archaeological record. More broadly, the assessment for the CHMP illustrates the importance of the whole landscape as it relates to Aboriginal cultural heritage values.

The location of Place ID 2 and 3 is associated with historical accounts of crushing and transport of quartz material along Glendhu Road in Crowlands. This suggests that possibility of contemporary Aboriginal presence with historic events. This Place also intersects the Place extent of previously registered VAHR 7523-0370.

Table 8-7: Significance rankings of Aboriginal cultural heritage values recorded during fieldwork for CHMP 17321

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
1	Hearth and associated artefact scatter	Rise adjacent to drainage channel. Unnamed waterway at the catchment to the south.	Low (1)	High (3)	High (3)	High (3)	Very High (10)
2	LDAD (subsurface)	Elevated plain towards the base of prominent hills and rises. North of an unnamed waterway.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
3	Artefact scatter	Elevated plain towards the base of prominent hills and	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
	(surface and subsurface)	rises. North of an unnamed waterway.					
4	LDAD (subsurface)	Elevated plain towards the base of prominent hills and rises. North of an unnamed waterway.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
5	Artefact scatter (subsurface)	Elevated plain towards the base of prominent hills and rises. East of an unnamed spring, south of an unnamed waterway.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
6	Artefact Scatter (subsurface)	Elevated plain towards the base of prominent hills and rises. East bank of Spring Creek.	Low (1)	High (3)	Moderate (2)	High (3)	High (9)
7	LDAD (surface)	Elevated plain towards the base of prominent hills and rises. East of Spring Creek.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
8	CMT (scarred tree)	Elevated landform between unnamed waterway and drainage channel	Low (1)	Moderate (2)	Moderate (2)	High (3)	Moderate (8)
9	LDAD (subsurface)	Steep slope on Pyrenees Ranges. Overlooking valley to the east.	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
10	Artefact scatter (subsurface)	Mid-slope towards the base of the Pyrenees Ranges, overlooking valley to the east.	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
11	Artefact scatter (subsurface)	Elevated plain at the foothills of the Pyrenees Ranges. On a rise directly adjacent to and west of Glenlofty Creek	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
12	Artefact scatter (subsurface)	Elevated plain at the foothills of the Pyrenees Ranges. On a rise directly adjacent to and east of Glenlofty Creek.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
13	Artefact scatter (surface and subsurface knapping floor)	Elevated plain at the foothills of the Pyrenees Ranges. On a rise east and south of Glenlofty Creek.	Low (1)	High (3)	High (3)	High (3)	Very High (10)
14	LDAD (surface)	Elevated plain at the foothills of the Pyrenees Ranges. On a rise south of Glenlofty Creek.	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
15	CMT (Scarred Tree)	On a rise to the south and east of Glenlofty Creek.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)

In summary, there are 15 Aboriginal cultural heritage values recorded during fieldwork for CHMP 17321. Of these, the significance rankings include three Aboriginal cultural heritage values ranked as having a low significance (IDs 9, 10 and 14), nine values ranked as having a moderate significance (IDs 2, 3, 4, 5, 7, 8, 11, 12 and 14), one value ranked as having a high significance (ID 6), and two values ranked as having a very high significance (IDs 1 and 13).

8.2.2.6 Summary Findings for Area 2

Standard and complex assessment fieldwork for CHMP 17321 found that unregistered Aboriginal cultural heritage is present within Area 2, consisting of surface and subsurface cultural deposits within 200m of waterways, typically within rises adjacent to waterways and at the foothills of the Pyrenees ranges. There is also potential for unknown CMTs and earth features to occur within these landforms.

It is highly likely that unknown Aboriginal cultural heritage is present within the activity area at some locations that are yet to be tested via the CHMP process and in areas that will not be impacted by the activity; however, the impact to unknown Aboriginal cultural heritage within the activity area will be managed through the CHMP process and consideration of CVA recommendations. The impact to tangible Aboriginal cultural heritage values is managed due to the construction methodology being above ground for the Project and responsive to cultural heritage investigations; however, visual impacts associated with design infrastructure are possible on intangible Aboriginal cultural heritage values, such as landscapes and landscape features. These matters are further expanded in Section 9.

8.2.3 Area 3: Non-RAP area

CHMP 17312 intersects the geomorphic land system from Sandy Creek in the east to the Wimmera River in the west, where a significant portion of the Proposed Route is within areas of CHS associated with these two waterways. Areas of CHS associated with Glenpatrick Creek also intersect a central/western portion of the Proposed Route. The easternmost corner of the activity area also crosses a CHS area associated with Amphitheatre Creek. The terrain typically comprises of undulating rises and plains, as well as the floodplains and terraces of Sandy Creek, Glenpatrick Creek, and the Wimmera River moving westwards through the Proposed Route.

In total, 100% of the Proposed Route has undergone standard assessment within Area 3. In total, 100% of Complex Assessment has been completed, including within areas of PAS and at selected control testing locations. The completed Complex Assessment program comprises testing at 61% (19 of 31) tower assembly areas. As such, CHMP 17312 for Area 3 has undergone Phase 1 testing and Phase 2 testing.

8.2.3.1 Desktop assessment

The desktop assessment determined that the area is located within the Western Uplands geomorphic division, in the 'Ridges, escarpments and mountains', 'Plutonic hills and valley slopes', and 'Terraces and floodplains' geomorphic land systems. The overall elevation of the activity area ranges from approximately 280 to 410m above sea level.

Prior to the non-Aboriginal settlement and alteration of the landscape, much of the activity area would have been favourable for Aboriginal occupation and resource procurement, given the availability of food and fresh water. While no major watercourses were mapped on Mitchell's 1836 survey map within the activity area, the prior alignments of minor waterways and tributaries of larger watercourses stemming from the Pyrenees and other ranges would likely have been extant. Non-Aboriginal settlement and gold mining have had a major impact on all prior watercourses, and the current Amphitheatre Creek, Glenpatrick Creek, Sandy Creek, and the Wimmera River do not reflect their previous alignments. Gold mining processes have made significant changes to the landscape from sluicing, dredging, and the channelisation of waterways. Sludge, the toxic by-product of gold mining, also changed the landscape in two main ways: it shifted soil that was removed as part of the gold mining process; and may have moved Aboriginal cultural heritage material downstream as a result, or it could have capped the natural landscape as it spread across the floodplain, thereby protecting any subsurface Aboriginal cultural heritage. This will impact on where archaeological deposits are identified within the landscape, and the depth at which archaeological deposits may be found.

The VAHR search and a review of relevant archaeological reports revealed that there are seven Aboriginal Places comprising 11 components located within the activity area for CHMP 17312 including two Aboriginal Places within the area of impact: a quartz core (cobble) at Murnane's 3 (VAHR 7523-0117), and another quartz core at Murnane's 4 (VAHR 7523-0118). One of the seven Aboriginal Places – Murnane's 3 (VAHR 7523-0117) - is intersected by proposed infrastructure for the Project (see Section 9.2.1). The small number of identified Aboriginal Places on the VAHR is likely due to the lack of previous Aboriginal cultural heritage assessments undertaken within the activity area or within proximity to the current activity, rather than a lack of archaeological material.

The background review and VAHR search results informed the predictive model for the CHMP, which indicated that Aboriginal Places will most commonly be found on rises in the landscape, hill slopes, ridges, and terraces, or associated with elevated landforms within 200m of prior watercourses. As such, there is a moderate-high potential for additional Aboriginal cultural heritage to be present.

8.2.3.2 Standard assessment

During Phase 1 of the standard assessment, the activity area to the south of Mount Direction, along the foothills of the Pyrenees Ranges, was surveyed. Aboriginal cultural material (VAHR 7523-0117 and VAHR 7523-0118) has been previously identified on the surface of a rise overlooking the floodplain of the Wimmera River, though the material could not be relocated during this assessment.

Nine areas of PAS (PAS 01/1A– PAS 08) were identified during standard assessment. These areas of PAS encompass gentle rises, undulating hills, elevated plains and stony rises, all associated with known waterways,

including rises and elevated plains at the confluence of multiple waterways (Figure 8-22 and Figure 8-25).

8.2.3.2.1 Newly identified Aboriginal Places

A single CMT (Scarred Tree) was identified adjacent to an unnamed waterway (Figure 8-27). This CMT has the potential to be a high significance Place and requires additional assessment and consultation with the surrounding RAP groups (see Section 8.2.1.4 for further details). All other mature trees identified during the standard assessment were also inspected for Aboriginal cultural heritage. A surface artefact scatter was also identified during standard assessment on a gradual rise adjacent to a named waterway at the far eastern end of the area (Figure 8-26). This gradual rise was part of a series of undulating rises at the foothills of the Pyrenees

Ranges and the Glenlogie Granodiorite Formation. All areas of PAS were identified in consultation with the TOs during fieldwork with representatives of DJAARA, EMAC and BGLCAC.



Figure 8-22: Example of an area of PAS identified within CHMP 17312 activity area. Landform is a prominent rise overlooking the Wimmera River and its abutting floodplains. Majority of the area of PAS has been cleared, however mature native vegetation on the far northern side of the area of PAS.

The majority of the activity area was determined to have been subjected to minimal ground disturbances, with the exception of a few properties that noted underground assets (inc. NextGen fibre optic cable), culverts, dams, gravel tracks and the prior powerline alignment.

8.2.3.3 Complex assessment

Seven of the nine areas of PAS have undergone some degree of complex assessment. Testing at PAS 01 and PAS 07 was not required as there is no intersecting infrastructure. Testing was undertaken in proximity to these areas of PAS where infrastructure is proposed, and impacts will occur. Of the seven areas of PAS that have been subject to complex assessment, Aboriginal cultural heritage has been identified at six.

Eight control locations for complex assessment were also chosen within the activity area, which have all been excavated. This high number of control locations has been selected to cross check that areas of PAS have been correctly identified as the CHMP 17312 activity area runs parallel to several waterways. These control locations include areas adjacent to prominent rises alongside waterways, low-lying plains associated with the Wimmera River and its tributaries, as well as rises outside 500m from a known waterway. A quartz artefact scatter has been identified at one control location.

The central portion of the activity area runs roughly parallel with the Wimmera River and its tributaries and, as such, is dominated by alluvial sediments with a shallow sterile clay base typically <400mm (Figure 8-23 and Figure 8-24). Though less common, discrete areas were excavated that had highly variable depths to the sterile base and alluvial sedimentary sequences. These are likely the result of ancient channels of the waterways in the easternmost portion of the activity area. The westernmost end of the activity area has moderate to steep undulating hills and ridges associated with the Pyrenees Formation. No areas of PAS were identified in this westernmost end of the activity area, and control test pits within this area revealed no Aboriginal cultural heritage.



Figure 8-23: Representative photograph of a test pit excavated within an area of PAS, positive for Aboriginal cultural heritage.



Figure 8-24: Representative photograph of a test pit at a control location for CHMP 17312. Location positive for Aboriginal cultural heritage.

Complex assessment for CHMP 17312 has been completed in Area 3. Mapping of fieldwork is shown in Figure 8-25, below. Additional information on Aboriginal cultural heritage values is provided in Section 8.2.3.4.

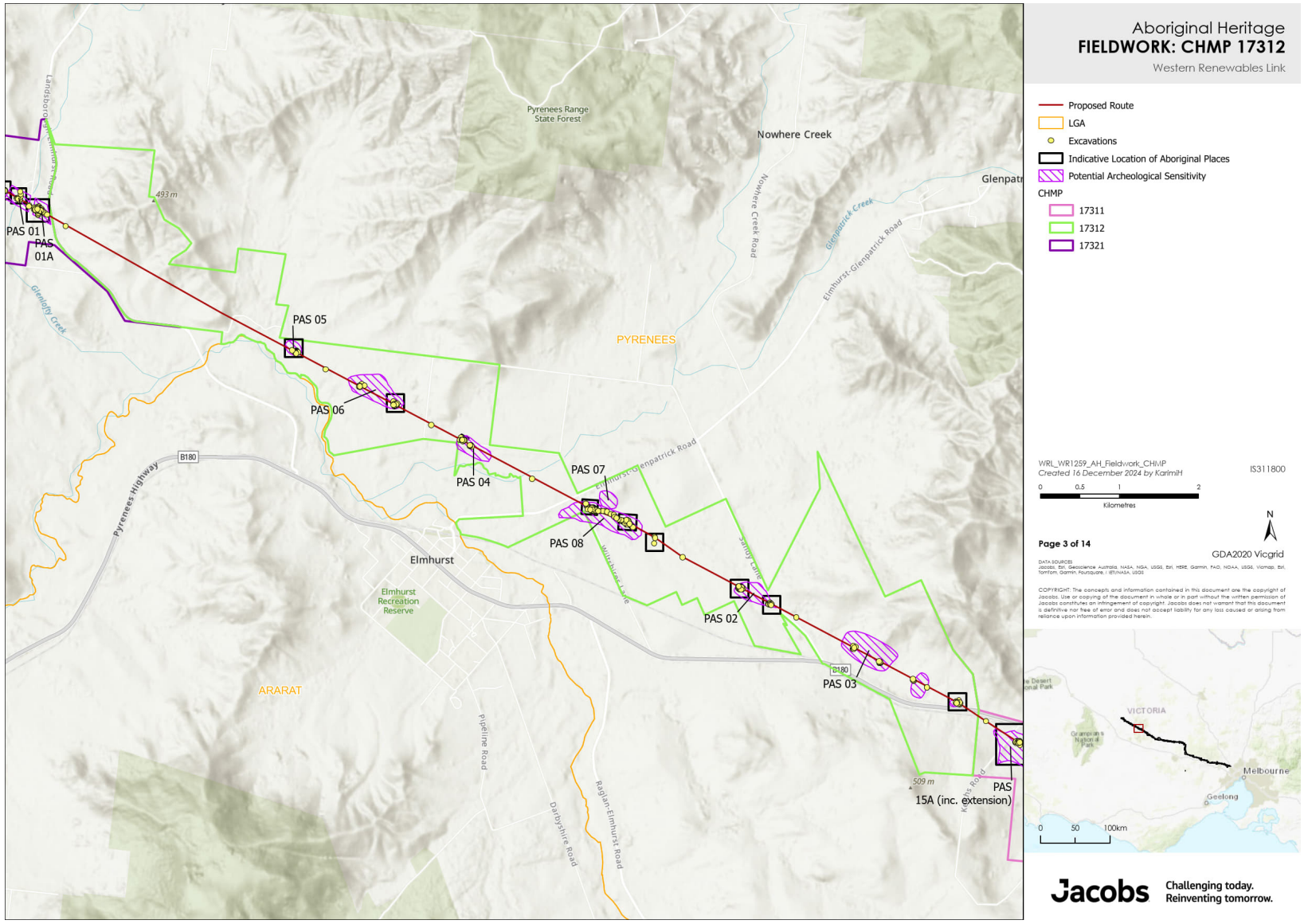


Figure 8-25: Fieldwork for CHMP 17312, Non-RAP Area. Fieldwork mapping includes data from late 2020 to June 2024.

8.2.3.4 Cultural Values Assessment

CVAs for this activity have been incorporated within the surrounding RAPs assessments. As such, please refer to Sections 8.2.1.4, 8.2.2.4 and 8.2.4.4 for relevant information. The Wimmera River, crossing north/south through the Study Area, holds Aboriginal cultural heritage values as identified in both the BGLCAC and DJAARA CVAs and is listed within Table 8-6.

As explained in the CVAs, The Wimmera River is of great significance to all three BGCLAC, EMAC and DJAARA in Area 3. A dominant water course of Area 1 of the BGLCAC and as a main factor in providing water and food resources for the Jadawadjali and Wotjobaluk. In places it acted as a boundary marker, travel and trade route. Stories around the creation of the Wimmera River include those of the Wotjobaluk around Tchingal, a giant emu who ate the flesh of humans and other animals. In the DJAARA CVA there is a sense of responsibility expressed for the quality of the Wimmera River that runs through their Country but specific stories about the water course were not shared.

8.2.3.5 Aboriginal cultural heritage

Artefact scatters are the most common Aboriginal Place currently identified within CHMP 17312, followed by LDADs (Figure 8-26) and CMTs (Figure 8-27). The CMT identified within the CHMP 17312 activity area has the potential to be of high significance and cultural heritage value to the Aboriginal communities (refer to Section 8.2.1.4). The raw material for almost all stone artefacts in CHMP 17312 is quartz, with small numbers of silcrete, tachylite, and basalt present, and artefact forms typically comprise flakes and flaked pieces. During complex assessment, artefacts have been identified to a maximum depth of 820mm below the surface, however, are typically associated with depths of 200-300mm within silt and/or sand-rich, alluvial deposits.

The scientific significance rankings presented in Table 8-8, are used in the overall significance rankings (refer to Table 8-9), which is used assessment of impacts for the Project (Section 9.2).

Table 8-8: List of Aboriginal cultural heritage values recorded during fieldwork for CHMP 17312 and the DJAARA, EMAC and BGLCAC CVAs.

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
1	Artefact scatter (subsurface)	Unregistered	Rise adjacent to Wimmera River (and associated floodplain)	Complete intersection of proposed infrastructure (Tower assembly area)	Contents: 2 Condition: 2 Representativeness: 2	Identified during complex assessment.
2	CMT (scarred tree)	Unregistered	Low rise adjacent to unnamed waterway. Although area is outside a recognised area of CHS, the Wimmera River is to the south-east, with a smaller creek running off the Wimmera to the north-east.	Outside area of impact	Contents: 3 Condition: 3 Representativeness: 3	Aboriginal Place with associated intangible Cultural Values verified by Aboriginal Elders. Identified during standard assessment.
3	LDAD (subsurface)	Unregistered	Low rise adjacent to unnamed waterway. Although area is outside a recognised area of	Complete intersection of proposed infrastructure	Contents: 1 Condition: 1	Identified during complex assessment.

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
			CHS, the Wimmera River is to the south-east, with a smaller creek running off the Wimmera to the north-east.	(Tower/tower assembly area)	Representativeness: 1	
4	Cultural landform with associated artefact scatter	Unregistered	Low rise (elevated plain) between unnamed waterway and large granite outcrop/stony rise. Although area is outside a recognised area of CHS, the Wimmera River is to the south-east, with a smaller creek running off the Wimmera to the north-east. Extensive scatter across two tower locations. proposed landform registration.	Partial intersection of proposed infrastructure (Tower/tower assembly area/access track/hurdle)	Contents: 2 Condition: 2 Representativeness: 3	Identified during standard and complex assessment.
5	Artefact scatter (subsurface)	Unregistered	Within elevated plain to the south of unnamed waterway.	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during complex assessment.
6	Artefact scatter (subsurface)	Unregistered	Top of creek terrace within elevated plain to the west of Sandy Creek.	Partial intersection of proposed infrastructure (Tower/tower assembly area)	Contents: 2 Condition: 2 Representativeness: 2	Identified during complex assessment.
7	LDAD (subsurface)	Registered	Mid-slope towards high stony rise, adjacent to Sandy Creek	Partial intersection of proposed infrastructure (Tower assembly area)	Contents: 1 Condition: 1 Representativeness: 1	Identified during complex assessment.
8	Artefact scatter (surface)	Unregistered	Located on driveway to property, within the mid-slope of a gradual rise within 500m of Amphitheatre Creek.	Complete intersection of proposed infrastructure (Access track)	Contents: 2 Condition: 1 Representativeness: 1	Identified during standard assessment.

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
9	Artefact scatter (subsurface)	Unregistered	Rise adjacent to the floodplain of the Glenpatrick Creek (and associated floodplain).	Complete intersection of proposed infrastructure (Tower/tower assembly area)	Contents: 2 Condition: 1 Representativeness: 1	Identified during complex assessment.

Aboriginal Places have all been identified on rises (including low and broad rises, stony rises and undulating rises) or within elevated plains directly adjacent to named waterways. This is to be expected, as a large portion of the activity area for CHMP 17312 runs adjacent to several watercourses and tributaries that run off the Wimmera River.



Figure 8-26: Representative photograph of a medial quartz flake from artefact scatter identified at the foothills overlooking Amphitheatre Creek.



Figure 8-27: Culturally modified tree recorded within CHMP 17312 activity area.

Newly identified Aboriginal Places in Area 3 consist of artefact scatters, LDADs, a CMT, and a cultural landform with an associated artefact scatter. This finding is in line with the desktop assessment of the CHMP, which predicted that these would be the most identified Aboriginal Places. The Aboriginal Places have been identified primarily on raised landforms close to permanent water, highlighting the sensitivity of these locations. More broadly, the assessment for the CHMP illustrates the importance of the whole landscape as it relates to Aboriginal cultural heritage values. While the Project can avoid many tangible Aboriginal Places, its very presence in the landscape will impact will have an unavoidable impact on intangible values, such as landscapes, biodiversity and contemporary values, and how places are interconnected through Country.

Table 8-9: Significance rankings of Aboriginal cultural heritage values recorded during fieldwork for CHMP 17312 and the DJAARA and BGLCAC CVAs.

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
1	Artefact scatter (subsurface)	Rise adjacent to Wimmera River (and associated floodplain)	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
2	CMT (scarred tree)	Low rise adjacent to unnamed waterway. Although area is outside a recognised	Low (1)	High (3)	High (3)	High (3)	Very high (10)

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
		area of CHS, the Wimmera River is to the south-east, with a smaller creek running off the Wimmera to the north-east.					
3	LDAD (subsurface)	Low rise adjacent to unnamed waterway. Although area is outside a recognised area of CHS, the Wimmera River is to the south-east, with a smaller creek running off the Wimmera to the north-east.	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
4	Cultural landform with associated artefact scatter	Low rise (elevated plain) between unnamed waterway and large granite outcrop/stony rise. Although area is outside a recognised area of CHS, the Wimmera River is to the south-east, with a smaller creek running off the Wimmera to the north-east. Extensive scatter across two tower locations. proposed landform registration.	Low (1)	High (3)	High (3)	High (3)	Very high (10)
5	Artefact scatter (subsurface)	Within elevated plain to the south of unnamed waterway.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
6	Artefact scatter (subsurface)	Top of creek terrace within elevated plain to the west of Sandy Creek.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
7	LDAD (subsurface)	Mid-slope towards high stony rise, adjacent to Sandy Creek	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
8	Artefact scatter (surface)	Located on driveway to property, within the mid-slope of a gradual rise within 500m of Amphitheatre Creek.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
9	Artefact scatter (subsurface)	Rise adjacent to the floodplain of the Glenpatrick Creek (and associated floodplain).	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)

In summary, there are nine Aboriginal cultural heritage values recorded during fieldwork for CHMP 17312 and the DJAARA and BGLCAC CVA. Of these, the significance rankings include two Aboriginal cultural heritage values ranked as having a low significance (IDs 3 and 7), five values ranked as having a moderate significance (IDs 1, 5, 6, 8 and 9), and two values ranked as having a very high significance (IDs 2 and 4).

8.2.3.6 Summary Findings for Area 3

The fieldwork findings to date indicate that unregistered Aboriginal cultural heritage is present within Area 3, consisting of both surface and subsurface deposits within 200m of waterways. These Aboriginal Places are within various landforms, including plains, rises directly abutting known waterways and undulating rises at the foothills of more substantial ranges and ridges within the activity area. There is also sensitivity for CMTs to occur within the area, some of which may be of potential high significance to TOs.

It is highly likely that additional unknown Aboriginal cultural heritage is located within the activity area in areas not subject to CHMP research and that will not be impacted by the activity. The risk to Aboriginal cultural heritage within the activity area will be managed through the CHMP process and consideration of CVA recommendations, which have yet to be provided in some cases. The impact to tangible Aboriginal cultural heritage values is managed through the construction methodology being above ground for the Project and responsive to cultural heritage investigations; however, visual impacts associated with design infrastructure are possible on intangible Aboriginal cultural heritage values, such as landscapes and landscape features. These matters are further expanded in Section 9.

8.2.4 Area 4: DJAARA

Two CHMPs are being prepared in the DJAARA RAP area (CHMP 17311 and CHMP 18101) due to the size of Area 4. The boundaries of these CHMP activity areas have been determined as being west (CHMP 17311) and east (CHMP 18101) of Beaufort-Lexton Road, Lexton. CHMP 17311 for Area 4 is located between Glenbrae and Elmhurst, Victoria. The eastern end of the activity area is situated approximately 4km to the west of Waubra, with its western end being approximately 7km to the west of Amphitheatre. CHMP 18101 is located between Lexton and Mollongghip, Victoria. The eastern end of the activity area is situated approximately 1km to the south of Lexton, with its western end being approximately 1km to the south-east of Mollongghip.

For CHMP 17311, 96.13% of the Proposed Route has undergone standard assessment. Complex assessment has taken Place at 31% (13 of 42) of tower assembly areas, including those within areas of PAS and those selected as control testing locations.

CHMP 18101 is not as advanced, with 47.33% of the Proposed Route surveyed and excavation has occurred at 24% of the tower assembly areas (34 of 144 tower assembly areas). The degree of fieldwork completed for this CHMP to date is the result of changes to the Project design and land access constraints; however, further fieldwork is planned as part of the preparation of CHMP 18101.

The site boundary for the laydown area and workforce accommodation facility near Lexton is located in CHMP 18101 activity area. Standard assessment has been completed for this location, where results are provided in Section 8.2.4.4.

8.2.4.1 Desktop assessment

The CHMP desktop assessments identified that Area 4 is located within the Western Uplands geomorphic division, in the ‘ridges, escarpments and mountains’, ‘non-granitic hills and valley slopes’, ‘plutonic hills and valley slopes’, ‘plateaux and rises’, ‘eruption points and volcanic plains’, and ‘terraces and floodplains’ geomorphic land systems. The overall elevation of the area ranges from approximately 310 to 735m above sea level.

Because of the variety of landforms through CHMP 18101, it has been divided up into five areas based on geomorphology and hydrology in order to study how people used these different landforms in the past. These areas are:

- Central Victorian Uplands – parts of the Project contained within the Central Victorian Uplands bioregion parallel to Birch Creek
- Victorian Volcanic Plain - Hepburn Lagoon Precinct – this section will include parts of the alignment around Hepburn Lagoon
- Victorian Volcanic Plain - Central precinct – the section of the activity between Hepburn Lagoon and Mt Beckworth and is intersected by a number of north/south oriented waterways including Birch Creek in the east, Kilkenny Creek in the west with Tourello, Creswick and a number of minor drainages in between. All of these creeks form part of the headwaters of Tullaroop Creek.
- Victorian Volcanic Plain - Mt Beckworth precinct – the section of the activity around Mt Beckworth and is dominated by the parallel One Mile and Beckworth Creeks.
- Goldfields – the remaining western areas on the volcanic plain bioregion and the area of the activity within the Goldfields bioregion. This section of the activity is largely bounded to the east by McCallum Creek and the West by Burnbank Creek and their tributaries. As above, McCallum eventually flows into Tullaroop Creek, but Burnbank Creek flows into Bet Bet Creek.

Prior to non-Indigenous colonisation and alteration of the landscape, much of the area would have been favourable for Aboriginal occupation and resource procurement, especially given the availability of food and fresh water. Watercourses included the prior alignments of former tributaries of the Loddon River, along with the tributaries stemming from these major waterways. These waterways were extant into the 1840s, but non-Aboriginal settlement and gold mining have had a major impact on these watercourses, and thus the current creek courses may not reflect their previous alignments. Gold mining processes have made significant changes to the landscape from sluicing, dredging, and the channelisation of waterways. Sludge, the toxic by-product of gold mining, also changed the landscape in two main ways: it shifted soil that was removed as part of the gold mining process; and may have moved Aboriginal cultural heritage material downstream as a result, or it could have capped the natural landscape as it spread across the floodplain, thereby protecting any subsurface archaeological deposits. This will impact where archaeological deposits are identified within the landscape and the depth at which archaeological deposits may be found.

Equally, many other historical land uses have dramatically altered the landscape. Agricultural activities have resulted in the clear-felling of trees, land levelling, and rock removal. The introduction of rabbits and the construction of irrigation channels and reservoirs in sensitive areas also have dramatically altered potential place disposition in the activity area. This type of landscape modification has taken place over a large part of the activity area, and archaeological materials in these regions will likely have been disturbed.

The VAHR searches and a review of relevant archaeological reports revealed 21 previously recorded Aboriginal Places comprising 21 components within the area: 19 artefact scatters, one LDAD, and one earth feature (mound). The majority of artefacts identified were quartz. Six of the these previously recorded Aboriginal Places, all artefact scatters, are intersected by proposed infrastructure for the Project (see Section 9.2.1): Sunraysia IA 1 (VAHR 7623-0065), BBP29 (VAHR 7723-0181), Goldfields SST 9 (VAHR 7723-0194), Goldfields SST 10 (VAHR 7723-0195), Goldfields SST 15 (VAHR 7723-0199) and Goldfields SST 20 (7723-0200). The number of registered Aboriginal Places on the VAHR is partly due to the small number of previous Aboriginal cultural heritage assessments undertaken within the area or proximity to the current area, rather than a lack of archaeological material.

The background review and VAHR search results informed the predictive model, which indicates that Aboriginal Places will most commonly be found on plateaux, linear rises, hill crests and ridgelines, and terraces, or associated with elevated landforms within 200m of prior watercourses and in proximity to permanent waterways, especially where other resources, including food resources, stone resources, and vantage points, are nearby. Places are also more likely to be identified where there is mature remnant native vegetation. Places are less likely

to be found in areas that have been subject to disturbance due to historical land use, especially extractive and agricultural industries.

The literature review of archaeological assessments within the region shows that artefacts are likely to be found across numerous geomorphic landforms. As such, there is a moderate to high potential for additional Aboriginal cultural heritage to be present.

Following the desktop assessment and consultation with the RAP the Hepburn Lagoon area of PAS was identified.

8.2.4.2 Standard assessment

The Phase 1 standard assessment of CHMP 17311 has been completed (96.13% of the alignment has been surveyed) and has identified that the area is characterised by various landforms, including undulating hills, broad valleys and floodplains. Areas of CHS are associated with a series of waterways that pass through the activity area. These include Amphitheatre Creek, Glenlogie Creek, the Avoca River, Bet Bet Creek and Burnbank Creek moving eastwards through the Proposed Route. Floodplains and terraces are typically associated with these waterways. There are three previously identified Aboriginal Places in the activity area for CHMP 17311.



Figure 8-28: Rise associated with PAS 14, facing the Avoca River.



Figure 8-29: Southern bank of unnamed waterway in PAS 10, facing NE.

8.2.4.2.1 Newly identified Aboriginal Places

Three Aboriginal Places, an artefact scatter, LDAD and a CMT (ring tree), were recorded during the standard assessment. The artefact scatter and LDAD were found on rises overlooking waterways (including Avoca River and an unnamed waterway). The ring tree was located on a road reserve surrounded by Avoca River and two other unnamed tributaries. All other mature trees identified during the standard assessment were also inspected for Aboriginal cultural modification. In total, 13 areas of PAS (PAS 02, 04,10, 10A, 11-14, 15A and 17-22) were identified during the standard assessment for CHMP 17311 (Figure 8-34 and Figure 8-35). These areas are uniformly associated with rises in the otherwise relatively flat landscape, and each area of PAS overlooks a named or unnamed waterway (Figure 8-28 and Figure 8-29). These rises include gradual and broad flat rises, steep rises, stony rises, and undulating hills.

The Phase 1 standard assessment of CHMP 18101 is underway but not yet complete. This assessment has identified that although there are a variety of landforms in this portion of the Project Land, including undulating hills, broad valleys and floodplains, it is dominated by the flat to mildly undulating clay plains of the western Victorian volcanic plains. During the standard assessment seven Aboriginal Places have been identified: one CMT (ring tree), two artefact scatters and four Places which are currently interpreted as LDADs based on the density of artefacts recorded. Of the LDADs in the activity area for CHMP 18101, one was identified in association with the drainages of Pinchgut Creek; one was within the tributaries of Doctors Creek; one was associated with McCallum

and Mount Greencock Creeks, and one was on raised ground associated with Tourello Creek and one of its tributaries. Artefact analysis and complex testing is ongoing for these areas and some of the LDADs may be re-classified as artefact scatters depending on the results of further fieldwork. As an example of this, low-density surface finds along Burnbank Creek have been re-classified as an artefact scatter following complex assessment testing, as have some surface finds on the lower slopes of Mt Beckworth.

A series of waterways that pass through the activity area, including Creswick Creek, Birch Creek, Kilkenny Creek, Glendaruel Creek, Beckworth Creek and Burnbank Creek (Figure 8-30 and Figure 8-31). Standard assessment for the CHMP is ongoing so it is currently not known whether all of these areas will have areas of PAS. Based on the predictive model, however, high flat ground close to a waterway will generally be identified as an area of PAS. Floodplains and terraces are associated with these waterways, but some waterways (Kilkenny Creek, Glendaruel Creek) exhibit deep incision into the surrounding plains with minimal floodplains or access points. Areas of CHS in the Project Land are also associated with Hepburn Lagoon and several volcanic cones and lava flows including Mt Gap, Mount Bolton, Langdon Hill, and Big Hill. One new Aboriginal Place was recorded during the standard assessment which has been registered on the VAHR as Burnbank Creek Ring Tree (VAHR 7623-0240) (Figure 8-45). This Aboriginal Place is no longer within the Proposed Route and will not be harmed by the proposed activity. Surface artefacts were recorded at four locations during the standard assessment, which will be registered as four LDADs, although there is a likelihood of recording more Aboriginal Places during ongoing survey. A full summary of the predictive model for the identification of Aboriginal heritage in the Activity Area is presented in Section 9.1.3.1.



Figure 8-30: Floodplain associated with Beckworth Creek.



Figure 8-31: Escarpment adjacent to Glendaurel Creek, facing south-west (PAS 17).

In total, 50 areas of PAS (PAS 01 -09, PAS 16-17, PAS 20-56) were identified during the standard assessment within the activity area for CHMP 18101 (Figure 8-36 to Figure 8-40). Hepburn Lagoon area of PAS was identified during the desktop assessment and following consultation with the RAP. Areas of PAS in the activity area for CHMP 18101 are generally associated with waterways and with rises in the otherwise relatively flat landscape. The exceptions to this are PAS 16, 18 and 25, which are on the floodplains and near extinct meanders of permanent waterways. Elevated landforms were favoured locations for campsites are they raised the site out of the seasonally flooded low-lying plains and provided excellent visibility for threats or hunting opportunities (Figure 8-30 and Figure 8-31).

For both CHMP 17311 and 18101, standard assessments revealed that the majority of the area had been subjected to minimal ground disturbances, with the exception of a few properties that noted underground assets (including NextGen fibre optic cable and Goldfields water pipeline), culverts, dams, gravel tracks, and the existing transmission line alignment between Bulgana and Waubra.

8.2.4.3 Complex assessment

Complex assessment has been undertaken at all areas of PAS identified within CHMP 17311 where ground disturbance works are proposed for the Project; the exception to this is access tracks. Where the proposed construction methodology for access tracks in areas of PAS is non-invasive, complex testing may not be required, but where construction of access tracks in areas of PAS will result in impacts, subsurface testing will need to be undertaken (Figure 8-32). As such, a total of nine areas of PAS have been subject to complex assessment. It is important to note that, while Phase 1 testing is complete, Phase 2 testing (including extent testing) is still underway.

Aboriginal Heritage has been identified in five of the areas of PAS that have undergone complex assessment (Table 8-10). Six control locations for control testing were also selected within the activity area, encompassing various landforms. These include areas adjacent to prominent rises alongside waterways, adjacent to ridges and areas associated with drainage channels at the foothills of the Pyrenees Ranges. No artefacts have been recovered from control testing for CHMP 17311 (Figure 8-34).

The complex assessment for CHMP 18101 has been undertaken at 43 areas of PAS where ground disturbance works had been proposed (Figure 8-33). Complex assessment has not been possible in some areas of PAS due to land access restrictions, while some areas have not been subject to complex assessment as the proposed infrastructure is restricted to access tracks, given the proposed construction methodology for access tracks is non-invasive. The areas of PAS subject to complex assessment thus far are 1, 2, 4, 5-7, 16-17, 26, 28, 34, 37,39-40, 47-48, 51, 54 and 56. It is important to note that Phase 1 testing is not complete, and more artefacts may be identified at some of these locations and other areas of PAS in the Project Land.

Aboriginal Heritage has been identified in 12 of the areas of PAS within CHMP 18101. These comprise the floodplains and terraces of Beckworth Creek in two areas; a rise abutting a minor, unnamed waterway; an area to the south of Pinchgut Creek; and areas associated with minor and ephemeral drainages to the north of Beckworth Creek. Eight control locations for complex assessment were also chosen within the activity area. These areas include the formerly proposed location of the Djina Witji Terminal Station and tower locations adjacent to smaller waterways and areas associated with drainage channels. An additional seven Aboriginal Places were identified during control testing, but artefact analysis and Place density and extent testing is ongoing.



Figure 8-32: Representative photograph of a test pit excavated within an area of PAS in CHMP 17311 activity area, positive for Aboriginal cultural heritage.



Figure 8-33: Representative photograph of a test pit excavated within CHMP 18101 activity area, positive for Aboriginal cultural heritage.

Mapping of fieldwork so far completed for CHMP 17311 and CHMP 18101 in Area 4 is shown in Figure 8-34 to Figure 8-40, below. Additional information on Aboriginal cultural heritage values is provided in Section 8.2.4.4.

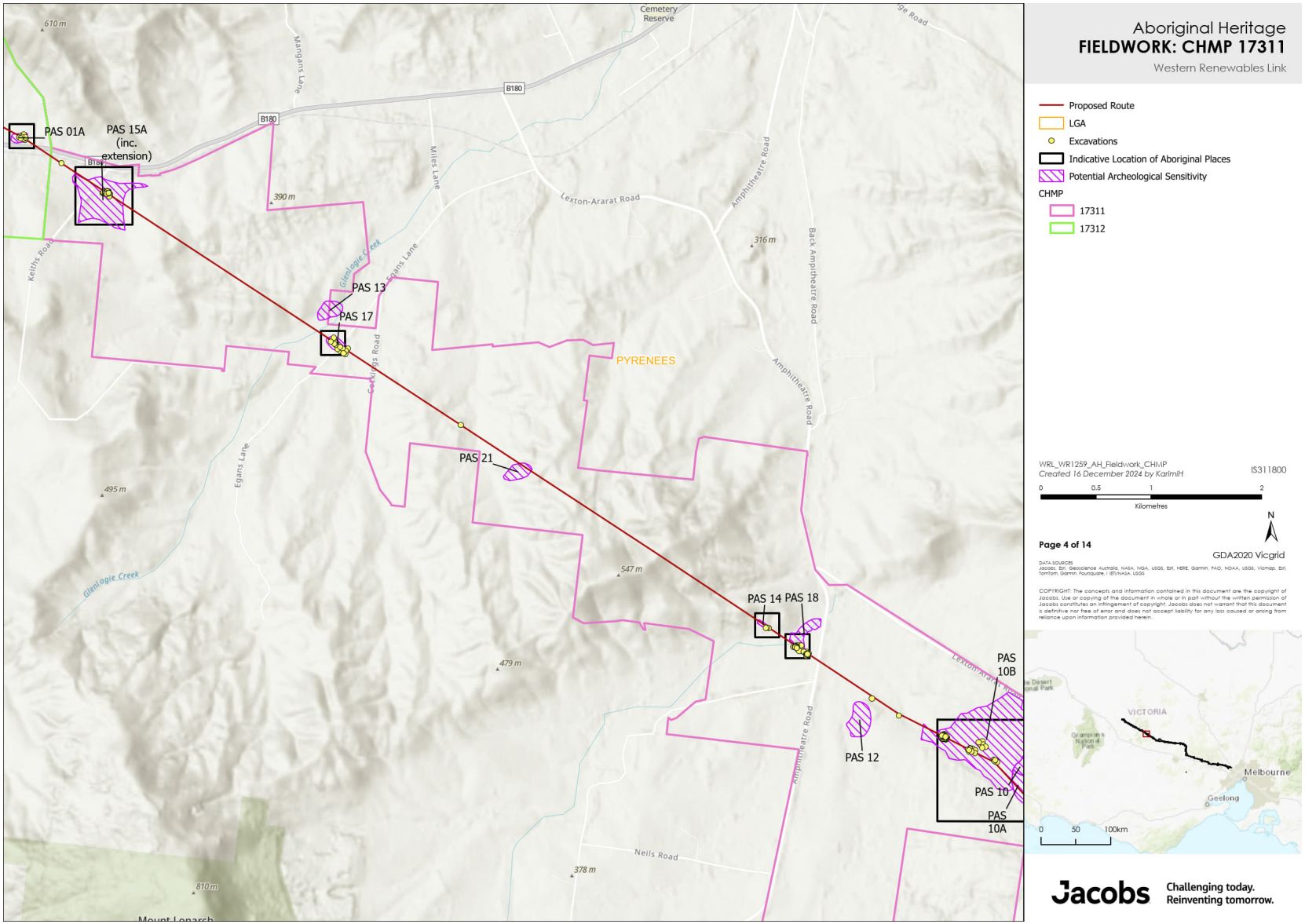


Figure 8-34: Fieldwork for CHMP 17311, DJAARA RAP Area. Fieldwork mapping includes data from late 2020 to June 2024. Page 1 of 2.

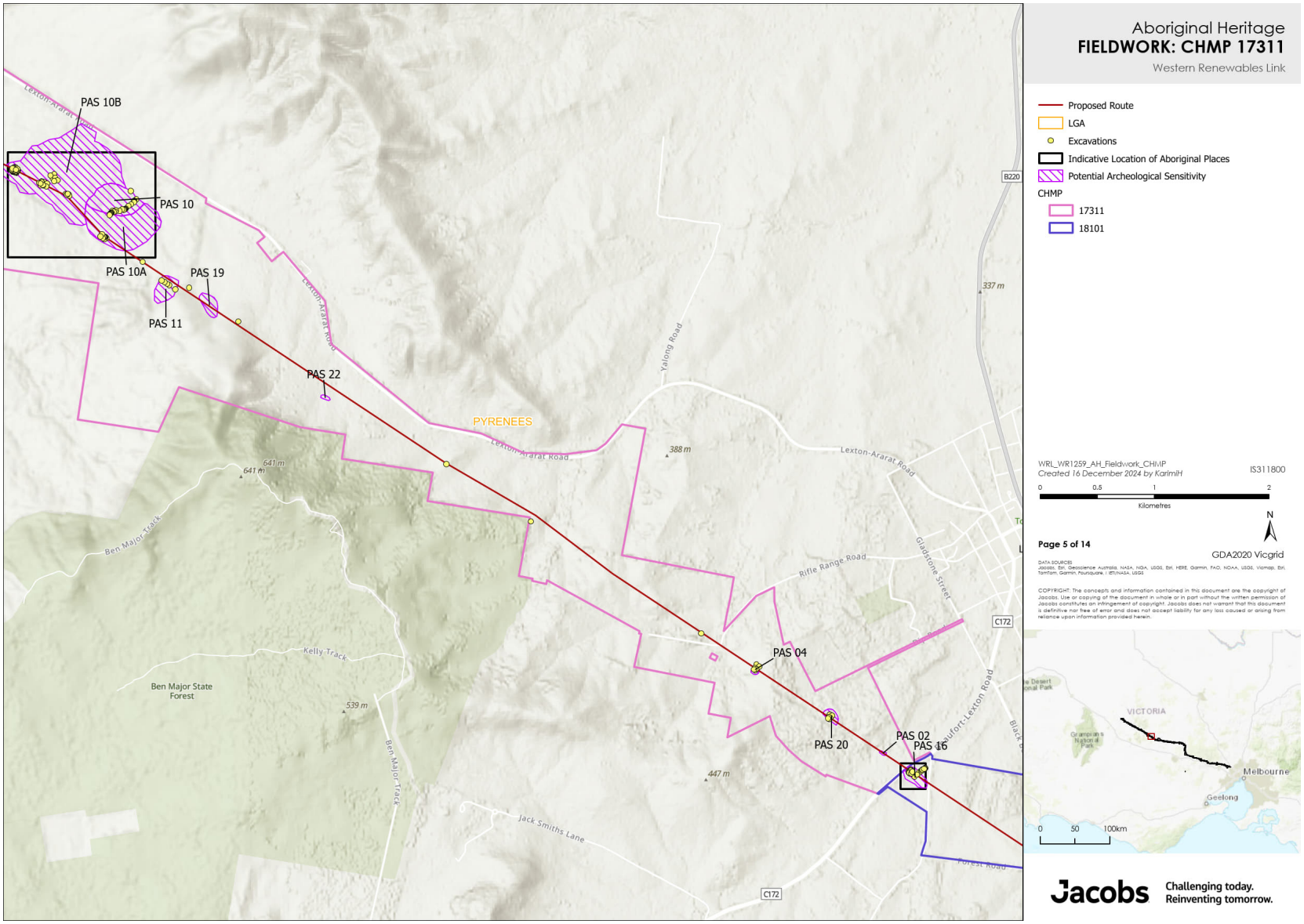


Figure 8-35: Fieldwork for CHMP 17311, DJAARA RAP Area. Fieldwork mapping includes data from late 2020 to June 2024. Page 2 of 2.

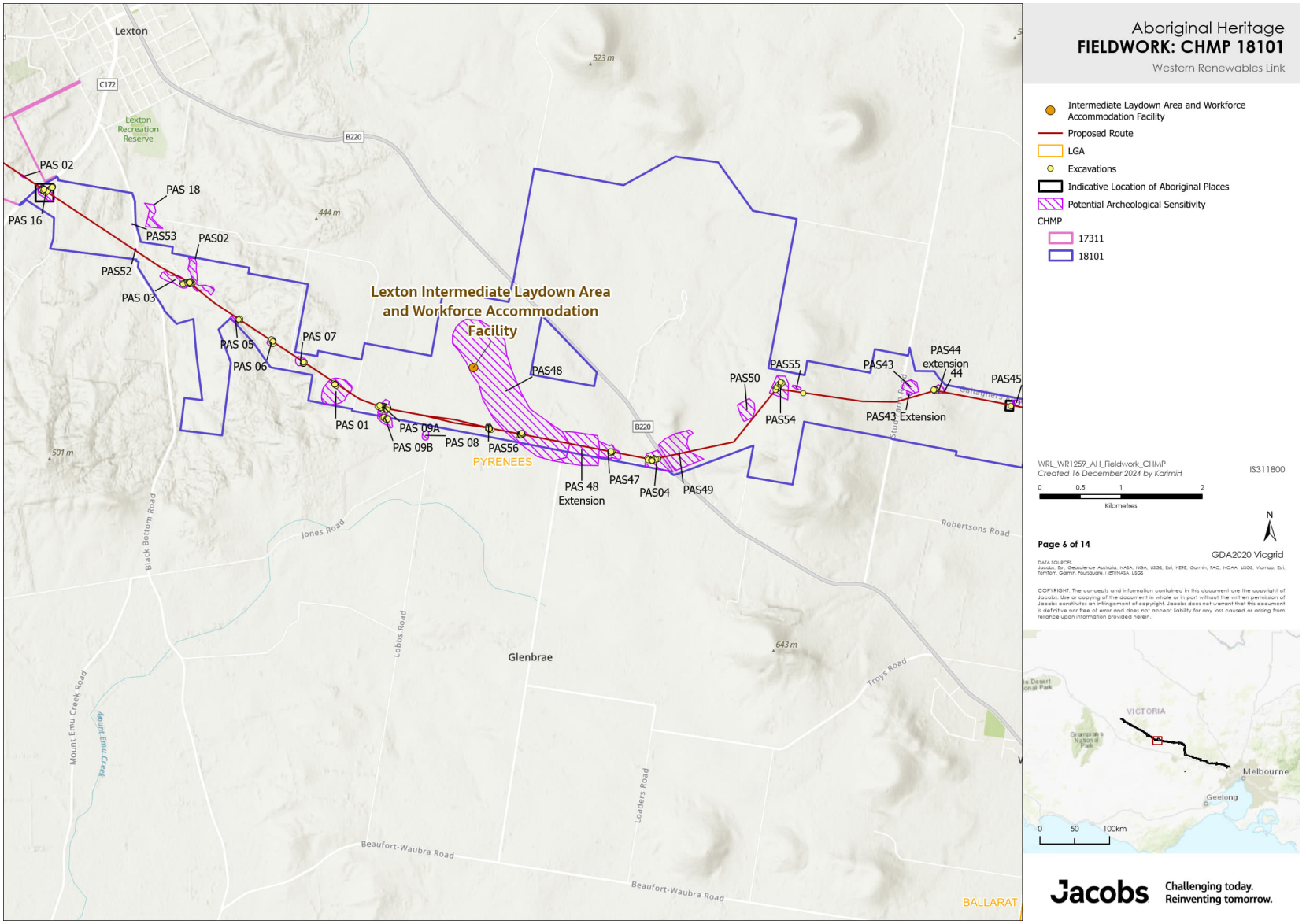


Figure 8-36: Fieldwork for CHMP 18101, DJAARA RAP Area. Fieldwork mapping includes data from late 2020 to June 2024. Page 1 of 5.

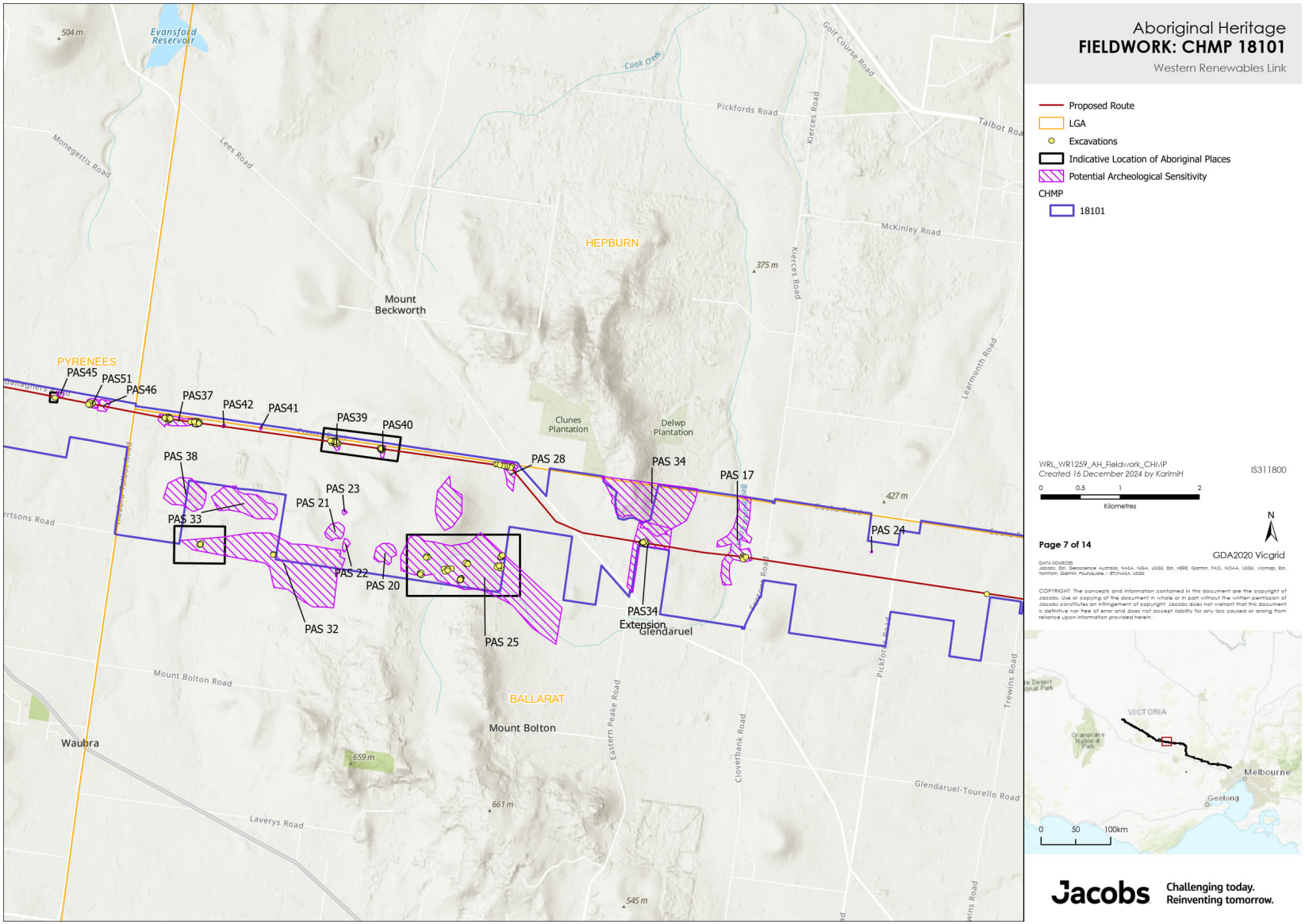


Figure 8-37: Fieldwork for CHMP 18101, DJAARA RAP Area. Fieldwork mapping includes data from late 2020 to June 2024. Page 2 of 5.

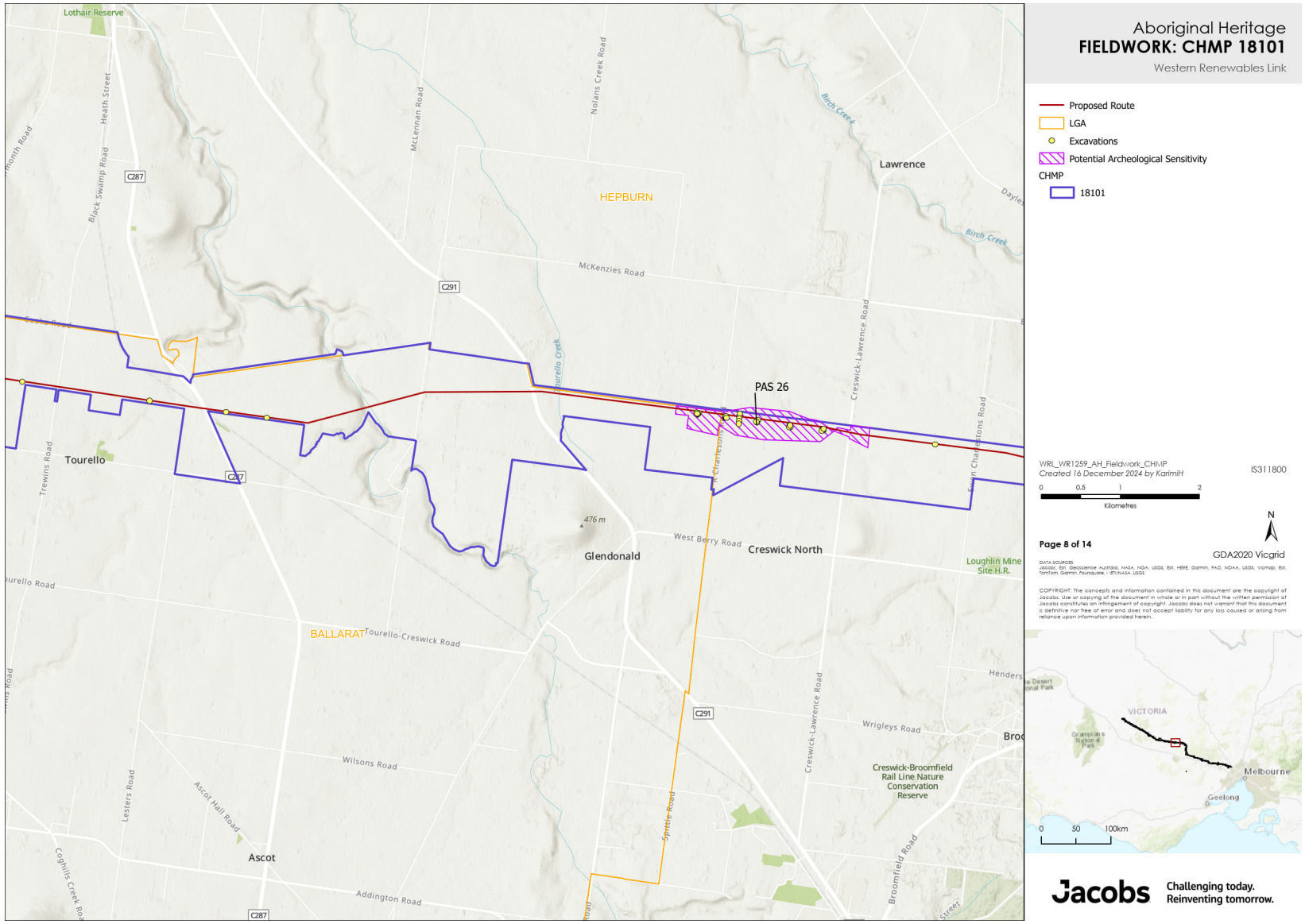


Figure 8-38: Fieldwork for CHMP 18101, DJAARA RAP Area. Fieldwork mapping includes data from late 2020 to June 2024. Page 3 of 5.

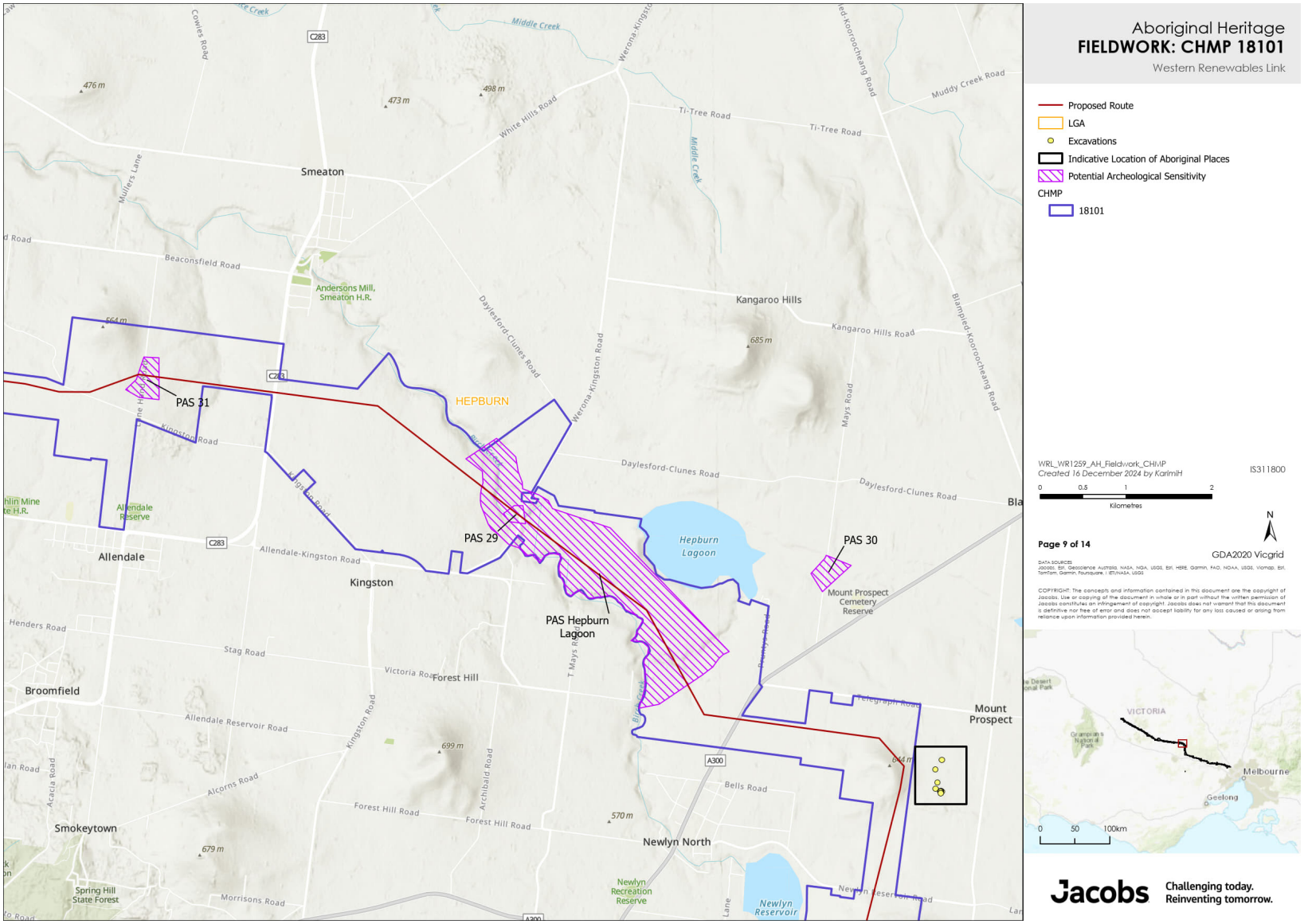


Figure 8-39: Fieldwork for CHMP 18101, DJAARA RAP Area. Fieldwork mapping includes data from late 2020 to June 2024. Page 4 of 5.

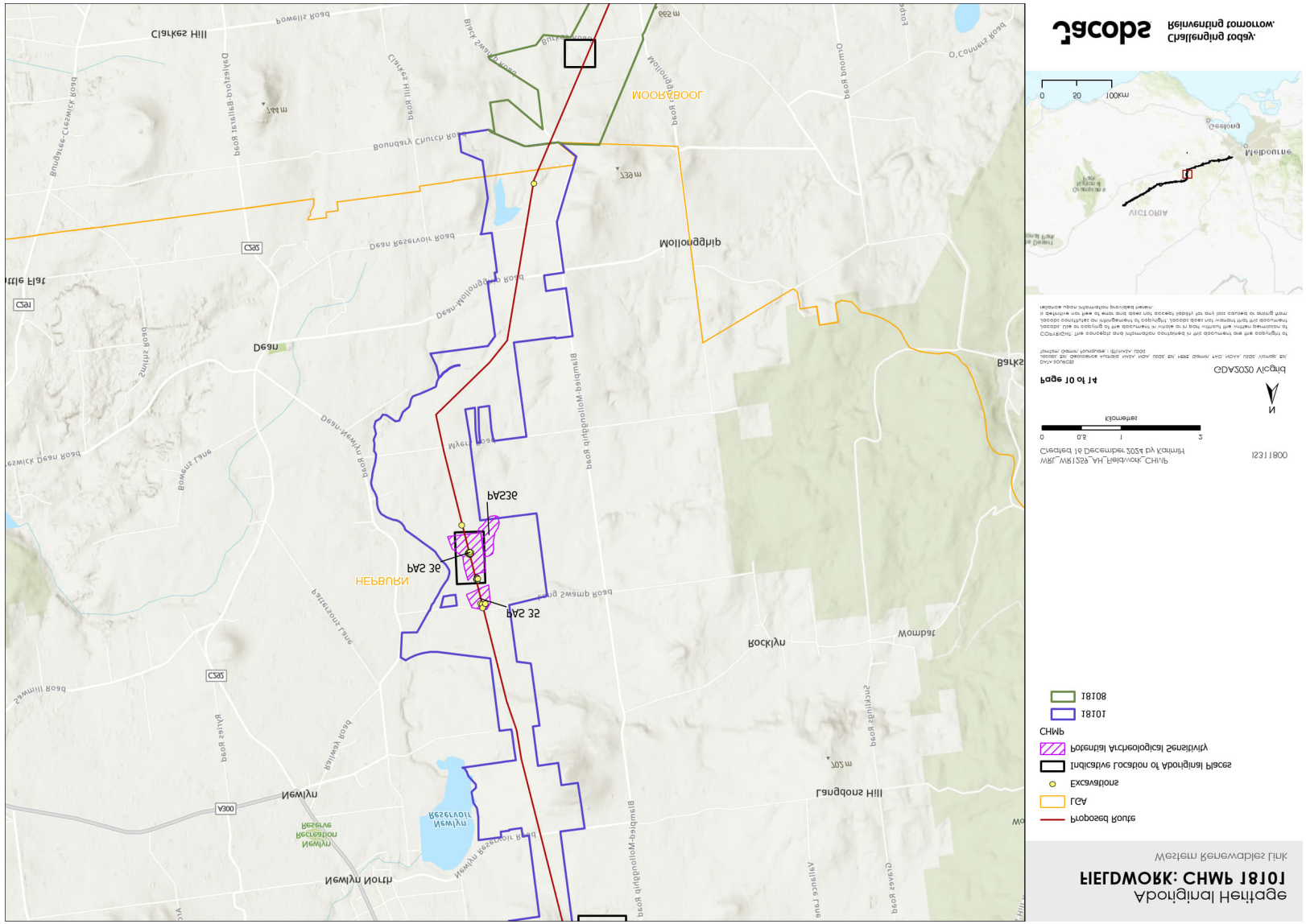


Figure 8-40: Fieldwork for CHMP 18101, DJAARA RAP Area. Fieldwork mapping includes data from late 2020 to June 2024. Page 5 of 5.

8.2.4.4 Fieldwork results from the Lexton laydown area and workforce accommodation facility

The site boundary for the laydown area and workforce accommodation facility near Lexton is intersected by an unnamed creek which is part of an extensive natural drainage system associated with Burnbank Creek, approximately 1.85km to the south-west. The site is approximately 2km west of the nearest volcanic cone within the eruption points and volcanic plains geomorphological unit. The proximity to these key features in the landscape indicate that the site would have been favourable for Aboriginal occupation.

There are no registered Aboriginal Places within the boundary of the laydown area and workforce accommodation facility Lexton, or any registered Aboriginal Places within 1.5km on the VAHR. However, registration for an LDAD, which was identified during preliminary field assessment works for CHMP 18101 and intersects the site boundary, is currently in preparation. There were no intangible Aboriginal heritage values identified during field assessments for CHMP 18101, or within the CVA that are specific to the laydown area and workforce accommodation facility in Lexton. However, this site is connected to the natural drainage system associated with Burnbank Creek, which is part of the broader system of rivers, swamps, creeks, and floodplains which hold special significance to DJAARA. It is important note that subsurface testing has not been completed at this location and, as such, CHMP field assessments are still in progress.

8.2.4.5 Cultural Values Assessment

A CVA for Area 4 was prepared by Dja Dja Wurrung and facilitated by Jacobs. The report has been summarised here and is provided in full in Appendix K. The CVA comprised a series of site visits undertaken over a two-day period to six locations within Area 4. Access to parts of the Proposed Route was hampered by being located on private property; the locations visited were primarily chosen because they were publicly accessible. An assumption has been made that the RAP understands the landscape of the Study Area and the anticipated types of cultural values within the non-visited landscape. Nonetheless, DJAARA has stated in the CVA that there are additional areas of interest in the Project Land that have not been visited and that, therefore, the CVA cannot be considered comprehensive.

DJAARA noted that throughout the Study Area “the flow of the land has been disrupted” by European settlement and land use practices. Common themes that were expressed in the CVA included:

- Lost familial connections due to colonisation;
- Colonial imposed restrictions have led to a disconnection with People and Country;
- Reconnecting to Country spiritually and physically, to practice traditional practices;
- Understanding of DJAARA culture can only be achieved through being present on Country;
- Disruptions to the flow of the land.

The Elders expressed distress and disappointment that they could not access more of their country. This view was specific to the Project but also a general statement that it was difficult to remain connected to Country when they could not spend time on it. The history of dispossession in the region is extensive, especially considering the history of the gold rush. This sense of dispossession continues into the present, with Aboriginal people excluded from cultural places by private land ownership. This exclusion contributes to the feeling that colonial land use practices are destroying both country and culture. The vast remodelling of waterways by gold workings and the ongoing land clearance required for many agricultural practices have continued to destroy the remaining cultural connections that survive. The Elders also expressed concern about the visual and landscape impacts of the Project, stating that large constructions like transmission lines interfere with the natural and cultural meanings of Country simply by their presence.

The Elders also expressed that there are multiple opportunities to repair these cultural connections to begin. Many suggestions centred on facilitating access to Country and restoration of healthy natural landscapes and

ecosystems. It was expressed that the Dja Dja Wurrung would be able to start recovering culture if access could be provided to cultural places along the Proposed Route. The Elders also expressed extremely strong support for revegetation and rewilding initiatives and strong preferred for Dja Dja Wurrung to be engaged in this work. A strong imperative was that waterways should be avoided to preserve their health and cultural values.

The Elders expressed a strong desire to retain access to the Proposed Route where possible; they also wished to be involved in any vegetation removal or revegetation works. They stated that caring for the Country and the waterways in a culturally appropriate manner should be a primary focus of any future work. The site assessments also enabled the Wartaka (the Djaara advisory group) to identify a number of culturally important plant and animal species such as the White-Tailed Black Cockatoo and the Wedge-tailed eagle located in and around the proposed transmission line. The proposed development was identified as likely to impact on culturally important species of flora, fauna and insects due to the associated activity and the Wartaka seek to mitigate the risk of any impacts to these species.

The locations visited also elicited specific comments and observations, some of which have been replicated below. In general, the Elders identified that major waterways, floodplains, and areas of remnant vegetation retain cultural values and that cultural values can be rediscovered in other areas through "healing Country". This consists of activities such as revegetation and waterway care.

8.2.4.5.1 CVA field survey

Replicated below are several observations and recommendations for each of the locations visited in the CVA; these are direct quotes from the full report. These are in relation to areas that have been specified as highly significant by the Wartaka members. The full report written by Djandak has been provided in Appendix K.

Wimmera River Crossing

"What happens here effects everything downstream in the Wimmera River. We have a responsibility to care for our section of the Wimmera so that we can pass good clean water through the system to our neighbours as well as care for all the creatures downstream of us". Wartaka Member

"There are already towers here. I think the closer to the existing towers the better". Wartaka Member

- This place is outside of the RAP areas and as such all mobs have a responsibility to care for it appropriately.
- This place is the source of the once mighty Wimmera River and any impacts here flow through neighbouring Country to the west and north-west and affect people and Country downstream directly.
- This place is culturally significant and was a place once rich in food resources and a place of culture and gathering.
- Significant cultural values were observed across this landscape including places of old growth vegetation and places of significance to Djaara culture ('Djaara' remains uncapitalised where replicated from the CVA).
- Runoff is causing ground and soil disturbance affecting the health of plants and quality of water.
- Invasive weeds and pest animals are destroying the growth of native vegetation causing a decline in the health of Country and the cultural values of Place.
- This is a very culturally significant river, and the 'source' of the river is on western edge of Dja Dja Wurrung Country which then flows to neighbouring mobs Country to the west and north-west. We have a responsibility to send clean water downstream. The water here is inaccessible to us due to private land, infrastructure and overgrown weeds. We would like to fish, swim and camp here but the river is too choked up and the water is brown.
- The old watercourse coming out of the base of the Pyrenees Ranges runs through a paddock, under hollowed trees and long grass. This is how runoff from the mountains reaches the river. The reeds here filter the water and are serving an important ecological function. They also provide us with a fibre plant we can use for ceremony, clothing and weaving of cultural objects.

- The current powerline easement is set back from the road, well into private property where we didn't have access, but it seems to cross the river at the point.
- New powerlines and towers may impact the river and floodplains in places we can't access making it difficult for us to exercise our cultural obligations to care for Country.
- Place the new towers as close as possible to existing towers to avoid further land disturbance.

Avoca River Crossing

"Without functional water bodies and floodplain systems all Bunjil's creations will struggle to survive, including Djaara. Our entire ecosystem would likely collapse". Wartaka Member

"Water ceremony would be impacted if cables and towers were built here. We do not want to see towers when we are trying to conduct ceremony and connect to Country". Wartaka Member

"My rights already feel impacted. We should've been given more notice than just a few weeks, especially when working within the constraints of harm minimisation/reduction. Farmers were negotiated with for years prior to us." Wartaka Member

"It is difficult to connect to Country here when western infrastructure is glaring at you and reminding you of what has happened in these places". Wartaka Member

'We do not want to be reminded of colonisation when conducting ceremony…' Wartaka Member

- The Avoca River is one of four major rivers that pass through Djandak and is extremely important to Djaara people's wellbeing and culture. Much has been lost in this part of Country including:
  - Lost cultural stories through the destruction of our lands.
  - The destruction of cultural ceremonial places used for cleansing, maturing, birthing.
  - Lost flora, fauna through the destruction of important habitats, these are important for the natural cycles of Country.
- Poor quality water here is a significant sign of the degrading health of the waterway and has detrimental impacts to People, Country and Culture.
- Limited access to Country along the Avoca limits cultural practices such as gathering, hunting, fishing, swimming, ceremony and recreation. As a result, Djaara cultural values decline.
- Water flow and the grassy floodplain would be impacted by cables and towers if placed here.
- It is important for the large gum trees that were observed within the landscape and the floodplain to remain intact to enable plants and animals to thrive on Country. The destruction of these would severely damage the remaining flora and fauna and exacerbate sick Country.
- The Avoca River floodplain has lots of healthy and intact native vegetation, and issues with weeds, encroachment and lack of care, but it's well worth preserving, protecting and enhancing a significant place for growing culturally important plant species.
- The Avoca River will become a place of colonial infrastructure rather than the cultural and spiritual place we have always known it to be. We may not be able to practice our culture where powerlines and towers dominate the landscape.
- Exercise appropriate engagement practices with TOs to achieve the best outcome for People, Country and Culture.
- Establish a relationship with TOs to allow scope for reciprocal, transparent and collaborative partnerships with managing Country.

Hepburn Lagoon

"All customs and practises would be impacted here if the powerline crosses the lagoon. It wouldn't be environmentally friendly or sustainable". Wartaka Member

- Water places such as Hepburn Lagoon are important for ceremonial practices for TOs. These places are cared for as sacred places and risk being further damaged through heavy modification.
- This place has seen a massive loss of food resources such as fish and birds which has heavily impacted Djaara's place based cultural values and ability to practice culture here.
- This place has very little vegetation left and very little cultural practice occurring here currently.
- This site has little remnant flora and fauna due to farming and residential development.
- This landscape was a rich cultural place with a healthy ecosystem that supported Bunjil's creations and a place for Djaara to practice ceremony, to hunt, fish and practice reciprocity with Country. This landscape still supports birds, fish, rakali (native water rat), possums and macroinvertebrates.
- This culturally significant water body is part of the broader wetland complex that has been severely impacted by colonial practices. There is protected Djaara cultural knowledge here related to the water resources.
- There's a lot of cultural heritage at this place that Djaara have chosen not to share as it is protected knowledge. A heritage study has been conducted here previously and revealed useful information. Djaara members would like to learn more about this place, it's a very significant cultural place for cultural values.
- The risk to tangible and intangible heritage is very significant near to waterways.
- Respectful consultation with TOs regarding the final location of infrastructure will mitigate this risk.

8.2.4.5.2 CVA recommendations

The report provided a large number of recommendations for the Project including the avoidance of culturally and ecologically sensitive places, support of and engagement with Dja Dja Wurrung in managing the Proposed Route, and the provision of economic and cultural opportunities to Dja Dja Wurrung for the operational phase of the Project (see full list in Appendix K).

Additionally, four landforms were highlighted as requiring special efforts to protect throughout the Project Land:

- **Waterways –** Rivers, swamps, creeks, and floodplains hold special significance to Djaara. Transmission lines should avoid these places where possible and go around them, not over them.
- **Locations where cultural heritage has been identified** - All works should be conducted with the intent to protect and preserve any physical heritage.
- **Old trees and remnant native vegetation** – Djaara have identified areas of 'healthy Country', and regard landscaping as destructive and expect land clearing to be kept to an absolute minimum.
- **Hilltops** – Hills and mountains are ancient volcanoes with story, spirit, and cultural value. Djaara People want transmission lines and towers to be located in the flatter, lowland areas to minimise the visual and physical impact on culturally important hilltops. The preferred location for infrastructure near hilltops is often on flatter farmland or along roadsides that have already been degraded ecologically.

8.2.4.6 Aboriginal cultural heritage

LDADs are the most common Aboriginal Place currently located within CHMP 17311, followed by artefact scatters and CMTs (Figure 8-41 - Figure 8-44). All Aboriginal Places were within 15m – 200m of waterways within landforms, including elevated plains, gradual rises and undulating hills. Stone artefact raw materials recovered consist primarily of quartz, although quartzite, basalt, and silcrete artefacts have also been identified during subsurface testing.

During the complex assessment, artefacts were identified from the surface to <400mm in silt and sand-rich deposits. Sandy stratigraphic sequences with granitic inclusions were typical of soils associated with the Glenlogie Granodiorite Formation, where artefacts were recovered at varying depths to 350mm. Two of these areas of PAS associated with this geological unit are in proximity and are representative of an extensive artefact scatter (the majority of which has been manufactured using quartz). This surface and subsurface artefact scatter spans ~500m over a low rise with granite outcrops that abuts an unnamed waterway.

The scientific significance rankings in Table 8-10 and Table 8-11 are used to develop the overall significance rankings (refer to Table 8-12 and Table 8-13). These rankings are used to assess impacts for the Project, provided in Section 9.2.

Table 8-10: List of Aboriginal cultural heritage values recorded during fieldwork for CHMP 17311 and DJAARA CVA (Unregistered Aboriginal Places are pending RAP consultation or completion of extent testing).

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
1	LDAD (subsurface)	Registered	Rise south of Amphitheatre Creek. Adjacent to drainage channel off steep hills with rocky outcrops to the south.	Complete intersection with proposed infrastructure (Tower/tower assembly area)	Contents: 1 Condition: 1 Representativeness: 1	Identified during complex assessment.
2	CMT (Ring Tree)	Unregistered	Road reserve between Amphitheatre creek and unnamed waterway.	Outside area of impact	Contents: 3 Condition: 3 Representativeness: 3	Aboriginal Place with associated intangible Cultural Values verified by Aboriginal Elders. Identified during standard assessment.
3	LDAD (surface)	Registered	Rise overlooking Avoca River.	Outside area of impact	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard assessment.
4	Artefact scatter (subsurface)	Unregistered	Elevated plain adjacent to Avoca River.	Complete intersection with proposed infrastructure (Tower/tower assembly area)	Contents: 2 Condition: 1 Representativeness: 1	Identified during complex assessment.
5	Artefact scatter (surface and subsurface) **associated with rich, cultural landforms and cultural values as expressed by field representatives	Unregistered	Rise adjacent to an unnamed waterway. Aboriginal Place spans a broad rise within valley landscape. Associated view scapes and stony rises to the south and east.	Partial intersection with proposed infrastructure (Access track)	Contents: 3 Condition: 3 Representativeness: 3	Identified during standard and complex assessment.
6	LDAD (surface and subsurface)	Unregistered	Spans across undulating plains either side of unnamed waterway	Partial intersection with proposed infrastructure	Contents: 1 Condition: 1 Representativeness: 1	Identified during complex assessment.

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
				(Tower/tower assembly area)		
7	Cultural landscape	Unregistered	Avoca River and associated landforms – crossing north-south through the Project Land.	Partial intersection with proposed infrastructure (all transmission line infrastructure elements/terminal station)	Contents: 3 Condition: 3 Representativeness: 3	Identified as having high cultural significance and intangible cultural heritage values and requiring protection in the CVA.
8	Artefact scatter (surface and subsurface) **associated with rich, cultural landforms and cultural values as expressed by field representatives	Unregistered	Elevated plain at the intersection of a drainage channel and unnamed waterway.	Partial intersection with proposed infrastructure (Tower/tower assembly area/stringing pad/access track)	Contents: 2 Condition: 2 Representativeness: 2	Identified during complex assessment.
9	CMT (Scarred Tree) **associated with rich, cultural landforms and cultural values as expressed by field representatives	Unregistered	Rise adjacent to an unnamed waterway.	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 3	Identified during standard assessment.

Table 8-11: List of Aboriginal cultural heritage Values recorded during fieldwork for CHMP 18101 and DJAARA CVA. (Unregistered Aboriginal Places are pending RAP consultation or completion of extent testing).

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
10	LDAD (subsurface)	Unregistered	Rise overlooking unnamed waterway.	Complete intersection with proposed infrastructure (Tower/tower assembly area)	Contents: 2 Condition: 1 Representativeness: 1	Identified during complex assessment.
11	CMT (Ring Tree)	Registered	Bank of Burnbank Creek	Outside area of impact	Contents: 3 Condition: 3 Representativeness: 3	Identified during standard assessment.
12	LDAD (subsurface). Likely associated with nearby cultural landscape	Unregistered	Base of large granite hill, adjacent to minor waterways	Outside area of impact	Contents: 1 Condition: 1 Representativeness: 2	Identified during complex assessment.

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
	that is associated with nearby volcanic cones and expansive granite mountains.		abutting floodplain.			
13	Artefact scatter (subsurface) **associated with rich, cultural landforms and cultural values as expressed by field representatives	Unregistered	Adjacent to Beckworth Creek, between stony rises to the north (volcanics) and southern granite mountains	Outside area of impact	Contents: 3 Condition: 3 Representativeness: 3	Intangible Cultural Values expressed during fieldwork. Identified during complex assessment.
14	Cultural landscape	Unregistered	Hepburn Lagoon and its environs, such as Bullarook Streamside Reserve	Partial intersection with proposed infrastructure (all transmission line infrastructure elements/terminal station)	Contents: 3 Condition: 1 Representativeness: 3	Identified as having high cultural significance and intangible cultural heritage values and requiring protection in the CVA and in the complex assessment.
15	LDAD (subsurface)	Registered	Volcanic plains at the foothills of a prominent rise.	Outside area of impact	Contents: 1 Condition: 1 Representativeness: 1	Identified during complex assessment.
16	LDAD (surface and subsurface)	Unregistered	Low rise south of Pinchgut Creek	Partial intersection with proposed infrastructure (Tower assembly area)	Contents: 2 Condition: 1 Representativeness: 1	Identified during standard assessment.
17	LDAD (surface and subsurface)	Unregistered	Associated with an ephemeral drainage, tributary of Burnbank Creek	Partial intersection with proposed infrastructure (Tower/tower assembly area)	Contents: 1 Condition: 2 Representativeness: 2	Identified during standard and complex assessment.
18	LDAD (surface)	Unregistered	Head waters of Tourello Creek	Partial intersection with proposed infrastructure (Tower assembly area)	Contents: 1 Condition: 2 Representativeness: 2	Identified during standard assessment.
19	Artefact scatter (subsurface)	Unregistered	On an elevated landform adjacent to unnamed waterway off McCallum Creek	Partial intersection with proposed infrastructure (Tower/tower assembly area)	Contents: 2 Condition: 2 Representativeness: 2	Identified during complex assessment.
20	LDAD (surface)	Unregistered	Elevated landform between two	Partial intersection with proposed infrastructure	Contents: 1 Condition: 1 Representativeness: 1	Identified during

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
			drainage channels in the foothills of the ranges to the north-west.	(laydown area and accommodation facility)		standard assessment.
21	Artefact scatter (surface and subsurface)	Unregistered	At the foothills of Mt Beckworth, overlooking Beckworth Creek to the south.	Partial intersection with proposed infrastructure (Tower/tower assembly area/access track)	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard and complex assessment.
22	Artefact scatter (subsurface)	Unregistered	Elevated landform between Mt Greencock Creek and McCallum Creek	Partial intersection with proposed infrastructure (Tower/tower assembly area)	Contents: 2 Condition: 2 Representativeness: 2	Identified during complex assessment.
23	Artefact scatter (surface and subsurface)	Unregistered	Rise overlooking Burnbank Creek to the east. Deeply incised waterways also to the south.	Partial intersection with proposed infrastructure (Tower/tower assembly area)	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard and complex assessment.

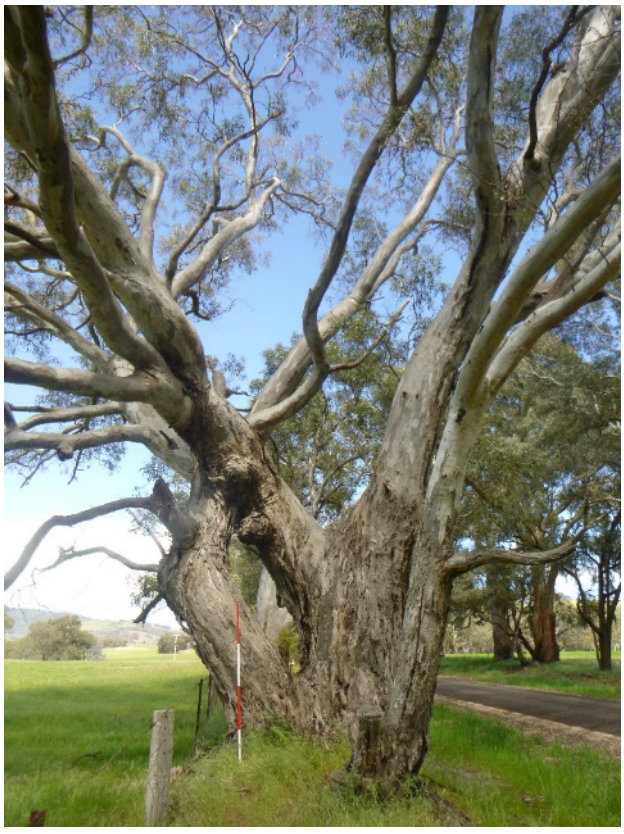


Figure 8-41: Culturally modified tree (ring tree) identified within the road reserve of the activity area.



Figure 8-42: Representative photograph of a surface LDAD identified during standard assessment. Image shows broken flake. Ventral surface.



Figure 8-43: Representative photograph of basalt artefacts identified within CHMP 17311 activity area.



Figure 8-44: Representative photograph of quartz artefact identified in CHMP 17311 activity area. Artefact: partial core fragment.



Figure 8-45: Culturally modified tree, facing south-west (Photo J. Pearson 19.10.2021)



Figure 8-46: Representative photograph of silcrete flake recovered in CHMP 18101 activity area.

Within CHMP 18101, LDADs are the most common Aboriginal Place, followed by artefact scatters and CMTs (Figure 8-45 and Figure 8-46). Artefacts were identified from the surface to <300mm in sandy and silty deposits and are typically of quartz, though silcrete artefacts have also been recovered in the activity area. Stratigraphic sequences of sandy silts with granitic and natural quartz inclusions were typic of soils associated with the waterways of the volcanic plains.

Areas of PAS that have recovered the most artefacts are in proximity to permanent waterways and illustrate the importance of creek floodplains for camping spots. A total of eight artefacts were identified in three excavations in one testing location, which indicates intermittent or occasional use of this area by Aboriginal People.

An extensive artefact scatter has been recovered within the floodplains and terraces landform of Beckworth Creek in the Project Land. The area is flat, but raised above the creek bed, well sheltered due to the high land on either side and was supplied with permanent running water throughout the year. It would have been an ideal location for long term settlement and resource exploitation. TO groups on site for the standard assessment identified it as an important hunting location and men's place, but not a place for men's business and thus not subject to access restrictions.

Artefacts were also located at one control testing location at the former proposed location of the Djina Witji Terminal Station (as proposed for the previous 220kV / 500kV Project design). An LDAD comprising silcrete artefacts was identified in two of 14 test excavations. These were identified in a heavily ploughed and worked

field and were not in situ; they may have been moved some distance through agricultural activity or erosion and are not considered indicative of Aboriginal occupation of this specific area rather they illustrate the widespread use of this landscape by Aboriginal people over time. Another LDAD comprising of silcrete and quartzite artefacts was identified during field survey on a low rise landform south of Pinchgut Creek. These were also identified in a heavily ploughed and worked field and were not in situ.

A LDAD at the headwaters of Mt Greencock and McCallum Creek was identified in association with historical artefacts which including an 1849 Shilling, albeit in the disturbed context of a ploughed field. Investigations on the nature and significance of this Place are ongoing.

All newly identified Aboriginal Places in Area 4 were artefact scatters, LDADs, and CMTs. This is in line with the desktop assessment of the CHMP, which predicted that these would be the most commonly identified Aboriginal Places. Aboriginal Places have been identified primarily on raised landforms close to permanent water, highlighting the sensitivity of these locations. More broadly, the assessment for the CHMP illustrates the importance of the whole landscape as it relates to Aboriginal cultural heritage values. While the Project can avoid many tangible Aboriginal Places, its very presence in the landscape will have an unavoidable impact on intangible values, such as landscapes, biodiversity and contemporary values, and how places are interconnected through Country.

Table 8-12: Significance rankings of Aboriginal cultural heritage values recorded during fieldwork for CHMP 17311 and DJAARA CVA.

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
1	LDAD (subsurface)	Rise south of Amphitheatre Creek. Adjacent to drainage channel off steep hills with rocky outcrops to the south.	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
2	Ring tree	Road reserve between Amphitheatre creek and unnamed waterway.	Low (1)	High (3)	High (3)	High (3)	Very High (10)
3	LDAD (surface)	Rise overlooking Avoca River.	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
4	Artefact scatter (subsurface)	Elevated plain adjacent to Avoca River.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
5	Artefact scatter (surface and subsurface) **associated with rich, cultural landforms and cultural values as expressed by field	Rise adjacent to an unnamed waterway. Aboriginal Place spans a broad rise within valley landscape. Associated view scapes	Low (1)	High (3)	High (3)	High (3)	Very High (10)

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
	representatives	and stony rises to the south and east.					
6	LDAD	Floodplain adjacent to unnamed waterway.	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
7	Cultural landscape	Avoca River and associated landforms – crossing north-south through the Project Land.	Low (1)	High (3)	High (3)	High (3)	Very High (10)
8	Artefact Scatter	Elevated plain adjacent to unnamed waterway	Low (1)	Moderate (2)	Moderate (2)	High (3)	High (9)
9	Scarred Tree	Rise adjacent to an unnamed waterway. With associated surface artefacts (LDAD).	Low (1)	High (3)	High (3)	High (3)	Very High (10)

Table 8-13: Significance rankings of Aboriginal cultural heritage values recorded during fieldwork for CHMP 18101 and DJAARA CVA.

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
10	LDAD (subsurface)	Rise overlooking unnamed waterway.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
11	Ring tree	Bank of Burnbank Creek	Low (1)	High (3)	High (3)	High (3)	Very High (10)
12	LDAD (subsurface). Likely associated with nearby cultural landscape that is associated with nearby volcanic cones and expansive granite mountains.	Base of large granite hill, adjacent to minor waterways abutting floodplain.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
13	Artefact scatter (subsurface) **associated with rich, cultural landforms and cultural values as expressed by field representatives	Adjacent to Beckworth Creek, between stony rises to the north (volcanics) and southern granite mountains	Low (1)	High (3)	High (3)	High (3)	Very High (10)
14	Cultural landscape	Hepburn Lagoon and its environs, such as Bullarook Streamside Reserve	Low (1)	High (3)	High (3)	High (3)	Very High (10)
15	LDAD (subsurface)	Volcanic plains at the foothills of a prominent rise.	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
16	LDAD (subsurface)	Low rise south of Pinchgut Creek	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
17	LDAD (surface and subsurface)	Associated with an ephemeral drainage, tributary of Burnbank Creek	Moderate (2)	Moderate (2)	Low (1)	High (3)	Moderate (2)
18	LDAD (surface)	Head waters of Tourello Creek	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
19	Artefact scatter (subsurface)	On an elevated landform adjacent to unnamed waterway off McCallum Creek	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
20	LDAD (surface)	Elevated landform between two drainage channels in the foothills of the ranges to the north-west.	Low (1)	Low (1)	Low (1)	High (3)	Low (6)

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
21	Artefact scatter (surface and subsurface)	At the foothills of Mt Beckworth, overlooking Beckworth Creek to the south.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
22	Artefact scatter (subsurface)	Elevated landform between Mt Greencock Creek and McCallum Creek	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
23	Artefact scatter (surface and subsurface)	Rise overlooking Burnbank Creek to the east. Deeply incised waterways also to the south.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)

In sum, there are 23 Aboriginal cultural heritage values recorded during fieldwork for CHMP 17311, 18101, and the DJAARA CVA. Of these, the significance rankings include seven Aboriginal cultural heritage values ranked as having a low significance (IDs 1, 3, 6, 15-16, 18, 20), eight values ranked as having a moderate significance (IDs 4, 10, 12, 17, 19, 21-23), one value ranked as having high significance (ID 8) and seven values ranked as having a very high significance (IDs 2, 5, 7, 9, 11, 13 and 14).

8.2.4.7 Summary Findings for Area 4

The fieldwork findings to date indicate that unregistered Aboriginal cultural heritage is present within Area 4. Surface and subsurface deposits are especially likely within 200m of waterways, typically within elevated plains, gradual rises and undulating hills. There is also potential for CMTs, and specifically, a high potential for ring trees, to occur within these landforms.

It is highly likely that additional unknown Aboriginal cultural heritage is located within the activity area within areas that have not been subject to CHMP research and will not be impacted by the activity. The risk to Aboriginal cultural heritage within the activity area will be managed through the CHMP process and consideration of CVA recommendations. The impact to tangible Aboriginal cultural heritage values is managed through the construction methodology being above ground for the Project and responsive to cultural heritage investigations; however, visual impacts associated with design infrastructure are possible on intangible Aboriginal cultural heritage values, such as landscapes and landscape features. These matters are further expanded in Section 9.

8.2.5 Area 5: WTOAC

CHMP 18108 is currently in preparation and has progressed only to the standard assessment level. The desktop assessment is complete and standard assessment has commenced with approximately half of the properties within the Area 5 subject to pedestrian survey. Further field surveys are still to occur across parts of the eastern section of the activity area. Approximately 39% of the Proposed Route has been surveyed for the CHMP standard assessment.

The terrain of the western and central sections of the CHMP 18108 activity area include hills and slopes of igneous rocks. The terrain of the eastern section of the activity is varied and includes eruption point slopes, basalt plains, hills and ridges and channels, floodplains, terraces, and escarpments associated with the waterways present (Devils Creek, Moorabool Rivers West and East Branch, and the Werribee River).

The site boundary for the laydown area and workforce accommodation facility near Ballan is located in the CHMP 18108 activity area. A preliminary site assessment has been completed for this location, where results are provided in Section 8.2.5.4.

8.2.5.1 Desktop assessment

There are three distinct sections of the CHMP 18108 activity area defined by the RAP. The associated geographic region has been divided into two sections – the East geographic region section, which takes in the East activity area section, and the West geographic region section, which includes the Central and West sections of the activity area.

The desktop assessment determined the activity area is located within the Western Uplands and Dissected Uplands. The geomorphological units present in the activity area under the Victorian Geomorphological Framework comprise geomorphological unit [GMU] 2.1.6 – Eruption points and volcanic plains (Creswick - Ballarat plains, Mt. Franklin, Mt. Blackwood, Metcalfe) and GMU 2.1.2 – Hills, valley slopes and plains on non-granitic Palaeozoic rocks (Daylesford, Maryborough, Bendigo).

The geology of the activity area predominately comprises Miocene to Holocene Newer Volcanic Group - basalt flows (Neo): generic with smaller amounts of Lancefieldian Castlemaine Group (Ocl) as well as smaller quantities of Pleistocene to Holocene Alluvium (Qa1), Paleocene to Oligocene White Hills Gravel (-Pxh) as well as a range of other geological units in smaller quantities.

CHMP 18108 is within WTOAC RAP area. The activity area comprises three discrete sections across the northern edge of Wadawurrung Country and is probably part of the estate of the Marpeang bulluk clan (Clark 1990: 322-323).

The VAHR search and a review of relevant archaeological reports reveal that there are three Aboriginal Places located within the activity area: [redacted]. None of these Aboriginal Places are intersected by proposed infrastructure for the Project. The limited number of identified Aboriginal Places on the VAHR is likely due to the lack of previous Aboriginal cultural heritage assessments undertaken within the activity area rather than a lack of archaeological material.

The background review and VAHR search results informed the predictive model for the CHMP, which indicated that Aboriginal Places would most commonly be found on elevated landforms, including rises, low rises, hills and ridges, and landforms associated with major water sources such as escarpments and terraces.

The literature review of archaeological assessments within the region has shown that artefacts are likely to be found across numerous geomorphic landforms. As such, there is a moderate-high potential for additional Aboriginal cultural heritage to be present.

8.2.5.2 Standard assessment

Phase 1 of the standard assessment involved full pedestrian coverage of the western and central sections of the activity area, amounting to 47.33% coverage of the Proposed Route. Further standard assessment is planned as part of the preparation of CHMP 18108.

The majority of the surveyed activity area was determined to have been subjected to minimal ground disturbances other than agricultural use, except a few properties with noted underground assets or impacts associated with timber plantations. A total of 43 manual auger boreholes have been excavated thus far as part of the CHMP 3 standard assessment, which support an assessment of minimal ground disturbance in the areas investigated. To date, there is no indication of the presence of sludge deposits.

8.2.5.2.1 Newly identified Aboriginal Places

A total of 52 stone artefacts have been identified so far during the standard assessment, with all on the escarpment edge and associated slopes overlooking the Moorabool River East Branch.

Six trees with potential cultural scars and one with potential cultural value have been identified, with these trees generally, but not always, in the vicinity of waterways. All other mature trees identified during the standard assessment were also inspected for Aboriginal cultural heritage.

Seven areas of PAS were identified during the standard assessment and represent areas of relative highest archaeological sensitivity. Areas of PAS include escarpment edges and terraces.

A select number of properties have yet to undergo standard assessment due to access difficulties. Additional areas of PAS may be identified as part of future assessment.

8.2.5.3 Complex assessment

Complex assessment excavation for CHMP 18108 has not yet commenced. Following discussions between the RAP, AusNet, and the HA, it was agreed that complex assessment would occur following the completion of the standard assessment and further consultation.

Mapping of preliminary fieldwork is shown in Figure 8-47 below.

8.2.5.4 Ballan laydown area and workforce accommodation facility

The laydown area and workforce accommodation facility near Ballan is within the CHMP 18108 activity area. The site is located on a volcanic plain, approximately 1km south-west of the Werribee River and within 750m of a dormant volcano to the north-east. There are no previously recorded Aboriginal Places within the site boundary or within a 1km radius of the site boundary. The results of the preliminary site inspection noted minor disturbance of the investigation area through agricultural activity and areas with no disturbance in the immediate vicinity of basalt boulders. Disturbance is not extensive and has likely left topsoils in place across much of the site. No areas of high archaeological potential in the natural landforms were noted during the site inspection.

The lack of Aboriginal culturally sensitive landforms suggests a low potential for Aboriginal heritage to be present in the site. However, CHMP fieldwork (both survey and complex assessment) has not been undertaken yet at this location and will be undertaken, if required, as part of the ongoing preparation of CHMP 18108. There were no intangible Aboriginal heritage values for this location, including any key landform or biodiversity considerations highlighted in the CVA.

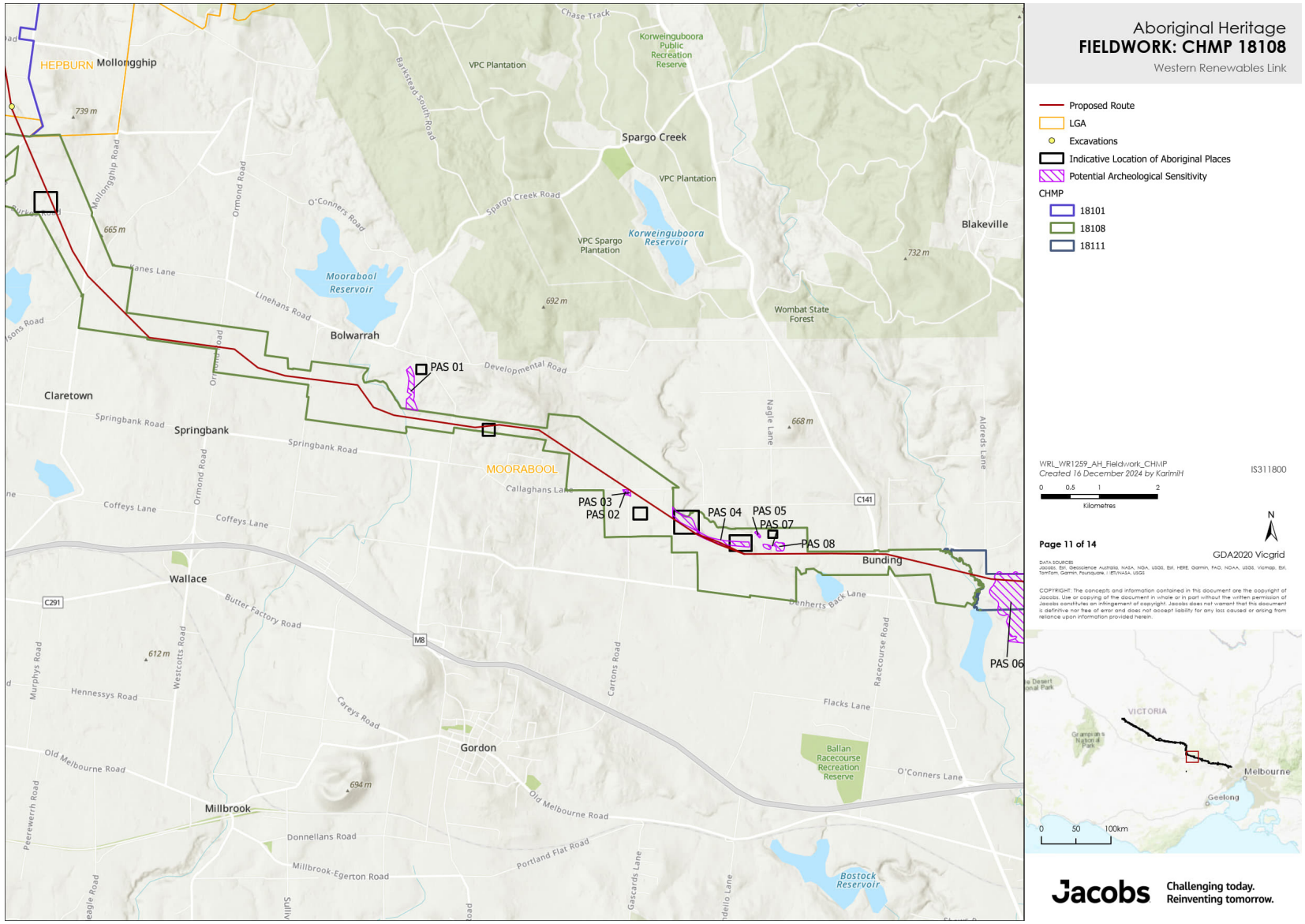


Figure 8-47: Fieldwork for CHMP 18108, WTOAC RAP Area. Fieldwork mapping includes data from late 2020 to January 2023.

8.2.5.5 Cultural Values Assessment

A CVA for Area 5 was prepared by Wadawurrung and facilitated by AusNet. The CVA was prepared in keeping with the Wadawurrung Country Plan (*Paleert Tjaara Dja*) and involved four key elements: 1) desktop and background consultative research; 2) field surveys and on-site investigations; 3) pre-and post-survey workshops; and 4) the formulation of Project recommendations based on the findings of the assessment.

The work undertaken during the preparation of the CVA included background research undertaken by members of the WTOAC Heritage Unit in consultation with Wadawurrung TOs followed by a preliminary drive of the Proposed Route to collect basic data about the Study Area (Area 5). A one-day workshop was then conducted in the WTOAC RAP area, during which the participants undertook a fine-grained discussion of the Study Area, focusing on its archaeological and cultural contexts. This workshop was later followed by an aerial helicopter survey to assess both the Study Area and the geographic region, and then followed by four days of a ground (windshield) survey along public roads and a waterways assessment of the Ballan to Bullarook and Waubra portions of Wadawurrung Country that intersects the Project Land across public and private land. Subsequently, a one-day post-fieldwork workshop was undertaken in the WTOAC RAP area to discuss the findings of the CVA investigation and present draft recommendations for TO review.

The full CVA report is provided in Appendix L.

WTOAC noted that the delivery of the CVA was hindered by several challenges, particularly land access issues which resulted in Project delays, fieldwork cancellations, and highly restricted schedules. Access restrictions to large portions of their country, meant that areas such as the Werribee River and surrounds could not be surveyed. Therefore, the WTOAC CVA provides a summary of Cultural Heritage Values only in relation to those areas surveyed. In unsurveyed portions of Country, WTOAC state that 'it is highly likely that cultural heritage values, both tangible and intangible, exist but have not been identified.'

8.2.5.5.1 Traditional Owner consultation

The results of the preliminary drive of the Proposed Route were forwarded to the participants of the cultural values assessment for their review prior to a pre-fieldwork workshop and undertaking of fieldwork. A post-fieldwork workshop was conducted with Wadawurrung TOs on 29 July 2022.

Culturally sensitive details regarding the consultation process have been redacted from the CVA by WTOAC.

8.2.5.5.2 Environmental and cultural context

The environmental context of the Study Area and geographic region was reviewed, with an emphasis on the nature and extent of Wadawurrung occupation of the region as a result of bioregional characteristics, landscape features, and resource availability. Additional details regarding the contact and post-contact history are discussed in Section 6.2.3.

Landscape characteristics of the western portion of the WTOAC area in the vicinity of Waubra (Section 1) feature elevated areas that may have operated as vantage-points for Wadawurrung people, inclusive of Mount Misery, Mount Ercildoun, Lady Mount, and Quoin Hill (the latter being located within the Study Area). Water sources in Section 1 occur outside of the Study Area, although close enough to have been utilised by Wadawurrung People. By contrast, the eastern portion of the Study Area between the Werribee River and the boundaries of the DJAARA RAP area (Section 2) is intersected by a complex system of waterways and associated terraces and floodplains, becoming increasingly hilly towards the west.

The pre-European settlement vegetation of the region would have provided abundant resources, especially the Murnong tuber (*Microseris walteri*), while land and aquatic animal resources, now been greatly impacted by land clearance and introduced species, would have provided food resources and by-products for use by Wadawurrung people. Faunal and floral resources Section 1 would have varied greatly to those in Section 2.

Regarding current resources, the background research found that:

Several vulnerable and endangered species have been observed within the current study area, including the Platypus, Koala and Gang Gang Cockatoo. And the Common Yabbie in the Moorabool River and Mount Emu Creek. The vulnerable Southern Greater Glider has also been recorded within the geographic region. These species are most at risk of extinction in the area due to habitat loss caused by further development.

A review of previous archaeological assessments in Section 1 of the geographic region found Aboriginal values are predominantly associated with elevated landforms (hills, lunettes, ridges, low rises, and slopes), especially when in proximity to waterways; however, Aboriginal archaeological sites will have been subject to moderate to high levels of disturbance as a result of agricultural practices, wind farm construction, urban development, roads, train lines, and other infrastructure. There is a paucity of archaeological investigation across Section 2 of the geographic region, although area ins proximity to waterways are considered sensitive for cultural heritage material, in particular, the environs of the Werribee River, but also Moorabool River East and West Branches, Devils Creek, Musk Creek, and their tributaries.

Additionally, it was noted in the CVA that the limited number of Aboriginal Places in the geographic region likely reflects the limited archaeological investigations undertaken to date. It was further noted that some of the native animal species that occur in the Study Area are listed as Endangered or Vulnerable, with potential habitat loss caused by further development risking their extinction.

8.2.5.5.3 CVA Field survey

A preliminary drive of the Proposed Route was undertaken by Wadawurrung participants on 16 March 2022 to collect basic data about the Study Area. An aerial survey was then undertaken by helicopter on Wednesday 20 July 2022 to assess the Study Area and geographic region. Subsequently, four days of ground (windshield) survey was conducted in July 2022 along public roads and ground survey within of public and private land targeted waterways across the Study Area, with the exception of the Werribee River where access was restricted.

Culturally sensitive findings in relation to fieldwork and resulting conclusions have been redacted from the CVA presented in Appendix L by WTOAC.

8.2.5.5.4 CVA recommendations (non-culturally sensitive)

Culturally sensitive recommendations as an outcome of this CVA have been redacted from the CVA presented in Appendix L by WTOAC.

Non-sensitive (public) recommendations provided by WTOAC as an outcome of this CVA are based on the background investigation, pre-survey workshop, and fieldwork conducted, and were drafted at the post-survey workshop. The report provided a large number of recommendations for the Project including the avoidance of ecologically sensitive places, support of and engagement with Wadawurrung in managing the Proposed Route, and the provision of economic and management opportunities to Wadawurrung until Project completion (see full list in Table 14 of Appendix L).

Additionally, five main landforms and biodiversity considerations were highlighted as requiring special efforts to protect and/or rehabilitate throughout the Project Land:

- **Waterways** – Rivers, estuaries, and wetlands hold cultural significance to Wadawurrung. Transmission lines should avoid these places before, during, and after the activity. Where ground disturbance is unavoidable, then all investigations and mitigation measures must employ the WTOAC River Terrace Excavation policy before works are undertaken in these areas. Pending an independent cultural values recording of the Werribee River, no works or ground disturbing activities should be carried out on or in its vicinity.

- **Elevated areas** – the transmission line should avoid hills, mountains, stony rises, and high points (including their lower slopes).

- **Areas of cultural sensitivity** - All works should be conducted with the intent to avoid areas of archaeological and cultural sensitivity.

- **Vegetation** – Wadawurrung has recommended that rehabilitation works be undertaken by WTOAC's Natural Resource Management team on Quoin Hill, which may include the re-introduction of cultural burning, as well as native plants, food sources, and animal habitats, and around Devils Creek and Musk Creek, followed by analysis of these areas for potential native floral regrowth and rehabilitation. It was further recommended that native species are cultivated in locations adjacent to waterways so that these areas can be appropriately rehabilitated. The transmission line should also avoid grasslands.

- **Fauna** – the Project should protect and monitor species such as the wedge-tail eagle, koala, and gang-gang cockatoo in the Study Area. Underground boring methods should be employed along the Western Freeway to protect native animals (especially birdlife) and their habitats within the Study Area. Pest management control along the transmission line should also be introduced.

8.2.5.6 Aboriginal cultural heritage

Two previously registered Aboriginal Places are present within the activity area. These Places were inspected as part of the current field survey with no Aboriginal cultural heritage identified at the locations. Following the inspection and review of the original site cards, updated Place extents are proposed for these Aboriginal Places.

To date, a total of 52 stone artefacts have been identified in a surface context as part of the CHMP 18108 standard assessment. These artefacts have all been found on an escarpment edge and associated slopes overlooking the Moorabool River East Branch. The stone artefacts are predominantly flakes (whole and broken), with angular fragments, tools and one core present. The dominant raw materials are quartz and silcrete, with quartzite, basalt and trachyte also present.

The scientific significance rankings in Table 8-14, are used to develop the overall significance rankings (refer to Table 8-15), which is used assessment of impacts for the Project, as provided in Section 9.2.

Table 8-14: List of Aboriginal cultural heritage values recorded during fieldwork for CHMP 18108.

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
1	LDAD (surface)	Registered	Escarpment edge and associated slopes overlooking the Moorabool River East Branch.	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard assessment.
2	LDAD (surface)	Registered	As above.	Outside area of impact	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard assessment.
3	CMT (scarred tree)	Unregistered	As above.	Outside area of impact	Contents: 3 Condition: 3 Representativeness: 3	Identified during standard assessment.
4	CMT (Scarred Tree)	Unregistered	Within 1km from escarpment and associated slopes overlooking the Moorabool River East Branch. On rises that	Outside area of impact	Contents: 3 Condition: 3 Representativeness: 3	Identified during standard assessment.

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
			appear to be nearby a palaeochannel or prominent remnant waterway branching from Moorabool River.			
5	CMT (scarred tree)	Unregistered	As above.	Outside area of impact	Contents: 3 Condition: 3 Representativeness: 3	Identified during standard assessment.
6	CMT (scarred tree)	Unregistered	Amongst dense forest between the Moorabool River East and West Branches.	Outside area of impact	Contents: 3 Condition: 3 Representativeness: 3	Identified during standard assessment.
7	CMT (scarred tree)	Unregistered	Amongst dense forest within 800m east of the Moorabool River West Branch	Outside area of impact	Contents: 3 Condition: 3 Representativeness: 3	Identified during standard assessment.
8	CMT (scarred tree)	Unregistered	On a rise, in between two drainage channels feeding the Wilsons Reservoir. A number of prominent rises and hills surrounding the broader landform.	Complete intersection of proposed infrastructure (Tower assembly area)	Contents: 3 Condition: 3 Representativeness: 3	Identified during standard assessment.
9	CMT	Unregistered	As above.	Outside area of impact	Contents: 3 Condition: 3 Representativeness: 3	Identified during standard assessment. Identified as having potential cultural value during fieldwork.
10	Cultural landscape	Unregistered	Werribee River and associated landforms	Partial intersection with proposed infrastructure (all transmission line infrastructure elements/terminal station)	Contents: 3 Condition: 3 Representativeness: 3	Identified as having high cultural significance and intangible cultural heritage values and requiring protection in the CVA.

In addition to the previously registered Aboriginal cultural heritage and the newly identified stone artefacts, six trees with potential cultural scars and one with potential cultural value have been identified. As stated in Table 8.14 only one of these trees and the Werribee River is intersected by the proposed infrastructure. These trees have the potential to be high significance places. However, the cultural origin of the scars is unverified and require additional assessment and consultation with the WTOAC. Though unverified, these trees have been included as part of this assessment in consideration of the WTOAC field representatives' requests. As these places have not been verified and additional cultural values have not been fully assessed for these places, they have been given a moderate social significance ranking pending the outcome of further consultation with WTOAC.

All newly identified Aboriginal Places in Area 5 were artefact scatters and CMTs. This finding is in line with the desktop assessment of the CHMP, which predicted that these would be the most commonly identified Places. The Places have been identified primarily on raised landforms close to permanent water, highlighting the sensitivity of these locations. More broadly, the assessment for the CHMP illustrates the importance of the whole landscape as it relates to Aboriginal cultural heritage values. While the Project can avoid many tangible Aboriginal Places, its very presence in the landscape will have an unavoidable impact on intangible values such as landscapes, biodiversity and contemporary values, and how places are interconnected through Country.

Table 8-15: Significance rankings of Aboriginal cultural heritage values recorded during fieldwork for CHMP 18108.

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
1	LDAD (surface)	Escarpment edge and associated slopes overlooking the Moorabool River East Branch.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
2	LDAD (surface)	As above.	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
3	CMT (scarred tree)	As above.	Low (1)	High (3)	Moderate (2)	High (3)	High (9)
4	CMT (scarred tree)	Within 1km from escarpment and associated slopes overlooking the Moorabool River East Branch. On rises that appear to be nearby a palaeochannel or prominent remnant waterway branching from Moorabool River.	Low (1)	High (3)	Moderate (2)	High (3)	High (9)
5	CMT (scarred tree)	As above.	Low (1)	High (3)	Moderate (2)	High (3)	High (9)
6	CMT (scarred tree)	Amongst dense forest between the Moorabool River East and West Branches.	Low (1)	High (3)	Moderate (2)	High (3)	High (9)
7	CMT (scarred tree)	Amongst dense forest within 800m east of the Moorabool River West Branch	Low (1)	High (3)	Moderate (2)	High (3)	High (9)
8	CMT (scarred tree)	On a rise, in between two drainage channels feeding the Wilsons Reservoir. A number of prominent rises and hills	Low (1)	High (3)	Moderate (2)	High (3)	High (9)

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
		surrounding the broader landform.					
9	CMT	As above.	Low (1)	High (3)	Moderate (2)	High (3)	High (9)
10	Cultural landscape	Werribee River and associated landforms	Low (1)	High (3)	High (3)	High (3)	Very High (10)

In sum, there have been ten Aboriginal cultural heritage values recorded during fieldwork for CHMP 18108 to date. Of these, the significance rankings include one Aboriginal cultural heritage values ranked as having a low significance (ID 2), one value ranked as having moderate significance (IDs 1), seven values ranked as having a high significance (IDs 3 - 9), and one cultural landscape assessed as having very high significance (ID 10) given the results of the CVA.

8.2.5.7 Summary Findings for Area 5

Noting that the standard assessment field survey is still in preparation and complex assessment has yet to begin, the findings to date indicate that the CHMP 18108 activity area is moderately to highly sensitive for Aboriginal cultural heritage. The newly identified stone artefacts are all on a similar landform (land near a waterway – escarpment edge and associated slopes). Both previously registered Aboriginal Places were identified in the west and central sections of the activity area on a hill landform. There is also sensitivity for CMTs to occur within the activity area.

Access tracks are within 50m of a potential CMT, found during this field assessment.

It is highly likely that additional Aboriginal cultural heritage is present within the activity area in areas not yet subject to CHMP research and that will not be impacted by the activity. The risk to Aboriginal cultural heritage within the activity area will be managed through the CHMP process and consideration of CVA recommendations. The impact to tangible Aboriginal cultural heritage values is managed through the construction methodology being above ground for the Project and responsive to cultural heritage investigations; however, visual impacts associated with design infrastructure are possible on intangible Aboriginal cultural heritage values, such as landscapes and landscape features. These matters are further expanded in Section 9.

8.2.6 Area 6: WWCHAC

The desktop assessment and Phase 1 standard and complex assessments have been completed for CHMP 18111. Approximately 47.33% of the Proposed Route has been surveyed and complex assessment has taken place across approximately 39.51% of the tower assembly areas in Area 6 (49 of 124 tower assembly areas). As per the RAP endorsed methodology for CHMP 18111 (Area 6), testing is conducted across all proposed areas of impact locations regardless of PAS. Identified areas of PAS are subject to a more intensive program of testing than areas considered to have low potential for Aboriginal cultural heritage.

The activity area is predominantly within the Western Uplands geomorphological unit but also crosses into the Western Plains geomorphological unit in the eastern section of the activity area. Both geomorphological units contain several archaeologically sensitive landforms, including stony rises, terraces, eruption points, and volcanic plains.

8.2.6.1 Desktop assessment

Waterways that cross the activity area include the Werribee and Lerderderg Rivers, and Korjamnunnip, Dale, Stony Hut, Myrniong, Goodman, Boggy, Djerriwarrh, Pyrites, Little Blinds, Toolern, Ryans, and Kororoit Creeks, as well as Arnolds Creek East and West Branches. These waterways would have provided abundant resources and fresh water for Aboriginal people and would have made much of the activity area favourable for occupation. Since the arrival of Europeans in the 1800s, large sections of the Study Area have been cleared of native vegetation for grazing and crops and major disturbance has been noted from the construction of Merrimu Reservoir and the Boral sand quarry north-east of Bacchus Marsh. Historical gold mining activities have also impacted the landscape within the activity area through the deposition of sludge, which has been noted along the Werribee River, Lerderderg River, Goodman Creek, Korjamnunnip Creek, and Dale Creek. Impacts to Aboriginal cultural heritage through agropastoral activities such as ploughing and stock grazing are likely to have moved Aboriginal cultural heritage short distances but are unlikely to have removed it from the activity area. In contrast, historical gold mining activities have the potential to remove in situ Aboriginal cultural heritage from upstream or within the activity area, depositing it further downstream via the movement of sludge. The deposition of sludge could also cap natural soil profiles, thereby altering the depths at which Aboriginal cultural heritage may be found within the activity area.

A search of the VAHR identified 19 previously registered Aboriginal Places comprising 99 components within the activity area, including four Places inspected as part of CHMP 18111. The registered Aboriginal Places include 12 artefact scatters, five LDADs and two earth features. Of the 19 previously registered Aboriginal Places, one LDAD - Rutland Square LDAD 1 (VAHR 7822-4440) - is intersected by proposed infrastructure for the Project (see Section 9.2.1). All registered places are located east of Korkuperrimul Creek (n=16), or within the area of CHS associated with Korkuperrimul Creek on its west bank (n=3). The absence of registered Aboriginal Places in the western section of the activity area is a direct result of the lack of investigation in the area and should not be interpreted as evidence for the absence of Aboriginal cultural heritage in this region. There are multiple areas of known CHS located across the activity area of CHMP 18111, which are related to waterways and previously registered Places. However, initial background research undertaken for CHMP 18111 has informed the predictive model and it has identified further areas within the activity area that may also contain tangible and intangible Aboriginal cultural heritage, notably areas around volcanic cones (Figure 8-48), especially when located near waterways, and the plains between waterways in the Melton area.



Figure 8-48: View from the mid slope of Mt Steiglitz looking west towards the Werribee River

8.2.6.2 Standard assessment

Phase 1 and Phase 2 of the standard assessment consisted of surveys across various areas and landforms within the activity area. These included the volcanic plains at Plumpton and north of Melton; eruption points (Stony

Rise, Mt Kororoit and Mt Steiglitz); terraces along Kororoit Creek, to the west of Djerriwarrh Creek, Pyrites Creek, both sides of the Lerderderg River, and to the west of Korjamnunnip Creek. In addition, surveys were conducted across the activity area on the plains between creeks. Approximately 29km of the Proposed Route and tower assembly areas were surveyed with approximately 6km of additional areas being opportunistically surveyed.

8.2.6.2.1 Previously registered Aboriginal Places

As a part of the standard assessment, three artefacts from previously registered Place VAHR 7822-4440 were relocated and 3652 newly identified surface artefacts were located. The majority of the artefacts were located along the northern base of Mt Kororoit near Kororoit Creek, on the plains between Arnolds Creek East Branch and Djerriwarrh Creek, to the east and west of the Lerderderg River, and in the area east and south of Merrimu Reservoir, with a smaller number identified on the stony rise landform to the east of the Sydenham Terminal Station.

8.2.6.2.2 Newly identified Aboriginal Places

As a result of the standard assessment, 11 areas of PAS (PAS 01-11) were identified (Figure 8-51). The most extensive areas were identified to the east and south of Merrimu Reservoir where a number of surface artefacts were located, around the northern base of Mt Kororoit and along Kororoit Creek where a high density of artefacts were identified (Figure 8-52), on the plains between Djerriwarrh Creek and Arnolds Creek East Branch where an additional high density of surface artefacts, including a greenstone axe, were identified, and on the plain between Mt Steiglitz and the Werribee River (Figure 8-51).

Additionally, one artefact scatter was located within 200m to the east of the Lerderderg River, one scatter on the eastern bank of an ephemeral waterway flowing into Toolern Creek from the west, one scatter along the eastern banks of Toolern Creek and two scatters on the western terrace of Goodman Creek (Figure 8-52). The rise landform east of Korjamnunnip Creek was also identified as an area of PAS associated with an artefact scatter during the standard assessment (Figure 8-52). Terrace landforms overlooking the western side of Korjamnunnip Creek, and the area around the base of Mt Steiglitz were also identified as areas of PAS, but no cultural heritage was located during the standard assessment. An additional area of PAS was identified along an ephemeral waterway running from the Sydenham Terminal Station to the west for approximately 700m (PAS 10).

All mature trees identified during the standard assessment were also inspected for Aboriginal cultural modification. A potential ring tree was identified west of Goodman Creek; however, the tree has not yet been confirmed by WWCHAC Elders and heritage advisors as being culturally modified.



Figure 8-49: View over Korjamnunnip Creek, looking east

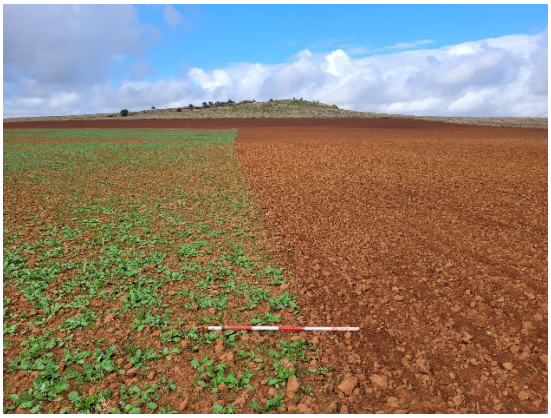


Figure 8-50: View of Mt Kororoit and its northern slopes, looking south

8.2.6.3 Complex assessment

Phase 1 and Phase 2 complex assessment comprised testing at 87 locations across Area 6. Eight of these locations have currently only been partially tested. Of the tested locations, 49 are located within the current alignment and of these, 21 are in areas of PAS and/or an area of cultural heritage sensitivity. Further complex assessment is planned as part of the preparation of CHMP 18111.

8.2.6.3.1 Mt Steiglitz

The lower slopes around Mt Steiglitz were identified as an area of PAS in the desktop assessment (PAS 06: Figure 8-51). Baseline testing was completed at two locations and partially completed at two additional locations on the lower slopes of the volcanic cone, all of which now lie outside the alignment. No Aboriginal cultural heritage was located in surface or subsurface contexts around Mt Steiglitz.

8.2.6.3.2 Mt Kororoit

All baseline testing has been completed along the northern base of Mt Kororoit with only 11 subsurface artefacts identified and while extent testing was not completed, it was agreed with the Elders to register the large artefact scatter as a landform with the extent testing program therefore terminated.

8.2.6.3.3 Lerderderg River to Toolern Creek

Baseline testing and extent testing has been completed within the area of CHS east of Lerderderg River, with a total of 841 artefacts identified; a further 56 subsurface artefacts were identified east of Toolern Creek. Baseline testing has been partially completed at one tower assembly area between Djerriwarrh Creek and Arnolds Creek East Branch with an additional 176 subsurface artefacts identified.

8.2.6.3.4 Melton to the Sydenham Terminal Station

The volcanic plains in the eastern section of the activity area in the vicinity of Plumpton and Melton are also known for the presence of Aboriginal cultural heritage. Eight locations were subject to complex assessment over an area of approximately 5km to the west of Sydenham Terminal Station on the stony rises landform. Within this landform, one artefact scatter was located approximately 500m to the west of the Sydenham Terminal Station and two LDADs were identified within the terminal station grounds, although these two LDADs are no longer part of CHMP 18111 and are currently being managed under CHMP 19659. Additional surface artefacts were identified outside the Proposed Route. An artefact scatter located approximately 500 m west of the terminal station comprising 89 artefacts was identified through a now completed extent testing program.

8.2.6.3.5 Korjamnunnip Creek

During the standard assessment, the terraces overlooking Korjamnunnip Creek was also identified as an area of PAS (PAS 05:Figure 8-51). One location on the western terrace overlooking Korjamnunnip Creek, which is no longer part of the Proposed Route, was subject to complex assessment but no Aboriginal cultural heritage was found. The rise landform east of Korjamnunnip Creek was also subject to complex assessment (PAS 07). The artefact scatter identified during the standard assessment was found to also have a subsurface component. In addition, an area of subsurface ochre was identified during excavation at this location. In consultation with the WWCHAC Elders, it was agreed to register the surface artefacts and ochre as a multi component Place and with a request from the Elders to avoid impact to the Place.

8.2.6.3.6 Merrimu Reservoir

The area east and south of Merrimu Reservoir is one of the largest identified area of PAS within the activity area and was subject to complex assessment at seven locations: one to the east of Merrimu Reservoir north of Diggers Rest-Coimadai Road and six to the south (PAS 02:Figure 8-52). As a result, subsurface Aboriginal cultural heritage was found at three locations. These Places include six artefact scatters and two LDADs within the Proposed Route to the east of Merrimu Reservoir with a combined artefact count of 331, and one artefact scatter consisting of 34 artefacts and one LDAD consisting of 12 artefacts south of Diggers Rest-Coimadai Road outside the Proposed Route.

8.2.6.3.7 West of the Lerderderg River

The floodplain to the west of the Lerderderg River was also subject to complex assessment (PAS 04:Figure 8-52). The area further west in the low hills of Lerderderg National Park was not subject to complex assessment due to the presence of visible weathered bedrock on the ground surface and the difficult terrain. An artefact scatter comprising 190 artefacts was located on the floodplain west of Lerderderg River; however, the artefacts were found within a deposit of possible mining sludge that extends to a depth greater than 1200mm in sections and are not considered to be in situ. Contamination reports were unable to confirm the presence of sludge in the area. Therefore, further investigation of the area is required to confirm the nature of this Aboriginal Place. An area of disturbance was also noted during the standard and complex assessment in the area to the west of Kororoit Creek, where large stockpiles of mulch and rubbish were stored at the time of the assessment. Subsurface testing in this area identified high levels of disturbance with very little topsoil remaining and possible soil contamination. Disturbance was also noted during the complex assessment in the area west of Korjamnunnip Creek, where an isolated subsurface artefact was found along with suspected asbestos.

Mapping of preliminary fieldwork is shown in Figure 8-51 to Figure 8-53 below.

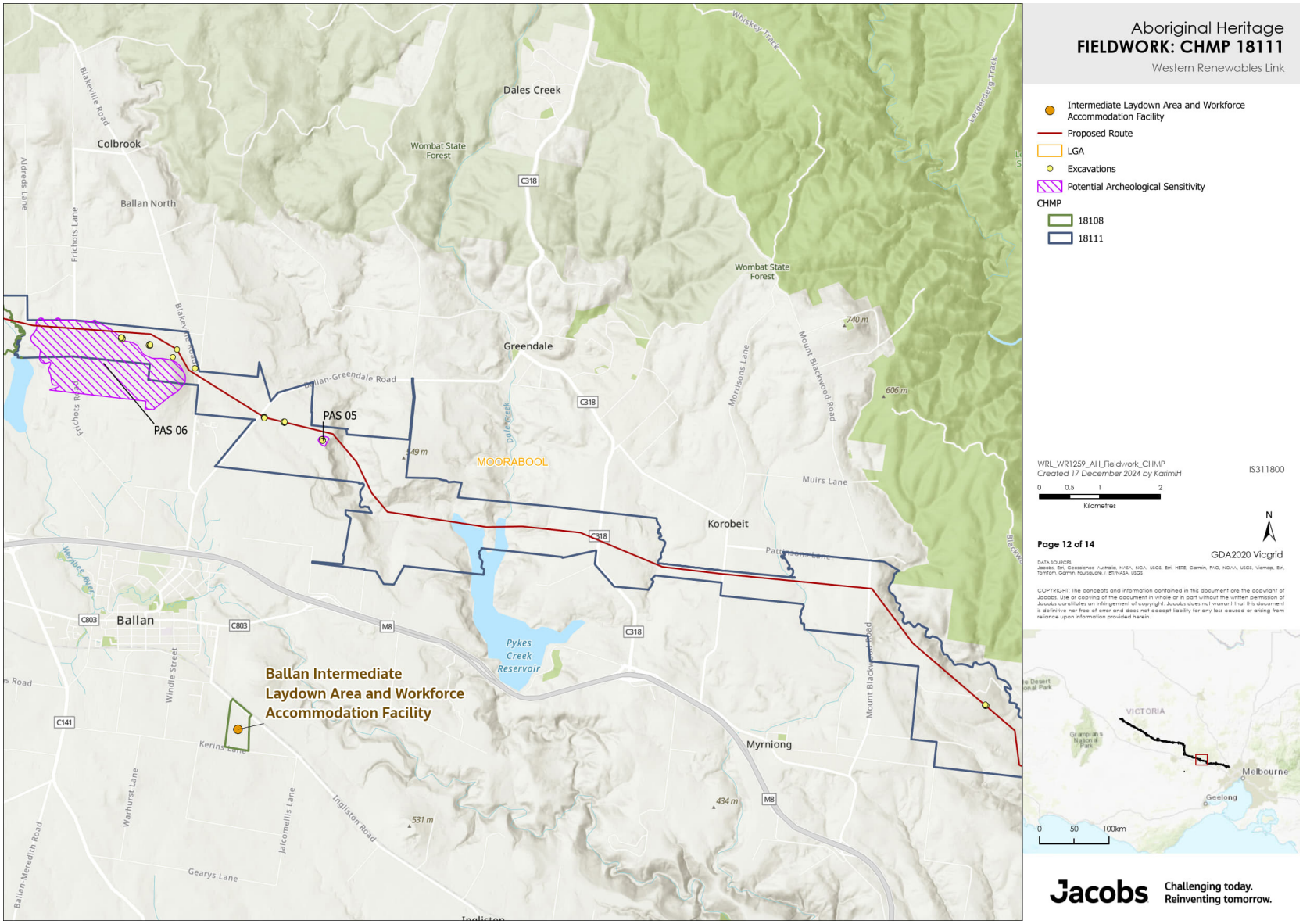


Figure 8-51: Fieldwork for CHMP 18111, WWCHAC RAP Area. Fieldwork mapping includes data from late 2020 to June 2024. Page 1 of 3.

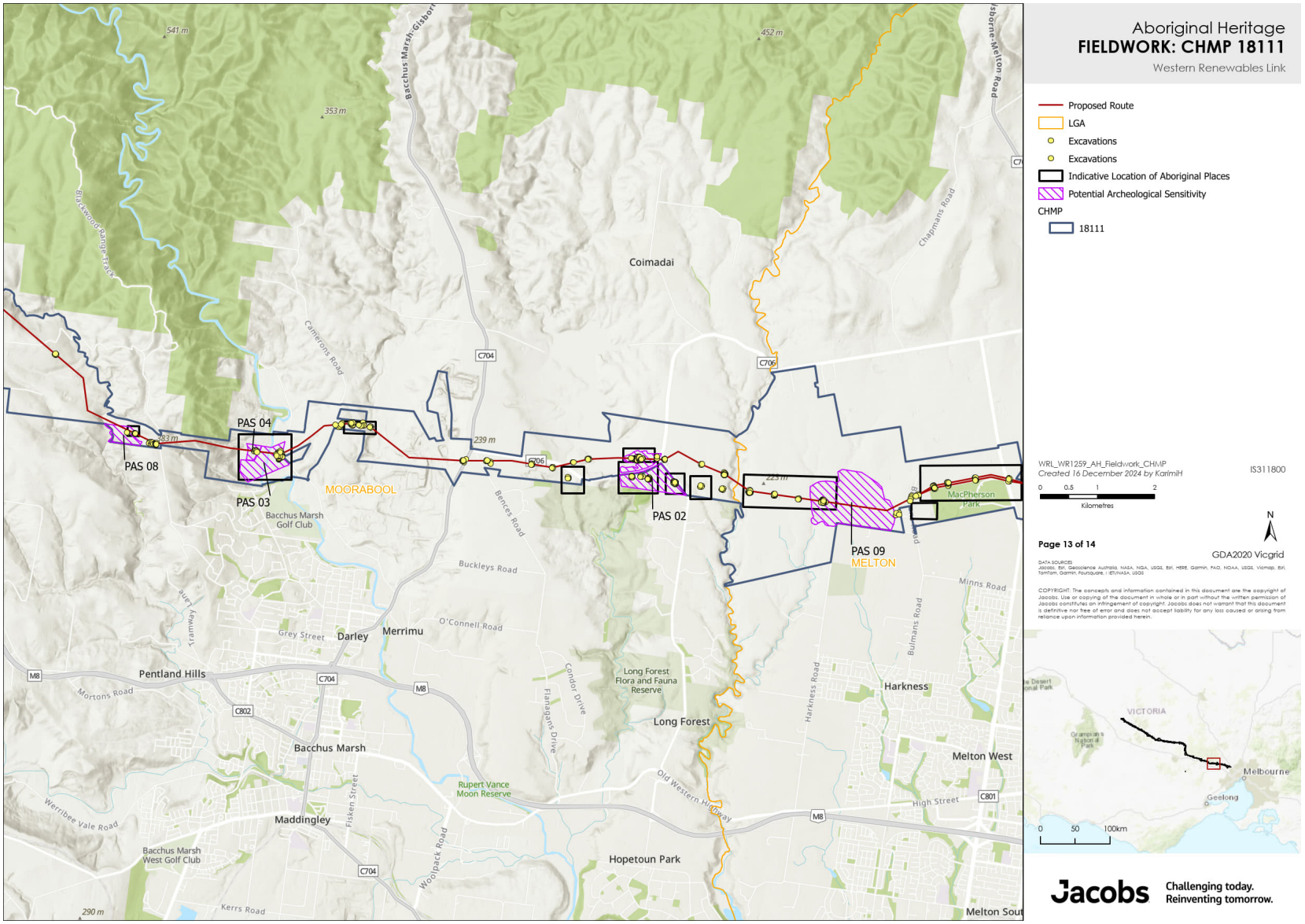


Figure 8-52: Fieldwork for CHMP 18111, WWCHAC RAP Area. Fieldwork mapping includes data from late 2020 to June 2024. Page 2 of 3.

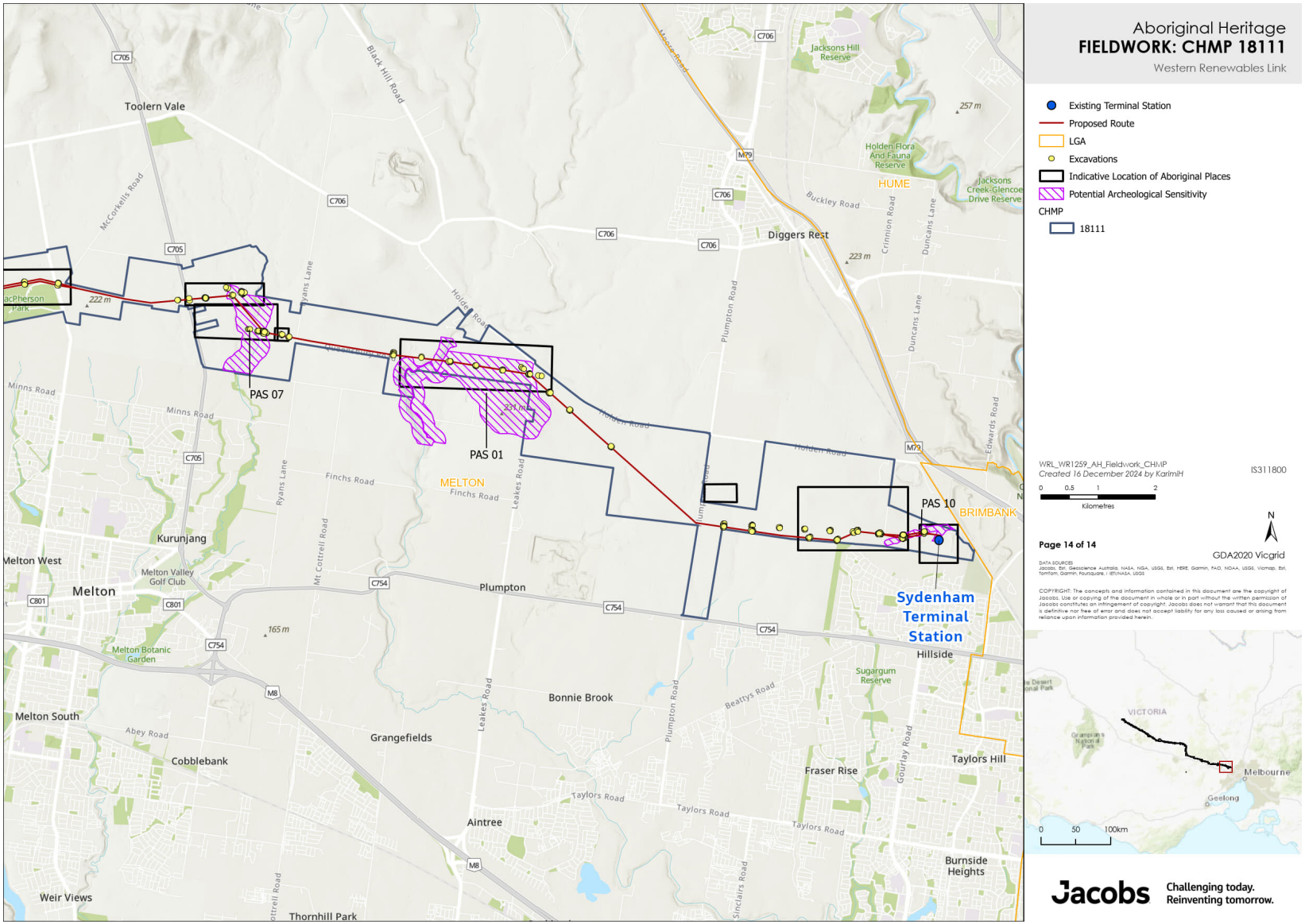


Figure 8-53: Fieldwork for CHMP 18111, WWCHAC RAP Area. Fieldwork mapping includes data from late 2020 to June 2024. Page 3 of 3.

8.2.6.4 Cultural Values Assessment

A CVA for Area 6 was prepared by Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation (WWCHAC) and facilitated by Andrew Long and Associates (ALA). The CVA involved five key elements: 1) desktop and background consultative research; 2) a Project establishment meeting; 3) an on-site investigation; 4) two post-research workshops; and 5) a workshop to review the CVA report and formulate recommendations.

The work completed during the preparation of the CVA included background research undertaken by members of ALA in consultation with WWCHAC TOs followed by a Project establishment meeting for the Study Area (Area 6). This was followed by an on-Country visit to assess both a possible Ceremonial Ground and possible burial approximately 700m west of the Lerderderg River and other areas of interest within Wurundjeri Woi-wurrung Country that intersects the Project Land across public and private land. Subsequently, two post-fieldwork workshops were undertaken to discuss the findings of the CVA investigation. A third and final workshop was held to present draft recommendations for TO review.

The redacted version of the CVA report is provided in Appendix M and should be read in full in conjunction with the below summary.

8.2.6.4.1 Traditional Owner consultation

A CVA establishment meeting was held online on 8 November 2021 to discuss the Project requirements and scope options. The on-Country visit was then conducted on 21 February 2022.

A subsequent workshop was held online on 16 March 2022 to present a summary of the on-Country visit and to discuss the nature and significance of the possible Ceremonial Ground and burial near the Lerderderg River. The Elders present in the online workshop agreed that the area on the rise to the west of Lerderderg River was not a Ceremonial Ground nor a burial site. Other themes and locations discussed as part of the workshop included the following:

- Mt Kororoit and Kororoit Creek;
- Mt Steiglitz.

A subsequent workshop was held online on 16 May 2022. During the second workshop, a summary of the on-Country visit and work to date on the Project were discussed. Possible themes of focus for the CVA were also discussed and agreed on by all participants. The WWCHAC Elders and representatives were consulted regarding any particular themes that they may not be comfortable discussing or would like excluded from this assessment, including:

- Formation of the land and landscape change;
- Wurundjeri Woi-wurrung placenames;
- Resource utilisation within the landscape;
- Cultural routes within the landscape;
- Gender roles;
- Significant Elders and Community members; and
- Post-Contact settlement/conflict.

Following receipt of the draft CVA by WWCHAC on 29 August 2022, comments were returned to ALA on 5 October 2022. It was noted that the CVA should provide additional inputs from the available literature. These comments were addressed and the CVA returned to WWCHAC on 25 October 2022. Additional feedback noted that WWCHAC would also require further CVA recommendations. Additional comments were supplied to ALA on 11 January 2023, which were addressed and the CVA and draft recommendations returned to WWCHAC the same day.

A final meeting was held on 12 January 2023 to discuss the CVA and finalise the CVA recommendations.

Further details regarding the consultation undertaken for this CVA are outlined in Section 3 of the CVA (Appendix M).

8.2.6.4.2 Environmental and cultural context

The environmental context of the Study Area was reviewed, with an emphasis on the factors that may have influenced past human behaviour resulting in archaeological Place and formation processes and the distribution of Aboriginal cultural heritage places. The key information relevant to Area 6 includes:

- Geomorphology, landforms, and environment;
- Aboriginal cultural heritage Places and artefacts;
- Aboriginal occupation of the area; and
- Ethnohistories and Wurundjeri Woi-wurrung suggested themes.

The CVA study area contains landforms that may be sensitive for Aboriginal cultural heritage material, including volcanic plains, river and creek margins, river terraces and elevated landforms associated with water courses. These waterways would have contained a variety of food and medicinal resources that were utilised by Aboriginal people. In addition, WWCHAC Elders noted the significance of Kororoit Creek at the Project establishment meeting, during the on-Country visit, and at the first workshop as being used by Aboriginal people as a travel route. The creek's importance was noted by WWCHAC Elders due to it being a songline from the mouth of the creek and the only waterway that travelled to Wil-im-ee moor-ing (Mt William, near Lancefield), Mt Macedon, and Hanging Rock. The creek possibly also had tunnels within which the Bunyip lived. Meanwhile, Mount Kororoit was the source of stone tools and possibly a landscape marker and stopping point along travel routes.

The Wurundjeri Woi-wurrung are part of the Kulin Nation language group, and the clans most closely associated with the study area were the *Kurrung -Jang-Balluk*, who were responsible for the land from the Werribee River to Toolern Creek and Kororoit Creek, and the *Marin-Bulluk*, who were responsible for the present-day Maribyrnong River and the land between Kororoit Creek and Saltwater Creek, in addition to Jacksons Creek. The Ngurungaeta, or headmen, of Aboriginal groups responsible for the land within the study area included Betbenjee, the Ngurungaeta of the *Kurung jang bulluk*, and Bungerim, the Ngurungaeta of the *Marin-balluk*. There was also Murrum Murrumbean, a member of the Native Police Corp, and Ningulabul, who Barak stated was the greatest headman of the Country.

Early explorers recorded creation stories relating to the origins of humankind and the social organisation of the Wurundjeri Woi-wurrung people, including the creation of the first man (Bunjil or Punjil) and the first woman. WWCHAC Elders notes specific gender roles and the adaptation of cultural laws over time in response to the environment. It should be noted that WWCHAC Elders also stated at the second workshop that the stories included within the early ethnohistories might have been told by people that did not have the authority to pass them on. Additional detail regarding the contact and post-contact history is also discussed in Section 6. In depth discussion of the themes suggested by the Wurundjeri Woi-wurrung is presented in Section 4.5 of the full CVA in Appendix M, including:

- Formation of the land and landscape change;
- Indigenous placenames;
- Resource utilisation within the landscape;
- Cultural routes within the landscape;
- Gender roles;
- significant Elders and Community members; and
- Post-Contact settlement/conflict.

8.2.6.4.3 CVA recommendations (non-culturally sensitive)

WWCHAC has chosen to not disclose details about specific tangible and intangible cultural values within the Study Area or their significance.

There are 14 recommendations included in the CVA. At the request of WWCHAC they are reproduced in full below as follows:

Recommendation 1: Avoidance of bunjil habitats

Old growth and other mature trees are important landmarks and provide habitat for a variety of species. WWCHAC Elders have therefore requested that impacts to old growth trees and mature trees within the study area be avoided, particularly those with potential bunjil (wedge tailed eagle habitats). If any bunjil nests are identified WWCHAC should be advised and participate in consultation regarding impacts to the nest and/or tree.

Recommendation 2: Avoidance of old growth and significant trees

Any significant trees, regardless of age, should not be impacted without consultation with WWCHAC. If through consultation it is decided that a significant tree will be cut down, WWCHAC should be allowed to take possession of the tree remains.

Recommendation 3: Protection of native flora

Native flora is integral to Wurundjeri Woi-wurrung beliefs and traditions. If any patches of native vegetation, including but not limited to native grasses, murnong and reeds, exist along waterways, WWCHAC should be consulted regarding their management. Consultation with the Narrap Unit [WWCHAC's dedicated natural resource management unit] *should also take place prior to construction to discuss opportunities for native revegetation and management.*

Recommendation 4: Native vegetation management

Consultation with the Narrap Unit should take place prior to construction to discuss opportunities for native revegetation and management. NRM work (including land management through fire) within the study area should be offered first to the Narrap Unit within WWCHAC.

Recommendation 5: Consultation with WWCHAC in relation to ecology

The ecology of this area of Country is as important as intangible and other tangible cultural heritage. WWCHAC should be consulted on ecological, geological, environmental and similar issues. WWCHAC should be consulted during all related studies, surveys and similar.

Recommendation 6: Future consultation in regard to management and conservation of waterways

The waterways were and are an essential part of Country for all forms of life (before and after contact, including Ancestors). Healthy waterways are crucial to maintaining the health of Country and the existence of life. WWCHAC Elders have therefore requested that impacts from the project within 200 m of waterways be avoided and that in instances where waterways may be impacted, that WWCHAC Elders are consulted regarding the management of the impacted waterways.

Recommendation 7: Protection of native fauna

Native fauna is integral to Wurundjeri Woi-wurrung beliefs and traditions. All efforts should be made during works to minimise the disruption to fauna habitats with special efforts made to ensure wildlife corridors are not broken.

Recommendation 8: Access to land around viewing point

The rise to the west of the Lerderderg River (visited by Aunty Annette Xiberras, WWCHAC Elder) provided a viewing point to look out across the Lerderderg floodplain and wider area. It was also part of a travel route. WWCHAC Elders should be consulted prior to impacts to this place to further ensure that this location does not hold

additional cultural significance for Wurundjeri Woi-wurrung people.

Recommendation 9: Management of tangible cultural heritage

A CHMP should be completed and approved in consultation with Wurundjeri Woi-wurrung Aboriginal Corporation prior to the commencement of works.

Recommendation 10: Direct interpretation

It is important that TOs have control over how Aboriginal culture and cultural values are presented to the wider community. Aboriginal artwork and cultural elements, including signage, reflected in any future buildings, works or infrastructure, or online, should be designed in consultation with WWCHAC peoples.

Recommendation 11: Ongoing consultation in relation to Intellectual Property

The sharing of knowledge is a critical aspect of cultural continuity; however, how this knowledge is communicated and with whom should be controlled by the leaders of individual cultural groups. Permission to share information included in this CVA should be requested from WWCHAC Elders prior to any information being released to third parties.

Recommendation 12: Preparation of a Reconciliation Action Plan in consultation with WWCHAC

Reconciliation Action Plan to be undertaken by AusNet in consultation with WWCHAC. AusNet to ensure the Reconciliation Action Plan is informed by this CVA and vice versa.

Recommendation 13: Education and cultural awareness training

Education and cultural awareness training should be provided to all those working on this project. WWCHAC should be asked first to provide this. Such education and training should include ceremonies conducted by WWCHAC (such as welcomes, smokings etc.).

Recommendation 14: Scholarships and other forms of support

AusNet should provide scholarships and other forms of support for Wurundjeri Woi-wurrung people. The specific forms of support should be discussed with WWCHAC.

8.2.6.5 Aboriginal cultural heritage

Preliminary analysis of the artefacts found during Phase 1 one and Phase 2 investigations show that 3652 surface artefacts and 1535 subsurface artefacts were located during the standard and complex assessments. Together, these artefacts consist of 27 artefact scatters: one west and seven east of the Lerderderg River; one south and six east of Merrimu Reservoir; one east of Korjamnunnip Creek; one approximately 500 m and another approximately 2km west of the Sydenham Terminal Station (outside the alignment); one along the northern base of Mt Kororoit; one along the western bank of Toolern Creek; one on the eastern bank of Toolern Creek; two on the western terrace of Goodman Creek; four between Djerriwarrh Creek an Arnolds Creek East Branch. Nineteen LDADs have also been identified: two along Toolern Creek; another approximately between 2.5 and 3.5km west of the Sydenham Terminal Station (partially outside the Proposed Route); three south and one east of Merrimu Reservoir (all outside the alignment); two east of Merrimu Reservoir (inside the Proposed Route); one west and east of Lerderderg River; one along the northern base of Mt Kororoit; and one on the plains between creeks, approximately 3.1km east of Djerriwarrh Creek, one approximately 500m west of the Sydenham Terminal Station (outside the Proposed Route), one approximately 500m west of the Sydenham Terminal Station.

The scientific significance rankings in Table 8-16 are used to develop the overall significance rankings (refer to Table 8-17), which is used assessment of impacts for the Project, as provided in Section 9.2.

Table 8-16: List of Aboriginal cultural heritage values recorded during fieldwork for CHMP 18111.

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
1	LDAD (surface)	Registered	Stony rise landform, 2km west of the Sydenham Terminal Station	Outside area of impact	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard assessment.
2	Artefact Scatter (subsurface)	Unregistered	Stony Rise landform, 500m west of the Sydenham Terminal Station	Partial intersection of proposed infrastructure (Tower assembly area /access track)	Contents: 2 Condition: 3 Representativeness: 1	Identified during complex assessment.
3	LDAD (subsurface)	Registered	Stony Rise landform, 2.5km west of the Sydenham Terminal Station	Partial intersection of proposed infrastructure (Tower assembly area)	Contents: 1 Condition: 1 Representativeness: 1	Identified during complex assessment.
4	Artefact scatter (subsurface)	Unregistered	Rise, south east of Merrimu Reservoir.	Outside area of impact	Contents: 2 Condition: 1 Representativeness: 1	Identified during complex assessment.
5	LDAD (surface and subsurface)	Registered	Rise, south of Merrimu Reservoir.	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard and complex assessment.
6	LDAD (surface and subsurface)	Registered	Rise, south of Merrimu Reservoir.	Outside area of impact	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard and complex assessment.
7	LDAD (surface)	Registered	Rise, west of Djerriwarrh Creek	Outside area of impact	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard assessment.
8	Artefact scatter (subsurface)	Unregistered	Floodplain to the west of the Lerderderg River	Partial intersection of proposed infrastructure (Tower assembly area/access track)	Contents: 2 Condition: 1 Representativeness: 1	Identified during complex assessment.
9	LDAD (surface)	Unregistered	Rise to the west of the Lerderderg River	Partial impact with proposed infrastructure (Tower assembly area)	Contents: 1 Condition: 2 Representativeness: 2	Identified during standard and complex assessment.
10	Artefact scatter (surface)	Unregistered	Rise east of Merrimu Reservoir	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard assessment
11	Artefact scatter (surface)	Unregistered	Rise east of Merrimu Reservoir	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard assessment

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
12	Artefact scatter (surface)	Unregistered	Rise east of Merrimu Reservoir	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard assessment
13	Artefact scatter (surface)	Unregistered	Rise east of Merrimu Reservoir	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard and complex assessment
14	Artefact scatter (surface and subsurface)	Unregistered	Rise east of Merrimu Reservoir	Partial intersection of proposed infrastructure (Tower assembly area/access tracks)	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard and complex assessment
15	Artefact scatter (subsurface)	Unregistered	Rise east of Merrimu Reservoir	Partial intersection of proposed infrastructure (Access tracks)	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard and complex assessment
16	Artefact scatter (surface)	Registered	Floodplain east of Lerderderg River	Partial intersection of proposed infrastructure (Tower assembly area/access tracks)	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard assessment
17	Artefact scatter (surface)	Unregistered	Floodplain east of Lerderderg River	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard assessment
18	Artefact scatter (surface)	Unregistered	Floodplain east of Lerderderg River	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard assessment
19	Artefact scatter (surface and subsurface)	Unregistered	Floodplain east of Lerderderg River	Partial intersection of proposed infrastructure (Tower assembly area/ distribution line)	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard and complex assessment
20	Artefact scatter (surface and subsurface)	Unregistered	Floodplain east of Lerderderg River	Partial intersection of proposed infrastructure (Access track)	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard and complex assessment
21	Artefact scatter (surface)	Unregistered	Floodplain east of Lerderderg River	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard assessment

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
22	Artefact scatter (surface)	Unregistered	Floodplain east of Lerderderg River	Partial intersection of proposed infrastructure (Access track)	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard assessment
23	Artefact scatter (surface and subsurface)	Registered	Floodplain east of Kororoit Creek	Partial intersection of proposed infrastructure (Tower assembly area/access track)	Contents: 2 Condition: 1 Representativeness: 2	Identified during standard assessment
24	LDAD (surface and subsurface)	Registered	Plain north of Mt Kororoit	Partial intersection of proposed infrastructure (Tower assembly area/access track)	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard assessment
25	LDAD (surface and subsurface)	Unregistered	Plain east and west of Arnolds Creek East Branch	Partial intersection with proposed infrastructure (Tower assembly area)	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard assessment
26	Cultural landscape	Unregistered	Mount Kororoit and Kororoit Creek	Partial intersection with proposed infrastructure (Tower assembly area/stringing pads, distribution line/access tracks)	Contents: 3 Condition: 3 Representativeness: 3	Identified in the CVA as having high cultural significance and intangible cultural heritage values and requiring protection.
27	LDAD (subsurface)	Unregistered	Rise to the east of Korjamnunnip Creek	Partial intersection of proposed infrastructure (Tower assembly area)	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard and complex assessment
28	Artefact scatter (surface)	Registered	Creek bank of unnamed tributary of Djerriwarrh Creek	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard assessment
29	LDAD (surface)	Unregistered	Plain to the east of unnamed tributary of Djerriwarrh Creek	Partial intersection of proposed infrastructure (Tower assembly area/ access track)	Contents: 1 Condition: 2 Representativeness: 2	Identified during standard assessment
30	LDAD (surface and subsurface)	Unregistered	Plain, rise and creek bank of unnamed tributary of Djerriwarrh Creek	Partial intersection of proposed infrastructure (Tower assembly area)	Contents: 1 Condition: 1 Representativeness: 1	Identified during complex assessment
31	LDAD (surface)	Unregistered	Rise to the west of Toolern Creek	Outside area of impact	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard assessment

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
32	Artefact scatter (surface and subsurface)	Unregistered	Rise to the east of unnamed tributary of Djerriwarrh Creek	Partial intersection of proposed infrastructure (Tower assembly area/access track)	Contents: 2 Condition: 2 Representativeness: 2	Identified during complex assessment
33	LDAD (surface and subsurface)	Unregistered	Floodplain to the east of the Lerderderg River	Partial intersection of proposed infrastructure (Tower assembly area/access track)	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard assessment
34	LDAD (surface)	Unregistered	Eastern Bank of Toolern Creek	Partial intersection of proposed infrastructure (Tower assembly)	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard and complex assessments
35	Artefact scatter (surface and subsurface)	Unregistered	Eastern Bank of Toolern Creek	Partial intersection of proposed infrastructure (Tower assembly area)	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard and complex assessments
36	Artefact scatter (surface) and earth deposit	Unregistered	Rise to the east of Korjamnunnip Creek	Partial intersection of proposed infrastructure (Tower assembly area /access track)	Contents: 3 Condition: 3 Representativeness: 3	Identified during standard and complex assessments
37	Artefact scatter (surface)	Unregistered	Plain between Djerriwarrh Creek and Arnolds Creek East Branch	Partial intersection of proposed infrastructure (Tower assembly area /stringing pad/access tracks)	Contents: 3 Condition: 3 Representativeness: 3	Identified during standard assessment
38	Artefact scatter (surface)	Unregistered	Western terrace of Goodman Creek	Outside area of impact	Contents: 2 Condition: 1 Representativeness: 2	Identified during standard assessment
39	LDAD (surface)	Unregistered	Western terrace of Goodman Creek	Partial intersection of proposed infrastructure (Access tracks)	Contents: 2 Condition: 1 Representativeness: 2	Identified during standard assessment
40	Artefact Scatter (surface)	Unregistered	Plain between Djerriwarrh Creek and Arnolds Creek East Branch	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard assessment
41	LDAD (subsurface)	Unregistered	Approximately 500m west of the Sydenham Terminal Station	Partial intersection of proposed infrastructure (Tower assembly area /access strack)	Contents: 1 Condition: 1 Representativeness: 1	Identified during complex assessment
42	LDAD (surface and subsurface)	Unregistered	Plain north-east of Mt Kororoit	Partial intersection of proposed infrastructure (Tower assembly area)	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard and

ID	Aboriginal Place Type	Status	Landform	Proposed intersecting infrastructure	Scientific significance	Comment
						complex assessment
43	LDAD (surface)	Unregistered	Plain to the east of unnamed tributary of Djerriwarrh Creek	Outside area of impact	Contents: 1 Condition: 1 Representativeness: 2	Identified during standard assessment
44	LDAD (surface)	Unregistered	Rise east of Merrimu Reservoir	Partial intersection of proposed infrastructure (Tower assembly area /access tracks)	Contents: 1 Condition: 1 Representativeness: 2	Identified during standard assessment
45	LDAD (surface)	Registered	Stony Rise landform, 1.3km west of the Sydenham Terminal Station	Outside area of impact	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard assessment.
46	Artefact Scatter (surface and subsurface)	Unregistered	Eastern bank of unnamed tributary of Toolern Creek	Partial intersection of proposed infrastructure (Stringing pad).	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard and complex assessment
47	Artefact Scatter (surface)	Unregistered	West of Merrimu Reservoir	Outside impact area	Contents: 2 Condition: 2 Representativeness: 2	Identified during Geotech works
48	Artefact Scatter (surface)	Unregistered	Plain to the east of unnamed tributary of Djerriwarrh Creek	Outside area of impact	Contents: 2 Condition: 2 Representativeness: 2	Identified during standard assessment
49	LDAD (surface)	Unregistered	Stony rise landform, approximately 1 km west of the Sydenham Terminal Station	Complete intersection with proposed infrastructure (Tower assembly area)	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard assessment
50	LDAD (surface and subsurface)	Unregistered	Plain west of Toolern Creek	Partial intersection with proposed infrastructure (Tower assembly area)	Contents: 1 Condition: 1 Representativeness: 1	Identified during complex assessment
51	Artefact scatter (surface and subsurface)	Unregistered	East of a tributary off the Djerriwarrh Creek	Partial intersection with proposed infrastructure (Tower assembly area)	Contents: 2 Condition: 2 Representativeness: 2	Identified during complex assessment
52	LDAD (surface)	Unregistered	West of Merrimu Reservoir	Outside impact area	Contents: 1 Condition: 1 Representativeness: 1	Identified during standard assessment

Subsurface artefacts were typically found between 0-200mm in depth except for those found to the west of Lerderderg River, which were located in the first 300mm (Figure 8-54). Aboriginal cultural heritage was typically found within 250m of waterways, around volcanic cones, or on raised landforms overlooking waterways.

Preliminary investigations from Phase 1 and Phase 2 standard and complex assessments indicate that there is high potential for Aboriginal cultural heritage to be present on raised landforms near waterways, around volcanic

cones, and on the stony rises landform to the west of the Sydenham Terminal Station. The floodplains between waterways are considered to have low potential for Aboriginal cultural heritage to be present.



Figure 8-54: Representative sample of artefacts from disturbed context at Tower 66, west of the Lerderderg River.

All newly identified Aboriginal Places in Area 6 were artefact scatters and LDADs, with one ochre deposit also identified. This finding is in line with the desktop assessment of the CHMP, which predicted that these would be the most commonly identified Aboriginal Places. The Aboriginal Places have been identified primarily on raised landforms close to permanent water, highlighting the sensitivity of these locations. More broadly, the assessment for the CHMP illustrates the importance of the whole landscape as it relates to Aboriginal cultural heritage values. While the Project can avoid many tangible Aboriginal Places, it will have an unavoidable impact on intangible values, as its very presence in the landscape will impact values, such as landscapes, biodiversity and contemporary values, and how places are interconnected through Country.

Table 8-17: Significance rankings of Aboriginal cultural heritage values recorded during fieldwork for CHMP 18111

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
1	LDAD (surface)	Stony rise landform, 2km west of the Sydenham Terminal Station	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
2	Artefact Scatter (subsurface)	Stony Rise landform, 500m west of the Sydenham Terminal Station	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
3	LDAD (subsurface)	Stony Rise landform, 2.5km west of	Low (1)	Low (1)	Low (1)	High (3)	Low (6)

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
		the Sydenham Terminal Station					
4	Artefact scatter (subsurface)	Rise, south of Merrimu Reservoir.	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
5	LDAD (surface and subsurface)	Rise, south of Merrimu Reservoir.	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
6	LDAD (surface and subsurface)	Rise, south east of Merrimu Reservoir.	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
7	LDAD (surface)	Rise, south of Merrimu Reservoir.	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
8	Artefact scatter (subsurface)	Floodplain to the west of the Lerderderg River	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
9	LDAD (surface)	Rise to the west of the Lerderderg River	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
10	Artefact scatter (surface)	Rise east of Merrimu Reservoir	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
11	Artefact scatter (surface)	Rise east of Merrimu Reservoir	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
12	Artefact scatter (surface)	Rise east of Merrimu Reservoir	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
13	Artefact scatter (surface)	Rise east of Merrimu Reservoir	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
14	Artefact scatter (surface and subsurface)	Rise east of Merrimu Reservoir	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
15	Artefact scatter (subsurface)	Rise east of Merrimu Reservoir	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
16	Artefact scatter (surface)	Floodplain east of Lerderderg River	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
17	Artefact scatter (surface)	Floodplain east of	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
		Lerderderg River					
18	Artefact scatter (surface)	Floodplain east of Lerderderg River	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
19	Artefact scatter (surface and subsurface)	Floodplain east of Lerderderg River	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
20	Artefact scatter (surface and subsurface)	Floodplain east of Lerderderg River	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
21	Artefact scatter (surface)	Floodplain east of Lerderderg River	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
22	Artefact scatter (surface)	Floodplain east of Lerderderg River	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
23	Artefact scatter (surface and subsurface)	Floodplain east of Kororoit Creek	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
24	LDAD (surface and subsurface)	Plain north of Mt Kororoit	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
25	LDAD (surface and subsurface)	Plain approximately 450m west of Arnolds Creek East Branch	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
26	Cultural Landscape	Mount Kororoit and Kororoit Creek	Low (1)	High (3)	High (3)	High (3)	Very High (10)
27	LDAD (surface)	Rise to the east of Korjamnunnip Creek	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
28	Artefact scatter (surface)	Creek bank of unnamed tributary of Djerriwarrh Creek	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
29	LDAD (surface)	Plain to the east of unnamed tributary of	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
		Djerriwarrh Creek					
30	LDAD (surface and subsurface)	Plain, rise and creek bank of unnamed tributary of Djerriwarrh Creek	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
31	LDAD (surface)	Rise to the west of Toolern Creek	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
32	Artefact scatter (surface and subsurface)	Rise to the east of unnamed tributary of Djerriwarrh Creek	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
33	LDAD (surface and subsurface)	Floodplain to the east of the Lerderderg River	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
34	LDAD (surface and subsurface)	Eastern Bank of Toolern Creek	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
35	Artefact scatter (surface and subsurface)	Eastern Bank of Toolern Creek	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
36	Artefact scatter (surface) and earth deposit	Rise to the east of Korjamnunnip Creek	Low (1)	High (3)	Moderate (2)	High (3)	High (9)
37	Artefact scatter (surface)	Plain between Djerriwarrh Creek and Arnolds Creek East Branch	Low (1)	High (3)	Moderate (2)	High (3)	High (9)
38	Artefact Scatter (surface)	Western terrace of Goodman Creek	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
39	Artefact Scatter (surface)	Western terrace of Goodman Creek	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
40	Artefact Scatter (surface)	Plain between Djerriwarrh Creek and Arnolds Creek East Branch	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
41	LDAD (subsurface)	Approximately 500m west of the Sydenham Terminal Station	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
42	LDAD (surface and subsurface)	Plain north-east of Mt Kororoit	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
43	LDAD (surface)	Plain to the east of unnamed tributary of Djerriwarrh Creek	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
44	LDAD (surface)	Rise east of Merrimu Reservoir	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
45	LDAD (surface)	Stony Rise landform, 1.3km west of the Sydenham Terminal Station	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
46	Artefact Scatter (surface and subsurface)	Eastern bank of unnamed tributary of Toolern Creek	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
47	Artefact Scatter (surface)	West of Merrimu Reservoir	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
48	Artefact Scatter (surface)	Plain to the east of unnamed tributary of Djerriwarrh Creek	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
49	LDAD (surface)	Stony rise landform, approximately 1 km west of the Sydenham Terminal Station	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
50	LDAD (surface and subsurface)	Plain west of Toolern Creek	Low (1)	Low (1)	Low (1)	High (3)	Low (6)
51	Artefact scatter (surface and subsurface)	East of a tributary off the Djerriwarrh Creek	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
52	LDAD (surface)	West of Merrimu Reservoir	Low (1)	Low (1)	Low (1)	High (3)	Low (6)

In summary, there have been 52 Aboriginal cultural heritage values recorded during fieldwork for CHMP 18111 in Area 6. Of these, the significance rankings include 19 Aboriginal cultural heritage values ranked as having a low significance (IDs 1, 3, 5-7, 9, 24-25, 27, 30-31, 33-34, 41-42, 45,49, 50 and 52), 30 values ranked as having a moderate significance (IDs 2, 4, 8, 10-23, 28-29, 32, 35, 38-40, 43-44 and 46-48 and 51), two artefact scatters (one associated with an earth deposit) and one cultural landscape assessed as having high significance (ID 36 and 37) and one cultural landscape assessed as having very high significance (ID 26).

8.2.6.6 Summary Findings for Area 6

Where baseline testing has been completed, Aboriginal cultural heritage was identified within the tower assembly areas of 51 percent of tower locations within the Proposed Route (25 out of 49 tower assembly areas). In addition, one cultural landscape of very high significance was identified during the preparation of the CVA. Collectively, Aboriginal cultural heritage Places are located on various landforms including floodplains, lower slopes of volcanic cones, volcanic plains, and raised landforms near waterways or overlooking waterways.

It is highly likely that additional unknown Aboriginal cultural heritage is present within the activity area in areas not subject to CHMP research and in areas that will not be impacted by the proposed activity. The impact to unknown Aboriginal cultural heritage within the activity area will be managed through the CHMP process and considerations of CVA recommendations. The impact to tangible Aboriginal cultural heritage values is managed through the construction methodology being above ground for the Project and responsive to cultural heritage investigations; however, visual impacts associated with design infrastructure are possible on intangible Aboriginal cultural heritage values, such as landscapes and landscape features. These matters are further expanded upon in Section 9.

8.3 Impacts of gold mining on Study Areas

As noted above, historical gold mining activities have impacted the landscape within the Project Land through the deposition of sludge, which has the potential to remove in situ Aboriginal cultural heritage material from upstream and discharge it further downstream. Thus far for the Project, sludge has only been identified during archaeological fieldwork in Area 6. No sludge has been identified during subsurface archaeological excavation in Areas 1 to 4 and there is no indication of the presence of sludge deposits within manual auger boreholes investigated in Area 5.

The deposition of sludge can also cap natural soil profiles as identified on the west bank of the Lerderderg River in Area 6 (Figure 8-55). Therefore, the depths at which Aboriginal cultural heritage may be found within the activity area may vary, in that archaeological deposits may be below the capped original topsoil within their original spatial and stratigraphic contexts (that is, in situ) or may be present within sludge but spatially displaced and without natural stratigraphy, as is the case in Area 6 (Section 6.6.1.1).

Due to the presence of chemicals and metals in the sludge, such as potential for high levels of arsenic, as well as mercury and cyanide, any archaeological excavation within contaminated soils must also address relevant OHS requirements.



Figure 8-55: Mining sludge exposed along the bank of the Lerderderg River within Area 6

8.4 Summary of Aboriginal cultural heritage assessments

In addition to the 69 previously recorded Places (see 6.7.1), Aboriginal cultural heritage assessments for the Project have identified 123 previously unregistered Aboriginal values across the CHMP activity areas. These values include 47 LDADs and 55 artefact scatters, including sites with varying levels of significance (higher significance artefact sites include knapping floors and sites associated with rich cultural values). Three of these artefact scatters are associated with earth features (hearths) sites. There have been 15 CMTs recorded (13 scarred trees and two ring trees). Six cultural landscapes of very high overall significance have also been identified as part of the CVAs: Pyrenees Ranges landscape (Area 1), Hepburn Lagoon (Area 4), Wimmera River (Areas 1 and 3), Avoca River (Area 4), Werribee River (Area 5), and Mount Kororoit and Kororoit Creek (Area 6). The very high significance ranking of these cultural landscapes is based on TO views expressed in the CVAs, where the TOs explicitly identify geographic features (cultural landscapes) as having very high cultural significance.

Table 8-18: Newly recorded Aboriginal cultural heritage values recorded per Area and CHMP.

Area	CHMP	LDADs	Artefact scatters	Culturally Modified trees	Earth features	Cultural landscapes	TOTAL
1	8 - BGLCAC	4	6 (1 also an earth feature)	2	1 (multi-component place in artefact scatter count)	2	14
2	7 - EMAC	6	7 (1 also an earth feature)	2	1 (multi-component place in artefact scatter count)	0	15

Area	CHMP	LDADs	Artefact scatters	Culturally Modified trees	Earth features	Cultural landscapes	TOTAL
3	6 – Non RAP	2	6 (1 with associated cultural landform)	1		(1 included under Area 1)	9
4	5 - DJAARA	3	3	2		1	9
	4 - DJAARA	7	5	1		1	14
5	3 - WTOAC	2		7		1	10
6	2 - WWCHAC	23	28 (1 with earth feature)		1 (multi-component place in artefact scatter count)	1	52
	TOTAL	47	55	15	3 (included in artefact scatter count)	6	123

These 123 Aboriginal cultural values are considered in Section 9.2, alongside registered Aboriginal cultural heritage values to provide an overall magnitude of impact for the Project.

9. Impact assessment

The risk screening process (described in Section 5.4) identified the key activities that have the potential to impact Aboriginal cultural heritage throughout the stages of the Project. The risk screening process considered the likelihood of Aboriginal heritage being present at a given place in the Project Land and the potential impact on that known or unknown heritage given standard controls. The outcomes of the risk screening identified the key issues that were taken forward into the impact assessment.

The impact assessment is based on information presently available, taking into account fieldwork completed up to 5 June 2024, as detailed in Section 8. In addition, comprehensive desktop assessments (summarised in Section 6) and CVAs were completed for each of the six Study Areas. Fieldwork completed for the CHMPs comprised the following (Table 9-1):

- Area 1: 100% standard assessment and 61.5% complex assessment of the tower assembly areas within areas of PAS or selected as a control testing location.
- Area 2: 100% standard assessment and 100% complex assessment of the tower assembly areas within areas of PAS or selected as a control testing location.
- Area 3: 100% standard assessment and 100% complex assessment of the tower assembly areas within areas of PAS or selected as a control testing location.
- Area 4: For CHMP 17311, 93.8% standard assessment and 100% complex assessment within areas of PAS or selected as a control testing location. For CHMP 18101, 49.1 % standard assessment and 34.2% complex assessment within areas of PAS or selected as a control testing location.
- Area 5: 39.0% standard assessment. There has been no complex assessment completed for this area.
- Area 6: 53.7% standard assessment and 63.2% complex assessment of all tower assembly areas.

Table 9-1: Percentage of fieldwork completed for each Cultural Heritage Management Plan.

Study Area	CHMP #	Size of Study Area (sq km)	Standard Assessment Coverage (%)	Complex Assessment Coverage (%)
Area 1	17313	16.19	100	61.5
Area 2	17321	11.83	100	100
Area 3	17312	14.99	100	100
Area 4	17311	95.35	93.8	100
Area 4	18101	19.57	49.1	34.2
Area 5	18108	54.15	39.0	0
Area 6	18111	212.09	53.7	63.2

Ongoing fieldwork being undertaken for CHMPs that are still in preparation means there are anticipated to be hitherto unknown or undefined Aboriginal cultural heritage values which cannot be included in this report. Therefore, where complex assessment is incomplete (Area 1 and Areas 4-6 shown in Table 9-1), the percentage of coverage may change if the discovery of Aboriginal cultural heritage necessitates additional extent testing. Potential impacts can only be precisely defined for known Aboriginal cultural heritage values identified to date across the Project Land, including those identified through desktop assessments, ground survey (in all Study Areas), and test excavation (in most Study Areas). Section 9.2 ranks the impact for each known Aboriginal cultural heritage value based on significance and the type of proposed intersecting infrastructure (or magnitude of impact).

Six specific cultural landscapes of very high overall significance have were identified as part of the CVAs: Pyrenees Ranges landscape (Area 1), Hepburn Lagoon (Area 4), Wimmera River (Areas 1 and 3), Avoca River (Area 4), Werribee River (Area 5), and Mount Kororoit and Kororoit Creek (Area 6). The significance ranking in each case is linked to intangible values and reflect TO views, and may be assigned on the basis of confidential traditional knowledge as noted in Section 5.5.2

Aboriginal cultural heritage encompasses unquantifiable and unknown intangible heritage, as highlighted in the outcome of the CVAs (Appendix I – Appendix M). TOs note in the CVAs that loss of cultural connection through impacts to intangible values is of significant concern. The CVAs also highlighted broad landscape values in relation to which impacts cannot be assessed in the same way as specific Aboriginal Places. These values include landscape features such as remnant vegetation, highlighted as a cultural value of importance to the RAP and TO groups. Avoidance of impacts to major waterways, specifically to avoid crossing waterways, where possible, has also been requested as part of the CVAs. As such, these broader values have been listed within the key issues and mitigation measures throughout 9.4 and 9.5.

9.1 Project development

Several measures have already been considered throughout the Project development to avoid and minimise impacts on Aboriginal cultural heritage. These measures include the following:

- The refinement of the Proposed Route and site selection has considered cultural heritage constraints. These factors were incorporated within constraints mapping of environmental values as detailed in EES Attachment I: Project development and assessment of alternatives, which provides a detailed account of the process undertaken to identify the least constrained corridor and Proposed Route for the Project and assesses alternative routes proposed by community members and stakeholders. The constraints mapping process included consideration of registered Aboriginal Places and areas of high Aboriginal cultural heritage significance, including waterbodies, watercourses, and adjacent terraces, volcanic cones, and stony rises. For example, impact on areas of PAS and extensive artefact scatters in the vicinity of the Lerderderg River and Merrimu Reservoir within Area 6 have been reduced through consultation with WWCHAC.
- Alternative route recommendations and advice has been received from individuals, communities, or other stakeholders in relation to the Proposed Route, as well as cultural heritage specialist advice provided by the authors of this Aboriginal Cultural Heritage Impact Assessment on Aboriginal cultural heritage constraints to avoid and mitigate impacts to known Aboriginal values as discussed in the Assessment of Alternative Routes report.

Progressive refinement and design mitigations have already occurred through design changes to avoid or minimise impacts to heritage values, including the relocation, reduction in size, or reshaping of infrastructure such as towers, tower assembly areas, and other infrastructure. For example, impacts to two CMTs have been avoided as the result of design changes in Area 1 (PAS 1) and in Area 3 (PAS 06). In addition, the Proposed Route was relocated to the north in Area 4 to avoid PAS 25 and PAS 32, which were assessed as having high significance cultural values through consultation with DJAARA. In some instances, impacts on areas of PAS and extensive artefact scatters have been reduced. This is the case in Area 6, in PAS 2 and PAS 3, in the vicinity of the Lerderderg River and Merrimu Reservoir, respectively, where impacts have been reduced through design changes following consultation with WWCHAC. Overall, harm has been avoided to 14 Aboriginal Places and has been minimised to a further 14 Aboriginal Places, as shown in Table 9-2.

Table 9-2: Design refinement avoidance / minimisation of harm to Aboriginal Places.

Aboriginal Place Type	Avoidance	Minimisation
Artefact scatter	5	8
Artefact scatter **associated with rich, cultural landforms and cultural values as expressed by field representatives	1	
Artefact scatter and earth feature (surface)	1	0
Hearth and associated artefact scatter	0	1
CMT	2	0
LDAD	5	5
Totals	14	14

It is also important to note, that avoidance of known Aboriginal cultural heritage values may result in design changes that uncover previously unknown Aboriginal cultural heritage values for the Project. As such, RAP

and/or TO consultation plays an important role in the decision making process for design refinement, where individual concerns and statements of significance allow for the best informed decision. As all tangible Aboriginal cultural heritage values are managed through the CHMP process, it is regularly preferable to manage known Aboriginal Places as part of the CHMP, rather than risk causing harm to new Aboriginal Places during the CHMP complex assessment program.

9.2 Assessment of impacts

Impacts on Aboriginal cultural heritage values have been assessed for both previously registered Aboriginal Places (refer to Section 6.7) and Aboriginal values that have been identified during Aboriginal cultural heritage assessments prepared for the Project (refer to Section 8). However, it is important to recognise that the assessment of impact to Aboriginal cultural heritage values within each of the six Study Areas do not result from the same level of field assessment. The impact on each Aboriginal cultural heritage value has been assessed based on the value's significance and the type of proposed intersecting infrastructure.

For Aboriginal Places discussed in Section 9, there is a focus on direct impacts, however indirect impacts are probable though unquantifiable. These are acknowledged and addressed as residual impacts in Section 9.3, 9.4 and 9.5 and will be continually managed during RAP and FP-SR consultation during the CHMP process. In addition, for an Aboriginal Place that has been identified within the Project Land that does not intersect any aspect of the Project (i.e., tower, tower assembly areas, laydown area, workforce accommodation facilities, access tracks or distribution line crossover), impact/s to that Place still needs to be considered. This is particularly relevant to surface artefact scatters and LDADs that have been salvaged, subsurface artefact scatters, LDADs and hearths which have been disturbed as part of their identification and recording. As such, these have been listed in 9.2.2.1 and evaluated as part of Section 9.2.3. For any CMT (i.e., scarred tree or ring tree), any proposed subsurface infrastructure in the root protection zone or 50m buffer is considered a complete impact (refer to Section 5.5). The majority of CMTs (including the root protection zone) that have been identified in the Project Land are now outside of the infrastructure footprint and as such, are not being impacted by the Project.

Where Aboriginal Places have been identified through CHMP fieldwork and are no longer going to be impacted by the Project (i.e. design has changed), a low impact rating has been added for all subsurface Aboriginal heritage values. Impacts are considered low in this case as they have been uncovered through manual archaeological excavation and will not be further disturbed by additional testing, salvage requirements or impacted directly through design.

Indirect impacts might be associated with the loss of Aboriginal biodiversity values of importance to TOs, as a result of vegetation clearance in the easement and loss of particular plant species or faunal habitat. The importance of Wedge-tailed eagles to Aboriginal communities is widely documented. The collision risk assessment in the EES Technical Report A: Biodiversity Impact Assessment for the Project found this species as having an elevated risk of collision rated as being at a level of 'concern'; however, the report found Wedge-tailed eagles are unlikely to be exposed to population effects from any collision risks such as those posed by wind turbines that present a less easily mitigated risk of collision mortality due to their mobile components and vertical frontage. Any individual effects on the species are significantly reduced through the use of various mitigation strategies in areas of concern and have been assessed in the Biodiversity Impact Assessment as being negligible. Indirect impacts might also occur due to the subsequent potential for soil erosion which might expose tangible Aboriginal cultural heritage material. Specific recommendations for avoidance of indirect damage to biodiversity values through strict adherence to construction and operation mitigation measures and controls is addressed in EES Technical Report A: Biodiversity Impact Assessment and Technical Report Q: Geology and Soils Impact Assessment. Indirect impacts might also be associated with the loss of Aboriginal waterways values of importance to TOs, as a result of alteration of drainage lines due to construction works. Specific recommendations for avoidance of indirect damage to waterways values through strict adherence to construction and operation mitigation measures and controls are addressed in the Technical Report T: Surface Water Impact Assessment and Technical Report Q: Geology and Soils Impact Assessment.

9.2.1 Previously registered Aboriginal Places

Register searches carried out for the broader Project Land are presented in Section 6.7 of this report. There are five previously recorded Aboriginal Places where proposed infrastructure intersects the recorded primary grid co-ordinates or where relevant, the extent of the Aboriginal Place. The five places where there are potential impacts from the proposed infrastructure are rated below. If re-inspection during standard assessment has taken place, this also may affect the impact rating. For example, if CMTs were not able to be relocated during pedestrian survey (i.e. old Aboriginal Place records with inaccurate coordinates), the impact rating reverts to nil.

As standard assessment is not always able to sufficiently assess the surface due to ground surface visibility at the time of inspection and cannot ascertain the nature (e.g., intactness) of subsurface deposits, these ratings assume Aboriginal Places such as LDADs and artefact scatters are accurate as per their VAHR registration details. Any unknown values that may be associated with these places are not considered if they have not been recorded in their registration, though are considered in Sections 9.3, 9.4 and 9.5.

Table 9-3: Assessment of registered Aboriginal Places from the VAHR search in Section 6.7.1 of this report that *intersect* proposed infrastructure.

VAHR Site Information	Scientific significance ranking	Proposed intersecting infrastructure	Significance	Overall Significance Rating	Re-inspection status
VAHR 7523-0348, Warre Creek 2	Contents: 2 Condition: 1 Representativeness: 1	Complete intersection of proposed infrastructure.	**Historic**: Low (1) **Scientific**: Moderate (2) **Social**: Low (1) **Spiritual**: High (3)	Moderate (7)	Has been re-inspected and subsurface testing completed. **Considered moderate impact.**
VAHR 7723-0209, Superpipe Myers Rd North	Contents: 1 Condition: 1 Representativeness: 1	Complete intersection of proposed infrastructure.	**Historic**: Low (1) **Scientific**: Low (1) **Social**: Low (1) **Spiritual**: High (3)	Low (6)	Has not been inspected - field assessment required at this location. **Considered low impact.**
VAHR 7822-4340, Rutland Square LDAD 1	Contents: 2 Condition: 1 Representativeness: 1	Partially intersected by proposed infrastructure.	**Historic**: Low (1) **Scientific**: Moderate (2) **Social**: Low (1) **Spiritual**: High (3)	Moderate (7)	Has been re-inspected and subsurface testing completed. **Considered low impact.**
VAHR 7822-4313-6 Holden Road Plumpton 9)	Contents: 1 Condition: 1 Representativeness: 1	Complete intersection of proposed connection to Sydenham Terminal Station and laydown area.	**Historic**: Low (1) **Scientific**: Low (1) **Social**: Low (1) **Spiritual**: High (3)	Low (6)	Site identified as part of CHMP 19659; Sydenham terminal station rebuild, Plumpton (Energy Facility). **Considered low impact.**
VAHR 7822-4756 (Sydenham Terminal Station LDAD)	Contents: 1 Condition: 1 Representativeness: 1	Complete intersection of proposed connection to Sydenham Terminal Station and laydown area.	**Historic**: Low (1) **Scientific**: Low (1) **Social**: Low (1) **Spiritual**: High (3)	Low (6)	Site identified as part of CHMP 19659; Sydenham terminal station rebuild, Plumpton (Energy Facility). **Considered low impact.**

Table 9-3 excludes those Aboriginal Places that were identified during field assessments for the Project that have since been registered: these have been presented in Section 8. The significance ranking uses the same criteria presented in Section 5.5.2 and has been assessed through available site card information.

9.2.2 Previously unregistered Aboriginal cultural heritage values

A total of 123 Aboriginal cultural heritage values were identified during CHMP field assessments and completion of the CVAs carried out as part of the Project (Table 8-18). These values encompass both tangible (Aboriginal Places) and intangible (oral traditions and environmental and ecological knowledge) heritage. These values have been categorised below based on their significance rating and the proposed intersecting infrastructure of the design at the time of assessment.

Impacts for the two workforce accommodation facilities, as well as the new terminal station near Bulgana are captured at a Project level in Sections 9.2.2.1 to 9.2.2.6 below. Key impacts can be summarised in the following points below:

- Partial impact to a LDAD (surface) at the Lexton laydown area and workforce accommodation facility (Area 4). This is considered a low impact for the Project.
- A brief site inspection at the Ballan laydown area and workforce accommodation facility (Area 3) noted no surface Aboriginal cultural heritage values. Refer to Appendix N, which captures CHMP Standard Assessment results at this location.
- At the new 500kV terminal station near Bulgana, of the four previously unidentified Aboriginal Places, two artefact scatters (surface) and an LDAD (surface) have nil impacts as they are outside the footprint of the design and one LDAD (surface) has a low impact (complete intersection of current design). The design of the new 500kV terminal station also intersects an important cultural landscape (Wimmera River) identified in the CVA for Area 1, contributing to its high impact ranking for this location. As fieldwork is ongoing at this location, refer to Appendix N, which captures partial CHMP Complex Assessment results.

For Aboriginal heritage values that will no longer be impacted from the current design, relevant impacts resulting from the sub-surface testing and recording of the Aboriginal Place are still considered in the assessment in Section 9.2.2.1. Through assessing the Aboriginal cultural heritage significance of each value, alongside the scale of impact, each value has been assigned an impact rating ranging from nil, low, moderate, to high (see Figure 5-2). All impact definitions are provided in Section 8.2. Previously registered Aboriginal Places are not included in these tables below, however, they are incorporated in Table 9-9.

9.2.2.1 Nil Impact

There are 43 newly identified Aboriginal Places that are not within an area of impact for the Project and have not been impacted through their discovery. These sites were identified during standard assessment, whereby the design has since undergone several changes and impacts have been avoided through iterative Project design updates. As these 43 newly identified Aboriginal Places have not been impacted and will not be impacted as part of the Project, they are not included as part of the assessment in Section 9.2.3. Aboriginal Places assessed as having nil impacts are expanded below in Table 9-4.

Table 9-4: Aboriginal Places that do not intersect with the design for the Project.

Quantity	Aboriginal Place Type	Status	Impact of design	Significance Ranking
5	LDAD (surface)	Unregistered	Outside area of impact	Low
6	LDAD (surface)	Registered	Outside area of impact	Low
3	LDAD (surface)	Unregistered	Outside area of impact	Moderate
10	Artefact scatter (surface)	Unregistered	Outside area of impact	Moderate
4	Artefact scatter (surface)	Registered	Outside area of impact	Moderate
2	CMT (Scarred Tree)	Registered	Outside area of impact	Moderate

Quantity	Aboriginal Place Type	Status	Impact of design	Significance Ranking
2	CMT (Scarred Tree)	Unregistered	Outside area of impact	Moderate
5	CMT (Scarred Tree)	Unregistered	Outside area of impact	High
1	CMT	Unregistered	Outside area of impact	High
1	Artefact scatter and earth feature (surface)	Unregistered	Outside area of impact	Very High
1	CMT (Ring Tree)	Registered	Outside area of impact	Very High
1	CMT (Ring Tree)	Unregistered	Outside area of impact	Very High
2	CMT (Scarred Tree)	Unregistered	Outside area of impact	Very High

9.2.2.2 Impact through discovery

There are Aboriginal Places which have been impacted through sub-surface testing during preliminary investigations for the Project (i.e. CHMP complex assessment fieldwork), but which will no longer be directly impacted by design. This includes a total of 10 Aboriginal Places comprising five LDADs and five artefact scatters. Due to the nature of these site types (subsurface components), the majority have been impacted only through controlled excavation and collection of subsurface artefacts. As such, Project impacts for these Aboriginal Places have been defined as low. All Aboriginal Places that will not be impacted through the Project design, but have been assessed as being impacted through CHMP fieldwork, are detailed further in Table 9-5 and assessed for the Project in Section 9.2.3.

Table 9-5: Assessment of Aboriginal Places that have been impacted as part of their discovery during preliminary investigations for the Project.

Quantity	Aboriginal Place Type	Status	Impact of design	Significance Ranking
2	LDAD (surface and subsurface)	Registered	Outside area of impact	Low
3	LDAD (subsurface)	Unregistered	Outside area of impact	Moderate
4	Artefact scatter (subsurface)	Unregistered	Outside area of impact	Moderate
1	Artefact scatter (subsurface)	Unregistered	Outside area of impact	Very High

9.2.2.3 Low Impact

For the Project, low impact has been associated with LDADs and artefact scatters with infrastructure that either partially or completely intersects the Aboriginal cultural heritage value. There are 47 Aboriginal Places ranging from moderate to low significance that have been assessed and the impact has been determined to be low (refer to Table 9-6).

Table 9-6: Assessment of Aboriginal Places that have low associated impacts within the Project Land.

Quantity	Aboriginal Place Type	Status	Impact of design	Significance Ranking
4	LDAD (surface)	Unregistered	Partial	Low
1	LDAD (surface)	Registered	Partial	Low
1	LDAD (surface)	Registered	Partial	Moderate
2	LDAD (surface)	Unregistered	Complete	Low
2	LDAD (surface)	Unregistered	Partial	Moderate
3	LDAD (subsurface)	Registered	Partial	Low
1	LDAD (subsurface)	Registered	Complete	Low
2	LDAD (subsurface)	Unregistered	Partial	Low
3	LDAD (subsurface)	Unregistered	Complete	Low
1	LDAD (surface and subsurface)	Unregistered	Partial	Moderate
3	LDAD (surface and subsurface)	Registered	Partial	Low
4	LDAD (surface and subsurface)	Unregistered	Partial	Low
6	Artefact scatter (subsurface)	Unregistered	Partial	Moderate
2	Artefact scatter (surface)	Registered	Partial	Moderate
9	Artefact scatter (surface and subsurface)	Unregistered	Partial	Moderate
3	Artefact scatter (surface and subsurface)	Registered	Partial	Moderate

9.2.2.4 Moderate Impact

Moderate impact is typically associated with values that have a moderate significance (artefact scatters and LDADs) that are completely intersected by the proposed infrastructure (n=6). There are also four artefact scatters of high significance that are partially intersected by the Project, and as such the impact has been determined to be moderate. Therefore, there are 10 Aboriginal Places ranging from high to moderate significance that have been assessed and the impact has been determined to be moderate (refer to Table 9-7).

Table 9-7: Assessment of Aboriginal Places that have moderate associated impacts within the Project Land.

Quantity	Aboriginal Place Type	Status	Impact of design	Significance Ranking
1	LDAD (surface)	Unregistered	Complete	Moderate
1	Artefact scatter (surface)	Unregistered	Complete	Moderate
1	Artefact scatter (surface)	Unregistered	Partial	High
4	Artefact scatter (subsurface)	Unregistered	Complete	Moderate
1	Artefact scatter (subsurface)	Unregistered	Partial	High
1	Artefact scatter (surface and subsurface)	Unregistered	Partial	High
1	Artefact scatter (surface) and earth deposit	Unregistered	Partial	High

9.2.2.5 High Impact

The Project is assessed to have a high impact on 13 Aboriginal cultural heritage values that have been assessed to have a high to very high significance. These are listed in Table 9-8, and include one CMT (scarred tree), six artefact scatters (one of which is associated with a hearth) and six areas of cultural importance (cultural landscapes) that were identified during completion of the CVAs by the RAP groups.

Table 9-8: Assessment of Aboriginal Places that have high associated impacts within the Project Land.

Total Number	Aboriginal Place Type	Status	Impact of design	Significance Ranking
1	CMT (Scarred Tree)	Unregistered	Complete	High
1	Artefact scatter (subsurface knapping floor)	Unregistered	Partial	Very high
1	Artefact scatter (surface and subsurface knapping floor)	Unregistered	Partial	Very high
2	Artefact scatter (surface and subsurface)	Unregistered	Partial	Very high
1	Artefact scatter (subsurface) with associate cultural landform	Unregistered	Partial	Very high
6	Cultural landscapes	Unregistered	Partial	Very high
1	Hearth and associated artefact scatter	Unregistered	Partial	Very high

9.2.2.6 Severe Impact

The Project is assessed to have no severe impacts on Aboriginal cultural heritage values.

9.2.3 Magnitude of impact

Table 9-9 presents the total number of known (previously and newly recorded) Aboriginal cultural heritage values in relation to the overall magnitude of the expected impact on them. This is based on a combination of fieldwork data, CVA recommendations, and register searches conducted at the time of this assessment. As discussed above, the nature and amount of the fieldwork data evaluated for each Study Area is variable and for Study Area 5 does not include complex assessment results.

Nil and low impact ratings, as defined in Table 5-5, are the most commonly occurring impacts on Aboriginal cultural heritage values for the Project. Where impacts have been assessed to be nil, they have not been considered further in Section 9.2. However, values with nil direct impacts have potential for indirect residual impacts and these are considered in Section 9.3.2 and Section 9.4.2.

By calculating a non-weighted statistical median of all Aboriginal cultural heritage values, the overall impact rating is low. However, it is important to recognise that this assessment does not comparatively weight the significance of a value within each category. For example, in Table 9-9 a single low impact on an Aboriginal cultural heritage value is given the same weight as a single severe impact on an Aboriginal cultural heritage value. Through applying a weighted average, a more accurate representation of impacts can be ascertained, as the relative significance of each Aboriginal Place is considered and contributed to the final impact rating. To define the impact ranking to Aboriginal cultural heritage values for the Project more accurately, a sample weighted median has been used. That is, low impact has been given a weighted ranking of '1', moderate impact has been given a weighted ranking of '2', high impact has been given a weighted ranking of '3', and severe impact has been given a weighted ranking of '4'. By categorising impacts within this impact assessment from low to severe, this assessment recognises that not all Aboriginal cultural heritage values are the same as their scientific, social, historical and spiritual significance varies. The median was chosen as it best represents the central tendency of a dataset and reduces the influence of outliers. This is represented in Table 9-10. The assessment rating is derived from the progressive weighted totals, where the median sits between 52-73 in the ranking scores column in Table 9-10. These results indicate a moderate level of impact on Aboriginal cultural heritage values (both tangible and intangible) for the Project.

Table 9-9: Overall impact for known Aboriginal cultural heritage values for the Project. Note: unweighted values.

	Impact			
	Low	**Moderate**	**High**	**Severe**
Previously registered Places	4	1	N/A	N/A
Places derived from Aboriginal cultural heritage assessments	47	10	13	0
Total	51	11	13	0
Progressive Total	51	62	75	-
Ranking Scores	0-51	52-62	63-75	-
Median	37.5			
Assessment: Overall impact	**Low**			

Table 9-10: Weighted total, showing calculation and resulting median for moderate level of overall impact known Aboriginal cultural heritage values for the Project.

	Low	**Moderate**	**High**	**Severe**
Total	51	11	13	0
Weighted Ranking	1	2	3	4
Weighted Total	51	22	39	0
Progressive Total	51	73	112	-

	Low	Moderate	High	Severe
Ranking Scores	0-51	52-73	74-112	-
Median	56			
Assessment: Overall impact	**Moderate**			

9.2.3.1 Summary of Predictive Statement and Results to Date

As CHMP investigations for the Project are ongoing, this assessment of impact magnitude is not inclusive of all values that may be present. This is particularly true for Areas 4, 5 and 6, for which CHMP fieldwork will be completed as access becomes available. However, adequate field assessments have already been conducted to inform the impact assessment, noting that well-informed inferences and conclusions can be made based on the wealth of data that has been collected both in the field, in desktop investigations (including the predictive model [refer to Section 7]), and during the CVAs. This dataset provides a solid foundation to understand the scale of impact to Aboriginal cultural heritage values, that can be extended across the Study Areas.

The Project covers an extensive transect of western Victoria; running through a number of different geological, ecological, topographical and climatic areas. In addition, the people who occupied these landscapes were not a homogenous population but had different spiritual and social systems that influenced the land use on their Country. As a result, how people used this landscape is also not equal and the Project findings show this variation along its length.

9.2.3.1.1 Summary of results to date

CHMPs investigations for the Project is largely complete for Area 1 (BGLCAC). Research for this area emphasises the importance of the Wimmera River and its tributaries for past Aboriginal occupation. All Aboriginal heritage identified during the assessments for the Project in this area can be associated with a water drainage. Emphasising this point the CVA assessments with BGLCAC have identified an important cultural landscape along the Wimmera River and its role in their past land usage. Stone artefacts associated with the landform are almost uniformly made of quartz and this dominance continues in Areas 2, 3 and 4. CMTs (scarred trees) have been found in this area in higher numbers than some other areas, with mounds and hearths also noted in the area during the desktop assessment.

An additional cultural landscape has been identified by BGLCAC along elevated terrains and ridgelines within the Pyrenees Ranges. It was reported during the CVA that this landform was an important trade route. BGLCAC have also expressed special efforts be made to protect mature trees, waterways and native vegetation.

Desktop reviews highlight the potential for mortuary ritual of secondary burial in hollow trees in western Victoria. While these have not been identified to date during this Project there remains the potential for them to occur in the geographic area.

CHMP investigations are also largely complete for Area 2 (EMAC). Area 2 is also associated with landscapes along the Wimmera River although through more undulating topography than Area 1. Cultural material and other Aboriginal Places have been identified more on elevated plains and within the foothills of the Pyrenees Range than other landforms with small unnamed waterways, generally tributaries of the Wimmera River in proximity.

EMAC chose not to provide details to the CVA regarding tangible and intangible heritage in this portion of the activity.

Much of the Goldfield bioregion which makes up parts of Areas 2, 3, and 4 has been impacted by nineteenth century mining practices. In these areas there is a loss of topsoil and erosion as a result of land clearance. As such the potential to identify in situ Aboriginal Places around historic gold workings is reduced. Downstream of these mining areas sludge can be present, and this may also obscure the presence of Aboriginal heritage within the depth of impact of this Project.

Area 3 (Non-RAP – BGLCAC, EMAC, DJAARA) is located between the drainages of the Wimmera River and Sandy Creek and CHMP work is largely complete for this area also. Aboriginal Places were identified through a variety of landforms in this area including low rises adjacent to waterways, elevated plains and mid-slopes. A Place has also been identified around 500m from current drainage channels. While EMAC elected not to contribute to the CVA for Area 3, both BGLCAC and DJAARA identified the importance of the cultural landscape of the Wimmera River.

Area 4 (DJAARA) is the largest of the six Study Areas and crosses through the Goldfields, Volcanic Plain and Uplands bioregions. In the Goldfields bioregion research for the CHMP process is largely complete and Aboriginal Places appear to be associated with defined waterways. In the western section of the Volcanic Plain bioregion, Aboriginal Places have been identified in more sheltered lower lying areas. Water drainage through this landscape is inefficient as a result of its volcanic heritage and Aboriginal Places are not always close to modern water drainage alignments.

From the western portion of Area 6 (WWCHAC) through to the eastern half of Area 4 (DJAARA), there has been a lack of land access due to OH&S risks associated with unsafe vehicle access or landholder objection. As a result, the predictive statements are largely based on the predictive modelling and desktop research rather than fieldwork. While fieldwork has occurred in some areas it has been extremely limited.

Taking into account the desktop research, predictive statements, predictive modelling and the results of the fieldwork undertaken where possible, it is expected that the use of the Volcanic Plain bioregion will continue to have been occupied in the east much that same as it was in the West in DJAARA country. Well drained sheltered areas next to wetlands and water drainages should be seen as areas of importance. Into the Uplands bioregion where there were better defined drainages, and more tree cover land usage may become more consolidated around high flat ground along waterways. Through this area, a gradual increase in the presence of silcrete and quartzite artefacts will be noted as the Project alignment extends further to the east. The shift from occupation of high ground to more sheltered areas in Area 4 has been concluded to be due to being more exposed to climate on high ranges of the Dividing Range.

The DJAARA CVA identified the Wimmera and Avoca River crossings along with Hepburn Lagoon as being landscapes of cultural significance to them.

Area 5 (WTOAC) is where the least amount of assessment has occurred for the CHMP of the six Study Areas. Land access constraints and WTOAC agreed methodology of completing all standard assessment before proceeding to complex assessment has held back this research. During survey fieldwork that has been completed in Area 5, 52 artefacts have been identified overlooking the Moorabool River and six CMTs generally in the vicinity of waterways. Identified areas of PAS include escarpments and areas overlooking waterways.

While the details of the CVA discussions have been redacted by WTOAC, five areas have been identified as having significance. These are, waterways (in particular along the Werribee River), elevated areas, areas of identified cultural or archaeological sensitivity, vegetation and fauna.

Area 6 (WWCHAC) presents with other landforms that are significant. Collapsed lava tubes, or stoney rises, have been identified to contain cultural material during the course of the Project in the east of the Study Area. High flat ground overlooking water sources have been identified as being important focal points for Aboriginal activity. Well drained floodplains away from water have also been observed to contain Aboriginal Places.

Desktop assessments on the eastern and central portions of the Study Area note the importance of stone arrangements, but more intense post contact agricultural practices may have impacted the frequency of these Places, likewise scarred trees, hearths and mounds.

Therefore, while the CHMP standard assessments (ground surveys) and complex assessments (sub-surface investigations) are not yet complete, an understanding of how Aboriginal people occupied Study Area 6 through the respective landforms, bioregions, and socio-cultural areas has been developed. Unknown Aboriginal cultural heritage values may be identified within the Project Land following this assessment. Statutory authorisation for the management of any such unknown values in accordance with the conditions of the CHMPs is granted by the relevant authority (RAP or FP-SR).

Appendix N provides an addendum to this report, capturing fieldwork and CHMP updates from the 6 June 2024 to 18 February 2025. This has been added to provide additional information and greater context for the assessment of impacts on Aboriginal cultural heritage values for the Project. The inclusion of the additional fieldwork results does not alter the magnitude of impact ranking – there remains a moderate level of impact on Aboriginal cultural heritage values (both tangible and intangible) for the Project. Furthermore, the results do not significantly alter the understanding of the Project's impact to Aboriginal cultural heritage values.

9.2.3.1.2 Predictive statements

Following a search of the VAHR, a review of literature and archaeological reports relevant to the Study Areas and geographic region, and a review of the fieldwork undertaken to date, the following predictive statements are made for Aboriginal Places in areas that have not been subject to field assessment:

- Although numerous, waterways may not always reflect their original alignment as the result of natural deviations through long-term changes in hydrology and of non-Aboriginal settlement and the goldrush period. Elevated landforms within proximity to prior watercourses have a moderate-high potential for Aboriginal cultural heritage to be present within the Study Areas;
    - In the west, waterways are associated with lower-lying plain landforms. Plateaux and rises begin further east in the Pyrenees Ranges goldfields bioregion. Moving eastwards into the Volcanic Plain bioregion, waterways are associated with plain environments and well-drained areas, which may have been a focus for Aboriginal occupation. In the uplands bioregion, waterways are again associated with a more undulating topography, before returning to the volcanic plain at the eastern end of the study area. In this eastern end of the study area, stony rises have also been shown to be associated with Aboriginal occupation.
- The most likely Aboriginal Place type to be present in areas that have not been subject to field assessment would be artefact scatters (including LDADs) throughout all Study Areas. Earth features and quarries may also be present in association with these scatters;
- Within the geographic region, artefact scatters are predicted to be found on rises and hill slopes, hill crests and ridgelines, and terraces, associated with well-drained landforms generally associated with water courses. This may vary throughout the alignment; in some areas climatic conditions may have made these areas unpleasant and more sheltered locations may have been sought for camp sites;
- Artefact scatters will likely consist of quartz artefacts in the west of the study area with a gradual transition to a silcrete dominated lithology in the east. Other raw materials may include coastal flint, quartzite, tachylite, chert, volcanic stone, greenstone, and siltstone. The presence of rarer stones may indicate trade routes;
- Technological types of artefacts include flakes, cores, axes, adzes and mortars. Examples of the Australian small tool tradition will be present through the study area;
- Earth features, stone arrangements and mounds may occur in areas that have not been subject to field assessment where there have been lower levels of ground disturbance;
- Scarred trees are likely to occur in areas that have not been subject to field assessment where mature remnant native vegetation still exists within proximity to prior watercourses;
- In the western Study Areas, mortuary trees are likely to occur in areas that have not been subject to field assessment where mature native gum trees are several hundred years or older, with suitable hollows present. Land clearances will have reduced the chance of encountering these Places;
- Site visibility will be heavily influenced by ground exposure and vegetation cover;
- There is potential for post-contact Aboriginal cultural heritage material to be present in areas that have not been subject to field assessment as Aboriginal people continued to use the landscape during the goldrush period. However, the severe alteration of the landscape as a result of gold mining will impact on the potential to record these sites;
- The level of previous ground disturbance will determine the likelihood of recording intact Aboriginal Places in areas that have not been subject to field assessment, especially where the waterways and surrounding

landscapes have been impacted by gold mining. Based on research by Lawrence *et al.* (2018), the following assumptions for Aboriginal Places in areas that have not been subject to field assessment may be made:

- The potential for *in situ* Aboriginal cultural heritage is low where:
  - The ground has been removed as part of the gold mining process, such as sluicing;
  - Sluicing has mixed Aboriginal cultural heritage in with sludge, and has been moved downstream having been flushed along a watercourse; and
  - Dredging has occurred, artefacts may have been discharged as part of the sludge, or retained amongst on-site gravels and used to backfill the dredging pond.
- The potential for *in situ* Aboriginal cultural heritage is moderate-high within the study area where:
  - The sludge has created new stratigraphic layers on the floodplains, capping any artefactual material or prior landforms; and
  - The relocation and channelising of waterways may have preserved the original waterway channels and surrounding landforms, although the original waterway may no longer be extant.

9.2.3.1.3 Key considerations

Sections 9.2.3.1.1 and 9.2.3.1.2 detail broader trends in the data (both desktop and field assessments) relating to Aboriginal cultural heritage values in the Project Land. This knowledge is used to extrapolate predictive statements to further our understanding of likely Aboriginal cultural heritage values in areas that have yet to undergo fieldwork. Further to this, intangible Aboriginal heritage values are well developed (through the completion of the CVAs and extensive consultation with the RAPs and TOs) for this report. Although the exact nature of the Aboriginal Places can only be fully defined upon the completion of the fieldwork programs, predictive statements indicate that fieldwork will likely identify Aboriginal Places of similar nature and form to what has been presented in this Impact Assessment. As such, though the number of Aboriginal cultural heritage values will increase, it is expected that the magnitude of impact (presented in Section 9.2.3) for the Project post completion of the CHMP fieldwork programs will not increase.

The key considerations for Aboriginal cultural heritage regarding impact magnitude can be summarised as:

- Pre-construction site investigations for terminal stations, transmission lines, and ancillary activities potentially impacting known Aboriginal Places, unknown Aboriginal Places or intangible heritage, or unknown Aboriginal Ancestral Remains.
- Construction of terminal stations, transmission lines, and ancillary activities potentially impacting known Aboriginal Places, unknown Aboriginal Places or intangible heritage, or unknown Aboriginal Ancestral Remains.
- Vegetation clearance potentially impacting known Aboriginal Places or unknown Aboriginal Places.
- Excavation of footings below finish surface level leading to potential disturbance to Aboriginal Places.
- Decommissioning activities (including dismantling and removal of transmission line, towers and terminal stations, and easement restoration and rehabilitation) potentially impacting known Aboriginal Places or unknown Aboriginal Places.

The key issues, mitigation measures, and residual impacts in the Impact Assessment for each stage of the Project are provided in Sections 9.3, 9.4, and 9.5. They have been structured in such a way that all relevant and potential impacts on Aboriginal cultural heritage are addressed, where possible.

9.3 Construction impact assessment

The main impacts to Aboriginal cultural heritage are as part of the construction stage of the Project. Key issues and risks and mitigation measures for these impacts are detailed in Section 9.3.1. Residual impacts, defined here as the final impacts which occur after mitigation measures have been implemented, are then described for Aboriginal cultural heritage impacted by the Project in Section 9.3.2.

9.3.1 Key issues and mitigation

During the construction stage, the key issues and risks to known and unknown Aboriginal cultural heritage values and corresponding mitigation measures are shown in Table 9-11.

Table 9-11: The key issues and risks associated with construction activities, along with mitigation measures

Key Issues and Risks	Mitigation measures

Known cultural heritage values
▪ Pre- Construction site investigations for terminal stations, transmission lines and ancillary activities impact on known Aboriginal cultural heritage values, including both tangible and intangible heritage.
▪ Construction of terminal stations, transmission lines and ancillary activities - impact on known Aboriginal cultural heritage values, including both tangible and intangible heritage.
▪ Vegetation clearance as required - impacts on known Aboriginal cultural heritage values, including both tangible and intangible heritage, these might include loss of cultural connection or loss of Aboriginal Places.
▪ Proposed transmission route crossing waterways and specifically major rivers that hold cultural values to the RAP and TO community - impacts on intangible Aboriginal cultural heritage values, which might include loss of cultural connection to a landscape feature.
	▪ Progressive refinement of the design may occur through micro-siting, as fieldwork progresses to avoid or minimise impacts to heritage values. To enable this, the heritage specialists have and will continue to provide AusNet with constraints mapping and recommendations for design refinement or design infrastructure relocation.
	▪ CHMPs will be developed in partnership with RAPs, TOGs and FP-SR and activities will be carried out in accordance with the Aboriginal Heritage Act and Aboriginal Heritage Regulations.
	  ▪ Known Aboriginal Places and areas of sensitivity will be mapped and avoided during design as far as practicable.
	  ▪ Where the extent, nature, and significance of known Aboriginal Places cannot be determined through desktop assessment or field survey alone, complex assessment has been and will continue to be conducted in accordance with FP-SR's 'Practice Note - Subsurface testing'.
	  ▪ The findings and recommendations of Aboriginal cultural heritage values assessments to be considered where practicable to protect broad and specific intangible cultural heritage values expressed by the RAP and TO community (including relevant oral history and broader values incorporating landscapes, biodiversity and contemporary values, mapped and those values avoided during detailed design as far as practicable).
	▪ Where practicable, consideration of recommendations made by Elders and TOs (as part of CVA) include:
	  ▪ Efforts should be made to avoid and protect waterways (and surrounding environs); areas of archaeological and cultural sensitivity; hilltops, stony rises, and high points; old trees, grasslands, and remnant vegetation; and all native fauna, especially the platypus, Wedge-tail eagle, koala, and gang-gang cockatoo. These each retain cultural values.
	  ▪ Wadawurrung TOs further note that where ground disturbance is unavoidable, then all investigations and mitigation measures must employ the WTOAC River Terrace Excavation policy before works are undertaken in these areas, with no works or ground disturbing activities on or near the Werribee River pending an independent cultural values recording of that area.
	  ▪ Jadawadjali Elders note the preferred location for infrastructure is on flatter farmland or along roadsides that have already been degraded ecologically.
	  ▪ Wurundjeri Woi-wurrung Elders specifically requested they be consulted prior to impacts to the rise west of the Lerderderg River.
	  ▪ Wadawurrung TOs also recommend infrastructure be underbored beneath the Western Freeway to protect native animals and their habitats, especially birdlife.
	  ▪ Jadawadjali and Wurundjeri Woi-wurrung Elders recommended all mature trees within the Proposed Route be avoided and protected from harm during the Project's construction activities. Where a tree is removed, it should be replaced by a new tree located in a nearby area

Key Issues and Risks	Mitigation measures
	as a vegetation offset, and tree removal and replanting should be discussed with TOs. ▪ TOs wish to be actively consulted during the Project's construction. In particular, they should be consulted regarding any construction activities that impact waterways and surrounding areas. ▪ Wadawurrung TOs wish to investigate the possibility of obtaining water rights for Devils Creek, the East and West Moorabool River, and the Werribee River and be engaged to assess and improve the health of the Moorabool River (East and West Branch), the Werribee River, and Devils Creek. ▪ Cultural burning, revegetation, pest management, and rewilding initiatives should be employed. The Project should involve TOs in finding ways to improve land management and restore healthy landscapes and ecosystems. This includes revegetation activities undertaken by the Project, particularly around waterways. ▪ Wadawurrung TOs specifically request rehabilitation works be undertaken by WTOAC's Natural Resource Management team on Quoin Hill and around Devils Creek and Musk Creek. ▪ Wurundjeri Woi-wurrung Elders recommend consultation with the WWCHAC Narrap Unit prior to construction to discuss opportunities for native revegetation and environmental management. ▪ Wurundjeri Woi-wurrung recommended Elders be consulted prior to any impacts at Mt Kororoit and Kororoit Creek. ▪ Management and protection of intangible values identified through the CVAs can be discussed and negotiated through the CHMP process where practicable. ▪ CHMPs contain conditions and contingencies for the management and protection where possible of specific tangible and intangible Aboriginal cultural heritage values. CHMPs contain conditions for the management and protection where possible of known Aboriginal cultural heritage values, in accordance with FP-SR's 'Guide to Preparing a Cultural Heritage Management Plan' and 'Guide for Drafting Enforceable Conditions and Contingency Plans'. These may include delineation of works (e.g., fencing/works exclusion zones). ▪ CHMPs contingencies include procedures for the discovery of high significance values such as Aboriginal Ancestral Remains found during any activity, in accordance with FP-SR's 'Guide to Preparing a Cultural Heritage Management Plan' and 'Guide for Drafting Enforceable Conditions and Contingency Plans', including stop work instructions. ▪ Where possible, avoid impacting on known Aboriginal cultural heritage values identified for the Project. This is particularly relevant to high and very high scientific significance places.
Unknown cultural heritage values ▪ Pre-construction site investigations for terminal stations, transmission lines and ancillary activities informed the design - impact on unknown Aboriginal Ancestral Remains. ▪ Pre-construction site investigations for terminal stations, transmission lines, and ancillary activities informed the design - impact on unknown Aboriginal cultural heritage values, including both tangible and intangible heritage. ▪ Construction of terminal stations, transmission lines and ancillary activities - impact on unknown Aboriginal Ancestral Remains.	▪ CHMPs will be developed in partnership with RAPs, TOs, and FP-SR, of which has contingencies and step-by-step requirements for the discovery of Aboriginal cultural heritage onsite for the Project. ▪ CHMPs contain contingencies including procedures for the discovery of Aboriginal Ancestral Remains found during any activity in accordance with FP-SR's 'Guide to Preparing a Cultural Heritage Management Plan', including stop work instructions. ▪ Activities associated with the Project, including preparatory activities will not commence until the CHMP for the relevant RAP, TO and FP-SR area has been approved by the evaluating authority, and any management condition required to be met prior to commencement has met compliance. ▪ Activities will be carried out in accordance with relevant legislation and other statutory requirements.

Key Issues and Risks	Mitigation measures
▪ Construction of terminal stations, transmission lines and ancillary activities - impact on unknown Aboriginal cultural heritage values, including both tangible and intangible heritage. ▪ Vegetation clearance as required - impacts on unknown Aboriginal cultural heritage values, including both tangible and intangible heritage, these might include loss of cultural connection or loss of Aboriginal Places.	▪ Consideration of CVA recommendations to protect broad and specific intangible cultural heritage values expressed by the RAP and TO community. For example, Jadawadjali Elders and Wadawurrung TOs noted their communities strive for greater care of the environment, managing endangered animal and plant species, re-introduction of native vegetation, reducing environmental impacts from construction activities, and a desire to reintroduce Aboriginal fire management in appropriate areas. ▪ Where possible, avoid impacting on previously unknown Aboriginal cultural heritage values identified during any redesign for the Project. This is particularly relevant to high and very high scientific significance places. ▪ The Project should engage with Registered Aboriginal Parties or TO groups to provide economic and cultural opportunities for the operational stage of the Project.
Known cultural heritage values -Access tracks ▪ Pre- Construction site investigations for access tracks between and surrounding the transmission lines - impact on known Aboriginal cultural heritage values, including both tangible and intangible heritage. ▪ Construction of access tracks - impact on known Aboriginal cultural heritage values, including both tangible and intangible heritage. ▪ Vegetation clearance as required - impacts on known Aboriginal cultural heritage values, including both tangible and intangible heritage, these might include loss of cultural connection or loss of Aboriginal Places.	▪ Existing access tracks are considered to have nil impact on Aboriginal cultural heritage. ▪ Progressive refinement of the design may occur through micro-siting, as fieldwork progresses to avoid or minimise impacts to heritage values. To enable this, the heritage specialists provide AusNet with constraints mapping and recommendations for design refinement or design infrastructure relocation. ▪ CHMPs will be developed in partnership with RAPs, TOGs and FP-SR and activities will be carried out in accordance with the Aboriginal Heritage Act and Aboriginal Heritage Regulations. ▪ Known Aboriginal Places and areas of sensitivity have been and will continue to be mapped and avoided during design as far as practicable. ▪ Where the extent, nature, and significance of known Aboriginal Places cannot be determined through desktop assessment or field survey alone, complex assessment has been and will continue to be conducted in accordance with FP-SR's 'Practice Note - Subsurface testing'. ▪ The findings and recommendations of Aboriginal cultural heritage values assessments to be considered where practicable to protect broad and specific intangible cultural heritage values expressed by the RAP and TO community (including relevant oral history and broader values incorporating landscapes, biodiversity, and contemporary values, mapped and those values avoided during detailed design as far as practicable). ▪ Management and protection of intangible values identified through the CVAs can be discussed and negotiated through the CHMP process where practicable. ▪ CHMPs contain conditions and contingencies for the management and protection where possible of specific tangible and intangible Aboriginal cultural heritage values. CHMPs contain conditions for the management and protection where possible of known Aboriginal cultural heritage values, in accordance with FP-SR's 'Guide to Preparing a Cultural Heritage Management Plan' and 'Guide for Drafting Enforceable Conditions and Contingency Plans'. These may include delineation of works (e.g., fencing/works exclusion zones). ▪ CHMPs contingencies include procedures for the discovery of high significance values such as Aboriginal Ancestral Remains found during any activity, in accordance with FP-SR's 'Guide to Preparing a Cultural Heritage Management Plan' and 'Guide for Drafting

Key Issues and Risks	Mitigation measures
	Enforceable Conditions and Contingency Plans', including stop work instructions. ▪ Where possible, avoid impacting on known Aboriginal cultural heritage values identified for the Project. This is particularly relevant to high and very high scientific significance places.
Unknown cultural heritage values – Access tracks ▪ Pre- Construction site investigations for access tracks between and surrounding the transmission lines - impact on unknown Aboriginal Ancestral Remains. ▪ Pre-construction site investigations for areas access tracks - impact on unknown Aboriginal cultural heritage values, including both tangible and intangible heritage. ▪ Construction of access tracks - impact on unknown Aboriginal Ancestral Remains. ▪ Construction of access tracks - impact on unknown Aboriginal cultural heritage values, including both tangible and intangible heritage. ▪ Vegetation clearance as required - impacts on unknown Aboriginal cultural heritage values, including both tangible and intangible heritage, these might include loss of cultural connection or loss of Aboriginal Places.	▪ CHMPs will be developed in partnership with RAPs, TOs, and FP-SR, of which has contingencies and step-by-step requirements for the discovery of Aboriginal cultural heritage onsite for the Project. ▪ CHMPs contain contingencies include procedures for the discovery of Aboriginal Ancestral Remains found during any activity in accordance with FP-SR's 'Guide to Preparing a Cultural Heritage Management Plan', including stop work instructions. ▪ Activities associated with Project, including preparatory activities will not commence until the CHMP for the relevant RAP, TO and FP-SR area has been approved by the evaluating authority, and any management condition required to be met prior to commencement has met compliance. ▪ Activities will be carried out in accordance with relevant legislation and other statutory requirements. ▪ Consideration of CVA recommendations to protect broad and specific intangible cultural heritage values expressed by the RAP and TO community as per terminal stations, transmission lines and other ancillary activities.
Known cultural heritage values – Laydown areas and workforce accommodation facilities ▪ Pre- Construction site investigations for laydown areas and workforce accommodation facilities at intermediate locations between the terminal stations (in the vicinity of Ballan and Lexton) - impact on known Aboriginal cultural heritage values, including both tangible and intangible heritage. ▪ Construction of laydown areas and workforce accommodation facilities - impact on known Aboriginal cultural heritage values, including both tangible and intangible heritage. ▪ Vegetation clearance as required - impacts on known Aboriginal cultural heritage values, including both tangible and intangible heritage, these might include loss of cultural connection or loss of Aboriginal Places.	▪ Laydown areas within existing terminal stations (Bulgana and Sydenham) are considered to have nil impact on Aboriginal cultural heritage. ▪ Progressive refinement of the design may occur through micro-siting, as fieldwork progresses to avoid or minimise impacts to heritage values. To enable this, the heritage specialists have and will continue to provide AusNet with constraints mapping and recommendations for design refinement or design infrastructure relocation. ▪ CHMPs will be developed in partnership with RAPs, TOGs and FP-SR and activities will be carried out in accordance with the Aboriginal Heritage Act and Aboriginal Heritage Regulations. ▪ Known Aboriginal Places and areas of sensitivity have been and will continue to be mapped and avoided during design as far as practicable. ▪ Where the extent, nature, and significance of known Aboriginal Places cannot be determined through desktop assessment or field survey alone, complex assessment has been and will continue to be conducted in accordance with FP-SR's 'Practice Note - Subsurface testing'. ▪ The findings and recommendations of Aboriginal cultural heritage values assessments to be considered where practicable to protect broad and specific intangible cultural heritage values expressed by the RAP and TO community (including relevant oral history and broader values incorporating landscapes, biodiversity and contemporary values, mapped and those values avoided during detailed design as far as practicable). ▪ Management and protection of intangible values identified through the CVAs can be discussed and negotiated through the CHMP process where practicable. ▪ CHMPs contain conditions and contingencies for the management and protection where possible of specific tangible and intangible Aboriginal

Key Issues and Risks	Mitigation measures
	cultural heritage values. CHMPs contain conditions for the management and protection where possible of known Aboriginal cultural heritage values, in accordance with FP-SR's 'Guide to Preparing a Cultural Heritage Management Plan' and 'Guide for Drafting Enforceable Conditions and Contingency Plans'. These may include delineation of works (e.g., fencing/works exclusion zones). ▪ CHMPs contingencies include procedures for the discovery of high significance values such as Aboriginal Ancestral Remains found during any activity, in accordance with FP-SR's 'Guide to Preparing a Cultural Heritage Management Plan' and 'Guide for Drafting Enforceable Conditions and Contingency Plans', including stop work instructions. ▪ Where possible, avoid impacting on known Aboriginal cultural heritage values identified for the Project. This is particularly relevant to high and very high scientific significance places.
Unknown cultural heritage values – Laydown areas and workforce accommodation facilities ▪ Pre-construction site investigations for laydown areas (Sydenham Terminal Station and Bulgana Terminal Station and the laydown areas and workforce accommodation facilities at Lexton and Ballan) informed the design - impact on unknown Aboriginal Ancestral Remains. ▪ Pre-construction site investigations for laydown areas and workforce accommodation facilities - impact on unknown Aboriginal cultural heritage values, including both tangible and intangible heritage. ▪ Construction of laydown areas and workforce accommodation facilities - impact on unknown Aboriginal Ancestral Remains. ▪ Construction of laydown areas and workforce accommodation facilities - impact on unknown Aboriginal cultural heritage values, including both tangible and intangible heritage. ▪ Vegetation clearance as required - impacts on unknown Aboriginal cultural heritage values, including both tangible and intangible heritage, these might include loss of cultural connection or loss of Aboriginal Places.	▪ CHMPs will be developed in partnership with RAPs, TOs, and FP-SR, of which has contingencies and step-by-step requirements for the discovery of Aboriginal cultural heritage onsite for the Project. ▪ CHMPs contain contingencies include procedures for the discovery of Aboriginal Ancestral Remains found during any activity in accordance with FP-SR's 'Guide to Preparing a Cultural Heritage Management Plan', including stop work instructions. ▪ Activities associated with Project, including preparatory activities will not commence until the CHMP for the relevant RAP, TO and FP-SR area has been approved by the evaluating authority, and any management condition required to be met prior to commencement has met compliance. ▪ Activities will be carried out in accordance with relevant legislation and other statutory requirements ▪ Consideration of CVA recommendations to protect broad and specific intangible cultural heritage values expressed by the RAP and TO community as per terminal stations, transmission lines and other ancillary activities.
Known cultural heritage values - distribution line crossovers ▪ Pre- Construction site investigations distribution line crossovers and ancillary activities impact on known Aboriginal cultural heritage values, including both tangible and intangible heritage. ▪ Construction of distribution line crossovers - impact on known Aboriginal cultural heritage values, including both tangible and intangible heritage. ▪ Vegetation clearance as required - impacts on known Aboriginal cultural heritage values, including both tangible and intangible heritage, these might include loss of cultural connection or loss of Aboriginal Places.	▪ Progressive refinement of the design may occur through micro-siting, as fieldwork progresses to avoid or minimise impacts to heritage values. To enable this, the heritage specialists have and will continue to provide AusNet with constraints mapping and recommendations for design refinement or design infrastructure relocation. CHMPs will be developed in partnership with RAPs, TOGs and FP-SR and activities will be carried out in accordance with the Aboriginal Heritage Act and Aboriginal Heritage Regulations. ▪ Known Aboriginal Places and areas of sensitivity will be mapped and avoided during design as far as practicable. ▪ Where the extent, nature, and significance of known Aboriginal Places cannot be determined through desktop assessment or field survey alone, complex assessment will be conducted in accordance with FP-SR's 'Practice Note - Subsurface testing'. ▪ The findings and recommendations of Aboriginal cultural heritage values assessments to be considered where practicable to protect

Key Issues and Risks	Mitigation measures
	broad and specific intangible cultural heritage values expressed by the RAP and TO community (including relevant oral history and broader values incorporating landscapes, biodiversity and contemporary values, mapped and those values avoided during detailed design as far as practicable). ▪ Management and protection of intangible values identified through the CVAs can be discussed and negotiated through the CHMP process where practicable. ▪ CHMPs contain conditions and contingencies for the management and protection where possible of specific tangible and intangible Aboriginal cultural heritage values. CHMPs contain conditions for the management and protection where possible of known Aboriginal cultural heritage values, in accordance with FP-SR's 'Guide to Preparing a Cultural Heritage Management Plan' and 'Guide for Drafting Enforceable Conditions and Contingency Plans'. These may include delineation of works (e.g., fencing/works exclusion zones). ▪ CHMPs contingencies include procedures for the discovery of high significance values such as Aboriginal Ancestral Remains found during any activity, in accordance with FP-SR's 'Guide to Preparing a Cultural Heritage Management Plan' and 'Guide for Drafting Enforceable Conditions and Contingency Plans', including stop work instructions. ▪ Where possible, avoid impacting on known Aboriginal cultural heritage values identified for the Project. This is particularly relevant to high and very high scientific significance places.
Unknown cultural heritage values - distribution line crossovers ▪ Pre-construction site investigations for distribution line crossovers - impact on unknown Aboriginal Ancestral Remains. ▪ Pre-construction site investigations for distribution line crossovers - impact on unknown Aboriginal cultural heritage values, including both tangible and intangible heritage. ▪ Construction of distribution line crossovers - impact on unknown Aboriginal Ancestral Remains. ▪ Construction of distribution line crossovers - impact on unknown Aboriginal cultural heritage values, including both tangible and intangible heritage. ▪ Vegetation clearance as required - impacts on unknown Aboriginal cultural heritage values, including both tangible and intangible heritage, these might include loss of cultural connection or loss of Aboriginal Places.	▪ CHMPs will be developed in partnership with RAPs, TOs, and FP-SR, of which has contingencies and step-by-step requirements for the discovery of Aboriginal cultural heritage onsite for the Project. ▪ CHMPs contain contingencies include procedures for the discovery of Aboriginal Ancestral Remains found during any activity in accordance with FP-SR's 'Guide to Preparing a Cultural Heritage Management Plan', including stop work instructions. ▪ Activities associated with Project, including preparatory activities will not commence until the CHMP for the relevant RAP, TO and FP-SR area has been approved by the evaluating authority, and any management condition required to be met prior to commencement has met compliance. ▪ Activities will be carried out in accordance with relevant legislation and other statutory requirements. ▪ Consideration of CVA recommendations to protect broad and specific intangible cultural heritage values expressed by the RAP and TO community as per terminal stations, transmission lines and other ancillary activities.

9.3.2 Residual impacts

The application of the CHMPs across the Project will avoid impacts on, or reduce the likelihood or consequence of, known and unknown Aboriginal cultural heritage values. The residual impacts, which are the final impacts after the proposed mitigation measures have been implemented during the construction stage, are detailed further below. Impact mitigation measures will be put in place during consultation with the relevant RAP, TO Group and FP-SR as part of the CHMP process. As the CHMPs are still in progress, these mitigation measures are not yet defined for each Study Area.

Broader environmental management plans to minimise impact to ecological and hydrological values are discussed in detail within EES Technical Report A: Biodiversity Impact Assessment and in EES Technical Report T: Surface Water Impact Assessment. Based on the assessment in EES Technical Report A, residual impacts remain to 238.607ha of native vegetation, including 844 large canopy trees within patches and 213 scattered trees, and a residual impact remains for threatened flora (n=13) and fauna (n=24) species. Based on the findings of EES Technical Report T, residual impacts are considered minor for waterways in the Project Land. It is noted that where towers are located close to waterbodies (such as Merrimu reservoir), potential residual impacts and risks of longer-term erosion and sedimentation may occur regardless of management during the construction stage.

AusNet has also made a commitment to undertake consultation with each individual RAP/TO for the pre-construction, construction, operational and decommissioning stage of the Project to manage and protect broad and specific intangible cultural heritage values. As this consultation is also still in progress, the details of these agreements are not yet defined for each study area, although input from the RAP/TO groups will be a key factor in minimising residual impacts to environmental values that are captured in the CVAs.

9.3.2.1 Known Aboriginal cultural heritage values

Residual impacts remain to 75 known Aboriginal cultural heritage places and values in the Project Land. This includes five previously registered Aboriginal Places (comprising four low and one moderate impacts across three low and two moderate significance rankings) and the 70 newly identified places for this Project, not including the 10 Places impacted through discovery (comprising 47 low, 10 moderate, 13 high impacts across 23 low, 30 moderate, five high, and 12 very high significance rankings). There are no severe magnitude of impact ratings. In addition, values with nil direct impacts still have potential for indirect residual impacts. There are 43 known Aboriginal cultural heritage values that have been assessed to have nil direct impacts arising from the Project as they do not intersect any aspect of the Project design (i.e., tower, tower assembly area, laydown area, workforce accommodation facility, access track or distribution line crossover). Where possible, it is recommended the Project avoid impacting on known Aboriginal cultural heritage values identified. This is particularly relevant to high and very high scientific significance places, such as CMTs, some high density artefact scatters (for example, knapping floors), multi-component places (for example, artefact scatters and hearths), and cultural landscapes.

Mitigation measures described above will minimise the adverse effects on Aboriginal cultural heritage values, which include Aboriginal Places that will undergo archaeological salvage work prior to the commencement of the construction stage of the Project. By constructing the Project above ground and utilising cultural heritage assessments to inform an iterative design process, the Project has avoided and minimised the potential adverse effects as much as possible. For Aboriginal Places that cannot be avoided, sensitive and appropriate management conditions and salvage requirements will result in further knowledge of Aboriginal archaeology in the Project Land, thereby mitigating the adverse effects on these values.

For the development of the workforce accommodation facilities, the conditions of the draft Incorporated Document (including the preparation of a Construction Environmental Management Plan and unexpected find protocol), together with other management conditions required by the relevant CHMPs, will apply. The management conditions of the relevant CHMPs and other relevant EPRs apply to the use of the workforce accommodation facilities. With these measures in place, the residual impact is considered to be low.

9.3.2.2 Unknown Aboriginal cultural heritage values

In addition, residual impacts remain to intangible Aboriginal cultural heritage in the Project Land. These comprise impacts to known Aboriginal cultural heritage values, inclusive of six high magnitude of impact cultural landscapes within the Project Land. While the choice to use an above ground construction methodology reduces residual impact to tangible Aboriginal cultural heritage, it increases the potential for impact on intangible values related to visual sight lines and connections of places across Country as expressed by Aboriginal TOs in the CVAs. This outcome is, to some extent, unavoidable with this construction method but can be minimised through the EPRs and consultation process.

As noted earlier in this report, there is a risk that some of landscapes within the Project Land contain previously undiscovered Aboriginal Cultural Heritage values that might be found during further CHMP fieldwork work and during Project construction. Residual impact to very high significance places, such as burials, is unlikely as there have been no burial sites yet identified during the preparation of this assessment and as the large majority of Project design impacts are not located in landforms generally associated with this type of high significance site, such as within terraces beside watercourses, in dunes surrounding old lake beds, or in dune ridges. Any Aboriginal Ancestral Remains identified will be managed through the CHMP process and through consultation with the RAP/TOs. The completion of a CHMP and the implementation of appropriate management conditions and contingency responses to discoveries of new Aboriginal cultural heritage during construction manages the risk and minimises potential harm where possible.

Other potential impacts to Aboriginal cultural heritage values may arise from environmental factors such as surface water changes, bushfire risk or biodiversity impacts. For example, any vegetation clearance and management works during the construction of the Project that result in soil erosion or increased surface water runoff, may result in residual indirect impact to Aboriginal cultural heritage values. There also remains potential residual indirect impact to waterways and banks and associated intangible Aboriginal cultural heritage values, such as loss of TO water knowledge of the cultural landscape, through the alteration of drainage lines due to construction works.

9.4 Operations impact assessment

9.4.1 Key issues and mitigation

Operation of the Project is unlikely to further impact tangible Aboriginal cultural heritage, as no further ground disturbing activities are anticipated during operation beyond that which has occurred already during the construction stage. However, visual impacts on intangible Aboriginal cultural heritage values such as landscapes and landscape features are possible due to the ongoing presence of infrastructure. These issues and risks are listed in Table 9-12.

Table 9-12: The key issues and risks associated with operation activities, along with mitigation measures

Key Issues and Risks	Mitigation measures
▪ Operation of the Project - impact upon tangible Aboriginal cultural heritage values. ▪ Operation of the Project - impacts on intangible Aboriginal cultural heritage values identified as part of each CVA.	▪ Adherence to management conditions and contingency plans from CHMPs that will be developed in partnership with RAPs, TOGs and FP-SR and activities will be carried out in accordance with the Aboriginal Heritage Act and Aboriginal Heritage Regulations. ▪ The EES Technical Report A: Biodiversity Impact Assessment notes measures to reduce the risk of collision for native birds in specific areas of the Project Land, such as for Wedge-tailed Eagles at Mount Beckworth, that include the installation of collision risk reducing mechanisms such as vertical line marking (bird 'flappers'). ▪ The Landscape and Visual Impact Assessment notes measures taken to mitigate the Project's visual impacts, such as landscaping and screening with vegetation to mitigate impacts to intangible Aboriginal cultural heritage values and cultural landscapes from the presence of Project structures. ▪ Consideration of CVA recommendations to protect broad and specific intangible cultural heritage values expressed by the RAP and TO community. ▪ Recommendations made by Elders include: – TOs wish to be actively consulted during the Project's operation. – Cultural burning, revegetation, pest management, and rewilding initiatives should be employed. The Project should involve TOs in finding ways to improve land management and restore healthy landscapes and ecosystems. This includes revegetation activities undertaken by the Project, particularly around waterways.

Key Issues and Risks	Mitigation measures
	– The Project should engage with Registered Aboriginal Parties or TO groups to provide economic and cultural opportunities for the operational stage of the Project.

9.4.2 Residual impacts

As noted in section 9.3.2.1 for construction, residual impacts remain to 75 known Aboriginal cultural heritage in the Project Land. These Aboriginal cultural heritage values include 43 values that have been assessed to have nil direct impacts as they do not intersect any aspect of the Project design.

Low residual impact remains to tangible heritage as no ground disturbing works are anticipated during operation. Additionally, any vegetation or access control and management works are unlikely to be more extensive than work undertaken during the construction stage as no ground disturbing activities are anticipated during operation beyond vegetation management and clearance within the easement.

The operation of the Project will have an ongoing impact on intangible heritage, especially where structures are present within cultural landscapes with a high or very high significance ranking, such as the Pyrenees Ranges landscape (Area 1), Hepburn Lagoon (Area 4), Wimmera River (Areas 1 and 3), Avoca River (Area 4), Werribee River (Area 5), and Mount Kororoit and Kororoit Creek (Area 6) run through the area surrounding the Proposed Route. For example, DJAARA Elders expressed concern about the landscape and visual impacts of the Project, observing that large structures like transmission lines interfere with the natural and cultural meanings of Country simply by their presence. These values may be particularly impacted along waterways and major rivers that run through the area surrounding the transmission. However, impacts will be minimised to the extent reasonably practicable in accordance with the mitigation measures identified above.

A commitment has also been made to undertake consultation with each individual RAP/TO for the pre-construction, construction, operational and decommissioning stage of the Project to manage and protect broad and specific intangible cultural heritage values. As this consultation is also still in progress, the details of these agreements are not yet defined for each study area, where input from the RAP/TO groups will be a key factor in in this process.

Other potential impacts to Aboriginal cultural heritage values may arise from environmental factors such as surface water changes, bushfire risk or biodiversity impacts. For example, despite low direct impact due to vegetation management and clearance, as a result of that management and clearance and any soil erosion or increased surface water runoff, there remains potential for residual indirect impact to Aboriginal biodiversity values as it cannot be known if the Project will impact these values in advance. There also remains potential residual indirect impact to waterways and banks and associated intangible Aboriginal cultural heritage values through the alteration of drainage lines due to operational works. The operation of the Project will have a low impact on Aboriginal biodiversity values associated with Wedge-tailed eagles. Impact to this species at the population level is considered low (that is, the species is not threatened and is considered viable). While there remains potential for individuals to be impacted through collision, this is not expected to impact the local population.

9.5 Decommissioning impact assessment

9.5.1 Key issues

Decommissioning of the Project will include excavation of footings below finished surface level, dismantling and removal of transmission line, dismantling and removal of towers, decommissioning and removal of terminal stations, easement restoration, and rehabilitation.

Decommissioning the Project is unlikely to further impact tangible Aboriginal cultural heritage values, as any further ground disturbing activities are anticipated to occur in areas that have already been disturbed as part of the construction stage. As there is a low likelihood that any additional ground disturbance works will occur, there is a low risk of any further impact on tangible cultural heritage during this stage. Visual impacts on intangible

Aboriginal cultural heritage values such as landscapes and landscape features are likely to be much reduced; however, there will be some permanent changes such as grading of tower assembly areas and terminal station sites.

9.5.2 Mitigation

- CHMPs will be developed in partnership with RAPs, TOGs, and FP-SR.
- Activities will be carried out in accordance with relevant legislation and other statutory requirements.
- Consideration of CVA recommendations to protect broad and specific intangible heritage values expressed by the RAP and TO community.

9.5.3 Residual impacts

Decommissioning of the Project is unlikely to further impact tangible Aboriginal cultural heritage values, as further ground disturbing activities are anticipated to occur in areas that have already been disturbed as part of the construction stage. This includes works for vegetation or access control and management, which are unlikely to exceed work undertaken during the construction stage.

As there is a low likelihood that any additional ground disturbance works will occur, there is a low risk of any residual impact on tangible cultural heritage during this stage. Visual impacts on intangible Aboriginal cultural heritage values such as landscapes and landscape features are likely to be much reduced during this stage.

9.6 Cumulative impacts

A cumulative impact assessment considers the impacts of a project together with the impacts of other relevant projects that may interact spatially and temporally to change the level of impact on environmental, social or cultural values. EES Chapter 4: EES assessment framework and approach identifies relevant future projects that are proportionate to the scale and potential significance of the impacts of the Project; that have sufficient information publicly available in an EES or an environmental approvals application; and that have a spatial and temporal relationship to the WRL. A cumulative impact is only possible when all three aspects exist. Cumulative impacts may occur when incremental, successive and combined effects of actions or projects are added to other proposed actions or projects. A review was undertaken of other large scale infrastructure projects in the region, with each assessed against several criteria to determine if they would contribute to a cumulative impact on Aboriginal cultural heritage resources with the current Project. Cumulative impacts may arise from the interaction of construction, operational and decommissioning activities of WRL, and other developments, activities, land uses and projects in the area, both current and future. When considered in isolation, specific WRL impacts may be considered manageable. These manageable impacts may, however, be more substantial, when the impact of multiple projects on the same receptors are considered.

Of the 23 relevant future projects identified in EES Chapter 4: EES assessment framework and approach, these projects were further reduced by removing those with too little information available to make a reasonable assessment of their impact on Aboriginal cultural heritage or where the project does not have a spatial relationship with the Project. Projects eliminated from consideration for the Aboriginal Cultural Heritage Impact Assessment were:

- Beaufort Bypass (no spatial relationship with WRL from an Aboriginal cultural heritage perspective)
- Brewster Wind Farm (no spatial relationship with WRL from an Aboriginal cultural heritage perspective)
- West Gate Tunnel (formerly the Western Distributor Project) (no spatial relationship with WRL from an Aboriginal cultural heritage perspective)
- 2022 Melbourne Airport Masterplan (no spatial relationship with WRL from an Aboriginal cultural heritage perspective)
- Melbourne Airport Business Park (MABP) – Sky Road West Warehouse Developments (no spatial relationship with WRL from an Aboriginal cultural heritage perspective)

- Delahey Urban Development (no spatial relationship with WRL from an Aboriginal cultural heritage perspective)
- Powercor Mt Cottrell Zone Substation (no spatial relationship with WRL from an Aboriginal cultural heritage perspective)
- Merrimu Precinct Structure Plan (PSP)/Bacchus Marsh Urban Growth Framework (the potential residential precinct is at only step 4 of a 10-step timeline and not currently named in the Victorian Government's Housing Statement (2023)
- Navarre Green Power Hub (no spatial relationship with WRL from an Aboriginal cultural heritage perspective)
- Outer Metropolitan Ring Road / E6 (detailed design not yet completed)
- Sand quarries to the north of Bacchus Marsh (proposals only).

The remaining short list of 11 projects has been assessed in Table 9-13, below, with locations mapped in Figure 9-1, which details the qualitative assessment of cumulative impacts to Aboriginal cultural heritage.

Based on the qualitative analysis presented below in Table 9-13, these projects are assigned low, moderate or high impacts to tangible and intangible cultural heritage according to the following criteria:

- Low – small footprint of ground disturbance, such as through parklands development, where Aboriginal Places and cultural values might be protected.
- Moderate – ground disturbance proposed but of lesser footprint than other projects, such as through other energy infrastructure development, utility installation, and small-scale development, where there might be possibilities for harm avoidance or minimisation to Aboriginal Places. These might have visual impacts on intangible cultural heritage values through the physical presence of these projects in cultural landscapes.
- High – widespread ground disturbance across a larger footprint, such as through large-scale suburban development. These might potentially result in loss of cultural connection to place through the destruction of many Aboriginal Places.

Table 9-13: Cumulative Impact Assessment of relevant future projects.

Project	Project description	Impact summary	Likely Impact on cultural heritage
Watta Wella Renewable Energy Project	The proposed Watta Wella Renewable Energy Project consists of three co-located renewable energy projects - a wind farm, solar farm and battery energy storage facility. The proposed location for the project is approximately 16km north-east of Stawell, in north-west Victoria. This project is located at 465 Vineyard Road, Concongella, approximately 6km from the western end of Project Land.	This project extends across approximately 5,200 hectares of farmland, most of which will form the wind farm, with approximately 170 hectares making up the solar farm and 10.5 hectares for a battery energy storage facility. Wind and solar farms typically have a small footprint of ground disturbance, which is limited to access tracks, turbine locations and panel table locations. These impacts can be minimised through judicious use of non-invasive construction methods and positioning of turbines and panels in areas that are less sensitive to Aboriginal heritage. The construction of the battery energy storage facility will likely cause the most substantial ground disturbance of the project and associated ancillary activities. A CHMP is currently being prepared for this project, which will likely limit the impact of the project on Aboriginal cultural heritage. Due to the visual impact and physical presence the wind farm, solar farm and energy storage facility will have on the broader landscape, intangible cultural values will be impacted by the project as it affects landscapes and sightlines, with the wind farm component of the project also posing a potential collision risk.	The assessed likely impact of the Watta Wella Renewable Energy Project on Aboriginal cultural heritage in the region is considered to be a moderate impact.
Sydenham Terminal Station Rebuild	Previously encompassed within the Western Renewables Link Project, this rebuild includes the construction of a new terminal station north of the existing Sydenham Terminal Station. This was removed from the Project in August 2023 and is being completed as a standalone project due to its urgency to ensure network reliability. This project is located within the eastern end of Project Land in Plumpton.	This rebuild will involve the expansion of the existing Sydenham Terminal Station with construction of new infrastructure and replacement of existing infrastructure. The proposed rebuild sits within the Project Land and has already been subject to disturbance due to previous construction activities for the existing terminal station. There will be additional ground disturbance that will impact areas where Aboriginal cultural heritage has been identified as part of work completed on CHMP 19659, that will likely limit the impact of the project on Aboriginal cultural heritage, where possible. Due to the visual impact and physical presence of the existing terminal station, the rebuild is unlikely to significantly impact on the broader landscape, where intangible cultural values have already been impacted.	The assessed likely impact of the Sydenham Terminal Station Rebuild on Aboriginal cultural heritage in the region is considered to be a moderate impact.
Lerderderg River Nature trail	This project proposes a new 5km trail that would extend the Aqualink hike and bike network from Bacchus Marsh township along the river frontage through to MacKenzies Flat picnic area and is associated with the Government's creation of Lerderderg River Nature Reserve, covering an area of 4.7 hectares. The proposed reserve is to protect an	The Lerderderg River is managed and protected in accordance with its significant values as a heritage river and the proposed trail will not pose a visually conspicuous development having a small footprint of ground disturbance that is limited to access tracks and signage installation. The creation of a nature trail with associated interpretation signage will educate visitors about the site's important features, including cultural landscapes and intangible cultural heritage values. Overall, the proposed minimal in comparison to many of the projects considered here.	The assessed likely impact of the Lerderderg River Nature trail on Aboriginal cultural heritage in the region is considered to be a low impact.

Project	Project description	Impact summary	Likely Impact on cultural heritage
	internationally significant outcrop of Permian glacial rocks in Darley.		
Lerderderg – Wombat National Park	Victoria's central west will have 65,106 hectares of new national parks further protecting the area's unique environment and giving Victorians and tourists more opportunities to enjoy the great outdoors. The new national parks will be created by linking existing state forests, parks and reserves. The largest will bring together Lerderderg State Park and much of the existing Wombat State Forest to create a new national park covering more than 44,000 hectares between Daylesford and Bacchus Marsh. The Government is investing in facility upgrades throughout the region, including upgrading campgrounds and new and upgraded walking trails and facilities, will continue through the $105.6 million Victoria's Great Outdoors program.	National Parks actively protect Aboriginal cultural heritage, landscapes and Places. The extension and combination of two existing parks in this region will likely protect a large number of Aboriginal Places, cultural landscapes and intangible cultural heritage values through several mechanisms including the *National Parks Act* 1975 (Vic) and the Aboriginal Heritage Act. Although some potentially negative impacts will still be permitted (i.e., collection of firewood) these will be limited to designated areas.	The assessed likely impact of the Lerderderg – Wombat National Park on Aboriginal cultural heritage in the region is considered to be a low impact.
Melbourne Renewable Energy Hub, Plumpton, Victoria	Located at 67 and 77 Victoria Road and 77 – 347 Holden Road, Plumpton. Battery project that will store wind, hydro and solar energy from regional Victoria and will connect into the adjacent Sydenham Terminal Station. Includes a 12.5MWp solar farm to recover battery efficiency losses and ensure low cost and 'net-zero emission' operations of the Built Environment Sustainability Scorecard.	It is likely that the construction of this hub will involve the development of a large portion of the land under consideration and that there will be only limited possibilities for avoidance of any Aboriginal Places and intangible heritage values identified during assessments and consultation. This is due to the constraints of energy production and storage and electricity and water connections. However, the proposed footprint is relatively small in comparison to many of the projects considered here.	The assessed likely impact of the Melton Renewable Energy Hub on Aboriginal cultural heritage in the region is considered to be a moderate impact.
Victoria to New South Wales Interconnector West (VNI West)	VNI West involves the development of a new 500-kilovolt high-voltage alternating current interconnector between the Snowy Mountains region and Melbourne to increase transfer capacity between New South Wales and Victoria.	This project will involve some ground disturbance at the location of new infrastructure that may harm Aboriginal heritage. Disturbance of Aboriginal cultural heritage (tangible and intangible) will be unavoidable, as a new transmission line affects landscapes and sightlines, and poses a potential collision and bushfire risk, but it is likely that damage to archaeological material can be minimised through investigation, the development of a CHMP and subsequent micro-siting of works.	The assessed likely impact of the VNI West on Aboriginal cultural heritage in the region is considered to be a moderate impact.
Western Irrigation Network (WIN) Scheme	Six projects involving infrastructure to connect the Melton, Bacchus Marsh and Sunbury Recycled Water Plants (RWPs), and to distribute recycled water for	Water infrastructure projects tend to cause large amounts of ground disturbance in limited areas through the undergrounding of pipelines. This project crosses several major and culturally sensitive waterways with associated intangible cultural	The assessed likely impact of the WIN scheme on Aboriginal cultural heritage

Project	Project description	Impact summary	Likely Impact on cultural heritage
	irrigation in the Parwan-Balliang area located south of the Bacchus Marsh RWP.	heritage values, with large number of Aboriginal Places, such as the Werribee River and the Kororoit Creek. The impact on Aboriginal cultural heritage along the project alignment is likely to be severe but the impact will be spatially limited by the nature of the project. All six projects are preparing CHMPs which will likely limit the impact of the project on Aboriginal cultural heritage.	in the region is considered to be a moderate impact.
Nyaninyuk Wind Farm	A proposed windfarm consisting of up to 58 wind turbine generators with a total combined capacity of up to 330 megawatts. This project is located between Ecansford, Clunes and Waubra and intersects with WRL.	This project is currently only in the feasibility stage but, as it is a proposed windfarm, the potential impacts are likely to be a small footprint of ground disturbance associated with turbine tower locations and access tracks. These impacts can be minimised through judicious use of non-invasive construction methods and positioning of turbines and panels in areas that are less sensitive to Aboriginal heritage. Due to the visual impact and physical presence the wind farm will have on the broader landscape, intangible cultural values will be impacted by the project as it affects landscapes and sightlines, with the wind farm component of the project also posing a potential collision risk.	The assessed likely impact of the Nyaninyuk Wind Farm on Aboriginal cultural heritage in the region is considered to be a moderate impact.
Elaine Solar Farm	A proposed solar farm in Elaine, covering approximately 247.5 hectares over two land parcels. This project is located adjacent to Midland Highway and Woolshed Road.	This project has had a number of environmental impact assessments undertaken by the project proponent as part of the EES referral process, including a biodiversity assessment which details a number of environmental impacts relevant to Aboriginal cultural heritage. The project land is bound by flat agricultural land within the Victorian Volcanic Plains in all cardinal directions, with Williamson Creek within approximately 600m of the project land, and a modelled wetland on the north-western side of the project land. The removal of a number of mature trees have also been noted. It is likely that the construction of this solar farm will involve the development of a large portion of the land and that there will be only limited possibilities for avoidance of any Aboriginal Places and intangible heritage values identified during assessments and consultation. Specifically, there is an increased likelihood to uncover Aboriginal heritage values in association with Williamson Creek and the nearby wetland. Due to the visual impact and physical presence the solar farm will have on the broader landscape, intangible cultural values will be impacted by the project as it affects landscapes and sightlines. However, the proposed footprint is relatively small in comparison to many of the projects considered here.	The assessed likely impact of the Elaine Solar Farm on Aboriginal cultural heritage in the region is considered to be a moderate impact.

Project	Project description	Impact summary	Likely Impact on cultural heritage
Sunbury Line Level Crossing Removals (Calder Park Drive and Holden Road Level Crossing Removal Project)	The Sunbury Line Level Crossing Removals will remove the Calder Park Drive level crossing by constructing a road bridge to provide a grade-separated connection over the Sunbury rail line and close the Holden Road level crossing by truncating the road at both sides of the rail line. The entire proposed development footprint is 127 hectares; however the disturbance footprint is 41.6 hectares.	The project will require relocation and protection of existing underground and overhead services, construction of a bridge and realignment of roads. It is likely that the majority of ground disturbances will be in areas that have been previously disturbed by construction activities for the railway and surrounding roads. Due to the visual impact and physical presence of the existing infrastructure, the project is unlikely to significantly impact on the broader landscape, where intangible cultural values have already been impacted. However, the proposed footprint is relatively small in comparison to many of the projects considered here.	The assessed likely impact of the Sunbury Line Level Crossing Removals on Aboriginal cultural heritage in the region is considered to be a moderate impact.
Toolern Vale Solar Farm	A proposed solar farm on Holden Road in Toolern Vale, covering approximately 39.8 hectares. The project has a proposed 12.5 megawatts generation capacity with capacity battery storage of 25 megawatts and is proposed to have a 30 year life.	The decision to grant a permit for this project was affirmed by the Victorian Civil and Administrative Tribunal in 2022.This project is proposed in a non-urban area, part of the Western Volcanic Plains, where the broader landscape encompassing extensive grasslands, agricultural lands and 'long range views'. Landscape features also include Kororoit Creek and Mt Kororoit, both within 3km to the south-east, and are associated with rich tangible Aboriginal cultural heritage values. Due to the visual impact and physical presence the solar farm will have on the broader landscape, intangible cultural values will be impacted by the project as it affects landscapes and sightlines. However, the proposed footprint is relatively small in comparison to many of the projects considered here.	The assessed likely impact of the Toolern Vale Solar Farm on Aboriginal cultural heritage in the region is considered to be a moderate impact.

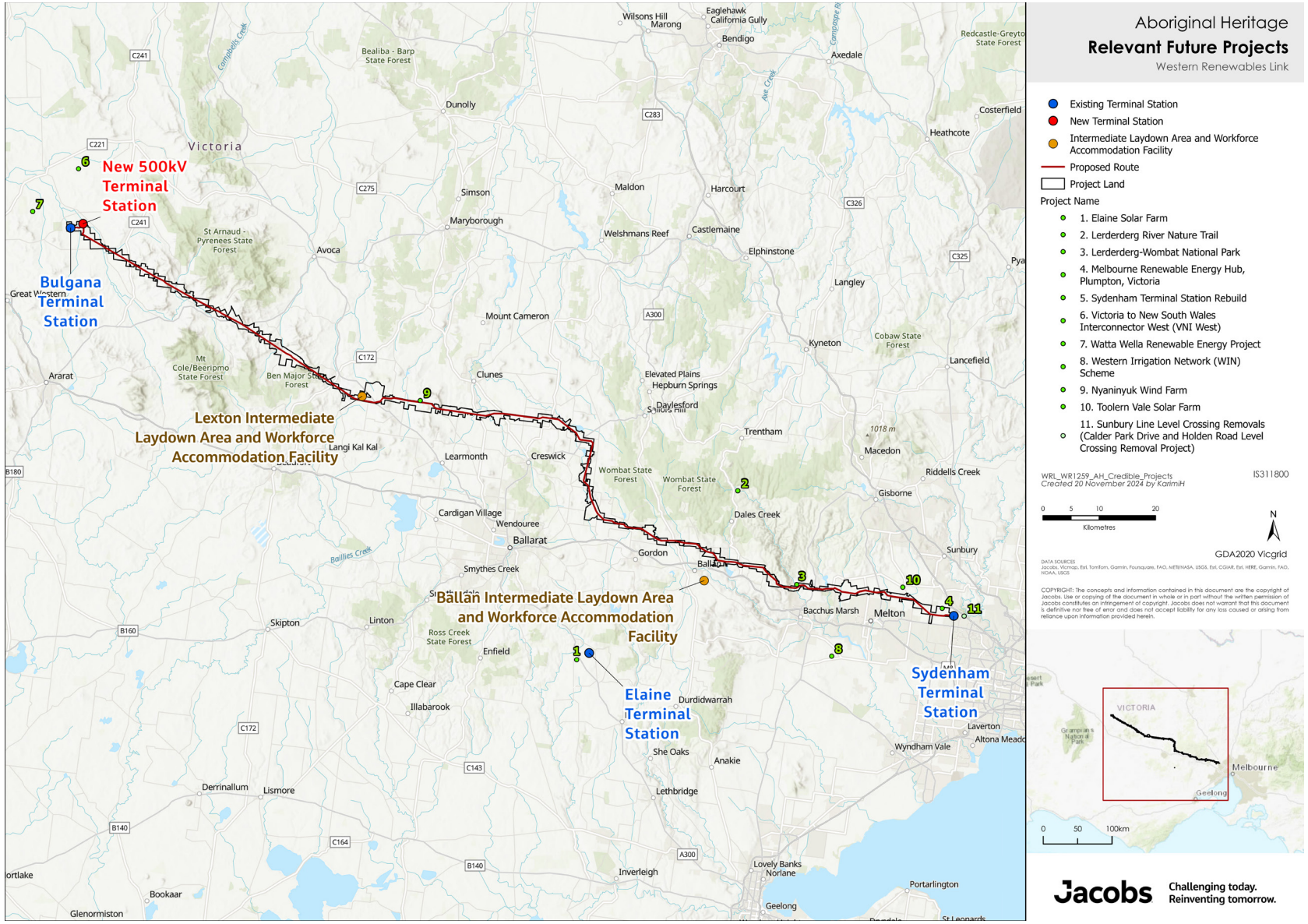


Figure 9-1: Location of relevant future projects assessed for Aboriginal cultural heritage cumulative impacts.

Table 9-14: Cumulative impact ranking for relevant projects

	Low	Moderate	High	Severe
Total	3	9	0	0
Progressive Total	3	11	N/A	N/A
Ranking Scores	0-3	4-11	N/A	N/A
Median	6			
Assessment	**Moderate**			

The cumulative impact of this Project on Aboriginal cultural heritage in the Project Land is considered to be moderate based on the qualitative analysis presented in Table 9-13 and the subsequent quantitative analysis presented in Table 9-14. The assessment rating is derived from the progressive totals where the median is 6. This sits within a moderate score of between 4 to 11 (Table 9-14).

The investigation results for the Project will enable future protection of places, contribute to the archaeological knowledge base of western Victoria, and enable future planning to prevent harm to Aboriginal Places. Close engagement with the RAPs will also improve knowledge sharing and build relationships for future work and protection of Places. All Aboriginal cultural heritage assessments contributed additional archaeological data on the nature of the Aboriginal occupation in the geographic region and confirm the predictive models developed in the CHMPs, which have positive implications for Aboriginal cultural heritage.

The Project will impact Aboriginal cultural heritage in the Project Land, where scientific and cultural values vary from low to very high and include both tangible and intangible cultural heritage. This outcome is, to some extent, unavoidable if the Project is to proceed, and the Project will impact the landscape wherever ground disturbing activities are occurring. The very presence of the transmission tower in the landscape will harm intangible values associated with landscape views and sight lines. However, the Project design has been an iterative process with the cultural heritage assessments aiming to inform the design to minimise impacts on as many Aboriginal Places and areas of sensitivity as possible. This process is being undertaken in close consultation with the RAPs to account for as many aspects of Aboriginal cultural heritage as possible. The CHMPs being prepared for the Project will further reduce harm by developing conditions that will manage Aboriginal Places in an appropriate and culturally sensitive manner.

There are various levels of impact on Aboriginal cultural heritage across other projects discussed in Table 9-13. These range from moderate negative impacts, where there is a likelihood of large-scale loss of heritage, to nil impacts with positive implications, such as where the creation of a new state park will provide strong protection for tangible and intangible values across a large area. The majority of projects have a low to moderate negative impact, meaning that heritage is being actively protected and, in the case of low impact, mostly retained with small amounts of harm or, in the case of moderate impact, partially retained with some harm expected.

Across the broader region, the cumulative impact of development in the region is moderate. While some projects have a greater impact to Aboriginal cultural heritage in their project areas, most are actively trying to preserve some Aboriginal cultural heritage values through design changes. Even in projects where sites are destroyed, all projects have undertaken CHMPs to manage Aboriginal Places with the RAP, TO group, and/or FP-SR in an appropriate manner to obtain as much archaeological information from these sites as possible. The Project will impact heritage in the region, but not in a manner that significantly increases the cumulative impact. This impact will be mitigated and managed through the EPRs and as such, meets the Project's scoping requirements for the EES.

10. Environmental management and monitoring

Environmental Performance Requirements (EPRs) set out the environmental outcomes to be achieved through the implementation of mitigation measures during construction, operation and decommissioning. While some EPRs are performance based to allow flexibility in how they will be achieved, others include more prescriptive measures that must be implemented. Compliance with the EPRs will be required as a condition of the Project's approval.

To meet the EES evaluation objective to avoid or minimise adverse effects on Aboriginal cultural heritage values, the EPRs outlined in Table 10-1 are recommended.

10.1 Recommended management and mitigation measures

In developing the environmental management measures, the cultural heritage assessment adhered to the mitigation hierarchy. This entails an obligation to first avoid, then minimise, and then mitigate any impacts on cultural heritage. Where avoidance could not practicably be achieved, minimisation is the next level in the mitigation hierarchy proposed. While the CHMPs will outline detailed and specific measures (management conditions) once those processes are complete, it is expected that standard measures would apply, such as:

- Site induction
- Cultural heritage awareness training
- Pegging, fencing, or marking in other ways where works are restricted to protect Aboriginal Places (both during construction and where needed during operation and/or decommissioning).
- Salvage excavation or surface collection of some registered places and associated analysis and reporting.
- Inspections by the RAP
- Removal, custody, curation, and management of Aboriginal cultural heritage (artefacts) identified during the CHMPs.
- A hard copy of the CHMP to be available in site offices within the boundaries of the Project Land Contingency procedure for unexpected finds.
- Regular CHMP compliance reviews by AusNet.
- The draft Incorporated Document has been informed by the EPRs below and includes conditions to avoid, minimise and manage impacts associated with the workforce accommodation facilities. For Aboriginal cultural heritage, this includes archaeological salvage of Aboriginal cultural heritage material and any other management conditions required by the relevant CHMPs. It is considered that these conditions are sufficient to meet the requirements of any relevant EPR applying to Aboriginal cultural heritage impacts at the workforce accommodation facilities.

In addition, CVAs prepared for the Project have identified measures for the management and protection of broad and specific intangible cultural heritage values. While these measures can be discussed and negotiated through the CHMP process, where practicable, it is expected that standard measures would apply, such as:

- Ongoing consultation with RAPs and TOs about management of broader cultural values.
- Efforts to avoid and protect waterways, areas of archaeological and cultural sensitivity, remnant vegetation, and native fauna.
- Involvement of each individual RAP in opportunities for native revegetation and environmental management.

10.2 Environmental Performance Requirements

To meet the EES evaluation objective to avoid, or minimise where avoidance is not possible, adverse effects on Aboriginal cultural heritage, the Environmental Performance Requirements outlined in Table 10-1 are recommended.

Table 10-1: Environmental Performance Requirements for the Project in relation to Aboriginal cultural heritage.

EPR Code	Environmental Performance Requirements	Stage
ACH1	**Comply with Cultural Heritage Management Plans** Implement and comply with Cultural Heritage Management Plans (CHMPs) sponsored by AusNet and approved for the Project under the *Aboriginal Heritage Act 2006*.	Design, Construction, Operation and Decommissioning
ACH2	**Discuss and negotiate Cultural Values Assessment recommendations** AusNet must engage with each of the relevant Registered Aboriginal Parties (RAPs) and Traditional Owner (TO) groups, being Barengi Gadjin Land Council Aboriginal Corporation, Eastern Maar Aboriginal Corporation, Dja Dja Wurrung Clans Aboriginal Corporation, Wadawurrung Traditional Owners Aboriginal Corporation, and Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation to address recommendations, where practicable, arising from each RAP or TO group's Cultural Values Assessment to avoid or minimise impacts on intangible cultural heritage values from the Project.	Design, Construction, Operation and Decommissioning

10.2.1 ACH1 Cultural Heritage Management Plans

As part of ongoing CHMP preparations, progressive refinement of the design has and will occur through micro-siting, as CHMP fieldwork progresses to avoid or minimise impacts to heritage values. To enable this, the heritage specialists provide AusNet with constraints mapping and spatial data, along with recommendations for design refinement or design infrastructure relocation.

Once the CHMPs have been approved, their management conditions and contingencies must be complied with to manage and protect registered and unidentified Aboriginal Places and values. General and specific management conditions will be provided in each CHMP to mitigate or minimise harm to known and unknown Aboriginal Places. CHMPs will also avoid and minimise harm to the extent reasonably practicable any residual impacts arising from the Project. These mitigations as part of the CHMP process are listed below.

Prior to construction:

- Site induction
- Cultural heritage awareness training
- Pegging, fencing, or marking in other ways where works are restricted to protect Aboriginal Places
- Archaeological salvage works (excavation and surface collection) of some registered Aboriginal Places and associated analysis and reporting where avoidance of harm is not possible.

During construction:

- Inspections by the RAP
- Ongoing checks to monitor compliance with the CHMPs
- Amendments to the CHMPs if the development footprint of the Project changes
- CHMPs contingencies include procedures for the discovery of unknown Aboriginal cultural heritage. This includes high significance finds, such as Aboriginal Ancestral Remains, in accordance with FP-SR's 'Guide to Preparing a Cultural Heritage Management Plan', including stop work instructions.

Post construction:

- Custody, curation and management of Aboriginal cultural heritage (artefacts) identified during the CHMP.

Operational stage of the Project:

- A hard copy of the CHMP to be available in site offices within the boundaries of the Project Land Notification procedure for unexpected finds in construction and post construction stage
- Ongoing consultation with the relevant RAP or TO/FP-SR for the operational stage of the Project to comply with agreed management conditions in the CHMPs:
  - The RAP for Area 1 is the Barengi Gadjin Land Council Aboriginal Corporation
  - The RAP for Area 2 is the Eastern Maar Aboriginal Corporation. As Eastern Maar Aboriginal Corporation have elected not to evaluate this CHMP, there will also be ongoing consultation with FP-SR
  - There is no appointed RAP for Area 3, therefore ongoing consultation will be with FP-SR and the relevant TO groups (Barengi Gadjin Land Council Aboriginal Corporation, Dja Dja Wurrung Clans Aboriginal Corporation, and Eastern Maar Aboriginal Corporation)
  - The RAP for Area 4 is the Dja Dja Wurrung Clans Aboriginal Corporation
  - The RAP for Area 5 is the Wadawurrung Traditional Owners Aboriginal Corporation
  - The RAP for Area 6 is the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation.

10.2.2 ACH2 Cultural Values Assessments

In addition to ACH1, ongoing consultation should occur with each individual RAP/TO for the pre-construction, construction, operation, and decommissioning stages of the Project to manage and protect broad and specific intangible cultural heritage values as identified through the CVA process. Intangible values as identified in the CVAs do not necessarily meet the definition of Aboriginal Places under the Aboriginal Heritage Regulations, meaning they are outside of the scope of the CHMPs being prepared for the Project, and therefore require consultation through alternative processes, such as the registration of Aboriginal intangible heritage under section 79C of the Aboriginal Heritage Act. This pathway is also considered appropriate as some RAPs have noted in their CVAs prepared for the Project that their relevant CHMP will not address intangible values. Mitigation measures for the management and protection of intangible values can be discussed and negotiated through and outside of the CHMP process, where practicable.

In efforts to protect, recognise, and document intangible values, AusNet commits to working with the RAP/TOs to submit intangible value registrations for specific intangible cultural heritage values, as identified through the CVA process in accordance with Section 79C of the *Aboriginal Heritage Act* 2006. Section 79C notes that a RAP or TO may apply for any Aboriginal intangible heritage to be recorded on the VAHR in the prescribed form, in consultation with and permission of the relevant RAPS/TOs. In doing so, AusNet seeks to assist TO communities in maintaining links to heritage and prevent loss of cultural knowledge. This commitment is consistent with the Burra Charter (Article 32), which states that records created of a place's intangible cultural heritage 'should be placed in a permanent archive and made publicly available, subject to requirements of security and privacy, and where this is culturally appropriate'.

Furthermore, AusNet commits to the recognition of RAP/TO cultural knowledge of places identified through the CVA process that contributes to intangible values, with consideration of the Project's needs. This includes opportunities for the interpretation, commemoration, and celebration of significant associations with a place, as culturally appropriate. This commitment is consistent with the Australia ICOMOS *Code on the ethics of co-existence in conserving significant places*.

In recognising the value that RAP/TO cultural knowledge brings to managing and protecting the land, AusNet also commits to consulting with the relevant RAP/TO groups where opportunities present for the joint management of environmental values (including mature remnant vegetation) and maintaining water quality objectives and rehabilitation goals. This includes the potential to tailor written agreements that define the working relationship, expectations and responsibilities in protecting intangible values. There is an opportunity for these to align with the management plans outlined in the EPRs (BD1-BD8) in EES Technical Report A: Biodiversity Impact Assessment and EPR SW3 in EES Technical Report T: Surface Water Impact Assessment.

Additional mitigation measures for the management and protection of intangible values can be discussed and negotiated through and outside of the CHMP process, where practicable. The mitigations recommended through the CVA prepared for the Project are broadly summarised below:

Prior to construction:

- Ongoing consultation with each individual RAP for the pre-construction stage of the Project to discuss and negotiate recommendations in the CVAs to avoid and/or minimise impact on intangible cultural heritage values.
- Efforts have been and will continue to be made to undertake design planning, including micro-siting, to avoid and/or minimise impact on waterways, areas of archaeological and cultural sensitivity, remnant vegetation, and native fauna so far as reasonably practicable.
- Efforts have been and will continue to be made to undertake design planning, including micro-siting, to avoid and/or minimise impact on six cultural landscapes (see Table 9-8) identified by the CVAs so far as reasonably practicable.

During construction:

- Ongoing consultation with each individual RAP for the pre-construction stage of the Project to discuss and negotiate recommendations in the CVAs to avoid and/or minimise impact on intangible cultural heritage values.
- Efforts should be made to undertake construction to avoid and/or minimise impact on waterways, areas of archaeological and cultural sensitivity, remnant vegetation, and native fauna so far as reasonably practicable.
- Efforts should be made to undertake construction to avoid and/or minimise impact on six cultural landscapes (see Table 9-8) identified by the CVAs so far as reasonably practicable.

Operational stage of the Project:

- Ongoing consultation with each individual RAP for the pre-construction stage of the Project to discuss and negotiate recommendations in the CVAs to avoid and/or minimise impact on intangible cultural heritage values. Involvement of each individual RAP in opportunities for native revegetation and environmental management so far as reasonably practicable.

11. Conclusion

This report presents the Aboriginal Cultural Heritage Impact Assessment for the Project. The assessment has been conducted across six Study Areas that correspond to the boundaries of the relevant RAPs; the assessment of each Study Area details the specific environmental conditions, and the Aboriginal cultural heritage and cultural values held by the local Aboriginal community. This impact assessment has been based upon a review and in-depth study of applicable legislation, policy, and guidelines, and the results of ongoing archaeological assessments for CHMPs that are currently in preparation, geological and geomorphological information, environmental context, ethnographic records of Aboriginal occupation, and records of registered and known Aboriginal Places.

11.1 Aboriginal cultural heritage assessments

11.1.1 Existing conditions analysis and MCA

Each of the six Study Areas within the Project Land contains specific landform features sensitive for Aboriginal cultural heritage and hold Aboriginal cultural values. These are typically centred around areas with abundant natural resources and prominent features in the landscape. For the Project Land, running west to east from the Central Victorian Uplands, Goldfields and Victorian Volcanic Plains, these include the Wimmera River (Areas 1 to 3), Avoca River (Areas 3 and 4), Loddon River (Areas 4 and 5), Moorabool River (Area 4 and 5), Werribee River (Area 5 and 6) and Maribyrnong River (Area 6) and their tributaries. The Project Land also intersects with numerous wetlands and volcanic cones that are highly significant places utilised by Aboriginal people. The largest mapped wetlands located within the Project Land are associated with water supply reservoirs, including Lake Merrimu and Pykes Creek Reservoir (Area 6), as well as Anderson's (Hepburn) Lagoon (Area 4).

Aboriginal cultural heritage frequently occurs throughout the Project Land, primarily in the form of surface and subsurface artefact deposits, but also CMTs and earth features. Aboriginal Places in the Project Land are most commonly found on rises and hill slopes, hill crests and ridgelines and terraces, or in association with elevated landforms within 200m of watercourses. Aboriginal Ancestral Remains (burials) have previously been recorded within the broader region, though none have been identified within the Project Land. Other landscape features that have the potential for the presence of Aboriginal cultural heritage include swamp and lake deposits, volcanic cones, caves and stony rises. These may have tangible or intangible values, or both.

Cultural landscapes identified as part of the CVAs include the Pyrenees Ranges landscape (Area 1), Hepburn Lagoon (Area 4), Wimmera River (Areas 1 and 3), Avoca River (Area 4), Werribee River (Area 5), and Mount Kororoit and Kororoit Creek (Area 6).

Predictive modelling of the Project Land was undertaken to assess and categorise the potential for Aboriginal cultural heritage to be present within different landforms across the activity area and geographic region. The MCA for the predictive model was a staged process, which was refined, added to, or removed from, based on reviews of the digital predictive model at various stages. The model broadened an understanding of the environmental variability across the Study Area, particularly across CHMP areas that have yet to undergo fieldwork. Hydrological, geomorphological, and geological trends that have emerged from development of the predictive model have aided in the selection of high priority areas for field assessment that was deemed essential for the EES, though identification of these areas using the predictive model does not replace ground-truthing and the consultation process on Country with members of the RAP and TO communities. In specific circumstances where there is a clear OH&S risk for fieldwork, this model has been and will continue to be a valuable tool during the consultation process with the RAPs, TOs and FP-SR. Specifically, it has been called on to add further insights to the desktop evaluation as an alternative to standard assessment ground surveys in situations where the latter is not possible.

11.1.2 Fieldwork and CVA analysis

As the CHMPs required for the Project are currently in preparation and at different stages of completion, there is not a complete dataset available for Aboriginal cultural heritage that may be impacted by the Project. However, the CHMP fieldwork is at an advanced stage for most of the Study Areas. At the time of this Impact Assessment, Phase 1 fieldwork testing was almost complete in the westernmost portions of the Project Land (Areas 1 to 3) and was partially completed in others (Areas 4 to 6). Phase 2 testing has been partially completed to varying degrees across the entire Project Land, with the exception of Area 5. Due to this variation in the level of testing, information has been presented for Areas 1 to 3, showing broader landscape trends and their correlation with types and densities of Aboriginal Places. For Areas 4 to 6, more specific fieldwork results have been provided.

CVAs for Areas 1 to 6 have been completed and intangible cultural heritage values have been fully integrated into this report for the Project Land.

Adequate field assessments have been conducted to inform the impact assessment; however, where fieldwork has not yet been conducted, currently unknown Aboriginal cultural heritage values will be managed through the conditions of the CHMPs in preparation and with the unexpected finds contingency plans of each CHMP, in accordance with EPR ACH1.

Appendix N provides an addendum to this report, capturing fieldwork and CHMP updates from the 6 June 2024 to 18 February 2025. This has been added to provide additional information and greater context for the assessment of impacts on Aboriginal cultural heritage values for the Project. The inclusion of the additional fieldwork results does not alter the magnitude of impact ranking, which remains moderate, nor do they significantly alter the understanding of the Project's impact to Aboriginal cultural heritage values.

11.1.3 Aboriginal occupation in the Project Land

The results of extensive fieldwork completed thus far broadly support the findings of the existing conditions analysis, the MCA for the predictive model, and the CVAs. A picture is emerging of how Aboriginal people in the past used the various ecosystems, topography, and microclimates across the Project. The most common Aboriginal Places identified have been stone artefact scatters; CMTs and earth features have also been recorded; and cultural landscapes with very high cultural significance have also been identified. Aboriginal Places have often been found to occur on high points close to water or the floodplains of permanent waterways.

The lithology of artefact scatters is dominated by quartz in the west but gradually transitions to more silcrete/quartzite lithology in the east as the Project moves into different local basement geologies. Lithic materials imported to the region include tachylyte, which indicates movement of material from the Spring Hill quarry near Woodend, coastal flint from limestone coast of Victoria, and greenstone from the Mt William, Dog Rocks or Hopkins River quarries.

Post-contact land clearance has meant that CMTs, earth features, and hearths are more frequently found in the western end of the activity area where agricultural activity has been less intensive. Burial Trees are a mortuary feature generally associated with people from the western sections of the Project Land, while stone arrangements are not generally connected to the BGLCAC Study Area. The likelihood of encountering such Aboriginal Places will depend on past land clearances.

Cultural landscapes occur in all parts of the Project Land, and include the Pyrenees Ranges landscape, Hepburn Lagoon, Wimmera River, Avoca River, Werribee River, and Mount Kororoit and Kororoit Creek. Consistent with tangible Aboriginal cultural heritage values, cultural landscapes occur across elevated areas close to water or surrounding permanent waterways, and are of very high cultural significance to RAPs and TOs. These values shed light on living cultural values and narratives associated with the landscapes which Aboriginal people occupied.

The presence of waterways is a useful indicator of the intensity of past Aboriginal land usage through all Study Areas, but this association is much looser on the Volcanic Plain bioregion, where there is inefficient water drainage, than occupation in the dryer climatic conditions of Area 1, where there is a closer association between water sources and evidence of Aboriginal occupation. Stony rises provide a strong indicator of Aboriginal occupation in Area 6 and wherever these geological features occur. High, flat ground overlooking water sources

have been shown to be an important predictor of Aboriginal occupation in Areas 2, 3, 5, and 6, although not as clearly in Area 4.

In Area 4, along the top of the Dividing Range and therefore more exposed to weather systems, Aboriginal occupation occurs in more sheltered areas along water sources, particularly in the Volcanic Plain bioregion. In Area 1 there is also a lower association between higher ground and Aboriginal Places, possibly because of the older and flatter topography and well-defined water drainage systems that did not require a strategic outlook.

The Goldfields, and some areas of the Uplands bioregions have been heavily impacted by nineteenth century mining. There has been a loss of original topsoil in some areas and evidence of erosion, thus impacting on the likelihood that Aboriginal heritage will be encountered. Waterways downstream of these mining areas are noted to have been impacted by mining sludge, which may have buried Aboriginal Places. These buried Aboriginal Places will not be impacted by the majority of the activity, other than by tower foundation construction.

Research for this impact assessment has provided a broad understanding of how Aboriginal people occupied the varied landforms, bioregions, and socio-cultural areas crossed by the Project Land. As stated in Section 9.2.3.1.2, elevated landforms within proximity to prior watercourses have a moderate-high potential for Aboriginal cultural heritage to be present within the Study Areas. The most likely Aboriginal Place type to be present in areas that have not been subject to field assessment would be artefact scatters (including LDADs), although their occurrence may vary across the Study Areas. Residual impacts to known and unknown Aboriginal values are summarised in Section 11.1.4.

11.1.4 Summary of impacts

From the completion of the existing conditions analysis, the MCA for the predictive model, and CVAs prepared for the Project, as well as the fieldwork data to date, the Project's understanding of Aboriginal occupation of the alignment is considered sufficient to understand the scale of impact to Aboriginal cultural heritage values within the study area. Though the exact nature of the Aboriginal Places can only be fully defined upon the completion of the fieldwork programs, there are clear trends in the Aboriginal Place data that have been used to develop a number of predictive statements for Aboriginal cultural heritage values in areas yet to undergo fieldwork (see Section 9.2.3.1.2). These predictive statements indicate that fieldwork will likely identify Aboriginal Places of similar nature and form to what has been presented in this Impact Assessment. As such, though the number of Aboriginal cultural heritage values will increase, it is expected that the magnitude of impact for the Project (presented in Section 9.2.3) post completion of the CHMP fieldwork programs will not increase.

The Impact Assessment has found that the Project will have both a positive and negative impact on the Aboriginal cultural heritage values of the Project Land and region. This investigation has contributed additional archaeological data on the nature of the Aboriginal occupation in the geographic region and confirmed the predictive models developed in the CHMPs, which is a positive outcome regarding Aboriginal cultural heritage. The investigation results for the Project will enable future protection of Places, contribute to the archaeological knowledge base of western Victoria and enable future planning to prevent harm to Aboriginal Places. Close engagement with the RAP will also improve knowledge sharing and build relationships for future work and protection of Places. This has already been established through comprehensive consultation and work alongside the RAPs and TO groups in the Project Land.

The Project will cause some harm to Aboriginal cultural heritage values, whose scientific and cultural values vary from low to very high significance. This outcome is, to some extent, unavoidable considering the Project's scale and nature, and the fact that the Project will impact the landscape wherever ground disturbing activities will occur. However, the Project will be managed through the EPRs that have been defined for the Project, including management conditions as part of the CHMP process. Where practicable, this also includes consideration of CVA recommendations that have ensued as part of the consultation for the impact assessment. This process is being undertaken in close consultation with RAPs, TOs and FP-SR to account for as many aspects of Aboriginal cultural heritage as possible. The CHMPs being undertaken will further reduce harm by developing conditions that will manage Aboriginal Places in an appropriate and sensitive manner.

The impact of the Project on Aboriginal cultural heritage in the Project Land is considered to be moderate. The Project is considered to have an overall moderate impact on Aboriginal cultural heritage. As stated above, based on the data currently available (including additional fieldwork results up until 18 February 2025, as reported in Appendix N), it is expected that the magnitude of impact for the Project post completion of the CHMP fieldwork programs will not increase. The cumulative impact of the Project is considered to be moderate (see Section 9.5).

In summary, this report has assessed the potential impacts of the Project on Aboriginal cultural heritage values within the Project Land and found that the Project will meet the evaluation objective in the scoping requirements as set out in Section 4.2 (Cultural Heritage) of the scoping requirements:

Avoid, or minimise where avoidance is not possible, adverse effects on Aboriginal cultural heritage and historic heritage value.

11.2 Construction impact assessment

Seventy-five Aboriginal cultural heritage values will be directly impacted during construction (five previously recorded and 70 newly recorded). Ten Aboriginal Places have been removed from impacts during the construction stage, as these were deemed to only have been impacted through discovery and no longer are intersected by the design. Of the impacted Aboriginal heritage values, there are impacts to 23 low, 30 moderate, five high, and 12 very high significance ranking values, inclusive of impacts to six intangible values (cultural landscapes) with very high significance rankings. These Aboriginal cultural heritage values, including both tangible and intangible heritage will be impacted during pre-construction and construction of the Project. However, the Project will be managed through the EPRs that have been defined for the Project, which state that impacts to Aboriginal cultural heritage will be managed through the CHMP process, including management conditions (EPR ACH1), and consideration of CVA recommendations for the management and protection of broad and specific intangible cultural heritage values (EPR ACH2).

Those values with nil direct impacts (and impacts only through discovery) have potential for indirect residual impacts. There are 53 known Aboriginal cultural heritage values that have been assessed to have nil direct impacts or are not intersecting any element of design for this Project. This includes 43 known Aboriginal cultural heritage values that have been assessed to have nil direct impacts and 10 Aboriginal cultural heritage values that will no longer be directly impacted by design.

There is also potential for unknown surface and subsurface Aboriginal cultural heritage to occur within the Project Land once construction begins. The potential for impacts to Aboriginal cultural heritage has been significantly reduced by preparing CHMPs and completion of the CVAs across the Project Land.

Residual impacts remain to tangible and intangible Aboriginal cultural heritage in the Project Land. Intangible values identified for the Project include six cultural landscapes that have a high magnitude of impact rating. There also remains a potential residual impact to unknown Aboriginal cultural heritage as impacts.

Mitigation measures and protocols within the CHMP process will minimise these residual impacts on Aboriginal cultural heritage values.

11.3 Operational impact assessment

Operation of the Project is unlikely to further impact Aboriginal cultural heritage, as no ground disturbing activities are anticipated during operation. Additionally, any vegetation or access control and management works are unlikely to be more extensive than work undertaken during the construction stage. Therefore, there is also a low residual impact to tangible heritage during the operation stage.

Considering the six intangible Aboriginal cultural heritage values (cultural landscapes) with very high significance rankings, impacts are likely due to the ongoing visual presence of infrastructure during the stage of the Project.

11.4 Decommissioning impact assessment

Decommissioning of the Project is unlikely to further impact tangible Aboriginal cultural heritage values, as any further ground disturbing activities are anticipated to occur in areas that have already been disturbed as part of the construction stage. As there is a low likelihood that any additional ground disturbance works will occur, there is a low risk of any residual impact on tangible cultural heritage during this stage. Visual impacts on intangible Aboriginal cultural heritage values such as landscapes and landscape features are likely to be much reduced during this stage.

11.5 Environmental Performance Requirements

Based on the Aboriginal Cultural Heritage Impact Assessment findings, two EPRs were developed for the Project as shown in Table 11-1.

Table 11-1: Recommended Environmental Performance Requirements for Aboriginal cultural heritage.

EPR Code	Environmental Performance Requirements	Stage
ACH1	**Comply with Cultural Heritage Management Plans** Implement and comply with Cultural Heritage Management Plans (CHMPs) sponsored by AusNet and approved for the Project under the *Aboriginal Heritage Act 2006*.	Design, Construction, Operation and Decommissioning
ACH2	**Discuss and negotiate Cultural Values Assessment recommendations** AusNet must engage with each of the relevant Registered Aboriginal Parties (RAPs) and Traditional Owner (TO) groups, being Barengi Gadjin Land Council Aboriginal Corporation, Eastern Maar Aboriginal Corporation, Dja Dja Wurrung Clans Aboriginal Corporation, Wadawurrung Traditional Owners Aboriginal Corporation, and Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation to address recommendations, where practicable, arising from each RAP or TO group's Cultural Values Assessment to avoid or minimise impacts on intangible cultural heritage values from the Project.	Design, Construction, Operation and Decommissioning

Once the CHMPs have been approved, their management conditions and contingencies must be complied with to protect and manage registered and previously unidentified Aboriginal Places and values. General and specific management conditions will be provided in each CHMP to mitigate or minimise harm to known and unknown Aboriginal Places. CHMPs will also avoid and minimise harm to the extent reasonably practicable any residual impacts arising from the Project.

11.6 EES evaluation objective

This assessment has found that the Project will meet the evaluation objective in the scoping requirements as set out in Section 4.2 (Cultural Heritage) of the scoping requirements:

> *Avoid, or minimise where avoidance is not possible, adverse effects on Aboriginal cultural heritage and historic heritage value.*

In order to meet the evaluation objective, this report characterised the known Aboriginal cultural heritage in the Project Land and identified the potential location of Aboriginal Places and areas of cultural significance that could be affected by the Project.

Measures to avoid, minimise, or otherwise manage potential Aboriginal cultural heritage impacts are outlined in this report and the EPRs (See also Section 11.5). With the implementation of the proposed mitigation measures including the EPRs, it is considered that the Project will meet the scoping requirements of the EES in respect of Aboriginal cultural heritage.

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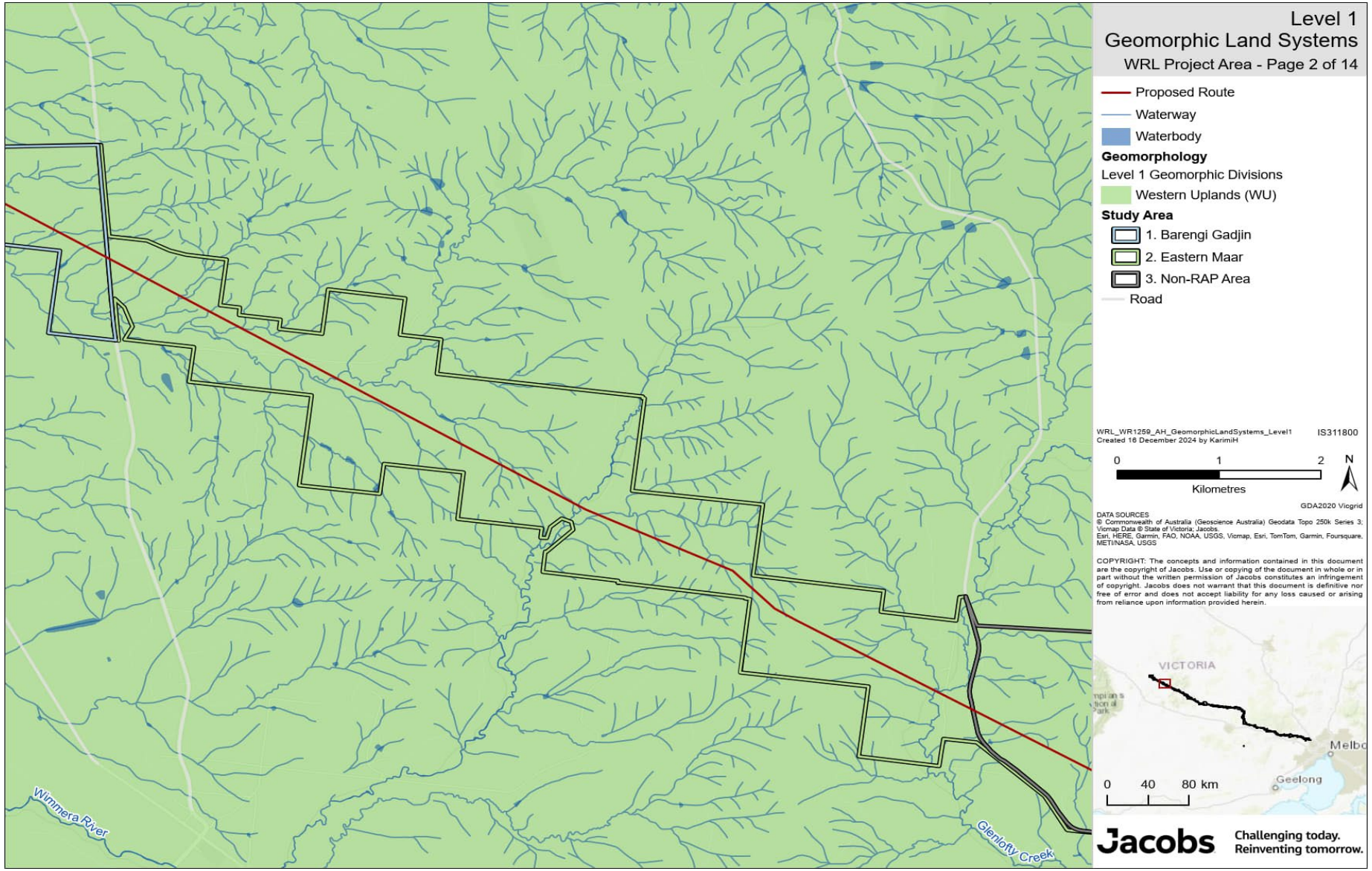
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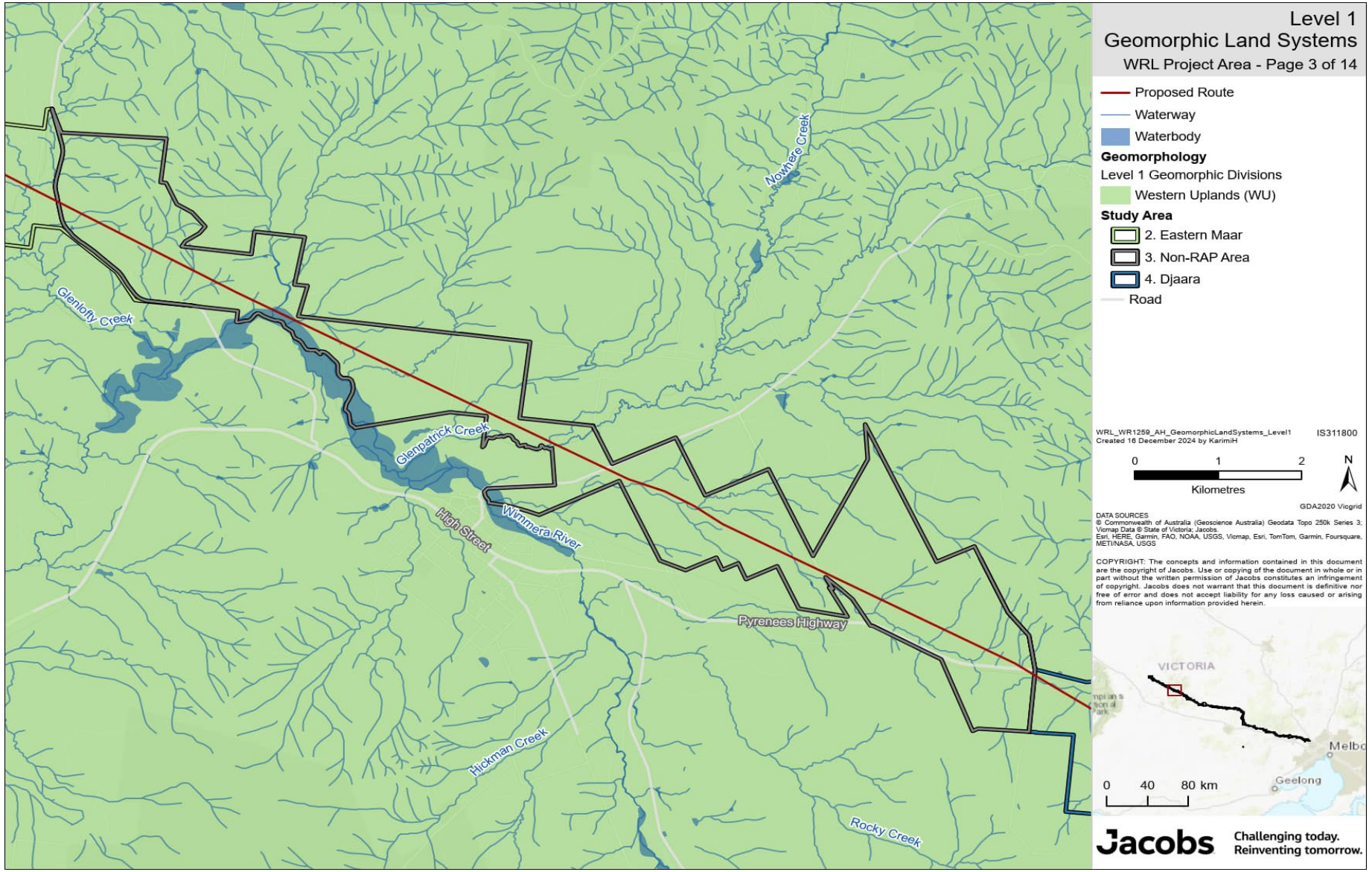
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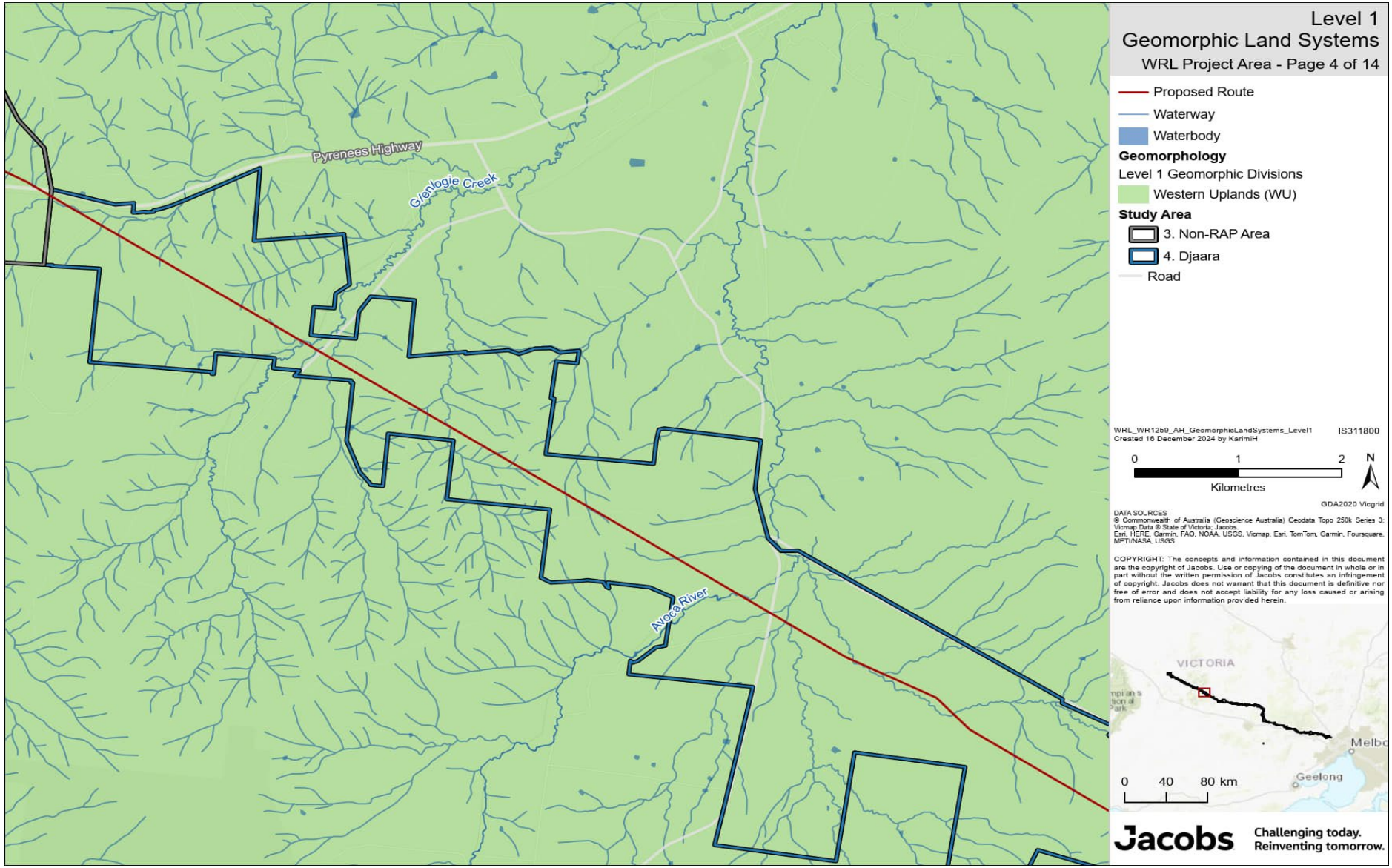
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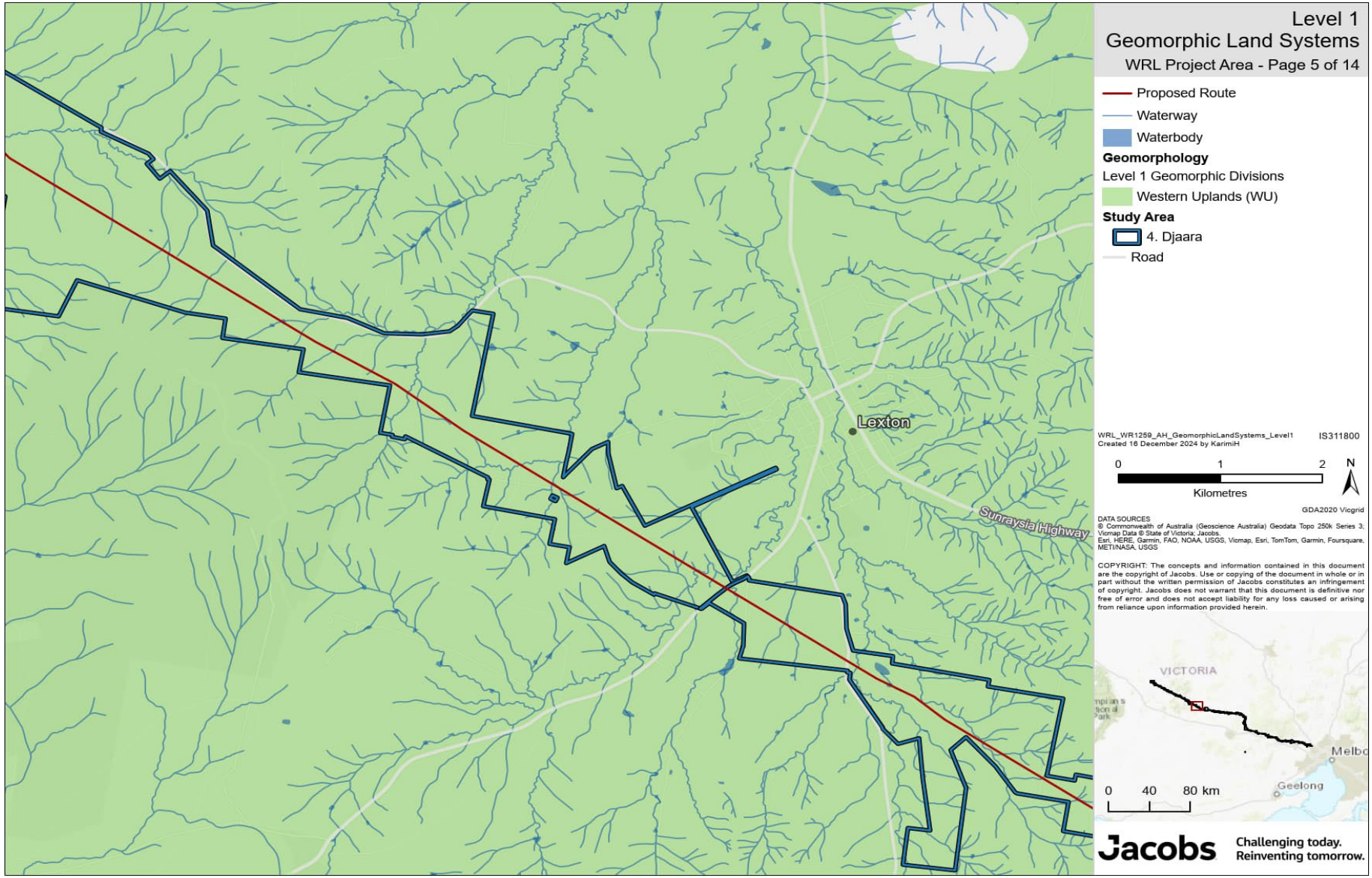
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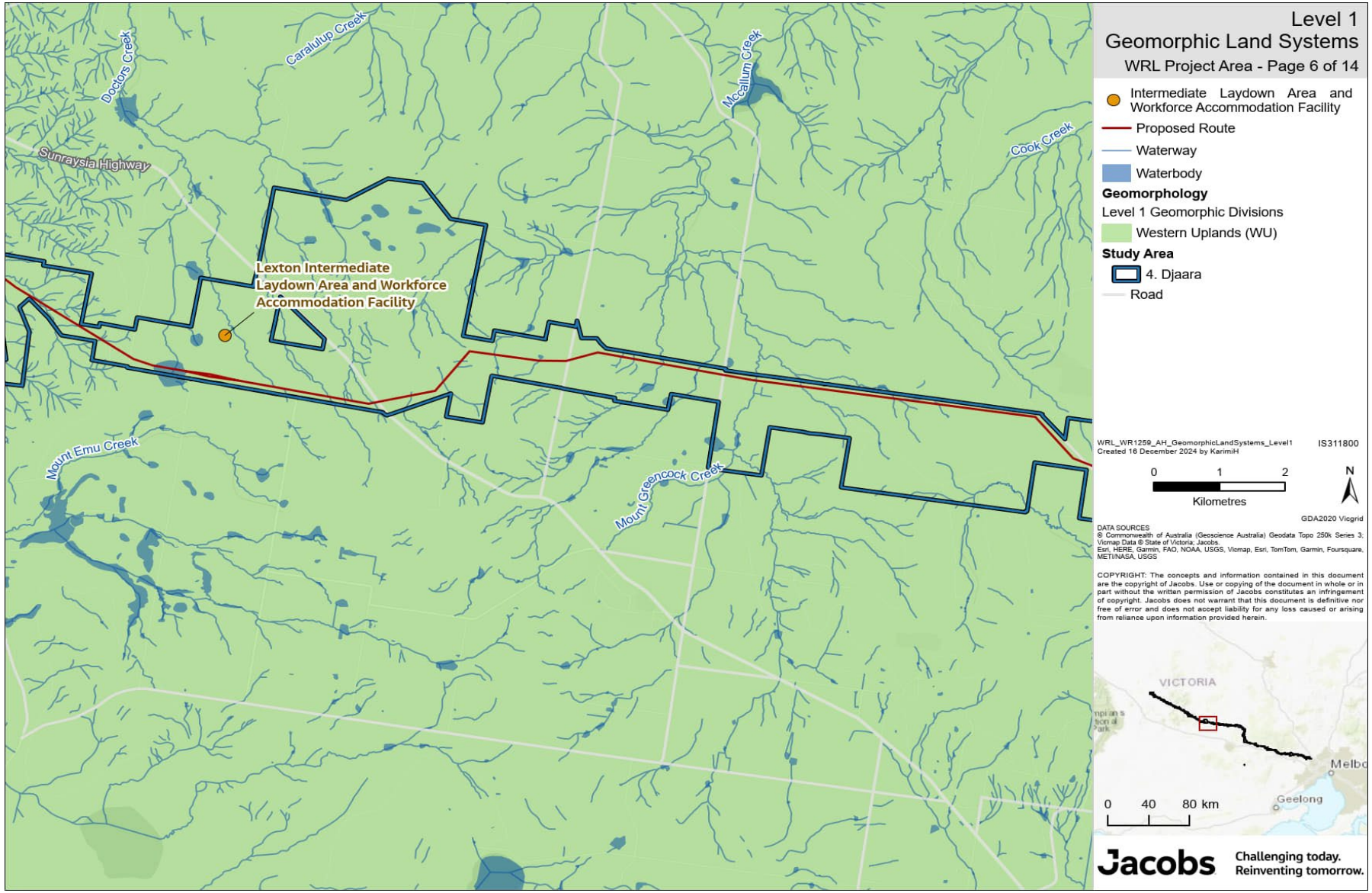
Appendix A. Geographic Land System

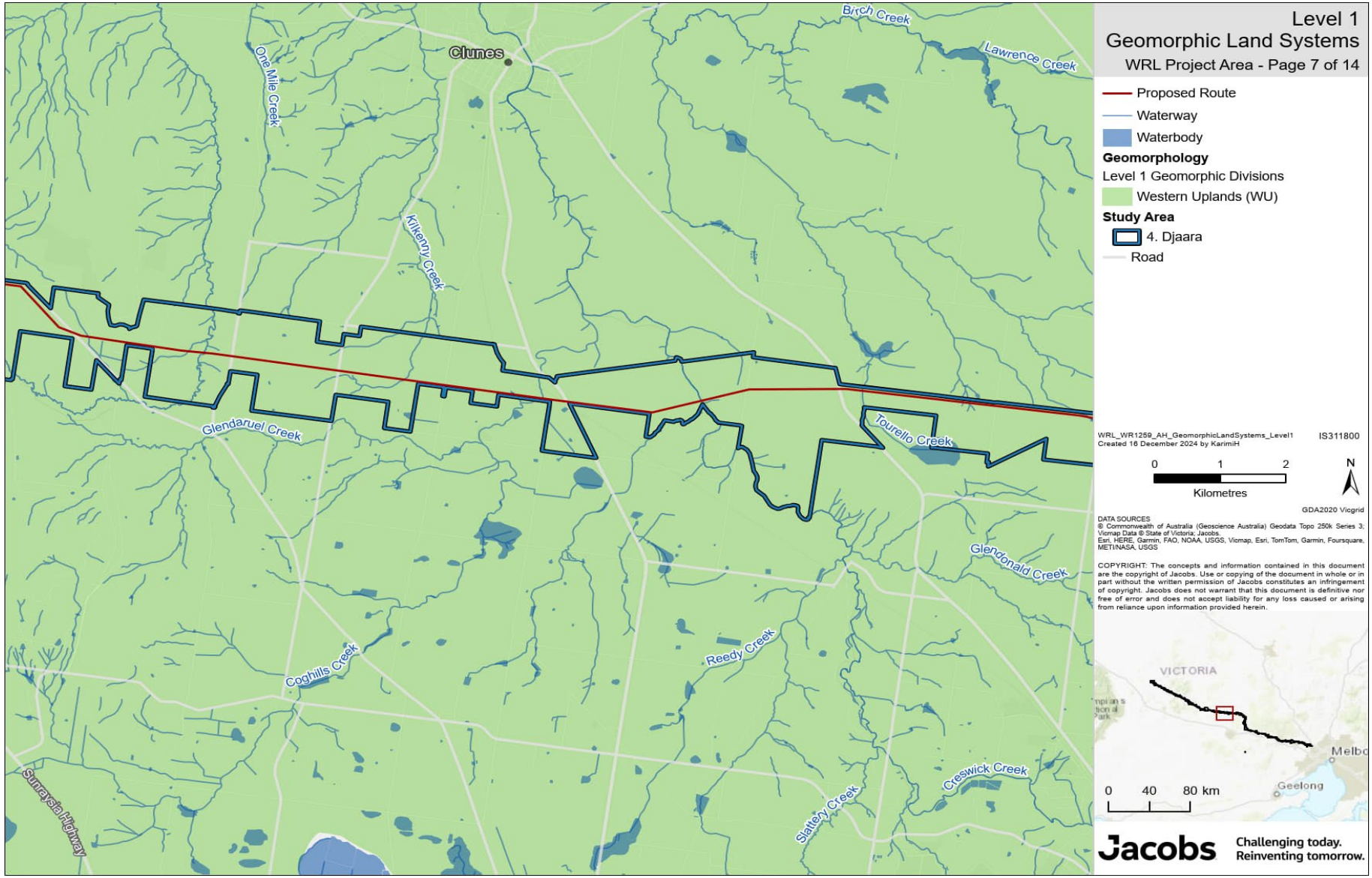

Level 1
Geomorphic Land Systems
WRL Project Area - Page 2 of 14
Proposed Route
Waterway
Waterbody
Geomorphology
Level 1 Geomorphic Divisions
Western Uplands (WU)
Study Area
1. Barengi Gadjin
2. Eastern Maar
3. Non-RAP Area
Road
WRL_WR1259_AH_GeomorphicLandSystems_Level1
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Wimmera River
Glenlofty Creek

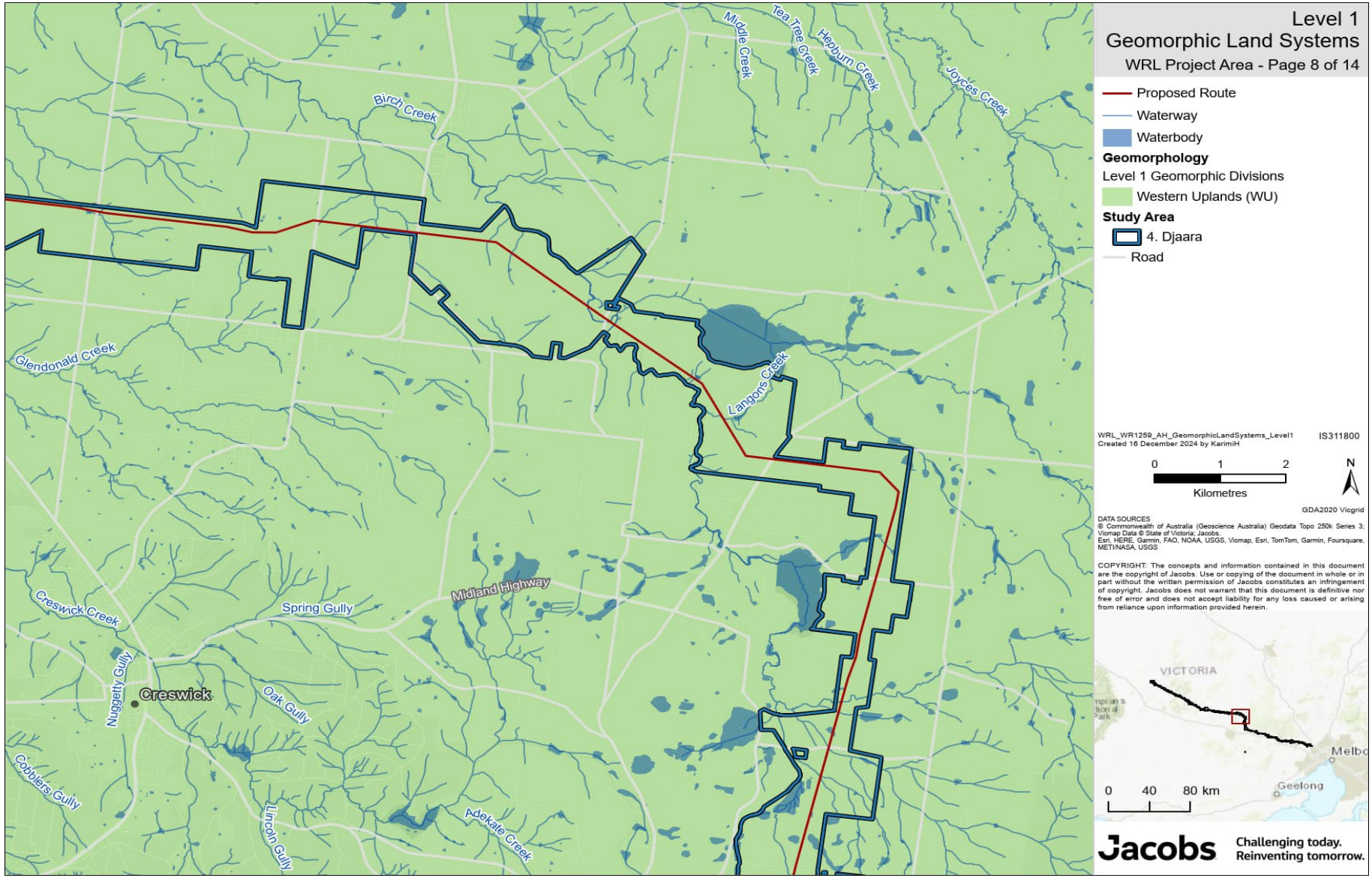

Level 1
Geomorphic Land Systems
WRL Project Area - Page 3 of 14
Proposed Route
Waterway
Waterbody
Geomorphology
Level 1 Geomorphic Divisions
Western Uplands (WU)
Study Area
2. Eastern Maar
3. Non-RAP Area
4. Djaara
Road
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Nowhere Creek
Glenlofty Creek
Glenpatrick Creek
High Street
Wimmera River
Pyrenees Highway
Hickman Creek
Rocky Creek

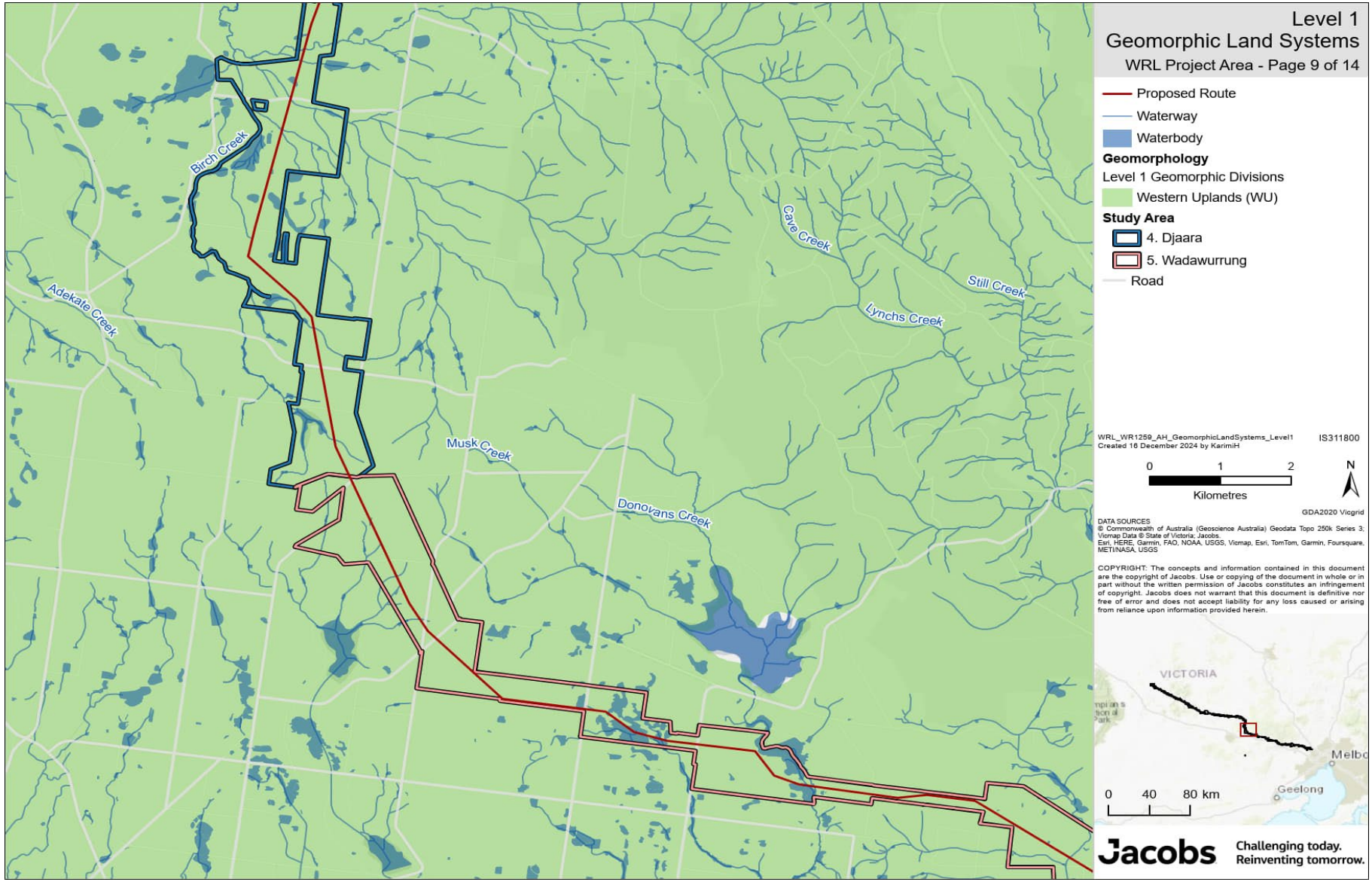

Pyrenees Highway
Glenlogie Creek
Avoca River
Level 1
Geomorphic Land Systems
WRL Project Area - Page 4 of 14
Proposed Route
Waterway
Waterbody
Geomorphology
Level 1 Geomorphic Divisions
Western Uplands (WU)
Study Area
3. Non-RAP Area
4. Djaara
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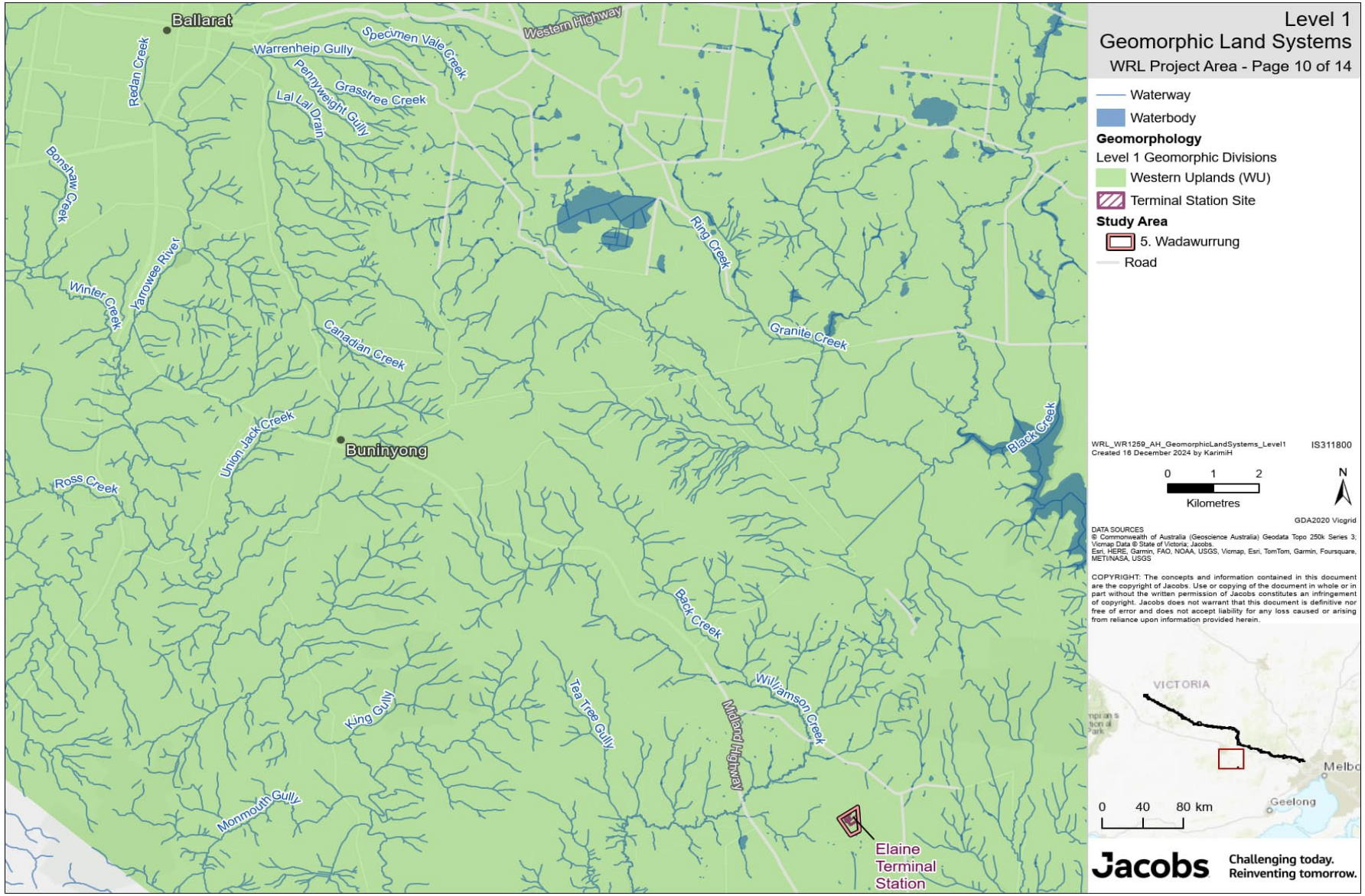

Level 1
Geomorphic Land Systems
WRL Project Area - Page 5 of 14
Proposed Route
Waterway
Waterbody
Geomorphology
Level 1 Geomorphic Divisions
Western Uplands (WU)
Study Area
4. Djaara
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Sunraysia Highway
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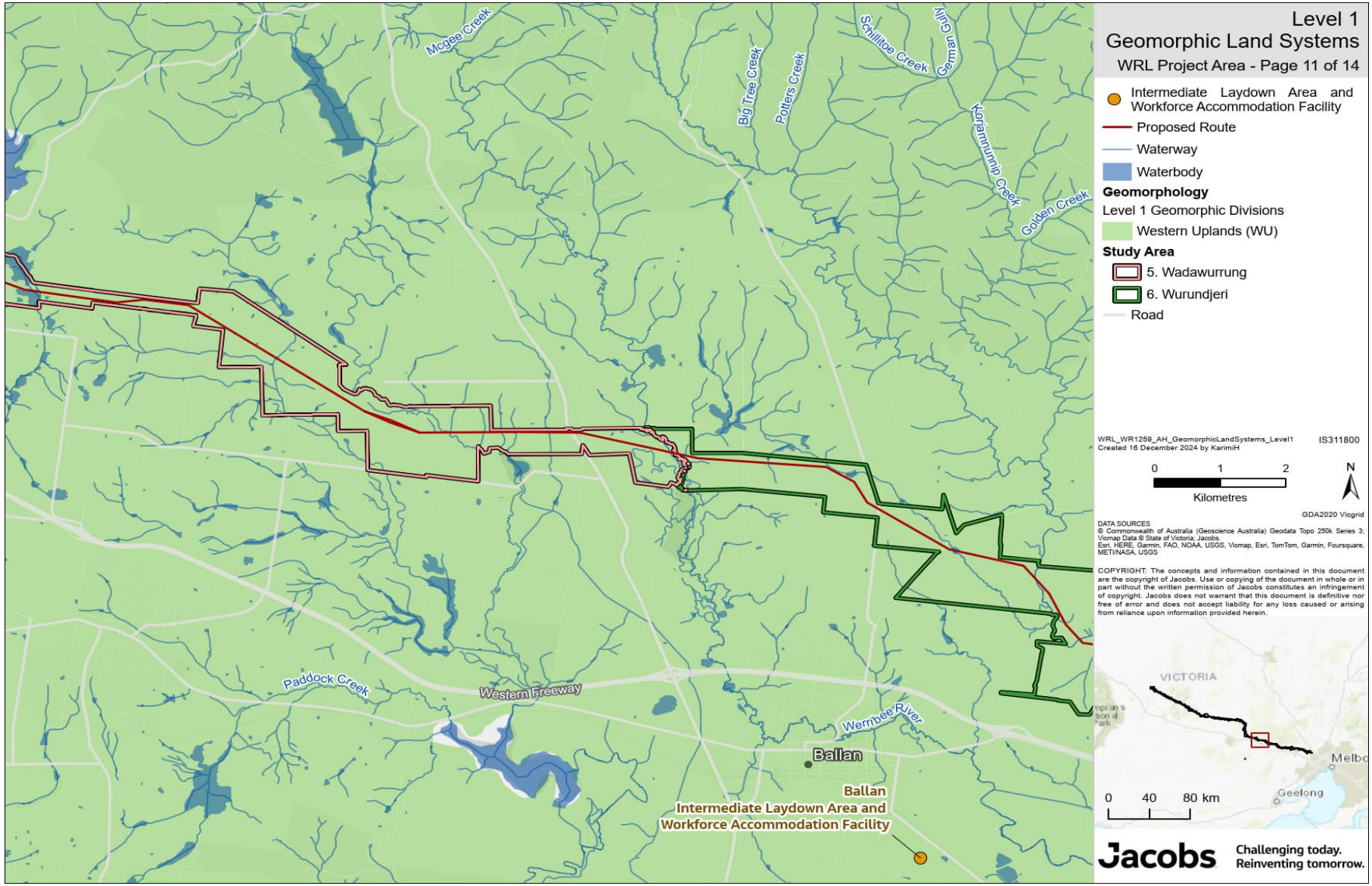

Doctors Creek
Caralulup Creek
Mccallum Creek
Cook Creek
Sunraysia Highway
Lexton Intermediate
Laydown Area and Workforce
Accommodation Facility
Mount Emu Creek
Mount Greencock Creek
Level 1
Geomorphic Land Systems
WRL Project Area - Page 6 of 14
Intermediate Laydown Area and Workforce Accommodation Facility
Proposed Route
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Waterbody
Geomorphology
Level 1 Geomorphic Divisions
Western Uplands (WU)
Study Area
4. Djaara
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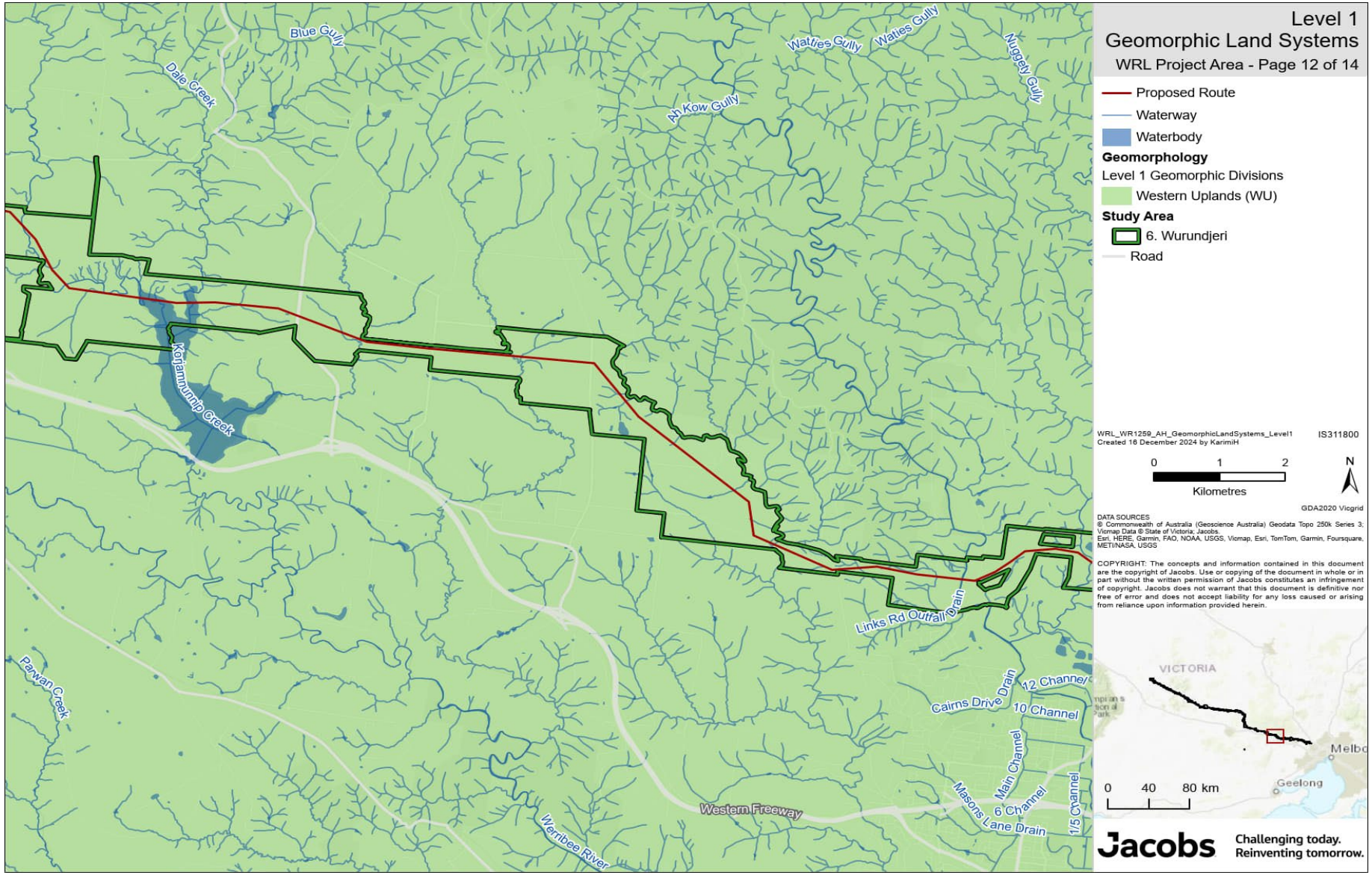

Birch Creek
Clunes
One Mile Creek
Lawrence Creek
Kilkenny Creek
Glendaruel Creek
Tourello Creek
Glendonald Creek
Reedy Creek
Coghills Creek
Creswick Creek
Slattery Creek
Sunraysia Highway
Level 1
Geomorphic Land Systems
WRL Project Area - Page 7 of 14
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Waterbody
Geomorphology
Level 1 Geomorphic Divisions
Western Uplands (WU)
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4. Djaara
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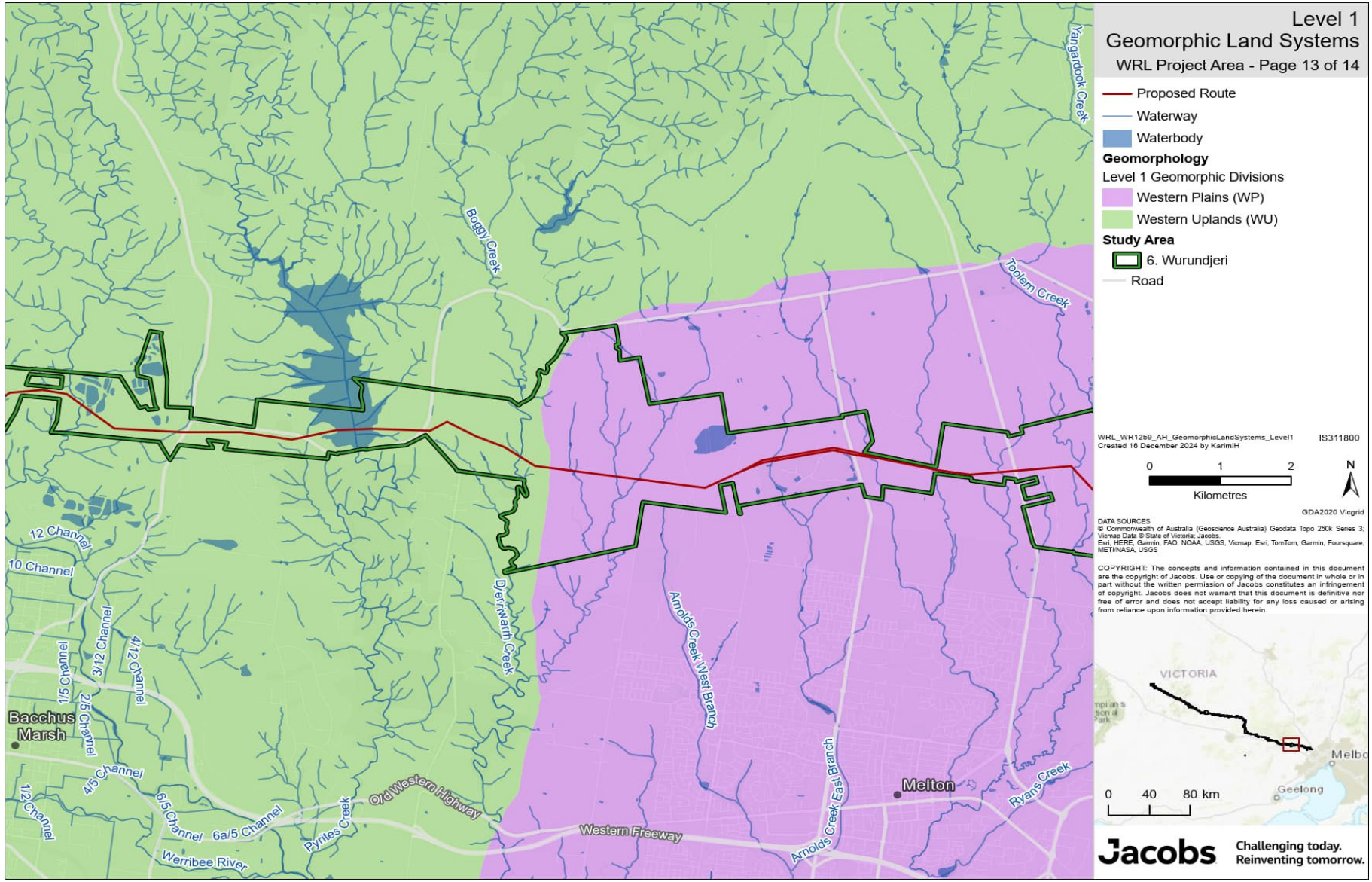

Level 1
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WRL Project Area - Page 8 of 14
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Geomorphology
Level 1 Geomorphic Divisions
Western Uplands (WU)
Study Area
4. Djaara
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Birch Creek
Middle Creek
Tea Tree Creek
Hepburn Creek
Joyces Creek
Glendonald Creek
Langons Creek
Midland Highway
Spring Gully
Creswick Creek
Nuggetty Gully
Creswick
Oak Gully
Cobblers Gully
Lincoln Gully
Adekate Creek

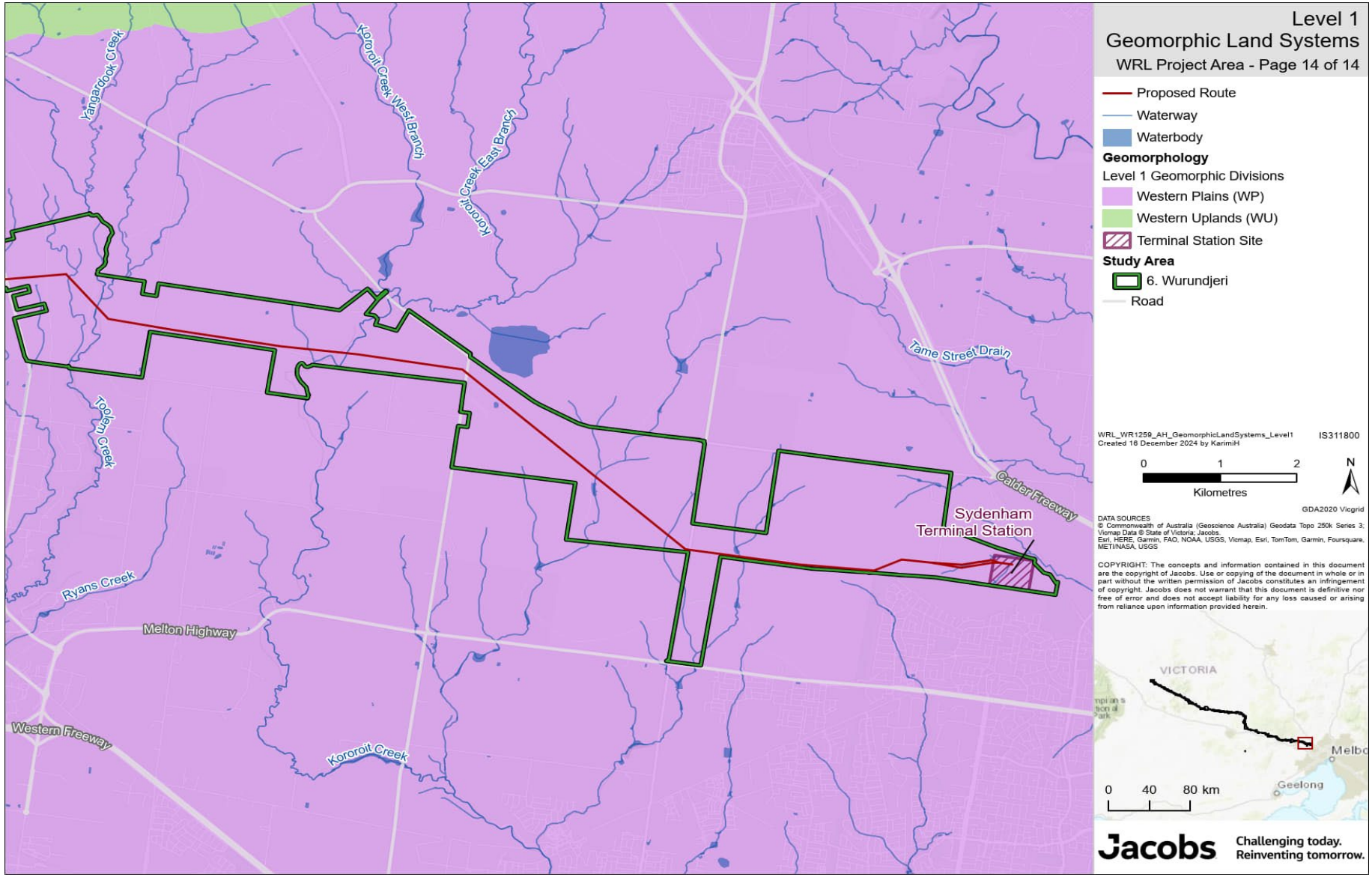

Level 1
Geomorphic Land Systems
WRL Project Area - Page 9 of 14
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Waterway
Waterbody
Geomorphology
Level 1 Geomorphic Divisions
Western Uplands (WU)
Study Area
4. Djaara
5. Wadawurrung
Road
Birch Creek
Adekate Creek
Musk Creek
Donovans Creek
Cave Creek
Still Creek
Lynchs Creek
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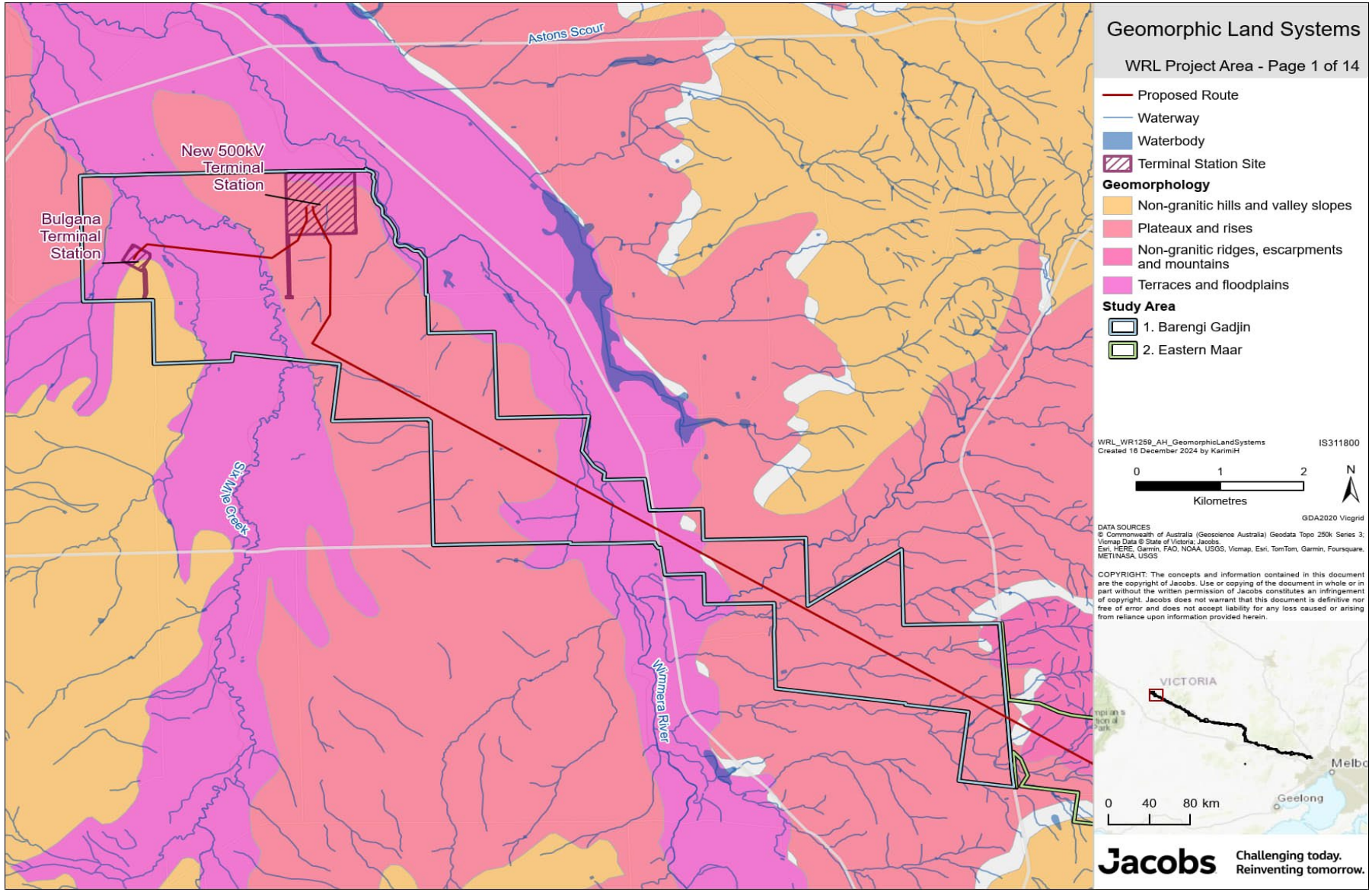

Ballarat
Redan Creek
Warrenheip Gully
Specimen Vale Creek
Western Highway
Pennyweight Gully
Grasstree Creek
Lal Lal Drain
Bonshaw Creek
Yarrowee River
Winter Creek
Ring Creek
Granite Creek
Canadian Creek
Union Jack Creek
Buninyong
Black Creek
Ross Creek
Back Creek
Williamson Creek
Tea Tree Gully
King Gully
Midland Highway
Monmouth Gully
Elaine
Terminal
Station
Level 1
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Level 1 Geomorphic Divisions
Western Uplands (WU)
Terminal Station Site
Study Area
5. Wadawurrung
Road
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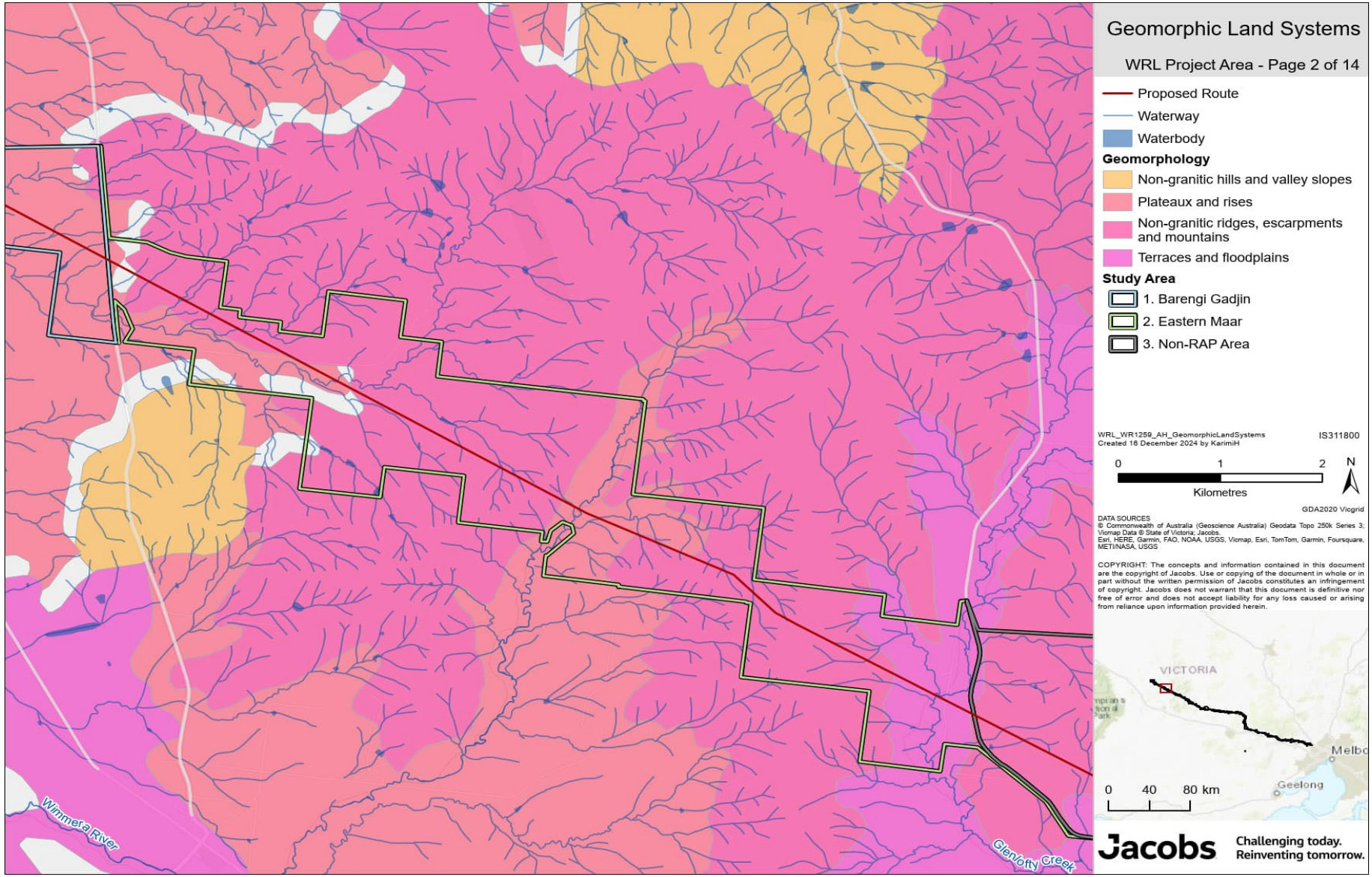

Mcgee Creek
Big Tree Creek
Potters Creek
Schillitoe Creek
German Gully
Koramnunnip Creek
Golden Creek
Paddock Creek
Western Freeway
Werribee River
Ballan
Ballan
Intermediate Laydown Area and
Workforce Accommodation Facility
Level 1
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Intermediate Laydown Area and Workforce Accommodation Facility
Proposed Route
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Western Uplands (WU)
Study Area
5. Wadawurrung
6. Wurundjeri
Road
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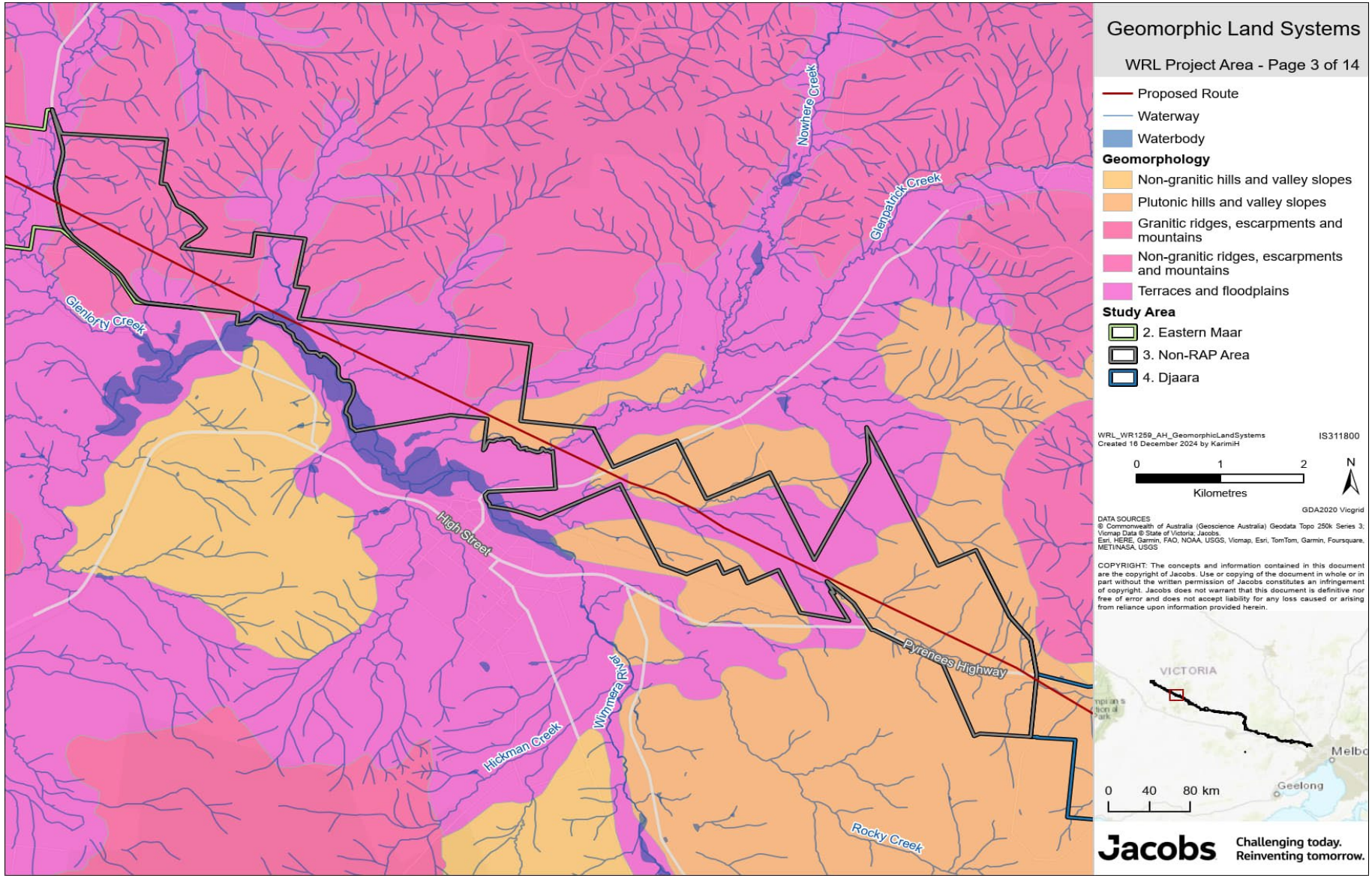

Level 1
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WRL Project Area - Page 12 of 14
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Level 1 Geomorphic Divisions
Western Uplands (WU)
Study Area
6. Wurundjeri
Road
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Blue Gully
Dale Creek
Watties Gully
Watties Gully
Nuggety Gully
Ah Kow Gully
Kororoit Creek
Parwan Creek
Links Rd Outfall Drain
12 Channel
Cairns Drive Drain
10 Channel
Main Channel
6 Channel
Masons Lane Drain
1/5 Channel
Western Freeway
Werribee River

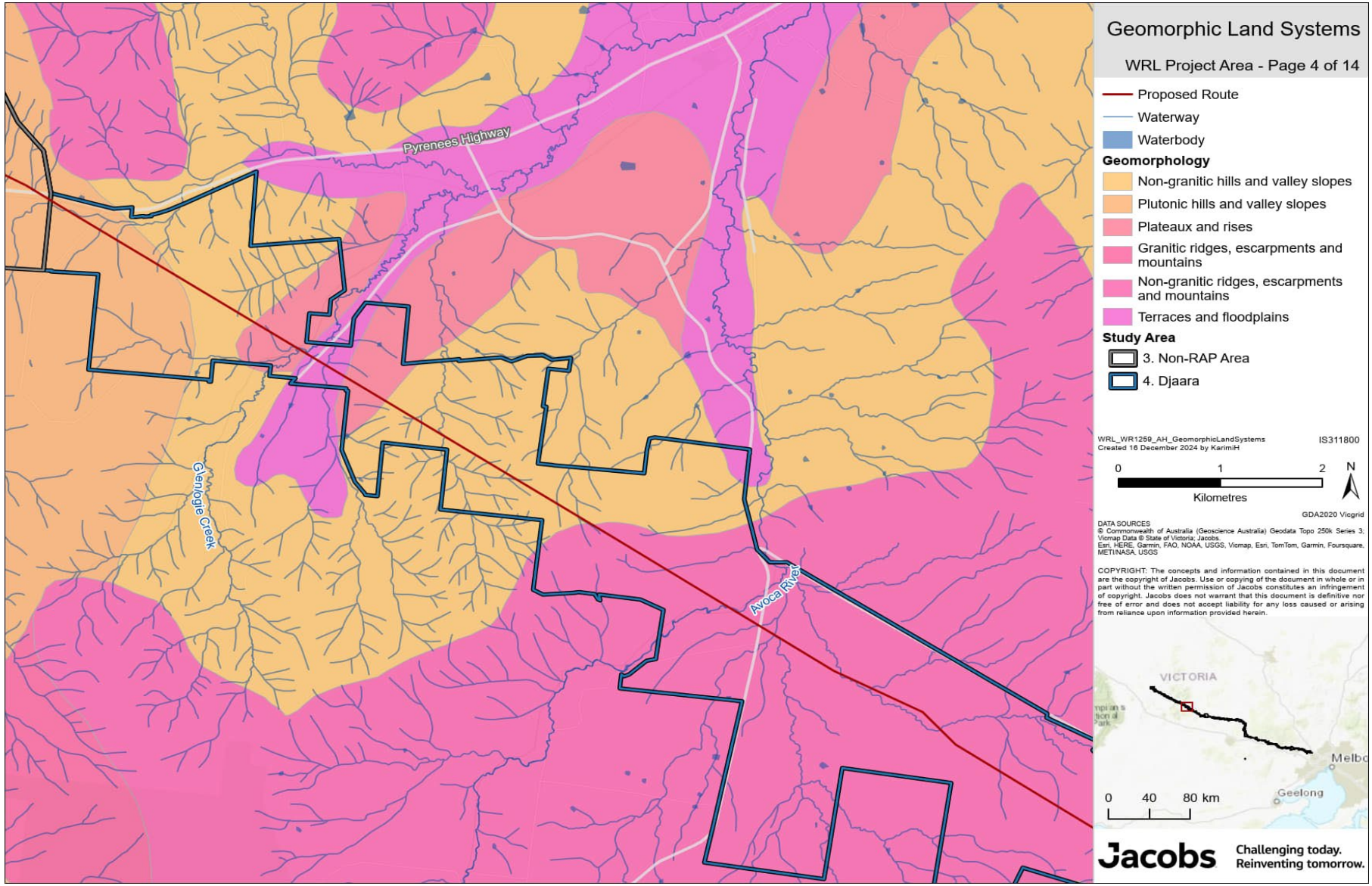

Level 1
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Level 1 Geomorphic Divisions
Western Plains (WP)
Western Uplands (WU)
Study Area
6. Wurundjeri
Road
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Boggy Creek
Toolern Creek
Djerriwarrh Creek
Arnolds Creek West Branch
Arnolds Creek East Branch
Ryans Creek
12 Channel
10 Channel
3/12 Channel
4/12 Channel
1/5 Channel
2/5 Channel
4/5 Channel
1/2 Channel
6/5 Channel
6a/5 Channel
Pyrites Creek
Werribee River
Old Western Highway
Western Freeway
Bacchus Marsh
Melton

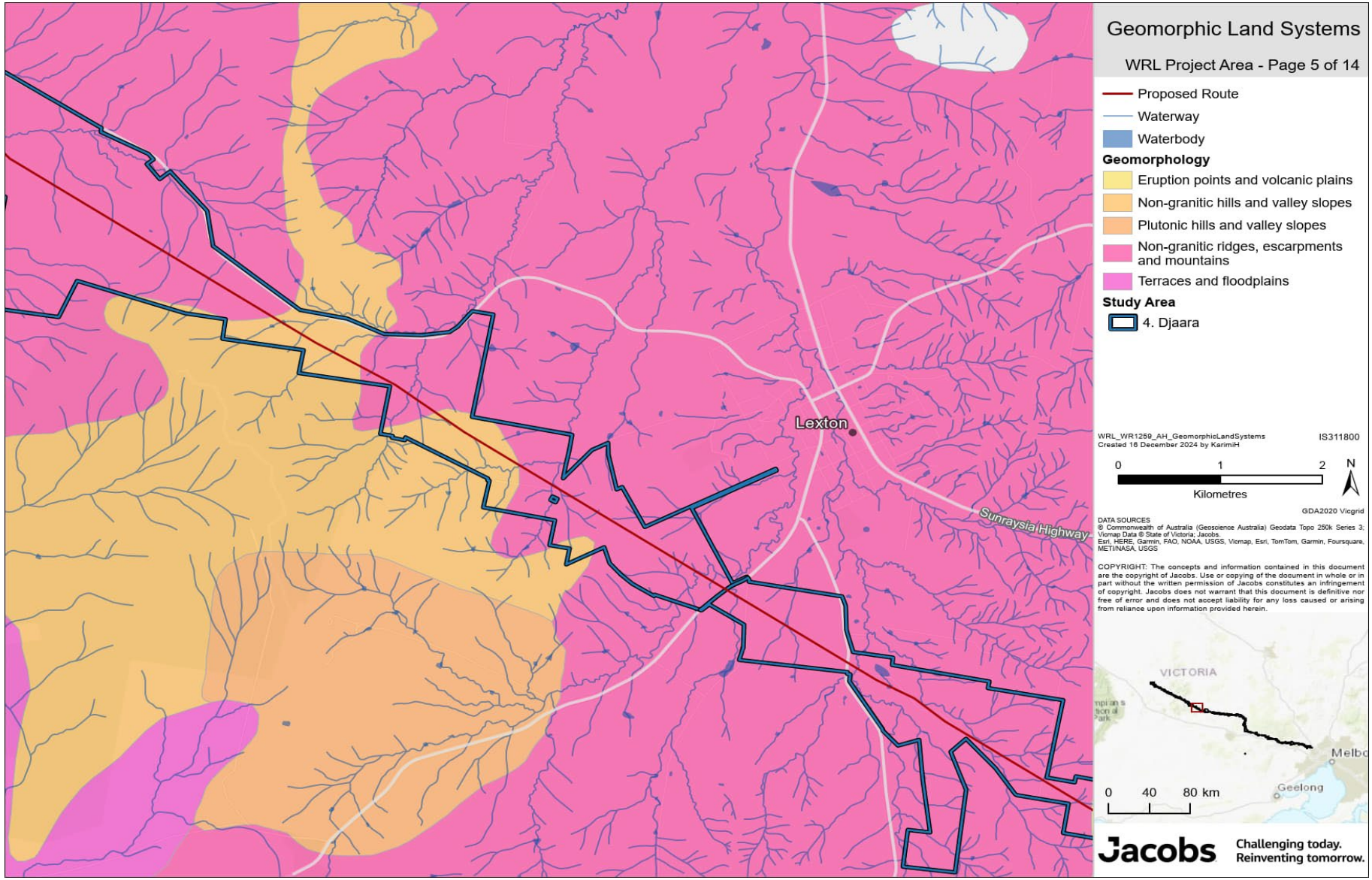

Level 1
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Waterbody
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Western Uplands (WU)
Terminal Station Site
Study Area
6. Wurundjeri
Road
Yangardook Creek
Kororoit Creek West Branch
Kororoit Creek East Branch
Tame Street Drain
Toolern Creek
Caldar Freeway
Sydenham
Terminal Station
Ryans Creek
Melton Highway
Western Freeway
Kororoit Creek
WRL_WR1259_AH_GeomorphicLandSystems_Level1
Created 16 December 2024 by KarimiH
IS311800
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Kilometres
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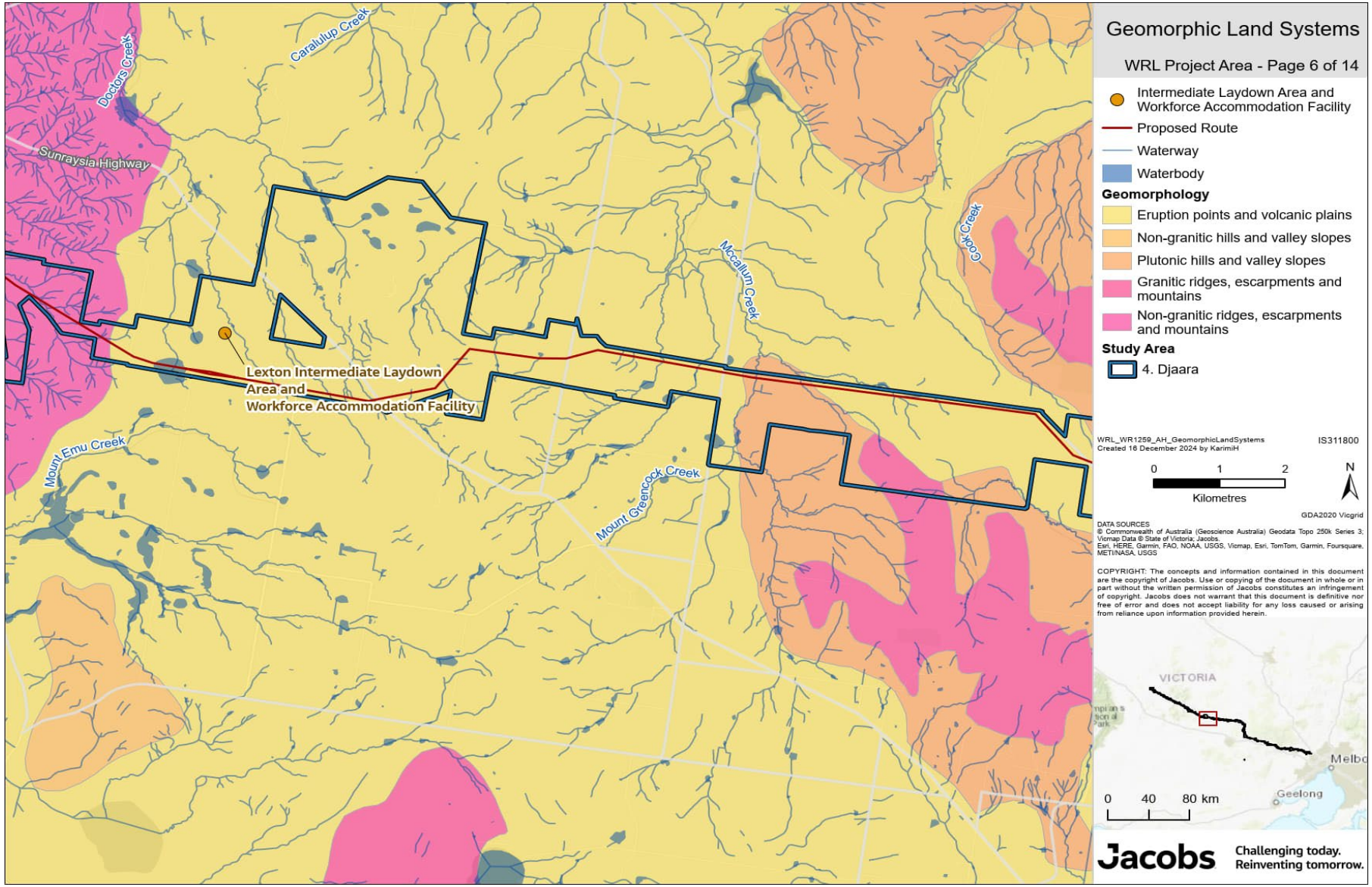

Astons Scour
New 500kV Terminal Station
Bulgana Terminal Station
Six Mile Creek
Wimmera River
Geomorphic Land Systems
WRL Project Area - Page 1 of 14
Proposed Route
Waterway
Waterbody
Terminal Station Site
Geomorphology
Non-granitic hills and valley slopes
Plateaux and rises
Non-granitic ridges, escarpments and mountains
Terraces and floodplains
Study Area
1. Barengi Gadjin
2. Eastern Maar
WRL_WR1259_AH_GeomorphicLandSystems
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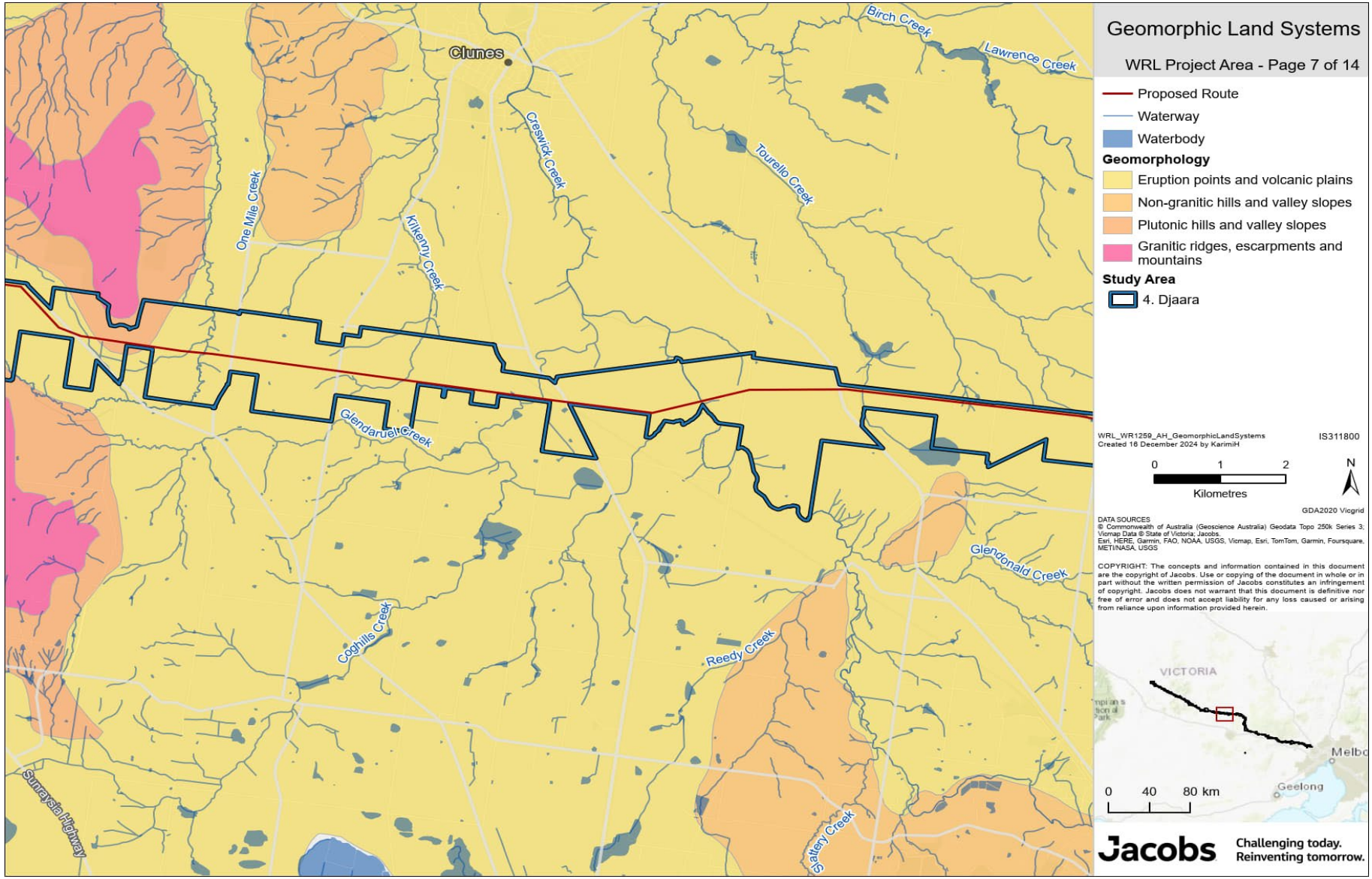

Geomorphic Land Systems
WRL Project Area - Page 2 of 14
Proposed Route
Waterway
Waterbody
Geomorphology
Non-granitic hills and valley slopes
Plateaux and rises
Non-granitic ridges, escarpments and mountains
Terraces and floodplains
Study Area
1. Barengi Gadjin
2. Eastern Maar
3. Non-RAP Area
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Wimmera River
Glenlofty Creek

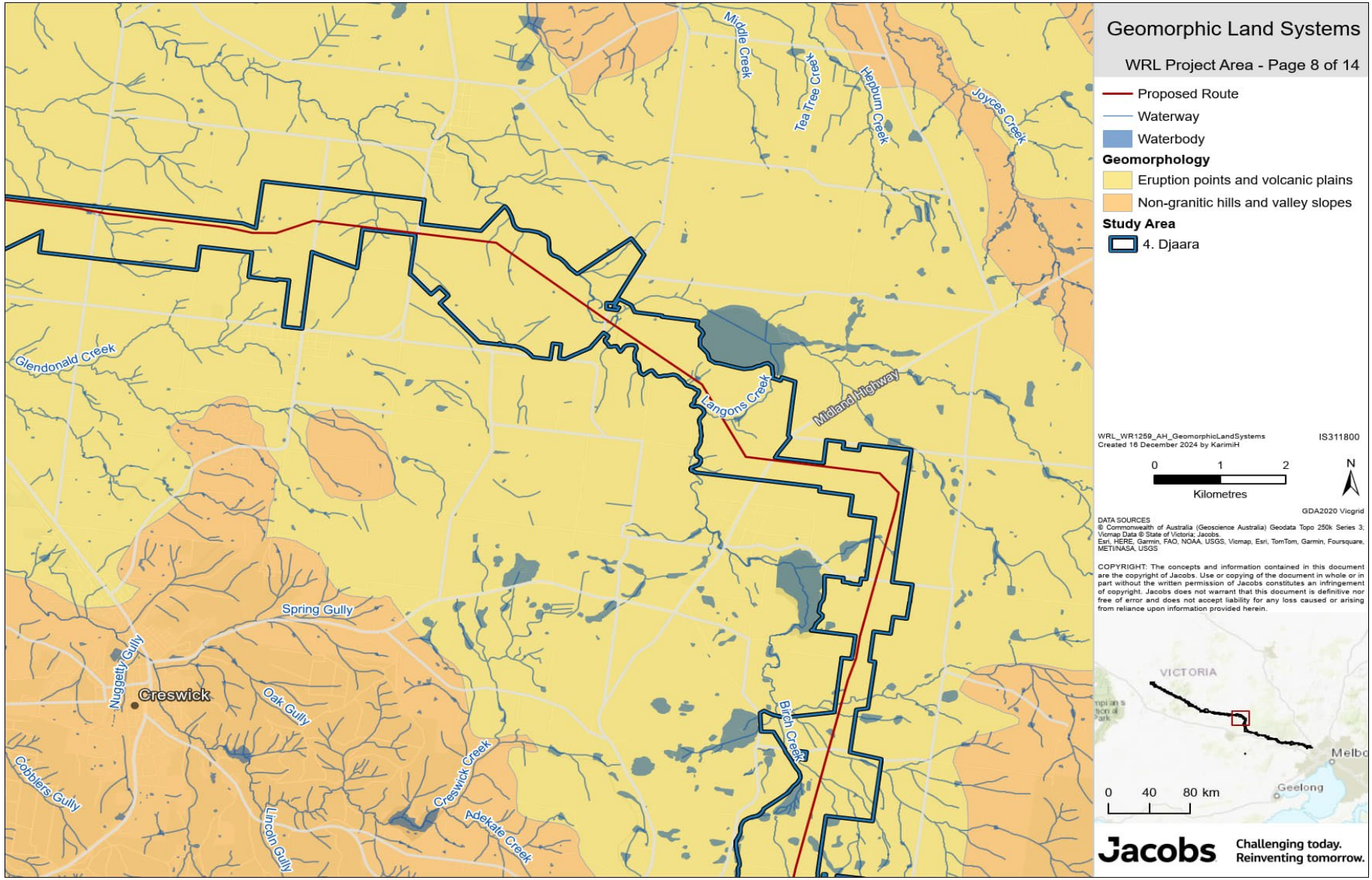

Geomorphic Land Systems
WRL Project Area - Page 3 of 14
Proposed Route
Waterway
Waterbody
Geomorphology
Non-granitic hills and valley slopes
Plutonic hills and valley slopes
Granitic ridges, escarpments and mountains
Non-granitic ridges, escarpments and mountains
Terraces and floodplains
Study Area
2. Eastern Maar
3. Non-RAP Area
4. Djaara
WRL_WR1259_AH_GeomorphicLandSystems
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Nowhere Creek
Glenpatrick Creek
Glenlofty Creek
High Street
Wimmera River
Hickman Creek
Pyrenees Highway
Rocky Creek

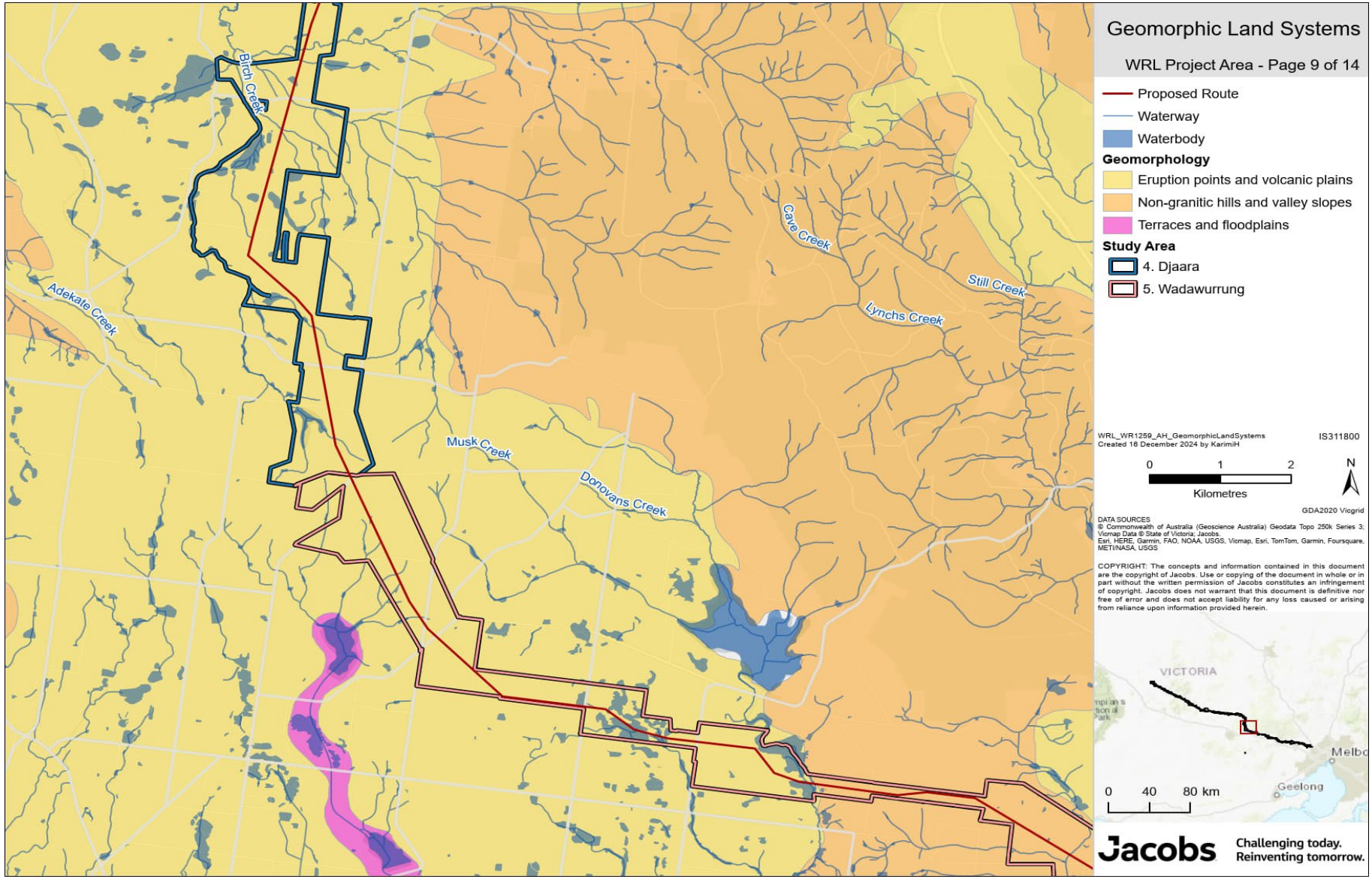

Pyrenees Highway
Glenlogie Creek
Avoca River
Geomorphic Land Systems
WRL Project Area - Page 4 of 14
Proposed Route
Waterway
Waterbody
Geomorphology
Non-granitic hills and valley slopes
Plutonic hills and valley slopes
Plateaux and rises
Granitic ridges, escarpments and mountains
Non-granitic ridges, escarpments and mountains
Terraces and floodplains
Study Area
3. Non-RAP Area
4. Djaara
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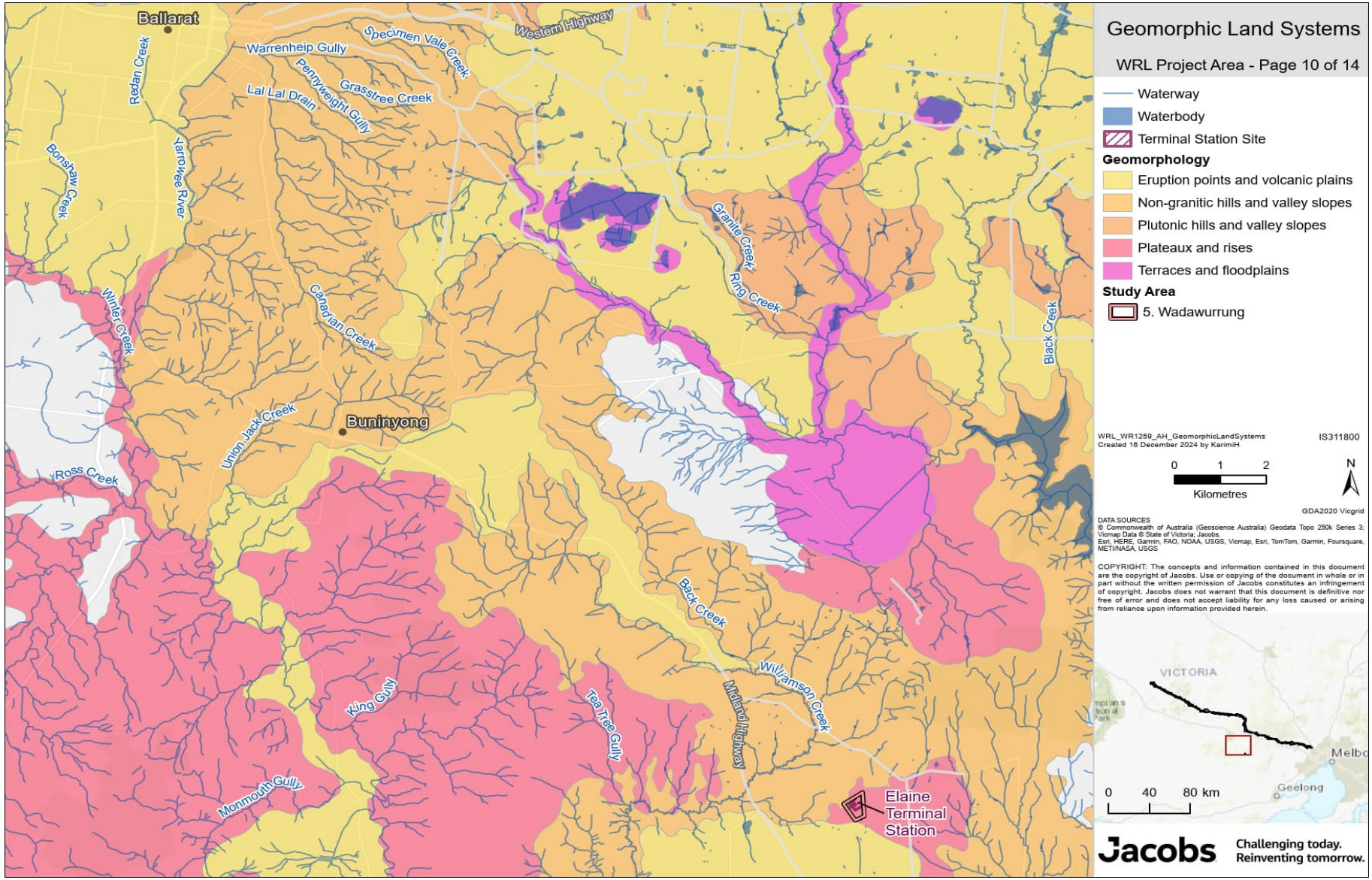

Geomorphic Land Systems
WRL Project Area - Page 5 of 14
Proposed Route
Waterway
Waterbody
Geomorphology
Eruption points and volcanic plains
Non-granitic hills and valley slopes
Plutonic hills and valley slopes
Non-granitic ridges, escarpments and mountains
Terraces and floodplains
Study Area
4. Djaara
Lexton
Sunraysia Highway
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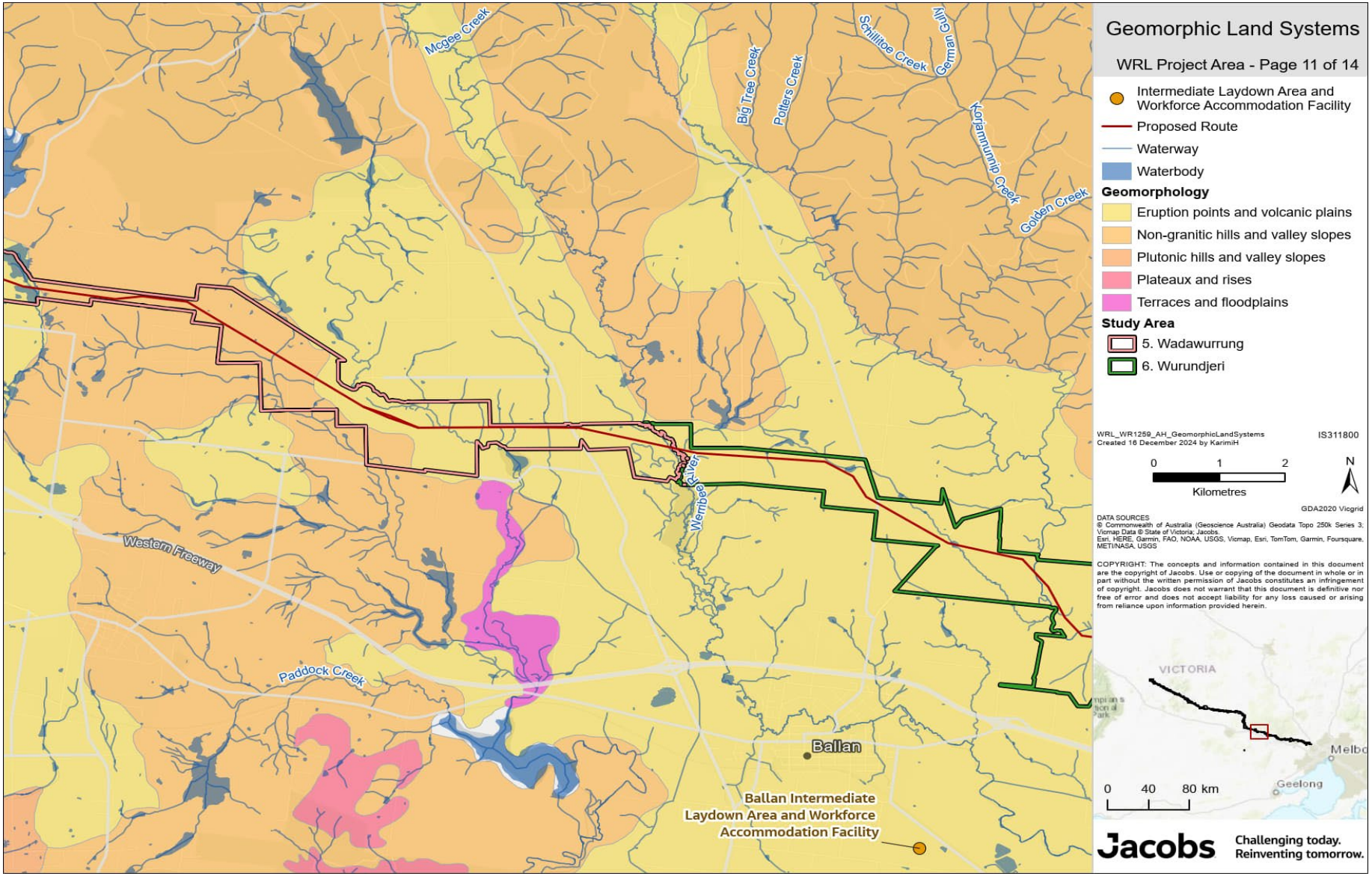

Geomorphic Land Systems
WRL Project Area - Page 6 of 14
Intermediate Laydown Area and Workforce Accommodation Facility
Proposed Route
Waterway
Waterbody
Geomorphology
Eruption points and volcanic plains
Non-granitic hills and valley slopes
Plutonic hills and valley slopes
Granitic ridges, escarpments and mountains
Non-granitic ridges, escarpments and mountains
Study Area
4. Djaara
Lexton Intermediate Laydown Area and Workforce Accommodation Facility
Caralulup Creek
Doctors Creek
Sunraysia Highway
Mount Emu Creek
Mount Greencock Creek
Mccallum Creek
Cook Creek
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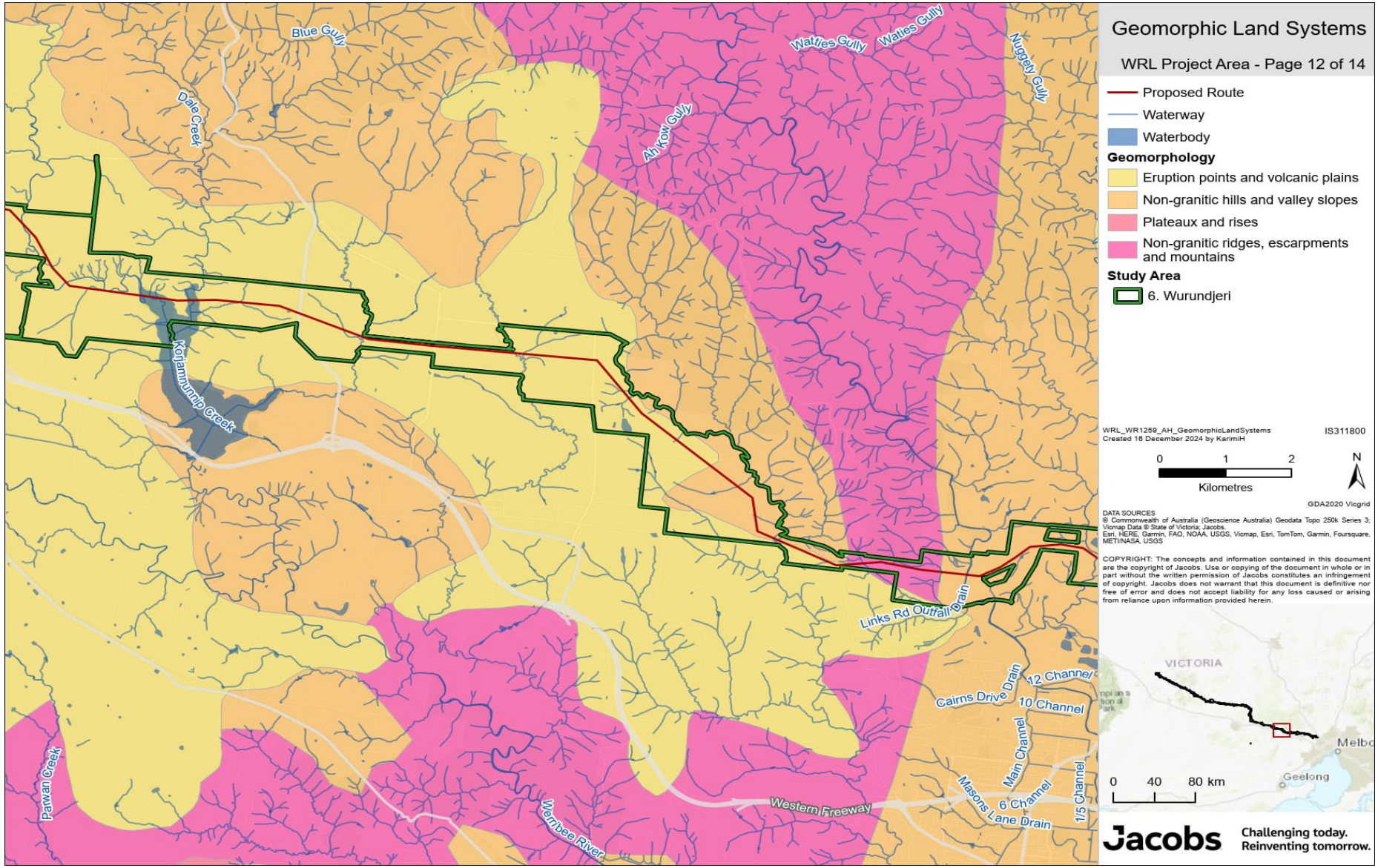

Clunes
Birch Creek
Lawrence Creek
Creswick Creek
Tourello Creek
One Mile Creek
Kilkenny Creek
Glendaruel Creek
Glendonald Creek
Coghills Creek
Reedy Creek
Slattery Creek
Sunraysia Highway
Geomorphic Land Systems
WRL Project Area - Page 7 of 14
Proposed Route
Waterway
Waterbody
Geomorphology
Eruption points and volcanic plains
Non-granitic hills and valley slopes
Plutonic hills and valley slopes
Granitic ridges, escarpments and mountains
Study Area
4. Djaara
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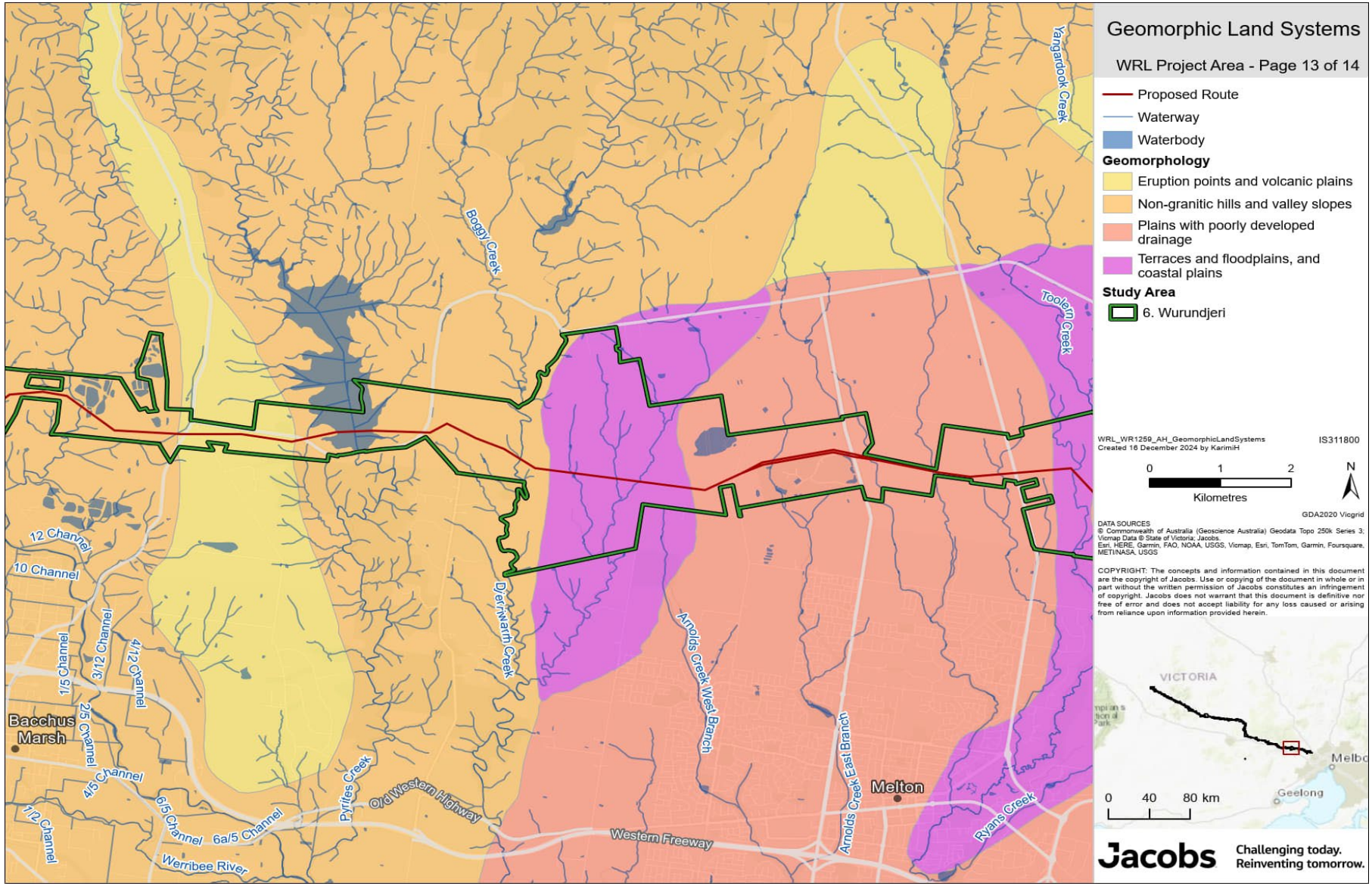

Geomorphic Land Systems
WRL Project Area - Page 8 of 14
Proposed Route
Waterway
Waterbody
Geomorphology
Eruption points and volcanic plains
Non-granitic hills and valley slopes
Study Area
4. Djaara
WRL_WR1259_AH_GeomorphicLandSystems
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Kilometres
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Middle Creek
Tea Tree Creek
Hepburn Creek
Joyces Creek
Glendonald Creek
Langons Creek
Midland Highway
Spring Gully
Nuggetty Gully
Creswick
Oak Gully
Cobblers Gully
Lincoln Gully
Creswick Creek
Adelaide Creek
Birch Creek

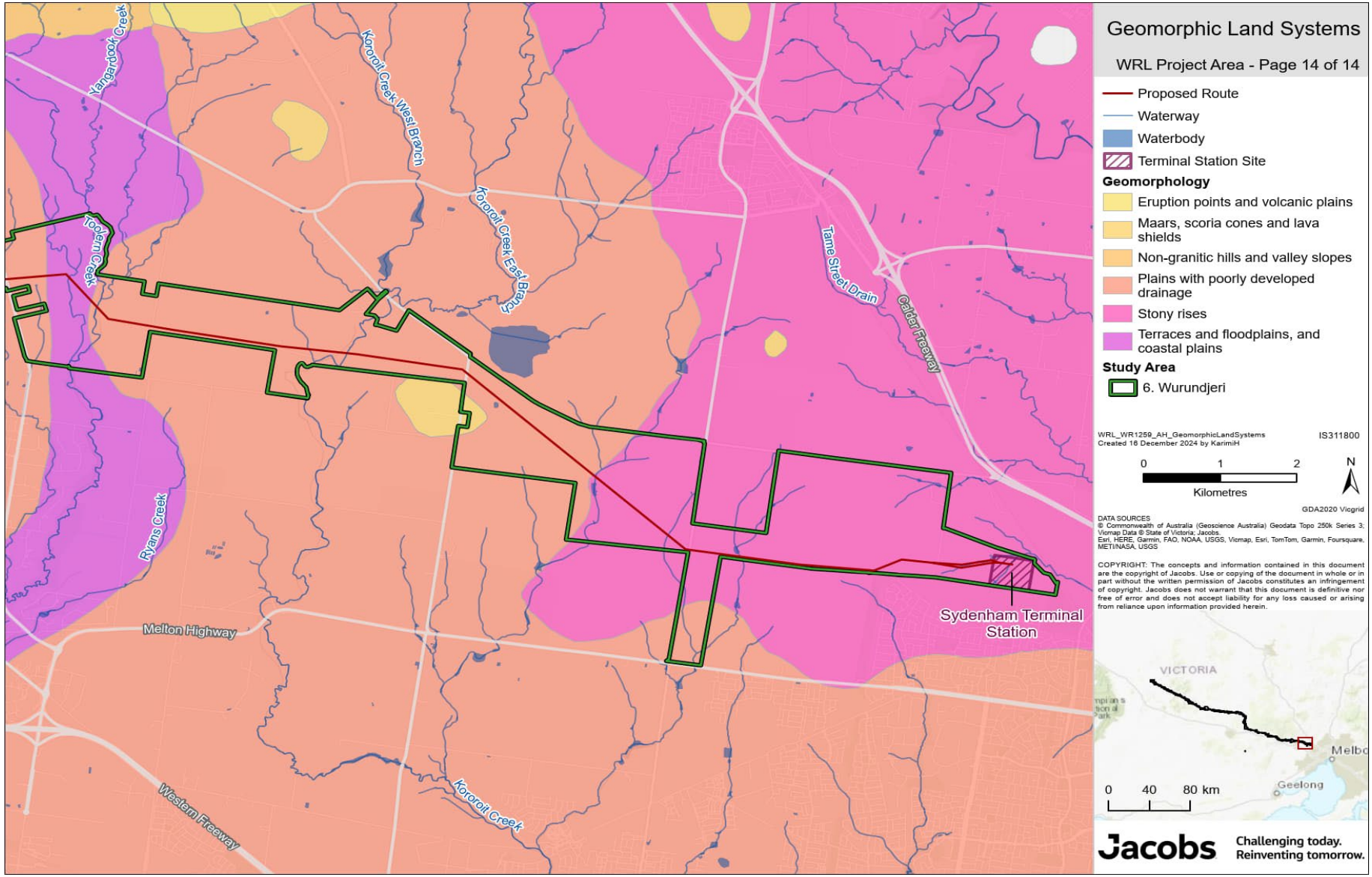

Geomorphic Land Systems
WRL Project Area - Page 9 of 14
Proposed Route
Waterway
Waterbody
Geomorphology
Eruption points and volcanic plains
Non-granitic hills and valley slopes
Terraces and floodplains
Study Area
4. Djaara
5. Wadawurrung
Birch Creek
Adekate Creek
Musk Creek
Donovans Creek
Cave Creek
Still Creek
Lynchs Creek
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Ballarat
Redan Creek
Warrenheip Gully
Specimen Vale Creek
Western Highway
Pennyweight Gully
Grasstree Creek
Lal Lal Drain
Bonshaw Creek
Yarrowee River
Granite Creek
Ring Creek
Black Creek
Winter Creek
Canadian Creek
Union Jack Creek
Buninyong
Ross Creek
Back Creek
Williamson Creek
Midland Highway
King Gully
Tea Tree Gully
Monmouth Gully
Elaine Terminal Station
Geomorphic Land Systems
WRL Project Area - Page 10 of 14
Waterway
Waterbody
Terminal Station Site
Geomorphology
Eruption points and volcanic plains
Non-granitic hills and valley slopes
Plutonic hills and valley slopes
Plateaux and rises
Terraces and floodplains
Study Area
5. Wadawurrung
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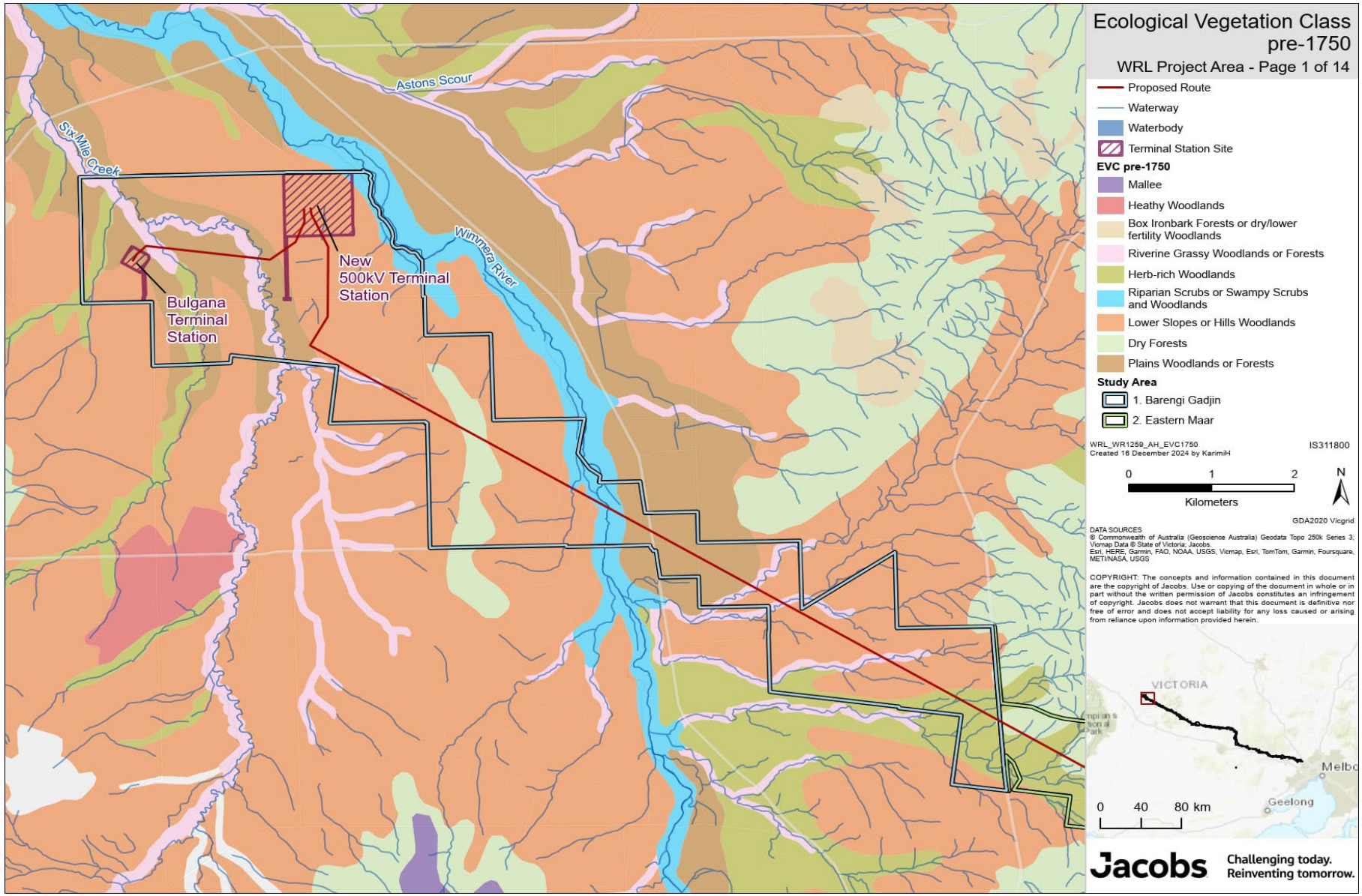

Mcgee Creek
Big Tree Creek
Potters Creek
Schillitoe Creek
German Gully
Koramrumnip Creek
Golden Creek
Werribee River
Western Freeway
Paddock Creek
Ballan
Ballan Intermediate Laydown Area and Workforce Accommodation Facility
Geomorphic Land Systems
WRL Project Area - Page 11 of 14
Intermediate Laydown Area and Workforce Accommodation Facility
Proposed Route
Waterway
Waterbody
Geomorphology
Eruption points and volcanic plains
Non-granitic hills and valley slopes
Plutonic hills and valley slopes
Plateaux and rises
Terraces and floodplains
Study Area
5. Wadawurrung
6. Wurundjeri
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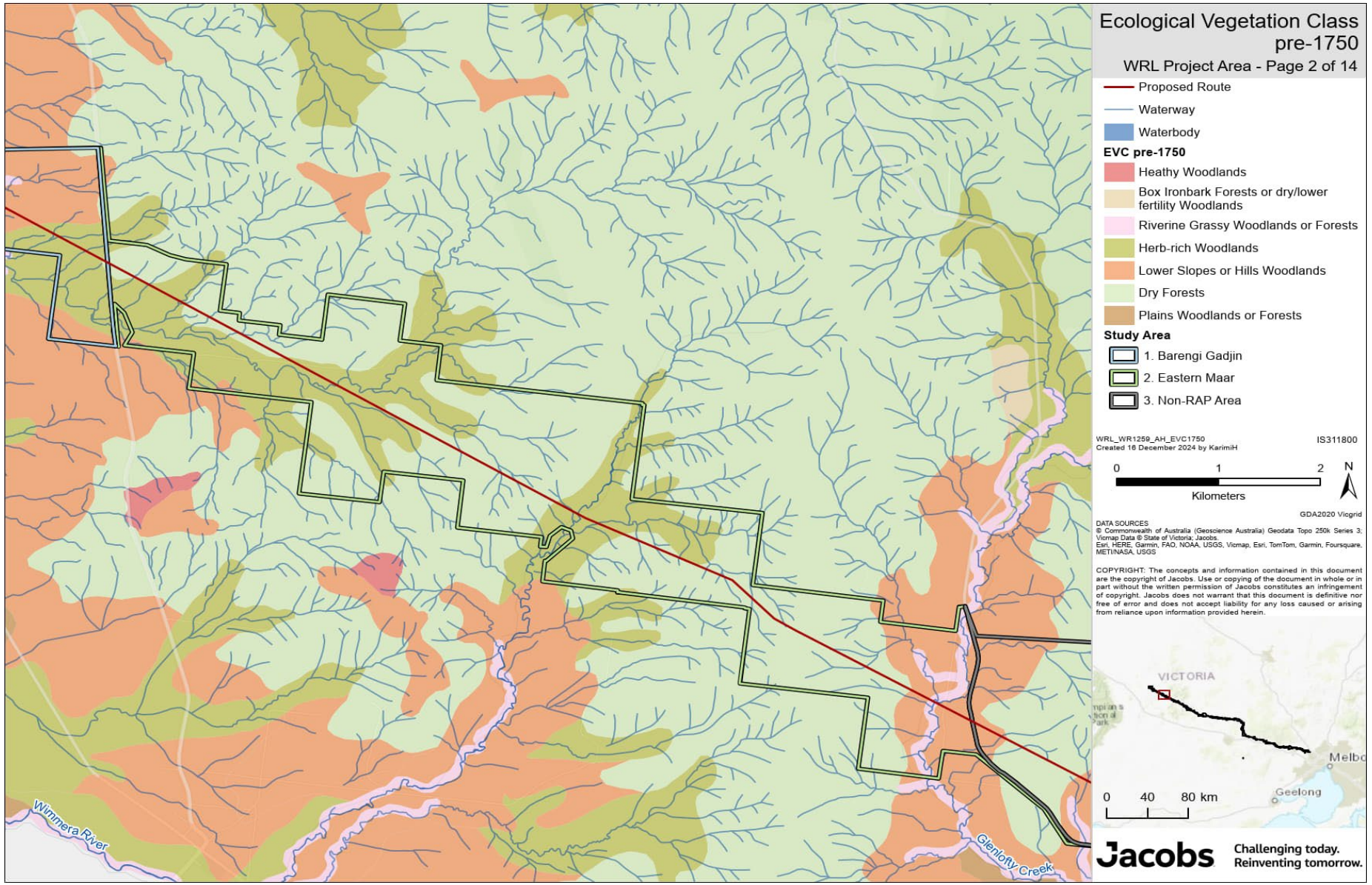

Blue Gully
Dale Creek
Watties Gully
Watties Gully
Nuggety Gully
Ah Kow Gully
Kororoit Creek
Links Rd Outfall Drain
Cairns Drive Drain
12 Channel
10 Channel
Main Channel
Masons Lane Drain
6 Channel
1/5 Channel
Western Freeway
Werribee River
Parwan Creek
Geomorphic Land Systems
WRL Project Area - Page 12 of 14
Proposed Route
Waterway
Waterbody
Geomorphology
Eruption points and volcanic plains
Non-granitic hills and valley slopes
Plateaux and rises
Non-granitic ridges, escarpments and mountains
Study Area
6. Wurundjeri
WRL_WR1259_AH_GeomorphicLandSystems
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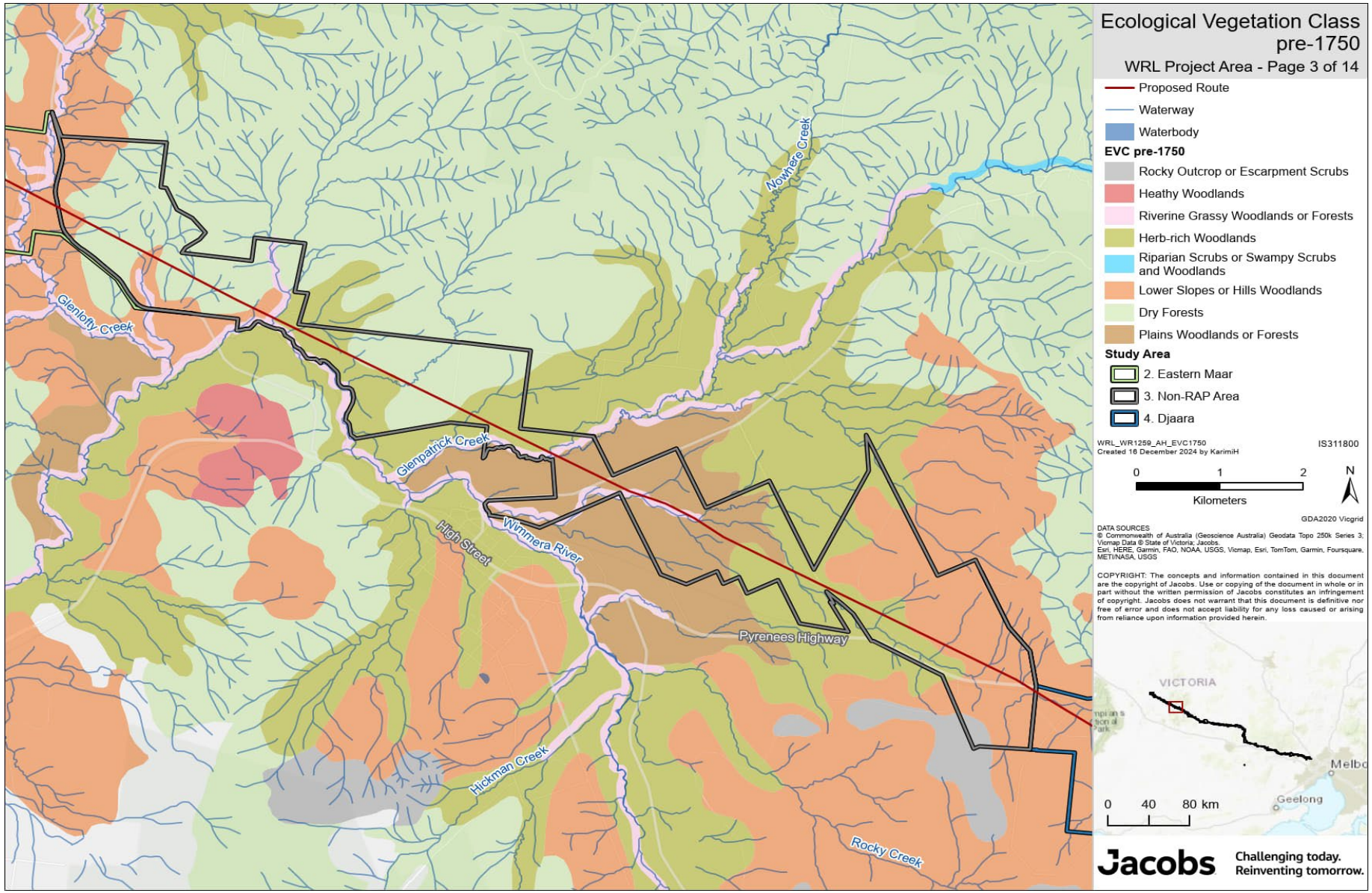

Geomorphic Land Systems
WRL Project Area - Page 13 of 14
Proposed Route
Waterway
Waterbody
Geomorphology
Eruption points and volcanic plains
Non-granitic hills and valley slopes
Plains with poorly developed drainage
Terraces and floodplains, and coastal plains
Study Area
6. Wurundjeri
WRL_WR1259_AH_GeomorphicLandSystems
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Yangardook Creek
Boggy Creek
Toolern Creek
Djerriwarrh Creek
Arnolds Creek West Branch
Arnolds Creek East Branch
Ryans Creek
Pyrites Creek
Old Western Highway
Western Freeway
Werribee River
Bacchus Marsh
Melton
12 Channel
10 Channel
1/5 Channel
3/12 Channel
4/12 Channel
2/5 Channel
4/5 Channel
6/5 Channel
6a/5 Channel
1/2 Channel

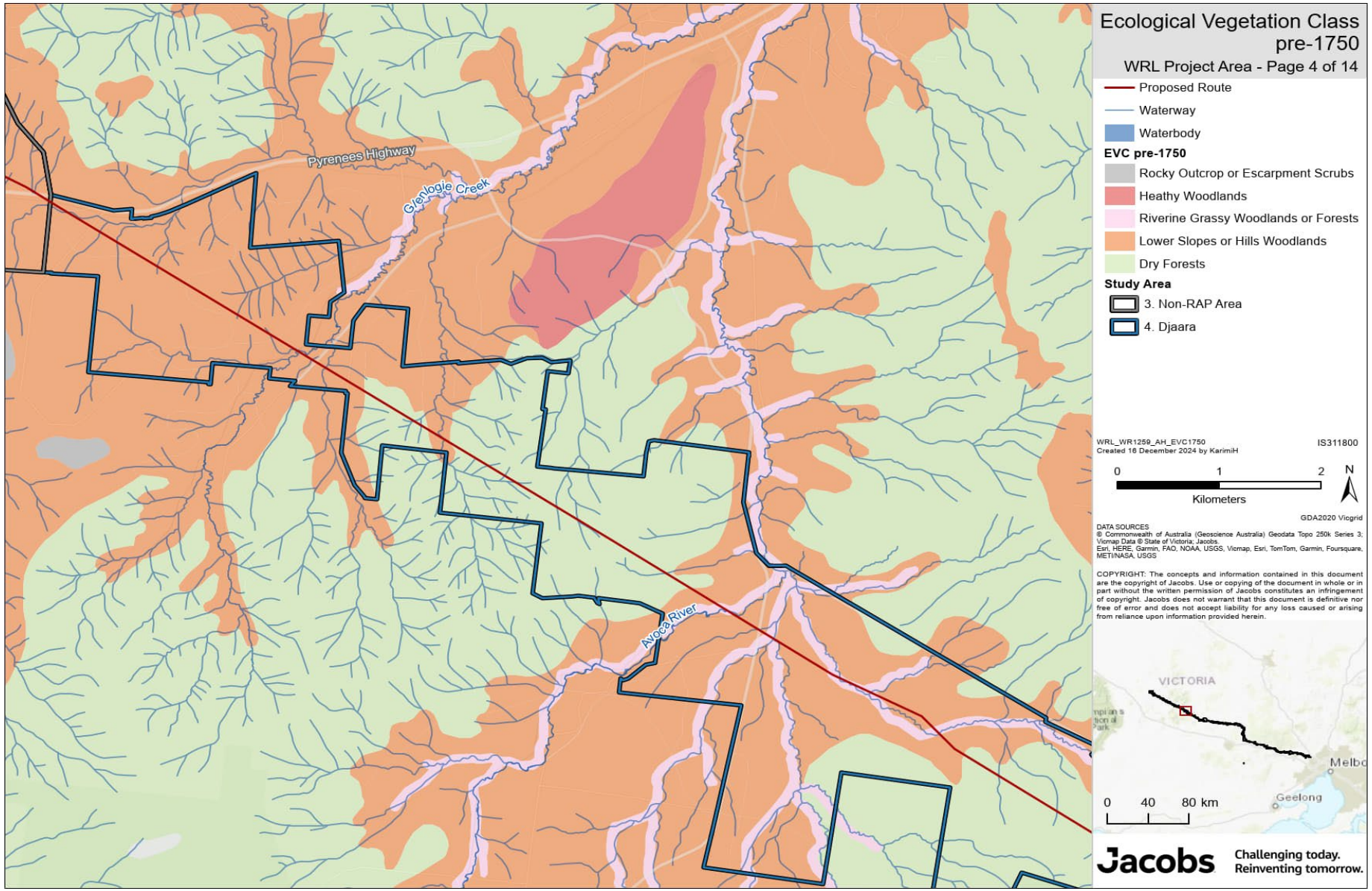

Yangardook Creek
Kororoit Creek West Branch
Kororoit Creek East Branch
Toolern Creek
Tarne Street Drain
Calder Freeway
Ryans Creek
Melton Highway
Western Freeway
Kororoit Creek
Sydenham Terminal Station
Geomorphic Land Systems
WRL Project Area - Page 14 of 14
Proposed Route
Waterway
Waterbody
Terminal Station Site
Geomorphology
Eruption points and volcanic plains
Maars, scoria cones and lava shields
Non-granitic hills and valley slopes
Plains with poorly developed drainage
Stony rises
Terraces and floodplains, and coastal plains
Study Area
6. Wurundjeri
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Kilometres
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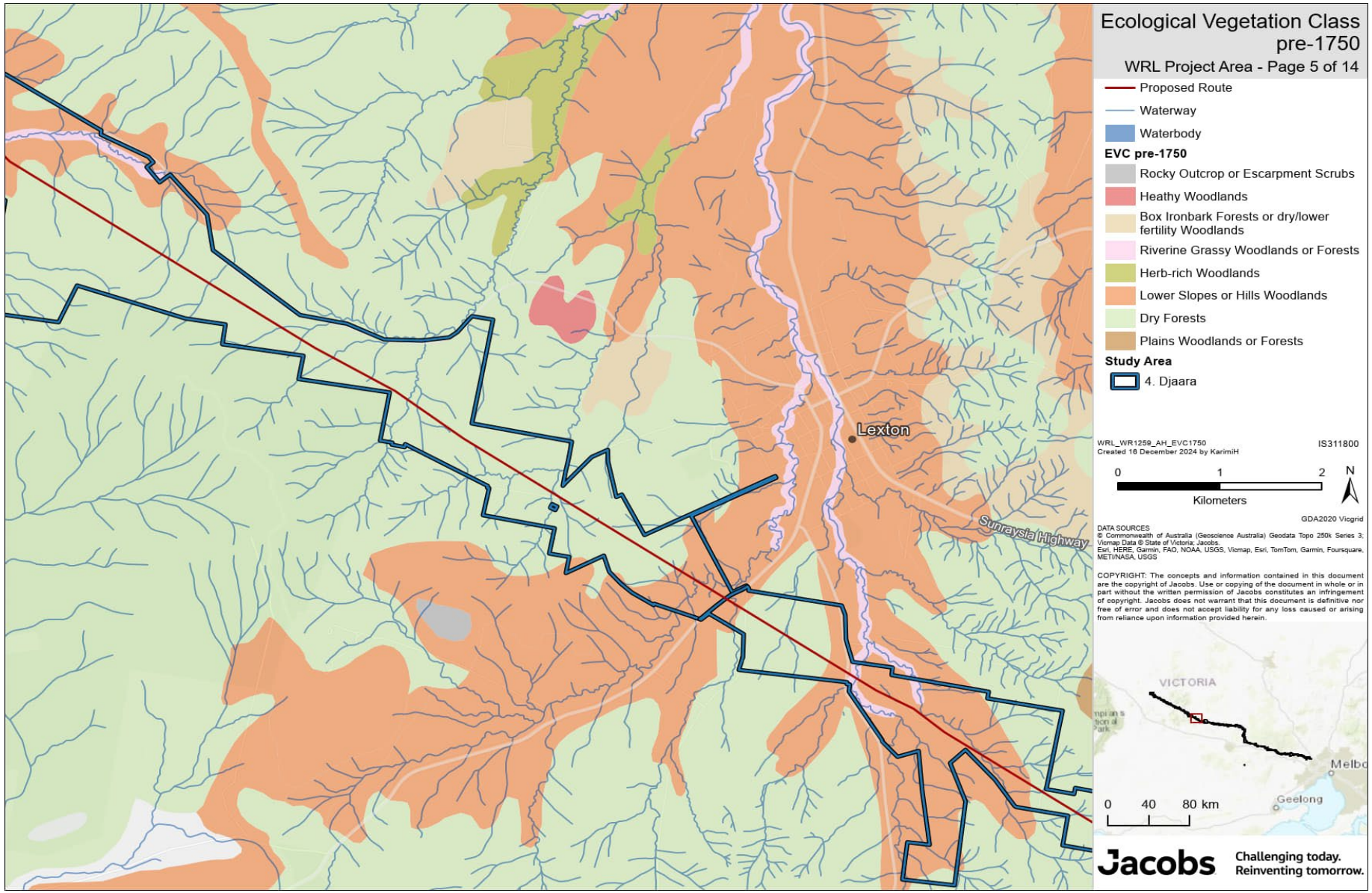
Appendix B. EVCs

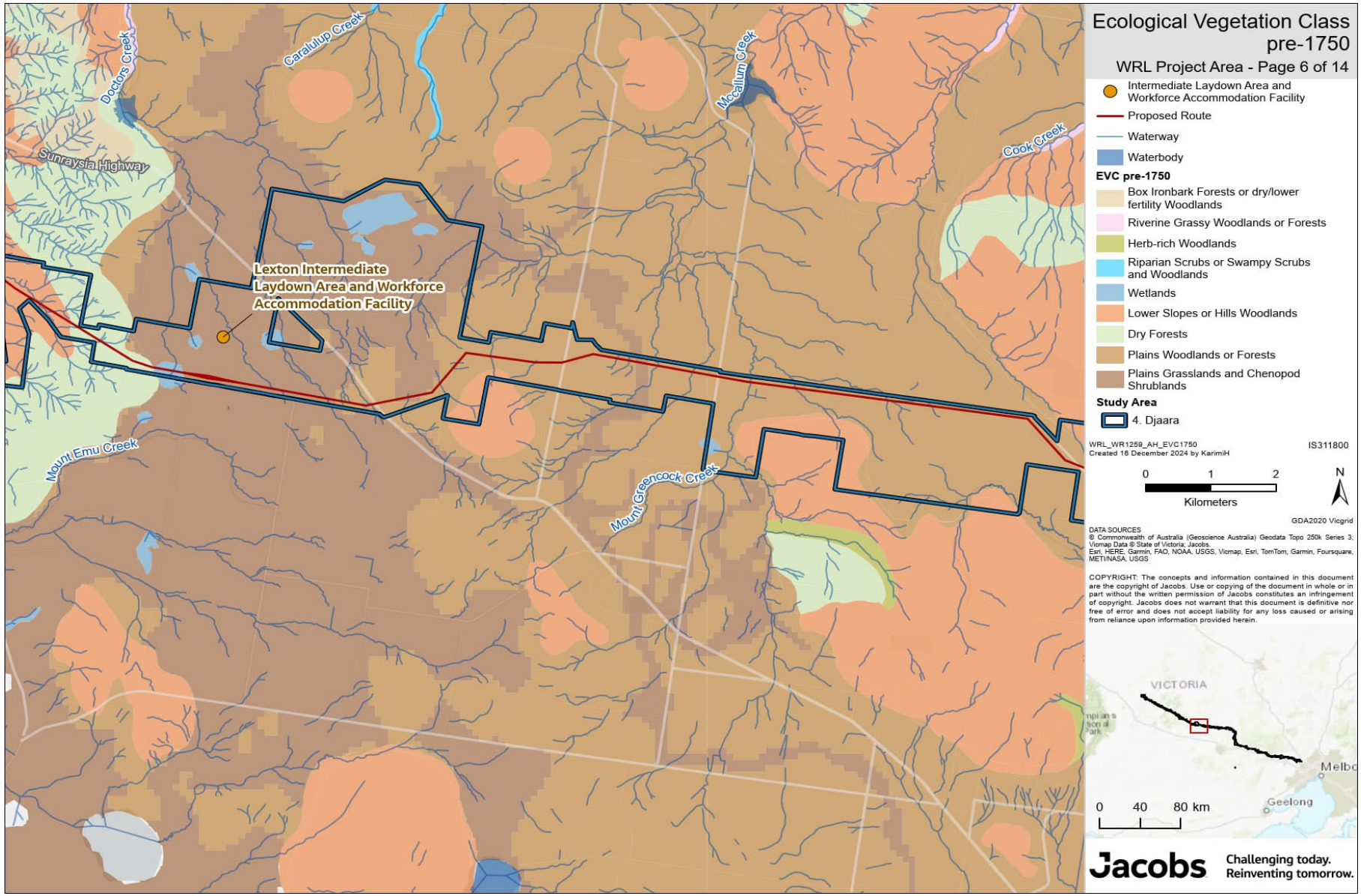

Astons Scour
Six Mile Creek
Wimmera River
New
500kV Terminal
Station
Bulgana
Terminal
Station
Ecological Vegetation Class
pre-1750
WRL Project Area - Page 1 of 14
Proposed Route
Waterway
Waterbody
Terminal Station Site
EVC pre-1750
Mallee
Heathy Woodlands
Box Ironbark Forests or dry/lower fertility Woodlands
Riverine Grassy Woodlands or Forests
Herb-rich Woodlands
Riparian Scrubs or Swampy Scrubs and Woodlands
Lower Slopes or Hills Woodlands
Dry Forests
Plains Woodlands or Forests
Study Area
1. Barengi Gadjin
2. Eastern Maar
WRL_WR1259_AH_EVC1750
Created 16 December 2024 by KarimiH
IS311800
0 1 2
Kilometers
N
GDA2020 Vicgrid
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VICTORIA
Melbo
Geelong
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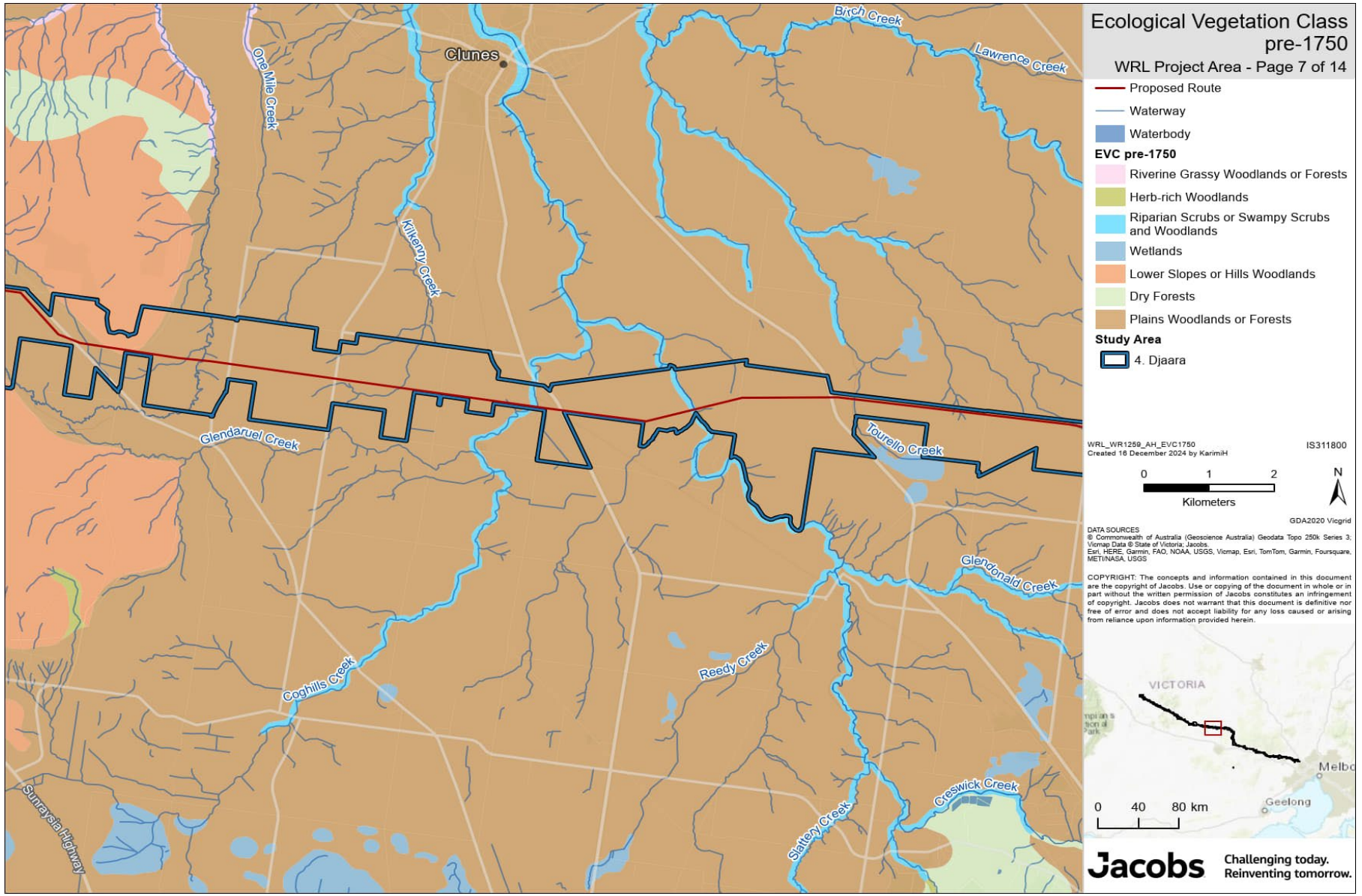

Ecological Vegetation Class pre-1750
WRL Project Area - Page 2 of 14
Proposed Route
Waterway
Waterbody
EVC pre-1750
Heathy Woodlands
Box Ironbark Forests or dry/lower fertility Woodlands
Riverine Grassy Woodlands or Forests
Herb-rich Woodlands
Lower Slopes or Hills Woodlands
Dry Forests
Plains Woodlands or Forests
Study Area
1. Barengi Gadjin
2. Eastern Maar
3. Non-RAP Area
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Kilometers
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Wimmera River
Glenlofty Creek

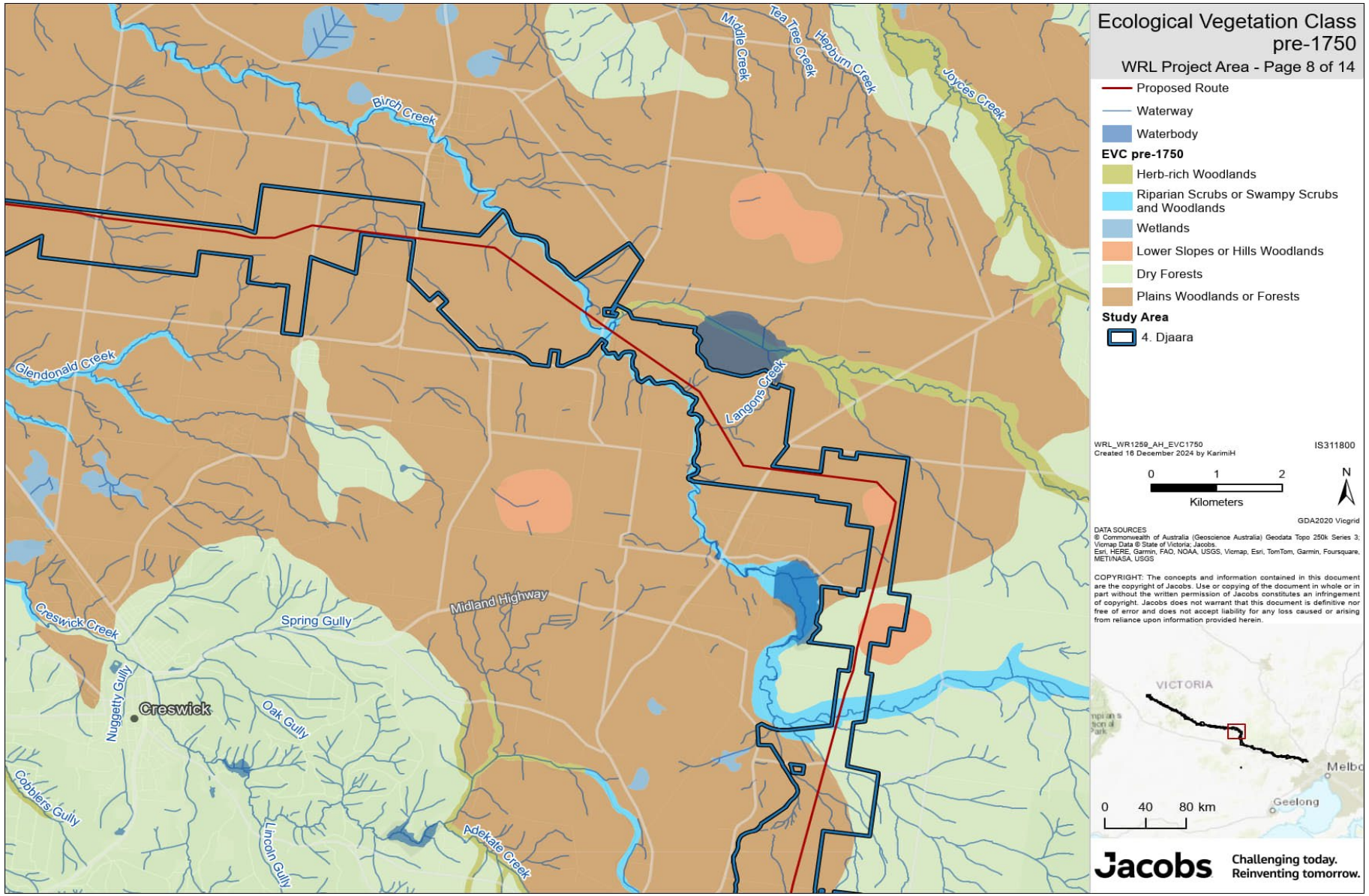

Ecological Vegetation Class pre-1750
WRL Project Area - Page 3 of 14
Proposed Route
Waterway
Waterbody
EVC pre-1750
Rocky Outcrop or Escarpment Scrubs
Heathy Woodlands
Riverine Grassy Woodlands or Forests
Herb-rich Woodlands
Riparian Scrubs or Swampy Scrubs and Woodlands
Lower Slopes or Hills Woodlands
Dry Forests
Plains Woodlands or Forests
Study Area
2. Eastern Maar
3. Non-RAP Area
4. Djaara
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Kilometers
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Glenlofty Creek
Glenpatrick Creek
High Street
Wimmera River
Pyrenees Highway
Hickman Creek
Rocky Creek
Nowhere Creek

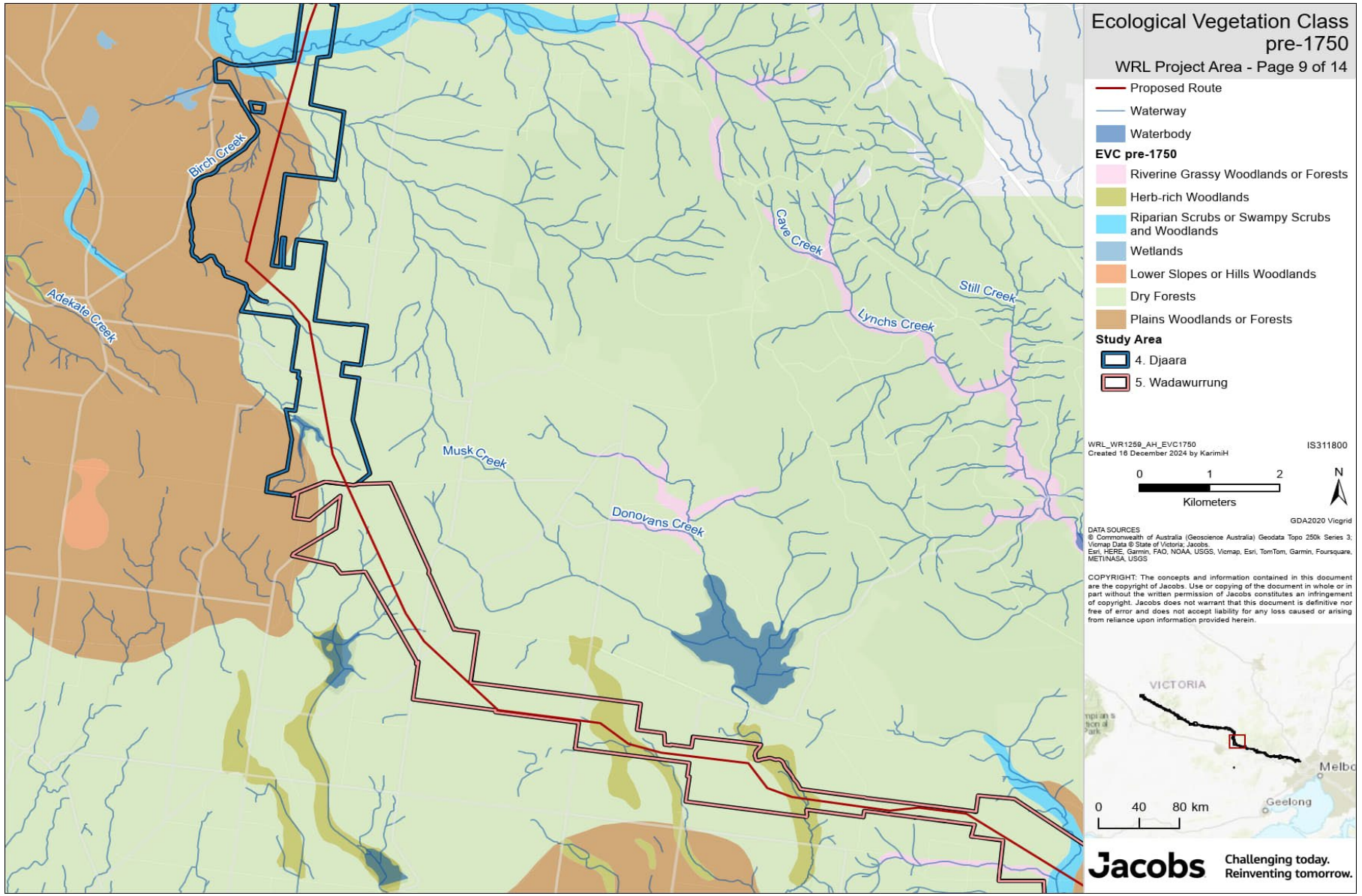

Pyrenees Highway
Glenlogie Creek
Avoca River
Ecological Vegetation Class pre-1750
WRL Project Area - Page 4 of 14
Proposed Route
Waterway
Waterbody
EVC pre-1750
Rocky Outcrop or Escarpment Scrubs
Heathy Woodlands
Riverine Grassy Woodlands or Forests
Lower Slopes or Hills Woodlands
Dry Forests
Study Area
3. Non-RAP Area
4. Djaara
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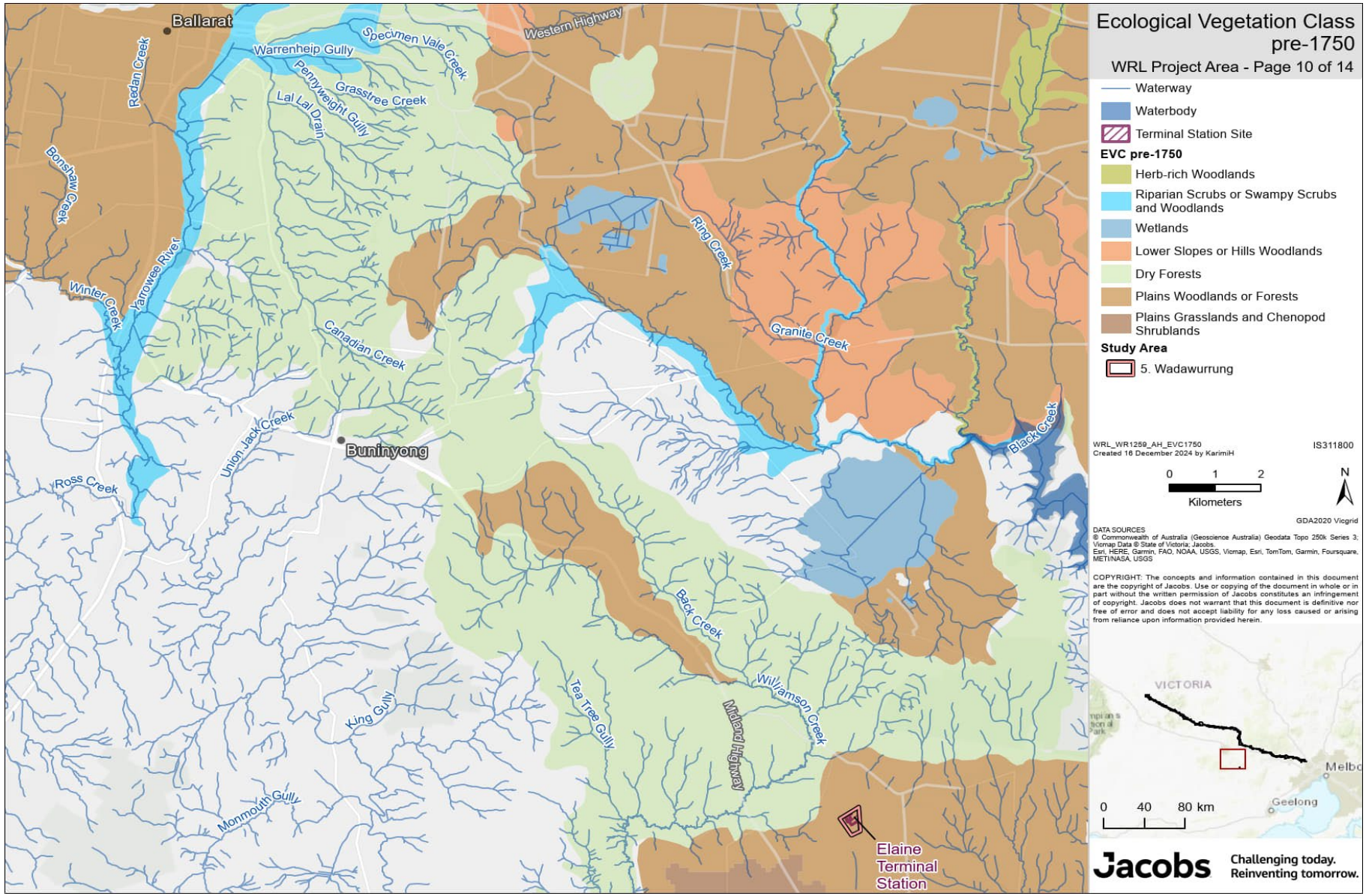

Ecological Vegetation Class pre-1750
WRL Project Area - Page 5 of 14
Proposed Route
Waterway
Waterbody
EVC pre-1750
Rocky Outcrop or Escarpment Scrubs
Heathy Woodlands
Box Ironbark Forests or dry/lower fertility Woodlands
Riverine Grassy Woodlands or Forests
Herb-rich Woodlands
Lower Slopes or Hills Woodlands
Dry Forests
Plains Woodlands or Forests
Study Area
4. Djaara
Lexton
Sunraysia Highway
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Kilometers
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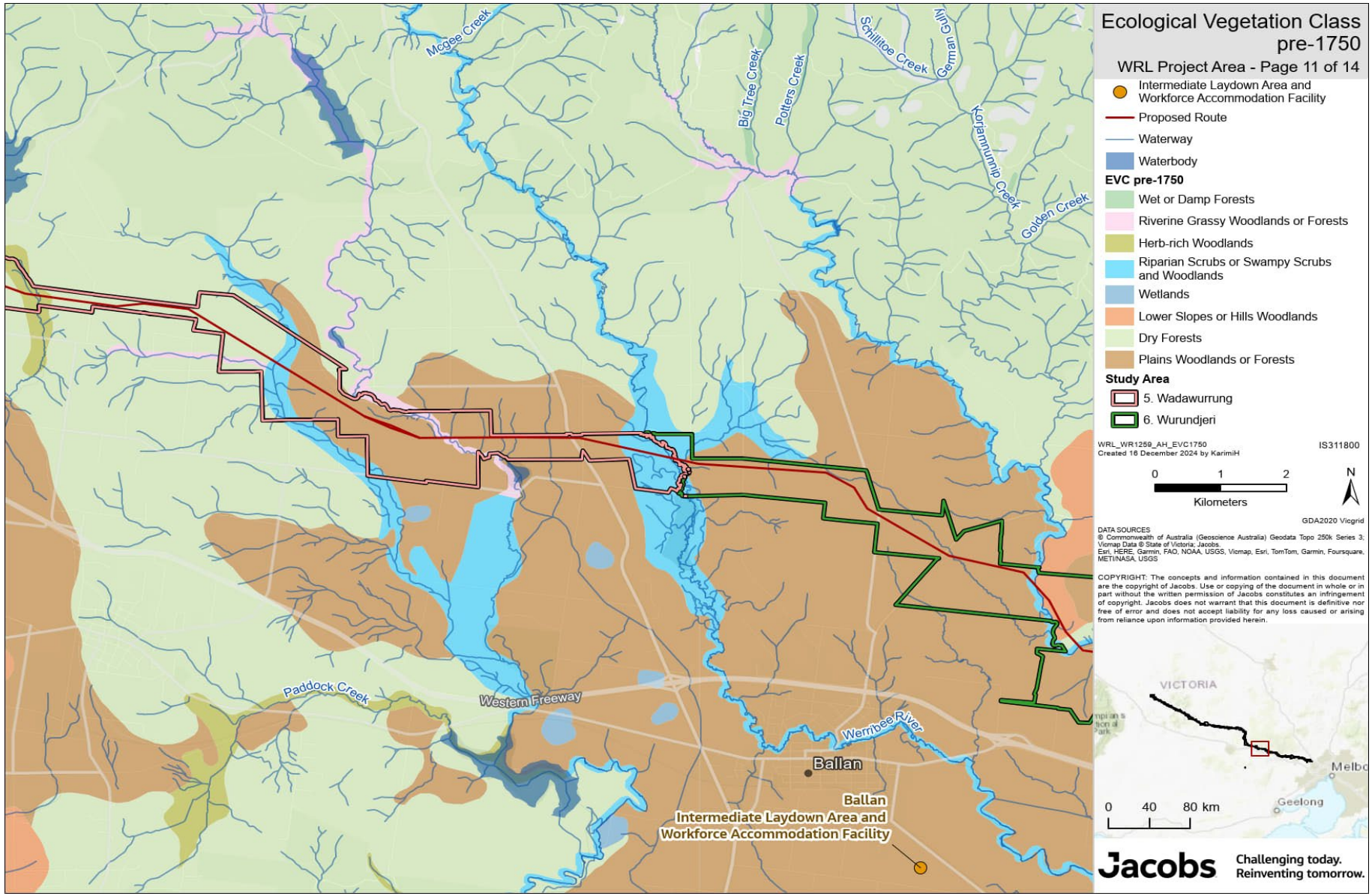

Doctors Creek
Caralulup Creek
Mccallum Creek
Cook Creek
Sunraysia Highway
Lexton Intermediate Laydown Area and Workforce Accommodation Facility
Mount Emu Creek
Mount Greencock Creek
Ecological Vegetation Class pre-1750
WRL Project Area - Page 6 of 14
Intermediate Laydown Area and Workforce Accommodation Facility
Proposed Route
Waterway
Waterbody
EVC pre-1750
Box Ironbark Forests or dry/lower fertility Woodlands
Riverine Grassy Woodlands or Forests
Herb-rich Woodlands
Riparian Scrubs or Swampy Scrubs and Woodlands
Wetlands
Lower Slopes or Hills Woodlands
Dry Forests
Plains Woodlands or Forests
Plains Grasslands and Chenopod Shrublands
Study Area
4. Djaara
WRL_WR1259_AH_EVC1750
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Kilometers
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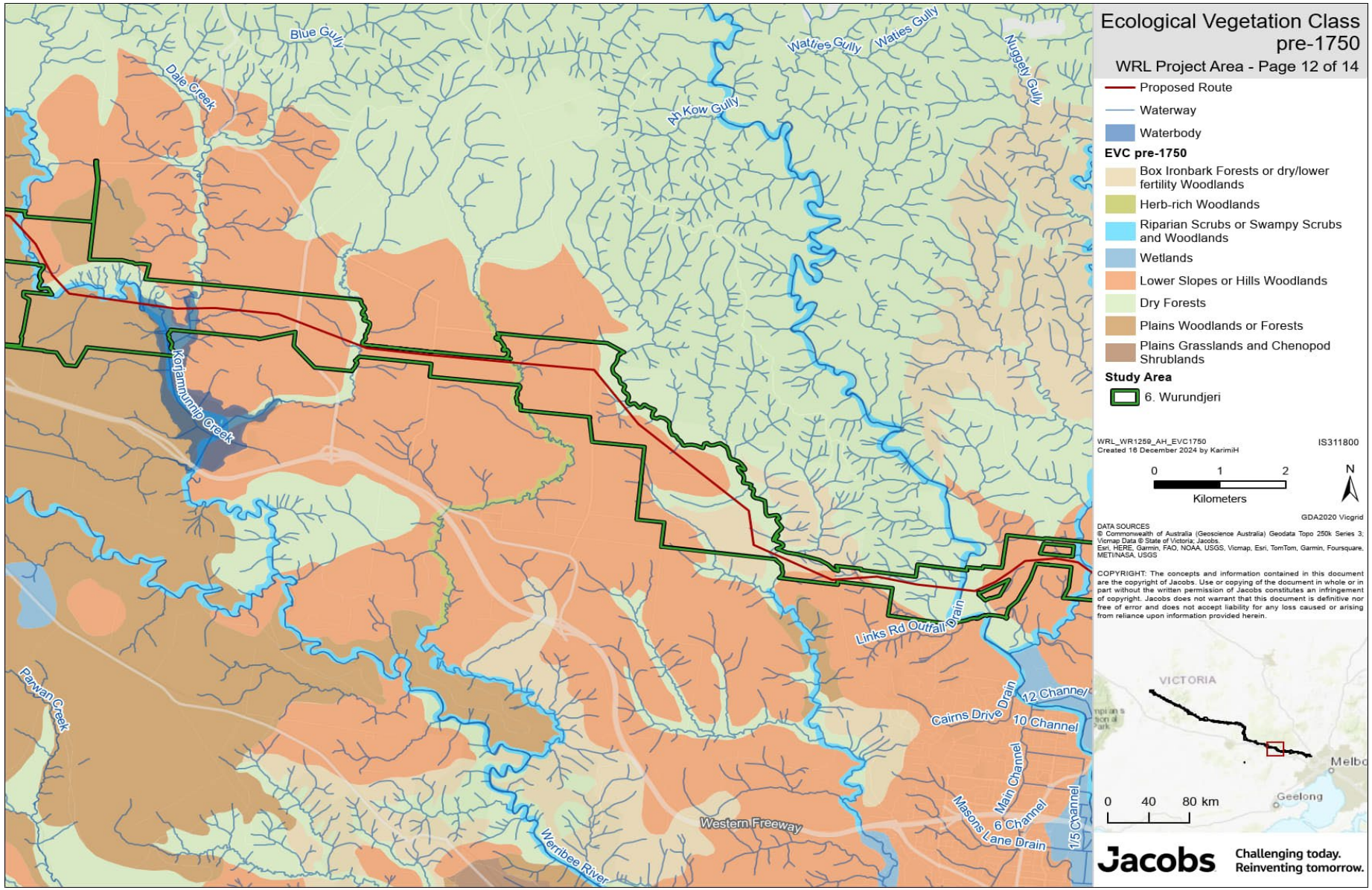

Clunes
Birch Creek
Lawrence Creek
One Mile Creek
Kilkenny Creek
Glendaruel Creek
Tourello Creek
Glendonald Creek
Reedy Creek
Coghills Creek
Cresswick Creek
Slattery Creek
Sunraysia Highway
Ecological Vegetation Class pre-1750
WRL Project Area - Page 7 of 14
Proposed Route
Waterway
Waterbody
EVC pre-1750
Riverine Grassy Woodlands or Forests
Herb-rich Woodlands
Riparian Scrubs or Swampy Scrubs and Woodlands
Wetlands
Lower Slopes or Hills Woodlands
Dry Forests
Plains Woodlands or Forests
Study Area
4. Djaara
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Kilometers
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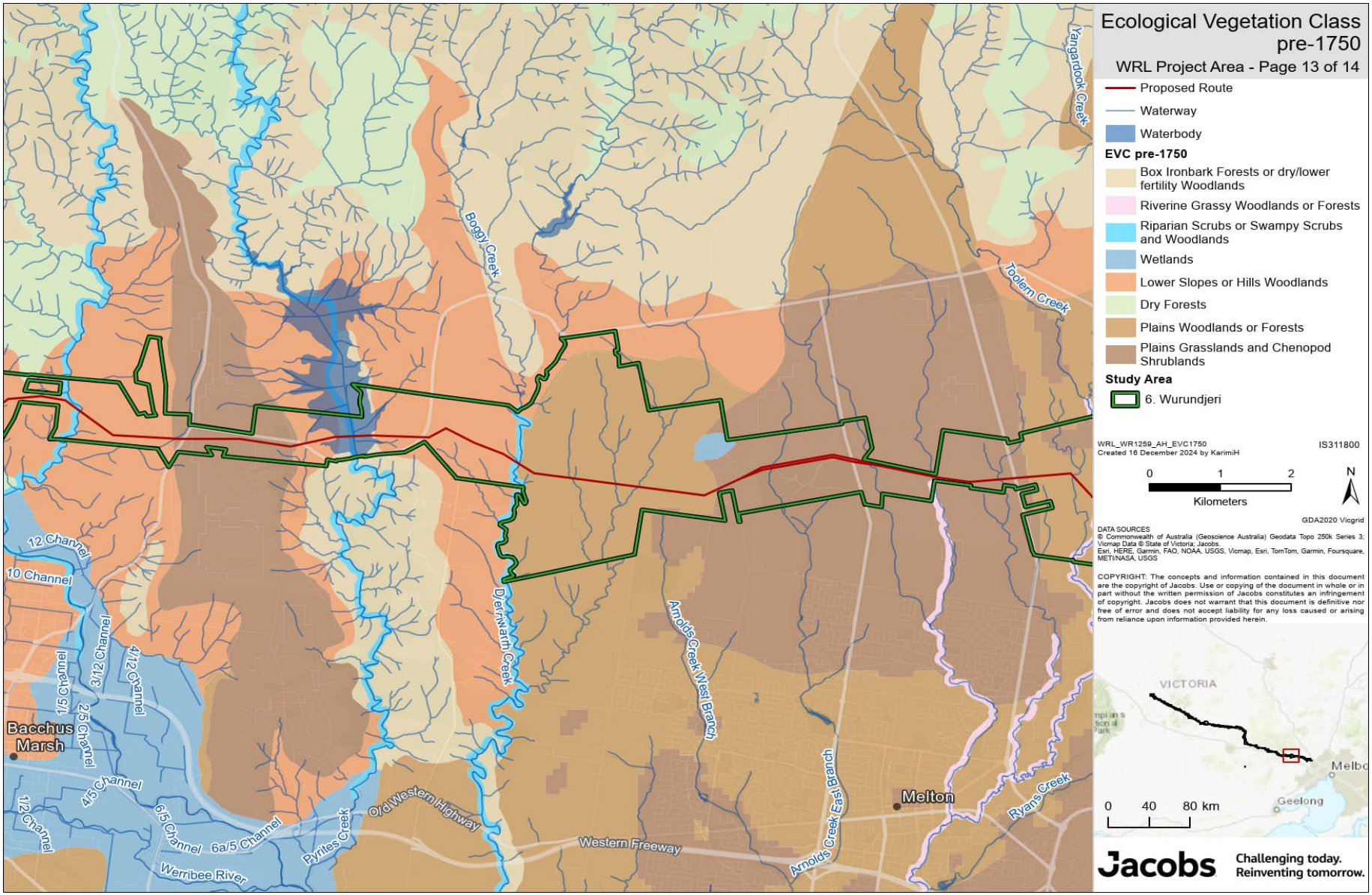

Ecological Vegetation Class pre-1750
WRL Project Area - Page 8 of 14
Proposed Route
Waterway
Waterbody
EVC pre-1750
Herb-rich Woodlands
Riparian Scrubs or Swampy Scrubs and Woodlands
Wetlands
Lower Slopes or Hills Woodlands
Dry Forests
Plains Woodlands or Forests
Study Area
4. Djaara
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Kilometers
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Birch Creek
Middle Creek
Tea Tree Creek
Hepburn Creek
Joyces Creek
Glendonald Creek
Langons Creek
Midland Highway
Creswick Creek
Spring Gully
Nuggetty Gully
Creswick
Oak Gully
Cobblers Gully
Lincoln Gully
Adelaide Creek

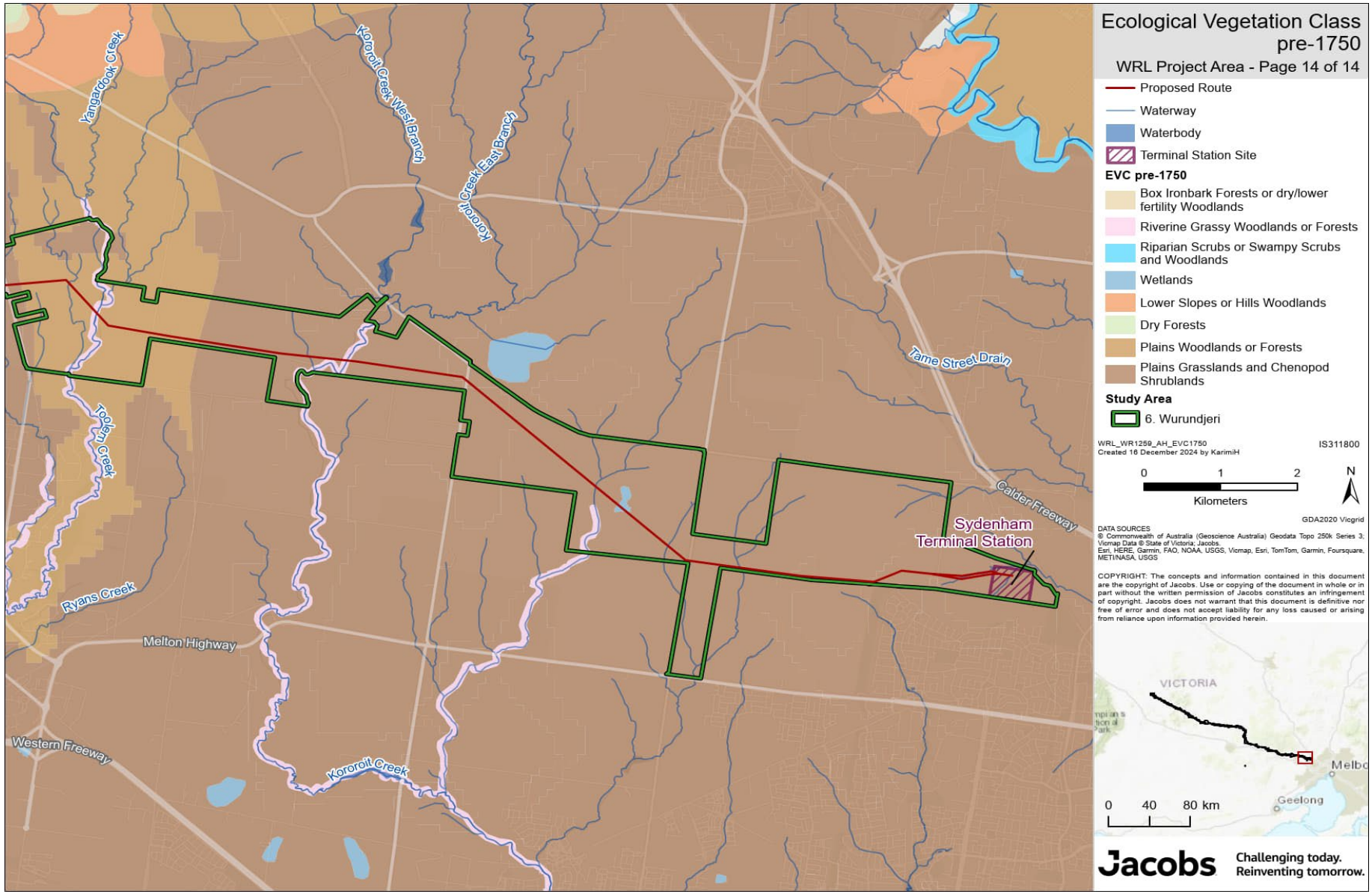

Ecological Vegetation Class pre-1750
WRL Project Area - Page 9 of 14
Proposed Route
Waterway
Waterbody
EVC pre-1750
Riverine Grassy Woodlands or Forests
Herb-rich Woodlands
Riparian Scrubs or Swampy Scrubs and Woodlands
Wetlands
Lower Slopes or Hills Woodlands
Dry Forests
Plains Woodlands or Forests
Study Area
4. Djaara
5. Wadawurrung
WRL_WR1259_AH_EVC1750
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0 1 2
Kilometers
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Melbo
Geelong
0 40 80 km
Jacobs
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Birch Creek
Adekate Creek
Musk Creek
Donovans Creek
Cave Creek
Lynchs Creek
Still Creek


Ballarat
Redan Creek
Warrenheip Gully
Specimen Vale Creek
Western Highway
Pennyweight Gully
Grasstree Creek
Lal Lal Drain
Bonshaw Creek
Yarrowee River
Winter Creek
Ring Creek
Granite Creek
Canadian Creek
Union Jack Creek
Buninyong
Black Creek
Ross Creek
Back Creek
Williamson Creek
Tea Tree Gully
King Gully
Midland Highway
Monmouth Gully
Elaine Terminal Station
Ecological Vegetation Class pre-1750
WRL Project Area - Page 10 of 14
Waterway
Waterbody
Terminal Station Site
EVC pre-1750
Herb-rich Woodlands
Riparian Scrubs or Swampy Scrubs and Woodlands
Wetlands
Lower Slopes or Hills Woodlands
Dry Forests
Plains Woodlands or Forests
Plains Grasslands and Chenopod Shrublands
Study Area
5. Wadawurrung
WRL_WR1259_AH_EVC1750
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IS311800
0 1 2
Kilometers
N
GDA2020 Vicgrid
DATA SOURCES
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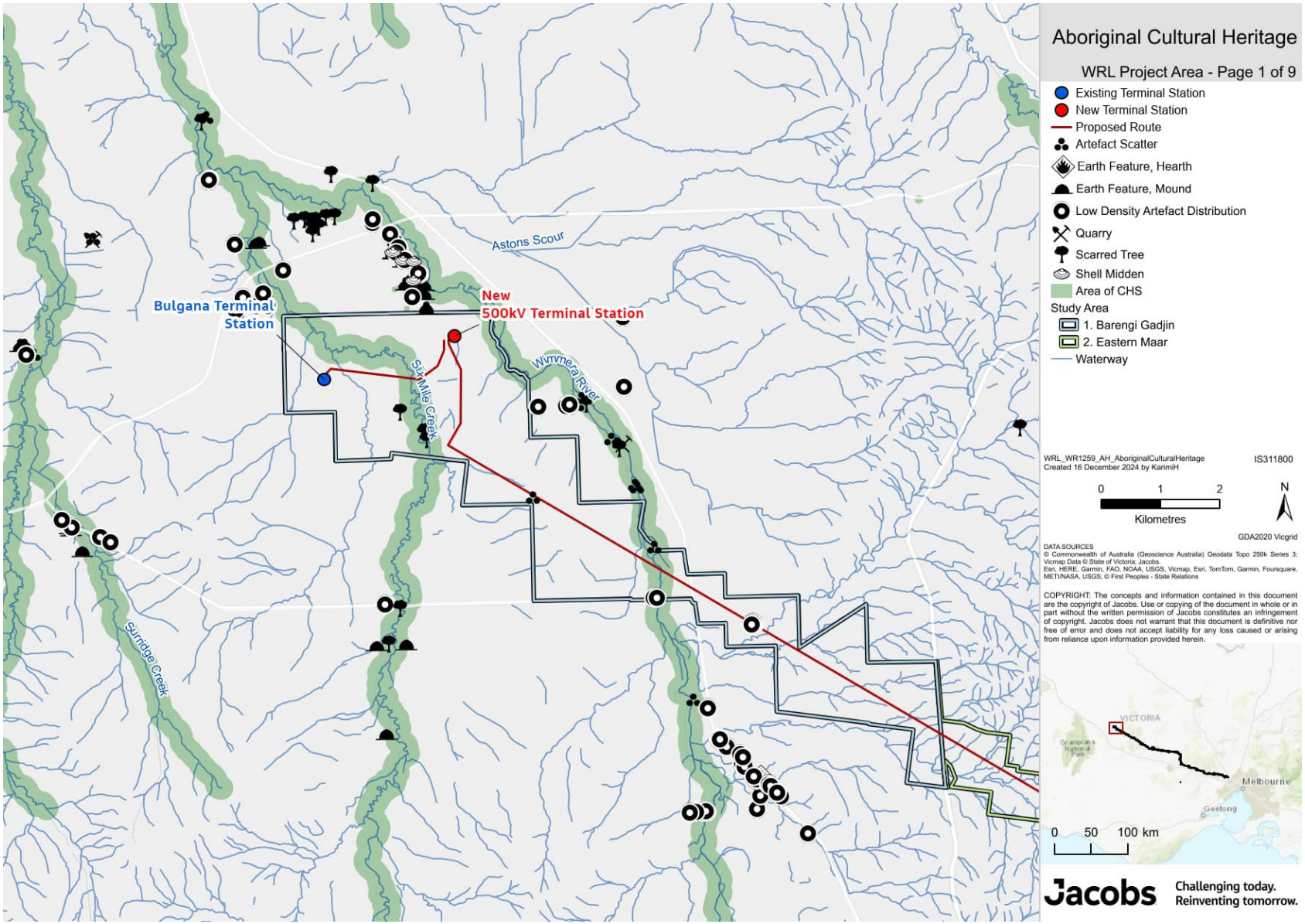

Ecological Vegetation Class pre-1750
WRL Project Area - Page 11 of 14
Intermediate Laydown Area and Workforce Accommodation Facility
Proposed Route
Waterway
Waterbody
EVC pre-1750
Wet or Damp Forests
Riverine Grassy Woodlands or Forests
Herb-rich Woodlands
Riparian Scrubs or Swampy Scrubs and Woodlands
Wetlands
Lower Slopes or Hills Woodlands
Dry Forests
Plains Woodlands or Forests
Study Area
5. Wadawurrung
6. Wurundjeri
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0 1 2
Kilometers
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GDA2020 Vicgrid
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Geelong
Jacobs
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McGee Creek
Big Tree Creek
Potters Creek
Schillitoe Creek
German Gully
Korjamnunnip Creek
Golden Creek
Paddock Creek
Western Freeway
Werribee River
Ballan
Ballan
Intermediate Laydown Area and
Workforce Accommodation Facility

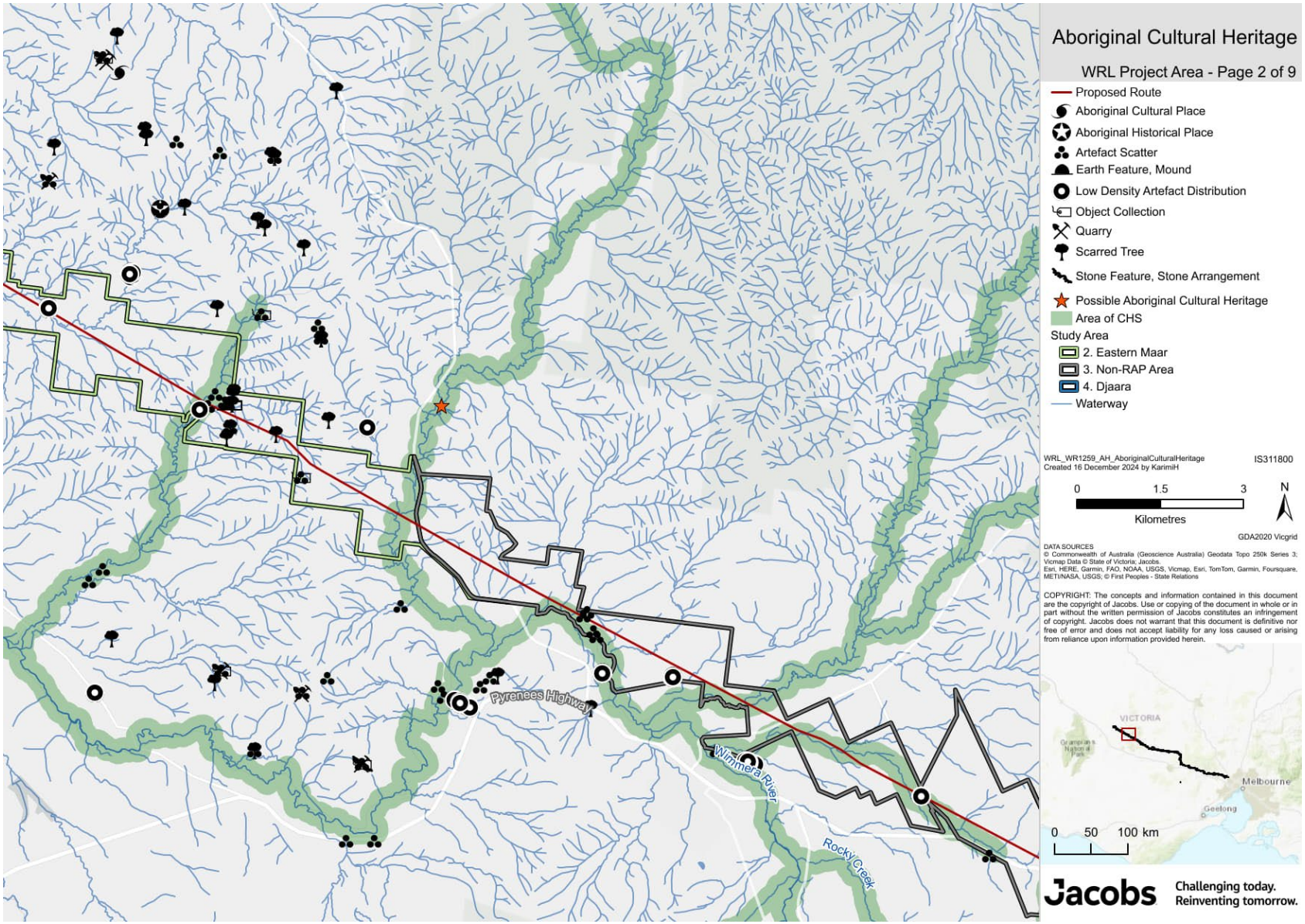

Ecological Vegetation Class pre-1750
WRL Project Area - Page 12 of 14
Proposed Route
Waterway
Waterbody
EVC pre-1750
Box Ironbark Forests or dry/lower fertility Woodlands
Herb-rich Woodlands
Riparian Scrubs or Swampy Scrubs and Woodlands
Wetlands
Lower Slopes or Hills Woodlands
Dry Forests
Plains Woodlands or Forests
Plains Grasslands and Chenopod Shrublands
Study Area
6. Wurundjeri
WRL_WR1259_AH_EVC1750
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IS311800
0 1 2
Kilometers
N
GDA2020 Vicgrid
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VICTORIA
Melbo
Geelong
0 40 80 km
Jacobs
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Blue Gully
Dale Creek
Ah Kow Gully
Wattles Gully
Waties Gully
Nuggety Gully
Kororoit Creek
Parwan Creek
Links Rd Outfall Drain
Cairns Drive Drain
12 Channel
10 Channel
Main Channel
6 Channel
Masons Lane Drain
1/5 Channel
Western Freeway
Werribee River

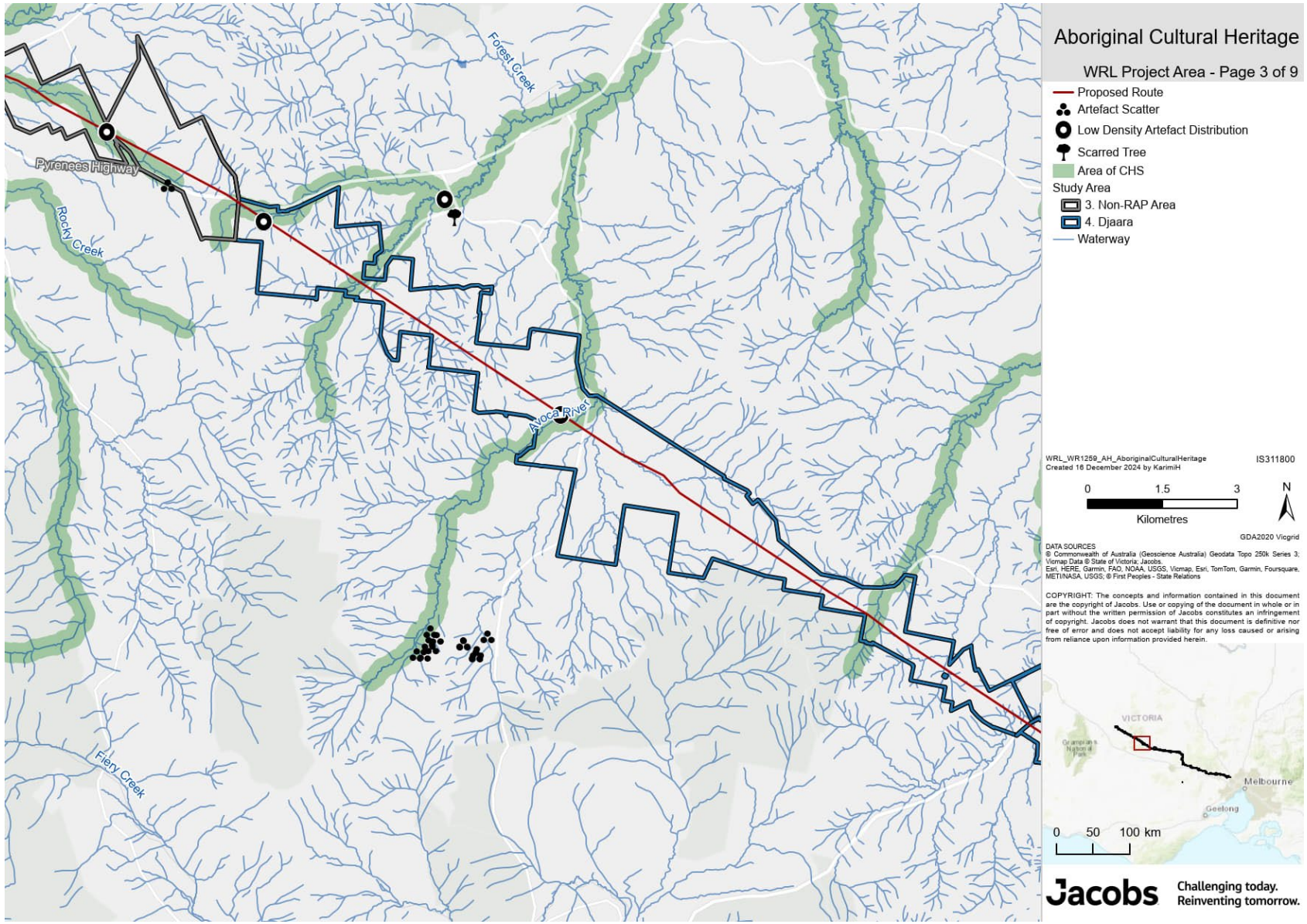

Ecological Vegetation Class pre-1750
WRL Project Area - Page 13 of 14
Proposed Route
Waterway
Waterbody
EVC pre-1750
Box Ironbark Forests or dry/lower fertility Woodlands
Riverine Grassy Woodlands or Forests
Riparian Scrubs or Swampy Scrubs and Woodlands
Wetlands
Lower Slopes or Hills Woodlands
Dry Forests
Plains Woodlands or Forests
Plains Grasslands and Chenopod Shrublands
Study Area
6. Wurundjeri
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Kilometers
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Melbo
Geelong
0 40 80 km
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Yangardook Creek
Boggy Creek
Toolern Creek
Djerriwarrh Creek
Arnolds Creek West Branch
Arnolds Creek East Branch
Ryans Creek
Pyrites Creek
Werribee River
Old Western Highway
Western Freeway
Melton
Bacchus Marsh
12 Channel
10 Channel
1/5 Channel
2/5 Channel
3/12 Channel
4/12 Channel
4/5 Channel
1/2 Channel
6/5 Channel
6a/5 Channel

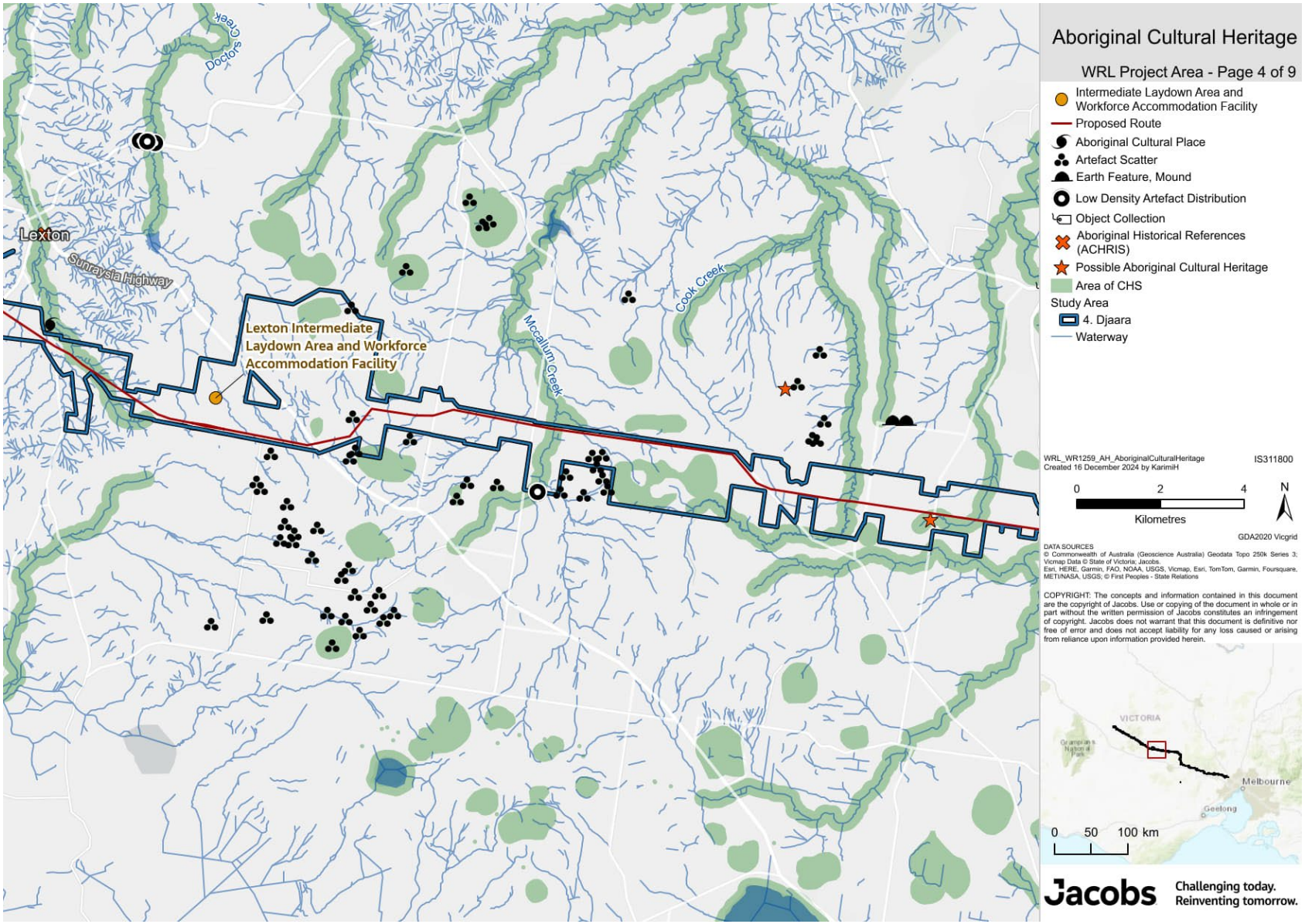

Yangardook Creek
Kororoit Creek West Branch
Kororoit Creek East Branch
Tame Street Drain
Calder Freeway
Sydenham Terminal Station
Toolern Creek
Ryans Creek
Melton Highway
Western Freeway
Kororoit Creek
Ecological Vegetation Class pre-1750
WRL Project Area - Page 14 of 14
Proposed Route
Waterway
Waterbody
Terminal Station Site
EVC pre-1750
Box Ironbark Forests or dry/lower fertility Woodlands
Riverine Grassy Woodlands or Forests
Riparian Scrubs or Swampy Scrubs and Woodlands
Wetlands
Lower Slopes or Hills Woodlands
Dry Forests
Plains Woodlands or Forests
Plains Grasslands and Chenopod Shrublands
Study Area
6. Wurundjeri
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Kilometers
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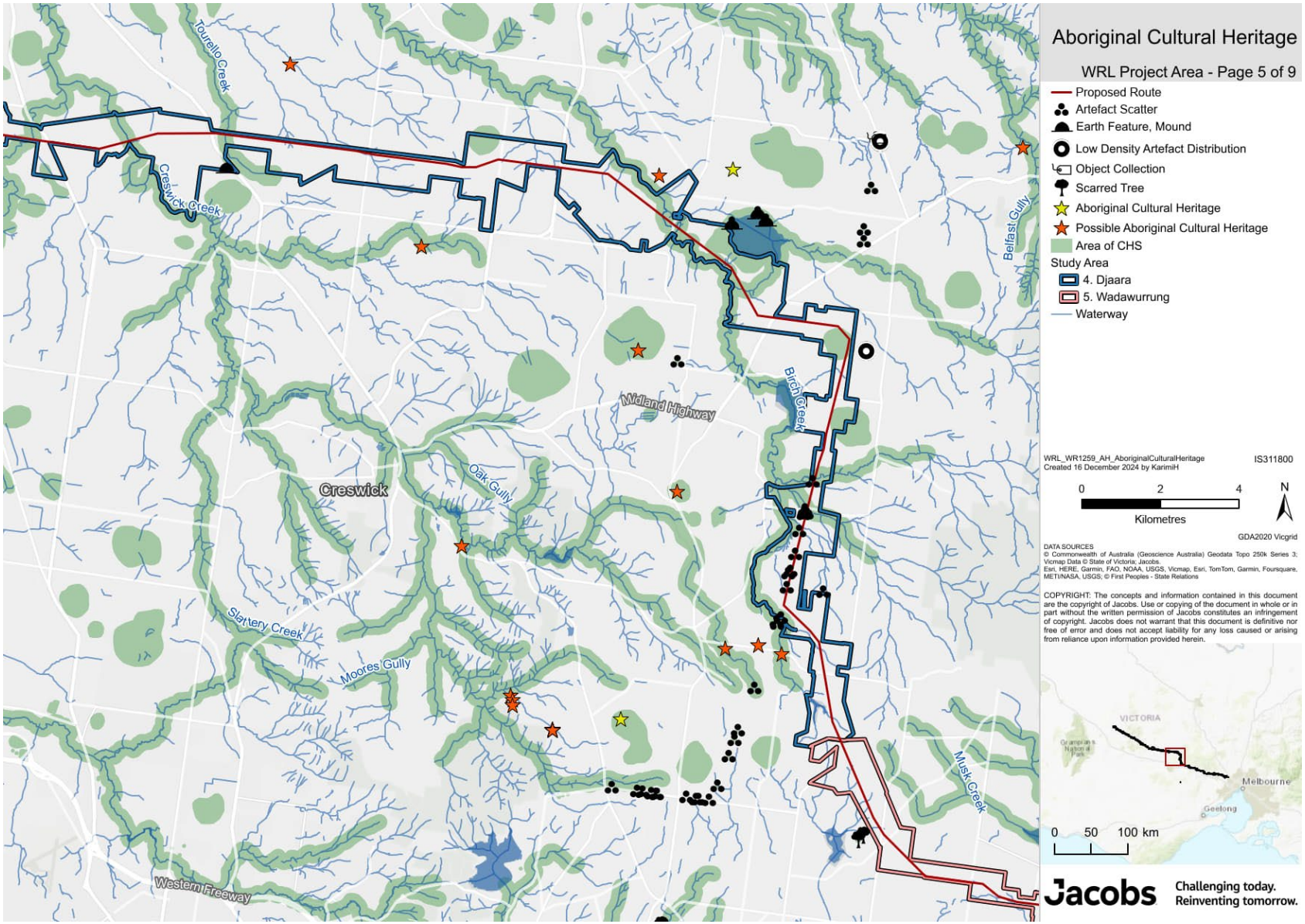
Appendix C. Aboriginal Places

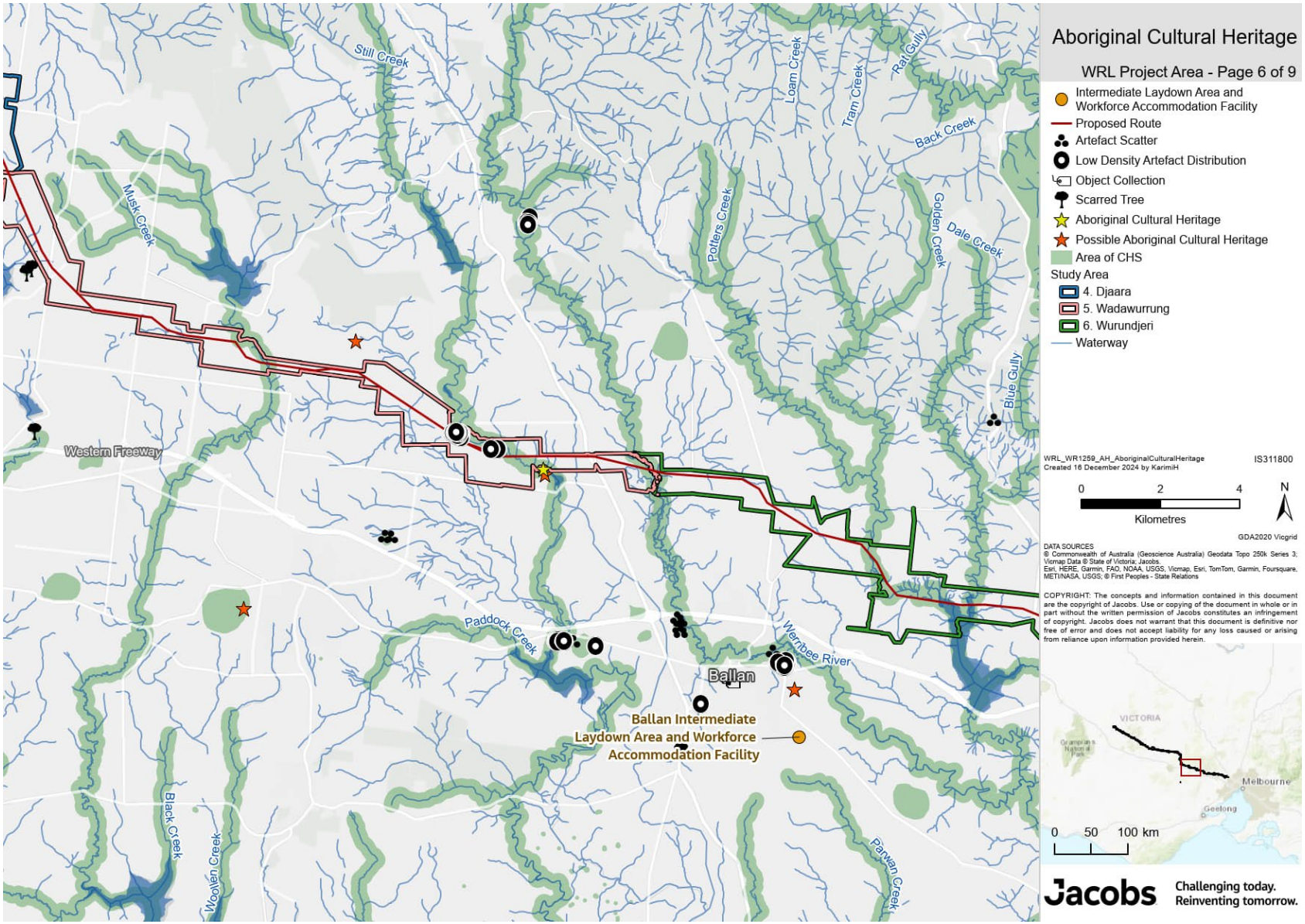

Aboriginal Cultural Heritage
WRL Project Area - Page 1 of 9
Existing Terminal Station
New Terminal Station
Proposed Route
Artefact Scatter
Earth Feature, Hearth
Earth Feature, Mound
Low Density Artefact Distribution
Quarry
Scarred Tree
Shell Midden
Area of CHS
Study Area
1. Barengi Gadjin
2. Eastern Maar
Waterway
Astons Scour
Bulgana Terminal Station
New 500kV Terminal Station
Six Mile Creek
Wimmera River
Surridge Creek
WRL_WR1259_AH_AboriginalCulturalHeritage
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Kilometres
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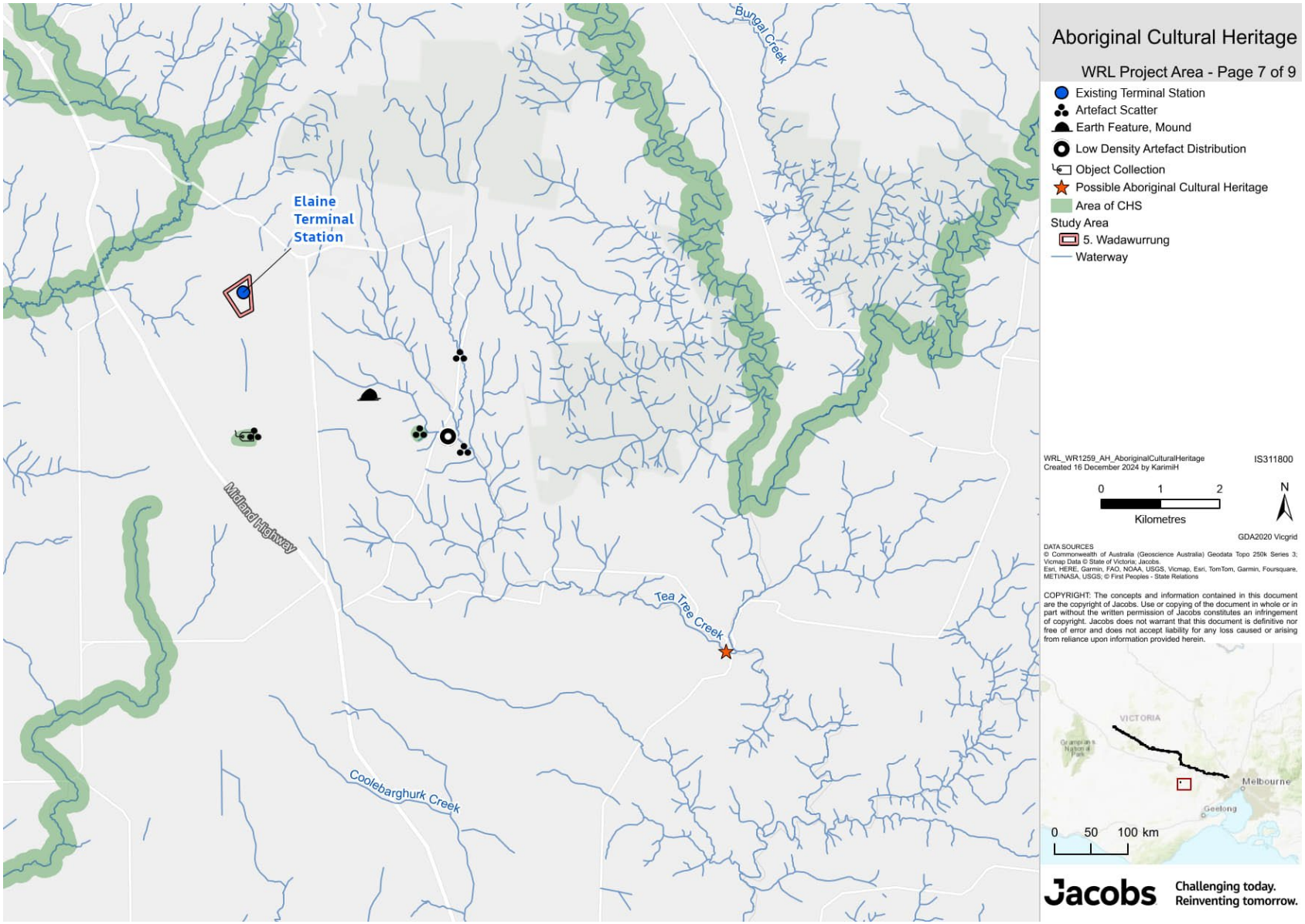

Aboriginal Cultural Heritage
WRL Project Area - Page 2 of 9
Proposed Route
Aboriginal Cultural Place
Aboriginal Historical Place
Artefact Scatter
Earth Feature, Mound
Low Density Artefact Distribution
Object Collection
Quarry
Scarred Tree
Stone Feature, Stone Arrangement
Possible Aboriginal Cultural Heritage
Area of CHS
Study Area
2. Eastern Maar
3. Non-RAP Area
4. Djaara
Waterway
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Wimmera River
Rocky Creek

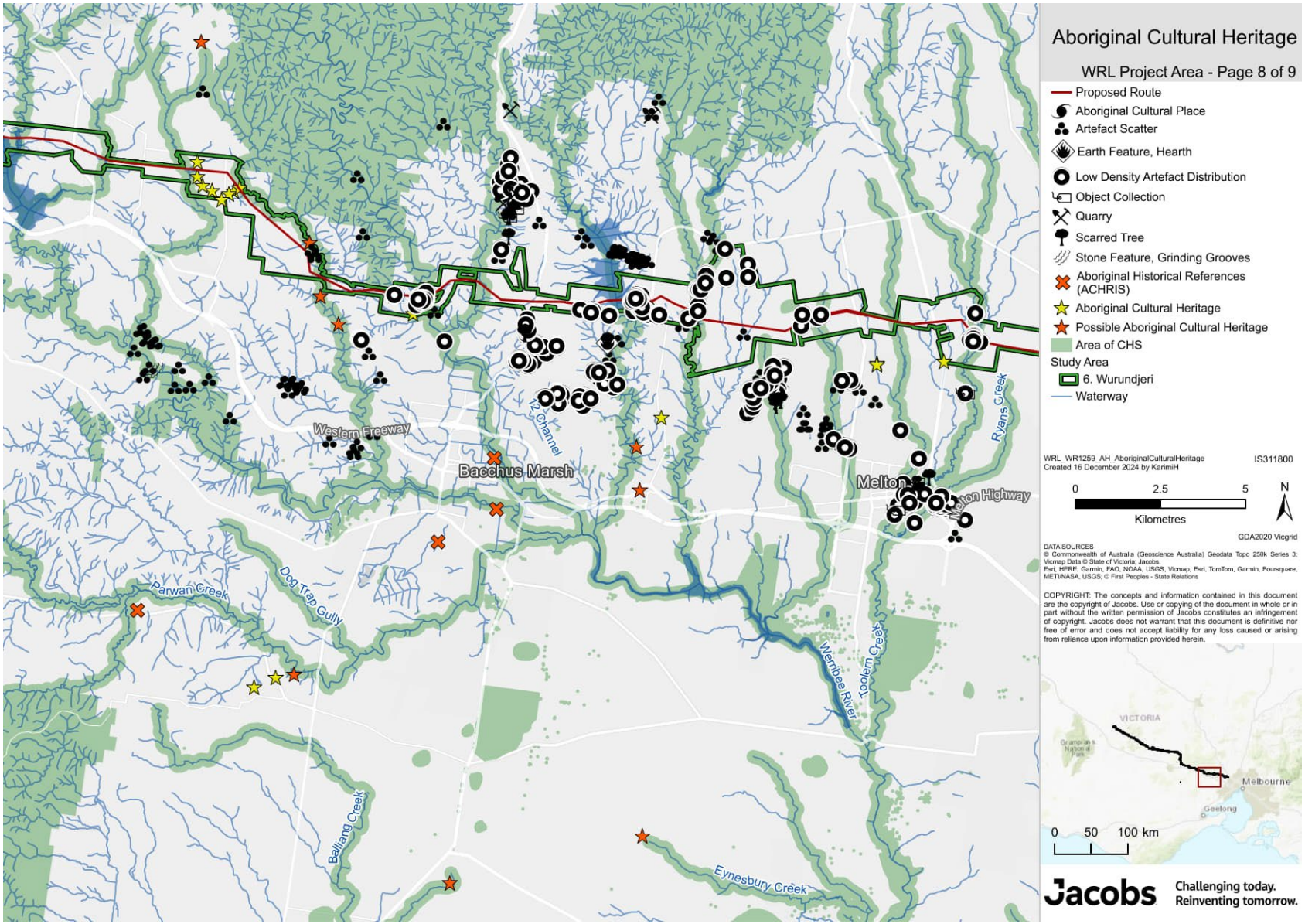

Aboriginal Cultural Heritage
WRL Project Area - Page 3 of 9
Proposed Route
Artefact Scatter
Low Density Artefact Distribution
Scarred Tree
Area of CHS
Study Area
3. Non-RAP Area
4. Djaara
Waterway
Pyrenees Highway
Forest Creek
Rocky Creek
Avoca River
Fiery Creek
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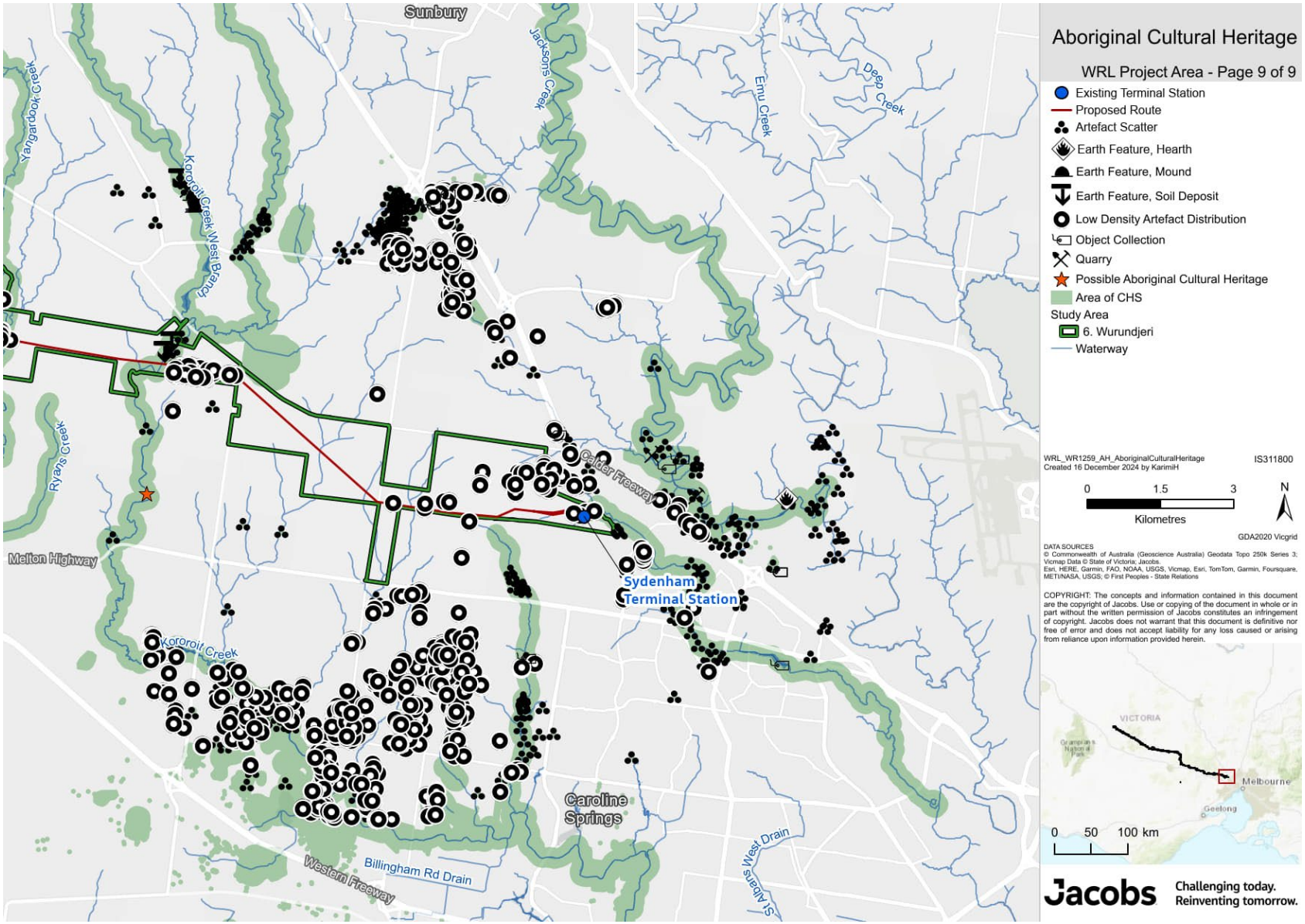

Aboriginal Cultural Heritage
WRL Project Area - Page 4 of 9
Intermediate Laydown Area and Workforce Accommodation Facility
Proposed Route
Aboriginal Cultural Place
Artefact Scatter
Earth Feature, Mound
Low Density Artefact Distribution
Object Collection
Aboriginal Historical References (ACHRIS)
Possible Aboriginal Cultural Heritage
Area of CHS
Study Area
4. Djaara
Waterway
Lexton
Sunraysia Highway
Doctors Creek
Lexton Intermediate Laydown Area and Workforce Accommodation Facility
Mccallum Creek
Cook Creek
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Aboriginal Cultural Heritage
WRL Project Area - Page 5 of 9
Proposed Route
Artefact Scatter
Earth Feature, Mound
Low Density Artefact Distribution
Object Collection
Scarred Tree
Aboriginal Cultural Heritage
Possible Aboriginal Cultural Heritage
Area of CHS
Study Area
4. Djaara
5. Wadawurrung
Waterway
Tourello Creek
Creswick Creek
Belfast Gully
Birch Creek
Midland Highway
Oak Gully
Creswick
Slattery Creek
Moores Gully
Musk Creek
Western Freeway
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Still Creek
Loam Creek
Tram Creek
Rat Gully
Back Creek
Musk Creek
Potters Creek
Golden Creek
Dale Creek
Blue Gully
Western Freeway
Paddock Creek
Werribee River
Ballan
Ballan Intermediate
Laydown Area and Workforce
Accommodation Facility
Black Creek
Woolen Creek
Parwan Creek
Aboriginal Cultural Heritage
WRL Project Area - Page 6 of 9
Intermediate Laydown Area and Workforce Accommodation Facility
Proposed Route
Artefact Scatter
Low Density Artefact Distribution
Object Collection
Scarred Tree
Aboriginal Cultural Heritage
Possible Aboriginal Cultural Heritage
Area of CHS
Study Area
4. Djaara
5. Wadawurrung
6. Wurundjeri
Waterway
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Aboriginal Cultural Heritage
WRL Project Area - Page 7 of 9
Existing Terminal Station
Artefact Scatter
Earth Feature, Mound
Low Density Artefact Distribution
Object Collection
Possible Aboriginal Cultural Heritage
Area of CHS
Study Area
5. Wadawurrung
Waterway
Elaine Terminal Station
Bungal Creek
Midland Highway
Tea Tree Creek
Coolebarghurk Creek
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Aboriginal Cultural Heritage
WRL Project Area - Page 8 of 9
Proposed Route
Aboriginal Cultural Place
Artefact Scatter
Earth Feature, Hearth
Low Density Artefact Distribution
Object Collection
Quarry
Scarred Tree
Stone Feature, Grinding Grooves
Aboriginal Historical References (ACHRIS)
Aboriginal Cultural Heritage
Possible Aboriginal Cultural Heritage
Area of CHS
Study Area
6. Wurundjeri
Waterway
WRL_WR1259_AH_AboriginalCulturalHeritage
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Western Freeway
Bacchus Marsh
Melton
Ryans Creek
Parwan Creek
Dog Trap Gully
Werribee River
Balliang Creek
Eynesbury Creek


Sunbury
Jacksons Creek
Emu Creek
Deep Creek
Yangardook Creek
Kororoit Creek West Branch
Ryans Creek
Melton Highway
Outer Freeway
Sydenham Terminal Station
Kororoit Creek
Caroline Springs
Billingham Rd Drain
Western Freeway
St Albans West Drain
Aboriginal Cultural Heritage
WRL Project Area - Page 9 of 9
Existing Terminal Station
Proposed Route
Artefact Scatter
Earth Feature, Hearth
Earth Feature, Mound
Earth Feature, Soil Deposit
Low Density Artefact Distribution
Object Collection
Quarry
Possible Aboriginal Cultural Heritage
Area of CHS
Study Area
6. Wurundjeri
Waterway
WRL_WR1259_AH_AboriginalCulturalHeritage
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Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7423-0754	SIX MILE BRIDGE TREE	7423-0754-1	Scarred Tree	677774	5898574	BGLCAC	
7523-0120	VANCE'S 1	7523-0120-1	Artefact Scatter	682029	5895297	BGLCAC	
7523-0121	VANCE'S 2	7523-0121-1	Artefact Scatter	681970	5896128	BGLCAC	
7523-0170	SIX MILE CREEK-1	7523-0170-1	Artefact Scatter	679958	5897041	BGLCAC	
7523-0351	Wimmera River Joel South LDAD 1	7523-0351-1	Low Density Artefact Distribution	681975.662	5895267.725	BGLCAC	
7523-0351	Wimmera River Joel South LDAD 1	7523-0351-2	Low Density Artefact Distribution	681921	5895268	BGLCAC	
7523-0382	Six Mile Creek Joel South CMT-02	7523-0382-1	Scarred Tree	678187.229	5898239.928	BGLCAC	Y
7523-0383	Six Mile Creek Joel South CMT-01	7523-0383-1	Scarred Tree	678164.815	5898228.784	BGLCAC	Y
7523-0409	Shay Flat LDAD	7523-0409-1	Low Density Artefact Distribution	683555.065	5894754.038	BGLCAC	Y
7523-0409	Shay Flat LDAD	7523-0409-2	Low Density Artefact Distribution	683555.065	5894754.038	BGLCAC	Y
7523-0409	Shay Flat LDAD	7523-0409-3	Low Density Artefact Distribution	683555.065	5894754.038	BGLCAC	Y
7523-0409	Shay Flat LDAD	7523-0409-4	Low Density Artefact Distribution	683555.065	5894754.038	BGLCAC	Y
7523-0409	Shay Flat LDAD	7523-0409-5	Low Density Artefact Distribution	683576.055	5894743.55	BGLCAC	Y
7523-0409	Shay Flat LDAD	7523-0409-6	Low Density Artefact Distribution	683599.362	5894748.777	BGLCAC	Y
7523-0409	Shay Flat LDAD	7523-0409-7	Low Density Artefact Distribution	683574.367	5894778.025	BGLCAC	Y
7523-0409	Shay Flat LDAD	7523-0409-8	Low Density Artefact Distribution	683574.367	5894778.025	BGLCAC	Y
7523-0410	Six Mile Creek CMT03	7523-0410-1	Scarred Tree	678202.744	5898102.18	BGLCAC	Y
7523-0201	LANDSBOROUGH 191	7523-0201-3	Object Collection	691693.414	5889795.016	EMAC	
7523-0202	BOATMANS GATE 385	7523-0202-1	Scarred Tree	691558	5889197	EMAC	
7523-0203	GLENLOFTY 243	7523-0203-3	Object Collection	691693.414	5889795.016	EMAC	
7523-0204	GLENLOFTY 244	7523-0204-5	Object Collection	691693.414	5889795.016	EMAC	
7523-0206	GLENLOFTY 261	7523-0206-1	Artefact Scatter	692870	5888430	EMAC	
7523-0206	GLENLOFTY 261	7523-0206-2	Object Collection	692870	5888430	EMAC	
7523-0208	CROWLANDS 152	7523-0208-1	Scarred Tree	691723	5890008	EMAC	
7523-0209	CROWLANDS 153	7523-0209-1	Scarred Tree	691713	5889964	EMAC	
7523-0210	CROWLANDS 156	7523-0210-1	Scarred Tree	691682	5889804	EMAC	
7523-0212	CROWLANDS 263	7523-0212-1	Artefact Scatter	691631	5889372	EMAC	

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7523-0212	CROWLANDS 263	7523-0212-2	Scarred Tree	691631	5889372	EMAC	
7523-0212	CROWLANDS 263	7523-0212-4	Object Collection	691693.414	5889795.016	EMAC	
7523-0214	EVERSLEY 279	7523-0214-3	Object Collection	691693.414	5889795.016	EMAC	
7523-0215	EVERSLEY 282	7523-0215-4	Object Collection	691693.414	5889795.016	EMAC	
7523-0216	EVERSLEY 293	7523-0216-4	Object Collection	691693.414	5889795.016	EMAC	
7523-0221	GLENDHU 159	7523-0221-4	Object Collection	691693.414	5889795.016	EMAC	
7523-0222	GLENDHU 160	7523-0222-3	Object Collection	691693.414	5889795.016	EMAC	
7523-0223	GLENDHU 168	7523-0223-4	Object Collection	691693.414	5889795.016	EMAC	
7523-0228	GLENDHU 184	7523-0228-3	Object Collection	691693.414	5889795.016	EMAC	
7523-0345	Rhockett Scarred Tree	7523-0345-1	Scarred Tree	692449	5889228	EMAC	
7523-0346	Spring Creek IA	7523-0346-1	Low Density Artefact Distribution	691096	5889731	EMAC	
7523-0347	Warre Creek 1	7523-0347-1	Artefact Scatter	691561	5889834	EMAC	
7523-0347	Warre Creek 1	7523-0347-2	Object Collection	691693.414	5889795.016	EMAC	
7523-0347	Warre Creek 1	7523-0347-3	Earth Feature (Mound)	691603	5889809	EMAC	
7523-0348	Warre Creek 2	7523-0348-1	Artefact Scatter	691245	5889773	EMAC	
7523-0348	Warre Creek 2	7523-0348-2	Object Collection	691693.414	5889795.016	EMAC	
7523-0369	Crowlands Windfarm AS1	7523-0369-1	Artefact Scatter	691389.052	5889992.389	EMAC	
7523-0370	Crowlands Windfarm LDAD 1	7523-0370-2	Low Density Artefact Distribution	688446.64	5891683.695	EMAC	Y
7523-0370	Crowlands Windfarm LDAD 1	7523-0370-3	Low Density Artefact Distribution	688446.64	5891683.695	EMAC	Y
7523-0370	Crowlands Windfarm LDAD 1	7523-0370-4	Low Density Artefact Distribution	688446.64	5891683.695	EMAC	Y
7523-0370	Crowlands Windfarm LDAD 1	7523-0370-5	Low Density Artefact Distribution	688454.016	5891664.769	EMAC	Y
7523-0370	Crowlands Windfarm LDAD 1	7523-0370-6	Low Density Artefact Distribution	688454.016	5891664.769	EMAC	Y
7523-0370	Crowlands Windfarm LDAD 1	7523-0370-7	Low Density Artefact Distribution	688454.872	5891668.511	EMAC	Y
7523-0370	Crowlands Windfarm LDAD 1	7523-0370-8	Low Density Artefact Distribution	688454.872	5891668.511	EMAC	Y
7523-0370	Crowlands Windfarm LDAD 1	7523-0370-9	Low Density Artefact Distribution	688452.167	5891658.83	EMAC	Y
7523-0370	Crowlands Windfarm LDAD 1	7523-0370-10	Low Density Artefact Distribution	688451.459	5891653.884	EMAC	Y
7523-0370	Crowlands Windfarm LDAD 1	7523-0370-11	Low Density Artefact Distribution	688451.459	5891653.884	EMAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7523-0370	Crowlands Windfarm LDAD 1	7523-0370-12	Low Density Artefact Distribution	688450.552	5891649.187	EMAC	Y
7523-0370	Crowlands Windfarm LDAD 1	7523-0370-13	Low Density Artefact Distribution	688449.237	5891644.245	EMAC	Y
7523-0115	MURNANE'S 1	7523-0115-1	Artefact Scatter	698070	5885337	Non-RAP	
7523-0116	MURNANE'S 2	7523-0116-1	Artefact Scatter	698020	5885427	Non-RAP	
7523-0117	MURNANE'S 3	7523-0117-1	Artefact Scatter	697850	5885717	Non-RAP	
7523-0118	MURNANE'S 4	7523-0118-1	Artefact Scatter	697920	5885777	Non-RAP	
7523-0366	Maryborough-Ararat AS 1	7523-0366-1	Artefact Scatter	704977.053	5881091.157	Non-RAP	
7523-0381	Elmhurst AS 1	7523-0381-1	Artefact Scatter	700150.84	5883186.85	Non-RAP	
7523-0413	Sandy lane LDAD	7523-0413-1	Low Density Artefact Distribution	703797.244	5882213.583	Non-RAP	Y
7523-0413	Sandy lane LDAD	7523-0413-2	Low Density Artefact Distribution	703797.244	5882213.583	Non-RAP	Y
7523-0413	Sandy lane LDAD	7523-0413-3	Low Density Artefact Distribution	703797.244	5882213.583	Non-RAP	Y
7523-0413	Sandy lane LDAD	7523-0413-4	Low Density Artefact Distribution	703797.244	5882213.583	Non-RAP	Y
7523-0413	Sandy lane LDAD	7523-0413-5	Low Density Artefact Distribution	703797.244	5882213.583	Non-RAP	Y
7523-0413	Sandy lane LDAD	7523-0413-6	Low Density Artefact Distribution	703797.244	5882213.583	Non-RAP	Y
7523-0413	Sandy lane LDAD	7523-0413-7	Low Density Artefact Distribution	703797.244	5882213.583	Non-RAP	Y
7523-0413	Sandy lane LDAD	7523-0413-8	Low Density Artefact Distribution	703797.244	5882213.583	Non-RAP	Y
7523-0414	ARTS Synchon, Elmhurst	7523-0414-1	Low Density Artefact Distribution	699408.635	5884554.496	Non-RAP	
7523-0414	ARTS Synchon, Elmhurst	7523-0414-2	Low Density Artefact Distribution	699397.433	5884550.939	Non-RAP	
7523-0414	ARTS Synchon, Elmhurst	7523-0414-3	Low Density Artefact Distribution	699397.433	5884550.939	Non-RAP	
7523-0414	ARTS Synchon, Elmhurst	7523-0414-4	Low Density Artefact Distribution	699415.886	5884555.604	Non-RAP	
7523-0414	ARTS Synchon, Elmhurst	7523-0414-5	Low Density Artefact Distribution	699415.886	5884555.604	Non-RAP	
7523-0412	Avoca River LDAD	7523-0412-1	Low Density Artefact Distribution	712672.092	5876145.491	DJAARA	Y
7523-0412	Avoca River LDAD	7523-0412-2	Low Density Artefact Distribution	712672.092	5876145.491	DJAARA	Y
7523-0412	Avoca River LDAD	7523-0412-3	Low Density Artefact Distribution	712672.092	5876145.491	DJAARA	Y
7523-0415	Keiths Road LDAD	7523-0415-1	Low Density Artefact Distribution	706871.488	5880284.568	DJAARA	Y
7623-0005	CLUNES	7623-0005-1	Earth Feature (Mound)	752075	5862120	DJAARA	
7623-0042	FRASERS PLANTATION 1	7623-0042-1	Artefact Scatter	735192	5864492	DJAARA	

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7623-0047	FRASER PLANTATION 6	7623-0047-1	Artefact Scatter	736231	5865327	DJAARA	
7623-0048	FRASERS PLANTATION 7	7623-0048-1	Artefact Scatter	736087	5865053	DJAARA	
7623-0049	FRASERS PLANTATION 8	7623-0049-1	Artefact Scatter	735992	5865319	DJAARA	
7623-0065	SUNRAYSIA IA 1	7623-0065-1	Artefact Scatter	730302	5866501	DJAARA	
7623-0131	SUNRAYSIA AS1	7623-0131-1	Artefact Scatter	730330	5865680	DJAARA	
7623-0152	EAST MT MITCHELL ROAD 1	7623-0152-1	Artefact Scatter	730383	5869114	DJAARA	
7623-0235	Reid's Road LDAD	7623-0235-1	Low Density Artefact Distribution	734643.815	5864518.054	DJAARA	
7723-0181	BBP 29	7723-0181-1	Artefact Scatter	235707	5853563	DJAARA	
7723-0182	BBP 30	7723-0182-1	Artefact Scatter	235134	5851222	DJAARA	
7723-0184	BBP 32	7723-0184-1	Artefact Scatter	234972	5850087	DJAARA	
7723-0194	GOLDFIELDS SST 9	7723-0194-1	Artefact Scatter	235524	5852853	DJAARA	
7723-0195	GOLDFIELDS SST 10	7723-0195-1	Artefact Scatter	235495	5852736	DJAARA	
7723-0196	GOLDFIELDS SST 11	7723-0196-1	Artefact Scatter	235568	5852747	DJAARA	
7723-0197	GOLDFIELDS SST 12	7723-0197-1	Artefact Scatter	235390	5852289	DJAARA	
7723-0199	GOLDFIELDS SST 15	7723-0199-1	Artefact Scatter	235509	5852797	DJAARA	
7723-0200	GOLDFIELDS SST 18	7723-0200-1	Artefact Scatter	235187	5851284	DJAARA	
7723-0209	SUPERPIPE MYERS RD NORTH	7723-0209-1	Artefact Scatter	235105	5850858	DJAARA	
7723-0232	GOLDFIELDS SUPERPIPE LONG SWAMP RD	7723-0232-1	Artefact Scatter	235301	5851712	DJAARA	
7723-0376	Myers Rd, Dean Artefact Scatter	7723-0376-1	Artefact Scatter	236033.378	5850767.324	DJAARA	
[redacted]	Yendon Powerline 1 – Coulsons & Clarks Roads	[redacted]	Low Density Artefact Distribution	758148.38	5838241.1	WTOAC	
[redacted]	Yendon Powerline 1 – Coulsons & Clarks Roads	[redacted]	Low Density Artefact Distribution	758148.38	5838241.1	WTOAC	
[redacted]	Yendon Powerline 1 – Coulsons & Clarks Roads	[redacted]	Low Density Artefact Distribution	758148.38	5838241.1	WTOAC	
[redacted]	Yendon Powerline 1 – Coulsons & Clarks Roads	[redacted]	Low Density Artefact Distribution	758148.38	5838241.1	WTOAC	
[redacted]	Wilson Reservoir Scarred Tree 1	[redacted]	Scarred Tree	767397	5844347	WTOAC	
[redacted]	Wilson Reservoir Scarred Tree 3	[redacted]	Scarred Tree	767527	5844451	WTOAC	

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
[redacted]	Moorabool River West Branch LDAD 1	[redacted]	Low Density Artefact Distribution	779119.525	5839381.686	WTOAC	
[redacted]	Moorabool River West Branch LDAD 1	[redacted]	Low Density Artefact Distribution	779119.526	5839381.686	WTOAC	
[redacted]	Moorabool River West Branch LDAD 1	[redacted]	Low Density Artefact Distribution	779119.526	5839381.686	WTOAC	
[redacted]	Moorabool River West Branch LDAD 1	[redacted]	Low Density Artefact Distribution	779108.141	5839382.493	WTOAC	
[redacted]	Moorabool River West Branch LDAD 1	[redacted]	Low Density Artefact Distribution	779097.956	5839382.156	WTOAC	
[redacted]	Moorabool River West Branch LDAD 1	[redacted]	Low Density Artefact Distribution	779087.314	5839386.076	WTOAC	
[redacted]	Moorabool River West Branch LDAD 1	[redacted]	Low Density Artefact Distribution	779083.166	5839383.921	WTOAC	
[redacted]	Moorabool River West Branch LDAD 1	[redacted]	Low Density Artefact Distribution	779082.978	5839388.122	WTOAC	
[redacted]	Moorabool River West Branch LDAD 1	[redacted]	Low Density Artefact Distribution	779081.108	5839387.631	WTOAC	
[redacted]	Moorabool River West Branch LDAD 1	[redacted]	Low Density Artefact Distribution	779078.127	5839391.387	WTOAC	
[redacted]	Moorabool River West Branch LDAD 1	[redacted]	Low Density Artefact Distribution	779060.646	5839389.721	WTOAC	
[redacted]	Moorabool River West Branch LDAD 1	[redacted]	Low Density Artefact Distribution	778950.254	5839400.86	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778076.192	5839850.742	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778199.96	5839725.698	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778212	5839827.578	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778178.168	5839838.775	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778171.608	5839837.751	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778160.458	5839820.137	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778142.452	5839844.191	WTOAC	

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778119.508	5839842.622	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778119.508	5839842.622	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778113.033	5839839.943	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778112.292	5839851.228	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778107.656	5839849.632	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778106.196	5839847.669	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778100.477	5839843.405	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778100.477	5839843.405	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778101.065	5839841.927	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778097.127	5839837.929	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778092.614	5839863.468	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778091.931	5839865.666	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778080.32	5839859.517	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778080.32	5839859.517	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778081.56	5839858.451	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778080.741	5839855.27	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778075.673	5839856.697	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778079.362	5839848.834	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778073.697	5839849.732	WTOAC	

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778072.344	5839844.101	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778064.535	5839847.636	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778059.757	5839850.874	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778048.589	5839854.615	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778073.814	5839824.456	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778117.072	5839785.441	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778118.628	5839785.161	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778121.127	5839778.972	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778133.229	5839775.456	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778144.802	5839753.69	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778133.429	5839756.851	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778117.22	5839762.4	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778003.327	5839837.868	WTOAC	
[redacted]	Moorabool River West Branch LDAD 2	[redacted]	Low Density Artefact Distribution	778079.559	5839869.554	WTOAC	
7722-0111	KORKUPERRIMUL CREEK 1	7722-0111-1	Artefact Scatter	269912	5833284	WWCHAC	
7722-0112	KORKUPERRIMUL CREEK 2	7722-0112-1	Artefact Scatter	269912	5833384	WWCHAC	
7722-0113	KORKUPERRIMUL CREEK 3	7722-0113-1	Artefact Scatter	269812	5833484	WWCHAC	
7722-0240	LERDERDERG RIVER RD	7722-0240-1	Artefact Scatter	273462	5831731	WWCHAC	
7722-1270	Merrimu Reservoir 31	7722-1270-2	Low Density Artefact Distribution	278015.647	5831858.595	WWCHAC	Y
7722-1270	Merrimu Reservoir 31	7722-1270-3	Low Density Artefact Distribution	277748.859	5831897.032	WWCHAC	Y
7722-1270	Merrimu Reservoir 31	7722-1270-4	Low Density Artefact Distribution	278021.845	5831819.172	WWCHAC	Y
7722-1270	Merrimu Reservoir 31	7722-1270-5	Low Density Artefact Distribution	278022.99	5831854.639	WWCHAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7722-1270	Merrimu Reservoir 31	7722-1270-6	Low Density Artefact Distribution	278038.865	5831853.903	WWCHAC	Y
7722-1270	Merrimu Reservoir 31	7722-1270-7	Low Density Artefact Distribution	278041.869	5831857.316	WWCHAC	Y
7722-1270	Merrimu Reservoir 31	7722-1270-8	Low Density Artefact Distribution	278041.869	5831857.316	WWCHAC	Y
7722-1270	Merrimu Reservoir 31	7722-1270-9	Low Density Artefact Distribution	278069.308	5831820.208	WWCHAC	Y
7722-1270	Merrimu Reservoir 31	7722-1270-10	Low Density Artefact Distribution	278134.168	5831877.165	WWCHAC	Y
7722-1270	Merrimu Reservoir 31	7722-1270-11	Low Density Artefact Distribution	278134.168	5831877.165	WWCHAC	Y
7722-1270	Merrimu Reservoir 31	7722-1270-12	Low Density Artefact Distribution	278134.168	5831877.165	WWCHAC	Y
7722-1270	Merrimu Reservoir 31	7722-1270-13	Low Density Artefact Distribution	278129.989	5831871.049	WWCHAC	Y
7722-1270	Merrimu Reservoir 31	7722-1270-14	Low Density Artefact Distribution	278134.982	5831876.064	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-1	Low Density Artefact Distribution	279388.583	5832176.691	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-2	Low Density Artefact Distribution	279355.793	5832184.522	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-3	Low Density Artefact Distribution	279286.553	5832196.254	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-4	Low Density Artefact Distribution	279390.422	5832278.923	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-5	Low Density Artefact Distribution	279390.025	5832269.037	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-6	Low Density Artefact Distribution	279390.547	5832258.314	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-7	Low Density Artefact Distribution	279381.515	5832257.103	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-8	Low Density Artefact Distribution	279378	5832252.888	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-9	Low Density Artefact Distribution	279376.41	5832249.729	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-10	Low Density Artefact Distribution	279374.466	5832247.293	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-11	Low Density Artefact Distribution	279369.744	5832239.058	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-12	Low Density Artefact Distribution	279369.685	5832239.625	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-13	Low Density Artefact Distribution	279376.994	5832233.259	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-14	Low Density Artefact Distribution	279371.236	5832229.943	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-15	Low Density Artefact Distribution	279374.074	5832257.401	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-16	Low Density Artefact Distribution	279372.96	5832257.049	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-17	Low Density Artefact Distribution	279386.625	5832270.518	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-18	Low Density Artefact Distribution	279373.241	5832257.552	WWCHAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-19	Low Density Artefact Distribution	279371.053	5832259.821	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-20	Low Density Artefact Distribution	279369.411	5832263.304	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-21	Low Density Artefact Distribution	279376.769	5832269.921	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-22	Low Density Artefact Distribution	279365.411	5832269.522	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-23	Low Density Artefact Distribution	279375.598	5832274.172	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-24	Low Density Artefact Distribution	279375.753	5832273.903	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-25	Low Density Artefact Distribution	279390.416	5832278.365	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-26	Low Density Artefact Distribution	279384.474	5832284.36	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-27	Low Density Artefact Distribution	279379.66	5832295.11	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-28	Low Density Artefact Distribution	279368.768	5832277.448	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-29	Low Density Artefact Distribution	279365.918	5832285.815	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-30	Low Density Artefact Distribution	279355.059	5832297.175	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-31	Low Density Artefact Distribution	279360.945	5832240.971	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-32	Low Density Artefact Distribution	279358.422	5832239.621	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-33	Low Density Artefact Distribution	279257.498	5832172.076	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-34	Low Density Artefact Distribution	279379.194	5832227.529	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-35	Low Density Artefact Distribution	279379.194	5832227.529	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-36	Low Density Artefact Distribution	279379.194	5832227.529	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-37	Low Density Artefact Distribution	279368.63	5832225.038	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-38	Low Density Artefact Distribution	279364.196	5832224.229	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-39	Low Density Artefact Distribution	279364.196	5832224.229	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-40	Low Density Artefact Distribution	279364.196	5832224.229	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-41	Low Density Artefact Distribution	279364.196	5832224.229	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-42	Low Density Artefact Distribution	279366.737	5832209.12	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-43	Low Density Artefact Distribution	279366.737	5832209.12	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-44	Low Density Artefact Distribution	279366.737	5832209.12	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-45	Low Density Artefact Distribution	279368.372	5832199.463	WWCHAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-46	Low Density Artefact Distribution	279368.372	5832199.463	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-47	Low Density Artefact Distribution	279368.372	5832199.463	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-48	Low Density Artefact Distribution	279358.392	5832197.165	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-49	Low Density Artefact Distribution	279351.803	5832209.771	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-50	Low Density Artefact Distribution	279338.12	5832197.583	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-51	Low Density Artefact Distribution	279328.988	5832210.647	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-52	Low Density Artefact Distribution	279328.988	5832210.647	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-53	Low Density Artefact Distribution	279314.857	5832213.015	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-54	Low Density Artefact Distribution	279314.857	5832213.015	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-55	Low Density Artefact Distribution	279300.931	5832218.742	WWCHAC	Y
7722-1275	Merrimu Reservoir LDAD 1	7722-1275-56	Low Density Artefact Distribution	279292.628	5832222.014	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-1	Low Density Artefact Distribution	273172.592	5832129.861	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-2	Low Density Artefact Distribution	273168.352	5832111.655	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-3	Low Density Artefact Distribution	273168.352	5832111.655	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-4	Low Density Artefact Distribution	273182.14	5832065.705	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-5	Low Density Artefact Distribution	273181.681	5832065.685	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-6	Low Density Artefact Distribution	273180.761	5832065.782	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-7	Low Density Artefact Distribution	273181.552	5832066.189	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-8	Low Density Artefact Distribution	273198.012	5832116.658	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-9	Low Density Artefact Distribution	273196.693	5832108.079	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-10	Low Density Artefact Distribution	273190.627	5832095.992	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-11	Low Density Artefact Distribution	272996.972	5832173.344	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-12	Low Density Artefact Distribution	272994.773	5832173.428	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-13	Low Density Artefact Distribution	272994.457	5832173.544	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-14	Low Density Artefact Distribution	272993.694	5832179.611	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-15	Low Density Artefact Distribution	272997.213	5832183.313	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-16	Low Density Artefact Distribution	272984.99	5832121.134	WWCHAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7722-1276	Lerderderg River LDAD	7722-1276-17	Low Density Artefact Distribution	272985.315	5832115.161	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-18	Low Density Artefact Distribution	272985.129	5832106.657	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-19	Low Density Artefact Distribution	272985.413	5832106.903	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-20	Low Density Artefact Distribution	272982.004	5832107.338	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-21	Low Density Artefact Distribution	272980.656	5832099.542	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-22	Low Density Artefact Distribution	272978.602	5832085.125	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-23	Low Density Artefact Distribution	272978.389	5832085.487	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-24	Low Density Artefact Distribution	272965.497	5832022.336	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-25	Low Density Artefact Distribution	273108.26	5832057.546	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-26	Low Density Artefact Distribution	273114.334	5832048.639	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-27	Low Density Artefact Distribution	273081.779	5832046.504	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-28	Low Density Artefact Distribution	273108.213	5832063.206	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-29	Low Density Artefact Distribution	273068.939	5832026.687	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-30	Low Density Artefact Distribution	273085.046	5832035.591	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-31	Low Density Artefact Distribution	273117.327	5832065.233	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-32	Low Density Artefact Distribution	273193.421	5832069.456	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-33	Low Density Artefact Distribution	273114.643	5832029.007	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-34	Low Density Artefact Distribution	273068.65	5832020.741	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-35	Low Density Artefact Distribution	273072.037	5832020.749	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-36	Low Density Artefact Distribution	273071.291	5832020.555	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-37	Low Density Artefact Distribution	273071.104	5832020.685	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-38	Low Density Artefact Distribution	273070.542	5832020.293	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-39	Low Density Artefact Distribution	273123.5	5832051.791	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-40	Low Density Artefact Distribution	273120.656	5832103.826	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-41	Low Density Artefact Distribution	273102.374	5832079.512	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-42	Low Density Artefact Distribution	273095.734	5832074.732	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-43	Low Density Artefact Distribution	273053.61	5832089.453	WWCHAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7722-1276	Lerderderg River LDAD	7722-1276-44	Low Density Artefact Distribution	273187.479	5832177.779	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-45	Low Density Artefact Distribution	273196.416	5832108.801	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-46	Low Density Artefact Distribution	273196.416	5832108.801	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-47	Low Density Artefact Distribution	273196.416	5832108.801	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-48	Low Density Artefact Distribution	273196.416	5832108.801	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-49	Low Density Artefact Distribution	273196.416	5832108.801	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-50	Low Density Artefact Distribution	273095.691	5832130.895	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-51	Low Density Artefact Distribution	273095.691	5832130.895	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-52	Low Density Artefact Distribution	273095.691	5832130.895	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-53	Low Density Artefact Distribution	273095.691	5832130.895	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-54	Low Density Artefact Distribution	273095.691	5832130.895	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-55	Low Density Artefact Distribution	272925.353	5831923.382	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-56	Low Density Artefact Distribution	272999.017	5832199.978	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-57	Low Density Artefact Distribution	273087.792	5832215.986	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-58	Low Density Artefact Distribution	273085.843	5832217.387	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-59	Low Density Artefact Distribution	273185.702	5832245.527	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-60	Low Density Artefact Distribution	273201.607	5832238.56	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-61	Low Density Artefact Distribution	273203.936	5832315.095	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-62	Low Density Artefact Distribution	273204.177	5832315.267	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-63	Low Density Artefact Distribution	273194.188	5832307.2	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-64	Low Density Artefact Distribution	273194.116	5832307.257	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-65	Low Density Artefact Distribution	273193.441	5832306.43	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-66	Low Density Artefact Distribution	273188.964	5832294.742	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-67	Low Density Artefact Distribution	273196.885	5832290.273	WWCHAC	Y
7722-1276	Lerderderg River LDAD	7722-1276-68	Low Density Artefact Distribution	273196.732	5832289.176	WWCHAC	Y
7722-1277	Lerderderg River West LDAD	7722-1277-1	Low Density Artefact Distribution	272273.812	5832230.014	WWCHAC	Y
7822-0148	LONG FOREST MALLEE LF3	7822-0148-1	Artefact Scatter	280759	5831498	WWCHAC	

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7822-0184	TARAMEADE 1	7822-0184-1	Earth Feature (Soil Deposit)	292848	5831190	WWCHAC	
7822-0227	TARAMEADE 2	7822-0227-1	Earth Feature (Soil Deposit)	292712	5830984	WWCHAC	
7822-0256	TARAMEADE 1	7822-0256-1	Artefact Scatter	293053	5831348	WWCHAC	
7822-0257	TARAMEADE 2	7822-0257-1	Artefact Scatter	292883	5831084	WWCHAC	
7822-0258	TARAMEADE 3	7822-0258-1	Artefact Scatter	292791	5831026	WWCHAC	
7822-2303	DIGGERS REST COIMADAI ROAD WIDENING 1	7822-2303-1	Artefact Scatter	282020	5833861	WWCHAC	
7822-2304	DIGGERS REST COIMADAI RD WIDENING 2	7822-2304-1	Artefact Scatter	281799	5833820	WWCHAC	
7822-3775	Holden Road, Plumpton 5	7822-3775-1	Low Density Artefact Distribution	300646.649	5828377.805	WWCHAC	
7822-3775	Holden Road, Plumpton 5	7822-3775-2	Low Density Artefact Distribution	300644.62	5828379.56	WWCHAC	
7822-3775	Holden Road, Plumpton 5	7822-3775-3	Low Density Artefact Distribution	300642.745	5828376.588	WWCHAC	
7822-3775	Holden Road, Plumpton 5	7822-3775-4	Low Density Artefact Distribution	300640.895	5828377.547	WWCHAC	
7822-3775	Holden Road, Plumpton 5	7822-3775-5	Low Density Artefact Distribution	300497.171	5828487.059	WWCHAC	
7822-3775	Holden Road, Plumpton 5	7822-3775-6	Low Density Artefact Distribution	300497.171	5828487.059	WWCHAC	
7822-3775	Holden Road, Plumpton 5	7822-3775-7	Low Density Artefact Distribution	300496.83	5828487.664	WWCHAC	
7822-3775	Holden Road, Plumpton 5	7822-3775-8	Low Density Artefact Distribution	300496.83	5828487.664	WWCHAC	
7822-3995	Holden Road, Plumpton 6	7822-3995-2	Artefact Scatter	300498.118	5828431.91	WWCHAC	
7822-3996	Holden Road, Plumpton 8	7822-3996-1	Artefact Scatter	300634.801	5828396.298	WWCHAC	
7822-3998	Holden Road, Plumpton 7	7822-3998-5	Low Density Artefact Distribution	300523.968	5828429.49	WWCHAC	
7822-3998	Holden Road, Plumpton 7	7822-3998-6	Low Density Artefact Distribution	300523.968	5828429.49	WWCHAC	
7822-3998	Holden Road, Plumpton 7	7822-3998-7	Low Density Artefact Distribution	300523.968	5828429.49	WWCHAC	
7822-3998	Holden Road, Plumpton 7	7822-3998-8	Low Density Artefact Distribution	300523.968	5828429.49	WWCHAC	
7822-3998	Holden Road, Plumpton 7	7822-3998-9	Low Density Artefact Distribution	300523.968	5828429.49	WWCHAC	
7822-3998	Holden Road, Plumpton 7	7822-3998-10	Low Density Artefact Distribution	300523.968	5828429.49	WWCHAC	
7822-3998	Holden Road, Plumpton 7	7822-3998-11	Low Density Artefact Distribution	300529.533	5828784.384	WWCHAC	
7822-3998	Holden Road, Plumpton 7	7822-3998-12	Low Density Artefact Distribution	300537.267	5828865.809	WWCHAC	
7822-3998	Holden Road, Plumpton 7	7822-3998-13	Low Density Artefact Distribution	300544.425	5828912.794	WWCHAC	
7822-4313	Holden Road Plumpton 9	7822-4313-6	Low Density Artefact Distribution	301167.83	5827903.361	WWCHAC	

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7822-4440	Rutland Square LDAD 1	7822-4440-4	Low Density Artefact Distribution	299242.429	5828482.083	WWCHAC	
7822-4440	Rutland Square LDAD 1	7822-4440-5	Low Density Artefact Distribution	299245.306	5828485.41	WWCHAC	
7822-4440	Rutland Square LDAD 1	7822-4440-6	Low Density Artefact Distribution	299280.216	5828708.72	WWCHAC	
7822-4440	Rutland Square LDAD 1	7822-4440-7	Low Density Artefact Distribution	299248.972	5828502.92	WWCHAC	
7822-4440	Rutland Square LDAD 1	7822-4440-9	Low Density Artefact Distribution	299244.152	5828483.56	WWCHAC	
7822-4440	Rutland Square LDAD 1	7822-4440-10	Low Density Artefact Distribution	299237.16	5828442.748	WWCHAC	Y
7822-4440	Rutland Square LDAD 1	7822-4440-11	Low Density Artefact Distribution	299235.018	5828436.713	WWCHAC	Y
7822-4440	Rutland Square LDAD 1	7822-4440-12	Low Density Artefact Distribution	299234.82	5828436.575	WWCHAC	Y
7822-4440	Rutland Square LDAD 1	7822-4440-13	Low Density Artefact Distribution	299236.335	5828437.858	WWCHAC	Y
7822-4440	Rutland Square LDAD 1	7822-4440-14	Low Density Artefact Distribution	299235.59	5828444.368	WWCHAC	Y
7822-4440	Rutland Square LDAD 1	7822-4440-15	Low Density Artefact Distribution	299235.696	5828445.301	WWCHAC	Y
7822-4440	Rutland Square LDAD 1	7822-4440-16	Low Density Artefact Distribution	299259.309	5828513.289	WWCHAC	Y
7822-4440	Rutland Square LDAD 1	7822-4440-17	Low Density Artefact Distribution	298501.852	5828087.549	WWCHAC	Y
7822-4440	Rutland Square LDAD 1	7822-4440-18	Low Density Artefact Distribution	298606.923	5828078.508	WWCHAC	Y
7822-4440	Rutland Square LDAD 1	7822-4440-19	Low Density Artefact Distribution	298114.663	5828029.459	WWCHAC	Y
7822-4440	Rutland Square LDAD 1	7822-4440-20	Low Density Artefact Distribution	297459.276	5828028.897	WWCHAC	Y
7822-4440	Rutland Square LDAD 1	7822-4440-21	Low Density Artefact Distribution	298104.712	5827937.485	WWCHAC	Y
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-1	Low Density Artefact Distribution	282027.133	5832928.303	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-2	Low Density Artefact Distribution	281972.564	5833782.173	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-3	Low Density Artefact Distribution	281433.19	5833037.878	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-4	Low Density Artefact Distribution	281219.047	5832577.637	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-5	Low Density Artefact Distribution	281189.051	5832588.332	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-6	Low Density Artefact Distribution	281188.283	5832586.783	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-7	Low Density Artefact Distribution	282667.748	5832961.736	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-8	Low Density Artefact Distribution	282652.578	5833339.226	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-9	Low Density Artefact Distribution	282652.578	5833339.226	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-10	Low Density Artefact Distribution	281437.377	5833021.532	WWCHAC	

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-11	Low Density Artefact Distribution	281430.065	5833003.795	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-12	Low Density Artefact Distribution	281427.827	5832994.665	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-13	Low Density Artefact Distribution	281426.444	5832993.703	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-14	Low Density Artefact Distribution	281427.947	5832993.401	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-15	Low Density Artefact Distribution	281432.368	5832989.395	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-16	Low Density Artefact Distribution	281277.817	5832569.653	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-17	Low Density Artefact Distribution	281280.223	5832578.523	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-18	Low Density Artefact Distribution	281213.687	5832083.488	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-19	Low Density Artefact Distribution	281213.201	5832091.263	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-20	Low Density Artefact Distribution	281211.85	5832090.579	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-21	Low Density Artefact Distribution	281212.12	5832096.598	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-22	Low Density Artefact Distribution	281214.374	5832097.083	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-23	Low Density Artefact Distribution	281213.745	5832097.945	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-24	Low Density Artefact Distribution	281215.113	5832101.998	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-25	Low Density Artefact Distribution	281212.793	5832076.552	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-26	Low Density Artefact Distribution	281218.312	5831937.465	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-27	Low Density Artefact Distribution	281442.007	5833044.703	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-28	Low Density Artefact Distribution	281441.409	5833044.419	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-29	Low Density Artefact Distribution	281441.239	5833042.119	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-30	Low Density Artefact Distribution	281440.122	5833040.958	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-31	Low Density Artefact Distribution	281440.744	5833040.65	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-32	Low Density Artefact Distribution	281440.142	5833033.922	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-33	Low Density Artefact Distribution	281440.009	5833034.017	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-34	Low Density Artefact Distribution	281433.19	5833037.878	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-35	Low Density Artefact Distribution	281444.154	5833043.708	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-36	Low Density Artefact Distribution	281414.364	5832774.452	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-37	Low Density Artefact Distribution	281413.859	5832775.152	WWCHAC	

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-38	Low Density Artefact Distribution	281414.518	5832775.591	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-39	Low Density Artefact Distribution	281413.793	5832776.13	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-40	Low Density Artefact Distribution	281414.719	5832776.019	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-41	Low Density Artefact Distribution	281414.753	5832776.094	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-42	Low Density Artefact Distribution	281414.197	5832777.092	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-43	Low Density Artefact Distribution	281416.479	5832776.781	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-44	Low Density Artefact Distribution	281411.688	5832776.741	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-45	Low Density Artefact Distribution	281412.293	5832775.475	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-46	Low Density Artefact Distribution	281189.051	5832588.332	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-47	Low Density Artefact Distribution	281188.283	5832586.783	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-48	Low Density Artefact Distribution	281191.189	5832592.518	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-49	Low Density Artefact Distribution	281206.595	5832589.906	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-50	Low Density Artefact Distribution	281283.954	5832559.282	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-51	Low Density Artefact Distribution	280941.511	5831723.365	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-52	Low Density Artefact Distribution	280941.511	5831723.365	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-53	Low Density Artefact Distribution	280940.426	5831720.963	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-54	Low Density Artefact Distribution	280934.862	5831720.953	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-55	Low Density Artefact Distribution	280933.825	5831717.136	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-56	Low Density Artefact Distribution	280933.825	5831717.136	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-57	Low Density Artefact Distribution	280926.19	5831714.871	WWCHAC	
7822-4564	Diggers Rest Coimadai Road LDAD	7822-4564-58	Low Density Artefact Distribution	280916.522	5831733.168	WWCHAC	
7822-4619	Symington Road LDAD	7822-4619-1	Low Density Artefact Distribution	280076.896	5831812.855	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-2	Low Density Artefact Distribution	280076.896	5831812.855	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-3	Low Density Artefact Distribution	280078.888	5831803.01	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-4	Low Density Artefact Distribution	280078.888	5831803.01	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-5	Low Density Artefact Distribution	280072.481	5831799.023	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-6	Low Density Artefact Distribution	280072.481	5831799.023	WWCHAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7822-4619	Symington Road LDAD	7822-4619-7	Low Density Artefact Distribution	280047.281	5831821.584	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-8	Low Density Artefact Distribution	280042.273	5831820.996	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-9	Low Density Artefact Distribution	280055.815	5831807.002	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-10	Low Density Artefact Distribution	280073.248	5831816.814	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-11	Low Density Artefact Distribution	280068.685	5831802.971	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-12	Low Density Artefact Distribution	280068.685	5831802.971	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-13	Low Density Artefact Distribution	280076.056	5831793.698	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-14	Low Density Artefact Distribution	280076.056	5831793.698	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-19	Low Density Artefact Distribution	279531.634	5832000.931	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-20	Low Density Artefact Distribution	279553.453	5831993.814	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-21	Low Density Artefact Distribution	279545.304	5831998.366	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-22	Low Density Artefact Distribution	279549.954	5831991.073	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-23	Low Density Artefact Distribution	279565.275	5832004.34	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-24	Low Density Artefact Distribution	279540.625	5831982.652	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-25	Low Density Artefact Distribution	279538.469	5831985.8	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-33	Low Density Artefact Distribution	279542.16	5831950.659	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-34	Low Density Artefact Distribution	279544.461	5831950.229	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-35	Low Density Artefact Distribution	279545.413	5831951.72	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-36	Low Density Artefact Distribution	279545.336	5831951.535	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-37	Low Density Artefact Distribution	279543.292	5831995.989	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-38	Low Density Artefact Distribution	279523.852	5831996.565	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-39	Low Density Artefact Distribution	279526.182	5832000.883	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-40	Low Density Artefact Distribution	279531.773	5832000.721	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-41	Low Density Artefact Distribution	279520.219	5831998.165	WWCHAC	Y
7822-4619	Symington Road LDAD	7822-4619-42	Low Density Artefact Distribution	280069.824	5831821.178	WWCHAC	Y
7822-4703	Holden Road, Plumpton LDAD 1	7822-4703-1	Low Density Artefact Distribution	299962.864	5828304.944	WWCHAC	
7822-4703	Holden Road, Plumpton LDAD 1	7822-4703-2	Low Density Artefact Distribution	299835.571	5828523.158	WWCHAC	

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7822-4703	Holden Road, Plumpton LDAD 1	7822-4703-3	Low Density Artefact Distribution	300008.839	5828709.285	WWCHAC	
7822-4703	Holden Road, Plumpton LDAD 1	7822-4703-4	Low Density Artefact Distribution	300076.435	5828692.291	WWCHAC	
7822-4703	Holden Road, Plumpton LDAD 1	7822-4703-5	Low Density Artefact Distribution	300076.435	5828692.291	WWCHAC	
7822-4703	Holden Road, Plumpton LDAD 1	7822-4703-6	Low Density Artefact Distribution	300076.435	5828692.291	WWCHAC	
7822-4703	Holden Road, Plumpton LDAD 1	7822-4703-7	Low Density Artefact Distribution	300076.435	5828692.291	WWCHAC	
7822-4703	Holden Road, Plumpton LDAD 1	7822-4703-8	Low Density Artefact Distribution	300076.435	5828692.291	WWCHAC	
7822-4703	Holden Road, Plumpton LDAD 1	7822-4703-9	Low Density Artefact Distribution	300182.07	5828719.854	WWCHAC	
7822-4703	Holden Road, Plumpton LDAD 1	7822-4703-10	Low Density Artefact Distribution	300184.321	5828715.711	WWCHAC	
7822-4703	Holden Road, Plumpton LDAD 1	7822-4703-11	Low Density Artefact Distribution	299964.48	5828299.526	WWCHAC	
7822-4703	Holden Road, Plumpton LDAD 1	7822-4703-13	Low Density Artefact Distribution	299835.154	5828523.464	WWCHAC	
7822-4703	Holden Road, Plumpton LDAD 1	7822-4703-14	Low Density Artefact Distribution	299959.681	5828466.652	WWCHAC	
7822-4714	Toolern Creek LDAD 1	7822-4714-1	Low Density Artefact Distribution	289330.223	5831299.998	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-2	Low Density Artefact Distribution	289329.108	5831299.669	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-3	Low Density Artefact Distribution	289321.726	5831302.159	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-4	Low Density Artefact Distribution	289324.138	5831307.347	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-5	Low Density Artefact Distribution	289330.932	5831308.272	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-6	Low Density Artefact Distribution	289332.199	5831308.446	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-7	Low Density Artefact Distribution	289329.87	5831314.299	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-8	Low Density Artefact Distribution	289329.202	5831314.314	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-9	Low Density Artefact Distribution	289334.95	5831316.276	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-10	Low Density Artefact Distribution	289334.265	5831299.998	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-11	Low Density Artefact Distribution	289332.59	5831316.983	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-12	Low Density Artefact Distribution	289331.534	5831317.258	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-13	Low Density Artefact Distribution	289330.11	5831318.494	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-14	Low Density Artefact Distribution	289331.072	5831318.062	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-15	Low Density Artefact Distribution	289331.534	5831321.575	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-16	Low Density Artefact Distribution	289334.947	5831321.941	WWCHAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7822-4714	Toolern Creek LDAD 1	7822-4714-17	Low Density Artefact Distribution	289343.834	5831322.115	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-18	Low Density Artefact Distribution	289350.065	5831405.51	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-19	Low Density Artefact Distribution	289344.685	5831382.486	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-20	Low Density Artefact Distribution	289340.749	5831381.284	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-21	Low Density Artefact Distribution	289344.385	5831364.933	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-22	Low Density Artefact Distribution	289344.011	5831364.93	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-23	Low Density Artefact Distribution	289320.546	5831302.371	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-24	Low Density Artefact Distribution	289321.886	5831291.724	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-25	Low Density Artefact Distribution	289327.493	5831226.095	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-26	Low Density Artefact Distribution	289327.109	5831225.472	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-27	Low Density Artefact Distribution	289327.486	5831226.133	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-28	Low Density Artefact Distribution	289326.653	5831225.657	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-29	Low Density Artefact Distribution	289319.309	5831243.064	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-30	Low Density Artefact Distribution	289223.008	5831260.969	WWCHAC	Y
7822-4714	Toolern Creek LDAD 1	7822-4714-31	Low Density Artefact Distribution	289531.654	5831202.767	WWCHAC	Y
7822-4715	Toolern Creek LDAD 2	7822-4715-1	Low Density Artefact Distribution	289370.558	5832036.925	WWCHAC	Y
7822-4715	Toolern Creek LDAD 2	7822-4715-2	Low Density Artefact Distribution	289377.978	5832024.885	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-1	Low Density Artefact Distribution	279414.118	5832178.065	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-2	Low Density Artefact Distribution	279414.118	5832178.065	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-3	Low Density Artefact Distribution	279414.118	5832178.065	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-4	Low Density Artefact Distribution	279433.437	5832207.115	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-5	Low Density Artefact Distribution	279433.437	5832207.115	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-6	Low Density Artefact Distribution	279433.489	5832194.737	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-7	Low Density Artefact Distribution	279398.575	5832184.229	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-8	Low Density Artefact Distribution	279398.575	5832184.229	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-9	Low Density Artefact Distribution	279408.433	5832177.71	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-10	Low Density Artefact Distribution	279398.804	5832175.828	WWCHAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-11	Low Density Artefact Distribution	279542.725	5832349.296	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-12	Low Density Artefact Distribution	279541.534	5832347.952	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-13	Low Density Artefact Distribution	279541.237	5832348.158	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-14	Low Density Artefact Distribution	279414.638	5832178.587	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-15	Low Density Artefact Distribution	279433.546	5832190.597	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-16	Low Density Artefact Distribution	279409.413	5832248.593	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-17	Low Density Artefact Distribution	279415.902	5832263.607	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-18	Low Density Artefact Distribution	279408.64	5832264.131	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-19	Low Density Artefact Distribution	279401.575	5832283.13	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-20	Low Density Artefact Distribution	279401.526	5832283.096	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-21	Low Density Artefact Distribution	279401.244	5832282.566	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-22	Low Density Artefact Distribution	279402.966	5832268.67	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-23	Low Density Artefact Distribution	279391.851	5832266.635	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-24	Low Density Artefact Distribution	279392.178	5832255.681	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-25	Low Density Artefact Distribution	279392.579	5832255.524	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-26	Low Density Artefact Distribution	279393.646	5832255.78	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-27	Low Density Artefact Distribution	279393.341	5832245.366	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-28	Low Density Artefact Distribution	279416.931	5832245.178	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-29	Low Density Artefact Distribution	279429.686	5832235.617	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-30	Low Density Artefact Distribution	279429.686	5832235.617	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-31	Low Density Artefact Distribution	279436.84	5832249.274	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-32	Low Density Artefact Distribution	279436.84	5832249.274	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-33	Low Density Artefact Distribution	279440.286	5832220.093	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-34	Low Density Artefact Distribution	279466.131	5832201.891	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-35	Low Density Artefact Distribution	279471.369	5832232.027	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-36	Low Density Artefact Distribution	279463.961	5832242.86	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-37	Low Density Artefact Distribution	279467.066	5832244.889	WWCHAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-38	Low Density Artefact Distribution	279467.189	5832244.537	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-39	Low Density Artefact Distribution	279463.94	5832246.326	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-40	Low Density Artefact Distribution	279487.325	5832251.063	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-41	Low Density Artefact Distribution	279438.356	5832286.714	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-42	Low Density Artefact Distribution	279441.558	5832294.356	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-43	Low Density Artefact Distribution	279409.15	5832297.759	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-44	Low Density Artefact Distribution	279409.3	5832298.374	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-45	Low Density Artefact Distribution	279405.076	5832302.409	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-46	Low Density Artefact Distribution	279405.425	5832302.371	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-47	Low Density Artefact Distribution	279410.568	5832316.701	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-48	Low Density Artefact Distribution	279412.018	5832339.159	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-49	Low Density Artefact Distribution	279410.371	5832339.447	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-50	Low Density Artefact Distribution	279406.611	5832341.059	WWCHAC	Y
7822-4725	Merrimu Reservoir LDAD 2	7822-4725-51	Low Density Artefact Distribution	279461.167	5832302.983	WWCHAC	Y
7822-4756	Sydenham Terminal Station LDAD	7822-4756-1	Low Density Artefact Distribution	301586.433	5827951.441	WWCHAC	Y
7822-4756	Sydenham Terminal Station LDAD	7822-4756-2	Low Density Artefact Distribution	301586.433	5827951.441	WWCHAC	Y
7822-4756	Sydenham Terminal Station LDAD	7822-4756-3	Low Density Artefact Distribution	301586.433	5827951.441	WWCHAC	Y
7822-4756	Sydenham Terminal Station LDAD	7822-4756-4	Low Density Artefact Distribution	301586.433	5827951.441	WWCHAC	Y
7822-4756	Sydenham Terminal Station LDAD	7822-4756-5	Low Density Artefact Distribution	301586.433	5827951.441	WWCHAC	Y
7822-4756	Sydenham Terminal Station LDAD	7822-4756-6	Low Density Artefact Distribution	301586.433	5827951.441	WWCHAC	Y
7822-4756	Sydenham Terminal Station LDAD	7822-4756-7	Low Density Artefact Distribution	301586.433	5827951.441	WWCHAC	Y
7822-4756	Sydenham Terminal Station LDAD	7822-4756-8	Low Density Artefact Distribution	301586.433	5827951.441	WWCHAC	Y
7822-4756	Sydenham Terminal Station LDAD	7822-4756-9	Low Density Artefact Distribution	301586.433	5827951.441	WWCHAC	Y
7822-4756	Sydenham Terminal Station LDAD	7822-4756-10	Low Density Artefact Distribution	301300.556	5827855.742	WWCHAC	Y
7822-4756	Sydenham Terminal Station LDAD	7822-4756-11	Low Density Artefact Distribution	301412.92	5827935.999	WWCHAC	Y
7822-4763	Arnolds Creek East Branch LDAD	7822-4763-1	Low Density Artefact Distribution	284258.271	5831557.472	WWCHAC	Y
7822-4763	Arnolds Creek East Branch LDAD	7822-4763-2	Low Density Artefact Distribution	284839.935	5831907.372	WWCHAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7822-4763	Arnolds Creek East Branch LDAD	7822-4763-3	Low Density Artefact Distribution	284830.457	5831905.529	WWCHAC	Y
7822-4763	Arnolds Creek East Branch LDAD	7822-4763-4	Low Density Artefact Distribution	284608.545	5831805.435	WWCHAC	Y
7822-4763	Arnolds Creek East Branch LDAD	7822-4763-5	Low Density Artefact Distribution	284724.795	5831809.094	WWCHAC	Y
7822-4763	Arnolds Creek East Branch LDAD	7822-4763-6	Low Density Artefact Distribution	284281.803	5831902.68	WWCHAC	Y
7822-4790	Harkness Road AS 1	7822-4790-1	Artefact Scatter	282569.697	5831271.513	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-1	Low Density Artefact Distribution	293553.299	5830504.26	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-2	Low Density Artefact Distribution	293519.738	5830508.04	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-3	Low Density Artefact Distribution	293453.36	5830514.145	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-4	Low Density Artefact Distribution	293447.459	5830514.695	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-5	Low Density Artefact Distribution	293442.575	5830514.244	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-6	Low Density Artefact Distribution	293436.47	5830515.145	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-7	Low Density Artefact Distribution	293434.092	5830516.135	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-8	Low Density Artefact Distribution	293356.117	5830525.432	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-9	Low Density Artefact Distribution	293322.637	5830548.488	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-10	Low Density Artefact Distribution	293295.516	5830556.325	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-11	Low Density Artefact Distribution	293260.865	5830588.235	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-12	Low Density Artefact Distribution	293263.163	5830624.245	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-13	Low Density Artefact Distribution	293267.459	5830544.197	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-14	Low Density Artefact Distribution	293253.361	5830551.078	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-15	Low Density Artefact Distribution	293253.262	5830551.987	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-16	Low Density Artefact Distribution	293245.788	5830551.249	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-17	Low Density Artefact Distribution	293250.864	5830557.557	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-18	Low Density Artefact Distribution	293209.139	5830555.308	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-19	Low Density Artefact Distribution	293206.375	5830559.255	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-20	Low Density Artefact Distribution	293173.376	5830562.21	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-21	Low Density Artefact Distribution	293151.809	5830564.315	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-22	Low Density Artefact Distribution	293138.264	5830569.411	WWCHAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7822-4795	Mt Kororoit LDAD	7822-4795-23	Low Density Artefact Distribution	293137.052	5830567.7	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-24	Low Density Artefact Distribution	293135.905	5830566.197	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-25	Low Density Artefact Distribution	293134.463	5830571.587	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-26	Low Density Artefact Distribution	293118.157	5830566.234	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-27	Low Density Artefact Distribution	293083.667	5830578.66	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-28	Low Density Artefact Distribution	293067.208	5830583.056	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-29	Low Density Artefact Distribution	293041.686	5830589.219	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-30	Low Density Artefact Distribution	293025.087	5830592.357	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-31	Low Density Artefact Distribution	292920.522	5830601.557	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-32	Low Density Artefact Distribution	292920.164	5830601.112	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-33	Low Density Artefact Distribution	292917.091	5830602.936	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-34	Low Density Artefact Distribution	292912.33	5830604.151	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-35	Low Density Artefact Distribution	292903.656	5830604.6	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-36	Low Density Artefact Distribution	292902.688	5830606.295	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-37	Low Density Artefact Distribution	294043.1	5830601.098	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-38	Low Density Artefact Distribution	293682.447	5830656.999	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-39	Low Density Artefact Distribution	293658.575	5830659.654	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-40	Low Density Artefact Distribution	293608.473	5830671.067	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-41	Low Density Artefact Distribution	293439.75	5830711.023	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-42	Low Density Artefact Distribution	293397.845	5830719.488	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-43	Low Density Artefact Distribution	293242.32	5830709.776	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-44	Low Density Artefact Distribution	293256.629	5830713.395	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-45	Low Density Artefact Distribution	293254.754	5830711.286	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-46	Low Density Artefact Distribution	293246.125	5830688.146	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-47	Low Density Artefact Distribution	293233.554	5830700.717	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-48	Low Density Artefact Distribution	293205.383	5830715.241	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-49	Low Density Artefact Distribution	293247.457	5830620.937	WWCHAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7822-4795	Mt Kororoit LDAD	7822-4795-50	Low Density Artefact Distribution	293231.824	5830647.934	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-51	Low Density Artefact Distribution	293200.564	5830684.796	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-52	Low Density Artefact Distribution	293187.13	5830688.485	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-53	Low Density Artefact Distribution	293182.802	5830705.109	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-54	Low Density Artefact Distribution	293180.383	5830715.784	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-55	Low Density Artefact Distribution	293181.589	5830716.144	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-56	Low Density Artefact Distribution	293200.742	5830717.702	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-57	Low Density Artefact Distribution	293189.394	5830744.485	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-58	Low Density Artefact Distribution	293195.361	5830750.369	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-59	Low Density Artefact Distribution	293052.086	5830720.836	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-60	Low Density Artefact Distribution	293030.65	5830739.111	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-61	Low Density Artefact Distribution	293021.256	5830595.601	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-62	Low Density Artefact Distribution	292984.997	5830583.647	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-63	Low Density Artefact Distribution	292902.536	5830622.291	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-64	Low Density Artefact Distribution	293091.709	5830626.584	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-65	Low Density Artefact Distribution	293102.024	5830666.204	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-66	Low Density Artefact Distribution	293073.962	5830626.122	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-67	Low Density Artefact Distribution	293282.108	5830537.601	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-68	Low Density Artefact Distribution	293152.339	5830553.925	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-69	Low Density Artefact Distribution	293052.05	5830568.914	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-70	Low Density Artefact Distribution	293050.849	5830561.419	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-71	Low Density Artefact Distribution	292952.103	5830572.136	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-72	Low Density Artefact Distribution	292946.606	5830568.25	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-73	Low Density Artefact Distribution	292952.494	5830569.752	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-74	Low Density Artefact Distribution	292920.969	5830571.377	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-75	Low Density Artefact Distribution	292897.986	5830572.235	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-76	Low Density Artefact Distribution	293270.01	5830542.189	WWCHAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7822-4795	Mt Kororoit LDAD	7822-4795-77	Low Density Artefact Distribution	293254.082	5830539.335	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-78	Low Density Artefact Distribution	293207.971	5830551.742	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-79	Low Density Artefact Distribution	293081.281	5830567.327	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-80	Low Density Artefact Distribution	292968.904	5830577.613	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-81	Low Density Artefact Distribution	293097.658	5830576.541	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-82	Low Density Artefact Distribution	294178.119	5830578.767	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-83	Low Density Artefact Distribution	294162.203	5830586.131	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-84	Low Density Artefact Distribution	292932.988	5830691.608	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-85	Low Density Artefact Distribution	292919.153	5830624.309	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-86	Low Density Artefact Distribution	292921.369	5830622.826	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-87	Low Density Artefact Distribution	292913.2	5830598.673	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-88	Low Density Artefact Distribution	292910.379	5830594.223	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-89	Low Density Artefact Distribution	294169.913	5830588.987	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-90	Low Density Artefact Distribution	293328.066	5830528.711	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-91	Low Density Artefact Distribution	293338.809	5830526.6	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-92	Low Density Artefact Distribution	293355.193	5830525.772	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-93	Low Density Artefact Distribution	293425.838	5830517.87	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-94	Low Density Artefact Distribution	293424.98	5830516.72	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-95	Low Density Artefact Distribution	293520.253	5830506.45	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-96	Low Density Artefact Distribution	293542.831	5830505.107	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-97	Low Density Artefact Distribution	293578.502	5830501.285	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-98	Low Density Artefact Distribution	293535.695	5830507.603	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-99	Low Density Artefact Distribution	293500.414	5830511.611	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-100	Low Density Artefact Distribution	293447.9	5830516.205	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-101	Low Density Artefact Distribution	293423.889	5830519.478	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-102	Low Density Artefact Distribution	293304.324	5830528.671	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-104	Low Density Artefact Distribution	293625.907	5830578.582	WWCHAC	Y

Aboriginal Place No.	Aboriginal Place Name	Component Number	Component Type	Easting	Northing	RAP Area	Recorded for WRL?
7822-4795	Mt Kororoit LDAD	7822-4795-105	Low Density Artefact Distribution	293704.385	5830613.931	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-106	Low Density Artefact Distribution	293719.09	5830686.39	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-107	Low Density Artefact Distribution	293714.774	5830670.939	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-108	Low Density Artefact Distribution	293423.864	5830710.602	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-109	Low Density Artefact Distribution	293251.455	5830746.063	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-110	Low Density Artefact Distribution	293251.455	5830746.063	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-111	Low Density Artefact Distribution	293223.079	5830716.213	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-112	Low Density Artefact Distribution	293293.971	5830520.358	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-113	Low Density Artefact Distribution	294021.946	5830593.091	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-114	Low Density Artefact Distribution	294040.578	5830593.886	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-115	Low Density Artefact Distribution	294048.671	5830589.834	WWCHAC	Y
7822-4795	Mt Kororoit LDAD	7822-4795-116	Low Density Artefact Distribution	294050.928	5830595.546	WWCHAC	Y
7822-4796	Kororoit Creek AS 1	7822-4796-1	Artefact Scatter	292863.872	5830757.974	WWCHAC	Y

Appendix D. Social Pinpoint Data

Values that are associated with Aboriginal Cultural Heritage marked Y, values that are not associated are marked N, and values that could potentially be associated marked P.

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Environmental features	Beautiful, unspoiled landscape looking west from Kingston. Huge, ugly power pylons would do great damage to the aesthetic values of this part of Victoria.	74065	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Mature tree with multiple hollows for nesting birds	74078	P	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Well-established native trees along creek line	74079	P	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Whole piece of land is under Vegetation Protection Overlay	74176	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Environmental features	Registered Land for Wildlife property.	74177	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Environmental features	Vegetation Protection Overlay Area	74181	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Environmental features	Significant breeding and feeding ground for local Ibis population	74188	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Dam and watercourse.	74246	N	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-
Environmental features	Shelduck habitat	74247	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Black swans nesting	74248	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Isolated Spur - Geological significance	74251	P	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Black Hill - highly visible extinct volcano seen from countless households and farms	74306	P	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Native flora and fauna, in particular, wedge tailed eagle population.	74367	N	-	-	-	Y	-	-		-	-	-	-		-	-	-	-	-	-
Environmental features	Watercourse, river	74377	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Watercourse, river	74378	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Watercourse, river	74379	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Environmental features	Watercourse, river	74380	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Watercourse, river	74381	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Watercourse, river	74382	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Environmental wetlands for bird life	74418	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Significant planting of manna gums being undertaken to regenerate land and further provide fauna habitat	74419	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74497	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74498	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74499	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74500	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74501	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74502	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74503	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74504	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74505	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74506	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74507	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74508	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74509	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74510	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Environmental features	40m trees creating an easement of at least 100m	74511	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74512	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74513	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	40m trees creating an easement of at least 100m	74514	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Koala's and wombats reside here. We regularly see their droppings and occasionally get the pleasure of seeing them for ourselves.	74541	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Environmental features	Wegde Tailed Eagles frequent our property Harriers have been resident for the last 3 years and have bred in our ponds Black Swans bred on our dam and raised 3 cignets Water Hens visit every year Numerous families of Rosellas, Black Cockatoos, Wrens visit every day	74636	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Wegde Tailed Eagles frequent our property Harriers have been resident for the last 3 years and have bred in our ponds Black Swans bred on our dam and raised 3 cignets Water Hens visit every year Numerous families of Rosellas, Black Cockatoos, Wrens visit every day	74637	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Natural spring fed dam is a haven for visiting water birds	74639	P	-	-	-	Y	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-
Environmental features	Echidna habitat	74746	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	This area provides stunning views of the Lerderderg mountains for hundreds of homes and walks that overlook this area. Transmission lines in this area will severally impact house prices for hundreds of people who purchased land and homes for no other reason other than the stunning views. Transmission lines here will destroy the serenity and in turn the community.	74784	N	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	Y	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Environmental features	Rowsley Fault - significant geological feature	74796	P	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Platypus habitat	74824	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Nesting site for swamp harriers	74825	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Swamp Harrier hunting / habitat	74935	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Little Eagle	74970	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Platypus, birds and other wildlife live along Birch Creek. It is essential habitat, especially for the at-risk platypus.	74995	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Birch Creek is an essential habitat for wildlife, especially Platypus and birds.	75010	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Birch's Creek is home to platypus.	75011	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Kangaroos sighted again this morning	75022	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Black wallabies sighted again	75023	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Black ducklings and parents waddling down the drive	75024	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Australian Shelducks	75025	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Family and friends enjoy walks to the lagoon, fishing and yabbying throughout the year. This has been a special tradition that goes back generations for families in the area especially mine, going back 5 generations.	75250	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	Y	Y
Environmental features	The Hepburn Lagoon is an amazing place to be surrounded by nature. Family and friends for generations have enjoyed time together at this lagoon.	75252	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	Y	Y
Environmental features	Koala's sited here	75279	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Wetlands - important to wildlife and agriculture	75330	N	Y	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-

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Environmental features	Wetlands - important to birdlife and agriculture	75331	N	Y	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Scrub Hill - one of the volcanic hills in this area	75332	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Black duck and 11 chicks walked passed my glass back door this morning under the verandah.	75345	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Mountain ducks flying past again today.	75346	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Black wallabies sighted again	75347	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Protected vegetation road side signs	75348	N	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Environmental features	Deep Creek Nature Reserve - home to endangered animals and native plants and a bio-diverse habitat.	75371	P	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Green Hill..another beautiful volcanic out crop.	75397	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Forest Hill..another beautiful volcanic outcrip	75399	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	It is wonderful to look out on the beautiful Kangaroo Hills everyday.. more special volcanic hills.	75400	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y
Environmental features	A place of spectacular beauty and relaxation for all the people who live in this area. The changing light of the skies on the water and the birdlife is inspiring.	75401	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y
Environmental features	Highly valued and appreciated Avenue of Honour...built to honour sacrifice and with a longterm vision....	75403	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Environmental features	The Lerderderg State Park is a beautiful nature spot that feels remote and wild even though it is very close and accessible to Melbourne. The amenity of the Lerderderg State Park will be destroyed by having 85m tall high voltage powerlines across this landscape.	75407	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y

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Environmental features	The higher ridges in the Lerderderg State Park are home to Wedge Tail Eagles and other birds of prey. These birds will be negatively affected by the HV powerline proposal.	75410	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	The Lerderderg State Park has many unusual and unique features. When I visit I feel immersed in nature with no man made structures. The natural values of the Lerderderg State Park will be destroyed by the proposal for HV powerlines.	75411	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y
Environmental features	GlenDonald Creek, nature corridor. Part of the upper reaches of the Loddon catchment	75429	P	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Echindna habitat along side of road	75431	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Running postman (Kennedia prostrata).	75432	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Mullock heap, used by Wedge tailed eagles as hunting ground, and surveillance roost.	75433	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Seasonal creek that runs at least 6 months of the year	75435	P	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-
Environmental features	Wedgetail eagle pairs regularly sighted	75441	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Important wildlife habitat, significant native vegetation, National trust significant tree	75468	P	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Environmental features	La Gerche Walking Track and historical forest. Important site for local people recreationally and environmentally.	75587	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	Y	Y	-	-	Y
Environmental features	Creswick REgional Park - bike trails, walking, bird watching, conservation area.	75592	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	-	-	-	Y
Environmental features	An area with diverse birdlife including Wedge Tail Eagles, Black Cockatoos, Ibis, many different parrots, Brown Falcon etc etc	75637	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Flora and fauna area including rare orchids.	75639	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Environmental features	Listening to the chorus of frogs again this evening	75660	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Environmental features	Enjoyed watching an eagle annoy the magpies this afternoon	75661	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	An unusual sounding bird on our walk this morning	75662	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Breeding area for native animals	75665	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Wild flowers including orchids, sundews, chocolate lilies, running postman. Kangaroo grass	75825	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	This is one of the most significant wildflower areas in the district and some features are significant nationally. It is frequented by Wedge - Tailed eagles and Black Cockatoos, sometimes in flocks of up to 300. This area is already damaged by pine tree plantations and their spread in local indigenous forests. Also I came here 25 years ago to find some peace and solitude in a bush area and I don't want it disturbed. My neighbour Max SCHULZ, who doesn't do internet much, also supports my comments.	75855	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	Y	-	-	Y
Environmental features	The area where I live is one of very high conservation value. The bush block on which I reside has never been subject to grazing or other practices which would degrade the native vegetation. Attached is an incomplete list of plants found along Barbys Rd. In addition, this land is home to many native animals and over 80 bird species have been recorded in the immediate vicinity.	75860	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-		
Environmental features	Almost invariably these sort of projects result in unnecessary destruction of bushland and wildlife habitat. Reducing biodiversity in a climate changed world makes no sense, economically or otherwise.	75861	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Environmental Reserve	75862	N	-	-	-	Y	-	-	-	-	-	-			-	Y	-	-	-	-
Environmental features	Native Orchids	75863	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Echidna and Kangaroos in area	75866	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Environmental features	Impact on flora and fauna	76003	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Rosella birds in abundance	76012	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	This is Hepburn Lagoon which is an important landmark within the area. It not only supplies critical water to produce fresh food but is also the home of native fish and wildlife. I am concerned that the overhead transmission lines will adversely affect this natural resource	76013	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	-	-	Y	-
Environmental features	Several pairs of wedge tail eagles	76029	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Eagles frequent area	76039	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Water catchment zone and seasonal creek I couldn't build a home near the waterway so no reason you should be able to build power lines.	76040	N	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y	
Environmental features	Frog habitat	76042	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Wedgetail Eagles frequent this area	76050	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Eagles are back. Landed in the paddock . So magnificent	76053	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Black Swans and 4 cignets sitting on the edge of the weir. They have grown so much	76056	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Family farm, water catchment area, wedged tail eagles flight path, high Bush fire zone	76060	N	Y	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-	-
Environmental features	Family farm, water catchment area, wedged tail eagles flight path, high Bush fire zone	76061	N	Y	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-	-
Environmental features	Family farm, water catchment area, wedged tail eagles flight path, high Bush fire zone	76062	N	Y	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-	-
Environmental features	Family farm, water catchment area, wedged tail eagles flight path, high Bush fire zone	76063	N	Y	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-	-

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Environmental features	Family farm, water catchment area, wedged tail eagles flight path, high Bush fire zone	76064	N	Y	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-	-
Environmental features	National Park	76068	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Wildlife conservation area (koala's)	76069	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Bush fire zone, water catchment area, wedged tail eagle flight zone	76070	N	-	-	-		-	Y	-	-	-	-	Y	-	-	-	-	-	Y	-
Environmental features	Flora and fauna conservation area	76072	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Native protected grasses, historical trees, close proximity to Werribee River and platypus habitats.	76082	P	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-	-	Y	-
Environmental features	sighted three wedgetail eagles flying overhead. Friday 16th Oct. too far up for photo from the ground	76087	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	crossing Wattle Flat Road at 8.00 pm , pair of echidna. I have a blurry photo taken through the car window lit by the car headlights and have uploaded to VBAGo	76088	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	crossing Wattle Flat Road at 8.00 pm , pair of echidna. I have a blurry photo taken through the car window lit by the car headlights and have uploaded to VBAGo	76089	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	swans breeding on the dam this spring	76090	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Owl in tree multiple occasions	76093	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Brisbane Ranges NP is known for its environmental significance for the diversity of native plant and animal species and is a major tourism asset for Moorabool Shire - the amenity and views seen in this area can not be adversely affected by having transmission towers located anywhere near the area. Residents who live in the Brisbane Ranges & Beremboke area do not want to see transmission towers in this area!	76094	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	Y	-	-	Y

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Environmental features	Brisbane Ranges NP is known for its environmental significance for the diversity of native plant and animal species and is a major tourism asset for Moorabool Shire - the amenity and views seen in this area can not be adversely affected by having transmission towers located anywhere near the area. Residents who live in the Brisbane Ranges & Beremboke area do not want to see transmission towers in this area!	76095	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	Y	-	-	Y
Environmental features	Brisbane Ranges NP is known for its environmental significance for the diversity of native plant and animal species and is a major tourism asset for Moorabool Shire - the amenity and views seen in this area can not be adversely affected by having transmission towers located anywhere near the area. Residents who live in the Brisbane Ranges & Beremboke area do not want to see transmission towers in this area!	76096	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	Y	-	-	Y
Environmental features	Remnant Allocasuarina littoralis and Banksia marginata. Striated Paardalote nesting burrows in bank of clay pit.	76099	N	-	-	-	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-	-
Environmental features	Remnant Eucalyptus rubida on roadside and in nearby paddocks. Older tress have hollows for nesting fauna.	76100	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Remnant Eucalyptus pauciflora	76101	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Excellent bird habitat along creek line. Historic water races.	76105	N	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-	-	Y	-
Environmental features	Remnant vegetation	76106	P	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	wedgetailed eagles	76107	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	“Drop a pin on the map to places that you know are unique, special or valued in your area” – My Home. It is not acceptable to have overhead high voltage power lines running through high fire risk areas. Health issues are also a worry. These power lines need to be underground.	76115	N	-	-	-	-	-	Y	-	-	Y	-	-	-	-	-	-	-	-	Y
Environmental features	aboriginal heritage	76129	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Environmental features	wildlife corridore	76130	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Very steep topography with poor soil and significant erosional tendencies. No vehicle access. Extreme northerly winds in summer.	76137	N	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	Y	-	-
Environmental features	Cultural Heritage overlay along Lerderderg River.	76138	Y	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Environmental features	Bushfire Management Overlay in this vicinity.	76139	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Black cockatoos migrate through the area frequently. While eagles, hawks and owls are often flying in the area.	76143	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	No vehicle access. Very steep topography with poor soil and significant erosional tendencies. Extreme and gusty northerly winds in summer. EES considerations.	76144	N	-	-	-		-	Y	Y	-	-	-	-	-	-	-	Y	Y	-	-
Environmental features	Koalas, Wallabies,Wedge Tail Eagles, Black Cockatoo, Magpies, Parrots and many other bird species inhabit this area	76150	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Significant and protected tree species. http://vhd.heritage.vic.gov.au/search/nattrust_result_detail/71848	76151	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Many eagles in area.	76196	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Black swan nesting area	76197	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Annual Brolga sightings	76199	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Annual Brolga sightings	76200	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Regular wedge tail eagle visits	76202	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Echidna sightings	76203	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Environmental features	Significant old growth habitat tree	76212	P	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Home, shedding, truck storage, gardens, drainage	76234	N	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-
Environmental features	Koala sightings	76277	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Resident echidna *Pinned at request of the owner	76278	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Environmental features	Significant vegetation and prolific bird life. Sightings include: Grey Fantail Rufous Whistler Jacky Winter Robin Scarlet Robin Grey Shrike Thrush Mistletoe bird Silver Eye Common Starling Australian Wood Duck Australian Shelduck Pacific Black Duck Hardhead Australian Grebe White faced heron Australian White Ibis White Faced Heron Superb Fairy Wren Yellow Hornbill Spotted Pardalote White Eared Honeyeater White Naped Honeyeater New Holland Honeyeater Noisy Miner Dusky Woodswallow White Browed Woodswallow Little Eagle Southern Boobook Yellow Tailed Cockatoo Galah Sulphur Crested Cockatoo Little Corella Crimson Rosella Laughing Kookaburra Sacred kingfisher	N	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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	Welcome swallow Little pied Cormorant Red browed Finch Magpie Lark Australian Magpie Forest Raven *Pinned at request of the owner																				
Environmental features	Dam with excellent frog habitat. *Pinned with permission of the owner	76281	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Kingfishers and other significant bird life	76282	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Active birds of prey *pinned with permission of the owner	76283	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Significant regenerated landscapes and native habitat	76284	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	High quality regenerated forest	76286	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Heavy populated Grey Kangaroo area right thru from north of this point sweeping under the Coimadai School thru to Coimadai Diggers Rest Road	76293	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Hight northerly winds funnel south along Gisborne Road plateau, power lines in this area would increase fire danger to immediate area and township of bacchus marsh. DELWP is continuing burning strategic fire breaks north of this area to prevent this catastrophe from happening. We dont want a repeat of Marysville! Placing power lines and towers in this area will increase the fire hazard significantly and putting 1000's of lives at risk.	76298	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	Y
Environmental features	High northerly winds funnel south along Gisborne Road plateau, power lines in this area would increase fire danger to immediate area and township of bacchus marsh. DELWP is continuing burning strategic fire breaks north of this area to prevent this catastrophe	76299	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	Y

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	from happening. We dont want a repeat of Marysville! Placing power lines and towers in this area will increase the fire hazard significantly and putting 1000's of lives at risk.																				
Environmental features	Hight northerly winds funnel south along Gisborne Road plateau, power lines in this area would increase fire danger to immediate area and township of bacchus marsh. DELWP is continuing burning strategic fire breaks north of this area to prevent this catastrophe from happening. We dont want a repeat of Marysville! Placing power lines and towers in this area will increase the fire hazard significantly and putting 1000's of lives at risk.	76300	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	Y
Environmental features	Hight northerly winds funnel south along Gisborne Road plateau, power lines in this area would increase fire danger to immediate area and township of bacchus marsh. DELWP is continuing burning strategic fire breaks north of this area to prevent this catastrophe from happening. We dont want a repeat of Marysville! Placing power lines and towers in this area will increase the fire hazard significantly and putting 1000's of lives at risk.	76301	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y
Environmental features	Hight northerly winds funnel south along Gisborne Road plateau, power lines in this area would increase fire danger to immediate area and township of bacchus marsh. DELWP is continuing burning strategic fire breaks north of this area to prevent this catastrophe from happening. We dont want a repeat of Marysville! Placing power lines and towers in this area will increase the fire hazard significantly and putting 1000's of lives at risk.	76302	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y
Environmental features	Hight northerly winds funnel south along Gisborne Road plateau, power lines in this area would increase fire danger to immediate area and township of bacchus marsh. DELWP is continuing burning strategic fire breaks north of this area to prevent this catastrophe from happening. We dont want a repeat of Marysville! Placing power lines and towers in this area will increase the fire hazard significantly and putting 1000's of lives at risk.	76303	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y

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Environmental features	Hight northerly winds funnel south along Gisborne Road plateau, power lines in this area would increase fire danger to immediate area and township of bacchus marsh. DELWP is continuing burning strategic fire breaks north of this area to prevent this catastrophe from happening. We dont want a repeat of Marysville! Placing power lines and towers in this area will increase the fire hazard significantly and putting 1000's of lives at risk.	76304	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	Y
Environmental features	Hight northerly winds funnel south along Gisborne Road plateau, power lines in this area would increase fire danger to immediate area and township of bacchus marsh. DELWP is continuing burning strategic fire breaks north of this area to prevent this catastrophe from happening. We dont want a repeat of Marysville! Placing power lines and towers in this area will increase the fire hazard significantly and putting 1000's of lives at risk.	76305	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	Y
Environmental features	Harriers are a constant on the farm. Like the ponds. Hopefully will next in there again this year. Magnificent birds.	76306	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Frogs are in full song today. Plenty of water this year	76308	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	End of Road. One way in and out of this area. Do not cross Swans Road with the high Voltage towers. They need to go elsewhere and not cross this Road as it would trap all the residents in the event of a tower collapse or bushfire.	76324	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	Y
Environmental features	End of Road. One way in and out of this area. Do not cross Swans Road with the high Voltage towers. They need to go elsewhere and not cross this Road as it would trap all the residents in the event of a tower collapse or bushfire.	76325	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	Y
Environmental features	Echidnas, see them everyday in the forest.	76372	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Echidnas, see them everyday in Wattle Flat.	76373	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Koala spotted in the Creswick Regional Park.	76374	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Environmental features	Birds of the Creswick Forest & Regional Park: Australian Wood Duck Pacific Black Duck Common Bronzewing Brush Bronzewing Tawny Frogmouth White-throated Needletail Little Pied Cormorant White-faced Heron Nankeen Night Heron Masked Lapwing Square-tailed Kite Brown Goshawk Collared Sparrowhawk Grey Goshawk Wedge-tailed Eagle Little Eagle Whistling Kite Yellow-tailed Black-Cockatoo Galah Long-billed Corella Sulphur-crested Cockatoo Musk Lorikeet Crimson Rosella Eastern Rosella Blue-winged Parrot Horsfield's Bronze-Cuckoo Shining Bronze-Cuckoo Pallid Cuckoo Fan-tailed Cuckoo Brush Cuckoo Powerful Owl Southern Boobook Laughing Kookaburra Sacred Kingfisher	76375	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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	White-throated Treecreeper Superb Fairy-wren White-browed Scrubwren Striated Thornbill Buff-rumped Thornbill Brown Thornbill Spotted Pardalote Striated Pardalote Eastern Spinebill Yellow-faced Honeyeater White-eared Honeyeater Red Wattlebird New Holland Honeyeater Brown-headed Honeyeater White-naped Honeyeater Spotted Quail-thrush Varied Sittella Black-faced Cuckoo-shrike White-winged Triller Crested Shrike-tit Golden Whistler Rufous Whistler Grey Shrike-thrush Olive-backed Oriole Dusky Woodswallow Grey Butcherbird Australian Magpie Pied Currawong Grey Currawong Rufous Fantail Grey Fantail Willie Wagtail Little Raven Satin Flycatcher Restless Flycatcher Magpie-lark																				

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	White-winged Chough Scarlet Robin Rose Robin Eastern Yellow Robin Silvereye Welcome Swallow Tree Martin Bassian Thrush Common Blackbird * Common Starling * Mistletoebird Red-browed Finch																				
Environmental features	At Pykes Creek there are lots of native animals that live in this area Wedged Tailed Eagles, Kangaroos, Wombats, Kolas Platypuses these power lines will effect their breeding	76380	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	This area has an established Native and organic vegetation with abundant happy wildlife including cattle that do not want power lines over their head. The wild life that regularly occupy this land are birds of prey including Wedge tail eagles, Kites and Falcons. It is a very beautiful environment that has had enormous dedication to organic regenerative farming encouraging native species. The greater environment has an enormous tourism present and future that encompasses natural wonders with the - 1/ Volcanic cones 2/ Historic mining sites. 3/ Beautiful Farming properties. 4/ Artists - Home to some of Australia's celebrated, internationally recognised artists and crafts people. 5/ Ballarat and region has now been granted UNESCO cultural protection for its folk artists- this Unsightly power line proposal will have a major impact on future tourism and arts businesses.	76386	N																		

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Environmental features	This area has an established Native and organic vegetation with abundant happy wildlife including cattle that do not want power lines over their head. The wild life that regularly occupy this land are birds of prey including Wedge tail eagles, Kites and Falcons. It is a very beautiful environment that has had enormous dedication to organic regenerative farming encouraging native species. The greater environment has an enormous tourism present and future that encompasses natural wonders with the - 1/ Volcanic cones 2/ Historic mining sites. 3/ Beautiful Farming properties. 4/ Artists - Home to some of Australia's celebrated, internationally recognised artists and crafts people. 5/ Ballarat and region has now been granted UNESCO cultural protection for its folk artists- this Unsightly power line proposal will have a major impact on future tourism and arts businesses.	76387	N	Y	-	-	Y	-	-	-	-	-	-	-	Y	-	Y	Y	-	-	Y
Environmental features	Grevillea steiglitziana Brisbane Range Grevillea and Pseudanthus orbicularis, Tangled Pseudanthus both Rare species in Australia and Victoria and are found in Werribee Gorge State Park.	76388	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	The orchestra of frogs were in harmony again last night.	76401	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	The roos were sunbaking enjoying the start of the warmer weather.	76402	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Whole area is home to Australias largest bird of prey, WEDGE TAILED EAGLE, Place High Voltage Power Lines UNDERGROUND	76426	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	We have lost parts of our roof due to the extreme winds in this area. Lots of wildlife would be impacted by these tower lines. This particular farmland is surrounded by residential properties, the potential fire hazard which worries all these residential properties will be increased with the towers and god knows what health issues may arise in people plus the fact that this beautiful vista will be ruined.	76448	N	Y	-	-	-	-	Y	-	-	Y	-	-	-	-	-	-	-	-	Y

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Environmental features	Leggless lizard habitat	76457	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	native grasses	76458	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	wedge tailed eagle nest	76460	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	wedge tailed eagle nests	76461	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	wedge tailed eagles nest	76462	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	trees planted for biolink & controlling landslides	76463	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	trees planted for biolink & controlling landslides	76464	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	trees planted for biolink & controlling landslides	76465	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	trees planted for biolink & controlling landslides	76466	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	trees planted for biolink & controlling landslides	76467	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	trees planted for biolink & controlling landslides	76468	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	trees planted for biolink & controlling landslides	76469	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	trees planted for biolink & controlling landslides	76470	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	trees planted for biolink & controlling landslides	76471	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	trees planted for biolink & controlling landslides	76472	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	trees planted for biolink & controlling landslides	76473	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	trees planted for biolink & controlling landslides	76474	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Trees once tagged as part of koala research study	76483	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Trees once tagged as part of koala research study	76484	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Environmental features	Yellow-tailed Black cockatoo nesting area and reside here.	76485	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Yellow-tailed Black cockatoo nesting area and reside here. Will add images soon.	76486	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Yellow-tailed Black cockatoo nesting area and reside here. Will add images soon.	76487	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Yellow-tailed Black Cockatoo nesting area and reside here. Will add images soon.	76488	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Yellow-tailed Black Cockatoo nesting area, they reside here in the Pine trees at the rear of the residential property. Will add images soon.	76489	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Tree of significance. Located on steep ridge.	76491	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Botanical Gardens	76498	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Un-interrupted views of surrounding areas and Greater Melbourne valley	76499	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Wedgetail Eagle Habitat	76511	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Wedgetail Eagle, Kangaroo, Koala habitat. Unobstructed views of Pykes Creek	76512	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	biolink	76513	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	biolink	76514	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Stony Hut Creek and surrounding bushland a habitat for wombats.	76526	N	-	-	-	Y	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-
Environmental features	Spring Feed Dams , tributaries to Barwon Water	76552	N	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-

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Environmental features	Arable farming land, with uninterrupted views of Mt Beckworth. With large dam for Arial fire access.	76584	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Arable farming land, with uninterrupted views of Mt Beckworth. With large dam for Arial fire access.	76585	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Known as Big Sky Country	76609	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Geomorphological significance	76615	P	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Geological and geomorphologically significance	76616	P	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Geological and geomorphological signifance	76617	P	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Seasonal wet land with birdlife	76626	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	Y	-
Environmental features	Unspoiled view of farmland in the great Volcanic Plains of Victoria. So important to Hepburn's renowned tourism amenity	76636	N	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	Y	-	-	-
Environmental features	Deep Lead Mining tourism area and important area of interest. This area is World Heritage nominated	76650	N	-	-	-	-	-	-	-	Y	-	-	-	Y	-	-	-	-	-	Y
Environmental features	Scenic and pristine Hepburn Lagoon lake with old volcanoes beyond. No place for powerlines in one of our favourite picnic spots.	76653	N	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	Y	-	Y	-
Environmental features	Little Eagle habitat	76671	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Little Eagle habitat	76672	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Little Eagle habitat	76676	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Little Eagle habitat	76678	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Little Eagle habitat	76680	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Little Eagle habitat	76681	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Growling Frog habitat	76683	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Environmental features	Growling Frog habitat	76685	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	biolink	76687	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	biolink flora and fauna	76688	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Biolink Flora and Fauna	76689	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	biolink	76691	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Biolink	76692	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Biolink in progress	76693	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Biolink	76696	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Nature corridor	76697	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Wedge Tail Eagle Habitat	76698	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Beautiful scenic views will be destroyed by these proposed towers, rendering the total area an eyesore for the hundreds of people who call this area their homes. Serenity for all will be destroyed.	76704	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y
Environmental features	The Creswick Creek is home to platypus and rakali in the Clunes area	76710	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Scenic recreational horse-riding route	76731	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y
Environmental features	Picturesque valley often photographed by tourists in the Pyrenees	76736	N	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	Y	-	-	-
Environmental features	Noted home and nesting / breeding area to approx 7 Wedge Tail Eagles	76740	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Known and witnessed Wombat and Endangered Wedge tail eagle breeding areas	76742	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Shelter belt planted by Local schools students for Landcare Biolink	76817	N	Y	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Environmental features	Platypus habitat Myrniong Creek	76818	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Shelter Belt Myrniong Landcare Biolink	76819	N	Y	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Shelter Belt Myrniong Biolink	76820	N	Y	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Feeding ground for Wedge tailed Eagle and Little eagle	76821	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Myrniong Biolink planted with landcare	76822	N	Y	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Platypus habitat, Little eagle and wedge Tailed eagle habitat and Falcons.	76824	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Shelter Belt and Little eagle feeding groud	76826	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	shelter Belt Little eagle and wedge tailed eagle feeding ground	76827	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	wedge tailed eagle nest active	76828	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	6 hectares of trees part of Landcare's Korkuperrimul Biolink	76831	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Environmental features	Hunting ground for hawks, harriers, crimson rosellas. Habitat of State listed threatened birds seen here: Australian masked owl, square tailed kite, egrets. Pine trees feeding ground for yellow tail black cockatoos.	76832	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	commuted to city 22 years to pay for this unique property for retirement now all dreams are destroyed, go underground or don't go at all	76849	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y
Environmental features	Glenlofty creek environmentally highly significant chain of ponds in Wimmera catchment.	76858	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Creek	76865	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	30 plus years to pay for this unique property all dreams are destroyed, go underground or don't go at all	76870	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Environmental features	variety of native wildflowers including orchids, groundcovers, grasses	76871	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	large, old trees, featuring nesting hollows used by a variety of birds and small mammals	76872	P	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Extinct volcano	76875	P	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Dry creek	76877	P	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-
Environmental features	Bio link plantings beside Dales Creek.	76880	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Native frogs	76883	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	native bushland. Recreational activities - bushwalking, mountain biking etc.	76892	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Environmental features	Werribee Gorge SP protects flora and Geology of State Significance. It is an important sanctuary and breeding area for Wedge-tailed Eagles and Peregrine Falcons.	76895	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Extinct volcano's lava rock	76897	P	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Steep slopes highly erodable	76901	N	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-
Environmental features	creek	76976	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Environmental features	Koala habitat, often sited	76978	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Echidnas often sited	76979	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Yellow-bellied Sheathtail bats, Saccolaimus flaviventris have been recorded in this area. This species is currently listed as FFG threatened. Studies undertaken in conjunction with the Moorabool Catchment Landcare Group and Federation University Australia.	76981	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Area of Environmental Significance	76984	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Environmental features	Important geological feature of glacial ice movement during the ice age.	76989	P	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Outcrop of granite boulder believed to be brought by glacial movement during the ice age.	76992	P	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Important conservation area, part of the Myrniong Biolink where many thousands of trees have been planted to stop soil erosion, add habitat and diversity for thousands of native animals and creatures, and give a green wildlife corridor between Lerderderg Gorge State Park and Werribee Gorge State Park. Site of the 1,000,000th tree planted for Grow West - a land restoration program for the upper Werribee River catchment.	76996	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Splendid views to the south and east. - the site for a farm homestead	77000	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Environmental features	Koala habitat - koalas move amongst the trees along Andrews Lane	77001	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Koala habitat in the neighbouring gum tree plantation.	77002	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental features	Splendid views to the Wombat forest in the north and north-east and eastwards to Greendale, Mt Blackwood and Korobeit - the site for a farm homestead.	77007	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y	-	-	-
Environmental features	Conservation trail planned along Djerriwwarh Creek alignment	77010	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	-	-	-	Y
Historical sites	Berry No. 1 Mine. Site of 1 of 2 Cornish Beam Pumps on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	73987	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Berry Consols No.2 Mine. Berry Consols Gold Mining Co. were the second largest gold producers on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	73988	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Berry Consols No.1 Mine. Berry Consols Gold Mining Co. were the second largest gold producers on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	73989	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-

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Historical sites	Site of Madame Berry No.1 Mine. The Worlds richest Deep Lead Alluvial Gold Mine. The Madame Berry GM Co. Mines were the largest gold producers on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	73990	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Madame Berry No.2 Mine. The Madame Berry GM Co. Mines were the largest gold producers on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	73991	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Madame Berry No.3 Mine. The Madame Berry GM Co. Mines were the largest gold producers on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	73992	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Madame Berry West Mine. Third largest gold producer on the Springhill / Berry Lead System - the worlds richest deep alluvial goldfield	73993	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Wheelers Bridge, 1898 - 1900. constructed by Monash and Anderson. This bridge is Victoria's oldest Monier Arch bridge	73996	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of West Berry Consols No.1 Mine. West Berry Consols Gold Mining Co. were the 11th largest gold producers on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	73997	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of West Berry Consols No.2 Mine. West Berry Consols Gold Mining Co. were the 11th largest gold producers on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	73998	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Loughlin No.2 Mine. on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	73999	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Loughlin No.1 Mine. on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	74000	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Ristori West Mine, the 14th largest gold producer on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	74001	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-

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Historical sites	Site of Lord Harry Mine on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	74002	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Lone Hand No.2 Mine. The Lone Hand GM Co. was the 4th largest gold producer on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	74003	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Lone Hand No.1 Mine. The Lone Hand GM Co. was the 4th largest gold producer on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	74004	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Former Township of Clemenston ~1890	74005	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Former township of Lawrence ~1890	74006	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Former township of Jerusalem ~1890	74007	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Former Township of Dibden Town ~1890	74008	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Site of Earl of Baconsfield Mine on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	74009	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Hepburn Estate No.1 Mine. Like the Berry No.1 mine, The Cornish Beam pump used in this mine was the largest in the southern hemisphere and unique to the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	74010	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Berry Consols Extended Mine. The Berry Consols Extended mine was the 5th largest gold producer on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	74011	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of The Spring Hill and Central Leads Mine. This mine was the 15th largest gold producer on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	74012	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Berry United Mine. The northern most mine on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	74013	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-

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Historical sites	Site of Ristori No.2 Mine. The two Ristori Freehold Mines were the 6th largest gold producers on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	74014	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Ristori No.1 Mine. The two Ristori Freehold Mines were the 6th largest gold producers on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	74015	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Dykes Freehold Mine. This mine was the 14th largest gold producer on the Springhill / Berry Leads - the worlds richest deep alluvial goldfield	74016	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Ryans Junction Mine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74017	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Camerons Freehold Mine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74018	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of De Murska Mine - the 18th richest goldmine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74019	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Kingston Park Mine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74020	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Bunyans Freehold Mine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74021	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Former township of Wallacetown	74022	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Site of Cunnings Freehold Mine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74023	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Baron Rothchild Mine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74024	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Hawkins Freehold Mine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74025	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-

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Historical sites	Site of Lewers Freehold Mine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74026	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Greys Freehold Mine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74027	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Richardsons Western Mine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74028	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Lewers Western Mine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74029	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Former township of Smokeytown	74030	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Site of Australasia No.2 Mine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74031	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of Australasia and Eaglehawk Mine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74032	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of South Berry Mine on the Springhill / Berry Leads system - the worlds richest deep alluvial goldfield	74033	N	-	-	-	-	-	-	Y	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Ancient Hydrothermal Lake	74053	P	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	-
Historical sites	There's a gravestone here, erected to the memory of a woman who was drowned nearby in the 1800s. It sits in the middle of a paddock under a tree.	74062	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Obelisk bearing the names of those who served and are remembered along the Avenue of Honour.	74063	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Kingston Avenue of Honour. One of the most intact and scenic groves of trees anywhere in Australia, looked after by a enthusiastic and committed group of Friends. To despoil the Avenue with huge, ugly power pylons would be vandalism.	74064	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y	-	-	Y

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Historical sites	Mining history - water race	74077	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Site of the former Wolfe's Hotel	74080	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Cypress tree makes the site of Tom Shuttleworth's hut.	74081	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Chinese garden site - Ah Chow	74083	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Area of Aboriginal Cultural Sensitivity - including surrounding private land.	74179	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Historic Farm House and shed , shed is particularly important, dating from very early settlement of the area.	74406	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	AAV registered scatter site	74792	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Diprotodon site - significant find	74793	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Mining works running along and then into Creswick State Forest	74927	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	The Avenue of Honour at Kingston is a beautiful monument honouring people of the former Creswick Shire who served in World War I. One of my relatives is represented in the Avenue.	74992	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	The Avenue of Honour at Kingston is a beautiful monument honouring people of the former Creswick Shire who served in World War I. One of my relatives is represented in the Avenue.	74993	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	The Avenue of Honour at Kingston is a beautiful monument honouring people of the former Creswick Shire who served in World War I. One of my relatives is represented in the Avenue.	74997	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	The Avenue of Honour at Kingston is a beautiful monument honouring people of the former Creswick Shire who served in World War I. One of my relatives is represented in the Avenue.	74998	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

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Historical sites	The Avenue of Honour at Kingston is a beautiful monument honouring people of the former Creswick Shire who served in World War I. One of my relatives is represented in the Avenue.	74999	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	The Avenue of Honour at Kingston is a beautiful monument honouring people of the former Creswick Shire who served in World War I. One of my relatives is represented in the Avenue.	75000	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	The Avenue of Honour at Kingston is a beautiful monument honouring people of the former Creswick Shire who served in World War I. One of my relatives is represented in the Avenue.	75001	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	The Avenue of Honour at Kingston is a beautiful monument honouring people of the former Creswick Shire who served in World War I. One of my relatives is represented in the Avenue.	75002	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	The Avenue of Honour at Kingston is a beautiful monument honouring people of the former Creswick Shire who served in World War I. One of my relatives is represented in the Avenue.	75003	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	The Avenue of Honour at Kingston is a beautiful monument honouring people of the former Creswick Shire who served in World War I. One of my relatives is represented in the Avenue.	75004	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	The Avenue of Honour at Kingston is a beautiful monument honouring people of the former Creswick Shire who served in World War I. One of my relatives is represented in the Avenue.	75005	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	The Avenue of Honour at Kingston is a beautiful monument honouring people of the former Creswick Shire who served in World War I. One of my relatives is represented in the Avenue.	75006	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	The Avenue of Honour at Kingston is a beautiful monument honouring people of the former Creswick Shire who served in World War I. One of my relatives is represented in the Avenue.	75007	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

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Historical sites	Avenue of Honour at Kingston. The 286 trees are listed on the National Trust of Australia (Victoria) Register of Significant Trees of Victoria. They remain very important to the descendants who live in the surrounding areas.	75008	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Historic Bluestone bridge	75009	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	The goldfields in the region led to a number of mining sites, which are under consideration for UNESCO World Heritage Listing.	75012	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Central Victorian Goldfields UNESCO World Heritage status bid - this area has been described as "the most extensive, coherent and best-surviving landscape anywhere, that illustrates the global gold rush phenomenon of the second half of the 19th century"	75013	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Historical Lava Flow	75135	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Historical Lava Flow	75136	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Historical Lava Flow	75137	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Historical Lava Flow	75138	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Historical Lava Flow	75140	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Historical Lava Flow	75141	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Historical Lava Flow	75142	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Historical Lava Flow	75143	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-
Historical sites	The Avenue of Honour represents men and women that have come before us fighting for their own freedom. It is a beautiful landmark that is seen and appreciated by many each and everyday.	75251	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y	-	-	-

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Historical sites	One of the most outstanding intact state heritage listed Avenue of Honour in Australia - 286 mature elma trees 120 years old over 6 klms with spectacular farmland views.	75280	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y	-	-	-
Historical sites	Scrub Hill - Historic Bluestone Church & Hymalayan Cedar Tree - both 151 years old. Pine & Elm forest and surrounded by rich farmland.	75327	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y	-	-	-
Historical sites	Original Dean Hotel (circa 1902)	75339	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Original Scrub Hill homestead.	75367	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Original Scrub Hill homestead.	75368	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Deep Springs Pump House - site of the original pumping station supplying mineral water to the region and Melbourne. Now heritage listed and located in the Deep Creek Nature Reserve (State Park)	75372	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	It always feels special to drive over this historic bluestone bridge.	75398	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Historically and culturally significant Avenue of Honor	75434	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Remnant gold races	75436	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Eatons Dam - A relic from the gold mining era, Eaton's Dam is an interesting example of early stone and earth construction techniques.	75596	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	Y	-
Historical sites	Koala Park - The Koala Park was established in 1941 and many koalas were housed here. Good walking track.	75597	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Historical sites	Kingston Avenue of Honour and historic tree lined township. 286 x 102 year old trees in the Avenue and other historic trees planted in Kingston Road and Church Parade.	75603	N	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Monument to acknowledge the discovery of the Spring Hill Leads. Front Inscription:	75822	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-

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	116 yards north 10 degrees east from here rich gold was discovered on 11th May, 1872, by Leonard R. Carter, Sarah Brawn, Edward Brawn & William Graham. This discovery led to the opening up of the Spring Hill leads, the richest deep alluvial goldfield in the world. Presented by J. A. Graham 1st April 1939																				
Historical sites	Former property and home site of the Brawn family who were involved in the discovery of deep alluvial gold which started Victoria's second gold rush in 1872. Remnant trees of their garden and drive way still exist.	75823	N	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Anderson Mill is a major historical site going back to the mid 1800's which attracts tourists and is also used by the local community for social and cultural events	76014	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Historic bluestone church and cemetery	76023	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Historic church and cemetery	76024	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Coimadai Avenue of a Honour - recognising Coimadai residents who fought in World War One.	76045	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Coimadai Avenue of Honour - Recognises solders from Coimadai who served in World War One. Goes down entire side of road.	76046	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Coimadai Memorial Park	76047	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Aboriginal heritage	76131	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Aboriginal Heritage	76132	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Ballan Cemetery	76154	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Wheeler's tramway, Mount Wilson, is a comparatively intact example of a log tramway formation, located in the Wombat Forest. It was constructed by James H Wheeler around 1878 to provide logs for his	76157	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-

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	sawmill nearby on the Lerderderg River. The formation, which extends about 800 metres along the western bank of Tram Creek, is substantially intact. It features well preserved impressions of foundation timbers, a short siding and a rock-cut ledge to accommodate the log line. The tramway was abandoned when the mill closed in 1898. https://vhd.heritagecouncil.vic.gov.au/places/12630																				
Historical sites	Former English Scottish & Australian Bank. Noted in Council Heritage study	76158	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Gordon Post Office. Noted in Council heritage study	76159	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Former Store & Mt Egerton Police Quarters. Noted in Council Heritage study	76160	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Gordon Pioneer Cemetery	76161	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Historic homestead	76198	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Slate outcrop	76230	N	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Locally significant 150 year old exotic pine and site of historic residence. *Pinned with permission from the owner	76280	N	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Historic Dam and water races	76285	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	Y	-
Historical sites	Land has a heritage overlay for aboriginal historical significance.	76310	Y	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Historical mining site	76385	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	historical gravesites of pioneers	76475	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-

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Historical sites	Avenue of Honour	76496	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Avenue of Honour	76497	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	The start of the heritage listed Kingston Avenue of Honour. An iconic Avenue of Honour with just under 300 significant elm trees extending for around 3km set in picturesque farm land that continues down to the township of Kingston.	76568	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Hand made well	76589	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	Y	-
Historical sites	The Avenue of Honour at Kingston is approx 2.9kms in length, and the 286 trees were planted in 1918 & 1919, as a sign of remembrance & respect to those that served in World War 1. This site holds great significance to the local community & to the descendants of those commemorated by this Avenue of Honour.	76637	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Kingston historical Avenue of Honour looking across the open farmland on the scenic drive to Kingston	76640	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	The historic deep lead mining is below the whole area of these volcanic plains with volcano hills and prime agricultural land all around.	76656	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Historical pioneer settlement ruins	76684	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Historical boundary water catchment stone fence	76686	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Historical pioneers homestead and dairy ruins	76690	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	There are several sites of the Clunes gold mine dating back to the 1860's in this area	76712	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	bridge	76794	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Old Myrniong mill Ruins	76815	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-

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Historical sites	dam wall	76889	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Historical sites	schools buildings	76890	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Historical sites	Hotel	76891	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Historical sites	feed pad	76908	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Historical sites	cropping site	76973	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Historical sites	Little Corbett's Mine. https://trove.nla.gov.au/newspaper/article/10980975	76982	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Hopetoun cemetery dates back to the mid 1800's and is believed to be about 3 times greater than its current outline in unmarked graves.	76987	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Leahy's cottage dates back to the 1840's and is an extensive historical site	76988	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	Cultural heritage protection along creek	77011	Y	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Historical sites	House, 395 Lesters Rd, Ascot - 'Lambleys Nursery' c.1860s. cyprus, various pinus spp, redwood, elms etc. Complex includes basalt residence with red brick quoins, as well as numerous outbuildings, sheds and works. Original owners the Coghills after whom Coghills Creek was named. In c.1866 the property passed on to the Lester family. Now Lambley's nursery. From: A.Ward 1998 Ballarat Heritage Review Lesters built c 1860 brick - weatherboard. Was originally Coghills preemptive right. Now owned by David Glenn - 'Nursery'. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77354	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

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Historical sites	'Bradworthy' 917 Addington Rd Ascot early 20th century (1920s) Arts and Crafts rendered brick residence. Original land owner - Clarke. The Grills family were the original tenant farmers. Built by N.Grills. From A.Ward 1998 Ballarat Heritage Review and Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77382	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Ascot M.I.A Hall, 47A Ascot Hall Road, Ascot Built 1900, weatherboard. Supper room replaced 1955. Hall later clad with colorbond. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77383	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Former Ascot State School 2507, 64 Ascot Hall Road, Ascot 1883 - 1975, brick, residence attached, now private home Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review Also: https://www.realestate.com.au/property/64-ascot-hall-rd-ascot-vic-3364	77384	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Former Ascot State School 2507, 64 Ascot Hall Road, Ascot 1883 - 1975, brick, residence attached, now private home Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review Also:	77385	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
	https://www.realestate.com.au/property/64-ascot-hall-rd-ascot-vic-3364																				
Historical sites	Former Ascot State School 2507, 64 Ascot Hall Road, Ascot 1883 - 1975, brick, residence attached, now private home From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review Also: https://www.realestate.com.au/property/64-ascot-hall-rd-ascot-vic-3364	77386	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	64 Ascot Hall Road, Ascot Former Ascot State School No.2507, 1883 - 1975, brick, residence attached. Now private home. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review Also: https://www.realestate.com.au/property/64-ascot-hall-rd-ascot-vic-3364	77387	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House, 2172 Ballarat Maryborough Road, Ascot Built by Patrick McGrath, Blacksmith c.1900. Weatherboard, good order. Now owned by grandson Frank McGrath. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77388	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Ascot Blacksmith Shop, 2172 Ballarat-Maryborough Road, Ascot Built by Patrick McGrath, Blacksmith, wheelwright. Made wagons & farm machinery 1890 - 1998 From: Hanson Partnership and others 2003 Ballarat Heritage Study	77389	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

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	Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review																				
Historical sites	Stables of former Ascot Hotel, cnr Ballarat-Maryborough Road and Ascot Hall Road. Brick, double gable former stables, now derelict, part of the now demolished Ascot Hotel. Built by John & Thomas Ogilvy 1854-1940. Hotel, store, post office. Also owned and leased a lot of land. From A.Ward 1998 Ballarat Heritage Review and Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review Also p.46 - Glimpses of Past Era, Learmonth and District Historical Society	77390	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House - 'Allowah', 2191 Ballarat-Maryborough Road, Ascot. Farmhouse, garden and trees. Cupressus macrocarpa, Pinus radiata etc Built by Thomas Keay c1900, weatherboard. Owners Keay - McIvor - Sobey From A.Ward 1998 Ballarat Heritage Review and and Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77391	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House, 'Pendennis', 2239 Ballarat-Maryborough Road, Ascot c 1900. Land originally Andrew Munro's. Sold to Thomas - Solomano - Sobey. Now owned by John Sobey. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation	77392	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
	No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review																				
Historical sites	Mt Blowhard Primary School No.2037, 527 Millers Road, Blowhard Brick and weatherboard buildings with corrugated galvanised iron roofs. A presbyterian school opened on the site in 1858 in a weatherboard building. Current brick structure dates from 1878. Residence attached. From A.Ward 1998 Ballarat Heritage Review and Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77393	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Blowhard Bridge, Coghills Creek Road Stone bridge. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77394	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Addington Avenue, Edmonson Road Elm trees planted in 1917 for those who enlisted from the Addington district From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77395	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House - Former Addington School House, 96 Edmonston Road, Addington 2 storey house restored. Kit home from Switzerland. Of 18 imported only 3 left in Victoria From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation Also p.73 - Glimpses of a Past Era, Learmonth and District Historical	77396	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
	Society Inc. No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review																				
Historical sites	Former Addington School No. 226, 96 Edmonston Road Weatherboard school. Was Ercildoune 1863-1912 changed to Addington 1912 - 1970s. School now closed. Restored. Owned by K Hammond From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77397	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Addington Avenue, Edmonson Road Elm trees planted in 1917 for those who enlisted from the Addington district From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77398	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Addington Pioneer Memorial Sandstone monument erected 1934 at same time as an elm tree avenue was planted Features various plaques such as boomerang shaped 'In Memory of the Blacks' -moved to this site by Learmonth Historical Society in 1990 From A.Ward 1998 Ballarat Heritage Review and Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review Also see: https://monumentaustralia.org.au/themes/landscape/settlement/display/30001-pioneers-memorial	77399	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
	Also p.40 Glimpses of Past Era, Learmonth and District Historical Society																				
Historical sites	Joel Joel War Memorial, cnr Landsborough Road and Joel Joel Road, Joel Joel. Unveiled 1922. WWII inscription added c.1945-46 Of recommended Local Significance From: Wendy Jacobs and others 2004 Northern Grampians Shire Heritage Study Stage 2 and https://vhd.heritagecouncil.vic.gov.au/places/105130 and Vic. War Heritage Inventory	77414	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Joel Joel Public Hall, 214 Joel Joel Road, Joel Joel Early 20th century Recommended of Local Significance From: Wendy Jacobs and others 2004 Northern Grampians Shire Heritage Study Stage 2 and https://vhd.heritagecouncil.vic.gov.au/places/105131	77415	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Woodlands, 233 Woodlands Road, Crowlands 1860s homestead of recommended State Significance From: Wendy Jacobs and others 2004 Northern Grampians Shire Heritage Study Stage 2	77416	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Ampitheatre Diggings Victorian Heritage Inventory H7523-0061 https://vhd.heritagecouncil.vic.gov.au/places/12336	77418	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Mount Mitchell - house and stables, 3056 Sunraysia Highway, Lexton 1860s - of State Significance https://vhd.heritagecouncil.vic.gov.au/places/652 https://www.mountmitchell.com.au/	77419	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House - 'Ivy Rock, 237 Edmonston Road, Addington Early pioneer house built by Beseler Family. Restored. Now owned by Bunning From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation	77420	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
	No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review																				
Historical sites	Excellent example of dry stone walling for full frontage of 148 Edminston Road Said to date to 1860s From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77423	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House - 'Lintel Grange', 127 Edmonston Road, Addington Single storied stone house with verandah, stone/brick/corrugated iron outbuildings - old Edmanson [sic] farm complex Built by Charles Edmonston c1860, brick & sandstone. Restored. Now owned by D. Edmonston From: A.Ward 1998 Ballarat Heritage Review and Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77424	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House, 205 Lesters Road, Ascot Built c 1860. Restored, living area added. Now owned by Craig Grills (2003) From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77429	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House, 'Sweet Bank', 305 Lesters Road, Ascot 1920s. Geo Grills. Farm building older. Now owned by Edgar Grills (2003) From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation	77430	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
	No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review																				
Historical sites	'Sauchieburn', 372 Lesters Road, Ascot Chibnall's farm, formerly Holmes, Farm complex includes brick/slate residence and basalt barn constructed with stone which came from Fry's 1856 flour mill at Ascot. Early petrol bowser. Early Farm complex. Brick house built 1900 by Holmes family. Bluestone woolshed. Now owned by Lee & Heather Chibnall (2003). From: A.Ward 1998 Ballarat Heritage Review and Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review https://victoriancollections.net.au/items/5b7e125821ea7016bc28fc4c. https://victoriancollections.net.au/items/5b0e196821ea69108c477463	77431	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Woolshed - Built 1900 [?] as wool shed. 2 storey. Bluestone carted from Frys Ascot Flour Mill as was the Coghills Creek Catholic Church. Stones and roofing numbered, carted, rebuilt. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review p.25 - Glimpses of Past Era, Learmonth and District Historical Society https://victoriancollections.net.au/items/5b0e196821ea69108c477463	77432	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Coghill Monument - Stone Memorial Cairn. Erected by Holmes Family 1890. Built of stone collected off property. Built in front of location of original Coghill Homestead. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation	77433	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
	No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review																				
Historical sites	203 Schwartz Road, Bald Hills - Former Bald Hills State School 1878 - 1994. Brick building. Now privately owned From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review Also p. 77 - Glimpses of Past Era, Learmonth and District Historical Society	77434	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	'The Mains', house and outbuildings, 581 Learmonth Sulky Road, Blowhard Weatherboard house, brick kitchen and basalt and timber outbuildings ... outbuildings contain early equipment, fittings and fixtures. Original owner - Whatley, current owner - Ford - descendant of the original owner. The property has been in the one family since being taken up. From: A.Ward 1998 Ballarat Heritage Review 1856 brick home original. Has been in family since 1856. Bluestone stable, barn etc. A 'Museum'. First owner - Whately, now J.Ford From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review Also p.10 -11 in Glimpses of Past Era, Learmonth and District Historical Society	77435	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Midas Railway Siding site - 1888 Midas railway siding named after Midas Mines. Now owned by W.Cluff (2003) From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77436	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Historical sites	Blowhard Railways Station site, off Millers Road - Only bank of siding remains. Original station house privately owned by Griffin (2003) From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77437	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Monument - south-east cnr Coghills Creek Road and Millers Road, Blowhard Built 1988 as bicentennial project, stone from district buildings: Flour Mill, Railway Station, Hotel etc From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77438	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	'Hedge, north side Mt Pisgah Road, Blowhard Extensive hawthorn hedge north side of unsealed road - some sections of remnant post and fence underneath. Associated with Sparrow Hawk Rise farm? From: A.Ward 1998 Ballarat Heritage Review No Heritage or other Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77439	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Former St David's Uniting Church, 813 Addington Creswick Road, Coghills Creek, now private residence Red brick church with rendered dressings, galvanised sheet iron covered spire. From: A.Ward 1998 Ballarat Heritage Review Built in 1910. Brick. Replaced wooden church-school. Still being used. Former Presbyterian Church. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation	77440	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
	No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review p.32 -33 in Glimpses of Past Era, Learmonth and District Historical Society																				
Historical sites	Coghills Creek Cemetery, Rose Lane local cemetery located adjacent to St David's Uniting Church, includes early gravestones and enclosures. C.1860s. Mature golden cupressus macrocarpa, Bunya, redwood, Spanish fir (Abies pinsapo) old timber buildings/sexton's house? From: A.Ward 1998 Ballarat Heritage Review Cemetery 1859. Still used. Historic tree seeds from tree planted in Ballarat Botanic Gardens From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77441	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Former Coghills Creek Methodist Church, 801 Coghills Creek Road, Coghills Creek well detailed rendered masonry church From: A.Ward 1988 Ballarat Heritage Review Built in 1860. Used by Methodists of Coghills Creek. At present for sale [2001]. Brick. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review p.34 in Glimpses of Past Era, Learmonth and District Historical Society National Trust - https://vhd.heritagecouncil.vic.gov.au/places/67310 Also: https://www.realestateview.com.au/real-estate/lot-3-coghills-creek-road-coghills-creek-vic/property-details-sold-residential-659359/	77442	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Historical sites	Coghills Creek Community Hall, Coghills Creek Weatherboard Sunday School adjacent to former Methodist Church. Built 1890s used by locals as hall. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77443	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Former Coghills Creek Primary School, 1875	77444	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House, 921 Coghills Creek Road, Coghills Creek Dichromatic brick house with decorative gable barges and cast iron lace verandah From: A.Ward 1998 Ballarat Heritage Review c1890 Built by Patrick Sheehan owner of the 'Victoria Hotel', Coghill's Creek. Built of brick From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77445	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Bluestone outbuilding, Coghills Creek Road, Coghills Creek constructed using stone from Fry's Ascot flour mill From: A.Ward 1998 Ballarat Heritage Review Bluestone stables built c1900. Stone part of Fry's Ascot Flour Mill originally built in 1856. When closed the stone was carted to Coghills Creek. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review Also p.25 - Glimpses of Past Era, Learmonth and District Historical Society	77446	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Historical sites	House and outbuildings, Coghills Creek Road c.1860s to 1880s. Bunya trees, pinus radiata, hedge. House and collection of old farm buildings. From: A.Ward 1998 Ballarat Heritage Review No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77447	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House - 'Pine Grove', 2 Troups Road, Coghills Creek c.1870s. Trees include pines, conifers, redwood, Cedrus atlantica, f.glauca etc From: A.Ward 1998 Ballarat Heritage Review Built by James Troup c 1890. Fully restored 1980. Brick, slate roof. Now owned by Thompson (2001) From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77450	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Bluestone bridge - demolished? Well detailed basalt road bridge over creek From: A.Ward 1998 Ballarat Heritage Review No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review National Trust - https://vhd.heritagecouncil.vic.gov.au/places/67557	77451	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House - 'The Rose', 807 Coghills Creek Road, Coghills Creek 1860 weatherboard. Albert Frank Residence. Albert was Blacksmith & Machinery agent. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77452	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Former Coghills Creek Catholic Church, 980 Coghills Creek Road, Coghills Creek Red brick church with applied timber decoration in gable	77453	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
	From: A.Ward 1998 Ballarat Heritage Review 1890 weatherboard, brick clad. Now private owner. Closed 1980s. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review p.69 in Glimpses of Past Era, Learmonth and District Historical Society																				
Historical sites	Bluestone Bridge, Coghills Creek Road, Glendaruel over Beckworth Creek Basalt bridge over Beckworth (?) Creek with recent concrete repair works. From: A.Ward 1998 Ballarat Heritage Review 1855 Built of bluestone on the original Ballarat - Amherst Road. Gold transported by coach along road. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review Also p.91 Glimpses of Past Era, Learmonth and District Historical Society	77454	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Former Glendaruel State School No.281. 1337 Coghilss Creek Road, Glendaruel School and residence constructed in 1880. Contractors were Morris and Begg, contract price £620. From: A.Ward 1998 Ballarat Heritage Review Erected in 1878. Closed 1956. Made of brick with residence attached. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review https://www.realestate.com.au/sold/property-house-vic-glendaruel-126554594	77457	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Historical sites	small avenue planting of cypress trees	77458	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House and outbuildings - 'Snizort', 888 Clunes Creswick Road, Glendonald Early farm complex including basalt and brick outbuildings and a 1905 brick, stucco and terracotta house (check if earlier house within structure) Original owner Andrew Munro. Current owner (1997) Hamilton From: A.Ward 1998 Ballarat Heritage Review Built by Andrew Munro c1900. 2 storey brick homestead. Bluestone Stable Machinery Shed. Munro was first land purchaser at Ascot 1856. Sold and bought at Glendonald [sic]. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review Also p.64 - Glimpses of Past Era, Learmonth and District Historical Society	77460	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House and outbuildings - 'Leneghans', 352 Trewins Road, Tourello Extensive farm complex includes basalt, sandstone and brick house (slate roof) and numerous masonry and timber outbuildings some in a state of partial collapse but very important to the understanding of the past farm activities. The descendants of the original Irish settlers, the Leneghens [sic] still own the property. The family holds many historical records, objects and photographs which document the development of the farm. From: A.Ward 1998 Ballarat Heritage Review Two storey bluestone residence built 1856 for Leneghans. Still in Leneghans name From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review also p.69 Glimpses of Past Era, Learmonth and District Historical	77461	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
	Society National Trust - https://vhd.heritagecouncil.vic.gov.au/places/67677																				
Historical sites	Tourello Avenue of Honour, Tourello Road, Tourello c.1918. Avenue of walnut trees at site of former Sheep Wash/Tourello School no.740 and parish hall. 1864-1993 From: A.Ward 1998 Ballarat Heritage Review Avenue planted for all who enlisted from Ballarat and district. Unusual Avenue of Walnut Trees, believed to be the only avenue of nut trees in Australia. Monument erected at end of avenue From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review https://www.monumentaustralia.org.au/themes/culture/display/97600-tourello-avenue-of-honour	77462	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	School Site, Tourello Road, Tourello Sheepwash School No.740 1864 - 1877. Name changed to Tourello No. 740 in 1877. Closed. Unusual octagonal shelter shed in good order. School now park. Historic trees. From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review Also p.82 Glimpses of Past Era, Learmonth and District Historical Society	77463	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Where W Coghill washed his sheep prior to shearing 1838 - 1855 on Coghills Creek From: Hanson Partnership and others 2003 Ballarat Heritage Study Stage 2 - Community consultation No Heritage Overlay protection - within recommended former Shire of Ballarat Study Area - Vicki Johnson 2010 Heritage Gaps Review	77464	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Historical sites	House, 406 Ballan Daylesford Road, Bunding Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as BUN03 - Significance Type - Individual	77476	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Ballan Water Channel Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as BUN07 - Significance Type - Individual	77477	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Bolwarrah Weir (Hunt's Dam) Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as BUN06 - Significance Type - Individual	77478	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Railway Weir Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as BUN08 - Significance Type - Individual	77479	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Moorabool Lodge and outbuildings, 570 Spargo Creek Road, Bolwarrah Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as BWH02 - Significance Type - Individual	77480	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Moorabool Reservoir (inc. Lodge & Gardens), Spargo Creek Road, Bolwarrah Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as BWH01	77481	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Former School Dwelling for Bullarook Primary School 284 Springbank Road, Bullarook Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as BU06 - Significance Type - Individual	77482	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House, 52 Springbank Road, Bullarook Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as BU07 - Significance Type - Individual	77483	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Historical sites	House, 52 Springbank Road, Bullarook Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as BU08 - Significance Type - Individual	77484	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Wilson's Reservoir (including surrounds and buildings) Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as BU09 - Significance Type - Individual	77485	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Beales Reservoir and Channel, Bungaree-Barkstead Road, Claretown Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as CT02 - Significance Type - Individual	77486	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Former Inn/Hotel, 512 Springbank Road, Claretown Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as CT06 - Significance Type - Individual	77487	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	St Peter's Catholic Church, 1120 Ballarat-Daylesford Road, Clarkes HIll Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as CH01 - Significance Type - Individual	77488	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House, 996 Ballarat Daylesford Road, Clarkes Hill Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as CH03 - Significance Type - Individual	77489	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House, 362 Boundary Church Road, Clarkes Hill Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as CH05 - Significance Type - Individual	77490	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House - 'Roisheen', 241 Clarkes Hill Road, Clarkes Hill Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as CH09 - Significance Type - Individual	77491	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House, 183 Clarkes Hill Road, Clarkes Hill Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as CH08 - Significance Type - Individual	77492	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Historical sites	House, 164 Clarkes HIll Road, Clarkes Hill Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as CH07 - Significance Type - Individual	77493	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	St Mary's Catholic Primary School, 131 Powells Road, Clarke Hill Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as CH11 - Significance Type - Individual	77494	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Clark Saw Mill, off Powells Road, Clarkes Hill Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as CH12 - Significance Type - Archaeological Inventory	77495	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House, 350 Greendale Myrniong Road, Greendale Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as GRE02 - Significance Type - Individual	77497	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Our Lady Help of Christians Catholic Church, 309 Myrniong-Korobeit Rd, Korobeit Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as KBT01 - Significance Type - Individual	77499	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House, 40 Lewis Lane, Pootilla c.early 20th century Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as PO001 - Significance Type - Individual (incorrectly addressed as 256 Ballarat Daylesford Road)	77500	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Bungaree Cemetery, Lewis Lane, Pootilla Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as PO002 - Significance Type - Individual	77501	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Pincottt Reservoir, Frawleys Road, Pootilla Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as PO04 - Significance Type - Individual	77502	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Historical sites	House, 111 Kanes Lane, Springbank Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as SPR01 - Significance Type - Individual	77503	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	St Michaels Catholic Church, 738 Springbank Road, Springbank Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as SPR09 - Significance Type - Individual	77504	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	St Michael's Convent, 738 Springbank Road, Springbank Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as SPR09 - Significance Type - Individual	77505	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	St Michael's Catholic Primary School, 738 Springbank Road, Springbank Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as SPR10 - Significance Type - Individual	77507	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House, 1065 Springbank Road, Springbank Identified in David Rowe and others 2010 Moorabool Shire Heritage Study Stage 1 as SPR13 - Significance Type - Individual	77508	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	76 Dean-Mollongghip Road, Dean Identified as 'an important element in the heritage of Creswick' in Lester Tropman and Associates 1991 Heritage Study - Shire of Creswick, File No.337	77510	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	99 Dean-Mollonghhip Road, Dean Identified as 'an important element in the heritage of Creswick' in Lester Tropman and Associates 1991 Heritage Study - Shire of Creswick, File No.338	77511	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	Bluestone House and outbuildings, 234 Dean Newlyn Road, Dean Identified as 'an important element in the heritage of Creswick' in Lester Tropman and Associates 1991 Heritage Study - Shire of Creswick, File No.339	77512	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Historical sites	House, 99 Dean Reservoir Road, Dean c.1915 weatherboard farmhouse Identified as 'an important element in the heritage of Creswick' in Lester Tropman and Associates 1991 Heritage Study - Shire of Creswick, File No.341	77513	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Historical sites	House, 45 Morrisons Road, Dean c.1915, weaherboard farmhouse Identified as 'an important element in the heritage of Creswick' in Lester Tropman and Associates 1991 Heritage Study - Shire of Creswick, File No.346	77514	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Land and economic uses	Prime agricultural land, being highly fertile soil for various farming commodities including potato and cereal cropping, cattle and sheep farming. Proven sustainable horticultural and agricultural properties being the food bowl of Australia. Aerial spraying, high pressure irrigation which is essential to assist crop yields.	74171	N	Y	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-	-	-	Y
Land and economic uses	Prime agricultural land used for cropping and cattle production. Aerial spraying and high pressure irrigation. Power-lines would impinge on carrying out everyday farming practices.	74172	N	Y	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-	-	-	Y
Land and economic uses	Prime agricultural land used for cropping and cattle production. Aerial spraying and high pressure irrigation. Power-lines would impinge on carrying out everyday farming practices.	74173	N	Y	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-	-	-	Y
Land and economic uses	Woodlot used for heating	74175	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Land and economic uses	Highly productive agricultural land used for grazing and horticultural purposes	74189	N	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Wedgetail Dairy. Proposed powerlines will affect our land use. 35,000sqm of easement will be uncroppable land that would otherwise provide browsing feed for the herd. That's about a third of	74249	N	Y	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
	our farm and half of our productive land. Tree removal means loss of shade and protective vegetation. The steep slopes will be at risk of erosion without the trees to hold them together. Ugly and noisy powerlines will have a significantly negative impact on the potential tourism that the farm will attract.																				
Land and economic uses	This is where we live, and work from home	74273	N	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-	-	-	Y
Land and economic uses	Clean air Beautiful views Perfect Growing chemical free garlic and vegetables The best life Even the swans think so	74641	N	Y	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-	-	-	Y
Land and economic uses	Clean air Beautiful views Perfect Growing chemical free garlic and vegetables The best life	74642	N	Y	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-	-	-	Y
Land and economic uses	Clean air Beautiful views Perfect Growing chemical free garlic and vegetables The best life	74643	N	Y	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-	-	-	Y
Land and economic uses	Clean air Beautiful views Perfect Growing chemical free garlic and vegetables The best life	74644	N	Y	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-	-	-	Y
Land and economic uses	Clean air Beautiful views Perfect Growing chemical free garlic and vegetables The best life	74646	N	Y	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-	-	-	Y
Land and economic uses	Sand and clay quarrying	74794	N	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farm grazing	74795	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Second spring and soak	74928	N	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-
Land and economic uses	Beehives (Bee behaviour is known to be disrupted by powerlines and EMFs)	74931	N	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Land and economic uses	Recently purchased block of land, where this proposal was not disclosed. We purchased this land as it is optimal and suitable for livestock and also for a new small family to grow with. I also have a diagnosed serious health condition that impacts my immune system, therefore making me very sensitive and susceptible to external factors. This was a major factor to encourage us to move from the city to the country where the living quality would best suit my health condition.	75262	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Land and economic uses	Recently purchased block of land, where this proposal was not disclosed. We purchased this land as it is optimal and suitable for livestock and also for a new small family to grow with. I also have a diagnosed serious health condition that impacts my immune system, therefore making me very sensitive and susceptible to external factors. This was a major factor to encourage us to move from the city to the country where the living quality would best suit my health condition.	75263	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Land and economic uses	150 year old domestic water well. Has never dried up fed from natural underground springs	75307	P	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-
Land and economic uses	Spring fed dam.	75308	P	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-
Land and economic uses	Spring fed water bore, used for irrigation of potatoes	75309	P	Y	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-
Land and economic uses	Rich and diverse farmland.	75369	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Private land adjoining the Lerderderg State Park and patches of forest is at extremely high risk of bushfire. The overhead powerlines will increase risk and put people lives and property in danger.	75408	N	-	-	-	Y	-	Y	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	The land in this area is currently zoned Farming, however it is mostly not usable for farming purposes. There is opportunity to rezone the land to Rural Living or Low Density Residential Zone in future, to allow smaller lifestyle allotments in close proximity to town. The HV powerline proposal will have a extremely negative impact on land use and values and I believe it is shortsighted to propose over head	75412	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-

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	powerrlines in close proximity to the Bacchus Marsh and Darley township.																				
Land and economic uses	Agricultural Air Strip	75427	N	Y	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Agricultural Air Strip	75428	N	Y	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Expansive, natural and undisturbed views from the house and anywhere on the property.	75442	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Land and economic uses	We operate our manufacturing and retail tourism enterprise at this location which attracts tourists from all over Australia and internationally. We do not wish to see transmission lines within view of our business and have concerns around visual amenity and safety. Powerlines must go underground.	75582	N	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	Y	-	-	-
Land and economic uses	Family Farm and Home. Prime farming land, part of an extremely productive food bowl.	75584	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Land and economic uses	Class 1 Agricultural Land	75589	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Cosgrove Reservoir - drinking water	75599	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Land and economic uses	Undisturbed expansive natural views from our home and property with plans for future business development of a BnB catering to tourists.	75646	N	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	Y	-	-	-
Land and economic uses	Rich productive agricultural land	75818	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Hi. I moved into this area recently, specifically for the amenity and amazing views. I paid significant real estate price to obtain the views here in Darley, along with hefty rates for the privilege. My wife and I cherish our views and, amongst other benefits, enjoy the way mist & clouds can roll through the troughs and valleys and how the moonlight often casts contrasting shadow & light effects upon the hills. I can't adequately express how important and therapeutic the views are for us.	75842	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y

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	I put forward, in the strongest language possible, that transmission towers are not welcome in Darley. Thanks for the opportunity to express objections.																				
Land and economic uses	Primary produce land as well as residence. Farm is an entirely off-grid operation. No visible powerlines should run through any part or Moorabool shire. It is an agricultural and environmentally important part of Victoria.	76035	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Agricultural land	76036	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Huge winds farm already here Government and power companies so useless they approve windfarms with no means to transport power.	76038	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Land and economic uses	This is a dairy, potato and crop farm. The project running above ground on this area would be incredibly damaging for this farm and other farms around it. This project needs to go underground to protect our farm, our community and your food bowl. This area already has the eyesore of wind turbines. Please move to another area or do the right thing and put these lines underground!	76049	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y
Land and economic uses	Highly productive dairy farm.	76052	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Our own cows.	76055	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	4 weeks or so and the Garlic will be ready to come out.	76057	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	4 weeks or so and the Garlic will be ready to come out	76058	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Garlic growing . Only 4 weeks or so to go	76066	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Garlic growing . Only 4 weeks or so to go	76067	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Garlic growing . Only 4 weeks or so to go	76071	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Land and economic uses	Garlic growing	76074	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Our property will be enormously devalued by these power lines	76086	N	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y
Land and economic uses	high value agricultural crop (small scale)	76091	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming business- beef and lamb	76108	N	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-
Land and economic uses	This is the site of Extractive Industry Work Authority 269 which spans the entire area between Davisons Lane and Reids Rd.	76126	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Land and economic uses	Existing 500kv Transmission line - Sydenham to Moorabool (Geelong).	76141	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Land and economic uses	Existing 500kV Transmission Tower Lines [Sydenham to Moorabool (Geelong)] in this vicinity.	76142	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Land and economic uses	Residents and commercial hazelnut orchard.	76193	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Land and economic uses	Farm land	76194	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Beautiful countryside, to good to spoil	76195	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-
Land and economic uses	Prime farming land	76216	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Farming use	76221	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	House (under construction)	76222	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Land and economic uses	Farming use	76224	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Landowners storage & camping area	76231	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	Y
Land and economic uses	Cleared storage area	76242	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	Y
Land and economic uses	Sheep grazing in the lower paddocks	76307	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Land and economic uses	So many lambs this year. So good to watch. Shame we also have full view of the wind turbines	76309	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Land and economic uses	Future Residential Land development	76328	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Land and economic uses	Land reserved for future property development	76335	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Land and economic uses	Land reserved for future property development	76336	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Land and economic uses	Land reserves for future property development with numerous buildings homes and tourist accomodation. Excellent views for residential property development and commercial development plans already in place.	76341	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Land and economic uses	We moved into Darley recently, specifically for the amazing views. We paid significant real estate price to obtain the views here in Darley, Power lines coming through our “Backyard" would spoil the landscape and will impact the price of our house. We find the views of the landscape “WITHOUT powerlines” important for us.	76366	N	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-	-	-	-
Land and economic uses	Relatively small cropping and grazing paddocks in this undulating area will be much more adversely impacted by transmission towers and lines than broadacre farming land.	76411	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	proposed house site	76459	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Land and economic uses	analogue forestry which also controls landslips	76476	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	analogue forestry which also controls landslips	76477	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	analogue forestry which also controls landslips	76478	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	6 generations of farming and land conservation	76480	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Residential property	76490	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	Y

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Land and economic uses	6 generations of farming and land conservation	76506	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Prime agricultural land producing high quality prime lamb for meat and wool, along with high quality pastures for cropping and livestock feed.	76527	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Prime agricultural land producing high quality beef cattle and prime lambs, also high quality and necessary livestock feed crops.	76529	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Permanent viticultural crop of high quality, cool climate grapes producing premium wines for export and domestic markets.	76530	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Arable farming land, for both cropping and livestock	76587	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Permanent viticultural crop of cool climate, high quality grapes producing premium wines for the domestic and export markets.	76592	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Volcanic earth, prime agriculture of the food bowl country. Picture perfect on the Blampied Mollongghip road also contributes largely to Hepburn Shire's renowned tourism and hospitality economy.	76595	N	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	-
Land and economic uses	I work and trade from here. People return because its a beautiful setting.	76610	N	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	Y	-	-	-
Land and economic uses	Controlled fire break burn area	76621	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-	-
Land and economic uses	I love this view across prime agricultural country on the way to Clunes	76624	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Land and economic uses	Residential property	76625	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	Y
Land and economic uses	Top farmland with one of the many volcanic cones in the background. This country is such an inspiration and how well the farmers have preserved it. It is essential to both Hepburn Shire's agricultural economy and to its renowned tourist economic contribution to Victoria's economy.	76631	N	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-

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Land and economic uses	Agricultural landscape at Kingston - prime agriculture is carried out here. We love the view to the volcanic hill in the background.	76646	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Land and economic uses	One of our favourite views of the farmland in the pristine area of the Blampied Mollingghip road.	76651	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Land and economic uses	Two of the old volcanoes in this very productive farming area. Lines should not come here!!	76658	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Economic hardship, loss of one third of house price to be expected.	76701	N	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y
Land and economic uses	Economic impact on house price. One third of value of house will be lost.	76703	N	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y
Land and economic uses	Main tourist route to wineries and vineyards on the west side of the Pyrenees Ranges	76733	N	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	Y	-	-	Y
Land and economic uses	Vineyard and Shays Flat Settlement	76734	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Land and economic uses	High intensity pure bred cattle and sheep breeding	76739	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Pure bred stud cattle and stud sheep farming	76741	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Pure bred cattle and sheep breeding paddocks	76746	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Pure bred cattle and sheep breeding paddocks	76747	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Pure bred cattle and sheep breeding paddocks	76748	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Pure bred cattle and sheep breeding paddocks	76749	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	cropping and livestock land	76778	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	cropping and livestock	76779	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	cropping and livestock	76780	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	cropping and livestock	76781	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Land and economic uses	cropping and livestock	76788	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	cropping and livestock	76789	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	cropping and livestock	76790	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	stock shelter	76803	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	livestock shelter	76804	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	livestock shelter	76805	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	livestock shelter	76806	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Livestock shelter	76807	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Livestock shelter	76808	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	livestock shelter	76809	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	livestock shelter	76810	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	livestock shelter	76811	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Airstrip used for aerial Agriculture	76814	N	Y	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Oaklands Farm agriculture	76816	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Oaklands Farm Agriculture and shearing shed	76823	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Oaklands farm agriculture, 400 acres	76829	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	IRRIGATION CROPPING PADDOCK HEIGHT CLEARANCE REQUIRED OF +4m	76833	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Land and economic uses	Working farm	76864	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Area is cropped anually	76866	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Land and economic uses	Important cattle breeding enterprise	76876	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Prime agricultural land	76896	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming	76903	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76904	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76905	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76906	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76907	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76909	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76911	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76912	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76913	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76914	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76915	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76944	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76945	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76946	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76947	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76948	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76949	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Land and economic uses	farming land	76950	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76951	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76952	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76953	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76954	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76955	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76956	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76957	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76958	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76959	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76960	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76961	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76962	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76963	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76964	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76965	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76966	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76967	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76968	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Land and economic uses	farming land	76969	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76970	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76971	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76972	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76974	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	farming land	76975	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Hazelnut Orchard	76977	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Valuable grazing land	76998	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Valuable farming land, especially for winter grazing of livestock	76999	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Valuable farming and grazing land.	77006	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	Conservation and eco-rural living lots planned. Area to include significant community benefit with park land and open space corridor planned.	77009	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	Y
Land and economic uses	Possible location of powerlines, how far is this ridge from the houses in Pamela & Par Courts and Augusta Place. What about the constant noise/humming, and this is when it's transmitting properly. How can they be safe so close to the forest.	77017	N	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-
Land and economic uses	Possible location of powerlines, how far is this ridge from the houses in Pamela & Par Courts and Augusta Place. What about the constant noise/humming, and this is when it's transmitting properly. How can they be safe so close to the forest.	77018	N	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-
Land and economic uses	future dwelling site to continue generations of farming beef cattle on this land	77360	N	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-

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Land and economic uses	future dwelling site to continue generations of farming beef cattle on this land	77361	N	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-
Land and economic uses	pure bred angus beef farming	77362	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	pure bred angus beef farming	77363	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land and economic uses	pure bred angus beef farming	77364	N	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Vegetation Protection overlay	74170	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Other important things for us to know	Recent tornado felled significant numbers of large trees.	74383	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	A number of significant bushfires have passed along Bush Inn Road. Powerlines would significantly hamper the firefighting attempts of crews and place residents and crews at risk of death or injury.	74384	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Potable water supply for Tullaroop reservoir	74826	N	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y	-
Other important things for us to know	Surrounding areas were used by indigenous people as their food bowl.....it still is a very valuable food bowl.	75406	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Prevailing north and west westerly winds during summer combined with heavy fuel loads in both Creswick Regional Park and Glen Park State Forest heighten the risk of crowning bushfires, which would only be effectively fought by waterbombing.	75437	N	-	-	-	Y	-	Y	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Prevailing north and west westerly winds during summer combined with heavy fuel loads in both Creswick Regional Park and Glen Park State Forest heighten the risk of crowning bushfires, which would only be effectively fought by waterbombing.	75438	N	-	-	-	Y	-	Y	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Prevailing north and west westerly winds during summer combined with heavy fuel loads in both Creswick Regional Park and Glen Park	75439	N	-	-	-	Y	-	Y	-	-	-	-	-	-	-	-	-	-	-	-

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	State Forest heighten the risk of crowning bushfires, which would only be effectively fought by waterbombing.																				
Other important things for us to know	Bush Inn Road is essentially one lane and is split between Moorabool Shire Council and Ballarat City Council. This results in it being poorly maintained: eg poor surfacing, poor monitoring of tree condition (residents often have to remove fallen trees that block the road). This results in a compounded risk for exiting during bushfire season.	75440	N	-	-	-	Y	-	Y	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Historic landscape	75466	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y	-	-	-
Other important things for us to know	Rowsley Heliport, Helicopters operations	75711	N	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Classified Significant Roadside Vegetation by the Hepburn Shire	75819	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Classified Significant Roadside vegetation by the Hepburn Shire (rare native wild flowers)	75820	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Extreme fire danger rated area and only one road to the freeway for evacuation. These towers threaten the exit as these towers (as per Cressy towers) are prone to fall over in extreme conditions	75988	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Unsealed Road - unsuitable for heavy machinery	75991	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Limited evacuation options in case of a bushfire.	75992	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Significant negative impact on vista for a number of homes in area	76004	N	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y
Other important things for us to know	This area is surrounded by the small townships of Allendale, Kingston and Smeaton all of which provide a close village-like living for the local farming community and relocated city people.	76016	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y

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Other important things for us to know	Community walking track used by walkers, joggers and bike riders. Built by community and Council. Goes down entire length of Long Forest Road.	76043	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Other important things for us to know	Community walking track along edge of road.	76044	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Other important things for us to know	Quality of life issues are a concern, views from our property without even a domestic power line in sight will be ruined by transmission towers and lines and cancel our plans to develop a tourist BnB /glam camping enterprise.These views are special and mean so much to us each and every day! Have experienced major fires on Mt Beckworth and Mt Bolton in the last few years (one out our front door and one from the back) as a CFA volunteer I have concerns regarding (a) potential ignition by the towers and (b) restricted access for ariel fire fighting planes etc.	76079	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	-	-	Y
Other important things for us to know	Very large dam used by firefighting helicopters as a firefighting resource to collect large amounts of water	76084	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Other important things for us to know	This is and has been our place of residence for 50 years. We choose to live here for the tranquility of the location with amazing views and abundant bird life. These include amongst many , Yellow Tail Black Cockatoo, Wedge Tail Eagles that are so enjoyable to watch. NO monstrous power line for this area	76085	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y
Other important things for us to know	overland flow water course (no defined boundary) flows over the road and breaks down the bitumen surface	76092	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Other important things for us to know	Residents who live in the Brisbane Ranges and Beremboke area have already had their amenity disturbed by the installation of the windfarms. Some residents not only view the Yalloack windfarm turbines but also can see the turbines located in Moorabool South. They have destroyed the visual aesthetic that was a main reason for residents wanting to live in this area. They do not want to have their properties further devalued and degraded by having above ground	76098	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y

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	transmission towers in view as well. No above ground transmission towers!																				
Other important things for us to know	Daylesford Rd-only avenue of escape from potential bushfire in Wombat forest. People will be trapped in the bush to die if these lines are that close to a state forest	76109	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	Y
Other important things for us to know	family home where young children live. Would prefer they weren't constantly exposed to the dangers of transmission lines	76112	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Other important things for us to know	Significant number of residents have views in northerly direction here, which will be dramatically effected should towerlines be placed here. See https://youtu.be/WTPnuHGxZbc	76133	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y
Other important things for us to know	Very steep topography with poor soil and significant erosional tendencies. No vehicle access.	76134	N	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-
Other important things for us to know	Very steep topography with poor soil and significant erosional tendencies. No vehicle access.	76135	N	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-
Other important things for us to know	Very steep topography with poor soil and significant erosional tendencies. No vehicle access.	76136	N	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-
Other important things for us to know	Bacchus Marsh Zone Substation	76140	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Observe the houses and their locations. The newer ones are built to take in the view, the scenery, the ambiance. The older residences recognize these features too.	76192	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Other important things for us to know	Very high wind area across the weir west to Swans Road. Power lines will increase fire hazards on hot northerly windy days and or any day high winds are in the area. Significant ifre danger area north off Bacchus Marsh township with power lines creating further potential hazards. I thought after Marysville royal commission, there was to be no overhead power lines in high risk fire prone areas??	76295	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-

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Other important things for us to know	Werribee Gorge State Park protects geology of international importance. Daintrees Cliff exposes 500 m years of earth's history. The Permian Period deposits formed 285 million years ago from continental glaciers help to confirm continental drift and Australia's past connection to other Gondwana continents.	76389	N	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	Y	-	-	-
Other important things for us to know	Water source for helicopter firefighting covering entire region radially.	76525	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Other important things for us to know	Heritage family home and farm for 6 generations.	76528	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Other important things for us to know	our views of Mt Beckworth	76590	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Other important things for us to know	our views of Mt Beckworth	76591	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Other important things for us to know	The beautiful vista that greets me each day, looking towards Mount Blackwood over gorgeous countryside of valuable agricultural land. Six generations of farming in this idyllic area where my heart and soul belongs. Please don't desecrate our beautiful countryside and views with ugly pylons.	76596	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Other important things for us to know	No through road, which could trap people if the towers were to come down and a fire resulted from it.	76597	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Aerial fire fighting water source	76614	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Other important things for us to know	High risk bushfire area	76618	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Extreme fire risk area	76620	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-

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Other important things for us to know	Would be highly unfair as already have a visual impact with the wind farm.	76643	N	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	Y	-	-	-
Other important things for us to know	Hobbit Habitat	76694	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Yellowstone Country	76695	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Other important things for us to know	Yellowstone Country	76699	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Other important things for us to know	Beautiful eagles	76702	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	Major road north. Plenty of heavy traffic and oversized ag machinery.	76735	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-
Other important things for us to know	Water source for aerial fire fighting	76743	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Other important things for us to know	Water source for Ariel fire fighting	76744	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Other important things for us to know	Water source for Ariel fire fighting	76745	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Other important things for us to know	underground water system	76782	N	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	-
Other important things for us to know	underground water system	76783	N	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	-
Other important things for us to know	underground water sytem	76784	N	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	-

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Other important things for us to know	underground water system	76785	N	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	-
Other important things for us to know	underground water system	76786	N	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	-
Other important things for us to know	underground water system	76787	N	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	-
Other important things for us to know	this is our home and beautiful view which you will decimate!	76825	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Other important things for us to know	I am a regular user of this airfield. The installation of these transmission lines would add danger to the safe operation of a aircraft taking off and landing, and make these runways unusable.	76842	N	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	I am a regular user of this airfield. The installation of these transmission lines would add danger to the safe operation of a aircraft taking off and landing, and make these runways unusable.	76843	N	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	I am a regular user of this airfield. The installation of these transmission lines would add danger to the safe operation of a aircraft taking off and landing, and make these runways unusable.	76844	N	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	I am a regular user of this airfield. The installation of these transmission lines would add danger to the safe operation of a aircraft taking off and landing, and make these runways unusable.	76845	N	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	I am a regular user of this airfield. The installation of these transmission lines would add danger to the safe operation of a aircraft taking off and landing, and make these runways unusable.	76846	N	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	No to overhead power lines	76868	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	wildlife corridor from nearby Wombat State Forest. used by wallabies, kangaroos, echidnas, koalas, possums	76873	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Other important things for us to know	water catchment area rainfall feeds into local creeks on north side of developmental road	76874	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Other important things for us to know	Telstra and NBN towers	76878	N	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-
Other important things for us to know	Uninterrupted views down the valley to Pykes Reservoir.	76879	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Other important things for us to know	This airport needs a significant radius for safe operation of both fixed wing and rotary aircraft. This airport is regularly used as an aircraft and logistics staging area for fire fighting operations in conjunction with state government and fire fighting services (CFA).	76980	N	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other important things for us to know	concrete house slab and fire bunker	76983	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Other important things for us to know	Beautiful vista for many DESTROYED FOREVER	77012	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Other important things for us to know	Beautiful vista for many DESTROYED FOREVER	77013	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Other important things for us to know	Beautiful vista for many DESTROYED FOREVER. How far is this ridge from our house, a very possible site for powerlines. What about noise, constant humming, and that is when lines are working properly.	77014	N	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	Y	-	-	-
Other important things for us to know	Beautiful vista for many DESTROYED FOREVER. How far is this ridge from our house, a very possible site for powerlines. What about noise, constant humming, and that is when lines are working properly.	77015	N	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	Y	-	-	-
Other important things for us to know	water source for fighting bush fires	77358	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Other important things for us to know	water source for fighting bush fires	77359	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-

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Recreational and social sites	Walk the property on a daily basis and watch the wildlife on Bolwarrah Weir Also frequent the weir for fishing	74638	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	Y	Y
Recreational and social sites	Access to State Forest for recreational use - orienteering, mountain biking, running, birdwatching, nature watching, walkers, motorcyclists, 4x4, prospecting etc.&etc.	74926	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	The historic Grandstand at the Kingston Showgrounds is a draw card to visitors who attend agricultural shows and other community events.	75054	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Recreational and social sites	Scrub Hill 1869 - local wedding and community venue. Originally the Scrub Hill bluestone church established in 1869. Surrounded by rich productive farm land. Opposite iconic Scrub Hill, hill & farm.	75328	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Recreational and social sites	Scrub Hill 1869 - local wedding and community venue. Originally the Scrub Hill bluestone church established in 1869. Surrounded by rich productive farm land. Opposite iconic Scrub Hill, hill & farm.	75329	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Recreational and social sites	Dean Hall & Mechanics Institute - This magnificent restored hall is 115 year old and is the hub of the community. There is 100+ year old Oak Tree and local stone walls.	75337	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Recreational and social sites	Dean Hall & Mechanics Institute - This magnificent restored hall is 115 year old and is the hub of the community. There is 100+ year old Oak Tree and local stone walls.	75338	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Recreational and social sites	Good family memories sitting in the historic grandstand of the Kingston Showgrounds watching the horses at the Show.	75402	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	Y
Recreational and social sites	Swans Road is an access point to the Lerderderg State Park for bushwalkers, cyclists and horseriders. High voltage overhead powerlines will greatly detract from enjoyment of these social and recreational activities.	75409	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y

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Recreational and social sites	Recreational cyclist and pedestrian use. Also pet walkers and equestrian traffic	75430	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	La Gerche Forest Walking track. Important walking track for local people and visitors to area	75588	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Lake Calembeen - swimming, walking	75590	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y
Recreational and social sites	Park Lake - walking, picnics, historical interest	75591	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Creswick Regional Park -Bike trails, walking, bird watching, prospecting, nature	75593	N	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	Y
Recreational and social sites	The Koala Park was established in 1941 and many koalas were housed here. Walking trails	75598	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	-	-	-	-
Recreational and social sites	Significant site used for many social purposes such as bush walking, camping, birdwatching, site seeing.	75638	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	State forest used for local, national and international orienteering events	75663	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Walkers, equestrians, cyclists, joggers use local roads frequently.	75824	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Common road cycling route	75864	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	common road cycling route	75865	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Looking south from the Daylesford Clunes Road, over the beautiful landscape here with one of the volcanoes in the distance. Such views are important to Hepburn Shire's tourism.	75935	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Recreational and social sites	This is the site of the Swiss Mountain Hotel which plays a major role in providing a community meeting place and is unique in being surrounded by some of the most pristine and productive agricultural land proving much needed fresh produce for Victoria.	76015	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	MAZE HOUSE Tourist attraction - maze and carnival garden that relies on the aesthetics of the surrounding landscape	76020	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	MAZE HOUSE Tourist attraction - maze and carnival garden that relies on the aesthetics of the surrounding landscape	76021	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	MAZE HOUSE tourist attraction. Relies on the aesthetics of the surrounding landscape	76028	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Community Meeting place. School bus stop. Council reserve where meetings held - Clean Up Australia Day	76037	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Community meeting place - Council reserve. Reserve where Christmas and Easter gatherings for the area have been held. Community Garage Sales. CFA fundraisers. It is our open space.	76041	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Picnic area used by travellers.	76048	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Recreational walking / bike trail	76065	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Popular abseiling and rock climbing sites	76078	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Brisbane Ranges NP is known for its environmental significance for the diversity of native plant and animal species and is a major tourism asset for Moorabool Shire. The Boar Gully Camp ground is a major camping ground and hiking location that leads to trails throughout the area. It is regularly frequented by international, local	76097	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
	and interstate visitors who come to enjoy the beauty of the area and is a major asset to attracting visitors to the Shire. The amenity and views seen in this area can not be adversely affected by having transmission towers located anywhere near the area. Residents who live in the Brisbane Ranges & Beremboke area do not want to see transmission towers in this area!																				
Recreational and social sites	Beautiful view over the stone bridge near Kingston with a volcano in view beyond	76110	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	Beautiful view over the stone bridge near Kingston with a volcano in view beyond	76111	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	Classic view across the land seen on the Daylesford Clunes Road with two of the volcanoes of the great Volcanic Plains of Victoria	76114	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	Grandchildren come here to fly their kites and model aircraft	76152	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Bush walking track, landowner's personal recreation area.	76228	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Walking track	76237	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	People come to Pykes Creeks to see the lovely rolling hills and farm land not to see hugh power lines	76379	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-
Recreational and social sites	Enjoyed dressage lessons again today	76403	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Had fun gold panning today	76404	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Car clubs, motorcycle clubs and other tourists driving between Daylesford and Ballarat often divert from the Midlands Highway to view the beautiful landscapes seen from the Avenue of Honour and	76408	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
	from the roads leading to and passing the Kangaroo Hills and Hepburn Lagoon. This area is appreciated by many more people than just the locals.																				
Recreational and social sites	Popular place for locals and tourists alike with lovely surroundings and views. Many weddings, markets and events held here attracting many thousands of visitors a year.	76531	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	New dwelling built to enjoy uninterrupted views of Mt Beckworth	76586	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	Personal Family camping area	76588	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	We love driving out on the scenic Blampied Mollongghip Road. We take visitors to Hepburn Shire to see the country here	76593	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y
Recreational and social sites	Looking south over the beautiful landscape here with the volcano in the distance. Such views are important to Hepburn Shire's amenity.	76622	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y
Recreational and social sites	One of my favourite views across Hepburn Lagoon	76623	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	Another scenic view of which there are so many in the great Volcanic Plains of Victoria	76630	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	This is a view from the Allendale - Kingston Road across to the historical Kingston Avenue of Honour seen in the distance across the volcanic farmland.	76632	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	Looking across a crop in the top farmland food bowl to see yet another of the volcanic hills of the great volcanic plains of Victoria	76633	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	Picture perfect - the absolutely beautiful and unspoiled Blampied Mollongghip road where we bring visitors to Hepburn Shire	76635	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Recreational and social sites	The road approaching Mollinghip area is one of the most beautiful scenic routes in Hepburn Shire.	76647	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	The Avenue of Honour at Kingston is of historic importance, we don't want powerlines disturbing these precious views.	76649	N	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-
Recreational and social sites	Creek walk , bowling club and footy oval are extensively used for recreation	76711	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	Scenic recreational horse-riding route	76732	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	Y
Recreational and social sites	home	76791	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	house	76792	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Mt views	76795	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational and social sites	Mt Views	76796	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational and social sites	Mt views	76797	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational and social sites	Mt views	76798	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational and social sites	Mt views	76799	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational and social sites	Mt views	76800	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Recreational and social sites	Mt views	76801	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational and social sites	Mt views	76802	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational and social sites	Family picnic spot	76830	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Negative effects of high voltage lines near public playing field.	76840	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	Tall high voltage power lines and aircraft do not mix, underground connections needed near airport.	76841	N	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational and social sites	Hobby farm	76867	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	wild life	76888	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational and social sites	native bushland. Recreational activities - bushwalking, mountain biking etc.	76893	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	native bushland. Recreational activities - bushwalking, mountain biking etc.	76894	N	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	mt views	76916	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76917	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76918	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Recreational and social sites	mt views	76919	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76920	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76921	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	nmt views	76922	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76923	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76924	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76925	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76926	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76927	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76928	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76929	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76930	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Recreational and social sites	mt views	76931	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76932	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76933	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76934	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76935	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76936	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76937	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76938	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76939	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76940	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76941	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	mt views	76942	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-

Category	Your Comment	Marker ID	Aboriginal Cultural	Agriculture / Forestry	Air Quality	Aviation	Biodiversity	Blasting	Bushfire	Contaminated land	Economic	EMI and EMF	GHG	Groundwater	Historic Heritage	Noise	Land use and Planning	Landscape and Visual	Transport	Surface Water	Social
Recreational and social sites	mt views	76943	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	-	-	-
Recreational and social sites	Significant site for Catholic worship with extensive grounds.	76993	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y
Recreational and social sites	This ridge is right behind our house, you can see our backyard in the pic. How far is this ridge from our house, a very possible site for the powerlines. What about the noise and constant humming, fire threat, etc. etc.	77019	N	-	-	-	-	-	Y	-	-	-	-	-	-	Y	-	-	-	-	Y

Appendix E. Summaries of local studies

Author	Summary	Relevant Area of this report
Clarke (1994)	This report details a single day survey of archaeologically sensitive areas along a proposed fibre optic cable route that intersects with the Project Area at the eastern end of area 4. The report's author states that the study area had been subject to volcanic activity and is a focus for Aboriginal cultural stories and for resources for stone tool making. The author asserts that the relative paucity of sites in the study area is due to lack of prior survey and that Aboriginal places can be expected to be identified at a rate of approximately one per hectare in this region, or half that in areas disturbed by agricultural land use practices. This is based on a series of personal communications with local land holders, the accounts of early European writers and the results of surveys that the author has taken part in. A one day survey was undertaken in which ten hectares of ground surface were surveyed in the most sensitive portions of the study area; 3 hectares around Hepburn Lagoon, and seven hectares at high points along the alignment. Three quartz stone artefact scatters were recorded on the northern side of Hepburn lagoon, which is inside the current activity area. Each place was recorded over a very large area and comprised a high density of quartz artefacts. The author proposes that these components represent "the location of many hundreds of former occupation mounds". The implication is that this was a site of intensive occupation with many earth mounds that have been destroyed and had their contents scattered by farming activity, particularly ploughing. The report recommends that future surveys should concentrate on swamps, creeks, creek flats and hilltops.	4
Lane and Peters (1996)	Lane and Peters (1996 – AV Report 1009) completed an archaeological survey along a section of the Western Highway from Leigh Creek to Woodmans Hill for a proposed highway upgrade. The study area is situated approximately 537m east of the current Project Area. At the time of the survey, little archaeological work had been undertaken within the region and few Aboriginal places had been recorded. The available data indicated that areas adjacent to water sources such as creeks, rivers and wetlands would be the most archaeologically sensitive. The study area contains areas of swampy ground and two creek lines – Leigh Creek and a smaller creek which are all areas that are potentially sensitive for Aboriginal cultural heritage. During the field survey a total of two Aboriginal places were recorded – a surface artefact scatter which was later registered as VAHR 7622-0030 and one isolated artefact occurrence, VAHR 7622-0029. Both of these places were found in ploughed paddocks and have been assessed to be of moderate scientific significance. There were no scarred trees recorded. Disturbance from land clearance and repetitive ploughing activities was noted, as well as more heavy disturbance from building construction and pine plantation planting. Areas of sensitivity were noted around the former swamp near Reidys Road in the area of which the Aboriginal places VAHR 7622-0029 and 7622-0030 were identified, along the edges of former and existing creek lines and other former swampy areas. Recommendations included the possible requirement for subsurface testing or inspection of the ground surface after ploughing. It was also recommended that the registered places identified during the survey, VAHR 7622-0029 and 7622-0030 be avoided during the proposed works.	3
Long (1998)	This report detailed the result of an archaeological survey that was carried out prior to the "pre-afforestation" of a property near Waubra, in the western extent of area 4 and close to area 5 of the project area. "Pre-afforestation" is the name given in the report for the preparation and planting of a commercial pulpwood plantation. The study area was recorded as being a highly degraded parcel of grazed land located across the northern and southern slopes of a nearby rocky granite hill, and adjacent volcanic plains. A network of degraded gullies separated the volcanic landforms from the granite geology. A field survey was undertaken to systematically sample all quadrants within the development area. Nine transects were examined and survey coverage was high as ground surface visibility was generally good. Eight Aboriginal places were identified during the course of this survey, comprising one stone artefact scatter and seven isolated artefacts [redacted] all within the current activity area. The vast majority of the artefacts identified were quartz flaked pieces, with two basalt flaked pieces and a few small quartz cores also	4 and 5

Author	Summary	Relevant Area of this report
	identified. The places identified were located adjacent to drainage lines or on the edges of the granite outcrop. It was concluded that while these landforms do indicate archaeological sensitivity, the location of the places was at least partially attributable to historic land use practices such as clear felling and ploughing.	
Clark (2001)	Clark (2001 – AV Report 2102) prepared an archaeological and cultural heritage study for a proposed underground cable installation between Barkstead and Leonards Hill south of Daylesford. The study area is situated approximately 5.9 km north east of the current Project Area and comprises road and its margins 5 m from the road edge. A field survey of the study area was undertaken, however no Aboriginal cultural heritage was identified. The consultant concluded that it is likely that Aboriginal heritage is situated in the vicinity of the study area likely closer to reliable water sources. Significant disturbances within the study area from road construction and past forestry activities have likely impacted on any Aboriginal heritage that may have been present and there are also few permanent water sources close to the study area so it is unlikely for significant undiscovered Aboriginal heritage places to be present in the study area (Clark 2001, 8).	3
Murphy and Amorosi (2003)	Murphy and Amorosi (2003 – AV report 2650) completed a cultural heritage assessment and archaeological survey for the Ballarat Fast Rail Project study area which comprised six deviations including areas near Melton, Bacchus Marsh, Ballan, Bungaree and two locations at Gordon. The latter locations are situated within the geographic region, the closest being located approximately 3.9 km south of the current Project Area. During the archaeological survey, no Aboriginal cultural heritage places were identified in the current geographic region (one isolated artefact was found in the Bacchus Marsh deviation area and registered). There was generally poor ground surface visibility at the time of the survey and limited access particularly to the Bungaree deviation. There were several archaeologically sensitive areas noted, and these generally related to water sources such as creeks and rivers. Several of these areas of sensitivity area located in the geographic region for the current CHMP and are situated in the Bungaree area, and these included the Bridge across West Moorabool River assessed to be of medium-high potential sensitivity, and the bridge across Lal Lal Creek also assessed to be of medium-high potential sensitivity. Recommendations for further archaeological investigation of these areas included subsurface testing by shovel probes around the bridge pylons and cuttings within 100 m of the creek and also for Lal Lal Creek within 200 m on the east side up the undulating hill slope. There was an area at Portland Flat Road, Gordon, also assessed to be archaeologically sensitive which was the area 500 m either side of creek line. Monitoring of this area was recommended.	3
Rhodes (2003)	Rhodes (2003- AV Report 2762) completed a draft environmental management plan for four railway reserves including the one that is most relevant to the current CHMP, Melbourne to Ballarat, as it passes through the current geographic region, with a potentially culturally sensitive section at Gordon situated approximately at its closest is situated approximately 5.3 km south from the current Project Area. The results of previous background studies had indicated that registered Aboriginal places in the Melbourne to Ballarat section of the rail corridor area were found within 500 m of major or minor watercourses, and generally within 100 m of a waterway or water source (Rhodes 2003, 24). The railway from Ballarat to Melbourne was constructed in 1889 and there was much cut and fill extensive disturbance undertaken during this construction. Significant disturbance also occurred on some of the watercourses along the rail route such as the Werribee River Gorge where fill has been placed from 384 mm to 13.44 m and cuttings at depths of 400 mm to 4.88 m over a 600 m distance on either side of the viaduct (Rhodes 2003, 24). Rhodes also states that in the goldfields areas the railway was constructed across terrain that had already been substantially disturbed and altered by the 1850s goldrushes with tailings heaps often used as fill on the banks of watercourses. These modifications and disturbances have likely significantly impacted upon Aboriginal cultural heritage within this section of the rail corridor, particularly in the goldfields areas where extensive land altering activities had occurred even prior to the construction of the railway. Rhodes stated that on the volcanic plains landform, away from the goldfields areas, Aboriginal places are likely to occur within 200 m of waterways and swamps. An area of potential	3

<table>
<tr><th>Author</th><th>Summary</th><th>Relevant Area of this report</th></tr>
<tr><td></td><td>archaeological sensitivity was noted south of Gordon at the Gordon Meredith Road rail crossing which generally had less soil disturbance than most other areas, and this area was recommended for monitoring.</td><td></td></tr>
<tr><td>Murphy and Amorosi (2004b)</td><td>This report was a desktop cultural heritage investigation of a proposed windfarm site near Waubra, in the western extent of area 4 and close to area 5 of the project area. The assessment noted that there were four previously recorded places in the activity area; three low density artefact scatters and an earth mound. Further low to medium density artefact scatters were considered the most likely site types within the study area, with mounds and scarred trees also possible, especially in areas of remnant native vegetation. Site density is expected to increase with proximity to reliable fresh water, as this would have been a focus of Aboriginal occupation. Similarly, high ground such as ridgelines, summits, lunettes and hills near water were considered to have high potential for archaeology, as these would have provided both vantage points and dry areas in winter when water levels were higher. Artefact scatters were noted to be most likely to be comprised of quartz, with basalt, quartzite and silcrete also present, and it was likely that flakes and flaked pieces would dominate the assemblage. The reported also noted a high chance of moderate to high levels of disturbance of any places present due to past land use activities such as ploughing and other agricultural activities, and the construction of dwellings and farm infrastructure. Places were deemed most likely to date between 1000 and 5000 years old. The report recommended that impact should be avoided within 100m of any past or present water source. The below is replicated from the report and summarises the landforms considered sensitive for Aboriginal places
<table>
<tr><th>Sensitive area and site type</th><th>Location</th><th>Level of potential/sensitivity</th></tr>
<tr><td colspan="3">Hilltops:</td></tr>
<tr><td>Surface artefact scatters and mounds</td><td>Entire study area</td><td>Moderate-high</td></tr>
<tr><td>Within 100-200m of fresh water and resources (lagoons, swamps, lakes, springs and soaks):
surface artefacts scatters and mounds</td><td>Lake Ercildoun, White Stone Lagoon, Horse Lagoon.</td><td>Moderate-high</td></tr>
<tr><td>Within 50m of temporary drainage lines or small tributaries:
Surface scatters, sub-surface deposits and mounds</td><td>Entire study area</td><td>Low-moderate</td></tr>
<tr><td colspan="3">Mountains:</td></tr>
<tr><td>Rockshelters, caves, ceremonial and spiritual connections, artefact scatters, stone arrangements and scarred trees.</td><td>Mt Ercildoun, Mt Misery, Mt Bolton and Mount Beckworth</td><td>Moderate</td></tr>
<tr><td>Remnant Mature Native Vegetation:
Scarred Trees</td><td>Entire study area, particularly at south base of Gordon Hill and north and northeast base of Ewing Hill</td><td>Moderate-high</td></tr>
</table></td><td>4 and 5</td></tr>
<tr><td>Murphy and Amorosi (2004a)</td><td>Murphy and Amorosi (2004a)– AV Report 2779, prepared an addendum report for the Ballarat Fast Rail Project study area, outlining the results of additional survey areas to be impacted by the proposed works. These five survey areas were located within the Bungaree deviation and comprised a series of properties, with the areas located approximately 8.7 KM south west of the current Project Area (Areas 4 and 5). Landforms of these areas generally consisted of plains, with lower hill slope and gently sloping land present at two of the areas. Prior disturbances noted included rail construction and land clearance, dam construction, grazing and at one property recent house and tree removal. Most of the areas contained very poor ground surface visibility with thick weeds and grass present. Most of the areas contained pasture grasses. One Aboriginal place, [redacted] was identified at one of the areas, and one area of potential sensitivity was identified immediately to the east of this Aboriginal</td><td>3, 4 and 5</td></tr>
</table>

Author	Summary	Relevant Area of this report
	place. This Aboriginal place was identified on a low rise and flat land in a paddock 50 m west of a small drainage line north of Old Melbourne Road. A total of 16 Aboriginal stone artefacts were scattered over an area 300 x 50 m. The artefacts comprised 13 quartz (flakes, cores, angular fragments), 2 silcrete (flake, core), and one fine grained silcrete (broken flake). Some recent disturbance had occurred with the removal of a collapsed house to the west of the Aboriginal place. Several historic artefacts were also noted such as bottle fragments likely associated with the former house (Murphy and Amorosi 2004, 10). Collection of the artefacts prior to the works and monitoring of the area was recommended during initial earth disturbance.	
Fiddian (2006)	Fiddian undertook an archaeological survey for the proposed location of a windfarm near Waubra, overlapping with the central portion of the Project Area (Areas 4 and 5). One artefact scatter and nineteen isolated artefacts were recorded during the survey. The majority of these were quartz flaked pieces and tools, with one basalt core tool and six quartz cores also recorded. A number of areas of archaeological sensitivity were identified, including water sources (soaks, springs or creeks), and rocky outcrops. The survey also considered past land use and the areas identified as sensitive had not been subject to ploughing in the past. Many of the places identified had been subject to disturbance through prior historical land use such as ploughing and land clearance. Artefacts identified were recorded as being indicative of food, wood and animal processing and it was considered highly likely that additional unidentified places were present in the study area. The scientific significance of the identified places was low to moderate. Briody AS 1 [redacted] was assessed as being of moderate scientific significance as the range and quantity of artefacts provided information regarding Aboriginal activities in the area (approximately 5km south of the Project Area). In addition, few artefact scatters had previously been recorded in the Waubra region, making them a relatively uncommon place type at that time. The report recommended the avoidance of places where possible and that a programme of subsurface testing be undertaken in areas noted as having archaeological potential.	4 and 5
Matic (2006)	Matic (2006)– AV Report 3668, completed a cultural heritage assessment and archaeological survey of a parcel of land on the west side of the Werribee River at Ballan, located approximately 2.7 KM south of the current Project Area near areas 5 and 6. The landform of the study area included an escarpment of the river. During the survey four new Aboriginal places were identified including two artefact scatters and two isolated artefact occurrences. These places were registered as [redacted] (assessed to be of high scientific significance – test excavation recommended if place is to be impacted), [redacted] (assessed to be of moderate scientific significance)The area of escarpment was identified as having high potential for Aboriginal archaeological places, the flat land on both sides of the creek was identified as having moderate archaeological potential and the remainder of the study area west of the escarpment was identified as having low archaeological potential. There was also one new historical archaeological site identified, a former homestead site. Matic recommended that impacts should be avoided to all known Aboriginal archaeological sites and landforms with highest potential to contain significant Aboriginal archaeological sites, and that the escarpment has the highest potential to contain significant archaeological deposits including Aboriginal ancestral remains (burials). Matic recommended that in the areas identified as of high archaeological potential a programme of archaeological monitoring during works being undertaken. In areas of medium and low archaeological potential, a representative of the Traditional Owner Group should be present to undertaken monitoring. If any Aboriginal places cannot be avoided and will be impacted by the development, then a Consent to Disturb would need to be sought, and further archaeological investigation should be undertaken prior any Consent to Disturb being sought.	3, 5 and 6
Paterson and Clark (2007)	Dr Vincent Clark and Associates completed a voluntary CHMP (No. 10007) on behalf of Central Highlands Water for the proposed installation of the Goldfields Superpipe water pipeline. The activity area comprises an 87 km route from Sandhurst Reservoir to the White Swan Reservoir, which intersects with the current Project Area at its eastern end near Mollongghip in area 4. The activity area cut through varied landforms, which were divided up into 3 general areas: northern (around Bendigo); central (around Castlemaine); and southern (around Ballarat/Creswick). The latter is the most applicable to the current Project Area. The field survey which intersected with the current activity area comprised a 51 km section between Yandoit and Dean. Within this section, ground surface visibility through most of the area was very low due to grass cover, which limited visibility in most areas to less than 10 per cent. It was also noted that many areas had been highly disturbed	4

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	by land clearance, erosion, the construction of an existing transmission line, ploughing and mechanical disturbance, stock trampling and overgrazing, and also through intensive goldmining activities in some areas. A total of 20 Aboriginal Places were recorded in the Yandoit and Dean sections. Subsurface testing comprised testing along transects within areas deemed to be sensitive, and at randomly selected points outside these sensitive areas. Transects were generally 50 m in length, with test holes taking place approximately 10 m apart, but this was varied to adapt to local conditions. In locations where deposits of cultural material were encountered, additional test holes were dug at 2-5 m. The report stated that given the high degree of ground disturbance identified in most areas in which subsurface testing was conducted, it was determined that further archaeological investigation of the majority of sites along the pipeline route was unlikely to produce any useful data. An area of high sensitivity was identified along the Loddon River during the survey and subsurface testing there revealed subsurface sites located on both sides of the river. The riverbank has a large amount of built up sediment present on both sides of the river, on top of the original riverbank surface. This was demonstrated stratigraphically in the exposed banks of the river, and was further confirmed through subsurface testing. The archaeological sites on both sides of the river were located beneath the sediment, at a depth of between 0.8-1.4 m. It was likely that the build up of sediment has occurred since non-Aboriginal settlement as a result of massive erosion due to land clearance and mining activities. No artefacts were identified in the silty layer. No description of the sediment layer was provided in the report, but as it was surmised that the sediment was from land clearance and mining activities, it is likely to have been a layer of sludge. In total, 83 transects were investigated. There were an additional 84 random test holes excavated. Both manual and auger testing was undertaken. The subsurface testing revealed a high degree of disturbance throughout most of the activity area, however a total of 19 new Aboriginal Places were recorded as a result of the subsurface testing, 13 of which were in the Yandoit and Dean sections. The depths of these artefacts was not noted. Additionally, no stratigraphy was detailed in the report. The Aboriginal Places found during the field survey were not detailed separately from those identified during subsurface testing, except where it was mentioned within the description of each Aboriginal Place. Those Aboriginal Places found in the Yandoit and Dean sections totalled 33 artefact scatters. Of these Aboriginal Places, 11 were identified within area 4 of the project area; all comprised artefact scatters: • BBP 29 (VAHR 7723-0181), three quartz artefacts found in an area of about 15 m x 5 m in a newly ploughed paddock; • BBP 30 (VAHR 7723-0182), four quartz artefacts identified in a field planted with potatoes • BBP 31 (VAHR 7723-0183), a scatter of quartz artefact in an area that had been recently ploughed and planted with a brassica crop • BBP 32 (VAHR 7723-0184), a large artefact scatter site containing quartz, silcrete, and trachyte artefacts located on the north bank of Birch Creek • Goldfields SST 1 (VAHR 7723-0192), a subsurface quartz artefacts scatter on the south bank of Birch Creek, between the creek and Cooneys Road • Goldfields SST 9 (VAHR 7723-0194), six quartz and one trachyte artefact were located in a disturbed context during identified during auger testing; • Goldfields SST 10 (VAHR 7723-0195), seven quartz artefacts were located in a disturbed context during auger testing; • Goldfields SST 11 (VAHR 7723-0196), seven quartz artefacts were located in a disturbed context during auger testing; • Goldfields SST 12 (VAHR 7723-0197), six quartz artefacts were located in a disturbed context during auger testing; • Goldfields SST 15 (VAHR 7723-0199), seven quartz artefacts were located in a disturbed context during auger testing • Goldfields SST 18 (VAHR 7723-0200), a surface artefact scatter containing flakes and cores made from silcrete, trachyte, and quartz found in a ploughed area. Two additional Aboriginal places were identified during monitoring of the construction of the pipeline: • Superpipe Myers Rd North (VAHR 7723-0209) a subsurface artefacts scatter comprising two cores, three flakes and one angular fragment, all quartz • Goldfield Superpipe Long Swamp Rd (VAHR 7723-0232) a subsurface artefacts scatter comprising 10 quartz flakes, one quartz core, one quartz angular fragment and two trachyte flakes. Note that the artefact description in the CHMP differs from that found in the site cards.	

Author	Summary	Relevant Area of this report
Paterson et al. (2007)	Dr Vincent Clark and Associates undertook an Aboriginal cultural heritage assessment for Earth Tech Engineering and Central Highlands Water, as part of the Goldfields Superpipe water pipeline. The study area was situated between Sandhurst Reservoir, Bendigo, and White Swan Reservoir, Ballarat. This report was written at the time CHMP No. 10007 was being prepared. The study area intersects with land along the west border of the current Project Area.The closest area of sensitivity to the project area was approximately 3.1 km to the north, and comprised a small stand of remnant eucalypts located in a paddock north of Daylesford-Clunes Road. One Aboriginal Place was identified within this area of sensitivity, comprising Goldfields SST 14 (VAHR 7723-0198). The report noted that the construction of the pipeline had the potential to have a severe adverse effect upon Aboriginal cultural heritage across the study area. However, the significance of the impact would be ameliorated by the high degree of disturbance previously identified at most sites. The most severe impacts would be upon any intact subsurface sites and upon scarred trees present.	Area 4
Paterson et al. (2007b); Paterson and Clark (2007b)	Paterson (et al. 2007 – AV Report 3929) prepared an Aboriginal cultural heritage assessment and field survey and subsurface testing for the proposed Goldfields Superpipe water pipeline from Sandhurst Reservoir, Bendigo to White Swan Reservoir, Ballarat. At its closest, the study area lies approximately 1.8 km west of the current Project Area. A total of 32 Aboriginal places were identified during the field survey, and a number of areas were assessed to be sensitive for Aboriginal archaeological places. Subsurface testing also took place across areas identified as archaeologically sensitive, and in the vicinity of all newly identified Aboriginal places. The subsurface testing consisted of mechanical auger test holes, and also manual shovel test pits excavated on private properties. There were 11 Aboriginal places identified within on Mapsheet 15 (which is within the geographic region for the current activity area, the eastern component), and this area was assessed to have a moderate to high level of sensitivity for Indigenous sites. There are a series of ephemeral creeks located in the area, with Cotty Creek also located nearby. Land uses include grazing, with disturbances from land clearing and cattle tramping. Quartz appeared to be locally available in the area. Low undulating rises were also noted. Several of the Aboriginal places were identified in association with the low rises, and most comprised quartz artefacts (Paterson et al. 2007, 28-29). Subsurface testing of the area revealed that the entire area along Madderns and Powells Roads had been subject to a high degree of disturbance by grazing, stock tramping and ploughing and movement of surface artefacts across the landscape is likely to have taken place. The consultants noted that the recorded Aboriginal places in this area are disturbed and dispersed surface scatters with very little subsurface cultural material present. Aboriginal places recorded on Mapsheep 15 included VAHR 7623-0090, VAHR 7623-0091, VAHR 7623-0092, VAHR 7623-0093, VAHR 7623-0094, VAHR 7623-0095, VAHR 7623-0096, VAHR 7623-0097, VAHR 7623-0100, VAHR 7623-0103, VAHR 7623-0104. In 2007, Paterson and Clark completed CHMP 10007 for the project. During the clearing and stripping works for the pipeline construction, the Aboriginal place VAHR 7622-0070 was identified and registered. This place is located in the pine plantation around the White Swan Reservoir. The area is recorded as being very disturbed with deep ploughing having occurred in the past and a mixture of modern and historical rubbish present combined with Aboriginal stone artefacts. The consultant has noted on the site record for VAHR 7622-0070, that the Aboriginal stone artefacts are probably not *in situ*. These 22 artefacts comprise two flaked quartz cores, 5 quartz angular fragments, 12 quartz flakes, 1 quartzite retouched flake, 1 silcrete blade, 1 silcrete angular fragment.	3
Burch et al. 2008	Burch et al (2018) prepared CHMP 10124 for the Lal Lal wind farm Elaine and Yendon. The study area is located approximately 656m south of the Elaine section of the current Project Area. Several phases of standard assessment took place, with two surface artefact scatters identified during the initial survey, VAHR 7722-0644, and VAHR 7722-0645. Changes were then made to the study area to avoid harm to these places. A second survey took place along with complex assessment testing of areas of archaeological sensitivity. During the second survey, with surface artefact scatters were identified in the Yendon section, including VAHR 7722-0666 to VAHR 7722-0668,	3

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	VAHR 7722-0663, VAHR 7722-0664, VAHR 7722-0670 to VAHR 7722-0672. Three of these places will not be impacted by the proposed works (VAHR 7722-0667, -0674 and -0663). Subsurface testing took place at the remaining five places with 22 1x1m test pits and 1,525 shovel probes excavated. This resulted in five additional Aboriginal places being identified including VAHR 7722-0665, VAHR 7722-0664, VAHR 7722-0669 and VAHR 7722-0662. Harm would be avoided to a number of these places through project redesign including VAHR 7722-0667, VAHR 7722-0668, VAHR 7722-0644, VAHR 7722-0667, VAHR 7722-0663, VAHR 7722-0664, VAHR 7722-0669, VAHR 7722-0645, VAHR 7722-0672, VAHR 77222-0673, VAHR 7722-0662. Harm would be minimised to VAHR 7722-0666 by moving the wind turbine proposed at this location away from the top of a rise where the highest artefact density was observed, with salvage excavation to occur. Harm would be minimised to VAHR 7722-0665 by limiting works to a highly disturbed location, and salvage is proposed for this place. Harm would also be minimised to VAHR 7722-0670, with salvage excavation to take place. Salvage excavation would also take place at VAHR 7722-0671. The closest registered Aboriginal place to the current Project Area is the artefact scatter VAHR 7722-0665 represented by 84 surface and two subsurface artefacts of silcrete, quartz and brecciated chert found on the crest and upper slope of Georges Hill, with the north eastern portion being highly disturbed and eroded from farming practices.	
De Lange and Williamson (2008)	Christine Williamson Heritage Consultants completed a mandatory complex CHMP (No. 10163) on behalf of Midway Pty Ltd for the proposed establishment of a 58-hectare blue gum (Eucalyptus globulus ssp globulus) plantation adjacent to the Avoca River, situated approximately 9 km southeast of the current Project Area. During the surface survey, 29 stone artefacts were recorded. The surface artefacts form part of four Aboriginal Places, containing between one and 17 artefacts each. Most of the surface material (93.1 per cent) consisted of quartz artefacts. The remainder comprised a flake of suspected volcanic material and a silcrete flake. The landforms within the activity area were characterised by gullies associated with streamlines, gentle ridges between the gullies in the western section of the property and with three ephemeral streams present in the eastern section. The western section consisted of a reasonably steep hill slope, sloping off in westerly and northerly directions, characterised by eroded rocky outcrops. The subsurface excavation comprised a single 1 m x 1 m test pit (TP), 14 0.5 m x 0.5 m shovel test pits (STPs), 18 0.4 m x 0.4 m TPs, and three 0.25 m x 0.25 m TPs. The 1 m x 1 m excavation area exposed a profile characterised by a brown topsoil horizon, approximately 150 mm thick, overlying a light-brown mottled sandy loam to a depth of 400-450 mm. Below this was a layer of orange clay to 500 mm, where excavation stopped. A total of 2,176 stone artefacts were recorded during excavations. The majority of the artefacts (98.76 per cent) were of quartz, 15 quartzite artefacts, three silcrete, three crystal quartz artefacts, two basalt, one chert, and an artefact of indeterminate raw material. Excavations were undertaken in 50 mm spits, with artefacts being identified between 0-550 mm in depth. The majority of artefacts were found between 0-250 mm. As a result of the surface survey and subsurface testing, 12 Aboriginal Places were identified within the activity area. These were mostly associated with watercourses on the property, and were preferentially situated on flat to lightly sloping land surfaces. These comprised 12 LDADs: Cocking Property 1 (VAHR 7523-0189), identified on a small plateau bordered by two creek lines within the plantation area; Cocking Property 2 (VAHR 7523-0190), along the top of a linear rise bordered by two creek lines within the plantation area; Cocking Property 3 (VAHR 7523-0191), along the top of a linear rise bordered by two creek lines; Cocking Property 4 (VAHR 7523-0192), on a small plateau on a middle hill slope within the plantation area; Cocking Property 5 (VAHR 7523-0193), within the plantation area; Cocking Property 6 (VAHR 7523-0194), within the plantation area; Cocking Property 7 (VAHR 7523-0195), outside the plantation area; Cocking Property 8 (VAHR 7523-0196), within the plantation area; Cocking Property 9 (VAHR 7523-0197), outside the plantation area; Cocking Property 10 (VAHR 7523-0198), outside the plantation area; Cocking Property 11 (VAHR 7523-0199), outside the plantation area; and Cocking Property 12 (VAHR 7523-0200), on a small plateau bordered by a creek line within the proposed plantation area.	Area 4
Mitchell and Szydzik (2009)	Mitchell and Szydzik prepared CHMP 10788 on behalf of Moorabool Shire Council for the proposed upgrade of amenities at Caledonian Park, Blackwood Street, Ballan. The study area is located approximately 1.6 KM north west of the current Project Area and is situated directly adjacent to the Werribee River. An archaeological survey of the study area took place and one Aboriginal place was identified, an isolated quartz flake artefact that was registered as VAHR 7722-0689. The artefact was found on a walking track that had previously been graded and included introduced gravel and road base. The provenance of the Aboriginal cultural heritage was unknown and it may	3

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	have either been introduced the area with the gravel or washed down from a site higher upslope to the north from a residential area (Mitchell and Szydzik 2009, 41). Due to a high level of disturbance in the area the activity area was assessed to have very low potential to contain any further Aboriginal cultural heritage.	
Toscano (2009)	TerraCulture Pty Ltd were engaged by GHD on behalf of Central Highlands Water to undertake a mandatory CHMP (No. 10263) for the Landsborough Water Augmentation Project, which would involve the construction of a water treatment plant, storage, piping and a pump station. The activity area was 6 km from Landsborough, starting from the intersection of Wattle Creek Road and Ararat-St Arnaud Road, approximately 9 km north of the Project Area near its western end. The standard assessment was a pedestrian survey which divided the activity area into three sections based on the construction locations of the water treatment plant, pipeline, and pump station. The pedestrian survey found the activity area for the water treatment plant was a large flat paddock currently used for livestock grazing, with native trees along its boundary, and quartz pebbles across the surface of the landscape. The areas for the pipeline and pump station were heavily disturbed road reserves. During the pedestrian survey, three Aboriginal archaeological sites were found within the activity area in three groupings: seven quartz artefacts comprising cores, an adze, and flaked pieces; one surface flaked piece and two siltstone mortars; and three quartz flaked pieces. Subsurface testing was conducted in areas that would be subject to impact. The subsurface testing involved the excavation of four 1 m x 1 m test pits (TPs) and three 0.5 x 0.5 m shovel test pits (STPs). The first 1 x 1 m TP was located in the flat paddock and consisted of brown/grey chalk to 100 mm, light brown/grey chalk to 200 mm and red/brown clay to 300 mm. The second 1 m x 1 m was located in the proposed lagoon site and consisted of grey/brown loose soil overlaying blocky clay to 150 mm, and orange/red compact clay from 150 mm. The third 1 m x 1 m TP was located in the road reserve for the pipeline and consisted of red/brown clay overlay cemented clay to 100 mm. The fourth 1 m x 1m TP was also located in a road reserve for the pump station and consisted of red/brown clay overlaying cemented clay to 100 mm. During the subsurface testing, excavations took place where the surface artefacts were found. Two quartz flaked artefacts were found in the first TP. No further Aboriginal cultural heritage was identified during subsurface testing. The two subsurface artefacts were identified within the light brown/grey chalk layer at depths between 50-100 mm. As a result of the assessment, three new Aboriginal Places were recorded. Generally, the sites were surface artefact scatters, one with subsurface components, within the deeper, less eroded area along the property fence line, with no artefacts, surface or subsurface, found in the shallow, eroded landform that comprises the bulk of the property. The three Aboriginal Places comprised: Landsborough 1 (VAHR 7524-0046), comprising seven surface quartz artefacts (cores, an adze, and flaked pieces) and two subsurface quartz flaked artefacts; Landsborough 2 (VAHR 7524-0047), with one surface quartz artefact (flaked piece) and two surface siltstone mortars; and Landsborough 3 (VAHR 7524-0048), with three surface quartz artefacts (flaked pieces).	1 and 2
Barker and Barker (2010)	CHMP 11228 was completed by Heritage Insight for the proposed installation of a 15km fibre optic cable between Hillside and Melton, approximately 1.5 km south of the current Project Area in Area 6. A standard assessment found that the entire activity area traversed disturbed landscape, including areas that had been affected by road construction and the installation of subsurface telecommunications lines, gas lines, and water pipelines. Aboriginal cultural heritage was identified in the form of two silcrete surface stone fragments. These were registered as Hillside-Melton (VAHR 7822-2503). The artefacts were found adjacent to Kororoit Creek and it was concluded that this part of landscape adjacent to the waterway had offered a favourable camping location, and the artefacts were likely formed during the tool making process. The complex assessment consisted of one 1x1 m test pit, and 13 STPs within the areas of least disturbance. The TP was located south of where the surface artefacts were identified during the standard assessment. The soil profile was relatively shallow (200 mm) and consisted of dark grey loam with mixed soils, overlying a dense light brown clay, onto a dense brown clay base. No Aboriginal cultural heritage material was identified during complex assessment.	6

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Builth and Nicolson (2010)	A mandatory CHMP (No. 10020) was undertaken by Australian Cultural Heritage Management and Ecology Partners Pty Ltd for Pacific Hydro Pty Ltd for the development of a 6,724-ha wind farm project consisting of 72 turbines. The activity area was located east of Crowlands and 6 km south of Landsborough, it overlaps with the current Project Area for much of Area 2 and adjoins areas 1 and 3. A pedestrian survey was carried out and targeted areas with a high potential for cultural material. The survey was divided into two sections: ridgelines and alluvial flats, which were systematically inspected. The survey found the ridgeline areas had been grazed low due to drought conditions and had high ground surface visibility, while the alluvial flats had evidence of long periods of disturbance due to the agricultural practices that had occurred in the activity area. The evidence of disturbance included large sediment deposits, eroded creek banks, vegetation clearing, and large, mostly dead gum trees. Archaeological survey produced 19 new sites along the ridges, and 15 new sites throughout the terraced flats. Surface Aboriginal Places on the ridges comprised quartz sources, seams and outcrops, worked quartz, quartz axes, a greenstone axe, standing stones, and scarred trees. They were identified on the eroding old rock surface, along with scarred trees. Surface finds on the flats included a quartz outcrop, worked quartz, worked glass, and scarred trees. The survey identified a total of 34 new Aboriginal Places across the activity area. Subsurface testing was conducted in areas that were deemed as being culturally sensitive and would be impacted by the construction works for the windfarm. The subsurface testing involved the excavation of 198 TPs. These comprised nine 0.5 m x 0.5 m TPs, and a series of mechanical augers in a range of sizes (300 mm in diameter, 250 mm in diameter, and 50 mm in diameter) which were used to ascertain the extent and boundaries of possible subsurface deposits. The first TP was excavated manually to understand geomorphological processes of the landscape. The TPs were excavated to a maximum depth of 700 mm, the general basal layer for TPs 22-43 was a beige clay usually with quartz content, 44-74 was clay/silt with less TPs containing quartz, 87-97 was a fine silt, 140-149 was a dry hard orange clay, and the remaining TPs were a dry clay/silt. No Aboriginal cultural heritage was identified in a subsurface context. The surface evidence varied from very low-density scatters of disturbed material to high quality material. Landsborough 191 (VAHR 7523-0201) and Crowlands 263 (VAHR 7523-0212) were both recorded as high-density surface artefact scatters.	1, 2 and 3
Murphy and Rymer (2010)	Murphy and Rymer (2010) prepared CHMP 11132 for an overhead powerline to connect the Mount Mercer Wind Farm to the national power grid, a lnear project of approximately 21.25 km with a section of the study area located within the Elaine Project Area. Areas of cultural heritage sensitivity were noted in land up to 300m west of Leigh River and land east of Leigh River to the Meredith Mount Mercer Road. A standard assessment took place with an overall effective survey coverage of 20%. One stone artefact scatter was identified and registered as VAHR 7622-0135. The current Project Area was in Survey Area 3 and comprised road reserve which contained no areas assessed to be of cultural heritage sensitivity. The areas of cultural heritage sensitivity identified during the survey included land within 100m of Leigh River escarpment edge, land within 200m of a tributary of Leigh River and land within 100m of the east terrace of Cargerie Creek north of the Elaine-Mount Mercer Road. Complex assessment was then conducted with 22 test pits excavated. A total of 117 stone artefacts were found in six of the test pits and registered as the stone artefact scatters, VAHR 7622-0136, VAHR 7622-0137, VAHR 7622-0138 and VAHR 7622-0139. One of the scatters, VAHR 7622-0136 was found on the west terrace of Leigh River and three artefact scatters were found along the margins of the Leigh River tributary (VAHR 7622-0135, VAHR 7622-0137 and VAHR 7622-0138). The Aboriginal place VAHR 7622-0139 was identified on a small micro-landform consisting of a dry basalt terrace overlooking Carerie Creek. Harm will be avoided and minimised to all of the places by restricting the location of power poles to test pits that have already been excavated during the complex assessment.	3
Noble *et al.* (2010)	Dr Vincent Clark and Associates undertook a mandatory complex CHMP (No. 10759) on behalf of the Department of Transport, as part of the Sunbury Rail Electrification Project. The activity area is situated along the Sunbury railway line and is adjacent to the eastern end of the current Project Area. The activity area was located on the low-lying undulating plains of the Victorian Western Volcanic Plains. The standard assessment was undertaken in three stages: from Watergardens Railway Station to Holden Road; from Holden Road to Diggers Rest Railway Station; and from Diggers Rest Railway Station to Sunbury. Of these, the closest stage to the current activity area was that extending from Watergardens Railway Station to Holden Road	6

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	located to the north of Calder Park Drive. The greatest modifications to the landscape in the Stage 1 area was noted as the railway line itself and the installation of underground services. The land had been built up and modified during the construction of the railway, or cuts had been made for the railway line through the occasional low undulating rises. On the western side of the activity area between Calder Park Drive and Holden Road, the activity area is surrounded by farmland. A total of five Aboriginal Places were recorded across the activity area during the standard assessment, with three located near the current activity area: Calder Park Drive Rail Reserve 1 (VAHR 7822-2409), a silcrete flake; Holden Road Rail Reserve 1 (VAHR 7822- 2424), two silcrete cores and one silcrete flake; and Holden Road Rail Reserve 2 (VAHR 7822-2425), a silcrete flake. None of these artefacts were considered to be in situ. Within the Watergardens Railway Station to Holden Road section, the complex assessment consisted of one 1 m x 1 m TP and 39 STPs. Twelve of these were excavated near the current Project Area between Calder Park Drive and Holden Road. Investigations showed that the western side of the track has been modified by previous earthworks associated with the railway and trenching for telecommunications cable. On the east side of the railway line, the soils also varied in depth with an average of 188 mm, a minimum depth of 130 mm and a maximum depth of 280 mm. The area has been disturbed from the installation of the rail infrastructure and utilities including sewer rising mains and telecommunications cables. No Aboriginal cultural heritage material was recorded during the complex assessment.	
Light (2011)	Light (2011) prepared CHMP 11566 for the proposed Gordon Sewerage Project, located c. 1.8km south west of the current Project Area. The study area comprised generally flat, low-lying land rising gently away from the Western Freeway and bound on the west and north by a tributary of Paddock Creek. There is a minor tributary extending north east-south west through the south east of the study area and in the north west there is a pronounced U-shaped ridgeline occurring north of a low rise. A standard assessment was undertaken and two Aboriginal places were identified, VAHR 7722-0956 and VAHR 7722-0957, surface artefact scatters found on exposures beneath trees, with VAHR 7722-0956 on the top and upper slopes of the ridge and VAHR 7722-0957 on flat land adjacent to the creek corridor. Complex assessment was undertaken with testing focusing on areas to be impacted by the proposed works. No Aboriginal cultural heritage was identified during the complex assessment. Three areas of archaeological sensitivity were assessed to be located in the study area, including the area of moderate-high sensitivity of the ridge, an area of low-moderate sensitivity corresponding with the rise and an area of low-moderate sensitivity including the creek corridor and land extending from the creek to the ridge. The remainder of the area was assessed to be of low archaeological sensitivity. Harm will be avoided to both Aboriginal places, with specific management measures for VAHR 7722-0956 including management zones limiting access.	3
Light et al. (2011)	On behalf of the Water Infrastructure Group, Ochre Imprints completed a mandatory complex CHMP (No. 11438) for the construction of a wastewater treatment plant, rising main, pumping house and reticulation at Waubra. The 34-hectare activity area for this is situated within and to the south of the current Project Area, near Mount Greencock Creek and Waubra. A pedestrian survey was undertaken, which identified that thick grass cover and vegetation was present throughout the activity area, meaning there was very poor ground surface visibility across the activity area. The standard assessment did not identify any Aboriginal cultural heritage within the activity area, although a surface stone artefact (Robertsons Road 1 (VAHR 7623-0166)) was identified outside the activity area on the crest and mid- to upper-slopes and crest of the granite-topped hill adjacent to the north. As such, a complex assessment was deemed to be necessary for the activity area. The complex assessment comprised three 1 m x 1 m excavation TPs and 66 0.4 m x 0.4 m STPs. All of the landforms in the activity area, comprising lower slopes of hill, flat base of hill, swamp, undulating land, creek corridor, and low-lying land, were subject to subsurface testing. The lower slopes consisted of topsoil extending to 100-200 mm deep, a mid-brown silty clay to between 400-600 mm where a lighter, mid-brown/yellow silty clay deposit occurred, occasionally comprising ferruginous nodules/gravel and overlying orange clay. The flat base of a hill landform comprised a shallow topsoil over a red/brown clayey silt to a depth of c. 200 mm, which overlies red clayey silt with ferruginous nodules/gravel to c. 400 mm where red/brown sticky clay occurred. The swampy landform comprised a shallow layer of topsoil over dark brown clayey silt	4

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	to c. 100 mm where a mid-grey silty clay occurred; all of the excavations on this landform immediately became inundated with water upon digging. The undulating landforms of the activity area were within the road corridor, and the stratigraphy comprised fill to c. 250/300 mm overlying red clayey silt or mid-brown firm clay at Robinsons Road, and overlying dark grey/brown clay (degrading basalt) at c. 250 mm at Waubra-Talbot Road. The creek corridor consisted of silty clay (containing quartz creek gravel and fragments of road base and glass) to a depth of between 200-300 mm, with sticky clay underneath. The stratigraphy of the low-lying landform dark brown clayey silt or dark grey silty topsoil overlying an orangey silty clay, with orange sticky clay occurring at between 400-500 mm deep. A total of 28 stone artefacts were identified within the activity area, comprising three artefact scatters: VAHR Robertsons Road 1 (VAHR 7623-0166), Robertsons Road 2 (VAHR 7623-0165) and Robertsons Road 3 (VAHR 7623-0164). The majority of these (n=22) were identified on the lower slopes landform, with several found at the base of a hill landform (n=3) and the swamp landform (n=2), and a single artefact within the undulating landform (n=1). The raw material for every artefact was quartz, while the tool types were predominantly flakes (n=20), with several cores (n=4) and angular fragments (n=4). The artefacts were recorded at depths between 0-400 mm, with the greatest amount being identified between 200-400 mm in depth. This Aboriginal cultural heritage was not considered to be in situ, as the artefacts would have been impacted by ploughing as well as other disturbance, such as bioturbation and slopewash.	
Murphy and Rymer (2011b)	Tardis Enterprises undertook a voluntary complex CHMP (No. 11052) for Origin Energy to assess the land for a proposed wind energy facility on Beaufort-Lexton Road, in Lexton. The activity area is approximately 846 hectares of land, situated approximately 1.2 km to the south of the current Project Area near Lexton. A pedestrian survey of the activity area showed that it had suffered high disturbance from historic land use and erosion. No Aboriginal cultural heritage was discovered during the survey. However, the lack of ground surface visibility, along with several vantage points and the existence of previously registered places on hill tops associated with the nearby Waubra Wind Farm indicted that a limited complex assessment was required. The results of the survey indicated that there was low to moderate sensitivity for low density stone artefacts on hill crests with extensive viewsheds. A total of 12 1 m x 1 m TPs were excavated within the activity area. The closest TP to the current Project Area was situated on the upper slope of an undulating hill where vegetation clearance and stock trampling was evident. This TP had a maximum depth of 200 mm; the other TPs were between 80-750 mm in depth, depending on the landform. The typical soil horizon on the hilltops comprised strong brown silt (0-350 mm) and very strong shale. Excavations on the plain adjacent to the creek comprised weak dark brown sandy silt (0-150 mm), weak brown sandy silt (150-750 mm), and very strong sandstone (from 750 mm). The results of the subsurface excavation did not identify any Aboriginal cultural heritage and concluded that there were no areas of archaeological sensitivity within the activity area.	4
Murphy and Rymer (2011c)	Tardis Enterprises undertook a mandatory complex CHMP (No. 11053) on behalf of Origin Energy, this time for the proposed powerline to grid terminal station, at approximately 800 m to the south of the current Project Area in Lexton, near Glenbrae. The activity area comprises a linear area that runs from the Lexton Wind Farm southern boundary on Jones Road to Troys Road, which runs for approximately 13.2 km. During the standard assessment, ground surface visibility was predominantly very poor outside of one area with excellent visibility. The survey also found that there were no strategic values in the activity area, and that the majority of the activity area had been subject to high ground disturbance in the form of road construction and ploughing. No Aboriginal Places were identified during the ground surface survey. Despite the results of the standard assessment, complex assessment was recommended on land within 100 m of Mount Emu Creek. As such, excavation comprised two 1 m x 1 m TPs which were situated approximately 3.5 km to the south of the current activity area. The soil horizon of the first TP consisted of strong brown silt (0-160 mm) and very strong heavy brown clay (from 160 mm). The second TP comprised firm brown silt (0-150 mm), firm silty clay (150-450 mm), and very strong heavy brown clay (from 450 mm). No Aboriginal cultural heritage was identified during the complex assessment.	4
(Murphy and Rymer 2011a)	A mandatory CHMP (No. 11442) was undertaken by Archaeology at Tardis on behalf of RES Australia Pty Ltd as part of their overhead powerline, terminal station and ancillary works for the Ararat Wind Farm between Elmhurst and Mount Cole Creek. The activity area intersects with the current activity area at Easter Brooks Lane, Elmhurst.	6

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	The land use history review undertaken during the desktop assessment showed that ground disturbances have occurred, in the form of vegetation clearance, long-term grazing, ploughing, stock trampling, and timber growing and the associated ripping of soils. This would have impacted Aboriginal cultural heritage in the area. There were 126 Aboriginal Places previously recorded within the geographic region, comprising 55 artefacts scatters, 48 scarred trees, seven earth features (mounds), two art sites and 13 multi-component places. The most likely Aboriginal Place type predicted to be present was small, very low-density stone artefact scatters. Stone artefact scatters, if present, would be most likely to occur within 200 m of Mount Cole Creek and within 200 m of Wimmera River terrace lip. The dominant raw material would likely be quartz, with minor components of crystal quartz, silcrete, basalt and hornfels. A ground survey of the activity area was undertaken on foot, where the ground surface visibility was very poor. Most of the powerline alignment comprised grazed paddocks, with some parts under crop and other parts used as tree plantations. The only areas of archaeological potential comprised land within 200 m of Mount Cole Creek and the Wimmera River. No Aboriginal Places were recorded during the ground surface survey. Of the five 1 m x 1 m TPs, 19 0.5 m x 0.5 m STPs, and two 1 m x 1.3 m mechanical test pits were excavated during the complex assessment, one was placed on the low hills landform, the Mount Cole Creek undulating plain, the undulating plain away from the creek, and the terrace of the Wimmera River. The hill slopes excavation and found that a clayey silt A-horizon with natural quartz coarse fragments (0-300 mm) was above a very strong clay B-horizon (from 300 mm). The undulating plain landforms comprised a sandy B-horizon up to 1,300 mm in depth above a clay B-horizon. The Wimmera River terrace landform found a shallow clayey silt A-horizon (0-200 mm) above a clay B-horizon (from 200 mm). No Aboriginal cultural heritage was found during the complex assessment, with the report stating that this was likely due to the overall low sensitivity of the activity area for Aboriginal cultural heritage, and the limited locations for excavation. Therefore, the report concluded that the activity was unlikely to harm Aboriginal cultural heritage.	
Mathews and Albrecht (2012)	Andrew Long and Associates completed the salvage program for CHMP 12123 that occurred within the Project Area to the west of the Calder Freeway and south of Holden Road in Plumpton. During the surface collection, surface artefacts were identified outside of the known Aboriginal places covered by CHMP 12123, triggering the requirement for a contingency response. These artefacts were recorded in situ, and subsequently registered as a low-density artefact distribution: 'Holden Road, Plumpton 5' (VAHR 7822-3775). Harm was able to be avoided to this place, therefore no response other than temporary fencing was required. VAHR 7822-3775, which was visible within an area of good ground surface visibility comprised two multidirectional cores, one retouched silcrete flake, two complete, one proximal, and two medial flakes. The cores in this assemblage represent the first cores to be identified within the activity area associated with CHMP 12123 and indicate that flaking activities were likely occurring in the vicinity. The microblade core supports evidence that the Australian Small Tool Tradition was present in the area. Additional artefacts were identified in and adjacent to a linear spoil heap during an on-site meeting, triggering a further contingency response. Although harm was able to be avoided to this place, consultation between the Sponsor, the HA, and the relevant Traditional Owner groups determined that the most appropriate response was a salvage strategy involving surface collection, sieving, and limited subsurface testing to determining the possible extent of material outside of the spoil heap. Three Aboriginal cultural heritage places were registered as a result of the additional contingency programme: two artefact scatters (VAHR 7822-3995 and VAHR 7822-3996), and one low-density artefact distribution (VAHR 7822-3998).	6
Fiddian et al. (2013)	A mandatory CHMP (No. 11996) was completed by Biosis for Central Highlands Water, as part of the Lexton Water Pipeline works. The activity area is situated on Retallicks Road, from Stud Farm Road to Leys Road, Lexton, approximately 3.3 km to the north of the current Project Area. The activity area covered a total area of around 18 hectares. The results of the standard assessment, which was undertaken in systematic pedestrian transects across the activity area, identified that land had been subject to past agricultural practices: slashing and mowing, and from vehicle movement, road construction and in some locations placement of drains. Lexton-Talbot Road had been sealed, however Retallicks Road was a mix of a graded gravel road and bitumen, and from the installation of a road culvert. While ground surface visibility was generally	4

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	poor, one new Aboriginal Place was identified as a result of the standard assessment. It comprised an LDAD, Doctors Creek 1 (VAHR 7623-0208), with 11 quartz artefacts. They included a geometric microlith, an end-scraper, flakes, angular fragment, debitage, and flaked pieces. Despite being in a disturbed context, it was assessed that subsurface deposits may be present. The subsurface investigations of the complex assessment consisted of one 1 m x 1 m TP, and 73 0.4 x 0.4 mm STPs. The stratigraphy of the TP revealed dark brown clayey loam with road gravel, quartz pebbles and cobbles, and basalt cobbles from 0-100 mm, with an underlying layer of dark brown clay of high plasticity becoming compact with depth from 100-200 mm. Two subsurface quartz flakes were recorded in a disturbed context, a distal flake and a proximal flake, and were found in two separate STP holes situated on a slight rise within a floodplain. One artefact was identified in a STP at between 0-590 mm in depth, and the other between 0-300 mm in depth. These were incorporated with Doctors Creek 1 (VAHR 7623-0208). It was determined in the report that this site was located in a disturbed context due to the presence of road fill within the same soil band as the artefacts. Although the site was located within a disturbed context, it was noted that that the artefacts may have originated from the nearby area, as quartz occurred ubiquitously throughout the activity area.	
Dugay-Grist et al. (2014)	A mandatory CHMP (No. 12064) was undertaken by Grist Archaeology Heritage Management for Grampians Wimmera Mallee Water, for a trunk main pipeline between Caroline Street outside of Stawell and connecting to an existing line at Moore Lane in Joel South. The activity area is 15 m wide by 25.5 km long and intersects ~3.5km of the westernmost portion of the current Project Area. The pedestrian survey determined that the majority of the activity area was covered in grasses and vegetation that greatly reduced ground surface visibility and effective survey coverage. The survey identified multiple sensitive landforms/features, including plains, rises, rivers, depressions, and creeks. The survey also noted levels of disturbance throughout the activity area as a result of clearing, ploughing, utilities, and dams. Areas of archaeological sensitivity identified during the survey suggested that subsurface testing was necessary. Four new LDADs were recorded as a result of the standard assessment, and one previously recorded scarred tree, Glengyle 5 (VAHR 7423-023) was reidentified. A total of 18 quartz artefacts were identified, comprising flakes, an angular fragment, a core, and a scraper. Subsurface testing was conducted on the 12 archaeologically sensitive landforms/features identified during the pedestrian survey. The subsurface testing involved the excavation of two 1 m x 1 m TPs, one 0.5 x 0.5 m TP, 113 0.4 m x 0.4 m STPs and 13 1.2 m x 2.5 m machine trenches. The first 1 m x 1 m TP was excavated on top of a rise near Concongella Creek and consisted of medium brown fine-grained silty loam to 200 mm, very fine-grained silt to 290 mm, and dry orange silty clay to 360 mm. Artefacts were identified between 100-200 mm in depth. The second TP (0.5 x0.5 m) was excavated along Surridge Creek and consisted of loose and friable gravel/sand to 100 mm, loose and friable pale gravel/sand to 400 mm, and firm orange clay to 500 mm. The third TP (1 m x 1 m) was excavated on the western side of Wimmera Creek and consisted of loose silt clay with sand to 210 mm, and red mottled sandy clay with small charcoal inclusions to 300 mm. No artefacts were recorded in the TP excavated closest to the Project Area. Of the seven STPs adjacent to this TP, located on the floodplain west of the Wimmera River, two contained subsurface artefacts. One quartz unidirectional core was located in the first of these STPs and one quartz flake in the second, both recorded at a depth of 100 mm. No artefacts were recorded as a result of any subsurface testing east of the Wimmera River. The Aboriginal Place was registered as Wimmera River Joel South LDAD 1 (7523-0351). The survey and subsurface testing recorded a total of nine new Aboriginal Places: Wattle Creek Concongella 1 (VAHR 7423-0773); Wattle Creek Landsborough 2 (VAHR 7423-0778); Landsborough Creek 1 (VAHR 7423-0777); Concongella Creek LDAD 1 (VAHR 7423-0781); Seven-Mile Creek LDAD 1 (VAHR 7423-0782); Surridge Creek West LDAD 1 (VAHR 7423-0783); Six-Mile Creek West LDAD 1 (VAHR 7423-0784); the aforementioned Wimmera River Joel South LDAD 1 (VAHR 7523-0351); and Landsborough Road Scarred Tree 1 (VAHR 7423-0782). The majority of the Aboriginal Places were artefact scatters mostly comprised of quartz stone artefacts. Artefacts were identified at depths between 0-200 mm, and artefact types included complete flakes and cores.	1

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Liousas (2014)	A mandatory CHMP (No. 13052) was prepared on behalf of Metro Trains Melbourne for the construction of a substantial rail infrastructure facility. The activity area was approximately 29.5 hectares and was located roughly 25 km northwest of the Melbourne CBD and intersects the easternmost portion (~350 m) of the current Project Area. The desktop assessment revealed that there were 12 previously registered Aboriginal cultural heritage places [7822-2409, 7822-2410, 7822-2424, 7822-2425, 7822-2642, 7822-2647, 7822-2655, 7822-2664, 7822-2682, 7822-2683, 7822-2697, 7822-3024] within the activity area. All the places were LDADs and were generally located near waterways or unnamed tributaries. The standard assessment was conducted on 16 May 2014. Due to the proximity of the activity area to the existing metropolitan railway track, all four of the targeted investigation units, (IA 1, IA 2, IA 3 and IA 4), were characterised by a high level of disturbance. No Aboriginal stone surface artefacts were identified in any of the four investigation areas and no evidence of the twelve previously registered Aboriginal heritage places, were rediscovered, indicating a very high likelihood that they have been disturbed or possibly destroyed. Most of the activity area had good ground surface visibility comprising mainly of cleared areas, which is consistent with railway embankment maintenance activities. The complex assessment was undertaken on 19-20 May 2014 and the testing programme included one 1x1m TP and 28 STPs. No subsurface Aboriginal cultural heritage was identified during the complex assessment. Due to these results and the highly disturbed nature of the activity area, it was determined that no further subsurface investigations were warranted as part of this CHMP in the activity area.	6
Mitchell and Timms (2014)	A mandatory CHMP (No. 12966) was prepared on behalf of the sponsor (Bonnievale Investments Pty Ltd) for a proposed sand quarry. The activity area intersects the Project Area at Russells Road near Coimadai. The standard assessment was conducted on 11-12 March 2014 and two new sites were identified during the standard assessment: VAHR 7722-1093 (Russells Road LDAD), a single silcrete flake and VAHR 7722-1094 (Russells Road ST), a Grey Box tree with a cultural scar on its southern face located just outside the northern boundary of the activity area. Although the area was thoroughly searched, VAHR 7722-0123 (Bonnie Vale) could not be located. The standard assessment concluded that there was a low potential for further cultural heritage material to be present within a surface or subsurface context in the activity area and complex assessment is not required. Following completion of the survey and submission of the CHMP two further scarred tree sites were registered by staff members of OAAV (now FP-SR). Subsurface testing took place on 21-23, 25, and 28 July 2014 and a total of two 1x1m test pits were hand excavated together with a total of 48 mechanical scrapes. A total of nine Aboriginal artefacts were recovered during the subsurface testing: six on the top of the southern spur and a further three on the south side of the Central Drainage Line/erosion gully. The nine new artefacts, and the additional two artefacts found during the site inspection were collected and recorded as part of VAHR 7722-1093 (Russells Road LDAD). No further Aboriginal cultural material was recovered during the subsurface testing.	6
Murphy and Rymer (2015)	A mandatory CHMP (No. 12715) was undertaken by Archaeology at Tardis Pty Ltd for Bulgana Wind Farm Pty Ltd for the construction of the Bulgana wind farm, which intersects the Project area at its extreme western end. The CHMP was amended in 2018 to include additional construction of 4 km of access tracks and road widening. The Bulgana Wind farm activity area is 7, 524 ha located within Bulgana, Joel, Joel South, Concongella, and Great Western Districts. The pedestrian survey determined that portions of the activity area had poor ground surface visibility in areas that had experienced less grazing, while other had good visibility but high levels of disturbance due to grazing, ploughing and the effects of drought which had also caused erosion on hills, ridgelines, and gullies exposing quartz deposits. The surface soils in the activity area were typically clay silts. The survey determined the most sensitive areas to be within 200 m of Surridge Creek at Joel South Road and sections near drainage lines north of Metcalfe Road. The land within 200 m of Six Mile Creek was also of high sensitivity. The survey and desktop assessment suggested subsurface deposits of cultural material would be present in the activity area. During the survey, one new Aboriginal cultural heritage place, Bulgana Wind Farm 1 (VAHR 7423-0786) which comprised a single quartz flake, was recorded. Four previously registered places (Overdale Artefact (VAHR 7423-0365), Six Mile Creek 5	1

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	(VAHR 7423-0389), Six Mile Creek 6 (VAHR 7423-0390), and Landsborough Road 1 (VAHR 7423-0777)) were resurveyed, but no evidence of these Aboriginal Places was identified. The pedestrian survey of the access track added in the CHMP amendment did not have any areas of sensitivity and it was determined subsurface deposits were unlikely to exist, therefore, subsurface testing was not recommended for the access track and road widening section of the activity area. As part of the original CHMP, subsurface testing was conducted in the activity area in archaeologically sensitive areas identified in the desktop assessment and pedestrian survey. Subsurface testing involved the excavation of two 1 m x 1 m TPs and 168 0.4 m x 0.4 m STPs. None of these testing units were within proximity to the current activity area, the closest being approximately 12 km to the west, near Joel South Road. During the subsurface testing, four subsurface quartz flakes were added to Bulgana Wind Farm 1 (VAHR 7423-0786). This Aboriginal Place is located on a gentle slope near an eroded waterway. A new Aboriginal Place was also recorded; A subsurface stone artefact scatter in the vicinity of a drainage line consisting of 25 artefacts. This was recorded as Bulgana Wind Farm 2 (VAHR 7423-0785). It contained 18 flakes, 5 angular fragments, one blade and one geometic microlith predominantly made from quartz (with some silcrete and volcanic stone present). Both Aboriginal Places were found near the township of Bulgana, within the 'Non-granitic hills and valley slopes' land system. The subsurface artefacts were found between 0-350 mm, with the majority were identified between 50-250 mm.	
Ward et al. (2015)	Ecology and Heritage Partners Pty Ltd was commissioned by AusNet Gas Services Pty Ltd to prepare a mandatory complex CHMP (No. 13075) for the proposed Avoca Gas Project in Avoca. The activity area is approximately 42.3 hectares in size and comprises a large section of the Avoca township before heading south into the locality of Amphitheatre. The activity area is approximately 10.5 km to the north of the current Project Area. The standard assessment included a pedestrian ground survey of the activity area. Ground surface visibility was poor throughout the entire activity area, primarily due to the heavy vegetation cover within the road reserve. While heavy disturbance was noted throughout the activity area due to the construction of road infrastructure or the installation of services, it was noted that cultural material may be present in elevated landforms and/or in proximity to watercourses. Despite the heavy disturbance, two Aboriginal Places were identified as a result of the archaeological survey: Avoca Greenhill Creek Road Scarred Tree (VAHR 7523-0354), a dead scarred tree, and Avoca Greenhill Creek Road LDAD1 (VAHR 7523-0355), an isolated quartz proximal flake. The complex assessment comprised the excavation of two 1 m x 1 m TPs, and 160 0.4 m x 0.4 m STPs. The stratigraphy of the terraces and floodplain landform showed dark brown loose moist clayey silt with angular quartz gravel sized clasts, and glass and metal (0-105 mm) over dark yellowish brown weak moist clayey silt with occasional quartz artefacts (105-190 mm), on top of a reddish brown/yellowish brown mottled, weak, moist silty clay with occasional poorly sorted rounded quartz pebble sized clasts. The valleys and slopes landform comprised brown very loose moist dry sandy silt with occasional poorly sorted angular quartz gravel sized clasts (0-110 mm) on yellowish brown weak dry sandy silt with occasional poorly sorted angular quartz gravel sized clasts increasing with depth (110-170 mm), overlying yellowish red/dark yellowish brown mottled, very compact, dry silty sandy clay with occasional poorly sorted quartz gravel sized clasts. Five quartz artefacts were recorded in a subsurface context, at a depth of between 100-200 mm, which were included in Avoca Greenhill Creek Road LDAD1 (VAHR 7523-0355). These comprised a core, a complete flake, flake fragments, and a flaked piece. Additionally, a quartz proximal flake fragment was identified at a depth of between 0-100 mm and was recorded as Avoca Greenhill Creek Road LDAD (VAHR 7523-0352). Finally, Liebig Street Avoca LDAD (VAHR 7523-0353) comprised one surface find, and nine artefacts found between 0-100 mm in depth. The artefacts were all of quartz, and comprised a complete flake, a core, flake fragments, and flaked pieces. These Aboriginal Places were all located in the 'terraces and floodplains' landform, confirming that elevated areas overlooking freshwater sources were important areas to Aboriginal people in the past, and are therefore likely to contain cultural material. The report also noted that location of the scarred tree suggests that Aboriginal people frequented these terrace landforms in the past for the purposes of food, water and other resource procurement.	4

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Tepper and James-Lee (2016)	Biosis undertook a voluntary CHMP (No. 14480) as part of V/Line Pty Ltd's Maryborough Rail Culvert Upgrade project. The activity area is situated at a number of different locations along the Maryborough to Ararat rail corridor, between Adelaide Lead to Amphitheatre, with the closest portion adjacent to the north of the current Project Area near Glenlogie Creek, Amphitheatre. The standard assessment, which was undertaken on foot, encountered poor ground surface visibility in all survey units, which hindered the ability to determine if surface artefacts were present. The ground survey identified numerous areas of previous ground disturbance within the activity area, including vehicle access tracks, rail ballast, culverts, utility access points, hardstands, road and rail construction, and drains. However, two areas of moderate potential for Aboriginal cultural heritage were identified: the subtle rise near a culvert at Moonlight Flat, and the floodplain within 50 m of at a culvert Glenlogie Creek. Of these, the latter was approximately 2 km north of the current activity area. No Aboriginal Places were identified during the survey. During the complex assessment, excavations were required in the vicinity of three culverts. One TP was excavated on a mid-slope of a gentle rise in an undulating plains landform, which identified a shallow stratigraphy. Excavations at a culvert near Amphitheatre comprised two STPs on either side of the culvert. The undisturbed stratigraphy of silty clay did not yield any artefacts. The closest excavation to the current Project Area, those at a second culvert near Amphitheatre (approximately 7 km north of the Project Area), comprised one TP which identified a disturbed floodplain of the Glenlogie Creek. The stratigraphy of this TP consisted of a horizon of damp, brown soft silty clay (0-220/480 mm) over a layer of damp, dark olive brown soft, silty clay with infrequent quartz fragments and cobbles (220/480-400/560 mm). This sat on a third horizon, which comprised damp, friable, soft, light olive brown silty clay with infrequent quartz fragments and cobbles (400/560-600/650 mm). The base layer comprised a damp, dark greyish brown, soft silty clay with infrequent quartz fragments and cobbles (600/650-700/760 mm). This was determined to be a culturally sterile base, as it matched the clays described for the 'terraces and floodplains' geomorphological unit upon which the TP was located. Three quartz artefacts, one distal flake and two angular fragments, were recovered from depths of 300-400 mm within the soft silty clay layer. The three artefacts were recorded as Aboriginal Place Glenlogie Creek LDAD (VAHR 7523-0362).	3 and 4
Walther and Flynn (2016)	A mandatory CHMP (No. 14546) was prepared on behalf of the sponsor (Melton City Council) for the purposed works intending to widen and seal the road between Coburns Road and Black Knight Way, and between the Gisborne Melton Road and Croxton Drive, Kurunjang. The activity area was largely flat and located within the Western Victorian volcanic plains geographic region and runs parallel to the southern boundary of the Project Area near Melton. The standard assessment confirmed the western portion of the activity area had excellent ground surface visibility (90%) and the area was very disturbed. The eastern portion of the activity area was less disturbed, but the ground surface visibility was limited (10%). No Aboriginal cultural heritage was located as a result of the survey. The complex assessment was undertaken on 13-14 October 2016 and consisted of 38 STPs and two 1m x 1m TPs. Soils were shallow with some disturbance from road construction and use. Two artefacts (7822-4004), one quartzite flake and one silcrete flake were located near the intersection of Croxton Drive and Minns Road (STP7), which was expanded into a 1mx 1m TP with radial STPs as per the AV and Wurundjeri requirements.	6
Young and Barker (2016)	Young and Barker (2016) prepared CHMP 14258 for a proposed residential subdivision and unit development at 81 Simpson Street Ballan, the study area for which is located approximately 2.2 km north west of the current Project Area. The landform of the study area was assessed to be plain above flood level located approximately 185 m northwest of the Werribee River. The activity area had been subject to agricultural land uses in the past, including vegetation clearance. There had also been recent vegetation removal undertaken. The soils of the study area were shallow volcanic soils with basalt, and Aboriginal cultural heritage is likely to have been highly disturbed by past land uses. A standard assessment took place and flat level ground was noted with no specific areas of sensitivity assessed to be present. Due to the proximity of Werribee River, it was deemed possible that Aboriginal cultural heritage may be present and a complex assessment was conducted with a 1x1m test pit and 8 shovel test pits excavated. The 1x1m test pit was excavated to a depth of 450 mm and soils comprised fill to 100mm overlying natural dark grey loam containing construction debris	3

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	and refuse to 250 mm overlying light grey to white silt to 400 mm overlying orange clay with ironstone inclusions. No Aboriginal cultural heritage was identified, and it is likely that the ground disturbance evidenced within the soil profile may have displaced any Aboriginal heritage that was present in the study area.	
Burch (2017)	Burch (2017) prepared CHMP 15263 for subsurface electrical cabling between an existing electrical substation and the proposed Lal Lal Wind farm at Elaine. The study area is located within the current Project Area – Elaine section. Most of the previously registered Aboriginal places in the Elaine region were found on hills or rocky outcrops on rises overlooking waterways or on gently sloping or flat land within 100m of waterways. A standard assessment was carried out and the area comprised flat to gently undulating land with the existing substation in the north (which comprises the current Project Area). The northern section contains the existing substation that has been surfaced with asphalt, and south of the substation and north of Murphys Road the area is modified low lying land with evidence of earthworks including fill deposits. No Aboriginal cultural heritage was identified, and as the study area was considered highly unlikely to contain Aboriginal cultural heritage, no further assessment was undertaken.	3
Tepper et al. (2017)	Biosis also completed a mandatory CHMP (No. 14978) for V/Line, as part of their Maryborough-Ararat Rail Corridor Reinstatement project, situated along the rail corridor between Elmhurst to Ararat. This activity area is situated approximately 900 m to the south of the current Project Area. The standard assessment was undertaken by foot along the entire activity area. The survey identified various levels of disturbance from railway track construction, cut and fill excavations, raising of land, vegetation removal, vehicle track construction, and asset installation across the activity area as a result of historic and current land uses. However, ground surface visibility was poor across the activity area because of deflated ballast and vegetation coverage. Railway tracks run along the entirety of the activity area. The ground survey identified 17 areas of potential for archaeological deposits in areas associated with adjacent waterways or ephemeral drainage lines. No Aboriginal Places were recorded within the activity area during the standard assessment. The complex assessment focussed on areas of least disturbance, and locations near to known landforms with archaeological potential, such as land near watercourses. Excavations comprised five 1 m x1 m TPs and 104 0.5 m x 0.5 m STPs. Soil stratigraphy varied across the activity area, with sediments consisting of silty sands or clayey silt overlying sticky clay. Gravels and quartz fragment inclusions were common throughout the subsurface testing locations. Disturbance relating to railway construction and subsurface asset installation was present across the extent of the activity area. The maximum depth of the clay layer was at 370 mm in the TPs, and the clay base layer was reached at depths of between 160-610 mm in the STPs. No new Aboriginal Places were recorded during the complex assessment, largely due to extensive land use activities as the result of the construction of the railway track and the alteration of the landscape within the rail corridor from cut and fill practices and the laying of subsurface assets. An amendment was made to CHMP 14978 in 2022 to allow for approximately 664 square-meters of road reserve at Elmhurst-Kilpatrick Road, approximately 5.8 km northeast of the current Project area. A review of the desktop assessment identified no additional Aboriginal Places had been recorded within the area where amendment activities are proposed to occur. As the amendment activity will not harm an known Aboriginal Places, no additional standard or complex assessment was undertaken.	6 and 7
Hardiman *et al.* (2017)	Green Heritage Compliance and Research Pty Ltd finalised a mandatory complex CHMP (14457) for the proposed construction of three pedestrian bridges, a boardwalk and shared pathways near Toolern Creek for Melton City Council. The activity area is approximately 4.2 km to the south of the Project Area, near the conjunction of Toolern Creek and Ryans Creek. Melton Botanic Gardens is located within the activity area. It is a public garden created in 2008 and maintained by volunteers. The garden has been heavily landscaped since 2008, although landscaping activities were not undertaken in the western portion of the activity area. Therefore, the areas immediately to the east and west of Toolern Creek are considered to have the most potential to contain Aboriginal cultural material as grading and landscaping activities associated with the construction of Darlingsford Lake and Botanic Garden are likely to have avoided areas within close proximity to the creek.	6

Author	Summary	Relevant Area of this report
	The following site prediction model was developed: • Stone artefact sites are the most likely site types to be present. • There was some potential for mature Indigenous trees to be present within the activity area near Toolern Creek and so there is some potential for scarred trees. However, as only a small portion of the activity area includes Toolern Creek, the potential for mature Indigenous trees to be present was slight, consequently there is low potential for scarred trees to be present. • Although possible, it was unlikely that Burials or Ancestral Remains would be present. • Based on previous land use, the potential for in situ survival of archaeological deposits was generally low. Areas of highest potential would be if undisturbed soil has survived at depth in alluvial deposits. During the standard assessment, the survey encountered varying degrees of ground surface visibility as well as evidence for varying levels of disturbance over the proposed shared path alignment. High levels of disturbance on the periphery of the constructed lake was confirmed by the survey. Additionally, high levels of disturbance were evident adjacent to Vivianne's Way and Darlingsford Boulevard as well as at the crossing of Ryans Creek in the extreme north of the alignment. Despite evidence of high levels of prior disturbance over much of the alignment, the banks of Toolern Creek and adjacent floodplain in the extreme west of the activity area were assessed as having moderate to high Aboriginal archaeological potential. The northern section of alignment between Darlingsford Lake and Ryans Creek was assessed as having moderate potential. No Aboriginal cultural heritage material or archaeological features were identified during the standard assessment. The complex assessment consisted of four 1x1 m TPs, 23 0.5x0.5 m STPs, one 1x1 m radial TP (RTP), and four 0.5x0.5 m RTPs. The maximum depth of excavations reached 600 mm, with the majority of excavations being 300 mm or less. Stratigraphy tended to comprise of disturbed or redeposited silt (0-220/600 mm) and clayey silt deposits overlying clay (220- 250/600 mm), often with inclusions of glass and plastic. One Aboriginal Place, Melton Botanical Trail LDAD 1 (VAHR 7822-4028), was identified on the eastern bank of Toolern Creek. VAHR 7822-4028 comprises five silcrete artefacts which were recovered from disturbed silt deposits at depths between 100-250 mm. This Aboriginal Place comprises five silcrete artefacts: a core, a backed blade, a distal flake, a medial flake and an angular fragment.	
Mitchell and Davis (2017)	Mitchell and Davis (2017) prepared CHMP 15231 for a proposed residential development at 56 Inglis Street, Ballan, located approximately 1.5 km north west of the current Project Area. Werribee River is situated to the north of the study area and the region would have been well utilised by Aboriginal people being resource rich. As a complex assessment would be carried out, no standard assessment of the study area took place. The study area contains existing structures and a residence along with trees and garden beds. The complex assessment involved the excavation of a 1x1m test pit a five shovel test pits excavated to a maximum depth of 290 mm. Soils comprised dark brown clayey loam to approximately 40 mm overlying dark clayey loam with orange clay clumps and modern inclusions to approximately 130 mm overlying compact black clay. The shovel test pits contained a similar soil profile. Modern inclusions were identified within all the pits (context two within the 1x1 at a depth range of approximately 40-130 mm) suggesting that ground disturbance from modern land uses has taken place. No Aboriginal cultural heritage was identified.	3
Oataway et al. (2017a)	A mandatory standard CHMP (No. 14976) was undertaken by Biosis on behalf of V/Line as part of the Maryborough-Ararat Rail Corridor Reinstatement. After the desktop and standard assessment was completed, this CHMP was divided into two stages; Stage 1, comprising this CHMP, and Stage 2, comprising CHMP (No. 15137). This CHMP was focussed on the ballasted railway line, including an area 12 m to the north and 12 m to the south of the rail line. This activity area is located along the Maryborough-Ararat railway line and covered an alignment of approximately seven kilometres from Amphitheatre to Elmhurst, Victoria. The current Project Area intersects with the rail corridor north of Amphitheatre Creek.	3 and 4

Author	Summary	Relevant Area of this report
	The standard assessment, which comprised a pedestrian ground survey of all survey units within the activity area, noted that non-Aboriginal settlement involved clearance and cultivation of the land, which stripped most of the natural vegetation cover. The construction of the railway line required cutting and levelling works throughout the natural landscape undulations, with a number of historic and more modern culverts having been installed within the fill and ballast. There were signs of maintenance works that had been undertaken within the activity area to establish drainage lines and vehicle access tracks for access to the rail, which involved the stripping of topsoil and excavations of soils, of which have generally been pushed towards the southern fence line of the rail reserve. No Aboriginal cultural heritage was located during the standard assessment. Five areas of archaeological potential for subsurface cultural heritage were identified within the rail corridor, including an intact landform which was thought to have the potential to shed light on the natural landscape of the activity area. These areas comprised locations adjacent to natural waterways and locations where the transformation of the natural landscape has been less severe. Each of these areas of archaeological potential was located outside of the ballast-covered area which comprised the majority of the activity area. None of these areas of archaeological potential are adjacent to the current Project Area. No Aboriginal cultural heritage was located within during the survey. Because the standard assessment did not identify areas which had potential for subsurface cultural heritage within the updated activity area, it was deemed unnecessary to undertake a complex assessment to complete this CHMP. Complex assessment was undertaken within the remaining rail reserve as part of CHMP 15137, by Oataway et al. (2017b), as detailed below.	
(Oataway and Truscott 2017)	This mandatory complex CHMP (No. 15136) was also undertaken by Biosis on behalf of V/Line as part of the Maryborough-Ararat Rail Corridor Reinstatement After the desktop and standard assessment was completed, the CHMP was split into two stages. This CHMP comprised Stage 2 of the project, following the results of the approved standard CHMP (No. 14977), which was Stage 1 of the CHMP. While CHMP14977 focussed on the ballasted areas of the railway line, this Stage focussed on the remainder of the rail corridor. Maryborough-Ararat Rail Corridor Reinstatement assessed the rail corridor from Maryborough to Amphitheatre Creek, Elmhurst, in Victoria. The western end of this CHMP intersects with the northern end of the current activity area at the railway line situated to the north of Amphitheatre Creek. This activity area is located along the Maryborough-Ararat railway line and covered an alignment of approximately seven kilometres from Amphitheatre to Elmhurst, Victoria. The western end of this CHMP intersects with the northern end of the current activity area at the railway line situated to the north of Amphitheatre Creek. The results of the desktop and standard assessment is summarised above in Oataway and Strickland (2017). During the complex assessment, 14 transects of shovel TPs were excavated, comprising four TPs and 58 STPs across three landforms. None of the TPs were excavated within or adjacent to the current activity area; the closest TP being approximately 6 km to the northeast of the current activity area. No artefacts were identified in excavations close to the current activity area. The stratigraphy across the landforms in the activity area was relatively consistent, with plains exhibiting a dark grey clayey silt overlying dark grey clay to more than 220 mm. Stratigraphy on the floodplain landform was typically a dark brown silt overlaying reddish yellow clayey silt deposits before a strong brown clay base was reached at depths more than 1000 mm. The gentle slope landform had profiles of sandy silts overlying silty sand deposits before a dry hard clay at base to depths of more than 310 mm. Typically, artefacts were identified in locations close to waterways, at depths between 50 mm and 400 mm. Artefacts were recorded at depths up to 400 mm. One new Aboriginal Places: Maryborough-Ararat LDAD (VAHR 7623-0227), was identified within the activity area. They were recorded in surface and subsurface contexts, VAHR 7623-0227 is 20 km to the northeast of the current activity area and comprised 17 quartz and one silcrete artefact.	5 and 6
Oataway et al. (2017b)	This mandatory complex CHMP (No. 15137) was also undertaken by Biosis on behalf of V/Line as part of the Maryborough-Ararat Rail Corridor Reinstatement. After the desktop and standard assessment was completed, the CHMP was split into two stages. This CHMP comprises Stage 2 of the project following the results of the approved	3 and 4

Author	Summary	Relevant Area of this report
	standard CHMP (No. 14976), which was Stage 1 of the CHMP. While CHMP14976 focussed on the ballasted areas of the railway line, this Stage focussed on the remainder of the rail corridor. This activity area was located along the Maryborough-Ararat railway line and covered an alignment of approximately seven kilometres from Amphitheatre to Elmhurst, Victoria. The east boundary of the activity area intersects with the current project area north of Amphitheatre Creek. The results of the standard assessment is summarised above in Oataway et al. (2017a). During the complex assessment, five transects of shovel TPs were excavated, comprising two TPs and 51 STPs. None of the TPs were excavated within or adjacent to the current Project Area; the closest TP being approximately 750 m to the west. No artefacts were identified in excavations close to the current Project Area. The stratigraphy across the activity area was relatively consistent, with dark brown silty sands overlying light brown sandy deposits before a reddish-brown clay base was reached. Depths varied, relating to the topography of the landscape at each location. Typically, artefacts were identified in locations close to waterways, at depths between 50 and 400 mm. However, most artefacts were recorded at depths between 100 and 300 mm. Two Aboriginal Places: Maryborough-Ararat LDAD 2 (VAHR 7523-0365), a LDAD; and Maryborough-Ararat AS 1 (VAHR 7523-0366), an artefact scatter, were identified within the activity area. They were recorded in subsurface contexts, with the majority of artefacts considered to have been in situ. The closest of these, VAHR 7523-0366 was 1.3 km to the west of the current Project Area, and comprised 113 quartz artefacts which were recorded between 50-450 mm depths, with the majority being between 100-300 mm. VAHR 7523-0365, which is approximately 5.8 km to the northwest of the current activity area, comprised 33 quartz artefacts at depths of between 50-200 mm. All of these artefacts were quartz, with raw materials varying considerably from higher quality material, to flawed, lower quality material. Most of the assemblage consisted of complete (33 per cent) and broken flakes (63 per cent), with small numbers of tools, core and angular fragments present (4 per cent). While no excavations took place adjacent the current Project Area, Biosis provided mapping of the region for predicted archaeological potential. There is a moderate-high level of predicted archaeological potential where the current activity area intersects with the rail corridor north of Amphitheatre Creek. Much of the area to the southeast, along the current Project Area alignment, is of moderate archaeological potential, with pockets of high, moderate-low and low archaeological potential to the southwest. The mapping stops prior to Glenlogie Creek. However, this indicates that the mapped section of the current Project Area covers a range of archaeological potential. The rail corridor was determined as being moderate-high, while the remainder of the current activity area is typically of moderate archaeological potential.	
Athanasiadis (2018)	Central Highlands Water commissioned TerraCulture to complete a mandatory CHMP (No. 15490) as part of their proposed water pipeline renewal program. The activity area is a 12 km long alignment located between Evansford Reservoir to land south of Talbot, which is approximately 5.1 km to the north of the current Project Area. The standard assessment comprised a pedestrian survey within the activity area. During the standard assessment, three new Aboriginal Places were recorded: Old Ballarat Road LDAD (VAHR 7623-0229), with one trachyte (possibly tachylite) flake and one clear glass flake; Stony Creek Quartz Scatter LDAD (VAHR 7623-0230), comprising 11 quartz flakes; and McCallum Creek Evansford Scatter (VAHR7623-0228), consisting of ten quartz artefacts. The majority of these stone artefacts were made of quartz, a stone which would have been readily obtained from hill outcrops. No scarred trees were identified within the activity area. The ground survey also identified three areas of archaeological potential that were assessed in terms of their proximity to water sources and on landforms such as on elevated basalt rises, ridges, and creek embankments. It was also determined that the area with the most potential for Aboriginal cultural heritage would be in the vicinity of Stony Creek and McCallum Creek, where the presence of artefacts indicated that Aboriginal people utilised the area. During the complex assessment, a total of five 1 m x 1 m TPs and 19 0.5 x 0.5 m STPs were excavated at locations at the southern half of the activity area, in proximity to the embankments of Stony Creek and McCallum Creek. Excavations identified that the stratigraphy of land to the south of a gully comprised yellow clayey silt (0-100 mm) with a disturbed grey brown compacted surface, over reddish yellow clay containing quartz pebbles (100-200 mm), and mottled reddish yellow clay (200-230 mm); a sondage identified compacted yellow clay (to 420 mm). On the hill crest with gradual slope to the south towards Stony Creek, the stratigraphy consisted of brown loose	4

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	silty loam with quartz and basalt gravels throughout (0-100 mm), brown loose silty loam (100-200 mm), firm white silty clay with buckshot and quartz inclusions (200-300 mm), over strong brown clay with quartz inclusions (300-400 mm); a sondage found further clay (to 550 mm). A second TP on the hill crest with gradual slope to the south towards Stony Creek identified brown loose silty loam with quartz gravels (0-200 mm), with an abrupt layer of firmly compacted reddish yellow clay with some ironstone, which a sondage found continued beyond the silty loam (to 550 mm). The TP on the alluvial terrace of McCallum Creek found very dark brown to dark brown loose clay loam (0-400 mm), on dark brown silty clay loam (400-600 mm), with a gravel lens over clay (600-700 mm). The final TP, situated mid slope on a granite outcrop 10 m south of McCallum Creek, found brown clayey sand (0-100 mm), brown clay sand/granitic sand (100-200 mm), dark brown clayey sandy loam (200-300 mm), on strong brown clay (300-400 mm). During the complex assessment, the majority of the artefacts identified were recorded at the McCallum Creek embankment. The 1 m x 1 m TP excavated in proximity to Old Ballarat Road LDAD (VAHR 7623-0229) did not locate subsurface artefacts, however, the surface finds recorded as part of the standard assessment were relocated and collected along with five new surface finds all located in proximity to the TP. Ten artefacts were located in the upper slopes and northern bank of Stony Creek, which were registered as Stony Creek Artefact Scatter LDAD (VAHR 7623-0230). A total of 286 artefacts were located on the upper slopes and banks of McCallum Creek, and were registered as McCallum Creek Evansford Scatter (VAHR 7623-0228); 51 additional surface finds were located and were added to McCallum Creek Evansford Scatter (VAHR 7623-0228). Artefacts were found at depths between 0-600 mm, with most subsurface artefacts being identified between 400-500 mm. The majority of these artefacts comprised angular fragments, followed by whole flakes, with some cores, blades or bladelets, scrapers, geometric microliths, distal flakes, proximal flakes, snapped flakes, and split flakes present. These artefacts were predominantly of quartz, with some of chert, banded chert, basalt, crystal quartzite, quartzite, silcrete, red silcrete, and glass. The results of the complex assessment indicated that the silty loam and clayey silty loam found at the creek banks and terraces has good stratigraphic integrity and were sensitive for Aboriginal cultural heritage.	
Bell (2018)	A CHMP (No. 15786) was undertaken by Jo Bell Heritage Services Pty Ltd for Powercor Australia Ltd for works involving the installation of overhead powerlines. The activity area is a 2 km long alignment on a gazetted road reserve corridor which is approximately 20 m wide, running from Bangor-Ben Nevis Road to a rail reserve. It is approximately 8.6 km to the southwest of the current Project Area. A pedestrian survey was conducted using a systematic method to inspect all mature native trees and potentially sensitive landforms in the activity area. The standard survey found the road reserve had been scraped with top soil removed before being built up and topped with redeposited soil. The majority of the activity area had experienced disturbance from drains, underground services, tree planting, and access tracks. The standard assessment resulted in no previously unidentified Aboriginal Places being recorded and no sensitive landforms were identified. The report stated that through consultation with on-site Martang representatives and based on the results of the desktop assessment and survey, complex assessment was not required.	
Burch (2018)	Burch (2018) completed CHMP 15252 for Turbine YSWT03 of the Lal Lal Wind Farm, located approximately 8.8 km south west of the Project Area (Warrenheip north eastern section) . The study area comprised a small portion of land 100 x 100 m in size. The landform of the study area comprises a mid-slope landform between a high rise to the north and lower lying land on the edge of an ephemeral drainage line to the south. A standard assessment of the area took place, and an area just outside of the study area was assessed to be archaeologically sensitive, and a complex assessment of the study area was then conducted. A single 1x1 m test pit and four machine trenches were excavated. Soils within the 1x 1 m test pit comprised brown silt to approximately 130 mm overlying brown compact silt to approximately 190 mm overlying brown very compact silt with occasional basalt, ironstone buckshot and natural quartz inclusions to approximately 410 mm overlying dark brown compact clay. Soils within the mechanical trenches generally corresponded to this, with some pale brown sandy silt present at a depth range of 150 – 600 mm. There was no Aboriginal cultural heritage identified.	3

Author	Summary	Relevant Area of this report
Cummins et al. (2018)	A CHMP amendment (No. 12590) was undertaken by Ecology and Heritage partners Pty Ltd for Pacific Hydro for the revised locations of temporary construction works at a proposed wind farm in Crowlands which were not previously assessed. These areas were not originally assessed in the existing CHMP No. 10020 (Builth and Nicolson 2010). The activity area was located east of Crowlands, 6 km south of Landsborough on the Crowlands Wind farm and intersects the majority of Area 2 of the current Project Area. The pedestrian survey undertaken focused on sections that would be affected by the proposed works that had not been considered in the original CHMP (10020). The pedestrian survey found the activity area had large grassed areas, which decreased ground surface visibility, with small increases in ground surface visibility on informal access tracks across the activity area. The pedestrian survey identified four landforms which had archaeological potential: a slight hill in proximity to a creek tributary crossing, a small rise south of Spring Creek, a rise nearby a planned substation site, and an undulating landform at the proposed construction compound site. The results of the survey identified one scarred tree and one isolated artefact. During the survey for the amendment three surface stone artefacts were recorded. Subsurface testing involved the excavation of four 1 m x 1 m TPs, and 14 0.4 m x 0.4 m STPs. Three of the 1 m x 1 m TPs were excavated along a high rise of a creek and one on the northern side of Warre Creek. The first two 1 m x 1 m TPs consisted of dark red-brown clayey silt with frequent siltstone, quartz and sandstone inclusions to 110 mm, and a yellow-red silty clay from 110 mm. The third 1 m x 1 m TP consisted of fine pale yellow-grey friable silt with inclusions of quartz to 170 mm, and cemented grey-orange silty clay to 210 mm. The fourth 1 m x 1 m TP consisted of loose yellow-brown sandy silt with occasional inclusions of quartz to 250 mm, pale yellow-grey sandy silt with inclusions of rounded quartz pebbles to 500 mm, and red-brown sandy clay at 500 mm. The 14 STPs were excavated to a maximum depth of 400 mm, with an average depth of 100-250 mm before locating basal clays. During the subsurface testing, 36 quartz artefacts were identified in a subsurface context. Three new Aboriginal Places were recorded: Crowlands Windfarm AS1 (VAHR 7523-0369), Crowlands LDAD 1 (VAHR 7523-0370), and Crowlands LDAD 1 (VAHR 7523-0371). All three Aboriginal Places contained surface and subsurface components and were entirely comprised of quartz stone artefacts. The recorded quartz artefacts were identified in Holocene-aged alluvium between depths of 0-450 mm. The most significant finding of the complex assessment was 30 artefacts identified in a single STP, between 210-300 mm in depth. Across the site, the majority of artefacts were recorded at depths between 250-300 mm. Crowlands LDAD 1 (VAHR 7523-0370) is also within the current activity area. The 12 quartz artefacts were identified on a low rise. The artefacts consisted of ten flakes, one blade, and one core. The artefacts were identified within different layers: light brown silty loam layer (0-120 mm), overlying a very light brown silty loam layer. The majority of the artefacts were within layer 2.	1, 2 and 3
Della-Vecchia *et al.* (2018)	Biosis Pty Ltd completed CHMP 15848 for the Millbrook and Ballan section of the Ballarat Line Upgrade. The Millbrook and Ballan activity areas are situated approximately 3.3 KM south of the current Project Area. Most of the activity area lay on the volcanic plains landform and was relatively flat or contained gentle slopes. Water courses such as Lal Lal Creek and Moorabool River also traversed the area. There were two previously registered Aboriginal places within the activity area prior to the commencement of the assessment, [redacted]. During the standard assessment, both of these places were inspected. It was noted that they were likely for further Aboriginal cultural heritage to occur at [redacted] on the western escarpment of the Moorabool River West Branch, however [redacted] had been completely destroyed by the installation of rail track and no further Aboriginal heritage was likely to exist. No new Aboriginal places were identified during the standard assessment however areas of archaeological potential were assessed including high aspects, areas close to fresh water and areas and landforms associated with major water ways such as Lal Lal Creek and Moorabool River West Branch. A complex assessment took place with six separate transects excavated and a 1x1 m test pit excavated on each landform. Landforms comprised a stony rise, the volcanic plains, and the interfluvial escarpments. Soils on the stony rise comprised brown friable silt with degrading basalt overlying compact brown silt with inclusions of degrading gravels and basalt overlying clayey brown silt with gravely inclusions overlying compact brown	5 and 6

Author	Summary	Relevant Area of this report
	clay with degrading basalt onto a clay base. The soils on the remaining landforms comprised friable dark grey silt overlying compact brown friable silt overlying brown clayey silt overlying dry brown clay. Some of the test pits also contained a slightly different stratigraphic profile with reddish brown clay silt (200-300 mm) overlying compact reddish brown clay silt containing buckshot inclusions (400-500 mm) overlying dark reddish grey to reddish brown silty clay with dense buckshot to approx. 420-560 mm. Aboriginal stone artefacts were identified in transects excavated near Bostock Reservoir (n=16 artefacts) and Lal Lal Creek (n=34 artefacts), with a total of 50 artefacts identified in two 1x1m test pits and 30 shovel test pits. The 16 artefacts identified near Bostock Reservoir were registered as an LDAD, [redacted]. The Aboriginal stone artefacts were found at various depth ranges including 0-380 mm in silt and silty clay soils, and at the area west of Moorabool River East Branch/Bostock Reservoir, generally at 0-200mm depth in reddish brown clay silt topsoil, with one artefact found at 200- 300 mm. The 34 artefacts identified near Lal Lal Creek were registered as the LDAD, [redacted]. Aboriginal stone artefacts were found at various depth ranges from 0-400mm in reddish brown silt and silty clay soils. Raw materials for both Aboriginal places comprised quartz (78% of the assemblage), silcrete (10%), other (6%), crystal quartz (4%), and quartzite (2%). Management conditions included compliance inspection for [redacted], no go zones, and capping the maximum depth of excavation to 300 mm at [redacted]	
Dalla-Vecchia et al (2018b)	Dalla-Vecchia et al. (2018b) completed CHMP 15211 for the Ballan section of the Ballarat Line Upgrade. The Ballan study area is situated approximately 427m north west of the current Project Area. The standard assessment identified areas of disturbance associated with the installation and maintenance of rail infrastructure as well as road crossings. Lower lying areas associated with waterways have been modified and built up or cuts have been made to allow for drainage under rail infrastructure. Several areas of archaeological potential were identified, including an area with a good aspect over the Moorabool River East Branch and complex assessment was conducted. In this area within the 1x1m test pit excavated , disturbed cut soils were present across half the excavation with some natural soils also still remaining which included reddish brown silt overlying sandy yellow brown silty overlying yellow brown clay to a depth of approximately 330 mm. No Aboriginal cultural heritage was identified during the assessment.	3
Falvey et al. (2018)	Falvey et al (2018) prepared CHMP 14638 for the proposed Moorabool Transmission Line to service the future Moorabool Wind Farm, with part of the study area located in the current Project Area at Elaine. The part of the area located in the current Project Area is the power grid substation. Previous assessments indicated that escarpments overlooking watercourses, banks and flats associated with watercourses and areas of higher ground were the most likely landforms to contain Aboriginal cultural heritage. A standard assessment took place with surface Aboriginal cultural heritage identified at several points along the alignment on a range of landforms, with 50 surface stone artefacts found. Most of the artefacts were made on silcrete (n=32) with quartzite, quartz, sandstone and tachylite artefacts also found. Most of the artefacts were complete flakes (n=32) with angular fragments, cores, distal flakes and slabs making up the remainder of the assemblage. The archaeological potential of the activity area as a whole as considered to be moderate to high. None of the Aboriginal artefacts were found in or in the vicinity of the current Project Area. The current Project Area was located in Survey Unit 13, the plain landform. Complex assessment was then conducted with a total of 25 test pits, 1999 shovel and machine test pits and 343 radial shovel test pits initially excavated. There were two STPs excavated within the current Project Area (STP 160 and STP 159). Soils comprised clay fill (c. 0-350mm) over dry firmly compacted brown silty loam with many ferruginous nodules and concretions to c. 400-450mm over moderately moist rigid strong brown clay at a depth range of 400-450mm with no Aboriginal cultural heritage identified. A total of 425 stone artefacts and two silcrete quarries were identified during the complex assessment, with 338 artefacts clustered in seven distinct locations, and the remaining 87 artefacts were spread across the activity area generally on the undulating volcanic plains landform (None of the Aboriginal cultural heritage was located within or in the vicinity of the current Project Area). The Ballark Gully contained part of an exposed silcrete formation with two distinct outcrops that were registered as quarries. Soils on the volcanic plains landform were typically shallow . The Ballark Gully was assessed to be the most sensitive landform in the study area located east of the Moorabool River. The Tea Tree Creek Valley was also assessed to have higher levels of sensitivity for Aboriginal	3

Author	Summary	Relevant Area of this report
	cultural heritage. A total of 11 Aboriginal places were registered as part of the CHMP, including 7 artefact scatters (VAHR 7722-1140, 7722-1141, 7722-1133, 7722-1132, 7722-1134, 7722-1135 and 7722-1136), two LDADs (VAHR 7722-1138 and 7722-1139), and two silcrete quarries (VAHR 7722-1142 and 7722-1145). Management conditions included compliance inspections particularly at areas assessed to be of high potential sensitivity, no go areas and exclusion zones, construction access management plan, avoidance to the 11 Aboriginal places with all artefact scatters to be fenced prior to works.	
Holzheimer et al. (2018)	A CHMP amendment (No. 14680) was undertaken by Ecology and Heritage partners Pty Ltd for Pacific Hydro for access tracks and a construction compound at a proposed wind farm in Crowlands which were not previously assessed. The activity area addressed by the CHMP amendment was 15.39 hectare and was located east of Crowlands, 6 km south of Landsborough on the Crowlands Wind farm. The activity area is approximately 1.5 km south of the current Project Area. A pedestrian survey was undertaken using a stratified and random sampling method to sample at least five per cent of each landform type in the activity area. A new Aboriginal Place was identified during the standard assessment. This consisted of eight surface quartz artefacts (flakes, scrapers and a bladelet) eroding out of an informal access track along a slight rise in the undulating plain landform, situated to the west of the Pyrenees Highway. This surface find was recorded as Wimmera River LDAD (VAHR 7523-0364). Two areas of Aboriginal archaeological sensitivity were identified during the survey: the land to the east and west of the Wimmera River, and land along the ridgeline in the west of the activity area. The complex assessment comprised of four 1 x 1 m TPs across each landform, including valley plain, river terrace (east and west), and ridge. There were also 17 0.5 x 0.5 m STPs and 34 radial test pits excavated across the activity area. As a result of the survey and subsurface testing two new Aboriginal Places were recorded. The greatest density of artefacts across these Aboriginal Places were found between 100-300 mm in depth. Eversley 279 (VAHR 7523-0214), situated on the Pyrenees ridgeline, was re-examined through subsurface testing undertaken within the registered extent of this Aboriginal Place. No additional Aboriginal cultural heritage material was recorded in association with VAHR 7523-0214. Wimmera River AS1 (VAHR 7523-0363) comprised 13 subsurface quartz artefacts found at depths between 0-180 mm within a firm, mid greyish-brown silt layer (0-180 mm) in a TP on the east bank of the Wimmera. An additional 23 artefacts were identified in four positive radial test pits surrounding this TP at depths between 100-300 mm. Artefact types included flakes and angular fragments. Wimmera River LDAD (VAHR 7523-0364) had eight surface and five subsurface quartz artefacts found at depths between 0-190 mm within two stratigraphic layers (one in the top firm mid greyish-brown friable silt (0-120 mm); and four within the compact mid yellowish-brown clayey silt layer (120-190 mm) in a TP on an undulating plain landform east of Wimmera River. An additional seven quartz artefacts were also recorded in three STPs and nine quartz artefacts in three radial test pits surrounding the TP, at depths between 0-300 mm. Artefact types included flakes, angular fragments and a core.	2
Robb *et al.* (2018)	Biosis Pty Ltd completed CHMP 15210 for two sections of the Ballarat Line Upgrade at Millbrook and Warrenheip. The Millbrook study area is situated approximately 7.5 km south west of the current Project Area. The study area has been used for rail reserve since the late 1880s when the Melbourne to Ballarat railway was completed. Since its completion, the railway has been extensively modified and upgraded and these activities as well as on-going maintenance works have impacted upon the study area. A standard assessment took place and areas of disturbance and impact were noted throughout the study area. There were also several areas of archaeological potential associated with the escarpments of major waterways including Lal Lal Creek and Moorabool River West Branch with a focus on areas that have had less disturbance with a higher chance of in situ archaeological deposits. Complex assessment then occurred, with 1 x 1m test pits excavated within each area assessed to be of archaeological potential. The remainder of the study area was tested through the excavation of 50 x 50cm shovel test pits along transects. Soils in the Millbrook study area comprised brown silty clay with gravels and basalt inclusions to approximately 150 mm overlying mixed fill with large basalt floaters, brown clay to 500 mm overlying darky reddish brown clayey silty with gravel inclusions to 800 mm overlying wet silty dark grey clay with frequent gravel and ironstone overlying brown wet clay. Both disturbed and in situ soil deposits were found within the activity area and Aboriginal artefacts were found in both disturbed and in situ contexts. A total of two Aboriginal places were	5

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	registered, [redacted], a subsurface low density artefact distribution that was identified adjacent to an access track on the northern side of the rail corridor to the east of Lal Lal Creek and is associated with the escarpment of the creek; and [redacted] a subsurface artefact scatter that was identified on the escarpment above Moorabool River West Branch. The artefact scatter was recorded on both sides of the rail corridor, capped by a layer of fill and Aboriginal cultural heritage was identified at up to 800 mm depth. Management conditions included that excavation within the management requirement area associated with [redacted] must not exceed 300 mm depth. Topsoil from the management requirement area for [redacted] must be stockpiled and reinstated.	
Sanders and Tuchener (2018)	Sanders and Tutchener (2018) prepared CHMP 15076 for the Yendon Wind Farm 66kV powerline upgrade, Yendon. The study area for CHMP 15076 includes part of the current Project area at Warrenheip. The results of the desktop assessment indicated that there was a high concentration of Aboriginal places along the major water sources in the region including Two Mile Creek, Lal Lal Creek, and Moorabool River West Branch. A standard assessment was conducted with one surface Aboriginal place identified and registered as the LDAD, VAHR 7622-0316. Three areas of archaeological sensitivity were noted. Modifications to the study area have occurred from farming and agriculture, construction of road infrastructure and powerline, and train line. Complex assessment was undertaken with a 1x1m test pit and five 50x50cm shovel test pits excavated. All of the STPs contained subsurface Aboriginal cultural heritage material and an additional four Aboriginal places were registered including two LDADs, VAHR 7622-0317 and VAHR 7622-0318 and two artefact scatters, VAHR 7622-0319 and VAHR 7722-1171. It was noted that there was high potential for additional subsurface Aboriginal cultural heritage material to be identified within the remainder of the study area, especially in elevated areas near water sources. Management conditions included salvage of surface artefacts for VAHR 7622-0316, salvage of any Aboriginal cultural heritage material identified during ground disturbing works at VAHR 7721-1171, VAHR 7622-0319, salvage of any Aboriginal cultural material identified during ground disturbing works along Glenanes Road, and salvage of any Aboriginal cultural material identified during ground disturbing works within the remainder of the activity area. The salvage Condition/s apply to areas adjacent to the current Project Area where new power pole locations are proposed.	3
Young, Barker and Wilson (2018)	Young, Barker and Wilson (2018) completed CHMP 15473 for the Fellmongers siphon replacement, at Fellmongers Creek located approximately 3 km north east of the Warrenheip section of the Project Area. The results of the desktop assessment indicated that the study area has been heavily disturbed by the import of fill in most sections aside from the area in proximity to the creek where sand and silt had been left intact. The study area has also been subject to disturbance from goldmining that took place in the mid-nineteenth century. A standard assessment occurred and very limited ground surface visibility was noted. One area of potential archaeological sensitivity was identified near Fellmongers Creek where natural soils may be present. Complex assessment took place and a 1x1 m test pit and seven 50x50 cm shovel test pits were excavated along with two 3x1 m mechanical trenches and seven 3 x 0.6 m machine trenches. The soil profile within the test pits and trenches was varied with differing ground disturbances and difference geomorphic units present. Generally the stratigraphy comprised loamy topsoil overlying sandy deposits, with occasions when topsoil immediately overlay clay. Construction fill, road base, glass, shotgun cartridges, ceramics and metals were present in a number of the trenches excavated. Aboriginal cultural heritage was identified and registered as two Aboriginal place, an artefact scatter VAHR 7622-0320 represented by 11 silcrete and quartz artefacts found in disturbed and undisturbed subsurface contexts at a depth range of 0-200 mm, and an LDAD VAHR 7622-0321 represented by 4 quartz artefacts found in disturbed and undisturbed sandy silts at a depth range of 0-400 mm. Management conditions included a constructability meeting prior to the proposed works and retention of potentially artefact bearing topsoil.	3
Millar *et al.* (2020)	Millar *et al.* (2020) prepared CHMP 16257 for a proposed residential subdivision at 166 Old Melbourne Road Ballan, located approximately 2.5 km south of the current Project Area. The landforms of the activity area included the floodplain of the Werribee River, an escarpment overlooking the River and its floodplain and an elevated plain to the south of the escarpment. The standard assessment assessed one area of archaeological potential in the activity area – the upper slope and crest of the escarpment elevated above and overlooking the Werribee River floodplain. Twelve surface artefacts were identified on a farm track on this landform. Very little ground disturbance of	1 and 2

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	the activity area was noted. A complex assessment took place and four 1x1 m test pits and forty five 50x50 cm shovel test pits were excavated. These test pits targeted the Werribee River floodplain, the escarpment and the elevated plain. Soils generally comprised those that are characteristic of the Newer Volcanic Group geological formation such as the profile of the 1x1m test pit, TP 1, with mid to dark brown silt to approximately 80 mm overlying conglomerate mix of mid brown silt, yellow clay and orange ochre with quartz inclusions to 180 mm overlying compact yellow clay with mid brown silt, orange ochre and quartz pebbles to approximately 350 mm overlying compact yellow clay with quartz pebbles (Young and Barker 2020, 88). The main evidence of previous disturbance within the test pits excavated was evidence of a plough zone in a small number of test pits. Subsurface Aboriginal cultural heritage was identified on the escarpment landform, particularly the crest and upper slopes, as well as the elevated plain. The Aboriginal cultural heritage identified was registered as two Aboriginal places, VAHR 7722-1210 (LDAD) represented by 17 subsurface Aboriginal stone artefacts and an artefact scatter, VAHR 7722-1206 represented by 111 Aboriginal surface and subsurface stone artefacts. Subsurface artefacts representing VAHR 7722-1206 were identified at various depths from 0-400 mm and included silcrete, quartz, basalt, chert and crystal quartz raw materials. Subsurface artefacts representing VAHR 7722-1210 were identified at a depth range of 0-300 mm and included quartz, silcrete and quartzite raw materials. Harm was able to be minimised to part of VAHR 7722-1206 through the retention of part of the site extent in public open space (approximately 10 % of the site extent), and an archaeological salvage excavation of a sample of the remaining site extent was a management condition of the CHMP.	
Montero-Lopez *et al.* (2020)	Jacobs completed a mandatory complex CHMP (No. 15513) on behalf of the Metro Tunnel Project, for their proposed twin nine-kilometre tunnels on the Sunbury to Cranbourne/Pakenham railway line. The activity area is adjacent to the eastern end of the Project Area at Calder Park. The standard assessment covered approximately 21.5 per cent of the activity area and visibility fluctuated but was generally very poor due to vegetation coverage, vehicle access tracks, presence of structures/buildings, and debris. As such, the potential for locating Aboriginal cultural heritage material was low. No mature indigenous trees were recorded during the standard assessment. Thirteen of 79 previously recorded Aboriginal places were relocated during the standard assessment, in addition to the discovery of one new LDAD, Sunbury Rail LDAD 1 (VAHR 7822-4275), and a preliminary registration form for a new silcrete quarry located adjacent to the activity area was also submitted. VAHR 7822-4275 is situated approximately 470 m to the northeast of the current activity area. Additionally, two of the six areas of sensitivity were confirmed (Sunbury and Taylors Hill). An additional six areas of sensitivity were recorded north of the Tame Street Drain in Diggers Rest, south of Tame Street Drain and north of Holden Road, south of Holden Park and behind Calder Park Service Station, near Thunderdome 1 (VAHR 7822-1824), near Holden Road Rail Reserve 2 (VAHR 7822-2425), and Taylors Creek in Calder Park. During the complex assessment, a total of 10 mechanical test pits (MTPs) and 18 TPs were excavated, and a total of 208 Aboriginal artefacts were recorded during the complex testing program. A total of 208 Aboriginal stone artefacts were recorded during the complex testing program. Ninety-nine per cent of the artefacts were recovered in the area located between Harpers Creek and Watsons Road, Sunbury. Two artefacts were located north of Tame Street Drain in Diggers Rest, opposite 13-15 Diggers Rest Coimadai Road AS1 (VAHR 7822-3993) and were included within Sunbury Rail LDAD 1 (VAHR 7822-4275). The Aboriginal cultural material was mostly found between Watsons Road and Harpers Creek in Sunbury, which were recorded as four new Aboriginal Places: Three-arched bridge Quarry 1 (VAHR 7822-4253), Sunbury Rail AS 1 (VAHR 7822-4254), Sunbury Rail AS 2 (VAHR 7822- 4251), and Sunbury Rail AS 3 (VAHR 7822-4252). Additional artefacts were added to Sunbury Rail LDAD 1 (VAHR 7822-4275), the closest newly recorded Aboriginal Place to the current activity area. The new artefact scatters and quarry registrations also resulted in the merger of 21 previously recorded Aboriginal Places. The complex assessment supported the desktop and standard assessment results, which suggested that the area between Watsons Road and Shields Street, Sunbury had retained its area of sensitivity. The New Quarry in Sunbury, and a potential third quarry which remains unidentified within the landscape. The subsurface testing within the	Area 6

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	remainder of the activity area confirmed that the area has been extensively disturbed due past activities including farming, installation of underground utilities, roads, and rail infrastructure.	
Rymer (2020)	Rymer (2020) completed Salvage Report 5075 for CHMP 15076. A total of 198 mechanical trenches were excavated as part of the salvage programme with excavations measuring 1mx1.25m. The salvage excavations tool place along Coulsons Road, in the vicinity of the current Project Area at Warrenheip, with artefacts found in several of the pits excavated along Coulsons Road. Soils in this area comprised loose light brown sandy silt that had been ploughed to 12cm over firm light greyish brown clayey silt to c. 45cm over firm light orange grey mottled clay to c. 53cm. Most of the artefacts identified during the salvage were recovered between 10cm and 30cm deep. . A total of 215 artefacts were identified during the salvage with a total of 271 artefacts recovered for both CHMP 15076 and the salvage programme. This resulted in a total of seven Aboriginal places. The new registrations from the salvage included VAHR 7622-0351 (LDAD), VAHR 7622-0352 (LDAD), VAHR 7622-0353 (artefact scatter), VAHR 7622-0350 (artefact scatter), VAHR 7722-1229 (LDAD), VAHR 7622-0354 (LDAD), VAHR 7722-1227 (artefact scatter), VAHR 7722-1228 (artefact scatter) and VAHR 7722-1183 (LDAD). All of these Aboriginal places were assessed to be of low scientific significance. The salvage assemblage was typically small and low density with artefacts found in disturbed contexts that were dispersed across the study area, and no high densities of stone artefacts or high integrity occupation deposits or features were identified. The site distribution is associated with proximity to drainage lines, creeks and former fresh water meadows and marshes. This Aboriginal heritage was considered to indicate two Aboriginal pathways along the Moorabool River system from north to south, with one of the routes skirting north of the freshwater meadow along Glenane Road down to the Lal Lal Creek confluence and beyond with the second route west of the freshwater meadow along the drainage line to the Navigators locality and then down to the large freshwater marsh near the confluence of several creeks with Moorabool West Branch.	3
Young et al. (2020)	Benchmark Heritage Management completed a CHMP (No. 14452) on behalf of Central Highlands Water for the proposed construction of the Goldfields-Daylesford Raw Water Pipeline from Blampied to Daylesford, approximately 300 m east of the current Project Area near Blampeid. Despite much of the land of the activity area having been subject to a high level of ground disturbance due to land clearance, grazing, ploughing, erosion and intensive goldmining activities, it was considered that LDADs and artefact scatters would be the most likely Aboriginal Place type to be identified within the activity area. The predictive model noted that: • Artefact scatters would be the most likely site types to be found within the activity area; • LDADs and artefact scatters may be found within 1 km of named and unnamed waterways; • Surface scatters may be identified in disturbed contexts; • Subsurface artefact scatters may be identified in both a disturbed and undisturbed context; however, given the shallow soils in the region, they would more likely to be located in a disturbed context; • There would be some, albeit low, potential for other site types i.e. scarred trees, earth features, etc. to occur in the activity area; • There was potential for subsurface archaeological deposits in areas that have experienced only minor disturbance; The standard assessment comprised pedestrian survey using an opportunistic sampling method that targeted areas of ground surface visibility. The activity area was located at, and is mostly comprised of, a pipeline easement and road reserves. Ground disturbances included roads, services in different areas, road cuts, spoon drains, vegetation clearance, and goldmining activities. Where exposed, the natural ground surface was characterised by reddish brown loam overlying a light-yellow clay/rock. Natural quartz was noted on the ground surface along much of the length of the activity area. No evidence of cultural scarring was observed on any of the large mature native trees in the activity area. One Aboriginal Place was identified during the standard assessment, Ridge Road, Daylesford LDAD1 (VAHR 7723-0333), comprising three tachylyte and two glass artefacts, approximately 8.6 km to the northeast of the Project Area near Stony Creek. Areas of potential across the activity area comprised discrete rises and relatively undisturbed areas within close proximity to creeks.	4

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	The complex assessment comprised one 1 m x 1 m test pit and 113 0.5 m x 0.5 m shovel test pits. The stratigraphy identified across the site was generally consistent with that found in the test pit, which comprised clayey silt (0-130 mm) overlying sterile clay (130/140 mm), although the depths and nature of the underlying clay varied. Maximum depth of excavations was 490 mm. The soil profile in the closest excavation to the current activity area, on Daylesford-Clunes Road, comprised fine-medium grained, humic (loose organic matter), moist, dark brown clayey silt (0-220 mm), overlying very dense, fine grained, brown clay (220-280 mm). No subsurface Aboriginal cultural heritage material was identified during excavation.	
Ayres *et. al* (2021)	Ayres et al. (2021) undertook a mandatory CHMP (17366) for a residential subdivision at 2389-2485 Diggers Rest-Coimadai Road, Coimadai. The activity area is located directly east of Djerriwarrh Creek and a large portion of the activity area intersects with the Project Area. The desktop assessment identified that the western section of the activity along Djerriwarrh Creek contains hills, valley slopes and plains on Palaezoic rocks and that the most likely type of places to be present in the Project Area are stone scatters and low density artefact distributions. The standard assessment identified two landforms, creek terraces and gentle plains. A total of 48 stone artefacts were identified during the standard assessment. The artefacts were found mostly on creek terraces and in areas of exposure. It was concluded that the higher density of artefacts on the creek terraces were likely to have originated from the escarpment above them. The artefacts were mostly manufactured from silcrete with quartz being the next most common raw material present. Other raw materials noted included quartzite, chert and tachylyte. The standard assessment concluded that the two areas most likely to contain Aboriginal cultural heritage are along Djerriwarrh Creek, especially on the escarpment and the creek terraces, and in the undisturbed southern extent of the activity area where four surface artefacts were identified. No scarred trees were identified. The complex assessment comprised 31 5x1 m mechanical test pits and four 2x1 m radial mechanical test pits around the positive baseline pits. All the test pits were located on the plains and identified duplex soils with dark greyish brown clayey silt overlaying a light mottled orange grey base clay. Two subsurface artefacts and an additional surface artefact were identified during the complex assessment making a total of 50 artefacts identified during the assessment.	2
Vines (2021)	Biosis undertook a CHMP (No. 14915) for a series of proposed mountain bike trails on behalf of Hepburn Shire Council. This was a mandatory CHMP being a high impact activity of a length greater than 100m which intersected areas of CHS associated with the drainages of Spring Gully, Oak Gully, Creswick Creek and St Georges Lake. The area for the proposed bike paths is located within the Creswick Regional Park and Creswick Plantation, to the east of the Creswick township, approximately 6km to the west of the current activity at its closest point. The study had been exposed to a great deal of mining activity through the nineteenth century and the evidence of this disturbance was noted in the desktop and standard stage of the investigation. The impact of the mining activity is a major component of the report. No Aboriginal cultural material was identified during this CHMP investigation. The standard assessment involved a sample survey coverage of 200ha within the 16 square kilometre activity area, focussed on different landforms, different disturbance areas and over areas with acceptable ground surface visibility. No new Aboriginal Places were identified in this survey. Two registered scarred trees (VAHR 7623-0204 - Jackass ST 1, and VAHR7623-0205 -Jackass ST 2) were revisited. Which were assessed as being unlikely to be of Aboriginal origin but were to be avoided by the activity regardless. Due to the evident disturbance present throughout the activity it was deemed unnecessary to undertake complex assessment. This study is of relevance to the current investigation as it describes the destructive nature of nineteenth century mining practices to Aboriginal heritage and feeds into the predictive model that Aboriginal Places are unlikely to be identified around historical mining areas.	4
Branda-Pawlaczyk, L. *et al*, (2023)	CHMP 16960 (2023) was prepared by Ecology and Heritage Partners (EHP) in response to the proposed residential subdivision and mixed-use development at 2 Gisborne Road, Merrimu. A total of two previously registered LDADs were located within the activity area: VAHR 7722-1213 and VAHR 7722-1223. VAHR 7722-1213 comprised six quartz artefacts identified on the surface of slight rises within the landform, and within 70 m of unnamed tributaries associated with the Lerderderg River. VAHR 7722-1223 comprised 54 stone artefacts of silcrete (n=38), quartz (n=5), quartzite (n=5), basalt (n=1), and other (n=5) raw materials, identified within both surface (n=53) and subsurface (n=1, ~110mm) deposits, on a flat volcanic plain landform. A standard assessment was not undertaken as a part of this CHMP. A previous formal archaeological	2

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	survey had been undertaken in 2018 by EHP and it was determined, in consultation with the RAP, that the previous survey had established the likelihood of the presence of Aboriginal cultural heritage, and that a complex assessment would be required. Therefore, this CHMP proceeded directly to a complex assessment. The previous survey that was undertaken within and surrounding the activity area for CHMP 16960 resulted in the registration of four Aboriginal places: VAHR 7722-1213, VAHR 7722-1214, VAHR 7722-1220, and VAHR 7722-1223 associated with escarpment and valley slope landforms. The complex assessment comprised both manual and mechanical excavations across the valley slope and volcanic plain landforms. A total of twelve 1x1 m test pits, 62 0.5x0.5 m STPs, and 95 3x1 m mechanical test pits were excavated as a result of the complex assessment. An additional five STPs were proposed to be excavated but were terminated prior to excavation due to the presence of asbestos. Following the identification of five stone artefacts a further 17 0.5x0.5 m radial test pits were excavated. Test pits excavated within the valley slope landform revealed a light yellowish/orangish compact clayey sand overlying a light yellowish/orangish compact clay to depths between 100-150 mm. A total of five stone artefacts were identified within three test pits (two STPs and one radial STP) at depths between 0 – 100 mm. Test pits excavated within the volcanic plain landform revealed a thin layer of orangish brown compact clayey sand or silt overlying an orangish or reddish brown compact clay. No Aboriginal cultural heritage was identified as a result of excavations within this landform. The five stone artefacts identified during the complex assessment were registered as an LDAD: VAHR 7722-1255. This place comprises five artefacts of quartz (n=2), silcrete (n=2), and quartzite (n=1) identified within a valley slope landform within a light yellowish/orangish compact clayey sand deposit.	
Burch et al. (2023)	Burch et al . (2023) prepared CHMP 19558 for a proposed battery energy storage system at 225 Eline-Blue Bridge Road, Elaine, which includes parts of the current Project Area at Elaine. The results of the desktop assessment indicated that it was likely that Aboriginal cultural heritage may be present in the western undeveloped section of the study area (not the current Project Area). The land use history indicated that the study area and immediate surrounds were rural in character in the 1970s through until around 2013, when the Elaine Terminal Station in the north eastern section of the study area (which is the current Project Area) was constructed. Aerial images show that an extensive amount of topsoils had been stripped from this area causing significant disturbance. By 2014, the footprint of the station and access roads had been sealed with bitumen and further topsoil had been stripped within the further extent of the area. The construction and ongoing maintenance of the Elaine Termination Station and associated infrastructure were considered to have involved activities that have caused extensive disturbance to the ground , including stripping of topsoils by way of cutting, grading, scraping , trenching, mechanical excavation, installation of surface and subsurface assets and utilities, the deposition of introduced fill materials and bitumen/concrete sealing. A standard assessment took place and no Aboriginal cultural heritage was identified, and no areas of Aboriginal archaeological sensitivity were assessed. It was considered highly unlikely that Aboriginal cultural heritage would be present in the study area and no further assessment was undertaken.	3
Chandlee and Welsh (2023)	Extent Heritage undertook a CHMP for the Level Crossing Project at Calder Park and Holden Road. The activity area runs adjacent to a large portion of the eastern section of the Project Area and includes a small section in the very eastern point of the Project area. The desktop assessment concluded there was high potential for Aboriginal cultural heritage material to be present in the activity area due to the presence of previously registered Aboriginal places and the known presence of sensitive landforms, particularly stony rises and waterways. The standard assessment included the survey of the area within the current Project Area (SA6) classed as a cleared area of the plains with introduced fill creating an artificial slope. The area was assessed as having low to nil archaeological potential due to previous ground disturbance from developments. No Aboriginal cultural heritage was identified in SA6 during the standard assessment. The standard assessment concluded that areas of the volcanic landform that had not been subject to previous ground disturbance had higher potential for Aboriginal cultural heritage material to be present. Two additional places (VAHR 7822-4681 and VAHR 7822-4682) and additional cultural heritage added to VAHR 7822-3318 were identified during the standard assessment. The complex assessment comprised nine 1x1m test pits and 13 0.5x0.5 m radial test pits with none excavated within the current Project Area. Two of these test pits were excavated adjacent to the surface artefacts registered as VAHR 7822-4682. The complex assessment identified typical soil profile in the area comprises shallow soils over a compacted clay, which is typical of the volcanic plains landform. Three artefacts were identified in two test pits during the complex assessment. The artefacts were identified at depths between 30 mm and 100	2

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	mm. All subsurface artefacts were identified in a very brown firm silt with evidence of bioturbation and modern inclusions and sign of heavy plouging. The artefact bearing deposit overlaid a compact greyish brown silty clay overlying a very compact dark brown clay.	
Scarff et al. (2023)	Scarff *et al.* (2023) prepared CHMP 17175 for a proposed construction of a discontinuous pressurised stock and domestic raw water pipeline to rural properties as part of the East Grampians Rural Pipeline Project (EGRPP). The proposed water pipeline, along with associated infrastructure, has a length of approximately 100.45 km, with up to 95,9 km within the Barengi Gadgjin Land Council Registered Aboriginal Party area. The activity area extends from Ararat in the south, to Stawell in the northwest, Landsborough West in the northeast and Crowlands in the east. The activity runs parallel to existing roadways within road reserves and within private properties. A section of the activity intersects with the southern boundary of the Project area along Joel Joel Road and Joel South Road, Crowlands, approximately 2.7 km in length. The pedestrian survey confirmed four landforms; plains, floodplains, slopes and terraces and was completed across 85 per cent of the original activity area, across agricultural and pastoral land, dirt and gravel roads, road reserves and creeklines, with an estimated effective survey coverage of 20 per cent. Approximately 15 per cent of the activity area was unable to be accessed. The lands unable to be accessed were subsequently removed by the Sponsor. Ground surface visibility ranged from zero per cent to 20 – 30 per cent in areas such as agricultural land and road reserves. In areas where surface artefacts were identified, ground surface visibility increased to between 75 – 100 per cent. The results of the pedestrian survey included two surface LDADs: VAHR 7423-0866 (Salt Creek LDAD 3), and VAHR 7523-0401 (Wimmera River LDAD 2); and one culturally modified tree, VAHR 7423-0863 (Pyrenees Highway CMT). Subsurface testing was undertaken in areas identified as containing archaeological potential during the pedestrian survey. Areas of archaeological potential were defined as areas with 200 m of waterways and where surface artefacts were present in densities of 10 or more. Manual excavation of 27 1 m x 1 m test pits (TPs) were placed throughout the activity area. Where Aboriginal cultural heritage was identified during excavation of TPs, radial testing was undertaken by uncontrolled 0.5 m x 0.5 m shovel test pits (STPs) positioned in four cardinal directions, spaced at 5 m intervals until two negative STPs were achieved, or constraints were encountered, or the activity area boundary was reached. Throughout the activity area, 194 STPs were excavated corresponding to TPs positive for Aboriginal cultural heritage. Subsurface profiles overall were generally consistent across the activity area, with silt or silty sand transitioning to a clay base. The depth of the clay base varied between the eastern locations, where it was generally between 200 – 400 mm, and the western locations where it was more variable between 500 – 800 mm. Subsurface cultural materials were identified throughout the entire activity area, with higher concentrations in the east that correspond to shallower stratigraphy. A total of seven subsurface artefact scatters were identified within the activity area, in addition to the two surface artefact LDADs identified during the pedestrian survey which produced a total of 1003 stone artefacts and one hearth. No new Aboriginal Places were identified where the activity area intersects within the current Project area. The seven new Aboriginal Places are VAHR 7423-0857 (Allanvale Creek AS 2), VAHR 7423-0862 (Sandy Creek AS 3), VAHR 7423-0864 (Salt Creek AS 6), VAHR 7423-0398 (Wimmera River AS 5), VAHR 7523-0399 (Wimmera River AS 6), VAHR 7523-0400 (Wimmera River AS 7), VAHR 7423-0866 (Salt Creek LDAD 3), and VAHR 7423-0863 (Pyrenees Highway CMT). Of these Places, VAHR 7423-0857 (Allanvale Creek AS 2) contained the highest density of 490 stone artefacts, consisting of chert, quartz, quartzite and silcrete material in the form of angular fragments, whole and broken flakes and including one silcrete core. The location of the test pit (TP 10) was approximately 190 m southeast of, and 120 m north of Allanvale Creek. Within the test pit, 13 stone artefacts were recovered from a loose grey-brown silt to a depth of 200 mm, and seven stone artefacts were recovered from a clayey silt to a maximum depth of 340 mm where an undulating yellow-red base was reached. A total of 67 radial STPs were excavated to depths to1050 mm through silty clay with some quartz and gravel inclusions. VAHR 7523-0399 (Wimmera River AS 6) is made of two components: stone artefacts and a surface hearth and is located approximately 1.1 km southwest of the current Project area. A total of 76 stone artefacts (quartz fragments and two quartz cores) were recovered in a friable silt context at shallow depths to approximately 300 mm. An	8

Author	Summary	Relevant Area of this report
	associated surface hearth (1.1 m x 1.2 m) was also recorded. The hearth consists of an ashy silt centre surrounded by dense baked red clay pieces with a small dense patch of charcoal at the western edge of the centre.	
Minter Brooke *et al.* (2023)	Minter Brooke et al (2023) prepared CHMP No 19254 to complex assessment level, for the proposed installation of a telecommunications cable from Sulky to Bagshot, Victoria. The activity area has a total length of approximately 112 km, with approximately 1.25 km located within the activity area of CHMP 18101 along Creswick Road. The proposed alignment was located within disturbed areas such as road reserves, agricultural properties, and residential streets, as well as wooded areas not subject to vegetation clearance. The Desktop Assessment identified potential for scarred trees in areas with remnant native vegetation, as well as stone artefact scatters and LDADs across the broader activity area. Elevated landforms and areas close to waterways such as Long Swamp and Loddon River were identified as being likely focal points for Aboriginal occupation. The portion of the activity area intersecting the current Project Land is entirely cleared of native vegetation, intersecting agricultural properties and sealed roads. However, it is partially located within the area of CHS associated with Tourello Creek. No previously registered Aboriginal places were identified within the activity area during the Desktop Assessment. All accessible parts of the activity area were surveyed during Standard Assessment, resulting in the identification of a single stone artefact. An isolated crystal quartz distal flake (VAHR 7724-0476-8) was identified on the ground surface in a ploughed paddock within 200 m of Bullock Creek, approximately 67 km north of the current activity area. This artefact was registered as part of Bullock Creek, Marong LDAD 1 (VAHR 7724-0476), which also includes artefacts identified during Complex Assessment. Ground surface visibility was very poor (<1%) due to sealed surfaces, leaf litter, grass and other vegetation. Archaeological sensitivity was considered to be low across most of the activity area due to prior disturbance associated with land clearance, mining, road and utility construction, as well as industrial and agricultural development. Within the current activity area, potential archaeological sensitivity was considered to be low-moderate. Testing undertaken during Complex Assessment consisted of eighteen 1x1 m test pits, and 112 0.5x0.5 m shovel test pits. Depth of excavation ranged from 90 mm to 1060 mm. Test pits were located in areas of sensitivity across the activity area, however none were located within the current activity area. Testing generally indicated moderate to high disturbance from past and current land use. In total, 11 subsurface artefacts were identified during Complex Assessment, 10 of which were registered as part of Bullock Creek, Marong LDAD 1 (VAHR 7724-0476). Subsurface artefacts within this Aboriginal place comprise silcrete, chert, quartz and crystal quartz artefacts identified between 100 mm and 400 mm depth, located in the vicinity of Bullock Creek and Spring Creek, 67 km north of the current activity area. A single quartz core was identified at 400 mm depth, approximately 44 km north of the current activity area, and was registered as Six Mile Creek, Baringhup LDAD 1 (VAHR 7624-0207). Conditions written as part of CHMP No 19254 included the collection of the surface artefact comprising VAHR 7724-0476-8, and monitoring of ground disturbing works in sensitive areas. Additionally, post-construction survey must be carried out in the vicinity of Bullock Creek, and within areas of low-moderate and moderate potential on the Hamilton property at Glendonald which could not be accessed during Complex Assessment. Therefore, a 400 m linear corridor in the vicinity of CLUNES (VAHR 7623-0005-1) and Tourello Creek within the current activity area will be subject to post-construction survey as part of the conditions of CHMP No 19254.	4
Barber *et al.* (2024)	Barber et al (2024) completed CHMP No 19193 for the installation of a synchronous condenser in Elmhurst, Victoria. The activity area is located approximately 1.3 km north of Elmhurst, partially within the current activity area for CHMP 17312, on the east bank of the Wimmera River in a non-RAP area. The activity area also extends into the boundaries administered by EMAC, outside the current activity area of CHMP 17321. The Desktop Assessment identified potential for quartz artefact scatters and LDADs in the area surrounding the Wimmera River, despite past disturbances caused by farming and grazing across much of the activity area. Additionally, the authors noted potential for scarred trees to be present in sections of the activity area containing remnant native vegetation. One previously registered scarred tree, Elmhurst St 1 (VAHR 7523-0376) was identified within the activity area, located approximately 530 m southwest of the activity area of CHMP 17312. This Aboriginal place was inspected during Standard Assessment, which noted no change in the condition to the place. Standard Assessment also allowed for ground-truthing of the Desktop Assessment.	6

Author	Summary	Relevant Area of this report
	Three areas of archaeological potential were identified within the activity area. One area of potential was located on the floodplain, west of the current activity area. However, two areas of potential were identified within the current activity area, on the elevated flat approximately 300 m east of the Wimmera River. These were located on an existing farm track, and a grassy flat with poor ground surface visibility. Visibility was generally low across the entire activity area. Due to the results of the Standard Assessment, Complex Assessment was required. A total of two 1x1 m test pits and thirty 0.5x0.5 m shovel test pits were excavated during Complex Assessment. Excavations were completed entirely within the three areas of potential identified during Standard Assessment. Quartz artefacts were identified in five pits, located on the floodplain and elevated flat landforms. As a result of the assessment, two Aboriginal places have been registered, both of which are LDADs: ARTS Synchon, Elmhurst (VAHR 7523-0414) located on the elevated flat, and ARTS Synchon LDAD (VAHR 7523-0416) located on the floodplain. The activity was amended to avoid impacts at the location of ARTS Synchon LDAD (VAHR 7523-0416). ARTS Synchon, Elmhurst (7523-0414) was identified at the location of the proposed condenser, necessitating salvage excavations and subsequent reburial of cultural material as per the management conditions of CHMP 19413.	
Sonego and Sexton (2024)	The authors completed CHMP No 19569 to complex assessment level, for the construction of a new terminal station at Sydenham. The works were originally part of the WRL project, covered by CHMP 18111. However, since the Sydenham Terminal Station Rebuild was excluded from the scope of WRL, the proposed works were assessed under CHMP 19569. The activity area is approximately 38.3 hectares in size, and is located entirely within the activity area of CHMP 18111 except for a 670 m corridor along Victoria Road, east of the current activity area. The activity area is located within the existing Sydenham Terminal Station, comprising paddocks, sealed roads and the established terminal station infrastructure. Desktop Assessment identified the area of CHS associated with Taylors Creek located within the activity area had been subject to disturbance from the construction of the terminal station, as well as rubbish and soil dumping. Two previously registered Aboriginal places were identified within the activity area, Holden Road Plumpton 9 (VAHR 7822-4313) and Sydenham Terminal Station LDAD (VAHR 7822-4756), both registered as part of CHMP 18111. Standard Assessment confirmed disturbance in the form of soil deposits across large parts of the activity area, as well as some areas of undisturbed land on the plain. One surface artefact, a quartzite core, was identified during survey, and was subsequently registered as part of the existing Aboriginal place Holden Road Plumpton 9 (VAHR 7822-4313-6). Complex Assessment comprised the excavation of six 1x1 m test pits and twenty-two 0.5x0.5 m shovel test pits in areas of cultural heritage sensitivity, areas with little disturbance, and areas subject to impacts. As a result of the excavations, 11 artefacts of quartz (n=9) and silcrete (n=2) were identified subsurface, between 0 and 200 mm depth. Extent testing was completed around positive pits, but no cultural material was identified during this stage. The stratigraphy of excavated pits indicates that the artefacts are not in situ, due to top soil disturbance. Modern detritus was evident in many pits excavated across the activity area. All 11 artefacts were registered as part of the existing Aboriginal place Sydenham Terminal Station LDAD (VAHR 7822-4756). As per the management conditions of CHMP 19569, cultural material collected during Complex Assessment must be reburied within the activity area after the completion of the activity. During works, the activity area will be demarcated with temporary fencing to prevent accidental impacts outside the activity area.	2
Carr *et al.* (2024)	Rail Projects Victoria proposal to upgrade two rail locations triggered a mandatory CHMP as it will constitute a high impact activity (rail infrastructure) within an area of CHS (200m from waterways and Koo Wee Rup Plain, swamp and lake deposits as defined by the presence of geological unit Qm1). AJM joint venture was engaged to undertake this CHMP (No. 18261). This CHMP was approved in December 2022, but was amended in April 2023 to include an additional temporary access track and laydown area outside of the originally approved Activity Area. A second amendment was prepared in 2024 following further augmentation of the activity area. No Aboriginal cultural material was identified during the amendments or the originally approved CHMP. The Tourello Passing Loop portion of this CHMP intersects with the current CHMP at the train line intersection with Ballarat Maryborough Rd just to the east of Tower F6053DL and this area is of the most relevance to the current CHMP. The Tourello Passing Loop scope of works consists of the construction of 1km of rail adjacent to the existing rail to allow for two broad gauge trains to pass each other between Ballarat and Maryborough.	4

Author	Summary	Relevant Area of this report
	The CHMP18261 investigation included a desktop, standard and complex assessment. Initially, the desktop assessment for this project did not find any previously recorded Aboriginal places within its activity area. However, an updated VAHR search for the second amendment identified two registered Aboriginal Places within the activity area: Maryborough Scarred Tree 1 (VAHR 7623-0238), 36 km north of the CHMP 18101 activity area, and Maryborough Scarred Tree 2 (VAHR 7624-0201), 40 km north of the CHMP 18101 activity area. The standard and complex assessment phases did not identify any new Aboriginal Places within the activity area. The standard assessment included a 100% survey of the 114ha activity area which achieved a 15.8% effective survey coverage. Large sections of the activity were found to be highly disturbed as a result of the construction of the existing, adjacent, rail line. The complex assessment included the excavation of three 1x1m TP and 26 50x50cm STP, disturbance as a result of underground service installation and rail corridor activity were noted in many of the excavations. Following the desktop assessment CHMP18261 made the following predictive statement about the likelihood of cultural material being located in the rail corridor: - There is low potential for intact Aboriginal Places to be present within the rail reserve, due to the previous ground disturbance; - The most common Aboriginal Place in the activity area will be scarred trees, followed by low density artefact distributions and artefact scatters; - There is a moderate potential for identifying scarred trees within the activity area. Scarred trees are common where remnant native vegetation exists. Aerial imagery suggests there are sections of the activity where mature vegetation exists; - There is a moderate potential for low-density artefact distributions and artefact scatters to be present within the activity area outside of the rail reserve. Artefact scatters and low density artefact distributions are most likely to occur on creek flats within 200m of water sources; - The most common raw material type for stone artefacts in the activity area will be quartz; and - The presence of Aboriginal Places within the activity area will be dependent on previous ground disturbance. CHMP18261 conditions of relevance to the current CHMP are: - Protection to ground surface during new access track and laydown installation; this condition allowed the removal of previously imported topsoil but does not allow the removal of natural soil which is to be protected with geofabric under crushed rock. - All other conditions are standard CHMP conditions for Djaara.	
Mullaney *et al.* (2024)	CHMP 16594 (2024) was prepared by Biosis in response to the proposed installation of the Western Outer Ring Main (WORM) pipeline between Plumpton and Diggers Rest. The CHMP was originally prepared in 2022, then amended in 2024 following the augmentation of the activity area. Three components of a previously registered LDAD, VAHR 7822-4185, were present within the activity area. The three components of VAHR 7822-4185 located within the activity area included two quartz angular fragments, and a quartz proximal flake. The standard assessment identified five areas of archaeological potential associated with a stony rise crest (AP1), unploughed secondary rise crest (AP2), lower slope of gentle rise (AP3), unnamed tributary of Stony Hill Creek (AP4), and a small rise (AP5) present throughout the activity area. Disturbance identified within the activity area was associated with the construction of the Sunbury gas pipeline, residential developments, subsurface utilities, as well as ongoing agropastoral land use. Aboriginal cultural heritage in the form of one quartz and two silcrete stone artefacts was identified within the stony rise crest landform and was registered as VAHR 7822-4440. Disturbance associated with these artefacts was rated as moderate, and was associated with basalt rock clearing, ploughing, vehicle tracks and the existing Sunbury gas pipeline. VAHR 7822-4185 was also subject to inspection as part of the standard assessment, however, all components associated with this place had previously been salvaged and no new material was identified. The complex assessment comprised the excavation of 12 test pits, six radial 0.5x0.5 m shovel test pits, and nine auger probes across the five identified areas of archaeological potential. The results of the complex assessment revealed generally shallow silty clays overlying clays typical of the cleared and ploughed volcanic plains soils. Aboriginal cultural heritage was identified in the form of 13 stone artefacts within silty clay deposits between 0 – 100 mm within the small rise landform (AP5), as well as four surface artefacts identified within vehicle tracks within the gentle rise landform (AP3).	2

Author	Summary	Relevant Area of this report
	The four surface artefacts, two of which are located within the CHMP 18111 activity area, were registered as VAHR 7822-4440. The 13 subsurface stone artefacts were registered as an artefact scatter: VAHR 7822-4439, located approximately 1.5 km north of the current activity area. According to the management conditions for VAHR 7822-4440 written during the amendment to CHMP 16594, surface collection of 16 artefacts located within the activity area must take place prior to construction. Twelve of these artefacts are located within the activity area of CHMP 18111. Additionally, surface salvage of VAHR 7822-4439 must occur prior to construction. Further surface salvage and surface collection for VAHR 7822-4439 and VAHR 7822-4440 must also take place during the course of the activity, after replacement of topsoils within the activity area.	

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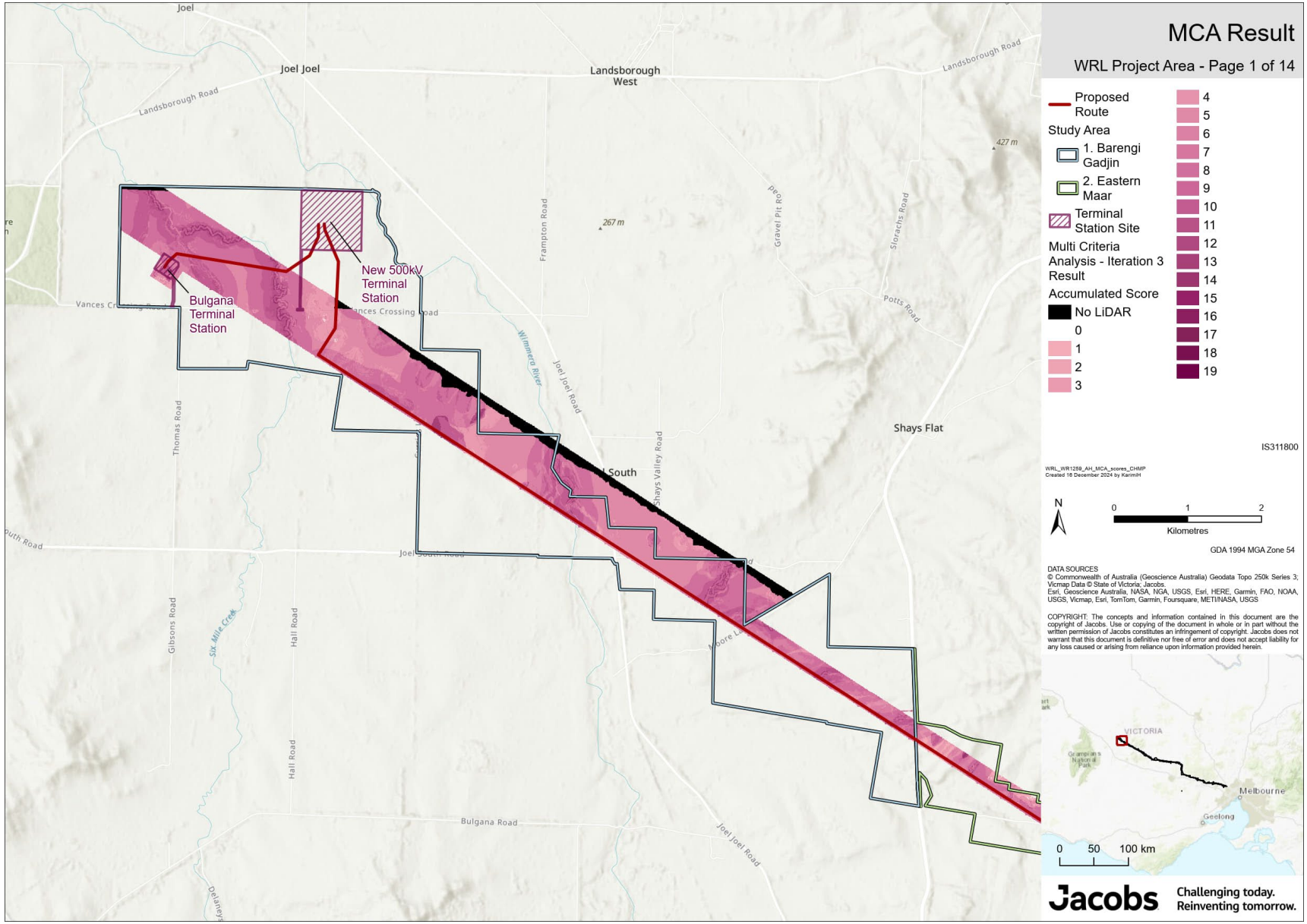
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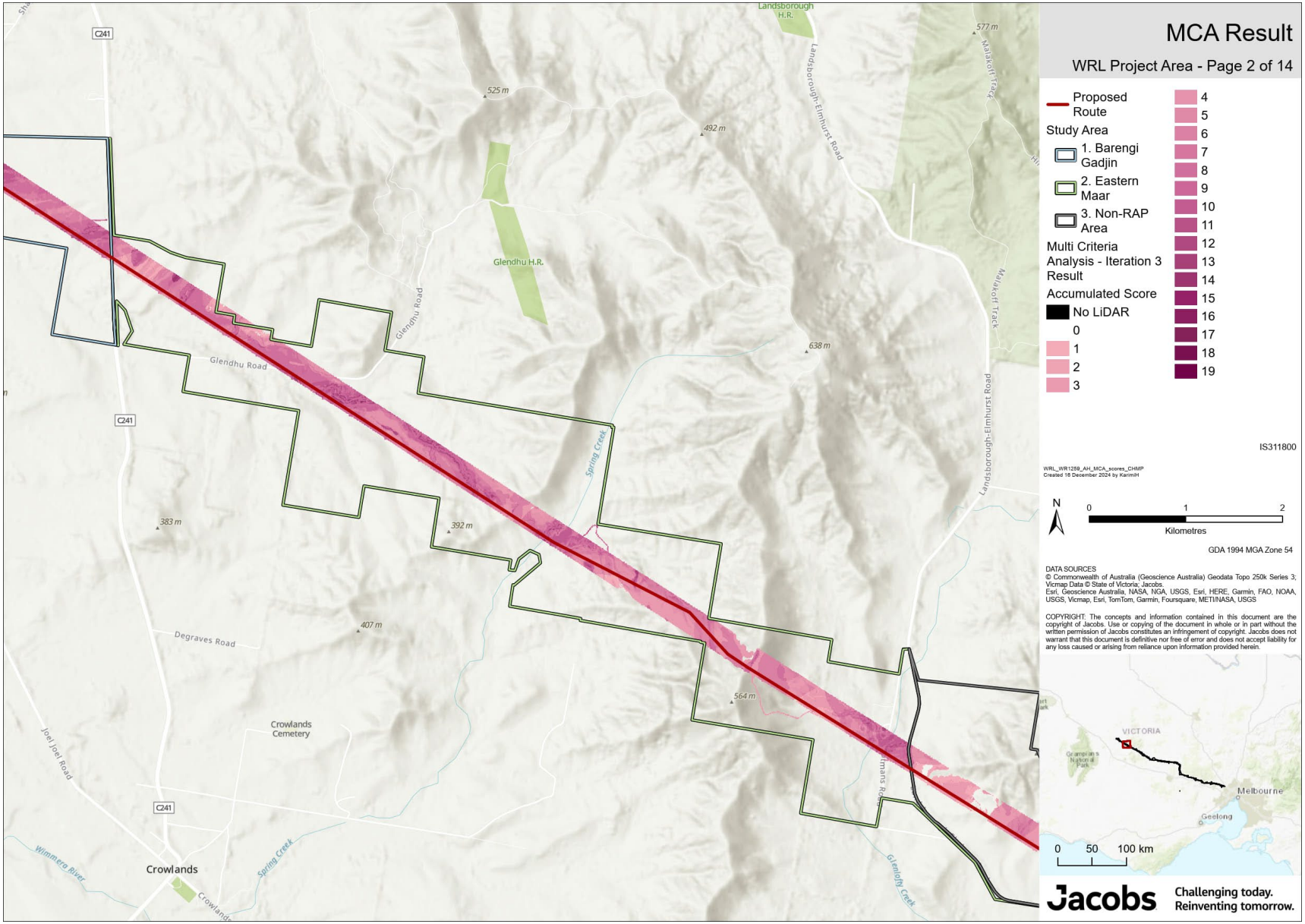
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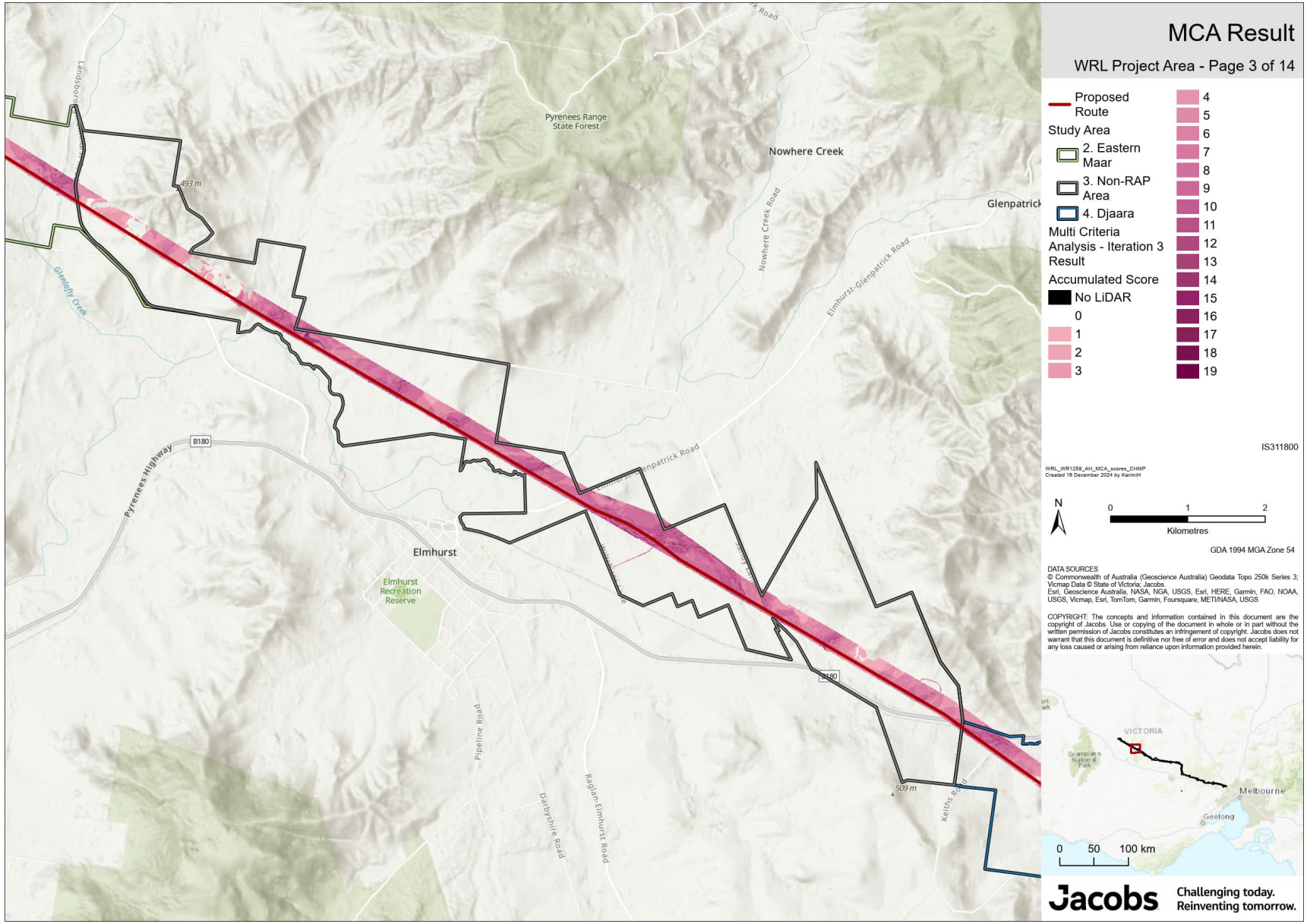
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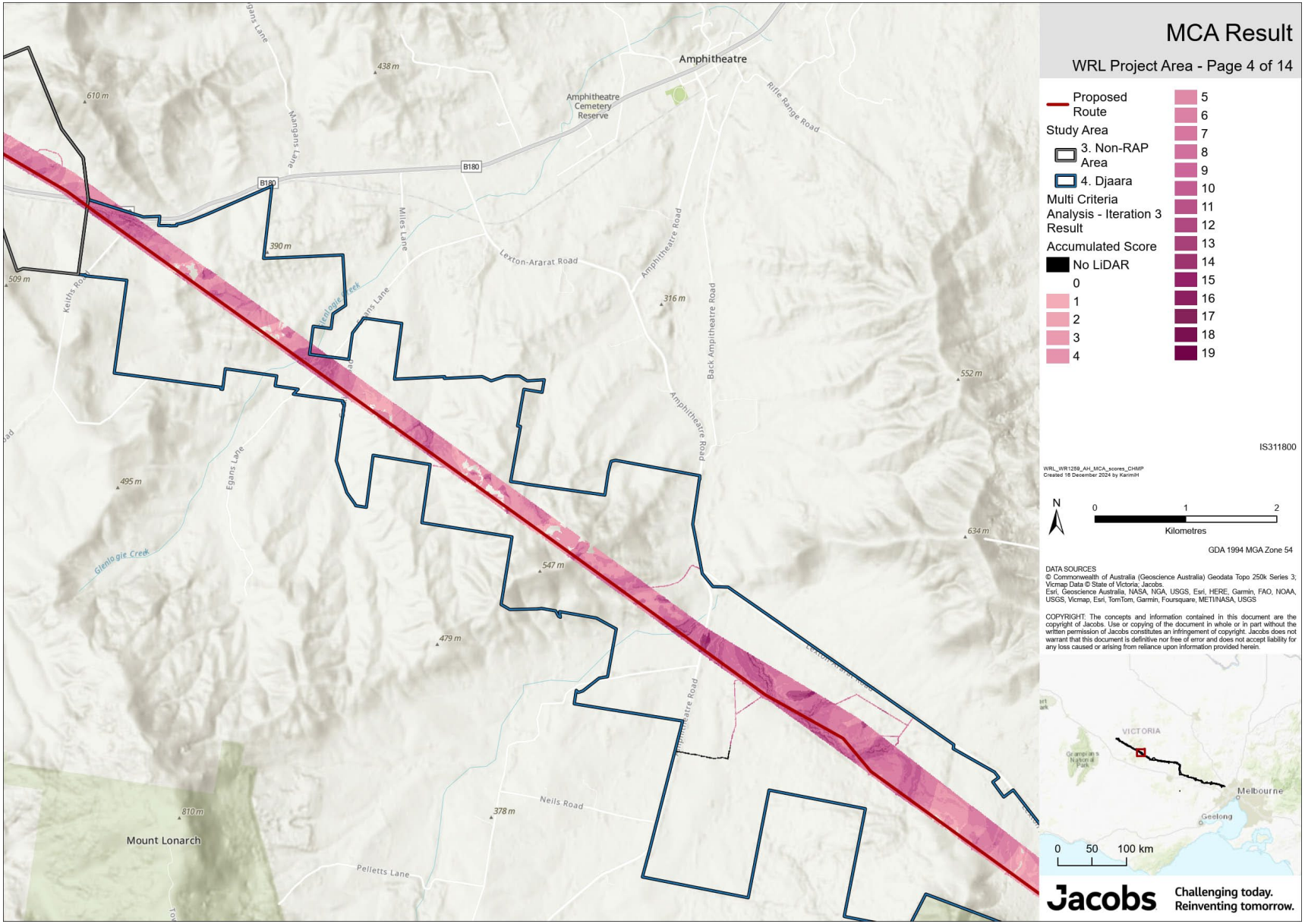
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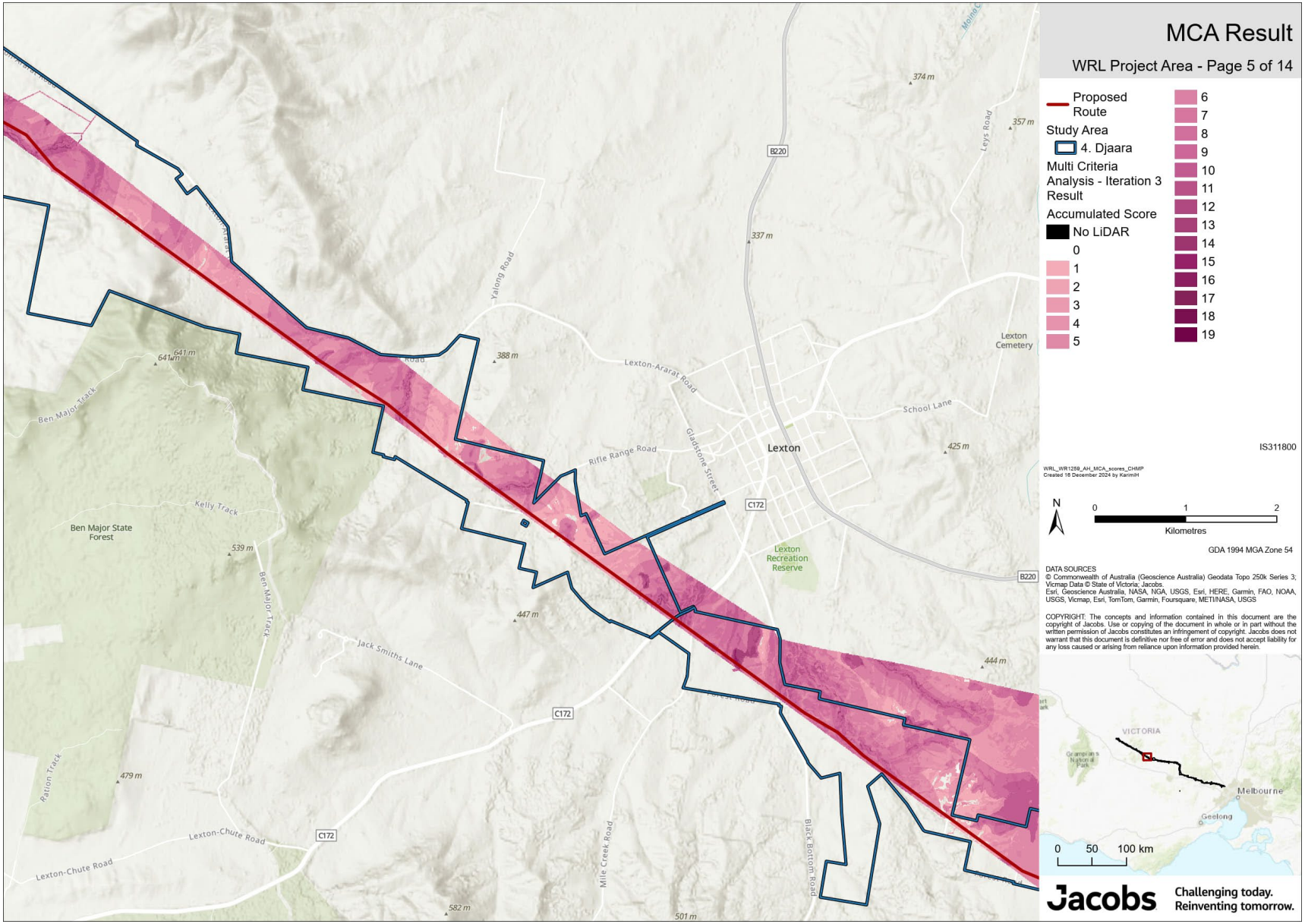
Appendix F. Predictive Model Workbook

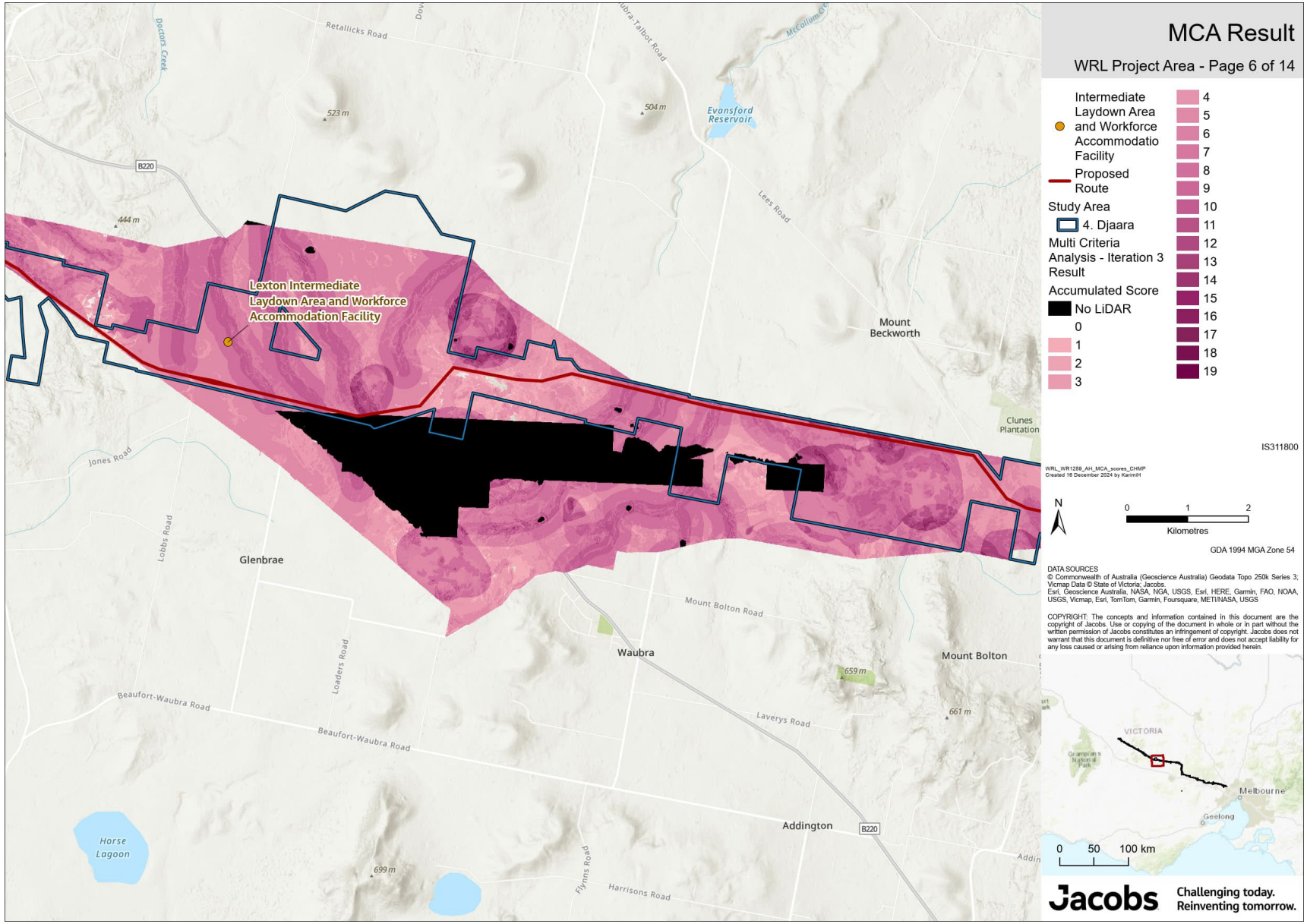

Joel
Joel Joel
Landsborough West
Landsborough Road
Landsborough Road
427 m
267 m
Frampton Road
Gravel Pit Road
Slorachs Road
Potts Road
New 500kV Terminal Station
Bulgana Terminal Station
Vances Crossing Road
Wimmera River
Joel Joel Road
Thomas Road
Shays Valley Road
Shays Flat
South
Joel South Road
Gibsons Road
Six Mile Creek
Hall Road
Hall Road
Bulgana Road
Joel Joel Road
Delaneys
MCA Result
WRL Project Area - Page 1 of 14
Proposed Route
Study Area
1. Barengi Gadjin
2. Eastern Maar
Terminal Station Site
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
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1
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WRL_IVR1259_AH_MCA_scores_CHMP
Created 16 December 2024 by KarimiH
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Kilometres
GDA 1994 MGA Zone 54
DATA SOURCES
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VICTORIA
Melbourne
Geelong
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Challenging today.
Reinventing tomorrow.

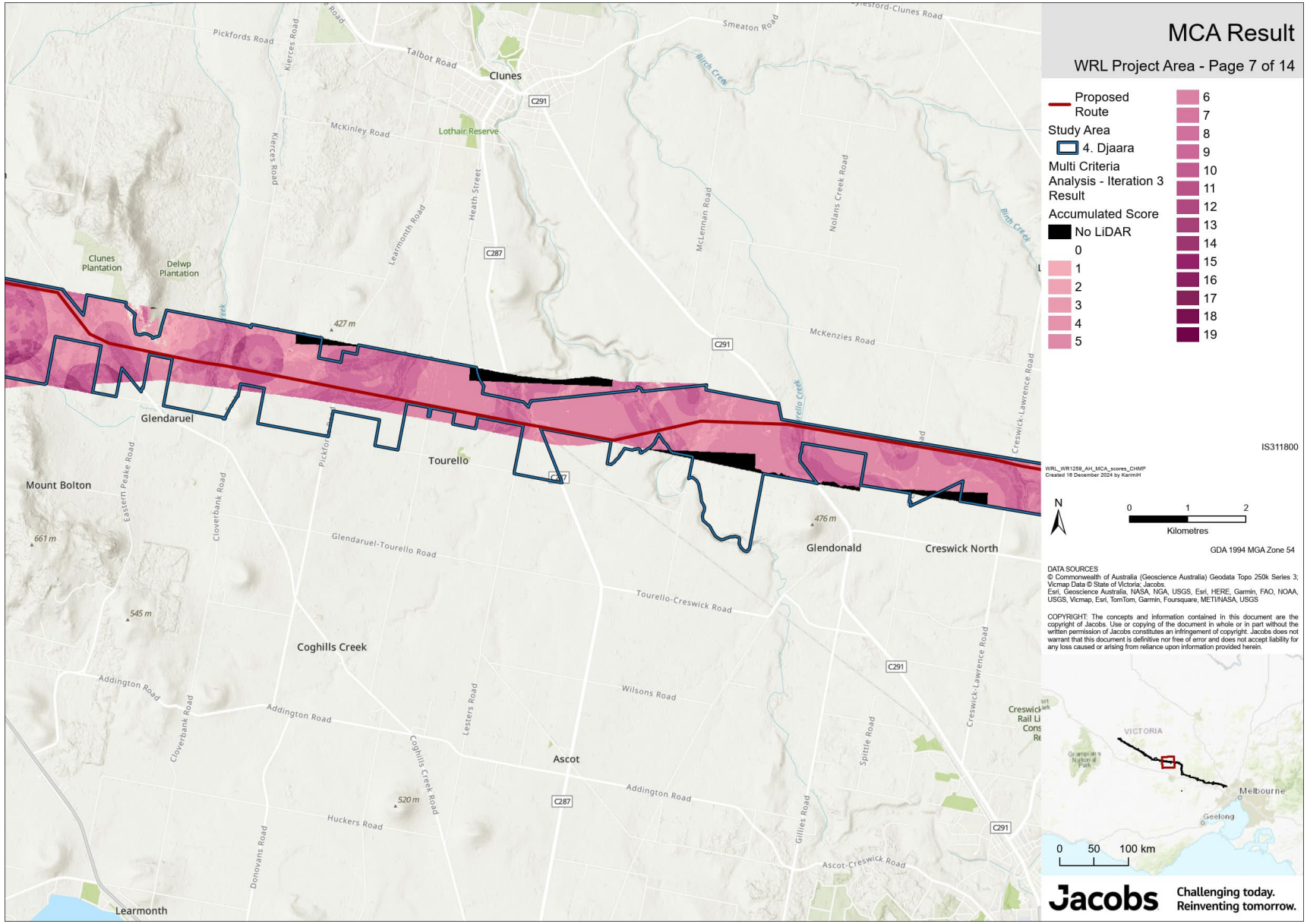

MCA Result
WRL Project Area - Page 2 of 14
Proposed Route
Study Area
1. Barengi Gadjin
2. Eastern Maar
3. Non-RAP Area
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
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IS311800
WRL_WR1259_AH_MCA_scores_CIMP
Created 16 December 2024 by KarimiH
N
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Kilometres
GDA 1994 MGA Zone 54
DATA SOURCES
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VICTORIA
Melbourne
Geelong
0
50
100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Landsborough H.R.
Glendhu H.R.
Glendhu Road
Landsborough-Elmhurst Road
Malakoff Track
Degraves Road
Crowlands Cemetery
Joel Joel Road
Crowlands
Wimmera River
Spring Creek
Glenlofty Creek
C241
525 m
492 m
577 m
638 m
383 m
392 m
407 m
564 m

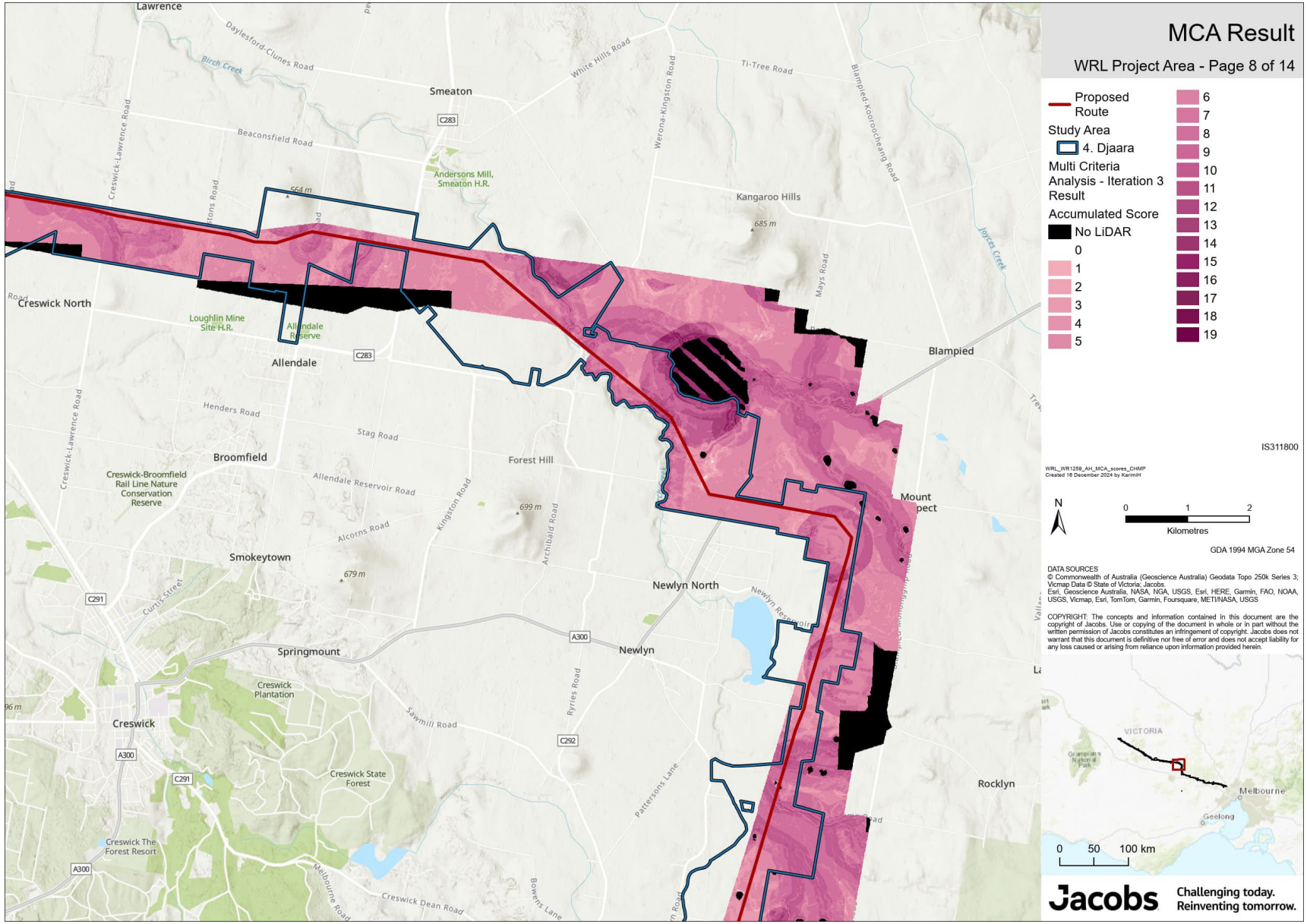

MCA Result
WRL Project Area - Page 3 of 14
Proposed Route
Study Area
2. Eastern Maar
3. Non-RAP Area
4. Djaara
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
IS311800
WRL_IVR1259_AH_MCA_scores_CHMP
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N
0
1
2
Kilometres
GDA 1994 MGA Zone 54
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VICTORIA
Melbourne
Geelong
0
50
100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Pyrenees Range State Forest
Nowhere Creek
Glenpatrick
Nowhere Creek Road
Elmhurst-Glenpatrick Road
Glenlofty Creek
493 m
B180
Pyrenees Highway
Elmhurst
Elmhurst Recreation Reserve
Pipeline Road
Dalbyshire Road
Raglan-Elmhurst Road
509 m
Keiths Road

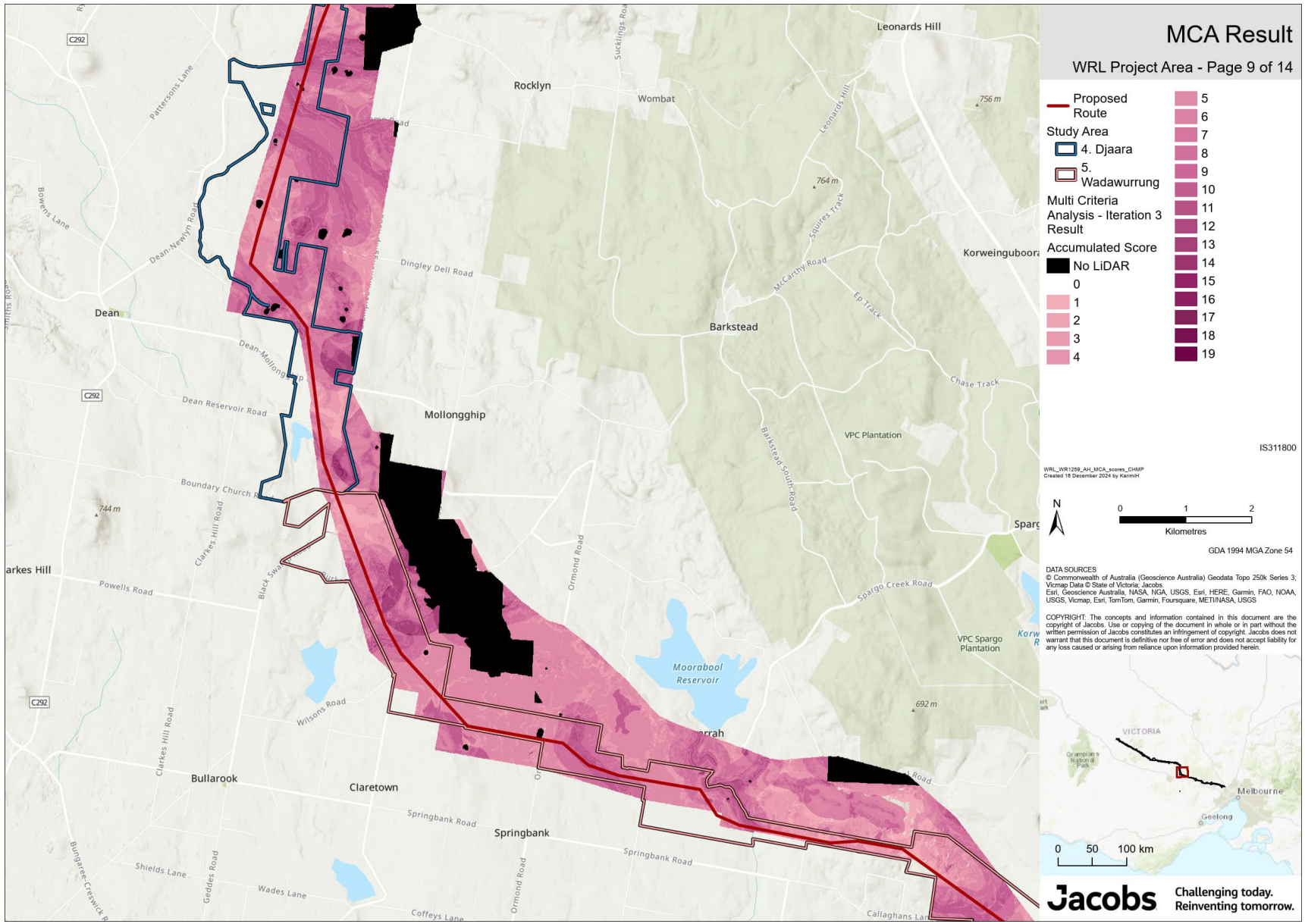

MCA Result
WRL Project Area - Page 4 of 14
Proposed Route
Study Area
3. Non-RAP Area
4. Djaara
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
IS311800
WRL_WR1259_AH_MCA_scores_CHMP
Created 16 December 2024 by KarimiH
N
0
1
2
Kilometres
GDA 1994 MGA Zone 54
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VICTORIA
Melbourne
Geelong
0
50
100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Amphitheatre
Amphitheatre Cemetery Reserve
Rifle Range Road
Mangans Lane
B180
Miles Lane
Lexton-Ararat Road
Amphitheatre Road
Back Amphitheatre Road
Keiths Road
Egans Lane
Glenlogie Creek
Neils Road
Pelletts Lane
Mount Lonarch
438 m
610 m
390 m
509 m
316 m
552 m
495 m
634 m
547 m
479 m
810 m
378 m

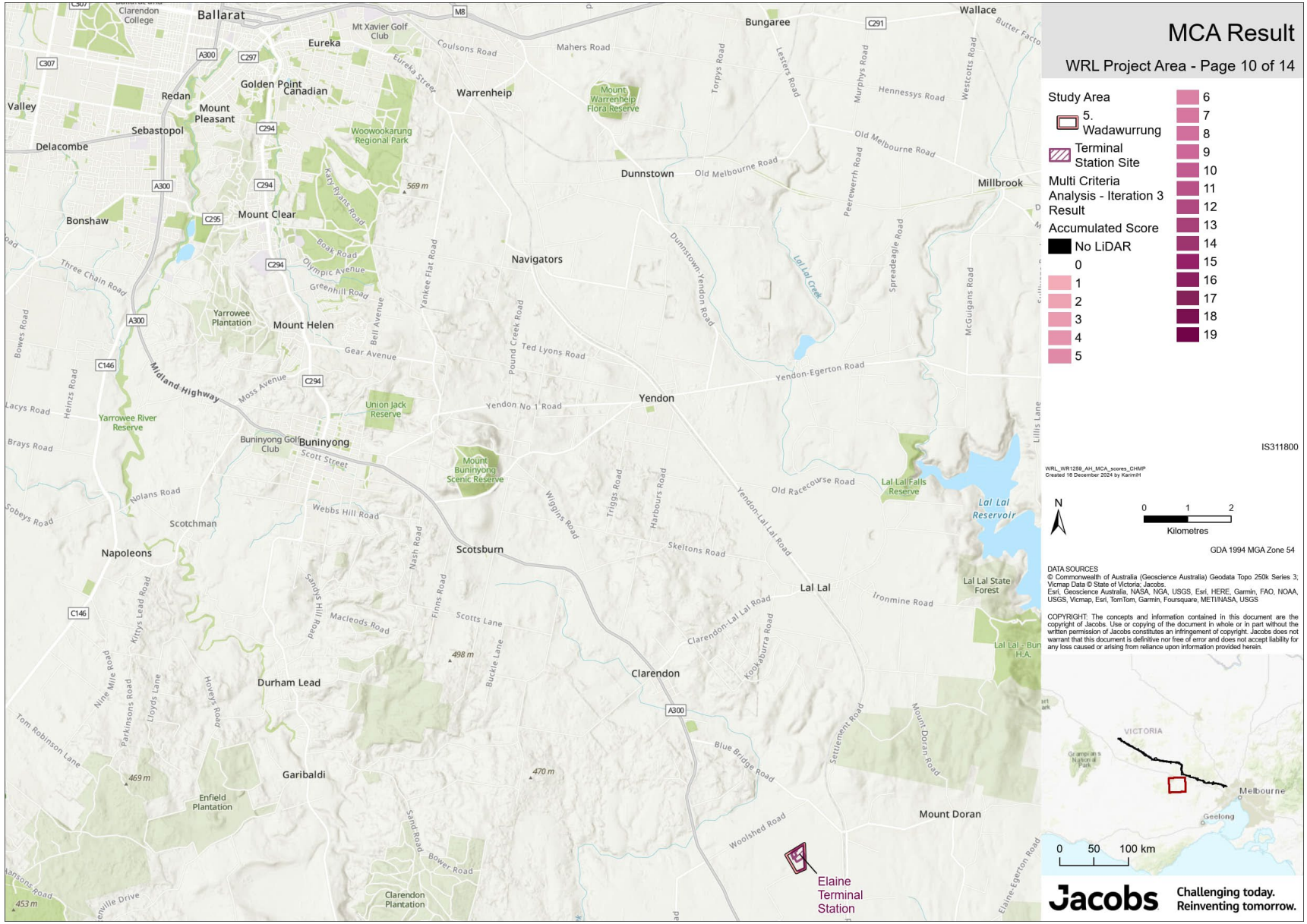

MCA Result
WRL Project Area - Page 5 of 14
Proposed Route
Study Area
4. Djaara
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
IS311800
WRL_IVR1259_AH_MCA_scores_CHMP
Created 16 December 2024 by KarimiH
N
0
1
2
Kilometres
GDA 1994 MGA Zone 54
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VICTORIA
Melbourne
Geelong
0
50
100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Lexton
Lexton Cemetery
Lexton Recreation Reserve
Ben Major State Forest
Ben Major Track
Kelly Track
Rifle Range Road
Gladstone Street
School Lane
Lexton-Ararat Road
Yalong Road
Leys Road
Jack Smiths Lane
Lexton-Chute Road
Mile Creek Road
Black Bottom Road
Ration Track
B220
C172
374 m
357 m
337 m
388 m
641 m
539 m
447 m
425 m
444 m
479 m
582 m
501 m

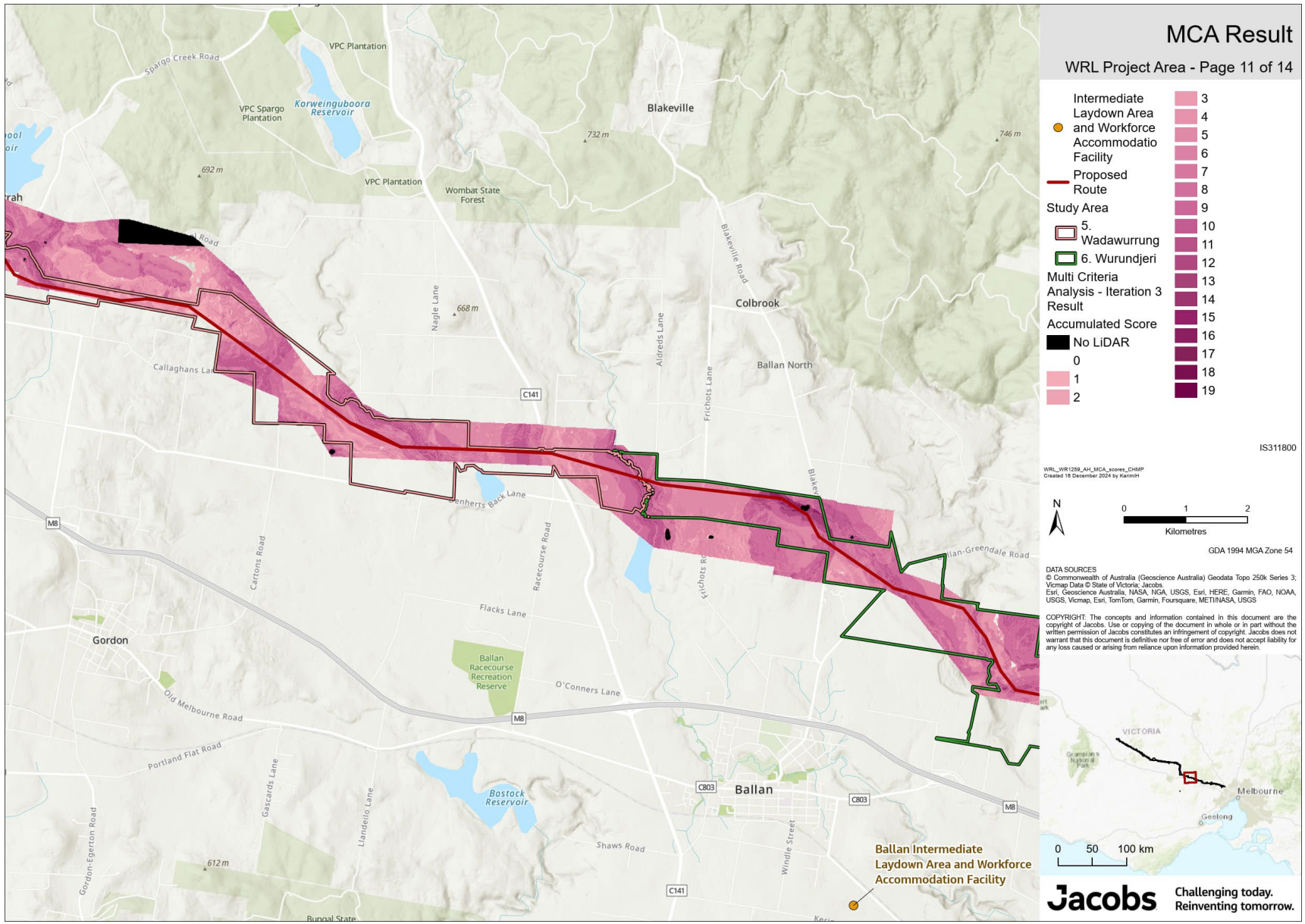

MCA Result
WRL Project Area - Page 6 of 14
Intermediate Laydown Area and Workforce Accommodatio Facility
Proposed Route
Study Area
4. Djaara
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
IS311800
WRL_WR1259_AH_MCA_scores_CIMP
Created 16 December 2024 by KarimiH
N
0
1
2
Kilometres
GDA 1994 MGA Zone 54
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VICTORIA
Melbourne
Geelong
0
50
100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Lexton Intermediate Laydown Area and Workforce Accommodation Facility
Retallicks Road
Doctors Creek
523 m
504 m
Evansford Reservoir
Lees Road
B220
444 m
Mount Beckworth
Clunes Plantation
Jones Road
Lobbs Road
Glenbrae
Mount Bolton Road
Waubra
Mount Bolton
659 m
661 m
Loaders Road
Beaufort-Waubra Road
Laverys Road
Addington
Horse Lagoon
699 m
Flynns Road
Harrisons Road

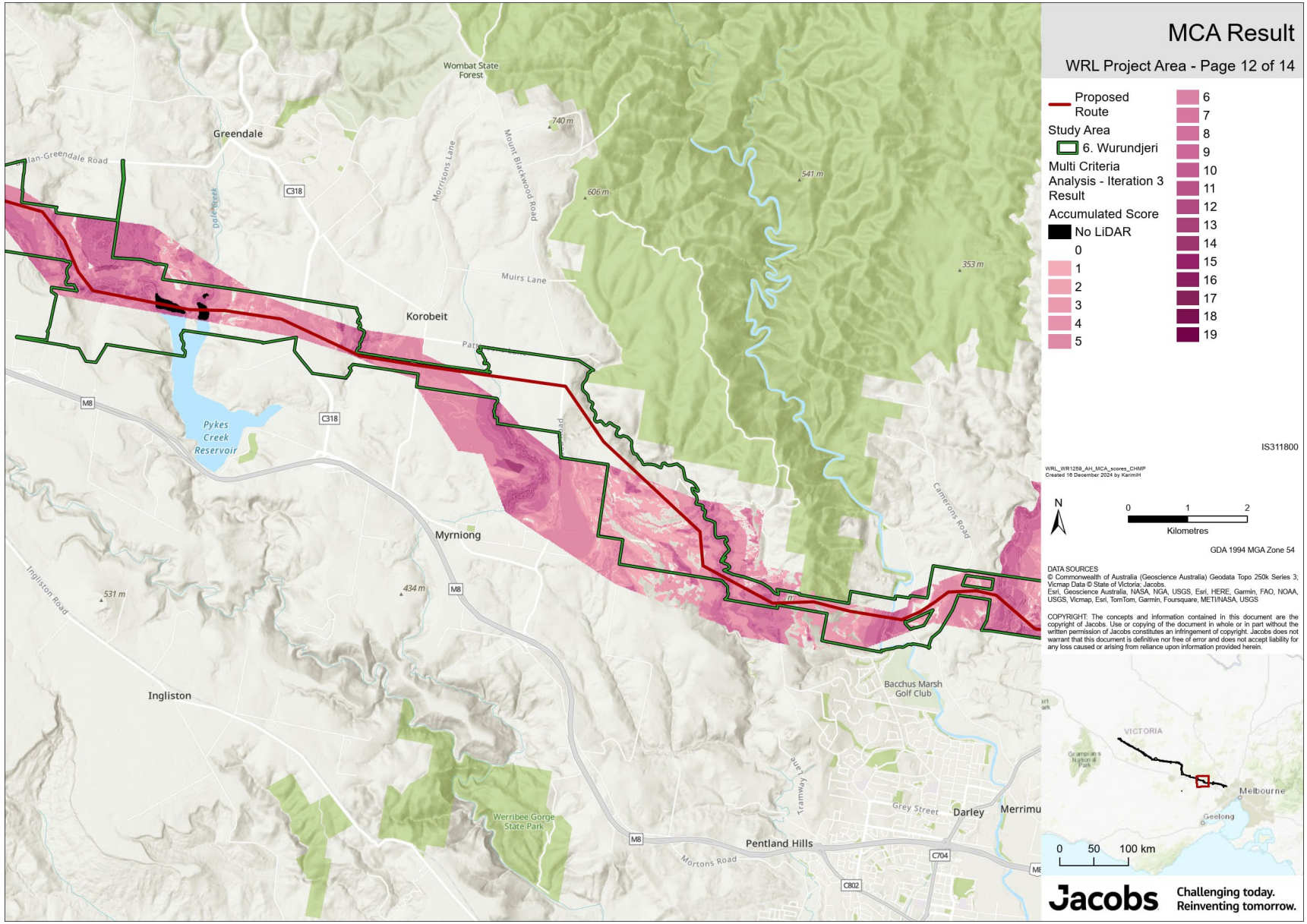

MCA Result
WRL Project Area - Page 7 of 14
Proposed Route
Study Area
4. Djaara
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
IS311800
WRL_WR1259_AH_MCA_scores_CIMP
Created 16 December 2024 by KarimiH
N
0
1
2
Kilometres
GDA 1994 MGA Zone 54
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VICTORIA
Melbourne
Geelong
0
50
100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Clunes
Lothair Reserve
Glendaruel
Tourello
Mount Bolton
Glendonald
Creswick North
Coghills Creek
Ascot
Learmonth
Pickfords Road
Talbot Road
McKinley Road
Heath Street
Learmonth Road
McKenzies Road
Nolans Creek Road
Creswick-Lawrence Road
Glendaruel-Tourello Road
Tourello-Creswick Road
Wilsons Road
Addington Road
Huckers Road
Ascot-Creswick Road
Eastern Peake Road
Cloverbank Road
Lesters Road
Coghills Creek Road
Donovans Road
Spittle Road
Gillies Road
Clunes Plantation
Delwp Plantation
427 m
476 m
661 m
545 m
520 m
C291
C287
C27

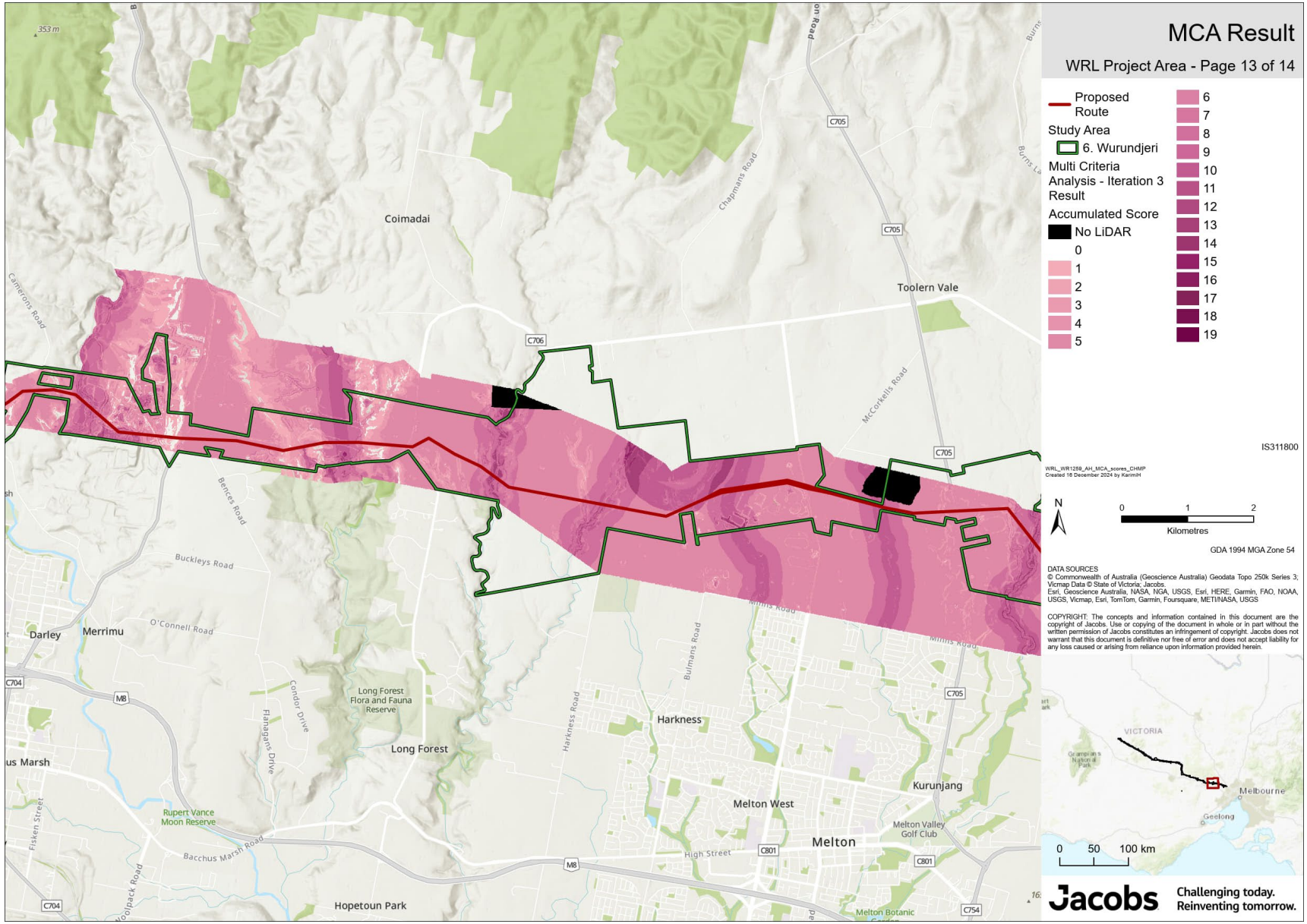

MCA Result
WRL Project Area - Page 8 of 14
Proposed Route
Study Area
4. Djaara
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
IS311800
WRL_WR1259_AH_MCA_scores_CIMP
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N
0
1
2
Kilometres
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VICTORIA
Melbourne
Geelong
0
50
100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Lawrence
Daylesford-Clunes Road
Birch Creek
Smeaton
White Hills Road
Ti-Tree Road
Beaconsfield Road
Creswick-Lawrence Road
Werona-Kingston Road
Blampied-Kooroocheang Road
Andersons Mill, Smeaton H.R.
564 m
Kangaroo Hills
685 m
Joyces Creek
Mays Road
Creswick North
Loughlin Mine Site H.R.
Allendale Reserve
Allendale
Blampied
Henders Road
Stag Road
Broomfield
Creswick-Broomfield Rail Line Nature Conservation Reserve
Forest Hill
Allendale Reservoir Road
Kingston Road
699 m
Archibald Road
Mount
Alcorns Road
Smokeytown
679 m
Curtis Street
Newlyn North
Springmount
Newlyn
Creswick Plantation
Ryries Road
Sawmill Road
Creswick
Creswick State Forest
Pattersons Lane
Rocklyn
Creswick The Forest Resort
Melbourne Road
Creswick Dean Road
Bowens Lane
C283
C291
C292
A300

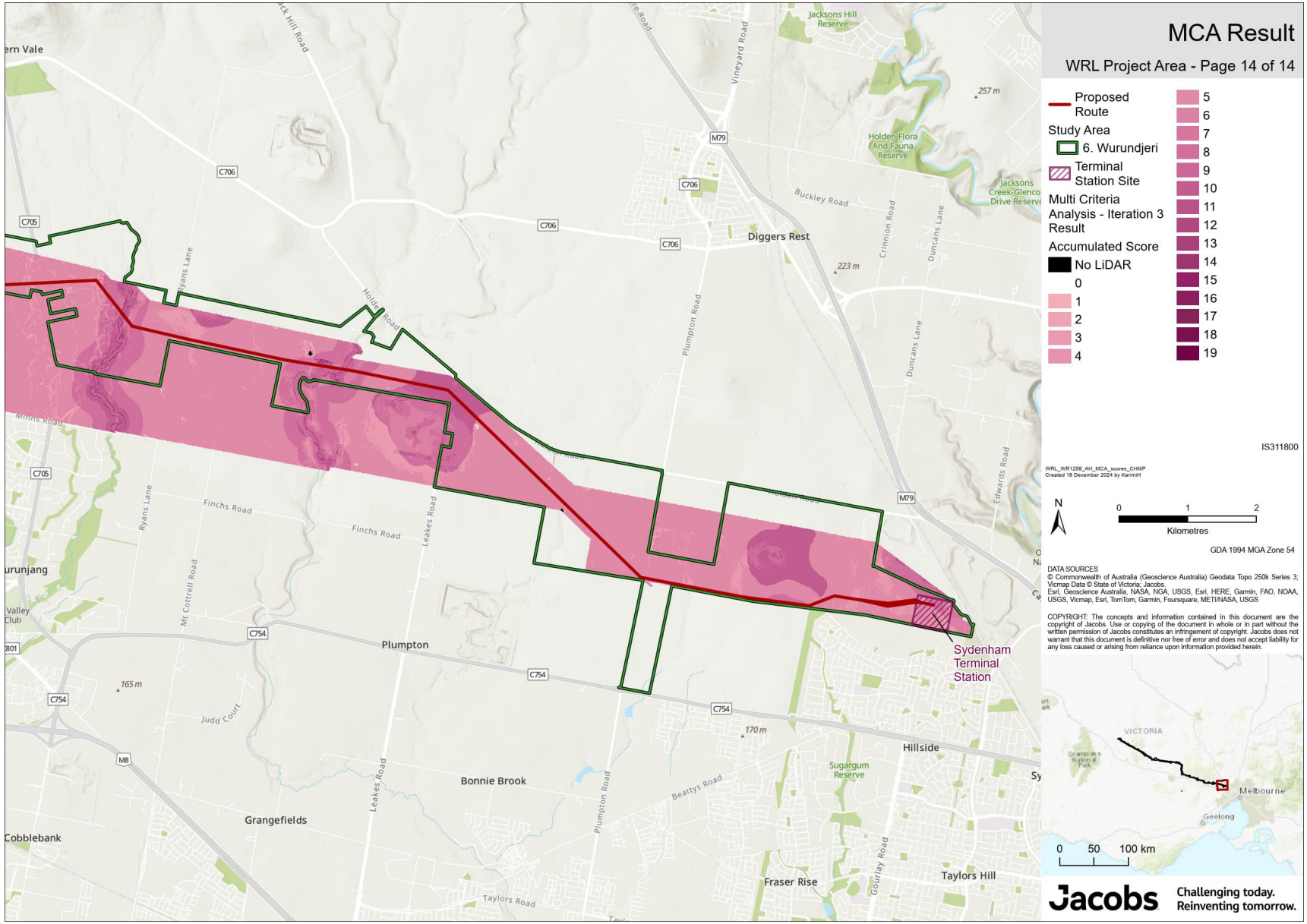

MCA Result
WRL Project Area - Page 9 of 14
Proposed Route
Study Area
4. Djaara
5. Wadawurrung
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
IS311800
WRL_IVR1259_AH_MCA_scores_CHMP
Created 16 December 2024 by KarimiH
N
0 1 2
Kilometres
GDA 1994 MGA Zone 54
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VICTORIA
Melbourne
Geelong
0 50 100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Leonards Hill
Rocklyn
Wombat
Korweinguboora
Barkstead
Mollongghip
VPC Plantation
VPC Spargo Plantation
Moorabool Reservoir
Dean
Bullarook
Claretown
Springbank
Dingley Dell Road
Dean Reservoir Road
Powells Road
Wilsons Road
Springbank Road
Spargo Creek Road
Barkstead South Road
Ormond Road
Clarkes Hill Road
Shields Lane
Wades Lane
Coffeys Lane
Callaghans Lane
McCarthy Road
Squires Track
Ep Track
Chase Track
Leonards Hill
Patersons Lane
Bowens Lane
Dean-Newlyn Road
Dean-Mollongghip Road
Boundary Church Road
Black Swamp Road
Geddes Road
Bungaree-Creswick Road
C292
744 m
764 m
756 m
692 m

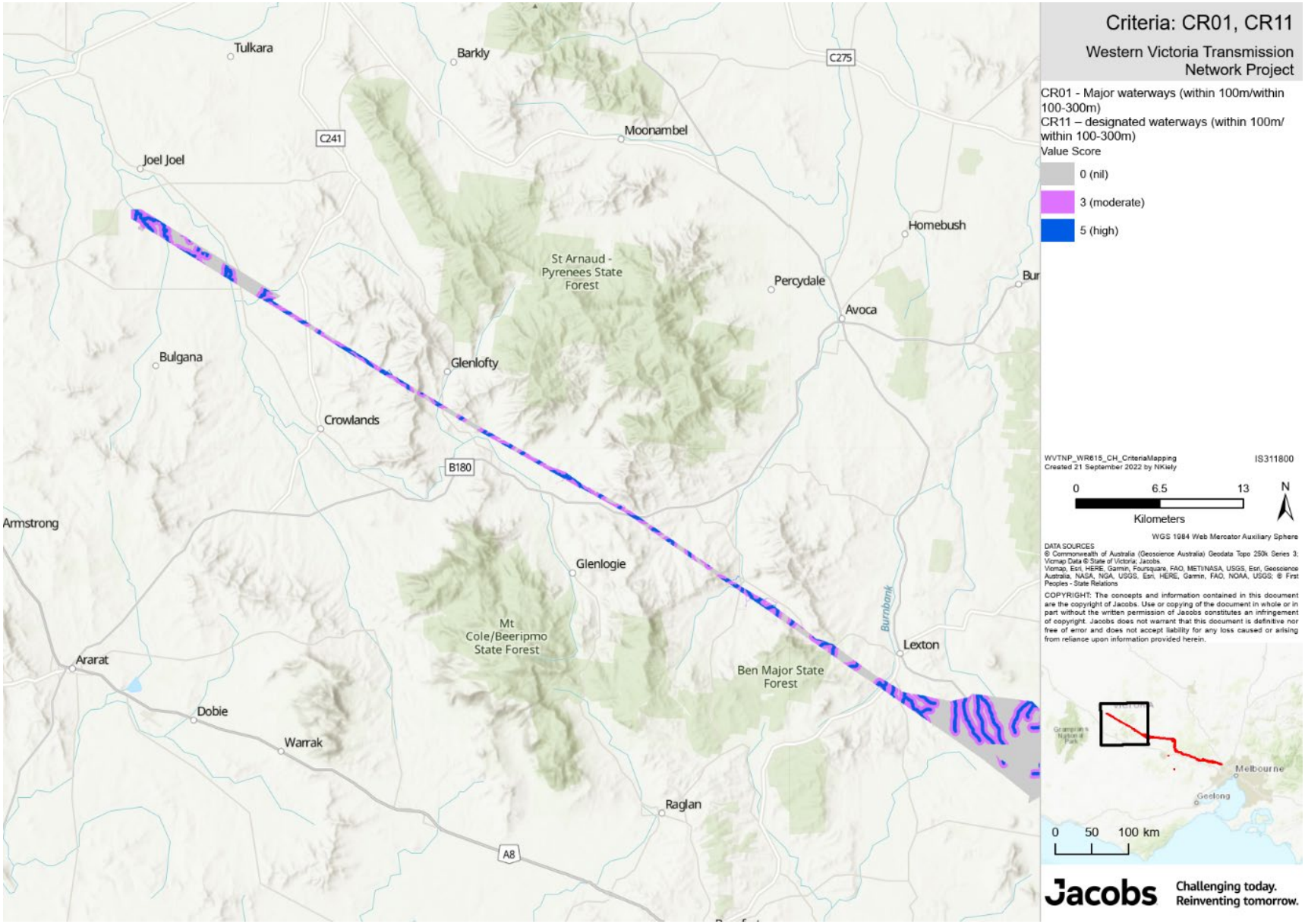

MCA Result
WRL Project Area - Page 10 of 14
Study Area
5. Wadawurrung
Terminal Station Site
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
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14
15
16
17
18
19
IS311800
WRL_IVR1259_AH_MCA_scores_CHMP
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N
0 1 2
Kilometres
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VICTORIA
Melbourne
Geelong
0 50 100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Ballarat
Eureka
Warrenheip
Bungaree
Wallace
Millbrook
Dunnstown
Navigators
Yendon
Buninyong
Mount Helen
Mount Clear
Bonshaw
Sebastopol
Delacombe
Redan
Golden Point
Canadian
Mount Pleasant
Valley
Scotsburn
Lal Lal
Clarendon
Durham Lead
Garibaldi
Napoleons
Scotchman
Mount Doran
Elaine Terminal Station
Midland Highway
Yendon-Egerton Road
Ted Lyons Road
Old Melbourne Road
Hennessys Road
Webbs Hill Road
Skeltons Road
Ironmine Road
Blue Bridge Road
Woolshed Road
Scott Street
Yendon No 1 Road
Old Racecourse Road
Yendon-Lal Lal Road
Clarendon-Lal Lal Road
Lal Lal Reservoir
Lal Lal State Forest
Lal Lal Falls Reserve
Mount Buninyong Scenic Reserve
Union Jack Reserve
Yarrowee River Reserve
Yarrowee Plantation
Woowookarung Regional Park
Mount Warrenheip Flora Reserve
Enfield Plantation
Clarendon Plantation
Lal Lal Creek
Coulsons Road
Mahers Road
Torpys Road
Lesters Road
Murphys Road
Westcotts Road
Peerewerrh Road
Spreadeagle Road
McGuigans Road
Dunnstown-Yendon Road
Yankee Flat Road
Pound Creek Road
Bell Avenue
Gear Avenue
Moss Avenue
Olympic Avenue
Greenhill Road
Boak Road
Mary Ryans Road
Three Chain Road
Bowes Road
Heinz Road
Lacys Road
Brays Road
Nolans Road
Sobeys Road
Kittys Lead Road
Nine Mile Road
Parkinsons Road
Lloyds Lane
Tom Robinson Lane
Macleods Road
Scotts Lane
Finns Road
Nash Road
Sandys Hill Road
Buckie Lane
Hovells Road
Sand Road
Bower Road
Settlement Road
Mount Doran Road
Kopkabarra Road
Wiggins Road
Triggs Road
Harbours Road
Lillis Lane
Elaine-Egerton Road
Butter Factory
469 m
470 m
498 m
569 m
453 m

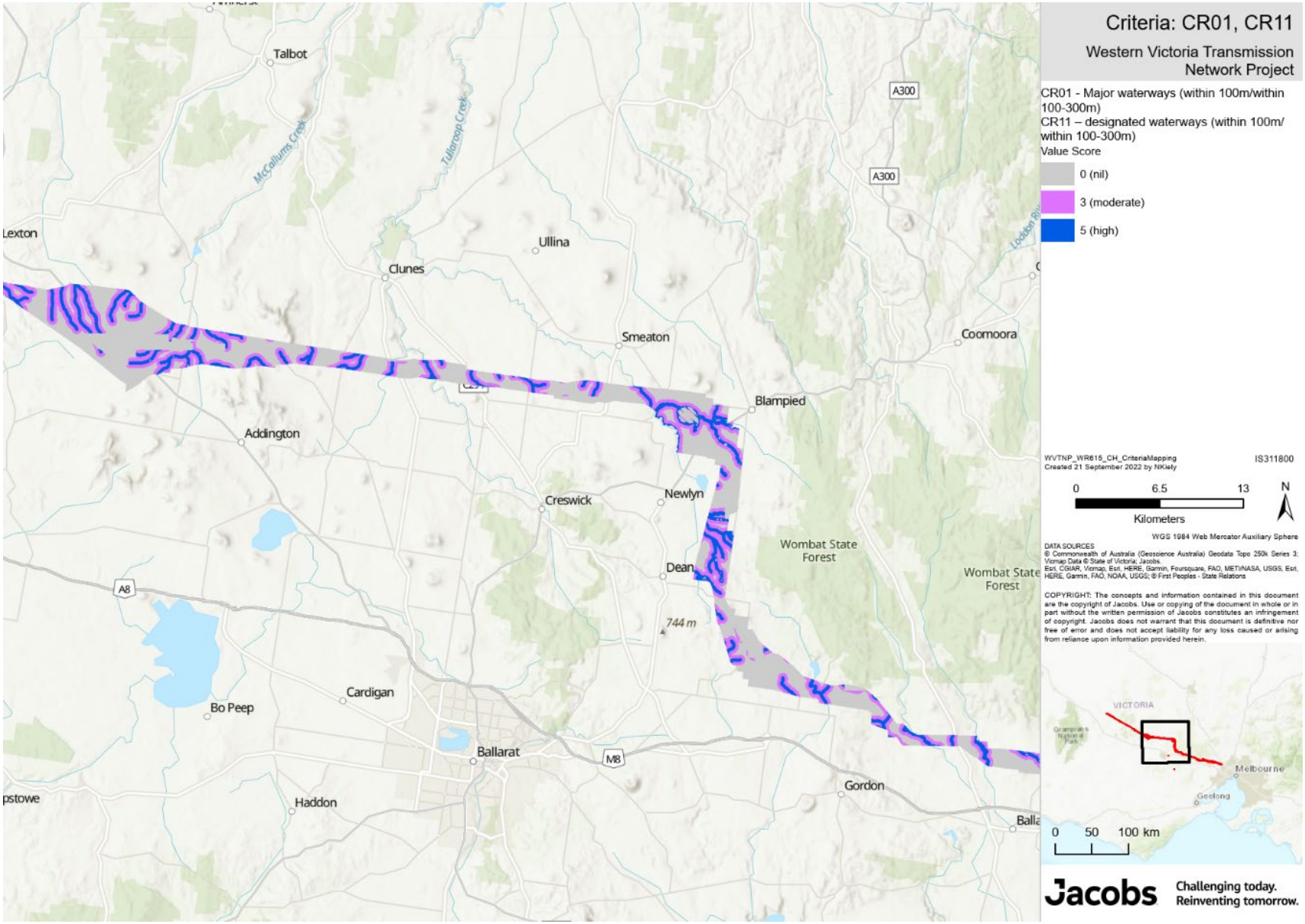

MCA Result
WRL Project Area - Page 11 of 14
Intermediate Laydown Area and Workforce Accommodatio Facility
Proposed Route
Study Area
5. Wadawurrung
6. Wurundjeri
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
7
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9
10
11
12
13
14
15
16
17
18
19
IS311800
WRL_IVR1259_AH_MCA_scores_CIMP
Created 16 December 2024 by KarimiH
N
0
1
2
Kilometres
GDA 1994 MGA Zone 54
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VICTORIA
Melbourne
Geelong
0
50
100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Ballan Intermediate Laydown Area and Workforce Accommodation Facility
Spargo Creek Road
VPC Plantation
VPC Spargo Plantation
Korweinguboora Reservoir
Blakeville
732 m
746 m
692 m
Wombat State Forest
Blakeville Road
Colbrook
Nagle Lane
668 m
Aidreds Lane
Frichots Lane
Ballan North
Callaghans Lane
C141
Benherts Back Lane
M8
Cartons Road
Racecourse Road
Flacks Lane
Gordon
Ballan Racecourse Recreation Reserve
O'Conners Lane
Old Melbourne Road
Portland Flat Road
Gascards Lane
Llandeilo Lane
Bostock Reservoir
C803
Ballan
Shaws Road
Windle Street
Gordon-Egerton Road
612 m
Bungal State

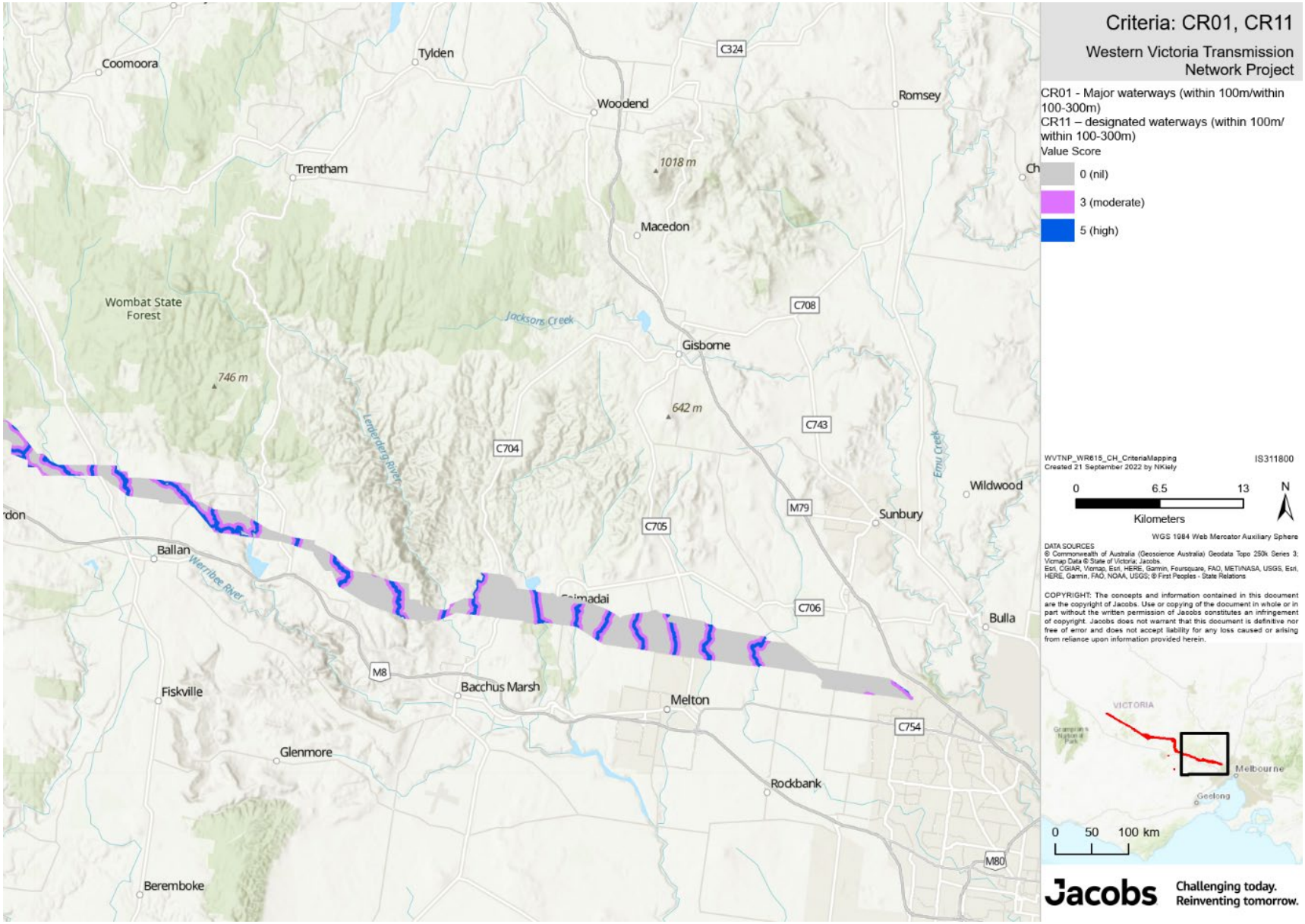

MCA Result
WRL Project Area - Page 12 of 14
Proposed Route
Study Area
6. Wurundjeri
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
IS311800
WRL_WR1259_AH_MCA_scores_CHMP
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N
0
1
2
Kilometres
GDA 1994 MGA Zone 54
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VICTORIA
Melbourne
Geelong
0
50
100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Wombat State Forest
Greendale
Korobeit
Myrniong
Ingliston
Pykes Creek Reservoir
Werribee Gorge State Park
Bacchus Marsh Golf Club
Darley
Merrimu
Pentland Hills
Grey Street
Mortons Road
Cameron Road
Muirs Lane
Morrisons Lane
Mount Blackwood Road
Ingliston Road
Tramway Lane
C318
C704
C802
M8
740 m
606 m
541 m
353 m
531 m
434 m

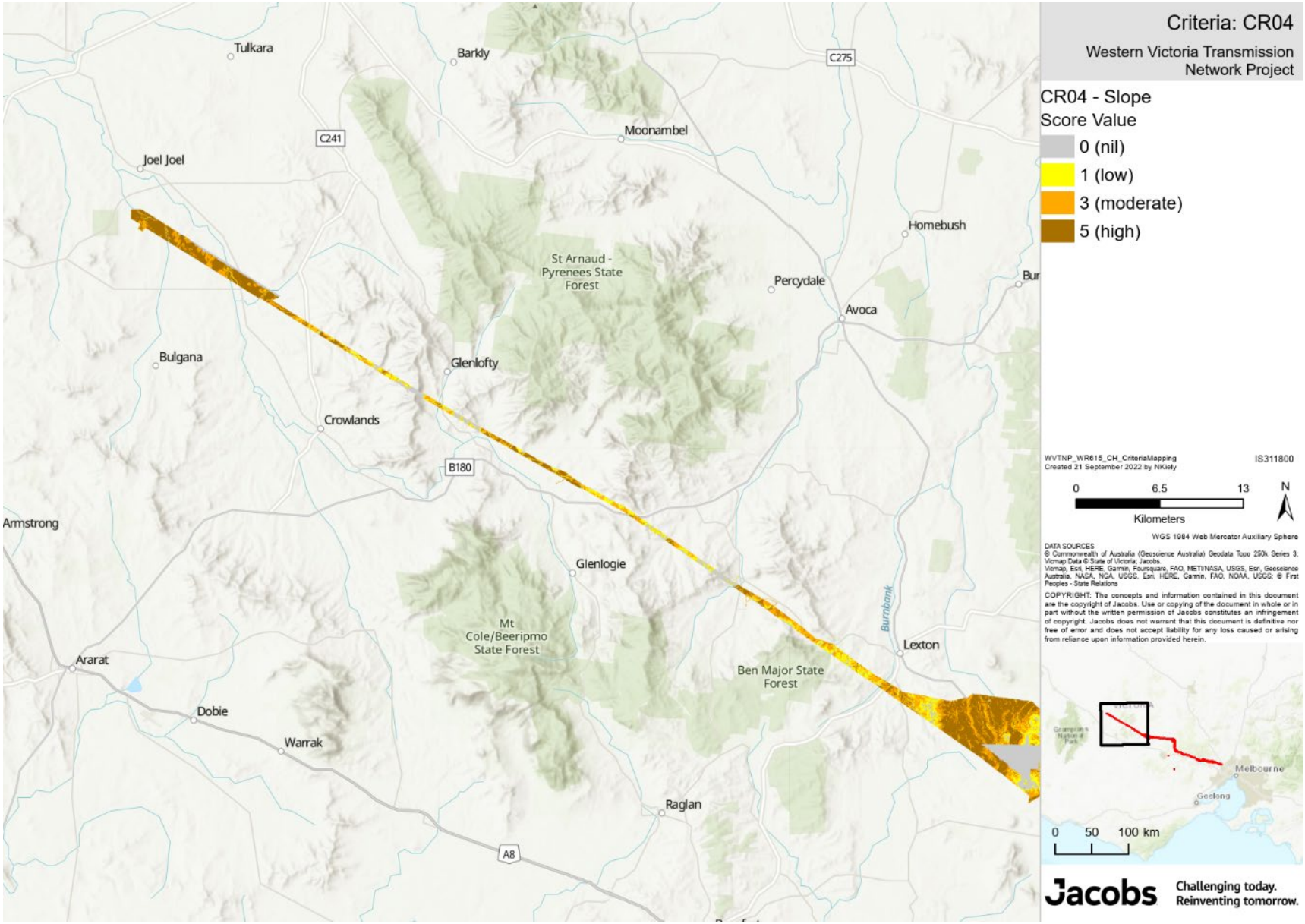

MCA Result
WRL Project Area - Page 13 of 14
Proposed Route
Study Area
6. Wurundjeri
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
IS311800
WRL_WR1259_AH_MCA_scores_CIMIP
Created 16 December 2024 by KarimiH
N
0
1
2
Kilometres
GDA 1994 MGA Zone 54
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VICTORIA
Melbourne
Geelong
0
50
100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Coimadai
Toolern Vale
Darley
Merrimu
Long Forest
Harkness
Kurunjang
Melton West
Melton
Hopetoun Park
Long Forest Flora and Fauna Reserve
Rupert Vance Moon Reserve
Melton Valley Golf Club
Melton Botanic
Chapmans Road
McCorkells Road
Bences Road
Buckleys Road
O'Connell Road
Harkness Road
Bulmans Road
Condor Drive
Flanagans Drive
Fisken Street
Bacchus Marsh Road
Woolpack Road
High Street
C705
C706
C704
C801
C754
M8

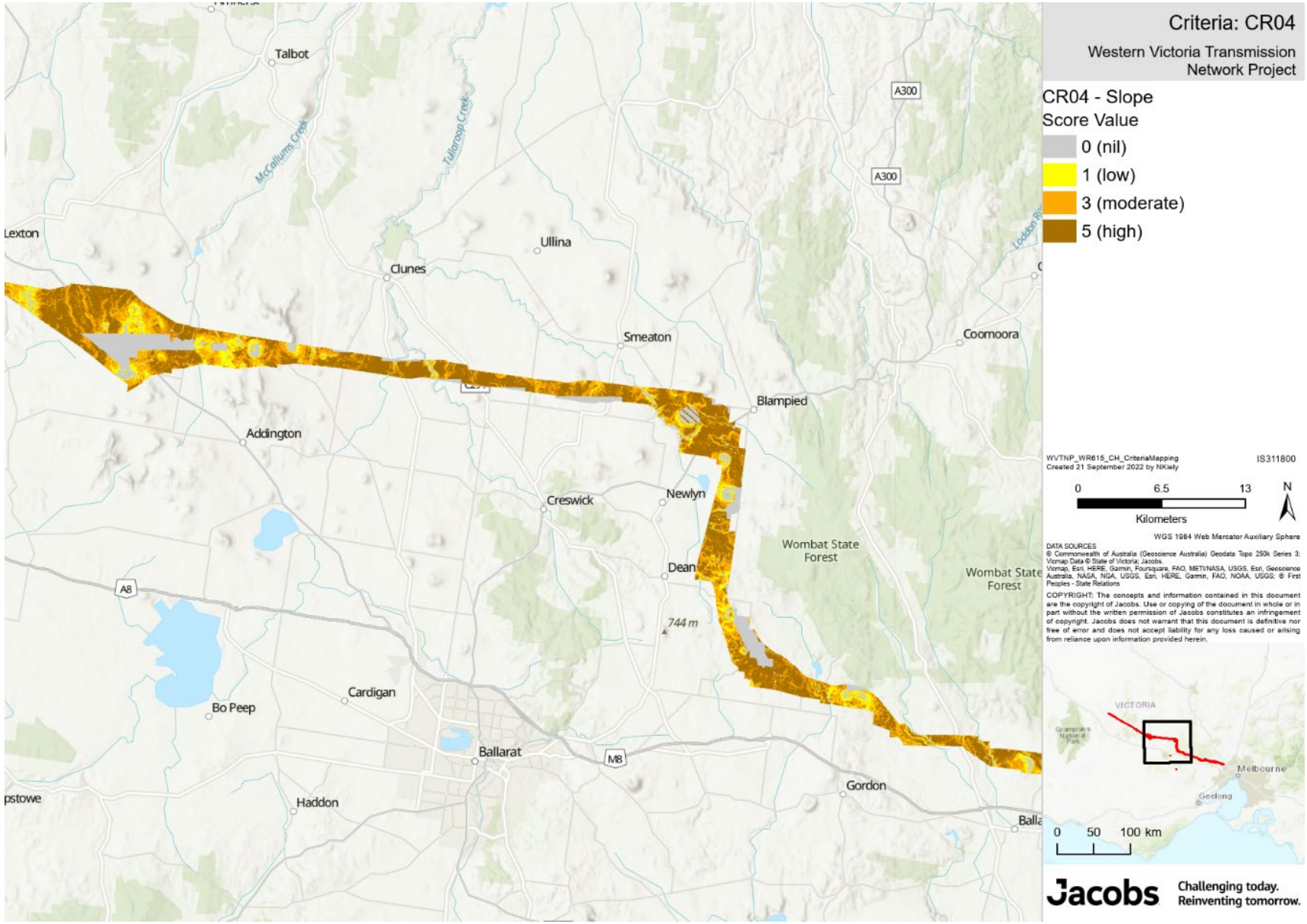

MCA Result
WRL Project Area - Page 14 of 14
Proposed Route
Study Area
6. Wurundjeri
Terminal Station Site
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
IS311800
WRL_IVR1259_AH_MCA_scores_CIHMP
Created 16 December 2024 by KarimiH
N
0
1
2
Kilometres
GDA 1994 MGA Zone 54
DATA SOURCES
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0
50
100 km
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Sydenham Terminal Station
Plumpton
Diggers Rest
Hillside
Bonnie Brook
Grangefields
Cobblebank
Fraser Rise
Taylors Hill
Jacksons Hill Reserve
Holden Flora And Fauna Reserve
Sugargum Reserve
Buckley Road
Finchs Road
Taylors Road
Plumpton Road
Leakes Road
Ryans Lane
Duncans Lane
Edwards Road
Vineyard Road
Crinnion Road
Beattys Road
Judd Court
Mt Cottrell Road
Holden Road
C706
C705
C754
M79
M8
257 m
223 m
165 m
170 m

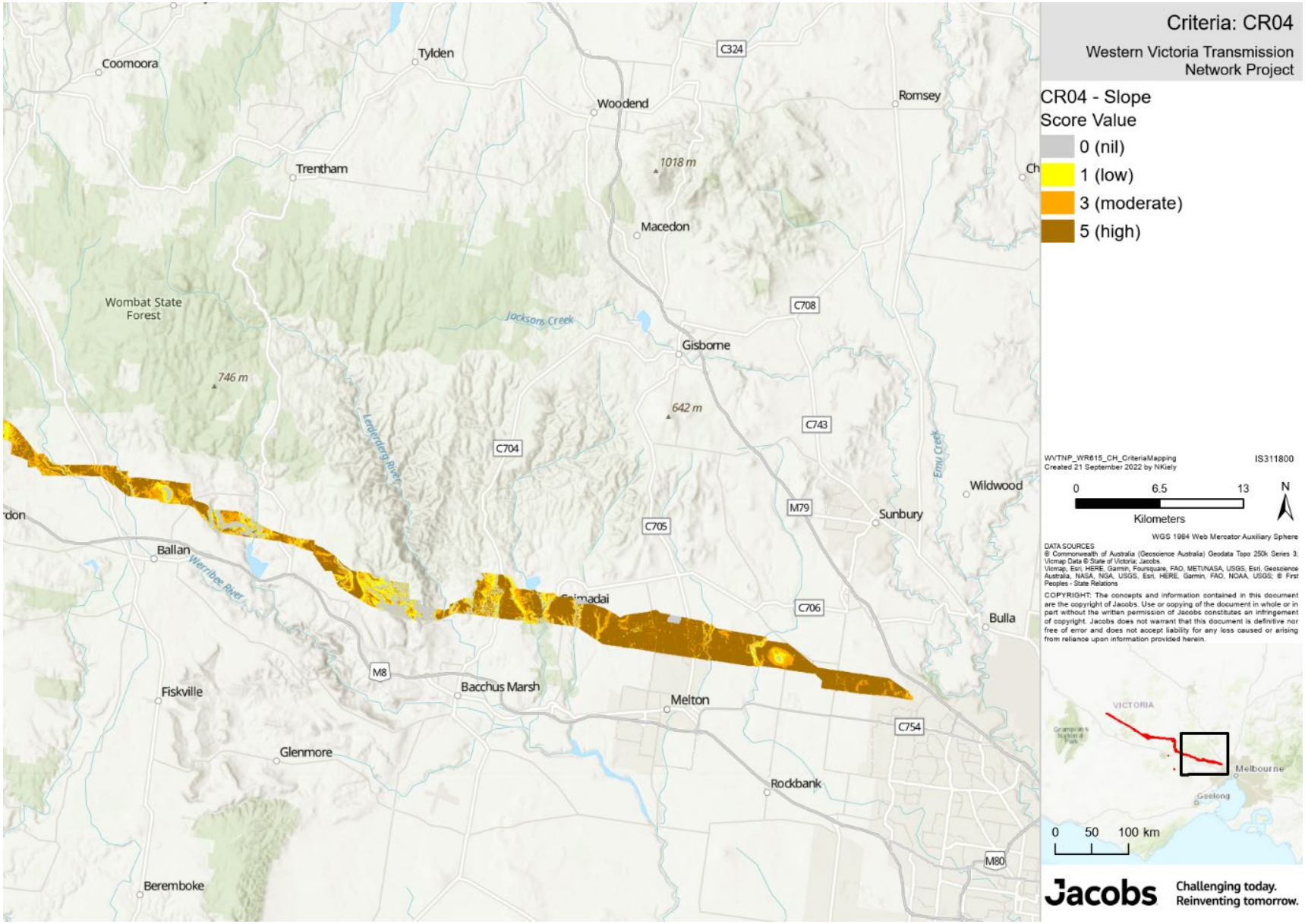

Tulkara
Barkly
C275
Moonambel
C241
Joel Joel
Homebush
St Arnaud -
Pyrenees State
Forest
Percydale
Bur
Avoca
Bulgana
Glenlofty
Crowlands
B180
Armstrong
Glenlogie
Mt
Cole/Beeripmo
State Forest
Burnbank
Lexton
Ararat
Ben Major State
Forest
Dobie
Warrak
Raglan
A8
Criteria: CR01, CR11
Western Victoria Transmission
Network Project
CR01 - Major waterways (within 100m/within
100-300m)
CR11 – designated waterways (within 100m/
within 100-300m)
Value Score
0 (nil)
3 (moderate)
5 (high)
WVTNP_WR615_CH_CriteriaMapping
Created 21 September 2022 by NKiely
IS311800
0
6.5
13
Kilometers
N
WGS 1984 Web Mercator Auxiliary Sphere
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Melbourne
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100 km
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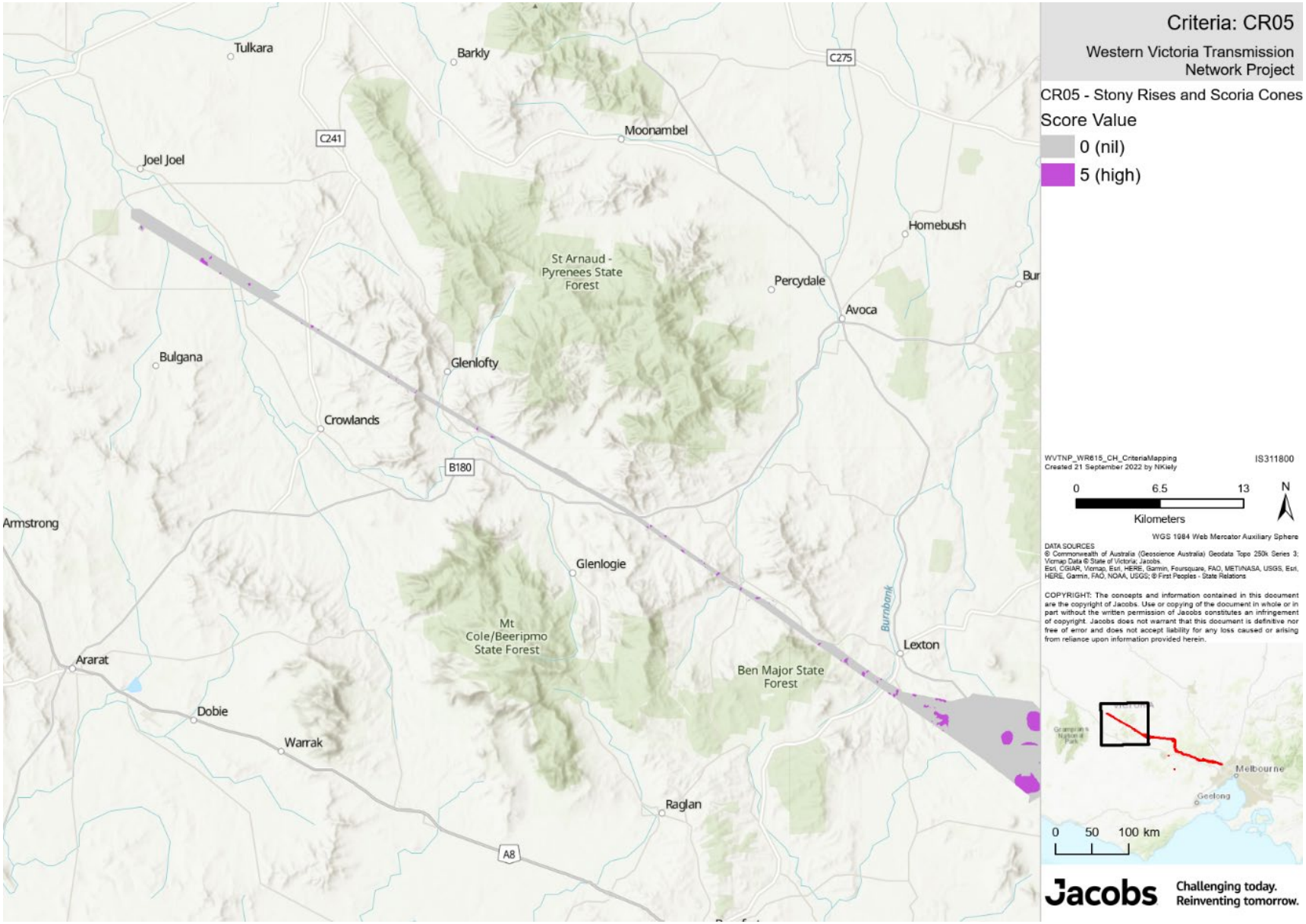

Talbot
McCallums Creek
Tullaroop Creek
A300
A300
Lexton
Ullina
Clunes
Smeaton
Coomoora
Blampied
Addington
Creswick
Newlyn
Wombat State Forest
Dean
Wombat State Forest
A8
744 m
Cardigan
Bo Peep
Ballarat
M8
Gordon
Haddon
Criteria: CR01, CR11
Western Victoria Transmission Network Project
CR01 - Major waterways (within 100m/within 100-300m)
CR11 – designated waterways (within 100m/ within 100-300m)
Value Score
0 (nil)
3 (moderate)
5 (high)
WVTNP_WR615_CH_CriteriaMapping
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IS311800
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6.5
13
Kilometers
N
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100 km
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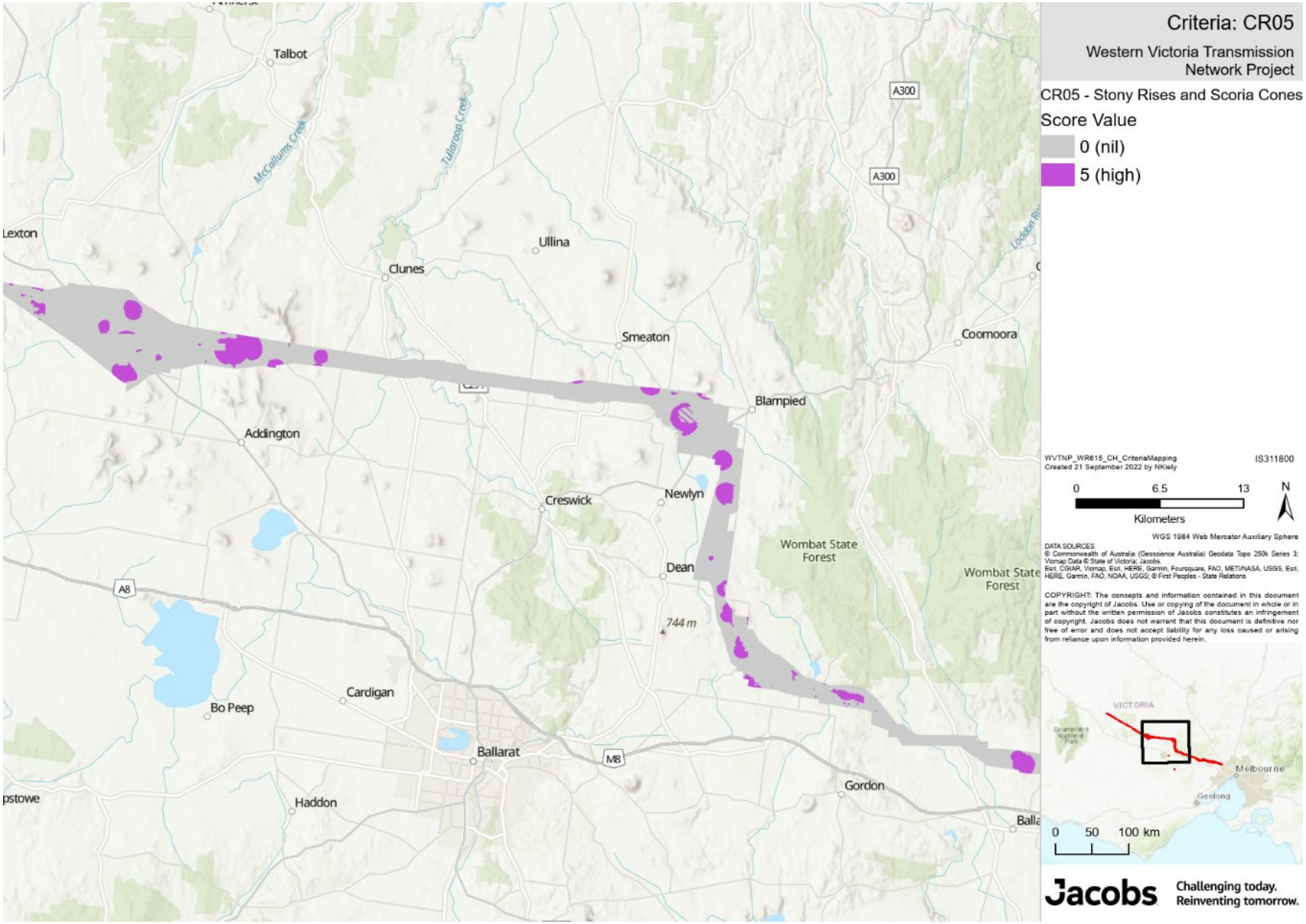

Criteria: CR01, CR11
Western Victoria Transmission Network Project
CR01 - Major waterways (within 100m/within 100-300m)
CR11 – designated waterways (within 100m/ within 100-300m)
Value Score
0 (nil)
3 (moderate)
5 (high)
Coomoora
Tylden
C324
Woodend
Romsey
Trentham
1018 m
Macedon
Wombat State Forest
Jacksons Creek
C708
Gisborne
746 m
642 m
C743
C704
Lerderderg River
Emu Creek
Wildwood
M79
Sunbury
C705
Ballan
Werribee River
C706
Bulla
M8
Fiskville
Bacchus Marsh
Melton
C754
Glenmore
Rockbank
M80
Beremboke
WVTNP_WR615_CH_CriteriaMapping
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IS311800
0
6.5
13
Kilometers
N
WGS 1984 Web Mercator Auxiliary Sphere
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VICTORIA
Melbourne
Geelong
0
50
100 km
Jacobs
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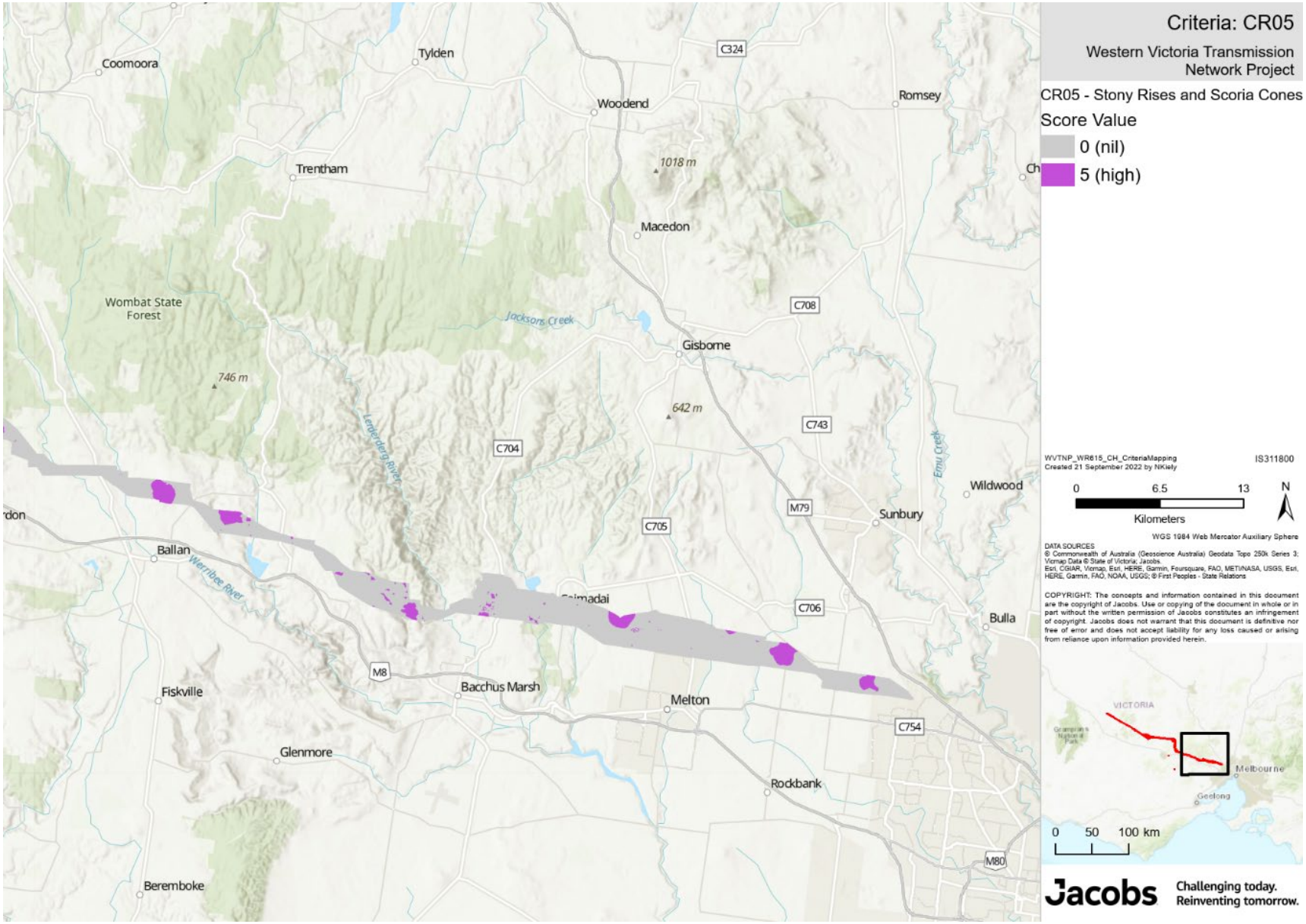

Tulkara
Barkly
C275
Moonambel
C241
Joel Joel
Homebush
St Arnaud -
Pyrenees State
Forest
Percydale
Avoca
Bulgana
Glenlofty
Crowlands
B180
Armstrong
Glenlogie
Mt
Cole/Beeripmo
State Forest
Burnbank
Lexton
Ararat
Ben Major State
Forest
Dobie
Warrak
Raglan
A8
Criteria: CR04
Western Victoria Transmission
Network Project
CR04 - Slope
Score Value
0 (nil)
1 (low)
3 (moderate)
5 (high)
WVTNP_WR615_CH_CriteriaMapping
Created 21 September 2022 by NKiely
IS311800
0
6.5
13
Kilometers
N
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Melbourne
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100 km
Jacobs
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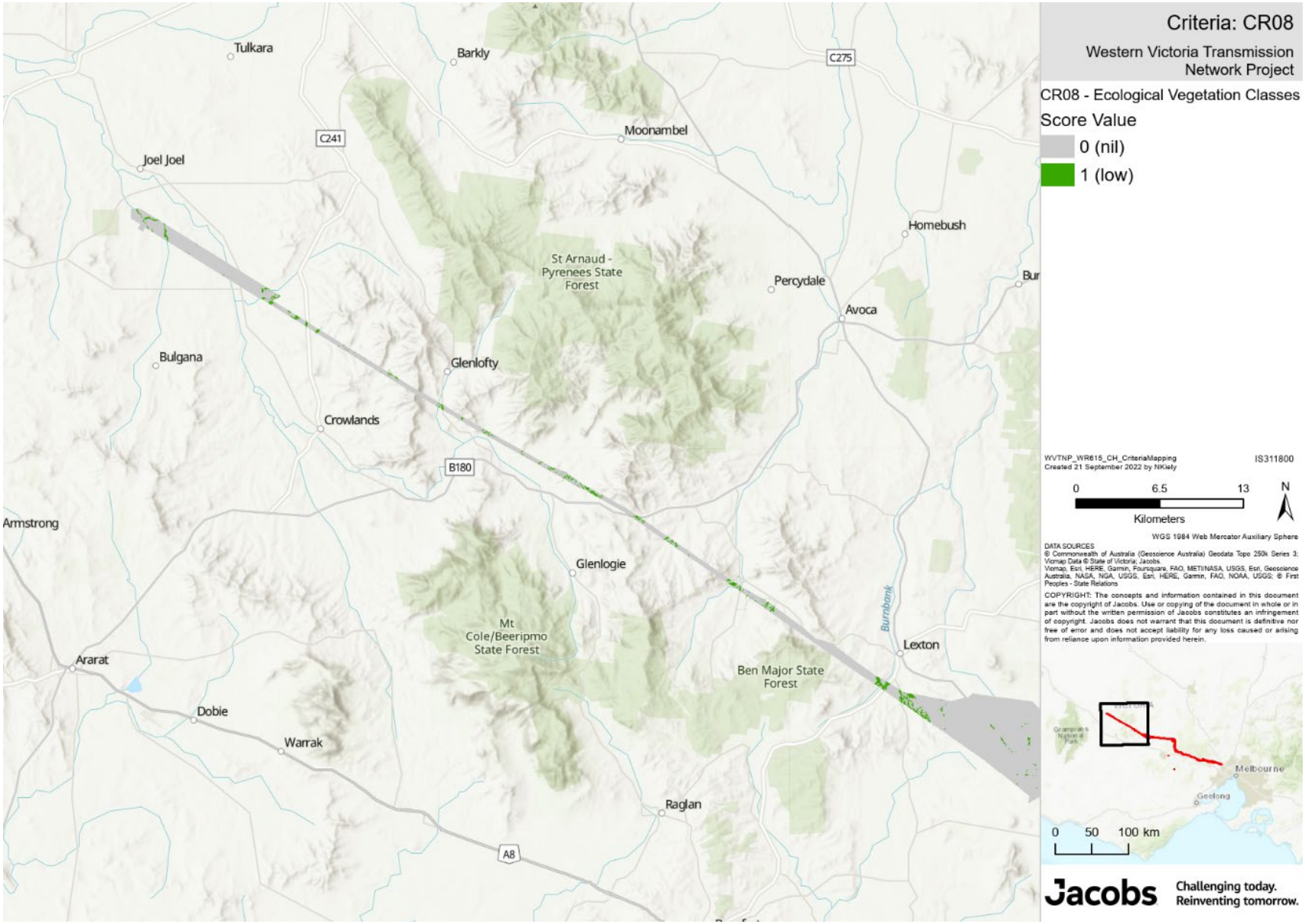

Talbot
McCallums Creek
Tullaroop Creek
A300
A300
Lexton
Ullina
Clunes
Smeaton
Coomoora
Blampied
Addington
Creswick
Newlyn
Wombat State Forest
Dean
Wombat State Forest
A8
744 m
Cardigan
Bo Peep
Ballarat
M8
Gordon
Haddon
Criteria: CR04
Western Victoria Transmission Network Project
CR04 - Slope
Score Value
0 (nil)
1 (low)
3 (moderate)
5 (high)
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IS311800
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6.5
13
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N
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VICTORIA
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100 km
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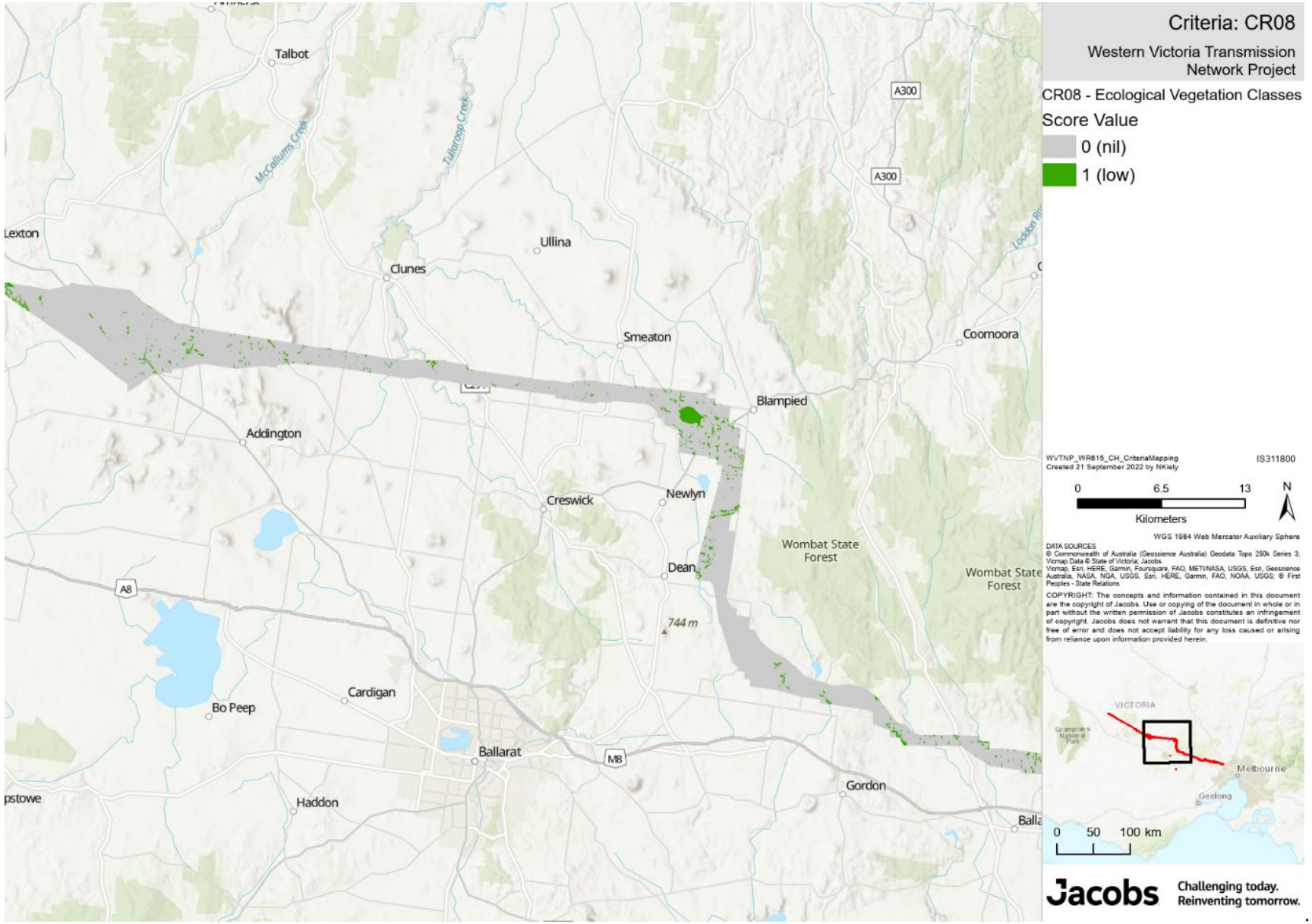

Criteria: CR04
Western Victoria Transmission Network Project
CR04 - Slope
Score Value
0 (nil)
1 (low)
3 (moderate)
5 (high)
Coomoora
Tylden
Woodend
Romsey
Trentham
1018 m
Macedon
Wombat State Forest
Jacksons Creek
Gisborne
746 m
642 m
Lerderderg River
Emu Creek
Wildwood
Sunbury
Ballan
Werribee River
Bulla
Fiskville
Bacchus Marsh
Melton
Glenmore
Rockbank
Beremboke
C324
C708
C743
C704
C705
C706
C754
M79
M8
M80
WVTNP_WR615_CH_CriteriaMapping
Created 21 September 2022 by NKiely
IS311800
0
6.5
13
Kilometers
N
WGS 1984 Web Mercator Auxiliary Sphere
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VICTORIA
Melbourne
Geelong
0
50
100 km
Jacobs
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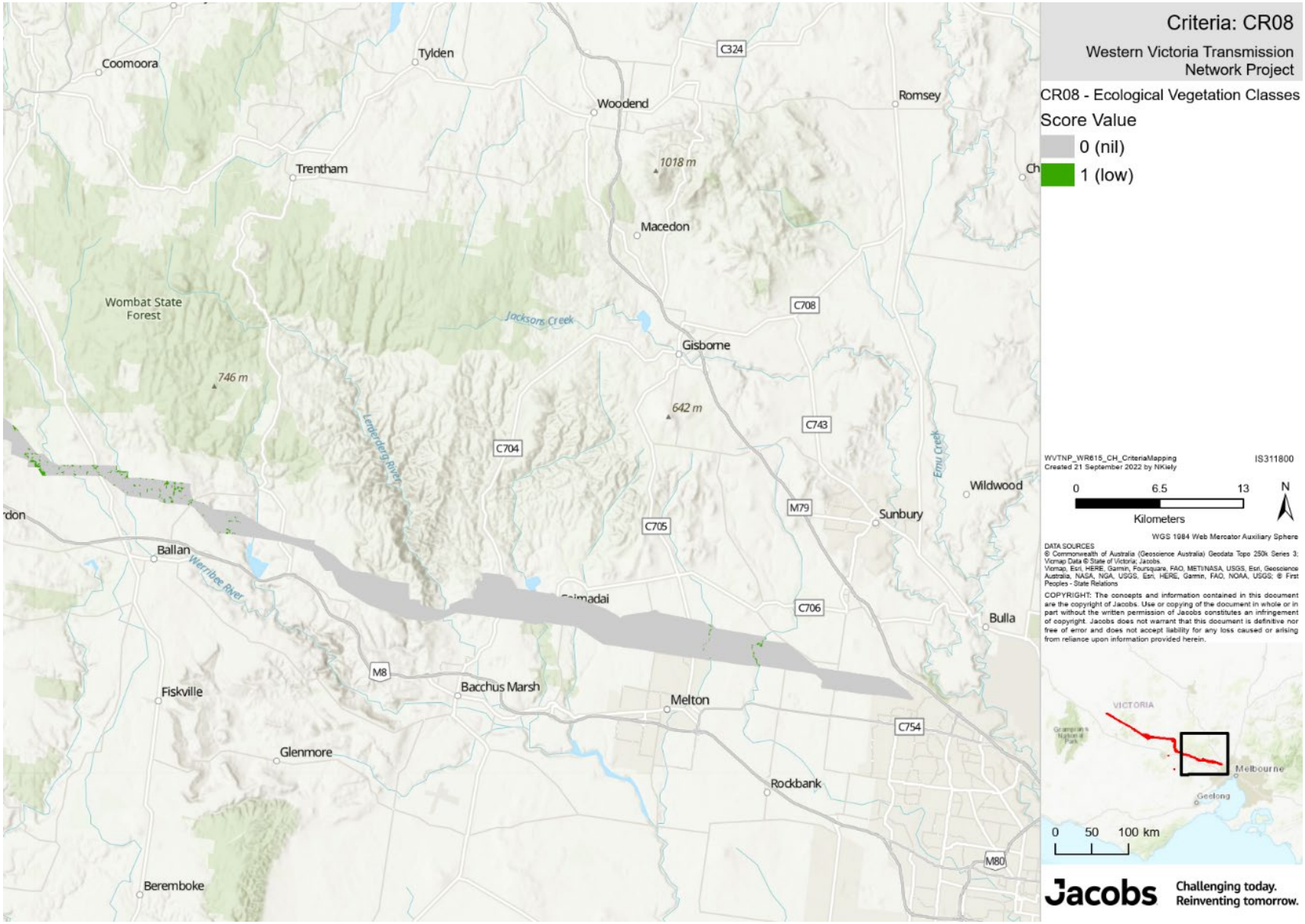

Tulkara
Barkly
C275
Moonambel
C241
Joel Joel
Homebush
St Arnaud -
Pyrenees State
Forest
Percydale
Avoca
Bulgana
Glenlofty
Crowlands
B180
Armstrong
Glenlogie
Mt
Cole/Beeripmo
State Forest
Burnbank
Lexton
Ararat
Ben Major State
Forest
Dobie
Warrak
Raglan
A8
Criteria: CR05
Western Victoria Transmission
Network Project
CR05 - Stony Rises and Scoria Cones
Score Value
0 (nil)
5 (high)
WVTNP_WR615_CH_CriteriaMapping
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0
6.5
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Kilometers
N
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Melbourne
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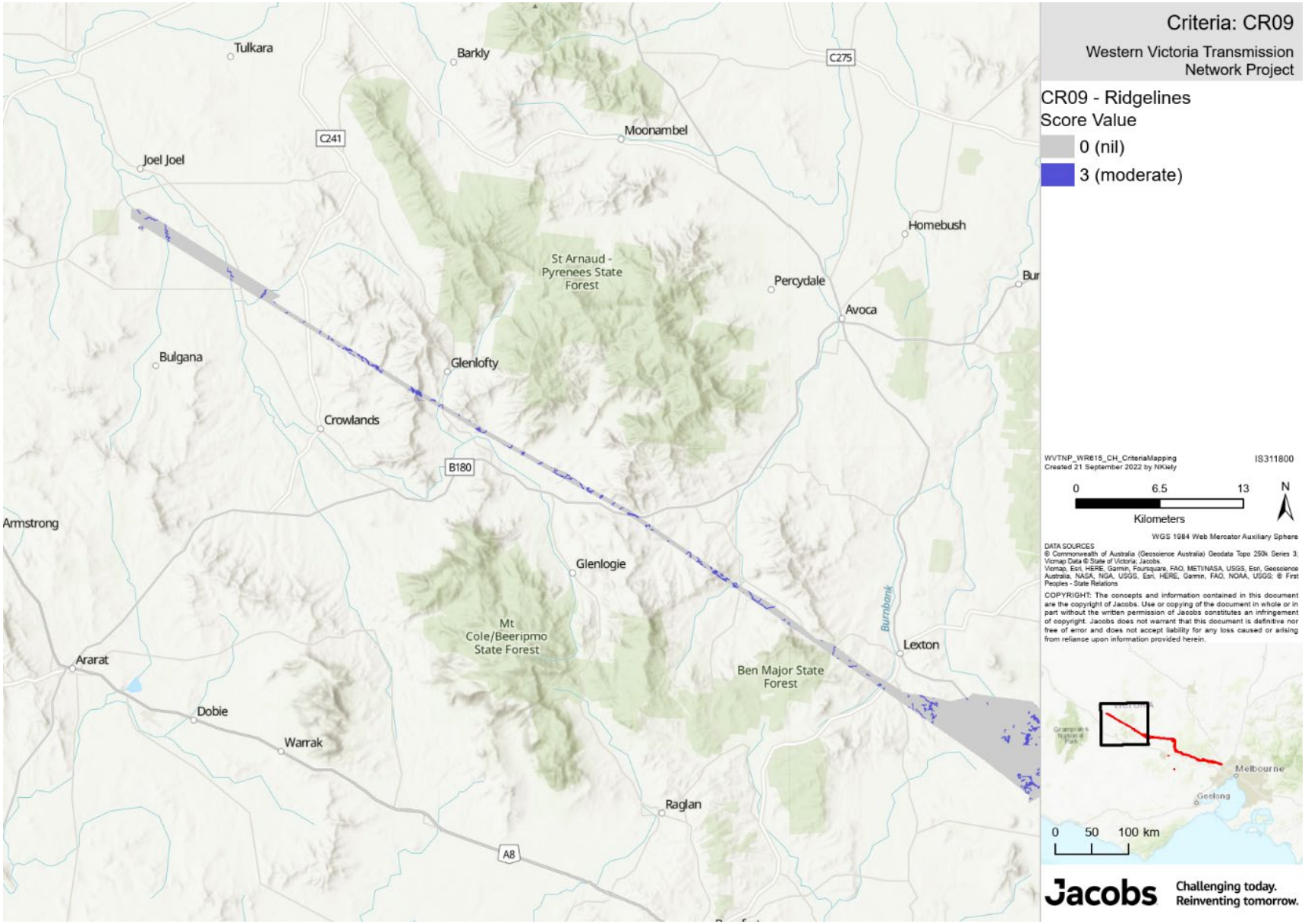

Talbot
McCallums Creek
Tullaroop Creek
A300
A300
Lexton
Ullina
Clunes
Smeaton
Coomoora
Blampied
Addington
Creswick
Newlyn
Wombat State Forest
Dean
Wombat State Forest
A8
744 m
Cardigan
Bo Peep
Ballarat
M8
Gordon
Haddon
Criteria: CR05
Western Victoria Transmission Network Project
CR05 - Stony Rises and Scoria Cones
Score Value
0 (nil)
5 (high)
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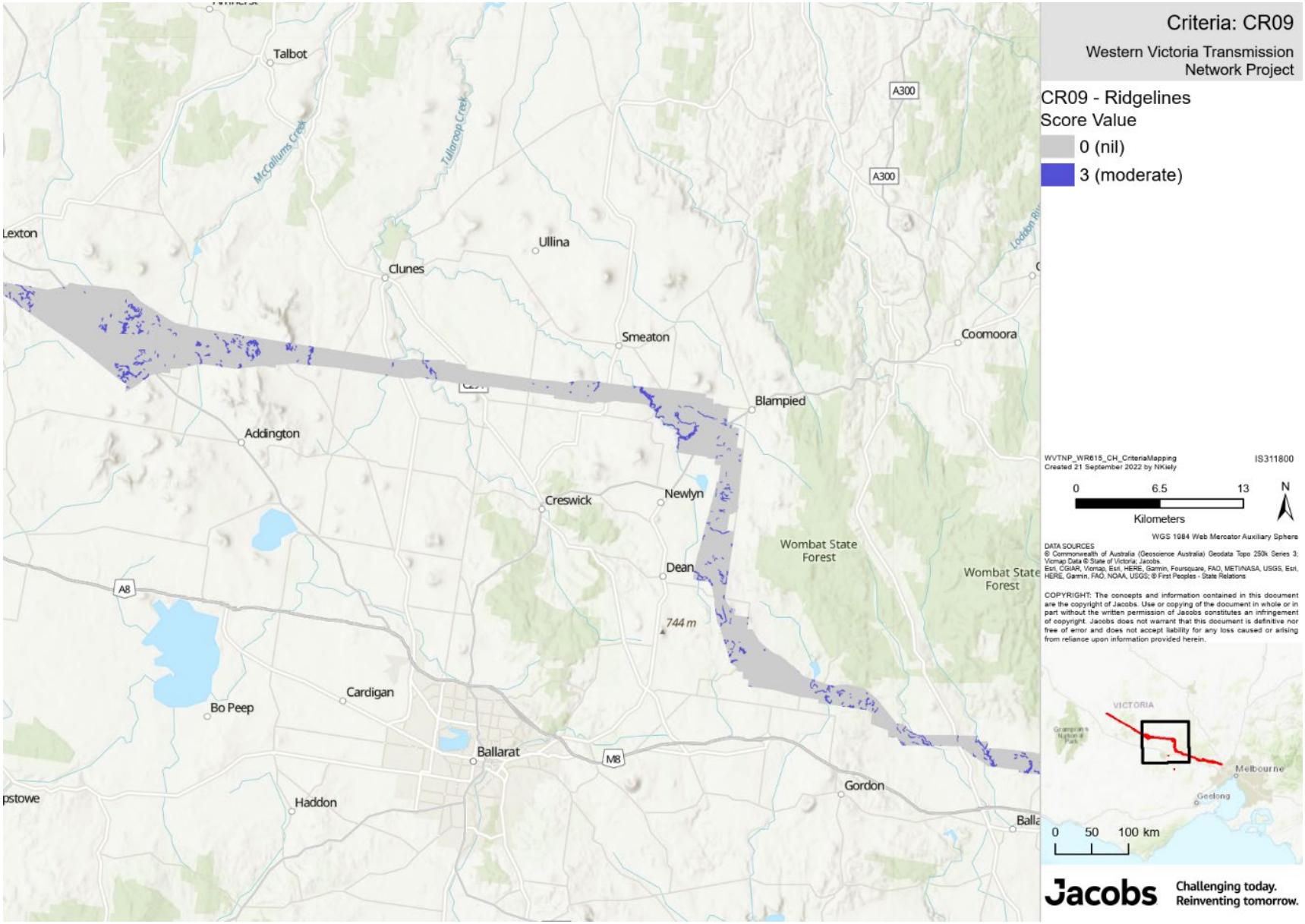

Criteria: CR05
Western Victoria Transmission Network Project
CR05 - Stony Rises and Scoria Cones
Score Value
0 (nil)
5 (high)
Coomoora
Tylden
Woodend
Romsey
Trentham
1018 m
Macedon
Wombat State Forest
Jacksons Creek
Gisborne
746 m
642 m
Lerderderg River
Emu Creek
Wildwood
Sunbury
Ballan
Werribee River
Bulla
Bacchus Marsh
Melton
Fiskville
Glenmore
Rockbank
Beremboke
C324
C708
C743
C704
C705
M79
C706
M8
C754
M80
WVTNP_WR615_CH_CriteriaMapping
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IS311800
0 6.5 13
Kilometers
N
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Melbourne
Geelong
0 50 100 km
Jacobs
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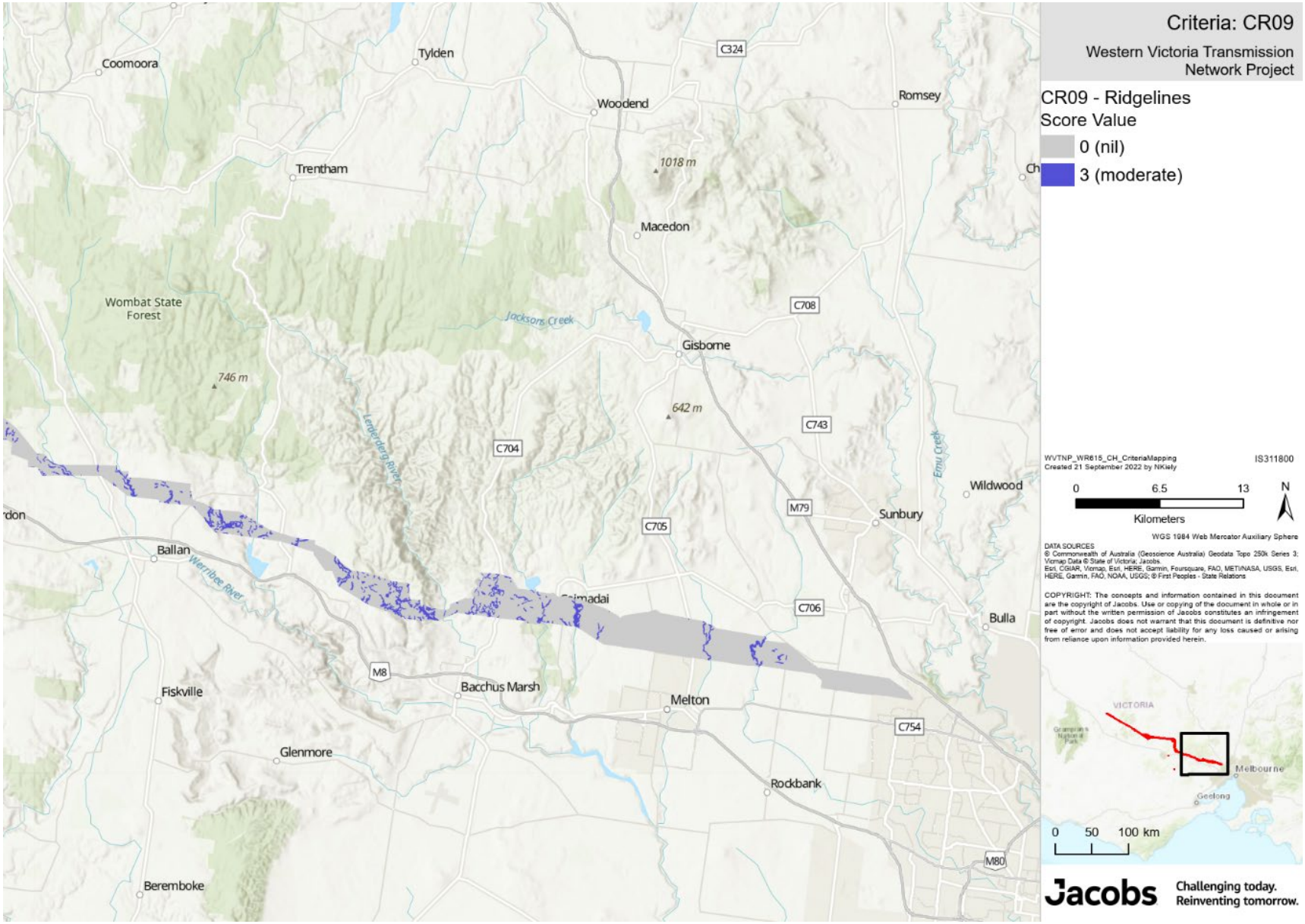

Tulkara
Barkly
C275
Moonambel
C241
Joel Joel
Homebush
St Arnaud -
Pyrenees State
Forest
Percydale
Bur
Avoca
Bulgana
Glenlofty
Crowlands
B180
Armstrong
Glenlogie
Mt
Cole/Beeripmo
State Forest
Burnbank
Lexton
Ararat
Ben Major State
Forest
Dobie
Warrak
Raglan
A8
Criteria: CR08
Western Victoria Transmission
Network Project
CR08 - Ecological Vegetation Classes
Score Value
0 (nil)
1 (low)
WVTNP_WR615_CH_CriteriaMapping
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IS311800
0
6.5
13
Kilometers
N
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Geelong
0
50
100 km
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Talbot
McCallums Creek
Tullaroop Creek
A300
A300
Lexton
Ullina
Clunes
Smeaton
Coomoora
Blampied
Addington
Creswick
Newlyn
Wombat State Forest
Dean
Wombat State Forest
A8
744 m
Cardigan
Bo Peep
Ballarat
M8
Gordon
Haddon
Criteria: CR08
Western Victoria Transmission Network Project
CR08 - Ecological Vegetation Classes
Score Value
0 (nil)
1 (low)
WVTNP_WR615_CH_CriteriaMapping
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IS311800
0
6.5
13
Kilometers
N
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Geelong
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100 km
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Criteria: CR08
Western Victoria Transmission Network Project
CR08 - Ecological Vegetation Classes
Score Value
0 (nil)
1 (low)
Coomoora
Tylden
C324
Woodend
Romsey
Trentham
1018 m
Macedon
Wombat State Forest
Jacksons Creek
C708
Gisborne
746 m
642 m
C743
C704
Lerderderg River
Emu Creek
Wildwood
M79
Sunbury
C705
Ballan
Werribee River
C706
Bulla
M8
Fiskville
Bacchus Marsh
Melton
C754
Glenmore
Rockbank
M80
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IS311800
0 6.5 13
Kilometers
N
WGS 1984 Web Mercator Auxiliary Sphere
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VICTORIA
Melbourne
Geelong
0 50 100 km
Jacobs
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Reinventing tomorrow.


Tulkara
Barkly
C275
C241
Moonambel
Joel Joel
Homebush
St Arnaud -
Pyrenees State
Forest
Percydale
Bur
Avoca
Bulgana
Glenlofty
Crowlands
B180
Armstrong
Glenlogie
Mt
Cole/Beeripmo
State Forest
Burnbank
Lexton
Ararat
Ben Major State
Forest
Dobie
Warrak
Raglan
A8
Criteria: CR09
Western Victoria Transmission
Network Project
CR09 - Ridgelines
Score Value
0 (nil)
3 (moderate)
WVTNP_WR615_CH_CriteriaMapping
Created 21 September 2022 by NKiely
IS311800
0
6.5
13
Kilometers
N
WGS 1984 Web Mercator Auxiliary Sphere
DATA SOURCES
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Melbourne
Geelong
0
50
100 km
Jacobs
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Talbot
McCallums Creek
Tullaroop Creek
A300
A300
Lexton
Ullina
Clunes
Smeaton
Coomoora
Blampied
Addington
Creswick
Newlyn
Wombat State Forest
Dean
Wombat State Forest
A8
744 m
Cardigan
Bo Peep
Ballarat
M8
Gordon
Haddon
Criteria: CR09
Western Victoria Transmission Network Project
CR09 - Ridgelines
Score Value
0 (nil)
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Criteria: CR09
Western Victoria Transmission Network Project
CR09 - Ridgelines
Score Value
0 (nil)
3 (moderate)
Coomoora
Tylden
C324
Woodend
Romsey
Trentham
1018 m
Macedon
Wombat State Forest
Jacksons Creek
C708
Gisborne
746 m
642 m
C743
C704
Lerderderg River
Emu Creek
Wildwood
M79
Sunbury
C705
Ballan
Werribee River
C706
Bulla
M8
Fiskville
Bacchus Marsh
Melton
C754
Glenmore
Rockbank
M80
Beremboke
WVTNP_WR615_CH_CriteriaMapping
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F.1 Introduction

Multi Criteria Analysis (MCA) is a general framework or tool for supporting complex decision-making situations that involve multiple and sometimes conflicting objectives and factors. It is a useful framework/tool to determine a choice (or choices) among a number of alternatives and can incorporate a variety of aspects and inputs from stakeholder groups and decision-makers alike.

This MCA seeks to map the potential for the occurrence of Aboriginal Heritage.

Jacobs applied it's **SpatialLogic** approach to delivery of this project. This approach has significant emphasis on the collaborative definition of the constraints that impact the decision being made (Figure 1).

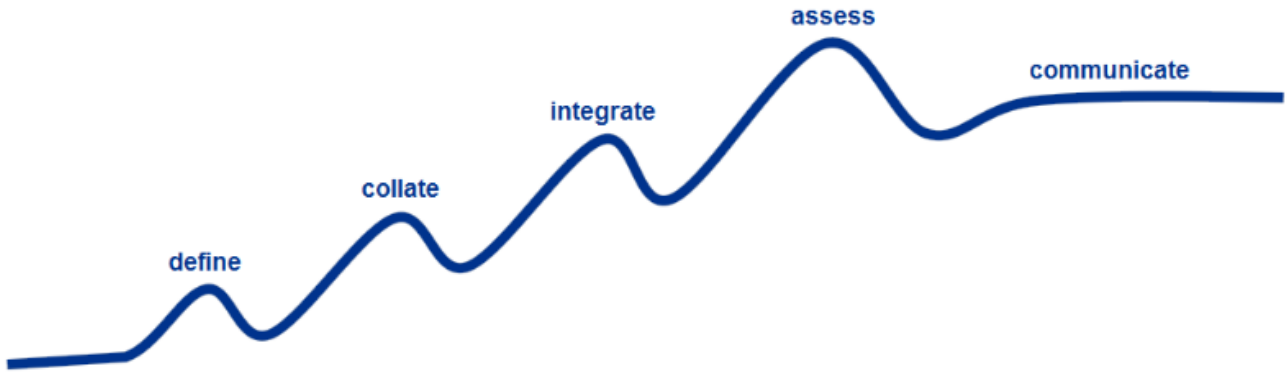


Figure 1: SpatialLogic approach

SpatialLogic explicitly calls attention to the key phases that should be considered when defining a multi-criteria analysis (MCA) model. This framework is used to establish an agreed intent and understanding of what the decision-making process will expect and how it can incorporate the results of the analysis. For this study the concept of *potential*, with respect to the presence of Aboriginal Heritage, was identified as the perspective to assess the criteria. In this context, high potential means areas are more likely to contain Aboriginal Heritage sites, shown as an accumulative potential surface. The nature of the criteria identified, and the available supporting data has highlighted large areas of low to medium potential with limited locations of very high potential where specific features in the landscape are present that in this geographic region indicate the presence of Aboriginal Heritage. The criteria considered in this analysis were as follows:

- Geological features
- Hydrology
- Topography

An overview of the criteria is discussed in Section 3 in additional to a summary of the analysis approach.

F.2 Assessment methodology

Jacobs uses a structured workflow called SpatialLogic to deliver Spatial Multi-Criteria Analysis (MCA) projects (see Figure 1). This approach provides a guide through the critical stages of an analysis project. Its sole objective is to provide an agreed and common understanding of the concepts, assumptions, decisions, and implications by the cultural heritage project team, across the project area, including the Jacobs WRL cultural heritage team and specialists from Andrew Long and Associates and Unearthed Heritage. SpatialLogic is our guidebook to a successful delivery of the analysis project.

Spatial MCA projects often present many uncertainties, that require iterative design to overcome. This can pose a significant risk to scope and delivery timelines. Spatial Logic helps manage this risk. Spatial Logic is a 5-phase workflow (see Figure 1). Its purpose is to increase knowledge or insight for decision-makers in a structured and logical manner.

F.3 SpatialLogic

Spatial Logic is a delivery framework used by Jacobs to provide a rigorous and structured approach to creating information and undertaking analysis in a multivariate environment where conflicting factors are inherent in the decision landscape. The framework is a delivery guide to **define** (understand the question being addressed), **collate** (bring together the required data), **integrate** (combine the data into an appropriate analysis framework), **assess** (undertake analysis, modelling, and assessment to generate insight), and **communicate** (distributing the insight gained).

F.3.1 Define

The **define** phase of the workflow focuses on understanding the issues and questions being addressed. This phase sets out the conceptual underpinning of the analysis and identifies the specific requirements to implement the solution. To develop the assessment definition, the cultural heritage project team conducted a workshop and iteratively developed an understanding of the decision framework that the assessment is to support and what impacts that decision making (the constraints).

This phase has three broad considerations – these are termed the "3 R's" of MCAs:

1) Representation
   How the information that addresses the issues are presented in the data. Going from a description of the information to a specific criterion based on data and scored in accordance with the decision-making framework. This includes understanding the criteria that represent areas that should be excluded from the analysis, typically referred to as *Exclusion Zones*.
2) Relationship
   How criterion relate to each other. This is considered in terms of relative importance to the issue and the methods used to combine the criteria.
3) Resolution
   At what scale and unit will the analysis and any subsequent reporting be undertaken. The size of the geographic unit that something meaningful to the issue can be articulated, and what type of geography makes sense to the issue.

Working through the 3 R's provides a documented and sound conceptual foundation for the analysis. The 3 R's and the details that support them are summarised in Figure 2.

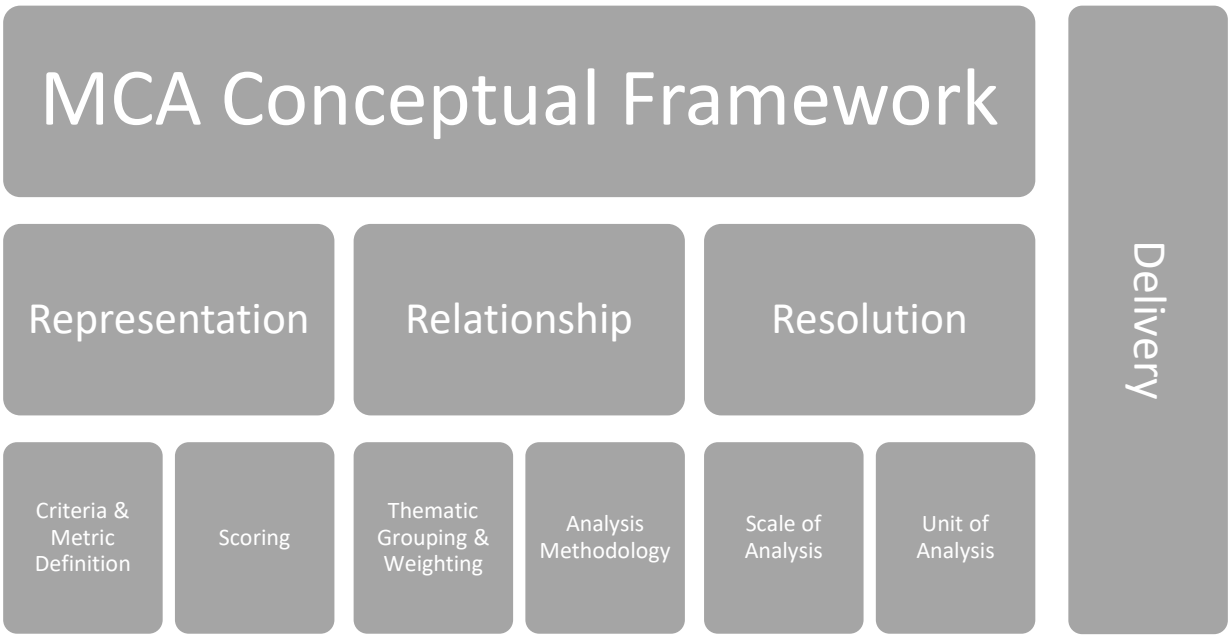


Figure 2: Summary of the 3R's

A significant factor that influences the representation of a constraint is the approach to scoring, in this case scoring potential. A consistent approach to scoring is required to enable criteria to be meaningfully accumulated to produce a heatmap. This involves establishing a normalised score categorisation and determining the cost curve that translates the score categorisation to the representation in the MCA analysis across all criteria.

The Predictive Model MCA for Cultural Heritage in the WRL Assessment Area considers potential from a likelihood context based on historical experience. Table 2 shows the value assigned from the cost curve for the analysis, this cost curve is drawn to scale on the Value Assignment **Curve**.

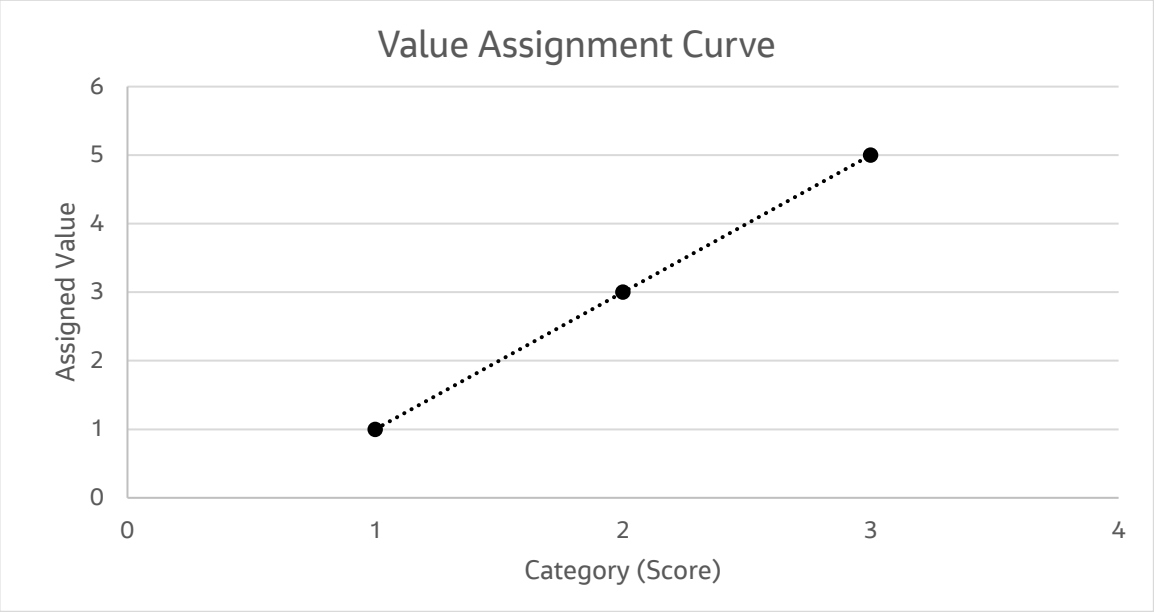
Table 1 shows the scoring rationale for each categorisation and Table 2 shows the value assigned from the cost curve for the analysis, this cost curve is drawn to scale on the Value Assignment Curve.

Table 1: Normalised score categorisation

Score	Category	Aboriginal Cultural Heritage – Potential
1	Low	Areas assigned low potential do not contain a highly utilised resource or preferred area of Aboriginal habitation in the past. Although sites may be present, they may comprise only one or two different site types and they are unlikely to be large and complex in nature.
2	Moderate	Areas assigned moderate potential demonstrate a resource or landform which may contain several archaeological site types. These sites are likely to demonstrate in situ cultural deposits and be complex in nature.
3	High	Areas of high potential have several intersecting resources or landforms which may contain a wide variety of archaeological sites. These sites are likely to demonstrate in situ cultural deposits and be large and complex in nature.

Table 2: Scoring cost curve

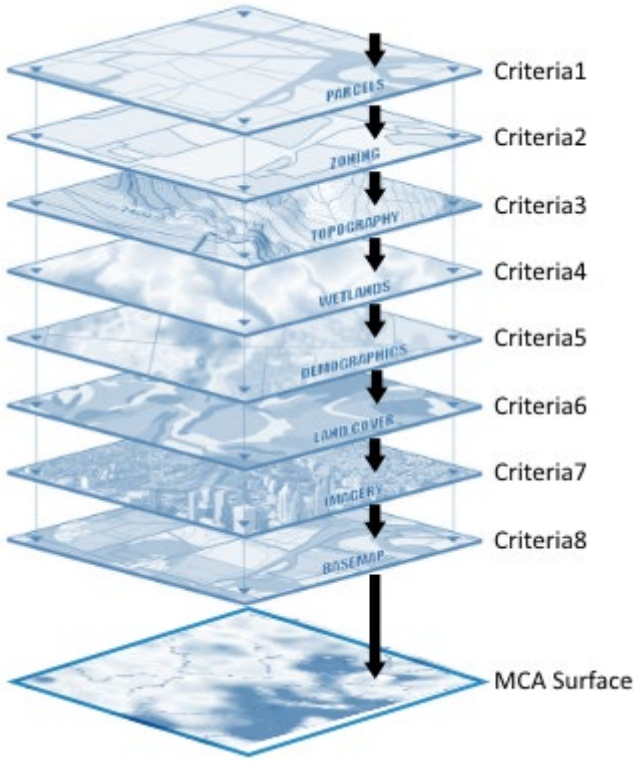
Score	Category	Assigned Value (linear)
1	Low	1
2	Moderate	3
3	High	5



These elements are documented in the project *MCA Workbook* along with results and criteria cartography, along with the rules and processes to convert the source data into the input constraints, this covers the Collate and Integrate aspects of SpatialLogic.

F.4 Assess

The focus of the Predictive Model MCA is best addressed through a methodology that focuses on accumulation of potential.



The accumulation assessment methodology uses a standard algorithm (weighted sum) to aggregate the scores of potential for all criteria to generate a surface, representing the total accumulative potential in each unit of analysis. The resulting layer provides a mechanism to identify locations with high or low total potential for the presence of Aboriginal Heritage.

Weighting between criteria is almost always subjective, and so must be based on defensible rational. Given the differentiation of potential between constraints was appropriately addressed using the categorisation no weights were required in this instance.

The accumulation formula takes the form of:

$$MCA\ Surface = \sum_{n=1}^{8} C_n \times Weight_n$$

Where:

C = potential score of criteria n

n= an instance of agreed criteria

F.5 Limitations of Assessment

The intended use for the MCA assessment is as a starting point for the decision-making process. The MCA enables the project team to easily visualise and understand the accumulative potential of identified factors across the study area and the relationships between them.

Additional limitations include:

- Spatial representation of criteria, in some cases the spatial data available only represents part of the required constraint definition, for example using the EVC2005 layer for CR08 Mature vegetation.
- Availability of spatial data, some constraints are not represented as there is no suitable existing spatial data, for example CR02 Paleo Channels/Remnant waterways/Former Springs.
- Currency of spatial data, most spatial datasets are a modern or current representation of the landscape, this creates limitations when we are seeking to map areas of heritage that may be many thousands of years old, for example CR01 and CR11 use watercourses, which do change with time.

F.6 Overview of Criteria

The Cultural Heritage specialist team had a project area greater than is possible to undertake full investigation. The purpose of the MCA is therefore to predict the potential for Aboriginal heritage that may be present within different landforms across the project corridor. Information obtained via desktop assessment research indicates that particular landforms within the Geographic Region of the assessment area have a higher probability of containing Aboriginal cultural heritage as they would have provided resources, or a series of resources, known to have been utilised by Aboriginal people in the past or represent landforms known to be favourable for habitation (higher, drier landforms above the surrounding floodplain).

The definition of criteria was driven by the scale of the analysis, the impact of modern datasets and the decision making that is the intended end use of the evidence-base that was developed. These criteria have been identified as areas with the potential for previously unknown Aboriginal Heritage places to be found.

Table 3: Criteria incorporated in the MCA. Criteria with ** indicates criteria where no suitable source data was available

ID	Description	Rationale	Potential
CR01a	Major waterways considered permanent where the nature of the stream indicates a minimum catchment area of 1 square kilometre, which Given the nature of the terrain would result in a suitable stream definition.	Aboriginal cultural heritage is more likely to be identified within proximity to high order/permanent water sources, lagoons, swamps, (within 100 m). It is expected that Aboriginal cultural heritage situated within proximity to water is more likely to represent intact, in situ, large, complex and archaeologically significant places than those situated further away.	High
CR01b	Description is as per CR01a	Aboriginal cultural heritage is more likely to be identified within proximity to high order/permanent water sources, lagoons, swamps, (from 100-300 m). It is expected that Aboriginal cultural heritage situated within proximity to water is more likely to represent intact, in situ, large, complex and archaeologically significant places than those situated further away.	Moderate
*CR02***	*Paleo channels / Remnant waterways / Former springs*	*Aboriginal cultural heritage is more likely to be identified within proximity to high order/permanent water sources (within 500 m). It is expected that Aboriginal cultural heritage situated within proximity to water is more likely to represent intact, in situ, large, complex and archaeologically significant Places than those situated further away.* *There is potential for the presence of former channels as the result of rerouting following gold mining activities.*	*No suitable data sources were available and as such was not included in the MCA.*
CR03	Waterways considered permanent due to their catchment and them being named within the hydrology dataset	Aboriginal cultural heritage is more likely to be identified within proximity to high order/permanent water sources, lagoons, swamps, (within 100 m). It is expected that Aboriginal cultural heritage situated within proximity to water is more likely to represent intact, in situ, large, complex and archaeologically significant places than those situated further away.	Low
CR04a	Slope model – flat range: Greater than 1 degree to 5 degrees.	Slope landforms have a low influence on the level of potential for Aboriginal cultural heritage to be identified. Aboriginal occupation is more likely to occur on flatter landforms over steep landforms.	Moderate
CR04b	Slope model – moderate slope range: Greater than 5 degrees to 10 degrees	Slope landforms have a low influence on the level of potential for Aboriginal cultural heritage to be identified. Aboriginal occupation is more likely to occur on flatter landforms over steep landforms.	Low
CR05a	Relief models –stony rises (where an area is 2m higher than the surrounding area)	Elevated areas such as stony rises have a high influence on the level of potential for Aboriginal cultural heritage to be identified. *CR05a and CR05b combined into CR05 for analysis*	High

ID	Description	Rationale	Potential
CR05b	Volcanic/Scoria cones	Volcanic cones are prominent features throughout the western plains of Victoria and are phenomenologically significant sites across the landscape. Volcanic cones are associated sites of social, cultural and spiritual significance and have a high influence on the level of potential for Aboriginal cultural heritage to be identified. *To avoid having the same multiplying factor added to the same area twice, CR05a and CR05b combined into CR05 for analysis*	High
CR06	Relief models – ridgelines	Elevated areas such as terraces, hills, ridgelines, have a moderate influence on the level of potential for Aboriginal cultural heritage to be identified.	Moderate
*CR07***	*Viewsheds*	*Aboriginal cultural heritage is likely to be identified in areas with larger (>180 degree) viewsheds to key landform features and views along major waterways.*	*No suitable data sources were available and as such was not included in the MCA.*
CR08	Remnant mature vegetation	Aboriginal cultural heritage (specifically culturally modified trees) is more likely to be identified in areas with remnant mature vegetation.	Low
*CR09***	*Soil profiles/ mapping*	*Aboriginal cultural heritage is more likely to be identified in more permeable, deep, soil profiles.*	*No suitable data sources were available and as such was not included in the MCA.*
*CR10***	*Quarry sources*	*Aboriginal cultural heritage is more likely to be identified in close proximity (within 500m) to culturally significant resource locations. This includes quartz, silcrete and quartzite sources.*	*No suitable data sources were available and as such was not included in the MCA.*
CR11a	CMA Designated Waterways	Aboriginal cultural heritage is more likely to be identified within proximity to high order/permanent water sources, lagoons, swamps, (within 100 m). It is expected that Aboriginal cultural heritage situated within proximity to water is more likely to represent intact, in situ, large, complex and archaeologically significant places than those situated further away.	High
CR11b	Description as per CR11a	Aboriginal cultural heritage is more likely to be identified within proximity to high order/permanent water sources, lagoons, swamps, (from 100-300 m). It is expected that Aboriginal cultural heritage situated within proximity to water is more likely to represent intact, in situ, large, complex and archaeologically significant places than those situated further away.	Moderate

F.7 Considerations of the Criteria

F.7.1 LiDAR Limitations

LiDAR was a critical input layer for several criteria, therefore where there were LiDAR coverage gaps in the study area no assessment was completed. This is different from areas which scored 0, this means no Criteria were present. The LiDAR for this analysis was captured in 2021 and was resampled to 5m pixels.

F.7.2 Waterway/Stream Criteria, CR01, CR03 and CR11

There are several criteria for waterways and streams, the project team made the decision to dissolve rather than stack these Criteria where they overlapped (not to be confused for when waterways overlap). In future iterations it would be recommended to combine CR01, CR03 and CR11 into a single classified criterion.

The priority order for the dissolve is as follows:

1) CR01a (high) use then,
2) CR11a (high) then,
3) CR01b (moderate) then,
4) CR11b (moderate) then,
5) CR03 (low)

F.7.3 CR04

Classification of slope into high/moderate/low classes was revised between Iteration 1 and 3, to remove the low grouping as this was introducing misleading potential.

F.7.4 CR05a and CR05b

These separate criteria were combined after iteration 1 as it was noticed they tended to occur in similar locations, which did not necessarily represent a doubling of the high potential, additionally the representation of the Scoria Cones was adjusted using the LiDAR to capture missing cones associated with mapped Eruption Points.

F.7.5 CR06

CR06 were mapped through using the LiDAR to analyse the terrain geometry to identify crests of ridgelines and abrupt changes of slope. It was revised from a high potential criterion to a moderate potential criterion between Iteration 1 and Iteration 3.

F.7.6 CR02, CR07, CR09, CR10

There was no acceptable spatial representation of the required criteria, therefore they were not included in the analysis.

F.8 Discussion

This analysis produced an accumulative potential surface for the WRL assessment area. This section provides an overview of the results.

This analysis is intended to support the decision making of the project team regarding the potential presence of Aboriginal heritage. The representation of the constraints underwent several iterations to align the representations closer to the decisions the results support, these iterations included:

- Using additional important watercourses (CR11), the designated waterways where available and equivalent Vicmap hydrology layer where they weren't.
- CR09, the ridgelines were reduced from high to moderate scoring as the criteria representation was considered too broad and may be misleading.

- CR05a and CR05b were combined into a single representation – CR05, this was because the project team decided the presence of both was not equivalent to two high criteria being present, rather a single high criterion.

The results demonstrate that the decision framework implemented has provided delineation of the assessment area into two classes of outcomes. This is particularly apparent when visualising the results. These classes include:

1) Low – Moderate potential range

   For these locations the potential is largely driven by the broad scale data that represent moderate potential of the presence of Aboriginal Heritage sites - examples include CR04 slope, and the occurrence of a single high criteria. Despite being at the lower end of the accumulation potential range, the area of the assessment that falls into this class is large, allowing areas with a high + moderate potential criteria to be more distinct.

2) High potential range

   For these locations the potential is largely driven by the presence of a single high criteria, plus a moderate or low. This is caused in particular by the combination of CR01a, CR11a and CR05 plus CR04 (slope). Therefore, you can distinctly see the presence of watercourses or scoria cones/eruption points in the results.

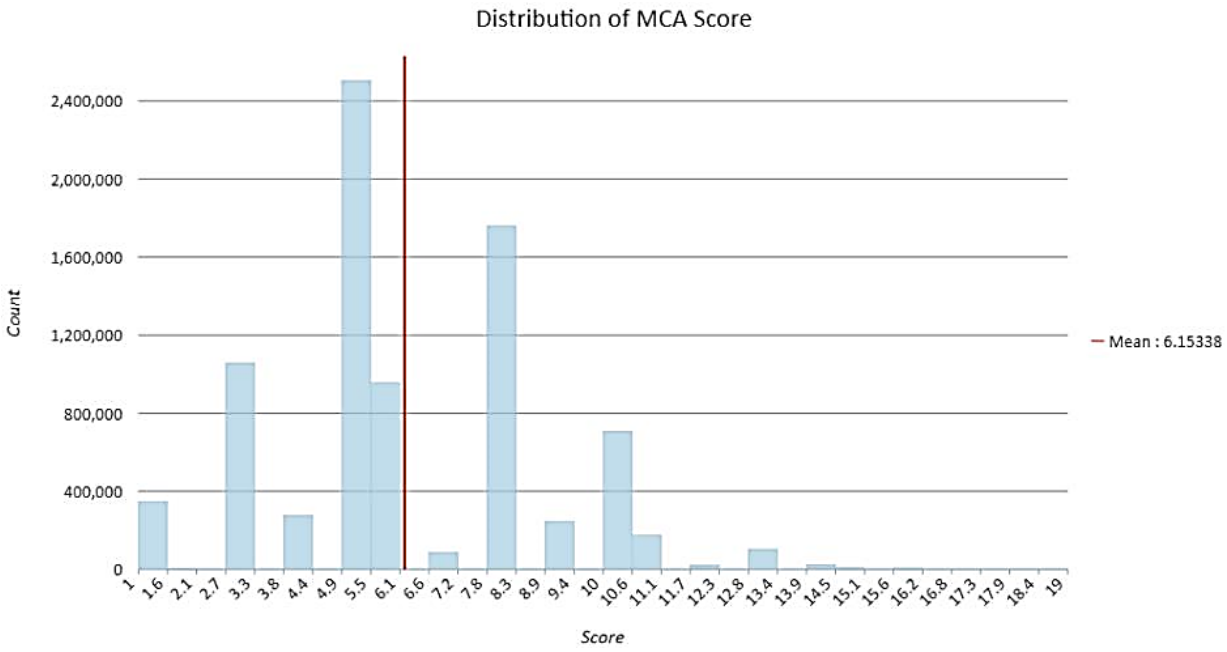


Figure 3. MCA Histogram

F.9 Results and Recommendations

The MCA surface is expressed as a colour map where locations identified as having lower total probability for Aboriginal cultural heritage are expressed on one end of the colour spectrum and locations identified as having the highest probability for Aboriginal cultural heritage are expressed at the other end of the spectrum.

Areas of highest probability for containing Aboriginal cultural heritage are representative of multiple intersecting criteria and are unlikely to have been subject to past land use disturbances. Areas of lower probability most likely reflect landforms that do not have other intersecting criteria or are defined as having low potential (i.e. floodplain), and may also reflect previous disturbance.

The mapping largely follows expectations but there are interesting points to note:

- In the mapping, there are generally low scores mapped across the eastern portion of the activity area (CHMP 2). Even though criteria scores in this area are low to moderate. It is likely that this expression relates to an absence of data sources for criteria that were ultimately excluded from the model. Standard assessment (archaeological ground survey) in the immediate area will be needed to ground truth the

mapping and to interpret whether and absence of criteria or presence of unmapped criteria in the area is the cause of the expression.

- The mapping is based on the data sources indicated in MCA Workbook. These data sources include geological data, LiDAR Analysis, and geomorphological maps. This essentially means that the data is broad scale and has not been subject to ground truthing. The assessment will provide further information which can be used to either verify or refine the predictive model.

Given the variable potential for Aboriginal cultural heritage to be present within the activity area, standard assessment involving ground surface survey is required. The standard assessment methodology will incorporate the results of the site prediction model and mapping.

Criterion_Code	Criterion_Name	Data Source	Data Source	Currency	Assumptions
CR01a	0-100m of Major/Permanent watercourse	LiDAR - Ausnet	https://discover.data.vic.gov.au/dataset/watercourse-network-1-25000-vicmap-hydro	2021	Major waterways considered permanent where the nature of the stream indicates a minimum catchment area of 1 square kilometre, which Given the nature of the terrain would result in a suitable stream definition.
CR01b	100-300m of Major/Permanent watercourse	LiDAR - Ausnet	https://discover.data.vic.gov.au/dataset/watercourse-network-1-25000-vicmap-hydro	2021	As per CR01a
CR03	Other Permanent watercourses	LiDAR - Ausnet	https://discover.data.vic.gov.au/dataset/watercourse-network-1-25000-vicmap-hydro	2021	As per CR01a
CR04a	Slope	LiDAR - Ausnet	https://discover.data.vic.gov.au/dataset/watercourse-network-1-25000-vicmap-hydro	2021	Waterways considered permanent due to their catchment and them being named within the hydrology dataset, but not included in CR01 or CR11
CR04b	Slope	LiDAR - Ausnet		2021	
CR04c	Slope	LiDAR - Ausnet		2021	
CR05a	Stony Rise	LiDAR - Ausnet		2021	Where an area is 2m higher than the surrounding area
CR05b	Scoria Cones	https://discover.data.vic.gov.au/dataset/volcanic-eruption-points		2021	
CR06	Ridgelines	LiDAR - Ausnet		2021	Elevated areas such as terraces, hills, ridgelines; isolated using the LiDAR and then manually selected
CR08	Remnant mature vegetation	https://discover.data.vic.gov.au/dataset/native-vegetation-modelled-2005-ecological-vegetation-classes-with-bioregional-conservation-sta		2021	
CR011a	0-100m of Designated Waterways	CMA Designated Waterways - Ausnet		NA	Section of the AOI not covered by this dataset, the spatial was instructed to select equivalent watercourses from the Vicmap Watercourse layers, but not included in CR01
CR011b	100-300m of Designated Waterways	CMA Designated Waterways - Ausnet		NA	As per CR11a

Appendix G. Areas of Identified Potential Archaeological Sensitivity (PAS)

Areas of Identified PAS – CHMP 17313 (Area 1)

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
11	PAS01	2\PS311954	NO INFRASTRUCTURE	PAS01 is associated with Six Mile Creek and adjacent areas. The area is thickly grassed and has semi-mature box trees and saplings growing within a narrow corridor adjacent to the west side of the creek. Six Mile Creek is deeply incised with riparian vegetation growing along its banks, including several large, mature box trees growing on the edge of the banks. The land is flat either side of the creek. Three previously unrecorded culturally marked trees were recorded on dead, standing eucalypts growing along the bank of the creek. Erosion and shifting of the waterway have impacted all three trees. Stock tracks were not observed on either the west or east side of Six Mile Creek due to thick grass. Visibility was also obscured by surface water south of the dam, which shows erosion to the ground surface. PAS01 is now encompassed by PAS09. GSV is very poor (0-5%) on both banks.
20	PAS02	182\PP2806	Tower assembly area Access tracks Cable crossing	PAS02 was mapped across a broad crest of low elevation approximately 650 m west of Wimmera River. The land descends moderately to the south and west extending into undulating hills and plains. The land descends steeply to the east towards former meanders and terraces of Wimmera River. It is likely that the hill crest was closer to the Wimmera River in the past due to the migration of the waterway to the east at this location. The elevated landform and proximity of the former alignment of the river would have made this area attractive for camping and resource procurement. The tower assembly area is covered in knee-high long grass. GSV is very poor (0-5%).
22, 24, 25, 26	PAS03	32~9\PP2468, 3\TP441787, 4\TP441787, 2\TP439885	Tower assembly area Access tracks Hurdles Cable crossing	PAS03 was mapped across two landforms of floodplains and terraces of low elevation to the west and east of Wimmera River. Riparian vegetation including old growth mature trees are present within and immediately adjacent to the Wimmera River. To the west, the floodplain is framed by a low elevation terrace approximately 160 m west of Wimmera River. A gully and low terrace are present to the west of the terrace which represent older channels of Wimmera River. The upper terrace landform and proximity of the river would have made this area attractive for camping and resource procurement. GSV is very poor (0-5%) due to thick grass coverage. However, exposures are present and the grass thins closer to the river, GSV is fair (25-30%) in these areas.
34, 35	PAS04	3\TP248672, 1\TP248672	Tower assembly area Access tracks	PAS04 was mapped across one landform of a mostly flat plain of low elevation that is intersected by deeply incised unnamed waterways that are tributaries of Wimmera River. Stock trampling evident along the banks and within the bed of the gully. GSV was very poor (1-5%).
38	PAS05	3\LP30347	Tower assembly area Access tracks	PAS05 was mapped across a broad upper slope and crest landform of low elevation to the north of an unnamed waterway that flows from the east to the southwest and is a tributary of Wimmera River. The access track location is southeast of a minor waterway. GSV was very poor (0 -5%) due to thick short grass.
40	PAS06	1\TP868615	Tower assembly area Access tracks	PAS06 is located on the north side of a small hill and directly south of an incised stream. GSV was very poor (0%) due to thick short grass.
10002, 1.3, 1.4, 2	PAS07	122\PP2806; 123\PP2806; 126\PP2806; 133344017	NO INFRASTRUCTURE	PAS07 is located along the banks, predominately the western bank, of Six Mile Creek approximately 2.5 km southeast of its confluence with the Wimmera River. Quartz, silcrete and basalt artefacts were identified on the ground surface on the low rises and slopes to the west of Six Mile Creek. At the time of survey, GSV was poor except in areas of exposure caused by tractor movement.
3	PAS08	128\PP2806	Tower assembly areas Access Track	PAS08 was identified on the east and west banks of an ephemeral stream that feeds into Six Mile Creek. The area of PAS extends up the gentle slopes on either side of the creek, and was designated in consultation with BGLC representatives. At the eastern extent, the paddock is flat, and used for cropping. Mature native vegetation is present along the creek line. At the time of survey, the eastern

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
				paddock had recently been burnt off. GSV on the west bank was poor due to dense long grass cover. In the east, GSV was variable, with corridors of visibility along plough lines.
1.6, 5, 5.01, 9, 10, 11, 10014, 11.01, 11.03, 12, 13, 13.01, 20001	PAS09	130\PP2806; 132\PP2806; 132A\PP2806; 158\PP2806; 2002\PP2806; 2\PS311954; 131\PP2806; 2\PS311954; 134\PP2806; 133332748; 2\PS311954; PC353622; 2\PS744378	Tower assembly areas Access Track	PAS09 was identified within 250 m of Six Mile Creek. The area of PAS extends from an elevated landform in the north, along the creek line to the confluence of Six Mile Creek and two tributaries. An artefact scatter was recorded adjacent to the west bank of Six Mile Creek. GSV was good surrounding the identified artefact scatter (>50%) possibly due to erosional processes (livestock/vehicle movement and heavy rain). PAS09 encompasses PAS01 in its entirety. However, GSV was poor in other areas due to dense vegetation and long grass.
10016; 10014; 11.02; 10015; 11.03; 11.04; 13.01; 10018; 14; 15	PAS10	135\PP2806; 131\PP2806; 133360956; 134A\PP2806; 134\PP2806; 133333988; 133351810; PC353622; 3\TP757544; 133350515; 154\PP2806	Tower assembly areas Access Tracks	PAS10 encompasses the elevated area between Six Mile Creek and the Wimmera River, characterised by hill crests and slopes. The top of these crests comprises a relatively flat plateau, which overlooks floodplains, bilabongs, wetlands and the two main watercourses. A large quartz outcrop was identified on a north facing slope overlooking the Wimmera River. Several outcrops of iron-rich rock were also observed, which may have been exploited for ochre. A single quartz artefact was identified on the ground surface during survey. During the preliminary site visit, GSV was generally good, with 30-50% visibility.
10029; 10028; 10027; 10026; 10014; 11.02; 10016; 10017; 11.03; 10018;	PAS11	1\TP393039; 2\TP232815; 1\TP404052; 7\TP757544; 131\PP2806; 133360956; 135\PP2806; 1\TP757544; 134\PP2806; 3\TP757544;	NO INFRASTRUCTURE	PAS11 encompasses an area of wetlands that runs along the east bank of the Wimmera River. This area of PAS is predominately situated on the floodplain adjacent to the river. From the River this area of PAS extends approximately 250 m, beyond the defined associated area of CHS. The southernmost boundary ends in parcels 150\PP2806 and 153A\PP2806 and extends north outside of the project area, and the northern boundary extends beyond parcels 1\TP393039 and 131\PP2806 outside of the project area. A quartz artefact scatter was identified on the west bank of the Wimmera River. During the preliminary site visit, GSV was generally good, with 30-50% visibility.

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
15; 16; 10019; 17.0		154\PP2806; 133360036; 153A\PP2806; 150\PP2806		

Areas of Identified PAS – CHMP 17321 (Area 2)

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
67, 68, 70	PAS01 (01 and 01A)	23~I\PP2609, 22~I\PP2609, 21B~I\PP2609	Tower assembly area Access tracks Hurdle Cable crossing	PAS01 was mapped on a terraced landform, adjacent to the west bank of Glenlofty Creek. PAS01 extends into an already defined area of CHS, due to its proximity to the Glenlofty Creek waterway. The area of PAS was extended to the east-southeast side of Glenlofty Creek to the property boundary adjacent to Boatmans Road. On the west side of Glenlofty Creek, the land rises towards the eastern foothills of the Pyrenees Range to the west and northwest. To the north, the land rises steeply to the terrace crest. On the eastern side of Glenlofty Creek, the terrace is less defined, rising gently as a broad plain towards Boatmans Road. Mature trees occur along the creekline. An existing high voltage tower is located on the crest of a low rise. Assessed as PAS in consultation with the EMAC field representatives based on the presence of surface artefacts and the close proximity of Glenlofty Creek. Approximately 11 surface artefacts were recorded. GSV was poor to fair. PAS01A is located between Boatmans Road and Landsborough-Elmhurst Road, intersecting the area of CHS associated with Glenlofty Creek. The landform comprises an undulating plain with low rises situated above the creek line. The paddock in TL70 contains patches of native grass, as well as mature native trees in the vicinity of Glenlofty Creek, including one CMT. Several stone artefacts were identified during survey, on the slopes near Landsborough-Elmhurst Road. At the time of survey, GSV was poor due to dense grass cover.
46, 47, 48	PAS02	7~R\PP2672, 7A~R\PP2672, 2~R\PP2672	NO INFRASTRUCTURE	PAS02 was mapped one landform of a broad plain of approximately 270 m elevation. The landform rises to the northeast to a range of hills with elevations to and above 400 m. To the northwest, approximately 200 m from the proposed tower assembly location, a deeply incised erosion gully separates the plain from an abrupt rise. The plain descends to the southeast on a moderate incline to an unnamed waterway approximately 440 m from the proposed tower location. Due south, the plain drops down to an incised channel and unnamed waterway approximately 200 m from the proposed tower location. A southern stream, which runs east to west, joins Glendhu Creek downstream which is a tributary of Wimmera River. Assessed as PAS in consultation with the EMAC field representatives. At the time of survey, GSV was poor to moderate as it was covered in short, grazed grass.
48, 49	PAS03	1~R\PP2672, 2~R\PP2672	Tower assembly areas Access tracks Stringing pad Cable crossing	PAS03 was mapped across two adjacent landforms intersected by an unnamed ephemeral waterway. To the northwest of the unnamed waterway the area of PAS was extended approximately 150 m on an elevated foothill. To the southeast, PAS03 extends across a plain to the south of the unnamed ephemeral waterway into a defined area of CHS, intersecting a recorded Aboriginal Place VAHR 7523-0370. The stream joins an unnamed waterway which runs east to west. This joins Glendhu Creek downstream, which is a tributary of Wimmera River. The waterway is intersected by an unpaved vehicle access track. Disturbances to the area include tree clearing, construction of the existing tower and installation of the NextGen cable parallel to the existing alignment. Assessed as PAS in consultation with the EMAC field representatives due to close proximity to a waterway. GSV was poor to moderate.
51, 52, 53	PAS04	10~8\PP2468, 29A~4\PP2468, 133049645	Tower assembly area Access tracks Hurdles	PAS04 was mapped across a low elevation terrace and plains landform south of Glendhu Road and is associated with a spring-fed unnamed waterway which intersects and runs south of and adjacent to the proposed alignment and area of impact. The spring itself intersects the existing and proposed high voltage alignments. The land descends gently to the south and southeast towards the incised path of the waterway. The bank of the terrace has several mature growth trees. The area descends to the south to a dry gully which shows signs of erosion. This gully runs east to west and is conjoined by the freshwater flow fed from a

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
				nearby spring. Assessed as PAS in consultation with the EMAC field representatives due to close proximity to a waterway. GSV was poor to moderate, with exposures of hard medium-brownish clay with minor silt content visible in animal tracks intersecting the location.
58, 60, 62, 10253, 20012	PAS05	2\PS811585, 133035674, 33050539, 35~H\PP2609, 36~H\PP2609, 36D~H\PP2609	Tower assembly area Access tracks Hurdles	PAS05 was mapped across a landform of terraces and low rises associated with Spring Creek, an unnamed tributary and foothills of the Spring Creek catchment area. The unnamed tributary of Spring Creek descends from the western slopes of the Pyrenees Range and is spring-fed. PAS05 extends across defined areas of CHS associated with Spring Creek and seven recorded Aboriginal Places: VAHR 7523-0348, VAHR 7523-0347, VAHR 7523-0204, VAHR 7523-0201, VAHR 7523-0223, VAHR 7523-0209 and VAHR 7523-0208. GSV was good (50-75%).

Areas of Identified PAS – CHMP 17312 (Area 3)

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
110, 110, 111	PAS01	17~2\PP2684, 17~2\PP2684, 133047142	Tower assembly areas Access tracks	PAS01 was mapped on the rise, which is surrounded by multiple creek lines (including Sandy Creek to the south-west, Amphitheatre Creek to the southeast and minor tributaries running north to south from downhill drainage). Areas of CHS associated with these waterways are also on either side of PAS01. Areas of impact that intersect with PAS01 includes the two tower assembly areas, as well as associated access tracks. PAS01A was mapped within the rise on the foothills of the extensive hills directly north and encompasses the area of a surface stone artefact scatter. Though it does not intersect an area of CHS, the rise is within 300m of Amphitheatre Creek. It is located approximately 375 m west of PAS01 within the same TL Corridor. Poor GSV overall (0% - 10%), with areas of exposure along the fence line and the existing track.
105, 106, 107	PAS02	17~2\PP2684, 3A~3\PP2684, 133047142	Tower assembly area Access tracks Hurdles	PAS02 was mapped on the elevated plains either side of Sandy Creek and thus is already within an area highlighted for CHS. On the western side of Sandy Creek is a tower assembly area within PAS02. To the east of Sandy Creek, there is another tower assembly area within PAS02, as well as two hurdles and half the access track to Sandy Lane. GSV is poor (0%) due to tall grasses.
109	PAS03	18~2\PP2684	Tower assembly area Access tracks	PAS03 was mapped along a broad rise, with rocky outcrops north-east from Sandy Creek. Some mature trees still exist toward the top of the rise, although the paddock is largely cleared. Consistently 0-10% GSV across the landform. Two tower assembly areas, as well as associated access tracks and tower assembly areas are encompassed within PAS03.
88, 89, 90, 91, 10355	PAS04	42\LP4975, 43\LP4975, 133049530, 29~K\PP2609, 25~K\PP2609	Tower assembly area Access tracks Hurdles	PAS04 was mapped on the rise adjacent to the floodplain of the Glenpatrick Creek. PAS04 encompasses an area already highlighted as having CHS, due to the proximity of the creek line. Although the majority of areas of impact are within the floodplain. A single surface artefact was recorded within this PAS. Poor GSV (0%) due to the tall grass cover.
81, 82, 82	PAS05	17F~K\PP2609, 133050979, 4\TP844345	Tower assembly area Access tracks	PAS05 was mapped on the location of the tower assembly area with associated access tracks included. The area is on low rise, overlooking floodplain from the Wimmera River and undulating rises in the vicinity. There are two previously registered places located within PAS05 (VAHR 7523-0117 and 7523-0118). PAS05 also partially encompasses an identified area of CHS, due to its proximity to the Wimmera River. Poor GSV (0% - 10%).
84, 85	PAS06	37\LP4975, 36\LP4975	Tower assembly area Access tracks	PAS06 was mapped between two tower assembly areas, on a rise viewed from south side of the creek. This PAS extends across an unnamed tributary of Wimmera River. The broader landform consists of undulating rises, with multiple associated waterways. Although PAS06 is outside a recognised area of CHS, the Wimmera River is to the southeast, with a smaller creek running off the Wimmera to the north-east. Poor GSV (0%).
100	PAS07	2\TP885202	Tower assembly areas	PAS07 was mapped outside the project corridor on a large granite rise, north of Sandy Creek. Boulders ranged from 1-5m in diameter. Extensive views of the valley and tributaries at the top of the rise. PAS07 is in the same TL Corridor of PAS08, adjacent to its northern boundary, and approximately 100 m north-east of a tower assembly area. Poor GSV (0%).
100.01, 10360	PAS08	2\TP885202, 3\TP885202, 54\LP4975	Access tracks Hurdles	PAS08 is on an elevated plain adjacent to Sandy Creek. This area encompasses the elevated terrain northward of the creekline. Ground is level and firm. Mature trees within the vicinity, including gumtrees inundated by water. Long dry grass interspersed with stock tracks and grazed out patches where the underlying ground surface can be seen. Surface is dry and sandy in summer and was green and lush over winter. All areas of impact are also within an area of CHS, due to the proximity of Sandy Creek. Disturbance from the construction of a pre-existing dam along the access tracks in between two tower assembly areas were noted. Poor GSV (0% - 10%) due consistent grass cover.

Areas of Identified PAS – CHMP 17311 (Area 4)

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
179	PAS02	23~B1\PP2989	Alignment only	PAS02 is located on a gradual rise to the eastern side of a minor creek line (unnamed water way). The small rise was previously along an access track east of the tower assembly area. Sheep were grazing in this paddock at the time of the standard assessment. 0% GSV observed due to extensive surface vegetation.
171, 172	PAS04	34B~B1\PP2989, 34C~B1\PP2989	Tower assembly area Access tracks	PAS04 encompasses the tower assembly area footprint and consists of a steep rise overlooking an unnamed waterway to the west. GSV was consistently 0% with infrequent basalt outcrops noted at the surface. Land clearance activities was also evidenced by large depressions in the ground and partially preserved stumps. A small portion of this PAS extends into parcel 34C~B1\PP2989.
144.01, 147, 148, 150, 151, 149	PAS10 (A-B)	2\LP64296, 3\TP762917, 4\TP762917, 133049262, 1\TP762917, 5\TP762917	Tower assembly area Access tracks Stringing pad	PAS10 encompasses both a large rise to the northwest and a broad flat rise to the southeast of an unnamed waterway. Due to several surveys in neighbouring parcels PAS10 has been extended and these extensions have been identified as PAS10A and PAS10B. PAS10 and its extensions include three tower assembly area, a stringing pad, and several associated access tracks to each of the towers. GSV was high between a 100% and 70% in certain areas due to high levels of erosion associated with the creek banks. The large rise was identified as high potential by TOs due to the west facing slope being protected by easterly winds, the presence of mature Red Gum trees and the great vistas at the top of the rise. Surface artefacts have been identified across the PAS area.
152, 153, 154	PAS11	2\TP762917, 133047688, 9\TP762917	Access track Cable crossing	PAS11 encompasses a large rise overlooking the valley and an unnamed waterway to the northwest. This PAS is located 145m west of a tower in parcel 2\TP762917, and extends across a DELWP corridor (133047688), and into parcel 9\TP762917 that was viewed only from the adjacent property boundary as a result of land access restrictions. GSV at 0% across the property due to extensive grass cover.
145, 146	PAS12	1\TP323565, 1\LP64296	Access track	PAS12 is located on a proposed access track. The landform is an undulating rise adjacent to a creek. GSV was 10%-20% off-track and 100% GSV on-track. Many mature trees are present within the area. Ground disturbance associated with an irrigation was also noted.
122, 122.01	PAS13	141L\PP2676, 2\PS434163	NO INFRASTRUCTURE	PAS13 was located on an access track approximately 320m east a tower that has been removed since the survey was completed. The area of PAS is also located partially within parcel 2\PS434163 which falls outside of the proposed Project Area. PAS13 encompasses an elongated, gradual slope at the base of a rise overlooking Glenlogie Creek to the south and intersects the associated area of CHS. GSV was consistently 0% across the property.
141, 142	PAS14	204\PP2676, 196D\PP2676	Alignment only	PAS14 is located on the mid-slope of a steep rise overlooking the Avoca River and the associated floodplain, within a defined area of CHS. It approximately 160 m southeast of a tower. GSV was consistently 0% across the property. The majority of the PAS area is in parcel 204\PP2676 but extends into parcel 196D\PP2676, where on a basalt outcrop three surface quartz artefacts were identified during Standard Assessment (VAHR 7523-0012).
114, 115, 116, 117, 118	PAS15 (15 – 15A)	1\PS600829, 1\TP391070, 2\TP391070, 3\TP391070, 133044611	Tower assembly area Access tracks	PAS15 encompasses a tower assembly area and associated access tracks on parcel 1\TP391070. The landform in this location is predominantly a rise adjacent to Amphitheatre Creek which ran east-west along the property, and its tributaries extending south. Due to waist high grasses GSV was consistently 0% and survey ceased during the Standard Assessment for OHS reasons. Survey was later undertaken of the adjoining property parcel to the east (1\PS600829) identified that the PAS15 extended

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
				across two low rises and a drainage line to Amphitheatre Creek in the north and the beginning of steeper hillslopes to the east and south (labelled PAS15A), and across Keiths Road.
123, 124, 125	PAS17	141E\PP2676, 133044931-1, 141F\PP2676	Tower assembly area	PAS17 encompasses the footprint of a tower assembly area and located approximately 170 m southeast of PAS13. PAS17 is situated between two tributaries of Glenlogie Creek and the boundary extends to the banks, over Egans Lane. GSV was 0%-10%. It overlooks a culturally modified Ring Tree approximately 38 m south of the PAS that was identified during Standard Assessment and will be registered on the VAHR.
142	PAS18	196D\PP2676	Access tracks	PAS18 encompasses impact footprint associated with a tower assembly area and the banks of the Avoca River reaching to Amphitheatre Road. This PAS is located on a low rise that overlooks the Avoca River to the north and northwest. GSV was overall low at 20%.
155	PAS19	1\TP756070	Alignment only	PAS19 was identified on the access track, approximately 60 m east of a tower location and 200 m east of PAS11, where multiple stony rises were identified. Geology of this location included metasedimentary rocks, basalt, granite, and surface quartz of a non-artefactual nature. GSV on these landforms was moderate at around 30% due to the short grass cover and stony outcrops.
176, 177	PAS20	133037973, 1\PS411486	Tower assembly area Access tracks	PAS20 encompasses a tower location and portions of associated access tracks. It is located on the mid slope of a rise overlooking an unnamed tributary of Burnbank Creek to the north-east. The area is heavily wooded with juvenile native trees and scrub vegetation visible on the surface. Due to this visibility was consistently low at 0% GSV. This PAS extends into a DELWP corridor (133037973).
132	PAS21	210\PP2676	Alignment only	PAS21 is located on a raised landform overlooking an unnamed drainage line to the southwest, between two tower locations. Some echidna burrowing activity was observed near the adjacent access track, but no cultural heritage material was identified on the surface of this PAS. This area was determined to hold significance due to its landform which would have afforded protection from the wind, its important vistas and proximity to Amphitheatre Creek to the west. GSV was negligible (0-5%) throughout due to the tall grass cover.
158	PAS22	2\PP3941	NO INFRASTRUCTURE	PAS22 encompasses a stony rise that is situated immediately east to a drainage channel that runs north-south. This stony rise is prominent in the landscape with large granite boulders and viewscapes of the valley. Mature trees are located nearby although when inspected none were culturally modified. GSV was 0% due to tall grasses.

Areas of Identified PAS – CHMP 18101 (Area 4)

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
194	PAS01	48F\PP2989	Tower assembly area Access track	PAS01 was identified on a large rise adjacent to the north and east of Burnbank Creek, located at a tower assembly area assembly area. A stand of trees was located on the top of the rise where PAS01 was identified. The lower slope intersects a drainage channel of Burnbank Creek. The channel had been dammed so was holding water at the time of the survey. PAS01 as well as the immediate area surrounding it showed signs of disturbance and erosion. 0% GSV observed due to extensive surface vegetation.
189	PAS02	B~B\PP2989	Tower assembly area	PAS02 is located along Burnbank Creek, to the north, the east and south-east of tower assembly area. The area was moderately forested by newly planted Eucalyptus trees. PAS02 includes undulating landforms associated with Burnbank Creek banks, which were deemed to hold high Aboriginal cultural potential in consultation with RAPs. GSV in this PAS was between 10-30%, with increased visibility in areas of exposure made possible through erosion. Overall visibility was low due to the thick detritus cover.
187	PAS03	1\TP575862	Tower assembly area Access track Stringing pad	PAS03 is located at hurdles northeast of a tower assembly and associated access tracks, on an elongated rise. The eastern side of PAS03 also intersects with an area of CHS associated with Burnbank Creek. A large dam is located either side of the access track and intersects with the NW end.
183.053	PAS04	88\PP2989	Tower assembly area Access tracks Stringing pad Hurdle	PAS04 comprises the floodplain, banks and slopes surrounding an unnamed creek, located directly south of a volcanic cone. The tower assembly area is located on flat terrain ringed by slopes to the west and south, and the unnamed creek to the north and east. Mature native vegetation is present at the eastern extent of PAS04. GSV was negligible across the parcel due to thick grass cover, except in narrow corridors of exposure caused by stock.
191	PAS05	11B~B\PP2989	Tower assembly area Access track	PAS05 encompasses a mid-to-steep rise overlooking Burnbank Creek directly to the northeast and east. GSV consistently 0-20% across the rise. In close proximity to PAS06 to the southeast. PAS05 was considered to have potential for its proximity to water and its associated elevated landforms.
191	PAS06	11B~B\PP2989	Tower assembly area Access track	PAS06 encompasses an extensive rise overlooking the broader landscape, particularly to the north and west. PAS06 is within an area already defined with CHS, due to the proximity of Burnbank Creek directly to the northwest and west. GSV consistently 0% across the rise.
193	PAS07	3D~B\PP2989	Tower assembly area Access track	PAS07 intersects the tower assembly area and associated access tracks, on the mid-slope of a rise. This rise is adjacent to Burnbank Creek to the south and a floodplain to the north. GSV 10-20%, except for areas that are heavily disturbed where GSV extends 90-100%. Disturbed areas include surface accumulations of fractured quartz from previous mining endeavours and depressions from tree clearing.
197	PAS08	31\PP3004	NO INFRASTRUCTURE	PAS08 is encompassed within a low-rise overlooking a natural drainage channel to the SE. GSV was 0% across the activity area.
196, 197	PAS09	51\PP2989, 31\PP3004	Tower assembly area Access track	Within the current design footprint, PAS09 is located on a low rise overlooking a floodplain to the north and east, and Burnbank creek to the west. PAS09 also encompasses the elongated rise at superseded tower assembly area and associated access tracks, which overlooks a floodplain to the southwest. GSV is 0% across both parcels due to extensive grass cover.
181	PAS16	1\TP887273	Tower assembly area Access tracks Hurdles	PAS16 encompasses both banks and rises of a minor creek line (pos. Mile Creek) that crosses through the parcel. Associated access tracks and stringing alignment are proposed from the top of the slope and intersect the creek line. 0% GSV was mapped

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
			Cable crossing	at the tower assembly area location, with 0-10% GSV across the proposed access track and. Most of the property parcel is encompassed within PAS16.
241, 242	PAS17	103\PP2671, 94\PP2671	Tower assembly area Access track	PAS17 comprises the terraces and tributaries of Glendaurel Creek in this property, the creek is deeply incised in places but has well developed terraces with suitable flat areas for use. The creek is permanent and can both fast- and slow-moving sections.
184.03, 184.03, 184.06	PAS18	216H\PP2989, 2003\PP2989, 216A\PP2989	NO INFRASTRUCTURE	PAS18 is located on the east and west banks of Burnbank Creek. The creek is surrounded by a flat plain and is deeply incised rather than having sloping banks. GSV was negligible due to grass cover, except in areas of exposure at the base of trees, around a dam and the creek, and animal burrows. Isolated pockets of exposure across the paddock afforded ~5% GSV. Several mature native trees were present around Burnbank Creek, including one CMT.
229	PAS20	1\PS339050	NO INFRASTRUCTURE	PAS20 is a large discrete rise to the south of the alignment. Stony rises such as this are often associated with volcanic landscapes and are known to be favoured locations for Aboriginal people for long term occupation. GSV was negligible due to grass cover.
229	PAS21	1\PS339050	NO INFRASTRUCTURE	PAS21 is the flat top of a large Volcanic Peak in this property. The peak is high and steep and the area may not have been an appropriate camp or long-term occupation site, but its height and the relative flatness of the top may have made it a good look out or viewpoint for monitoring the surrounding landscape.
229	PAS22	1\PS339050	NO INFRASTRUCTURE	PAS22 is a basalt outcropping close by the medium volcanic peak in this property. Outcroppings such as this are more likely to be archaeological places as the stones trap artefacts and hold them in place, unlike the clay natural soils of the volcanic plains. These outcrops are also often slightly elevated from the surrounding land and comparatively well drained, making them favoured occupation sites.
229	PAS23	1\PS339050	NO INFRASTUCTURE	PAS23 comprises the small flat top of a rise. Stony rises such as this are often associated with volcanic landscapes and are known to be favoured locations for Aboriginal people for long term occupation. GSV was negligible due to grass cover.
230	PAS24	2\PS339050	NO INFRASTRUCTURE	PAS24 is the top of Mt Gap, a volcanic cone that dominates the property. The peak is extremely high and steep, and the area may not have been an appropriate camp or long-term occupation site, but its height and the relative flatness of the top may have made it a good look out or viewpoint for monitoring the surrounding landscape.
225.08, 229, 230, 231.01, 231.02	PAS25	33\PP2002, 1\PS339050, 2\PS339050, 131\PP2671, 126\PP2671	NO INFRASTUCTURE	PAS25 is the floodplains and terraces of Beckworth creek between the northern foothills of Mt Bolton and the base of Mt Gap in this property. The area is flat, but raised up from the creek bed, well sheltered due to the high land on either side and supplied with permanent running water all year round by the creek. It would have been an ideal location for long term settlement and resource exploitation, and it was likely utilised by groups for many kilometres around. Traditional owners on site for the standard assessment identified it as an important hunting location and men's place, but not a place for men's business and thus not subject to access restrictions.
280, 283, 283.01, 289	PAS26	112\PP3495, 133265305, 133747813, 104\PP3495, 133659620, 133663275, 133653799,	Tower assembly areas Cable Crossing	PAS26 extends multiple properties and encompasses an area ~142 acres. To the west, the PAS includes undulating rises and crests at a moderate to gentle incline. The area consists mostly of grazing paddocks with cleared vegetation with little remnant vegetation noted. Due to the tall grass cover, GSV remained low at 5 and would increase to 20% where erosion-based exposure increased GSV. Some rocky outcrops were noted in the western portion of the PAS on a moderately inclined slope. Some natural quartz fragments were observed along the road reserve associated with Charlesons Road. At the eastern end PAS26, a flat overall landscape with a low rise along the northern boundary was observed. GSV at this end was high between 50

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
		133657497, 133651308, 133660831, 133653436, 99\PP3495, 133660719, 133659125, 92\PP3495, 1\TP671733, 1\TP238053		and 80% due to recent cropping and overall cleared landscape. Basalt and quartz gravel were noted in the plough furrows. Birch creek run across the northwest corner. A basalt grinding stone, basalt anvil slab, and some ochre were identified in the western section of the PAS. Given the proximity of Birch Creek and the flatness, the low-lying nature of the surrounding landscape and the identification of cultural heritage material, Aboriginal representatives identified the low rise as a camping place and an area of PAS that encompasses all four-tower assembly areas in the parcel.
247	PAS27	3\TP862994	NO INFRASTRUCTURE	PAS27 is a basalt outcropping close by the medium volcanic peak in this property. Outcroppings such as this are more likely to be archaeological places as the stones trap artefacts and hold them in place, unlike the clay natural soils of the volcanic plains. These outcrops are also often slightly elevated from the surrounding land and comparatively well drained, making them favoured occupation sites.
230	PAS28	2\PS339050	Tower assembly area Access Track	A low rise between a granite peak to the northwest and a volcanic cone to the southeast. The low rise provides excellent visibility of the plain between the two peaks and there is an ephemeral drainage line to the northeast. The area of PAS has been defined as the high points along the contour line in this portion of the property.
300.13, 300.16, 300.2201, 300.2202, 300.2204, 300.2205, 300.2206, 300.2207, 300.2208, 300.2209, 300.2211	PAS29	2035\PP3495, 133663399, 133663705, 133660911, 2031\PP3495, 1A1~A\PP3495, 2005\PP3490, 57A~A\PP3490, 57B~A\PP3490, 2006\PP3490, 2034\PP3495, 1B2~A\PP3495, 1\TP329449	Tower assembly areas Access Tracks Hurdles Cable crossing	PAS29 comprises an area running through the Bullarook Creek Streamside reserve, and identified as a significant cultural location in the CVA prepared for Area 4. The area is amongst mature trees and saplings. At the stone bridge is a 10 to 15 m drop down to the creek with exposed basalt rocks. Proximity to the waterway and adjacent reserves suggests a likelihood that cultural material is retained in the soils. There are basalt cliffs exposed at the bottom of the cutting of the waterway. Due to the potential sensitive nature of these landforms in proximity to a source of basalt, RAPs determined the area to be a PAS. GSV along the road corridor was reduced due to the tall grass cover and dense leaf litter, at around 10% while the paddock remained high due to its cleared nature at 80%.
300.11, 300.12, 300.1501, 300.15, 300.1602, 300.1603,	HEPBURN LAGOON	3\LP85081, 1\TP889031, 59\PP3490, 3\TP329449, 58\PP3490, 1\TP855035,	Tower assembly areas Access Tracks Cable Crossing Hurdles	Hepburn Lagoon was broadly assessed as an area of PAS by the RAP and identified as a culturally significant sacred place in the CVA prepared for Area 4, noting that the TOs have not shared all values associated with this area as it is protected knowledge. Standard assessment in this area is incomplete.

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
300.1604, 300.1606, 300.2101, 300.21, 300.2009, 300.2039, 300.2040 1, 300.2040, 300.2045, 20044, 300.2202, 300.2210, 300.16, 300.2206, 300.2211, 300.2205		1\TP372130, 57B\LP2617, 1\TP86760, 1\TP87931, 2\PS509853, 29~B\LP2617, 1\TP81196, 1\TP358537, 1\TP160706, 1\TP82744, 1A1~A\PP3495, 1B1~A\PP3495, 133663399, 133663705, 133660911, 57B~A\PP3490, 1\TP329449, 57A~A\PP3490		
300.1905, 300.1906, 300.1907, 300.2018, 300.2019, 300.2008, 300.2020, 300.2050	PAS30	2\PS345180, 50\PP2261, 133665329, 1\TP193348, 133664099, 2017\PP2261, 2016\PP2261, PC380005	NO INFRASTUCTURE	PAS30 was identified from the road reserves of Jeffrey Road, approximately 100m north of Langdon Creek which runs off Hepburn Lagoon to the west. This area is a rise that slopes north to a ridge and overlooks a wetland to the south. Grass cover ranges from short to overgrown, with frequent Willow, Poplar, and Blackberry within the design area. This location was determined to have potential cultural heritage due to proximity to waterways.
292.06, 292.07, 292.09	PAS31	74\PP3495, 133665505, 1\TP826812	Access track Hurdle	PAS31 was identified in road reserves of Lone Hand Road immediately southeast of a volcanic cone. The landscape is a volcanic plain that slopes north. Birch Creek is located approximately 900m east, and an ephemeral creek runs through the alignment in the adjacent property.
229, 228, 227, 227.01, 224, 225, 225.01, 225.02	PAS32	1\PS339050, 1\TP375402, 4\TP375402, 3\TP587055, 28\PP2002,	NO INFRASTRUCTURE	PAS32 was identified within proximity of several significant landforms. This area is characterised by hills, granite stony rises, volcanic cones (Mount Bolton), Beckworth Creek, and ephemeral waterways. The properties surveyed have been mostly cleared and ground covered by agricultural grasses. Vegetation includes remnant native trees; box trees, sporadic mature redgums (estimated up to 200 years old) and blue gums. Scattered clusters of blue gums remain from a plantation to indicate previously registered Aboriginal places. Natural quartz was visible on the ground surface near a superseded tower assembly area, and

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
		29\PP2002, 27\PP2002		potential surface artefacts were identified immediately east of this location. A historical feature was also located within PAS32. GSV was 10% or less. This PAS was assessed as having high significance cultural values through consultation with DJAARA.
228, 227, 227.01	PAS33	1\TP375402, 4\TP375402, 3\TP587055	NO INFRASTUCTURE	PAS33 is located north of PAS32. This PAS surrounds an area of granite stony rises and a hill. The peak of this hill provides views capes of the surrounding landscape.
237, 237.02, 237.01, 238, 239.01, 239, 240	PAS34	2\LP113576, 1\TP80484, 114A\PP2671, 133209125, 113A\PP2671, 1\TP599187, 104\PP2671	Tower assembly area Access Tracks	PAS34 comprises the entirety of TL238 and TL 239, as well as the forested sections of adjoining parcels north of the proposed alignment. PAS34 is located on the slopes and ridge overlooking plains to the south. GSV was negligible due to grass cover, except in areas of exposure caused by ploughing or vehicular movement. Glass and quartz artefacts were identified on the ground surface within TL 238.
2064	PAS35	2\PS403256	Tower assembly area Access Track	PAS35 is located on a gently sloping floodplain directly southwest of Pinchgut Creek. Vegetation surrounding the creek indicates suitability for resource extraction by Aboriginal people. A mature eucalypt is located at the western extent of PAS35. Three previously registered Aboriginal places are located within the area of PAS. GSV was 10% due to grass coverage, except in areas of exposure caused by vehicle and stock movement, where GSV was 100%.
2064	PAS36	2\PS403256	Tower assembly area Access Track	PAS36 comprises the banks of a tributary of Birch Creek, as well as the northern slope and crest of a rise within TL2064. Birch Creek is located 250 m to the west. Three stone artefacts were identified on the ground surface during standard assessment. GSV was variable due to canola crops, with 0% visibility in cropped sections and 90% in between plants.
183.102, 227.02	PAS37	2\PP2002, 1\TP587055	Tower assembly area Access Tracks	PAS37 comprises the gentle slopes and crests either side of Mt Greencock Creek, which runs north-south through the paddock. Three quartz artefacts were identified in the ploughed paddock located at the western extent of PAS37. GSV was negligible due to grass cover, however areas of exposure were present in the cropped paddock at the western extent, and at the eroded banks of Mt Greencock Creek.
183.102, 227.01, 227.02	PAS38	2\PP2002, 3\TP587055, 1\TP587055	NO INFRASTRUCTURE	PAS38 is located on the crest and slopes of a stony rise with dense mature vegetation. Stony rises such as this, overlooking surrounding creeks and plains, are likely locations for Aboriginal occupation.
229	PAS39	1\PS339050	Tower assembly area Access Track	PAS39 is located on the gently sloping plain directly west of a drainage line. Three mature introduced trees located at the southern extent of PAS39 are associated with a historical site. GSV was negligible due to dense grass cover, except in areas of exposure along the drainage line.
229	PAS40	1\PS339050	Tower assembly area Access Track	PAS40 is located on a stony rise overlooking surrounding plains, and an unnamed creek. Stony rises such as these are likely locations for Aboriginal occupation. GSV was 0% due to grass cover.
227.03	PAS41	2\TP587055	NO INFRASTRUCTURE	PAS41 is an elevated landform overlooking the surrounding landscape: rolling hills, plains and a drainage line running northwest to southeast. The proposed alignment runs through a grazing pasture, partially used for blue gum plantation, with some slight to moderate slopes. GSV was very poor with dense and long grass coverage. Native trees are sparse within the parcel but those that are present are located along the edge of the road reserve.

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
227.02	PAS42	1\TP587055	NO INFRASTRUCTURE	PAS42 was identified in, and around, a marshy area with mature native trees directly west of a drainage line. The surrounding landform consists of low undulating hills and plains. GSV was very poor with dense grass coverage. Trees are sparse through the property but those that are present are located along the edge of the road reserve. Mature native trees are located along the water drainage and near the identified area of PAS.
183.080	PAS43	139\PP2989	NO INFRASTRUCTURE	PAS43 was identified on the banks and slopes of a drainage channel running north south through the parcel. GSV was negligible at the time of survey, due to dense grass cover.
183.080	PAS44	139\PP2989	NO INFRASTRUCTURE	PAS44 is located on an elevated landform overlooking a drainage channel and the surrounding plains and low undulating slopes. GSV was negligible at the time of survey, due to dense grass cover.
183.092	PAS45	141\PP2989	NO INFRASTRUCTURE	PAS45 comprises an area of high ground overlooking a north-south aligned drainage channel and surrounding plain. The paddock gently slopes downward towards the south. Proposed tower assembly area was located approximately 70 m west of the drainage channel. The area of PAS extends from the crest of a slope on the eastern bank, across the channel to include the western bank. GSV was very poor due to thick grass cover.
183.100	PAS46	1\PS310387	NO INFRASTRUCTURE	PAS46 consists of the banks and slopes on either side of a north-south drainage line. The surrounding landform is a flat plain. GSV was negligible at the time of survey due to grass cover and inundation in parts.
183.051	PAS47	81\PP2989	Tower assembly area Access Track	PAS47 comprises the banks of a creek, and the crest of a slope overlooking the creek and surrounding plain. Proposed tower assembly area is located on the elevated landform in the east of PAS47. The creek runs northwest to southeast through the paddock. GSV was poor at the time of survey due to dense grass cover.
183.027, 183.030, 183.031, 183.045, 183.046, 183.047, 183.050, 196.03, 200.01, 201, 201.01, 203	PAS48	58\PP2989, 61\PP2989, 133050492, 133034964, 133035766, 133040318, 133049697, 133048338, 67\PP2989, 68\PP2989, 69\PP2989, 80\PP2989, 60\PP2989, 133044799, 2~21\PP2597, 1~22\PP2597, 133044831	Tower assembly areas Access Tracks	PAS48 extends along an unnamed creek, encompassing the banks and slopes on either side, and the crests of the slopes. Slopes on the eastern side are steeper than those to the west. Surrounding the creek line is a flat plain and several other creeks also running northwest to southeast. During survey, GSV was good along established access tracks, but poor in grassy areas. Paddocks under crop were unable to be surveyed, however the area of PAS was extended according to the continuation of the landform. Several stone artefacts were identified on the ground surface along the west bank of the unnamed creek within PAS48. At its southern extent, he area of PAS extends eastward to abut PAS47 at another unnamed creek. Several stone artefacts were identified on the ground surface on the plain in between the two creeks.
183.039	PAS49	151A\PP2989	Waubra bypass	Preliminary identification of PAS. Standard assessment incomplete.

Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
183.039	PAS50	151A\PP2989	Waubra bypass	Preliminary identification of PAS. Standard assessment incomplete.
183.100	PAS51	1\PS310387	Tower assembly area Access Track	PAS51 is located on a flat plain directly to the west of a drainage line and associated area of PAS (PAS46). GSV was negligible at the time of survey due to grass cover and inundation in parts.
184	PAS52	133041647	NO INFRASTRUCTURE	PAS52 was identified on a small area of exposure directly west of Black Bottom Road. GSV was generally low in this parcel due to thick vegetation cover, gravel beside the road, and the bitumen road itself.
184	PAS53	133041647	Access Track	PAS53 is located in a small flat area directly west of Black Bottom Road, at the location of an existing access track. PAS53 is at a low elevation, overlooking a plain to the west. GSV was generally low in this parcel due to thick vegetation cover, gravel beside the road, and the bitumen road itself.
183.059	PAS54	148A\PP2989	Tower assembly area Access Track Stringing Pad	PAS54 encompasses a north facing slope directly south of a volcanic cone, overlooking a drainage line, swamp, and extensive plains. Several basalt outcrops are present on the slope. This area was designated as an area of PAS in consultation with DJAARA representatives due to its commanding view of the surrounding region. GSV was negligible at the time of survey due to dense grass cover.
183.059	PAS55	148A\PP2989	NO INFRASTRUCTURE	PAS55 is located directly east of PAS 54, on a relatively flat section of a north facing slope. PAS55 overlooks a swamp, drainage line, extensive plains, and a volcanic cone. This area was designated as an area of PAS in consultation with DJAARA representatives due to its commanding view of the surrounding region. GSV was negligible at the time of survey due to dense grass cover.

Areas of Identified PAS – CHMP 18108 (Area 5)

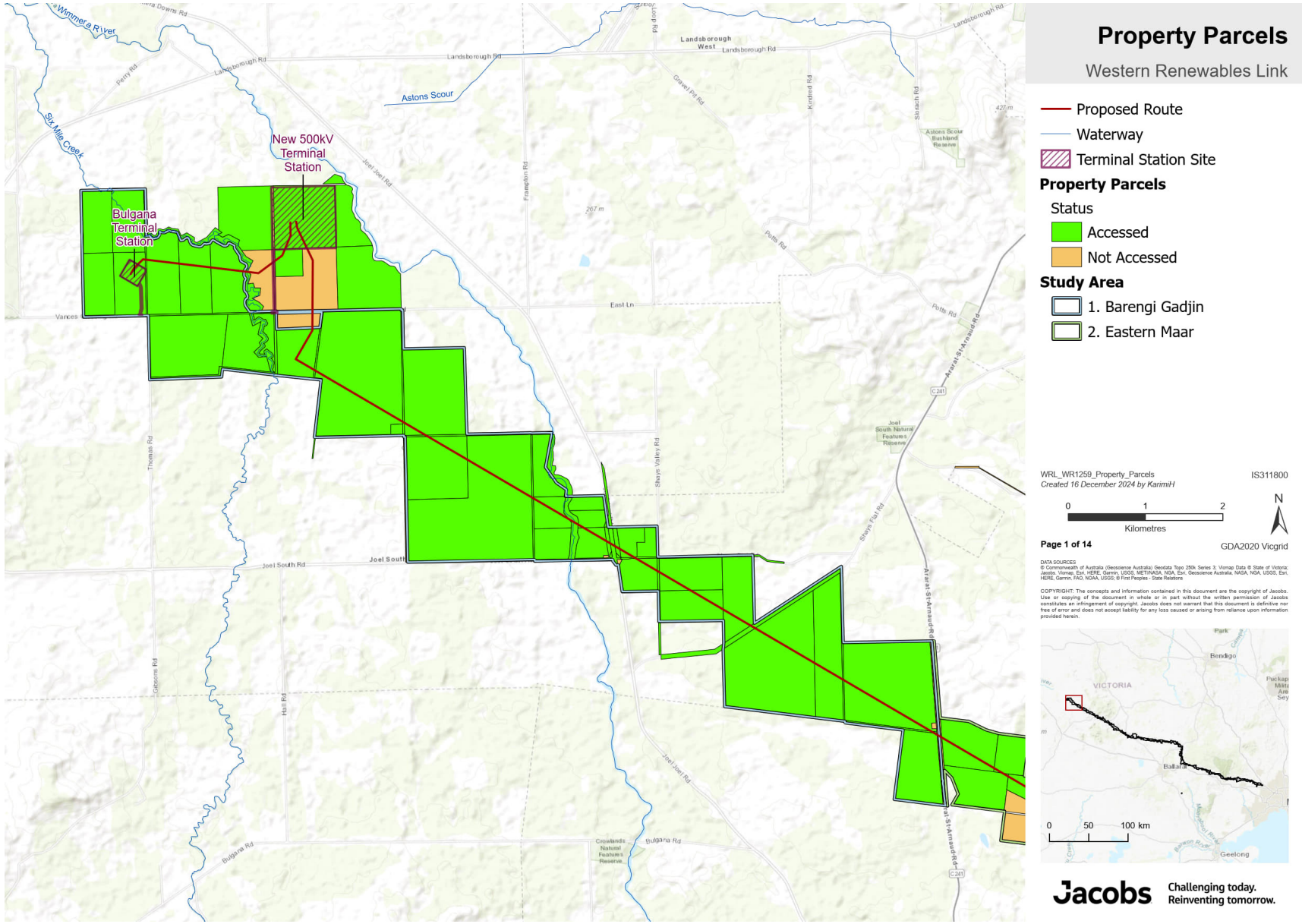
Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
401.10, 410, 11, 403	PAS01	2\PS636058, 10A~15\PP3167, 10B~15\PP3167	NO INFRASTRUCTURE	PAS01 is now located outside of the Project Land in tree plantation to the east of Moorabool River West Branch. This PAS is east of an unnamed stream. This area included the location of possible CMTs. These are waiting on further assessment by the RAP.
426.001	PAS02	17~18\PP3167	NO INFRASTRUCTURE	PAS02 located south of Callaghans Lane and west of PAS03 from which it is separated by a paper road. This PAS is east of an unnamed stream.
427	PAS03	12~18\PP3167	Hurdle Cable crossing	PAS03 located south of Callaghans Lane and east of PAS03 from which it is separated by a paper road. This area included the location of possible CMTs. These are waiting on further assessment by the RAP.
431, 432, 433, 434, 435, 436,	PAS04	6A~18\PP3167, 2\TP884967, 3\TP884967, 4\TP884967, 5\TP884967	Tower assembly areas Hurdle	PAS04 extends over several parcels west of Moorabool West Road and south of an unnamed tributary of Werribee River. This PAS intersects a tower assembly area on TL431 and overlaps a tower assembly area on TL 434. Artefact scatters were identified in TL 431, 432, and 436 within areas of higher GSV. The RAP provided notification to the HA by phone of the significance of this area.
441	PAS05	15~13\PP3167	NO INFRASTRUCTURE	PAS05 is north of an unnamed tributary of Werribee River and longer in the proposed route. This area included the location of a possible CMT. This area is waiting on further assessment by the RAP.
441	PAS07	15~13\PP3167	NO INFRASTRUCTURE	PAS06 is north of an unnamed tributary of Werribee River and longer in the proposed route. This area included the location of a possible CMT. This area is waiting on further assessment by the RAP.
442, 443	PAS08	20A~12\PP3167, 20~12\PP3167	NO INFRASTRUCTURE	PAS07 is north of an unnamed tributary of Werribee River and longer in the proposed route.

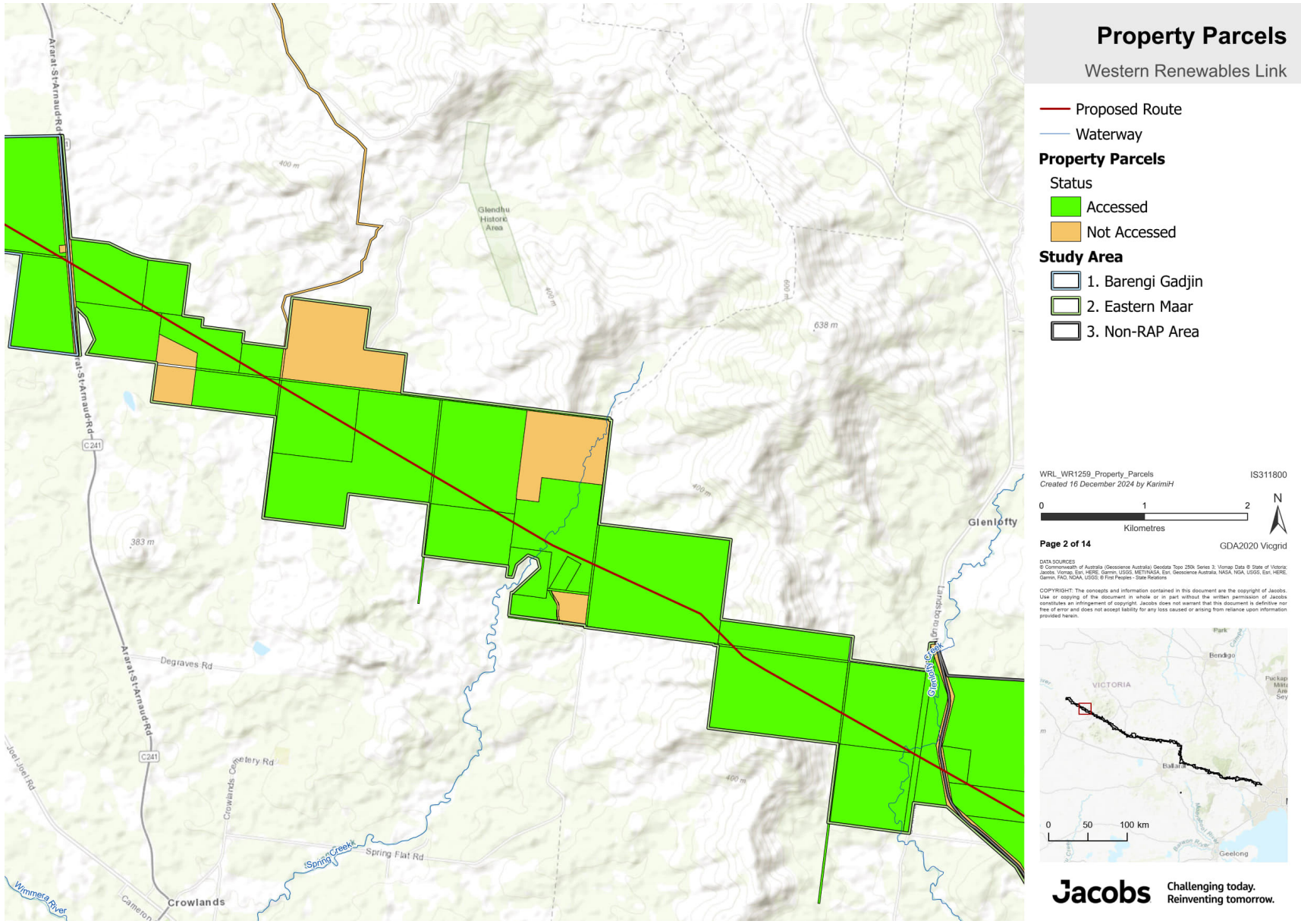
Areas of Identified PAS – CHMP 18111 (Area 6)

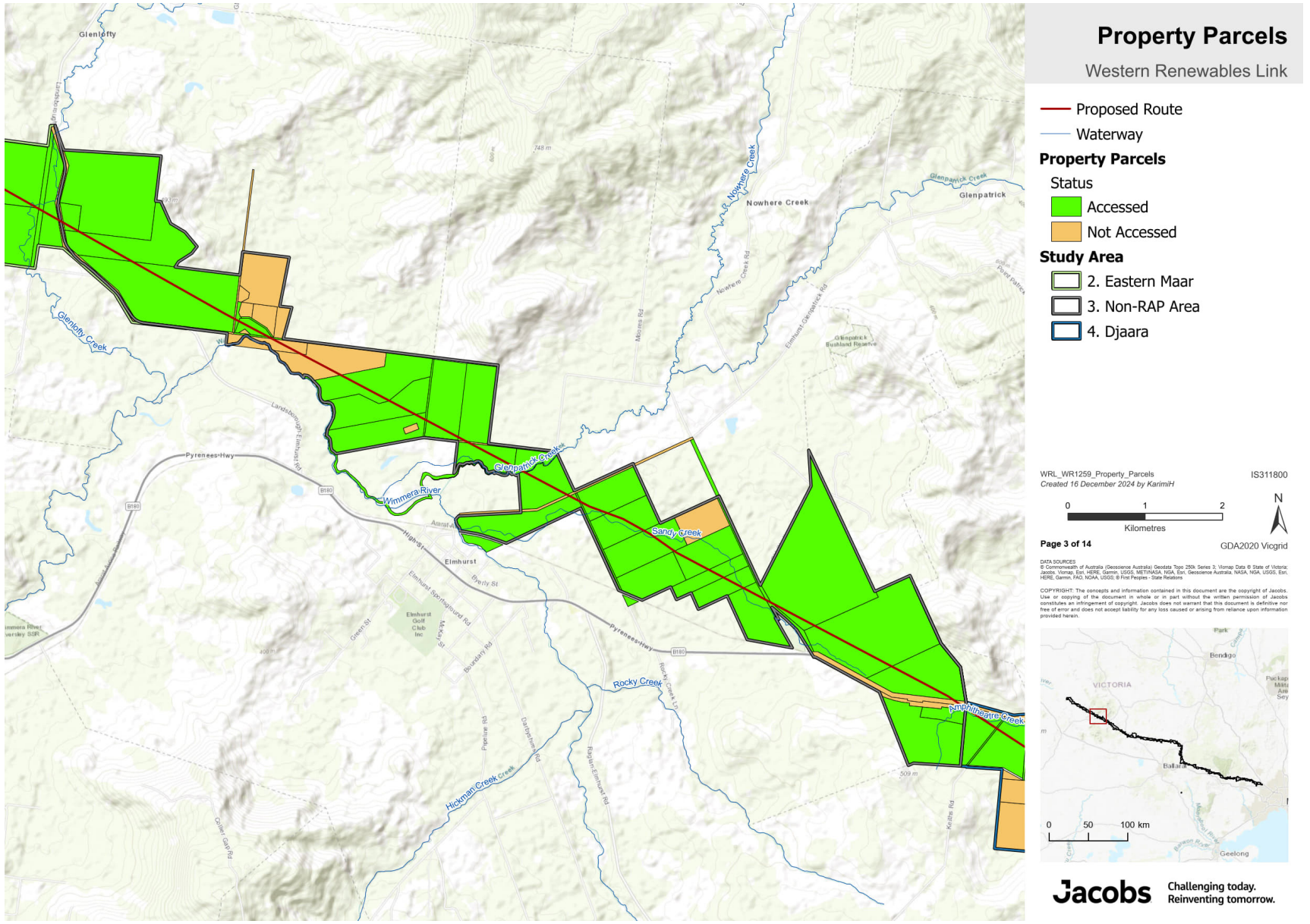
Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
604, 605, 594, 597, 598, 599, 600, 600.01, 600.02, 602, 600.03, 600.04, 600.06, 603, 600.07, 600.08	PAS01	1\TP539627, 1\PS736444, 2\PS839649, 2\TP828228, 2\TP827912, 1\TP827912, 1\PS839649, 2\PS736444, 3\PS736444, 1\TP827875, 1\TP827912, 1\TP827874, 2019\PP2761, 2\TP827874, 6\PP3948	Tower assembly areas	PAS01 includes the lower slopes of Mt Kororoit, a significant eruption point, and the terraces of Kororoit Creek. This area was identified as a significant cultural landscape in the CVA prepared for Area 6 due to the role of Mount Kororoit as a source of stone tools and possibly a landscape marker and stopping point for travel routes along the creek. A high density of surface artefacts was identified along the northern base of Mt Kororoit near Kororoit Creek during standard assessment. GSV was poor (~5%).
559.03, 559.04	PAS02	1\PS34971, 2\PS349871, 1\PS349871, 2\PS349871, 1\TP759305, 2\PS349871	Tower assembly area	PAS02 is one of the largest identified area of PAS in Area 6 and encompasses the hills and hill slopes along waterways to the east of Merrimu Reservoir. PAS02 is located on a ridge overlooking a gully. Extensive surface artefact scatters were identified during the survey. GSV was poor (~10%).
528.01, 528.02, 529, 530, 531, 531.01, 531.03, 531.02	PAS03, PAS04	1A\PP2404, 1\TP245532, 1\TP245532, PC378291, PC378290, 1C\PP3095, 2003\PP2922, 2005\PP3095	Tower assembly areas	PAS03 and PAS04 covers the floodplains east and west of Lerderderg River. Extensive surface artefacts were identified during the survey (typically in areas of better GSV). GSV was poor to very good (~5% to ~80%).
484	PAS05	1\TP761475	NO INFRASTRUCTURE	PAS05 encompasses the rise and terrace to the east above Korjamnunnip Creek associated with an artefact scatter identified during the standard assessment. This area was assessed as an area of PAS by the RAP during fieldwork.
468, 471, 466.09, 473, 474,	PAS06	4\TP127348, 3\TP127348, 1\TP127348,	Tower assembly areas	PAS06 encompasses the lower slopes of eruption point Mt Steiglitz and the plain between Mt Steiglitz and the Werribee River. A high density of surface artefacts, including a greenstone axe, were identified on the plain.

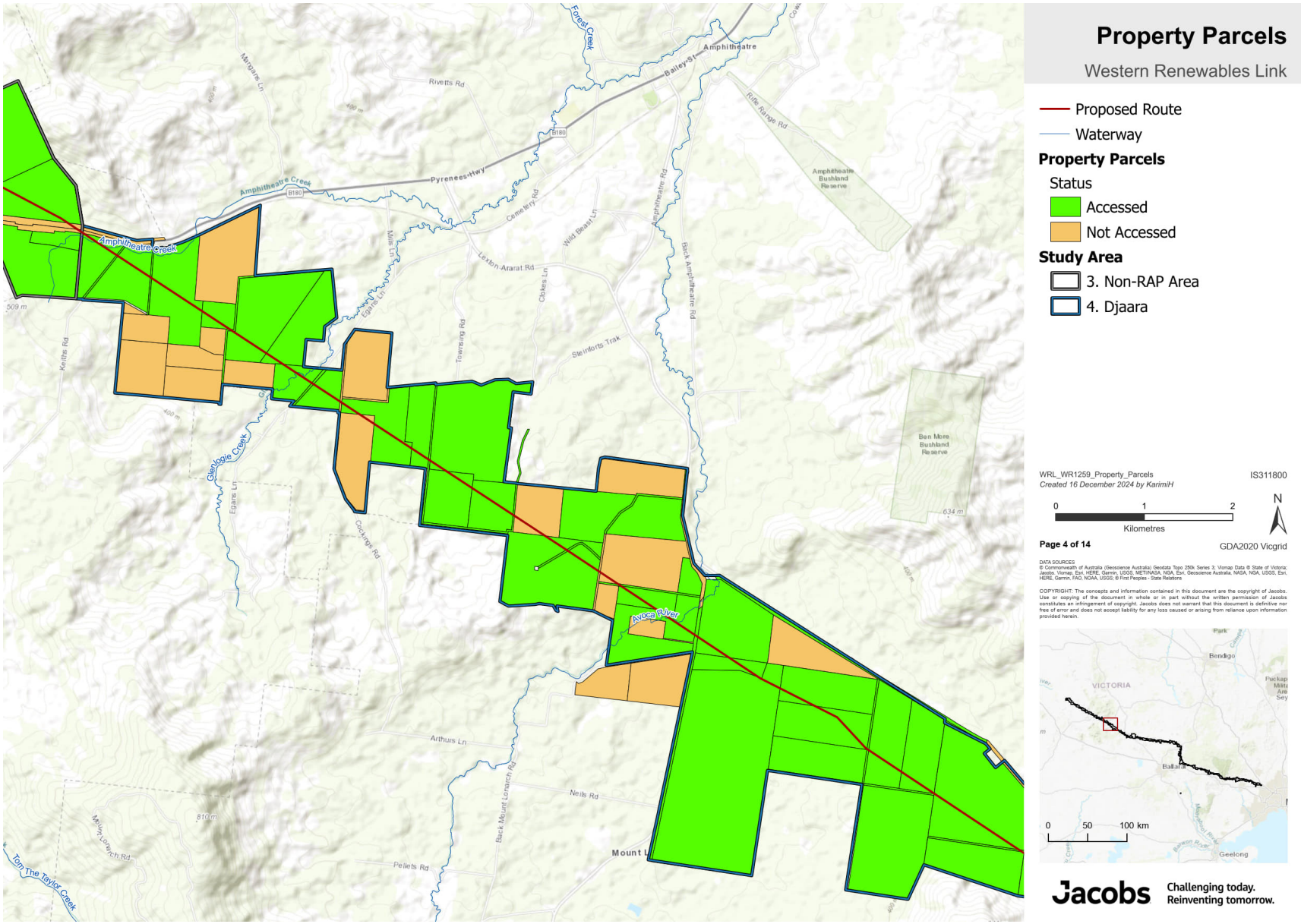
Corridor ID	PAS ID	Parcel SPI	Infrastructure	PAS Description
475.01, 475		5\TP127348, 6\TP127348, 3\PS807054, 12C~A\PP3166, 1\LP61368, 1\LP61368, 2\TP213007, 1\TP213007, 3\PS807054		
587,585, 586, 589	PAS07	2\LP126697, 1\PS419532, RES1\PS419532, 2033\PP3948, 1\TP945588, 2\TP945587, 1\TP945587, 32\PP3948, 2033|PP3948, 1\TP945587, 2\TP945587	Tower assembly areas	PAS07 includes the banks, terraces, and surrounding plains along Toolern Creek, a tributary of the Werribee River, and an unnamed tributary. The identification of PAS was supported by a high density of surface artefacts identified during survey in an area of erosion on a mid to upper slope of the creek bank. GSV was poor (~5% poor).
522, 523	PAS08	RES1\LP95379, 1\LP96559	Tower assembly areas	PAS08 covers the eastern bank and plain of Korkuperrimul Creek. PAS08 includes a steep landform sloping towards the creek. Surface artefacts were identified during the survey (typically in areas of exposure). GSV was very good (~80%).
570.01, 572	PAS09	5\PS517412 2\LP111533	Tower assembly areas	PAS09 captures the confluence of unnamed tributaries and the surrounding plain. A high density of surface artefacts was identified during the survey. GSV was good.
619	PAS010	1\PS711917	Tower assembly areas	PAS10 includes the ephemeral waterway off Taylors Creek. Surface artefacts were identified during the survey. GSV poor to very good.

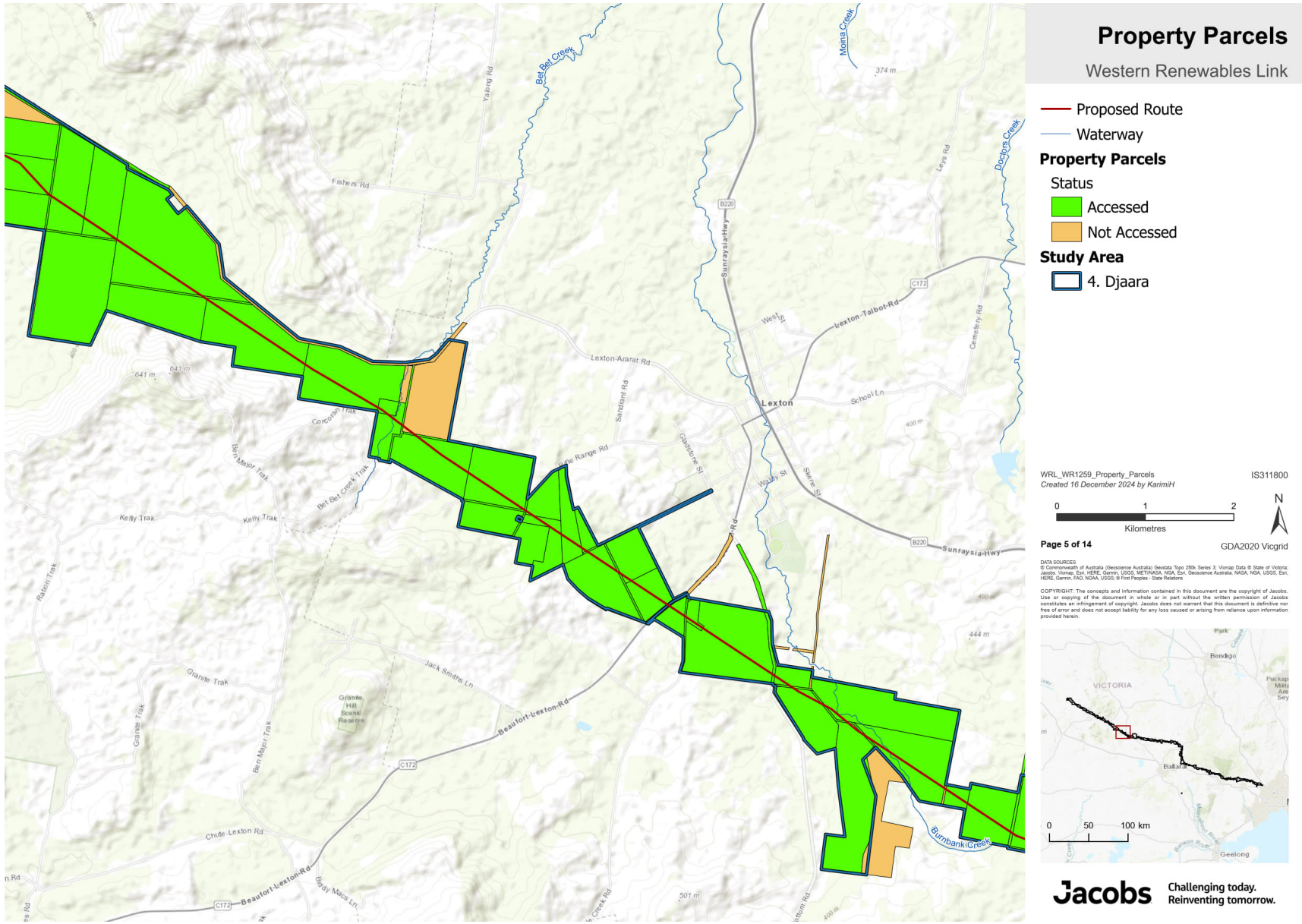
Appendix H. Fieldwork coverage

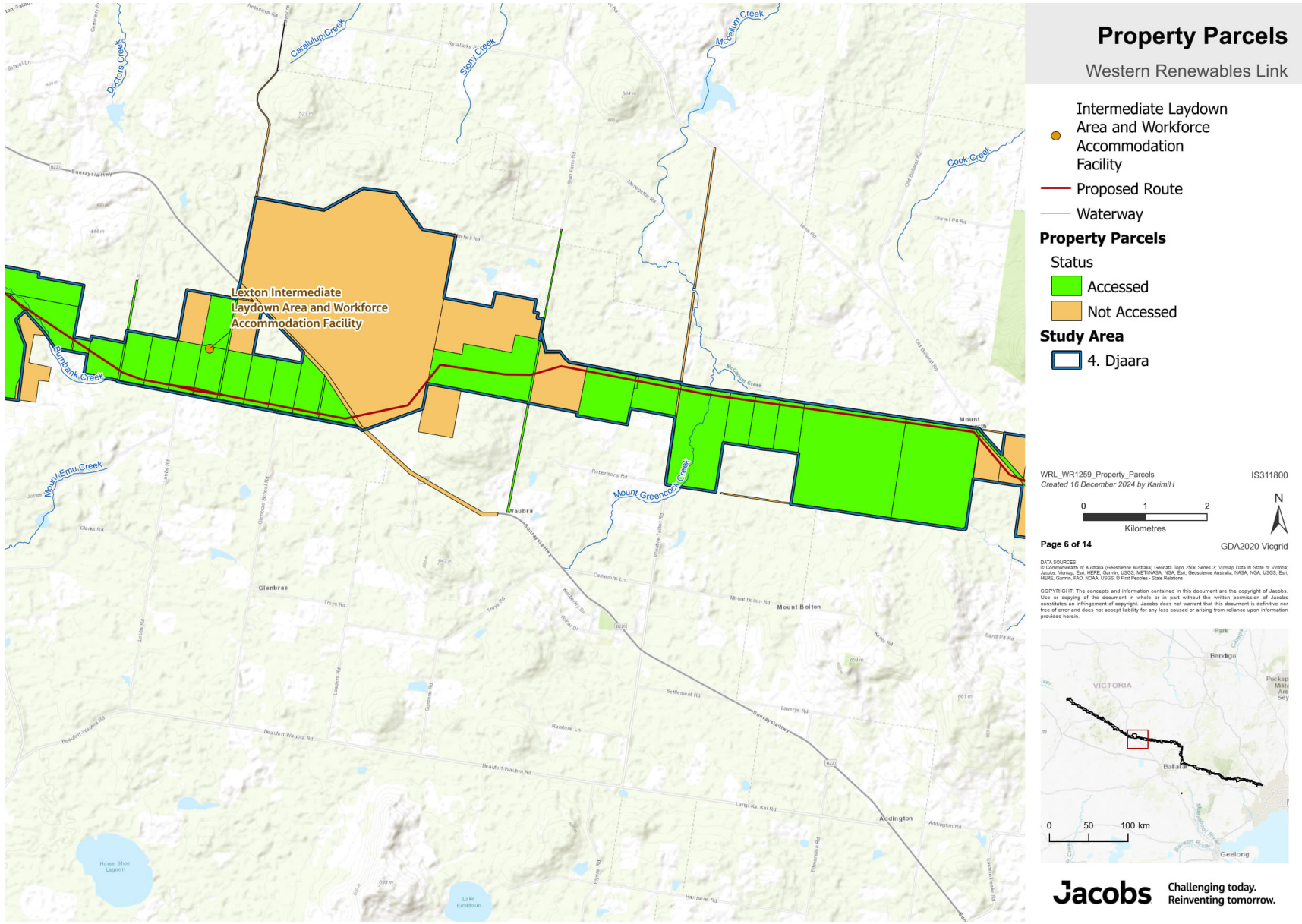

Wimmera River
Six Mile Creek
Landsborough Rd
Landsborough West
Astons Scour
New 500kV Terminal Station
Bulgana Terminal Station
Joel Joel Rd
Franklin Rd
Gravel Pit Rd
Kindred Rd
Straun Rd
Astons Scour Bushland Reserve
Potts Rd
East Ln
Vances
Thomas Rd
Shaw Valley Rd
Shaw Flat Rd
Ararat St Arnaud Rd
C241
Joel South Natural Features Reserve
Joel South Rd
Gibsons Rd
Hart Rd
Bulgana Rd
Crowlands Natural Features Reserve
Property Parcels
Western Renewables Link
Proposed Route
Waterway
Terminal Station Site
Property Parcels
Status
Accessed
Not Accessed
Study Area
1. Barengi Gadjin
2. Eastern Maar
WRL_WR1259_Property_Parcels
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Page 1 of 14
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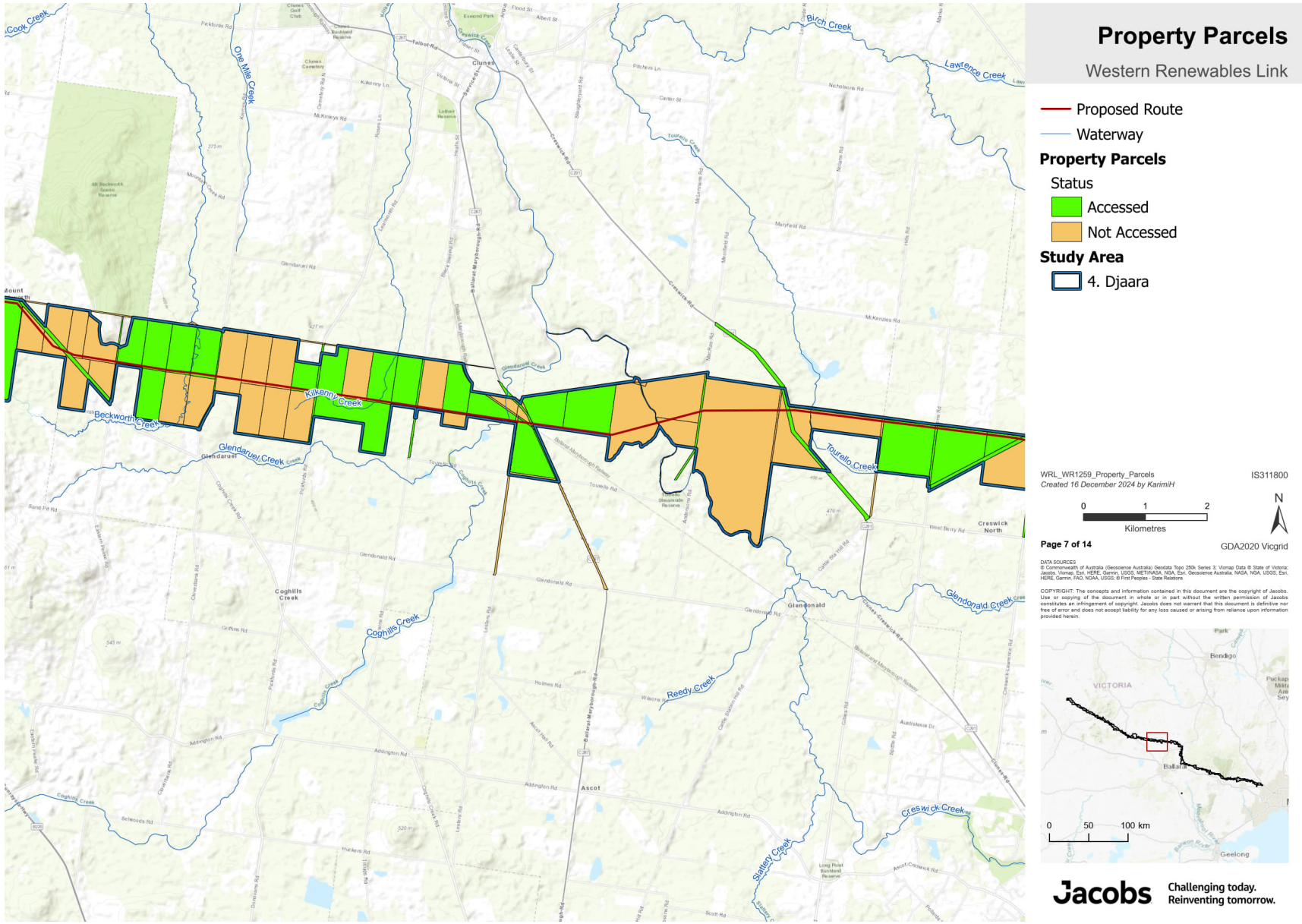

Property Parcels
Western Renewables Link
Proposed Route
Waterway
Property Parcels
Status
Accessed
Not Accessed
Study Area
1. Barengi Gadjin
2. Eastern Maar
3. Non-RAP Area
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Ararat-St-Arnaud-Rd
C241
Glendhu Historic Area
Glenlofty
Landsborough Creek
Degraves Rd
Crowlands Cemetery Rd
Joel Joel Rd
Spring Creek
Spring Flat Rd
Wimmera River
Crowlands
400 m
383 m
638 m

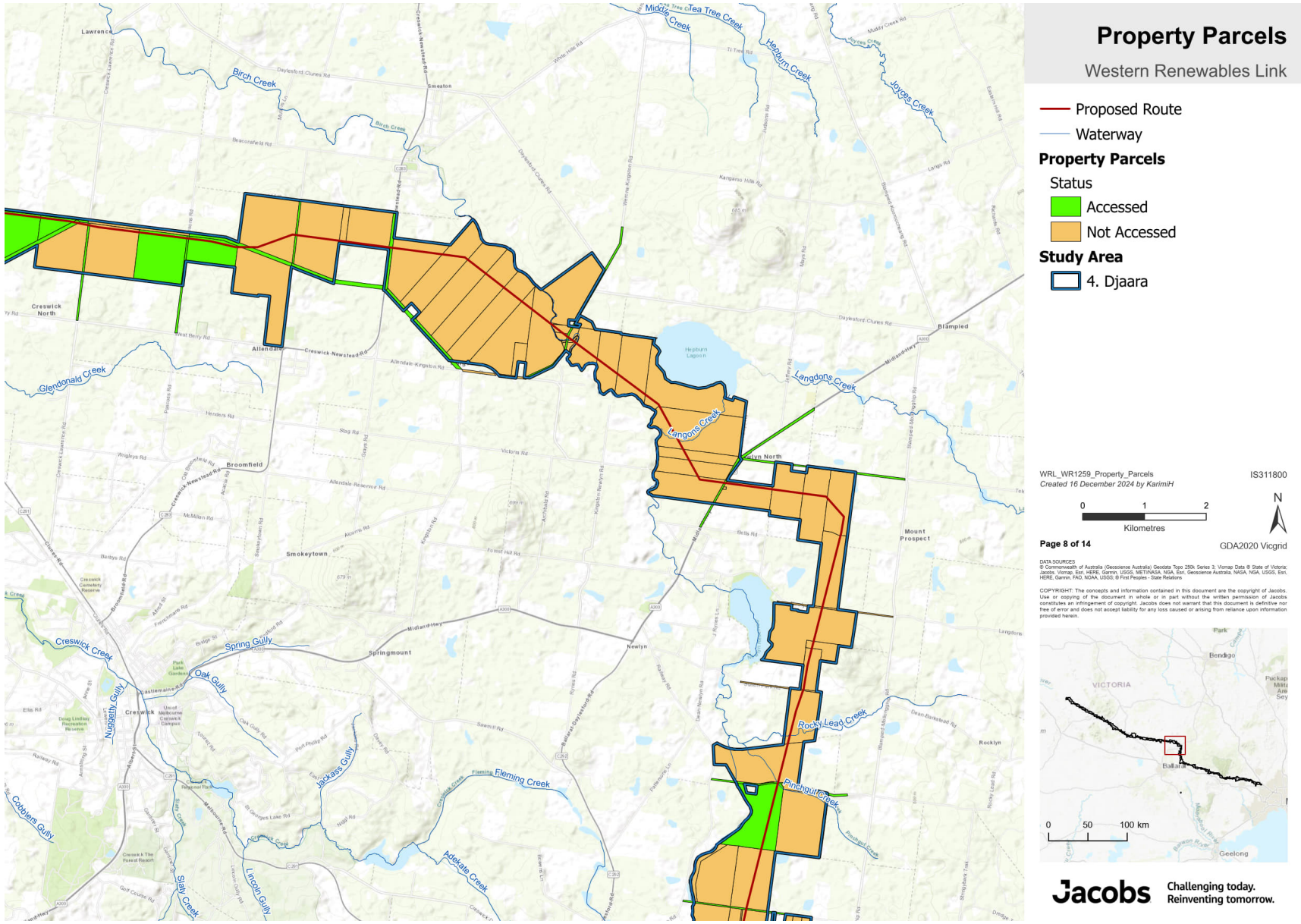

Glenlofty
Glenlofty Creek
Pyrenees Hwy
Wimmera River
Glenpatrick Creek
Nowhere Creek
Sandy Creek
Elmhurst
High St
Rocky Creek
Hickman Creek Creek
Property Parcels
Western Renewables Link
Proposed Route
Waterway
Property Parcels
Status
Accessed
Not Accessed
Study Area
2. Eastern Maar
3. Non-RAP Area
4. Djaara
WRL_WR1259_Property_Parcels
Created 16 December 2024 by KarimiH
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Page 3 of 14
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DATA SOURCES
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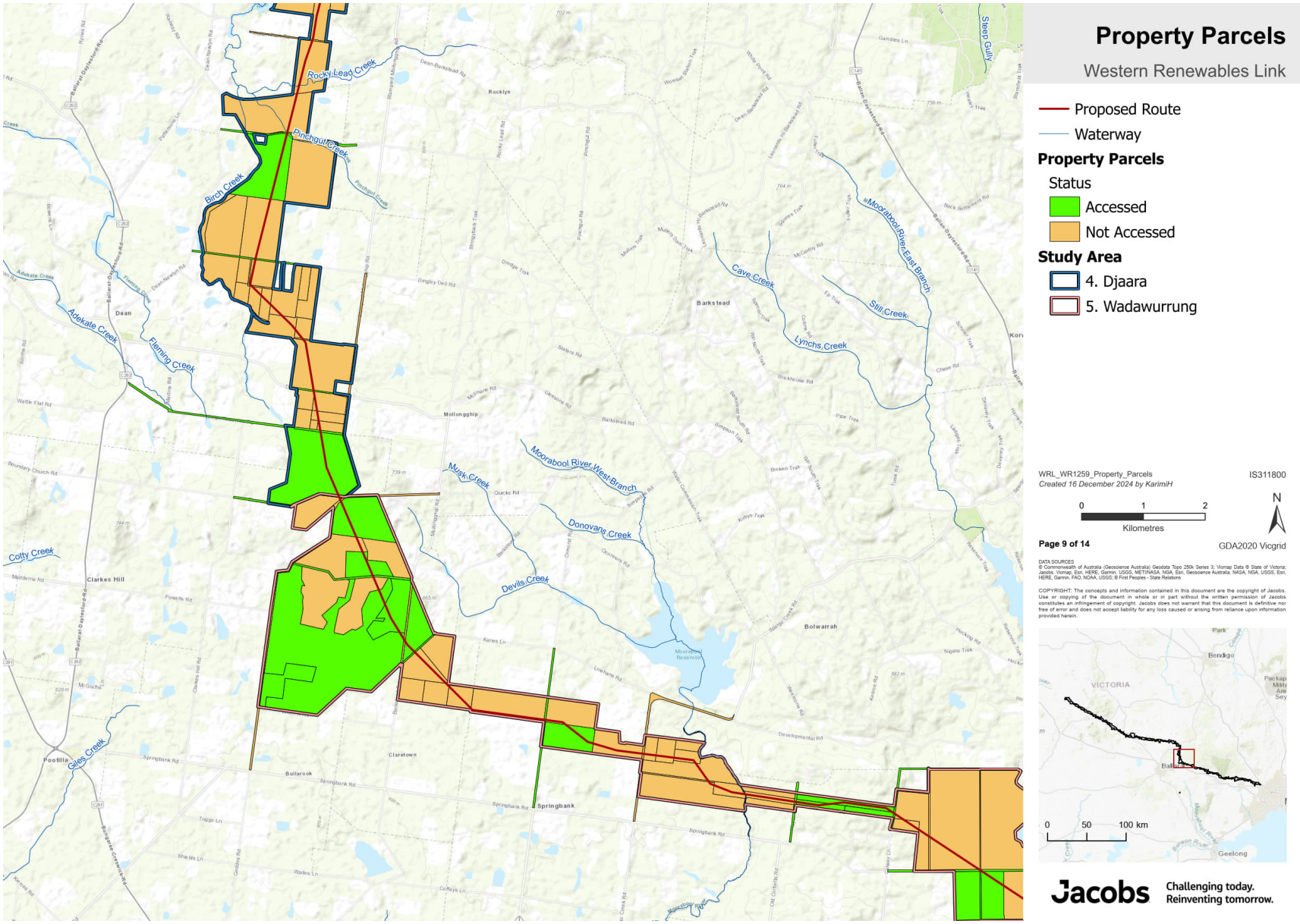

Property Parcels
Western Renewables Link
Proposed Route
Waterway
Property Parcels
Status
Accessed
Not Accessed
Study Area
3. Non-RAP Area
4. Djaara
WRL_WR1259_Property_Parcels
IS311800
Created 16 December 2024 by KarimiH
0
1
2
Kilometres
N
Page 4 of 14
GDA2020 Vicgrid
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VICTORIA
Bendigo
Ballarat
Geelong
0
50
100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Amphitheatre Creek
Pyrenees Hwy
Lexton-Ararat Rd
Steinforts Trak
Glenlogie Creek
Avoca River
Arthurs Ln
Neils Rd
Pellets Rd
Tom The Taylor Creek
Amphitheatre
Bailey St
Rivetts Rd
Forest Creek
Rifle Range Rd
Amphitheatre Bushland Reserve
Cemetery Rd
Wild Beast Ln
Back Amphitheatre Rd
Ben More Bushland Reserve
Keiths Rd
Townsing Rd
Egans Ln
Cockings Rd
Back Mount Lonarch Rd
Melvin Lowrie Rd


Property Parcels
Western Renewables Link
Proposed Route
Waterway
Property Parcels
Status
Accessed
Not Accessed
Study Area
4. Djaara
WRL_WR1259_Property_Parcels
Created 16 December 2024 by KarimiH
IS311800
0
1
2
Kilometres
N
Page 5 of 14
GDA2020 Vicgrid
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VICTORIA
Bendigo
Ballarat
Geelong
0
50
100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Lexton
Lexton-Talbot-Rd
Lexton-Ararat Rd
Sunraysia Hwy
Beaufort-Lexton-Rd
Chute-Lexton Rd
Bet Bet Creek
Moina Creek
Doctors Creek
Bumbank Creek
Granite Trak
Kelly Trak
Ben Major Trak
Jack Smiths Ln
Granite Hill Scenic Reserve
Fishers Rd
Yaering Rd
Leys Rd
Cemetery Rd
School Ln
Sandford Rd
Gladstone St
Wally St
Sheere St
Rifle Range Rd
Concord Trak
Ralphs Trak
Bayly Nilcis Ln
641 m
374 m
444 m
501 m
B220
C172


Lexton Intermediate Laydown Area and Workforce Accommodation Facility
Property Parcels
Western Renewables Link
Intermediate Laydown Area and Workforce Accommodation Facility
Proposed Route
Waterway
Property Parcels
Status
Accessed
Not Accessed
Study Area
4. Djaara
WRL_WR1259_Property_Parcels
Created 16 December 2024 by KarimiH
IS311800
0 1 2
Kilometres
N
Page 6 of 14
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VICTORIA
Bendigo
Ballarat
Geelong
0 50 100 km
Jacobs
Challenging today.
Reinventing tomorrow.


Property Parcels
Western Renewables Link
Proposed Route
Waterway
Property Parcels
Status
Accessed
Not Accessed
Study Area
4. Djaara
WRL_WR1259_Property_Parcels
Created 16 December 2024 by KarimiH
IS311800
0 1 2
Kilometres
N
Page 7 of 14
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VICTORIA
Bendigo
Ballarat
Geelong
0 50 100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Cook Creek
One Mile Creek
Birch Creek
Lawrence Creek
Clunes
Talbot Rd
Kilkenny Creek
Beckworth Creek
Glendaruel Creek
Tourello Creek
Creswick North
Coghills Creek
Glendonald
Glendonald Creek
Reedy Creek
Ballarat-Maryborough Rd
Ascot
Creswick Creek
Slattery Creek


Property Parcels
Western Renewables Link
Proposed Route
Waterway
Property Parcels
Status
Accessed
Not Accessed
Study Area
4. Djaara
WRL_WR1259_Property_Parcels
Created 16 December 2024 by KarimiH
IS311800
0 1 2
Kilometres
N
Page 8 of 14
GDA2020 Vicgrid
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VICTORIA
Bendigo
Ballarat
Geelong
0 50 100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Lawrence
Birch Creek
Smeaton
Tea Tree Creek
Middle Creek
Heathcote Creek
Joyces Creek
Creswick North
Allendale
Creswick-Newstead Rd
Glendonald Creek
Langdons Creek
Blampied
Broomfield
Smokeytown
Springmount
Newlyn
Mount Prospect
Creswick Creek
Spring Gully
Oak Gully
Nuggetty Gully
Creswick
Jackass Gully
Fleming Creek
Rocky Lead Creek
Pinchgut Creek
Rocklyn
Cobblers Gully
Slaty Creek
Lincoln Gully
Adelaide Creek



Property Parcels

Western Renewables Link

- Proposed Route
- Waterway

Property Parcels

Status

- Accessed
- Not Accessed

Study Area

- 4. Djaara
- 5. Wadawurrung

WRL_WR1259_Property_Parcels IS311800

Created 16 December 2024 by KarimiH

0 1 2

Kilometres

N

Page 9 of 14

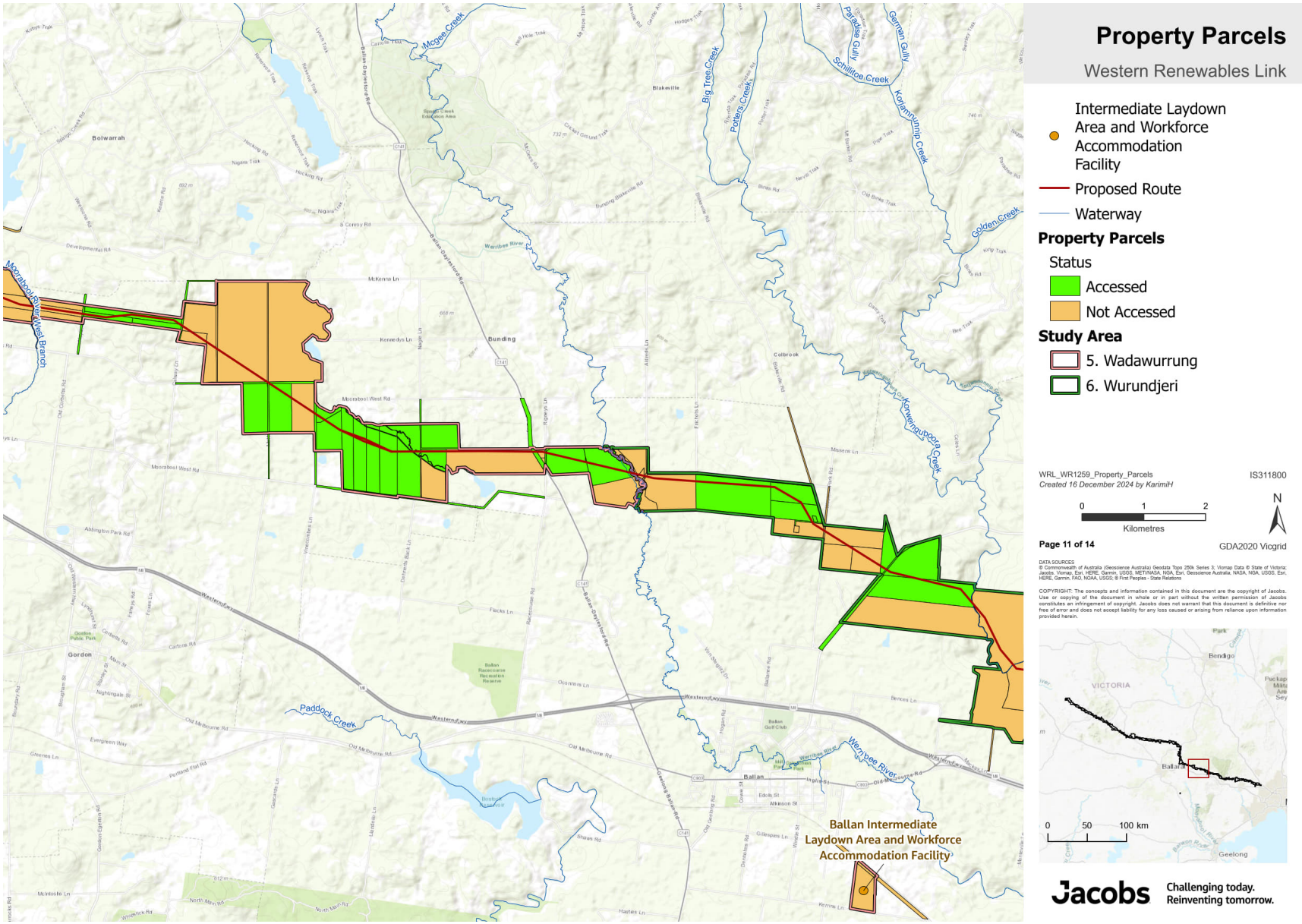
GDA2020 Vicgrid

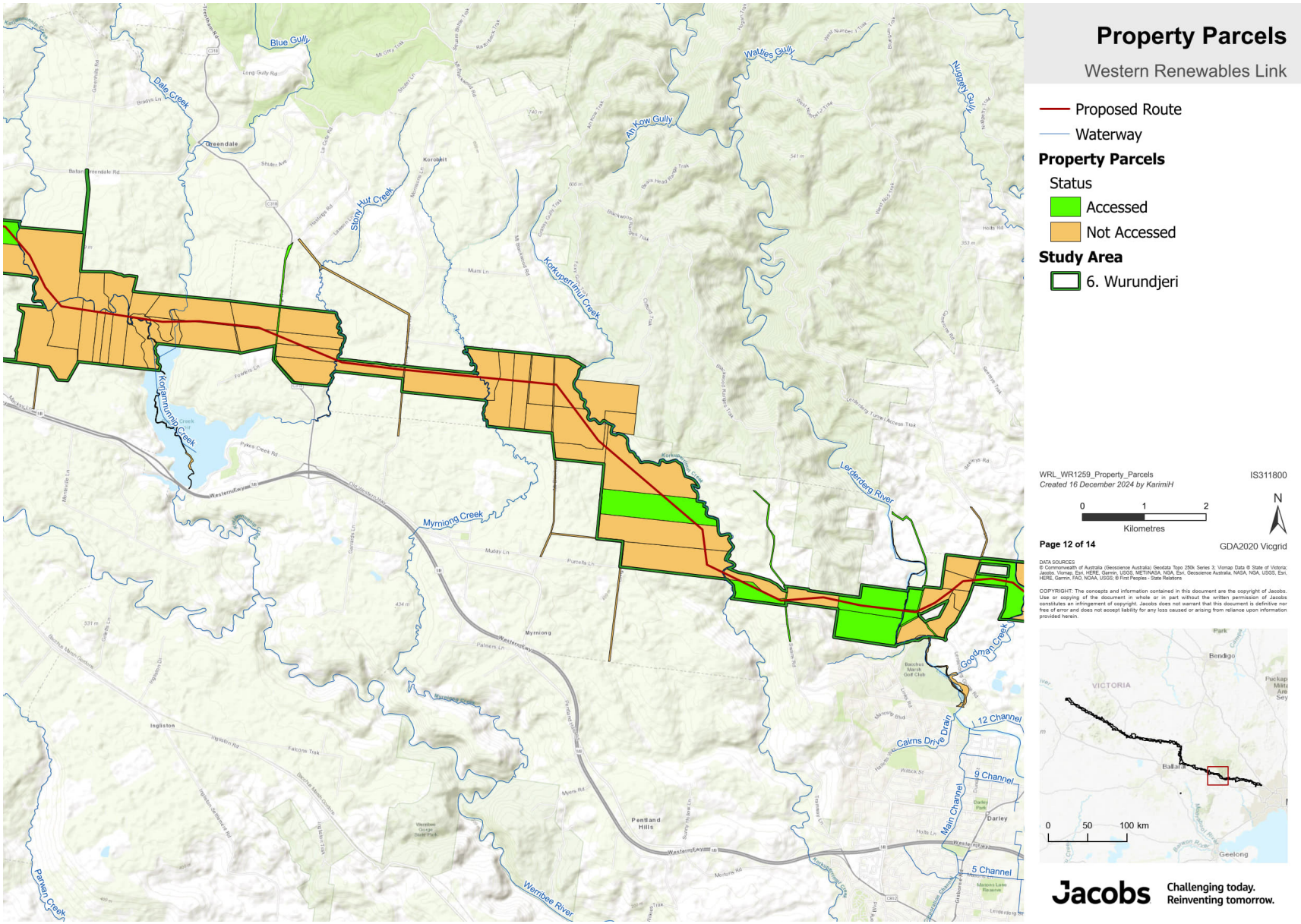
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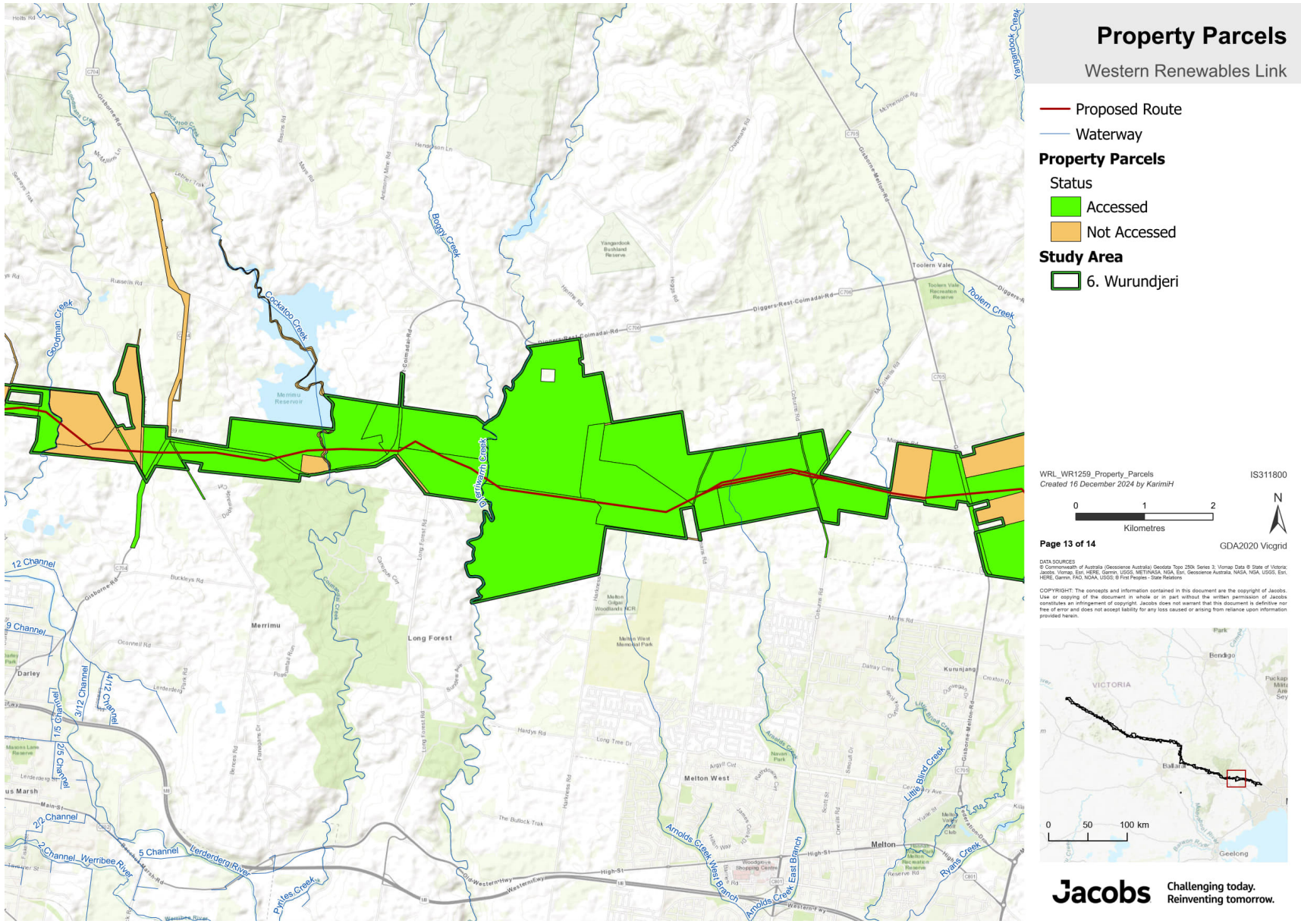
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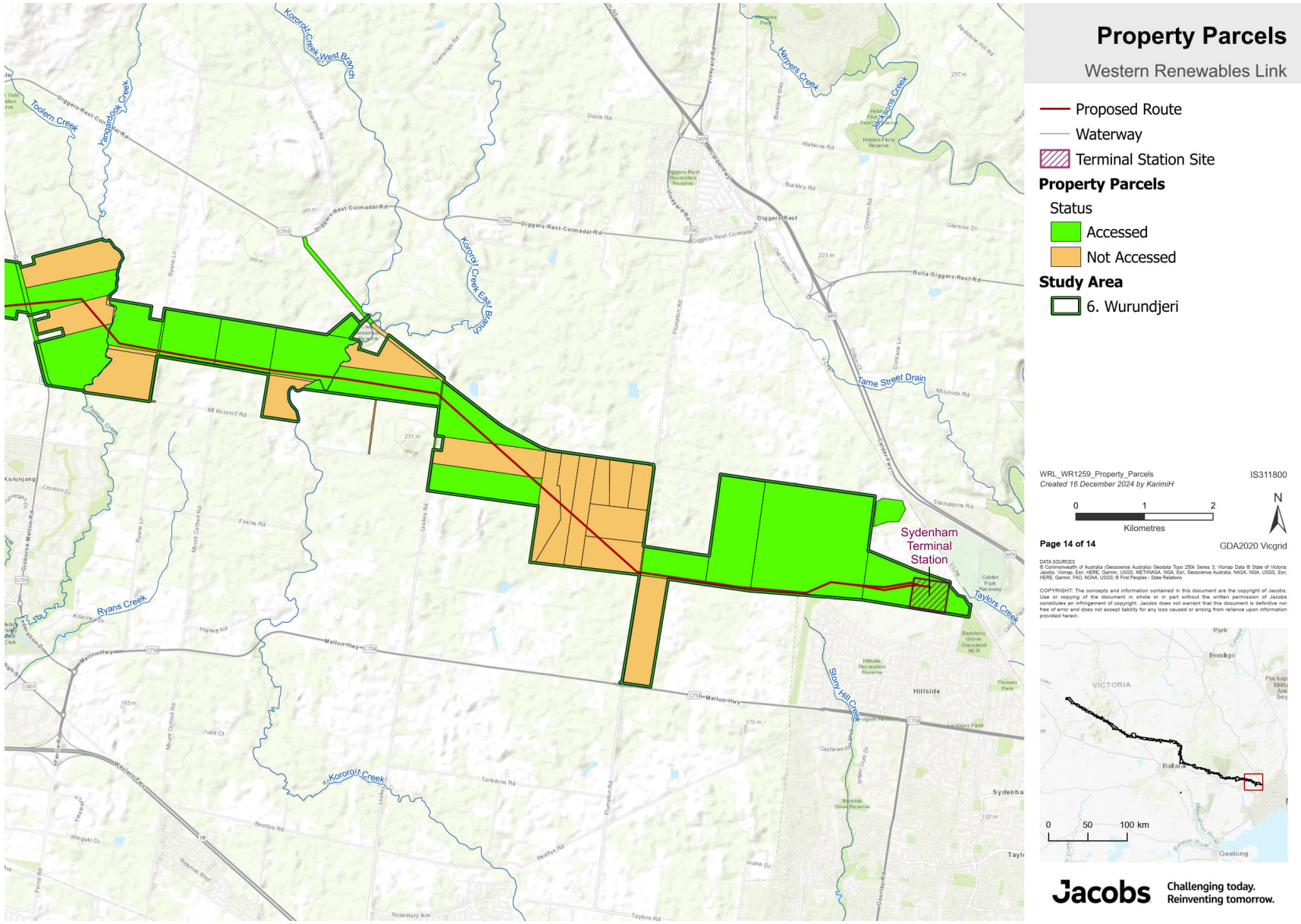
Jacobs Challenging today. Reinventing tomorrow.

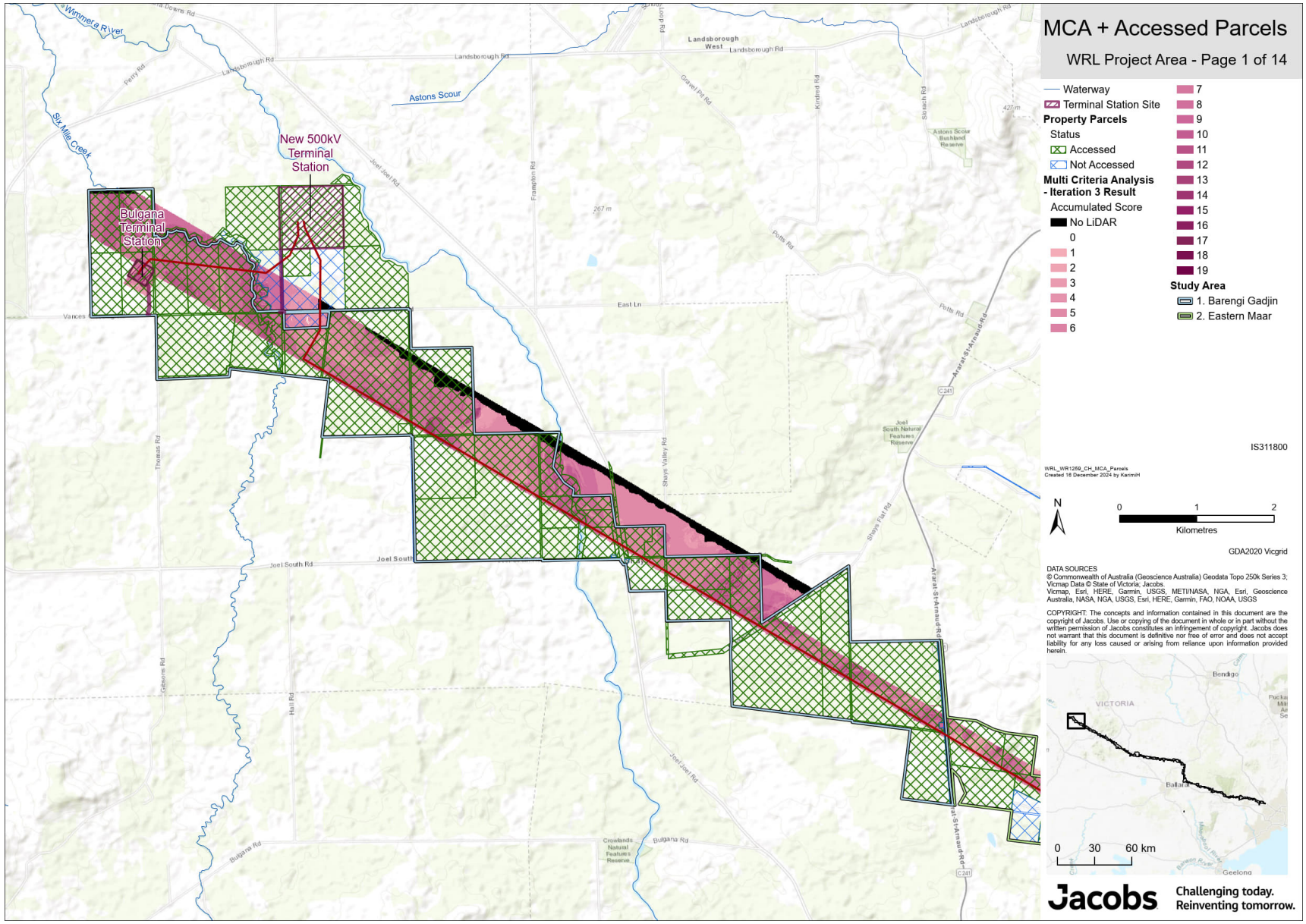

Ballarat East
Ballarat
Eureka
Warrenheip Gully
Specimen Vale Creek
Warrenheip
Redan
Yarrowee River
Lal Lal Drain
Grassfree Creek
Canadian
Dunnstown
Two Mile Creek
Millbrook
Mount Clear
Navigators
Bonshaw
Bonshaw Creek
Winter Creek
Canadian Creek
Mount Helen
Federation University Aus-Mt Helen
Yendon
Granite Creek
Ring Creek
Lal Lal Creek
Black Creek
Bunninyong
Union Jack Creek
Ross Creek
Scotchmans Lead
Scotsburn
Lal Lal
Napoleons
Durham Lead
Clarendon
Williamson Creek
King Gully
Tea Tree Gully
Monmouth Gully
Garibaldi
Elaine Terminal Station
Mount Doran
Mozaboool River West Branch
Midland Hwy
Geelong Rd
Colac-Ballarat Rd
Property Parcels
Western Renewables Link
Waterway
Terminal Station Site
Property Parcels
Status
Not Accessed
Study Area
5. Wadawurrung
WRL_WR1259_Property_Parcels
Created 16 December 2024 by KarimiH
IS311800
0 1 2
Kilometres
N
Page 10 of 14
GDA2020 Vicgrid
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VICTORIA
Bendigo
Geelong
0 50 100 km
Jacobs
Challenging today.
Reinventing tomorrow.

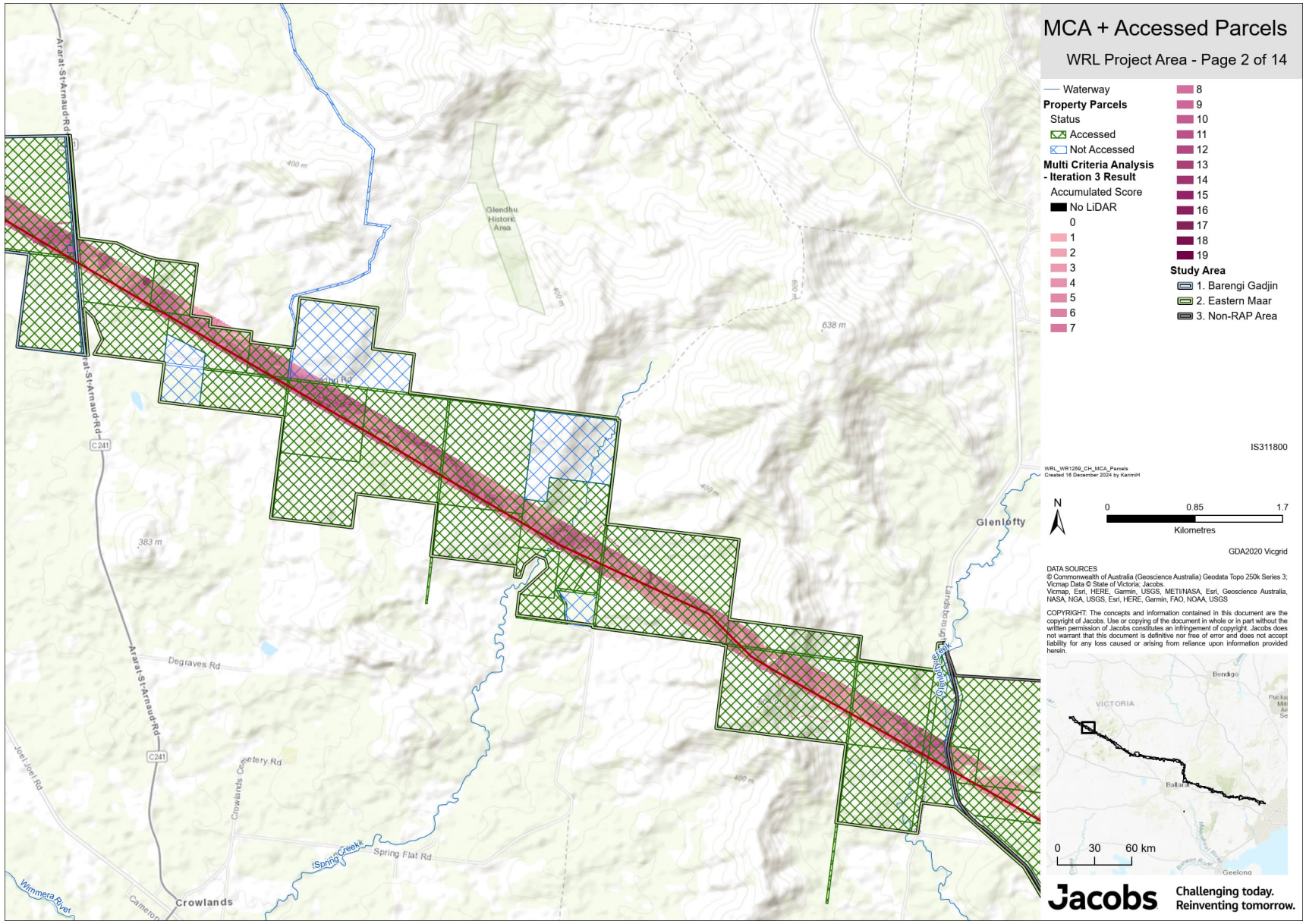

Property Parcels
Western Renewables Link
Intermediate Laydown Area and Workforce Accommodation Facility
Proposed Route
Waterway
Property Parcels
Status
Accessed
Not Accessed
Study Area
5. Wadawurrung
6. Wurundjeri
WRL_WR1259_Property_Parcels
Created 16 December 2024 by KarimiH
IS311800
0 1 2
Kilometres
N
Page 11 of 14
GDA2020 Vicgrid
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VICTORIA
Bendigo
Ballarat
Geelong
0 50 100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Ballan Intermediate Laydown Area and Workforce Accommodation Facility
McGee Creek
Big Tree Creek
Potters Creek
Paradise Gully
German Gully
Schilltoe Creek
Korlannunnip Creek
Golden Creek
Werribee River
Moorabool River West Branch
Konwerrupdora Creek
Paddock Creek
Bolwarrah
Blakeville
Bunding
Colbrook
Gordon
Ballan
Moorabool West Rd
Western Fwy
Old Melbourne Rd

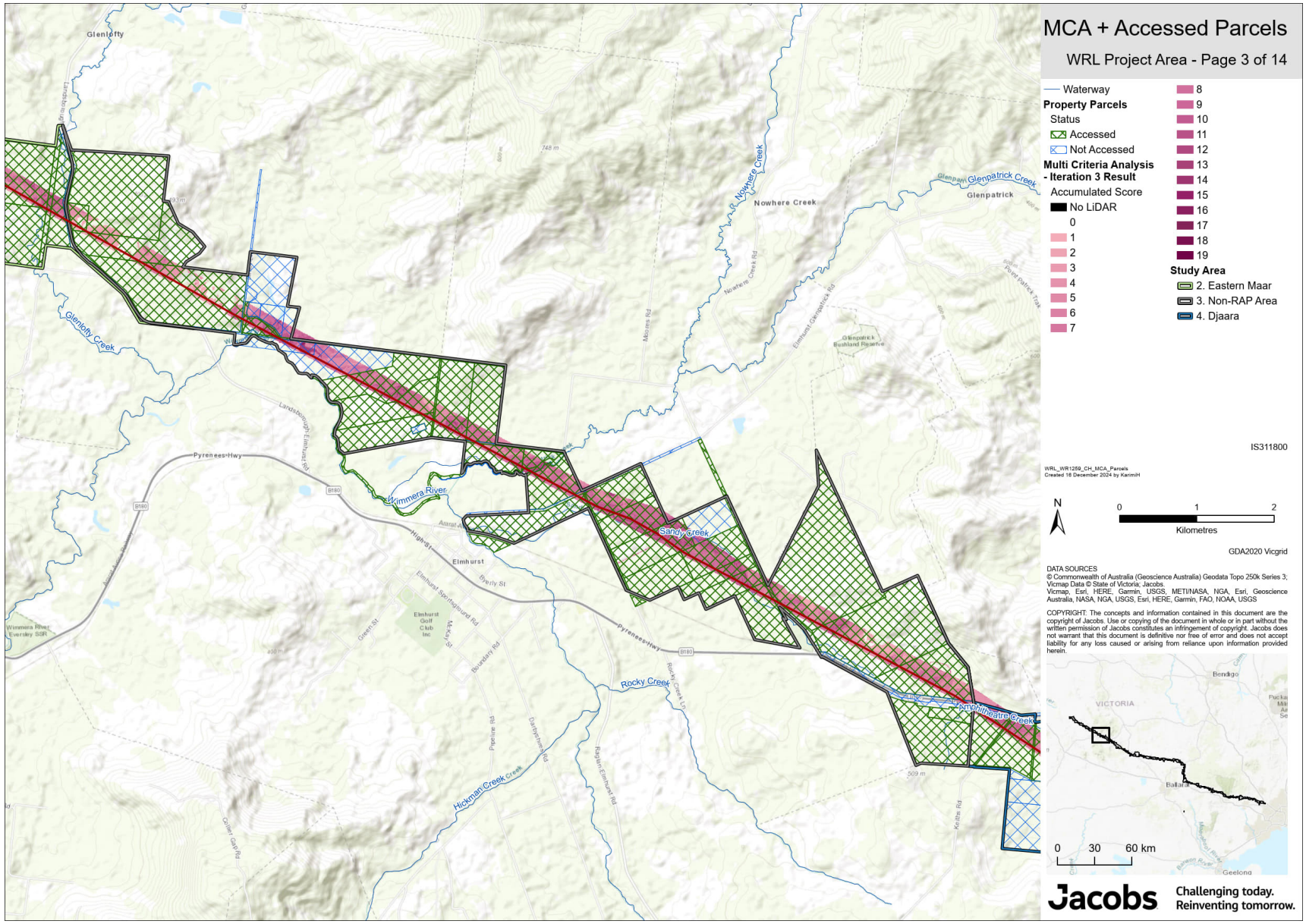

Property Parcels
Western Renewables Link
Proposed Route
Waterway
Property Parcels
Status
Accessed
Not Accessed
Study Area
6. Wurundjeri
WRL_WR1259_Property_Parcels
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IS311800
0 1 2
Kilometres
N
Page 12 of 14
GDA2020 Vicgrid
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VICTORIA
Bendigo
Ballarat
Geelong
0 50 100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Blue Gully
Dale Creek
Greendale
Stony Hut Creek
Korkuperrmuil Creek
Ah Kow Gully
Wallies Gully
Nuggety Gully
Korrumburra Creek
Myrniong Creek
Lerderderg River
Goodman Creek
12 Channel
Cairns Drive Drain
9 Channel
Main Channel
5 Channel
Darley
Pentland Hills
Ingliston
Parwan Creek
Werribee River

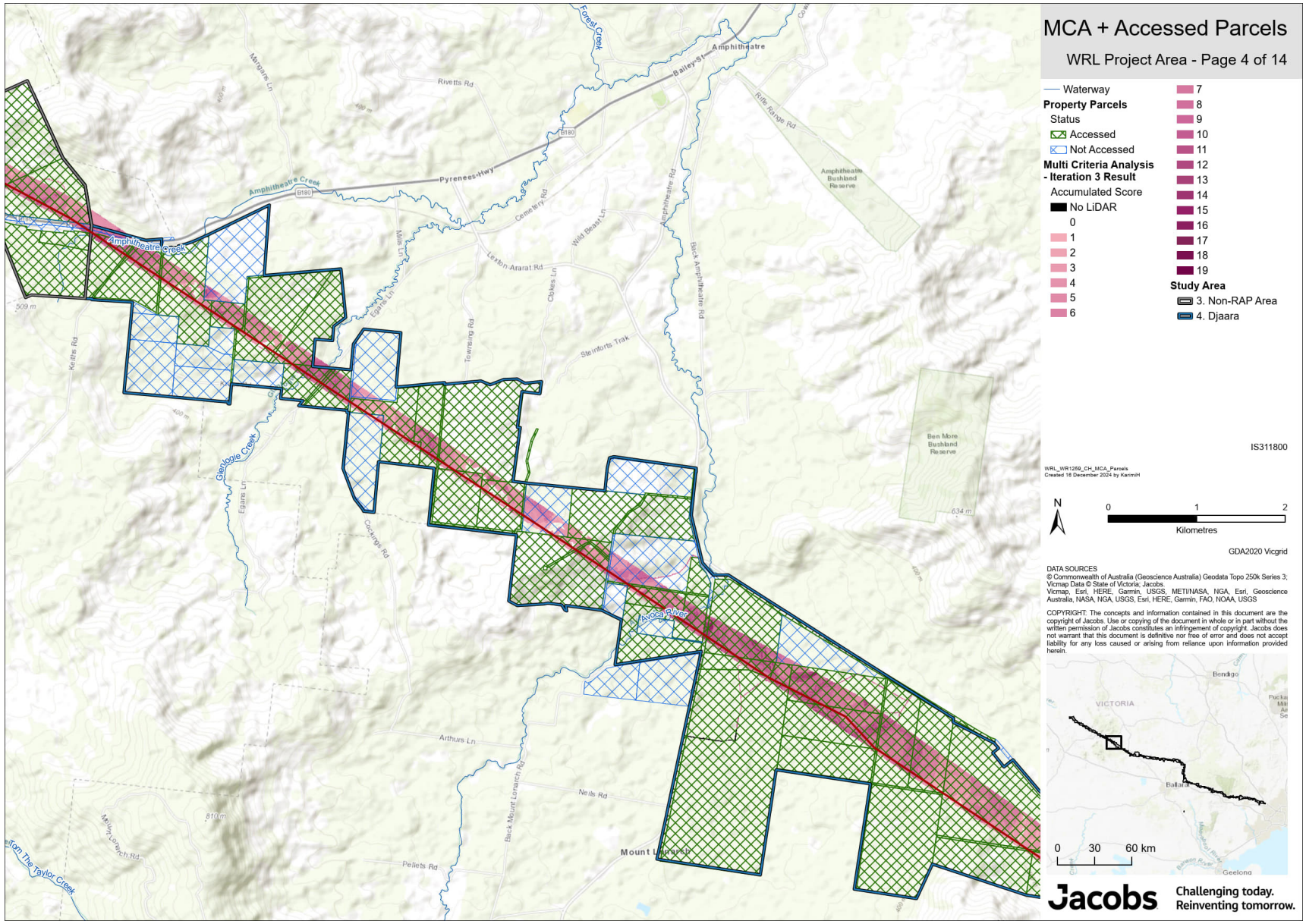

Property Parcels
Western Renewables Link
Proposed Route
Waterway
Property Parcels
Status
Accessed
Not Accessed
Study Area
6. Wurundjeri
WRL_WR1259_Property_Parcels
Created 16 December 2024 by KarimiH
IS311800
0 1 2
Kilometres
N
Page 13 of 14
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VICTORIA
Bendigo
Ballarat
Geelong
0 50 100 km
Jacobs
Challenging today.
Reinventing tomorrow.
Merrimu
Long Forest
Darley
Melton West
Melton
Kurunjang
Goodman Creek
Cockatoo Creek
Boggy Creek
Toolern Creek
Djerriwarrh Creek
Little Blind Creek
Arnolds Creek West Branch
Arnolds Creek East Branch
Pykes Creek
Ryans Creek
Lerderderg River
Werribee River
Diggers Rest-Coimadai-Rd
Gisborne-Rd
Western Hwy
High-St
12 Channel
9 Channel
5 Channel
2 Channel

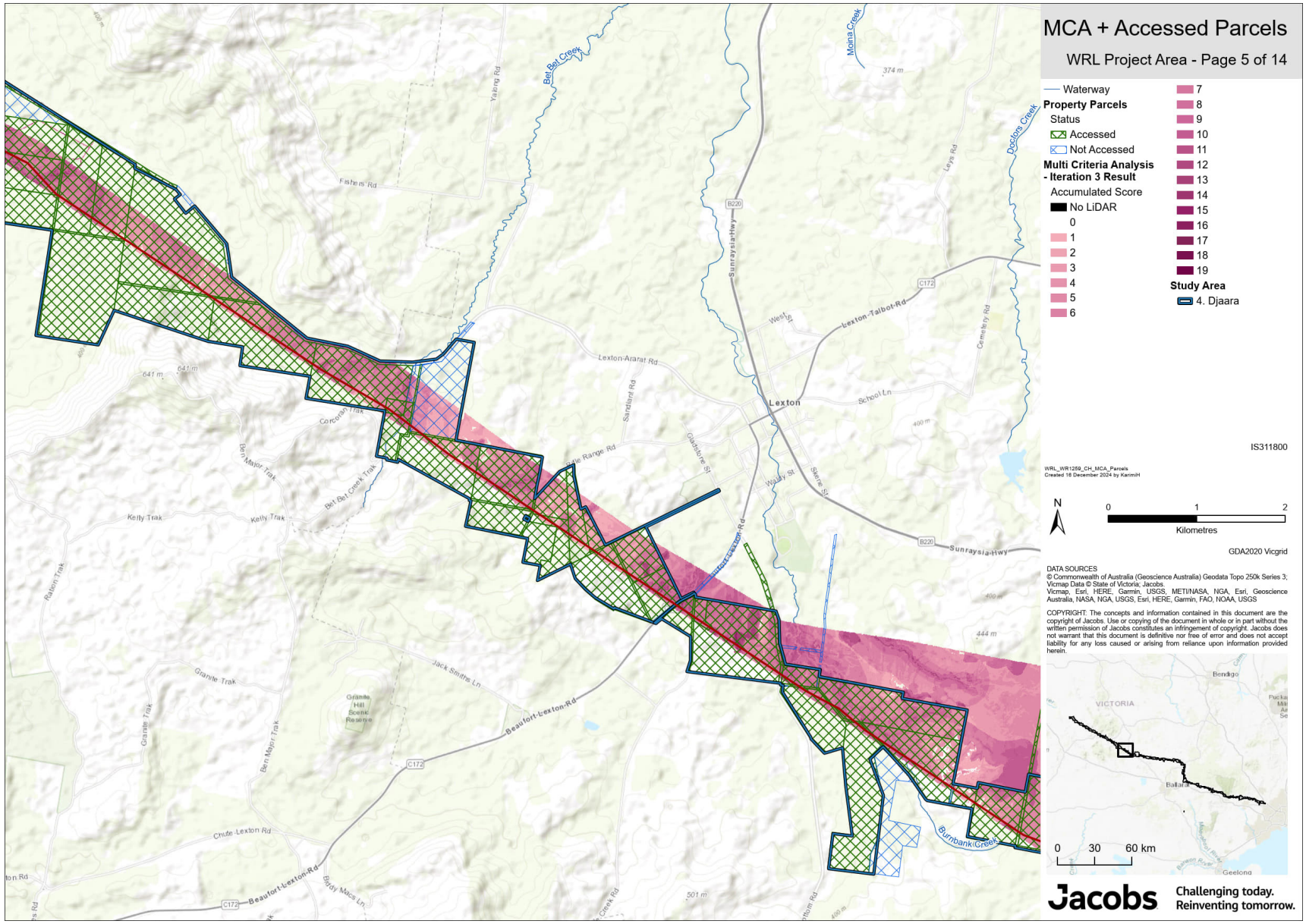

Property Parcels
Western Renewables Link
Proposed Route
Waterway
Terminal Station Site
Property Parcels
Status
Accessed
Not Accessed
Study Area
6. Wurundjeri
Sydenham Terminal Station
Kororoit Creek West Branch
Kororoit Creek East Branch
Kororoit Creek
Toolern Creek
Yangardook Creek
Jacksons Creek
Harpers Creek
Tame Street Drain
Ryans Creek
Taylors Creek
Stony Hill Creek
Diggers-Rest-Coimadai-Rd
Melton-Hwy
Bulla-Diggers-Rest-Rd
Mt Kororoit Rd
Hillside
Diggers Rest
Sydenham
WRL_WR1259_Property_Parcels
Created 16 December 2024 by KarimiH
IS311800
0 1 2
Kilometres
N
Page 14 of 14
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VICTORIA
Bendigo
Ballarat
Geelong
0 50 100 km
Jacobs
Challenging today.
Reinventing tomorrow.

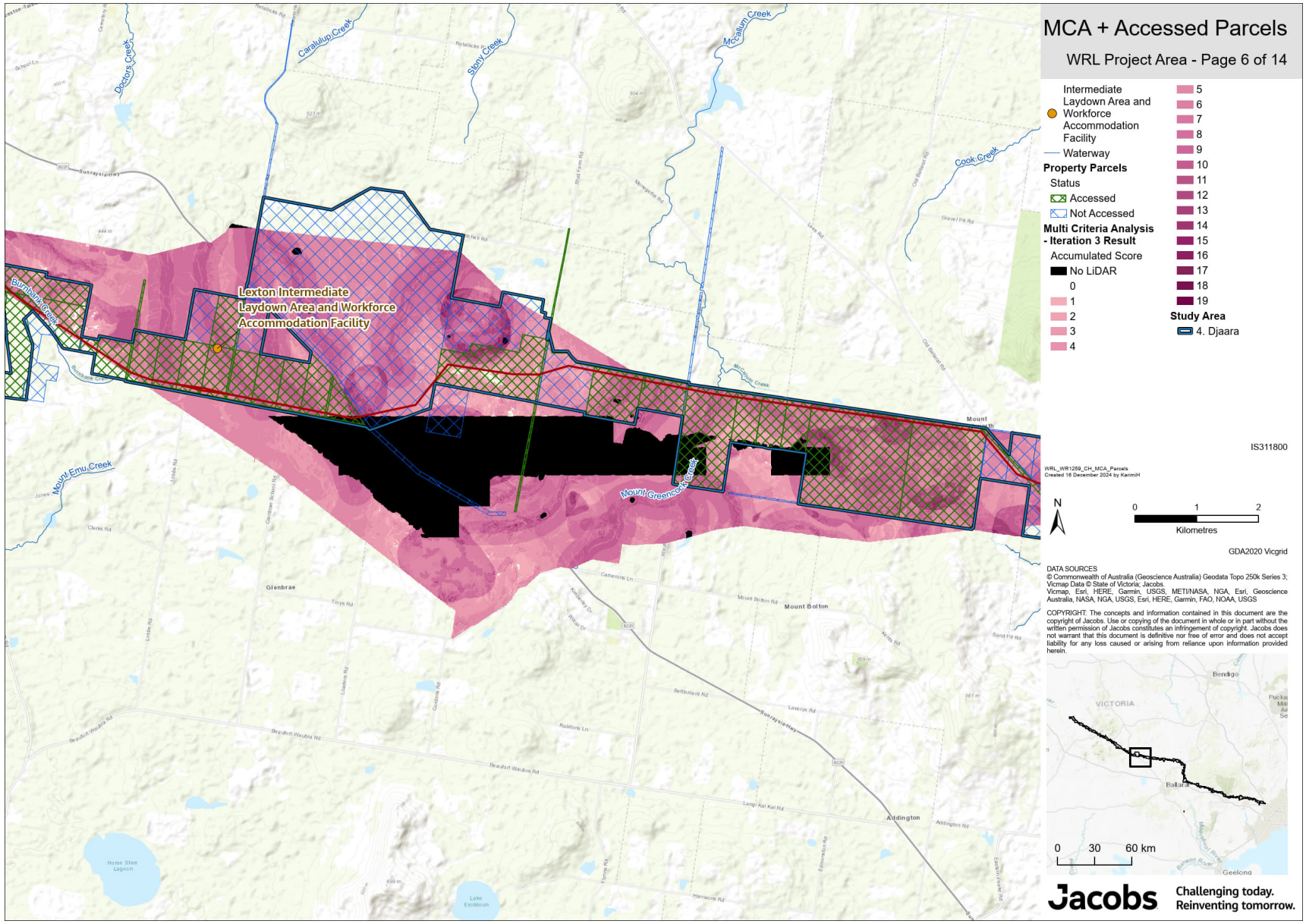

Wimmera River
Six Mile Creek
Astons Scour
New 500kV Terminal Station
Bulgana Terminal Station
Landsborough Rd
Landsborough West
Joel Joel Rd
Joel South Rd
Bulgana Rd
Potts Rd
East Ln
Vances
Thomas Rd
Gibsons Rd
Hall Rd
Shays Valley Rd
Shays Flat Rd
Ararat-St Arnaud Rd
Joel South Natural Features Reserve
Crowlands Natural Features Reserve
Astons Scour Bushland Reserve
MCA + Accessed Parcels
WRL Project Area - Page 1 of 14
Waterway
Terminal Station Site
Property Parcels
Status
Accessed
Not Accessed
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Study Area
1. Barengi Gadjin
2. Eastern Maar
IS311800
WRL_WR1259_CH_MCA_Parcels
Created 16 December 2024 by KarimH
N
0
1
2
Kilometres
GDA2020 Vicgrid
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Bendigo
VICTORIA
Ballarat
Geelong
0
30
60 km
Jacobs
Challenging today.
Reinventing tomorrow.

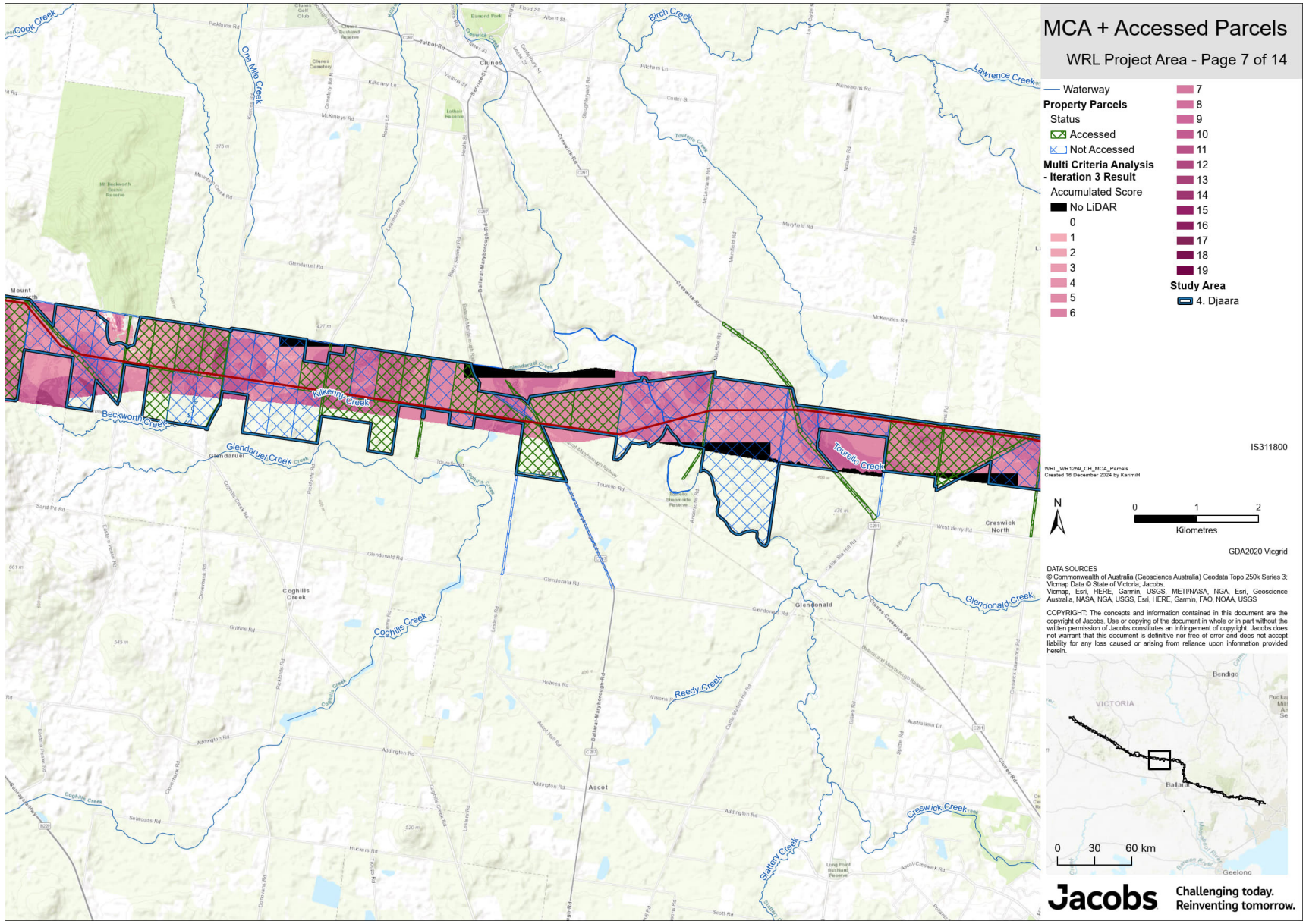

MCA + Accessed Parcels
WRL Project Area - Page 2 of 14
Waterway
Property Parcels
Status
Accessed
Not Accessed
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Study Area
1. Barengi Gadjin
2. Eastern Maar
3. Non-RAP Area
IS311800
WRL_WR1259_CH_MCA_Parcels
Created 16 December 2024 by KarimiH
N
0
0.85
1.7
Kilometres
GDA2020 Vicgrid
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Bendigo
VICTORIA
Ballarat
Geelong
0
30
60 km
Jacobs
Challenging today.
Reinventing tomorrow.
Ararat-St-Arnaud-Rd
C241
Glendhu Historic Area
Degraves Rd
Crowlands Cemetery Rd
Joel Joel Rd
Spring Creek
Spring Flat Rd
Wimmera River
Crowlands
Glenlofty
Landsborough East Rd
400 m
383 m
638 m

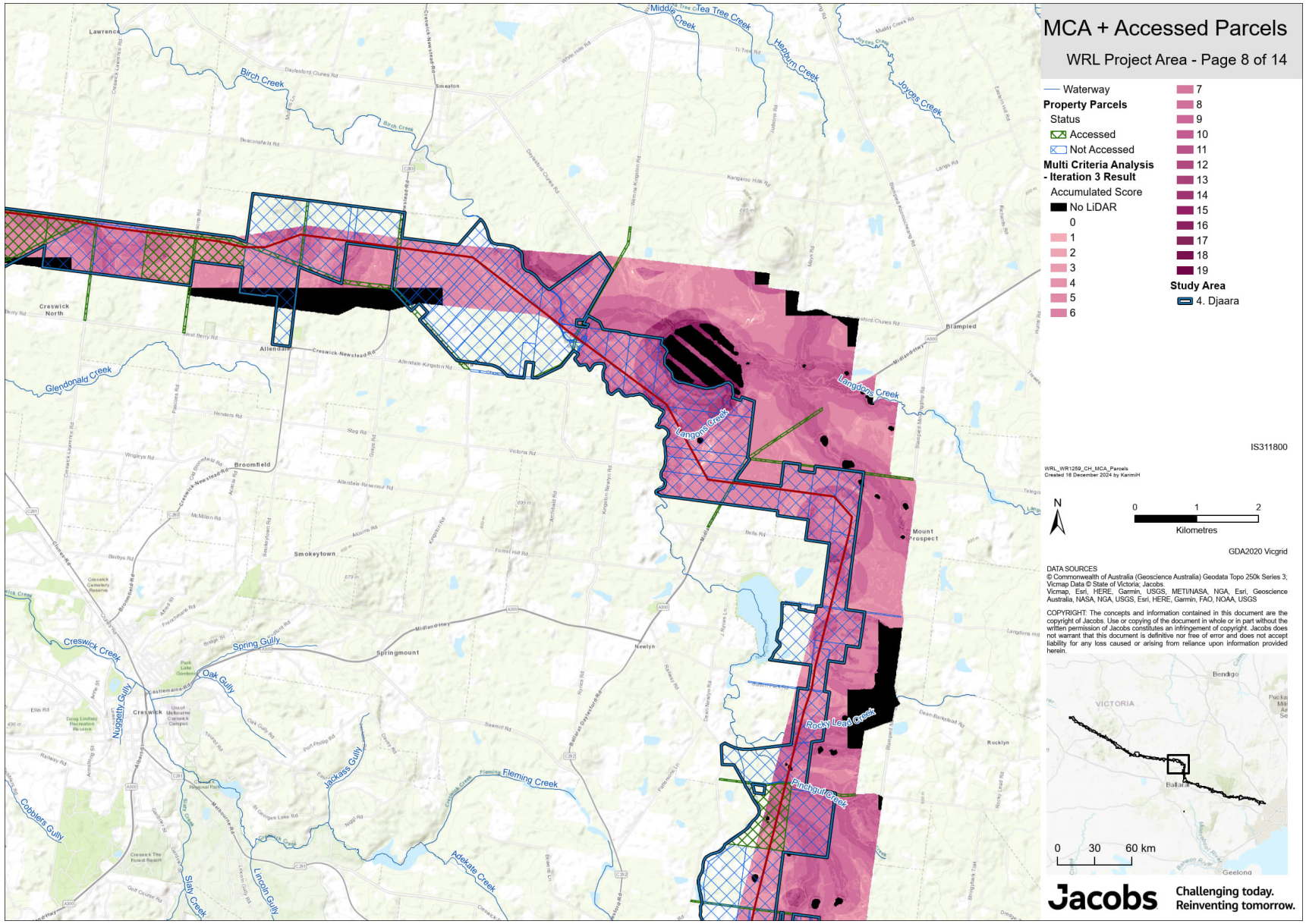

Glenlofty
Glenlofty Creek
Landsborough Elmhurst Rd
Pyrenees Hwy
B180
Wimmera River
Wimmera River Eversley SSR
Nowhere Creek
Nowhere Creek Rd
Glenpatrick Creek
Glenpatrick
Elmhurst Glenpatrick Rd
Glenpatrick Bushland Reserve
Sandy Creek
Elmhurst
High St
Byerly St
Elmhurst Golf Club Inc
Elmhurst Stonyground Rd
Green St
McKay St
Boundary Rd
Rocky Creek
Rocky Creek Ln
Amphitheatre Creek
Hickman Creek Creek
Pipeline Rd
Dairyhens Rd
Raglan Elmhurst Rd
Keiths Rd
Mokes Rd
Forest Patrick Track
Cowies Gap Rd
748 m
509 m
MCA + Accessed Parcels
WRL Project Area - Page 3 of 14
Waterway
Property Parcels
Status
Accessed
Not Accessed
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Study Area
2. Eastern Maar
3. Non-RAP Area
4. Djaara
IS311800
WRL_WR1259_CH_MCA_Parcels
Created 16 December 2024 by KarimH
N
0
1
2
Kilometres
GDA2020 Vicgrid
DATA SOURCES
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Bendigo
VICTORIA
Ballarat
Geelong
0
30
60 km
Jacobs
Challenging today.
Reinventing tomorrow.

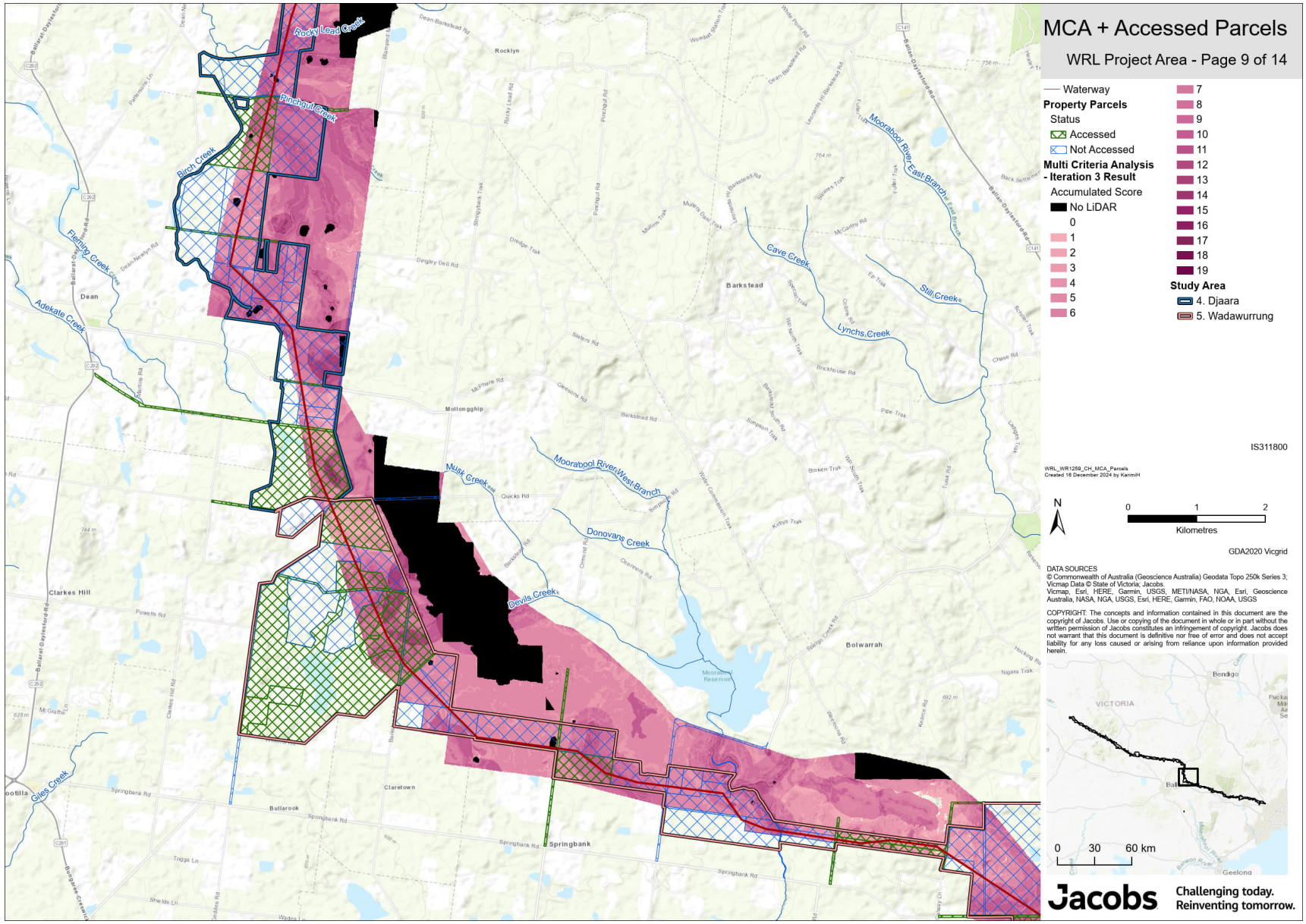

MCA + Accessed Parcels
WRL Project Area - Page 4 of 14
Waterway
Property Parcels
Status
Accessed
Not Accessed
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
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3
4
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13
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16
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18
19
Study Area
3. Non-RAP Area
4. Djaara
IS311800
WRL_WR1259_CH_MCA_Parcels
Created 16 December 2024 by KarimiH
N
0
1
2
Kilometres
GDA2020 Vicgrid
DATA SOURCES
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Bendigo
VICTORIA
Ballarat
Geelong
0
30
60 km
Jacobs
Challenging today.
Reinventing tomorrow.
Amphitheatre Creek
Pyrenees Hwy
Rivetts Rd
Forest Creek
Amphitheatre
Bailey St
Rifle Range Rd
Amphitheatre Bushland Reserve
Cemetery Rd
Wild Beast Ln
Amphitheatre Rd
Back Amphitheatre Rd
Lexton-Ararat Rd
Clickes Ln
Steinforts Trak
Ben More Bushland Reserve
Keiths Rd
Towrang Rd
Glenlogie Creek
Eglins Ln
Evans Ln
Cockings Rd
Nyoca River
Arthurs Ln
Nells Rd
Back Mount Lonarch Rd
Mount Lonarch
Pellets Rd
Melvins Lonarch Rd
Tom The Taylor Creek

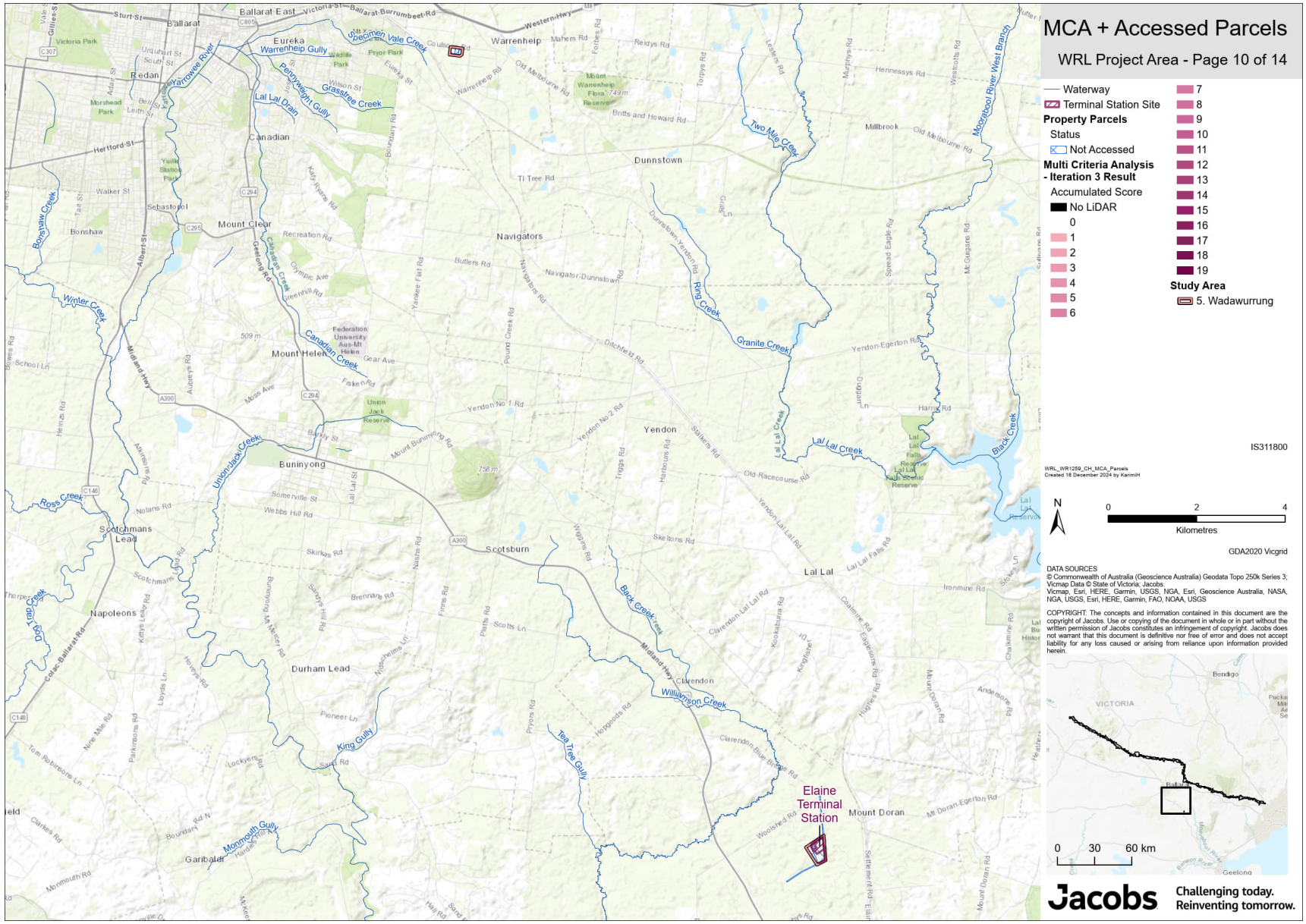

MCA + Accessed Parcels
WRL Project Area - Page 5 of 14
Waterway
Property Parcels
Status
Accessed
Not Accessed
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
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2
3
4
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6
7
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11
12
13
14
15
16
17
18
19
Study Area
4. Djaara
IS311800
WRL_WR1259_CH_MCA_Parcels
Created 16 December 2024 by KarimiH
N
0
1
2
Kilometres
GDA2020 Vicgrid
DATA SOURCES
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VICTORIA
Bendigo
Ballarat
Geelong
0
30
60 km
Jacobs
Challenging today.
Reinventing tomorrow.
Lexton
Lexton-Talbot-Rd
Lexton-Ararat Rd
Sunraysia-Hwy
Beaufort-Lexton-Rd
Crute-Lexton-Rd
Granite Trak
Kelly Trak
Bet Bet Creek
Burnbank Creek
Moina Creek
Doctors Creek
Fishers Rd
School Ln
Cemetery Rd
Jack Smiths Ln
Granite Hill Scenic Reserve

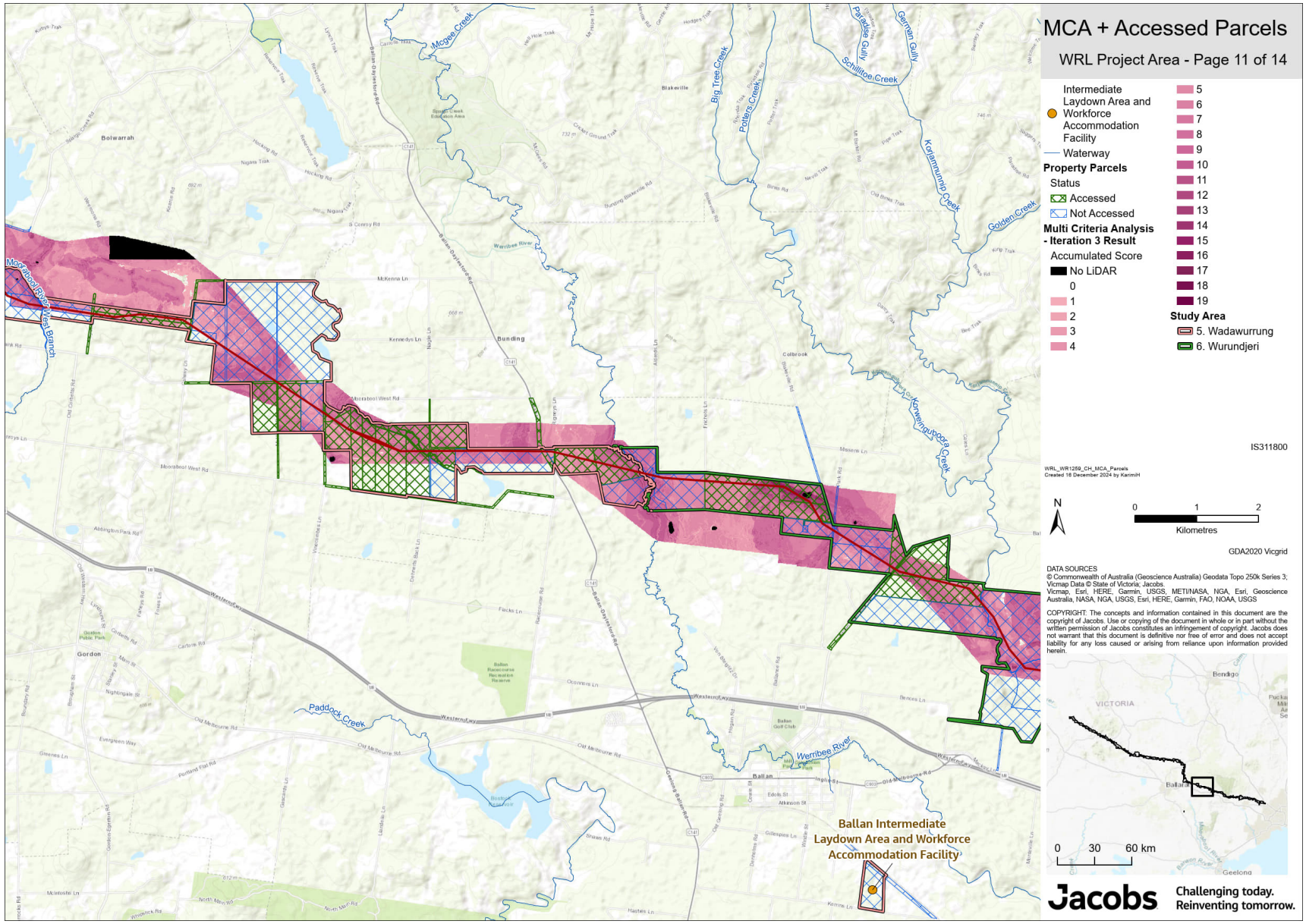

Lexton Intermediate
Laydown Area and Workforce
Accommodation Facility
Doctors Creek
Carulilup Creek
Stony Creek
McCallum Creek
Cook Creek
Burnbank Creek
Mount Emu Creek
Mount Greenock Creek
Glenbrae
Mount Bolton
Addington
Home Shoe Lagoon
Lake Ercildoun
MCA + Accessed Parcels
WRL Project Area - Page 6 of 14
Intermediate Laydown Area and Workforce Accommodation Facility
Waterway
Property Parcels
Status
Accessed
Not Accessed
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
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4
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12
13
14
15
16
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18
19
Study Area
4. Djaara
IS311800
WRL_WR1259_CH_MCA_Parcels
Created 16 December 2024 by KarimiH
N
0 1 2
Kilometres
GDA2020 Vicgrid
DATA SOURCES
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Bendigo
VICTORIA
Ballarat
Geelong
0 30 60 km
Jacobs
Challenging today.
Reinventing tomorrow.

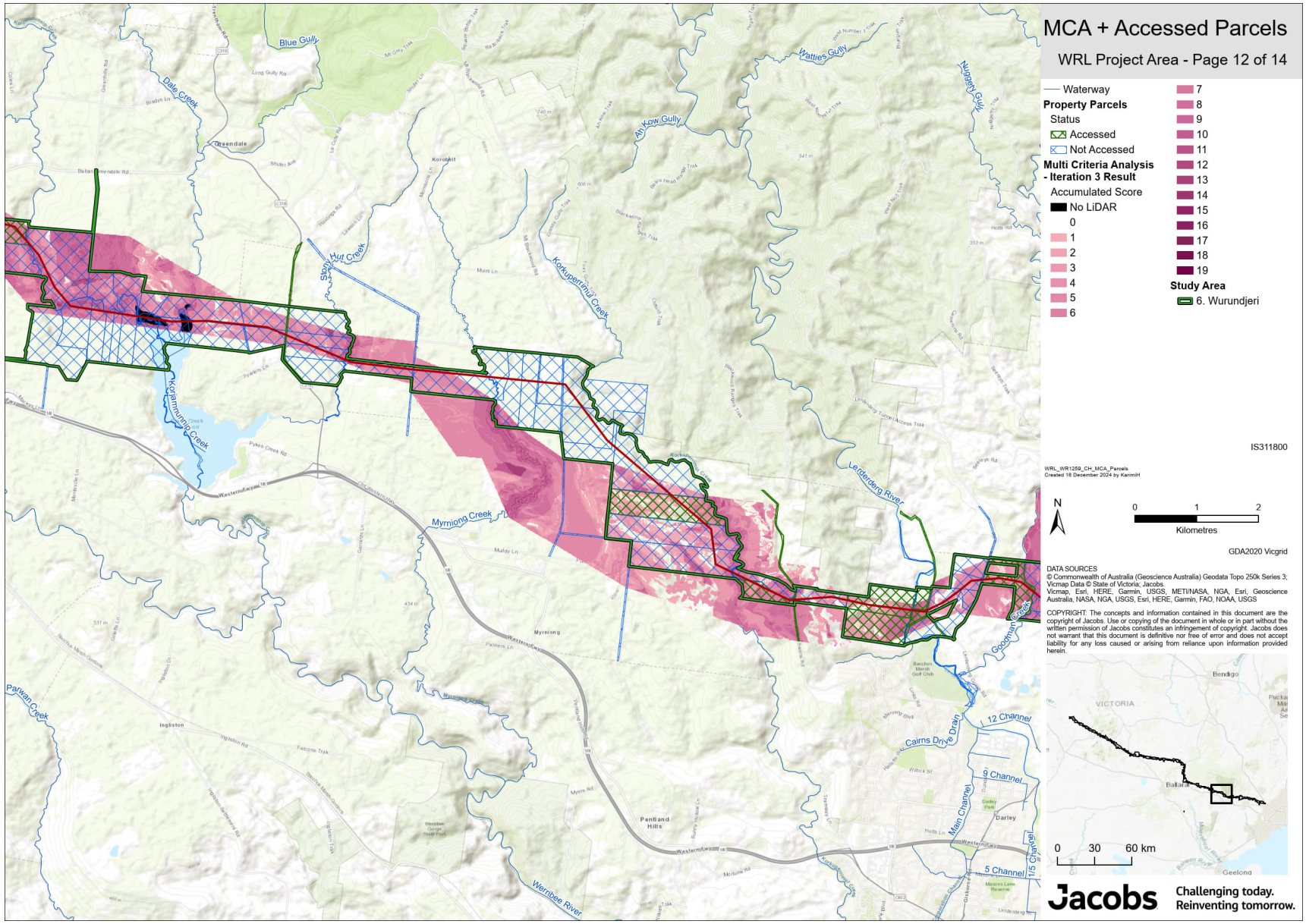

MCA + Accessed Parcels
WRL Project Area - Page 7 of 14
Waterway
Property Parcels
Status
Accessed
Not Accessed
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
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Study Area
4. Djaara
IS311800
WRL_WR1259_CH_MCA_Parcels
Created 16 December 2024 by KarimiH
N
0 1 2
Kilometres
GDA2020 Vicgrid
DATA SOURCES
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Bendigo
VICTORIA
Ballarat
Geelong
0 30 60 km
Jacobs
Challenging today.
Reinventing tomorrow.
Cook Creek
One Mile Creek
Birch Creek
Lawrence Creek
Clunes
Talbot Rd
Mount Beckworth Scenic Reserve
Kilkenny Creek
Beckworth Creek
Glendaruel Creek
Tourello Creek
Creswick North
Coghills Creek
Glendonald
Glendonald Creek
Reedy Creek
Ascot
Creswick Creek
Slattery Creek

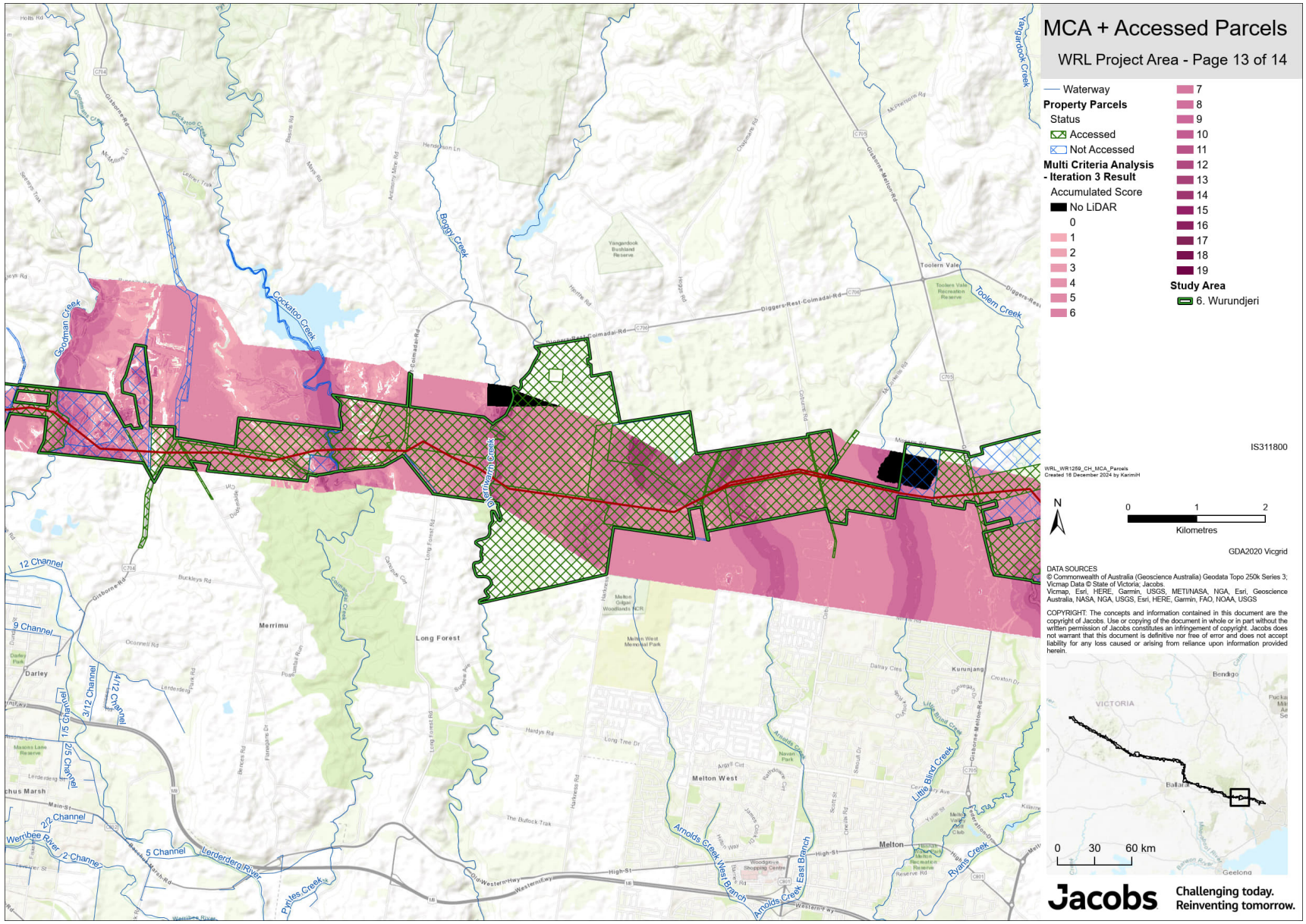

MCA + Accessed Parcels
WRL Project Area - Page 8 of 14
Waterway
Property Parcels
Status
Accessed
Not Accessed
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
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Study Area
4. Djaara
IS311800
WRL_WR1259_CH_MCA_Parcels
Created 16 December 2024 by KarimH
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Kilometres
GDA2020 Vicgrid
DATA SOURCES
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VICTORIA
Bendigo
Ballarat
Geelong
0 30 60 km
Jacobs
Challenging today.
Reinventing tomorrow.
Tea Tree Creek
Middle Creek
Heabourn Creek
Joyces Creek
Birch Creek
Glendonald Creek
Langdons Creek
Creswick Creek
Spring Gully
Oak Gully
Nuggetty Gully
Jackass Gully
Fleming Creek
Cobblers Gully
Slaty Creek
Lincoln Gully
Adelaide Creek
Rocky Lead Creek
Pinchgut Creek
Lawrence
Creswick North
Allendale
Broomfield
Smokeytown
Springmount
Creswick
Newlyn
Rocklyn
Mount Prospect
Blampied

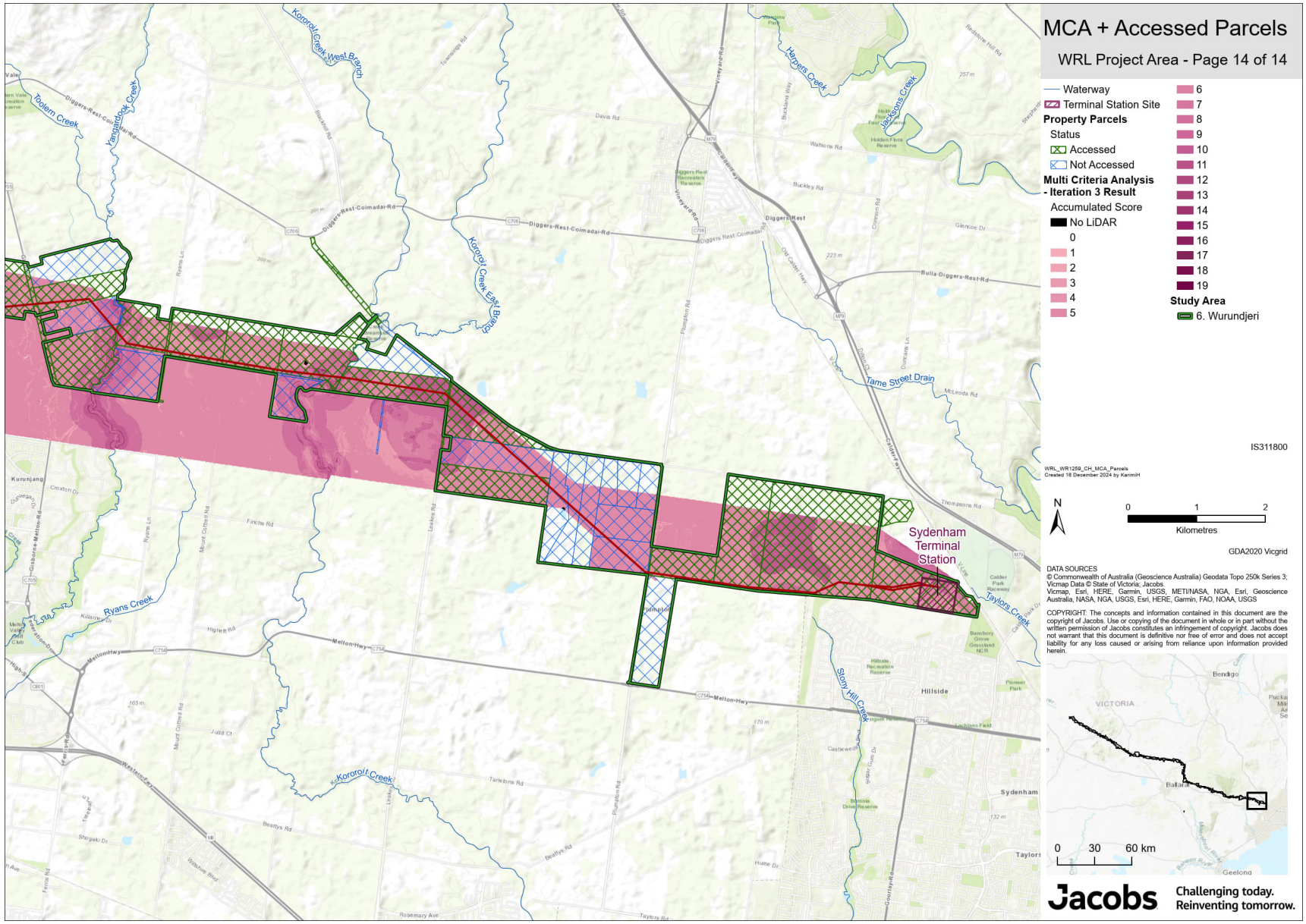

MCA + Accessed Parcels
WRL Project Area - Page 9 of 14
Waterway
Property Parcels
Status
Accessed
Not Accessed
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
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Study Area
4. Djaara
5. Wadawurrung
IS311800
WRL_WR1259_CH_MCA_Parcels
Created 16 December 2024 by KarimiH
N
0
1
2
Kilometres
GDA2020 Vicgrid
DATA SOURCES
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Bendigo
VICTORIA
Geelong
0
30
60 km
Jacobs
Challenging today.
Reinventing tomorrow.
Rocky Lead Creek
Pinchgut Creek
Birch Creek
Fleming Creek
Adekate Creek
Moorabool River East Branch
Cave Creek
Still Creek
Lynchs Creek
Musk Creek
Moorabool River West Branch
Donovans Creek
Devils Creek
Giles Creek
Rocklyn
Barkstead
Dean
Mollongghip
Clarkes Hill
Bolwarrah
Claretown
Bullarook
Springbank


MCA + Accessed Parcels
WRL Project Area - Page 10 of 14
Waterway
Terminal Station Site
Property Parcels
Status
Not Accessed
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
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Study Area
5. Wadawurrung
IS311800
WRL_WR1259_CH_MCA_Parcels
Created 16 December 2024 by KarimH
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2
4
Kilometres
GDA2020 Vicgrid
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VICTORIA
Bendigo
Ballarat
Geelong
0
30
60 km
Jacobs
Challenging today.
Reinventing tomorrow.
Elaine Terminal Station
Ballarat
Ballarat East
Warrenheip
Eureka
Redan
Canadian
Mount Clear
Bonshaw
Sebastopol
Dunnstown
Navigators
Mount Helen
Yendon
Buninyong
Scotsburn
Lal Lal
Scotchmans Lead
Napoleons
Durham Lead
Clarendon
Mount Doran
Garibaldi
Millbrook
Morgedoor River West Branch
Two Mile Creek
Ring Creek
Granite Creek
Lal Lal Creek
Black Creek
Yarrowee River
Warrenheip Gully
Specimen Vale Creek
Lal Lal Drain
Pennyweight Gully
Grassfree Creek
Canadian Creek
Winter Creek
Bonshaw Creek
Union Jack Creek
Ross Creek
Back Creek
Williamson Creek
King Gully
Tea Tree Gully
Monmouth Gully
Midland Hwy
Western Hwy
Ballarat-Burrumbeet Rd
Geelong Rd
Albert St
Sturt St
Hertford St
Dunnstown-Yendon Rd
Navigator-Dunnstown Rd
Yendon-Egerton Rd
Old Racecourse Rd
Mt Doran-Egerton Rd
Colac-Ballarat Rd


MCA + Accessed Parcels
WRL Project Area - Page 11 of 14
Intermediate Laydown Area and Workforce Accommodation Facility
Waterway
Property Parcels
Status
Accessed
Not Accessed
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
0
1
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Study Area
5. Wadawurrung
6. Wurundjeri
IS311800
WRL_WR1259_CH_MCA_Parcels
Created 16 December 2024 by KarimiH
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0 1 2
Kilometres
GDA2020 Vicgrid
DATA SOURCES
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VICTORIA
Bendigo
Ballan
Geelong
0 30 60 km
Jacobs
Challenging today.
Reinventing tomorrow.
Ballan Intermediate Laydown Area and Workforce Accommodation Facility
Moorabool River West Branch
Bolwarrah
Bunding
Colbrook
Gordon
Ballan
Blakeville
Paddock Creek
Werribee River
Big Tree Creek
Potters Creek
Schillitoe Creek
German Gully
Paradise Gully
Golden Creek
Konwenguppora Creek
Karlamnunnip Creek
McGee Creek
Western Hwy
Old Melbourne Rd
Moorabool West Rd
Kennedys Ln
McKenna Ln
Flacks Ln
Inglis St
Edols St
Atkinson St
Gillespies Ln
Hasties Ln
Snaiths Rd
Mcintoshs Ln
Evergreen Way
Greenes Ln
Portland Flat Rd
Abbington Park Rd
Nightingale St
Main St
Carbine Rd
Gordon Public Park
Ballan Racecourse Recreation Reserve
Ballan Golf Club
Ballan Cemetery
Ballan Swimming Pool
Ballan Primary School
Ballan Caravan Park
Ballan Lake
Ballan Reservoir
Ballan Daylesford Rd
Ballan Greendale Rd
Ballan Gordon Rd
Ballan Meredith Rd
Ballan Mt Egerton Rd
Ballan Wallace Rd
Ballan Werribee Rd
Ballan Wheelers Hill Rd
Ballan Wilsons Rd
Ballan Wimmera Rd
Ballan Woodlands Rd
Ballan Yendon Rd
Ballan Yendon Rd
Ballan Yendon


MCA + Accessed Parcels
WRL Project Area - Page 12 of 14
Waterway
Property Parcels
Status
Accessed
Not Accessed
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
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19
Study Area
6. Wurundjeri
IS311800
WRL_WR1259_CH_MCA_Parcels
Created 16 December 2024 by KarimiH
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2
Kilometres
GDA2020 Vicgrid
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Bendigo
VICTORIA
Ballarat
Geelong
0
30
60 km
Jacobs
Challenging today.
Reinventing tomorrow.
Blue Gully
Date Creek
Greendale
Korobeit
Hut Creek
Korkuperrimul Creek
Korpermunnung Creek
Myrniong Creek
Lerderderg River
Werribee River
Parwan Creek
Ingliston
Myrniong
Pentland Hills
Darley
Cairns Drive Drain
12 Channel
9 Channel
Main Channel
5 Channel
1/5 Channel
Goodmans Creek
Watties Gully
Nuggety Gully
Ah Kow Gully


MCA + Accessed Parcels
WRL Project Area - Page 13 of 14
Waterway
Property Parcels
Status
Accessed
Not Accessed
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
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18
19
Study Area
6. Wurundjeri
IS311800
WRL_WR1259_CH_MCA_Parcels
Created 16 December 2024 by KarimH
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0
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Kilometres
GDA2020 Vicgrid
DATA SOURCES
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VICTORIA
Bendigo
Ballarat
Geelong
0
30
60 km
Jacobs
Challenging today.
Reinventing tomorrow.
Goodman Creek
Cockatoo Creek
Boggy Creek
Toolern Creek
Yangardook Creek
Diggers Rest-Coimadai-Rd
Coimadai-Rd
Gisborne-Melton-Rd
Toolern Vale
Toolern Vale Recreation Reserve
Yangardook Bushland Reserve
Merrimu
Long Forest
Darley
Melton West
Melton
Kurunjang
Werribee River
Lerderderg River
Pykes Creek
Arnolds Creek West Branch
Arnolds Creek East Branch
Little Blind Creek
Ryans Creek
Western Hwy
High-St
12 Channel
9 Channel
3/12 Channel
4/12 Channel
1/5 Channel
2/5 Channel
2/3 Channel
2 Channel
5 Channel


MCA + Accessed Parcels
WRL Project Area - Page 14 of 14
Waterway
Terminal Station Site
Property Parcels
Status
Accessed
Not Accessed
Multi Criteria Analysis - Iteration 3 Result
Accumulated Score
No LiDAR
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1
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14
15
16
17
18
19
Study Area
6. Wurundjeri
IS311800
WRL_WR1259_CH_MCA_Parcels
Created 16 December 2024 by KarimiH
N
0
1
2
Kilometres
GDA2020 Vicgrid
DATA SOURCES
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VICTORIA
Bendigo
Ballarat
Geelong
0
30
60 km
Jacobs
Challenging today.
Reinventing tomorrow.
Sydenham Terminal Station
Kororoit Creek West Branch
Kororoit Creek East Branch
Kororoit Creek
Tame Street Drain
Ryans Creek
Taylors Creek
Stony Hill Creek
Jackson Creek
Hopkins Creek
Toolern Creek
Yarrabubdook Creek
Diggers Rest-Coimadai-Rd
Melton Hwy
Bulla-Diggers Rest-Rd
Diggers Rest
Hillside
Sydenham
Taylors
Kurunjang

Appendix I. Cultural Values Assessment (BGLCAC)

This document was exhibited with the Western Renewables Link Environment Effects Statement from 30 June to 25 August 2025

The document has been redacted on 02/10/2025 at the request of the Registered Aboriginal Party

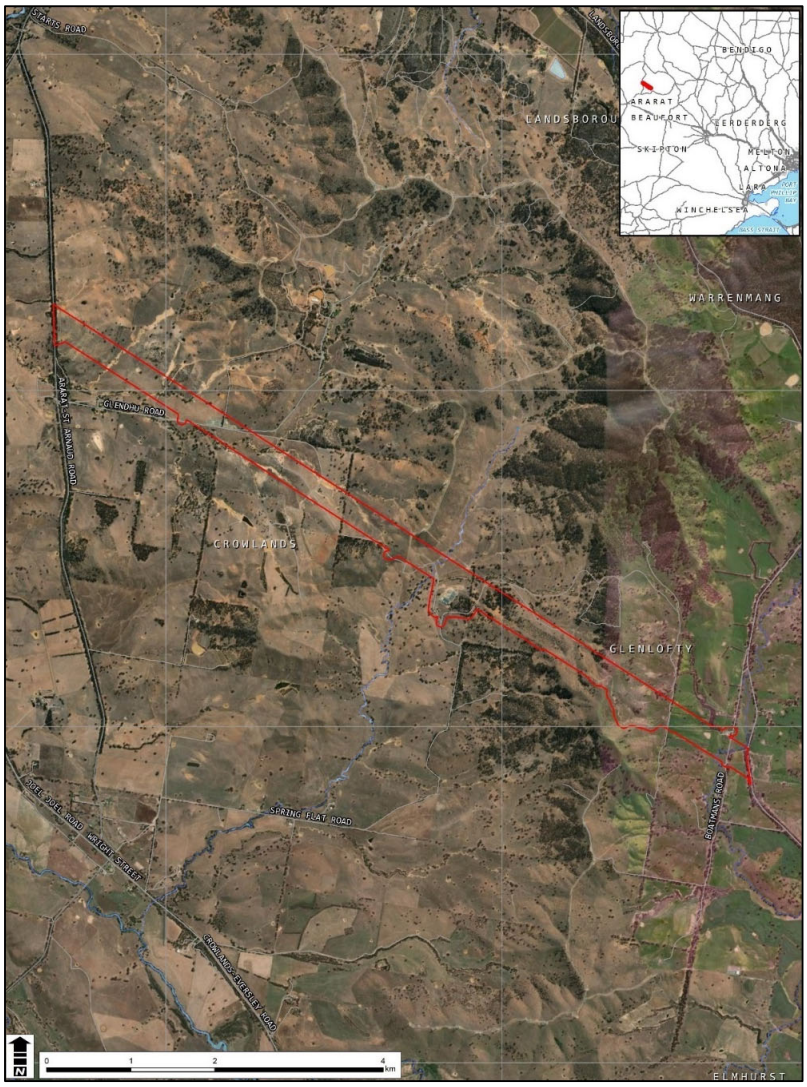
Appendix J. Cultural Values Assessment (EMAC)

EMAC give permission to include this Cultural Values Assessment in its entirety and acknowledge this report will be included in a document that will be put on public exhibition for the WRL EES.

No culturally sensitive information has been incorporated into this document.

Western Victoria Transmission Network Project

Aboriginal Cultural Heritage Values Assessment



Authors: Dr Peter Mathews, Anna Light, David Mathews and Joseph Minter Brooke
Heritage Advisors: David Mathews, Anna Light and Joseph Minter Brooke
Date of completion: 10 October 2022

UNEARTHED HERITAGE

Revision History:

Revision	Revision Date	Details	Authorised	Comments
1	18 Feb 2022	Initial Draft	David Mathews (UHA)	
2	9 Sep 2022	Second draft	David Mathews (UHA)	Updated to address RAP feedback (revise text to focus on EMAC Country). Consultation details also updated.
3	10 Oct 2022	Final version	David Mathews and Nathalia Guimaraes (EMAC)	Updated to include EMAC statement of significance and recommendations

We acknowledge First Australian Peoples as the Traditional Custodians of this country and their continued connection to land, sea, and culture. We also acknowledge the Traditional Owners of the lands covered in this report, the Eastern Maar People and clans whose estates they are, and whose ancestors are mentioned, and we pay our respects to all their Elders, past, present, and future, and to all First Australian Peoples.

Aboriginal and Torres Strait Islander people should be aware that this document contains names of deceased persons.

In addition, some quotations and references contain offensive terms or views that should not have been acceptable in colonial times when they were written, and certainly are not acceptable now.

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Cover photo: The study area (courtesy Nearmap)

Spellings used in this report

Eastern Maar Group	Other spellings: Language Group (Clark 1990)
Eastern Gunditjmara	(eastern) Dhauwurd wurrung
Tjap Wurrung	Djab wurrung
Peek Whurrong	Dhauwurd wurrung (Big wurrung dialect)
Kirrae Whurrung	Girai wurrung
Kuurn Kopan Noot	Dhauwurd wurrung (Gurngubanud dialect)
Yarro waetch (Tooram Tribe)	Gadubanud
	Djargurd wurrung
	Gulidjan

Language Group names: spellings used here:
Gunditjmara
Western Gunditjmara
Tjap wurrung
Jardwadjali
Buandig
Wadawurrung
Woi Wurrung (Wurundjeri Woi wurrung)
Bunurong (Boon wurrung)
Daung wurrung
Dja Dja Wurrung
Ngurai-illam wurrung
Gunai Kurnai
Gadubanud
Wemba-wemba
Waveroo

Clan names: spellings used here:

Tjap Wurrung

1. Bankneit	Unknown; possibly in the Wickliffe region
2. Bar gundidj	Wimmera River at 'Woodlands' station
3. Beeripmo balug	Mt. Cole
4. Boner balug	Mt. Cassell
5. Buller buller cote gundidj	Junction of Salt Creek and Hopkins River
6. Bulug bara	Lake Bolac
6a. Wenoduc	Presumably near Lake Bolac
7. Cartbonong gundidj	Caramut
8. Cart cart worrate gundidj	Plains between 'Narrapumelap' and 'Nareeb Nareeb' stations
9. Curruc balug	Source of the Wimmera River, and at 'Glenlogie' station
9a. Pilawin balug	Pyrenees
10. Euerer burer	Unknown
11. Gnareeb gnareeb gundidj	'Nareeb Nareeb'station
12. Jacalet	Part of 'La Rose' and 'Mokepilly' stations
13. Kolorer gundidj	Mt. Rouse

14. Konegilwerring gundidj	Swamp on the Hopkins R. , 10 miles north of Lake Bolac
15. Mingalac gundidj	Mt. Stavely
16. Mitteyer balug	Barton Morass or Nekeeya Swamp
17. Mutterchoke gundidj	Mt. Abrupt
18. Neetsheere balug	Mt. Willam, 'Barton' station, and Mt. Moornambool
19. Parn balug	Large hill five miles southwest of 'Allanvale' station
20. Peerepar balug	Fiery Creek, 20 miles south of 'Mount Cole' station
21. Poit balug	'Allanvale' station, Great Western
22. Punnoinjon gundidj	Lake Buninjon
23. Puppellenneerring	Fiery Creek, 30 miles south of 'Mt. Cole' station
24. Tappoc gundidj	Mt. Napier
25. Teerel balug	North of Mt. Langi Gheran
26. Terrumbehal gundidj	Between Hopkins River and Fiery Creek
27. The Gums clan	'The Gums' station east of Penshurst
28. Tillac gundidj	A river northwest from Mt. Rouse
29. Tin balug	'La Rose' and 'Mokepille' stations
30. Tonedidgerer balug	'Burrumbeep' station
31. To ol balug	Mt. William
32. Toorac balug	Mt. Pierrepoint
33. Uelgal gundidj	'The Grange', near Strathkellar
34. Ural balug	Plains, seven miles southeast of 'Burrumbeep'
35. Utoul balug	Mts. Cole and Langi Gheran
36. Wattenneer balug	Between Mt. William Swamp and Nekeeya Swamp
37. Weeripcoort balug	Under the Grampians, 6 miles from 'Mt. William' station
38. Worrembeetbeer gundidj	Mt. Bainbridge and 'Kanawalla' station
39. Wurcurri gundidj	Mt. Sturgeon
40. Yam yam burer balug	South of 'Barton' station at head of Mt. William Creek
41. Yourwychall gundidj	Between the Wannon and Grangeburn Rivers

Jardwadjali

22. Murra murra barap	Mount Zero

Executive Summary

This review of Eastern Maar culture, history, and lifeways is a desktop assessment to support a Cultural Values study relating to the Western Victoria Transmission Project. Please note that special attention is paid here to the Tjap Wurrung language group of the Eastern Maar People. Below are summarised some major observations concerning the study.

- The ancestors of Eastern Maar People arrived in what is now Victoria at least 40,000 years ago.
- The Eastern Maar People with their western neighbours the Gunditjmara People are part of a larger group, the Maar nation.
- Eastern Maar country, *Meerreengeeye*, 'Our Country', is in southwestern Victoria, extending from the Eumerella River in the west to Painkalac Creek (Airey's Inlet) in the east, and from the Bass Strait coast in the south to the Great Dividing Range in the north. The Eastern Maar People have looked after their Country for hundreds of generations.
- Evidence of the Eastern Maar People exists on their Country in the form of thousands of archaeological sites. These sites include rock shelters, quarries, hearths, mounds, burials, fish and eel traps, shell middens, stone arrangements, rock wells, scar trees, artefact scatters, and isolated artefacts.
- Over 100 clans of the Eastern Maar People can be reconstructed, and over 200 clans for the Maar People as a whole. These clans have varying degrees of surviving documentation.
- Eastern Maar Country is resource-rich, with a wide variety of ecozones, including the coast, temperate rain forest, lakes and marshes, volcanic plains, heathlands and hill country, and open woodlands. The rich waterways and wide variety of native vegetation have provided for the Eastern Maar People in return for their caring for Country.
- For thousands of years the Eastern Maar People and their ancestors developed practices such as the use of fire in their management of the land that sustained them.
- Eels were one of the most important resources for the Eastern Maar People. Each Autumn attracted large numbers of Eastern Maar People as well as neighbouring clans to the Lake Buloke (Lake Bolac) area, where elaborate traps and weirs were used to catch huge numbers of migrating eels.
- Eastern Maar People participated in wider relationships with neighbouring people, with whom they intermarried and shared in trade and ceremonies.
- These lifeways had existed for thousands of years when, after 1810, foreigners (European sealers and whalers) began to make contact with the coastal clans of the Eastern Maar People, stealing their resources and kidnapping Eastern Maar women. Thus the first Invasion of Eastern Maar lands began with sealers and whalers around 1810.
- The second Invasion had its beginnings after 1834, when a European farming settlement was made in Portland, just to the west of Eastern Maar Country. This was followed in 1835 and 1836 with European settlements on the Bellarine Peninsula and at Melbourne, to the east of Eastern Maar Country.
- In 1836 Eastern Maar lands suffered their first trespassing by Europeans, when Major Thomas Mitchell crossed Eastern Maar Country from the northeast on his way to Portland.
- The following year saw the first settlement by Europeans, and by 1841 over half of Eastern Maar Country had been stolen by European squatters moving in from the east, the northeast, and the southwest. By the late 1840s almost all of Eastern Maar Country had been seized.

- The Eastern Maar People resisted the stealing of their lands, their food and water, their language and culture, leading to massacres of their people and the ushering in of an extended period of racism, marginalization, and discrimination.
- A third Invasion of Eastern Maar lands occurred in the 1850s, following the finding of gold on northern Eastern Maar estates around Ararat in 1854.
- The declining numbers of Eastern Maar People were concentrated into 'reserves' and missions and moved around Victoria—often they were removed off Eastern Maar Country onto land traditionally owned by other First Peoples.
- The most important of these missions for the Eastern Maar People was the Framlingham Aboriginal Station, which was an Aboriginal reserve from 1865, and despite government attempts to close it, the Station survived until 1890. In 1970 Framlingham was returned to the Traditional Custodians, the Eastern Maar People. Framlingham is of central importance for the Eastern Maar People.
- Eastern Maar today are the descendants of a number of identified ancestors. The family groups descended from these ancestors each has a position on the Board of Directors of the Eastern Maar Aboriginal Corporation.

RECOMMENDATIONS

1. Eastern Maar Aboriginal Corporation policy is for no harm to occur to Aboriginal cultural heritage where possible. The harm minimisation includes the environmental protection. It is recommended that Ausnet involves Eastern Maar on the conversations concerning all the values to be affected by the project, not only tangible cultural heritage.
2. No removal of mature native trees within the area. If areas near culturally modified trees are to be impacted, EMAC should be consulted.
3. Eastern Maar should be consulted about proposed changes to the project.
4. Ausnet team and contractors should undergo cultural heritage awareness training.
5. Environment impacts caused by the project should be reported to Eastern Maar.

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1 Background

1.1 Introduction

Unearthed Heritage Australia Pty Ltd (UHA) has prepared this desktop assessment at the request of AusNet to assist with the cultural values assessment for the Western Victoria Transmission Network Project (WVTNP)

1.1.1 Methodology

The methodology for the cultural values assessment was developed in collaboration between AusNet (the Sponsor of the WVTNP project), Eastern Maar Aboriginal Corporation, Jacobs and Unearthed Heritage Australia and it was agreed that a cultural values assessment comprising of an on-site visit/meeting with Eastern Maar Aboriginal Corporation Elders, and a follow-up in-house meeting, would be an acceptable approach.

It was also agreed that to best facilitate the CVA, a desktop assessment would also be prepared that detailed key environmental, ethnohistorical and archaeological information relating to the study area. As part of the desktop assessment, relevant information relating to a broader suitable geographic region around the study area would also be considered and reviewed to provide context.

This report includes a detailed desktop assessment providing environmental, ethnohistorical and archaeological background of the study and study region (Section 3).

1.2 Sponsor

The sponsor of this desktop assessment is AusNet.

1.3 Registered Aboriginal Party (RAP)

Eastern Maar Aboriginal Corporation (EMAC or Eastern Maar) is the Registered Aboriginal Party for the study area. Pursuant to the Aboriginal Heritage Act 2006 (Victoria), DDWCAC were appointed a RAP in 2020.

1.4 Consultation

The RAP, Sponsor and Sponsor's heritage advisors consulted each other regularly during the preparation of the CVA.

Table 1-1 summarises the consultation undertaken during this CHMP.

Table 1-1: Summary of substantive consultation undertaken between the RAP, Sponsor and Has during the preparation of this CVA

Date	From	To	Format	Summary
7 October 2021	Joseph Brooke	John Clark (Eastern Maar Aboriginal Corporation)	Phone	Joseph canvassed idea of CVA and how EMAC might see this proceeding. John queried if this was something that Ausnet really wanted (i.e. if the CVA identified impact to EMAC cultural values, EMAC would not support the project). Joseph discussed some scope options, which John said may work, but intellectual property and cultural security protocols would need to be agreed upon before confirming a scope.

Date	From	To	Format	Summary
15 November 2021	Joseph Brooke	Davina Taylor, Craig Edwards, Samantha Fidge and John Clark (Eastern Maar Aboriginal Corporation)	Email	Provision of introductory maps and request for meeting availability
15 November 2021	Samantha Fidge (Eastern Maar Aboriginal Corporation)	Joseph Brooke	Email	Sammy identified that meetings weren't available until the new year
25 November 2021	Joseph Brooke	Davina Taylor, Craig Edwards, Samantha Fidge and John Clark (Eastern Maar Aboriginal Corporation)	Email	Meeting booking form
29 November 2021	Davina Taylor (Eastern Maar Aboriginal Corporation)	Joseph Brooke	Email	Confirmed meeting booking
19 January 2022	See below for attendees	See below for attendees	Meeting	CVA Inception Meeting
10 February 2022	Joseph Brooke	John Clark (Eastern Maar Aboriginal Corporation)	Phone	Joseph called John to discuss the draft and see if the scope could be established and activities slated. John said new staff and sub-committee being established would require things to wait a few weeks. John wanted to explore the possibility of somehow combining the CVA with a CVA being prepared on the Western Hwy to avoid engagement fatigue and perceived overlap in study areas. John also floated that the CVA may be better as a desktop alone.
12 April 2022	See below for attendees	See below for attendees	Meeting	CVA Draft document meeting
29 April 2022	Joseph Brooke	John Clark and Nathalia Guimaraes (Eastern Maar Aboriginal Corporation)	Email	Sent draft Desktop CVA report for review
29 April 2022	Nathalia Guimaraes (Eastern Maar Aboriginal Corporation)	Joseph Brooke	Email	Receipt of report and hope though couldn't commit to providing comment by 5 May
5 May 2022	Joseph Brooke	Nathalia Guimaraes (Eastern Maar Aboriginal Corporation)	Phone	Phone message left to ask if they had any comments or needed assistance with providing comment on the draft desktop CVA
20 May 2022	Joseph Brooke	Nathalia Guimaraes (Eastern Maar Aboriginal Corporation)	Phone	Phone message left to ask if they had any comments or needed assistance with providing comment on the draft desktop CVA
6 June 2022	Joseph Brooke	Nathalia Guimaraes (Eastern Maar Aboriginal Corporation)	Phone	Phone message left to ask if they had any comments or needed assistance with providing comment on the draft desktop CVA

Date	From	To	Format	Summary
14 June 2022	Nathalia Guimaraes (Eastern Maar Aboriginal Corporation)	David Mathews	Phone and email	Comments provided on the draft CVA. The only comment received was that the CVA should focus on Eastern Maar rather than including Kulin as well.
14 June 2022	David Mathews	Nathalia Guimaraes (Eastern Maar Aboriginal Corporation)	Email	Confirmation of comments and request for any additional comments or specific page references, etc.
16 August 2022	David Mathews	Nathalia Guimaraes (Eastern Maar Aboriginal Corporation)	Phone	Discussion and recap on status of the CVA draft and next steps. EMAC's only comment on the draft CVA document was to adjust the desktop to focus more exclusively on EMAC Country. EMAC said they would also contribute to a consultation section to detail the communication process and who was involved in review of the CVA and to include the agreed scope within the CVA document. EMAC restated their presence is that the CVA remains a desktop assessment for this project.
16 August 2022	Nathalia Guimaraes (Eastern Maar Aboriginal Corporation)	David Mathews	Email	Meeting request for a results meeting to be held on 8 September 2022
8 September 2022	See below for attendees	See below for attendees	Meeting	CVA meeting

1.5 Authors and Heritage Advisors

Dr Peter Mathews, Anna Light, David Mathews and Joseph Minter Brooke are the heritage advisors

Peter Mathews[1] is an Emeritus Professor of archaeology from La Trobe University and a MacArthur Fellow with extensive experience in archaeology, linguistics and ethnohistory.

Anna[2] has over 20 years of experience in heritage management and archaeology and is a qualified heritage advisor under Section 189 of the *Aboriginal Heritage Act* 2006.

David[3] has over 14 years of experience in heritage management and archaeology and is qualified as both a heritage advisor and an archaeologist and is on the AV list of approved Victorian heritage advisors.

Joseph[4] has over 13 years of experience in heritage management and archaeology and is qualified as both a heritage advisor and an archaeologist and is on the AV list of Victorian heritage advisors. Joseph is a full member of the Australian Association of Consulting Archaeologists Inc.

[1] Bachelor of Arts, Honours - first class (1975), University of Calgary, Canada; MPhil (1979), Yale; PhD (1988), Yale
[2] Bachelor of Arts (Archaeology, Honours, first class) from La Trobe University in 2001
[3] Bachelor of Archaeology (Honours – first class) 2005, University of Calgary, Canada.
[4] Bachelor of Archaeology (Honours – first class) 2006, La Trobe University.

2 Study Area

2.1 Extent of the Study Area

The study area encompasses c. 333.21 ha of land within the Eastern Maar Aboriginal Corporation Registered Aboriginal Party (RAP) area. The geographic region includes a c. 10 km radius surrounding the study area, extending into the east where no RAP is currently appointed and limited in size to the west and northeast where the RAP boundaries of Barengi Gadjin Land Council Aboriginal Corporation and Dja Dja Wurrung Clans Aboriginal Corporation, respectively, occur (c. 35,084.57 ha). These parameters provide a meaningful context broad enough to capture regional environmental and Aboriginal place distribution patterns, while remaining targeted so that these patterns are not missed. This region (Figure 2-1) is considered to provide an effective comparative sample of previous assessments and registered places both on similar landforms and from a broader landscape perspective as numerous studies have been undertaken within this radius. It also provides an effective scope to understand the flora and fauna, geology, soils and geomorphological context which would have influenced the occupation by Aboriginal people and the post-contact land-use history that may have impacted Aboriginal places.

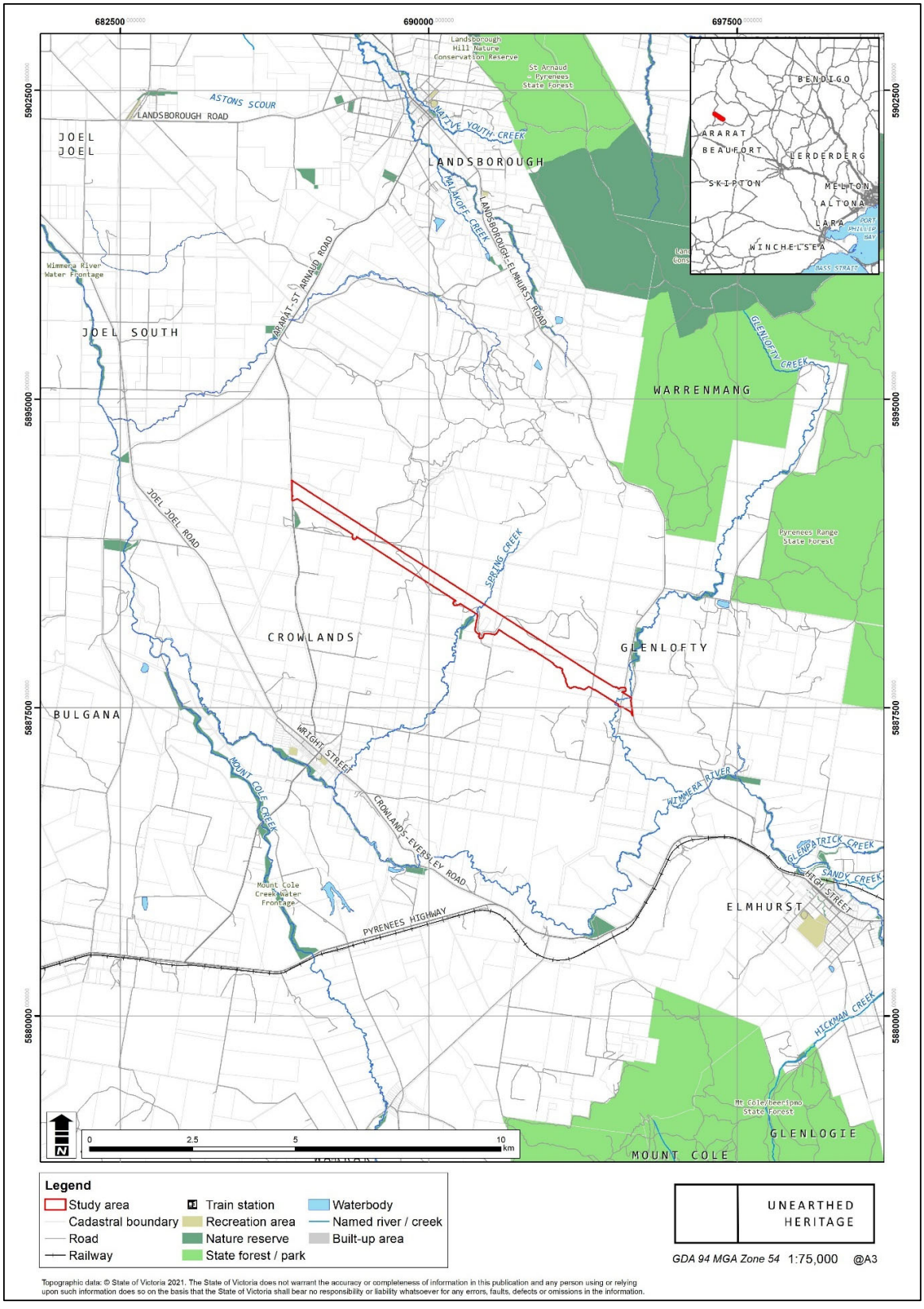


Figure 2-1 The location of the study area

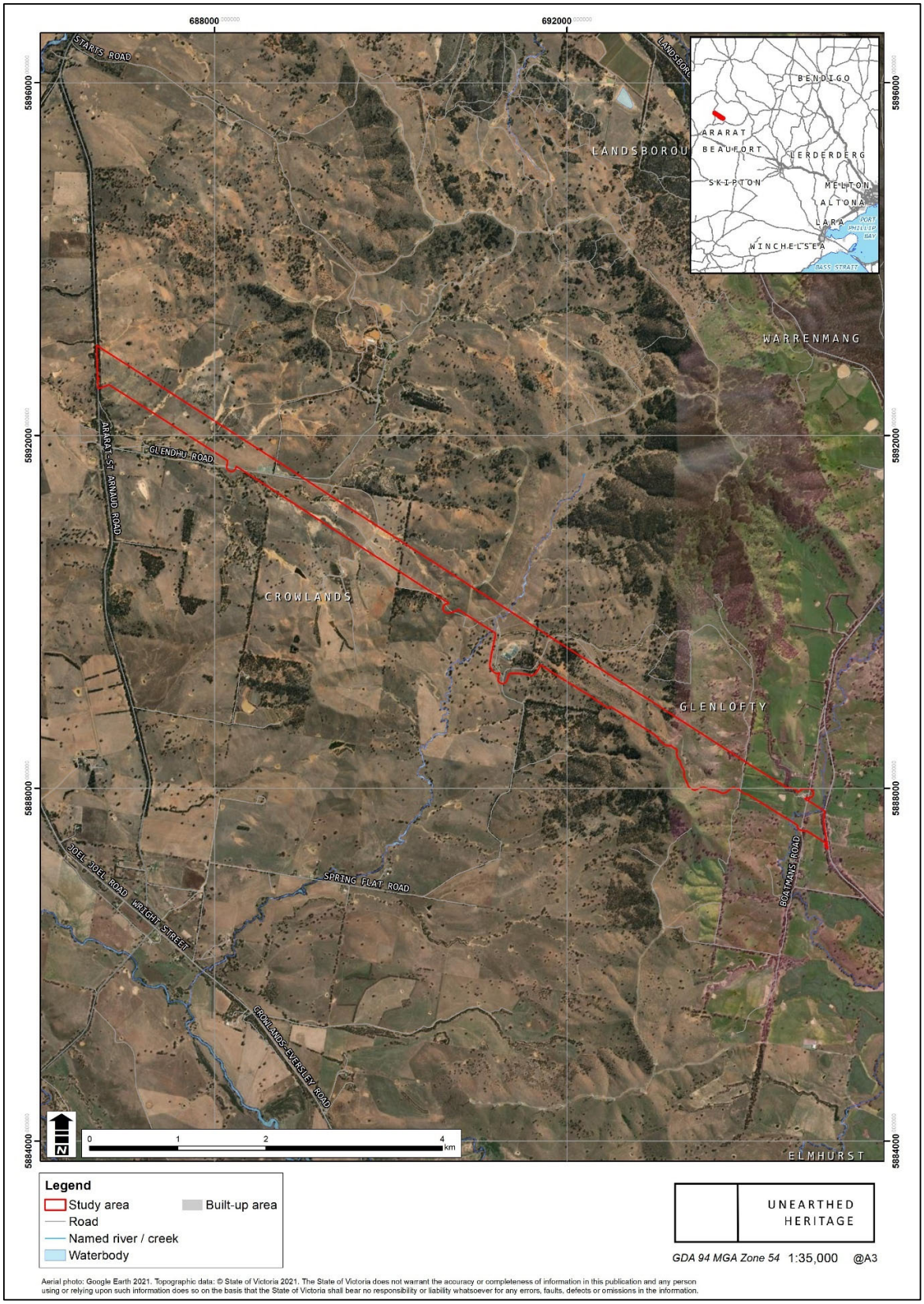


Figure 2-2 Photomap of the study area

3 Desktop Assessment

This section provides background information on the activity area and the surrounding region. This information is presented to provide an understanding of the physical, historical, cultural and archaeological setting in which the study area is located. This information is useful in developing archaeological place prediction models. Anna Light, Dr Peter Mathews, David Mathews and Joseph Minter Brooke undertook the background research for the desktop assessment. There were no obstacles encountered to undertaking the desktop assessment.

3.1 Method of Assessment

The aims of the desktop assessment were:

- To determine the level of previous investigation of the study area and the surrounding geographic region;
- To determine the presence of registered Aboriginal places within the study area and the surrounding geographic region;
- To determine the environmental context of the study area with regard to landform and geomorphology; and
- Review the historical and cultural setting of the study area and surrounding geographic region.

The methods used to undertake the desktop assessment included:

- Reviewing appropriate sources, including Victorian government on-line information, and summarising relevant environmental background;
- Searching the Victorian Aboriginal Heritage Register (VAHR) and other research sources (for example, consultancy reports and academic research) for information relating to the study area and the geographic region
- Reviewing this information to identify and characterise Aboriginal site types likely to be present within the study area and to obtain relevant information to inform the cultural values assessment.

3.2 Environmental Context

This section provides an overview of the environmental context of the study area, with particular focus on factors that may have influenced past human behaviour and hence archaeological place formation processes and the distribution of Aboriginal cultural heritage places. The land-use history of the of the region is also reviewed as it assists in identifying any site formation processes that may have impacted the occurrence and/or location of Aboriginal cultural material.

The information provides a broad yet targeted context within which to view information relevant to the activity area regarding flora and fauna, geology, soils, geomorphology, the past occupation by Aboriginal people that may have led to the creation of Aboriginal places, and the post-contact land-use history that may have disturbed Aboriginal places. Hydrological resources in the geographic region include the Wimmera River with minor and major creeks and tributaries flowing into it. The study area is bounded on the east by Glenlofty Creek and Spring Creek crosses the central portion.

3.2.1 Geology and Geomorphology

The study area is situated within the Goldfields (Gold) bioregion the geographic region also includes the Central Victorian Uplands (CVU) bioregion in the north, east and south. The study area and the

geographic region are both located within the Western Uplands geomorphological unit (GMU) (GMU 2) and within the subgroup of Dissected Uplands (GMU 2.1) and comprise numerous subgroups (Table 3-1,

Table 3-2 & Figure 3-2). One geomorphological unit dominates in the study area: the ridges, escarpment, mountains on non-granitic Palaeozoic rocks (GMU 2.1.1) representing 70.48% of the study area, followed by 'Plateaux and rises of residual Cainzoic landscapes' (GMU 2.1.5). In the broader geographic region this GMU also represents the proportionately largest unit present (39.61%), followed aby the 'Terraces and floodplains' (GMU 2.1.7) (29.41%). The three dominant GMUs are described in more detail below:

GMU 2.1.1: ridges, escarpments, mountains on non-granitic Palaeozoic rocks: described as (VRO 2021a) "the ridges, escarpments and mountains are located within the upper catchments of the Wimmera River, Mount William Creek and Mount Cole Creek drainage networks. Occurring throughout the Midlands (including North Central and Glenelg Hopkins CMA regions), these landscape features often adjoin the hills, rises and plains of similar broad geological lithologies. The Ararat Hills with the Pyrenees Ranges are examples of these Palaeozoic rock landforms [...] The topography of the Pyrenees Ranges becomes more subdued in the north-west where it merges in with the Avon plains to the south-west and south-east. Major ridges are orientated along strike (north-west) with rectangular stream channel patterns that are generally orientated in a north-east orientation that often reflect jointing and faulting".

GMU 2.1.5: 'Plateaux and rises of residual Cainzoic landscapes' (VRO 2021b) "The rocks of the Western Uplands are capped in places by sands and gravels, which are remnants of Palaeogene and Neogene sediment deposition […] Widespread deposition of sands and gravels are preserved as fringing sheets of capping material across Palaeozoic sediments and granitic terrains of the upper Wimmera River catchment. They are significant due to their preservation of underlying bedrock as resistant ferricrete and silcrete. Examples include the undulating rises near Great Western and gentle to undulating plains from Deep Lead to Glenorchy and Mokepilly. Undulating rises and plains characterise the landform patterns of these landscapes. Generally the rises that are often capped with Cainozoic sands and gravels sit in a lower topographic position in comparison to neighbouring low hills and hills of granitic plutons and Palaeozoic bedrock. The extensive rises that fringe many of the higher landscapes as well as lining alluvial valleys and flats, often occur as discontinuous landforms with relief of 5–30 m and gently to very gently inclined slopes."

GMU 2.1.7: 'Terraces and floodplains' described as (VRO 2021c): "Alluvial systems within the Dissected Uplands of the Wimmera CMA region include Mount Cole Creek, Mount William Creek and the Wimmera River. Mount Cole Creek, the upper Wimmera River and other minor tributaries are supplied surface and groundwaters by Palaeozoic bedrock hilly terrain and Neogene cappings that line many lower hillslopes. As a tributary that supplies the Wimmera River, Mount William Creek rises on the slopes of Mt. William in the Grampians and flows slowly to the north-west through Dadswells Bridge. Extensive alluvial plains of this drainage system represent a low pass (geocol) that separates the Dissected Uplands (Midlands) to the east from the Grampians to the west. […] The entrenched valleys of Quaternary sediments including the Shepparton Formation (a thick sequence of unconsolidated fluvial and lacustrine sediments – coarse sand, silt and clay) occur largely as terraces, plains and drainage lines. Sediments have been derived through differential weathering of granite masses that are surrounded by ridges and peaks of resistant metamorphosed sediments. […] Flood plains of Mount William Creek are lined by aeolian deposits (sands) sourced from the Grampians and lined by River Red gums on subdued slopes of this inset stream. The plains and terraces of the upper reaches of the Wimmera River system around Mount Cole Creek, Concongella

and Elmhurst have been formed by the more rapid weathering of granitic rocks in the area, accompanied by the deposition of recent alluvial sediments. Incipient weathering profiles of older fluvial deposits have some mottling reflecting poor site drainage and clay alleviation processes. Granitic detritus of these valley systems has high concentrations of quartzose sand intermixed with silts that often compose terraces occupying elevated positions above the current drainage plain."

In terms of geology, the study region is dominated by the high schistosity metamorphic rock associated with the Warrak Formation (-Caw) of Palaezoic (Cambrian) development and the clay, sand, silt and gravel of the Shepparton Formation (Nws), with a variety of geological units in small proportions (Table 3-3, Table 3-4 & Figure 3-3). Stratigraphic profiles associated with the Warrak Formation have been observed to comprise an A-horizon of fine sandy loam overlying a bleached, fine sand with ferruginous nodule and quartz inclusions which overlie B-horizon of fine sandy light clay which becomes clayier and heavier with depth (VRO 2021d). The Shepparton Formation is dominated by sediments which were deposited via an old river system during the Quaternary and also comprise fine calcareous aeolian deposits blown across during dry periods and overlie both Tertiary alluvial deposits and Ordovician marine deposits (VRO 2021e).

An 1890 parish map (Figure 3-1) shows the study area as located within a 'Silurian' lithographic zone and surrounded by 'Tertiary' lithography.

Landforms within the geographic region can be divided into several useful analytical categories:

- Western extent of Great Dividing Range with high peaks of, generally, <900 masl
- Glenlofty Creek (at east of study area) and Spring Creek (at centre of study area), and in the wider geographic region water courses such as the Wimmera River occurs to the south and numerous other creeks and tributaries (e.g. Mount Cole Creek, Glenpatrick Creek, Nowhere Creek, Malakoff Creek draining into the river
- Ridgelines
- Narrow alluvial valleys
- Rises
- Floodplains

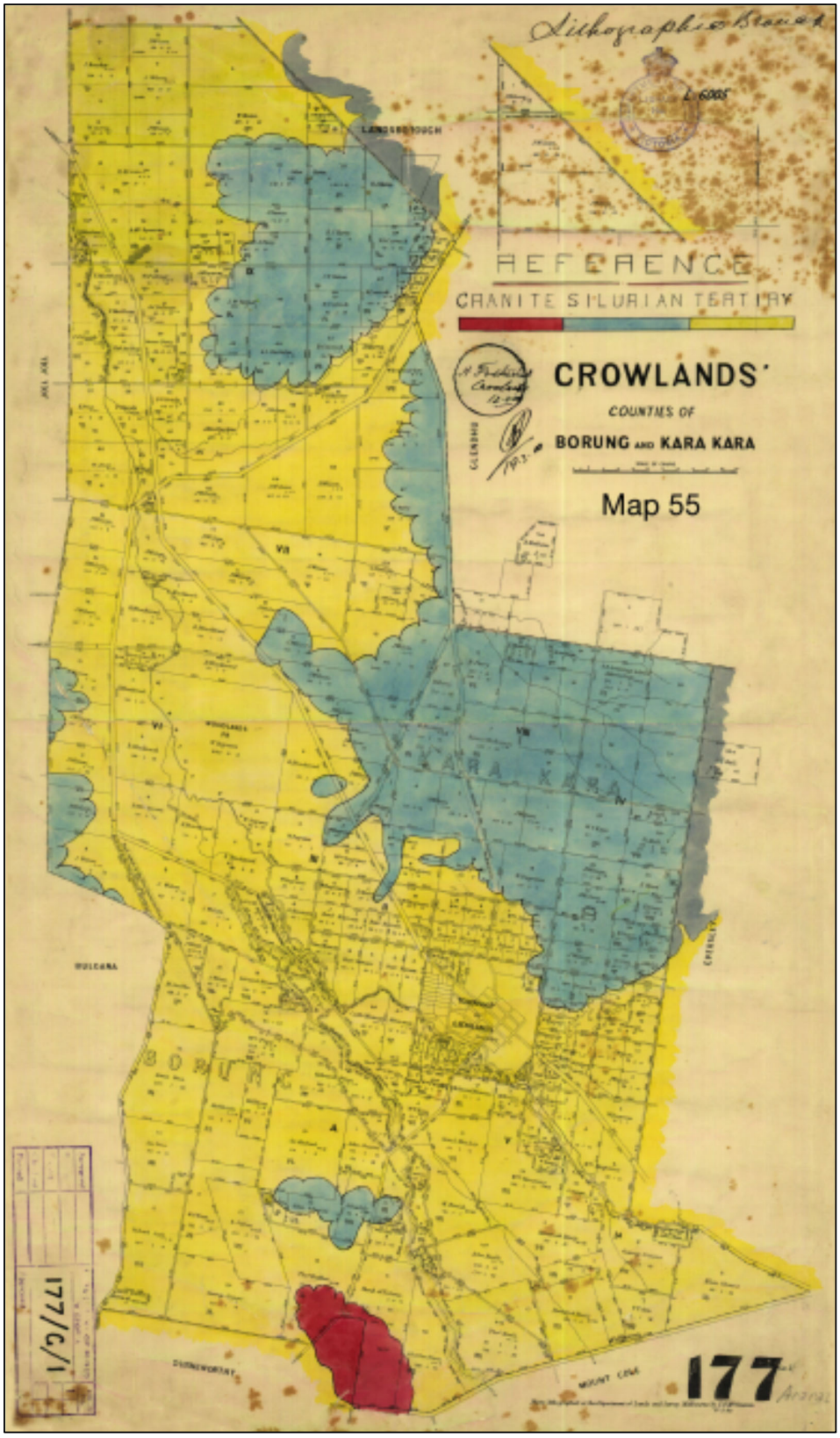


Figure 3-1 1890 Counties of Borung and Kara Kara lithographic map (source: www.nla.gov.au)

Table 3-1 Geomorphological units in the study area

Unit	Geomorphological unit	Area (ha)	Area (%)
2.1.1	Western Uplands: Dissected Uplands: Ridges, escarpments, mountains on non-granitic Palaeozoic rocks (Ararat Colbinabbin, Pyrenees, Tarrangower, Big Hill, Mt. Macedon)	234.83	70.48%
2.1.5	Western Uplands: Dissected Uplands: Plateaux and rises of residual Cainozoic landscapes (Dereel, Meredith, White Hills, Trentham)	68.94	20.69%
2.1.7	Western Uplands: Dissected Uplands: Terraces and floodplains (Upper Loddon, Upper Woady Yallock Creek, Pomonal-Moyston area, Crowlands, Avoca, Newstead	29.43	8.83%
Total		**333.21**	**100%**

Table 3-2 Geomorphological units in the geographic region

Unit	Geomorphological unit	Area (ha)	Area (%)
2.1.1	Western Uplands: Dissected Uplands: Ridges, escarpments, mountains on non-granitic Palaeozoic rocks (Ararat Colbinabbin, Pyrenees, Tarrangower, Big Hill, Mt. Macedon)	13898.22	39.61%
2.1.2	Western Uplands: Dissected Uplands: Hills, valley slopes and plains on non- granitic Palaeozoic rocks (Daylesford, Maryborough, Bendigo)	3863.88	11.01%
2.1.3	Western Uplands: Dissected Uplands: Ridges, escarpments, mountains on granitic Palaeozoic rocks (Mt. Cole, Langi Ghiran, Mt. Beckworth, Mt Alexander)	1205.63	3.44%
2.1.4	Western Uplands: Dissected Uplands: Hills, valley slopes and plains on plutonic Palaeozoic rocks (Pittong, Harcourt, Amphitheatre, Victoria Valley)	684.88	1.95%
2.1.5	Western Uplands: Dissected Uplands: Plateaux and rises of residual Cainozoic landscapes (Dereel, Meredith, White Hills, Trentham)	5115.21	14.58%
2.1.7	Western Uplands: Dissected Uplands: Terraces and floodplains (Upper Loddon, Upper Woady Yallock Creek, Pomonal-Moyston area, Crowlands, Avoca, Newstead	10316.75	29.41%
Total		**35,085.57**	**100%**

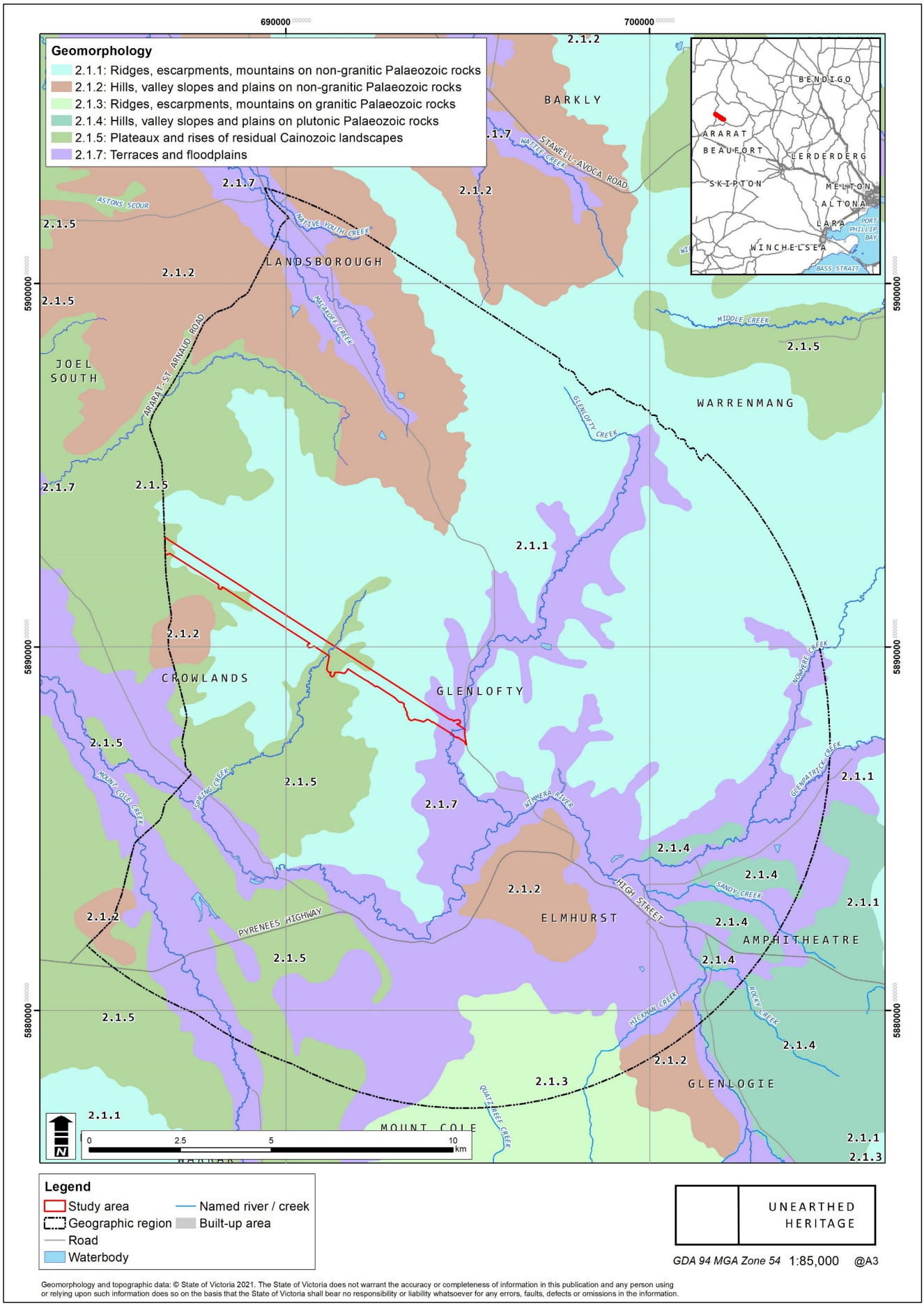
Table 3-3 Geological units in the study area

Unit/Name	Description	Area (ha)	Area (%)
Pyrenees Formation (-Cap): generic	Sandstone and mudstone: dominantly sand-rich turbidite facies; moderately to well sorted, variably rounded quartz with minor feldspar and lithic grains in quartz silt or clay matrix; medium to thick bedded; unfossiliferous; weathered to partly kaolinis	3.41	1.02%
Warrak Formation (-Caw): generic	Sandstone, interbedded siltstone and shale: deep water; unfossiliferous; sandstones are immature quartzwacke to feldspathic greywacke; mostly grade up into green to brown siltstone; thick blue to black carbonaceous mudstone beds common; fine grained Tbc	38.53	11.56%
Warrak Formation (-Caw): regional biotite zone	Slate, psammite, phyllite, fine-grained schist with biotite.	116.97	35.10%
Incised colluvium (Nc1): generic	Silt, sand, gravel: generally poorly sorted and poorly rounded except within channels cut into colluvial material; dissected to variable degrees	20.56	6.17%
Shepparton Formation (Nws): generic	Clay, sand, silt, pooly-sorted lenticular gravel. Dissected flood plain alluvium: terraces 1-10 metres above present river channels; well developed soil 2-3 m thick.	91.13	27.35%
White Hills Gravel (-Pxh): generic	Vein quartz conglomerate, sand, silt, clay in fluvial braid plain, outwash fan and colluvial deposits; typically compositionally mature, with ubiquitous well-rounded pebbles and cobbles of reef quartz, lesser more angular vein quartz and bedrock clasts;	26.86	8.06%
Alluvium (Qa1): generic	Gravel, sand, silt: variably sorted and rounded; generally unconsolidated; includes deposits of low terraces; alluvial floodplain deposits	10.51	3.15%

Unit/Name	Description	Area (ha)	Area (%)
Colluvium (Qc1): generic	Diamictite, gravel, sand, silt, clay, rubble: sorting variable, usually poor; generally poorly rounded; clasts locally sourced; includes channel deposits with better rounding and sorting	25.24	7.57%
Total		**333.21**	**100%**

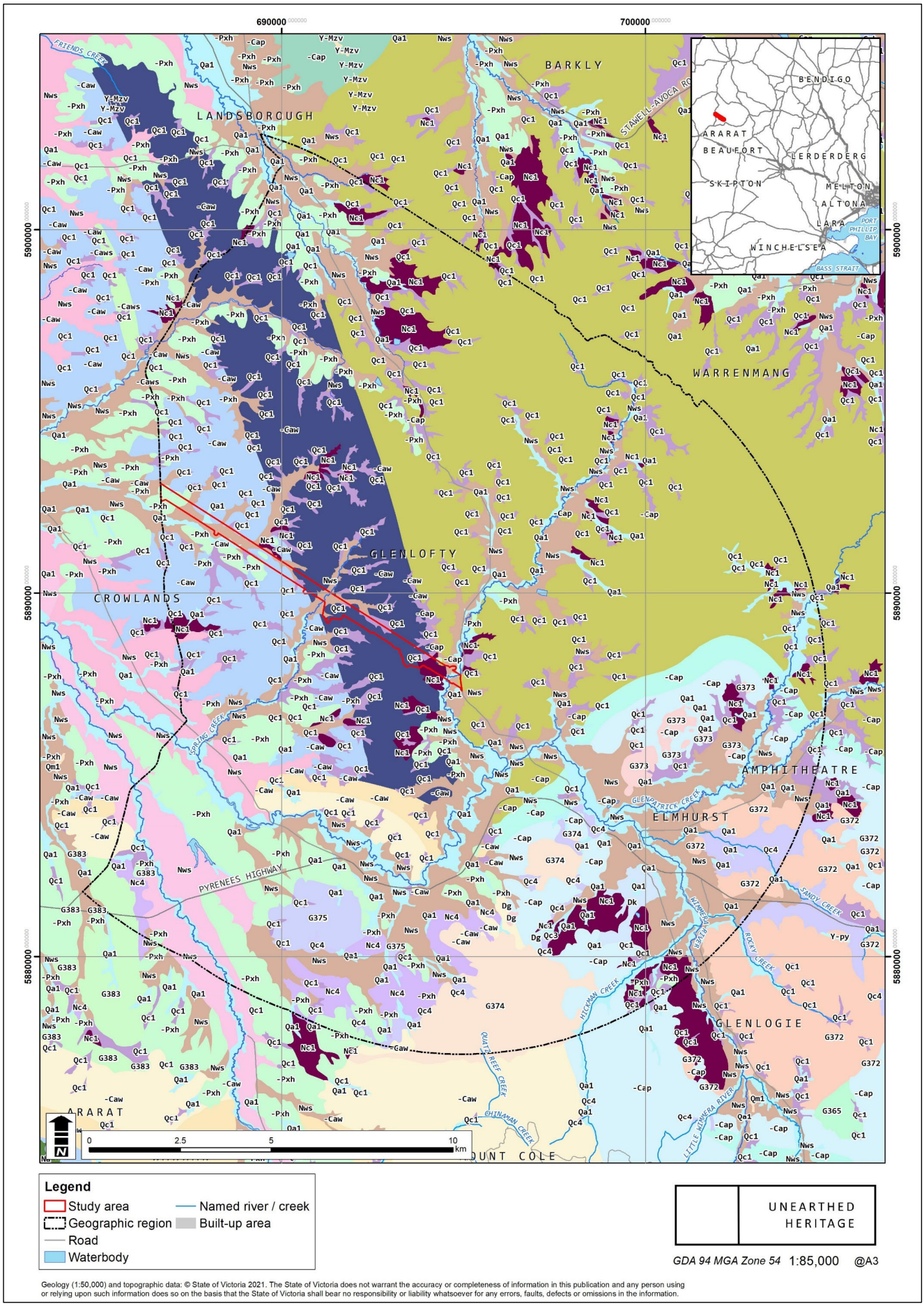
Table 3-4 Geological units in the geographic region

Unit/Name	Description	Area (ha)	Area (%)
Pyrenees Formation (-Cap): generic	Sandstone and mudstone: dominantly sand-rich turbidite facies; moderately to well sorted, variably rounded quartz with minor feldspar and lithic grains in quartz silt or clay matrix; medium to thick bedded; unfossiliferous; weathered to partly kaolinis	8910.41	25.40%
Pyrenees Formation (-Cap): hornfels biotite zone	Biotite hornfels	600.28	1.71%
Pyrenees Formation (-Cap): hornfels cordierite zone	Cordierite hornfels formed from sandstone and mudstone; includes quartz-bioitite hornfels and minor calc-silicate rock	1348.54	3.84%
Warrak Formation (-Caw): hornfels cordierite zone	Cordierite-biotite hornfels	2002.88	5.71%
Warrak Formation (-Caw): regional biotite zone	Slate, psammite, phyllite, fine-grained schist with biotite.	265.74	0.76%
Warrak Formation - black shale member (-Caws): generic	Thick packages of uniform blue to black carbonaceous mudstone and shale beds within Warrak Formation.	441.40	1.26%
Devonian, granite (Dg): generic	Granite, granodiorite	3292.68	9.38%
Intrusive breccia (Dk): generic	Breccia: angular schist and hornfels fragments aligned in a matrix of quartz, fractured schist and granodiorite	1.88	0.01%
Glenlogie Granodiorite (G372): generic	Hornblende-biotite granodiorite: mafic; speckled grey; medium to coarse grained; strongly kaolinised in places, with limonite and goethite staining	12.37	0.04%
Elmhurst Granite (G373): generic	Biotite granite: pale grey; felsic; fine to medium grained	144.63	0.41%
Ben Nevis Granite (G374): generic	Biotite granite: pale grey to cream, porphyritic; dykes, pegmatite and quartz veins prevalent; small miarolitic cavities	360.31	1.03%
Eversley Granite (G375): generic	Biotite granodiorite: pale grey; medium grained; felsic; slightly porphyritic; outer biotite-rich parts are highly weathered	179.13	0.51%
Dunneworthy Granodiorite (G383): generic	Biotite granodiorite: pale grey; medium grained; strongly kaolinised in places	1213.27	3.46%
Incised colluvium (Nc1): generic	Silt, sand, gravel: generally poorly sorted and poorly rounded except within channels cut into colluvial material; dissected to variable degrees	381.41	1.09%
Dissected granite-derived colluvium (Nc4): generic	Quartz and feldspar sand and gravel: well sorted, fine to medium grained; derived from granite	132.86	0.38%
Shepparton Formation (Nws): generic	Clay, sand, silt, pooly-sorted lenticular gravel. Dissected flood plain alluvium: terraces 1-10 metres above present river channels; well developed soil 2-3 m thick.	1013.44	2.89%
Shepparton Formation (Nws): Radiometric high K	Relatively high Potassium radiometric signature developed on clay, sand, silt, pooly-sorted lenticular gravel. Dissected flood plain alluvium: terraces 1-10 metres above present river channels; well developed soil 2-3 m thick.	605.29	1.73%
Shepparton Formation (Nws): Radiometric high total count	Relatively high total count (U, Th, K) radiometric signature developed on clay, sand, silt, pooly-sorted lenticular gravel. Dissected flood plain alluvium: terraces 1-10 metres above present river channels; well developed soil 2-3 m thick.	5296.70	15.10%
White Hills Gravel (-Pxh): generic	Vein quartz conglomerate, sand, silt, clay in fluvial braid plain, outwash fan and colluvial deposits; typically compositionally mature, with ubiquitous well-rounded pebbles and cobbles of reef quartz, lesser more angular vein quartz and bedrock clasts;	737.60	2.10%
Alluvium (Qa1): generic	Gravel, sand, silt: variably sorted and rounded; generally unconsolidated; includes deposits of low terraces; alluvial floodplain deposits	392.19	1.12%
Colluvium (Qc1): generic	Diamictite, gravel, sand, silt, clay, rubble: sorting variable, usually poor; generally poorly rounded; clasts locally sourced; includes channel deposits with better rounding and sorting	2744.25	7.82%
Slump deposits (Qc3): generic	Diamictite, clay, clayey silt, rubble: poorly sorted and unconsolidated	2422.36	6.90%
Granite-derived colluvium (Qc4): generic	Quartz and feldspar sand: well sorted, fine to medium grained; derived from granite	2139.42	6.10%
Total		**35,085.57**	**100%**



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Figure 3-2 Geomorphology of the study area and the geographic region



Geology (1:50,000) and topographic data: © State of Victoria 2021. The State of Victoria does not warrant the accuracy or completeness of information in this publication and any person using or relying upon such information does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.

Figure 3-3 Geology of the study area and the geographic region (see Figure 3-4 for associated legend)

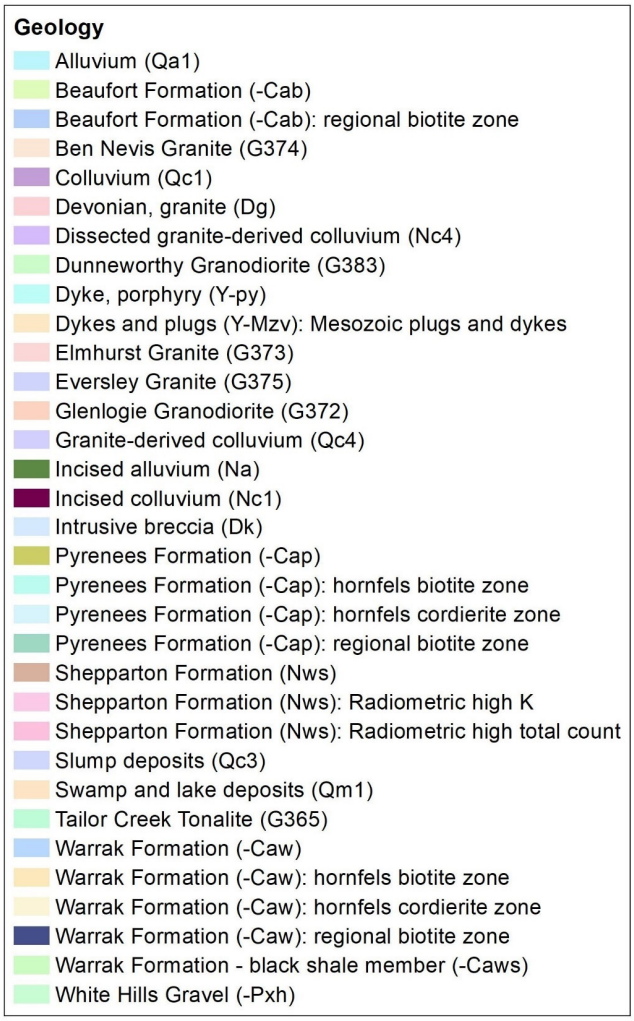
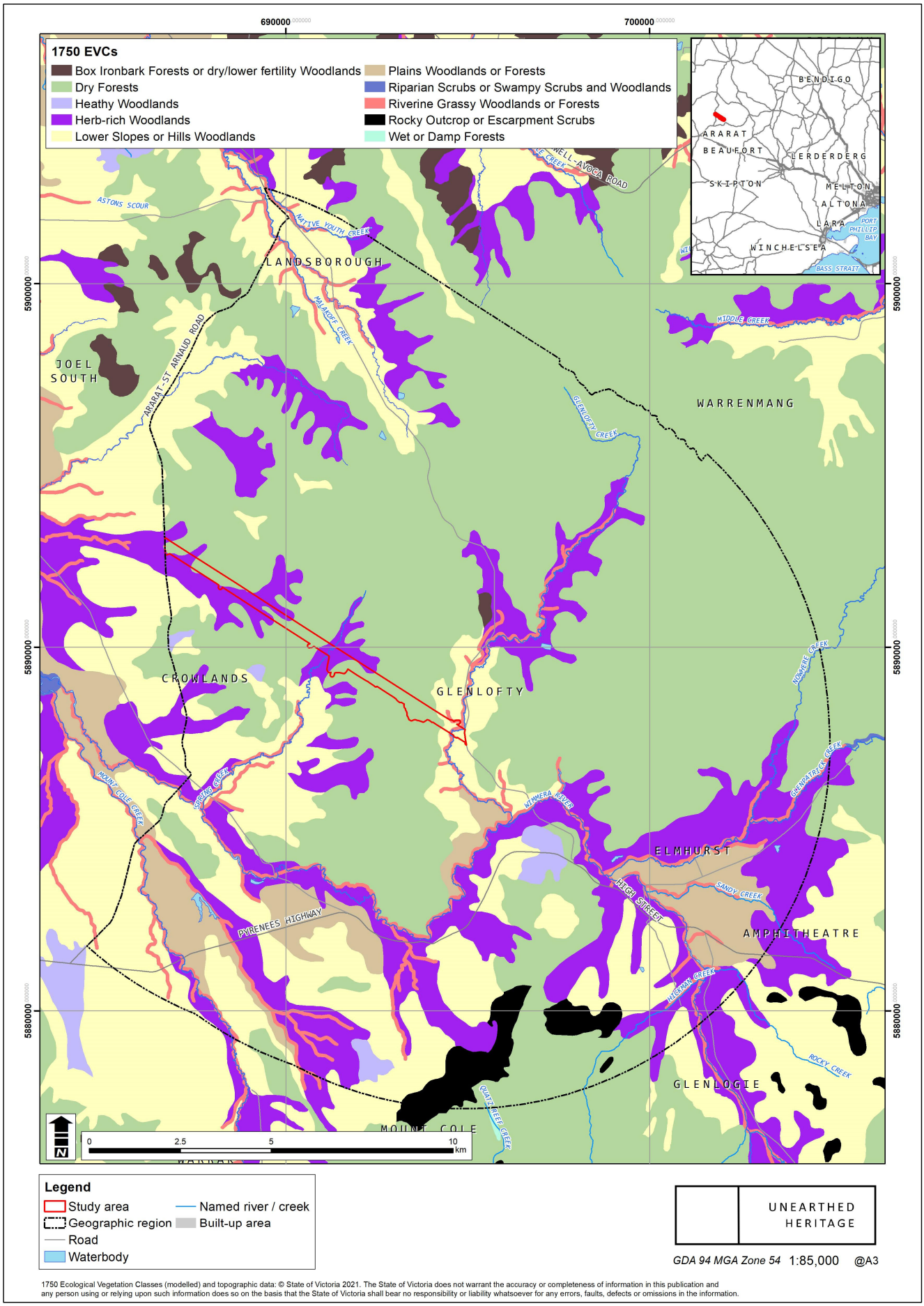
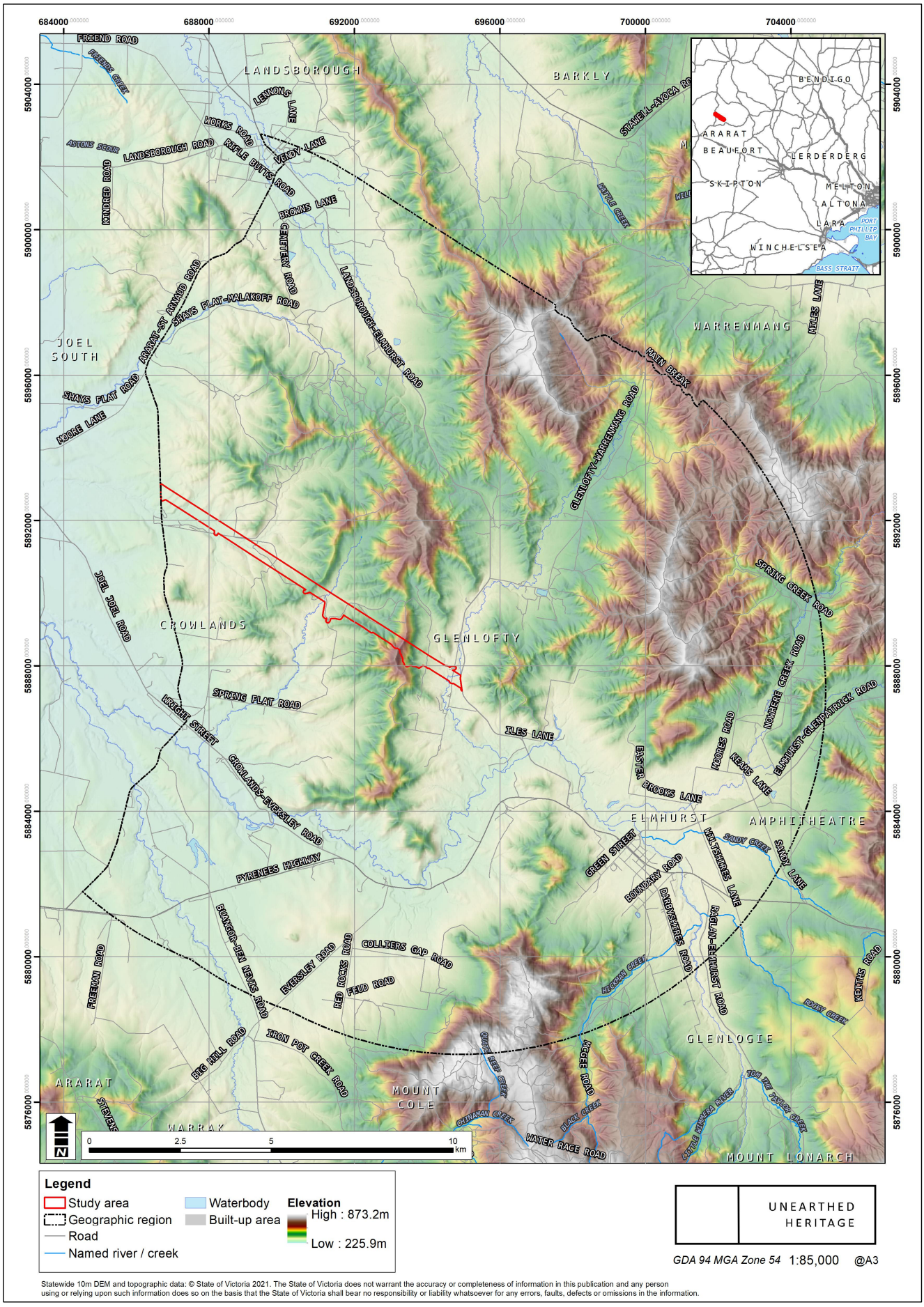


Figure 3-4 Legend associated with Figure 3-3 (Geology)



1750 Ecological Vegetation Classes (modelled) and topographic data: © State of Victoria 2021. The State of Victoria does not warrant the accuracy or completeness of information in this publication and any person using or relying upon such information does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.

Figure 3-5 Modelled 1750s EVCs within the geographic



Statewide 10m DEM and topographic data: © State of Victoria 2021. The State of Victoria does not warrant the accuracy or completeness of information in this publication and any person using or relying upon such information does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.

Figure 3-6 Digital Elevation Model (DEM) showing study area and geographic region

3.2.2 Flora and Fauna

Prior to European settlement and land-use, the study area would have consisted primarily of Dry Forests (Ecological Vegetation Classes (EVCs) 22, 23, 47) followed by Herb-rich Woodlands (EVC 67) and with small areas of other vegetation classes present in the region (Figure 3-5, Table 3-5). At the eastern end of the study area a small area of Lower Slopes or Hills Woodlands (EVC 76) is present in association with Riverine Grassy Woodlands or Forests (EVC 68) where Glenlofty Creek is situated. The wider geographic region was also dominated by Dry Forests (EVCs 20, 22, 23 & 47), however numerous additional varieties were present in this larger area. This dominant EVC is described below:

Dry Forest: *Heathy Dry Forest* (EVC 20): described as "Grows on shallow, rocky skeletal soils on a variety of geologies and on a range of landforms from gently undulating hills to exposed aspects on ridge tops and steep slopes at a range of elevations. The overstorey is a low, open eucalypt forest, poor in form to 20 m tall with an open crown cover. The understorey is dominated by a low, sparse to dense layer of ericoid-leaved shrubs including heaths and peas. Graminoids and grasses are frequently present in the ground layer, but do not provide much cover" with tree species including Red Stringybark, Red Box, Red Ironbark and Bundy (DELWP 2021).

Dry Forest: *Grassy Dry Forest* (EVC 22): described as "Occurs on a variety of gradients and altitudes and on a range of geologies. The overstorey is dominated by a low to medium height forest of eucalypts to 20 m tall, sometimes resembling an open woodland with a secondary, smaller tree layer including a number of Acacia species. The understorey usually consists of a sparse shrub layer of medium height. Grassy Dry Forest is characterised by a ground layer dominated by a high diversity of drought-tolerant grasses and herbs, often including a suite of fern species" with tree species including Red Stringybark, Red Box, Yellow Box, Red Ironbark and Bundy.

Dry Forest: *Herb-rich Foothill Forest* (EVC 23): described as "Occurs on relatively fertile, moderately well-drained soils on an extremely wide range of geological types and in areas of moderate to high rainfall. Occupies easterly and southerly aspects mainly on lower slopes and in gullies. A medium to tall open forest or woodland to 25 m tall with a small tree layer over a sparse to dense shrub layer. A high cover and diversity of herbs and grasses in the ground layer characterise this EVC" with tree species including Messmate Stringybark, Narrow-leaved Peppermint, Manna Gum and Eurabbie (DELWP 2021).

Dry Forest: *Valley Grassy Forest* (EVC 47): described as "Valley Grassy Forest occurs under moderate rainfall regimes of 700-800 mm per annum on fertile well-drained colluvial or alluvial soils on gently undulating lower slopes and valley floors. The tall, open overstorey to 20 m tall may carry a variety of eucalypts, usually species which prefer more moist or more fertile conditions over a sparse shrub cover. In season, a rich array of herbs, lilies, grasses and sedges dominate the ground layer but at the drier end of the spectrum the ground layer may be sparse and slightly less diverse, but with the moisture-loving species still remaining" with tree species including Yellow Box, Red Stringybark, Red Box, Candlebark and Bundy (DELWP 2021).

The vegetation would have provided habitat for a range of fauna, exploited by Aboriginal people including koalas, possums, wallabies, kangaroos, echidna, platypus, reptiles, woodland birds, and freshwater fish and eels.

The vegetation itself would have also provided many resources to Aboriginal people, such as wood and bark for tools and bark huts, plant material for medicinal purposes, and native vegetable foods, such as nuts, fruits, tubers, and seeds.

Table 3-5 1750s modelled EVC units in the study area & geographic region

EVC Code	EVC Group Name	EVC Name	Subgroup	Study Area		Geographic Region	
				Area (ha)	Area (%)	Area (ha)	Area (%)
0020	Dry Forests	Heathy Dry Forest	Exposed and/or lower altitude			1221.02	3.48%
0022	Dry Forests	Grassy Dry Forest	Exposed and/or lower altitude	210.80	63.26%	13858.55	39.50%
0023	Dry Forests	Herb-rich Foothill Forest	Sheltered and/or higher altitude	5.98	1.80%	3135.34	8.94%
0047	Dry Forests	Valley Grassy Forest	Sheltered and/or higher altitude	0.16	0.05%	796.82	2.27%
0048	Heathy Woodlands	Heathy Woodland	Dry and/or better drained			214.79	0.61%
0055	Plains Woodlands or Forests	Plains Grassy Woodland	Freely-draining			1731.50	4.94%
0061	Box Ironbark Forests or dry/lower fertility Woodlands	Box Ironbark Forest	(blank)			27.43	0.08%
0067	Herb-rich Woodlands	Alluvial Terraces Herb-rich Woodland	Alluvial terraces and/or creeklines	91.12	27.35%	3159.56	9.01%
0068	Riverine Grassy Woodlands or Forests	Creekline Grassy Woodland	Creekline and/or swampy	5.60	1.68%	1161.31	3.31%
0069	Heathy Woodlands	Metamorphic Slopes Shrubby Woodland	Dry and/or better drained			34.06	0.10%
0070	Lower Slopes or Hills Woodlands	Hillcrest Herb-rich Woodland	Herb-rich			167.94	0.48%
0071	Lower Slopes or Hills Woodlands	Hills Herb-rich Woodland	Herb-rich			416.57	1.19%
0073	Rocky Outcrop or Escarpment Scrubs	Rocky Outcrop Shrubland/Rocky Outcrop Herbland Mosaic	(blank)			34.94	0.10%
0076	Lower Slopes or Hills Woodlands	Grassy Woodland/Alluvial Terraces Herb-rich Woodland Mosaic	Grassy	19.54	5.86%	3042.01	8.67%
0152	Herb-rich Woodlands	Alluvial Terraces Herb-rich Woodland/Plains Grassy Woodland Complex	Alluvial terraces and/or creeklines			2810.57	8.01%
0175	Lower Slopes or Hills Woodlands	Grassy Woodland	Grassy			610.04	1.74%
0351	Rocky Outcrop or Escarpment Scrubs	Rocky Outcrop Shrubland/Rocky Outcrop Herbland/Grassy Dry Forest Complex	(blank)			503.47	1.44%
0896	Lower Slopes or Hills Woodlands	Grassy Woodland/Heathy Dry Forest Complex	Grassy			2158.65	6.15%
		Grand Total		**333.21**	**100%**	**35,084.57**	**100%**

3.2.3 Climate

In the study region, summer highest and lowest average maximum and minimum temperatures are c. 28.5 and 6.3 degrees Celsius, respectively, while in winter the highest and lowest average maximum and minimum are 12.8 and 2 degrees Celsius, respectively (BOM 2021). The average annual rainfall is c. 579.8 mm (BOM 2021).

During the long period of Aboriginal occupation of this region, climatic conditions have varied significantly. This would have included colder and drier conditions during the last ice age that would have seen the drying up of Port Phillip Bay, to warmer and wetter periods (in the mid-late Holocene, c. 3,000-4,000 years ago) that would have provided different challenges and opportunities (Mulvaney and Kamminga 1999).

3.3 Cultural Context

3.3.1 Introduction

The Eastern Maar Aboriginal Corporation (EMAC) represents the Eastern Maar People of southwest Victoria, and manages their Native Title Rights and Interests. "Eastern Maar" is the name adopted by the people who identify as Maar, Eastern Gunditjmara, Tjap Wurrung, Peek Whurrong, Kirrae Whurrung, Kuurn Kopan Noot and/or Yarro waetch (Tooram Tribe), among others; who are Aboriginal people and who are descendants, including by adoption, of the identified ancestors; and who are members of families who have an association with the former Framlingham Aboriginal Mission; and who are recognised by other members of the Eastern Maar People as members of the group. There are twelve identified Eastern Maar family groups, and each has a position on the Board of Directors of the Eastern Maar Aboriginal Corporation (Eastern Maar Aboriginal Corporation 2020).

In his study *Aboriginal Languages and Clans* Ian Clark (1990) identified a number of what he called "Language Groups" of western and central Victoria. These include several Language Groups whose estates in whole or in part make up Eastern Maar Country:

Eastern Maar Group	Clark 1990 Language Group	Clark 1990 No. of Clans	
Eastern Gunditjmara	(eastern) Dhauwurd wurrung	59	(32*)
Tjap Wurrung	Djab wurrung	41	(27*)
Peek Whurrong	Dhauwurd wurrung (Big wurrung dialect)		
Kirrae Whurrung	Girai wurrung	21	
Kuurn Kopan Noot	Dhauwurd wurrung (Gurngubanud dialect)		
and/or Yarro waetch (Tooram Tribe), amongst others	Gadubanud	5	
	Djargurd wurrung	12	
	Gulidjan	4	

* The number of clans within the Eastern Maar RAP boundaries (as per Clark 1990)

The current Study Area is in the far north of Eastern Maar Country, in the northeastern estates of the Tjap Wurrung language group.

In the report that follows we present an overview of the culture, history, and lifeways of the Eastern Maar People, with particular emphasis on the northern Tjap Wurrung clans in whose estates the current Study Area is located.

The discovery of what is now called southwestern Victoria occurred at least 40,000 years ago—by Aboriginal people. The climate, landscape, vegetation, and fauna would have been different from today, with fluctuations between temperate and colder and drier conditions. Very cold conditions, from about 26,000 to 16,000 years ago (peaking from 23,000 to 19,000 years ago) involved temperatures up to 5^{o}C cooler than today and drier, even arid, conditions. At that time sea levels were much lower (beginning about 30,000 years ago Tasmania was joined to continental Australia). In good times, climatically speaking, there would have been a variety of vegetation types and animals—including now-extinct megafauna—available for food, across rolling plains intersected by streams and lakes. In harsher times the Aboriginal population would have concentrated around scarcer water and food resources, for example along the coast. Any coastal sites from those times are now

underwater, since there has been a sea level rise of up to 120 meters from the lowest 'Glacial Maximum' sea levels of around 20,000 years ago.

Meanwhile, other things were going on in western Victoria that were greatly affecting the lives of Aboriginal People over the past 40,000 years. Western Victoria is home to one of the largest volcanic regions in the world. Some are ancient volcanoes, such as Mount Macedon, which erupted about 360 million years ago, but there are several hundred younger volcanoes whose eruption dates are within the past 7 million years. They stretch from central Victoria and across the west of the state into southeast South Australia. The Newer Volcanics Province, as this geological region is called, was of central importance to the Aboriginal people living there. A number of volcanic eruptions laid down lava beds which dammed up regions and altered the courses of rivers. The numerous volcanic cones that dot the landscape of western Victoria are sacred landmarks for the Eastern Maar People and their neighbours, and the lower volcanic craters—maar volcanoes, the result of explosive eruptions when magma encounters groundwater not far from the surface, contain lakes and swamps that attracted both Aboriginal people and the animals and birds that they hunted. Some eruptions were recent enough that Aboriginal people would have witnessed them and been greatly affected by them:

Aboriginal Name	Language Group	English Name	(Last) Eruption Date
Budj Bim	Gunditjmara	Mount Eccles	36,900 ± 3,100 BP
Koroit	Eastern Gunditjmara	Tower Hill	36,800 ± 3,800 BP
Tappoc	Tjap Wurrung	Mount Napier	33,600 ± 2,800 BP
Gnurad	Kirrae Whurrung	Mount Noorat	5,000 – 20,000 BP
Djerrinallum	Wadawurrung	Mount Elephant	5,000 – 20,000 BP
Leehoorah	Djargurd Wurrung	Mount Leura	5,000 – 20,000 BP

Indeed, volcanic eruptions feature in Aboriginal folklore. The following story of the creation of Budj Bim has been passed down by the Gunditjmara People:

Dhauwurd Wurrung: The Creation of Budj Bim

At the start of the Yakinitj [Dreaming], bolitabolita [four] Creator Beings were sent by the Prenheal [the Great Creator Spirit] to muyuban [make] the different features that cross the mirring [country]. The Creator Beings were of giant form and first arrived at a secret sacred location in the Stony Rises country just to the kuurreen [south] of Kerup [Lake Condah]. Kerup is also known by some clans as Koon Doon**.**

These bolitabolita Creator Beings took the shape of maara [men] and became the kaiap [first]of a long line of Law maara who had special spiritual and ceremonial powers and responsibilities. The Gunditjmara believe that the descendants of these bolitabolita maara continue to perform their special duties through generations.

Ngathangan paleeya [three] of the original Law maara moved to other parts of the mirring, to the laahlaar kuurn [north], and the kameetngunnang [west]. The bolitabolita [fourth] Law maara crouched down and his giant koong [body] transformed to muyuban [make] the peaks of Tappoc [Mount Napier] and Budj Bim [Mount Eccles].

When Budj Bim erupted molten lava and kuulorr [stone] some 30,000 years ago, the Gunditjmara witnessed the Creator Being reveal himself in the mirring. The scoria stones are his tun gatt [teeth] (Lovett 2016).

Some 1,600 generations or more after the first Aboriginal people entered what is now Victoria, it was 'discovered' by invading Europeans. The impact on the lifeways, languages, and traditional knowledge of the Eastern Maar People and their neighbours—and on the people themselves—was immediate and devastating: within just two generations, their estates were invaded and stolen, their lifeways had been forever changed, and their numbers reduced to tiny remnants.

It is difficult to estimate the population size of Aboriginal Australia at the time of European invasion, but most recent estimates range from about 500,000 to 1,000,000. By 1901 there were only about 650 Aboriginal people in all of Victoria (Presland 2010: 90). Only now, over 200 years after the first European settlement, is the Aboriginal population of Victoria getting back to its pre-contact level. The catastrophic reduction of Indigenous populations in the face of European colonizers has been shared all over the world. It is due to the multiple effects of disease, warfare and massacres, loss of land and language, habitat and culture, and feelings of spiritual hopelessness.

3.3.2 Ethnohistorical Background

The current Study Area is in the far north of Eastern Maar Country, in the estates of the northernmost Tjap Wurrung clans.

The Country of the Tjap Wurrung People covers an area of some 7,000 square kilometres (Clark 2016: 52, 166). Clark defined the northern boundary of Tjap Wurrung Country as extending from the Grampians at a point west of Ledcourt to Warrenmang, 12 km northwest of Avoca. The eastern boundary follows the ridgeline of the Pyrenees Mountains south to Raglan, and from there follows Fiery Creek downstream until it flows into Lake Bolac, and then follows Salt Creek until it runs into the Hopkins River. The southern boundary of Tjap Wurrung Country briefly follows the Hopkins River upstream until the confluence of Mustons Creek, which it follows upstream until it is about 10 km west-northwest of Caramut. From there the southern boundary goes in a direct line to Mount Napier, and from there northwest until the intersection of the Henty Highway and Muddy Creek, which the boundary follows until it flows into the Grange Burn near Bochara, and then follows the Grange Burn until it flows into the Wannon River. The western boundary of Tjap Wurrung Country as defined by Clark follows the Wannon River upstream to Mount Sturgeon, the southern peak of the Grampians, at which point the inner escarpment north to just south of Roses Gap, west of Ledcourt (Clark 1990: 108).

Overall the lands of the Eastern Maar People extend in the south from half-way between Portland and Port Fairy to Aireys Inlet, from there to beyond Cressy in the north the Country of the Tjap Wurrung People described above.

Aboriginal language group and clan boundaries appear largely to be determined by features of the landscape; the boundaries described here are the ones that appear to have been in place at the time of contact with Europeans in the early 19th century and are at present recognized as comprising Eastern Maar Country under the *Aboriginal Heritage Act 2006* (Vic). While boundaries would not have been fixed immutably over time, Aboriginal Peoples have always had an extremely strong connection to their Country. Land was cared for through what the anthropologist Ted Strehlow called a 'totemic geography', mediated through a system of beliefs and mythology. Strehlow further argued that the totemic geography was a force in ensuring stability in the boundaries between language groups (Strehlow 1970: 92). Strehlow was talking about the Aboriginal Peoples of Central Australia, but there is much complementary evidence from Victoria in the form of European references from colonial times:

> every tribe has its district the boundaries of which must not be passed without permission from the tribe to which it belongs (Lancelot Edward Threlkeld to William Alers Hankey, 29 Aug 1825, cited in Mitchell (2011: 89).

> each Tribe has its own district the extent and boundaries of which are well known to themselves, and they speak of their country to a stranger with emotions of pride. . . [territories] were amongst themselves well understood and sacredly recognised from one generation to another (James Dredge to D. Harding, 12 September 1840 , 6 June 1842, cited in Mitchell (2011: 87).
>
> I should remark that, when Tung.bor.roong spoke of Borembeep and the other localities of his own nativity, he always added, "that's my country belonging to me!! That's my country belonging to me!!" This language is [plain] but not less forcible on that account (George Augustus Robinson, journal entry of 17 July 1841 [Clark 1998a: 318]).

Tung.bor.roong was the clan head of the Tonedidgerer balug clan of the Tjap wurrung People, and his estate lies about 55 km southwest of the current Study Area.

The following sections provide a review of the ethno-historical and historical information relating to the Eastern Maar People in general, and in particular to the Tjap Wurrung People and to their northernmost clans, in whose estates the current Study Area lies. This information will assist in understanding Tjap Wurrung subsistence and occupation patterns across the region. It also helps inform the documented archaeological record of the region and assists in the interpretation of archaeological sites in the wider area, as well as helping to predict the potential location of archaeological site types within the Study Area. Some of our information comes from early European travellers and settlers in the region, as well as government officials, and therefore must be viewed through a filter of bias and misunderstanding that these writers often had. On the European side there were problems due to the lack of understanding of Aboriginal languages, customs, and social systems. On the Aboriginal side was an extremely rapid loss of much of their traditional culture in the face of loss of lands, disease, and societal breakdown. The removal of Aboriginal groups to reserves and mission stations added to problems associated with early European accounts of the Aboriginal people of Victoria (Barwick 1984: 103). As Barwick pointed out, ". . . their [nineteenth century European writers'] jealousies, ambitions, loyalties and roles in colonial society shaped their inquiries and the content of their publications" (Barwick 1984: 103). These nineteenth century authors were writing from an Anglo-centric and gender-biased viewpoint, and for a colonial audience who had a very limited and generally negative view on Aboriginal life, heritage, and culture. Despite these shortcomings, nineteenth century ethnographical accounts are a useful resource (and for in some cases the only resource); the information has often been provided to the various authors by Aboriginal informants or by the authors' first-hand observations and experience.

3.3.2.1 Language

There is some degree of debate over the status of languages and dialects in western Victoria. This is in part due to discussions over what constitutes a language versus a dialect, and in part due to the relative paucity and inconsistency of documentation of Aboriginal languages in the area.

Several vocabularies of the Tjap Wurrung language were compiled by early European invaders, administrators, and scholars, over the period 1841–1902 (Clark 2016: 10-11, 24-26); these various vocabularies are in agreement to the tune of 90% according to the linguist Robert Dixon (Clark 2016: 10-11). Dixon considers the Tjap Wurrung "dialect" to be part of the dialect chain of a language stretching from northern Victoria to the central west of the state (Dixon 1980). Dixon called this dialect chain 'Wemba-Wemba'; the linguists Luise Hercus (1986) and Barry Blake (2011) have called it "Western Kulin".

According to Barry Blake, the Tjap Wurrung dialect shares the following percentages of common vocabulary with other dialects in the Western Kulin dialect chain: Wati [Wadiwadi] (71%), Wemba-Wemba (82%),

Wimmera [Wergaia] (87%), Yartwatjali [Jardwadjali] (85%), and Djadjawurrung (81%). The shared common vocabulary with the Tjap Wurrungs' eastern neighbours, the Wadawurrung, was 52%, and with the Eastern Kulin languages 42% (Blake 2011: 9).

Tjap Wurrung had less in common with the Eastern Maar languages to the south. George Augustus Robinson, the Chief Protector of Aborigines from 1839 to 1949, reported in1841 that his Djargurd Wurrung and Gulidjan travelling companions considered the Tjap Wurrung to be *mainmait*, 'foreign', or wild men', because their speech was alien (George Augustus Robinson, 1841, cited in Clark 2016: 24)

3.3.2.2 Social Organization

At the time of contact with Europeans the Tjap Wurrung comprised some 41 clans (Clark 1990: 107-139; Clark 1995: 58-60). Each of these clans was responsible for a particular area of land (called their 'estate' by Barwick [1984: 106] and Presland [2010]), and each shared a common identity in terms of history, genealogy and religion.

Table 3-6 Tjap Wurrung clans (Clark 2016: 114-163; Clark 1990: 107-139; Clark 1995: 59-60).

No.	Clan name	Location	Clan-head	Moiety
1	Bankneit	Unknown; possibly in the Wickliffe region	not identified	unknown
2	Bar gundidj	Wimmera River at 'Woodlands' station	Tiemburneen/Trin.bur.nin, 'Davy'	Grugidj
3	Beeripmo balug	Beerip (Mount Cole)	Tin.ner, Tit.go.mur.nin/Lit go mur nin, 'Big One Billy'; and Pe.get.now.er.rer	Grugidj
4	Boner balug	Immediately northeast of To-ol (Mount William)	Lang.gur.rer.min	Gamadj
5	Buller buller cote gundidj/ Bunyap gundidj	Junction of Boloke (Salt Creek) and Hopkins River	Hain de.bur.nin/Ain.de.bur.nin/ Nine je.bur.nin/Ninyeburnin, "principal chief"; Mone.ner.gorrer/Mo noo gor rer; By.et.mor rone; Cor.do.bur rer; and My.at.murt/My.un.murt, a 'big chief'; Pen nite Barrabul; and My urt bur ri gin	unknown
6	Bulug bara	Bulug/Bulluk (Lake Bolac)	(i) Illitgareip/Illingerip/ Il.lin.gare.rip, alias 'Jack'; (ii) Noon-nat-yar/Moonutcher/ Noon.at.cher/Kar ne utyer, alias 'Davy'/alias 'King William'	Gamadj
6a	Wenoduc [Bulugbara patriline]	Presumably near Bulug/Bulluk (Lake Bolac)	not identified	Gamadj
7	Cartbonong gundidj	Cor.ramut (Caramut), SE of Col.lorrer (Mount Rouse)	not identified	unknown
8	Cart cart worrate gundidj	Plains between 'Narrapumelap' and 'Nareeb Nareeb' stations	Pare reer been tur nin	unknown
9	Curruc balug	Source of the Witterbecurruc (Wimmera River), and at 'Glenlogie' station	Wal.go.mur.nin/Walgo-mur-nin/ Tal.go.mur.nin/Algo mur nin/ Ooalkun-murnin	Gamadj
9a	Pilawin balug [sub-group of Curruc balug]	At 'Pellerwin-punole, a hill on the western side of the Pyrenees Range 11 miles NNE of Irvine's 'Glenlogie'	Nare-nar-rer-min; and Wor.dur.rer.min	Gamadj

10	Euerer burer	unknown	not identified	unknown
11	Gnareeb gnareeb gundidj	'Nareeb Nareeb' station	Barringbittarney/Barranbittar-ney/ Barrenbittarney/ Barenbittariney/Timor Timour/ Barrinbittarney	unknown
12	Jacalet	Part of 'La Rose' and 'Mokepilly' stations	not identified	Gamadj
13	Kolorer gundidj	Kolorer (Mount Rouse)	Tuurap Warneen/Torap Wareen; Fagara/Figara/Tigara/Alkaperete/ Alkeperete/Figara Alkeourata/ Allipute, alias Roger, alia 'the Russian'; Brien Boru	unknown
14	Konegilwerring gundidj	Konegilwerring (a swamp on the Hopkins River, 10 miles north of Lake Bolac)	Won goit mur	unknown
15	Mingalac gundidj	Barite Barite (Mount Stavely)	not identified	unknown
16	Mitteyer balug	Mit ye (Barton Morass or Nekeeya Swamp)	not identified	unknown
17	Mutterchoke gundidj	Muddadjig (Mount Abrupt)	not identified	unknown
18	Neetsheere balug	Mount William, 'Barton' station, and Mor.na.bul (Mount Moornambool)	Billy Billy/Billy Urquart/Billy Urquor/Jackia Jackia/Jacky Jacky	Grugidj
19	Parn balug	Parn, a large hill 5 miles SW of 'Allanvale' station	Tal.lit.tar.rer.min/Tollittar-er-min/Tal.le.jer rer min	Gamadj
20	Peerepar balug	Fiery Creek, 20 miles south of 'Mount Cole' station	not identified	Grugidj
21	Poit balug	'Allanvale' station, Great Western	Par.re.chur.nin/Parrrchernin/ Perrechermin/Pag.re.tur.nin, alias Charley	unknown
22	Punnoinjon gundidj	Punnoinjon (Lake Buninyon)	not identified	unknown
23	Puppellenneerring	Fiery Creek, 30 miles south of 'Mount Cole' station	not identified	Gamadj
24	Tappoc gundidj	Tappoc (Mount Napier)	Cor.rore.mur.rer.min	unknown
25	Teerel balug	North of Mount Langi Gheran	not identified	Grugidj
26	Terrumbehal gundidj	Between Hopkins River and Fiery Creek	not identified	unknown
27	The Gums clan	'The Gums' station east of Penshurst	not identified	unknown
28	Tillac gundidj	A river northwest from Mount Rouse	Addoc	unknown
29	Tin balug	'La Rose' and 'Mokepille' stations	More re nutch/More re Nutcher/ More rer Nutyer	Grugidj
30	Tonedidgerer balug	'Burrumbeep' station	Pur.re.jer.min; Tung.bor.roong/ Tung.bor.roon/Timber-roon/ Tun-ber roon	Grugidj
31	To ol balug	To.ol (Mount William)	not identified	unknown
32	Toorac balug	Toorac (Mount Pierrepoint)	Too.rac.cone.nun	unknown
33	Uelgal gundidj	Uelgal ('The Grange'), near Strathkellar	not identified	unknown
34	Ural balug	Plains, 7 miles SE of 'Burrumbeep' station	not identified	Grugidj ?
35	Utoul balug	Mounts Cole and Langi Gheran	Wol.litur.ne.mim/Wal.le.ter.-ne.min/Wolliturmin/	Gamadj

			Wate.tur.rer.min/Wertarramin/ Werturramin, alis Jacky; Tommy Jerusalem (in 1870)	
36	Wattenneer balug	Between Mount William Swamp and Nekeeya Swamp	not identified	Gamadj
37	Weeripcoort balug	Under the Grampians, 6 miles from 'Mount William' station	Weer wurnin	unknown
38	Worrembeetbeer gundidj	Mount Bainbridge and 'Kanawalla' station	not identified	unknown
39	Wurcurri gundidj	Mount Sturgeon	Yam-gil	unknown
40	Yam yam burer balug	South of 'Barton' station at the head of Mount William Creek	not identified	unknown
41	Yourwychall gundidj	Between the Wannon and Grangeburn Rivers	not identified	unknown

The clan was the most important social group in Aboriginal society. It was the clan that owned the land, and it was the clan with which the individual identified himself or herself (Presland 2010: 18). But all the members of a clan did not permanently live together. Smaller groups, comprising extended families made up the basic economic group. These are generally called 'bands' and would typically number fifteen to twenty individuals – usually one or two families: men, their wives, sons, unmarried daughters, and a shifting population of other relatives (Presland 2010: 18). The band is the group that is most relevant to archaeological investigations, since it is most commonly their activities (hunting, fishing, gathering, camping) that are represented in the rather ephemeral archaeological record. While band membership could be rather fluid, clan membership was established at birth. Both one's moiety and one's clan were inherited from his or her father; this inheritance was retained for life (Barwick 1984: 106). Once born, a clan member identified deeply and spiritually with his or her land. The clan members' connection to the land defined their very existence: it was theirs since the Dreaming: "Wherever one is born, that is his or her country" (William Thomas, cited in Cannon 1983: 624). And it was the land, tragically, that was taken away from the Aboriginal people: their suffering on this account cannot be overemphasized.

The clans whose estates are closest to the current Study Area are the Bar gundidj, the Curruc balug, and the Teerel balug clans of the Tjap Wurrung People.

The Bar gundidj clan is centered on the Wimmera River on the land seized by the 'Woodlands' Station, around what is now Crowlands. The Curruc balug clan's estate is higher up, at the headwaters of the Wimmera River, land seized by the squatters of 'Glenlogie' station. The estate of the Teerel balug clan is to the west of the Curruc balug clan, on lower land around Mount Cole Creek north of Mount Langi Gheran.

For most of the year, the individual bands making up the northern Tjap Wurrung clans would have moved around their estates exploiting the various local resources (plant and animal) as they became available for harvesting. The three estates near the current Study Area and Geographic Region had a wide variety of topography, environmental zones, and resources: the hills and ridges of the western Pyrenees Mountains, the creek valleys that drain them and form the headwaters of the Wimmera River, and the broad floodplains lower down. At various times of the year, when resources were more widely abundant, larger gatherings – often involving other clans and even other language groups – would be possible. At these times initiations, marriage contracts, trade, and other ceremonies, as well as corroborees, would be conducted. These northern clans were probably more mobile than the southern Tjap Wurrung clans and their Eastern Maar relatives further south. Some Eastern Maar groups were semi-sedentary—remaining in one spot (in some cases in stone villages (such as Allambie, Tyrendarra and Muston's Creek)—for lengthy parts of the year in

order to harvest the rich local resources. The most notable of these resources were the eels that were harvested at places like Lake Bolac and Budj Bim.

The Tjap Wurrung, like other Eastern Maar People and their neighbours to the west (Jardwadjali and Buandig) and north (Wergaia), had a matrilineal descent system—unlike their Kulin neighbours to the east, whose descent system was patrilineal. They also had an exogamous moiety system. Each clan belonged to one of two moieties: *gabadj* (the red-tailed black cockatoo or Banksian cockatoo) or *grugidj* (the sulphur-crested cockatoo or long-billed corella), and marriages could not be with members of the same moiety. Residence was patrilocal: women lived on their husbands' estates, but the matrilineal system meant that children had the same moiety as their mother. The moiety system was further sub-divided into 'totems', which further regulated marriage options. According to the anthropologist Robert H. Mathews, writing about the Wimmera region to the north of Tjap Wurrung Country, the Krokitch moiety [cognate with Tjap Wurrung Grugidj—White Cockatoo] included such totems as Possum, Mallee hen, Teal duck, Mopoke, Emu, Wallaby, Mussel, Sun, Curlew, Iguana [Goana], Smoker Parrot, Edible grub, Kookaburra, Carpet Snake, Plains Turkey, Eaglehawk, and Dickomi Snake. The Kamatch moiety [Tjap Wurrung Gabadj—the Black Cockatoo] had totems such as Porcupine [Echidna], Whip-snake, Native Companion Brolga], Water, Black Cockatoo, Blackfish, Magpie, Sleeping Lizard, Wattle-bird, Kangaroo, Swan, Mountain Dick, Native Dog [Dingo], Jew Lizard [Eastern Bearded Dragon], Wild Hop, Native Bee, White Ant, Honey-bird, Black Duck, Death Adder, Crow, Kangaroo-rat, Platypus, Bunyip, Pelican, Honey, and Red Gum (Mathews 1898: 333-334).

Many of the (matrilineal) Eastern Maar clans did not confine marriages to other matrilineal clans. The Tjap Wurrung, for example, intermarried with the matrilineal Jarwadjali, Djargurd wurrung, Gulidjan, Kirrae Whurrung, and northeastern Gunditjmara People, but they also married with the patrilineal Wadawurrung and Dja Dja Wurrung People of the Kulin Nation.

There seems to have been a preference to marry a member of a distant clan; such marriages would often involve partners from different ecological regions, which would expand the possibilities for resource access and exploitation. Such marriages could also cement alliances between far-flung groups—but they could also cause tensions and enmities.

Another feature or Aboriginal life involved get-togethers of multiple clans and even clans from multiple language groups. These would happen periodically at a number of locations.

The early European settler James Dawson in 1844 squatted on a cattle run north of Port Fairy and spent his later years at Camperdown, where he compiled an ethnography of Aboriginal people of western Victoria, drawing heavily from Aboriginal people at the Framlingham reserve. Dawson described the preliminaries to these meetings:

> Great meetings are held periodically in summer, by agreement among the friendly tribes. But any two chiefs have the power of sending messengers and commanding the attendance of the tribes at an appointed time and place, in order that matters of dispute may be arranged. Sometimes, instead of dispatching men to give notice of a meeting, a signal smoke is raised by setting fire to a wide circle of long grass in a dry swamp. This causes the smoke to ascend in a remarkable spiral form, which is seen from a great distance. The summons thus given is strictly attended to. Or, if there is not a suitable swamp, a hollow tree is stuffed with dry bark and leaves, and set on fire. Or, a fire is made on a hill top.
>
> Each tribe, on its arrival, erects its wuurns, and lights its fires in front of them, on the side of the camp next their own country. When all are assembled, proceedings

> commence after sunset, or before sunrise next morning. As soon as the families of the different tribes are seated in rows on the ground, the chief of each tribe, accompanied by the other chiefs, walks along and taps everyone on the head with a piece of bark, asking the name of his tribe, his personal name, and his class. If anything of importance has to be discussed, a circular open space, of one hundred or one hundred and fifty yards in diameter, is reserved in the centre of the camp, into which the chiefs advance by turns, and speak in a loud voice, that everyone may hear what is said (Dawson 1881: 72).

Dawson continued with a description of one such get-together, at Mount Noorat in Kirrae Whurrung (Eastern Maar) Country:

> At the periodical great meetings trading is carried on by the exchange of articles peculiar to distant parts of the country. A favourite place of meeting for the purpose of barter is a hill called Noorat, near Terang. In that locality the forest kangaroos are plentiful, and the skins of the young ones found there are considered superior to all others for making rugs. The aborigines from the Geelong district bring the best stones for making axes, and a kind of wattle gum celebrated for its adhesiveness. This Geelong gum is so useful in fixing the handles of stone axes and the splinters of flint in spears, and for cementing the joints of bark buckets, that it is carried in large lumps all over the Western District. Greenstone for axes is obtained also from a quarry on Spring Creek, near Goodwood; and sandstone for grinding them is got from the salt creek near Lake Boloke. Obsidian or volcanic glass, for scraping and polishing weapons, is found near Dunkeld. The Wimmera country supplies the maleen saplings, found in the mallee scrub, for making spears. The Cape Otway forest supplies the wood for the bundit spears, and the grass-tree stalk for forming the butt piece of the light spear, and for producing fire; also a red clay, found on the sea coast, which is used as a paint, being first burned and then mixed with water, and laid on with a brush formed of the cone of the banksia while in flower by cutting off its long stamens and pistils. Marine shells from the mouth of the Hopkins River, and freshwater mussel shells, are also articles of exchange.
>
> Attendance at these great meetings is compulsory on all (Dawson 1881: 78).

We can infer that this Mount Noorat meeting involved clans from a number of different language groups:

Material/object(s)	**Source**	**Language Group**	**Clan**
forest kangaroos, skins	around Mount Noorat	Kirrae Whurrung	Mount Noorat clan
“best stone for axes”	Geelong	Wadawurrung	Watha wurrung balug
wattle-gum adhesive	Geelong	Wadawurrung	Watha wurrung balug
greenstone for axes	Spring Creek near Goodwood, southwest of Caramut	Gunditjmara	Moperer gundidj ?
sandstone for grinding	Salt Creek near Lake Boloke [Lake Bolac]	Tjap Wurrung	Bulukbara ?
obsidian	near Dunkeld	Tjap Wurrung ?	Wurcurri gundidj ?
maleen sapplings for spears	Wimmera mallee scrub	Jardwadjali ? / Wergaia ?	?? / ??
wood for *bundit* spears	Cape Otway forest	Kirrae Whurrung ?	Ngaragurd gundidj ?

grass-tree stalk for spear butts and fire	Cape Otway forest	Kirrae Whurrung ?	Ngaragurd gundidj ?
red clay for paint	Cape Otway forest	Kirrae Whurrung ?	Ngaragurd gundidj ?
marine shells	mouth of the Hopkins River	Gunditjmara / Kirrae Whurrung ?	?? / Badadgil gundidj
freshwater mussel shells	Hopkins River?	Gunditjmara / Kirrae Whurrung ?	?? / Badadgil gundidj

Thus the people who gathered near Mount Noorat likely came from at least five distinct language groups, and from distances up to 160 km from the meeting-place.

There were three important places in or near Tjap Wurrung Country where large annual get-togethers of multiple clans and even various language groups took place: Djakil (Lake Lonsdale), Mirraewuae Swamp, and Lake Bolac.

Djakil/Lake Lonsdale, in the far northwest of Tjap Wurrung Country, lies between the northern end of Gariwerd/ The Grampians and what is now the city of Stawell; it is located about 50 km west of the current Study Area. It is part of the estate of the Jacalet clan (named after Djakil, 'lake', 'swamp', the Tjap Wurrung name for the lake that the European invaders subsequently named after the first Police Magistrate of Port Phillip District, William Lonsdale). In pre-Invasion years, Djakil was the location for major get-togethers:

> In times of plenty, all the bands of the Djab wurrung and Jardwadjali would come together for ritual, fun and business. The arrangement of marriages combined all three of these agenda items.
>
> . . . great meetings of 1,000 or more people . . . [took place] at Lake Lonsdale, a neutral zone in plains country with abundant plant and animal resources . . . (Wettenhall 2019 [1999]: 29).

Archaeological investigations have found evidence of a large ceremonial ring on the eastern shoreline of Lake Lonsdale [this brings to mind Dawson's "circular open space . . . in the centre of the camp"]. This could have been the site for everything from settling legal conflicts, singing and dancing at corroborees, acting out mythical stores, wrestling, competing in boomerang or spear throwing, perhaps even kicking around a stuffed possum skin in the game that was to inspire the invention of Australian Rules football (Wettenhall 2019 [1999]: 29).

A second place for large gatherings was at Mirraewuae Swamp, or Black Swamp, 6 km south of Caramut—technically just to the south of Tjap Wurrung Country according to Ian Clark's mapping (Clark 1990). Dawson also provides information on this locality:

> . . . [a] number of friendly tribes . . . met annually in midsummer for hunting, feasting, and amusements,—occasions of all others the most likely to draw together the largest gatherings . . .
>
> These great meetings were held at Mirræwuæ, a large marsh celebrated for emus and other kinds of game, not many miles to the west of Caramut. This place was selected on account of its being a central position for the meetings of the tribes occupying the districts now known as the Wannon, Hamilton, Dunkeld, Mount William, Mount Rouse, Mount Napier, Lake Condah, Dunmore, Tarrone, Kangatong, Spring Creek,

> Framlingham, Lake Boloke, Skipton, Flat-topped Hill, Mount Shadwell, Darlington, Mount Noorat, Camperdown, Wardy Yallock, and Mount Elephant. None of the sea coast tribes attended the meetings at Mirræwuæ, as they were afraid of treachery and of an attack on the part of the others. According to the testimony of the intelligent old chief Weeratt Kuyuut, and his equally intelligent daughter Yarruum Parpurr Tarrneen, and her husband, Wombeet Tuulawarn, when two of these tribes fought a pitched battle, each mustered at least thirty men; and for every able-bodied warrior present (and no one durst absent himself on such an occasion under the penalty of death) there would be at least three members absent, as the old men, women, children and invalids were kept at home; thus making an average of one hundred and twenty in each tribe; and, as the twenty-one tribes enumerated were generally present, there must occasionally have been the large gathering of two thousand five hundred and twenty aborigines (Dawson 1881: 3)

The area around Mirraewuae Swamp was also the scene of what Ian Clark (2016: 56) has called "cooperative subsistence interaction": in this case, emu hunts. The specific example that Dawson gives involves a hunt centered on "Muston's Creek, a few miles from its junction with the River Hopkins" (Dawson 1881: 79): this is just a few kilometers to the east of Mirraewuae Swamp, and has been reconstructed as the boundary between the Tjap Wurrung and Gunditjmara Peoples. It is also near the boundary with the Kirrae Whurrung People, just a few kilometers to the east. If we take as participants the same 21 'tribes' [clans] of Dawson, as listed in the previous quote, then we can consider where their estates lie:

Table 3-7 Identification of Dawson's 'tribes' at Mirraewuae (Dawson 1881: 3) with Language Groups and Clans (Clark 1990, 2016)

Dawson's 'tribe'	Language Group (Clark 1990)	Clan (Clark 1990, 2016)	Reference
Wannon	Tjap Wurrung (Djab Wurrung)	41. Yourwychall gundidj	Clark 2016: 163 *
Hamilton	Tjap Wurrung (Djab Wurrung)	33. Uelgal gundidj	Clark 2016: 153
Dunkeld	Tjap Wurrung (Djab Wurrung)	39. Wurcurri gundidj	Clark 2016: 161
Mount William	Tjap Wurrung (Djab Wurrung)	31. To ol balug	Clark 2016: 152
Mount Rouse	Tjap Wurrung (Djab Wurrung)	13. Kolorer gundidj	Clark 2016: 134
Mount Napier	Tjap Wurrung (Djab Wurrung)	24. Tappoc gundidj	Clark 2016: 145 **
Lake Condah	Gunditjmara (W.) (Dhauwurd Wurrung)	17. Kerup gundidj	Clark 1990: 62
Dunmore	Gunditjmara (E.) (Dhauwurd Wurrung)	31. Nartitbeer gundidj	Clark 1990: 69
Tarrone	Gunditjmara (E.) (Dhauwurd Wurrung)	59. Yowen gundidj	Clark 1990: 89
Kangatong	Gunditjmara (E.) (Dhauwurd Wurrung)	1. Art gundidj	Clark 1990: 53
Spring Creek	Gunditjmara (E.) (Dhauwurd Wurrung)	25. Moperer gundidj	Clark 1990: 66
Framlingham	Kirrae Whurrung (Girai Wurrung)	9. Killitmurer gundidj	Clark 1990: 213
Lake Boloke	Tjap Wurrung (Djab Wurrung)	6. Bulug bara	Clark 2016: 122
Skipton	Wadawurrung (Watha Wurrung)	18. Pakeheneek balug	Clark 1990: 326
Flat-topped Hill	Kirrae Whurrung (Girai Wurrung)	5. Flat Topped Hill clan	Clark 1990: 212
Mount Shadwell	Kirrae Whurrung (Girai Wurrung)	3. Booruc gundidj	Clark 1990: 210
Darlington	Djargurd Wurrung	10. Uropine gundidj	Clark 1990: 183
Mount Noorat	Kirrae Whurrung (Girai Wurrung)	16. Mount Noorat clan	Clark 1990: 216
Camperdown	Djargurd Wurrung	5. Liwura gundidj	Clark 1990: 180
Wardy Yallock	Wadawurrung (Watha Wurrung)	21. Woodealloke gundidj	Clark 1990: 329-330
Mount Elephant	Djargurd Wurrung	9. Teerinyillum gundidj	Clark 1990: 183

* may be a Jardwadjali clan (Clark 2016: 163)

** may be a Dhauwurdwurrung (Gunditjmara) clan (Clark 2016: 145)

In other words, participants from these cooperative emu hunts came from at least five—possibly six—different language groups spread across southwest Victoria, and from as far away as 50 km to the north (Dunkeld), 100 km to the east (Wardy Yallock), and 80 km to the west (Lake Condah).

James Dawson described the hunt as follows:

> When it had been agreed by the chiefs of the associated tribes to have a grand battue [a collective driving of game], messengers were sent all round to invite everybody to join. As each tribe left its own country, it spread out in line, and all united to form a circle of fifteen or twenty miles in diameter. By this means the kangaroos and emus were enclosed, in order to be driven to an appointed place—usually on Muston's Creek, a few miles from its junction with the River Hopkins. To this place the old people, women, and children of the several tribes had previously gone, and were there encamped. At a fixed time the circle was perfected by arranging the men so that they stood about two hundred yards apart. The circle then began to contract. As they drew near to the central camp both young and old joined them, and formed a line too compact to allow the escape of the game; which, frightened and confused with the yells and shouting all around, were easily killed with clubs and spears. In the evening a grand feast and korroboræ ended the day's sport. Next morning the game was fairly divided, and each tribe started homewards, with the usual 'wuwuurk, wuwuurk,' farewell, farewell (Dawson 1881: 79).

The beginning point of the encirclement may seem immense: according to Dawson's figure of a circle 15–20 miles in diameter, the circumference would have been 47.12 to 62.83 miles (82,938 to 110,584 yards), which means (if Dawson's stated 200-yard spacing is accepted) that there would have been between 415 and 533 men involved in the hunt. Archaeological evidence has survived to corroborate Dawson's statements: Elizabeth Williams (1984) mapped and partially excavated clusters of mounds that lie on both sides of Mustons Creek a few kilometers south of Caramut. The location corresponds with a colonial map showing an Aboriginal "village", a drawing of a village, and descriptions of a village by William Thomas:

> . . . by Mustons and the Scrubby Creek to the westward . . . first settlers found a regular aboriginal settlement. This settlement was about 50 miles NE of Port Fairy. There was on the banks of the creek between 20 and 30 huts of the form of a beehive or sugar loaf, some of them capable of holding a dozen people. These huts were about 6' high or [a] little more, about 10' in diameter, an opening about 3'6" high for a door which they closed at night if they required with a sheet of bark, an aperture at the top 8 or 9" to let out the smoke which in wet weather they covered with a sod. These buildings were all made of a circular form, closely worked and then covered with mud, they would bear the weight of a man on them without injury. These blacks made various well constructed dams in the creek, which by certain heights acted as sluice gates at the flooding season . . . In 1840 a sheep station was formed on the opposite banks of the creek to this Aboriginal village or town. My informant who was a well educated man and a nephew to the Recorder of the City of London, though a shepherd at the time gave me a drawing he had taken of the village . . . These blacks used to live almost on fish, grubs and small animals and were perfectly harmless and stationary in 1841 or the end of 1840. My informant stated that the grass got bare or scarce on the side of the creek where the sheep station was, and one day while the Blacks were from their village, up the creek, seeking their daily fare, the white people set fire to and demolished the aboriginal settlement and it afterwards became the

> sheep farmers [?] . . . What became of the blacks he would not tell but at the close of 1841 when he again went shepherding in that locality he could not trace a single hut along the whole creek (William Thomas, 1858, quoted in Williams 1984: 174).

We actually *do* know "what became of" the Aboriginal people of this locality, for there were two massacres in the immediate vicinity of the Scrubby Creek Aboriginal village. The first, on 24 February 1842, took place near a creek named Lubra Creek, just to the north of Mustons Creek near the present-day Caramut cemetery. In a premeditated act of murder, six or eight Europeans armed themselves and went off on horseback in search of a 'mob of blacks near'. They soon found two sleeping Aboriginal families. They dismounted, surrounded the families, and opened fire—killing three women (one was pregnant) and a boy. Another woman subsequently died of wounds (Clark 1995: 35-42). Clark considered the victims to be of the Moperer gundidj clan of the Dhauwurd Wurrung (Gunditjmara) language group (Clark 1995: 35). He believes that the second massacre, in the vicinity of Mirraewuae or Black Swamp, later in 1842, also involved Moperer gundidj people, but it is not well documented, and it is not known how many were killed (Clark 1995: 35).

One of the most important multi-group 'cooperative subsistence interactions' took place at Lake Bolac on an annual basis in early Autumn. These were huge meetings: Robinson was told that 800 to 1,000 people gathered during the eeling season; he calculated the number of the local clan, the "Boolucburrers" (the Bulug bara clan) at fewer than 80 (Clark 1990: 114). James Dawson wrote:

> Lake Boloke is the most celebrated place in the Western District for the fine quality and abundance of its eels; and, when the autumn rains induce these fish to leave the lake and to go down the river to the sea, the aborigines gather there from great distances. Each tribe has allotted to it a portion of the stream, now known as the Salt Creek; and the usual stone barrier is built by each family, with the eel basket in the opening. Large numbers are caught during the fishing season. For a month or two the banks of the Salt Creek presented the appearance of a village all the way from Tuureen Tuureen, the outlet of the lake, to its junction with the Hopkins (Dawson 1881: 94).

Another probable meeting-place in Tjap Wurrung Country was southeast of Mount William, at a swamp probably to be identified with Mount William Swamp, 15 km northwest of Willaura. This place is discussed in more detail in Section 3.4.4.5, below. Robinson estimated that 15 acres (6 ha) of ground were turned into channels for eeling—one "triple line" channel he measured to be 500 yards long. Adjacent to the network of channels were earth mounds, which Robinson interpreted as roasting ovens (George Augustus Robinson, journal entry for 9 July 1841, in Clark, ed. 1998a: 308). Presumably this complex of channels was also another multi-group meeting place at the height of the eeling season, but it is less well known ethnographically, apart from Robinson's eye-witness account of the physical structures involved.

In addition to the Lake Colac and Mount William eeling locations, there were others outside Tjap Wurrung Country, such as at Toolondo, about 48 km southwest of Horsham in Jardwadjali Country (Lourandos 1980; Frankel 1991: 97-101), and a major one at and around Lake Condah near Budj Bim, in Gunditjmara Country, where Aboriginal villages have also been documented (Wettenhall 2010: 18-27).

It is noteworthy that most of the locations mentioned above were near to language group boundaries, making it easier for people of different groups to attend:

Table 3-8 Locations of large group meetings in and near Tjap Wurrung Country.

Location	Language Group	Adjacent/Nearby Language Groups
Mount Noorat	Kirrae Whurrung	Djargurd Wurrung, Tjap Wurrung, Gunditjmara
Mirraewuae Swamp/ Caramut	Gunditjmara	Tjap Wurrung, Kirrae Whurrung, Djargurd Wurrung, Wadawurrung
Lake Bolac	Tjap Wurrung	Kirrae Whurrung, Wadawurrung, Djargurd Wurrung
Mount William	Tjap Wurrung	Jardwadjali
Toolondo	Jardwadjali	Tjap Wurrung
Lake Condah/ Budj Bim	Gunditjmara	Tjap Wurrung

The periodic gatherings between various clans and language groups, as was said above, involved a variety of purposes: renewing family ties, trade, dance and song and story-telling, and initiation and ritual and ceremony, as well as the settling of disputes through fighting. Corroborees were a feature of these meetings, which occurred in many different places across the Aboriginal landscape. There was a formality to the meetings: different groups would camp in separate spaces determined by tradition near the corroboree ground.

3.3.2.3 Belief Systems

Spirituality and beliefs

The Tjap Wurrung have a deep spiritual connection to the land. Unlike people of the western tradition, land is not some inert object or merely a commodity to be bought and sold. Aboriginal people belong to the land, rather than the land belonging to them. The land owns them, and needs to be cared for so that it in turn can care for the people. There is an overwhelming attachment to land—to Country—that exists at a deep, all-pervading spiritual level. The Europeans' treatment of Aboriginal People is so tragic on this account. The early invades, the squatters, chased them off their land at the point of a gun; the Boards of so-called 'Protection of the Aborigines' moved them off their land into missions and reserves often hundreds of kilometers from their Country; and ever since Invasion Aboriginal children have been taken from their parents and moved away from their Country, often with no hope of re-connecting with it. All Aboriginal people want to die in their own Country; that way their spirit will be at 'home' (Wettenhall 2019 [1999]: 47).

James Dawson writes of 'good and bad spirits'—the language group he is talking about is not clear, but in general he refers to Eastern Maar People:

> The good spirit, Pirnmeheeal, is a gigantic man, living above the clouds; and as he is of a kindly disposition, and harms no one, he is seldom mentioned, but always with respect. His voice, the thunder, is listened to with pleasure, as it does good to man and beast, by bringing rain, and making grass and roots grow for their benefit. But the aborigines say that the missionaries and government protectors have given them a dread of Pirnmeheeal; and they are sorry that the young people, and many of the old, are now afraid of a being who never did any harm to their forefathers.
>
> The bad spirit, Muuruup, sometimes called 'Wambeen neung been-been aa,' 'maker of bad-smelling smoke,' is always spoken of with fear and bated breath, as the author of every misfortune. He visits the earth in the form of lightning, knocking trees to pieces, setting fire to wuurns, and killing people by 'striking them on the back.' At times he assumes the form of a large ugly man, frequenting scrubs and dense thickets; and, although not provided with wings, like the white man's devil, he flits and darts from place to place with the rapidity of lightning, is very mischievous, and hungers for the flesh of children. The natives are not much afraid of Muuruup in the

daylight, but have a great dread of him in the dark. They say that he employs the owls to watch and give notice when he may pounce upon any unfortunate straggler from the camp. Hence their hatred of owls, as birds of evil omen. When one of these birds is heard screeching or hooting, the children immediately crawl under their grass mats. If children are troublesome at any time, they are hushed by their mother calling out 'kaka muuruup,' 'Come here, devil.' None of the Kuurn kopan noot tribe ever saw the Muuruup, but believe he was once seen by two natives of the Chaap wuurong tribe [Tjap Wurrung] at Merrang, on the Hopkins River, when that country was first occupied with live stock; and they described him as a huge black man, carrying a great many spears, with a long train of snakes streaming behind him, 'like smoke from a steamboat.'

The Muuruup lives deep under the ground in a place called Ummekulleen, and has under his command a number of inferior spirits, who are permitted to visit the surface of the earth occasionally. No human being has ever returned to tell what kind of place Ummekulleen is. There is a belief, however, that there is nothing but fire there, and that the souls of bad people get neither meat nor drink, and are terribly knocked about by the evil spirits (Dawson 1881: 49-50).

Creation and other stories

Gariwerd Creation Story

In the time before time, the Great Ancestor Spirit, Bunjil, began to create the world we see around us: the mountains, the lakes, the forests and the rivers, the plains and the seas. He created all the plants and all the animals.

When he had created the beautiful sandstone ranges of Gariwerd, he often took the form of Werpil the Eagle so that he could view his work. He looked over the cliffs and the mountains. He listened to the sound of water, dripping after rain and thundering over waterfalls. He watched the plants and animals grow – from moss and tiny blades of grass to tall sturdy gums; from birds that flew to animals that burrowed through the soil.

Bunjil had a special place near Gariwerd. From there he could look out over the ranges. He is pictured above in Bunjils Shelter with his two helpers, two Wirringan, or dingoes.

Bunjil appointed two brothers, the Bram-bram-bult brothers, sons of Druk the Frog, to finish the task he had set himself. Their job was to bring order to the new world; to name the animals and creatures, to make the languages and give the laws.

At the end of his time on earth, Bunjil rose into the sky and became a star. He remains up there to this day, the protector of the natural world, his people and their beliefs.

Meanwhile the Bram-bram-bult brothers had a big job, sorting things out here on earth. There was a huge, ferocious emu called Tchingal who lived on the flesh of people and animals. His home was in the mallee scrub. He was hatching an enormous egg.

One day while Tchingal was away from the nest, War the Crow flew past. Feeling hungry, War decided to have a peck at the egg. He was pecking away quite happily when Tchingal returned. The monster emu was furious. War fled across the country towards Gariwerd, with Tchingal right behind him.

As he approached the ranges, War saw a crack in the mountains ahead. He flew into it, thinking he would be safe from Tchingal there. But Tchingal rushed at the mountain and struck it a mighty blow with his foot.

The mountain split open under the force of the impact, releasing a mountain stream and creating a gap, Barigar, also known as Rose's Gap. The emu could now see War flying off towards the west. He chased him through Barigar, right to the other side of the range.

War spotted another crack in the rockface. Desperately he tried to hide in it, but again Tchingal delivered a mighty kick to the rock and split it right open. This is how Jananginj Njaui (Victoria Gap) was formed where Bugara (Glenelg River) passes out onto the western plains. With the sun low on the horizon, Tchingal decided to make his camp at the foot of the new gap. This is why the place is called Jananginj Njaui, which means 'the sun will go'.

The next morning War rose early and escaped to the nearby Moora Moora swamp. As This was his totem site, and, therefore, sacred territory, Tchingal was forbidden to follow him there.

Tchingal was angry and he was also very hungry. Just at this moment he spied a man, Bunya, out hunting in the distance. He decided to make a meal of him. When Bunya, who was not very brave, realised the emu was after him, he took off as fast as he could. Instead of using his spears to protect himself, as a warrior should, he threw them to the ground and scrambled up a large tree. Tchingal, not being able to climb, decided to wait. He knew that Bunya would have to come down some time.

Meanwhile, War the Crow had flown north to where the Bram-bram-bult brothers were staying. He told them of his narrow escape and of Tchingal's ferociousness. Already angry at the emu for his bad deeds, the two brothers decided to punish him.

They came down to the mountains and saw what they thought was a bright star shining – it was Tchingal's eye. Approaching the bird from different directions, the brothers crept up and threw their spears. One struck the emu in the chest, one in the rump, and one in the neck. Tchingal raged and stormed at the brothers, but he was fatally wounded. He ran off towards the northern plains, losing blood all the time. Soon he died, and the trail of blood he left behind him turned into the Wimmera River.

The Bram-bram-bult now approached the tree where Bunya had hidden. They told him to come down, but Bunya was too scared and called back that he would stay there until they made sure Tchingal was dead.

The elder brother was angry at such cowardice. He waved his spear and caused Bunya

to become a possum, telling him to always stay in the treetops and to hunt for his food only at night.

Reaching the spot where Tchingal had died, the brothers plucked all the feathers from his body. Splitting each feather down the centre, they threw one half to the left, the other to the right, making two piles of emu feathers, each the size of a present day emu. The splitting of the feathers can still be seen in all emus. Their feathers are double, with two separate halves.

After feasting on Tchingal's flesh, all the people travelled to collect his egg. It was so big and heavy that no one could lift it until Babimbal the Wattlebird came along. He was very strong and managed to carry the egg to Horsham, where it was cooked and made into a great feast. Babimbal had the honour of dishing it out, and in so doing he splashed himself with some of the yolk, creating the wattles on the side of his head.

Before leaving, the Bram-bram-bult ordered the two emus to divide their large egg into several smaller ones in future, so they wouldn't be as jealous of their one egg as Tchingal had been. In this way they hoped to keep the peace.

Now, if you look at the Southern Cross, you can see the story told in the stars. At the Head of the Cross is Bunya, the timid possum. Three of the stars are the spears hurled by the Bram-bram-bult. The large western star is the spear-that struck Tchingal in the chest, the smaller star next to it is the spear that passed through his neck, and the star at the bottom of the Cross is the spear that struck him in the rump.

Tchingal himself is the dark shape that lies next to the Southern Cross. The eastern star of the Cross is Druk, the mother of the Bram-bram-bult, and the two brothers are the Pointers of the Southern Cross War the Crow is at a safe distance on the other side of the sky, as the star we know as Canopus. (Wettenhall 2019 [1999]: 49-50, based on a film script written by Martin Gordon for the video *Brambuk Creation Story*).

James Dawson recounts a story that is possibly related:

> The aborigines have a tradition respecting the existence at one time of some very large birds, which were incapable of flight, and resembled emus. They lived long ago, when the volcanic hills were in a state of eruption. The native name for them is 'meeheeruung parrinmall'—'big emu,' and they are described, hyperbolically, as so large that their `heads were as high as the hills,' and so formidable that a kick from one of them would kill a man. These birds were much feared on account of their extraordinary courage, strength, and speed of foot. When one was seen, two of the bravest men of the tribe were ordered to kill it. As they dared not attack it on foot, they provided themselves with a great many spears, and climbed up a tree; and when the bird came to look at them, they speared it from above. The last specimen of this extinct bird was seen near the site of Hamilton. In all probability, skeletons will be some day found, corroborating the statements of the aborigines with regard to this bird, which seems to have resembled the gigantic moa of New Zealand (Dawson 1881: 92-93).

Bunjil was a figure widely known and revered by Victorian Aboriginal Peoples. A Jardwadjali man, John Connolly, told the anthropologist Alfred William Howitt:

> All that I know of the beliefs of the Mukjarawaint [Jardwdjali] is that Bunjil was once a man who was father of all the people, and that he was good and did no harm to anyone. I may mention here as in one sense belonging to this part of my subject, that one of the Mukjarawaint said that at one time there was a figure of Bunjil and his dog painted in a small cave behind a large rock in the Black Range near Stawell, but I have not seen it, nor have I heard of anyone having seen it (Howitt 2001 [1904]: 491).

The painting was 'rediscovered' in 1911, becoming more generally known only in 1957. It is a sacred site, and one of many examples of rock art in the region (especially in the Grampians. Bunjil's Shelter, and the Place has become known, is in the estate of the Jacalet clan of the Tjap Wurrung People (Clark 2016: 68-69).

Mortuary practices

Different methods of dealing with the deceased were employed by the various Tjap Wurrung clans. George Augustus Robinson

> Differences in custom among the natives in disposing of their dead . . . This man was buried according to the custom of the eastern tribes or Waverong, Boonerong and Wadowerong – by being interred under ground. A grave was dug and corpse was wrapped in his skins and other garments and laid in the grave with all his war implements and a variety of other things, his own and many contributed. Two fires, one on each side [of] the grave, was kept burning for 10 or 12 nights. Thus the custom of interring the dead extends westward to the centre of the Pyrenees, to the Bar conedeet, Carac bulluc and Peelerwin bulluc [the Bar gundidj, Curruc balug, and Pilawin balug clans, respectively, of the Tjap Wurrung People], and from there westward they burn their dead. Towards Adelaide they put their dead up in trees. I visited the grave of this man, accompanied by the natives. It was quite recent, the ground is fresh. The grave is on a bank on the west side if the Wit.ter.be.car.ruc [Wimmera River] and about 100 yards from where he was killed at his camp on the east side of the river. The Tonedidgerir bulluc, Nesheera bulluc and Bonena bulluc [the Tonedidgerer balug, Neetsheere balug, and Boner balug clans, respectively] burn their dead (George Augustus Robinson, Journal entry for 28 July 1841, in Clark, ed. 1998a: 334-335).

> The U.toul bulluc [Utoul balug] and Beerip.mo bulluc [Beeripmo balug] put their dead up in trees, the Tonedidgerabulluc [Tonedidgerer balug] burn their dead, the Barconedeet [Bar gundidj] bury their dead, the Bullucbur [Bulukbara] place their dead on the ground, Jacalet leave their dead on the ground, Mor.rer.mor.rer.be.rap [the Murra murra barap clan of the Jardwadjali People] leave them on the ground (George Augustus Robinson, Journal entry for 6 August 1841, in Clark, ed. 1998a: 368).

These differences over a relatively small area are quite remarkable. In the far northeast of Tjap Wurrung Country, the dead were buried. To the south—around Mount Cole and Mount Langi Ghiran—were tree burials. To the west and south of modern-day Ararat, cremation seems to have been the norm. Further west and into Jardwadjali Country, according to Robinson, the dead were left on the ground. "Towards Adelaide",

according to Robinson, tree burials were practiced (it is not clear if this is a reference to Tjap Wurrung clans further to the southwest).

Table 3-9 Customs of Treating the Dead (George Augustus Robinson, in Clark, ed. 1998a: 334-335, 368)

Tjap Wurrung clan	Approximate Location	Method of treating of the dead
2. Bar gundidj	Wimmera River at 'Woodlands' station	burial
3. Beeripmo balug	Mount Cole	tree burial
4. Boner balug	Mount Cassell	cremation
6. Bulukbara	Lake Bolac	placed on the ground
9. Curruc balug	Source of the Wimmera River, and at 'Glenlogie' station	burial
9a. Pilawin balug (sub-group of Curruc balug	Western side of the Pyrenees	burial
12. Jacalet	Part of 'La Rose' and 'Mokepilly' stations	placed on the ground
18. Neetsheere balug	Mount William, 'Barton' station, and Mount Moornambool	cremation
30. Tonedidgerer balug	'Burrumbeep' station	cremation
35. Utoul balug	Mount Cole and Mount Langi Ghiran	tree burial
22. Murra murra barap (**Jardwadjali**)	Mount Zero	placed on the ground

It is possible that the differences in dealing with the dead at least in part reflect different local environments, such as softer soils (for burial) near rivers versus hared, stonier ground (granitic highlands).

Tree burials have been documented in recent times: two secondary tree burials have been found west of Ararat (one near a burial found in 1854), and the primary interment in a hollow tree of a child was found near Stawell (Builth and Nicolson 2010, I: 16, 23).

James Dawson's comments on the treatment of the dead perhaps go some way in explaining differences:

> When a person of common rank dies under ordinary circumstances, and without an enemy being blamed, the body is immediately bound, with the knees upon the chest, and tied up with an acacia bark cord in an opossum rug. Next day it is put between two sheets of bark, as in a coffin, and buried in a grave about two feet deep, with the head towards the rising sun. All the ornaments, weapons, and property of the deceased are buried with him. Stone axes are excepted, as being too valuable to be thus disposed of, and are inherited by the next of kin. If there is no time to dig a grave-which occasionally happens in hot weather or if the ground is too hard, the body is placed on a bier and removed by two men to a distance of a mile or two. There the relatives prepare a funeral pyre, on which the body is laid, with the head to the east. All the effects belonging to the deceased are laid beside the body, with the exception of stone axes. Two male relatives set fire to the pyre, and remain to attend to it till the body is consumed. Next morning, if any bones remain, they are completely pulverized and scattered about. When a married woman dies, and her body is burned, the husband puts her pounded calcined bones into a little opossum-skin bag, which he carries suspended in front of his chest until he marries again, or till the bag is worn out, when it is burned.
>
> When two persons die in a wuurn at the same time, if they are brothers or sisters, they are interred close together in separate graves. If they are not so related, one of

the bodies is tied with the knees to the face, and buried with the head towards the rising sun, in a shallow hole, or in a deserted mound; the other is put up in a tree till nothing remains but skin and bones, when it is taken down and burned.

The bodies of children between the ages of four and seven years are wrapped in an opossum rug, and put in a sheet of bark rolled up into a tube. This is pushed up into a hollow tree till the remains are quite dry, when they are taken down and burned. The bodies of children under four years of age, who have died a natural death, are kept a day and a night, and are then interred or burned without any ceremony. Infants who have been put to death by their parents, in accordance with the customs of the tribe, are burned without ceremony.

Under ordinary circumstances a corpse is kept in the wuurn one night; in very hot weather it is kept only a few hours; and, immediately on its removal, a large fire is kindled on the spot, and the wuurn and all the materials connected with it are burned. Even the grass and the leaves, if dry enough, are carefully gathered and consumed.

Before the minds of the aborigines were poisoned by the superstitions of the white people, they had not the slightest dread of the dead body of a friend, nor had they any repugnance to remain beside it. Indeed, it often occurred that, while awaiting the arrival of friends from a distance, they kept watch constantly for six days beside the corpse, and in the same wuurn; by turns sleeping and wailing, and protecting the body from the flies by green boughs of trees. They have their own superstition, however, connected with this watching; for they believe that should the corpse open its eyes and stare at any one, that person will not live long.

The approaching death of a chief causes great excitement. Messengers are sent to inform the neighbouring tribes, and all his relatives and friends come and sit around him till he expires. They then commence their mourning. They enumerate the good qualities of the deceased, and wail and lacerate their foreheads. Messengers are sent, with their heads and faces covered with white clay, to inform the tribes of his death, and to call them to attend his funeral obsequies.

Immediately after his death the bones of the lower part of the leg and of the fore-arm are extracted, cleaned with a flint knife, and placed in a basket; the body is tied with a bark cord, with the knees to the face, and wrapped in an opossum rug. It is then laid in a wuurn filled with smoke, and constantly watched by friends with green boughs to keep the flies away.

When all the mourners, with their faces and heads covered with white clay, have arrived, the body is laid on a bier formed of saplings and branches, and is placed on a stage in the fork of a tree, high enough from the ground to be out of the reach of wild dogs. Everyone then departs to his own home. The adult relatives and friends of the deceased visit the spot every few days, and weep in silence. No children accompany them, as ‘they are frightened.’

At the expiry of one moon, the relatives and the members of his own and the neighbouring tribes come to burn the remains. The body is removed from the tree. Each chief, assisted by two of his men, helps to carry it, and to place it on the funeral pyre; while the relatives of the deceased sit in a semicircle to windward of the pyre, and each tribe by itself behind them. The fire is lighted and kept together by several men of the tribe, who remain till the body is consumed, and till the ashes are

> sufficiently cool to allow the fragments of small bones to be gathered. These are then pounded up with a piece of wood, and put into the small bag prepared for them. The widow of the deceased chief, by first marriage, wears the bag of calcined bones suspended from her neck, and she also gets the lower bones of the right arm; which she cleans and wraps in an opossum skin. This she puts in a long basket made of rushes, and ornamented with kangaroo teeth, emu feathers, cockatoos' crest feathers, red paint, and a lock of hair of the deceased. These relics she carries for two years, and keeps them under cover, with great care. She cannot marry while she carries these. Should she resolve to be married before the two years are out, she delivers the basket and bones to her deceased husband's next widow, or widows, in succession; failing them, to his mother; but should she also be dead, she gives them to his mother's sister, if she has a family; or, lastly, to his eldest daughter, if she is married and has a family. If the deceased has left no such relatives, the widow ultimately buries the bones in a deserted mound and burns the basket.
>
> The eldest sister of the deceased chief gets the lower bones of the left arm, and his aunts get the lower bones of the legs, which are treated in the same way. Failing sisters and aunts, the nearest female relatives, to the degree of first cousins, take their place. The only reason one can assign for the observance of this custom is to induce the relatives of chiefs to keep them alive as long as possible; for the task of carrying dead men's bones for two years cannot be an agreeable one.
>
> The body of a chiefess is treated like that of a chief, and the bones are carried about in a basket in the same way. When the body is burned, at the termination of one moon, if the deceased was greatly beloved by her husband, he gathers the calcined bones, pounds and puts them into a small bag made of opossum skin, which he wears suspended in front of his chest for twelve moons. They are then buried. Until these relics of his wife are buried he cannot marry again. The bodies of the adult sons and daughters of chiefs are disposed of in like fashion, and their bones carried about for the same period by their mother, and other relatives in succession (Dawson 1881: 63-65).

James Dawson also related the following observations about Eastern Maar People's beliefs concerning death and the afterlife, although at the end he adds a caveat—Dawson was not clear whether these views were entirely traditional, or whether some were influenced by contact with New South Wales Aboriginal people or Europeans:

> Every person over four or five years of age has a spirit or ghost, which, although dormant through life, assumes a visible but undefined form after death; and, for a time, haunts the spot where a corpse is interred or placed in a tree. Although it is considered to be quite harmless, it is regarded with fear. It is said to be seen sitting on the grave or near the body, but it sinks into the ground or disappears if anyone approaches. As the friends of the deceased are very unwilling to go near the place, it is seldom seen and never examined. For its comfort a large fire is kept burning all night near the corpse. The recent custom of providing food for it is derided by the intelligent old aborigines, as 'white fellow's gammon.'
>
> It is a remarkable coincidence with the superstition of the lower orders in Europe, that the aborigines believe every adult has a wraith, or likeness of himself, which is not visible to anyone but himself, and visible to him only before his premature death. If he is to die from the bite of a snake, he sees his wraith in the sun; but in this case it

> appears in the form of an emu. If, in the evening, after sunset, a person walking with a friend sees his own likeness—'muuruup man,' and, if a woman, 'muuruup yernan,'—the friend says, 'Something will happen to you, as you have seen your wraith.' This so preys on the mind of the individual that he falls into low spirits, which he tries to relieve by recklessness and carelessness in battle.
>
> After the disposal of the body of a good person, its shade walks about for three days; and, although it appears to people, it holds no communication with them. Should it be seen and named by anyone during these three days, it instantly disappears. At the expiry of three days it goes off to a beautiful country above the clouds, abounding with kangaroo and other game, where life will be enjoyed for ever. Friends will meet and recognize each other there; but there will be no marrying, as the bodies have been left on earth. Children under four or five years of age have no souls and no future life. The shades of the wicked wander miserably about the earth for one year after death, frightening people, and then descend to Ummekulleen, never to return. There was a belief current among the aborigines, that the first white men seen by them were the embodied spirits or shades of deceased friends. Whether this belief originated with the tribes of Port Phillip, or was transmitted from the Sydney district, it is now impossible to ascertain; but there is no doubt that it did exist among the aborigines of Victoria at the time of its first occupation by the white man.

Some of the ideas described above may possibly have originated with the white man, and been transmitted from Sydney by one tribe to another (Dawson 1881: 50-51).

Certainly the view that dead Aboriginal people were bought back to life as white, and that therefore the invading Europeans were reincarnated Aboriginal people was widespread across Victoria, and predated the Invasion.

The Gunditjmara People have preserved a story about Deen Maar:

> On the coast across from Deen Maar there is a haunted cave called Tarn Weerreeng ['road of the spirits'] which has a path between the land and Deen Maar. When someone dies the body is wrapped in grass and put in the burial place.
>
> When the grass is found at the mouth of Tarn Weerreeng you know that Pooyeet Pooyeet Tyeepeety [a good spirit] took the body and its belongings through Tarn Weerreeng to Deen Maar and carried the person's spirit to the clouds.
>
> If maar see a meteor at the same time it is believed that fire has been taken up with it. If there is fresh grass found near Tarn Weerreeng someone was killed and no one will go near until the grass decays or is removed (Gunditjmara: Deen Maar 2016).

3.3.2.4 Population Numbers

There are all sorts of problems in trying to estimate the pre-Invasion population of the Tjap wurrung People. As noted above, Ian Clark has reconstructed 41 clans of the Tjap Wurrung People (Clark 1990: 104, 108-109). George Augustus Robinson (cited in Lourandos 1977: 210) recorded clan groups (he called them tribes) ranging from 16-20 to over 100 individuals in western Victoria. In 1841 Robinson recorded the population of seven Tjap wurrung clans as 403 individuals—an average of about 58 per clan (George Augustus Robinson,

cited in Clark 1990: 103). Foster Fyans (in Bride, ed. 1898: 117) referred to a group of 150 individuals near Budj Bim, which can perhaps be taken as an upper limit for clan size. James Dawson (1881: 3) estimated an average of 120 individuals in each clan (he called them 'tribes'). Lourandos (1977: 211) concluded that most clan populations (he called them 'bands') ranged from 30 to 100 individuals, with a maximum of 150 and an average of 40-60 individuals. Lourandos identified 33 'bands' (clans) and calculated an average Tjap Wurrung population density of 1.3–2.0 square miles (or 2.6–3.9 square km) per person (Lourandos 1977: 206-207, 219). Using his 2,700 square mile (6,993 square km) estimation of the area of the Country of the Tjap Wurrung People, this results in a population estimate of 1,350–2,077 individuals (although taking his square kilometer figures the numbers come out at 1,793–2,690 individuals).

We can thus consider a variety of estimates from these different authors, using Clark's number of clans as 41:

Author	Average Clan Size	Population Average	Minimum	Maximum	Comment
Robinson	57.57	2,360			
Dawson	120.00	4,920			(can probably be taken as a maximum)
Lourandos			1,230	4,100	(using Lourandos' clan size range)
Lourandos			1,640	2,460	(using Lourandos' average clan sizes)
Lourandos			1,350	2,077	(using Lourandos' square mile figures)
Lourandos			1,793	2,690	(using Lourandos' square km figures)

From these figures we can take the population of the Tjap Wurrung People at the time of the invasion of their lands around 1838-1841 as between 1,230 and 4,920. We must also remember that by the time that these estimates were being made the killings of Aboriginal people by European invaders had already begun. In addition, two smallpox epidemics—one around 1789-1790 and the other 1829-1832—appear to have devastated Victorian Aboriginal peoples (death rates were probably around 50% of those infected). The effect on the Tjap Wurrung People and other Aboriginal groups would have been devastating. Some groups reportedly were wiped out entirely in western Victoria (Robinson, cited in Presland 2010: 87). Dysentery (1839), influenza (1847), pneumonia, tuberculosis, and venereal disease also ravaged the people in the early years of the European invasion.

Another major destroyer of Aboriginal people was the gun: once the European invaders had seized the land and water of the Tjap Wurrung People, they jealously protected their new-found possessions, and in many areas Aboriginal people were shot or poisoned, in some cases 'to keep them away from our land, huts, and sheep', in some cases, even more appallingly, for 'sport'.

During the first ten years of the Invasion, to 1845, Michael Christie (1979) estimated that Aboriginal population losses were at least 70%, due to the causes mentioned above as well as dietary change, and conflict between language groups. Christie estimated that death by European guns accounted for as much as 25% of Aboriginal deaths. Ian Clark extrapolated these figures:

> If we assume Lourandos' average of 50 per clan, probably an understatement, but a useful minimum figure nevertheless, we arrive at a figure of 2050 as the Djab wurrung population prior to contact. By 1845, if Christie's estimate is correct, 1435 people would have died, 334 as a result of European weapons. This would mean a surviving population of 615 people, or an average of 15 per clan, a loss of 35 people per clan, of which 9 would have been shot. I have been able to account for roughly a third of the deaths through shootings. Using Dawson's estimates, by 1845, 3444 Aborigines would have died, of which 861 would have been the result of shootings. Dawson's figures would mean a surviving population of 1476, or 36 per clan in 1845.

> The degree to which the figure of 615, based on Lourandos' population estimate, is conservative can be seen by comparing it with the 1841 and 1843 figures based on Robinson's and Parker's census figures, between 1435 and 2378 in Robinson's case and 861 in Parker's (Clark 1990: 104).

In contrast to the high number of Aboriginal people killed by shooting, Beverley Nance has calculated that 59 Europeans had been killed by Aboriginal people during the occupation phase of Port Phillip District (Nance 1981, cited in Clark 2016: 270). This number is for Port Phillip District as a whole, as opposed to, probably, hundreds of deaths among the Tjab Wurrung People. In Tjap Wurrung Country, according to Ian Clark, there were at least 35 massacres and killings. Twenty-one of these were before the end of 1841. Clark documents 24 of these killings, which involved 69 Aboriginal deaths (Clark 1995: 61-83).

When it became a separate colony in 1851, Victoria had a European population of 77,345, as well as 391,000 cattle and 6,590,000 sheep (Barwick 1984: 108). The Aboriginal population of the colony had probably declined by close to 90%. In 1845 the Tjap Wurrung population was probably about 500 individuals; by 1851 they would have numbered considerably less (Clark 2016: 270).

The decline in the population of the Tjap wurrung People was catastrophic and precipitous. The 1858-1859 Select Committee mentioned above (3.3.2.3, Mortuary Practices) made requests to the various districts of Victoria regarding Aboriginal numbers. Responses from correspondents in or near Tjap Wurrung Country are as follows (Select Committee . . . 1859: 26):

> *A. French, Esq., J.P. Moonvea, Hamilton*.—The number of aborigines must have very much diminished since my arrival in this part of the country, eighteen years ago, as I seldom see any now, though I used constantly to employ them formerly.
>
> *Henry Gottreux, Esq., the Gums, Caramut*.—In the district or county of Villiers, from 150 to 200, divided into five or six tribes; viz., Port Fairy, Spring creek, Maston's creek, Hopkin's river, and Mount Rouse, numbering from thirty to forty each.
>
> *Patrick Mitchell, Esq., Kangatong*.—The number of aborigines in this district may be computed at from 120 to 150. They consist of the Mount Rouse tribe, together with a few others, whose former tribal distinctions are now obliterated.
>
> *Cuthbert Fetherstonhaugh, Esq., P.M., Hamilton*.—Between eighty and one hundred, named Mount Rouse and Wannon tribes, nearly equal in number.

The responses show that numbers were consistently declining, and in some areas they were very much reduced, and the social devastation to the Aboriginal People of Victoria was causing the millennia-long clan identifications to break down.

As a result of the Select Committee's report, the "Central Board Appointed to Watch Over the Interests of Aborigines" was legislated. It came into being in 1860 and ran until 1869. In each of its annual reports, the Central Board published the numbers of Aboriginal individuals in the various districts. Ian Clark (1990: 105) has summarized the data regarding the Tjap Wurrung People:

Date	Locality	Number
1861	Of the Pyrenee clans the most numerous was the Fiery Creek clan	??
1862	Wickliffe, Mount Rouse, Hexham	70

	Hamilton.	52
1863	Wickliffe, Mount Rouse, and Hexham	57 males, 35 females
	Hamilton	46 males, 20 females
1864	Wickliffe, Mount Rouse, and Hexham	70
	Hamilton	58
1866	Mt. Cole, Mt. Sturgeon, and Hopkins River Aborigines	30 males, 26 females
	Buangor locality	10–12
1867	Fragments of two or three clans from the Moyston area	??
1868	Mount William and Good Morning Bill regions	3 males, 2 females
1869	Nareeb Nareeb	41 males, 28 females
	Hamilton	33 males, 11 females

By the time a census was taken on the 15th of April 1877, the collapse of the Aboriginal population was revealed: there were only 1,067 Aboriginal people in all of Victoria. According to the census there were 527 Aboriginal people on stations under the control of the Central Board, and there were 540 non-station residents. Only 12 Tjap Wurrung people were living at localities within their traditional language area. Five of these were at Wycliffe (four male adults and one female adult), one female child was at Elmhurst; two adult males at Barton station; one adult male at Hamilton; two adult males at Dunkeld; and one male adult at Hexham. In addition to these 12 there were some Tjap Wurrung people at Lake Condah, Framlingham, and Coranderrk (Clark 1990: 104-105). As Ian Clark says:

> With the fragmentation of the Djab wurrung onto various Government stations from the 1870's it becomes very difficult to trace their movements and determine their population (Clark 1990: 105).

By 1880 the situation was dire:

> At this date, July, 1880, there are only seven aborigines who speak the Chaap wuurong language, three who speak the Kuurn kopan noot language, and four who speak the Peek whuurong language (Dawson 1881: 4).

Robert Brough Smythe, who published an important study of the Aboriginal people of Victoria in 1878, echoed the pessimistic view of many in the late nineteenth century:

> Now that the natives are no longer able to follow their old pursuits, now that they are cut off from those enjoyments which in their natural state kept them in health, now that they are held in restraint either at the stations established by the Government or where living in the neighbourhood of places peopled by whites, it is probable that the numbers will decrease, and that, as a race, they will ultimately be extinguished in Victoria. Nothing that can be provided for their sustenance and comfort can compensate for the loss they experience in being deprived of their lands, the society of their friends, and the delights of the chase (Smyth 1878, I: 45).

These reports and figures document the rapid decline of the Tjap Wurrung People in particular, and the Eastern Maar population as a whole, in the years following Invasion.

3.4 Lifestyle, Environment, and Resources

3.4.1 Introduction

The general picture of the subsistence lifeways of some Tjap Wurrung People—especially the northern Tjap Wurrung clans—is one of small extended family groups (of fifteen to twenty individuals), generally called bands, moving about their land on a seasonal basis to exploit the changing availability of plant and animal resources:

> It seems that while travelling the people were busy but the day was not long: all are employed; the children in getting gum, knocking down birds etc; women in digging up roots, killing bandicoots, getting grubs etc; the men in hunting kangaroos, etc, scaling trees for opossums etc. They mostly are at the encampment about an hour before sundown – the women first, who get fire and water, etc. by the time their spouses arrive . . . In warm weather, while on tramp, they seldom make a miam – they use merely a few boughs to keep off the wind, in wet weather a few sheets of bark make a comfortable house. In one half hour I have seen a neat village begun and finished" (Thomas, quoted in Gaughwin and Sullivan 1984: 93-4).

> They are migratory in their habits, remaining but a few days at a time in any one place. These migrations are however confined within certain limits. In the eastern district [i.e. the estates of the Wadawurrung People] they do not build huts of any kind, contenting themselves with a break-weather made of the boughs, or, in wet weather, of the bark, of tree: one of these they put up in a few minutes, and contrive to make of these simple materials a very comfortable lair. This break-weather, or mi-mi, is about four feet in height, and is in shape something like half a bird 's nest inverted; they always erect them so as to have the open to the lee side, where they make a small fire quite close to them. The great secret in making a fire in the bush is to make a small one: new hands generally make one so large that they cannot go near it. It is the habit of the natives to strip themselves when in their mi-mis, in order to expose the surface of their bodies to the full action of the fire. As they never make use of one of these which they have once abandoned, they are in a measure free from the vermin and filth, to which they would be obnoxious had they fixed abodes . . . Each family has a separate mi-mi and fire—the unmarried men, however, occupying one large one in common: the spears of the men being stuck upright in the ground, close to the fires, give to one of their encampments rather a military effect (Griffith 1845: 151-152).

The further one moves south in Eastern Maar Country the more this mobile pattern turns to a semi-sedentary one, with numerous villages reported by early European observers (see Sections 3.3.2.2 and 3.4.4.5).

The Eastern Maar People have six seasons throughout the year, based on the animals and plants that come to fruition for harvesting.

Table 3-10 The Seasons in Eastern Maar Country (Eastern Maar Meerreengeeye ngakeepoorryeeyt 2015: 14-15)

Eastern Maar Season Name	Season Name	Calendar Dates	Events and Features
Kooyang	Season for Eels	Late January to late March	Some plants still flowering; surface water scarce; eels and *galaxias* at their migration peaks

Gwangal moronn	Honeybee Season	Late March to the end of July	The land begins to cool; river red gums and manna gums flowering; peak of the fungi season; mature eels heading out to sea; marsupials active
Chinnup	Cockatoo Season	June to late July	Morning frosts and fogs; fungi appear; winter orchids and chocolate lilies bloom; mammals breeding; possums have their young in the pouch; rising wetland waters force ducks to move for nesting and feeding; yellow-tailed black cockatoos on the move
Larneuk	Season for nesting birds	Late July and August	The wettest months of the year; rivers running high; coldest season; ground orchids, manna gums, wattle in flower; birds nesting; migrating birds beginning to arrive
Petyan	Wildflower Season	Late August to mid-November	The bush comes to life; many wildflowers, yam daisy, mat rush; birds laying eggs; mammals breeding; migrating birds arriving from north; native trout moving downstream to spawn
Ballambar	Butterfly Season	Mid-November to late January	Hot, dry weather; many plants still in flower; butterflies abundant; many birds still with their young

By 1837, just a few years after the Invasion of Aboriginal lands in what was to become Victoria, there were over 50,000 sheep grazing in the Port Phillip district (Cotter 2006: 44). By 1851, when Victoria became a separate colony, there were 77,345 Europeans, 391,000 cattle, and 6,590,000 sheep (Barwick 1984: 108). The native plant and animal resources—so carefully tended by Aboriginal people for thousands and thousands of years—had been destroyed, and the Aboriginal population had been decimated.

3.4.2 Fresh Water

In general, Eastern Maar Country is very well watered, with rivers, creeks, lakes and marshes never far away from any given location. The current Study Area, in the far north of Tjap Wurrung Country, is probably the driest part of Eastern Maar Country. It straddles the Great Divide, and is the headwaters both of the Wimmera River flowing to the northwest into Lake Hindmarsh and the Hopkins River flowing south to the coast. In the current Study Area these rivers and the creeks that flow into them, such as Spring Creek, do not run all year round, but they are characterized by long and deep waterholes, which were a major attraction to the Bar gundidj clan and their neighbours.

George Augustus Robinson travelled through the region in late July 1841. He makes various passing comments about the creeks and water sources, which taken together build up a good picture of the country:

> As you follow down the course of the rivulet [from 'Glenlogie' station] in a west course, the country improves in appearance: the flats get wider and the hills are lower, some of which are but thinly wooded; on the water holes in the bed of the river, some of which are 20 yards broad, ducks were floating on the water and native companions [brolgas] were seen on the plains. Mr Irwin [Alexander Irvine] said a water spout passed over the hills in the month of April last and deluged the country. Frogs he said abounded in the water holes.
>
> The country at and about Lynot's ['Glen Imlay'] belong to the Bar conedeet [Bar gundidj clan], the locality at Lynot's is called Too.er.me.got.chin; 'gotchin' means water.

. . .

After leaving Too.er.me.gotchin, i.e. Lynot's home station, followed along the south side of the Witter.be.currac [Wimmera River] which runs south, and south by west, for three miles. The country during this distance is very much intersected with water channels or hills and hollows from 10 to 20 feet deep – the scourge of the Pyrenees; run parallel with the river during these three miles, their altitude from four to 500 feet; small conical hills along the bases thinly grassed . . .

At five miles from Too.er.me.got.chin the country became level. The river has a broad margin from two to 300 yards, at which distance is the berg or bank, from 10 to 20 feet high; occasionally the flats are 500 yards. The course of the river after leaving Too.er.me.gotchin, three miles, takes a northwest course and continues in this direction to Lynot's. Lynot's lays about northwest from Francis' ['Woodlands' station'], and Blow's ['Allanvale'] west from Francis. Birds are found on these creeks, I observed rosella and magpie. The water holes in places are long and deep; a large hole six miles SSE of Francis' the natives call Tar.nor.rer. The country is thinly covered with herbs and short grass; the soil is poor, a red sandy loam of two or three inches deep on a white marl. Passed numerous old camps of the natives and cooking or baking mounds, the muscle [mussel] shell lay strewed about. The river was a favorite resort of the natives. The large water holes afforded them mussels and other food and the bulrush was abundant, the root of which the natives eat . . .

The whole of the country travelled over today is covered with open forest. Heavy rain the whole of this day. I started with Lynot's with the Bar conedeet [Bar gundidj] native to give me information but as it was raining hard I cantered on at a brisk pace and my Aboriginal friend run'd and kept pace with me. He was armed with spears. He kept chatting about his country and calling out the names of different localitys and said his country was good country. I answered him in the affirmative which afforded him satisfaction (George Augustus Robinson, journal entries for 29-30 July 1841, in Clark, ed. 1998a: 335-337).

3.4.2 Plant Resources

The current Study Area and geographic region had a variety of vegetation types, according to the Victoria's Department of Environment, Land, Water and Planning's (DELWP) mapping of vegetation prior to the European Invasion. In the relatively small (333 ha) Study Area only six vegetation types are reconstructed; in the Geographic Region there are eighteen. Two vegetation types dominated in the Study Area—together they make up over 90% of the area—and these two were also the largest two types reconstructed for the Geographic Region (DSE 2004).

Vegetation Category	EVC Number	Study Area	Geographic Region
Grassy Dry Forest	EVC 22	63.26 %	39.50 %
Alluvial Terraces Herb-rich Woodland	EVC 67	27.35 %	9.01 %
Grassy Woodland/Alluvial Terraces Herb-rich Woodland Mosaic	EVC 76	5.86 %	8.67 %
Herb-rich Foothill Forest	EVC 23	1.80 %	8.94 %
Creekline Grassy Woodland	EVC 68	1.68 %	3.31 %
Valley Grassy Forest	EVC 47	0.05 %	2.27 %
Alluvial Terraces Herb-rich Woodland/Plains Grassy Woodland Complex	EVC 152	—	8.01 %

Grassy Woodland/Heathy Dry Forest Complex	EVC 896	—	6.15 %
Plains Grassy Woodland	EVC 55	—	4.94 %
Heathy Dry Forest	EVC 20	—	3.48 %
Grassy Woodland	EVC 175	—	1.74 %
Rocky Outcrop Shrubland/Rocky Outcrop Herbland/Dry Grassy Forest Complex	EVC 351	—	1.44 %
Hills Herb-rich Woodland	EVC 71	—	1.19 %
Heathy Woodland	EVC 48	—	0.61 %
Hillcrest Herb-rich Woodland	EVC 70	—	0.48 %
Rocky Outcrop Shrubland/Rocky Outcrop Herbland Mosaic	EVC 73	—	0.10 %
Metamorphic Slopes Shrubby Woodland	EVC 69	—	0.10 %
Box Ironbark Forest	EVC 61	—	0.08 %
		100.00 %	100.02 %

Grassy Dry Forest (EVC 22) (63.26 % of the Study Area; 39.50 % of the Geographic Region)

This vegetation type occurs on a variety of underlying geological types, and on various altitudes and slope gradients. The forest canopy is typically dominated by eucalypts up to 20 m tall, such as Red Stringybark (*Eucalyptus macrorhyncha*), Bundy (*Eucalyptus goniocalyx*), and Messmate Stringybark (*Eucalyptus obliqua*). Overall, this vegetation type generally has the appearance of an open woodland, with an understory comprising a sparce layer of shrubs including several species of Acacia. The ground cover consists of a variety of drought-tolerant grasses and herbs, including such plants as Silvertop Wallaby-grass (*Joycea pallida*) and Wattle Mat-rush (*Lomandra filiformis*) (DSE 2004).

Species typical of this vegetation type include:

Species	**Common Name**
Eucalyptus camaldulensis	River Red-gum (tree canopy cover)
Eucalyptus melliodora	Yellow Box (tree canopy cover)
Acacia dealbata	Silver Wattle
Epacris impressa	Common Heath
Hovea heterophylla	Common Hovea
Pimelea humilis	Common Rice-flower
Acacia aculeatissima	Thin-leaf Wattle
Acrotriche serrulata	Honey-pots
Senecio tenuiflorus	Slender Fireweed
Gonocarpus tetragynus	Common Raspwort
Viola hederacea sensu Willis (1972)	Ivy-leaf Violet
Hypericum gramineum	Small St John's Wort
Dichondra repens	Kidney-weed
Hydrocotyle laxiflora	Stinking Pennywort
Goodenia lanata	Trailing Goodenia
Joycea pallida	Silvertop Wallaby-grass
Poa sieberiana	Grey Tussock-grass
Lomandra filiformis	Wattle Mat-rush
Dianella revoluta s.l.	Black-anther Flax-lily
Microlaena stipoides var. stipoides	Weeping Grass
Pteridium esculentum	Austral Bracken

Hardenbergia violacea	Purple Coral-pea

Alluvial Terraces Herb-rich Woodland (EVC 67) (27.35 % of the Study Area; 9.01 % of the Geographic Region)

The second major vegetation type reconstructed for the current study area is Alluvial Terraces Herb-rich Woodland. It is characterized by open woodland (up to 15 m tall) on broad alluvial plains and along ephemeral drainage lines. Soils are generally poorly drained, with sandy loam overlying a heavier clay subsoil. The understorey consists of few if any shrubs. The major feature of this vegetation type is a ground layer rich in species but with a low biomass cover, particularly in summer (DSE 2004).

Species typical of this vegetation type include:

Species	**Common Name**
Acacia mearnsii	Black Wattle
Banksia marginata	Silver Banksia
Leptospermum continentale	Prickly Tea-tree
Brachyloma daphnoides	Daphne Heath
Leptospermum scoparium	Manuka
Hibbertia fasciculata var. prostrata	Bundled Guinea-flower
Hibbertia riparia	Erect Guinea-flower
Hibbertia stricta s.l.	Upright Guinea-flower
Astroloma humifusum	Cranberry Heath
Acrotriche serrulata	Honey-pots
Wahlenbergia stricta	Tall Bluebell
Hypericum gramineum	Small St John's Wort
Drosera peltata ssp. peltata	Pale Sundew
Poranthera microphylla	Small Poranthera
Viola cleistogamoides	Hidden Violet
Siloxerus multiflorus	Small Wrinklewort
Drosera pygmaea	Tiny Sundew
Solenogyne dominii	Smooth Solenogyne
Deyeuxia quadriseta	Reed Bent-grass
Austrostipa mollis	Supple Spear-grass
Luzula meridionalis	Common Woodrush
Schoenus apogon	Common Bog-sedge
Juncus subsecundus	Finger Rush
Austrodanthonia setacea	Bristly Wallaby-grass
Microlaena stipoides var. stipoides	Weeping Grass
Triglochin nanum	Dwarf Arrowgrass
Centrolepis strigosa ssp. strigosa	Hairy Centrolepis
Centrolepis aristata	Pointed Centrolepis
Aphelia pumilio	Dwarf Aphelia
Thysanotus patersonii	Twining Fringe-lily

Another vegetation type worth mentioning here that has been reconstructed for the current Geographic Region is Plains Grassy Woodlands (EVC 55; 4.94 % of the Geographic Region). This type is characterized by open eucalypt forest, dominated by Red River Gum (*Eucalyptus camaldulensis*), growing on fertile soils. This

zone is on flat and gently undulating plains that often are poorly drained. The understory is characterised by sparse shrubs over a species-rich grassy and herbaceous ground layer, including Supple Spear-grass (*Austrostipa mollis*), Golden Wattle (*Acacia pycnantha*), and Kangaroo Grass (*Themeda triandra*) (DSE 2004). As the common name of this last plant implies, it would have provided good grazing food for kangaroos and wallabies. This vegetation type and another, Plains Grasslands, were major areas for the harvesting of murnong (*Microseris scapigera*), 'Yam Daisy'.

Murnong was a major plant resource of southeast Australian Aboriginal Peoples. This plant grew abundantly along stream and riverbanks, as well as in grassland plains and forests and woodlands.

Aboriginal people would eat the murnong tuber raw or roasted. A form of plant husbandry practiced, in which women would turn over the soil with digging sticks to get the tubers, and in the process aerate the soil. In open grasslands and woodlands fire would also be used: after burning, the women would dig out the tubers and in the process mix ash into the soil, producing a higher yield the following year; yields would gradually decline until the process was repeated, after three or four years (Presland 2010: 71-72). The firing also promoted a new growth of grasses, which attracted game animals to the area. Murnong provided a major part of the Aboriginal diet until its ecosystem was largely destroyed by European grazing animals very soon after the European invasion (Pascoe 2018 [2014]: 18-27).

Plants of Tjap Wurrung and Eastern Maar Country were used for a wide range of purposes beyond food. The bark from River Red Gum trees was used for shields and bowls and other utilitarian functions. Golden Wattle produces an edible gum. It would be harvested, especially in the summer, and softened by soaking in water; it was considered both a food and a tonic. The gum was also used as a glue in the fashioning of artefacts (Cahir et al. 2018: 63-64). James Dawson was probably talking of the Golden Wattle when he wrote:

> The gum of the acacia, or common wattle tree, is largely consumed as food, as well as for cement [for tools and weapons]; and each man has an exclusive right to a certain number of trees for the use of himself and his family. As soon as the summer heat is over, notches are cut in the bark to allow the gum to exude. It is then gathered in large lumps, and stored for use (Dawson 1881: 21).

In all, almost 300 plants were utilized by the Aboriginal peoples of Victoria (Gott and Conran 1991; Gott 1991, 2001, 2008; Zola and Gott 1992; Presland 2010: 71; Cahir et al. 2018).

3.4.3 Animal Resources

3.4.3.1 Mammals

The Country of the Tjap Wurrung had a wide variety of native animal resources before the European Invasion. Early European settlers and visitors in the plains and woodlands describe the local native fauna as plentiful (the emu especially so); the region would have been a rich one for the Tjap Wurrung clans whose estates they were, and especially abundant in the vicinity of water sources. This region was of major attraction for European settlers, and in the years following the Invasion many native animal species quickly became extinct from the area.

There were at least 45 mammals endemic to Tjap Wurrung Country (ALA n.d.). Of these, seven were large animals (over 10 kg), and fourteen were medium-sized (1 – 10 kg).

Large Mammals (10 kg +)

Common Name	Scientific Name	Max. Weight	Habitat
Eastern Grey Kangaroo	*Macropus giganteus*	90.0 kg	Grassland, Forest
Bare-nosed Wombat, Common Wombat	*Vombatus ursinus*	35.0 kg	Forest, Grassland

Swamp Wallaby	*Wallabia bicolor*	20.5 kg	Heath, Forest
Dingo	*Canis familiaris dingo*	20.0 kg	Grassland, Forest
Red-necked Wallaby	*Macropus rufogriseus*	18.6 kg	Forest, Heath
Tasmanian Pademelon	*Thylogale billardierii*	12.0 kg	Forest
Koala	*Phascolarctos cinereus*	11.8 kg	Forest

Medium-size Mammals (1 – 10 kg)

Common Name	Scientific Name	Max. Weight	Habitat
Bridled Nailtail Wallaby	*Onychogalea fraenata*	8.0 kg	Grassland, Forest
Short-beaked Echidna	*Tachyglossus aculeatus*	7.0 kg	Forests, Scrubland
Common Brushtail Possum	*Trichosurus vulpecula*	4.5 kg	Arboreal
Rufous Bettong	*Aepyprymnus rufescens*	3.5 kg	Forest
Bindjulang, Spotted-tail Quoll	*Dasyurus maculatus*	3.5 kg	Forest
Eastern Hare-Wallaby	*Lagorchestes leporides*	3.0 kg (av.)	Grassland
Platypus	*Ornithorhynchus anatinus*	2.5 kg	Rivers, Lakes
Eastern Barred Bandicoot	*Perameles gunnii*	2.0 kg	Grassland
Long-nosed Potoroo	*Potorous tridactylus*	1.8 kg	Forest
Luaner, Eastern Quoll	*Dasyurus viverrinus*	1.4 kg	Grassland, Forest
Southern Brown Bandicoot	*Isoodon obesulus*	1.4 kg	Scrub with firing
Long-nosed Bandicoot	*Parameles nasuta*	1.1 kg	Woodland
Common Ringtail Possum	*Pseudocheirus peregrinus*	1.0 kg	Forest
Grey-headed Flying Fox	*Pteropus poliocephalus*	1.0 kg	Forest

The other 24 mammals in the region were all smaller than 1 kg in maximum weight, and thus would have been of less focus as resources for food or body parts, although Katherine Kirkland (1979 [1845]: 20) talks about obtaining skins of the "flying squirrel, or tuan, from the natives". This animal is the Brush-tailed Phascogale (*Phascogale tapoatafa tapoatafa*), which has a maximum weight of about 300 g.

The main food species within the study area would have been Eastern Grey Kangaroo, Dingo, Rufous Bettong, Eastern Barred Bandicoot, Luaner or Eastern Quoll, and possibly the Bare-nosed Wombat. It is not clear if the Bridled Nailtail Wallaby and the Eastern Hare-Wallaby (now extinct) ranged as far south as the northernmost Tjap Wurrung estates.

Hunting Techniques

The Tjap Wurrung People and the Eastern Maar People more widely used a variety of strategies for hunting. The common method was hunting with spears. If the target, such as the kangaroo, was in open ground, the hunter would approach from behind a screen of branches to use as camouflage while approaching the prey, as James Dawson relates, probably talking about Tjap Wurrung hunters, and certainly about Eastern Maar People:

> The forest kangaroo is generally hunted by stalking, and is killed with the hunting spear. If the kangaroo is grazing on open ground, where there is no cover to conceal the hunter, he makes a circular shield of leafy branches, about two or three feet in diameter, with a small hole in the centre to look through; and, with this in front, he crawls towards the kangaroo while its head is down, remains motionless if it looks up, and, when he has got within throwing distance, transfixes it with a spear which

> he has dragged after him between his toes. The brush and wallaby kangaroos, unlike the foresters, frequent scrubby valleys and patches of brushwood, and are hunted with dogs and spears (Dawson 1881: 89-90).

Dawson continues on the subject of hunting possums:

> The common opossum supplies the aborigines with one of their principal articles of food, and the skin of this animal is indispensable for clothing. It lives in holes in the trunks of trees, and also in the ground and among rocks. Before the occupation of the country by the white man, opossums were only to be found in the large forest trees; and they were so scarce that the hunter required to go in search of them early in the morning, before the dew was off the grass, and track them to the trees, which were then marked and afterwards visited during the day. Now, since the common opossums have become numerous, in consequence of the destruction of animals of prey by the settlers, the hunter does not look for their tracks among the grass, but examines the bark of the trees; and, if recently-made scratches are visible on it, he immediately prepares to swarm up the bole. It may be seventy or one hundred feet in height without a branch, but he ascends without difficulty, by cutting deep notches in the thick bark with his axe. In these notches he inserts his fingers and his toes, and climbs with such skill and care that very few instances of accident are known. On reaching the hole where the opossum has its nest, he introduces a long wand and pokes the opossum till it comes out. He then seizes it by the tail, knocks its head against the tree, and throws it down. Occasionally several opossums occupy one cavity. When it is too deep for the wand to reach them, a hole is cut in the trunk of the tree opposite their nest.
>
> The ring-tailed opossum-so the aborigines say-formerly made its nest in the holes of trees; but, since the common kind has increased so greatly in numbers, they have taken possession of the holes, and compelled the ring-tails to build covered nests in low trees and scrub, somewhat similar to those of the European magpie and squirrel. In corroboration of the change in the habits of the ring-tail opossum, the writer may state that he has observed their nests in both situations, in low shrubs and also in hollow stumps of trees. As a further proof of this, the aborigines have no name for the nest of the ring-tail opossum when it is built in a bush (Dawson 1881: 90).

And regarding the hunting of wombats, Dawson says:

> The wombat, being a nocturnal animal, cannot be caught by daylight; and, being a deep burrower, cannot be got by digging, except where the ground is soft. The burrow sometimes extends a long distance; but, as it is large enough to admit a man, the hunter crawls into it till he reaches the animal-which is harmless—and then taps on the roof to let his friend above ground know its position; a hole is then sunk, and the wombat dragged out. Should the burrow be under a layer of rock, the hunter lies quietly above its mouth, and, when the wombat comes out after sunset to feed, he jumps into the hole and intercepts the frightened animal on its retreat to its den. The flesh of a fat wombat is considered very good to eat. No use is made of the skin (Dawson 1881: 90-91).

James Dawson also talks about the hunting of koalas:

> The bear, or 'sloth bear of Australia,' forms a substantial article of food; and it is easily discovered by the hunter, as it does not hide itself in holes, but sits all day long in the fork of a tree. On a native ascending the tree, it gradually climbs for safety to the top of a branch so slender that it bends with its weight. As the climber dare not venture so far, he cuts the limb, and with it sends the bear to the ground. But, as nature appears to have given tree-climbing animals immunity from injury from falls of even hundreds of feet, the bear immediately scrambles up the nearest tree, unless someone is ready to secure it. No use is made of the skin of the bear (Dawson 1881: 91).

James Dawson also says that there were certain restrictions regarding the eating of certain animals:

> The aborigines have superstitious ideas connected with certain animals. The grey bandicoot belongs to the women, and is killed and eaten by them, but not by the men or children. Boys are not allowed to eat any female quadruped. When they are caught eating a female opossum, they are punished by their parents, as it makes them peevish and discontented. The common bat belongs to the men, who protect it against injury, even to the half-killing of their wives for its sake. The fern owl, or large goatsucker, belongs to the women, and, although a bird of evil omen, creating terror at night by its cry, it is jealously protected by them. If a man kills one, they are as much enraged as if it was one of their children; and will strike him with their long poles. Children are severely punished if they kill and eat the magpie lark, for it makes their hair prematurely white. The shepherd 's companion belongs to both men and women, and is never killed, because it attacks snakes, and gives warning of their approach. The pelican and its eggs are never eaten, but only because they are too strongly flavoured and fishy.
>
> Kokok, the powerful owl, is a bird of evil omen, smells death in the camp, and visits the neighbourhood of a dying person, calling 'Kokok-kokok.' It is therefore hated by men, women, and children. It is of a fierce disposition, vigorously attacking anyone who approaches its nest; and, as it has a strong spur on the carpal joint of the wing, a blow from it is not pleasant. It is also disliked because it kills opossums, flying squirrels, and small animals, the food of the natives. The kokok builds its nest of reeds and sedges in the blackwood tree, and lays three eggs, which are sought after and eaten.
>
> A porcupine ant-eater coming near a dwelling is a sign that someone in it will die before long. The cries of the banksian and white cockatoos announce the approach of friends (Dawson 1881: 52-53)

James Dawson (1881: xlviii-l) provides the following Tjap Wurrung names for "quadrupeds":

Animal	(only specific)
Bandicoot , brown	Bo'o
Bandicoot , banded	Wateun
Bat, common	Hinnahinnitch
Bat, vampire or flying fox	Wutpa chureep
Bear , or sloth	Wirngbuul
Bear, young one on mother' s back	Kuurangdat kuurk

Bull	Buul
Bullock , worker	Muutchelup ka'at
Cat, domestic	Puus
Cattle	Chang birk ('long horns')
Cow, milch	Kowuutch
Dasyure, black and spotted native cat	Work
Dasyure, brown and spotted native cat	Porgormuum
Dasyure, tiger-cat	Neumarng
Dog, domestic	Kuurnuumek
Dog, wild	Wilter
Dog, wild female	Bab wilter
Dog, Barrukills dog	Karlok
Foal	Watchepee gump gump ('young horse')
Horse	Gump gump
Jerboa, or bilboa	Yaakar
Kangaroo, general name	Kuuræ
Kangaroo, old male	Murtæ kuuræ ('big kangaroo')
Kangaroo, young male	Wurtepee kuuræ
Kangaroo, flying doe	Merrin'gar
Kangaroo, red	Kæmun'gor
Kangaroo, brush	Kalarn
Kangaroo, wallaby	Peeræ
Kangaroo, joey	Puupuuwuuk
Kangaroo rat	Potchuuk
Kangaroo mouse	Paruut
Opossum, common	Willæ
Opossum, old male	Pittin yannee
Opossum, old female	Parpoork
Opossum, young, in pouch	Kokok
Opossum, ringtail	Pun'ya
Platypus	Mirwil, or mirpeeal
Porcupine, ant-eater	Yuluwill
Rat, British rat	Paruutch
Rat, rabbit- rat	Kinngnor
Rat, water-rat	Pirppæær
Sheep	Tchekcha ('feed on the ground')
Squirrel	(only specific)
Squirrel, large flying	Poroll
Squirrel, small flying	Tuan
Squirrel, feather-tailed	Gniin guutch
Swine	Peepig
Wombat	Meeam

3.4.3.2 Birds

There are over 275 species of birds (both land and water) in western Victoria (Middleton 1971: 52). Many species of birds were hunted by Aboriginal people.

Table 3-11 Birds in Tjap Wurrung Country (ALA n.d.)

Bird	Scientific Name	Max. Wt	Habitat
Emu	*Dromaius novaehollandiae*	60.0 kg	Plains, scrublands, open woodlands
Australian Bustard	*Ardeotis australis*	14.5 kg	Grasslands, plains, open woodlands
Australian Pelican	*Pelecanus conspicillatus*	13.0 kg	Inland freshwater wetlands, coastal bays and inlets
Black Swan	*Cygnus atratus*	9.5 kg	Lakes, wetlands, coastal bays
Brolga	*Grus rubicunda*	8.7 kg	Freshwater wetlands and swamps
Wedge-tailed Eagle	*Aquila audax*	5.8 kg	Most areas
Musk Duck	*Biziura lobata*	3.1 kg	Open lakes with dense vegetation
Australian Brush-Turkey	*Alectura lathami*	3.0 kg	Wet sclerophyll forests, scrublands
Australian White Ibis	*Threskiornis molucca*	2.5 kg	Freshwater wetlands, swamps, and grasslands
Australian Shelduck	*Tadorna tadornoides*	1.5 kg	Freshwater swamps, lakes, grasslands, open woodlands
Bush Stone-Curlew	*Burhinus grallarius*	1.2 kg	Grassy woodlands and open forests
Superb Lyrebird	*Menura novaehollandiae*	1.1 kg	Wet eucalypt forests
Pacific Black Duck	*Anas superciliosa*	1.1 kg	Freshwater and saltwater wetlands, rivers
Nankeen Night-Heron	*Nycticorax caledonicus*	1.0 kg	Freshwater wetlands and swamps
Australian Wood Duck	*Chenonetta jubata*	1.0 kg	Freshwater wetlands, grasslands, lightly wooded areas
Black Falcon	*Falco subniger*	950 g	Woodland, shrubland and grassland – especially wooded waterways
Sulphur-crested Cockatoo	*Cacatua galerita*	950 g	Wooded areas near water
Red-tailed Black Cockatoo	*Calyptorhynchus banksii*	920 g	Open forests and woodlands, grasslands
Yellow-tailed Black Cockatoo	*Calyptorhynchus funereus*	900 g	Wet forests and woodlands
Chestnut Teal	*Anas castanea*	816 g	Freshwater and saltwater wetlands
Grey Teal	*Anas gracilis*	670 g	Freshwater and saltwater wetlands
White-faced Heron	*Egretta novaehollandiae*	600 g	Wetlands, swamps, coastal bays and inlets
Glossy Black-Cockatoo	*Calyptorhynchus lathami*	500 g	Woodlands and open forests
Major Mitchell's Cockatoo	*Lophochroa leadbeateri*	450 g	Dry inland areas along watercourses
Galah	*Eolophus roseicapilla*	430 g	Most areas except forested mountain areas
Masked Lapwing	*Vanellus miles*	412 g	Wetlands
Kookaburra	*Dacelo novaeguineae*	380 g	Open woodlands and forests
Australian Magpie	*Gymnorhina tibicen*	360 g	Open woodlands, grasslands near trees
Australasian Grebe	*Tachybaptus novaehollandiae*	240 g	Freshwater wetlands
Japanese Snipe	*Gallinago hardwickii*	230 g	Shallow freshwater wetlands, grasslands
Brown Quail	*Coturnix ypsilophora*	140 g	Wetlands and grasslands
Australian Painted Snipe	*Rostratula australis*	130 g	Shallow freshwater wetlands, grasslands with thick cover
Stubble Quail	*Coturnix pectoralis*	125 g	Grasslands and shrublands with dense ground vegetation
Buff-banded Rail	*Hypotaenidia philippensis*	52 g	Open lakes with dense vegetation
King Quail	*Excalfactoria chinensis*	48 g	Low, dense vegetation, heathland

Of these easily the most important was the emu, which was widespread in Eastern Maar Country and in the current Study Area. It was hunted for its meat and its eggs, and its feathers were used for ornamentation. Other birds hunted by Aboriginal people include swans, geese, ducks, plovers, dotterels, ibis, spoonbills, herons and oyster catchers. Ducks, swans, and geese were especially plentiful on the marshes, swamps and lagoons in the study area. Bush-Stone-curlews would have inhabited the grasslands and forested areas. Other birds would have included parrots: for Katherine Kirkland parrot pie was a great favourite. Eggs were of course seasonal, and were available to be harvested during the Eastern Maar seasons of *Larneuk* and *Petyan*, from August through mid-November.

James Dawson (1881: li-lvi) provides the following Tjap Wurrung names for birds:

Bird, general term	Yowwir
Avoset	Akarn akarn
Bittern	Karwor
Bower or satin-bird	Loreetch
Brush turkey, or Iowan	Laahwin
Bunting, large	Chilpinjir (‘sing for summer’)
Bunting, small	Chirpkærnmirnk (‘bright eye’)
Bustard, or wild turkey	Taariwill
Cock, domestic fowl	Kuurn kuurn kullat (‘call for daylight’)
Cockatoo, common	Chinupp
Cockatoo, banksian	Wirran
Cockatoo, black with red feathers in tail	Bonbonturong (‘eater of she-oak cones’)
Cockatoo, long-billed	Kutchukka
Coot	Kibuul
Cormorant, large	Yuungar
Cormorant, small	Tæræbillæguurk (‘white breast’)
Crane, native companion	Kuutchon
Creeper, white-throated	—
Crow, common	Wææ (‘its cry’)
Crow, with white eye	Tirrtu
Curlew	Kuuriwirp (‘its cry’)
Duck	(only specific)
Duck, grey duck or drake	Gnarræ
Duck, mountain or sheldrake	Pitchan’gor
Duck, musk duck	Gnuunyawil
Duck, teal	Pirndær
Duck, wood duck	Peeup peeup (‘its cry’)
Duck, widgeon	Wirrinourt
Duck, speckled duck	Barræmakuurk
Eagle	Pirrpil
Egret, or white heron	Gnummakeek yowwer (‘white man’s meat’)
Emu	Kowwirr
Flycatcher, white-fronted	—
Gannet	Bukkuuruum (‘dive into water’)
Goose	(only specific)
Goose, grey	Kurral
Goose, tree goose	Gnaak gnaak (‘its cry’)
Grebe, great -crested	Kæærn

Grebe, small dobchick	Kuurmkuurmeetch
Gull, large	Tarook
Gull, small	Tarook
Hawk	(only specific)
Hawk, kestrel, large	Charrak
Hawk, kestrel, small	Kuyong kuyong (‘its cry’)
Hawk, falcon	Warrall
Hawk, swamp	Chuurk
Hawk, white	Buukannæ
Hawk, kite	Chukkchukk bo'ang (‘eater of carrion’)
Hawk, black-shouldered kite	Millamarr
Hen, domestic	Kuurn kuurn kulleitch (‘call for daylight’)
Heron, common	Kuukup wuuchu
Heron, white-necked	Kuukæbang'gar (‘old basket’)
Heron, nankeen or night heron	Kuukæ kalwar (‘grandmother of herons’)
Ibis	Kuum kuum bulu kuurk (‘relation of another’)
Jay	Muunyukill
Kingfisher, sacred	Bunbun yuchuuk (‘catch fish’)
Lapwing, large	Pirrit pirrit (‘its cry’)
Lapwing, small	Munjarra kuurk (‘relative of another’)
Lark, or pipit, native	Tirteen charuuk
Laughing jackass, large	Kuurnk kuurnk (‘its cry’)
Laughing jackass, small	Kaan billæguurk
Lyre bird	Buuln buuln (‘its cry’)
Magpie, or organ-bird	Kuuruuk (‘its cry’)
Magpie, black	Killirn (‘its cry’)
Magpie lark	Chirmp chirmp (‘its cry’)
Minah, or soldier-bird	Pirndeen
Osprey	Wo’ok
Owl	(only specific)
Owl, common	Warroma will
Owl, barn or screetch	Bokanng
Owl, fern or goatsucker	Yeratta kuurk (‘woman’s owl’)
Owl, kuurku	Peepniyaa
Owl, little	Muuluup
Owl, powerful	Yuuitch pilap
Parraqueet	(only specific)
Parraqueet, blue mountain	Kulling’arr, or Nænett
Parraqueet, crested	Yatchukee yowirr
Parraqueet, crimson-fronted	Yuukap
Parraqueet, grass	Gnæno’gnor
Parraqueet, swamp	Yuulu yuulo uurakk
Parraqueet, lorry	Porkill
Parraqueet, leek	—
Parraqueet, rose hill	Kueetch kueetch (‘its cry’)
Parraqueet, shell	Muuluumbær
Parrot	(only specific)
Parrot, gang gang	Mirrann

Parrot, king lory	Wærtuuk tuurong
Pelican	Putchang al
Pigeon, bronzewing	Ta'app
Pigeon, small	Chapallin kuurk ('related to another')
Pigeon, crested	Uurææp
Quail, large	Puuron'gii
Quail, small	Yuugib
Quail, painted	Nib nib
Reed fauvette, or sedgebird	Kuulin kuulin chark ('hidden in the reeds')
Robin, with white spot on brow	Chimp kirk
Robin, with white spot before eyes	Pilp gnuuneeart
Robin, yellow-breasted	—
Robin, grey	Chaluunwær
Sandpiper, large	Dipeet dipeet ('its cry')
Sandpiper, small	Pirrtuup
Seapie, or oyster-catcher	Gnaakurn gnaakurn ('look out')
Shepherd's companion, or black fantail flycatcher	Cherrup cherrup
Shrike	Yaya kuula
Snipe, large	Chimkalk
Snipe, painted	Puulokor
Spoonbill	Kuukæ kuunawar ('grandmother of swan')
Summer bird, black-faced	—
Swan	Kuunawarr
Swallow, common	Weewheetch ('its cry')
Swallow, bottle nest	Yuulowil kuurk
Swallow, wood martin	La'arp
Swallow, sand martin	(not known)
Swift, or black martin	Wirnchaller
Tern, or sea swallow	Taarook
Thrush	Wuurbaruuk
Titmouse	Wirtuuk
Titmouse, frontal shrike tit	—
Wagtail, flycatcher	Yellpillup
Water-hen	Kuyapuul
Wattle-bird	Kannee yuulong ('peck at tree')
Whip-bird	(not known)
Wren, emu-tailed	Tirnwitt
Wren, blue-headed	Cheecheer ('its cry')
Wren, slate-coloured *	Teupeetch teupeetch
Wren, yellow-rumped	—
Wren, firetail	Woreewill kuurk
Wryneck	Tirn tirn ('its cry')

* The wren which builds a false nest on the top of the true one

[Dawson's note:] It will be seen that, in the case of the crane, crow, curlew, duck (mountain and wood), goose (large and small), kestrel hawk, swamp

> hawk, lapwing, laughing jackass, lyre-bird, magpie, black and lark magpie, native companion, owl, parraqueet, pigeon, quail, sandpiper, sea-pie, shepherd's companion, swallow, blue-headed and slate-coloured wren, wryneck, the foal, horse, ring-tail opossum, and flying squirrel, the native names have been applied to the various animals in imitation of the peculiar sounds they utter; the only exception being that, in the case of the horse (which is not indigenous), the epithet gump gump is used to signify the sound which is produced by the impact of its hoof upon the sward in the bush. I have called attention to this fact, because it seems to lend some countenance to the onomatopoetic theory of the origin of speech; or, in other words, to the highly plausible assumption that the latter, like writing, was suggested by the instinct of imitation. I am aware that this is ridiculed by no less distinguished an authority than Professor Max Muller as the "bow-wow" theory; but I think the facts are against him.

Hunting Techniques

Easily the most impressive type of hunting practiced by the Eastern Maar People was the large communal emu drive conducted annually (?) near Caramut, as has been related in Section 3.3.2.2.

George Augustus Robinson relates methods of bird-catching in Eastern Maar Country (Gunditjmara):

> The most curious implement was a snare and a shield for catching turkeys. The snare was the same I had seen before, only larger. It was a long light stick 12 feet in length with a loop at the end. The stick was ½ inch in diameter and in two parts joined together and tied with a slip of kangaroo skin and two small wedges drove in to tighten it. This instrument is called but.ky.er.
>
> The shield is curiously made of boughs and sufficiently large to cover the upper part of the body. The boughs are worked from the centre. The outer were of tea tree; the inner gum boughs. Two holes were left for peep holes to look through and a loop to put over the head. And it was suspended thus from the neck. And to keep it steady, the man held it fast between his teeth. The legs of the sportsman are all that are seen. This instrument or shield is called cur.re.bit.mart screened or secreted behind this shield of boughs are leaves with the snare held in his right hand, the sportsman proceeds to snare the birds, turkey. These birds in their habit appear very stupid (George Augustus Robinson, journal entry for 25 April 1841, in Clark, ed. 1998a: 147-148).

A little later, in Jardwadjali Country near the boundary with Tjap Wurrung and Gunditjmara lands, Robinson came across more bird snares:

> I saw native spears and a bird snare at Edgar's. The loop of the snare was made of twisted rush and 12 inches long. Used for catching turkeys. Of a similar description as those I got from the natives on the Hopkins, only that this latter was a small one and used for smaller birds . . .
>
> This creek is a favorite resort of the natives in summer season for catching birds. Passed several waterholes where the natives had been catching birds. This creek contains, like most others, a chain of holes and in dry weather few contain water.

> The holes with water are then selected by the natives for catching birds. The method resorted to is by sticking boughs in the bank on the edge of the pond, the boughs overhanging the water . . . This is done to prevent the birds getting at the water. One end of the hole is left open and at this place two sticks, bent in cimicircle [sic] or form of a segment of a circle, is then placed in front of this opening – for the birds to perch on. The bird catcher then builds himself a hut of boughs of the smallest size in which he can crouch; the one I saw was two feet by three. The sportsman then crouches in and watches the bird perch on the stick. When he snares them with his [blank] a stick with a noose. This mode of catching birds indicated much ingenuity and I should think patience also (George Augustus Robinson, journal entry for 9 May 1841, in Clark, ed. 1998a: 194-195).

Birds were also caught by placing nets across creeks.

James Dawson recounts various things he was told by Tjap Wurrung people regarding birds:

> The emu, the turkey bustard, and the gigantic crane are stalked by means of a screen made of a bunch of plants held in front of the hunter . . . The hunter, concealed from view behind this screen, creeps up towards the game, and carries exposed to view as a lure a blue-headed wren, which is tied alive to the point of a long wand, and made to flutter. When the game approaches to seize the bait, it is killed with a waddy; or it is caught with a noose fixed on the point of the wand, which the hunter slips over its head while it is trying to catch the wren.
>
> The turkey bustard is sometimes killed without stalking, as it has a habit, when anyone approaches, of lying down and concealing itself among long grass, like the grouse and partridge. In this way the hunter gets near enough to kill it with a waddy. In the breeding season no respect is paid to birds hatching. When a turkey's nest is discovered, the great object of the hunter is to secure the mother as well as the eggs; and, for that purpose, he suspends a limb of a tree across the nest, supported at one end with a short stick, to which a long string is attached. This string reaches to a hole in the ground, which the hunter digs, and in which he sits, covered with bushes and dry grass. When the turkey returns to her nest, and seats herself in it, the string is pulled, and she is crushed by the log.
>
> Emus are frequently run down with dogs. They are sometimes trapped, during the dry weather, by digging a hole in a nearly dried-up swamp, where the birds are in the habit of drinking. The hole is about twenty feet in diameter, and made very muddy and soft, with a little water in the centre. When the birds wade in to drink, they get bogged, and are easily captured. If not actually smothered, they are very much exhausted with struggling. This trap, if at a distance from the camp, is visited every two or three days to remove the birds. The feathers are highly prized for making ornaments, the fat for anointing the body and hair, and the flesh for food. Emu is considered the greatest delicacy. It is eaten, however, only by the men and grey-haired women; young women and children are not allowed to partake of it. No reason is given for this rule. When the time for the emu to lay her eggs has arrived—which is marked, as has been elsewhere observed, by the star Canopus appearing a little above the horizon in the east at daybreak-every member of a tribe must return home, and no eggs must be taken from the grounds of a neighbouring tribe. If any person is caught trespassing and stealing the eggs, he or she can be put to death on

> the spot . . . The first egg of the emu is called 'purtæ wuuchuup,' meaning 'youngest,' because it is not only the smallest but the last to hatch, and is always at the bottom of the nest, covered by the others. The eggs are considered a great treat, and are cooked in hot ashes.
>
> Swans are killed in marshes, by the hunter wading among the tall reeds and sedges, and knocking the birds on the head with a waddy. When the nullore blossoms, the swans commence laying. The eggs are generally eaten raw, especially by the men while wading in the cold swamps, as they believe an uncooked egg keeps them warm. The penalty for robbing a swan's nest in a marsh belonging to a neighbouring tribe is a severe beating. Ducks and the smaller waterfowl are captured among the reeds and sedges with a noose on the point of a long wand. The hunter approaches them under the concealment of a bunch of leaves, and slips the noose over their heads, and draws them towards him quietly, so as not to disturb the others.
>
> In summer, when the long grass in the marshes is dry enough to burn, it is set on fire in order to attract birds in search of food, which is exposed by the destruction of the cover; and, as the smoke makes them stupid, even the wary crow is captured when hungry. Sometimes a waterhole is surrounded with a brush fence, in which an opening is left. Near this opening a small bower is made, in which the hunter sits; and, when the birds come to drink, he nooses them while passing. Pigeons are caught in great numbers in this way; and, as they come regularly to drink at sunset, the hunter has not long to wait for them. The quail is captured during the breeding season only, for then it is readily attracted by imitating the call of its mate; and the hunter, concealed by a bush shield and provided with the long wand and noose, has no difficulty in catching it among the long grass. Small birds are killed with a long, sharp-pointed wand by boys, who lie in thickets and attract them by imitating their cries. When a bird alights on a bush above their heads, they gently push up the wand and suddenly transfix the animal (Dawson 1881: 91-93).

3.4.3.3 Reptiles Amphibians, and Insects

A variety of snakes, lizards, and amphibians would have lived in the current study area. Eastern Brown Snakes, Tiger Snakes, and Copperheads would have been the main snake species (and still are), and the Blue-tongue Lizard would have been the main large lizard. A variety of frogs would have inhabited swamps and marshlands.

Grubs were also a food resource of Victorian Aboriginal peoples:

> They are also fond of a large grub found generally in the cherry and honeysuckle tree: they can tell, by knocking the tree with a stick, if any grubs are in it. When they knock the tree, they put their ear close to listen, and they open it with a tomahawk at the very spot the grubs are to be found. It is a large white grub, with a black head. I know a gentleman who was tempted to taste them from seeing the natives enjoy them so much, and he said they were very good (Kirkland 1979 [1845]: 20).

"Manna" was another delicacy:

> Manna falls very abundantly from the gum-trees at certain seasons of the year. I think it was in March I gathered some. It is very good, and tastes like almond biscuits. It is only to be procured early in the morning, as it disappears soon after sunrise (Kirkland 1979 [1845]: 20).

"Manna" is more prosaically called lerp (from the Wemba-wemba word *laap*); they are the sugary secretions of insects used to create a shelter for them to live in, on gum leaves. They are small but plentiful in the autumn months.

James Dawson (1881: lvii-lviii) provides the following Tjap Wurrung names for reptiles:

Reptile	(only specific)
Bunyeep	Puneep
Frog, large green	Wo'ork (‘good-night, its cry)
Frog, small green	Wærwær (‘its cry’)
Frog, small black	Tom tom (‘its cry’)
Frog, burrowing frog	Wokok (‘its cry’)
Frog, long-legged	Wirwirr (‘its cry’)
Frog, toad	Puuputtyuuk (‘its cry’)
Iguana, large	Wallap
Iguana, lazy, with blue tongue	Yuurkuurn
Lizzard, general term	Muurndarnk
Lizzard, frilled	Wirræneurn
Lizzard, prickly	Wirrakuutch
Lizzard, middle size	Muurndarnk
Lizzard, black-headed	Tuurkpuurn
Lizzard, smallest size	Turuchall
Snake, general term	Kuurnwill
Snake,* banded	Kuurnwill
Snake, black	Wuin wuin
Snake,* black, with white cheeks	Wuin wuin gnaluuk
Snake, boa	Chalann
Snake, short-tailed	Gnullin gnullin
Snake,* tiger-snake	Kuurnwill
Snake, green—newly skinned	Paamok
Snake, fawn-coloured	Wuin wuin
Tadpole	Yeem
Tortoise	Tuukuurwill (‘turn mud’)

* Venomous

And James Dawson (1881: lxi-lxiii) provides the following Tjap Wurrung names for insects:

Insects, small	Gneun gneunduwan
Ant	(only specific)
Ant, bright blue and solitary	Tirræwitchin
Ant, bull-dog	Wuuluukii
Ant, jumping ant	Pirk pirk (‘jump jump’)
Ant, sugar ant	Teulong'or
Ant, white ant	Kulkeetch
Ant, small, with strong smell	Gneeko
Ant which builds large nest like a chimney	Pirtor
Bee, honey-bee	(no name)
Bee, native	Moronn

Beetle, general name	Teunkeep
Beetle, burying beetle	Tæræ witchin
Beetle, jumping beetle	Chuurteen
Beetle , water beetle	Paapee challuup
Butterfly, all kinds	Ballumbar
Caterpillar	Kukil
Caterpillar, hairy	Tirn'gibap beng (‘rough skin’)
Centipede	Teering bang'arrak (‘many hands’)
Chrysalis, or pupa	Puuronbeetch
Cicada, large green	Kalgall
Cicada, small green	Kalgall
Cicada, large black	Kalgall
Cicada, small black	Kalgall
Cricket	Tarrondal
Earwig	Kuurtuuk kuurtuuk wuurmbuul (‘enter ear’)
Flea, not indigenous	Flea
Fluke	(not known)
Fly	(only specific)
Fly, blowfly	Pitchik
Fly, cleg or March fly	Muuron
Fly, large March fly	Maam
Fly, dragon fly, bee-eater	Muur muur aa (‘tremble’)
Fly, dragon fly, common	Nalukanna kuurææ (‘nose like kangaroo’)
Fly, hornet	Kuukæ wuul wuul (‘grandmother of mason fly’)
Fly, house fly	Minnik
Fly, mason fly	Wuul wuul
Fly, mantis	Kærnduuk peep gniya gnaa (‘digger of grubs for the fern owl’)
Fly, causing blight in the eye	Nimpnimp kork (‘sting the eye’)
Grasshopper	Gneear gneear
Grub in acacia tree	Gnaluun gnuum tuulnn
Grub in blackwood tree	Muutchangar
Grub in banksia tree	Puutchuum
Grub in eucalyptus tree	Puuron
Grub, very large, in eucalyptus tree	Muurkarm
Grub which forms fairy rings	Pitchoitch
Leech, common	Chuulong
Leech, yellow	Challeep mun'girr
Louse, black	Muunyu
Louse, white, imported	(no name)
Louse on snake and lizzards	Muunyu
Maggot	Bitchik
Mosquito	Muurukar
Moth, largest size	Nullamuum tuuliin (‘moth of acacia tree’)
Moth, death's-head	Puuroitch wirrembuul (‘dark ear’)
Piper, with sting	Kuukæ barran (‘mother of pipers’)
Scorpion	Wirann
Snail	Chuulim gnun'gær
Spider, general term	Wupkueaa pueetmuuk (‘bad smell’)
Spider, tarantula	Muurnakureek

Spider, goes into ear	Kuurta kuurta kuurk (‘enter the ear’)
Soldier bug, red	Nimpor
Tick on native animals	Muun'yu
Wood louse or slater	(no name, as it was imported)
Worm, earth worm	Cho'or
Worm in animals	Kuulær
Worm, glow worm	Lanjerr

Some of these can be identified as to species, but many cannot—there are over 80 species of dragonfly in Victoria, for example.

3.4.3.4 Freshwater fish, mollusks, and crustaceans

Various freshwater fish have been attested in Eastern Maar Country and were an important part of the subsistence economy. They include the River Blackfish (*Gadopsis marmoratus*), which reaches 60 cm in length and 5 kg in weight, and the Tupong, or Congolli (*Pseudaphritis urvillii*), which grows to a maximum of 36 cm. The Tupong migrates to coastal estuaries between late April and August to breed. Smaller fish include species of the *Galaxias* genus (generally 6-12 cm), which like the eels were at the peak of their migration from late January to late March. Three species in particular are documented in Tjap Wurrung Country. Common Galaxias (*Galaxias maculatus*) and Obscure Galaxias (*Galaxias oliros*) are widespread, and *Galaxias rostratus* has been documented in Lake Bolac (ALA n.d.). Three other species have been documented in other parts of Eastern Maar Country or nearby. It was likely a species of Galaxias that Thomas Mitchell found in a woman’s bag (see Section 3.4.6.2).

The Balonne Freshwater Mussel (*Velesunio ambiguus*) has been documented in the Tjap Wurrung Country and very near the current Study Area. This mollusk was an important food source for Aboriginal people and was endemic in rivers and streams throughout Victoria. For example, along Mount Emu Creek near Trawalla (in northern Wadawurrung country), Katherine Kirkland observed:

> In some of the fresh-water ponds there are immense quantities of mussels, which the native women dive for. We often saw numbers of shells lying in heaps where the blacks had been eating them (Kirkland 1979 [1845]: 19).

This almost certainly refers to Balonne Freshwater Mussels. They are medium-sized mussels, growing to a maximum of 12 cm in length, but more commonly they are about 4 cm. These mussels were probably not a staple food resource, since they generally would have provided less than 1 g of food each and required an expenditure of energy to collect. However, they would have been a good dietary supplement, and they would have been a good food reserve in hot, dry summer months. Buried in damp ground they can survive for over a year, and Aboriginal people were observed by early European settlers digging for them in dry creek beds. An Aboriginal cache of freshwater mussels has been found: it consisted of over 360 neatly arranged shells, buried at a depth of 1 m (Anonymous 2008: 2). Freshwater mussels are able to tolerate dry conditions for long periods, and so they could have been carried to other campsites away from their source. Conceivably they could have been traded to groups who did not have access to them. The shells of freshwater mussels were used for tools, as scrapers for animal skins or wood, and also, perhaps, for fashioning fishhooks (Anonymous 2008: 2).

George Augustus Robinson described mussels near the headwaters of the Wimmera River:

> Passed numerous old camps of the natives and cooking or baking mounds, the muscle [mussel] shell lay strewed about. This river was a favorite resort of the natives. The large water holes afforded them mussels and other food and the

> bulrush was abundant, the root of which the natives eat. The gum trees on the margin of the river are some of them large in the trunk, seven and eight feet, but are not tall – in general 20 to 30 feet to where they branch off . . . The whole of the country travelled today is covered with open forest" (George Augustus Robinson, journal entry for 30 July 1841, in Clark 1998a: 337).

Apart from fish and shellfish, an important source of freshwater food was the Yabby (*Cherax destructor*) which has also been widely documented in Tjap Wurrung waterways. Yabbies grow up to 25 cm long, and like the mussels can survive in dry conditions, by digging burrows into the creek bank and hiding in them until water returns to the creek.

James Dawson (1881: lix-lx) provides the following Tjap Wurrung names for fish and crustacea. The names include some salt water species, the words for which were likely borrowed from their Eastern Maar coastal neighbours:

Fish, saltwater, general term	Yarrar
Fish, freshwater, general term	Mo'om
Blackfish, freshwater	Chuulim
Clamshell fish	(no name)
Crab, saltwater	Kalweetch
Crab, freshwater	Yaapeetch
Crawfish	Yarram
Cuttlefish, or octopus	Paar munya ('many hands')
Eel, freshwater	Puunyart
Eel, lamprey	(not known)
Little fish in fresh water	Tuurt kuurt
Little fish in fresh water	Yuchuuk
Mussel, freshwater	Challuup
Mussel, saltwater	Mæhmæt
Mutton-fish, large	Tullik
Mutton-fish, small	Munjir
Periwinkle	Gnumatt
Seal	Kuurn muurn
Shark	Tallang irræ
Shrimp	Yapeetch
Sting ray	Kunnæ wilkuurk
Trout, colonial	Yerrar
Whale	Kounterbuul

3.4.3.5 Eels

Eels were a major Aboriginal source of food in Victoria south of the Great Dividing Range. Two species occur: the Southern Shortfin Eel (*Anguilla australis*) and the Longfin Eel (*Anguilla reinhardtii*). The Longfin Eel has not been attested recently in western Victoria, although William Buckley, writing about his experiences in Wadawurrung country, describes it accurately, saying that it was not as numerous as the smaller [Southern Shortfin] eel (Morgan 1852 [Sayers, ed. 1967]: 58). The Longfin Eel does not seem to have been present in Tjap Wurrung or Eastern Maar Country. The Southern Shortfin Eel, however, has been attested widely throughout the streams and lakes of Tjap Wurrung Country and throughout Eastern Maar Country. The Southern Shortfin Eel was called *Puunyart* in Tjap Wurrung and *Kuyang* or *Kooyang* by other Eastern Maar

People (Dawson 1881: lix). There were several major eeling localities across Aboriginal Victoria, at which large numbers of people would gather to harvest eels during their mass migrations in the late summer (late January to late March). At this time the eels reached their highest meat-to-weight ratio (Sullivan 1981:5). The eeling season was a time of great celebration, when large groups (multi-clan and even various language groups) could get together for eeling as well as for important ceremonial purposes. Perhaps the most important single location was Lake Bolac, in Tjap Wurrung Country, but there were others such as Condah Swamp, Lake Condah, and Tyrendarra (all on the Darlot Creek), Gorrie Swamp on the Eumeralla River (these are all in Gunditjmara Country), and near Mount William (in Tjap Wurrung Country). In these and other locations the Eastern Maar People have practiced aquaculture for several thousand years. James Dawson gave a detailed description of eeling at Lake Boloke (Lake Bolac:

> Eels are prized by the aborigines as an article of food above all other fish. They are captured in great numbers by building stone barriers across rapid streams, and diverting the current through an opening into a funnel-mouthed basket pipe, three or four feet long, two inches in diameter, and closed at the lower end. When the streams extend over the marshes in time of flood, clay embankments, two to three feet high, and sometimes three to four hundred yards in length, are built across them, and the current is confined to narrow openings in which the pipe baskets are placed. The eels, proceeding down the stream in the beginning of the winter floods, go headforemost into the pipes, and do not attempt to turn back. Lake Boloke is the most celebrated place in the Western District for the fine quality and abundance of its eels; and, when the autumn rains induce these fish to leave the lake and to go down the river to the sea, the aborigines gather there from great distances. Each tribe has allotted to it a portion of the stream, now known as the Salt Creek; and the usual stone barrier is built by each family, with the eel basket in the opening. Large numbers are caught during the fishing season. For a month or two the banks of the Salt Creek presented the appearance of a village all the way from Tuureen Tuureen, the outlet of the lake, to its junction with the Hopkins [a straight-line distance of 67 km]. The Boloke tribe claims the country round the lake, and both sides of the river, as far down as Hexham, and consequently has the exclusive right to the fish. No other tribe can catch them without permission, which is generally granted, except to unfriendly tribes from a distance, whose attempts to take the eels by force have often led to quarrels and bloodshed. Spearing eels in marshes and muddy ponds is a favourite amusement. Armed with two eel-spears, the fisher wades about, sometimes in water up to his waist, probing the weeds and mud, at the same time gently feeling with his toes. On discovering an eel under his feet, he transfixes it with one spear pushed between his toes, and then with another, and by twisting both together he prevents its escape, and raises it to the surface. He then crushes its head with his teeth, and strings it on a kangaroo sinew tied to his waist. In instances where old men have very few or bad teeth, it is amusing to see them worrying the heads, while the tails of the eels are wriggling and twisting round their necks. If the marsh is shallow, the eel can be seen swimming in the water. It is followed to its hole in the ground. The fisher probes the spot with an eel-spear, and, feeling that he has transfixed the eel, he treads in with his heel a round portion of the mud and weeds, lifts the sod to the surface of the water, and removes the eel. Sometimes two spears are needed to secure the fish. In summer, when the swamps are quite dry on the surface, but moist underneath, eels are discovered by their air-holes, and are dug up (Dawson 1881: 94-95).

An excellent description of the Lake Condah eel-trapping works was made by the surveyor Alexander Ingram and Police Magistrate and antiquarian Reynell Eveleigh Johns in 1893:

> Aboriginal Fishery, Lake Condah
> At the south western point of Lake Condah, near where it overflows down the valley of Darlot's Creek, along the margin of the rough stony ground until it joins the permanent stream at the Condah Mission station, is situated one of the largest and most remarkable aboriginal fisheries in the western district of Victoria.
>
> The position has been very well chosen, as the small bay shown on accompanying plan is the lowest point on the western side of the Lake. Owing to the peculiar formation (open trap scoriae) along the eastern, southern, and part of the western sides of the Lake the water sinks very rapidly and becomes very low during summer months but as it receives the drainage of a large extent of Country the water rises very quickly during winter, and first overflows onto the scoriae at the point named, which has been facilitated to some extent by the channels formed by the aborigines for trapping eels trout &c. These channels have been made by removing loose stones and portions of the more solid rocks between the ridges and lowest places, also low wing walls to concentrate the streams. At suitable places are erected stone barricades with timber built in so as to form openings of from 1 to 2 feet wide, behind these openings were secured, long narrow bag nets made of strong rushes, the mouths of these nets were from 2 to 3 feet wide secured to a hoop, these were of various lengths some 10 feet long the principal portion being about 4 or 5 inches in diameter. The smallest ends were made to open so that the eels &c could be easily extracted.
>
> There are also numerous smaller fisheries constructed in suitable places in small bays and outlets where the water sinks into the trap scoriae down along the Margin of the Valley of Darlot's Creek. Across this valley at suitable places were erected large barricades, constructed with strong forked stakes, horizontal spars, and vertical stakes strengthened with piles of stones, openings were also left in these.
>
> Many of the aborigines residing at the Lake Condah Mission Station still construct similar barricades for trapping purposes, and large quantities of fish are recovered every year during winter, more particularly since an outlet drain has been made in connection with the drainage of Condah Swamp (Alexander Ingram and Reynell Eveleigh Johns, 1893, in Richards 2011: 68-69, 74).

Thomas Richards, who has published the letter by Ingram and Johns, as well as detailed maps surveyed by Ingram, has commented:

> [These maps show] the only historic map of such features known to exist, and it is accompanied by a detailed explanatory commentary on their functioning as a system. Much of the value of the map and text lies in their unique creation on the basis of observation in combination with information obtained from traditional owners. The documents provide invaluable information on the specific operation of features at the Lake Condah outlet, on the operation of such water control and eel management systems in general, and crucial evidence regarding the economic basis of transegalitarian features in the ethnographic Gunditjmara (Richards 2011: 65).

A half a century earlier, the Aboriginal Protector George Augustus Robinson had been travelling around western Victoria, meeting Aboriginal people and exploring their Country. In northwestern Tjap Wurrung Country, near Mount William northwest of Willaura, he made the following observations:

> At the confluence of this creek [Mason Creek?] with the marsh observed an immense piece of ground trenched and banked, resembling the work of civilized man but which on inspection I found to be the work of the Aboriginal natives, purposely constructed for catching eels. A specimen of art of the same extent I had not before seen and therefore required some time to inspect it . . . These trenches are hundreds of yards in length. I measured at one place in one continuous trepple [sic] line for the distance of 500 yards. These treble water courses led to other ramified and extensive trenches of a most tortuous form. An area of at least 15 acres was thus tracd [sic] over . . . These works must have been executed at great cost of labor to these rude people the only means of artificial power being the lever, the application and inventive of which force being necessity. This lever is a stick chisel, sharpened at one end, by which force they threw up clods of soil and thus formed the trenches, smoothing the water channel with their hands. The soil displaced went to form the embankment.
> . . .
> The plan or design of these ramifications was extremely perplexing and I found it difficult to commit it [to] paper, in the way I could have wished, all its varied form and curious curvilinear windings and angles of every size and shape and parallels, &c. At intervals small apertures left and where they placed their *arabines* or eel pots. These gaps were supported by pieces of the bark of trees and sticks. In single measurement there must have been some thousands of yards of this trenching and banking. The whole of the water from the mountain rivulet is made to pass through this trenching ere it reaches the marsh; it is hardly possible for a single fish to escape. I observed at short distance higher up, minor trenching was done through which part of the water ran in its course to the more extensive works. Some of the banks were two feet in height, the most of them a foot and the hollow a foot deep by 10 or 11 inches wide. The main branches were wider (George Augustus Robinson, journal entry for 9 July 1841, in Clark, ed. 1998a: 308).

Elsewhere, Robinson commented on the "eel pots", in this case ones held at holes in a large woven weir on the Moyne River north of Port Fairy, in the estate of the "*Yowcumillims*" (Yowen gundidj) clan of the Peek Whurrong People:

> He [a member of the Yowen gundidj clan] also took me to a very fine and large weir and went through, with several other of the natives, the process of taking eels and the particular spot where he himself stood and took them. I measured this weir with a tape, 200 feet; 5 feet high. It was turned back at each end and two or three holes in the middle was left for placing the eel pots as also one at each end. The eel pots are placed over the holes and the fisher stands behind the *yere.roc* or weir and lays hold of the small end of the *arrabine* or eel pot. And when the eel makes its appearance he bites it on the head and puts it on the *lingeer* or small stick with a knob at the end . . . or, if near the bank, he throws them out. The fishing is carried on in the rainy season. *Arrabine* or eel pot made of bark or plaited rushes with a willow round mouth and having a small end to prevent the eel from rappidly [sic] getting away (George Augustus Robinson, journal entry for 30 April 1841, in Clark 1998a: 162-163).

Continuing his narrative of the eeling earthworks near Mount William, Robinson said:

> Around these entrenchments was a number of large ovens or mounds for baking, there were at least a dozen in the immediate neighbourhood. They were the largest I had seen: the one I measured was 31 yards long, two yards high, and 19 yards broad. They roast their food on these places. Numerous fragments of quartz which they had used for sharpening and preparing their implements lay strewed around (George Augustus Robinson, journal entry for 9 July 1841, in Clark, ed. 1998a: 308).

Mounds such as these are associated with other major eeling centers (Mirraewuae Swamp, Lake Condah). They have been variously interpreted as ovens, burial mounds, and house mounds. Near the Hopkins River on the boundary of the Peek Whurrong and Kirrae Whurrung Peoples, Robinson observed:

> . . . came to an old sheep station near to which we saw a large mound of earth at least four feet high and 10 feet long, five wide. My native companions said it was a black man's house, a large one like white man's house. There were pieces of some sticks among the earth, about three inch diameter, and it appeared that the whole had been burnt down. A short distance from this, about 200 yards, was the remains of another hut of a similar description. Crossed a creek connecting with the Hopkins. Here I observed a large were [weir] at least 100 yards in length and though the first I had seen, I was assured by its structure and its situation before I reached it that it was the work of the Aboriginal natives. I called to Pevay, my VDL [van Diemen's Land] attendant, who had passed it with one of the Tcharcote natives and pointed it out to him. He evinced surprise at it and the native said it was made by black fellows for catching eels when the big water came and was by them called *yere.roc*. He said they got plenty eels and then showed us how they did it by biting their heads and throwing them on shore. This were [weir] was made of stout sticks, from 2-3 inches thick drove in to the ground and vertically fixed, and other sticks interlaced in an horizontal manner. A hole is left in the centre and a long eel pot made of basket or matting is placed before it and into which the eels gather and are thus taken. It is probable that two or three such pots are set in large weres [weirs]. This were [weir] must have been 100 yards long, at least, and made with wings or corner pieces at the ends (George Augustus Robinson, journal entry for 24 April 1841, in Clark, ed. 1998a: 145).

The widespread locations of weirs and channel complexes for catching eels, and the adjacent presence of house mounds, indicated how prosperous life was for the Eastern Maar People. The resources were plentiful enough that large numbers of people could be housed in villages on a semi-permanent basis, although there is debate as to whether the villages were used on a permanent, year-round basis.

James Dawson investigated some of these mounds, and considered them to be permanent:

> Native mounds, so common all over the country, are called 'pok yuu' by the Chaa wuurong [Tjap Wurrung] tribe; 'po'ok,' by the Kuurn kopan noot tribe; and 'puulwuurn' by the Peek whuurong tribe; and were the sites of large, permanent habitations, which formed homes for many generations. The great size of some of them, and the vast accumulation of burnt earth, charcoal, and ashes which is found in and around them, is accounted for by the long continuance of the domestic hearth, the decomposition of the building materials, and the debris arising from their frequent destruction by bush fires. They never were ovens, or original places of

> interment, as is generally supposed, and were only used for purposes of burial after certain events occurred while they were occupied as sites for residences—such as the death of more than one of the occupants of the dwelling at the same time, or the family becoming extinct; in which instance they were called 'muuru kowuutuung' by the Chaa wuurong tribe, and 'muuruup kaakee' by the Kuurn kopan noot tribe, meaning 'ghostly place,' and were never afterwards used as sites for residences, and only as places for burial. There is an idea that when two persons die at the same time on any particular spot, their deaths, if not attributed to the spell of an enemy, are caused by something unhealthy about the locality, and it is abandoned for ever. It is never even visited again, except to bury the dead; and the mounds are used for that purpose only because the soil is loose, and a grave is more easily dug in them than in the solid ground. The popular notion of their having been ovens is refuted, not only by the unanimous testimony of all the old aborigines, but also by a careful examination of the structure and stratification of the mounds. On opening a very perfect circular mound, sixty -five feet in diameter and five feet high, and intersecting it by parallel trenches dug at intervals of three feet, down to the original surface soil, and through that and a bed of gravel to the clay, not the slightest sign was observed of the ancient alluvial soil having been disturbed. Had an oven ever existed there, it would have been distinctly visible in the floor of the wuurn, as native ovens are always formed by digging deep holes in the ground. In cutting through these mounds, a complete history of their growth was exhibited. Layers of yellow ashes, mixed with small pieces of charred wood, alternated with the earthy debris of the old dwellings; and the numerous saucer-shaped, ashy hollows in the strata of the mounds showed where the fires had been. No stones larger than a walnut were found; which is another proof that the fireplaces were never used as ovens. Several mounds, not more than a foot high, on being intersected in every direction, showed the remains of only one fireplace, and that always on the eastern side of the mound. In every large mound, and in some of the smaller ones, human skeletons were found about eighteen inches below the surface, lying on the side, with the head to the west, and the knees drawn up to the chest—a mode of sepulture not uncommon among the aboriginal inhabitants of England (Dawson 1881: 103-104).

The early European invaders immediately recognized the richness of the land:

> Here is their cradle and their grave, from the water and the land they could live a life of endless luxury (James Ritchie, 1841, quoted in Barrie and Garrett 2013: 31).

And of course the white invaders were quick to seize the land for themselves.

The Southern Shortfin Eel (*Anguilla australis*) is a remarkable animal. The eels begin their life journey in the Coral Sea off New Caledonia; the newly hatched larvae, transparent and leaf-shaped, are then transported by ocean currents toward the southeastern coast of Australia. It can take up to three years to reach the coastal estuaries, by which time they have metamorphosed into 'glass eels' or 'glass elvers'. They reach the estuaries of western Victoria by mid-Spring. They progress through two more phases—'elver' and 'yellow eel'—and spend anywhere from 10 to 30 years from spawning to when they have the urge to begin their return journey to the Coral Sea. Males live up to 25 years and reach lengths of 55 cm and a weight of 1.2 kg; females live up to 35 years, reach up to 1.1 m in length, and weigh up to 3 kg.

The return migrations to the sea to spawn begin as early as November, and continue through the summer and peak in February and March: it is presumably these times when their harvesting by weirs and stone channel traps took place. However the eels were present in lakes, rivers, and creeks year-round, and during 'quieter' periods in the rest of the year several techniques to capture them were employed:

> Spearing eels in marshes and muddy ponds is a favourite amusement. Armed with two eel-spears, the fisher wades about, sometimes in water up to his waist, probing the weeds and mud, at the same time gently feeling with his toes. On discovering an eel under his feet, he transfixes it with one spear pushed between his toes, and then with another, and by twisting both together he prevents its escape, and raises it to the surface. He then crushes its head with his teeth, and strings it on a kangaroo sinew tied to his waist. In instances where old men have very few or bad teeth, it is amusing to see them worrying the heads, while the tails of the eels are wriggling and twisting round their necks. If the marsh is shallow, the eel can be seen swimming in the water. It is followed to its hole in the ground. The fisher probes the spot with an eel-spear, and, feeling that he has transfixed the eel, he treads in with his heel a round portion of the mud and weeds, lifts the sod to the surface of the water, and removes the eel. Sometimes two spears are needed to secure the fish. In summer, when the swamps are quite dry on the surface, but moist underneath, eels are discovered by their air-holes, and are dug up (Dawson 1881: 95).

The eels were a delicacy far and wide across Victoria. They could be kept for long periods by keeping them in ponds, and they could also be smoked, which was done in hollow trees (Wettenhall 2010: 21). The smoking preserved them, and they were an important item of trade for the Eastern Maar People.

3.4.4 Stone Resources

A wide variety of stone resources was available to the Tjap Wurrung People. Basalt, was of course widely available across their territory and at sites in their southern estates was used for house walls. Porphyritic diabase ("greenstone") was used for fashioning edge-ground axes; an Aboriginal quarry exists on the southeast and southwest flanks of Mount Dryden and another source near Jallukar, some 27 km to the southeast (Massola 1970: 6, 7), and sandstone from the Grampians was used for grinding mills (Clark 2016: 55). In the rivers and creeks, quartz, quartzite, silcretes and chert cobbles could be found for flaking tools.

Near the current Study Area almost all the stone artefacts found are of quartz. There are numerous outcrops of good-quality quartz in the area, and several quartz quarries have been located (Builth and Nicolson 2010: 1-36, 75, 76, 99, 103-104, 105). The quarries are all on surface outcrops; there is no evidence of subsurface quarrying. Quartz has been used for flaked artefacts and even for axes (Builth and Nicolson 2010: 1-34, 2-64). The vast majority of artefacts found near the current Study Area are of quartz, but at least one greenstone axe has been found (Builth and Nicolson 2010: 1-94, 2-73). In addition, some artefacts have been found made of knapped glass bottles (Builth and Nicolson 2010: 1-68-69, 2-61-63).

A rarer material occasionally used for tools and implements comes in the form of australites, created by Earth material melted by meteor impacts and splashed into the atmosphere before falling back to Earth as molten glass-like blobs. They occur widely over southern Australia; over 100,000 have been found, and they weigh up to 0.4 kg (most are the size of small pebbles); many have been found in the plains of Tjap Wurrung Country. Most australites date to between 610,000 and 750,000 years ago (Anonymous 2022). The australites have been referred to as 'obsidian' in some studies (they have been called 'obsidian buttons' or 'obsidian bombs'), but despite the volcanic nature of most of the country of western Victoria, obsidian flows have not been found. The connection of australites with Aboriginal people may have begun with emus. Emus and Australian Bustards have been found with australites and other small stones in their digestive tracts. These stones, often

called ‘gizzard stones’ are used by the birds to grind ingested food in order to aid digestion. Aboriginal hunters would have found these stones in the stomachs of emus and other birds, and across southern Australia the glassy australites have entered into the lifeways of Aboriginal people. It is perhaps not surprising that many groups considered them talismans and healing stones:

> The natives of Condah, in the Western District of Victoria, also applied australites to the human body to remove pain (Dunn 1912: 14, cited in Baker 1957: 4).
>
> [A] remedy [for toothache] is the application of a heated spear-thrower to the cheek. The spear-thrower is then cast away, and the toothache goes with it in the form of a black stone, about the size of a walnut, called karriitch. Stones of this kind are found in the old mounds on the banks of the Mount Emu Creek, near Darlington. The natives believe that when these stones are thrown into the stream at a distance from their residence, they will return to the place where they were found; and as they are considered an infallible remedy for toothache, they are carefully preserved. They are also employed to make an enemy ill, and are thrown in the direction of the offending tribe, with a request to punish it with toothache. If, next day, the stones are found where originally picked up, it is believed that they have fulfilled their mission. Not far from the spot where these stones are plentiful, there is a clump of trees called karriitch—meaning toothache—and the natives of the locality warn their friends never to go near it, for if they do they will be sure to get toothache. Stones of a similar description are found in the sand hills on the sea coast, and are put into a long bag made of rushes, which is fastened round the cheek. The doctor always carries these stones in his wallet, and lends them to sick people without fee or reward (Dawson 1881: 59-60).
>
> One australite, among others, in the collection of Mr. C. S. Rogers, of Kilsyth, Victoria, is pronounced as being a magic-stone from the dilly-bag of a native medicine man (Baker 1957: 7).
>
> Information supplied by Mr. Archibald, a former curator of the museum at Warrnambool on the south coast of Western Victoria was to the effect that the aborigines of the Western District of Victoria carried australites as amulets, and sometimes broke them up to obtain splinters for barbing spears (Baker 1957: 9).

This last reference to australites being used for tools is commented on by other writers also:

> The ‘wurokiigil’ is jagged for six inches on each side of the point, with sharp splinters of flint or volcanic glass, fixed in grooves with the same kind of cement which is employed to fix the handles of stone axes (Dawson 1881: 87).
>
> Australites from other parts of the tektite-sprinkled strewnfield have also been artificially chipped by aboriginal man for use as flaked implements. Thus, Dunn (1912: 11) referred to some that he inspected as showing distinct signs of handwear (now referred to as "carry polish"), and others as having been artificially chipped or rubbed. A few in the collection of Dr. T. D. Campbell, of Adelaide, have been likewise secondarily chipped.
>
> One collected from the large aboriginal encampment at Willaura in the Western District of Victoria by Dr. R. M. Wishart, of Kew, Victoria, measures 14 x 14 x 8 mm., and is a semi-discoidal scraper which was made from the interior portion of a

broken australite.

Seven implements prepared from australites, lodged in the collection of Mr. F. C. Smith, of Mt. Dandenong, Victoria, were found at three different localities in Western Victoria, namely, Glenthompson, Murtoa and Willaura. The one from Glenthompson was prepared from a boat-shaped australite, and measures 45 mm. in length, 21 mm. in width, and 17 mm. in depth (= thickness). Reconstruction of the specimen reveals an original length of approximately 55 mm. One end of this specimen was chipped away by a Stone Age craftsman in such a manner as to produce a secondary face lying at an oblique angle to the long axis of the boat-shaped australite, thus producing an implement ideally suited for use as a scraper, or micro-adze stone. The fracture surface reveals a vitreous lustre and conchoidal fracture pattern. Dr. R. M. Wishart and Mr. F. C. Smith classify this implement as an end-scraper. It shows signs of having been used, for the fractured surface is scratched and possesses a scraper edge with minor chipping effects brought about by wear. Since the hardness of australites is between six and seven, the scratched character of the fracture surface on this end-scraper indicates that it was occasionally used to attempt to shape something relatively hard.

The implement from Murtoa is a semi-discoidal scraper measuring 15 x 14 x 3 mm., and was prepared from one side of the waist region of a dumbbell-shaped australite. It reveals three remnants of flow ridges which provide the clue to the original shape of the australite, and also indicate that the portion of the outer surface of the australite still remaining on the implement is the anterior surface. The fracture surface reveals many subsequently developed scratches.

The other five implements in Mr. F. C. Smith's collection were obtained from the ancient aboriginal camp site at Willaura. One is classified as a geometric and measures 15 x 9 x 5 mm., one is a semidiscoidal scraper measuring 19 x 19 x 6 mm., and one a discoidal scraper measuring 19 x 19 x 5 mm. The original shape of the australite from which the semidiscoidal scraper was prepared is not indicated, but the slightly thinner discoidal scraper represents the greater part of the bubble-pitted top of the posterior surface of a button-shaped australite from which the flange had previously been broken, either purposefully or accidentally (by natural fracture). In plan aspect, this implement is thus virtually circular in outline, and its shape entirely due to the original form of the australite. It bears adequate testimony to the adroitness of the aboriginal craftsman, who fashioned it by cleanly fracturing a small lenticular, glassy object (originally just over 19 mm. in diameter) along an equatorial plane; the depth of such a lenticular object with a diameter of approximately 19 mm. would not have exceeded some 9 to 14 mm. Of the two other scrapers in the Smith collection, one was derived from the edge of an oval- or boat-shaped australite; this implement measures 17 x 9 x 3 mm., the thickness of 3 mm. on one side tapering down to a fraction of a millimetre on the other side. It shows typical conchoidal fracture, with a well preserved vitreous lustre on the fracture surface, this being in marked contrast to the opposite surface, which is constituted of a duller, remnant portion of the flow-ridge-bearing anterior surface of the original australite. This implement, which is blade-like in character, reveals five minor points of conchoidal fracture at one end, six it the other, all of which represent points of minute secondary pressure flaking. These minute conchoidal fracture surfaces vary from 1

> mm. to 2-5 mm. across. The other microscraper, measuring 13.5 x 12 x 6 mm., was prepared from the edge of an australite core carrying a few bubble pits, and considerably weathered. The implement is trigonal in end-on aspect (i.e., normal to its long axis), and the vitreous, conchoidal fracture surface is slightly dulled by natural etching which has accentuated a few internal flow lines; this surface is also scratched in two or three places. The edges show no marginal flaking, but are occasionally minutely chipped from use as a scraping implement (Baker 1957: 10-11).

The most important material for axes among the Aboriginal peoples of Victoria was greenstone. There are six belts of Cambrian greenstone Victoria, and several have Aboriginal quarries associated with them. Easily the most famous, and important, is the Mount William quarry site, near Lancefield in Wurundjeri Woi wurrung country. Axes from Mount William were traded far and wide, and the site was jealously guarded by the Woi wurrung People, as the anthropologist Alfred Howitt recounts:

> As a good instance of the manner in which trespasses by a person of one tribe on the country of another tribe were dealt with, I take the case of a man of the Wudthaurung tribe [Wadawurrung], who unlawfully took, in fact stole, stone from the tribal quarry at Mt. William near Lancefield. I give it in almost the exact words used by Berak [William Barak, a great Woi wurrung leader of the Wurundjeri willam patriline] in telling me of it, and who was present at the meeting which took place in consequence, probably in the late forties.
>
> It having been found out that this man had taken stone without permission, the Ngurungaeta Billi-billeri sent a messenger to the Wudthaurung, and in consequence they came as far as the Werribee River, their boundary, where Billi-billeri and his people met them. These were the men who had a right to the quarry, and whose rights had been infringed. The place of meeting was a little apart from the respective camps of the Wurunjerri and the Wudthaurung.
>
> At the meeting the Wudthaurung sat in one place, and the Wurunjerri in another, but within speaking distance. The old men of each side sat together, with the younger men behind them. Billi-billeri had behind him Bungerim, to whom he "gave his word." The latter then standing up said, "Did some of you send this young man to take tomahawk stone?" The Headman of the Wudthaurung replied, "No, we sent no one." Then Billi-billeri said to Bungerim, "Say to the old men that they must tell that young man not to do so any more. When the people speak of wanting stone, the old men must send us notice." Bungerim repeated this in a loud tone, and the old men of the Wudthaurung replied, "That is all right, we will do so." Then they spoke strongly to the young man who had stolen the stone, and both parties were again friendly with each other.
>
> At such a meeting all the weapons were left at the respective camps, and each speaker stood up in addressing it (Howitt 2001 [1904]: 340-341).

Greenstone axes sourced from Mount William have been found in Tjap Wurrung Country and in Eastern Maar Country more widely (McBryde 1979, Figure 4).

3.4.5 Aboriginal tools and toolkits

3.4.5.1 Men's Toolkits

A typical Victorian Aboriginal man's wooden toolkit was as follows: five spears (two of which were barbed), a waddy [club], a bludgeon, a throwing stick for fighting or hunting birds, a boomerang, two shields (one for

close and one for more distant combat), and an axe (Thomas, cited in Sullivan 1981: 26). Elsewhere Thomas described how bark shields were curved due to fire treatment. Tools often had several purposes. The boomerang, for example, could be used for hunting, or its sharp, hardwood edge could be used as a knife. It could also be used as a hammer or a club, as well as a digging stick. Finally, it could be used as a percussive musical instrument, and even as a firestick. Stone tools are under-reported in early accounts of Aboriginal people, but they included blades for skinning and sharpening wooden tools, and spear points. Bones were used as barbed tips for fishing spears. Mussel shells were also used for cutting and for sharpening wood.

Major Thomas Mitchell, in his travels through Tjap Wurrung Country described a rather fearsome weapon:

> These men carried a singular kind of malga, of a construction different from any Piper [an Aboriginal man from Sydney] had ever seen. The malga is a weapon usually made in the form of a Figure 2, but that with which these natives were provided somewhat resembled a pick-axe with one half broken off . . . being made so as to be thickest at the angle. The blow of such a formidable weapon could not be easily parried from the uncertainty whether it would be aimed with the thick heavy corner or the sharp point. All the weapons of this singular race are peculiar and this one was not the least remarkable (Mitchell 1838, II, Journal entry for 20 September 1836).

James Dawson commented on some superstitions concerning other people's weapons:

> Strange spears and weapons are reluctantly touched, as it is believed they communicate sickness, and might cause death. It was with difficulty that some of the aborigines could be prevailed upon to take hold of spears, arrows, and clubs from the Society Islands. When the spear or weapon of an enemy has killed a friend, it is always burnt by the relatives of the deceased; but those captured in battle are kept, and used by the conquerors (Dawson 1881: 53).

3.4.5.2 Women's Toolkits

Aboriginal women also had a wooden toolkit. The main item was a digging stick about two meters long, and about as thick as a man's wrist, with a sharp point, usually hardened by fire. Women also had a variety of wood and bark containers, and bags woven with string from reeds and rushes or from Messmate (*Eucalyptus oblique*) bark (Presland 2010: 55).

Major Thomas Mitchell, on 20 September 1836, near Willaura in central Tjap Wurrung Country, commented on a bag that he found abandoned by an Aboriginal woman that his party had frightened away the evening before:

> next morning we found near the spot one of the bags usually carried by gins and containing the following samples of their daily food: three snakes; three rats; about 2 pounds of small fish, like white bait; crayfish; and a quantity of the small root of the cichoraceous plant tao, usually found growing on the plains with a bright yellow flower [murnong]. There were also in the bag various bodkins [bone needles] and colouring stones [for decoration], and two mogos or stone hatchets. It seemed that our civility had as usual inspired these savages with a desire to beat our brains out while asleep, and we were thankful that in effecting their cowardly designs they had been once more unsuccessful (Major Thomas Mitchell, journal entry for 30 September 1841, in Mitchell 1838).

James Dawson gives some further information on the 'bodkins':

> A bodkin, or awl, is formed from the small bone of the hind leg of the forest kangaroo,

> ground to a fine point, and is used for sewing rugs. A finely -tapered sharp pin is made of the small leg bone of the brush kangaroo or opossum, and is essential for extracting thorns and splinters of wood from the hands and feet. Ti-tree pins are used for pegging out the skins of the forest kangaroo.
>
> Knives are of various kinds and material, according to the purposes they are to serve. For skinning animals, marking rugs, and cutting the human skin to produce ornamental wens on the chest, back, and arms, knives are made of splinters of flint, or of sharpened mussel shells. The sea mussel shell found on the coast at Warrnambool is preferred, but freshwater mussel shells are also used. For skinning the ring-tailed opossum, and for dividing meat, the leaf of the grass-tree is used, and also the long front teeth of the bandicoot, with the jaw attached as a handle. The shells of the freshwater mussel and of the sea snail serve for spoons. Every person carries one. In making necklaces of the quills of the porcupine ant-eater, the holes at the roots of the quills are burned through with a wooden pin made red-hot in the fire (Dawson 1881: 25).

Presumably many of these other objects would often have been part of a woman's toolkit. They also would have carried "food, sticks and tinder for producing fire, gum for cement, shells, tools, charms, &c" (Dawson 1881: 15).

James Dawson lists the following items related to women's toolkits in his Tjap Wurrung vocabulary (Dawson 1881: i-xlvii):

Axe, stone celt	buuraku
Axe, large stone celt	wang'itch
Bag ('only specific')	
Bag, net bag for back	warrak
Bag, water bag	ko'wapp
Bag, game-bag	gnuunyee
Bag, made of kangaroo pouch	piinteuk
Bag, for carrying calcined human bones	wææt
Band round the head	marak kulla
Bark of acacia for making cord and netting	waakong
Bark for pegging skins on	gninakk
Basket made of rushes	paalk
Feather ornaments	warwal
Mat of plaited grass	pææp
Necklace of reeds	charkuun
Pin, bone pin	kee'een
Pin, for pegging out skins	tuptup karra
Pin, bone pin for picking out thorns	ke'een
Pin, for fastening clothing	gnarræng gnarræng
Rug, man's kangaroo skin	dallang
Rug, opossum rug, large	willakuurn
Rug, opossum rug, small	tuulu mannæ
Yam-stick ('pole, carried by woman')	charng

3.4.5.3 Fire

Fire was of course a major resource for the Aboriginal peoples of Victoria. Fire was needed for daily life, but it was also used to manage the landscape. Tjap Wurrung Country was especially conducive to 'firestick farming', as it has been called (Jones 1969; Bird et al. 2008). These were effectively 'controlled burns', aimed at favouring plant species that were of importance for them as food, such as yam daisies, lilies, native orchids, and small perennial herbs. Burning patches where tuberous plants (yam daisies, lilies) were present would remove plant competitors while the tubers would be safe below the surface. They would then have better access to sunlight, and ash from the burning would provide nourishment. The burning would typically take place in late summer or autumn.

As Gib Wettenhall has said:

> Hundreds of generations of accumulated wisdom ensured that the Djab wurrung and Jardwadjali took all the right steps to produce an abundant crop to feast upon come springtime.
>
> It has become evident that the Aboriginal people's application of controlled patchwork burns over tens of thousands of years permanently changed the nature of the landscape. Firestick farming ensured that fire-dependent vegetation such as eucalypts, wattles, Austral grass-trees and orchid would thrive, spreading to dominate all but the wettest habitats (Wettenhall 2019 [1999]: 36).

The Tjap Wurrung People of course had numerous traditions concerning fire. James Dawson recounted several stories concerning fire:

> Fire caused by lightning is called 'Pillætuung murndall gnat'—'supernatural fire belonging to thunder'—and is shunned, because there is a belief that the lightning hangs about the spot, and would kill anyone going near it. However much the natives may be in want of a firestick in travelling through the bush, they will not take a light from a strange fire unless they observe the footprints of human beings near it, indicating that it has been kindled by man. Neither will they take a light from a funeral pyre.
>
> There is a tradition that fire, such as could be safely used, belonged exclusively to the crows inhabiting the Grampian Mountains; and, as these crows considered it of great value, they would not allow any other animal to get a light. However, a little bird called Yuuloin keear—'fire-tail wren'—observing the crows amusing themselves by throwing firesticks about, picked up one, and flew away with it. A hawk called Tarrakukk took the firestick from the wren, and set the whole country on fire. From that time there have always been fires from which lights could be obtained (Dawson 1881: 53-54).

This is presumably another legend concerning War the Crow (see Section 3.3.2.3 above)

3.4.6 Trade and Exchange

There was an active trade among Aboriginal groups throughout Victoria, both among clans and between different language groups. One group would have access to stone for axes, another the gum used for hafting and binding, and so on. James Dawson sums up the situation:

> At the periodical great meetings trading is carried on by the exchange of articles peculiar to distant parts of the country. A favourite place of meeting for the purpose of barter is a hill called Noorat, near Terang. In that locality the forest kangaroos are plentiful, and the skins of the young ones found there are considered superior to all others for making rugs. The aborigines from the Geelong district bring the best stones for making axes, and

> a kind of wattle gum celebrated for its adhesiveness. This Geelong gum is so useful in fixing the handles of stone axes and the splinters of flint in spears, and for cementing the joints of bark buckets, that it is carried in large lumps all over the Western District. Greenstone for axes is obtained also from a quarry on Spring Creek, near Goodwood; and sandstone for grinding them is got from the salt creek near Lake Boloke. Obsidian or volcanic glass, for scraping and polishing weapons, is found near Dunkeld. The Wimmera country supplies the maleen saplings, found in the mallee scrub, for making spears. The Cape Otway forest supplies the wood for the bundit spears, and the grass-tree stalk for forming the butt piece of the light spear, and for producing fire; also a red clay, found on the sea coast, which is used as a paint, being first burned and then mixed with water, and laid on with a brush formed of the cone of the banksia while in flower by cutting off its long stamens and pistils. Marine shells from the mouth of the Hopkins River, and freshwater mussel shells, are also articles of exchange.
>
> Attendance at these great meetings is compulsory on all (Dawson 1881: 78).

Mount Noorat is in Kirrae whurrung Country, but Tjap Wurrung People attended the meetings there. There were meeting places in Tjap Wurrung Country also: the most famous is Lake Bolac, where hundreds of people from different Tjap Wurrung clans and various language groups would attend each eeling season. Even the most northerly of Tjap Wurrung clans, the Bar gundidj attended these meetings, and had there own local meeting place prior to travelling there (see Section 3.6.5).

3.4.7 Travel Routes

> The blacks have regular beaten paths. I met with several on my journey (George Augustus Robinson, 9 July 1841, in Presland 1980: 92).

There appear to have been two major types of travel routes employed by Victorian Aboriginal peoples. The first was along river valleys – an obvious choice, since so many resources were concentrated there. The second would have been across country guided by particular landmarks, such as hills or mountains (in many cases these would have also been important points along sacred songlines). Both types – mountain landmarks and river routes – were numerous across Tjap Wurrung Country, which overall comprises gently undulating plains. The main impediment to travel would have been the numerous swamps and marshes that dotted Tjap Wurrung Country.

In the current Study Area travel routes would likely have been along the upper tributaries of the Wimmera River: the Spring, Glenlofty, Glenpatrick, and Hickman Creeks. Numerous Aboriginal Heritage Places have been found within about 1 km of these watercourses.

3.4.8 Place Names

A good place to start in looking for Aboriginal place names is in the names of the clans. Forty-one clans have been reconstructed for the Tjap Wurrung People (Clark 1990: 107-139; Clark 2016: 113-163), and most clan names are an indication of a locality or feature in the clan's estate. Most Tjap Wurrung clans end with the suffix *gundidj*, 'belonging to' – the land or place that the clan 'belongs to' being the first part of the clan name. The other common clan suffix is *balug*, 'people' – again with the implication that the first part of the clan name refers to their estate or a locality or feature within it. The following places can be identified from the clan names of the Tjap Wurrung People:

Tjap Wurrung name	European name	Translation	Reference
Barite Barite	Mount Stavely		Clark 2016: 137

Beerip	Mount Cole		Clark 2016: 119
Boloke	Salt Creek		Clark 2016: 120
Bulug/Bulluk	Lake Bolac		Clark 2016: 126
Col.lorrer, Kolorer	Mount Rouse		Clark 2016: 127, 135
Cor.ramut	Caramut		Clark 2016: 127
Konegilwerring	a swamp on the Hopkins River, 10 miles north of Lake Bolac		Clark 2016: 136
Mit ye	Barton Morass, or Nekeeya Swamp		Clark 2016: 137
Mor.na.bul	Mount Moornambool		Clark 2016: 138
Muddadjug	Mount Abrupt		Clark 2016: 137
Parn	a large hill 5 miles SW of 'Allanvale' station		Clark 2016: 140
Punnoinjon	Lake Buninjon		Clark 2016: 144
Tappoc	Mount Napier		Clark 2016: 147
Tare.cur.rum.beet	Mount Emu		Clark 2016: 118
To.ol, To-ol	Mount William	'The Mountain'	Clark 2016: 152, 120
Toorac	Mount Pierrepoint		Clark 2016: 153
Uelgal	'The Grange' station		Clark 2016: 153
Witterbecurruc	Wimmera River		Clark 2016: 128

In addition to these place names, Ian Clark (2016a: 450-467) has provided valuable lists of Tjap Wurrung place names:

Tjap Wurrung place names currently in use:

Current name in use	Tjap Wurrung name	Translation	Reference
Bayindeen	??	??	Clark 2016a: 450
Bellellen	Bellenbirra	'a certain kind of smooth grass'	Clark 2016a: 450
Berrimbool	Brimboal	'ears'	Clark 2016a: 450
Bochara	Bochara	'river'	Clark 2016a: 450
Bolac Plains	Buluk	'lake'	Clark 2016a: 450
Bolac Plains home station	Toruptoreerbul	??	Clark 2016a: 450
Boroka	Buruka	'breaking off'	Clark 2016a: 450
Buangor	Yuwang gar ?	'granite mountain'	Clark 2016a: 450
Bulgana	Bulgana (eastern Kulin)	'beef', 'bullock'	Clark 2016a: 451
Burrumbeep Hill	Bor.rum.beep	??	Clark 2016a: 451
Burrumbeep Hill – waterhole	Morrungorrergorroke	??	Clark 2016a: 451
Byambynee	Baynbayn	'woman'	Clark 2016a: 451
Caramut	Cor.ramut	??	Clark 2016a: 451
Concongella Creek		??	Clark 2016a: 451
Concongella Creek – waterhole	Wormbomemechung, Widjibaboit	??	Clark 2016a: 451
Denicull Creek	Deenigal	gal = 'dog'	Clark 2016a: 451
Eurambeen	Yulong been ?	'white gum'	Clark 2016a: 451
Gorrinn Creek	??	??	Clark 2016a: 451
Jallukar	Jaluka	??	Clark 2016a: 452
Karabeal	Karabeal	beal = 'red gum'	Clark 2016a: 452
Kyup	Kyup	'finger' ?	Clark 2016a: 452
Lake Bolac	Bulluc, Boloke, Bullook	'lake'	Clark 2016a: 452
Lake Bolac – outlet	Tuureen Tuureen	??	Clark 2016a: 452
Lake Bolac – township	Parupa	??	Clark 2016a: 452

Lake Buninjon	Punnoinjon ?	??	Clark 2016a: 452
Langi Logan	Langi [European name Logan]	langi (Kulin) = 'camping place', 'the home of'	Clark 2016a: 452
Maroona	Maroona	??	Clark 2016a: 452
Mininera	Mininera	??	Clark 2016a: 452
Mokepilly	Moke billy, Moke.pil.le, Mokbilly, Mukbilly	muk = 'short', pilli = 'stomach' ?	Clark 2016a: 452
Morrl Morrl	Morri-morri	'little hills'	Clark 2016a: 453
Mount Challicum	Tomilgarn	'windbreak' ?	Clark 2016a: 453
Mount Gorrinn	Djalibepin	djali = 'tongue', bep = 'white gum'	Clark 2016a: 453
Mount Langi Ghiran	Larngiwran?, Larnerjeering, Lanengeren, Langi-geran, Lang-i-gherin, Larnegerin, Lang-muchan	'home of the (Banksian) Black Cockatoo' ?	Clark 2016a: 453-454
Mount Moornambool	Mor.na.bul	??	Clark 2016a: 454
Nekeeya Swamp	Mit ye ?	??	Clark 2016a: 454
Wannon River	Wannon	wanya = 'boomerang' ?	Clark 2016a: 454
Wannon River	Bareng	'river'	Clark 2016a: 454
Wannon River	Garrawalla, Karrawalla	'big flood'	Clark 2016a: 454
Wannon River	Bariyaluk	'running river/creek'	Clark 2016a: 454
Wannon River	To.orn	??	Clark 2016a: 454
Warrak	Warrak	'plains'	Clark 2016a: 454
Warra-yadin	Warra-Yadin	??	Clark 2016a: 454-455
Warrayure	Warrayure	wurru = 'lips', 'mouth'	Clark 2016a: 455
Wimmera River	Bar	'river'	Clark 2016a: 455
Wimmera River – locality at source	Palitykatjin	'large water'	Clark 2016a: 455
Yarram Gap	Yarram	'big'	Clark 2016a: 455
Yatchaw	Yatchaw	??	Clark 2016a: 455
Yulecart	Yuelgirt	??	Clark 2016a: 455

Tjap Wurrung names for features that currently have European names:

Allanvale home station	Burnaere	??	Clark 2016a: 455
Allanvale home station – waterhole	Widjibapoit	widji = 'rushes', ba = 'and', poit = 'grass'	Clark 2016a: 455
Amphitheatre	Yabal	??	Clark 2016a: 455
Ararat – diggings	Karangajaruk	??	Clark 2016a: 455
Ararat – town site	Butingitch	??	Clark 2016a: 455
Ararat – Flint Hill	Tallarambooroo	??	Clark 2016a: 456
Armstrong	Widjibaboit	widji = 'rushes', ba = 'and', poit = 'grass'	Clark 2016a: 456
Bald Hill (a.k.a. Ware's Hill)	Coron	??	Clark 2016a: 456
Bald Hill (north of Elmhurst)	Warre	??	Clark 2016a: 456
Bald Rock	Poonijaller	??	Clark 2016a: 456
Barton home station	Wangoruc, Tallingareena	?? djaling = 'tongue'	Clark 2016a: 456
Barton station	Lagallik	??	Clark 2016a: 456
Barton Swamp	Mitye	??	Clark 2016a: 456
Black Range (near Stawell)	Burrunj	'darkness'	Clark 2016a: 456

Boundary Gap	Dirag	'turpentine bush'	Clark 2016a: 456
Briggs Bluff	Budjun Budjun	'phlegm', 'matter', 'running sore'	Clark 2016a: 456
Cathcart	Ingoa	??	Clark 2016a: 456
Cave Hill	Punnap	'white gum tree'	Clark 2016a: 457
Charleycombe Creek	U.rone.bate	??	Clark 2016a: 457
Chatauqua Peak	Bim	??	Clark 2016a: 457
D'Alton Peak (south)	Gurdgaragwurd	??	Clark 2016a: 457
D'Alton Peak (north)	Ngarram Ngarram	'big'	Clark 2016a: 457
Decameron home station	Murrermoonyurnin, Gungungarereno	?? ??	Clark 2016a: 457
Decameron home station – waterhole	Tooermegotchin	gadjin = 'water'	Clark 2016a: 457
Deep Lead	Bvarree	??	Clark 2016a: 457
Fiery Creek	*Barri yalug', *Barengayalug	'the running or flowing creek/river/ stream, bareng = 'river', yalug = 'river'	Clark 2016a: 457
Fiery Creek – tributary near Eurambeen homestead	Karkalk	kar = 'nose', 'pointed hill', kalk = 'wood', 'tree'; karkalk = (probably) 'nose stick', placed through septum of nose	Clark 2016a: 457
Fiery Creek – upper (where it passes Eurambeen homestead)	Moonbalk	??	Clark 2016a: 458
Fiery Creek – locality (approximately 32 km south of Mount Cole station)	Peerrepar	??	Clark 2016a: 458
Fiery Creek – locality (approximately 48 km south of Mount Cole station)	Puppellenneerring	??	Clark 2016a: 458
Fyans Creek	Barri yalug	'running river/creek'	Clark 2016a: 458
Fyans Creek -- hamlet	Merputyal	??	Clark 2016a: 458
Good Morning Bill Creek	named after Bood Bood Yarramin aka Good Morning Bill, who was shot by Tarenbe, William Kirk's shepherd at Buurumbeep	—	Clark 2016a: 458
The Grampians	Gariwerd	'The Mountain Range'	Clark 2016a: 458
Great Western	Bindowrim	??	Clark 2016a: 458
Green Hill Lake -- Ararat	Warrayatkin, Warra-yardin (see Warra-yadin, above)	??	Clark 2016a: 458
Halls Gap	Budgem Budgem	??	Clark 2016a: 458
Hamilton	Mullerateronq	??	Clark 2016a: 459
Hexham	Bulla-bulla, Petereet	'good', 'Masked Lapwing'	Clark 2016a: 459
Hopkins River – near Ararat	Bura	'kangaroo'	Clark 2016a: 459
Hopkins River – waterhole near Burrumbeep	Tonedidjerer	??	Clark 2016a: 459
Hopkins River – swamp east of Willaura	Konegilwering	??	Clark 2016a: 459
Hopkins River – at Gibb's station	Lappeet; Lapeeyt parreeyt	'salt'; 'salt water'	Clark 2016a: 459 Clark 2016a: 462

Lake Fyans	Martang	??	Clark 2016a: 459
Lake Kennedy	Mumyawoune	mum = 'bum'	Clark 2016a: 459
Lake Linlithgow	Tarrae-yarr	'reedy ground'	Clark 2016a: 459
Lake Lonsdale	Djakil	'swamp', 'lake'	Clark 2016a: 459
Lawrenny home station	Buller-bullope	??	Clark 2016a: 460
Lexington home station	Mulpal	??	Clark 2016a: 460
Linlithgow Plains	Warrak	'plains'	Clark 2016a: 460
Mafeking	Ngaram-ngaram	'big'	Clark 2016a: 460
Middle Creek	Moon balk ?; Kar kalk ?; Won.arer ?	??; 'nose stick' ?; wungara = 'stringy bark' ?	Clark 2016a: 460
Middleton Peak	Warrirburra	??	Clark 2016a: 460
Mount Abrupt	Mud-dadjug, Murd-dajook; Wirriboot	'blunt, useless [his] arm' (reference to a mythological ancestor); wirri = 'trunk', 'stem'	Clark 2016a: 460
Mount Ararat	Gorambeep barak	??	Clark 2016a: 460
Mount Bainbridge	Karrik	'throwing stick'	Clark 2016a: 460
Mount Cassell	Didjun	??	Clark 2016a: 461
Mount Cole	Beerip, Bereep-bereep	??	Clark 2016a: 461
Mount Cole Creek	Warragarak	??	Clark 2016a: 461
Mount Drummond	Butjuk	'his/her liver'	Clark 2016a: 461
Mount Lookout	Boram Borang	??	Clark 2016a: 461
Mount Napier	Taapuuk, Tappoc	??	Clark 2016a: 461
Mount Pierrepoint	Allowween; Culmurri; Parreeyt;	??; ??; 'water' [Maar]	Clark 2016a: 462
Mount Rosea	Bukika-merkani	merkani = 'enemy'?	Clark 2016a: 462
Mount Rouse	Kulurr	'lava', 'lava stone used to rub ochre'	Clark 2016a: 462
Mount Rouse – crater	Kuulmittop	'oval shape'	Clark 2016a: 462
Mount Rouse – sink hole	Yarrt mirng	'white eye'; yatt/yarrt = 'moon', 'white'; mirng = 'eye'	Clark 2016a: 462
Mount Rouse – sink hole	Kuulmurtuup	'oval shape'	Clark 2016a: 462
Mount Rouse/Penshurst – spring (north side of Mount Rouse)	Mortom	'round'	Clark 2016a: 462
Mount Stavely	Barrite Barrite	??	Clark 2016a: 462
Mount Sturgeon	Wurgarri	'black'	Clark 2016a: 462
Mount Sturgeon home station	Dulin gurgundidj	'belonging to red (acacia) resin'	Clark 2016a: 463
Mount William	Duwul	'The Mountain'	Clark 2016a: 463
Mount William Creek	Baribial	'Red Gum River'	Clark 2016a: 463
Moyston	Jaraughi-jakil	jakil/djakil = 'lake', 'lagoon'	Clark 2016a: 463
Norval (a.k.a. Opossum Gully)	Gurkiderkut	gurk-i- = 'the blood', 'the woman'	Clark 2016a: 463
Red Man's Bluff, Mount William Range	Ngarra mananinja gadjin	'having water in one's hand'	Clark 2016a: 463
Rocky Ranges (near Maroona)	Erererturn	??	Clark 2016a: 463
Rosebrook	Buyub budjun budjun	buyub = 'pigface (plant)', budjun = 'matter from a wound or a boil', '"sleep" from the eyes', 'phlegm'	Clark 2016a: 463
Salt Creek	Ollocibberloke	presumably contains yaluk = 'creek', 'river'	Clark 2016a: 463

Salt Creek – confluence with Hopkins River	Baller Baller cote	??	Clark 2016a: 463
Salt Lake (the larger of the two NW of Lake Bolac)	Colan buluk	buluk = 'lake', 'swamp'	Clark 2016a: 464
Salt Lake (the smaller of the two NW of Lake Bolac)	Warreculmar	??	Clark 2016a: 464
Spring Creek (near Mount Rouse)	Mumparreeyt	'bottom of the water'	Clark 2016a: 464
Spring Creek – spring (source of Spring Creek)	Puupuul	'child'	Clark 2016a: 464
Spring Creek – spring	Lurtpii	??	Clark 2016a: 464
Shirley	Wonagarack, Wonagreck	'sandy ground'	Clark 2016a: 464
Stawell	Yirrip; Kobram (name for Big Hill specifically?)	'ironbark gum tree'; 'head'	Clark 2016a: 464
Telegraph Hill	Byergorong; Tirril	gorong = 'oven'; 'sky'	Clark 2016a: 464
The Grange (Grange Burn)	Matang	"on account of the pipe clay or white clay found on its banks'	Clark 2016a: 464
'The Grange' homestead	Youlbowen; Allongwereing	??; ?? (Dhauwurd Wurrung)	Clark 2016a: 464
Tucker Hill	Tamborer	??	Clark 2016a: 464
'Woodlands' home station – waterhole in upper Wimmera River (Bar) at home station	Nareen	??	Clark 2016a: 465
Upper Wimmera River	Bar	—	Clark 2016a: 465

Early pastoral stations on Tjap Wurrung land with Aboriginal names:

'Challicum'	challicum ?	'Prickly Cockspur' ?	Clark 2016a: 465
'Concongella'	Konkongella	??	Clark 2016a: 465
'Eilyer'	Kooneet	??	Clark 2016a: 465
'Kanawalla'	Kanawalla	??	Clark 2016a: 465-466
'Ledcourt'	*Letcurt	lidh = sharp (Wergaia, Wembawemba)	Clark 2016a: 466
'Merrang'	merrang?, mirrang?	??	Clark 2016a: 466
'Nareeb Nareeb'	Nareip Nareum, Nareb Nareb Nareb, Narrab Narrab	??	Clark 2016a: 466
'Narrapumelap'	Narrapumelap	??	Clark 2016a: 466
'Narrapumelap' home station	Kunegirein	??	Clark 2016a: 466
'Nerrin Nerrin'	Nerrin Nerrin	??	Clark 2016a: 466
'Purdeet'	purdeet, bourt-deat, bourtdeet	'root'. Or 'swamp reed' (Dhauwurd Wurrung/Marr)	Clark 2016a: 466-467
'Tatyoon'	katjin, kattyoong	'water'	Clark 2016a: 467
'Wartook'	werdug	'(his) shoulder'	Clark 2016a: 467
Yalla-Y-Poora	Yalla-Y-Poora	??	Clark 2016a: 467
Yarram Yarram	Yarram Yarram	'big waterholes' (Kulin)	Clark 2016a: 467

3.5 Post-contact History

3.5.1 Early European Explorers

The earliest Europeans to encounter the Eastern Maar People were sealers, and they began a horrific pattern for what was to follow: the introduction of diseases, the seizing of local resources, and the kidnapping and raping of Aboriginal women (Cotter 2001: 19). They operated (as did whalers slightly later) on the Bass Strait coast from around 1810 until the 1830s.

Meanwhile, British and French explorers sailed along the coast of what was to become Victoria, beginning with George Bass who sailed from Sydney as far as Western Port in 1797.

From 20-21 and 24-26 April 1802 Matthew Flinders was sailing along the Eastern Maar coastline, but he did not land. He described the coast between what are now Apollo Bay and Lorne in glowing terms:

> The rising hills were covered with wood of a deep green foliage, and without any vacant spaces of rock or sand; so that I judged this part of the coast to exceed in fertility all that had yet fallen under observation (Flinders 1814, I, Journal entries for 25 April 1802).

Flinders had a similarly very favourable view of the land around Port Phillip Bay, and by 1836 permanent British settlements had been founded at Portland, Melbourne, and Geelong. The invasion of Eastern Maar Country began soon afterwards, with squatters and their sheep coming from all three settlements as well as overland from Sydney.

3.5.2 British and New South Wales Policies on Port Phillip Settlement / Victoria

In fact, as early as 1803 the authorities in England were discussing the possibility of a settlement in Port Phillip Bay (Cotter 2001: 11). While some have argued that the reason for a settlement was to thwart French colonization (which Governor King himself believed was likely), the main reason for a settlement seems to have been simply to create another convict colony.

On 24 April 1803, the *Calcutta* and the *Ocean* set sail from Portsmouth, under the command of Lieutenant-Colonel David Collins, with orders to found a new antipodean colony on the shore of Port Phillip Bay. In early October, Collins entered Port Phillip Heads, and established the first European settlement (apart from some earlier sealers' camps on Western Port) in what was to become Victoria. He 'settled' in Bunurong country, at Sullivan Bay, near what is now Sorrento.

Shortly after the establishment of the settlement at Sullivan Bay, Lieutenant James Tuckey and several men left the camp (16 October 1803) and in two boats spent ten days exploring and surveying Port Phillip Bay. In part Tuckey was looking for the possibility of a better site for the settlement than Sullivan Bay. He saw the mouth of the Yarra River, but did not investigate it closely. Tuckey's expedition encountered Aboriginal groups at various points around the Bay. Mostly they were peaceful meetings, but one, on 23 October 1803, was not. In the northwest of the Bay, in what was almost certainly Wadawurrung country (but was possibly the western extremity of Bunurong land), Tuckey and his men shot and killed one or two Aboriginal men and wounded several others. Overall, Tuckey’s view of Port Phillip was not very favourable. After Tuckey completed his survey, Collins, as unimpressed as Tuckey, decided it would be better to move to another location outside Port Phillip Bay. Collins asked Governor King of New South Wales for permission to abandon the Sullivan Bay settlement, and, on 30 January 1804, Collins sailed to Van Diemen's Land.

3.5.3 William Buckley

Perhaps the most noteworthy feature of the ill-fated expedition to Sullivan Bay was that on 27 December 1803 six convicts escaped. One was shot during the escape attempt, and one later returned to the camp. But

one of the convicts, William Buckley, made his way around Port Phillip Bay to the lands of the Wadawurrung People, around what is now Geelong. He was found and adopted by the Watha wurrung bulluk clan of Wadawurrung People. Buckley lived with the Wadawurrung People for over 31 years, before being found by a European exploration party at Indented Head on 6 July 1835. Buckley's account of his time with the Wadawurrung is an invaluable account of the contact-period Aboriginal people of Victoria, albeit with no doubt some faulty and exaggerated recollections and some hyperbole likely added by the man to whom he told his story, John Morgan (1852 [Sayers, ed. 1967]).

3.5.4 The Henty Brothers and Portland Bay

The first permanent European settlement in Victoria was not at Melbourne or Geelong, but rather in the far southwest, in Gunditj Mirring Country at what is now called Portland.

Whaling and sealing had been based in non-permanent stations along the south coast of Victoria since at least 1810, and Portland Bay, Port Fairy, and Warrnambool, in Gunditjmara Country were temporary bases for the burgeoning industry. In 1833 Thomas Henty and his son Edward Henty sailed to Portland Bay to investigate the possibility of getting involved in the whaling industry. They liked the land at Portland and decided to establish a settlement there.

On 19 November 1834 Edward Henty and his brother Stephen landed from Van Diemen's Land with cattle, pigs, and seed to found the settlement. They established a small farm, and also engaged in whaling. A month later their brother Francis arrived with a flock of merino sheep. In 1836 they were visited, to their mutual surprise, by Major Thomas Mitchell on his overland surveying expedition. Mitchell told the Hentys of the excellent grazing land north of Portland Bay.

The Henty brothers determined to extend their operations northward (their settlement was illegal; they had petitioned three times for permission to settle in Port Phillip District, and all three times were rejected). The brothers moved northward, and by 1839 had over 30,000 sheep and 500 cattle. The Gunditjmara People, whose land they had invaded, had suffered from European transgressions as early as 1910 from the winter-season whalers, both through disease and violence. The violence was to increase markedly in the 1840s as more invaders joined the Hentys and determined to clear the resident Aboriginal people from 'their' land. Unsurprisingly, the Gunditjmara resisted fiercely.

The first massacre of Gunditjmara had in fact taken place in 1833 or 1834, just before the arrival of the Hentys. George Augustus Robinson, who visited Portland in May 1841, tells the story:

> [Mr Edward Henty related that] a whale broke from her moorings and went on shore. And the boats went in to get it off, when they were attack[ed] by the natives who drove them off. He [Henty] said the men were so enraged that they went to the head station for their firearms and then returned to the whale, when the natives again attack[ed] them. And the whalers then let fly, to use his expression, right and left upon the natives. He said the natives did not go away but got behind trees and threw spears and stones . . .
>
> [blank] miles from Double Corner [which was two miles north of the Portland settlement] is Messrs Hentys' fishery. This spot where the buildings are is called the Convincing Ground . . .
>
> It is stated that the natives fought the whalers. Now, the cause of this fight, if such an unequal contest can be so designated, firearms [are] certain death against spears, was occasioned by the whalers going to get the whalebone from the fish, when the natives, not knowing their intentions and supposing they intended to take away the

> fish which the natives considered theirs and which it had been for 1000 of years previous, they of course resisted the aggression on the part of the white men. It was the first year of the fishery, and the whalers having used their guns beat them off and hence called the spot Convincing Ground. That was because they convinced them of their mistake and which, but for their firearms, they perhaps could not have done (George Augustus Robinson, journal entries for 16 and 17 May 1841, in Clark 1998a: 211, 214).

The Convincing Ground Massacre, as it is called, was lethal: only two young men of the Kilcarer clan of the Gunditjmara People survived. In the years that followed the Convincing Ground massacre, Ian Clark (1995: 17-56) has documented 27 separate episodes of killings of Gunditjmara people, involving at least 136 individuals—the true numbers (both of massacres and of victims) is much higher. In response to the theft of their land and the murders of their people, the Gunditjmara People engaged in an extended guerilla campaign, known as the Eumarella War, which was most intense in the mid-1840s. By this time virtually all of Gunditjmara land had been seized and most of the population—perhaps 90%—had perished.

3.5.5 John Batman

Meanwhile things were also happening to the east of Portland in Port Phillip Bay. William Buckley rejoined the European world on 6 July 1835, when he walked into a European camp established by John Batman near Indented Head, on the Bellarine Peninsula.

Batman was the leader of an enterprise from Van Diemen's Land called the Port Phillip Association, whose aim was to sign an agreement with the Aboriginal people in the Port Phillip District to 'purchase' their land. Batman sailed through Port Phillip heads on 29 May 1835. On 6 June 1835, probably on the banks of what is now known as the Merri Creek in Northcote, Melbourne, Batman and his companions, who included seven Aboriginal men from Sydney, met leaders of the Wurundjeri Woi wurrung, and signed two 'treaties'. According to the first document, which had been prepared in advance, the "Native Tribe" agreed to hand over about 500,000 acres [2023 km²] of land in exchange for "Twenty Pair Blankets, Thirty Knives, Twelve Tomahawks, Ten Looking Glasses, Twelve Pair Scissors Fifty Handkerchiefs, Twelve Red Shirts, Four Flannel Jackets, Four Suits of Clothes and fifty Pound flour" and an annual rent of similar items. The documents were signed by Batman and three other Englishmen, and eight "Chiefs" of the Wurundjeri Woi wurrung.

There are of course several problems with these 'treaties'. There is some doubt whether the 'signatures' of the Aboriginal 'chiefs' were really theirs, and thus whether the 'treaty' is fraudulent – the 'signatures' look like ones by Sydney area Aboriginal people. There are even more problems with the second, 'Geelong', treaty, covering 100,000 acres (we have already seen that on 30 May Batman exulted over the "100000, Acres of good Land . . . as good as Land could be" in the Bellarine Peninsula). This 'treaty' was not even 'signed' by any of the Wadawurrung People, whose lands were covered by it. In any case, the point is moot: within three months the 'treaties' were declared invalid by the British Crown, on the basis that (1) only the Crown could grant land, (2) that "all persons" found on those lands would be considered trespassers, and (3) that the land was "vacant". In the course of three months the Wadawurrung and Wurundjeri Woi wurrung Peoples went from landowners to "trespassers" or worse, to non-humans, in the mind of the British Crown.

3.5.6 Overland expeditions

Meanwhile, overland expeditions from the colony of New South Wales were also beginning to be made. The first expedition was led by Hamilton Hume and William Hovell, who in 1824 led an expedition to explore for new grazing territory. They began their journey in Appin, southwest of Sydney, and travelled to the area where Albury now is, and then crossed the Murray River, heading southwest. In mid-December 1824 they reached the Werribee River near Bacchus Marsh. The general view is that the expedition then moved on as

far as Hovells Creek, near Geelong, but recently it has been argued that the furthest point the expedition reached was the Werribee River (Pritchard 2021).

In 1836 Thomas Mitchell, Surveyor-General of the colony of New South Wales, passed through Eastern Maar Country on the third of his expeditions of exploration of the colony (Mitchell 1838). The expedition began on 17 March 1836; Mitchell first explored the Murrumbidgee River down to the Murray River, and then went down the Murray in search of its junction with the Lachlan River. On 27 May 1836 Mitchell's party encountered a large party of Aboriginal People, probably of the Kureinji or Dadi Dadi language group, and in what Mitchell claimed was 'anticipatory self-defence' they proceeded to shoot them as they were fleeing across the Murray River; at least seven were probably killed. Mitchell, with no sense of irony, called the small hill where the massacre began 'Mount Dispersion'.

On 29 June 1836 Mitchell left the Murray River, near what is now Cohuna, heading generally south and west across what looked like excellent pasturelands. He passed to the north and west of the Grampians, before following the Glenelg River south to its mouth and then exploring country to the east of the Glenelg River. There he was amazed to find a European settlement—the Henty brothers, who had invaded 1½ years earlier. Mitchell's glowing reports to them of the land to the north of Portland was to be a major impetus in their moving into those lands over the next few years.

On his return journey to Sydney, Mitchell and his party passed through the Country of the Eastern Maar People, and from Mount Napier to Mount Cole he was in the estates of the Tjap Wurrung People; he passed about 25 km south of the current Study Area:

> To the westward the noble outline of the Grampians terminated a view extending over vast plains, fringed with forests and embellished with lakes. To the northward appeared other more accessible looking hills, some being slightly wooded, some green and quite clear to their summits, long grassy vales and ridges intervening: while to the eastward, the open plain extended as far as the eye could reach. Our way lay between distant ranges, which, in that direction, mingled with the clouds. Thus I had both the low country, which was without timber, and the well wooded hills, within reach, and might choose either for our route, according to the state of the ground, weather, &c. Certainly a land more favourable for colonization could not be found. Flocks might be turned out upon its hills, or the plough at once set to work in the plains. No primeval forests required to be first rooted out, although there was enough of wood for all purposes of utility, and as much also for embellishment as even a painter could wish (Mitchell 1838, II, Journal entry for 21 September 1836).

Mitchell's glowing description of southwestern Victoria as "Australia Felix" did much to attract European squatters and settlers there. They were to follow 'the Major's Line'—the wheel tracks first laid down by the heavy boat carriages that Mitchell took with him on his expedition. These tracks, impressed in damp soil during the wet spring of 1836, were still visible years after Mitchell's journey:

> *At Lake Repose, near Mount Sturgeon, I came upon Major Mitchell's tracks, and followed the marks left by his heavy boat-carriage across the Hopkins Plains to the Fiery Creek* (Edward Bell, 1853, in Bride [ed.] 1898: 178).

But even before Mitchell's return to Sydney, some European settlers were planning to move stock overland into the Port Phillip District of New South Wales, across the Murray River (Randell [ed.] 1980: xiv). In October 1836 John Gardiner, Joseph Hawdon, and John Hepburn drove a herd of 300 cattle from Sydney to the latter's 'Gardiner's Creek' run, just east of the fledgling town of Melbourne, as it would be named the following year.

A few days after Gardiner's party arrived in Melbourne, another group arrived: Charles Bonney, with seven men and a bullock dray. Bonney was the station manager of Charles Ebden, who was the first squatter to

send cattle across the Murray River—to Bonegilla, near Wodonga, in 1836. Ebden had asked Bonney to seek out an overland stock route from the Murray River to the Port Phillip settlement. The following year, he Ebden and Bonney drove 10,000 sheep from Ebden's station on the Murray towards Melbourne, and selected a run at Kilmore, where they stayed less than a year before moving to a new run, 'Kyneton', at Carlsruhe northwest of Mount Macedon.

Shortly after Ebden set up at 'Kyneton' he was joined by another overlander, Alexander Mollison. Mollison had been inspired by Major Mitchell's account. With 51 men, 5,000 sheep, and 634 head of cattle he followed 'the Major's line' and ended up just to the north of Ebden at 'Colliban', on the Coliban River at Malmsbury.

These were the first of the 'overlanders' to invade and squat on land to the northwest of Melbourne. While still to the east of Eastern Maar Country, they were soon joined by fellow squatters in a major land rush which took place over the following decade. They came across Bass Strait from Van Diemen's Land ('overstraiters'), via Geelong and Melbourne, from Sydney and settled areas to its southwest—the Monaro District—('overlanders'), as well as direct from Britain, having landed at Geelong, Melbourne, and (later) Portland.

3.5.7 Squatters

On the heels of Batman's expedition, and despite the Crown's objections, European settlers began to move into the areas around the mouth of the Yarra River and Geelong. Within three years they had also begun to invade Tjap Wurrung land.

Ian Clark has documented the invasion of Tjap Wurrung Country (roughly 7,000 square km or 1,729,738 acres, or 700,000 hectares) by European squatters. He enumerates 55 squatting runs occupied in Tjap Wurrung Country from 1838 through 1848, covering 1,740,000 acres:

Year of occupation	Number of new stations formed	Acreage occupied	Percentage of Tjap Wurrung land occupied	Cumulative acreage	Cumulative percentage
1838	5	83,000	4.798	83,000	4.770
1839	7	212,000	12.254	295,000	16.954
1840	10	414,300	23.948	709,300	40.764
1841	9	435,800	25.191	1,145,100	65.810
1842	3	34,500	1.994	1,179,600	67.793
1843	5	187,800	10.855	1,367,400	78.586
1844	5	180,700	10.445	1,548,100	88.971
1845	6	108,400	6.266	1,656,500	95.201
1846	3	47,000	2.717	1,703,500	97.902
1847	1	20,500	1.185	1,724,000	99.080
1848	1	16,000	0.925	1,740,000	100.000
Totals	**55**	**1,740,000**	**100.000**	**1,740,000**	**100.000**

(table derived from Clark 2016: 166)

These figures show the devastating speed with which the Invasion happened. Within four years of the first run 'taken up' in Tjap Wurrung Country, nearly two-thirds of their land had been stolen; within eight years of the initial invasion, over 95% of Tjap Wurrung Country had been seized by the white invaders, whose sheep and cattle had begun to destroy the traditional murnong plains and hunting grounds, and foul the precious waterholes.

The first phase of European colonization, the invasion phase, had been completed; the second phase was now to start: "the Aboriginal problem". This appalling term, or an even worse one, "the problem of the blacks", has been with Australia ever since the 1788 invasion of the Sydney region. In Victoria, the period of the "Aboriginal problem" started even as the Tjap Wurrung People and their neighbours were being driven from their own lands.

In many parts of Victoria massacres began to take place as the competition for land gathered apace. The killings accompanying the invasion of Gunditjmara Country has been mentioned in Section 3.5.4. In Tjap Wurrung Country the situation was similar, as was recounted in Section 3.3.2.4: according to Ian Clark there were at least 35 massacres and killings in Tjap Wurrung Country (Clark 1995: 61-83). Like the Gunditjmara numbers, the Tjap Wurrung figures, both for massacres and numbers of victims, represent only a fraction of what really happened.

In many cases the killings of Aboriginal people were argued to be in reprisal for the killing of squatters or their servants, or the stealing of sheep (which the Tjap Wurrung saw as animals on their land and as such 'fair game' for hunting). There were dozens of massacres and killings of Aboriginal people In Victoria (Clark 1995). Some truly were massacres involving a hundred or more people, while in other cases 'only' one Aboriginal person was killed; in most cases the number of deaths is not certain. Certainly the total of Aboriginal murder victims was in the thousands. In contrast, by 1851 there had been 59 Europeans 'murdered' (Nance 1981, cited in Barwick 1984: 108-109). By 1851 there were 77,345 Europeans and 6,590,000 sheep in Victoria. By 1861, after a decade of gold rushes, there were over 540,000 Europeans and fewer than 2,000 Aboriginal survivors (Barwick 1984: 108, 109).

Most of the first squatters in Victoria had emigrated as free men from the United Kingdom to Tasmania between 1804 and 1835. Many of their overseers, shepherds and servants were former convicts. Katherine Kirkland wrote:

> Bad servants were now our chief annoyance; and it seemed of no use being at the expense of bringing good ones from home, for they soon get corrupted (Kirkland 1979 [1845]: 16).

George Augustus Robinson wrote in 1841:

> It is dreadful to reflect on the exposed and unexpected state of the original inhabitants of this soil. The past and the present state of the Aborigines is one of annihilation or destruction. The chief class and by far the largest of the labouring men employed in the province have been convicts and for the sixteen years that I have been in these colonies I have never met with a more lawless and infamous a set. They acknowledge no authority and if they will, set their employer at complete defiance – and which is the case excepting a few individuals who have their servants direct from home as Neil Black, the manager, and a few more. It may be guessed what the fate of the poor Aborigines will be that fall into their hands (Robinson, Journal entry for 15 May 1841 [Clark, ed. 1998a: 208]).

The "Neil Black" referred to was actually Niel Black, a landowner who settled a large property, Glenormiston, near Terang in Kirrae Whurrung (Eastern Maar) country. In Robertson's statement quoted above he comes across as a relatively liberal man, but in fact he was deeply conservative. For example, he opposed free education (for Whites; he wouldn't have even considered it for Aboriginal children) (Mennell 1892: 42). In his diary, Black stated:

> The best way [to procure a run] is to go outside and take up a new run, provided the conscience of the party is sufficiently seared to enable him without remorse to slaughter

> natives right and left. It is universally and distinctly understood that the chances are very small indeed of a person taking up a new run being able to maintain possession of his place and property without having recourse to such means — sometimes by wholesale . . . it, however, seems to be little thought of here as it is only done in defense of self or property . . . I believe, however, that great numbers of the poor creatures have wantonly fallen victims to settlers scarcely less savage though more enlightened than themselves, and that two thirds of them does not care a single straw about taking the life of a native, provided they are not taken up by the Protectors (Black, Journal entry for 9 December 1839 [Clark 1989: 16]).

Black bought Glenormiston because the destruction of the Aboriginal people around Terang had already been done by others:

> the blacks have been very troublesome on it and I believe they have been very cruelly dealt with . . . The poor creatures are now terror stricken and will be easily managed. This was my principle [sic] reason for fighting so hard for it . . . I could not stand the thought of murdering them, and to tell the truth I believe it impossible to take up a new run without doing so, at least the chances are 50 to one (Black, Journal entries of 4 and 18 January 1840 [Clark 1995: 1]).

This kind of mindset prevalent among the squatters of the Port Phillip District led to the devastation of the Aboriginal people. Life was cheap in the Australian colonies in the mid-nineteenth century, and Aboriginal lives were the cheapest. Stories abound like the one told to George Augustus Robinson by James Blair, the Police Magistrate at Portland Bay in 1841:

> he [Blair] believed the blacks had been badly used; that he [had] been told of a man named Robinson, a sawyer; that he had just sent to Melbourne jail for a trifling offence; that the murder committed by this man upon the blacks was incredible and that Mr. Winter had told him he could prove a number which to his knowledge this man had committed. The most of these murders was for mere cruelty. He has been known to go up to a child and beat out its brains (Robinson, Journal entry for 15 May 1841, in Clark, ed. 1998a: 208).

Edward Bell, whose station was ‘Englefield’, in Jardwadjali Country south of present-day Balmoral, reported that:

> The collisions with the blacks, which I had heard of on almost every station after my arrival in the Western District, if they took place at all, were kept very quiet (Edward Bell, 1853, in Bride [ed.] 1898: 177).

Views in the Port Phillip District toward the Aboriginal population were polarized. Some whites openly called for their extermination; others were sympathetic to the plight of the Aboriginal people but seemed conveniently resigned to the fact that they would probably die out fairly quickly.

The squatters rapidly became a dominant force in the Port Phillip District, even though their 'runs' were continually changing hands. Various attempts were made to curb their power through legislation, ultimately culminating in the Land Act of 1862, which made about 20% of Victoria's land available to "selectors".

3.5.8 Depasturing

Thus in the late 1830s and early 1840s there were two problems developing for the British Crown in the newly named Port Phillip District of New South Wales: illegal White settlers—the squatters—and the rapid decline of the Aboriginal inhabitants. The New South Wales government attempted to deal with the first of

these through a succession of legislative bills, and the second through the establishment of an Aboriginal Protectorate.

As early as September 1836 the New South Wales government had announced that (White) occupation would be allowed under the grazing ("depasturing") rights in operation in New South Wales around Sydney: grazing rights would be granted in return for a £10 annual license. William Lonsdale was appointed Police Magistrate of the Port Phillip District, and in 1837 Foster Fyans was appointed Police Magistrate in the Geelong area. Depasturing licenses were not, in fact, issued until 1838, and by 1839 a new act added payments per sheep, cattle and horses – which had the effect of encouraging squatters to seek land further away from the settlements and authority. This process was continued when in 1847 all land in New South Wales was divided into three categories: settled, intermediate, and unsettled. An unspoken agreement was that homesteads would be separated by at least three miles. These legislative developments were a major factor in the expansion of 'runs' further inland and, very quickly, to the invasion of Tjap Wurrung Country.

3.5.9 Gold

On 1 July 1851, after much petitioning by the Port Phillip setters, a separate colony – Victoria – was established by the Crown, and Charles La Trobe was appointed its first Lieutenant-Governor. By this time about 23,000 people lived in Melbourne.

Meanwhile, just a few days earlier, at the end of June 1851, gold was found at Warrandyte, and later the same year at Clunes. Finds all across the colony soon followed. In the years that followed there was a huge influx of people from all over the world, hoping to find their fortune. Between 1851 and 1854 the population of Victoria grew from 77,000 to 237,000, and by 1857 to 411,000.

In northern Tjap Wurrung Country, gold was found on the 'Burrumbeep' squatting run in May 1854, around the same time that it was found in Beaufort, just to the southeast of the current study area in Wadawurrung Country. At 'Burumbeep', the goldrush attracted up to 1,000 'diggers' within a month (Ballinger and Westbrooke 2016: 43). Gold was found around Ararat in a series of discoveries from 1856 to 1858. By 1857 Ararat 's population had grown to between 10,000 and 30,000.

Near the current Study Area mining was briefly undertaken at the Glendhu Reef, along the Glendhu Creek on the Glendhu run: up to 4,000 miners descended on the creek over the course of several months; the area is now part of the historic Glendhu Reserve (Builth and Nicolson 2010, I: 26). In June 1859 gold was found around Navarre, about 20 km north of the current Study Area, which led to a rush involving about 6,000 miners for a few months (Builth and Nicolson 2010, I: 15).

Ian Clark (2016: 271-272) has pointed out that the goldrushes were of mixed fortunes for the Tjap Wurrung People. Environmentally, they were disastrous, both to the flora and to the fauna on which the Aboriginal people depended. The goldminers turned to hunting to provide themselves with food, which left even fewer resources for Aboriginal people than during the squatting invasion, and creeks and waterholes were even more seriously harmed than before. But there were so many people looking for gold that there were employment opportunities for Aboriginal people on the pastoral stations, which gained them both a living and pastoral skills. Generally, those Aboriginal people working on the pastoral runs were better off economically than their brethren in the towns, although some of the 'town' Aboriginal people made a good living from selling possum-skin blankets to the freezing miners.

3.6 Eastern Maar People Since Invasion

3.6.1 Diseases

The Aboriginal people of Victoria are likely to have been severely impacted by Europeans long before they actually saw any of them. In April 1789 an outbreak of smallpox broke out in Sydney, and killed probably thousands of Aboriginal people in the Sydney region; it did not affect the White invaders. There has been much debate over many of the issues surrounding the Sydney outbreak. Was it actually smallpox? Was it introduced by the First Fleet, or by an earlier French expedition or by Macassan traders in northern Australia? Was it introduced deliberately or accidentally into the Aboriginal population by officials of the First Fleet (bottles of smallpox were carried by the First Fleet)? In 1829 a second epidemic of smallpox broke out in central New South Wales, in Wiradjuri and Kamilaroi country, as European pastoralists were beginning their invasion there (Cary and Roberts 2002: 822). A military surgeon who investigated the outbreak, John Muir, reported that Aboriginal people who already had marks from a previous smallpox infection were immune from the disease (Warren 2014). In other words, to answer the first question above, the earlier outbreak in 1789 must have been smallpox.

The earlier epidemic appears to have travelled via the communication and exchange routes in Aboriginal Australia as far as southern Victoria. In 1803 Charles Grimes, the Acting Surveyor-General of New South Wales was on board the *Cumberland*, exploring Port Phillip Bay. On 18 February his exploring party on the Bellarine Peninsula met a group of 11 Aboriginal people, almost certainly Wadawurrung of the Bengalat balug clan. His journalist, James Flemming, reported that two of them "appeared to be marked with the smallpox" (Flemming 1802-1803, Journal entry for 18 February 1803). The smallpox scars observed by Flemming and Grimes could have been the result of infection by early sealers, but much more likely they were the result of chains of contact from the 1789 Sydney epidemic.

The second smallpox epidemic mentioned above appears to have reached Victoria and swept through it around 1830. James Dawson records:

> The aborigines have been visited on several occasions by epidemics, which were very fatal. The first occasion which the natives remember was about the year 1830, and the last in 1847. The very small remnant of old aborigines now alive who escaped the first of these epidemics describe it as an irruptive fever resembling small-pox. They called it Meen warann—'chopped root.' They have still a very vivid recollection of its ravages, and of the great numbers cut off by it in the Western District. In remembrance of it they still chant a wail called Mallae mallaeae, which was composed in New South Wales, where the disease first broke out, and is known to all the tribes between Sydney, Melbourne, and Adelaide. The malady spread with rapidity from tribe to tribe, in consequence of the infection being carried by the messengers who were sent forward to communicate the sad news of its ravages (Dawson 1881: 60).

The later epidemic alluded to by Dawson was influenza, which hit again in 1876. Measles, whooping cough, and tuberculosis also devastated the Aboriginal population, and in the years after the Invasion venereal diseases and alcohol were added to the misery. Venereal diseases were particularly cruel. Many Aboriginal women who were kidnapped and raped by White sealers, whalers, and settlers contracted gonorrhea and syphilis, and they infected their Aboriginal families in turn:

> . . . there was hardly a shepherd without disease. Large families of natives—husband, wife, boys, and girls—were eaten up with venereal disease. The disorder was an introduction from V. D. Land, and I am of opinion that two-thirds of the natives of Port Phillip have died from this infection (Foster Fyans, in Bride 1898: 115).

Apart from the mortality rate, the Aboriginal birth rate was seriously affected. Most Aboriginal groups suffered massive declines in the birth of children—largely due to venereal disease, but also to despair.

3.6.2 The Early Years of the Invasion

The early 1830s had been a period of "liberalism" in England, with the Reform Act of 1832 and the Slavery Abolition Act of 1833. In England there were several prominent people who agitated for better treatment of the Aboriginal population of Victoria. In March 1837 Port Phillip's capital was named after Britain's reform-minded prime minister of the day, Lord Melbourne. In the same year, 1837, the Aborigines' Protection Society was founded in London, to lobby the British government for the rights and well-being of indigenous people subjected to colonial powers. Also in 1837 a British Parliamentary Select Committee on Aboriginal Tribes published its report. One of the Committee's recommendations was the establishment of an Aboriginal Protectorate in the Port Phillip District of New South Wales. The report was sent to Governor Gipps in Sydney in January 1838, and Gipps appointed George Augustus Robinson as the Chief Protector of Aborigines. Robinson took up his position as Chief Protector in March 1839, with four Assistant Protectors (see below, Section 3.6.3).

This was the period when the expansion of the squatters was at its peak, and there were still relatively large numbers of Aboriginal people still in competition with them over their traditional and unceded lands. The killing of Aboriginal people by squatters and their employees was common, as has been related above. There were several major massacres: the Waterloo Creek massacre of 26 January 1838 (in which 40 or more Aboriginal people were killed), the Slaughterhouse Creek massacre of 1 May 1838 (300 Aboriginal dead), and the Myall Creek massacre of 10 June 1838 (28 Aboriginal dead) – all in what is now northern New South Wales, where the killings already had a 40-year history. Meanwhile, in the Port Phillip District also, the massacres had already started. The massacres of the coastal Gunditjmara People have been discussed above (Section 3.5.4). As European invaders moved onto Tjap Wurrung land—from Melbourne, Geelong, Portland, and overland from Sydney—the massacres began there also.

Known massacres and killings of Victorian Aboriginal people began with Tuckey's surveying party on 23 October 1803, and continued through to the late 1840s (Clark 1995: 169-175). The first Tjap Wurrung killings were in 1840, hard on the heels of the invasion of their land by Europeans.

For the murderers the consequences were mostly negligible. In some cases they left the district for a time or for good; in other cases inquiries were opened but nothing came of them for want of witnesses willing to testify (by law Aboriginal people could not testify). Only the Myall Creek massacre in New South Wales was followed up in any serious way. Governor Gipps ordered an investigation, and eleven of the twelve murderers were arrested (the twelfth was the only free man, and the leader of the premeditated attack). The trial began in November 1838, and the eleven accused were represented by prominent barristers and supported by wealthy landowners. It ended in their acquittal; one of the jurors reportedly said afterwards:

> the sooner they [Aboriginal people] are exterminated from the face of the earth, the better. I knew the men were guilty of murder but I would never see a white man hanged for killing a black (*The Australian*, 8 December 1838).

A second trial, of only seven of the original eleven accused, resulted in guilty verdicts, and the seven were hanged on 7 December 1838. The hangings resulted in a huge uproar in New South Wales, mostly in favour of the murderers. Governor Gipps stopped encouraging prosecutions for other massacres, and a code of silence quickly developed among squatters throughout New South Wales, including the Port Phillip District.

3.6.3 The Aboriginal Protectorate

It was in this atmosphere that the Aboriginal Protectorate of the Port Phillip District was created. It came about in large part due to lobbying from the Aborigines Protection Society that had formed in 1837 in

London, and in June 1837 a House of Commons Select Committee recommended that a Protectorate be established, as was recounted above: it was created by the Colonial Office in January 1838 (Clark 1995: 3), and the Protectorate became operational in 1839.

The first objective of the Protectorate was to shield Aboriginal people from the encroachment on their lands (we have seen that the 'encroachment' had already been virtually completed). Specifically, the Protectors were to attach themselves to the Aboriginal groups in their district, guard the interests and rights of the Aboriginal people, try to get them to settle in a particular location, instruct them in Christianity, teach them such things as agriculture and carpentry, educate the children, learn the language(s) in their district, and conduct a census of the Aboriginal people in their district: name, gender, and age (Clark and Cahir, eds. 2016: 1). In order to be able to assert their authority, the Protectors were also appointed magistrates (Clark 1995: 3).

George Augustus Robinson, who had gained a certain notoriety for his role in the 'conciliation' of the Van Diemen's Land Aborigines between 1829 and 1838, was appointed Chief Protector. The four assistant protectors were William Thomas, Charles Wightman Sievwright, Edward Stone Parker, and James Dredge. Parker and Dredge were Methodist preachers, Thomas a Methodist educator, and Sievwright a British Army Officer. In March 1839, Robinson allocated regions of the Port Phillip District to his assistants: Thomas was given the Central Protectorate District of Western Port, Sievwright the Western District (which included Geelong and stretched west to Portland), Parker was given the Loddon and Northwest District, and Dredge the Goulburn District.

Almost all of Tjap Wurrung and Eastern Maar Country was within the jurisdiction of Sievwright's Western District, which ran from Melbourne to Myrniong (northwest of Bacchus Marsh) and from there to Mount Cole and on to the South Australian border (Cahir 2019: 196). Technically, the far northern part of Tjap Wurrung Country (and the area of the current Study Area) was within the area allocated to Edward Parker.

Initially Charles Sievwright based himself near Fyansford, a few kilometers southwest of the current study area, in May 1839. In February 1841 he relocated out of Wadawurrung Country, establishing his base at Lake Keilambete, and in April 1841 to Lake Terang, both in Kirrae Whurrung Country, near Terang. In February 1842 he moved again, to Kolorer/Mount Rouse. Just a few months later, in June 1842, he was suspended and later dismissed from his position.

The Mount Rouse Station became an involuntary centre for Tjap Wurrung people in the subsequent years, which were when the seizing of land by the squatters and Aboriginal resistance to their theft were most intense. It is a tragic irony that the Native Police Corps, an Aboriginal police force founded in 1837, was instrumental in this process:

> In November 1842, [Henry] Dana [in command of the Corps] reported to La Trobe that his men had driven between 200 to 300 Aborigines from Lake Bolac and the Hopkins River to the station at Mt. Rouse. He noted 'that the fear which the wild blacks regard the men, and their knowing that now they can be followed to any place they go to, will have a good effect in preventing them from thinking that they can commit depredations with impunity' (HOC 1844: 288, cited in Clark 1990: 96).

The northernmost Tjap Wurrung Country was overseen by Edward Stone Parker, although most of his District, the Loddon District was in Dja Dja wurrung Country, as was said above. In 1839 Parker's first, temporary base was near at Jackson's Creek, just north of Sunbury. He then briefly established a base on a tributary of the Loddon River, before moving in 1841 to a site near Mount Franklin, on a creek with permanent spring water. This became known as the Loddon Aboriginal Protectorate Station at Franklinford, comprising a reserve of 2.6 km², with a "hunting ground" reserve at a radius of 8 km beyond, which was intended as an interim measure

until the Aboriginal inhabitants could "engage in the pursuit of agriculture" (Holst 2008: 112). The total area was over 16,000 ha.

There was a common problem for the Protectorate districts: the Aboriginal people of one language group were very reticent to move onto the Country of another, due to centuries-old traditions of land ownership. While some northern Tjap Wurrung People did briefly move to the Franklinford Reserve, which was on Dja Dja wurrung Country, there was much tension:

> in 1842 . . . three Djab wurrung clans visited his Protectorate Station . . . After nine days at the station some of the Djadja wurrung clans decided that they were not only foreign in speech and countenance but foreign altogether, and it was with considerable skill that Parker was able to avert a major conflict, and recommended the Djab wurrung clans return to their own country (Clark 1990: 92, citing Charles Sievwright's journal entry for 1 June 1842),

These were most likely northern Tjap Wurrung clans—possibly the ones in whose estates the current Study Area lies. The Bar gunduj clan, for example, had been driven out of their Country by July 1841 – their estates having been stolen by John Cayle Francis and Charles A. Lynott to make the 'Woodlands' and adjoining 'Glen Imlay' (later 'Decameron') runs, respectively (Clark 1990: 95). The survivors took refuge at 'Allanvale' station (later 'Sinclairs'), the estate of their neighbours the Poit balug clan to the west, as well as other 'friendly' stations: 'Burrumbeep', 'Mount Cole', 'Mount Emu', and 'Emu Hill' to the south and southeast (Clark 1990: 110). In May 1841 Assistant Protector Parker visited John Cayle Francis at 'Woodlands' to investigate several murders that Francis had committed over the previous ten months:

> Francis later avowed to E S Parker . . . that he was determined to act in the same manner should he be placed in the same circumstance again (Clark 1995: 67).

In August 1841 George Augustus Robinson had recommended four localities in western Victoria for selection as reserves for the Aboriginal people there. Two of them were located in Tjap Wurrung Country: 'Burrumbeep', south of Ararat, and Mount Rouse. The idea of reserves was anathema to the squatters, such as Horatio Wills, of 'Lexington' northwest of Ararat, who wrote to Superintendent La Trobe in 1842:

> . . . I beg to point out to your Honour the injury inflicted on the grazing interests of the colony by the present method of granting black reserves. The finest stations are usually selected, and from the manner in which the selection is made, and its extent, it destroys all confidence in the sheep farmer. I am told that the principal protector, Mr. Robinson, has pitched upon the head station of Mr. Kirk as a black reserve; and as such a reserve embraces the lands for six miles on every side, it will render useless the runs of Kirk, Thompson, Bunburry [sic], and myself; and I have no doubt if such large limits are assigned, that it will cause, and it has caused, immense loss to individuals, and will be very detrimental to the best interests of the colony (HOC 1844: 215, cited in Clark 1990: 96).

Burrumbeep was never used (Clark 1995: 60); the Mount Rouse Aboriginal Protectorate was established in early 1842. Mount Rouse was the major landmark in the estate of the Kolerer gundidj clan of the Tjab Wurrung People (The Tjap Wurrung name for Mount Rouse is Kolorer), and there was a permanent spring on its northwest flank. Traditionally, it was a place for major meetings involving numerous clans and even various language groups. Initially 100 square miles (640,000 acres, or 25,900 ha) appear to have been set aside (Ham 1847), and Sievwright established himself there until he was dismissed in June 1842. He was replaced by a doctor, John Watton, who was appointed as Medical Officer of the Protectorate. The Mount Rouse Protectorate operated until about 1850, although its formal closure was in 1858 (Critchett 1990: 143). In its early years (1842-1843) it was used as a safe base from where the Tjap Wurrung and others could make

guerilla attacks on surrounding squatters. Needless to say, most of the squatters in the area hated the Mount Rouse station and the Aboriginal Protectorate in general.

In 1850, the area of the Mount Rouse Reserve was reduced to one-sixteenth of its original area—40,986 acres, or 16,586 ha (Clark 2016: 271). The Government Surveyor completed a survey of the reserve in May 1851, and in the land opened up to tender. In November 1851 it was leased to John Twomey ('Kolor' station' and John and Thomas Hutton ('Purdeet') (Clark 2016: 271). The buildings were absorbed by the township of Penshurst. The remaining Aboriginal people of Mount Rouse seem to have moved to a utopian commune run by Johann Friedrich Krummnow at Herrnhut, not far from Penshurst. They later appear to have moved on to either Lake Condah of Framlingham Missions.

In many ways the Protectorate was doomed from the start: the Protectors were unable to offer much assistance to Aboriginal people, neither with supplies nor protection from squatters. The squatters in turn considered the Protectorate an obstacle to the running of their enterprises, and most of the squatters actively opposed and undermined the Protectors, whose work was increasingly difficult. The Aboriginal population continued to decline rapidly, and reserves and missions became more prominent.

3.6.4 Missions and Reserves

In 1849 the Protectorate was abolished. One of the Assistant Protectors, William Thomas was appointed as Guardian of Aborigines from 1850 until his death in 1867, but with deteriorating health he concentrated on trying to help Aboriginal people in and around Melbourne. Generally the decade of the 1850s was a period of government inaction and neglect of Aboriginal people. This situation was exacerbated when gold was found throughout much of Victoria, which marginalized the Aboriginal people even more—although they were largely 'marginalized' in settlements and in the goldfields. Their traditional hunting and plant harvesting estates had been taken over by sheep and the goldrush, and they survived as best they could.

In 1858-1859 a Select Committee of the Legislative Council of Victoria was appointed to investigate the current condition of Aboriginal people in the state (not surprisingly, no Aboriginal witnesses were called upon to testify). As a result of the Select Committee's report, the "Central Board Appointed to Watch Over the Interests of Aborigines in the Colony of Victoria" was legislated. It came into being in 1860, and ran until 1869. The Central Board made nine recommendations that it proposed to initiate (Central Board . . . 1861: 11). The first point of the plan was:

> That it is the bounden duty of the people who have taken possession of their [Aboriginal people's] country to protect them as far as possible, and to a certain extent maintain them. We occupy for pastoral and for other purposes nearly all the land in the colony, and that which we do not occupy is the least fitted for the black population. *Under these circumstances it is necessary that permanent reserves should be made for the blacks whenever their numbers are such as to require a tract of country yielding food* (Central Board . . . 1861: 11; emphasis ours).

As a result, a number of reserves were set aside. In western Victoria three reserves were established: Ebenezer, near Dimboola, in Wergaia Country, Lake Condah in (Western) Gunditjmara Country, and Framlingham near Terang in Kirrae Whurrung Country.

3.6.4.1 Framlingham

Around 1860 the Warrnambool Anglican church had bought 3,500 acres (1416 ha) for an Aboriginal mission to "ameliorate the present wretched conditions of the Aborigines" (Victorian Places 2015). The land lay west of the tiny village of Framlingham, on the right bank of the Hopkins River. They requested government support to establish an Aboriginal reserve on the land. The newly created Central Board responded by gazetting the land in 1861 to establish the Framlingham Aboriginal Reserve, but it was not until 1865 that

Framlingham Aboriginal Station officially became a fact. The Central Board's Annual Report for 1864-1865 announced the formal beginnings of the Framlingham station:

> FRAMLINGHAM.
>
> A new station has lately been formed near Framlingham, on a reserve of 3,500 acres, having for its eastern boundary the River Hopkins, where it is proposed to gather together, if possible, the Aborigines of the Western District. A station, similar to that at Coranderrk, would be most valuable, if such a one could be formed in this district. The Aborigines would be better cared for; there would be few opportunities for them to get intoxicating liquors, and the cost of maintaining them would be greatly reduced.
>
> The Central Board will carefully watch the experiment which has just been initiated, and they will endeavor to follow as nearly as practicable the plans which they adopted at Coranderrk (Central Board . . . 1866: 14).

In 1865 there was still no government infrastructure in place at Framlingham, and the Central Board made an agreement with the Church of England Mission to establish a station there, and allocated some stores and supplies (McLiskey et al. 2015). Within a year the Church of England Mission had failed, with poor attendance from the Aboriginal people of the district, and the Central Board took over again. The following year there was a major change of plan by the Central Board. Framlingham was closed temporarily in 1867—the Central Board deciding to concentrate Aboriginal people from the Western District to a new station at Lake Condah, in Gunditjmara Country near Budj Bim (Mount Eccles). As the Central Board's Annual Report for 1866-1867 put it:

> There is a large reserve at Framlingham, on which the Aborigines were located from September, 1865, to the 15th November, 1867. Subsequently they removed to the reserve at Lake Condah, that locality having been recommended as a more suitable place.
>
> At Framlingham the Aborigines had the services of a master and matron; and stores to the value of £360 were sent to them during the year 1866.
>
> The attempt to form a station at this place was, however, not very successful, though every exertion was used by the Central Board to ensure practical and useful results.
>
> Some of the Aborigines remained in the vicinity of the old station at Framlingham, and refused altogether to live at Lake Condah, and in order to protect them and to provide for their wants, Mr. Francis Tozer, who resided near the place, was appointed an honorary correspondent, and stores and clothing for the blacks were sent to him.
>
> A master and matron have been employed to teach such of the blacks at Framlingham as choose to remain there, and a depot for stores will be formed.
>
> It is not expected that any very useful results will follow on this arrangement. The object of the Central Board is to prevent destitution and suffering amongst those who persist in remaining at Framlingham, and to afford the means of improvement to such as are willing to attend the school, which will be conducted by the master and matron; but it is to Lake Condah and not Framlingham that we must look for such results as have rewarded the exertions of the Board at Coranderrk.
>
> Mr. Green, the Inspector of Stations, is now at Lake Condah, and it is hoped he will
>
> introduce order and good management, and lay the basis of a scheme which will be

productive of lasting benefit to the blacks (Central Board . . . 1869: 7).

LAKE CONDAH.

A station for the Aborigines who were formerly at the reserve at Framlingham, has been formed at Lake Condah.

Upwards of seventy blacks have settled on the reserve, which contains 2,043 acres 1 rood, and they have commenced to clear some of the land. Fourteen acres have been cleared and fenced in.

The stock on the station consists of seven bullocks, one bull, four cows, three steers, one yearling heifer, three calves, and two hundred and twenty sheep.

The buildings on the station are but temporary structures. They consist of four huts, in which a few of the blacks reside. The remainder of the blacks live in mia-mias. There is a store-house and a missionary's slab hut (Central Board . . . 1869: 5-6).

The Aboriginal people in Framlingham—most of whom were Kirrae Whurrung People, bitterly resisted the proposed move. John Green (the Central Board's Inspector of Stations, who later was the superintendent at Coranderrk), supported them in their resistance to being moved to Lake Condah:

MR. GREEN'S REPORTS

5th. I spoke to about seventy Aborigines on the subject of again forming an establishment at Framlingham, and about sixty of them told me that they would like to settle there and get a home for themselves.

I also asked them if they would go to Lake Condah, but they all said that they would not go. Some of them said that they liked the place but not the Aborigines, others said that they did not like Mr. Francis. I also spoke to some of the honorary correspondents on the subject, and to others, and the general opinion was that an establishment ought to be formed at Framlingham, and many of the Aborigines would settle on it, but that they would not go to Lake Condah. My own opinion is, if one is not formed there, all the Aborigines who are willing or wishing to settle could very soon be prevailed upon to go to Lake Condah, which is in my opinion by far the best place, and most healthy, for an establishment.

But seeing that there are so many of them wishing to settle there, and also that there are but few children among them, not many buildings would be required.

If the Central Board could get a good manager and matron for an establishment, I think the Board would do well to form one. All that would be required is a team of bullocks, a few cows, farm implements, a house, and store (Central Board . . . 1869: 9-10).

In 1869 Framlingham officially opened again. Conditions were hard: although the Aboriginal residents were provided some basic rations of flour, sugar, tea, and tobacco, and some clothing—but no boots—and they were expected to obtain their own meat by hunting. The manager, William Goodall, was supportive of the Aboriginal people at the station, and—unlike other stations—allowed them free movement on and off the

station to look for work. The fortunes of the Framlingham station can be tracked through the reports published in the annual reports of the Central Board.

According to the Central Board's 1871 annual report there were 63 Aboriginal residents at Framlingham; no births had been recorded at the station in seventeen months (Central Board . . . 1871: 3, 4).

The 1872 report said that there were 48 Aboriginal residents at Framlingham: 14 men, 18 women, and 16 children under 16 years. The medical doctor James Jamieson found that the station was in good health and condition:

> On the whole the station seems to be in a thriving condition, creditable to the manager, who seems to he on excellent terms with the people (Central Board . . . 1872: 13).

John Green, however, was not so impressed:

> It will be necessary for the Board to take some steps to improve the management of this station if it is their intention to carry it on.
>
> I would recommend the removal of all the orphan children (and they are nearly all such) either to Lake Condah or to Coranderrk; and I think that most of the adults could be easily persuaded to go, some to Condah and some to Coranderrk (Central Board . . . 1872: 8, 13).

In the Central Board's 1873 annual report, John Green appeared to have a more supportive view of Framlingham:

> On Monday morning, before they [the Aboriginal men] left [for shearing], they asked me if the Government was going to break up their station. I told them that if they would only work better, the Government would never break it up. I also told them that I was sorry to see so little work done, but that I was better pleased this time, as I saw they, had wrought a little better, and if they would all promise to work better for the future, I assured them the Board would help them as much as possible. They all promised to work better, and went away apparently well pleased.
> . . .
> About twelve acres of land have been cleared of trees and fenced in since my last visit, and about five acres of it have been planted with potatoes, and about five of the old' paddock have also been planted with potatoes. They have also enclosed a few small gardens round" some of the huts, and cultivated some flowers in them, which improves the appearance of the village very much.
> . . .
> I have no doubt this station could be made self-supporting (Central Board . . . 1873: 6).

There were 53 Aboriginal people on the station: 20 men, 16 women, and 17 children, but an additional 10 or 12 men had just left for shearing (Central Board . . . 1873: 10).

In the 1874 annual report, Green said that when he visited there were 53 Aboriginal people on the station: 25 men, 15 women, and 13 children, and he repeated what he said the previous year: that the station was doing well and that it could be made self-supporting with financial aid to the tune of £50 (Central Board . . . 1874: 7-8).

Dr Jamieson reported 59 individuals when he visited: 36 males and 23 females, with a total of 17 under the age of 20 (Central Board . . . 1874: 10). William Goodall, the superintendent of Framlingham station, reported

that the daily average number of Aboriginal people attending the station throughout 1873 varied from 50 to 63, with the highest number being 67 in January (Central Board . . . 1874: 10).

In the 1875 annual report, the numbers of Aboriginal people at Framlingham were given as 59 (37 males, 22 females) (Central Board . . . 1875: 3); 49 (Green: 18 men, 14 women, 17 children) (Central Board . . . 1875: 6); 60 (Jamieson: 25 men, 18 women, 17 children) (Central Board . . . 1875: 10). John Green was once again suggesting that Framlingham be closed:

> The stores are now kept in the hut used as a schoolroom. There was only a small quantity of stores on hand; they were all of good quality.
>
> The manager's house is altogether too small for his family; only three small rooms with kitchen, and in these nine people have to sleep.
>
> The water they have to use at present is very bad. Owing to the dryness of the season, the river is very low, and the water in it is quite brackish, and I do not think that it can be good to use it.
>
> I would suggest to the Board that the whole of the Aborigines at this station be removed to Coranderrk and Lake Condah. I have no doubt this could easily be done by Mr. Goodall and myself; and I may here state that Mr. Goodall informed me that he was quite willing to render all the assistance he could to get them removed to either or both of these stations.
>
> If the Board do not approve of the removal, I would recommend that the Board take steps to have ten acres of hops put in. If this is done, this station can be made self-supporting in two years (Central Board . . . 1875: 6).

In the Central Board's 1876 annual report it was reported that there were 71 Aboriginal people, of whom 27 were men, 16 were women, and 28 were children. Ominously, for the first time the figures included the appalling term 'half-castes'—of whom there were 24 at Framlingham (Central Board . . . 1876: 11). William Goodall reported that the number of Aboriginal people in attendance at the station reached 71, with an average through the year (January-December 1875) of from 51 to 62 (Central Board . . . 1876: 14).

The numbers of Aboriginal inhabitants at Framlingham continue in this fashion throughout the rest of the 1870s and the 1880s, dropping throughout the 1890s to around 26.

From these reports it can be seen that during the 1870s Framlingham Station was stable and popular among the local Aboriginal population, most of whom can be assumed to have been Kirrae Whurrung People. It prospered, if that term can be used, despite much support from the Central Board to either the Aboriginal population or the manager William Goodall and his family. Even those who were generally sympathetic to and supportive of Aboriginal people, like John Green, who later became the extremely popular manager of Coranderrk, repeatedly suggested to the Central Board that Framlingham be closed and the Aboriginal inhabitants be moved to Lake Condah or Coranderrk.

From 1877 to 1890 the white residents of Warrnambool campaigned to have the Framlingham Reserve closed and to take away the land from the residents and turn it into an experimental agricultural farm; in 1894 the area of the reserve was slashed, to 222 ha. Most of the land that was seized was given to the Council of Agricultural Education. The alleged plans for an agricultural college and farm were never carried through, and the land instead became the Framlingham Forest (Clark 1995: 127). The 1877-1890 battle to close the Framlingham Reserve coincided with the Victorian government's determination to reduce its already meagre expenditure on Aboriginal people. This 'cost-cutting' had begun with the passage of an act, the Aboriginal

Protection Act 1869 (Vic), sarcastically called 'An Act to Provide for the Protection and Management of the Aboriginal Natives of Victoria'. This act formalized the definition of an 'Aboriginal', introducing the appalling term 'half-caste':

> Every aboriginal native of Australia and every aboriginal half-caste or child of a half-caste or child habitually associating and living with aboriginals, shall be deemed to be an aboriginal within the meaning of this act (Aboriginal Protection Act 1869 [Vic], Clause 8).

In 1886 there was a far worse development: an amendment to the 1869 act, the Aborigines Protection Law Amendment Act 1886. What this act did, in fact, was do anything but 'protect' Aboriginal people; it tore families apart in what effectively was the first legislation of 'stolen generations'. Kidnapping of Aboriginal women had been going on since 1810 by whalers and sealers; the Aboriginal Protection Act 1869 (Vic) made the kidnappings of Aboriginal people legal under white law. The main mechanism for this was a re-definition of 'Aboriginality'. So-called 'half-castes' were no longer defined as Aboriginal people. And since they were no longer 'Aboriginal', they should no longer live with 'Aboriginals', which in turn meant that they should be removed from the missions and forced out into a 'white' society that did not want them. For 'half-caste' children, this meant being forcibly removed from their parents and being placed with white families. This overtly racist policy was not conceived through racism alone; there was an economic motive as well. The 'half-castes' forced out of the missions and stations no longer received any assistance from the Central Board or the Victorian Government, which of course could save money and, in any case (as many officials believed) the 'blacks' who remained on the stations would soon die out and the stations could then be closed. The Central Board was completely complicit in this:

> Since the last Report was submitted to Your Excellency, Parliament has passed a measure for merging the half-castes among the general population of the colony. For a long time the Board had been urging this policy on the attention of the country, It seemed to the Board unreasonable that the State should continue to support able-bodied men who were well able to earn their own living. They were supplied at the public expense with houses, food, and clothing, with all the necessaries and many of the comforts of life. Under these circumstances, no habits of self-reliance were cultivated in them, and the great body of them were quite satisfied with their dependent position.
>
> No sooner was the Act passed than the Board set itself to carry out its provisions, which were carefully explained to all the half-castes to whom the law applied, and already the Board has made a fair beginning of a policy which is the beginning of the end, and which, in the course of a few years, will leave only a few pure blacks under the care of Government.
>
> The total number of half-castes on the various stations coming under the provisions of the Act is 233.
>
> No fewer than sixty half-castes have already been well placed and are now earning their own living.
>
> While the Board desire to carry out the Act in its spirit as well as in its letter, they find that great care must be exercised to prevent cases of individual hardship, and they are anxious to interfere as little as possible with family life. Every case will receive individual attention (Central Board . . . 1887: 3-4).

For the year 1 July 1886 through 30 June 1887 the Central Board was allocated £11,584,0.0 as its annual budget; the six stations produced a combined revenue of £1,968.8.3. In other words, for the financial year 1886-1887 the Victorian Government spent a total of £9,615.11.9 on the 'Aboriginal problem', as it liked to call it (Central Board . . . 1887: 13). Victoria's revenue for the same financial year was £6,733,826 (Statistical Register . . . 1888: 6). In other words, the Central Board for the 'Protection' of Aborigines considered that the expenditure of as little as 0.14% of the colony's revenue on Aboriginal people was "unreasonable".

In 1889 the Central Board again tried to closed Framlingham and move the residents to Lake Condah Mission once again. The inhabitants of Framlingham again resisted. In 1894 more land was excised from the Framlingham reserve by the Victorian Government; the area of the reserve was slashed, to 222 ha, as was said above. Still the Aboriginal residents stayed on.

Around 1916 there was another attempt to close the Framlingham Mission and move the residents to Gippsland; again the residents resisted.

The Board for the Protection of Aborigines was abolished in 1957. In 1970 a new act was passed by the Victorian government, the Aboriginal Lands Act 1970, and under this Act the reserves of Framlingham and Lake Tyers were closed on 1 July 1971—the last two Aboriginal reserves to be closed. The ownership of Framlingham was transferred to a trust held by Aboriginal residents of the site.

In 1976 the Aboriginal community at Framlingham campaigned to assert their rights to the Framlingham Forest The campaign included, in 1979, the blocking of an access road to a picnic ground in the forest. The Victorian Government responded in 1980 with the suggestion that the Aboriginal community would be allowed to manage the forest, but the land and forest would remain Crown Land. The community rejected the proposal and renewed the blockade. In 1987 the Victorian Government tried to grant some of the forest to the Framlingham Aboriginal community with inalienable title held in trust. The State opposition party, led by Jeffrey Kennett, blocked the proposal in the Legislative Council.

However the Federal Labor government intervened, and passed the Aboriginal Land (Lake Condah and Framlingham Forest) Act 1987. Under this act, the Framlingham Forest was vested in the Kirrae Whurrong Aboriginal Corporation, giving it the power of "management, control and enjoyment" of the forest. In all, 1,130 acres (457.3 ha) were transferred to the Framlingham Trust, and later to the Eastern Maar Aboriginal Corporation.

This extended history of Framlingham Mission Station is presented in homage to the generations of Aboriginal residents who fought for so long, and ultimately successfully, to stay on their Country. In the face of almost constant attempts to close the station down, amid racist policies, and with almost no outside support, they persevered and survived.

Today, the Eastern Maar People are defined very largely through their connection and association with the Framlingham Aboriginal Mission Station.

3.6.5 European Land-use History

We have seen (Section 3.5.7) that the European invasion of Tjap Wurrung land was effectively completed by 1848. In the region of the current Study Area, in the far northeast of Tjap Wurrung Country, the estate of the Bar gundidj clan was centered on the upper Wimmera River. This estate was stolen to form two large runs, 'Woodlands' and 'Glen Imlay'.

'Woodlands', a run of 183,000 acres (74057.5 ha) was taken by William Clarke, a wealthy landowner called 'Big' Clarke and 'Moneyed' Clarke, who had a reputation as a ruthless landgrabber (when he died in 1874 he left a fortune estimated to be £2,500,000—two-thirds of the revenue raised by the Colony of Victoria that year). At 'Woodlands' he hired an overseer who was equally ruthless—and a racist thug—John Cayle Francis.

Francis killed numerous Tjap Wurrung men—at least eleven—most of them of the Bar gundidj clan. He freely admitted five killings to George Augustus Robinson in July 1841, who was so disgusted with the man when he met him that he refused to sleep in his hut. In what can only be called poetic justice, Francis was murdered just over a year later, on 17 September 1842, thereby surely saving countless aboriginal lives. He was stabbed to death by a station hand named, appropriately, 'Cranky John' Conolly (Clark 1995: 67-71).

'Glen Imlay' was a run of 102,400 acres (41440 ha) on Glenpatrick Creek near Elmhurst, land seized by another wealthy landowner, Dr Peter Imlay. Imlay's overseer was Charles Lynott, who also drove the local Aboriginal people from 'his' land. Imlay owned 'Glen Imlay' for just over a year; it was sold in 1842 and renamed 'Decameron'. To the south of 'Glen Imlay' was 'Glenlogie, a 96,000 acre (38,850 ha) run owned by Alexander Irvine.

The other major European 'landowner' in the region of the current Study Area was John Sinclair, who in early 1841 had stolen 80,000 acres (32375 ha) of Tjap Wurrung land to form 'Sinclair' or 'Sinclair's Run', later to be called 'Allanvale. 'Sinclair' was to the west of 'Woodlands', and Sinclair's overseer was a man called William Blow. Blow treated the Aboriginal men (but possibly not the women) of the region with more kindness, and many fled to his run for safety from men like Francis.

The land stolen from the Tjap Wurrung in the region of the current Study Area was used for sheep runs by the early squatters (William Clarke introduced Border Leicester sheep to Victoria). It has continued thus until the present day, the only exception being during the gold rush, when most people in the district were trying their hand at mining. Gold mining continued in the region until about 1880, but the pastoral life had resumed long before that (Builth and Nicolson 2010, I: 24). The beautiful estates of the northern Tjap Wurrung People have been transformed over the past 180 years. The sheep destroyed the Aboriginal plant resources such as murnong (yam daisy). The European squatters settled adjacent to the best waterholes and thus deprived Aboriginal people of their favourite campsites and the numerous resources there—water, plants, and animals. The sheep fouled other waterways. The squatters harvested the open woodlands for wood for construction, fencing, and firewood. George Augustus Robinson posed the question:

> Where are the natives to go? Question: the settlers or rather squatters do not allow the natives to stop at their home or out stations, then where are they to go? As many of the squatters claim for their runs from 2, 3 and 400 square miles of country, the home station and out station, in many instances in a bad water country, secure all the water and the sheep and cattle graze the intermediate space. Then where are the natives to go? Where are they to procure food? Or are they to live? Are they to throw themselves on the mercy of other tribes because no British humanity exists in the hearts of English Australian squatters towards the original occupants of the soil? (George Augustus Robinson, journal entry for 31 July 1841, in Clark, ed. 1998a: 340-341).

Some landmarks of the Bar gundidj clan of the Tjap Wurrung are known. Bar gundidj means 'belonging to *Bar*'—bar being the name of a group or a locality. In this case, Bar is a reference to a waterhole:

> The only general name I could get for Synnott' and Francis' river was 'Bar' from Bar conedeet [Bar gundidj], the name of the tribe of the country'. . . Bar = a part of the river between Mr Lynot's and Francis' station - the long waterhole I passed. The name of the tribe is derived from the name of this locality (George Augustus Robinson, quoted in Clark 1990: 110).

The names of some other Tjap Wurrung locations in the estate of the Bar gundidj clan have survived. The name of the Wimmera River is Witterbekurruk in the Tjap Wurrung language. The Hopkins River, which has its

source on the Bar gundidj clan's estate, is called Bura, 'Kangaroo' in the area of Ararat (Clark 2016a: 459). Robinson commented on the waterholes in the area:

> The waterholes in places are long and deep; a large water hole 6 miles SSE of Francis' ['Woodlands' homestead] the natives call Tar.nor.rer (Robinson, Journal entry for 30 July 1841, in Clark, ed. 1998a: 337).

Robinson also said:

> The eyes of my native companion glistened when he pointed out the position of his native locality and the big hill which marked its position. This hill he called Cor.re.kee.bar, and the tribe inhabiting that part of the country where Lynot has his station are called Bar Conedeet [Bar gundidj] of which he is one (Robinson, Journal entry for 30 July 1841, in Clark, ed. 1998a: 333).

Builth and Nicolson (2010, I: 22) speculate that this might be the hill called 'Commissioners Hill'.

One landmark survived until recently. Vic Start, a grandson of a man who settled in the district in 1850, told archaeologists Heather Builth and Oona Nicolson in February 2008:

> a Yellow Box Eucalyptus tree that was situated in Crowlands township and was known to be of great importance to many clans. It had served as a trading and meeting place, including for the journey down to Lake Bolac for the annual eel harvesting. The tree was destroyed for the installation of new power lines through the area. According to Vic, many people were deeply affected by its loss, both Aboriginal and non-Aboriginal. He also spoke of the unnecessary destruction of another Yellow Box Eucalyptus at nearby Morton's Hill (Builth and Nicolson 2010, I: 25).

Its importance as a local landmark of the highest significance to Aboriginal people is self-evident. Its significance as a trading place and a meeting place indicates how ephemeral is much of the knowledge of Aboriginal places of significance. And it is remarkable that one tree can indicate the significance of long-distance trade and exchange networks—in this case within Tjap Wurrung Country, from the northern estates to Lake Bolac, 80 km to the south, but also within larger communities such as the Eastern Maar People or the Maar Nation or beyond. Thanks to Vic Start and the recording of his words by Heather Builth and Oona Nicolson, knowledge of the tree has survived even though the tree itself has not. And despite persistent and ongoing abuse, neglect and racism, the Aboriginal Peoples of Victoria have survived as well.

In the Country of the Tjap Wurrung People, and their neighbours the Peek Whurrong, Kirrae Whurrong, Kuurn Kopan Noot and Yarro waetch (Tooram Tribe) Peoples, the Eastern Maar Aboriginal Corporation has been established, to take care of and manage their Native Title claims and interests, and those also of other people who identify and are recognized as part of the broader Eastern Maar group without identifying with a particular clan.

3.6.6 Historical Land-use History

In 1836 Major Thomas Mitchell and his party of explorers were the first of the Europeans to officially pass through this region and they thought themselves the first humans to have set foot on the western Victorian plains, as he recorded in his journal:

> The scene was different from anything I had ever before witnessed, either in New South Wales or elsewhere. A land so inviting, and still without inhabitants! As I stood, the first European intruder on the sublime solitude of these verdant plains, as yet untouched by flocks or herds, I felt conscious of being the harbinger of mighty changes,

> and that our steps would soon be followed by the men and the animals for which it seemed to have been prepared (Mitchell 1838, Journal entry for 30 June 1836).

He gave European names to the various peaks he sighted, such as the Grampians, the Pyrenees and Mount Alexander (Banfield 1964: 5). In the decade following land in the region was taken up by pastoralist squatters and overlanders and their stock, mainly sheep. The study area extended through three pastoral runs: Decameron, Glendhu, and Woodlands North (Figure 3-7). Settlements were established around the needs of the sheep stations, with employment, accommodation, schools and other needs following.
Activities associated with gold mining are extremely destructive and goldfields in Victoria have been subject extensive landscape modifications associated with excavations of water races, backfilling of creeks, diversion of water, quartz crushing, excavation of mines and tunnels and shallow surface diggings (Figure 3-11). Peripheral activities associated with settlement on the goldfields such as timber clearing and road construction. The 'Glendhu (or Glen Dhu) Reef Mine' or 'Crowlands Mine' is located between Joel South and Glenlofty and was one of the earliest alluvial gold mines worked in the area in the 1860s, however, very few of the 70-80 claims were taken out on it were actually worked (DNRE 1999: 21). By the mid-1860s Glendhu was revisited for both gold and silver (DNRE 1999: 22). After a decade and a half of stagnancy, mining was again pursued in the late-1880s in the region (DNRE 1999: 22). An 1888 map shows the study area as land open for purchase under Section 67, situated south of the gold mining locations and west of the timber reserves (Figure 3-10). At this time, the district was part of the 'Electoral District of Crowlands' as described in Figure 3-8 and Figure 3-9.

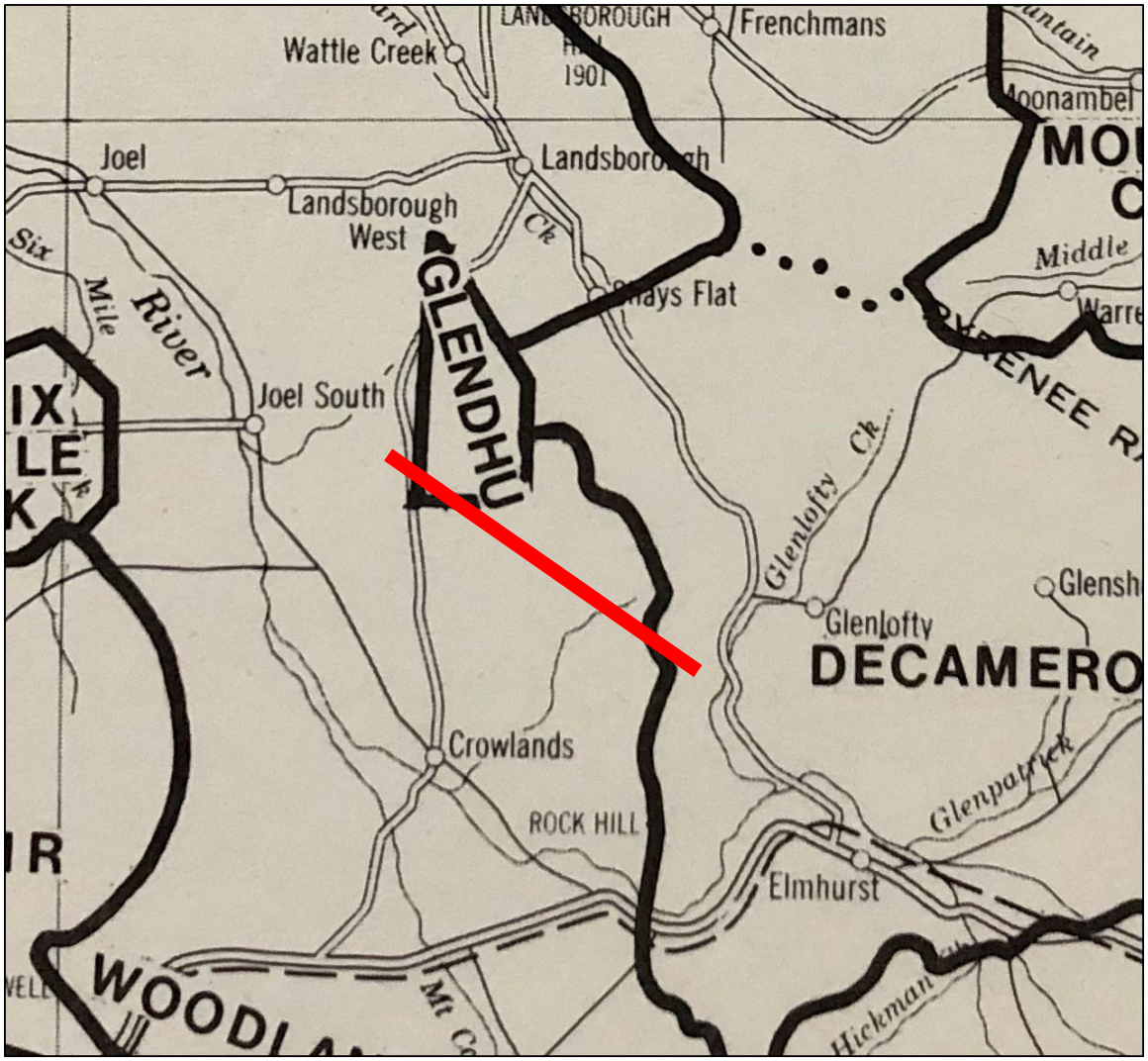


Figure 3-7 Pastoral runs in the vicinity of the study area (roughly marked in red) (source: Spreadborough & Anderson 1983)

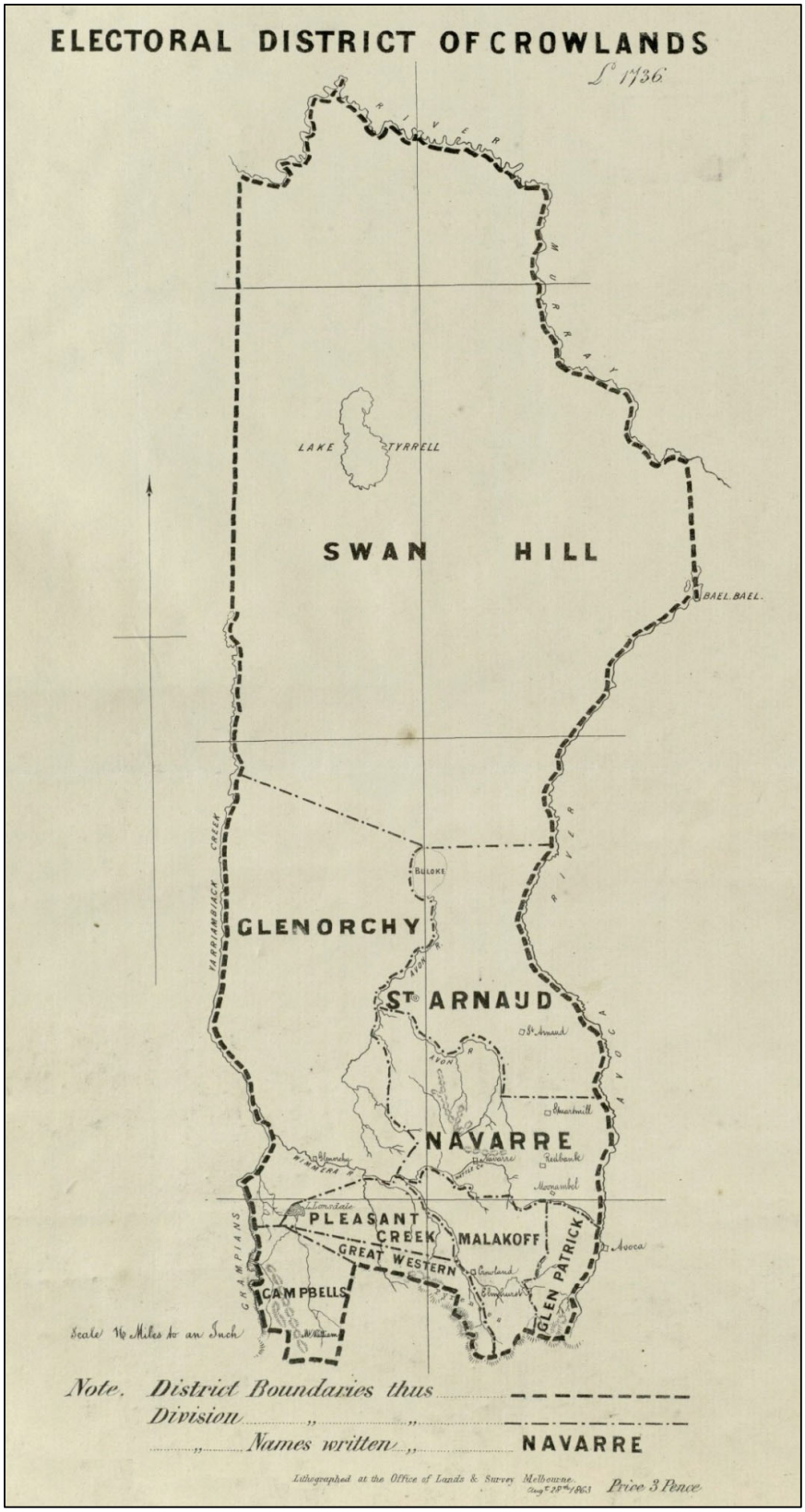
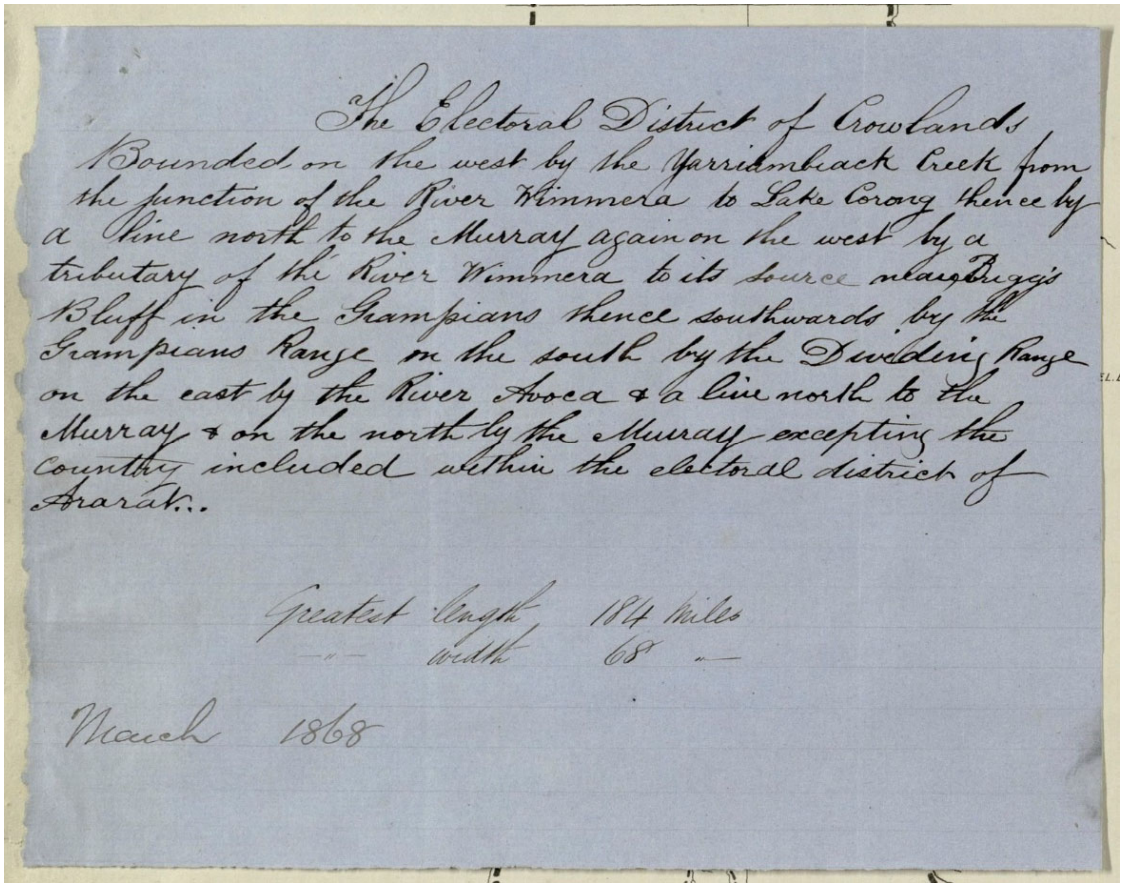


Figure 3-8 Electoral District of Crowlands as at 1863 (source: National Library of Australia)



The Electoral District of Crowlands
Bounded on the west by the Yarriambiack Creek from the junction of the River Wimmera to Lake Corong thence by a line north to the Murray again on the west by a tributary of the River Wimmera to its source near Briggs Bluff in the Grampians thence southwards by the Grampians Range on the south by the Dividing Range on the east by the River Avoca & a line north to the Murray & on the north by the Murray excepting the country included within the electoral district of Ararat..

Greatest length 184 miles
" width 68 "

March 1868

Figure 3-9 Description of the Electoral District of Crowlands as at 1868 (source: National Library of Australia)

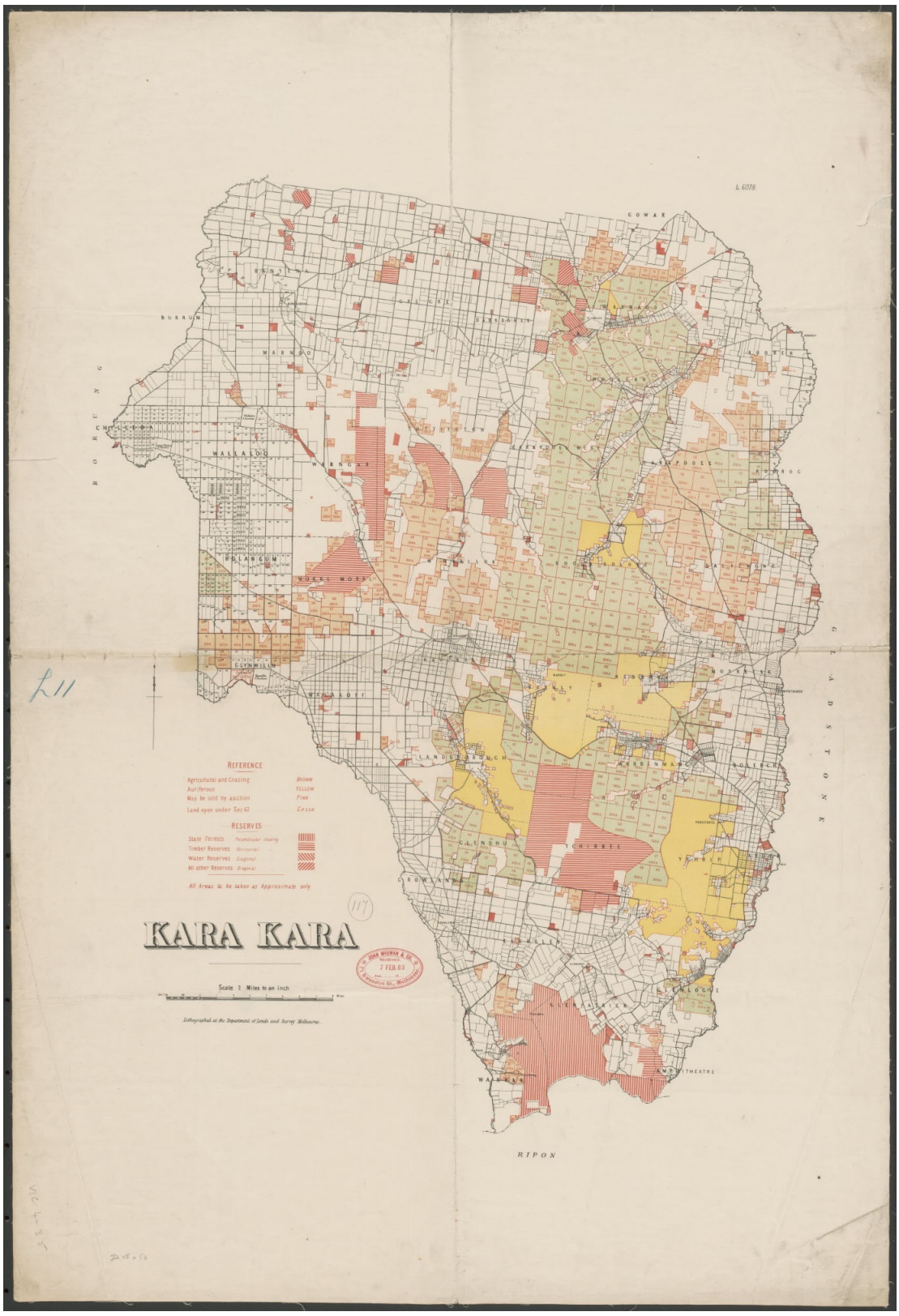


Figure 3-10 1888 Parish map showing study area as predominantly 'Land open under Sec 67' (source: National Library of Australia)

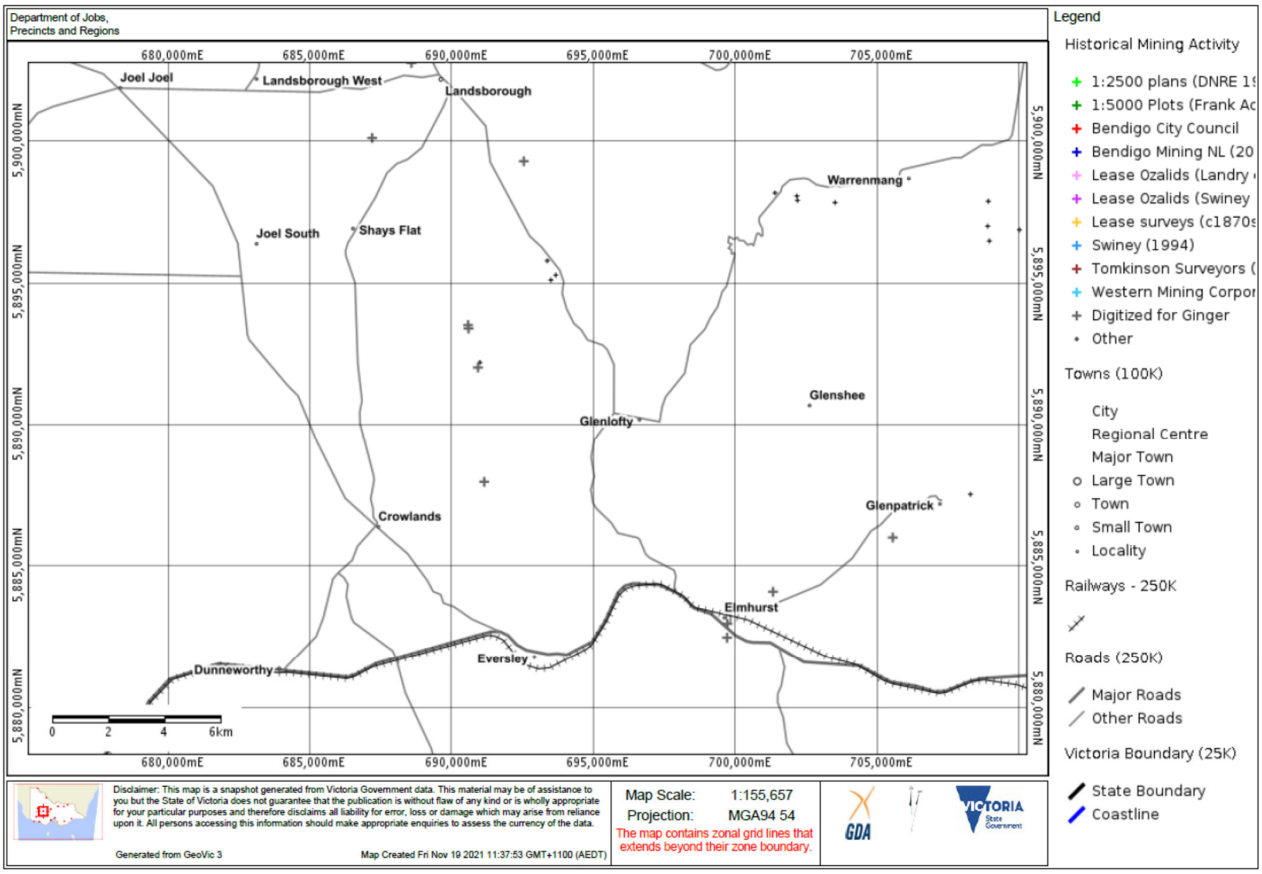


Figure 3-11 Map showing historical mining activity in the region (source: GeoVic: www.gsv.vic.gov.au)

Farming replaced gold mining as the main industry in the region at the turn of the century, with wheat and sheep forming the main focus and dairy and poultry as a minor industry (LDHGI 2006: 6). Timber harvesting and sawmills were established in the region and involved the carting of wood via train (LDHGI 2006: 10-11). The larger townships developed within the geographic region include Landsborough and Elmhurst, supported by transport routes such as the railway line to the south, Pyrenees Highway, Landsborough-Elmhurst Road and Ararat-St Arnaud Road. Agriculture in these districts included olive groves, vineyards

The land within the study area itself, however, has remained pastoral and agricultural, with the larger impacts of gold mining and town development being located further afield. Within the study area region clearing, localised road development and the installation of an overhead power line easement, including development of a terminal power station between 2017-2018 and carparking and other impacts location between 2017-2018 (Figure 3-12 - Figure 3-17).

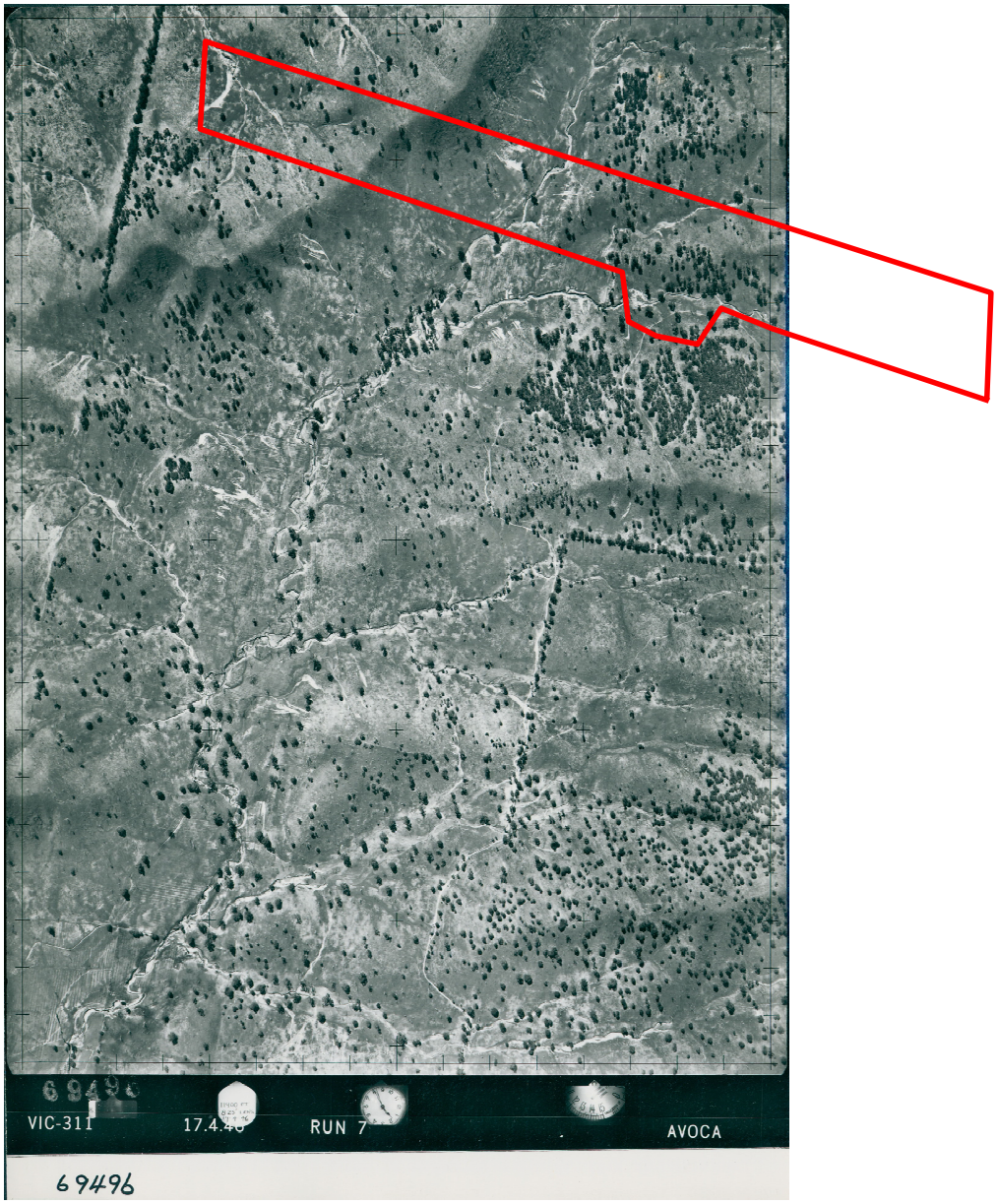


Figure 3-12 1946 aerial image of central section of the study area (source: www.landata.vic.gov.au)



Figure 3-13 1946 aerial image of west of study area (source: www.landata.vic.gov.au)

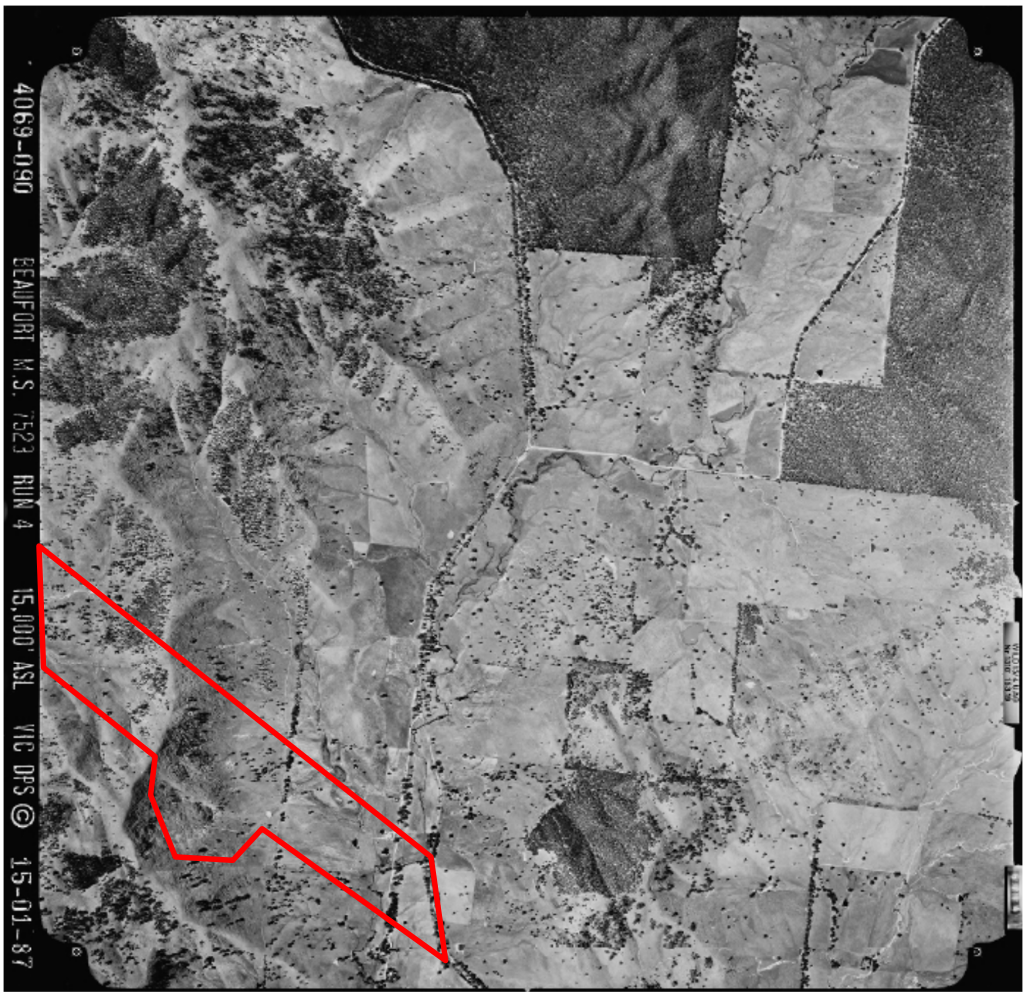


Figure 3-14 1987 aerial image of western section of the study area (source: www.landata.vic.gov.au)

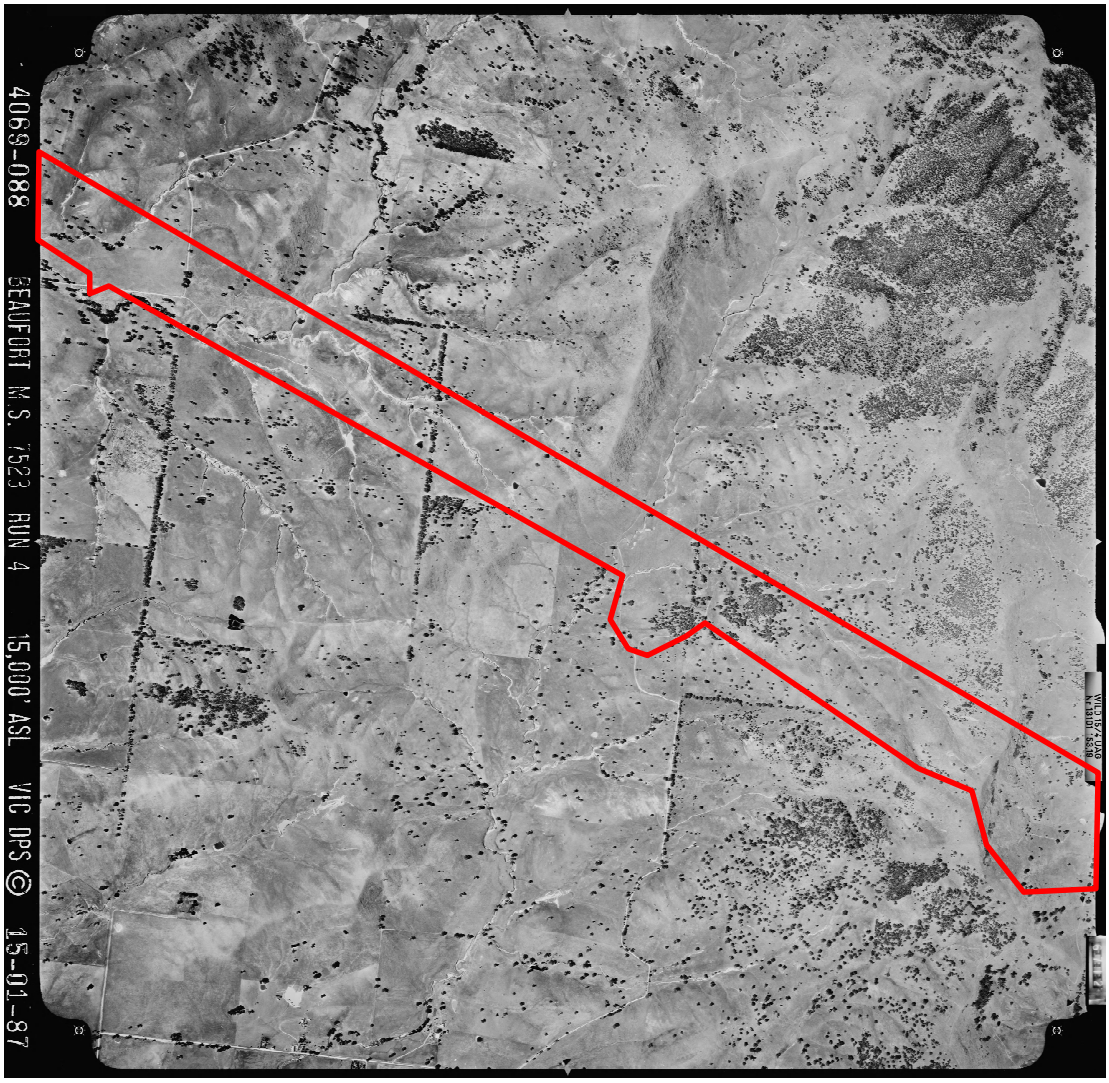


Figure 3-15 1987 aerial image of central section of the study area (source: www.landata.vic.gov.au)



Figure 3-16 September 2017 aerial showing west to centre of study area (red) (source: Google Earth Pro)

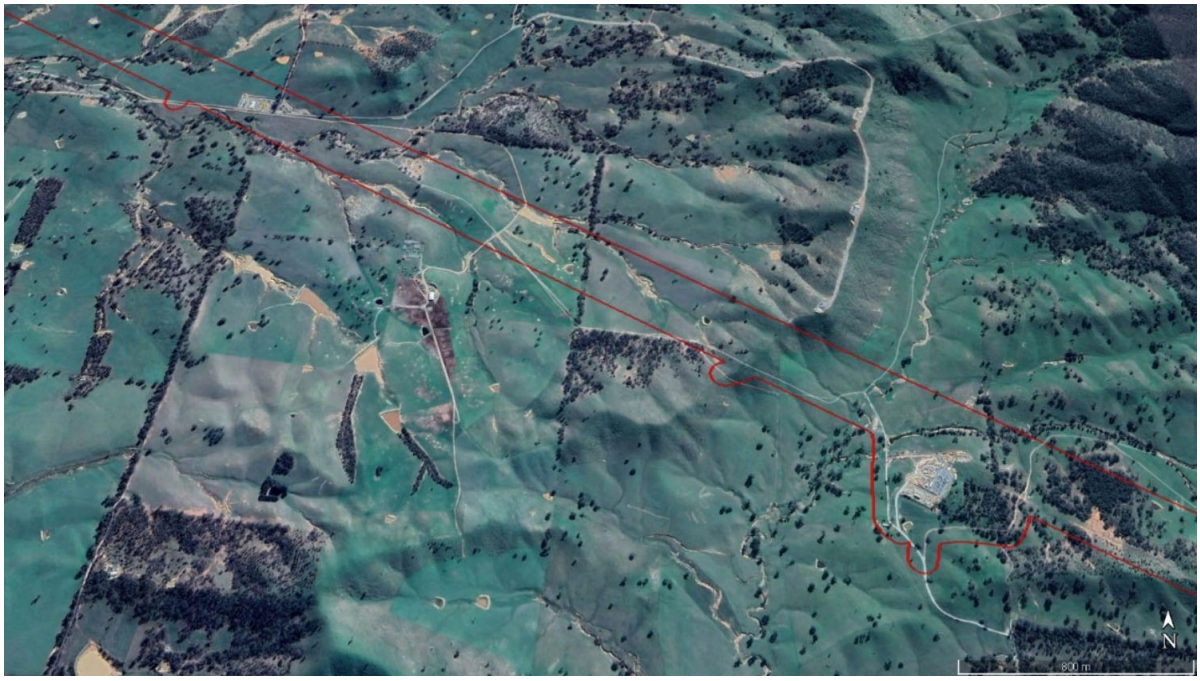


Figure 3-17 August 2018 aerial showing west to centre of study area (red) (source: Google Earth Pro)

3.6.7 Impacts of land-use on the study area

A summary of impacts from land-use is presented bellow

- Clearance of timber;
- Establishment of agricultural land;

- Extensive impacts on flora and fauna from European impact on landscape;
- Continual cropping/ploughing on will impact location and context of cultural material;
- Energy infrastructure (electricity easement);
- Larger localised impacts of dam excavation, rail and road construction.

3.7 Archaeological Background

The findings of previous cultural heritage assessments in the study area and wider geographic region can help inform the current investigation by improving our understanding of the distribution of Aboriginal places in the region and the factors that have led others to their discovery. Therefore, a review of previous assessments in the geographic region, as well as more locally, is pertinent.

It is important to note that many Aboriginal places within the study region will have previously been impacted by intensive activities, such as farming, land clearing, construction of drainage schemes along with both residential and commercial development. The known distribution of Aboriginal places reflects the investigation effort and land-use, rather than the intensity of Aboriginal occupation and archaeological deposition in the region.

The Victorian Aboriginal Heritage Register (VAHR) was accessed by David Mathews for previous archaeological reports and sources.

3.7.1 Regional assessments

Coutts (1977a) reported on the results of the 1977 Victoria Archaeological Survey summer school conducted in southwest Victoria, with the current study area located in the northeast of the region. A total of 308 Aboriginal places were registered during the program, dominated by mounds (60.7%), followed by stone house places (15.9%), coastal middens (10.4%) and surface stone artefacts occurrences (8.1%), with small numbers of weirs/fish traps, burials and quarries identified. Nearly 65% of the mounds were identified on the margins of a large swamp where numerous stone houses/stone structures were also identified (c. 20 km south of the geographic region) and with the remainder of the stone houses/stone structures and the 'most spectacular finds' located around the margins of Lake Condah, indicating an intricate and complex knowledge of hydrodynamics (Coutts 1977a: 7).

Edmonds et al. (1997) conducted a survey of the Upper Wimmera River Basin with the current study area located within the 'Uplands' landsystem unit, with the two other represented systems being the 'Tertiary Plains' and the 'Alluvial Plains'. The Uplands unit is characterised by narrow ravine corridor, steep sided river valleys, ridgelines and granite outcrops. The Uplands unit represented the smallest component of the riverine corridor and of the 208 Aboriginal places recorded, only seven were in this unit (1 x scarred tree, 2 x surface scatter, 4 x isolated artefacts). The stone artefacts included quartz flaked artefacts and basalt ground pieces. The ground pieces were located adjacent to billabongs and swamps and the flaked pieces were located along the top of a river terrace. Edmonds et al. (1997: 42) suggested this may be as due to the 'youthful Wimmera' not being a resource zone, with the valleys comprised of rock holes and springs and concluded that there is a much higher density and range of places in proximity to former and present wetlands within the Upper Wimmera study area.

3.7.2 Local-scale assessments

Local-scale investigations have been undertaken relating to the urban development of the area that provide further detail and enable more concise prediction models. The most relevant are discussed here. The CHMPs associated with the Crowlands Windfarm (Builth & Nicolson 2010, Cummins et al. 2018, Holzheimer et al. 2018) covers c. 75% of the current study area, however the localised assessments associated with each of

those CHMPs focussed only on areas proposed for impact so not necessarily representative of coverage of 75% of the current study area.

Builth and Nicolson (2010) prepared CHMP 10020 for the construction of a wind farm on c. 6,724 ha of land encompassing c. 20% of the geographic region and the majority of the current study area. Field survey focussed on areas proposed for impact across the ridgeline and alluvial flats landforms. A total of 34 Aboriginal places were registered as a result of the survey, with nineteen identified on the ridgeline landform and fourteen on the alluvial flats. Of these, seventeen were scarred trees, one was a ceremonial site, one comprised a greenstone axe, one included post-contact artefacts (historic bottles and worked glass), and the remainder comprised of either a source of quartz or quartz artefacts. The results were interpreted as suggesting that the ridgelines were valued in the landscape with high quality quartz being available on this landform. The absence of hearths or dwellings was suggested to reflect an absence of campsites, supported by the distance to potable water and the presence of a ceremonial site. On the alluvial flats the presence of canoe scars on trees (as well as shield cars) was interpreted as indicating that navigable water would have been seasonally available at this point away from the Wimmera River. Subsurface testing included the excavation of ten 0.5x0.5 m test pits and 188 mechanical augers (ranging from 50mm – 600 mm diameter) on the alluvial flats (totalling 16.16 m^2). Testing did not occur on the ridgeline as it was considered of low potential due to the "shallow presence of eroding sub-surface rock, as horizontally laid stratigraphy of Cambrian aged sandstone with a large quantity of quartz and other outcropping stone" (Builth & Nicolson 2010: 58). No Aboriginal cultural material was identified during excavations. **Cummins et al. (2018)** prepared CHMP 12590 for additionally proposed works associated with the wind farm requiring further survey and subsurface testing (both in 2013 and then as an additional amendment in 2018). Field survey identified two previously unrecorded places, a scarred tree and five stone artefacts. In addition, the previously registered scarred trees in the vicinity of new works were assessed and one was determined not to be cultural and one was not at the recorded location. Four 1x1 m test pits and fourteen 0.4x0.4 m shovel test pits were excavated (6.24 m^2 in total). A total of 46 quartz artefacts (40 in subsurface contexts) were identified on rises and rises on the creekbank landforms in Holocene alluvium and, in all, were registered as eight Aboriginal places. One of the shovel test pits contained 30 artefacts between 210-3100 mm in association with charcoal and a radiocarbon date at this place location (VAHR 7523-0347) yielded a date of 5004±25 BP (Wk-37169) suggesting mid-Holocene occupation. It was considered possible that this location may include a mound site. Further: subsurface finds were "restricted to deposits of fine silty-sands that were pale yellow-beige from surface to 500mm bs. The location and density of the sites is consistent with expectations in light of both the desktop and standard assessments, with the silts and the sites corresponding to Holocene alluvial deposition across the landscape" (Cummins et al. 2018: 68). It was concluded that each place represents coexisting areas associated with familial relationships and possibly with activity types. **Holzheimer et al. (2018)** prepared CHMP 14680 for the development of an access track into the wind farm (c. 15.39 ha) crossing ridgeline and undulating river/valley plain and terrace associated with the Wimmera River. Ground surface visibility was poor at the time of survey. Eight quartz artefacts eroding out of a slight rise on the plain were registered as a result of the survey. Subsequent subsurface testing included the excavation of four 1x1 m test pits and 51 shovel test pits (0.5x0.5 m) (totalling c. 16.75m^2). A total of 57 quartz artefacts were identified across 12 pits, all located east of the Wimmera River and registered as two places. The majority of artefacts were identified within the river terrace landform, followed by the valley plain landform and none within the ridge landform (excepting one previously registered surface scatter of five quartz artefacts). Multiple stratigraphic profiles were noted dependent on landform and disturbance with relatively undisturbed profiles beneath the impact of ploughing (which will have dispersed or removed any cultural material). Historic flooding of the Wimmera River has resulted in sandy silts and quartz pebbles building up at this location.

Murphy & Rymer (2011) prepared CHMP 11442 for a c. 21.3 km linear project (c. 426 ha) of windfarm connected powerline located c. 3.2 km southeast of the current study area at its closest point. The route extended across low hills, Mount Cole Creek, a shallow valley, Wimmera River valley, a saddle and terraces. Field survey encountered poor ground surface visibility and no Aboriginal cultural material was identified and concluded that only land within 200 m of Mount Colle Creek and specific areas within 200 m of the Wimmera

River were of low-moderate sensitivity for the presence of stone artefacts. Subsurface testing included the excavation of four 1x1 m test pits, two mechanical pits (1.3x1 m) and fifteen 0.5x0.5 m test pits (totalling c. 10.35 m^2). No Aboriginal cultural material was identified and it was suggested this could be as there are no strategic values within the study area so no long term camp locations and those areas considered of higher strategic value (the water courses) have only a very small representation within the study area.

Tepper et al. (2017) prepared CHMP 14978) for c. 35 km of rail reinstatement within an existent rail corridor located c. 3.2 km south of the current study area and extending across low-lying undulating plain incised with ephemeral creeks, drains, minor and major creeks. During the survey surface visibility was poor and extensive disturbance associated with previous land use and rail construction was observed, with no Aboriginal cultural material identified. Subsequent subsurface testing excavated five 1x1 m test pits and 104 shovel test pits (0.5x0.5 m) (totalling c. 31 m^2) at areas considered of higher potential (proximity to waterways and elevated landforms). No Aboriginal cultural material was identified and it was determined that the extent of disturbance and the distance from resources meant that there was low potential for material to be present. An additional two CHMPs (CHMP 14976, **Oataway & Strickland 2017**; CHMP 15137, **Oataway et al. 2017**) which assessed lengths of the same rail corridor further south (c. 6.2 km south of the current study area). The survey undertaken by Oataway & Strickland (2017, CHMP 14976) did not identify Aboriginal cultural material or any areas of Aboriginal archaeological potential, with extensive disturbance present associated with the rail reserve and no further investigation was undertaken. The survey undertaken by Oataway et al. (2017, CHMP 15137) identified fiver areas of Aboriginal archaeological potential based on sensitive landforms: rise above Wimmera River swampland; rise between Wimmera River and Sandy Creek; rise amongst remnant gum trees; substantial flat rise above prior drainage channel, and; low rise west of drainage channel. Subsurface testing at these locations included the excavation of two 1x1 m test pits and 51 shovel test pits (0.4x0.4 m), totalling 14.75 m^2. A total of 146 quartz artefacts were identified, varying in raw material quality and were mainly in proximity to waterways. Artefact depths ranged from 50 - 400 mm, with most identified between 100 - 300 mm. The artefacts were registered as two places, one as a low-density occurrence on a raised landform overlooking the Wimmera River floodplain north of the river and south of Sandy Creek, and one as a higher density scatter within a sandy rise adjacent to an ephemeral creek associated with Sandy Creek. It was suggested that the low-density place, given depths of deposits but shallowness of artefacts (<200 mm), was likely disturbed through natural alluvial processes. The place on the elevated landform, however were considered to be largely *in situ*.

Bell (2018) prepared CHMP 15786 for c. 2 km of overhead powerline installation and c. 70 m of underground service installation located c. 8 km south of the current study area. A field survey was undertaken as desktop research indicated that landforms of Aboriginal archaeological potential were present, such as terraces and floodplains associated with the Wimmera River, however ground assessment determined that these landforms were absent and that the area had been significantly disturbed through road construction. No further investigation was undertaken.

Implications:
Due to the absence of extensive development projects in the study area and geographic region, very little recent investigation has been undertaken and the earlier research has generally been limited to background research and limited field surveys, limiting the likelihood of identifying Aboriginal cultural heritage in a low visibility landscape. The CHMP assessments generally provide more detailed results including excavation and artefact analysis.

However, as a general conclusion:

- Quartz almost exclusively dominates as the raw material utilised for artefacts;
- Of the six investigations that included subsurface testing, half did not identify cultural material in subsurface contexts and those that did had artefact densities ranging between 3.4 p/m^2 – 9.9 p/m^2; with a total of 95.25 m2 excavated and an average of all program artefact totals at 2.6 p/m^2

- Ridgelines may have surface stone artefacts present but none has been identified on this landform in subsurface contexts (Builth & Nicolson 2010; Holzheimer et al. 2018);
- Landforms considered sensitive for the presence of cultural material include rises, river terraces, proximity to a water source (Builth & Nicolson 2010; Cummins et al. 2018; Holzheimer et al. 2018; Oataway & Strickland 2017; Oataway et al. 2017; Tepper et al. 2017);
- Where no strategic values were included in study regions no Aboriginal cultural material was identified (Murphy & Rymer 2011; Tepper et al. 2017; Bell 2018);
- A mid-Holocene occupation date was yielded from a place adjacent to the river.

3.7.3 Registered Aboriginal Cultural Heritage Places

The Victorian Aboriginal Heritage Register (VAHR) was accessed by David Mathews for information regarding previous archaeological reports and sources, and the locations and details of Aboriginal places within the geographic region. There are 60 Aboriginal places registered on the VAHR within the geographic (see Table 3-16). These comprise 22 (36.7%) scarred trees, 18 (30%) artefact scatter listings, ten (16.7%) multi-component listings with a rage of artefact scatters, quarries, scarred trees, post-contact artefacts and stone features represented; six (10%) low density artefact distributions (LDADs), and one (1.7%) each of an earth feature (mound), quarry, rock art and Aboriginal cultural place (Table 3-12). There are six Aboriginal places registered within the study area itself. One preliminary report of possible Aboriginal cultural heritage in the geographic region has been submitted to the VAHR, not yet assessed (Table 3-15).

Where LDADs have been recorded within the geographic region, their artefact numbers were generally low (Table 3-9). It should be noted that some of the artefact scatters registered within the geographic region prior to the introduction of the LDAD registration would now fall within the definition of a LDAD, due to low artefact density.

Those places registered within the current study area are described in further detail below:

- VAHR 7523-0212: Located on the mid-slope of a 'Cambrian geological formation', both a scarred tree and numerous quartz artefacts of varying quality were identified on the surface, extending for c. 50 m downslope. Of these, only twenty were recorded in detail. The scarred tree exhibited a single scar on a healthy, standing gum species.
- VAHR 7523-0345: A single scar on a dead (but standing) gum species located on an alluvial terrace of Spring Creek.
- VAHR 7523-0347: Registration of both a stone artefact scatter and a mound on an alluvial terrace associated with Spring Creek. The scatter solely comprises quartz artefacts identified in both surface and subsurface contexts (majority between 250-300 mm deep). The mound is located at the centre of the extent of the artefact scatter, however its cultural origin was not confirmed by excavation.
- VAHR 7523-0348: Located on an alluvial terrace of Spring Creek and with nine quartz artefacts identified in surface and subsurface contexts (50-150 mm deep), this place is considered to be located within the same landform context as VAHR 7523-0347 and considered likely to relate to similar Aboriginal settlement practices and social and cultural activities (e.g. tool production, resource procurement and processing) and with the spatial distribution of occupation along Spring Creek reflecting distinct encampments of groups separated by time, family or kin divisions.
- VAHR 7523-0370: Twelve quartz artefacts identified in subsurface contexts (c. 200 mm deep) on a gentle slope adjacent to a minor tributary.

Table 3-12 Summary of Aboriginal place types within the geographic region

Component Type	Total	%
Artefact Scatter	18	30%

Artefact Scatter / Quarry	4	6.7%
Artefact Scatter / Quarry / Stone Feature	1	1.7%
Artefact Scatter / Scarred Tree	4	6.7%
Artefact Scatter / Aboriginal Heritage Place	1	1.7%
Earth Feature	1	1.7%
Quarry	1	1.7%
Rock Art	1	1.7%
Low Density Artefact Distribution	6	10%
Aboriginal Cultural Place	1	1.7%
Scarred Tree	22	36.7%
Grand Total	**60**	**100%**

Table 3-13 Registered Aboriginal places & Historical References within the geographic region sorted by distance to the study area

Distance Category	Component Type	Total
In study area	Artefact Scatter	2
	Artefact Scatter/Scarred Tree	1
	Earth Feature (Mound)	1
	Low Density Artefact Distribution	1
	Scarred Tree	1
<200m	Scarred Tree	4
	Low Density Artefact Distribution	1
200m -1 km	Artefact Scatter	1
	Low Density Artefact Distribution	1
	Scarred Tree	1
1-2 km	Artefact Scatter	2
	Artefact Scatter/Quarry	1
	Artefact Scatter/Scarred Tree	1
	Low Density Artefact Distribution	1
	Scarred Tree	1
2-3 km	Artefact Scatter	5
	Aboriginal Historical Place/Artefact Scatter	1
	Scarred Tree	3
3-4 km	Artefact Scatter	8
	Artefact Scatter/Quarry	2
	Low Density Artefact Distribution	1
	Scarred Tree	6
4-5 km	Aboriginal Cultural Place	1
	Artefact Scatter/Quarry	1
	Artefact Scatter/Quarry/Stone Feature	1
	Artefact Scatter/Scarred Tree	2
	Quarry	1
	Scarred Tree	3
Grand Total		**60**

Table 3-14 Low Density Artefact Distribution, including component (artefact) count

Component Type	VAHR	Place Name	Total
Low Density Artefact Distribution	7523-0364	Wimmera River LDAD	14
	7523-0365	Maryborough-Ararat LDAD 2	6
	7523-0370	Crowlands Windfarm LDAD 1	7
	7523-0371	Crowlands Windfarm LDAD 2	5
Grand Total			**32**

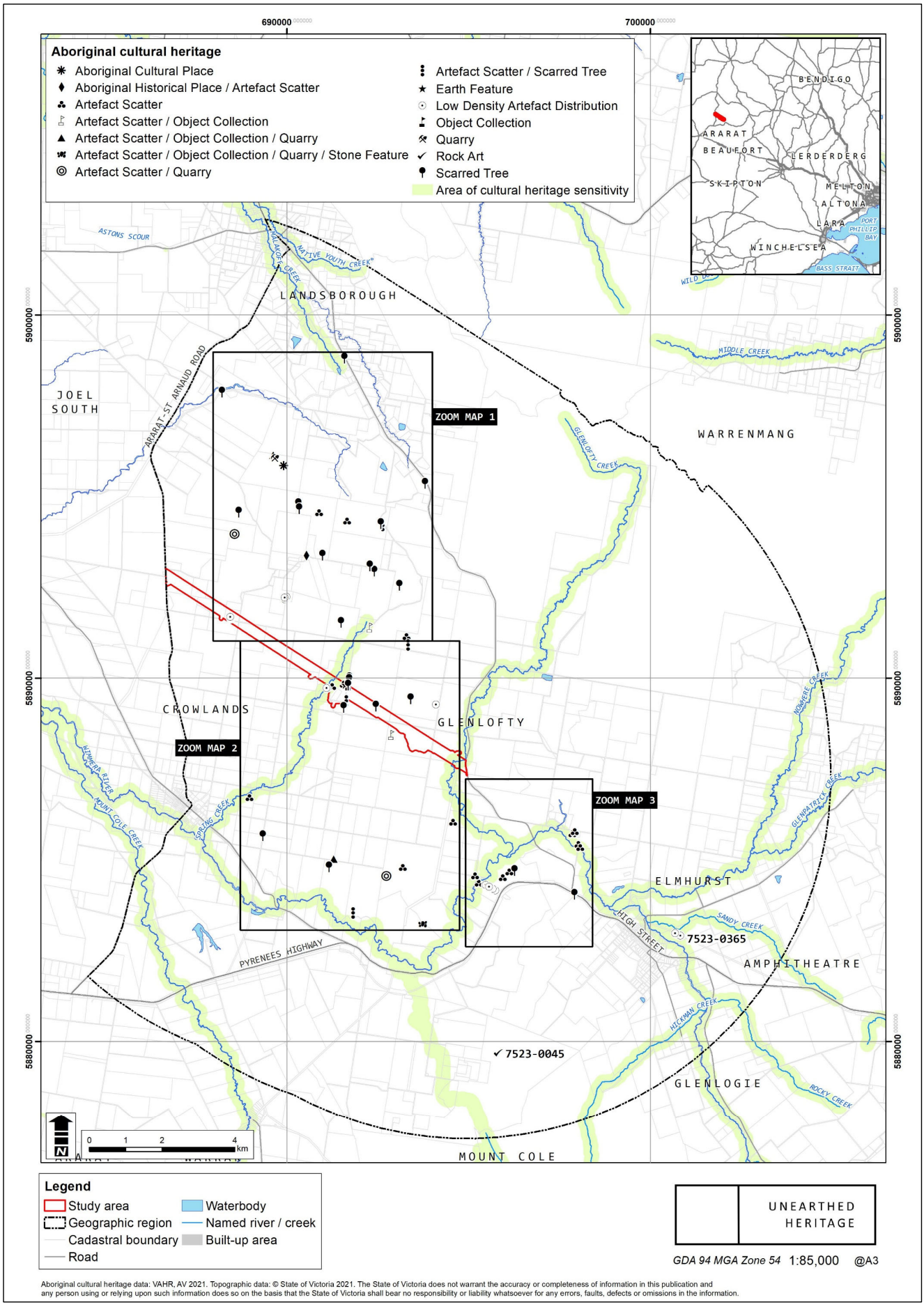
Table 3-15 Preliminary reports of Aboriginal cultural heritage within the geographic region

Project No.	Description	In study area
2019004	Scarred Tree	N

Table 3-16 Summary of Aboriginal place types within the geographic region

VAHR	Name	Type	Distance from Study Area
7523-0045	MT COLE ART SITE	Rock Art	>5km
7523-0112	DECAMERON 1	Scarred Tree	2-3km
7523-0113	DECAMERON 2	Artefact Scatter	2-3km
7523-0114	DECAMERON 3	Artefact Scatter	2-3km
7523-0115	MURNANE'S 1	Artefact Scatter	3-4km
7523-0116	MURNANE'S 2	Artefact Scatter	3-4km
7523-0117	MURNANE'S 3	Artefact Scatter	3-4km
7523-0118	MURNANE'S 4	Artefact Scatter	3-4km
7523-0165	SPRING CREEK 1	Artefact Scatter	3-4km
7523-0166	MAKALOFF-1	Scarred Tree	>5km
7523-0167	SHADY'S FLAT ROAD 1	Scarred Tree	>5km
7523-0182	GLENLOFTY CREEK 1	Artefact Scatter	1-2km
7523-0201	LANDSBOROUGH 191	Artefact Scatter / Quarry	1-2km
7523-0202	BOATMANS GATE 385	Scarred Tree	<200m
7523-0203	GLENLOFTY 243	Artefact Scatter	2-3km
7523-0204	GLENLOFTY 244	Artefact Scatter / Scarred Tree	1-2km
7523-0205	GLENLOFTY 252	Scarred Tree	200m-1km
7523-0206	GLENLOFTY 261	Artefact Scatter / Object Collection	200m-1km
7523-0207	CROWLANDS 113	Artefact Scatter / Object Collection	1-2km
7523-0208	CROWLANDS 152	Scarred Tree	<200m
7523-0209	CROWLANDS 153	Scarred Tree	<200m
7523-0210	CROWLANDS 156	Scarred Tree	<200m
7523-0211	CROWLANDS 232	Scarred Tree	1-2km
7523-0212	CROWLANDS 263	Artefact Scatter / Scarred Tree	In Study Area
7523-0213	CROWLANDS 375	Artefact Scatter / Object Collection / Quarry	3-4km
7523-0214	EVERSLEY 279	Artefact Scatter	3-4km
7523-0215	EVERSLEY 282	Artefact Scatter / Quarry	3-4km
7523-0216	EVERSLEY 293	Artefact Scatter / Scarred Tree	4-5km
7523-0217	EVERSLEY 297	Artefact Scatter / Object Collection / Quarry / Stone Feature	4-5km
7523-0218	GLENDHU 01	Scarred Tree	2-3km
7523-0219	GLENDHU 04	Scarred Tree	3-4km
7523-0220	GLENDHU 06	Scarred Tree	3-4km
7523-0221	GLENDHU 159	Aboriginal Historical Place / Artefact Scatter	2-3km
7523-0222	GLENDHU 160	Artefact Scatter	3-4km
7523-0223	GLENDHU 168	Artefact Scatter / Scarred Tree	4-5km
7523-0224	GLENDHU 169	Scarred Tree	4-5km
7523-0225	GLENDHU 173	Artefact Scatter / Object Collection / Quarry	4-5km
7523-0226	GLENDHU 176	Quarry	4-5km
7523-0227	GLENDHU 178	Aboriginal Cultural Place	4-5km
7523-0228	GLENDHU 184	Artefact Scatter	3-4km

7523-0229	GLENDHU 187	Scarred Tree	3-4km
7523-0230	GLENDHU 188	Scarred Tree	3-4km
7523-0231	GLENDHU 199	Scarred Tree	3-4km
7523-0237	EVERSLEY 300	Scarred Tree	3-4km
7523-0238	EVERSLEY 301	Scarred Tree	4-5km
7523-0239	GLENDHU 302	Scarred Tree	2-3km
7523-0332	Glenlofty Creek Tributary IA	Low Density Artefact Distribution	200m-1km
7523-0345	Rhockett Scarred Tree	Scarred Tree	In Study Area
7523-0346	Spring Creek IA	Low Density Artefact Distribution	<200m
7523-0347	Warre Creek 1	Artefact Scatter	In Study Area
	Warre Creek 1	Earth Feature	In Study Area
7523-0348	Warre Creek 2	Artefact Scatter	In Study Area
7523-0363	Wimmera River AS 1	Artefact Scatter	2-3km
7523-0364	Wimmera River LDAD	Low Density Artefact Distribution	3-4km
7523-0365	Maryborough-Ararat LDAD 2	Low Density Artefact Distribution	>5km
7523-0370	Crowlands Windfarm LDAD 1	Low Density Artefact Distribution	In Study Area
7523-0371	Crowlands Windfarm LDAD 2	Low Density Artefact Distribution	1-2km
7523-0374	Wimmera River AS2	Artefact Scatter	2-3km
7523-0376	Elmhurst ST 1	Scarred Tree	4-5km
7523-0377	Landsborough-Elmhust Road ST 1	Scarred Tree	>5km



Aboriginal cultural heritage data: VAHR, AV 2021. Topographic data: © State of Victoria 2021. The State of Victoria does not warrant the accuracy or completeness of information in this publication and any person using or relying upon such information does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.

Figure 3-18 Registered Aboriginal places within the geographic region

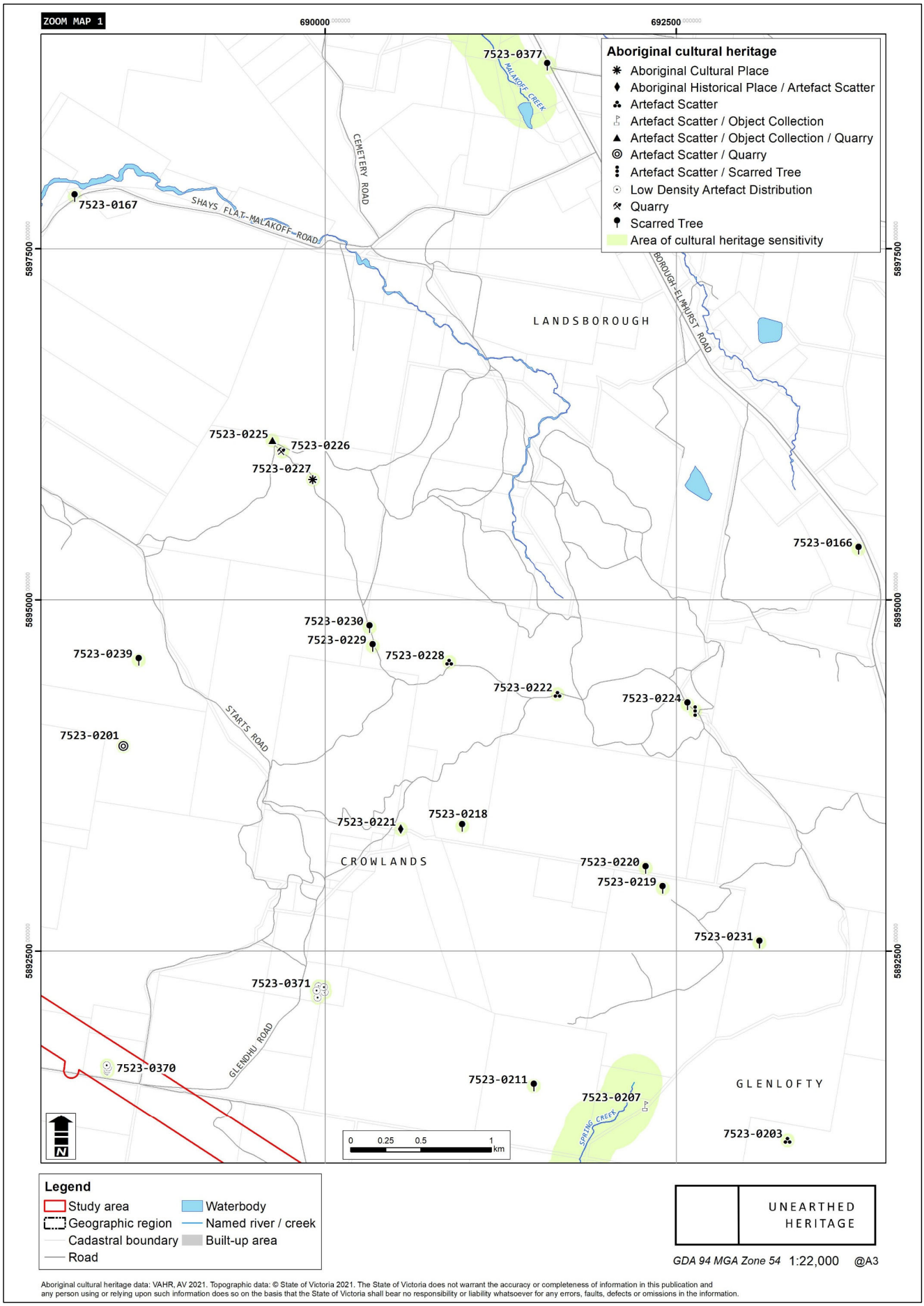


Figure 3-19 Zoom Map 1: Registered Aboriginal places within the geographic region

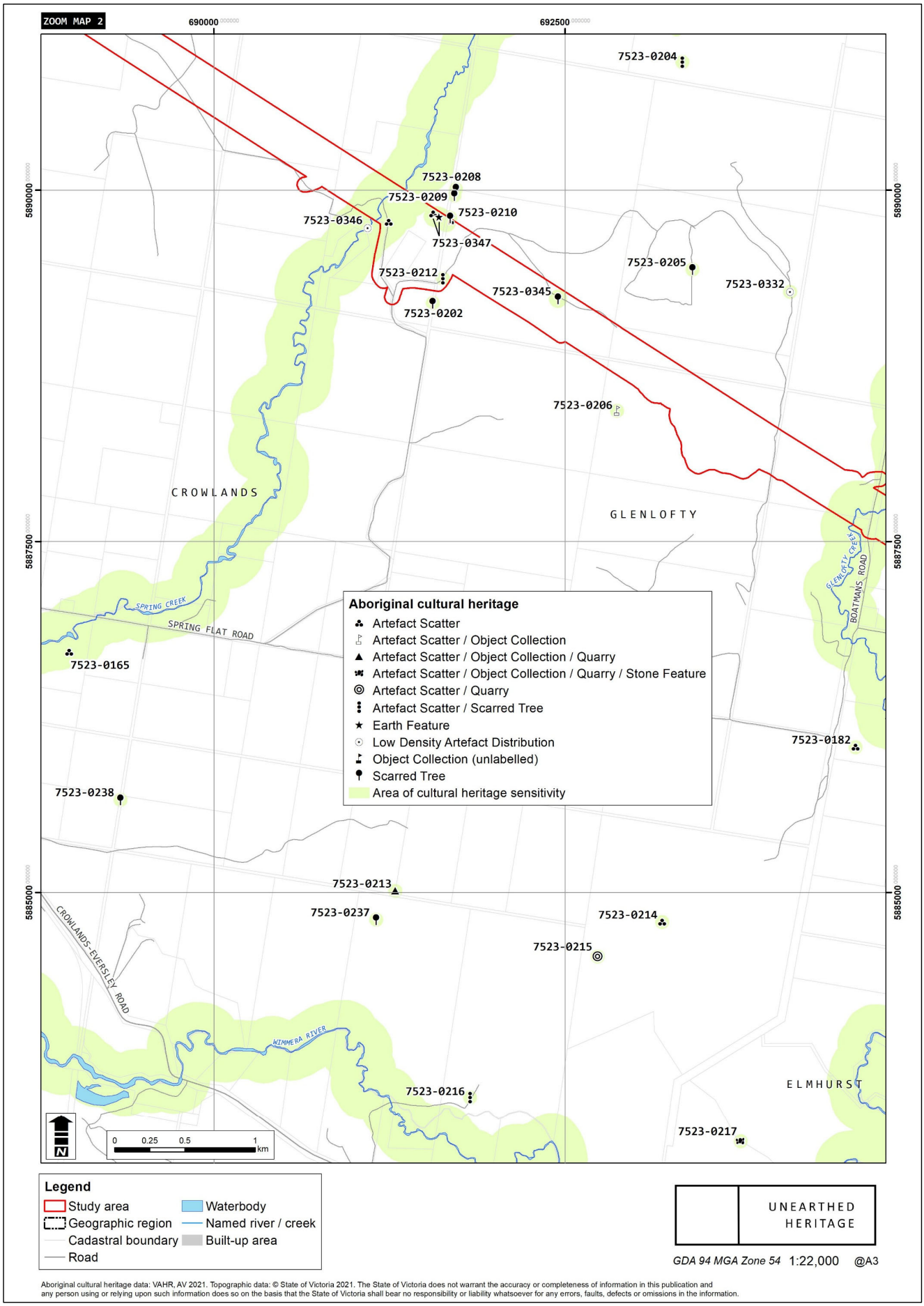


Figure 3-20 Zoom Map 2: Registered Aboriginal places within the geographic region

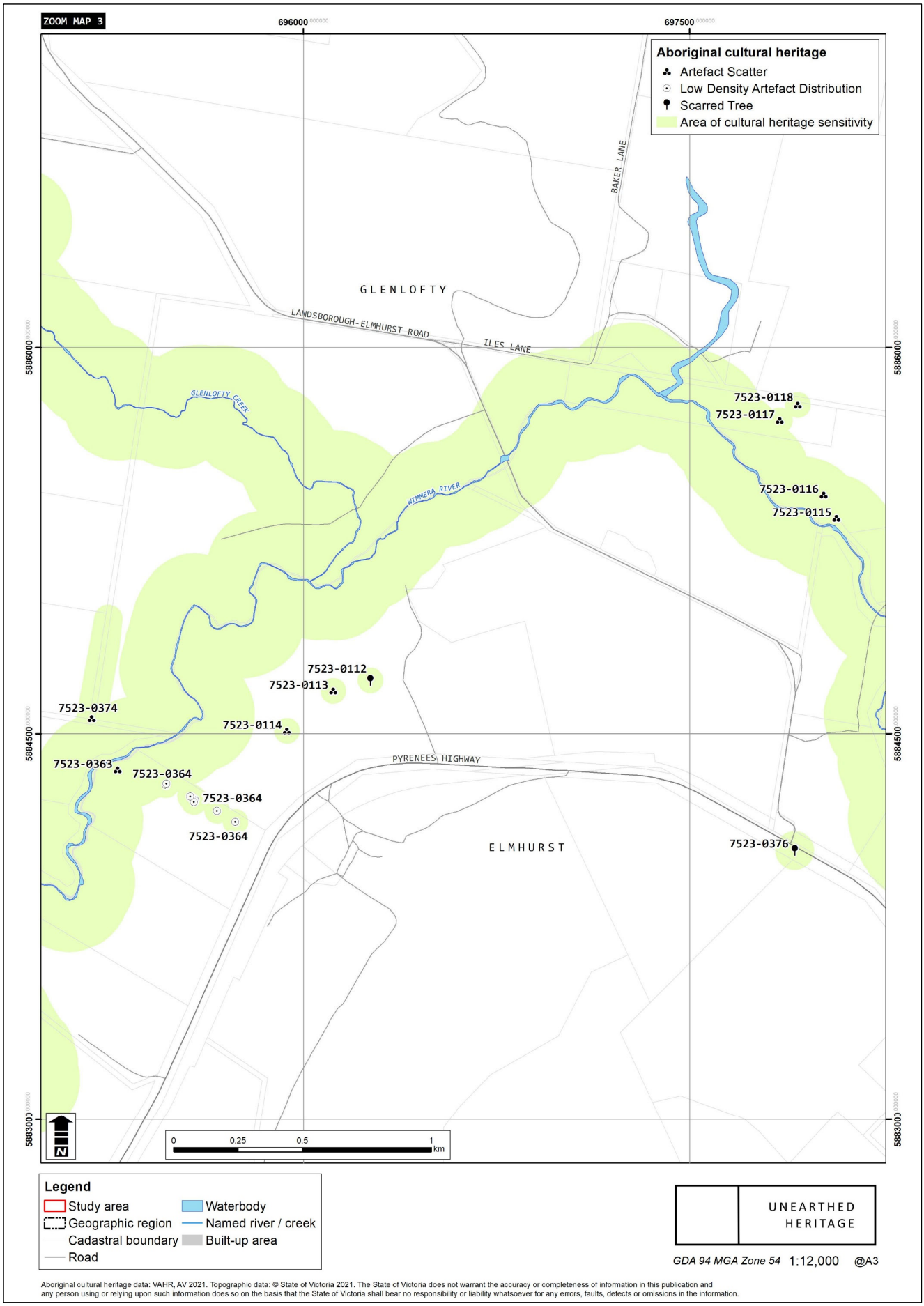


Figure 3-21 Zoom Map 3: Registered Aboriginal places within the geographic region

4 EMAC Statement of significance and Recommendations

Eastern Maar
Aboriginal Corporation

10 October 2022

STATEMENT OF SIGNIFICANCE

The Eastern Maar Aboriginal Corporation, trading as Eastern Maar Aboriginal Corporation RNTBC, was engaged by Unearth Heritage on behalf of Ausnet in the consultation for the preparation of the report **"Western Victoria Transmission Network Project Aboriginal Cultural Heritage Values Assessment".**

Although Eastern Maar Aboriginal Corporation (EMAC) identifies tangible and intangible heritage values within the activity area described in the Cultural Values Assessment (CVA), EMAC choose not to disclose details about its significance with the Heritage Advisor and sponsors of the CVA based on the Registered Aboriginal Party intellectual property management policy. EMAC reserves the right to have ownership, access, and control of the use of their Aboriginal cultural heritage, Traditional Knowledge, and Traditional Cultural Expressions.

EMAC was consulted throughout the CVA process; however, the level of involvement of the corporation and community members was limited due to the time constraints of the assessment and engagement overload. EMAC reviewed the drafts of the CVA provided by Unearthed Heritage and feedback was returned regarding the content of the assessment.

RECOMMENDATIONS

1. Eastern Maar Aboriginal Corporation policy is for no harm to occur to Aboriginal cultural heritage where possible. The harm minimisation includes the environmental protection. It is recommended that Ausnet involves Eastern Maar on the conversations concerning all the values to be affected by the project, not only tangible cultural heritage.
2. No removal of mature native trees within the area. If areas near culturally modified trees are to be impacted, EMAC should be consulted.
3. Eastern Maar should be consulted about proposed changes to the project.
4. Ausnet team and contractors should undergo cultural heritage awareness training.
5. Environment impacts caused by the project should be reported to Eastern Maar.

Please contact the Cultural Heritage Team at culturalheritage@easternmaar.com.au any further information is required.

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Eastern Maar Aboriginal Corporation

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Appendix K. Cultural Values Assessment (DJAARA)

This document was exhibited with the Western Renewables Link Environment Effects Statement from 30 June to 25 August 2025

The document has been redacted on 02/10/2025 at the request of the Registered Aboriginal Party

Appendix L. Cultural Values Assessment (WTOAC)

This document was exhibited with the Western Renewables Link Environment Effects Statement from 30 June to 25 August 2025

The document has been redacted on 02/10/2025 at the request of the Registered Aboriginal Party

Appendix M. Cultural Values Assessment (WWCHAC)

This document was exhibited with the Western Renewables Link Environment Effects Statement from 30 June to 25 August 2025

The document has been redacted on 02/10/2025 at the request of the Registered Aboriginal Party

Appendix N. Addendum to EES Technical Report B: Aboriginal Cultural Heritage Impact Assessment

Jacobs

Western Renewables Link

Addendum to the Aboriginal Cultural Heritage Impact Assessment

EES Technical Report B

12 March 2025

Ashleigh Murszewski, Jacobs Pty Ltd

Purpose

The purpose of this addendum is to ensure that Aboriginal cultural heritage field assessments and Cultural Heritage Management Plan (CHMP) updates from 6 June 2024 to 18 February 2025 are added to provide additional information and greater context for the assessment of impacts on Aboriginal cultural heritage values for the Western Renewable Link (the Project). This includes any change to impacts on known intangible and tangible Aboriginal cultural heritage values within the Project Land, the magnitude of impact for the Project, or the Environmental Performance Requirements (EPRs).

To meet the evaluation objective, it is necessary to understand the potential impact of the Project on Aboriginal cultural heritage values so that impacts can be appropriately avoided or mitigated. The most up to date and accurate information, as presented below, is pivotal for reliably assessing potential impacts and how they can be appropriately avoided or mitigated.

Stakeholder Engagement

Additional consultation has been also undertaken in the management of the CHMPs and the EES for the Project. Please refer to the statements below, which summarise key records of consultation that have not been captured in Technical Report B: Aboriginal Cultural Heritage Impact Assessment. A key focus of recent consultation has been to inform the TOs of the Environment Effects Statement (EES) process and garner their comfort in the level of field assessments, as well as their comfort in the management of intangible heritage values for the Project.

- **TRG Feedback Discussion:** On 18 February 2025, AusNet and Jacobs met with Barengi Gadjin Land Council Aboriginal Corporation (BGLCAC) to discuss ongoing management of intangible heritage values within Area 1 for the Project. Detailed discussions with BGLCAC reviewed the level of consultation that has been undertaken to date, in regard to intangible Aboriginal cultural heritage values. All parties were comfortable with the wording for ACH EPR 2 to manage these values. This meeting has been highlighted here, as well as being included in Table 1, as it pertains to text updates relating to the management of intangible values in EPR ACH2 in Technical Report B: Aboriginal Cultural Heritage Impact Assessment.

To achieve key construction milestones, CHMPs 18111 (Wurundjeri) and 18108 (Wadawurrung) have each been split into two CHMP areas. This decision was made in direct consultation with the Registered Aboriginal Parties (RAPs) late 2024 (Table 1). As a result, the CHMP activity area for CHMP 18111 was divided in two at 151 Camerons Rd, Darley VIC 3340, with the formerly westernmost activity area of CHMP 18111 now captured within the CHMP 20459 activity area (Figure 1). The workforce accommodation facility near Ballan was also extracted from CHMP 18108 and is now captured within the CHMP 20436 activity area (Figure 1).

Table 1 below presents the engagement with RAPs and FP-SR up to and including 18 February 2025.

Table 1: Stakeholder engagement undertaken for Aboriginal cultural heritage not included in Table 5-6 of Technical Report B: Aboriginal Cultural Heritage Impact Assessment.

Stakeholder group	Inception meeting	Other meetings	Fieldwork (inc. inductions)
Barengi Gadjin Land Council Aboriginal Corporation (BGLCAC)	-	20/08/2024 – CHMP 17312 progress update 26/09/2024 (CHMP 17313; new 500kV terminal station near Bulgana meeting – geotechnical trenching) 14/11/2024 (new 500kV terminal station near Bulgana meeting – complex assessment methodology) 18/02/2025 – Meeting to discuss management of intangible Aboriginal cultural heritage values and outstanding TRG comments.	June to December 2024 January to February 2025
Eastern Maar Aboriginal Corporation (EMAC)	-	20/08/2024 – CHMP 17312 progress update	June to November 2024
Dja Dja Wurrung Clans Aboriginal Corporation (DJAARA)	-	01/08/2024 – CHMP 18101 progress update 20/08/2024 – CHMP 17312 progress update 03/09/2024 – CHMP 17311 progress update 31/10/2024 – CHMP 18101 progress update	June to December 2024 January to February 2025
Wadawurrung Traditional Owners Aboriginal Corporation (WOTAC)	31/10/2024 CHMP 20436	31/10/2024 – CHMP 18108 progress update and discussion on CHMP activity area split	October to December 2024 January 2025
Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation (WWWCHAC)	17/12/2024 CHMP 20459	09/08/2024 – CHMP 18111 progress update. 06/02/2025 – CHMP 20459 progress update and methodology discussion.	June to November 2024
First Peoples State Relations (FP-SR)	-	20/08/2024 – CHMP 17312 progress update	-

Existing Conditions

Register searches

Victorian Aboriginal Heritage Register

A search of the Victorian Aboriginal Heritage Register (VAHR) was conducted on 20 January 2025 by Daniel Kelly (Heritage Advisor, Jacobs) to identify Aboriginal Places previously recorded within the Project Land and within 50m of the Project Land.

There are no new Aboriginal Places registered in the Project Land that have not been already identified as part of CHMP related fieldwork for the Western Renewables Link (WRL) Project.

Aboriginal cultural heritage assessments

CHMP fieldwork data collected up until 5 June 2024 is presented in Technical Report B: Aboriginal Cultural Heritage Impact Assessment. Updates to the fieldwork coverage for each CHMP from 6 June 2024 to 18 February 2025, as well as new Aboriginal cultural heritage values identified during fieldwork, are presented below. Fieldwork for Areas 2 (CHMP 17321), 3 (CHMP 17312) and 6 (CHMP 18111) has occurred during this time period; however, there are no updates required to existing Aboriginal cultural heritage values as a result of this fieldwork.

Table 2: Percentage coverage for standard assessment across each Study Area.

Study Area	CHMP #	Length of Proposed Route in Study Areas (m)	Length of Study Area Coverage (m)	Percentage coverage for Study Area (%)
Area 1	17313	14152	14152	100
Area 2	17321	9764	9764	100

Area 3	17312	13125	13665	96.1
Area 4	17311	18717	18717	100
Area 4	18101	31652	61576	51.4
Area 5	18108	20265	6911	34.1
Area 5	20436	257090*	257090*	100%
Area 6	18111	32136	28648	89.1%
Area 6	20459	23875	4120	17.3%

** Provided as an area measurement (m^2) as this is a single parcel.*

Table 3: Percentage of fieldwork coverage for each Cultural Heritage Management Plan. Note: complex assessment coverage is for tower assembly areas only (i.e. access tracks, laydown areas etc. excluded).

Study Area	CHMP #	Standard Assessment		Complex Assessment	
		Coverage of alignment within CHMP until February 2025 (%)	Adjustment Since 5 June 2024 (%)	Coverage of tower assembly areas until February 2025 (within PAS or control testing locations) (%)	Adjustment Since 5 June 2024 (%)
Area 1	17313	100	Nil	65	+3.5
Area 2	17321	100	Nil	100	Nil
Area 3	17312	96.1	-3.9*	100	Nil
Area 4	17311	100	+6.2	100	Nil
Area 4	18101	51.4	+2.3	51.7*	+6.6
Area 5	18108	34.1	-4.9*	9	+9
Area 5	20436	100%	+100	0	Nil
Area 6	18111	89.1%	+5.8	79**	+1
Area 6	20459	17.3%	+3.2	16	Nil

**Reduction due to design changes during this time.*

***Percentage includes towers where the RAP has stated complex assessment is not required as part of the CHMP.*

Area 1: BGLCAC

Fieldwork undertaken from 6 June 2024 to 18 February 2025 largely focused on the new 500kV terminal station near Bulgana. The details for an Aboriginal Place have been amended for CHMP 17313, by which the social significance has been upgraded from low to moderate following consultation with BGLCAC during fieldwork (ID 11). There is no change to the overall significance ranking of this Place. There has also been one new Aboriginal Place identified as part of this fieldwork (ID 14). These findings are presented in Table 4 below.

Table 4: Significance rankings of newly identified Aboriginal cultural heritage values recorded during fieldwork for CHMP 17313. Note ID 11 has been updated only as this Aboriginal cultural heritage value is captured in Technical Report B: Aboriginal Cultural Heritage Impact Assessment.

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
11	Artefact scatter (surface)	Adjacent to Wimmera River	Low (1)	Moderate (2)	Moderate (2)	High (3)	Moderate (8)
14	Artefact scatter (subsurface)	Hill and associated floodplain, south (85m – 780m) and west (380m – 1000m) of Wimmera River	Low (1)	Moderate (2)	High (3) Association with Wimmera River	High (3)	High (9)

Area 4: Djaara

Fieldwork for CHMP 17311 has occurred from 6 June 2024 to 18 February 2025; however, there are no updates required to existing Aboriginal cultural heritage values.

Fieldwork for CHMP 18101 has also occurred from 6 June 2024 to 18 February 2025, and there has been one new Aboriginal Place identified (ID 24). This finding is presented in Table 5 below.

Table 5: Significance rankings of newly identified Aboriginal cultural heritage values recorded during fieldwork for CHMP 18101.

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
24	Artefact scatter (subsurface)	Plain, edge of ephemeral wetland	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)

Area 5: Wadawurrung

Complex Assessment for CHMP 18108 has occurred from 6 June 2024 to 18 February 2025, and there have been two new Aboriginal Places identified. There has also been a reduction in the impact on ID 8 due to the avoidance of a CMT (scarred tree) in the Project Land. These findings are presented in Table 6 below.

Table 6: Significance rankings of newly identified Aboriginal cultural heritage values recorded during fieldwork for CHMP 18108.

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
8	CMT (scarred tree)	On a rise, in between two drainage channels feeding the Wilsons Reservoir. A number of prominent rises and hills surrounding the broader landform.	Low (1)	High (3)	Moderate (2)	High (3)	High (9)
11	LDAD (subsurface)	Undulating plain	Low (1)	Moderate (6)	Low (1)	High (3)	Low (6)
12	LDAD (subsurface)	Undulating plain	Low (1)	Moderate (5)	Low (1)	High (3)	Low (6)

Area 6: Wurundjeri

There are two Aboriginal Places that have merged during the registration process from 6 June 2024 to 18 February 2025, either post feedback from the RAP or with the incorporation of new fieldwork results. As such, ID 13 and ID 41 are now removed from the impact assessment, as their components have merged into nearby Aboriginal Places: ID 13 has merged with ID 14, and ID 41 has merged with ID 2. The significance rankings for both ID 14 an ID 2 have not changed as their combined components and features do not exceed the thresholds for elevated significance rankings.

Table 7: Significance rankings of newly identified Aboriginal cultural heritage values recorded during fieldwork for CHMP 18111. These are now both nil impacts for the Project.

ID	Aboriginal Place Type	Landform	Historic Significance	Scientific significance	Social significance	Spiritual significance	Significance ranking
13	Artefact scatter (surface)	Rise west of Merrimu Reservoir	Low (1)	Moderate (2)	Low (1)	High (3)	Moderate (7)
41	LDAD (subsurface)	Approximately 500m west of the Sydenham Terminal Station	Low (1)	Low (1)	Low (1)	High (3)	Low (6)

Impact Assessment

Updates for Areas 1, 4, 5 and 6 following CHMP fieldwork and Place registrations as detailed above have resulted in a total increase from 123 to 125 previously unregistered Aboriginal values across the Project Land. This includes the addition of two LDADs that have a low impact. These updates are summarised below within Table 8.

Table 8: Revisions to Aboriginal Place data up until the 18 February 2025 (note: ID 11 from Area 1 has been excluded as there are no changes to impact ranking).

Total	Aboriginal Place Type	Significance ranking (Jan2025)	Previous impact ranking (June2024)	Revised impact ranking (Jan2025)
1	Artefact scatter (subsurface)	High	-	High
1	Artefact scatter (subsurface)	Moderate	-	Low
1	CMT (scarred tree)	High	High	Nil
2	LDAD (subsurface)	Low	-	Low
1	Artefact scatter (surface)	Moderate	Nil	-
1	LDAD (subsurface)	Low	Low	-

There are no changes to the magnitude impact ranking of the Project on Aboriginal cultural heritage, which remains moderate (Table 9).

Table 9: Revisions to the magnitude of impact table, showing total number of Places impacted by the Project as known on the 18 February 2025.

	Nil	Low (Impact through discovery)	Low	Moderate	High	Severe	Total
Previously registered Places	N/A	N/A	4	1	N/A	N/A	5
Places derived from Aboriginal cultural heritage assessments	43	10	49	10	13	N/A	125
Total	43	10	53	10	13	0	125
Weighted Ranking			1	2	3	4	
Weighted Total			53	22	39	0	
Progressive Total			53	75	114	-	
Ranking Scores			0-53	54-75	76-114	-	
Median			57				
Assessment: Overall Impact			**Moderate**				

Environmental Performance Requirements

There are no updates required to the EPRs. All relevant information is already captured in Technical Report B: Aboriginal cultural heritage impact assessment.

Conclusions

Due to additional CHMP fieldwork that has occurred for the Project from June 2024 to February 2025, the fieldwork coverage for each study area that has been used to inform the Aboriginal Cultural Heritage Impact Assessment has increased. The greatest increases in fieldwork coverage can be seen in Area 1 and Area 5, where complex assessment has commenced at the new terminal station near Bulgana, and in Wadawurrung country. Area 4 (largely CHMP 18101) and Area 6 have also been ongoing steadily since June 2024. Based on this additional fieldwork, newly identified Aboriginal cultural heritage, and changes to Aboriginal Place registrations during this period are minor. It is also important to note that the nature of the new finds is not different in kind to what has been previously identified. The changes to the impact assessment are as follows: a total of 76 Aboriginal cultural heritage values (including five previously recorded) will be impacted by the Project, while an additional 10 Aboriginal cultural heritage values (subsurface deposits) have been impacted through subsurface testing and will not be further impacted due to design changes. Although the majority of impacts fall within the nil to low impact rating, a weighted median has been applied to the dataset, so that the significance of each Aboriginal Place is considered and contributes to the final impact rating. **The resulting overall impact magnitude remains moderate.**

The results in this addendum support predictive statements detailed in Section 9.2.3.1 of the Technical Report B: Aboriginal cultural heritage impact assessment. That is, the technical report concludes that additional fieldwork undertaken for the Project from June 2024 to February 2025 found that the number of Aboriginal cultural heritage values will increase; however, the magnitude of impact for the Project will not increase and remains moderate.

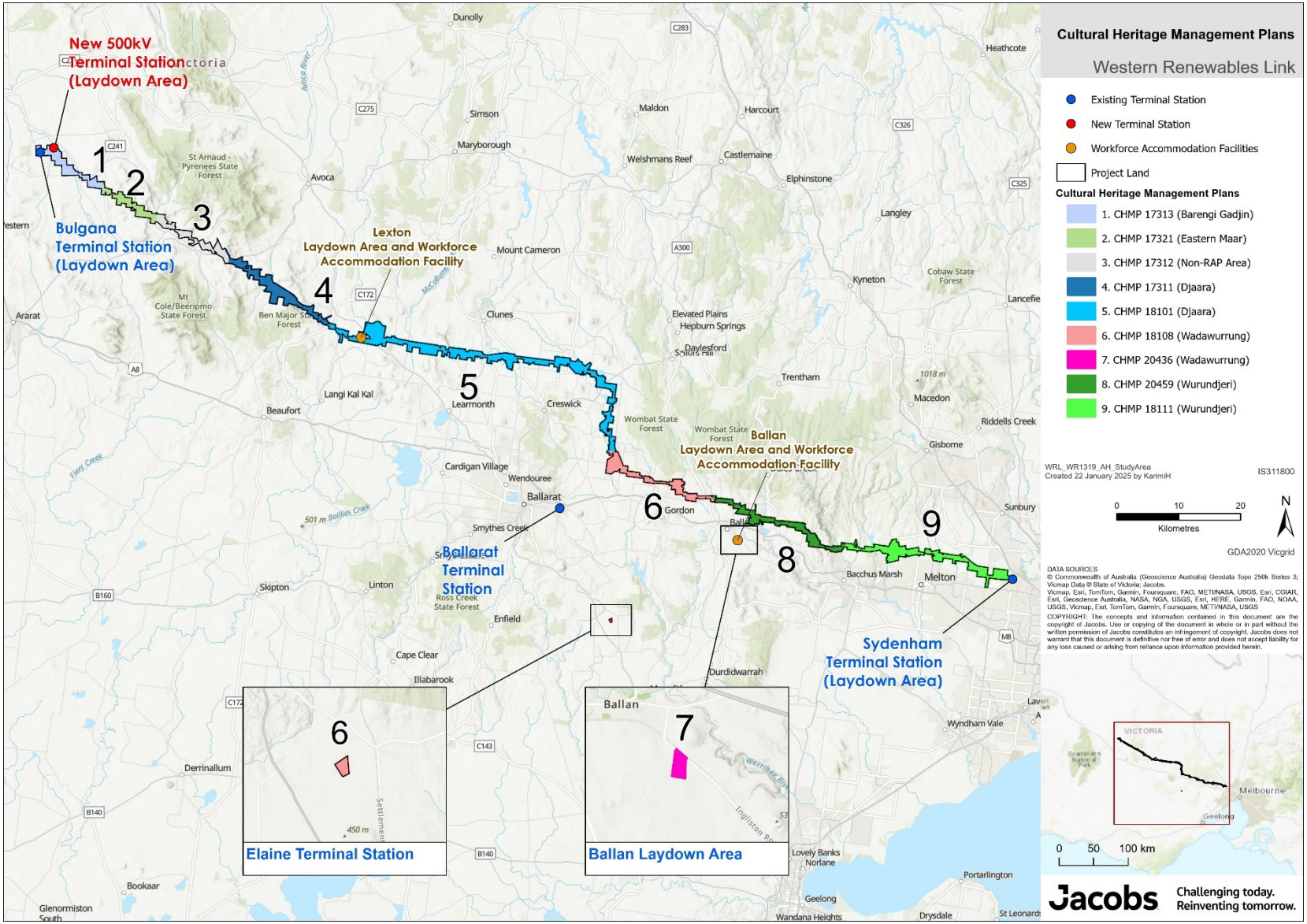


Figure 1: Cultural Heritage Management Plans for the Western Renewables Link.

ISBN 978-1-7641235-5-6

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