Jem Archaeology

Car Park (Education Centre), 15 Crawley Street, Warrnambool, Victoria:

Aboriginal Cultural Heritage Management Plan

Number: 19891

Sponsor: Emmanuel College Warrnambool

Heritage Advisor: Talia Green and Jen Burch

Authors: Jen Burch, Talia Green, Mia Kleehammer, Georgia Cowling and Liam Ricketts

Date: 20 February 2024

Jem Archaeology Pty Ltd
PO Box 520 Croydon VIC 3136
admin@jemarchaeology.com.au
03 9726 4498
www.jemarchaeology.com.au

Eastern Maar
Aboriginal Corporation

PO Box 546
Warrnambool VIC 3280

21 February 2024

CULTURAL HERITAGE MANAGEMENT PLAN – NOTICE OF APPROVAL

The Eastern Maar Aboriginal Corporation, trading as Eastern Maar Aboriginal Corporation RNTBC, acting as the Registered Aboriginal Party, herby approve the Cultural Heritage Management Plan as referred to below:

CHMP Name:	Car Park (Education Centre), 15 Crawley Street, Warrnambool, Victoria		
CHMP Number:	19891		
Sponsor:	Emmanuel College Warrnambool	ABN:	69 154 531 780
Heritage Advisor (s):	Talia Green and Jen Burch		
Author(s):	Jen Burch, Talia Green, Mia Kleehammer, Georgia Cowling and Liam Ricketts		
Cover Date:	20 February 2024	Pages:	i-xii/1-106

Eastern Maar Aboriginal Corporation is satisfied that the CHMP has been prepared in accordance with the standards prescribed for the purposes of Section 53 of the *Aboriginal Heritage Act 2006*, and the CHMP adequately addresses the matters set out in Section 61.

Pursuant to Section 64 [1] of the *Aboriginal Heritage Act 2006* this Cultural Heritage Management Plan takes effect upon the granting of this approval and once a copy is lodged with the Secretary*.

Yours Sincerely,

Marcus Clarke
CEO Eastern Maar Aboriginal Corporation RNTBC

*This notice of approval should be inserted after the title page and bound with the body of the cultural heritage management plan.

Car Park (Education Centre), 15 Crawley Street, Warrnambool, Victoria:

Aboriginal Cultural Heritage Management Plan

Number: 19891

Assessment: Complex

Activity Size: Small

Is Registered Aboriginal Cultural Heritage Present?: No

Sponsor: Emmanuel College Warrnambool

Heritage Advisors: Talia Green and Jen Burch

Authors: Jen Burch, Talia Green, Mia Kleehammer, Georgia Cowling and Liam Ricketts

Quality Assurance: Talia Green and Jen Burch

Date: 20 February 2024

PROTOCOLS FOR HANDLING SENSITIVE INFORMATION

The information contained in this CHMP may be culturally sensitive. Before releasing the contents of this CHMP to the general public, permission should be obtained from the relevant authorities and communities, including but not limited to First Peoples – State Relations (FPSR), Department of Premier and Cabinet (DPC) and any relevant Registered Aboriginal Party (RAP), RAP applicant/s or other stakeholder Aboriginal corporation/s.

Please note this CHMP may contain pictures of and/or information about people who may have passed away.

JEM ARCHAEOLOGY

ACKNOWLEDGEMENTS

Jem Archaeology Pty Ltd would like to thank the following people and organisations for their contributions to this CHMP:

- Stephen Kerr and Emma Banner, Emmanuel College Warrnambool;
- Steve Myers, Myers Planning and Associates;
- Emily Corris, Craig Edwards, Phillip "Fid" Chatfield, Jyran Chatfield and Jandamara Chatfield, Eastern Maar Aboriginal Corporation (EMAC); and
- First Peoples – State Relations, Department of Premier and Cabinet.

DISCLAIMER

The information contained within this CHMP has been compiled from standard government heritage databases and at the time of production is true and correct as far as Jem Archaeology Pty Ltd is aware. While this CHMP contains a summary of information pertaining to the activity area, it does not provide, nor does it intend to provide, a comprehensive summary of all available information. Jem Archaeology Pty Ltd does not take responsibility for errors or omissions in primary or secondary sources cited in this CHMP.

Any opinions provided in this CHMP are those of Jem Archaeology Pty Ltd and do not constitute legal advice or necessarily represent the opinions of any third parties. Jem Archaeology Pty Ltd has undertaken all reasonable measures to actively consult with representatives of the relevant Registered Aboriginal Party or other Aboriginal corporations or community groups who are, to the best of our knowledge and advice, the legal and proper representatives of the relevant and appropriate Aboriginal community. However, Jem Archaeology Pty Ltd does not take responsibility for any opinions or actions of dissenting persons or organisations. This CHMP has been prepared in accordance with and aims to comply with the relevant current Victorian heritage legislation.

JEM ARCHAEOLOGY

EXECUTIVE SUMMARY

Compliance requirements are set out in Part 1 of this Cultural Heritage Management Plan.

This mandatory Aboriginal Cultural Heritage Management Plan (CHMP) details the findings of a complex archaeological assessment of 15 Crawley Street, Warrnambool, Victoria (Warrnambool City Council). Jem Archaeology Pty Ltd was commissioned by Emmanuel College Warrnambool (the Sponsor) to prepare this CHMP.

*The activity area is located in western Victoria, approximately 230km southwest of the Melbourne CBD at 15 Crawley Street, Warrnambool, Victoria (Warrnambool City Council). The activity area is bounded by Crawley Street to the east, private residential properties to the north and south and vacant land to the west and is approximately 724m^2 in size (*Map 1*).*

The Sponsor proposes to develop the activity area into a car park ancillary to an education centre (Appendix C).

The desktop assessment did not identify any previously recorded Aboriginal places within the activity area (Map 3). The results of the desktop assessment suggest that it is likely that Aboriginal cultural heritage may be present within the activity area. A review of previously recorded Aboriginal places and previous archaeological investigations within the defined geographic region indicates that artefact scatters are commonly located on elevated landforms in proximity to the coast or permanent waterways, with views of the surrounding landscape and access to additional natural resources. Predictive site modelling derived from the desktop assessment suggests that it is likely that Aboriginal places in the form of low density artefact distributions and/or artefact scatters. Despite the activity area having been utilised as a residential property since at least 1987, it remains possible that undisturbed portions of the activity area retain the potential to contain Aboriginal cultural deposits.

The standard assessment (archaeological survey) of the activity area (Map 4) did not identify any Aboriginal places, however one area of Aboriginal archaeological sensitivity was identified. This area comprises the mid-slope of a rise landform (Map 5). It is considered likely that Aboriginal cultural heritage may be present within the activity area, therefore a complex assessment was undertaken.

The complex assessment (archaeological subsurface testing) included the excavation of one 1x1m test pit (TP) and five 50x50cm shovel test pits (STP) (Map 6).

No Aboriginal places were discovered during the complex assessment.

Page intentionally left blank

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF MAPS

LIST OF PHOTOGRAPHS

LIST OF TABLES

ABBREVIATIONS

The following abbreviations may appear throughout this CHMP:

BOM:	Bureau of Meteorology
BP:	Before Present
CHMP:	Cultural Heritage Management Plan
DEECA:	Department of Energy, Environment and Climate Action
DJPR:	Department of Jobs, Precincts and Regions
DPC:	Department of Premier and Cabinet
DSE:	Department of Sustainability and Environment
EMAC:	Eastern Marr Aboriginal Corporation
EVC:	Ecological Vegetation Class
FPSR:	First Peoples – State Relations
GDA:	Geocentric Datum of Australia
GPS:	Global Positioning System
GSV:	Ground Surface Visibility
HA:	Heritage Advisor
HV:	Heritage Victoria
LDAD:	Low Density Artefact Distribution
MT:	Machine Trench
NLA:	National Library of Australia
PGC:	Primary Grid Coordinate
RAP:	Registered Aboriginal Party
SLV:	State Library of Victoria
STP:	Shovel Test Pit
TP:	Test Pit
VAHR:	Victorian Aboriginal Heritage Register
VAHC:	Victorian Aboriginal Heritage Council
VHR:	Victorian Heritage Register
VHI:	Victorian Heritage Inventory

A glossary of terms is presented in Appendix A.

Page intentionally left blank

PART 1: CULTURAL HERITAGE MANAGEMENT CONDITIONS

NB: These conditions become compliance requirements once the Cultural Heritage Management Plan is approved. Failure to comply with a condition is an offence under section 67A of the *Aboriginal Heritage Act 2006*.

The Cultural Heritage Management Plan must be readily accessible to the Sponsor and their employees and contractors when carrying out the activity.

1 SPECIFIC CULTURAL HERITAGE MANAGEMENT REQUIREMENTS

1.1 General Conditions

The following management conditions have been agreed to by the Sponsor, in consultation with Eastern Maar Aboriginal Corporation (EMAC) to manage cultural heritage within the activity area. The Sponsor of this Cultural Heritage Management Plan (CHMP) is responsible for undertaking all management conditions and contingencies as outlined below.

The Sponsor is responsible for ensuring that the activity undertaken as part of this CHMP, adheres to the activity description outlined in Section 4. The Sponsor is responsible for ensuring that no works as part of the activity as outlined in Section 4, are completed outside of the activity area as shown in Map 1. Any changes to the activity area, the activity description or the approved management conditions will require an amendment to the CHMP or the preparation of a new CHMP.

1.1.1 General Condition 1: Cultural Heritage Induction - *Prior to the Activity*

Prior to the commencement of the activity, a cultural heritage induction must be facilitated by a representative of EMAC and assisted by a Heritage Advisor. EMAC must be provided with at least two (2) weeks' notice of the intended date of the cultural heritage induction. A booking form must be completed to book a cultural heritage induction, which can be found on the EMAC website www.easternmaar.com.au. This induction will be organised and paid for by the Sponsor.

Prior to the commencement of the activity (or any works associated with the activity) a cultural heritage induction must be undertaken by all personnel involved in the activity (in particular ground disturbing works), including staff/supervisors working permanently within the activity area, and the Sponsor. An inducted Sponsor or supervisor may subsequently provide an in-house induction for additional contractors and staff after the initial induction. The induction will be conducted by a representative of the Eastern Maar Aboriginal Corporation (EMAC) and a Heritage Advisor. The induction will take place on site within the activity area, or alternatively at Emmanuel College.

A cultural heritage induction booklet will be produced by the Heritage Advisor and contain all relevant CHMP information, including a summary of the key conditions and contingencies outlined in Part 1 of the CHMP. The cultural heritage induction booklet must be kept with a hard copy of the CHMP as General Condition 3 and be used during the initial phase of any works associated with the activity.

The Sponsor/Heritage Advisor will keep a record of induction attendees (e.g., a sign-off sheet) and any induction materials, a copy of which will be made available to EMAC via email, up to no more than two (2) business days after the induction is held.

The induction will include:

- brief background of the Aboriginal occupation of the activity Area and broader region;
- summary of the assessments conducted during the CHMP;
- specific details of all Aboriginal places located during the CHMP;
- explanation of the conditions and contingency plans contained within the CHMP; and
- the obligations of the Sponsor and all personnel under the Aboriginal Heritage Act 2006 (Vic).

An important focus of the cultural heritage induction is to present personnel with examples of Aboriginal cultural heritage that may occur in the activity area, and to explain the contingency procedures required by the CHMP, should unidentified Aboriginal cultural heritage be found during the conduct of the activity.

1.1.2 General Condition 2: Notification to EMAC of Commencement/Completion of the Activity - *Prior to the Activity/After the Activity*

The Sponsor must notify EMAC, via telephone call or email, at least ten (10) business days prior to the proposed start date of when the activity is expected to commence. The Sponsor must notify EMAC, via telephone call or email, up to no more than ten (10) business days after the activity has been completed.

EMAC is to ensure that there is an electronic means of confirmation of notification. Confirmation of telephone notification is to be confirmed by email within one (1) business day of the telephone call.

During business hours the contact details for EMAC are as follows:

RAP Cultural Heritage Manager

Eastern Maar Aboriginal Corporation

Phone: 0452 350 728

Email: culturalheritage@easternmaar.com.au

1.1.3 General Condition 3: A Copy of the Approved CHMP to be Retained Onsite – *Throughout Duration of the Activity*

A hard copy of the approved CHMP must always be available and present onsite for the duration of the activity.

The CHMP must be readily available to those undertaking the activity and the hard copy of the CHMP must be able to be provided upon request. The Sponsor is responsible for ensuring that all personnel undertaking the activity are aware of the onsite location of the hard copy of the CHMP.

1.1.4 General Condition 4: Protocols for Managing and Handling Sensitive Information Relating to Aboriginal Cultural Heritage within the Activity Area. – *Throughout Duration of the Activity*

This CHMP is to be used for the purpose of managing cultural heritage (Section 46 of the *Aboriginal Heritage Act 2006*) within the activity area defined in this CHMP, and is not to be used by the Sponsor, Contractors or Heritage Advisor for any other purpose.

EMAC reserves the right to have ownership, access, and control of the use of their Aboriginal cultural heritage, Traditional Knowledge and Traditional Cultural Expressions within this CHMP—including but not limited to artefact descriptions and photos, locations of cultural heritage, oral histories and statements provided, tangible and intangible cultural heritage knowledge and information.

- There shall be no communication, public release, or publishing of information within the CHMP, without the written permission of EMAC - including for academic and commercial use.

- There shall be no communication, public release, or publishing of information concerning Aboriginal cultural heritage, without the written permission of EMAC – including academic and commercial use.

- No onsite photographs or information concerning Aboriginal cultural heritage, by a Sponsor, Contractor or Heritage Advisor, is to be circulated to the media or via social media without the written permission of EMAC – including academic and commercial use.

1.1.5 General Condition 5: Compliance Inspections - *Throughout Duration of the Activity*

A minimum of one (1) Compliance Inspection must be completed by an Eastern Maar Aboriginal Corporation representative over the duration of the activity to review the progress of the activity, determine if any unexpected cultural heritage has been uncovered in the works area/s and check that each applicable condition and contingency contained within the approved CHMP is in effect.

The inspections must occur following each stage of ground stripping within the activity area. All excavated soil must also be retained for inspection.

The requirement for additional inspections, up to the maximum of three (3) inspections must be determined in consultation with the Eastern Maar Aboriginal Corporation unit after completion of the first inspection.

An Eastern Maar representative must conduct the inspections. If the inspections reveal suspected non-compliance with the approved CHMP, then the procedure outlined in Contingency 3 must be initiated. If suspected Aboriginal cultural heritage is identified during the inspections, then the procedure outlined in Contingency 4 or 5 must be initiated accordingly. If the inspection reveals a suspected breach of the Victorian Aboriginal Heritage Act 2006 then this must be reported to First Peoples State Relations (FP-SR) immediately and an Authorised Officer or Aboriginal Heritage Officer may be called out and/or a Stop Order may be issued by FP-SR.

Eastern Maar Aboriginal Corporation must be notified at least four (4) weeks before the Inspections are required, prior to or during the activity.

The procedures outlined in this condition must be organised and paid for by the Sponsor.

1.1.6 General Condition 6: Activity to occur within the Activity Area - *Throughout Duration of the Activity*

All works associated with the activity must be conducted within the area delineated within this approved CHMP as Map 1 shows.

2 CONTINGENCY PLANS

This section of the assessment contains contingency plans to facilitate appropriate heritage management during the proposed activity and to fulfil the requirements set out in Schedule 2 Clause 13 of the Aboriginal Heritage Regulations 2018.

At the time of approval of this CHMP, the Registered Aboriginal Party (RAP) for the activity area was the Eastern Maar Aboriginal Corporation (EMAC). All references to 'the RAP' throughout this section of the CHMP are references to the EMAC.

2.1 Contingency 1: Matters Referred to in Section 61 of the Act

This CHMP contains contingency plans that are specific to the activity and activity area (Part 2) as described within Section 4 (activity area) of this CHMP. If changes are made to the activity and/or activity area that require statutory authorisation, or which require changes to the management conditions, following the approval of the CHMP, the Sponsor will likely be required to undertake and submit a new CHMP or apply to amend the approved CHMP.

If Aboriginal cultural heritage is unexpectedly discovered during the activity, the following contingencies (which consider matters referred to in Section 61 of the *Aboriginal Heritage Act 2006* with regard to harm avoidance and minimisation) must be implemented by the Sponsor or the relevant delegate.

2.2 Contingency 2: Dispute Resolution

Clause 13 (1) Schedule 2 of the regulations requires that a CHMP must contain a contingency plan for the resolution of any disputes between the Sponsor and RAP or relevant Traditional Owner representatives, in relation to the implementation of an approved CHMP or the conduct of the activity. Disputes may occur at various stages during the activity. Procedures for dispute resolution aim to ensure that all parties are fully aware of their rights and obligations, that full and open communication between parties occurs, and that those parties conduct themselves in good faith.

If a dispute arises that may affect the conduct of the activity, resolution between parties using the following informal dispute resolution guidelines is recommended.

Informal Dispute Guidelines

a) The party raising the dispute will complete a Notice of Dispute Form (included below) and email a copy to all parties listed in the Notification contingency in this CHMP.
b) All disputes will be jointly investigated and documented by both parties (RAP and Sponsor).
c) Authorised representatives of each party (RAP and Sponsor) will attempt to negotiate a resolution to any dispute related to cultural heritage management of the activity area, within two business days or written notice being received.
d) Where a breach of the CHMP conditions has been identified, authorised representatives of both parties (RAP and Sponsor) must endeavour to agree upon the best method of correction or remediation.
e) If the authorised representatives of both parties (RAP and Sponsor) cannot reach an agreement, then the authorised representatives of both parties (RAP and Sponsor) will negotiate a resolution to an agreed schedule.
f) If the authorised representatives of both parties (RAP and Sponsor) fail to reach an agreement, an independent mediator should be initially sought to assist in resolving the dispute. Both parties (RAP and Sponsor) must agree upon a timeframe for the independent mediator.

g) If an independent mediator cannot be agreed on or fails to resolve the dispute with the allowed timeframe, the Victorian Aboriginal Heritage Council may be approached for their willingness to act in resolving the dispute.
h) If it is deemed that a cultural heritage audit is required, the Heritage Advisor will contact the Secretary of the process. A cultural heritage audit may also be ordered by the Minister under the *Aboriginal Heritage Act 2016*.

Regardless of the category of dispute, the informal dispute guidelines do not preclude:

a) The parties seeking advice from First Peoples – State Realtions to assist in resolution of the dispute; and
b) Any legal recourse that is open to the parties (RAP and Sponsor) being undertaken, however, the parties must agree that the above resolution mechanism will be implemented before such recourse is made.

2.3 Contingency 3: Reviewing Compliance with the CHMP

Under the *Aboriginal Heritage Act 2006*, the conditions and contingency plans outlined within this approved CHMP must be complied with as written. Breaching the conditions and contingency plans contained within the approved CHMP is an office under s.67A of the *Aboriginal Heritage Act 2006* and penalties apply.

To ensure compliance with the conditions and contingency plans outlined within this approved CHMP, the Sponsor should review the following checklist both prior to and throughout the course of the activity. Any negative responses to the following questions in the checklist may indicated that the conditions and contingency plans of the approved CHMP have been breached and remedial actions for non-compliance should be considered.

The RAP or relevant Traditional Owner representatives may undertake heritage inspections to monitor the progress of the activity and observe whether management conditions and contingency plans outlined within this CHMP have been complied with. A total of 3 heritage inspections may be undertaken during the activity. The RAP or relevant Traditional Owner representatives must provide the Sponsor with at least 3 business days' notice prior to the time they wish to enter the activity area. The Sponsor must ensure that the RAP or relevant Traditional Owner representatives are aware of any job safety restrictions or protocols. The RAP or relevant Traditional Owner representatives must comply with any job safety protocols required by the Sponsor and their contractors (if relevant).

2.3.1 Remedying Non-Compliance within the CHMP.

The Sponsor is responsible for remedying non-compliance with the conditions and contingency plans outlined within this approved CHMP. A non-compliance my trigger the requirement for a cultural heritage audit under Part 6 of the *Aboriginal Heritage Act 2006*. All reasonable costs arising from the meeting and any agreed remedies must be borne by the Sponsor.

If non-compliance is identified the Sponsor must:

- Cease all works within the activity area.
- Notify the RAP or Traditional Owner representatives and notify First-Peoples State Relations at compliance.aboriginalvictoria@dpc.vic.gov.au
- Follow the contingency plans within this CHMP for discovery of Aboriginal Cultural Heritage during the activity.
- Prepare a programme of remedial action in consultation with the RAP or Traditional Owner representatives and a Heritage Advisor.

Notice of Dispute

Notice issued to: _____

Notice issued by: _____

RAP: _____

Sponsor of CHMP: _____

Under contingency _____ of this CHMP, I/we give notice of the following dispute.

Description of the Dispute.

[Describe the dispute as you see it.]

_____

_____

Impact of the Dispute.

[Describe how the dispute has affected you.]

_____

_____

Proposed Solution as per Dispute Resolution Contingency.

To resolve this dispute, I/we would like *[describe what action/steps you believe would assist to resolve the dispute].*

_____

_____

Who to Contact About This Notice.

Name: _____

Phone: _____

Email: _____

Postal Address: _____

Signed by:
(as the authorised representative for the party issuing this notice)

Signature: _____

Date: _____

Compliance Checklist

Question	Yes *[Date Completed]*	No *[Remedy/Comments]*
Prior to the commencement of the activity		
Has the CHMP been approved?		
Has a Cultural Heritage Induction been completed?		
Has the RAP been notified of the commencement of the activity?		
Have the specific management conditions outlined in this CHMP, which are required to take place prior to the commencement of the activity been undertaken?		
During the course of the activity		
Have the specific management conditions outlined in this CHMP, which are required to take place during the course of the activity been undertaken?		
After the activity has been completed		
Has the RAP been notified of the completion of the activity?		
Have the specific management conditions outlined in this CHMP, which are required to take place after the activity has been completed been undertaken?		
Changes to the activity or activity area		
If required, has the approved CHMP been amended and approved?		
If required, and if the approved CHMP has not been amended and approved, has a new CHMP been prepared and approved?		
Have all relevant statutory approvals been obtained?		
If Aboriginal Cultural Heritage is discovered during the activity		
As per the contingency:		
Has the activity ceased within at least 10 meters of the discovery, and a stop works buffer implemented?		
Has the stop works buffer been fenced off?		
Has the site manager and/or Sponsor, RAP or Traditional Owner representatives and a HA been notified?		
Has HA been engaged within three business days of notification?		
Has the HA fully recorded and documented the Aboriginal cultural heritage?		
Has the Sponsor made all reasonable attempts to avoid or minimise harm to the Aboriginal cultural heritage?		
If harm to the Aboriginal cultural heritage cannot be avoided or minimised, has an appropriate archaeological salvage been undertaken?		
Has a report detailing the results of the salve been submitted to VAHR and the RAP or Traditional Owner representatives within six months?		
Have the removal, custody, curation, and management of the Aboriginal cultural heritage been undertaken in accordance with the relevant contingency plan?		

Question	Yes *[Date Completed]*	No *[Remedy/Comments]*
Have the Sponsor, Heritage Advisor and relevant RAP or Traditional Owner representatives have agreed that no further action is warranted?		
If Aboriginal Ancestral Remains are discovered during the activity		
As per the contingency:		
Has the activity within at least 30 meters ceased of the discovery?		
Have the human remains been left in place and protected from harm?		
Have the State Coroner's Office and the Victorian Police been notified?		
If the human remains are confirmed to be Aboriginal Ancestral remains, has the VAHC and RAP been notified?		
Has the appropriate impact mitigation or salvage strategy been implemented?		
Have the Aboriginal Ancestral remains been treated in accordance with the directions of the VAHC?		
Has a suitably qualified and experienced archaeologist fully documented and clearly marked the reburial site(s) and provided all details to VAHR?		
Has this been done in consultation with the RAP?		
Have appropriate management measures been implemented to ensure that the remains are not disturbed in the future?		

2.4 Contingencies in Relation to the Discovery of Aboriginal Cultural Heritage During the Activity

2.4.1 Contingency 4: Unexpected Discovery of Aboriginal Cultural Heritage (Excluding Human Remains)

Secret/Sacred Objects

As per Section 4 of the *Aboriginal Heritage Act 2006* a Secret or sacred object includes an Aboriginal object directly associated with a traditional Aboriginal burial

i. Any suspected Secret / Sacred Objects must be reported to the Victorian Aboriginal Heritage Council, as per Part 2, Division 3 (Sections 21-2) of the *Aboriginal Heritage Act 2006*.
ii. All works must stop within at least 10 metres of the objects
iii. The Victorian Aboriginal Heritage Council will transfer the object/s to an Aboriginal person that the Victorian Aboriginal Heritage Council is satisfied is entitled to and willing to take possession, custody, or control of the object/s, or otherwise deals with the object/s as the Victorian Aboriginal Heritage Council thinks appropriate, as per section 21B of the *Aboriginal Heritage Act 2006*.

Aboriginal Cultural Heritage

If suspected Aboriginal cultural heritage (excluding Aboriginal Ancestral Remains) is uncovered or identified during the activity, the following contingency plan must be followed:

Discovery

i. The activity must cease within at least 10 metres of the suspected Aboriginal cultural heritage, and a stop works buffer must be implemented. Works may continue in the remainder of the activity area.
ii. The stop works area around the suspected Aboriginal cultural heritage must be fenced off using appropriate temporary fencing (chain wire fence panels with concentre base feet) to protect the suspected Aboriginal cultural heritage from further disturbance. No-go zone signage must be attached to the fencing and be clearly visible.
iii. The suspected Aboriginal cultural heritage must not be picked up or removed from the stop works area.

Notification

i. The individual who uncovered or identified the suspected Aboriginal cultural heritage must notify the site manager and/or Sponsor of the discovery immediately.
ii. The Sponsor must notify the relevant RAP or Traditional Owner representatives and a Heritage Advisor within one business day of the discovery of the suspected Aboriginal cultural heritage.

Assessment

i. An appropriately qualified Heritage Advisor must be engaged to inspect the suspected Aboriginal cultural heritage within three business days of notification.
ii. Relevant RAP or Traditional Owner representatives must be provided the opportunity to participate in the inspection.
iii. The Heritage Advisor will consult with the relevant RAP or Traditional Owner representatives regarding the management, collecting and recording of the cultural material. The Heritage Advisor will notify the Secretary of the discovery and any agreements.
iv. If the suspected Aboriginal cultural heritage is assessed by the Heritage Advisor to be Aboriginal cultural heritage, then the Heritage Advisor must fully record and document the Aboriginal cultural heritage, and the following site protection, impact mitigations or salvage conditions must be completed.

Impact Mitigation or Salvage

i. It is the obligation of the Sponsor to ensure that all reasonable attempts to avoid or minimise harm to the Aboriginal cultural heritage have been undertaken, in consultation with the RAP or Traditional Owner representatives.
ii. If the Aboriginal cultural heritage is determined to be significant (for example, an intact cultural deposit), site protection or impact mitigation conditions may be required. If site protection or impact mitigation measures are not possible a salvage excavation of part or all of the Aboriginal place may be required prior to the activity proceeding.
iii. In the situation where a salvage excavation is required the following process must be adhered to:
    a) The extent and methodology of the salvage program will be determined by the RAP or relevant Traditional Owner representatives, in consultation with the Heritage Advisor and Sponsor.
    b) Any salvage program must be undertaken in accordance with First Peoples – State Relations' (formerly Aboriginal Victoria) Practice Note: Salvage Excavations, by a suitably qualified archaeologist/Heritage Advisor with assistance from the RAP or relevant Traditional Owner representatives.
    c) The Heritage Advisor must update or complete the relevant Victorian Aboriginal Heritage Register (VAHR) place and component forms, including the object collection form, and submit the documentation to the VAHR within fourteen business days of the assessment. The Heritage Advisor must notify the RAP or relevant Traditional Owner representatives, via email, once the VAHR has been updated.

d) An archaeological report meeting the Secretary standards and detailing the methods, analysis and results of the salvage program must be submitted to the VAHR, the Sponsor and the RAP or relevant Traditional Owner representatives no later than six (6) months after the salvage excavation has been completed.
e) At the completion of analysis, any Aboriginal cultural heritage collected during the salvage program must be managed as outlined in the removal, custody, curation, and management of Aboriginal Cultural Heritage contingency in this CHMP.

Recommencement of the activity

i. The activity may recommence in the stop works area once:
   a) The Aboriginal cultural heritage material has been identified, fully documented, and assessed, including the collection and analysis of any artefacts by a Heritage Advisor.
   b) All reasonable attempts to avoid harm and appropriately protect the Aboriginal cultural heritage has been made by the Sponsor in consultation with the RAP or relevant Traditional Owner representatives.
   c) If harm to the Aboriginal cultural heritage cannot be avoided, then an appropriate archaeological salvage program, meeting the minimum standards as outlined above, has taken place.
   d) The Heritage Advisor has updated or completed VAHR place and component form(s), submitted the forms to the VAHR within 14 business days of the assessment, and the forms have been approved.
   e) The Sponsor, Heritage Advisor and the RAP or relevant Traditional Owner representatives have agreed that no further action is warranted.

Dispute Resolution

If all parties fail to reach an agreement under this contingency plan, this will be classified as a dispute. Any dispute that may arise from this process must be dealt with under the Dispute Resolution contingency as outlined in this CHMP.

2.4.2 Contingency 5: Unexpected Discovery of Human and Aboriginal Ancestral Remains

If suspected human remains are discovered, you must contact the Victoria Police and the State Coroner's Office immediately. If there are reasonable grounds to believe that the remains are Aboriginal Ancestral Remains, the Coronial Admissions and Enquiries hotline must be contacted on 1300 888 544.

Any such discovery at the activity area must follow these steps.

Discovery

a) If suspected human remains are discovered, all activity within at least 30 metres must cease immediately.
b) The remains must be left in place and protected from harm or damage.
c) Do not contact the media; do not take any photographs of the remains other than those requested by the relevant authorities below.

Notification

a) If suspected human remains have been found, the State Coroner's Office (**1300 309 519)** and the Victoria Police **(000)** must be notified immediately.
b) If there are reasonable grounds to believe the remains are Aboriginal Ancestral Remains, the Coronial Admissions and Enquiries hotline must be immediately notified on **1300 309 519.**

c) If the human remains are confirmed by State Coroner's Office to be Aboriginal Ancestral Remains, the person responsible for the activity must report the existence of them to the Victorian Aboriginal Heritage Council in accordance with section 17 of the *Aboriginal Heritage Act 2006* (https://www.aboriginalheritagecouncil.vic.gov.au/report-ancestral-remains-submit).
d) If the remains are confirmed to be Aboriginal Ancestral Remains, the RAP or relevant Traditional Owner representatives must be notified immediately as listed in the Notification contingency in this CHMP.
e) All details of the location and nature of the human remains must be provided to the relevant authorities.

Impact Mitigation or Salvage

a) The Victorian Aboriginal Heritage Council, after taking reasonable steps to consult the RAP or relevant Traditional Owner representatives, will determine the appropriate course of action as required by section 18(2)(b) of the *Aboriginal Heritage Act 2006*
b) An appropriate impact mitigation or salvage strategy as determined by the Victorian Aboriginal Heritage Council must be implemented by the Sponsor. All costs associated with this will be the responsibility of the Sponsor.

Curation and Further Analysis

a) The treatment of salvaged Aboriginal Ancestral Remains must be in accordance with the direction of the Victorian Aboriginal Heritage Council.

Reburial

a) Reburial to occur in consultation with the relevant RAP or relevant Traditional Owner representatives.
b) Any reburial site(s) must be fully documented by an experienced and qualified archaeologist and all relevant details provided to VAHR.
c) Appropriate management measures must be implemented to ensure the Aboriginal Ancestral Remains are not disturbed in the future.

2.5 Contingency 6: Removal, Custody, Curation, and Management of Aboriginal Cultural Heritage

This contingency relates to the removal, custody, curation, and management of unexpected Aboriginal cultural heritage (excluding Human and Aboriginal Ancestral Remains) discovered during the activity. For management of known Aboriginal cultural heritage see the relevant condition as outlined within this approved CHMP.

Removal

No Aboriginal cultural heritage must be picked up or removed from the activity area, except by a Heritage Advisor during salvage.

Custody

Aboriginal cultural heritage collected during the salvage program can be temporarily stored by the Heritage Advisor until the scientific analysis has been completed. Once the salvage and scientific analysis of the Aboriginal cultural heritage has been completed, the Aboriginal cultural heritage must be repatriated to the RAP (no later than six (6) months after the salvage excavation has been completed).

The custody of Aboriginal cultural heritage (excluding Aboriginal Ancestral Remains, or Secret or Sacred Objects) discovered during or after an activity must comply with the requirements of the *Aboriginal Heritage Act 2006* and be assigned according to the following order of priority, as appropriate:

a) any relevant Registered Aboriginal Party for the land from which the Aboriginal cultural heritage is salvaged *(as outlined above and in the relevant contingency plans)*

Where there is no Registered Aboriginal Party:

b) any relevant registered native title holder for the land from which the Aboriginal cultural heritage is salvaged
c) any relevant native title party (as defined in the Aboriginal Heritage Act 2006) for the land from which the Aboriginal cultural heritage is salvaged
d) any relevant Traditional Owner or Owners of the land from which the Aboriginal cultural heritage is salvaged
e) any relevant Aboriginal body or organisation which has historical or contemporary interests in Aboriginal cultural heritage relating to the land from which the Aboriginal cultural heritage is salvaged
f) the owner of the land from which the Aboriginal cultural heritage is salvaged
g) Museum Victoria

Curation and Management (Reburial)

The RAP will be the caretakers of the Aboriginal cultural heritage and may choose to rebury the artefacts within an agreed location, safe from future development and disturbance. The reburial of the Aboriginal cultural heritage will be organised and paid for by the Sponsor. Sponsors must consider the willingness and the capacity of the proposed custodian to adequately, and appropriately, manage salvaged Aboriginal cultural heritage material.

Access to Activity Area

If the RAP wishes to enter the activity area at any stage during the activity, this must be facilitated by the Sponsor. The RAP must provide the Sponsor with at least 3 business days' notice prior to the time they wish to enter the activity area. The Sponsor must ensure that the RAP is aware of any job safety restrictions or protocols. The RAP must comply with any job safety protocols required by the Sponsor and their contractors (if relevant). The RAP reserves the right to inspect the location of reburied Aboriginal cultural heritage, once the activity has been completed.

2.6 Contingency 7: Notification

The Sponsor is to ensure that sufficient time is given for written correspondence to reach parties (as tabled below) and for a response to be composed and sent. Notification in email form must be provided in accordance with the timeframes outlined within the relevant contingency plan/s. Email and telephone is the preferred method of communication and notification. Written correspondence in letter/mail form is not preferred, but if this is required, then sufficient time for delivery needs to be considered and a phone call should made to notify of the posting of the letter/mail.

Response to communication must occur by either party (RAP and Sponsor) within three (3) business days or receipt of the communication, unless otherwise agreed by all parties.

Key Contacts:

Role	Name	Organisation	Contact
CHMP Contacts			
Registered Aboriginal Party	RAP Cultural Heritage Manager	EMAC	culturalheritage@easternmaar.com.au 0452 350 728
Registered Aboriginal Party	On Country Operations Manager	EMAC	craig.edwards@easternmaar.com.au 0475 310 509
Sponsor	Stephen Kerr	Emmanuel College Warrnambool	skerr@emmanuel.vic.edu.au 03 5560 0888
Emergency Contacts			
State Coroner's Office	Coronial Admissions and Enquiries Line		1300 309 519
Victorian Police			000 (Triple 0)
Victorian Aboriginal Heritage Council	Report Ancestral Remains		Ancestral.Remains.Unit@dpc.vic.gov.au
Victorian Aboriginal Heritage Register			VAHR@dpc.vic.gov.au
Compliance			compliance.aboriginalvictoria@dpc.vic.gov.au

PART 2: ASSESSMENT

3 INTRODUCTION

Jem Archaeology Pty Ltd has been commissioned by Myers Planning and Associates on behalf of Emmanuel College Warrnambool (the Sponsor) to prepare this mandatory complex Aboriginal Cultural Heritage Management Plan (CHMP) for the proposed education centre and car park, 15 Crawley Street, Warrnambool, Victoria (Warrnambool City Council) (Map 1).

3.1 Activity Area Location

The activity area is located in western Victoria approximately 230km southwest of the Melbourne CBD at 15 Crawley Street, Warrnambool, Victoria (Warrnambool City Council). The activity area is bounded by Crawley Street to the east, private residential properties to the north and south and vacant land to the west and is approximately 724m^2 in size (Map 1). The cadastral details of the activity area are:

- Volume 09008, Folio 880, Lot 65 LP59001.

A detailed description of the activity area is located in Section 5.

3.2 Sponsor

The Sponsor of this CHMP is Emmanuel College Warrnambool, ABN: 69 154 531 780.

3.3 Heritage Advisors (HA)

This CHMP has been prepared by Jem Archaeology Archaeologists/HAs Jen Burch, Talia Green, Georgia Cowling and Liam Rickets and Jem Archaeology Archaeologist Mia Kleehammer. Fieldwork was undertaken by Jem Archaeology Jem Archaeology Archaeologists/HAs Liam Ricketts and Georgia Cowling and Jem Archaeology Archaeologist Mia Kleehammer, and was supervised by Jem Archaeology Archaeologist/HA Liam Ricketts. Jem Archaeology Archaeologist/HA Georgia Cowling provided mapping for this CHMP. Quality Assurance reviews were undertaken by Jem Archaeology Archaeologists/HAs Talia Green and Jen Burch.

Jen Burch is an Archaeologist/Heritage Advisor who has worked in the Victorian heritage management industry for over 16 years. Jen has managed and worked on more than 1,000 archaeological projects for a variety of developments and clients, including gas pipelines including offshore components, electricity alignments, residential, commercial and industrial subdivisions, multi-dwelling developments, water and sewerage pipelines, road and rail projects, wind and solar farms and mining and quarrying projects.

Jen has experience in a variety of tasks, including project management, background research and due diligence assessments, archaeological survey, subsurface testing and salvage excavation, supervision of field work programs, Aboriginal and non-Aboriginal historical site identification, recording and photography, preparation of site cards, site significance assessment, development of recommendations to mitigate the impact of development upon Aboriginal and non-Aboriginal historical heritage, flaked stone and historical artefact recording, analysis and interpretation, communication and consultation with regulatory bodies (First Peoples – State Relations [FPSR] and Heritage Victoria [HV]), clients, landowners and Aboriginal Registered Aboriginal Parties (RAPs) and other Aboriginal corporation and community representatives, preparation of Consents to Disturb for HV, preparation of Historical Heritage Assessments (HHA) and preparation of desktop, standard and complex Aboriginal Cultural Heritage Management Plans (CHMP).

Jen's formal qualifications and memberships are as follows:

- Bachelor of Archaeology (Honours) (First Class), La Trobe University, Bundoora, (2007);
- Full membership of the Australian Association of Consulting Archaeologists Inc. (MAACAI);

- Membership of the Australian Archaeological Association Inc. (AAA);
- Membership of the Victorian Planning and Environmental Law Association (VPELA); and
- Membership of the Urban Development Institute of Australia (UDIA).

Talia Green is a Senior Archaeologist and Heritage Advisor with over six years' experience in the Victorian heritage industry. Talia has worked on and managed a variety of consulting projects including residential and commercial developments, pipelines, precinct structure plans, water management and road and rail projects in the form of CHMP's, Preliminary Aboriginal Heritage Tests, Aboriginal and Historical Heritage Assessments, Due Diligence Assessments, Historical Assessments, Defence Heritage Assessments and excavation of Aboriginal places.

Talia is experienced in a wide variety of tasks including project management, background research, due diligence assessments, Aboriginal and historical heritage assessments, archaeological survey, subsurface testing and salvage excavation, Aboriginal and historical site identification, site recording and photography, preparation of Aboriginal and historical site cards, site significance assessments, development of recommendations to mitigate the impact of development upon Aboriginal heritage, analysis and interpretation, communication and consultation with regulatory bodies (First Peoples – State Relations [FPSR] and Heritage Victoria [HV]), clients, landowners and Registered Aboriginal Parties (RAPs), and preparation of desktop, standard and complex Aboriginal Cultural Heritage Management Plans.

Talia completed her Bachelor of Science degree at the University of New England in 2017, majoring in Archaeology and Palaeoanthropology, and completed her Honours degree in 2018 where she specialized in Zooarchaeology. Talia's research focused on reconstructing the diet of a human population from Colonia-era Sydney by analyzing the butchery patterns on sheep remains, and subsequently relating dietary preference and resource availability to different socio-economic classes inhabiting colonial Sydney. Talia has spent time working in forensic archaeology/bioarchaeology in Cyprus where she worked in the excavation, exhumation, skeletal analysis and repatriation of modern humans remains. Talia is currently a PhD Candidate in Bioarchaeology at the University of New England where her current research is focused on the analysis of non-metric traits of the crania as a tool for ancestry evaluation in a modern Greek-Cypriot population.

Talia is trained in historical and Indigenous artefact analysis, faunal and human remains analysis and has experience in project management, report production, standard and complex heritage assessment and salvage operations across Victoria. Her formal qualifications include:

- Bachelor of Science (Archaeology and Palaeoanthropology), University of New England (2017);
- Honours in Archaeology (Zooarchaeology), University of New England (2018); and
- PhD Candidate, University of New England (in progress); and
- Membership of the Australian Archaeological Association Inc. (AAA).

Georgia Cowling is an Archaeologist who has completed a Bachelor of Arts with a double major in Archaeology & Ancient History and Classical Studies at Monash University and a Masters of Professional Archaeology at La Trobe University, Bundoora.

Georgia has experience in a wide range of tasks, including archaeological survey, manual and mechanical subsurface testing, salvage excavation, lithic recording and analysis, archaeological illustration, writing CHMPs, and consultation with regulatory bodies, clients, landowners, Registered Aboriginal Parties (RAPs) and other Aboriginal corporation and community representatives.

Georgia's formal qualifications are as follows:

- Bachelor of Arts majoring in Archaeology & Ancient History and Classical Studies, Monash University, Melbourne;
- Master of Professional Archaeology, La Trobe University, Melbourne;
- Membership of the Australian Archaeological Association Inc. (AAA).

Mia Kleehammer is an Archaeologist who recently graduated from a Bachelor of Archaeology at La Trobe University. She is currently undertaking a Research Master's at La Trobe University with a particular focus on the analysis of charcoal and botanical remains on Yung Balug country in the Dja Dja Wurrung region.

Mia's studies primarily focused on Australian Indigenous Archaeology, undertaking lithic analysis, animal bone analysis, and site identification, as well as historical artefact management and analysis of ceramic, glass, and brick analysis. Mia is passionate about heritage management and has experience in basic mapping, archaeological survey, manual and mechanical salvage excavation, and stakeholder consultation.

Mia's formal qualifications include:

- Bachelor of Archaeology, La Trobe University, Bundoora (2022)

Liam Ricketts is an Archaeologist/HA who has completed a Bachelor of Archaeology through Flinders University, and a Masters in Archaeology and Cultural Heritage Management through Flinders University.

Liam has skills in lithic identification and analysis, osteology, GIS, research and has done heritage work in South Australia including surveys, background site research and consultation with traditional owners, and stakeholders. He also has experience in mechanical and manual excavation, report writing, and illustration.

Liam's formal qualifications include:

- Bachelor of Archaeology, Flinders University (2021);
- Masters of Archaeology and Cultural Heritage Management, Flinder University (2023).

3.4 Owner and Occupier

The activity area is owned by McAuley Property Limited (MPL). The activity area is vacant.

3.5 Registered Aboriginal Party

The Registered Aboriginal Party (RAP) for the activity area is the Eastern Maar Aboriginal Corporation (EMAC).

The Eastern Maar people lodged a Native Title claimant application with the National Native Title Tribunal on 14 December 2012 (tribunal file number VC2012/001) which covers land within the activity area. However, the activity area comprises privately owned land; therefore Native Title has been extinguished.

3.6 Reasons for Preparation of CHMP

Under s.47 of the *Aboriginal Heritage Act 2006*, this CHMP is required by the *Aboriginal Heritage Regulations 2018*. The specific Regulations which trigger the requirement of this CHMP are:

- Under r.41, the activity area is within an area of cultural heritage sensitivity as it is located within a sand sheet, including the Cranbourne sand;

- Under r.46, the proposed activity is a high impact activity as it involves the construction of a building or the construction or carrying out of works for a specified use:
    - A car park (r.46(1)(b)(iii)); and
    - An education centre (r.46(1)(b)(viii)).

3.7 Notice of Intention to Prepare CHMP

Under s.54 (1) of the *Aboriginal Heritage Act 2006*, a Notice of Intention to prepare a Cultural Heritage Management Plan (NOI) must be submitted by the Sponsor to the appointed RAP and to the Secretary of the Department of Premier and Cabinet (DPC) and to the relevant municipal council before the preparation of a CHMP commences.

Under s.54 (1) (a) of the *Aboriginal Heritage Act* 2006, a NOI was submitted by Jem Archaeology Archaeologist/HA Jen Burch on behalf of the Sponsor to the RAP on 16 November 2023. A copy of this notice is attached in Appendix B. The RAP submitted a notice to evaluate on 20 November 2023.

Under s.54 (1) (b) of the *Aboriginal Heritage Act* 2006, a NOI was submitted by Jem Archaeology Archaeologist/HA Jen Burch on behalf of the Sponsor to the Secretary of DPC and to Warrnambool City Council on 16 November 2023. A copy of this notice is attached in Appendix B. The Secretary of DPC submitted an acknowledgement letter of this notice to the Sponsor on 16 November 2023. A copy of this notice is attached in Appendix B. The First Peoples – State Relations (FPSR) Project Number for this CHMP is 19891.

In accordance with s.54 (1) (c) of the *Aboriginal Heritage Act 2006*, the Sponsor also gave notice of this CHMP to the owner of the activity area.

3.8 CHMP Distribution

Copies of this CHMP will be distributed to the following organisations:

- Emmanuel College Warrnambool;
- Myers Planning and Associates;
- Eastern Maar Aboriginal Corporation;
- Warrnambool City Council; and
- First Peoples – State Relations.

Page intentionally left blank

4 ACTIVITY DESCRIPTION

The Sponsor proposes to develop the activity area into a car park ancillary to an education centre (preliminary plans are shown in Appendix C). The proposed activity will include demolition and clearing activities across the property, preparation of the ground for the construction of the proposed education centre and car park, including cutting, grading, scraping and mechanical excavation, trenching, deposition of introduced filling materials, installation of surface and sub surface assets, utilities, and salient features, sealing of the ground, and landscaping. The proposed activity will impact on the surface of the land and buried former land surfaces to a maximum depth of 1.5m. More specifically, the construction of the pavement will involve ground disturbance to a typical depth of 0.3m, and landscaping and stormwater installation will ground disturbance to a typical depth of 0.6m, with stormwater subject to detailed engineering design.

The proposed activity will impact on the surface of the land and buried former land surfaces by way of mechanical excavation followed by the installation of required utilities and construction of dwellings, and therefore the activity is likely to impact on any surface or subsurface Aboriginal cultural heritage that may be present within the activity area.

It should be noted that any and all development plans depicting the proposed activity contained within this CHMP are preliminary only and will not be finalised until such time that any relevant statutory authorisation is granted.

Page intentionally left blank

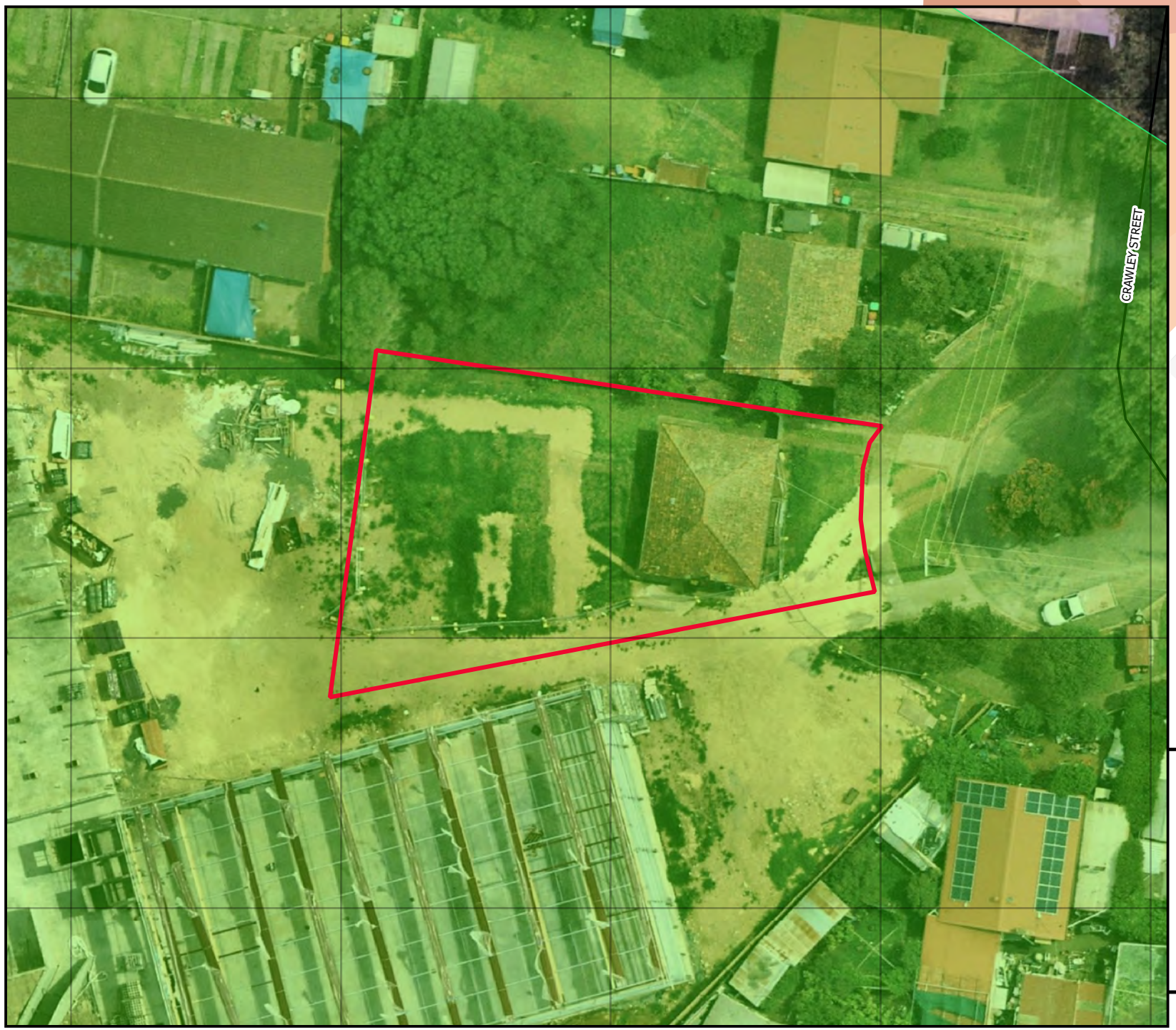
5 ACTIVITY AREA

The activity area is located western Victoria approximately 230km southwest of the Melbourne CBD at 15 Crawley Street, Warrnambool, Victoria (Warrnambool City Council). The activity area is bounded by Crawley Street to the east, private residential properties to the north and south and vacant land to the west and is approximately 724m^2 in size (Map 1). The cadastral details of the activity area are:

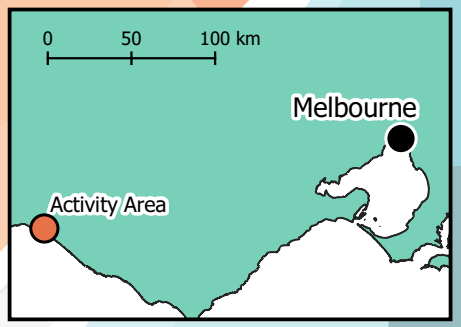
- Volume 09008, Folio 880, Lot 65 LP59001.

Recent satellite imagery indicates that the activity area currently comprises a residential allotment featuring a residential dwelling within the eastern half of the property, two small shedding structures, limited sealed areas in the form of pathways and cleared grassed areas (Map 1). The property boundary is marked by permanent fencing to the north, south, east and west.

CHMP 19891 - 15 Crawley Street, Warrnambool



Map 1:
Location and Extent of the Activity Area
(Warrnambool City Council)



Legend

- Activity Area
- Mapped Area of Aboriginal Cultural Heritage Sensitvity
- Road
- Contour

0 10 20 m

1:400
GDA94 / MGA Zone 54
Map Created: 16 November 2023
Last Updated: 11 February 2024
Map Creator: Rachel Colby
Satellite Image: 6 January 2024

N

JEM ARCHAEOLOGY

6 DOCUMENTATION OF CONSULTATION

The Registered Aboriginal Party for the activity area is the Eastern Maar Aboriginal Corporation (EMAC)

6.1 Consultation in Relation to the Assessment

On 17 November 2023, Jem Archaeology Archaeologist/Heritage Advisor Jen Burch contacted the EMAC via email and queried if the EMAC had any oral history information relating specifically to the activity area.

No oral history information was received from EMAC prior to the submission of the CHMP for evaluation.

A CHMP inception meeting was held on 13 December 2023 via video conference. The meeting was attended by Emmanuel College Warrnambool (Sponsor) Business Manager Stephen Kerr and Emmanuel College Warrnambool Project Manager Emma Banner, EMAC RAP Technical Specialist/Heritage Advisor Emily Corris, and Jem Archaeology Archaeologist/HA Jen Burch. During the meeting the nature of the activity area, the details of the proposed activity and the results of the desktop assessment were discussed. The proposed standard and complex assessment methodologies were also discussed, and EMAC RAP Technical Specialist/Heritage Advisor Emily Corris indicated that it would be appropriate for a standard assessment to be undertaken across the activity area and for the complex assessment to include the excavation of a single 1x1m test pit (TP) and four to five 50x50cm shovel test pits (STP).

6.2 Participation in the Conduct of the Assessment

No representatives of the EMAC participated in the conduct of the desktop assessment.

Table 1 details the EMAC representatives who attended the standard and complex assessments. The EMAC representatives participated in all aspects of the fieldwork, aside from recording, including archaeological survey, excavation and sieving activities.

Table 1: EMAC Fieldwork Participants

Date	Name	Assessment
9 January 2024	Phillip “Fid” Chatfield	Standard Complex
9 January 2024	Jyran Chatfield	Standard Complex
9 January 2024	Jandamara Chatfield	Standard Complex

6.3 Consultation in Relation to the Conditions

A standard and complex results meeting was held on 9 February 2024 via video conference. The meeting was attended by Emmanuel College Warrnambool (Sponsor) Business Manager Stephen Kerr and Emmanuel College Warrnambool Project Manager Emma Banner, EMAC RAP Technical Specialist/Heritage Advisor Emily Corris, and Jem Archaeology Archaeologist/HA Jen Burch. During the meeting the results of the standard and complex assessments and the required management conditions were discussed. EMAC RAP Technical Specialist/Heritage Advisor Emily Corris indicated that she was satisfied with the methodology and results of the standard and complex assessments and that the CHMP must include the standard EMAC conditions and contingency plans.

6.4 Summary of Consultation Outcomes

All of the EMAC representatives named in Table 1 (Section 6.2 above) indicated that they were satisfied with the methodology and results of the standard and complex assessments undertaken on the day that each individual attended.

During consultation activities, EMAC RAP Technical Specialist/Heritage Advisor Emily Corris indicated that she was satisfied with the methodology and results of the standard and complex assessments and that the CHMP must include the standard EMAC conditions and contingency plans.

7 DESKTOP ASSESSMENT

7.1 Introduction

The desktop assessment aims to identify the known environmental, ethnohistorical, historical and archaeological context of the activity area and the surrounding geographic region.

The desktop assessment was undertaken by Jem Archaeology Archaeologists/HAs Jen Burch, Talia Green and Georgia Cowling and Jem Archaeology Archaeologist Mia Kleehammer. No limitations were encountered during the desktop assessment.

7.2 Geographic Region

The geographic region of which the activity area forms a part, and which is relevant to any Aboriginal cultural heritage which may be present within the activity area, is designed to capture an adequate representative sample of the geology, geomorphology, vegetation history and resource availability that would have influenced patterns of Aboriginal occupation in the region. For the purposes of this CHMP, the geographic region has been defined as `Merri River, the 30m contour line, Russell Creek, Saffords Road and St Mary's Road to the north, the high water mark of the Victorian coastline, the northern extent of Lake Pertrobe and Merri River to the south, an unnamed drainage channel and tributary, the 30m contour line, Hopkins River and private property boundaries to the east, and Merri River to the west (Map 2). This area is considered to capture an appropriate sample of the environmental characteristics of the region of which the activity area forms a part as it contains includes the region close to the coast and a number of nearby watercourses including Russell Creek, Yangery Creek, Hopkins River, Merri River and their tributaries.

7.3 Environmental Context

7.3.1 Geology

The activity area lies within the Warrnambool Plain bioregion. The geology of this part of Victoria is highly variable, however, the geology of the activity area is characterised by one distinct geological unit, that being the 'Bridgewater Formation' (Qxr). This geology was laid down during the Pleistocene epoch of the Quaternary Period (approximately 2.558 million years ago [mya] to approximately 11,700 years ago). The Bridgewater formation consists of calcarenite (limestone) with medium to course grained shell fragments and minor quartz, consolidated thin, interbedded red paleosols with minor hard calcrete capping, and prominent cross bedding of coastal dune deposits (DEECA 2023). The geology of the geographic region is shown in Figure 1.

CHMP 19891 - 15 Crawley Street, Warrnambool

Map 2:
The Geographic Region and Activity Area

Legend

- Activity Area
- Geographic Region

VAHR Places

- Artefact Scatter
- Low Density Artefact Distribution
- Shell Midden

- Waterbody
- Watercourse

0 1 2 km

N

1:70,000
GDA94 / MGA Zone 54
Map Created: 4 December 2023
Last Updated: 11 February 2024
Map Creator: Georgia Cowling
Basemap: MapTiler (c) 2023
OpenStreetMap Contributors (c) 2023

JEM ARCHAEOLOGY

CHMP 19891 - 15 Crawley Street, Warrnambool

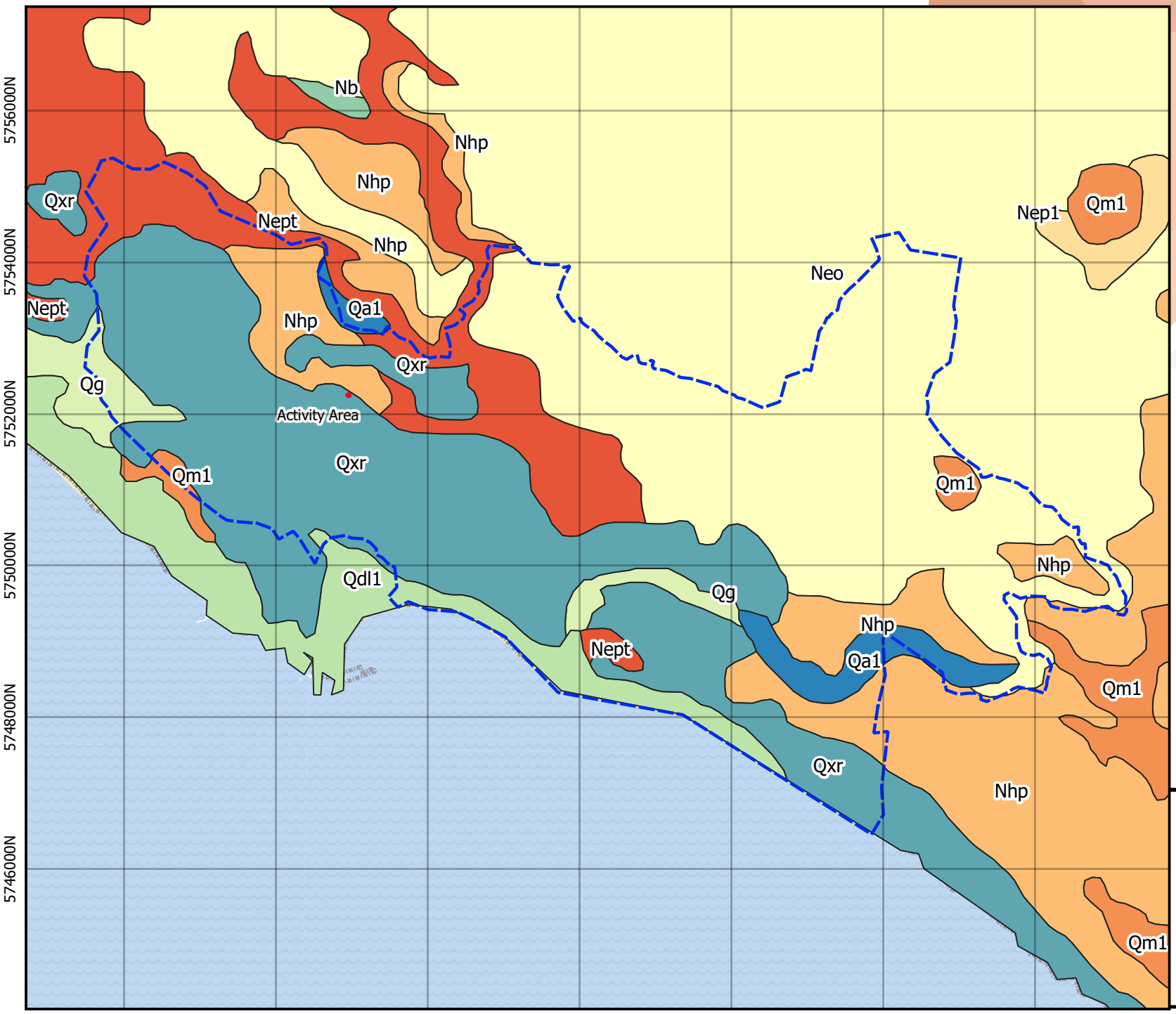
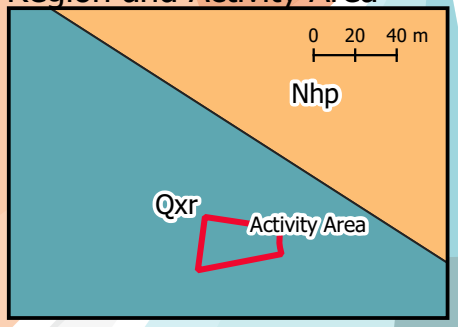


Figure 1:
Geology of the Geographic Region and Activity Area



Legend

- Activity Area
- Geographic Region

Geology

- alluvium (Qa1)
- Bridgewater Formation (Qxr)
- Brighton Group (Nb)
- coastal dune deposits (Qdl1)
- coastal lagoon deposits (Qg)
- Newer Volcanic Group - basalt flows (Neo)
- Newer Volcanic Group - tuff rings (Nep1)
- Port Campbell Limestone (Nhp)
- swamp and lake deposits (Qm1)
- Tower Hill Tuff (Nept)

0 1 2 km

1:70,000

GDA94 / MGA Zone 54

Map Created: 4 December 2023
Last Updated: 11 February 2024
Map Creator: Georgia Cowling

N

JEM ARCHAEOLOGY

7.3.2 Geomorphology and Landform

The activity area is situated within the 'Plains with ridges (Follett) geomorphological unit (GMU [GMU 6.2.1]) (DPC 2023). This geomorphological unit is a subunit of the Western Plains GMU (GMU 6) and is characterised by sandy plains and associated dunes, which reflect a transition to more recent sediment deposits within the southwestern extent of Victoria. These deposits are dominated by aeolian sands and silts and influence a landscape characterised by dunes with crests, gently inclined slopes grading into plains and poorly developed drains; such slopes typically sit between 120-140m above sea level. Swamp beds and sand sheets are common within the plain landforms. Parent material of this geomorphological unit comprises Neogene marine sand and silt (Parilla Sand), Quaternary aeolian dune sand (Lowan Sand) and paludal silt, and clay swamp deposits (DJPR 2023).

Previous archaeological investigations have been carried out to the immediate south of the current activity area during the preparation of CHMP #18654 (East and Painter 2022). This assessment identified three landforms within that activity area: a swampy depression within the southeast and southwest, from which a slope inclines towards a crest across the north of the activity area. Consequently, it is anticipated that the landform within the current activity area will be generally flat or gently sloping, in a continuation of the crest landform within the northern portion of the activity area identified during CHMP #18654.

7.3.3 Soils

Soils in the geographic region typically consist of acidic sandy soils (Tenosols and Podosols), and sodic brown, yellow and grey texture contrast soils (Sodosols) (DJPR 2023).

Previous archaeological investigations have been carried out to the immediate south of the current activity area during the preparation of CHMP #18654 (East and Painter 2022). The stratigraphic profiles recorded during the preparation of this CHMP varied according to landform. Within the swamp landform, deposits comprised shallow, dark reddish brown clayey silt (with a small humic layer) to a depth of 10cm, overlying a base of impenetrable calcium carbonate. Similar topsoils were recorded within the slope/crest landform. The most relevant Test Pit (TP) and shovel test pits (STP) to the activity area excavated during the preparation of CHMP #18654 are TP1, and STP1, STP2, and STP3 which comprised a dark reddish brown clayey silt to a depth of 5cm, directly overlying impenetrable calcium carbonate deposits. These pits were located within the crest landform, and as such, it is anticipated that the activity area may exhibit similar soil deposits.

7.3.4 Flora

Prior to 1750, vegetation in the activity area consisted of Damp Sands Herb-rich Woodland (Ecological Vegetation Class [EVC] 3 (DEECA 2020). This EVC typically occurs on moderately fertile and well drained flat or undulating areas consisting of deep sandy or loamy topsoils, overlying heavier duplex subsoils. Damp Sands Herb-rich Woodland is characterised by Eucalypt forest or open woodland up to 15m in height which is dominated by a low grass or bracken. This overlies a large shrub understorey, with an herbaceous ground layer including grasses and orchids.

Tree species present would have included *Eucalyptus viminalis* (Manna Gum) and *Eucalyptus ovata* (Swamp Gum), with an understorey of small, medium and large herbaceous, shrub, graminoid and lichen species. Understorey tree species present would have included *Acacia melanoxylon* (Blackwood). Medium herb species present would have included *Gonocarpus tetragynus* (Common Raspwort), *Hypericum gramineum* (Small St John's Wort) and *Lagenophora stipitata* (Common Bottle-daisy). Medium to small tufted graminoid species present would have included *Poa rodwayi* (Velvet Tussock-grass), *Lomandra filiformis* (Wattle Mat-rush), *Dianella tasmanica* (Tasman Flax-lily) and *Themada triandra* (Kangaroo Grass). Medium shrub species present would have included *Leptospermum Continentale* (Prickly tea tree), *Banksia Marginata* (Silver Banksia), *Epacris impressa* (Common Heath) and *Acacia verticillata* (Prickly Moses) (DSE 2004).

Given the extensive uses of the natural flora associated with the defined geographic region, the activity area would have contained valuable natural resources that would have been utilised by Aboriginal people. Eucalypt barks were commonly used by Aboriginal people to make canoes and dishes, with large burls being hollowed out and used to make water containers. Saps were used to make medicinal treatments for injuries and illness and were occasionally mixed to produce flavoured drinks or eaten raw; Eucalypt leaves were also used in medicinal steam baths (Gott and Conran 1998:50; Zola and Gott 1996:14, 55). *Acacia melanoxylon* (Blackwood) was used to make shields and spear-throwers due to its sturdy properties, while the bark was heated and infused in water to assist in the treatment of rheumatic joints (Gott and Conran 1998:50). Acacias more generally were used for a variety of purposes, including the use of the inner bark to manufacture string, cooking and eating of the green seed pods, grinding of dry seed pods into flour, applying gum to wounds or taken to treat dysentery, and use of the bark to treat boils (Zola and Gott 1996: 63). The hard wood of Paperbarks and Tea-trees was used to make spears, digging sticks and clubs, whilst the papery bark of some Paperbark species was used to make soft wrappings for babies (Gott and Conran 1998:63). The leaves and stems of *Themeda triandra* (Kangaroo Grass) were used by Aboriginal people to make string and to create fishing nets (Zola and Gott 1996: 58).

7.3.5 Climate

The activity area and surrounding region currently has a temperate climate, with hot and dry summers and cool and wet winters. Climate data from the nearest weather recording station indicates that average maximum temperatures range between 13.5°Celsius in July to 24.7°Celsius in January. Average minimum temperatures range between 5.5°Celsius in July to 12.4°Celsius in February. Monthly mean rainfall peaks in August with 91.4mm and is lowest in February with 31.7mm. Annual rainfall for the region is 742.8mm (BOM 2023).

Climatic conditions in Australia are known to have fluctuated greatly during the late Pleistocene and Holocene periods and within the 65,000 or more years that Australia has been occupied by Aboriginal peoples (Clarkson et al. 2017). The last glacial period, commencing 80,000 years ago, resulted in global cooling that peaked approximately 18,000 years BP. At the height of the Last Glacial Maximum (LGM), temperatures in southeastern Australia were between 6 and 10 degrees cooler, winds were stronger and the sea level dropped up to 120m lower than it is today, resulting in the connection of Tasmania to the mainland via a land bridge. As the glacial conditions receded towards the end of the Pleistocene and conditions ameliorated during the early Holocene, temperatures and rainfall gradually increased to be more consistent with current conditions and Bass Strait filled with water, severing the land bridge between mainland Australia and Tasmania. Approximately 5,000 years BP conditions became slightly cooler and drier before returning to the temperate conditions that continue to the present time (Kershaw 1995). Bay floor channelling evidence, seismic and core dating suggests that between approximately 2,800 and 1,000 years BP Port Phillip became a lake before drying out, despite sea levels remaining stable at modern levels. This drying of the bay is likely to have been caused by sand blockage at the mouth of the bay, coupled with high rates of evaporation. At around 1,000 years BP the blockage at the bay entrances cleared, facilitating the formation of the modern marine bay (Holdgate, Wagstaff and Gallagher 2011).

7.4 Historical Context

7.4.1 Land Use History

The southwest coast of Victoria and the surrounding region was first explored by French navigator Nicholas Baudin in 1802. Approximately 22 years later, Hume and Hovell's arrival further to the east had put in motion events that would lead to the signing of the Batman Treaty in 1835 by John Batman and the Wurundjeri traditional owners (State Library New South Wales 2020). Following the signing of the Batman Treaty, European settlers began to settle in Victoria, many of whom moved their stock overland from New South Wales and Melbourne in the 1840s and established enormous pastoral runs. The first European settlers to the region were the Watson brothers who selected land along the Hopkins River, and the Allen brothers at Allansford, with both families occupying the area by 1839 (Victorian Places 2015). By this time, whalers were also accessing the bay at Warrnambool during seasonal whaling expeditions (named Lady Bay in 1844).

According to Spreadborough and Anderson (1983), the activity area itself lay on the boundary of the 'St Marys' pastoral run and the settled district. The St Marys pastoral run was a 16,000 acre run originally held by Thomas Augustus Strong and Henry Forster from 1842 (Figure 2). St Marys was gazetted on 23 February 1849 and was held solely by Henry Forster by 29 January 1851 (Spreadborough and Anderson 1983: 276).

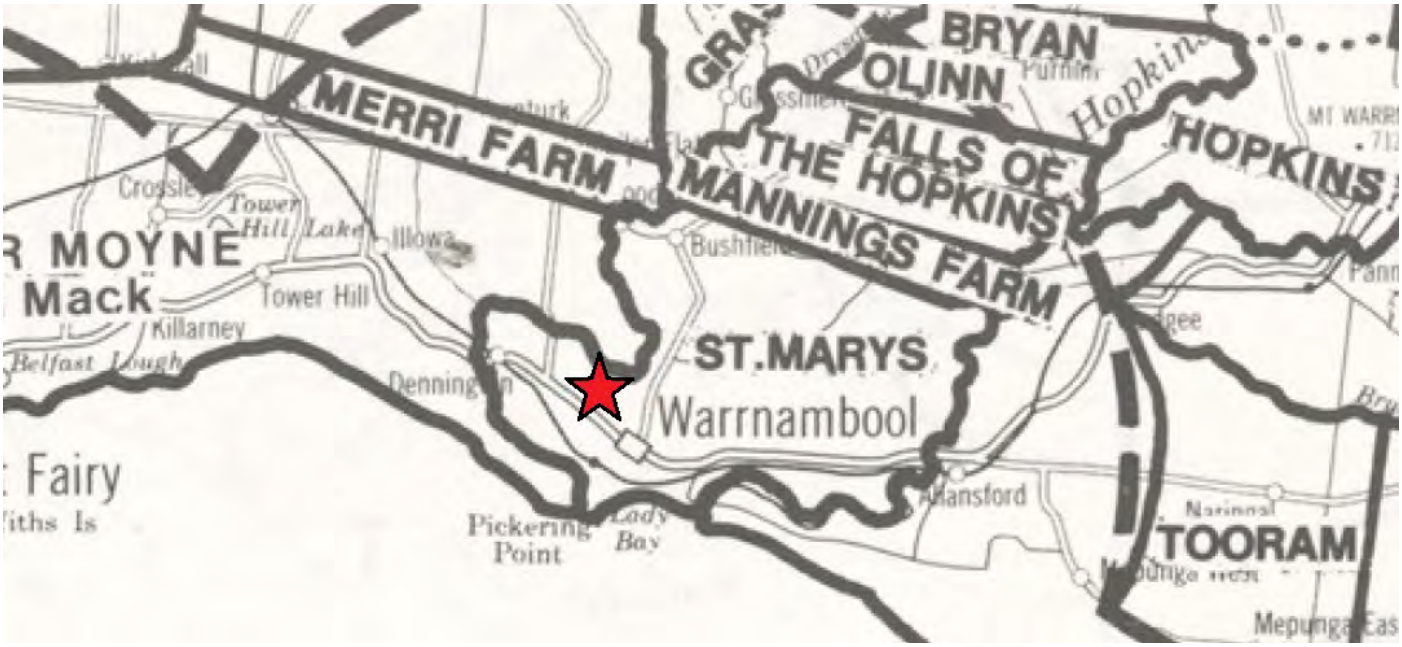


Figure 2: Pastoral runs of the Settled District (detail), with red star showing the general location of the activity area (Spreadborough and Anderson 1983).

In 1847 the settlement at Lady Bay was officially surveyed and land sales in the region commenced the following year. A school was established in 1849 and a jetty was constructed to aid in the transportation of goods to and from Lady Bay. Over the next twenty years lighthouses, churches, hotels, shops, a courthouse, police station and post office were constructed at Lady Bay, and a network of bridges and ferries was established to facilitate produce transportation over the Merri and Hopkins Rivers, and further east to Allansford. Despite Warrnambool initially relying on water transport in and out of the port at Lady Bay, exposure to unfavourable winds and a breakwater causing excess silt build-up in the bay hindered the efficiency of the port (Victorian Places 2015). A parish map of districts near Belfast and Warrnambool dated to 1858 indicates that the land comprising the activity area and immediate surrounds had been subdivided and selected by this time; however, due to poor image quality the occupier and allotment details are unclear (Figure 3).

The Victorian gold rush of the 1850s resulted in growth for the agricultural industry of the region, as demand for a steady food supply to gold rush towns increased. Wheat, potatoes, and wool production dominated the agricultural industry until the 1890s. Consequently, Warrnambool continued to grow and was made a municipality on 7 December 1855 (Victorian Places 2015). Although the port was still used for the shipping of potatoes, wheat and wool until the early 20th century, road and rail quickly became the principal means of transportation. A plan of Lady Bay and Warrnambool Harbour dated to 1870 shows that the nature of the activity area and surrounding properties remained consistent with 1858 conditions (Figure 4), however, the area further to the south had been further established; the botanical gardens, cattle market and quarry reserve had been established to the south and southeast of the activity area, and additional roadways had been developed. Figure 4 also indicates that as of 1870, the activity area formed part of Crown Allotment 20, Section 119, and was occupied by William Jellie; it is possible that these details were valid in 1858, but not visible in Figure 3.

On 4 February 1890, the Warrnambool Railway Station was opened, opening passenger access to the final section of the Melbourne-Dennington railway line (Terang to Dennington) (Victorian Places 2015; VicSig 2020). The extension of the railway facilitated increased development in the area, and a coffee palace and town hall were also established. Dairying emerged as the dominant industry around this time, and by

1890 four butter and cheese factories had been established in the Warrnambool area (Victorian Places 2015).

Figure 3: Plan of the Belfast and Warrnambool Districts (detail) dated 1858, with red star showing the general location of the activity area (Department of Lands and Survey Victoria 1858).

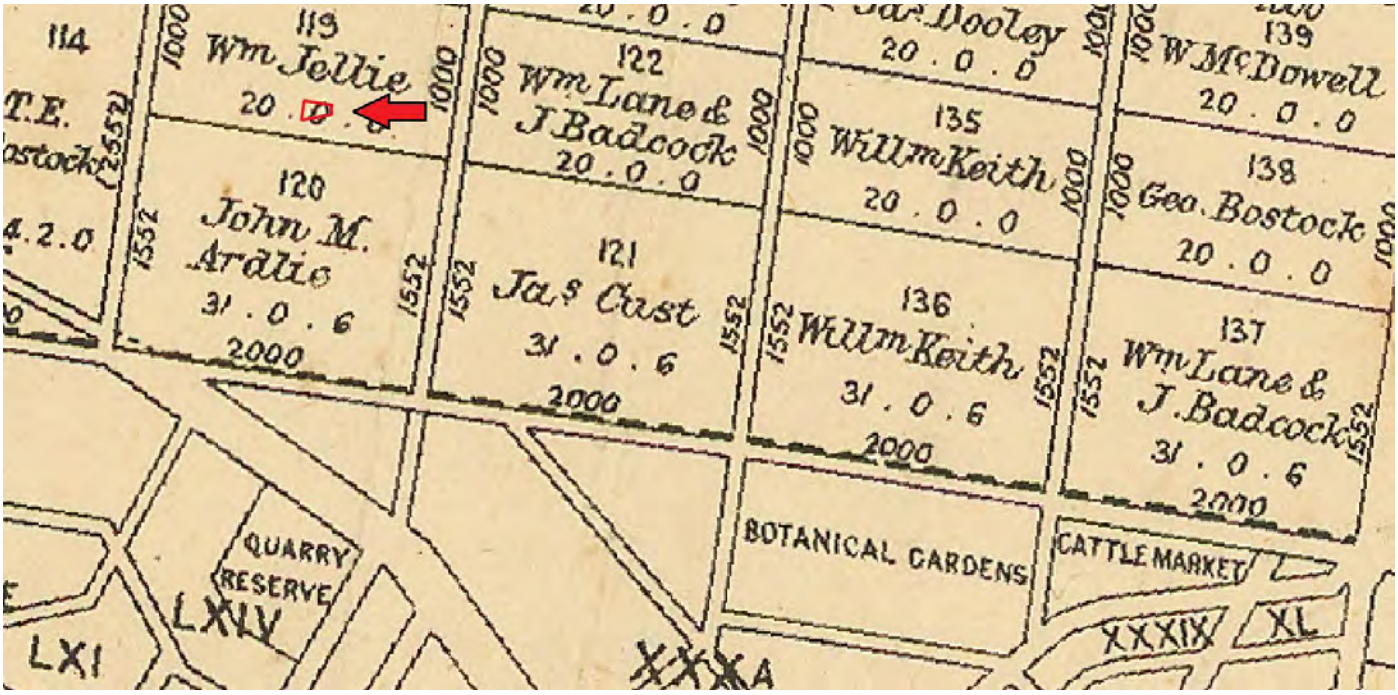


Figure 4: Plan of the Parish of Wangoon, County of Villiers (detail) dated 1891, with activity area outlined in red and indicated by arrow (Department of Lands and Survey Victoria 1891).

Warrnambool's population had reached 6000 by the turn of the century, and the agricultural industry continued to thrive into the 20th century with three major dairying factories established by 1910, helping to propel the town's strong industrial base. These factories remained a key employer during World War II. Despite unfavourable maritime conditions and the effective rail system, shipping continued to operate in and out of Warrnambool until 1942, at which time the port was permanently closed (Victorian Places 2015). Aerial imagery dating to 1947 (Figure 5) shows that by this time, the activity area comprised cleared pastoral land; however, it is noted that some areas of surrounding land had been subject to residential development.

Figure 5: Aerial photograph of Warrnambool area dated 1947 (detail), showing the activity area outlined in red (Aerial Survey of Victoria 1947).

Figure 6 indicates that as of 1987 the activity area had been subject to residential development, including the construction of a dwelling in the eastern half of the activity area and a small structure in the southwestern quadrant of the property. The residential allotments surrounding the activity area had also been subject to development and a network of formal roadways had been established, including Crawley Street to the immediate east of the activity area.

Figure 6: Aerial photograph of Warrnambool area dated 1987 (detail), showing the activity area outlined in red (Aerial Survey of Victoria 1987).

Comparative aerial imagery dated 2003 shows that by this time, the activity area remained relatively unchanged (Figure 7); however, it is noted that the immediate surrounds had become more urbanised, with the development of additional residential properties, roadways, landscaping and community facilities. More recent satellite interpretation indicates that as of 2022, additional shedding had been

constructed to the immediate south of the dwelling and garden structures had also been erected within the southwestern corner of the activity area (Figure 8).

In late 2023 crushed rock was introduced across some portions of the activity area. Current conditions of the activity area are shown in Map 1.

Figure 7: Aerial photograph of Warrnambool area dated 2003 (detail), showing the activity area outlined in red (Google Earth Pro Maxar Technologies 2003).

Figure 8: Aerial photograph, 2022 (Google Earth Pro Airbus 2022). Location of activity area shown in red.

7.5 Aboriginal Context

7.5.1 Ethnohistory

Archaeological evidence from sites around Australia indicates that Aboriginal peoples occupied all environmental zones by 40,000 years BP. In Victoria, archaeological evidence from Bend Road 2 (7921-0736 [VAHR]) at Keysborough in southeast suburban Melbourne suggests that this area was occupied ca.

35,000 years BP (Hewitt and de Lange 2007). Aside from archaeological evidence, the majority of information regarding Aboriginal peoples and their lifeways comes from ethnohistorical accounts.

The Dhauwurd wurrung (Gundidjmara) were divided into 59 clans, each with a distinct area of land or estate. The clan living in and responsible for the region surrounding the activity area was the Yarrer gundidj clan, whose estate extended between the Merri River and Hopkins River ("Allandale") stations close to Warrnambool (Figure 10). Given their location, the Yarrer gundidj presumably spoke the southerneastern dialect of Big wurrung. Very little is known about the Yarrer gundidj clan, aside from a brief account written by George August Robinson (Chief Protector of Aborigines) in 1842. Yarrer gundidj translates into English as "belonging to Yarrer", with Yarrer translating to "salt water fish". The head of the Yarrer gundidj in 1842 was Par.de.we.dung. The clan moiety is unknown (Clark 1990: 88).

European settlement in the region had a devastating effect on local Aboriginal populations. Steep declines in population were recorded soon after European settlement of the region in the late 1830s. The Dhauwurd wurrung speaking people reportedly responded to the arrival of European settlers by fighting a sustained guerrilla war against European settlers (Clark 1990: 33).

In 1839 the Aboriginal protectorate scheme was introduced in Victoria. A Chief Protector, Robinson, was appointed and supported by four Assistant Protectors. The role of the protectorates was to provide food, shelter and medical supplies, record cultural and population information and to indoctrinate Aboriginal peoples into European cultural and economic systems. The Assistant Protector assigned to the western district was C. W. Sievwright, who established his headquarters at Thomsons Keilambete run near Terang in February 1841. In February 1842 Sievwright moved his headquarters to John Cox's Mount Rouse run close to the northern boundary of Gundidjmara territory. Robinson joined Sievwright between March and August, spending almost four weeks in Gundidjmara territory (Clark 1990: 33-34). Under the Aboriginal protectorate scheme, Aboriginal reserves and stations were being established across the state and in August 1842 Robinson recommended the junction of the Wannon and Glenelg Rivers as an appropriate reserve site (Clark 1990: 36). The Aboriginal protectorate scheme was disbanded in 1949 (Clark 1990: 194-44).

In the 1850s Dhauwurd wurrung speaking people were living on a number of pastoral stations in the district. J. H. Craig, a Justice of the Peace at Warrnambool, estimated in 1858 that there was not more than 40 Aboriginal people living in the district. He estimated that there had been nearly 200 Dhauwurd warrung speaking people at Warrnambool eleven years earlier. Sargent Archibald, also at Warrnambool, stated that there were 34 Aboriginal people in the area in 1858 (Clark 1990: 47).

In the 1850s Dhauwurd wurrung (Gundidjmara) people were living on a number of pastoral stations in the district. In 1861 3,500 acres of land on the Hopkins River was reserved by the government for the exclusive use of Aboriginal people (Clark 1990: 197). Responsibility for the mission, Framlingham Aboriginal Station, was given to the Church of England in 1865, however, most Aboriginal groups from the Portland area refused to live on the mission despite sharing a common language with some of the groups settled there (Clark 1990: 48). The Church only managed the site for a year before handing it back to the Central Board for Protection of Aborigines. In 1867 the Board decided to close Framlingham and moved the 73 residents to Lake Condah Mission (Koorie Heritage Trust 2018a).

In 1886, The Victorian Parliament passed the Aborigines Protection Law Amendment Act, which redefined the legal definitions of Aboriginality to be "full bloods, half castes over 35, female half castes married to aborigines, infants of Aborigines". Any person not meeting these criteria was forced to leave the Lake Condah Mission within three years. This was done with the intention that they would be "Europeans", reducing government costs and therefore assimilating them into European society. Many of these families moved to Little Dunmore, just south of the mission. In the 1890s, some of these families petitioned to have land from the mission on which to live, a request that was denied by the Board. In 1916, four weatherboard houses were moved to little Dunmore as housing for the remaining Aboriginals living in the area. The Condah Mission had 70 residents in 1939. The school was officially closed in 1948 and in 1951 all but a small portion of the mission land was revoked and given to the Solider Settlement Commission (Koorie Heritage Trust 2018b).

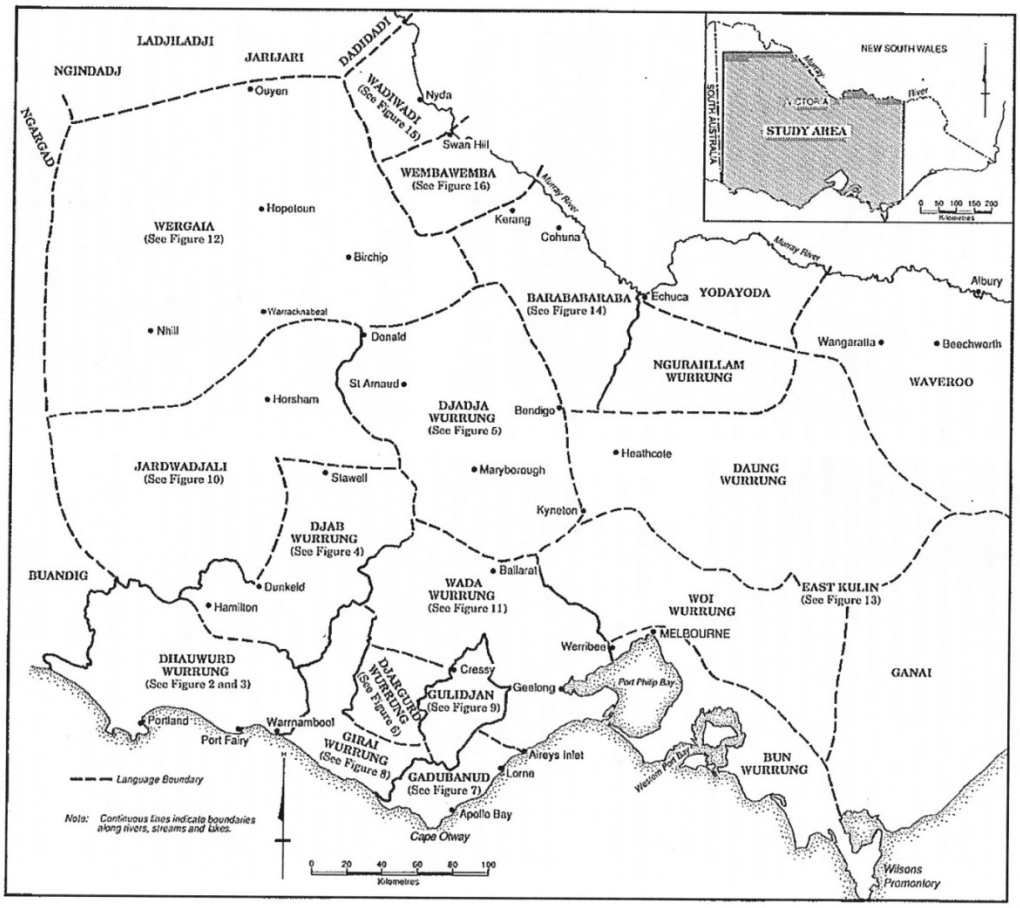


Figure 9: Western and Central Victorian Aboriginal Languages (Clark 1990: 20)

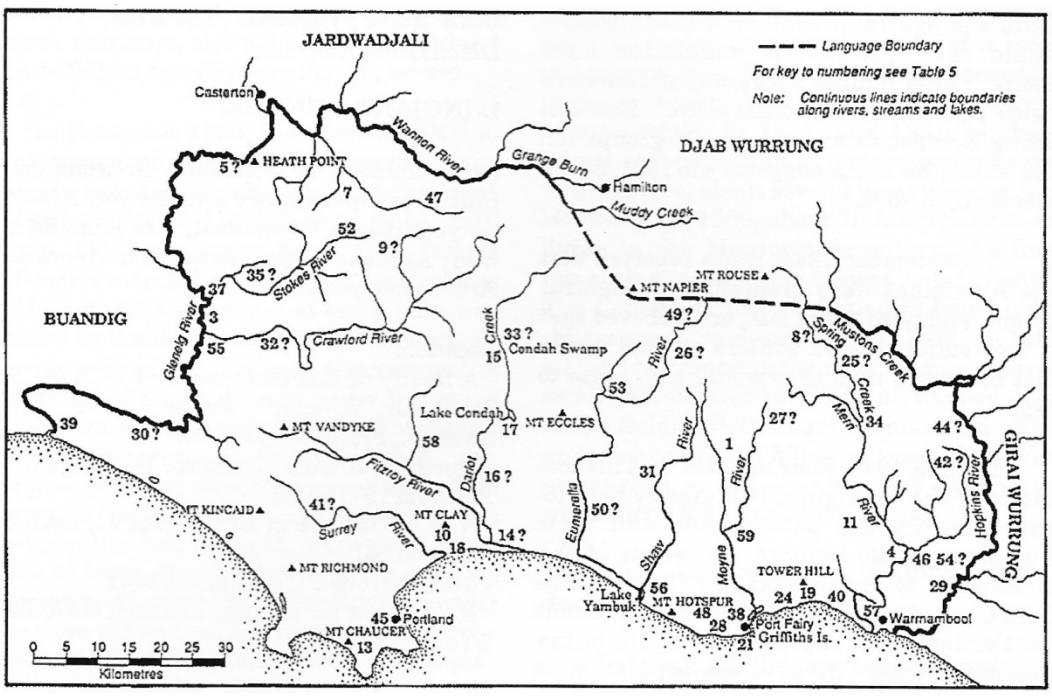


Figure 10: Dhauwurd wurrung (Gundidjmara) Language Area and Clans (Clark 1990: 54)

7.5.2 Oral History

No oral history information was able to be determined in consultation with EMAC.

7.6 Archaeological Context

7.6.1 Victorian Aboriginal Heritage Register (VAHR)

The Victorian Aboriginal Heritage Register (VAHR) was accessed by Jem Archaeology Archaeologist/Heritage Advisor Talia Green on 11 December 2023 and was searched for information relating to previously identified Aboriginal places within the activity area and the defined geographic region. A total of 40 previously recorded Aboriginal places are present within the defined geographic region (see Map 2 and Appendix D). These include 15 shell middens, 10 low density artefact distributions, nine artefact scatters, five shell middens/artefact scatters, and one artefact scatter/shell midden. No Aboriginal places are present within the activity area or within 200m thereof (Map 3).

Object Collections are not included in this summary as they represent collected artefacts from Aboriginal places that may not be located within the defined geographic region. It should also be noted that due to changing site conventions over time, some isolated artefacts may be registered as artefact scatters.

Due to the large number of previously recorded Aboriginal places present within the defined geographic region, an appropriate representative sample of Aboriginal places located within the defined geographic region is presented in Table 2. Aboriginal places chosen to be summarised in Table 2 have been carefully selected based on their distance from the activity area and location within the same mapped area of cultural heritage sensitivity (that being a dune landform). This representative sample is proportional to the known Aboriginal places within the wider geographic region.

Table 2: Representative sample of Aboriginal places within the defined geographic region

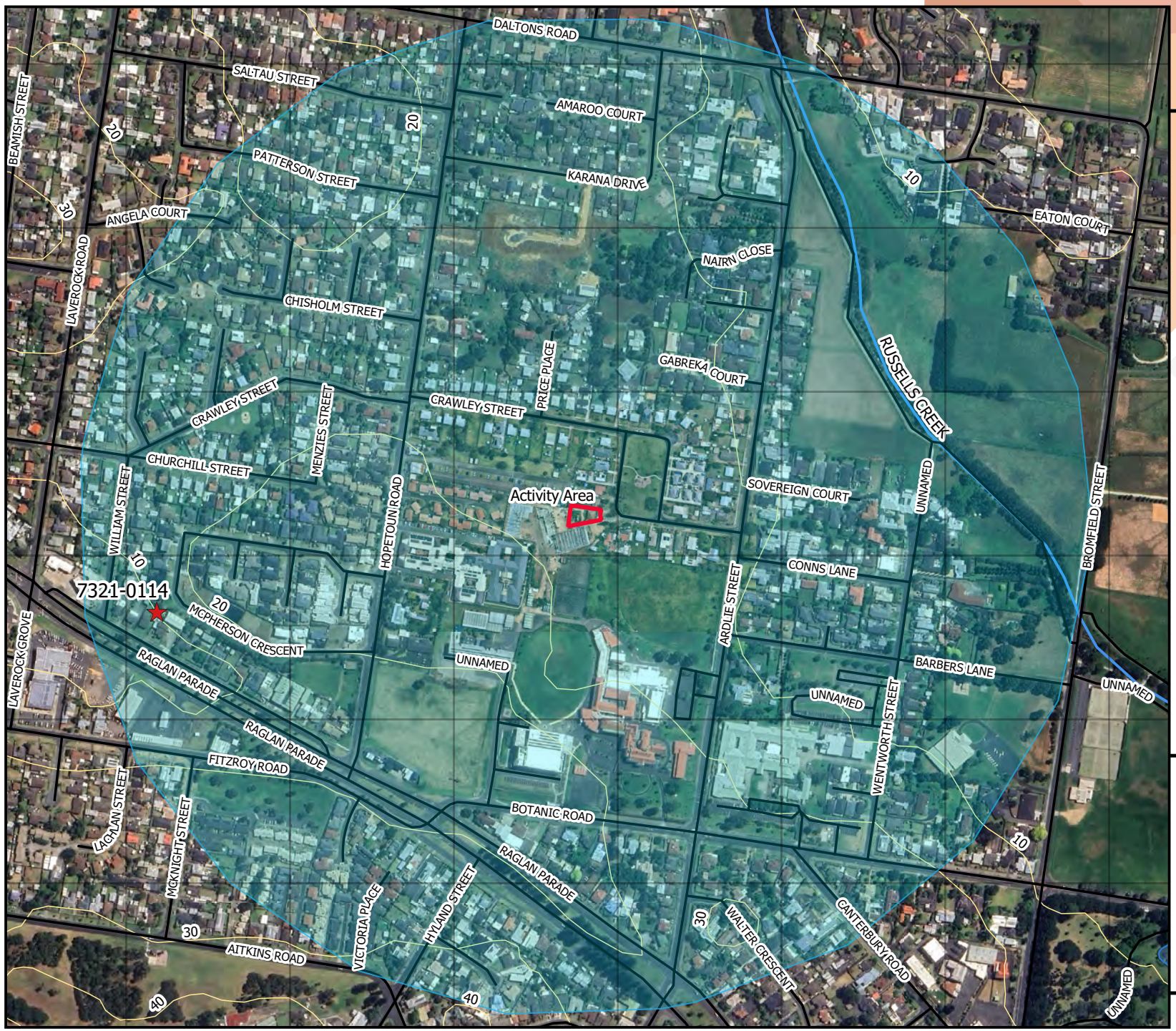
VAHR Number	Place Name	Place Type	Location/Landform	Description
7321-0003	Dennington	Shell Midden	3.33km west of activity area within an unspecified landform, and 60m east of Merri River	No information on this Aboriginal place is recorded on the site card associated within the initial place registration
7321-0114	Warrnambool 1	Artefact Scatter	512m southwest of activity area within an undulating landform and 980m southwest of Russell Creek	Isolated surface quartz core identified in vicinity of a rubble pile
7321-0117	Merri River 2	Artefact Scatter	3.34km west of activity area within an unspecified landform and 145m east of Merri River	Surface scatter. No additional information available

VAHR Number	Place Name	Place Type	Location/Landform	Description
7321-0118	Merri River 3 Dennington	Artefact Scatter/Shell Midden	3.38km west of activity area within dune landform and 100m east of Merri River	An artefact scatter comprising an unspecified number of chopped stone made from raw materials of flint and chert, with some burnt stone. Shell midden component comprises shell from *Subninella, Cellana* and *Brachidontes*
7321-0355	Spring Onions	Artefact Scatter	2.1km west of activity area at the top of a rise landform	Unspecified number of surface artefacts made from raw material of coastal chert in the form of flakes
7321-0471	Harrington Road 1	Artefact Scatter	2.3km northwest of activity area within a low-rise landform	Isolated artefact made from raw material of crystal quartz in the form of an angular fragment, recovered from a depth of 20cm in a disturbed context
7321-0472	Harrington Road 2	Artefact Scatter	2.2km northwest of activity area within an undulating dune landform	Three artefacts made from raw materials of coastal flint (2) and quartz (1) in the form of flakes (2) and angular fragments (1), recovered from depths of between 20-60cm
7321-0493	Botanic Road LDAD	Low Density Artefact Distribution	1.5km southeast of activity area within a floodplain landform and 27m south of Russells Creek	Isolated coastal flint flake recovered from a depth of 20cm
7321-0505	Merrivale LDAD 1	Low Density Artefact Distribution	2.2km southwest of activity area within a floodplain landform and 395m northeast of Merri River	Isolated silcrete distal flake recovered from a depth of 30cm
7321-0512	Warrnambool Rail Warrnambool LDAD 1	Low Density Artefact Distribution	3km southeast of activity area within a dune landform and 330m north of the coastline	Isolated coastal flint distal flake recovered from a depth of 45cm

VAHR Number	Place Name	Place Type	Location/Landform	Description
7321-0513	Warrnambool Rail Warrnambool Shell Midden 1	Shell Midden and Artefact Scatter	2.7km southeast of activity area within a modified dune landform and 325m north of the coastline	Total of 26 artefacts made from raw materials of coastal flint (25) and quartz (1) in the form of angular fragments (12), complete flakes (5), proximal flakes (3), medial flakes (3), distal flakes (2) and bifacial core (1) recovered from shell midden at depths of between 11-80cm. Shell midden component contains shell from *Turbo*, *Limpet*, *Chiton* and *Ostrea*
7321-0521	Dennington LDAD 1	Low Density Artefact Distribution	2.9km northwest of activity area within a floodplain landform and 530m south of the Merri River	Total of two artefacts made from raw materials of chert (1) and quartz (1) in the form of complete flakes (2), recovered from depths of between 70 to 80cm
7321-0541	Merri Maar Artefact Scatter 1	Shell Midden and Artefact Scatter	1.5km south of activity area within an alluvial terrace and 540m north of Merri River	Total of 51 artefacts made from raw materials of coastal flint (45), quartz (4), silcrete (1) and glass (1) in the form of complete flakes (28), proximal flakes (6), angular fragments (6), complete blades (4), distal flakes (3), distal blade (1), bifacial core (1) and medial flake (1), recovered from depths of between 0-50cm. Shell midden contains shell of *Turbo* and *Limpet*

VAHR Number	Place Name	Place Type	Location/Landform	Description
7321-0544	Moore Street LDAD	Low Density Artefact Distribution	1.7km east of activity area on an unspecified landform and 175m south of Russells Creek	Total of 13 artefacts made from raw materials of coastal flint (5), silcrete (4), quartz (3) and quartzite (1) in the form of complete flakes (6), distal blades (2), cores (2), angular fragment (2) and distal flake (1) recovered from depths of between 0 to 80cm
7421-0006	Moyjil Aboriginal Place	Shell Midden	1.63km southeast of activity area within the lower slope of a dune landform, 100m northwest of the Hopkins River and 60m north of the coastine	A shell midden with isolated occurrences of shell including gastropod fragments and possible chiton plate
7421-0256	Aberline Road LDAD	Low Density Artefact Distribution	3.6km east if the current activity area and 575m southeast of Russells Creek in an unspecified landform (associated CHMP #19332 has not been published at time of VAHR search)	A subsurface low density artefact distribution comprising a basalt proximal flake and a rhyolite distal flake identified at a depth of 40cm

CHMP 19891 - 15 Crawley Street, Warrnambool



Map 3:
Aboriginal Place nearest to the Activity Area

Legend

- Activity Area
- VAHR Place
  - Artefact Scatter
- 600m Buffer
- Road
- Watercourse
- Contour

0 100 200 m

1:6,600

GDA94 / MGA Zone 54

Map Created: 4 December 2023
Last Updated: 11 February 2024
Map Creator: Georgia Cowling
Basemap: Google Satellite (c) 2023

JEM ARCHAEOLOGY

7.6.2 Previous Archaeological Investigations

A number of previous regional and localised archaeological investigations have been prepared within the defined geographic region surrounding the activity area. One report has previous been prepared to the immediate south of the activity area. This report is summarised below:

East and Painter (2022) prepared a complex CHMP (#18654) for a proposed school facilities upgrade at Emmanuel Collage, located to the immediate south and west of the current activity area. The standard assessment identified three distinct landforms across the activity area, those being a crest/slope, a highly modified landscaped area and a swampy depression. Ground surface visibility (GSV) was considered to be poor (<10%) and several disturbances were observed across the property, including the construction of buildings, sealed areas, landscaped areas and artificial cutting and filling. No new Aboriginal places were identified during the standard assessment; however, three areas of Aboriginal archaeological potential were identified, those being undisturbed sections of the crest, slope and swampy depression landforms. The complex assessment involved the manual excavation of two 1x1m test pits (TP) and 18 50x50cm Shovel Test Pits (STP). Soils generally comprised a dark reddish brown clayey silt to approximately 10cm, over a reddish grey silty clay to 40cm, overlying a reddish brown mottled clay base at 50cm. A limestone rock layer was identified at 12cm in TP1. No new Aboriginal places were identified during the complex assessment.

Additionally, a number of archaeological reports have previously been prepared in proximity to the activity area. A review of the most relevant reports, which were determined as being relevant due to proximity to the activity area and their position within the same, or similar mapped area of cultural heritage sensitivity (that being a sand sheet), is presented below.

Paynter and Rhodes (2005) prepared an archaeological assessment (Report #3396) for a proposed local structure plan at Wollaston Road, Warrnambool, approximately 880m north of the current activity area. The assessment involved a desktop assessment and a ground survey, and divided the study area into three sections. A large portion of the survey took the form of a windscreen survey, whilst the remaining area was surveyed on foot. GSV was deemed to be poor, and a variation in soil was observed closer to the River. Four surface artefacts were identified during the ground survey, those being an isolated flaked silcrete artefact located on a riverbank landform, and three silcrete artefacts including a core and two flakes located on a floodplain landform, all of which were identified within disturbed soils. These artefacts were subsequently registered as Aboriginal places Wollaston Road 1 (7321 – 0450 [VAHR]) and Wollaston Road 2 (7321 – 0451 [VAHR]), respectively. Two historical sites were also identified within several sections, Merri River Hut Sites (H7321-0033), Bromfield Street Weir, Wollaston Road Quarry Site (D7321/0032) and several dry-stone walls. As a result of this survey the activity area was divided into areas with levels of heritage protection. Recommendations included further investigation of the Aboriginal places and the historical sites before any construction or invasive action takes place.

O'Reilly and McAlister (2011) prepared a complex CHMP (#11662) for a proposed housing subdivision on Wollaston Road, Warrnambool, approximately 576m east of the current activity area at its closest point. The desktop assessment identified one previously recorded Aboriginal place within the activity area, that being Wollaston Road 1 (7321-0450 [VAHR]). This site is an artefact scatter comprising an isolated silcrete flake. The standard assessment noted poor ground surface visibility and observed some areas of extensive disturbance and stockpiled materials. An attempt was made to re-identify previously recorded Aboriginal place Wollaston Road 1 (7321-0450 [VAHR]), however, no cultural material associated with this place was able to be identified. No new Aboriginal places were identified during the standard assessment; however, the entirety of the activity area was considered to be archaeologically sensitivity. The complex assessment involved the manual excavation of 11 1x1m TPs and 257 40cmx40cm STPs. Soils generally comprised a black or yellowish-brown silty clay to 10cm, over a brown compact sand to 30cm, overlying a brown to black compact clay base at 40cm. However, this varied due to the large size of the activity area. The complex assessment identified five new Aboriginal places, those being: Wollaston Road 1 (7321-0450 [VAHR]), Wollaston Road 3 AS (7321-0486 [VAHR]), Wollaston Road 4 IA (7321-0482 [VAHR]), Wollaston Road 5 IA (7321-0483 [VAHR]) and Wollaston Road 6 AS (7321-0487 [VAHR]), all of which are located outside

of the defined geographic region for this CHMP. Management conditions for the identified Aboriginal places included salvage program and the installation of temporary fencing.

O'Reilly (2012) prepared a desktop CHMP (#12329) for a proposed pipeline along Wollaston Road, Warrnambool, approximately 1.4km northeast of the current activity at its closest point. The desktop assessment identified a total of 18 previously recorded Aboriginal places within the defined geographic region, none of which were located within the activity area itself. All of these places were artefact scatters associated with waterways. The desktop assessment concluded that the activity area was not located in an area of Aboriginal archaeological sensitivity, exhibited low sensitivity for Aboriginal cultural heritage deposits and that no further assessments were necessary.

Chandler (2014) prepared a complex CHMP (#12906) for a proposed residential subdivision at 123 Queens Road, Warrnambool, approximately 920m northeast of current activity area. The standard assessment identified two distinct landforms within the activity area, those being a flat floodplain and a rise landform. GSV was deemed to be poor due to the high level of vegetation cover, and some areas of disturbance were also identified due to the presence and demolition of a former structure. No new Aboriginal places were identified during the standard assessment; however, one area of moderate archaeological potential was identified, that being the rise landform; the remainder of the activity area was deemed to exhibit low archaeological potential. The complex assessment involved the manual excavation of two 1x1m TPs and 23 40cmx40cm STPs. Soils within the floodplain landform generally consisted of a clayey silt to 22cm, over a silty clay to 47cm, overlying a compact clay as base at 50cm. Soils on the rise landform generally consisted of a fine silt to 40cm, over a sandy silt with modern inclusions to 60cm, over a sandy silt to 68cm, overlying with a solid rock base at 68cm. No new Aboriginal places were identified during the complex assessment.

Mitchell (2014) prepared a complex CHMP (#13111) for a proposed residential subdivision at 17–19 Mortlake Road, Warrnambool, approximately 1.36km east/southeast of the current activity area. No standard assessment was carried out due to the complete dearth of ground surface visibility within the activity area. The complex assessment involved the manual excavation of one 1x1m TP and 12 40x40cm STPs to depths of between 39-68cm. Soils generally comprised a silty sand to 30cm, over a silty sand with manganese inclusions to 60cm, overlying a clay base at 60cm. Although little disturbance was evident in the soil profile, a piece of Willow patterned ceramic was identified at a depth of 20cm, suggesting minor disturbance to shallow layers within the activity area. No new Aboriginal places were identified during the complex assessment, and no specific management conditions were required.

Burch (2015) prepared a complex CHMP (#13510) for a proposed residential subdivision on 20 Botanic Road, Warrnambool, approximately 1.26km southeast of the current activity area. The standard assessment identified one distinct landform within the activity area, that being a sloping floodplain. Some disturbances were observed, including those associated with the prior residential development of the property and the installation of sub surface assets and utilities. GSV was deemed to be poor due to extensive amounts of surface vegetation and structures. No new Aboriginal places were identified during the standard assessment; however, one area of archaeological potential was identified, that being the entirety of the activity area. The complex assessment involved the manual excavation of one 1x1m TP, 25 50x50cm STPs, and four 40x40cm radial STPs. Soils generally comprised a brown sandy silty loam with root and gravel inclusions to 13cm, over a yellowish-brown dry sand with modern rubbish inclusions to 35cm, overlying a compact coffee rock base at a depth of 35cm. One new Aboriginal place was identified, that being Botanic Road LDAD (7321-0493 [VAHR]), which was identified within disturbed contexts and comprises a single whole flake made from raw material of coastal flint. Management recommendations required for a 10m protective buffer around Aboriginal place Botanic Road LDAD (7321-0493 [VAHR]).

Patton, Thompson and Fiddian (2021 [amended East and Painter 2022]) prepared a complex CHMP (#17553) for a proposed place of worship and residential dwellings at 58-60 Mortlake Road, Warrnambool, approximately 1.5km east of the current activity area. The standard assessment identified one distinct landform within the activity area, that being an low lying volcanic plain. Areas of disturbance were also observed that were associated with the construction of the existing facilities. GSV was deemed to be very poor (0%). No new Aboriginal places were identified during the standard assessment, however, as the degree of prior disturbance was unable to be determined, the assessment proceeded to complex

assessment. The complex assessment involved the manual excavation of one 1x1m TP. Additionally, an auger probe was drilled in the northeastern quadrant of the completed TP using a 10cm diameter auger. Soils consisted of a dark brown sandy loam to 30cm, over a dark grey loam to 55cm, overlying a brown clay base. The auger probe determined that the sterile clay base continued to a depth of 80cm before becoming impenetrable. No new Aboriginal places were identified.

Albrecht and Minter Brooke (2022 [amended 2023]) prepared a complex CHMP (#18247) for a proposed car parking plan along sections of road reserves in proximity to Warrnambool Hospital, approximately 1.15km southwest of the current activity area at its closest point. The standard assessment identified one distinct landform within the activity area, that being a former dune. Varying levels of ground disturbance was also observed, ranging from low, moderate and high across the activity area. GSV was deemed to be poor in most areas (<10%) however, some areas exhibited over 92% GSV. No new Aborignal places were identified during the standard assessment; however, one area of archaeological sensitivity was identified, that being an elevated section of the sloping dune landform. The complex assessment involved the manual excavation of two 1x1m TP's and 16 50x50cm STP's. Soils generally comprised a black friable damp sandy silt to 17cm, over a black dry sandy silt to 38cm, overlying silty sand with degrading sandstone to 53cm. A total of 51 artefacts were identified made from raw materials of coastal flint (45), quartz (4), silcrete (1) and an unidentified material (1), in the form of complete flakes (28), proximal flakes (6), angular fragments (6), complete blades (4), distal flakes (3), medial flake (1), distal blade (1), proximal blade (1) and bifacial core (1). A shell midden was also identified, comprising shell of *Turbo* and *Limpet*. This Aboriginal place was subsequently registered as Merri Maar Artefact Scatter 1 (7321-0541 [VAHR]). Specific management recommendations include establishing a No Go Zone surrounding Merri Maar Artefact Scatter 1 (7321-0541 [VAHR]) and discussing its future protection with the City of Warrnambool.

Ball and Patton (2022) prepared a complex CHMP (#18842) for a proposed kayak launch and fishing pontoon and associated infrastructure along the Merri Creek between Woodend Road and Platypus Park, located approximately 875m northwest of the current activity area. The standard assessment identified one distinct landform, that being a flat to gently sloping floodplain. GSV was deemed to be very poor (0%), and a series of disturbances were identified that could be attributed to ground stripping, installation of sub surface assets and utilities and landscaping. No new Aboriginal places were identified during the standard assessment. Due to very poor GSV, it was determined that the archaeological potential of the activity area could not be adequately determined during the standard assessment and as such, the CHMP proceeded to complex assessment. The complex assessment involved the manual excavation of one 1x1m TP and eight 50x50cm STP's to depths of between 14-38cm. Soils generally comprised a silty loam to 20cm, over clayey silt to 30cm, overlying a clay base at a depth of 38cm. The complex assessment indicated that the activity area had been subject to ground surface disturbance, fill material and modern rubbish inclusions present in the soils excavated. No new Aboriginal cultural heritage was identified during the complex assessment and as such, no specific management recommendations were outlined.

Burch, Green and Hunt (2022) prepared a complex CHMP (#18884) for a proposed retirement village at 27-29 Princess Street and 6A Manifold Street, Warrnambool, approximately 1.32km southeast of the current activity area. The standard assessment identified one distinct landform within the activity area, that being a highly modified hill slope. GSV was deemed to be very poor. Extensive amounts of disturbance were observed, including ground modifications to accommodate a former bowling green, remnant structures and surface and sub surface services, cutting, filling and driveways. One small area of archaeological potential was identified, that being a potentially unmodified grassed area. The complex assessment involved the excavation of one 1x1m TP. Soils comprised a reddish back sandy loam to 34cm, over a dusky red silty sand to 55cm, overlying a dusky red clay as base at 64cm. Frequent inclusions of calcium carbonate were also present. No new Aboriginal places were identified during the complex assessment.

Frost, Albrecht and Brooke (2023a) prepared a complex CHMP (#19137) for 6-8 and 14 Redford Street and 312 Timor Street, Warrnambool, approximately 1.2km south of the current activity area at its closest point. The standard assessment indicated that the activity area had been subject to moderate to high levels of superficial ground surface disturbance due to vegetation and land clearances, the informal use of the land for cattle grazing and agricultural purposes, and the construction of residential dwellings. GSV was deemed to be very poor (0-5%). One distinct landform was identified during the standard assessment, that being a gently undulating sandsheet. No new Aboriginal places were identified during the standard

assessment; however, the activity area was considered to exhibit low to moderate archaeological potential. The complex assessment involved the manual excavation of one 1x1m TP and two 50x50cm STP's. Soils comprised reddish brown sandy silt to 13cm, over a layer of mixed modern fill with a high content of large quartz pebbles to 20cm, overlying a firm clayey sandy silt with inclusions of frequent glass and ceramic to 70cm. No new Aboriginal places were identified and as such, no specific management recommendations were required.

Frost, Albrecht and Brooke (2023b) prepared a complex CHMP (#19322) for a proposed carparking facility at 321 Timor Street, Warrnambool, approximately 1.4km south of the current activity area. The standard assessment indicated that the activity area had been subject to moderate to high levels of superficial ground surface disturbance due to vegetation and land clearances, the informal use of the land for cattle grazing and agricultural purposes and due to the construction of residential dwellings. GSV was deemed to be very poor (0-5%). One distinct landform was identified during the standard assessment, that being a gently undulating sandsheet. No new Aboriginal places were identified during the standard assessment; however, the activity area was considered to exhibit low to moderate archaeological potential. The complex assessment involved the manual excavation of one 1x1m TP and one 50x50cm STP's. Soils comprised an upper layer of clayey silt to 27cm, over a deposit of sand fill to 33cm, over a very dark brown silty clay to 56cm, overlying a base layer of clay at 58cm. No new Aboriginal places were identified and as such, no specific management recommendations were required.

7.7 Prediction Model

The results of the desktop assessment suggest that it is possible that Aboriginal cultural heritage may be present within the activity area. A review of previously registered Aboriginal places and previous archaeological investigations within the geographic region suggests that artefact scatters are commonly located on elevated landforms in proximity to the coast or larger waterways with views of the surrounding landscape and access to resources. As the activity area is situated on an elevated landform, it is most likely that the activity area will contain an artefact scatter. Lower density artefact scatters can also be found across plain and floodplain landforms close to sources of fresh water, with shell middens also very common along the coast.

A review of previous uses of the land encompassing the activity area indicates that it was established as a residential allotment by at least 1987. Prior to this development it likely had a pastoral past use. Whilst these developments likely impacted the natural ground surface, it remains possible that undisturbed portions of the activity area retain the potential to contain as yet unrecorded Aboriginal places.

The site types which are most likely to be present within the activity area are:

- artefact scatters; and
- low density artefact distributions.

7.8 Desktop Assessment Conclusion

The activity area lies within the Warrnambool Plain bioregion and is characterised by sandy plains and associated dunes, which reflect a transition to more recent sediment deposits within the southwestern extent of Victoria. These deposits are dominated by aeolian sands and silts and influence a landscape characterised by dunes with crests, gently inclined slopes grading into plains and poorly developed drained; such slopes typically sit between 120-140m above sea level, associated with geomorphological unit 6.2.1. One previous archaeological investigation has been prepared in the immediate vicinity of the activity area (CHMP #18654, East and Painter 2022). This investigation identified three distinct landforms, those being a swampy depression, a slope and a crest. Consequently, it is anticipated that the landform within the current activity area will comprise a generally flat or gently sloping landform.

Soils within this region typically consist of acidic sandy soils (Tenosols and Podosols), and sodic brown, yellow and grey texture contrast soils (Sodosols). The stratigraphic profiles recorded during the preparation

of CHMP #18654 varied according to landform. It is anticipated that the activity area will comprise a variation of silty clays, over mottled clay bases. Prior to 1750, the activity area would have predominately comprised one distinct ecological class: of Damp Sands Herb-rich Woodland (Ecological Vegetation Class [EVC] 3.

At the time of European contact, the activity area and surrounding region formed part of the traditional lands of the Dhauwurd wurrung language group. A total of 40 previously recorded Aboriginal places are present within the defined geographic region. These include 15 shell middens, 10 low density artefact distributions, nine artefact scatters, five shell middens/artefact scatters, and one artefact scatter/shell midden. There are no Aboriginal places are present within the activity area or within 200m thereof. Shell middens and LDADs are the most common site type in the geographic region, followed closely by artefact scatters, and it is considered likely that artefact scatters or LDADs will be present within the activity area.

Aerial imagery dating to 1947 indicates that the activity area comprised cleared, pastoral land, and had been subject to residential development by 1987. Aerial imagery and satellite interpretation shows that the activity area remained largely unchanged until 2022, when additional shedding had been added to the southern side of the dwelling, and a potential garden patch had been added in the southwest portion of the activity area around the small structure in the backyard. Current conditions of the activity area remain generally unchanged.

The results of the desktop assessment suggest that it is likely that Aboriginal cultural heritage may be present within the activity area. Therefore, under r.62(1) of the *Aboriginal Heritage Regulations 2018*, a standard assessment of the activity area is required.

Page intentionally left blank

8 STANDARD ASSESSMENT

8.1 Introduction

The standard assessment was undertaken on 9 January 2024 by Jem Archaeology Archaeologist/Heritage Advisors Liam Ricketts and Georgia Cowling, Jem Archaeology Archaeologist Mia Kleehammer, and EMAC representatives Phillip "Fid" Chatfield, Jyran Chatfield and Jandamara Chatfield.

8.2 Aims

The standard assessment aimed to identify any Aboriginal cultural heritage which may be present within the activity area and to identify any areas of Aboriginal archaeological sensitivity which may be present within the activity area.

8.3 Methodology

The standard assessment involved a detailed pedestrian survey of the activity area. The surveyors walked in transects spaced 2m to 3m apart across all accessible portions of the activity area, to ensure that the activity area was thoroughly examined (Map 4). Jem Archaeology Archaeologist/Heritage Advisor Liam Ricketts took photographs of the activity area and made detailed field notes. The standard assessment was undertaken in accordance with proper archaeological practice as described by Burke and Smith (2004: 65). If present, all mature native trees were inspected for evidence of cultural scarring.

8.4 Limitations and Obstacles

The effectiveness of the standard assessment was limited by low ground surface visibility (GSV), gravel, two narrow strips of concrete utilised as a driveway and a residential dwelling. Ground surface visibility is estimated to be 1-5%. The following formula was used to calculate Effective Survey Coverage (ESC) following Witter (1990) (Map 4).

ESC = (c) x (e) x (v) x (b).

Table 3: Effective Survey Coverage definitions, method of calculation and results

	Definition	Method of Calculation	Result
c	Area surveyed in m^2	NA	$624m^2$
e	Erosion rating - the index of sedimentation occurring within the activity area	0.1 = aggrading surface 0.5 = stable surface 1.0 = degrading surface	0.5
v	Visibility rating – an estimation of the percentage of bare ground present within the activity area	0.1 = negligible visibility 0.2 = (1-25%) 0.3 = (26-50%) 0.4 = (51-75%) 0.5 = (76-99%) 1.0 = (100%)	0.2
b	Background effect -a measure of the occurrence of materials (such as structures, sealed footpaths/driveways) that obstructs the identification of cultural deposits	0.1 = high 0.5 = medium 1.0 = low	0.5

ESC = (c) x (e) x (v) x (b)

= (624) x (0.5) x (0.2) x (0.5)

= 31.2

= 31.2% of 624m^2

Effective survey coverage is estimated to be 31.2%.

8.5 Results

The activity area comprises an irregular/rectangular shaped residential property (Map 5). One distinct landform was identified during the standard assessment, that being the upper slope of a rise.

The slope of activity area inclines from the northeastern corner, increasing in elevation as it trends toward the southwestern corner where the activity area (Photos 1 to 3). A residential dwelling is present in the eastern half of the property (Photos 1 and 2). The residential dwelling surrounded by paved areas including concrete walkways and a concrete driveway, which extends on a east/west orientation adjacent to the northern boundary from Crawley Street, terminating at the northwestern corner of the dwelling (Photos 4 and 5). The eastern and western portions of the activity area (front and back yards) comprise grassed areas with notable amounts of recently deposited crushed rock and are otherwise relatively featureless (Phots 1 to 7). Some small landscaped areas and evidence of surface and sub surface assets and utilities are also present within the western half of the activity area (Photos 7 and 8). The preparation of the ground and installation of the dwelling, sealed areas, landscaping and crushed rock have caused some superficial disturbance to the ground surface. Permanent wooden fencing bounds the northern boundary of the activity area, whilst the southern and western boundaries of the property is bounded by temporary fencing (Photos 1 to 8).

Photo 1: Northeastern portion of activity area, showing incline trending southwest, facing west

Scale increments 20cm

Photo 2: Southwestern portion of activity area, showing decline trending northeast, facing northeast

Scale increments 20cm

Photo 3: Southwestern portion of activity area, showing incline trending southwest, facing west

Scale increments 20cm

Photo 4: Red arrow indicating paved walkway surrounding dwelling, facing northeast

Scale increments 20cm

Photo 5: Paved driveway extending west from Crawley Street, facing east

Scale increments 20cm

Photo 6: Northwestern portion of activity area featuring grass and crushed gravel, facing northwest

Scale increments 20cm

Photo 7: Backyard of property featuring grass, crushed gravel, and assets and utilities, facing south

Scale increments 20cm

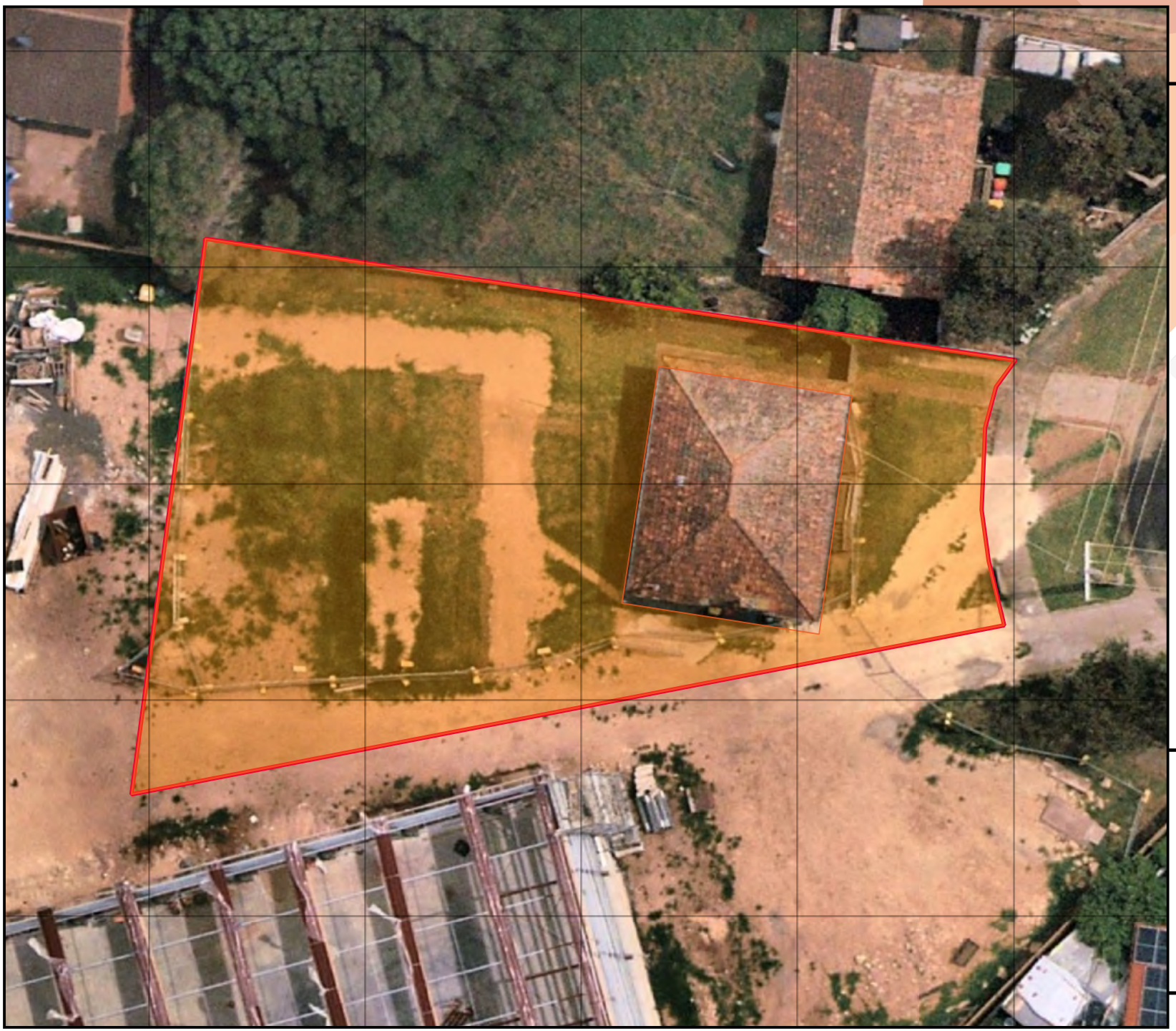
Photo 8: Western half of activity area showing minor landscaping and assets and utilities, facing east

Scale increments 20cm

No mature native trees are present within the activity area. No rockshelters, caves or cave entrances are present within the activity area.

No Aboriginal places were identified during the standard assessment; however one area of Aboriginal archaeological sensitivity was identified. This area comprises the mid-slope of a rise landform (Map 5). This rise trends southwest as it inclines in elevation, extending beyond the boundary of the activity area. It is considered likely that Aboriginal cultural heritage may be present within the activity area, therefore a complex assessment is required.

CHMP 19891 - 15 Crawley Street, Warrnambool



Map 4:
Survey Area

Legend

Activity Area (624m²)

Survey Area
- effective survey coverage 31.2%

0 5 10 m

N

1:250

GDA94 / MGA Zone 54

Map Created: 11 January 2023
Last Updated: 11 February 2024
Map Creator: Georgia Cowling
Satellite Image: 6 January 2024

JEM ARCHAEOLOGY

CHMP 19891 - 15 Crawley Street, Warrnambool

Map 5:
Standard Assessment Results

Legend

- Activity Area
- Area of Aboriginal Archaeological Sensitivity

0 5 10 m

N

1:250

GDA94 / MGA Zone 54

Map Created: 11 January 2023
Last Updated: 11 February 2024
Map Creator: Georgia Cowling
Satellite Image: 6 January 2024

JEM ARCHAEOLOGY

8.6 Standard Assessment Conclusion

The standard assessment aimed to identify any Aboriginal cultural heritage which may be present within the activity area and to identify any areas of Aboriginal archaeological sensitivity which may be present within the activity area. A pedestrian survey was carried out across all accessible portions of the activity area. The activity area comprises a residential allotment with a residential dwelling and fencing along the northern boundary, and a small undeveloped grassed areas to the immediate east and west of the dwelling, comprising the front and back yards of the property. Some minor landscaping is present, in addition to surface and sub surface assets and utilities. Some sealed areas are also present in the form of a concrete walkway and driveway. As a result, some superficial ground disturbance is visible across the activity area. Crushed gravel has been deposited indiscriminately across sections of the front and back yards.

One single landform was identified during the standard assessment. This comprises the upper slope of a rise landform. This rise trends southwest as it inclines in elevation, extending beyond the boundary of the activity area.

No Aboriginal places were identified during the standard assessment; however, one area of Aboriginal archaeological sensitivity was identified. This area comprises the entire activity area, with the exception of the residential dwelling positioned in the eastern half of the property (Map 5). It is considered likely that Aboriginal cultural heritage may be present within the activity area, therefore under r.64(1)(a) of the *Aboriginal Heritage Regulations 2018*, a complex assessment is required.

Page intentionally left blank

9 COMPLEX ASSESSMENT

9.1 Introduction

The complex assessment was undertaken on 9 January 2024 by Jem Archaeology Archaeologist/HAs Liam Ricketts and Georgia Cowling, Jem Archaeology Archaeologist Mia Kleehammer, and EMAC representatives Phillip "Fid" Chatfield, Jyran Chatfield and Jandamara Chatfield. Jem Archaeology Archaeologist/HA Liam Ricketts supervised the complex assessment.

9.2 Aims

The complex assessment aimed to investigate the stratigraphy of subsurface deposits and soil types within the activity area, to identify any Aboriginal cultural heritage which may be present within the activity area.

9.3 Methodology

The complex assessment comprised controlled manual archaeological excavations in the form of one 1x1m test pit (TP) and five 50x50cm shovel test pits (STP) (Map 6). The excavations were undertaken in accordance with proper archaeological practice and the guidelines contained in AV's (2016) *Aboriginal Heritage Act 2006* Practice Note: Subsurface Testing. The 1x1m TP was excavated to determine the stratigraphy of the single landform within the activity area, the upper slope of a rise, and to search for any subsurface Aboriginal cultural heritage. The 50x50cm STPs were excavated to supplement the results of the 1x1m TP by providing additional spatial information and tracing stratigraphic layers across the excavated portions of the activity area and as an investigative technique to determine if Aboriginal cultural heritage was present within the activity area.

The TP measured 1x1m and was excavated using shovels to remove surface vegetation, the topsoil and culturally sterile layers in each spit. Excavation proceeded in arbitrary spits of no more than 5cm and all excavated material was hand sieved through 5mm mesh. Jem Archaeology Archaeologist/Heritage Advisor Liam Ricketts recorded the TP in full, including recording TP location using a Trimble TDC600 differential GPS, photographing and drawing stratigraphic profiles, describing soil types from each stratigraphic context, testing soil samples from each stratigraphic context for pH level and describing the colour of soil samples from each stratigraphic context using Munsell colour charts.

The STPs measured 50x50cm and were excavated using shovels. Excavation proceeded in arbitrary spits of no more than 10cm and all excavated material was hand sieved through 5mm mesh. Jem Archaeology Archaeologist/Heritage Advisor Liam Ricketts recorded the STPs in full, including recording STP locations using a Trimble TDC600 differential GPS, photographing and drawing stratigraphic profiles, describing soil types from each stratigraphic context, testing soil samples from each stratigraphic context for pH level and describing the colour of soil samples from each stratigraphic context using Munsell colour charts.

9.4 Limitations and Obstacles

The complex assessment involved the excavation of a total area which is relatively small in comparison with the total size of the activity area. Therefore, there is a minor possibility that undiscovered Aboriginal cultural heritage may be present in unexcavated subsurface contexts within the activity area. However, the sampling strategy employed targeted all areas of Aboriginal archaeological sensitivity within the activity area and ensured that the nature of subsurface deposits within the activity area was well documented.

The effectiveness of the complex assessment was also limited by the presence of asbestos in STP2. In accordance with Occupational Health and Safety regulations, all excavation and sieving activities immediately ceased once asbestos was discovered. The Sponsor was subsequently notified of the presence of asbestos within the activity area.

9.5 Results

A total of one TP and five STPs were excavated within the activity area (Map 6). The details of all excavations undertaken within the activity area are presented below.

No Aboriginal places were discovered during the complex assessment.

CHMP 19891 - 15 Crawley Street, Warrnambool

Map 6:
Complex Assessment Results

Legend

- Activity Area
- Test Pit - No Artefacts
- Shovel Test Pit - No Artefacts

0 5 10

N

1:250

GDA94 / MGA Zone 54

Map Created: 11 January 2023
Last Updated: 11 February 2024
Map Creator: Georgia Cowling
Satellite Image: 6 January 2024

JEM ARCHAEOLOGY

9.5.1 Test Pit

9.5.1.1 TP1

Project	Pit ID	Coordinates (MGA GDA94, Zone 54)	Date	Landform	Disturbance
CHMP 19891	TP1	E: 628946, N: 5752254	9 January 2024	Upper Slope of a Rise	-

Table 4: TP1 description

Context No.	Soil Horizon	Depth (cm)	Munsell Colour	pH	Consistency	Moisture	Structure	Texture	Inclusions	Boundary	Artefacts
1	A1	0- 4/5cm	Dark brown (Munsell 7.5YR 3/3)	9	Firm	Damp	Fine grained	Silt	Rootlet	Smooth abrupt	-
2	A11	4/5 – 27/18cm	Dark reddish brown (Munsell 5YR 3/3)	9	Weak	Damp	Fine grained	Silt	Ceramic	Smooth abrupt	-
3	A2	27/18 – 38/32/35cm	Red (Munsell 2.5YR 4/6)	6	Weak	Damp	Medium grained/ granular	Silty Sand	-	Smooth Gradual	-
4	A3	38/36- 44/45cm	Red (Munsell 2.5YR 4/6)	6	Firm	Damp	Granular	Clayey Sand	-	Irregular Massive	-
5	R	44/45/32/35cm+	Very pale brown (Munsell 10YR 8/4)	8.5	Compacted	Dry	Massive	Impenetrable Calcium Carbonate	-	-	-

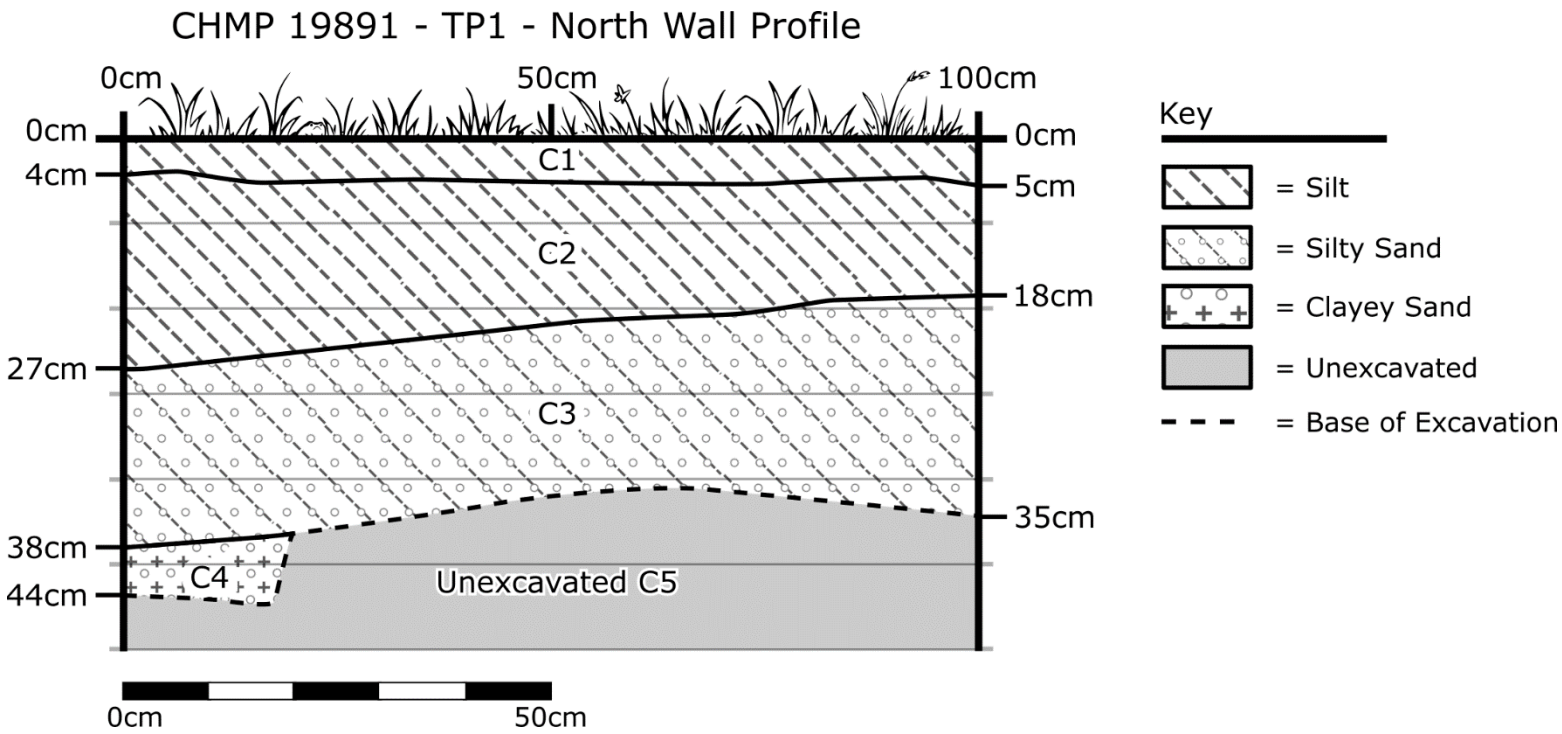


Figure 11: TP1 stratigraphic profile, north wall

Photo 9: TP1 facing north
Scale increments 20cm

Photo 10: TP1 facing north
Scale increments 20cm

9.5.2 Shovel Test Pits

Table 5: STP descriptions

STP Details	Coordinates (MGA GDA94, Zone 54)	Profile Description	Photograph	Artefacts
STP1 9 January 2024	E: 628975 N: 5752249	[1] 0 – 5/5cm: Dark brown (Munsell 7.5YR 3/3), pH 9, firm, damp, fine grained silt with grass root inclusions and a smooth abrupt boundary [2] 5 – 34/38cm: Dark reddish brown (Munsell 5YR 3/3), pH 9, weak, damp, fine grained silt and a smooth abrupt boundary [3] 34/38 – 60/61cm: Red (Munsell 2.5YR 4/6), pH 6, weak, damp, medium grained/granular silty sand and a smooth gradual boundary [4] 60/61 – 70/71cm: Red (Munsell 2.5YR 4/6), pH 6, firm, damp, granular clayey sand and a smooth abrupt boundary [5] 70/71 – 88/91cm: Very pale brown (Munsell 10YR 8/4), pH 8.5, strong, dry, calcium carbonate layer with an irregular sharp boundary [Base] 88/91cm+: Very pale brown (Munsell 10YR 8/4), pH 8.5, impenetrable calcium carbonate base	 **Photo 11: STP1 east wall** Scale increments 20cm	-

STP2 9 January 2024	E: 628960 N: 5752253	[1] 0 – 7/5cm: Dark brown (Munsell 7.5YR 3/3), pH 9, firm, damp, fine grained silt with grass root inclusions and a smooth abrupt boundary [2] 7/5 – 18/17cm: Dark reddish brown (Munsell 5YR 3/3), pH 9, weak, damp, fine grained silt with asbestos and animal bone inclusions *Pit abandoned due to the presence of asbestos	 **Photo 12: STP2 west wall** Scale increments 20cm	-
STP3 9 January 2024	E: 628959 N: 5752245	[1] 0 – 7/6cm: Yellowish brown (Munsell 10YR 5/6), pH 8.5, very weak, damp, granular sand with gravel inclusions and a smooth sharp boundary [2] 7/6 – 26/29cm: Dark brown (Munsell 7.5YR 3/3), pH 9, weak, damp, fine grained silt and a smooth abrupt boundary [3] 26/29 – 48/62cm: Red (Munsell 2.5YR 4/6), pH 6, weak, damp, medium grained/granular silty sand and a smooth gradual boundary [4] 48/62 – 58/100cm: Very pale brown (Munsell 10YR 8/4), pH 8.5, strong, dry, calcium carbonate layer with an irregular sharp boundary [Base] 58/100cm+: Very pale brown (Munsell 10YR 8/4), pH 8.5, impenetrable calcium carbonate base	 **Photo 13: STP3 south wall** Scale increments 20cm	-

STP4 9 January 2024	E: 628951 N: 5752250	[1] 0 – 12/13cm: Dark brown (Munsell 7.5YR 3/3), pH 9, firm, damp, fine grained silt with gravel inclusions and a smooth sharp boundary [2] 12/13 – 30/44cm: Dark reddish brown (Munsell 5YR 3/3), pH 9, weak, damp, fine grained silt and an irregular sharp boundary [Base] 30/44cm+: Very pale brown (Munsell 10YR 8/4), pH 8.5, impenetrable calcium carbonate base	 **Photo 14: STP4 south wall** Scale increments 20cm	-
STP5 9 January 2024	E: 628945 N: 5752247	[1] 0 – 7/8cm: Dark brown (Munsell 7.5YR 3/3), pH 9, firm, damp, fine grained silt with grass root inclusions and a smooth abrupt boundary [2] 7/8 – 36/35cm: Dark reddish brown (Munsell 5YR 3/3), pH 9, weak, damp, fine grained silt and a smooth gradual boundary [3] 36/35 – 70/77cm: Red (Munsell 2.5YR 4/6), pH 6, weak, damp, medium grained silty sand with calcium carbonate inclusions and an irregular sharp boundary [Base] 70/77cm+: Very pale brown (Munsell 10YR 8/4), pH 8.5, impenetrable calcium carbonate base.	 **Photo 15: STP5 north wall** Scale increments 20cm	-

9.6 Complex Assessment Conclusion

The complex assessment aimed to investigate the stratigraphy of subsurface deposits and soil types within the activity area and to identify any Aboriginal cultural heritage which may be present within the activity area. A total of one 1x1m TP and five 50x50cm STPs were excavated within the activity area (Map 6). The complex assessment revealed that A1 and A2 horizon deposits within the activity area comprised a dark brown fine grained silt to depths of between 4-13cm, over a dark reddish brown silt to depths of between 18-44cm. Often, these contexts lay above a red silty sand to depths of between 18 to 77cm. In the northwestern section of the activity area, this red silty sand continued with a higher clay content to depths of between 36-45cm. On the lower half of the rise landform a penetrable calcium carbonate layer was present to depths of between 48-91cm, overlying an impenetrable calcium carbonate base at depths of between 58-100cm. The western half the activity area comprised the same impenetrable calcium carbonate base at depths of between 30 to 77cm.

During the desktop assessment it was noted that soils in the immediate vicinity of the activity area varied according to landform; however, based on previous archaeological testing in the adjacent property carried out by East and Painter (2022), it was anticipated that soils would comprise variations reddish brown clayey silts to a depth of 5cm, directly overlying impenetrable calcium carbonate deposits. Although the upper A horizon soils were similar as predicted, the stratigraphic profile of the activity area contained less clay content and a higher sand content than anticipated and were notably deeper, with the impenetrable calcium carbonate base appearing at depths of between 48-100cm, depending on the elevation of the slope. Although inclusions of asbestos and faunal remains indicated some degree of disturbance in the northern mid-section of the activity area in proximity to the dwelling, the soil profile indicates that the area has been subject to only a limited amount of superficial disturbance.

No Aboriginal places were discovered during the complex assessment; therefore, no remaining areas of Aboriginal archaeological sensitivity are considered to exist within the activity area.

10 CONSIDERATION OF SECTION 61 MATTERS

10.1 Consideration of Cumulative Impacts

The Warrnambool region has a long history of primarily pastoral and agricultural land use and associated development, with European settlers establishing runs in the region in the 1820s. From the time of European settlement, much of the land across the Warrnambool region was subject to ground modifying activities, including the large scale clearance of vegetation, livestock grazing and crop planting, all of which are likely to have impacted upon and/or destroyed numerous unrecorded Aboriginal places. Urban and residential developments were underway in the Warrnambool area by the late 1800s and early 1900s and continued at a low to moderate rate thereafter to accommodate the gradual increase in population. Despite this, large numbers of a variety of Aboriginal place types remain in the region, including rare Aboriginal place types such as earth features.

More recently, the Warrnambool region has been subject to an increase in urban developments which are serviced by small scale commercial and retail precincts and associated infrastructure, including road networks and utility installations. Ground disturbing activities associated with the increasing urban development of the Warrnambool region has caused further, more extensive disturbance to the ground in both a surface and sub surface context. Activities associated with the development of the Warrnambool area include the large scale clearance of vegetation, grading, scraping, and excavation of land, construction of residential subdivisions, major roadway upgrades and the development of commercial and industrial premises. All such activities, particularly prior to the introduction of the *Aboriginal Heritage Act 2006* which introduced regulations for heritage management, would have impacted to an unknown degree upon countless undiscovered Aboriginal places.

Despite the increase in urban development across the in the area, much of the Warrnambool region remains relatively undeveloped compared to other parts of Victoria and many high significance Aboriginal places have been protected from harm. It is likely that large numbers of unrecorded Aboriginal places remain across the landscape. Previously recorded Aboriginal places in the defined geographic region and the wider Warrnambool area (many of which comprise surface and sub surface artefact scatters and low density artefact distributions) vary in scientific significance from very low to high, however, all of these places are of high cultural significance in accordance with Aboriginal tradition.

Many previous archaeological investigations have been carried out across the wider region, particularly in the last 15-20 years. These investigations aim to manage and protect Aboriginal cultural heritage by implementing various measures to manage, mitigate and avoid harm to Aboriginal places. These measures include, but are not limited to mandatory Cultural Awareness Inductions, RAP inspections and monitoring programs, the erection of temporary fencing around known extents of Aboriginal places, the establishment of Heritage parks and interpretive signage, implementation of salvage programs, laying of geofab to protect known Aboriginal places from impacts to the ground, in addition to the mandatory establishment of Contingency Plans in each CHMP to account for the unexpected discovery of Aboriginal heritage during the course of activities. Given the increasing amount of development in and around the Warrnambool region, it is highly likely that a significant number of additional Aboriginal places will continue to be identified, particularly along the coastline, in proximity to waterways and across more elevated landforms. The most common Aboriginal place types in the Warrnambool region present in the form of artefact scatters, low density artefact distributions and shell middens; however, it is also possible that less common Aboriginal places will be uncovered during the preparation of future CHMPs. Every effort should be made to avoid or harm to any such Aboriginal places through the establishment of Conditions, both General and Specific to Aboriginal places in the region. These Conditions may include the re-design of some components of proposed developments, the establishment of temporary and permanent fencing and no-go zones during and after the development phase, cultural awareness inductions and salvage programs.

It is possible that previous activity across the landscape has impacted upon, and consequently destroyed tangible Aboriginal heritage that may have once been present within the activity area. Whilst the previous land use of the area is considered to have contributed to the cumulative impact of Aboriginal places in the region, there is no previously known or newly identified Aboriginal cultural heritage within the activity

area. Consequently, as there is no known Aboriginal cultural heritage within the activity area, the proposed activity will have no cumulative impact on Aboriginal cultural heritage in the region.

10.2 Consideration of Section 61 Matters

There is no requirement for harm avoidance measures to be included in this CHMP in accordance with s.61(a) of the *Aboriginal Heritage Act 2006*, as no known Aboriginal cultural heritage is present within the activity area.

There is no requirement for harm minimisation measures to be included in this CHMP in accordance with s.61(b) of the *Aboriginal Heritage Act 2006*, as no known Aboriginal cultural heritage is present within the activity area.

There is no requirement for specific conditions for the management of Aboriginal cultural heritage within the activity area in accordance with s.61(c) of the *Aboriginal Heritage Act 2006*, as no known Aboriginal cultural heritage is present within the activity area.

Matters relating to s.61(d) and s.61(e) of the *Aboriginal Heritage Act 2006*, regarding disputes and custody and management of cultural heritage respectively are contained within Section 2 of this CHMP.

10.3 General Requirements

10.3.1 Contingency Plans

Under the *Aboriginal Heritage Regulations 2018* (Schedule 2, Clause 13[1]), the CHMP must include contingency plans for the following:

- the matters referred to in Section 61 of the *Aboriginal Heritage Act 2006*;
- the resolution of any disputes between the Sponsor and relevant RAP in relation to the implementation of the CHMP or the conduct of the activity;
- reviewing compliance with the CHMP and mechanisms for remedying non-compliance;
- the management of Aboriginal cultural heritage found during the activity; and
- the notification, in accordance with the *Aboriginal Heritage Act 2006*, of the discovery of Aboriginal cultural heritage during the activity.

The contingency plans are contained in Section 2.

REFERENCES

Aboriginal Affairs Victoria. 2008. Standards for Recording Aboriginal Places and Objects: Victorian Aboriginal Heritage Register Forms. Department of Planning and Community Development, Melbourne.

Aboriginal Affairs Victoria. 2012. **Interim Guidelines: Recording Low Density Artefact Distributions in ACHRIS.** Department of Planning and Community Development, Melbourne.

Aboriginal Victoria. 2016. **Aboriginal Heritage Act 2006: Practice Note: Subsurface Testing**. Department of Premier and Cabinet, Melbourne.

Aerial Survey of Victoria. 1947. Available: https://www.landata.vic.gov.au/tpc_plan_records.aspx. [Accessed 1 December 2023].

Aerial Survey of Victoria. 1987. Available: https://www.landata.vic.gov.au/tpc_plan_records.aspx. [Accessed 1 December 2023].

Albrecht, M. and J. Minter Brooke. 2022 [Amended 2023]. Warrnambool Hospital Car Parking Plan, Victoria. Cultural Heritage Management Plan: #18247. Unpublished report to South West Health Care.

Bell, A. and K. Patton. 2022. Woodend Road Kayak Launch, Fishing Pontoon and Connecting Path, Warrnambool, Victoria, 3280. Cultural Heritage Management Plan: #18842. Unpublished report to Warrnambool City Council.

Burch, J. 2015. Residential Subdivision, 20 Botanic Road, Warrnambool, Victoria: Cultural Heritage Management Plan: #13510. Unpublished report to Stephen Timms.

Burch, J. T. Green and J. Hunt. 2022. Proposed Retirement Village, 27-29 Princess Street and 6 A Manifold Street, Warrnambool, Victoria. Cultural Heritage Management Plan: #18884. Unpublished report to Heatherlie Homes.

Bureau of Meteorology. 2023. Climate Data Online. [Online]. Commonwealth of Australia, Bureau of Meteorology, Australia. Available: http://www.bom.gov.au/climate/averages/tables/cw_090186.shtml. [Accessed 1 December 2023].

Burke, H. and C. Smith. 2004 **The Archaeologist's Field Handbook**. Allen and Unwin, Sydney.

Chandler, J. 2014. Residential Subdivision, 123 Queens Road, Warrnambool, Victoria. Cultural Heritage Management Plan: #12906. Unpublished report to GJ and JA Dwyer Family Trust.

Clark, I. D. 1990. **Aboriginal Languages and Clans: An Historical Atlas of Western and Central Victoria, 1800-1900.** Monash Publications in Geography, Number 37, Department of Geography and Environmental Science, Monash University, Melbourne.

Clarkson, C., Z. Jacobs, B. Marwick, R. Fullagar, L. Wallis, M. Smith, R. G. Roberts, E. Hayes, K. Lowe, X. Carah, S. A. Sloring, J. McNeil, D. Cox, L. J. Arnold. Q. Hua, J. Huntley, H. E. A. Brand, T. Manne, A. Fairbairn, J. Shulmeister, L. Lyle, M. Salinas, M. Page, K. Connell, G. Park, K. Norman, T. Murphy and C. Pardoe. 2017. Human occupation of northern Australia by 65,000 years ago. *Nature* 547:306–310.

Department of Energy, Environment and Climate Action. 2020. NatureKit. [Online]. Available: https://maps2.biodiversity.vic.gov.au/Html5viewer/index.html?viewer=NatureKit. [Accessed 1 December 2023].

Department of Energy, Environment and Climate Action. 2023. GeoVic. [Online] Department of Energy, Environment and Climate Action. Available http://er-info.dpi.vic.gov.au/sd_weave/anonymous.html. [Accessed 1 December 2023].

Department of Jobs, Precincts and Regions. 2023. 6.2.1 Plains with ridges (Follett). [Online]. Department of Jobs, Precincts and Regions, Victoria. Available: https://vro.agriculture.vic.gov.au/dpi/vro/vrosite.nsf/pages/landform_geomorphological_framework_6.2.1. [Accessed 1 December 2023].

Department of Lands and Survey Victoria. 1858. Plan of District near Belfast and Warrnambool. [Online]. Available: https://viewer.slv.vic.gov.au/?entity=IE7118567&mode=browse [Accessed 1 December 2023].

Department of Lands and Survey Victoria. 1891. Wangoom Country of Villiers. [Online]. Available: https://viewer.slv.vic.gov.au/?entity=IE9649357&mode=browse [Accessed 1 December 2023].

Department of Premier and Cabinet. 2023. Aboriginal Cultural Heritage Register and Information System. [Online]. Department of Premier and Cabinet. Melbourne. Available: https://applications.vic.gov.au/apps/achris/public/home. [Accessed 1 December 2023].

Department of Sustainability and Environment. 2004. **EVC/Bioregion Benchmark for Vegetation Quality Assessment: EVC 3: Damp Sands Herb-rich Woodland.** Department of Sustainability and Environment, Victoria.

East, E. and L. Painter. 2022. Emmanuel Collage, Warrnambool School Facilities Upgrade. Cultural Heritage Management Plan: #18654. Unpublished report to Mercy Education Limited.

Frost, C. M. Albrecht, and J. Minter Brooke. 2023a. 6-8 and 14 Redford Street and 312 Timor Street, Warrnambool. Cultural Heritage Management Plan: #19137. Unpublished report to South West Healthcare.

Frost, C. M. Albrecht, and J. Minter Brooke. 2023b. Carpark: 321 Timor Street, Warrnambool. Cultural Heritage Management Plan: #19322. Unpublished report to South West Healthcare.

Google and Maxar Technologies. 2023. Warrnambool (December 2003). 38° 22' 07.33" S, 142° 28' 34.31 E. [Online]. Available: http://www.earth.google.com. [Accessed 1 December 2023].

Google and Airbus. 2023. Warrnambool (2022). 38° 22' 07.33" S, 142° 28' 34.31 E. [Online]. Available: http://www.earth.google.com. [Accessed 1 December 2023].

Gott, B. and J. Conran. 1998. **Victorian Koorie Plants.** (2nd edition) Yangennanock Women's Group, Hamilton.

Hewitt, G. and J. de Lange. 2007. Report on Bend Road Archaeological Investigations: Bend Road 2 Phases 1 to 4. Unpublished report to Thiess John Holland.

Hiscock, P. and S. Mitchell. 1993. **Stone Artefact Quarries and Reduction Sites in Australia: Towards a Type Profile.** Australian Heritage Commission Technical Publications Series No. 4, Australian Government Publishing Service, Canberra.

Holdaway, S. 2004. Report of the Southern Forests Archaeological Project: Continuity and Change: An Investigation of the Flaked Stone Artefacts from the Pleistocene Deposits at Bone Cave, Southwest Tasmania, Australia. Volume 2. Archaeology Program, School of Historical and European Studies, La Trobe University, Bundoora.

Holdaway, S. and N. Stern. 2004. **A Record in Stone: The Study of Australia's Flaked Stone Artefacts.** Aboriginal Studies Press, Canberra.

Holdgate, G.R., B. Wagstaff and S.J. Gallagher. 2011. Did Port Phillip Bay nearly dry up between ~2800 and 1000 cal. yr BP? Bay floor channelling evidence, seismic and core dating. **Australian Journal of Earth Sciences** 58: 157-175.

Jones, R. 1971. Rocky Cape and the Problem of the Tasmanians. Unpublished PhD thesis, Australian National University, Canberra.

Kershaw, P. 1995. Environmental Change in Australia. **Antiquity** 69 Issue 265: 656-675.

Koorie Heritage Trust. 2018a. Framlingham Mission History. [Online]. Available: http://www.abc.net.au/missionvoices/framlingham/default.htm [Accessed 11 December 2023].

Koorie Heritage Trust. 2018b. Lake Condah Mission History. [Online]. Available: http://www.abc.net.au/missionvoices/lake_condah/default.htm [Accessed 11 December 2023].

McCarthy, F.D. 1976. **Australian Aboriginal Stone Implements.** (2nd edition [reprint]). Australian Museum Trust, Sydney.

Mitchell, J. 2014. Proposed Residential Subdivision at 17-19 Mortlake Road, Warrnambool. Cultural Heritage Management Plan: #13111. Unpublished Report to Shane Keogh and Louise Keogh.

O'Reilly, S. 2012. Wollaston Road Development Infrastructure Works: Pipeline, Warrnambool. Cultural Heritage Management Plan: #12329. Unpublished report to Peter Wilson, Wannon Region Water Corporation.

O'Reilly, S. and R. McAlister. 2011. Wollaston Road, Warrnambool: Housing subdivision. Cultural Heritage Management Plan: #11662. Unpublished report to Roger Construction and Wannon Region Water Corporation.

Patton, K., M. Thomson, J. Fiddian. 2021 (amended [E. East and L. Painter] 2022). Place of Worship, 58-60 Mortlake Road, Warrnambool, Victoria 3280. Cultural Heritage Management Plan: #17553. Unpublished Report to Salvation Army.

Paynter, N. and D. Rhodes. 2005. An Archaeological Assessment Wollaston Road, Warrnambool. Report #3396. Unpublished report to Earth Tech.

Spreadborough, R. and H. Anderson. 1983. **Victorian Squatters**. Red Rooster Press, Ascot Vale.

State Library of New South Wales. 2020. Hume and Hovell. [Online]. Available: https://www.sl.nsw.gov.au/stories/hume-and-hovell [Accessed 11 December 2023].

VicSig. 2020. Warrnambool Line. [Online]. Available: https://vicsig.net/infrastructure/line/Warrnambool [Accessed 11 December 2023].

Victorian Places. 2015. Warrnambool. [Online]. Available: https://www.victorianplaces.com.au/warrnambool [Accessed 10 December 2023].

Witter, D.C. 1990. **Regions and Resources**, Unpublished PhD thesis, Australian National University, Canberra.

Wright, R. 1970. Flaked stone material from GGW-1. **Memoirs of the National Museum of Victoria** 30: 79-92.

Zola, N. and B. Gott. 1996. **Koorie Plants, Koorie People: Traditional Aboriginal Food, Fibre and Healing Plants of Victori**a. Koorie Heritage Trust, Melbourne.

Page intentionally left blank

APPENDIX A: GLOSSARY

Page intentionally left blank

Aboriginal ancestral remains:	The whole or part of the bodily remains of an Aboriginal person, but does not include a body or the remains of a body, buried in a public cemetery (within the meaning of the *Cemeteries and Crematoria Act 2003* that is still used for the internment of human remains (*Aboriginal Heritage Act 2006*).
Aboriginal cultural heritage:	Aboriginal Places, Aboriginal objects and Aboriginal human remains (*Aboriginal Heritage Act 2006*).
Aboriginal object:	An object that relates to the Aboriginal occupation of any part of Australia, whether or not the object existed prior to the occupation of that part of Australia by people of non-Aboriginal descent, and is of cultural heritage significance to the Aboriginal people of Victoria, or an object, material or thing that is removed or excavated from an Aboriginal place; and is of cultural heritage significance to the Aboriginal people of Victoria (*Aboriginal Heritage Act 2006*).
Aboriginal Place:	An area of land, expanse of water, natural feature, formation or landscape, archaeological site, feature or deposit, the area immediately surrounding a natural feature, formation or landscape, archaeological site, feature or deposit, to the extent that it cannot be separated from the thing without diminishing or destroying the cultural heritage significance attached to the thing by Aboriginal people, land set aside for the purpose of enabling Aboriginal human remains to be re-interred or otherwise deposited on a permanent basis or a building or structure that is of cultural heritage significance to the Aboriginal people of Victoria (*Aboriginal Heritage Act 2006*).
Aboriginal tradition:	The body of traditions, observances, customs and beliefs of Aboriginal people generally or of a particular community or group of Aboriginal people; and any such traditions, observances, customs or beliefs relating to particular persons, areas, objects or relationships (*Aboriginal Heritage Act 2006*).
Angular fragment:	An artefact resulting from knapping which exhibits no identifiable platform, bulb of percussion, impact point or termination (Holdaway and Stern 2004: 113).
Archaeological site:	A place that contains evidence of past human activity in the form of artefacts, structures or features.
Artefact:	An object or item made and/or used by humans in the past. In an Australian context, often synonymous with stone artefacts or lithics.
Artefact scatter:	A concentration of flaked and/or ground stone artefacts, faunal remains or items resulting from the manufacture or use of implements made of wood, bone, hide or other materials, found in surface and/or subsurface contexts.
Assemblage:	A collection of artefacts found in close association.
Basalt:	A volcanic igneous basic rock which is fine grained (containing 45-55% silica), rich in iron and magnesium, and dark in colour (usually grey) (Holdaway and Stern 2004: 22).
Bipolar technique:	A knapping technique where the core is rested on an anvil while being struck with a hammerstone.
Burial:	Human remains, including partial human remains, of one or more individuals, located in an undisturbed or disturbed burial pit or container (e.g. a tree) (AAV 2008: 62).
Chert:	A cryptocrystalline siliceous sedimentary rock which is isotropic and has low fracture toughness (Holdaway and Stern 2004: 23). Chert occurs in a range of colours and textures and often feels “greasy” to touch. Marine chert is dark grey and develops a chalky white cortex.

Core:	An artefact with one or more negative flake scars more than 10mm in maximum dimension (Holdaway 2004: 24) and no dorsal surface or an artefact with negative flake scars and a dorsal and ventral surface (i.e. a flake which has been used as a core) (Holdaway and Stern 2004: 37-38). Core types include:
• **Unidirectional:**	A core from which flakes were removed in one direction from a single platform (Holdaway and Stern 2004: 180).
• **Bidirectional:**	A core from which flakes were removed in two directions from two platforms (Holdaway and Stern 2004: 180).
• **Multidirectional:**	A core from which flakes were removed in three or more directions from three or more platforms (Holdaway and Stern 2004: 180).
Core fragment:	A core with clear evidence of being broken (Holdaway 2004: 24).
Core tool:	A core with retouch or edge damage.
Earth feature:	A feature made of earth, including a bank, ditch, canal or trench, hearth, mound, oven, posthole, ring, soil deposit or soil feature or pit (AAV 2008: 61).
Flake:	An artefact with a dorsal and ventral surface. Subcategories include:
• **Distal flake**	A flake with a termination and the absence of a platform, impact point or bulb of percussion (i.e. no proximal end) (Holdaway and Stern 2004: 111).
• **Medial flake**	A flake with no proximal end and no distal end, but with an identifiable ventral surface (Holdaway and Stern 2004: 111).
• **Proximal flake**	A flake possessing a platform, bulb of percussion or impact point but with no termination (i.e. no distal end) (Holdaway and Stern 2004: 111).
• **Special flake**	Ridge straightening or platform rejuvenation (e.g. tablet) flake (Holdaway and Stern 2004: 150).
• **Split flake**	A flake which is split longitudinally, parallel to the flaking axis (Holdaway and Stern 2004: 111).
• **Whole flake**	An artefact with a dorsal and ventral surface, a platform, an impact point, a bulb of percussion and a termination. Flakes may or may not also exhibit negative flake scars (Holdaway and Stern 2004: 111).
Ground-edge axe:	A tool which possesses one or more ground cutting edges which are usually highly polished.
Hammerstone:	A cobble or lump of stone which is pitted on at least one surface indicating that it has been used to strike a core during stone knapping (Holdaway and Stern 2004: 4).
Holocene:	A geological epoch extending from 11,650 years BP to present.
Low density artefact distribution:	The occurrence of up to ten flaked or ground stone artefacts within an area of approximately 10x10m (AAV 2012: 1).
Manuport:	An item (usually stone) which has been introduced into an archaeological site by humans.
Maximum dimension:	The maximum dimension of an artefact in any direction.
Oriented length:	The dimension of an artefact along the percussion axis.

Oriented width: The dimension of an artefact halfway along and at right angles to the percussion axis.

Oriented thickness: The dimension of an artefact between the dorsal and ventral surfaces, at the point where the measurements of oriented length and width intersect.

Platform: The surface on a flake or tool where the hammerstone originally struck the core at the proximal end. Platform types include:

- **Cortical:** The platform is partly or wholly covered by cortex, indicating that the flake was removed relatively early in the knapping sequence (Holdaway and Stern 2004: 120).
- **Crushed:** The platform is damaged to the extent that platform attributes cannot be recorded (Holdaway and Stern 2004: 120). The presence of a crushed platform may indicate the use of too much force by the knapper.
- **Faceted:** The platform exhibits three or more negative flake scars, indicating that the platform of the core from which the flake was removed was subject to extensive preparation (Holdaway and Stern 2004: 120).
- **Flaked:** The platform exhibits one or two negative flake scars, indicating that the flake was removed from a surface which had already been flaked (Holdaway and Stern 2004: 120).
- **Plain:** The platform is plain (Holdaway and Stern 2004: 120).

Pleistocene: A geological epoch extending from approximately 2,580,000 years BP to 11,650 years BP.

Quarry: The location of an exploited stone resource, where stone has been procured or extracted, and may also have been transported and reduced through knapping (Hiscock and Mitchell 1993: 23).

Quartz: A mineral with frequent flaws which influene fracture pathways, occurring in white (milky quartz), clear (rock crystal or crystal quartz), pink (rose quartz) and purple (amethyst) (Holdaway and Stern 2004: 24).

Quartzite: A metamorphic quartz-rich sandstone that has been recrystallised by heat and/or pressure. Quartzite has a granular (or sugary) texture and can occur in a range of colours and grain sizes (Holdaway and Stern 2004: 24).

Retouch: The removal of small flakes along the margins of tools to blunt or sharpen edges or to reshape tools. Retouch types include:

- **Backed:** Abrupt unidirectional or bidirectional retouch which involves blunting (Holdaway and Stern 2004: 159).
- **Edge damage:** Irregular flake scar damage resulting from the use of a tool (Holdaway and Stern 2004: 167).
- **Notched:** Retouch forming a concave shape resulting from one or several flake removals (Holdaway and Stern 2004: 165).
- **Scalar:** Scale-like flake scars (Holdaway and Stern 2004: 163).
- **Step:** Small flake removals with step terminations along the retouched margin (Holdaway and Stern 2004: 163).

Rock art: Images on rock surfaces that can be produced either by the adding of pigment (pictograms: painting, drawing, stencilling, printing, etc.) to the rock surface, or by breaking through or extracting the rock surface (petroglyphs: pecking, pounding, abrading, scratching etc.) (AAV 2008: 71).

Scarred tree: A tree from which Aboriginal people have removed bark for a variety of purposes, including for canoes, shields and containers.

Silcrete: A sedimentary rock consisting of quartz grains in a matrix of either amorphous or fine-grained silica. Silcrete occurs in a variety of textures and colours, especially reds, pinks, browns, greys and beiges as well as mottled varieties.

Shell midden: A surface or subsurface scatter of shells accumulated by cultural mechanisms in estuarine or freshwater contexts. Often the shell is accompanied by other artefacts, including flaked or ground stone, fish and other faunal bone, hearths and human remains (AAV 2008: 83).

Stone feature: A stone structure of feature constructed by Aboriginal people, including cairns, channels (stone races or canals), fish or eel traps, grinding grooves, rockwells, stone arrangements or stone structures (AAV 2008: 86).

Termination: The distal end of a flake or tool where force exited the original core. Termination types include:

- **Axial:** Termination at a right angle or close to a right angle compared to the platform, resulting from the force forming the flake moves right through the core (Holdaway and Stern 2004: 130).
- **Bipolar:** Termination exhibits crushing or small negative flake removals consistent with resting on an anvil during bipolar flaking (Holdaway 2004: 28, Table 3.3).
- **Feather:** A tapering termination with minimal thickness at the dorsal end (Holdaway and Stern 2004: 129). The optimal termination type (Holdaway and Stern 2004: 133).
- **Hinge:** The termination is rippled and the ventral surface curves towards the dorsal surface (Holdaway 2004: 28, Table 3.3). Hinge terminations result in cases where the platform is thick or the removal of the flake was initiated from the wrong angle (Holdaway and Stern 2004: 133).
- **Plunge:** A termination where the base of the core has been removed as a result of curvature of the fracture plane toward the core, resulting in a J-shaped flake (Holdaway and Stern 2004: 132) with the dorsal surface curving towards the ventral surface (Holdaway 2004: 28, Table 3.3). A plunge termination indicates the application of too much force (Holdaway and Stern 2004: 133).
- **Step:** The flake terminates in an abrupt 90° break, or there is evidence of a finial projection (Holdaway and Stern 2004: 130). Step terminations also result from a relatively thick platform or the application of force from the wrong approach angle (Holdaway and Stern 2004: 133).

Tool: A flake with some or all edges modified either by deliberate retouch or by macroscopic edge damage resulting from use (Holdaway and Stern 2004: 153). Tools may be whole, proximal, distal, medial or split (as defined above for flakes). Common tool types found in Victoria include:

- **Backed blade/artefact:** A tool with blunting retouch located opposite the working edge.
- **Bondi point:** A tool, generally less than 80mm in maximum dimension, which has the form of an asymmetrical point and has been backed along one margin (McCarthy 1976: 44).

- **Concave and nosed scraper:** A tool with one or more retouched 'noses' separated by areas of notched retouch (Jones 1971:425).
- **End scraper:** A tool with retouch at the distal end, larger than a thumbnail scraper.
- **Flat straight edge scraper:** A tool with long straight edges lightly trimmed by retouch with acute angles between the dorsal and ventral surface (mean of 66.6 ±12.4°) (Jones 1971:404).
- **Geometric microlith:** A tool with backing retouch on the proximal and/or distal ends, and sometimes along one lateral margin, forming a symmetrical crescent or triangular shape along the transverse axis (Holdaway and Stern 2004: 263).
- **Notched scraper:** A tool with a small, concave area of retouch on the lateral or distal margin (Jones 1971:415).
- **Point:** A tool which has been retouched along both lateral margins to form a point when viewed in plan (Holdaway and Stern 2004: 266). Points may be unifacial or bifacial.
- **Round edge scraper:** A small, flat scraper with regular, convex curved edges (Jones 1971:340).
- **Steep edge scraper:** A thick tool with steep and stepped retouched margins (Jones 1971:402).
- **Thumbnail scraper:** A small (generally under 20mm) flake which has been retouched on the distal end (and occasionally along the lateral margins) to form a convex scraper edge shaped like a thumbnail (Wright 1970).
- **Utilised:** Where tool form does not conform to any of the above types and retouch type is edge damage.

Page intentionally left blank

APPENDIX B: NOTICE OF INTENT TO PREPARE CHMP AND RESPONSE

Page intentionally left blank

Notice of Intent to prepare a Cultural Heritage Management Plan for the purposes of the *Aboriginal Heritage Act 2006*

This form can be used by the Sponsor of a Cultural Heritage Management Plan to complete the notification provisions pursuant to s.54 of the *Aboriginal Heritage Act 2006* (the "Act").

For clarification on any of the following please contact Victorian Aboriginal Heritage Register (VAHR) enquiries on 1800-726-003.

SECTION 1 - Sponsor information

Sponsor:	Emmanuel College Warrnambool		
ABN/ACN:	69 154 531 870		
Contact Name:	Stephen Kerr		
Postal Address	PO Box 486 Warrnambool VIC 3280		
Business Number:	03 5560 0888	Mobile:	
Email Address:	skerr@emmanuel.vic.edu.au		

Sponsor's agent (if relevant)

Company:	Myers Planning and Associates		
Contact Name:	Steve Myers		
Postal Address	Level 1, Co.Lab Dispensary Lane Warrnambool VIC 3280		
Business Number:		Mobile:	
Email Address:			

SECTION 2 - Description of proposed activity and location

Project Name:	15 Crawley Street, Warrnambool
Municipal district:	Warrnambool City Council

Clearly identify the proposed activity for which the cultural heritage managment plan is to be prepared (ie. Mining, road construction, housing subivision)

Education centre

SECTION 3 - Cultural Heritage Advisor

Jennifer Burch	Jem Archaeology Pty Ltd	jen.burch@jemarchaeology.com.au
Name	*Company*	*Email address*

SECTION 4 - Expected start and finish date for the cultural heritage management plan

Start Date:	16-Nov-2023	Finish Date:	16-Nov-2024

Submitted on: 16 Nov 2023

SECTION 5 - Why are you preparing this cultural heritage management plan?

☑ A cultural heritage management plan is required by the Aboriginal Heritage Regulations 2007

What is the high Impact Activity as it is listed in the regulations?

Is any part of the activity an area of cultural heritage sensitivity, as listed in the regulations? 1

☐ Other Reasons (Voluntary)

☐ An Environment Effects Statement is required

☐ A Cultural Heritage Management Plan is required by the Minister for Aboriginal Affairs.

☐ An Impact Management Plan or Comprehensive Impact Statement is required for the activity

SECTION 6 - List the relevant registered Aboriginal parties (if any)

This section is to be completed where there are registered Aboriginal parties in relation to the management plan.

EASTERN MAAR Aboriginal Corporation RNTBC

SECTION 7A - List the relevant Aboriginal groups or Aboriginal people with whom the Sponsor intends to consult (if any)

*This section is to be completed only if the proposed activity in the management plan is to be carried out in an area where there is **no Registered Aboriginal Party.***

SECTION 7B - Describe the intended consultation process (if any)

*This section is to be completed only if the proposed activity in the management plan is to be carried out in an area where there is **no Registered Aboriginal Party.***

SECTION 8 – State who will be evaluating this plan (mandatory)

The plan is to be evaluated by:

☐ Joint - Registered Aboriginal Party AND The Secretary

☑ A Registered Aboriginal Party

If checked, list the relevant Registered Aboriginal Party Evaluating:

☐ The Secretary

☐ Victorian Aboriginal Heritage Council

SECTION 9 – Preliminary Aboriginal Heritage Tests (PAHTs)

List the Reference Number(s) of any PAHTs conducted in relation to the proposed activity:

SECTION 10 - Notification checklist

Submitted on: 16 Nov 2023

Ensure that any relevant registered Aboriginal party/ies is also notified. A copy of this notice with a map attached may be used for this purpose.
(A registered Aboriginal party is allowed up to 14 days to provide a written response to a notification specifying whether or not it intends to evaluate the management plan.)

In addition to notifying the Deputy Director and any relevant registerd Aboriginal party/ies, a Sponsor must also notify any owner and/or occupier of any land within the area to which the management plan relates. A copy of this notice with a map attached may be used for this purpose.

Ensure any municipal council, whose municipal district includes an area to which the cultural heritage management plan relates, is also notified. A copy of this notice, with a map attached, may also be used for this purpose.

Aboriginal Victoria

15 Crawley Street Warrnambool

Areas of Cultural Heritage Sensitivity

VICTORIA State Government

Produced by Aboriginal Victoria
for
Jem Archaeology

1:1,250

Metres 20 40

GDA

N

Date: 15 November 2023

From:	Jen Burch
To:	Tania Krecul
Subject:	Fwd: Notice of Intent to Prepare CHMP 19891 Emmanuel College Warrnambool - 15 Crawley Street, Warrnambool
Date:	Thursday, 16 November 2023 12:07:50 PM

From: VAHR@dpc.vic.gov.au
Date: 16 November 2023 at 10:21:18 am AEDT
To: skerr@emmanuel.vic.edu.au, Jen Burch <jen.burch@jemarchaeology.com.au>, admin@easternmaar.com.au, craig.edwards@easternmaar.com.au, john.clarke@easternmaar.com.au, nathalia.guimaraes@easternmaar.com.au
Subject: Notice of Intent to Prepare CHMP 19891 Emmanuel College Warrnambool - 15 Crawley Street, Warrnambool

To whom it may concern,

This is a formal automated response indicating that, on 16-Nov-2023, the Secretary, Department of Premier and Cabinet received a Notice of Intent to Prepare a Cultural Heritage Management Plan (CHMP) for: Emmanuel College Warrnambool - 15 Crawley Street, Warrnambool

The notification has been allocated the following Project Number: CHMP Plan ID. 19891 Please quote this number when making any future enquiries regarding this project.

If your activity lies within the boundaries of a registered Aboriginal party (RAP) you must also notify that organisation of your intention to prepare the CHMP (if you have not already done so). Forwarding this email to the RAP does not satisfy the requirements of notification under section 54(3) of the Act. Please refer to that section for the required details. Further information about registered Aboriginal parties can be found at: https://www.aboriginalheritagecouncil.vic.gov.au/victorias-current-registered-aboriginal-parties

If your CHMP is to be evaluated by this Department please make contact with the relevant Regional Manager to arrange a meeting before any complex assessment is undertaken. If no complex assessment is proposed it is advised that this decision is discussed with the Regional Manager prior to submission of the CHMP. Contact VAHR@dpc.vic.gov.au if you require assistance with contact details.

Please provide additional notification provisions (as set out below):

- Ensure any municipal council, whose municipal district includes an area to which the cultural heritage management plan relates, is notified. You may provide a copy of your Notice of Intent for this CHMP, to the relevant municipal council, for this purpose.
- Notification to the relevant Aboriginal groups or Aboriginal people with whom the Sponsor intends to consult (if any).

Eastern Maar
Aboriginal Corporation

PO Box 546
Warrnambool VIC 3280

Monday, 20 November 2023

Stephen Kerr
Emmanuel College Warrnambool
PO Box 486
Warrnambool VIC 3280

Ngatanwarr Stephen Kerr,

EASTERN MAAR ELECTS TO EVALUATE CHMP 19891 – 15 Crawley Street, Warrnambool (s55).

I refer to your notice of intent to prepare a cultural heritage management plan (CHMP), received on 17/11/2021, for 15 Crawley Street, Warrnambool. The Eastern Maar Aboriginal Corporation, as the Registered Aboriginal Party (RAP) for the area, Elects to evaluate the CHMP.

As part of the CHMP process, Eastern Maar Aboriginal Corporation expects that Sponsors and Heritage Advisors will make reasonable efforts to consult with us before the design phase and during the preparation of the CHMP (s.59(2) of the Act). Eastern Maar Aboriginal Corporation expect consultation to take place in the form of cultural heritage meetings, typically three meetings, which will allow us to discuss assessment methodology, reburial and repatriation of artefacts, Aboriginal Place registration,CHMP conditions, and most importantly harm avoidance or minimisation of harm to cultural heritage values.

Please contact Vinicius Fiumari (vin.fiumari@easternmaar.com.au) to arrange an initial inception meeting (Tuesday and Wednesday Only), using the booking form attached, no sooner than two weeks after providing a copy of the completed desktop assessment and relevant mapping.

To book field representatives please complete the booking form attached and forward to Craig.Edwards@easternmaar.com.au with your preferences. Note that assessments can only be undertaken once consultation has occurred.

A copy of the Eastern Maar Aboriginal Corporation schedule of fees is attached for your reference.

I look forward to consulting with you to protect our Aboriginal cultural landscape as an integral part of your project.

Yours sincerely,

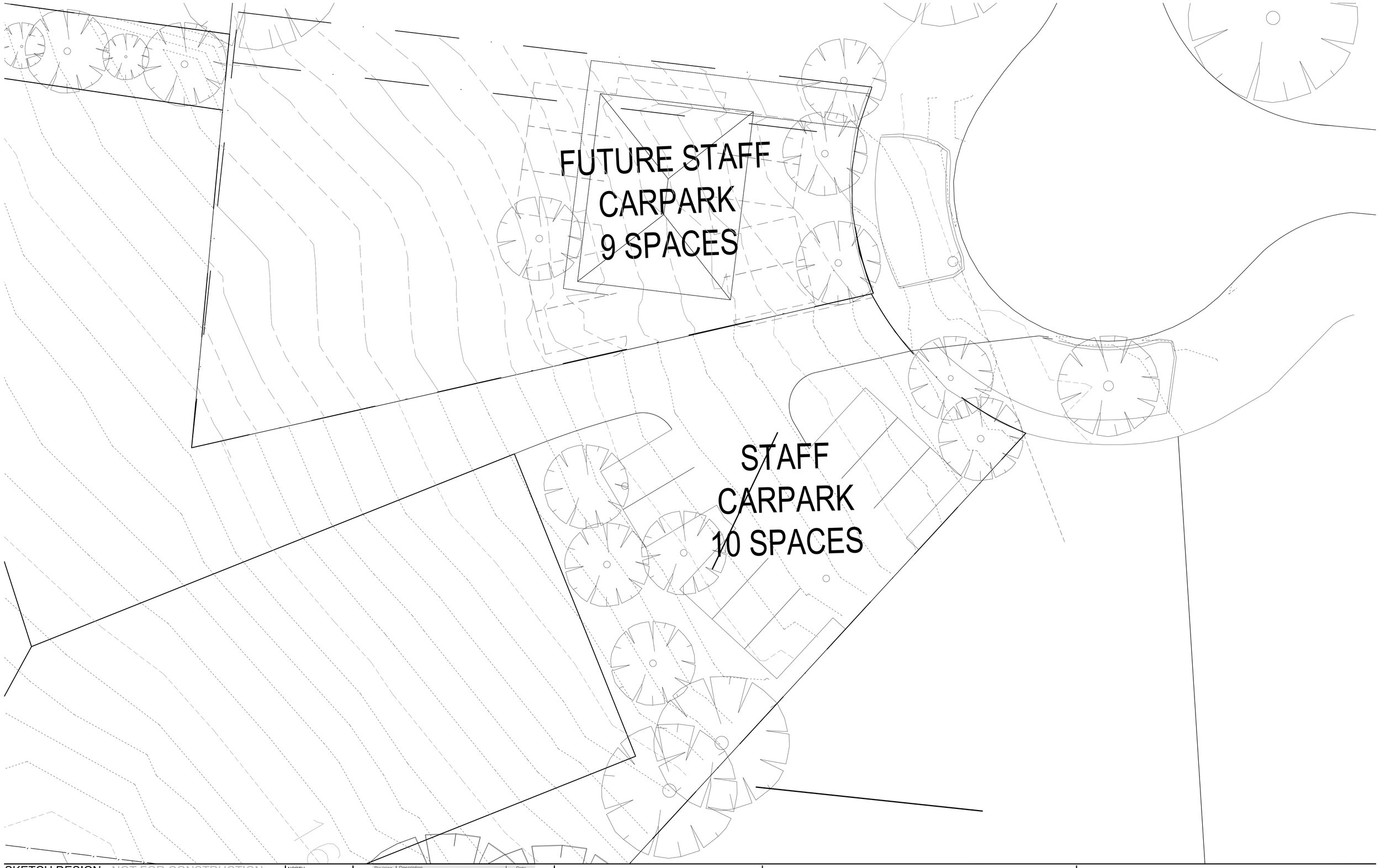
Emily Corris
RAP Technical Specialist
Eastern Maar Aboriginal Corporation
Phone: 0429 553 655
Email: emily.corris@easternmaar.com.au
Website: www.easternmaar.com.au

Attached: Booking Form and Schedule of Fees

APPENDIX C: PRELIMINARY ACTIVITY DEVELOPMENT PLANS

Page intentionally left blank

PROPOSED MASTERPLAN



SKETCH DESIGN - NOT FOR CONSTRUCTION

NORTH

Revision	Description	Date

SCALE 1 : 1000 (A1) 1 : 2000 (A3)

0 10 50 100m

BALDASSO CORTESE
LEVEL 1/103 OXFORD ST
POST OFFICE BOX 1569
COLLINGWOOD VIC 3066
ABN 71 445 953 215
(T) +61 3 9417 7555
WWW.BCARCH.NET

140 Botanic Road, Warrnambool

15 CRAWLEY ST - CARPARK

JOB NUMBER	DRW NUMBER	REV
20210026	SK205	A

Page intentionally left blank

APPENDIX D: VAHR PLACES WITHIN THE GEOGRAPHIC REGION

Page intentionally left blank

Place No	Aboriginal Place Name	Component No	Component Type
7321-0003	DENNINGTON	7321-0003-1	Shell Midden
7321-0114	WARRNAMBOOL 1	7321-0114-1	Artefact Scatter
7321-0117	MERRI RIVER 2	7321-0117-1	Artefact Scatter
7321-0118	MERRI RIVER 3 DENNINGTON	7321-0118-2	Artefact Scatter
7321-0355	SPRING ONIONS	7321-0355-1	Artefact Scatter
7321-0471	HARRINGTON ROAD 1	7321-0471-1	Artefact Scatter
7321-0472	HARRINGTON ROAD 2	7321-0472-1	Artefact Scatter
7321-0493	Botanic Road LDAD	7321-0493-1	Low Density Artefact Distribution
7321-0505	Merrivale LDAD 1	7321-0505-2	Low Density Artefact Distribution
7321-0512	Warrnambool Rail Warrnambool LDAD 1	7321-0512-1	Low Density Artefact Distribution
7321-0513	Warrnambool Rail Warrnambool Shell Midden 1	7321-0513-3	Artefact Scatter
7321-0513	Warrnambool Rail Warrnambool Shell Midden 1	7321-0513-1	Shell Midden
7321-0521	Dennington LDAD 1	7321-0521-1	Low Density Artefact Distribution
7321-0521	Dennington LDAD 1	7321-0521-2	Low Density Artefact Distribution
7321-0541	Merri Maar Artefact Scatter 1	7321-0541-2	Artefact Scatter
7321-0541	Merri Maar Artefact Scatter 1	7321-0541-3	Shell Midden
7321-0544	Moore Street LDAD	7321-0544-1	Low Density Artefact Distribution
7321-0544	Moore Street LDAD	7321-0544-13	Low Density Artefact Distribution
7321-0544	Moore Street LDAD	7321-0544-12	Low Density Artefact Distribution
7321-0544	Moore Street LDAD	7321-0544-11	Low Density Artefact Distribution
7321-0544	Moore Street LDAD	7321-0544-10	Low Density Artefact Distribution
7321-0544	Moore Street LDAD	7321-0544-9	Low Density Artefact Distribution
7321-0544	Moore Street LDAD	7321-0544-5	Low Density Artefact Distribution
7321-0544	Moore Street LDAD	7321-0544-4	Low Density Artefact Distribution
7321-0544	Moore Street LDAD	7321-0544-3	Low Density Artefact Distribution
7321-0544	Moore Street LDAD	7321-0544-2	Low Density Artefact Distribution
7321-0544	Moore Street LDAD	7321-0544-8	Low Density Artefact Distribution
7321-0544	Moore Street LDAD	7321-0544-7	Low Density Artefact Distribution
7321-0544	Moore Street LDAD	7321-0544-6	Low Density Artefact Distribution
7321-0554	236 Moore LDAD	7321-0554-1	Low Density Artefact Distribution
7421-0006	Moyjil Aboriginal Place	7421-0006-4	Shell Midden
7421-0006	Moyjil Aboriginal Place	7421-0006-3	Shell Midden
7421-0006	Moyjil Aboriginal Place	7421-0006-1	Shell Midden
7421-0007	HOPKINS MOUTH 2	7421-0007-1	Artefact Scatter
7421-0008	HOPKINS MOUTH 3	7421-0008-1	Shell Midden
7421-0009	HOPKINS MOUTH 4	7421-0009-1	Shell Midden
7421-0010	HOPKINS MOUTH 5	7421-0010-1	Shell Midden
7421-0011	HOPKINS MOUTH 6	7421-0011-1	Shell Midden
7421-0024	HOPKINS RIVER SHELTER 1	7421-0024-1	Shell Midden
7421-0025	HOPKINS RIVER 2	7421-0025-1	Shell Midden
7421-0026	HOPKINS RIVER 3	7421-0026-1	Artefact Scatter
7421-0027	HOPKINS RIVER 4	7421-0027-1	Shell Midden
7421-0111	HOPKINS LOOKOUT 1	7421-0111-2	Artefact Scatter
7421-0111	HOPKINS LOOKOUT 1	7421-0111-1	Shell Midden
7421-0194	HOPKINS POINT 1	7421-0194-1	Artefact Scatter
7421-0212	Hopkins Rd Path Shell Midden 1	7421-0212-2	Artefact Scatter
7421-0212	Hopkins Rd Path Shell Midden 1	7421-0212-1	Shell Midden
7421-0213	Point Ritchie Road Shell Midden 1	7421-0213-2	Artefact Scatter
7421-0213	Point Ritchie Road Shell Midden 1	7421-0213-1	Shell Midden
7421-0214	Granny's Grave Shell Deposit	7421-0214-2	Artefact Scatter

Place No	Aboriginal Place Name	Component No	Component Type
7421-0214	Granny's Grave Shell Deposit	7421-0214-1	Shell Midden
7421-0215	Hopkins River Path Shell Midden 1	7421-0215-1	Shell Midden
7421-0216	Hopkins River Path Shell Midden 2	7421-0216-1	Shell Midden
7421-0217	Hopkins River East Bank Shell Midden 1	7421-0217-1	Shell Midden
7421-0219	Logans Beach Road Midden 1	7421-0219-1	Shell Midden
7421-0220	Logans Beach Road Midden 2	7421-0220-3	Shell Midden
7421-0220	Logans Beach Road Midden 2	7421-0220-4	Shell Midden
7421-0220	Logans Beach Road Midden 2	7421-0220-1	Shell Midden
7421-0220	Logans Beach Road Midden 2	7421-0220-2	Shell Midden
7421-0221	Logans Beach Road Midden 3	7421-0221-4	Shell Midden
7421-0221	Logans Beach Road Midden 3	7421-0221-2	Shell Midden
7421-0221	Logans Beach Road Midden 3	7421-0221-3	Shell Midden
7421-0221	Logans Beach Road Midden 3	7421-0221-1	Shell Midden
7421-0226	Rodgers Road LDAD	7421-0226-3	Low Density Artefact Distribution
7421-0226	Rodgers Road LDAD	7421-0226-2	Low Density Artefact Distribution
7421-0226	Rodgers Road LDAD	7421-0226-1	Low Density Artefact Distribution
7421-0243	Raglan Parade 1	7421-0243-1	Low Density Artefact Distribution
7421-0243	Raglan Parade 1	7421-0243-2	Low Density Artefact Distribution
7421-0243	Raglan Parade 1	7421-0243-3	Low Density Artefact Distribution
7421-0243	Raglan Parade 1	7421-0243-4	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-1	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-2	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-3	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-4	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-5	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-6	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-8	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-9	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-10	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-11	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-12	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-13	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-14	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-15	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-16	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-17	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-7	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-18	Low Density Artefact Distribution
7421-0244	Warrnambool Rail Warrnambool LDAD 2	7421-0244-19	Low Density Artefact Distribution
7421-0249	Warrnambool Rail LDAD 1	7421-0249-4	Low Density Artefact Distribution
7421-0249	Warrnambool Rail LDAD 1	7421-0249-3	Low Density Artefact Distribution
7421-0249	Warrnambool Rail LDAD 1	7421-0249-6	Low Density Artefact Distribution
7421-0249	Warrnambool Rail LDAD 1	7421-0249-5	Low Density Artefact Distribution
7421-0249	Warrnambool Rail LDAD 1	7421-0249-2	Low Density Artefact Distribution
7421-0249	Warrnambool Rail LDAD 1	7421-0249-1	Low Density Artefact Distribution
7421-0249	Warrnambool Rail LDAD 1	7421-0249-8	Low Density Artefact Distribution
7421-0249	Warrnambool Rail LDAD 1	7421-0249-7	Low Density Artefact Distribution
7421-0249	Warrnambool Rail LDAD 1	7421-0249-10	Low Density Artefact Distribution
7421-0249	Warrnambool Rail LDAD 1	7421-0249-9	Low Density Artefact Distribution
7421-0256	Aberline Road LDAD	7421-0256-1	Low Density Artefact Distribution

Place No	Aboriginal Place Name	Component No	Component Type
7421-0256	Aberline Road LDAD	7421-0256-2	Low Density Artefact Distribution

Page intentionally left blank

APPENDIX E: ABORIGINAL ANCESTRAL REMAINS AND CULTURAL HERITAGE FACT SHEETS

Page intentionally left blank

ABORIGINAL BURIALS

Site Identification
Mini Poster 5

Source-bordering dune. Aboriginal burials often occur in sand dunes near rivers and lakes

What are Aboriginal Burials?

Aboriginal burials are normally found as clusters of human bones eroding from the ground, or exposed during ground disturbance.

Aboriginal customs for honouring and disposing of the dead varied greatly across Victoria, but burial was common. Aboriginal burial sites normally contain the remains of one or two people, although cemeteries that contain the remains of hundreds of people buried over thousands of years have been found. Sometimes the dead person was buried with personal ornaments and artefacts. Charcoal and ochre are also often found in burial sites.

Where are they Found?

Although Aboriginal burials are quite rare in Victoria, they have been found in almost every kind of landscape, from coastal dunes to mountain valleys. They tend to be near water courses or in dunes surrounding old lake beds. Many burials have been found on high points, such as dune ridges, within surrounding flat plains. They are often near or within Aboriginal occupation sites such as oven mounds, shell middens or artefact scatters.

What to Do if You Find a Burial Site

Do not disturb the site or remove any material. You should immediately report any discovery of human remains to the police. Also check whether the site has the characteristics of an Aboriginal burial. If it does, record its location and write a brief description of its condition.

Note whether it is under threat of disturbance.

Characteristics

- Aboriginal burials are normally found as concentrations of human bones or teeth, exposed by erosion or earth works.
- Remains may be scattered over a wide area, but well-preserved remains occur as tight clusters about the size of a human body.
- Burials tend to be in soft soils and sand, although some burials also occur in rock shelters and caves.
- Recently exposed bones look ‘fresh’, and may be spotted or stained the colour of surrounding soil. Older remains may be covered by a smooth, cement-like substance and be weathered grey or white in colour.
- Soil or sand around the bones may be stained with charcoal or ochre.
- Shell, animal bone and stone tools may sometimes be present.

Please help to preserve Aboriginal cultural sites by reporting their presence to Aboriginal Affairs Victoria.

Contact:

The Heritage Registrar
Aboriginal Affairs Victoria
PO Box 2392
Melbourne VIC 3001

Telephone: 1800 762 003
Website: www.dpcd.vic.gov.au/aav

How were Aboriginal Burial Sites Produced?

Aboriginal people honoured and disposed of their dead in many different ways. The dead were usually buried in the ground, sometimes accompanied by possessions such as stone tools or personal ornaments. In some areas, special clothes were made for the deceased. Small fires were often lit inside or near the grave, and sometimes ochre was sprinkled over the body. In some places, the grave was covered by a special structure such as a small hut or an earth mound, and its location was marked by other earthworks or by cutting bark from surrounding trees.

Other customs included placing the dead person on a wooden platform above the ground, sometimes in a tree, or wrapping the body in bark. After many months, the remains were collected for burial or deposited in a cave or rock crevice.

Aboriginal people were buried in the ground in a variety of positions. Some were placed lying flat on their backs, legs fully extended or lying on their side in a crouched, or 'foetal' position. Others were buried in an upright sitting position.

The dead were buried either singly or in small numbers. The place of burial was either near the place where they happened to be camping at the time, or in cemeteries to which their relatives and descendants returned over hundreds, or even thousands, of years.

Why are Aboriginal Burials Important?

Aboriginal burials have a particular significance for Aboriginal people today and provide important physical and spiritual connections with the land, culture and their past.

The places where the dead are laid to rest have always been important to humans. Burials provide an important link to the ancestral past, for they are physical evidence of a set of spiritual beliefs that lasted many thousands of years. Burials also provide us with valuable information about past Aboriginal ways of life, including diet, health, population, economy and social structures. We can even trace changes in the ways Aboriginal people perceived and related to their environment by looking at the development of large-scale cemeteries.

Threats to Aboriginal Burials

Although human bone can survive for a long time if buried, it deteriorates rapidly once exposed. Many burials are found on the edges of lakes and rivers, or in sand dunes that once lay near fresh water. Wind and water can readily expose and eventually destroy these sites.

Because many burials are found in loose soil or sand, they are often disturbed by burrowing animals such as rabbits.

Human activities such as sand mining, stock grazing, ripping rabbit warrens, ploughing and even trail bike riding can devastate burial sites.

Aboriginal Affairs Victoria records the location, dimensions, and context of Aboriginal burials so that we will have a permanent record of this important part of the heritage of all Australians. Management works, such as the eradication of rabbits, fencing and erosion control, are carried out so that Aboriginal burial locations can be preserved for future generations.

Is it against the Law to Possess Aboriginal Skeletal Remains?

Yes. It is illegal to possess or display Aboriginal skeletal remains without a permit.

Anyone who has such remains is advised to contact Aboriginal Affairs Victoria, so that arrangementscan be made for their appropriate treatment.

Are Aboriginal Burials Protected?

All Aboriginal cultural places in Victoria are protected by law. Aboriginal artefacts are also protected.

It is against the law to disturb or destroy an Aboriginal place. Artefacts should not be removed from sites.

In general, the presence of Aboriginal cultural places on private land will not affect ownership, or stop existing land use from continuing.

June 2008

ISBN 978-1-921331-56-5

ABORIGINAL FLAKED STONE TOOLS

Site Identification
Mini Poster 4

A group of artefacts of different size, shape and material

What are Aboriginal Flaked Stone Tools?

Flaked stone tools were made by hitting a piece of stone, called a core, with a 'hammerstone', often a pebble. This would remove a sharp fragment of stone called a flake.

Both cores and flakes could be used as stone tools. New flakes were very sharp, but quickly became blunt during use and had to be sharpened again by further flaking, a process called 'retouch'. A tool that was retouched has a row of small flake scars along one or more edges. Retouch was also used to shape a tool.

Not all types of stone could be used for making tools. The best types of stone are rich in silica, hard and brittle. These include quartzite, chert, flint, silcrete and quartz. Aboriginal people quarried such stone from outcrops of bedrock, or collected it as pebbles from stream beds and beaches. Many flaked stone artefacts found on Aboriginal sites are made from stone types that do not occur naturally in the area. This means they must have been carried long distances.

Where are Stone Tools Found?

Stone tools are the most common evidence of past Aboriginal activities in Australia. They occur in many places and are often found with other remains from Aboriginal occupation, such as shell middens and cooking hearths. They are most common near rivers and creeks. It is easier to find them where there is not much vegetation or where the ground surface has been disturbed, for example by erosion.

Characteristics

General

- Sharp edges.
- Retouch along one or more edges.
- Stone rich in silica.
- Stone type often different to the natural rock in the area.

Flakes

- Usually less than 50 mm long.
- A 'striking platform' (see diagram) visible.
- Impact point often present on the striking platform.
- A 'bulb of percussion' often present below the striking platform.
- May have been shaped into a recognisable tool form, such as a point or scraper.

Cores

- May be fist-sized or smaller.
- May have one or more scars where flakes have been removed.

Not all of these features can be seen on each stone tool and some require an experienced eye to identify them. Breakage can remove some key features.

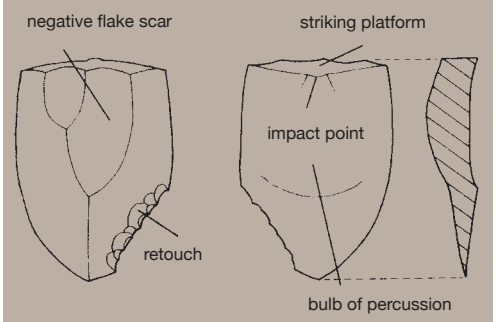
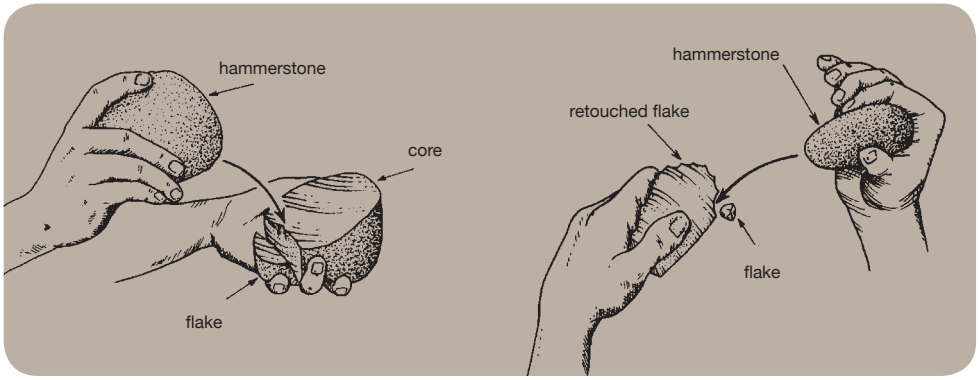


Diagram showing basic flake characteristics



How flaked stone tools were made

What to Do if You Find a Flaked Stone Tool

Do not remove any material from the area. If you pick up a stone to examine it, make sure that you put it back where it came from. Check whether it has some of the key characteristics. Record the location, noting roughly how many stones there are. Note whether the area is under threat of disturbance.

What Were Flaked Stone Tools Used For?

Flaked stone tools could be made quickly, and were used for many everyday tasks, including shaping objects made of wood, bark and bone. They were used as spear-tips in hunting weapons and as knives to butcher game. They were also used to scrape and prepare animal skins for making cloaks, containers and decorative items.

How Else can Stone be Flaked?

Many natural processes can break stone. These include rockfall and extreme changes in temperature. Modern machines, such as ploughs, can also fracture stone. It is important to be able to distinguish stone that has been naturally or accidentally fractured from stone that was deliberately flaked by Aboriginal people. Some of the characteristics of Aboriginal flaked stone artefacts may occasionally occur on naturally fractured stone. However, it is very rare for two or more of these characteristics to occur on the same piece of stone as the result of a natural process.

Why are Flaked Stone Tools Important?

Because stone artefacts do not rot or rust, they are often the only evidence of Aboriginal occupation in a particular area. Stone artefacts can provide information about where Aboriginal people lived, how they made other tools, hunted and prepared food. Sometimes traces of wood, plant food, or animal blood can survive on the edges of flaked stone tools. Specific marks and damage on a tool from use can help tell us what it was used for. This is because different tasks, such as wood carving or scraping animal skins, damaged the edge in different ways.

By finding the original source of stone that was used to make tools, it is sometimes possible to trace the movement of stone within an area. This tells us about Aboriginal systems of trade, exchange and social alliances.

There were a number of changes to the stone tools used by Aboriginal people over time. Because of this, stone tools can help provide an approximate age for the Aboriginal occupation of an area. Flaked stone tools are one of a range of artefacts that provide Aboriginal people today with an important link to their culture and past.

Threats to Aboriginal Stone Tools

Because stone artefacts are found in many different places, and are usually small, they can be difficult to protect. They are sometimes collected by people who do not understand the importance of leaving Aboriginal cultural materials where they are found. Erosion and weathering and activities such as ditch digging and ploughing can disturb flaked stone artefacts. They can also be broken when trampled by animals such as cows, or when run over by vehicles.

Aboriginal Affairs Victoria records flaked stone artefacts so that we will have a permanent photographic and written record of this important part of the heritage of all Australians. Some particularly good examples of sites containing flaked stone artefacts may require active conservation so that they can be preserved for future generations.

Are Flaked Stone Artefacts Protected?

All Aboriginal cultural places in Victoria are protected by law. Aboriginal artefacts are also protected.

It is against the law to disturb or destroy an Aboriginal place. Artefacts should not be removed from sites.

Please help to preserve Aboriginal cultural places by reporting their presence to Aboriginal Affairs Victoria.

Contact:

The Heritage Registrar
Aboriginal Affairs Victoria
PO Box 2392
Melbourne VIC 3001

Telephone: 1800 762 003
Website: www.dpcd.vic.gov.au/aav

June 2008

ISBN 978-1-921331-55-8

Victoria The Place To Be
Department of Planning and Community Development

ABORIGINAL SURFACE SCATTERS

Site Identification
Mini Poster 6

A typical surface scatter found when an older land surface has been exposed

What are Aboriginal Surface Scatters?

Surface artefact scatters are the material remains of past Aboriginal people's activities. Scatter sites usually contain stone artefacts, but other material such as charcoal, animal bone, shell and ochre may also be present. No two surface scatters are exactly the same.

Where are They Found?

Surface scatters can be found wherever Aboriginal occupation has occurred in the past.

Aboriginal campsites were most frequently located near a reliable source of fresh water, so surface scatters are often found near rivers or streams where erosion or disturbance has exposed an older land surface.

What to do if You Find an Aboriginal Surface Scatter?

Do not disturb the site or remove any material. Check whether the site has the characteristics of an Aboriginal surface scatter. If it does, record its location and write a brief description of its condition. Note whether it is under threat of disturbance.

Please help to preserve Aboriginal cultural places by reporting their presence to Aboriginal Affairs Victoria.

Contact:

The Heritage Registrar
Aboriginal Affairs Victoria
PO Box 2392
Melbourne VIC 3001

Telephone: 1800 762 003
Website: www.dpcd.vic.gov.au/aav

Characteristics

- The size of scatters may vary from one square metre to one hectare.
- Scatters may contain a few artefacts or many thousands.
- They generally consist of chipped stone artefacts (see Mini Poster 4), but sometimes contain animal bone, shell, charcoal, hearth stones, clay balls and ochre.
- Surface scatters are most visible where erosion, roadwork, ploughing or earthworks have disturbed the ground.
- They can be exposed as a concentration of material on the ground, or as a thin layer (or layers) of material in the side of a bank or cutting.

This Aboriginal camp shows how surface scatters were created
State Library of Victoria

What Produced Surface Scatters?

Surface scatters are the remains of past Aboriginal campsites and other activities. Aboriginal people produced and left the scatter material in the course of their daily life. Activities that produced surface scatters include:

- manufacture of stone implements for a range of everyday tasks;
- production and maintenance of weapons, tools and other items made of wood and bone;
- construction of shelters and huts;
- preparation and consumption of meals;
- preparation of clothes and blankets from animal skins;
- social and spiritual activities.

Away from the camp, activities that produced surface scatters include:

- wood chopping and the removal of bark from trees;
- preparation of large items such as canoes;
- hunting and game processing;
- gathering and processing fruit and vegetables.

Scatters may be the remains from a number of activities in a camp, or from just one activity away from the main camp site.

Large surface scatters with many types of artefacts indicate favoured camping areas. These were often resource-rich areas such as swamps, lakes or riverine environments. Aboriginal people returned to these locations repeatedly, stayed for longer periods, and undertook a wider range of activities. A large scatter may have many thousands of artefacts and cover more than a hectare. The repeated use of an area may have left a dense deposit that is many layers thick, or a huge scatter consisting of artefacts from many overlapping occupations.

Smaller sites generally resulted from single, short occupations such as overnight camps and dinner camps. Some consist of debris at an activity area away from the main camp. Small scatters may cover only a few square metres, consist of only one layer and comprise only a few artefacts. They can be found anywhere, whereas larger scatters are rarer in resource-poor areas such as coastal plains, highlands and deserts.

What Other Factors Produce Surface Scatters?

Scatters of naturally occurring gravel, particularly quartz, may be mistaken for Aboriginal surface scatters. Gravel usually has rounded edges and originates in the immediate area. Imported gravel, particularly from roadwork or building construction, can also be mistaken for surface scatters. Imported gravel has sharp edges and a narrow size range, and it is usually found around earthworks.

Why are Aboriginal Surface Scatters Important?

Surface scatters of artefacts are one of the most common types of Aboriginal site. They provide important information about past Aboriginal people's settlement patterns and lifestyles.

Some organic materials (such as charcoal, bone and shell) found in scatters can be dated by radiocarbon dating. These dates tell us when people were living in a particular area. Artefacts in the surface scatters can show how Aboriginal culture changed over time. The presence of stone from other areas can indicate trade, exchange and contact between different groups that lived many kilometres apart.

Surface scatters are an important link for Aboriginal people today with their culture and past.

Are Aboriginal Surface Scatters under Threat?

Aboriginal surface scatters can be disturbed or destroyed by people or natural processes such as wind and water. Weathering and erosion can damage or disperse artefacts,

Stone Artefacts like these are commonly found in Victorian surface scatters

as can trampling by hard-hoofed animals and rabbit burrowing. Human activities such as mining, road building, damming, clearing and construction can disturb and destroy artefact sites.

Aboriginal Affairs Victoria records the location, dimensions and condition of Aboriginal scatters. The aim is to have a permanent photographic and written record of this important part of the heritage of all Australians. Management works around Aboriginal surface scatters, such as the eradication of rabbits and erosion control, help preserve the sites for future generations.

Are Aboriginal Surface Scatters Protected?

All Aboriginal cultural places in Victoria are protected by law. Aboriginal artefacts are also protected.

It is illegal to disturb or destroy an Aboriginal place. Artefacts should not be removed from sites.

June 2008

ISBN 978-1-921331-57-2

Victoria The Place To Be
Department of Planning and Community Development