



Proposed Subdivision, 240 Malcolm Street,
Mansfield

Cultural Heritage Management Plan 18293

Sponsor: Alex Lyons

Heritage advisors: Daniel Carpenter, Eleanor Riggall & Lucy Amorosi

Authors: Daniel Carpenter, Eleanor Riggall, Lucy Amorosi and Kylie McFadyen

4 July 2024



Aboriginal Heritage Act 2006
Section 64

**Cultural Heritage Management Plan
Notice of Approval by Registered Aboriginal Party
Taungurung Land and Waters Council (Aboriginal Corporation)**

I, Matthew Burns, Chief Executive Officer Taungurung Land and Waters Council, as the Registered Aboriginal Party hereby approve the Cultural Heritage Management Plan referred to below:

Cultural Heritage Management Plan Title:
Proposed Subdivision, 240 Malcom Street, Mansfield

Cultural Heritage Management Plan Number:
18293

Cultural Heritage Management Plan Cover Date:
04 July 2024

Sponsor/s:
Alex Lyons

Cultural Heritage Advisor/s:
Daniel Carpenter, Eleanor Riggall and Lucy Amorosi

Author/s:
Daniel Carpenter, Eleanor Riggall, Lucy Amorosi and Kylie McFadyen

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Date of approval:
08 July 2024

Pursuant to s.64 of the Act this Cultural Heritage Management Plan takes effect upon its lodgment with the Secretary of the Department of Premier and Cabinet with this notice of approval inserted. *

Dated: 08 July 2024

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

Biosis offices

New South Wales

Albury

Phone: (02) 6069 9200
Email: albury@biosis.com.au

Gosford

Phone: (02) 9101 8700
Email: gosford@biosis.com.au

Newcastle

Phone: (02) 4911 4040
Email: newcastle@biosis.com.au

Sydney

Phone: (02) 9101 8700
Email: sydney@biosis.com.au

Western Sydney

Phone: (02) 9101 8700
Email: sydney@biosis.com.au

Wollongong

Phone: (02) 4201 1090
Email: wollongong@biosis.com.au

Victoria

Ballarat

Phone: (03) 5304 4250
Email: ballarat@biosis.com.au

Melbourne

Phone: (03) 8686 4800
Email: melbourne@biosis.com.au

Wangaratta

Phone: (03) 5718 6900
Email: wangaratta@biosis.com.au



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Sponsor:	Alex Lyons
Heritage Advisors	Daniel Carpenter Lucy Amorosi Eleanor Riggall
Authors	Daniel Carpenter Lucy Amorosi Eleanor Riggall Kylie McFadyen
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Biosis acknowledges the Aboriginal and Torres Strait Islander peoples as Traditional Custodians of the land on which we live and work.

We pay our respects to the Traditional Custodians and Elders past and present and honour their connection to Country and ongoing contribution to society.

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Executive summary

Compliance requirements are set out in Part 1 of the Cultural Heritage Management Plan (CHMP).

Activity

The proposed activity is a nine-lot low density rural living subdivision at 240 Malcolm Street, Mansfield (the Activity Area). Biosis Pty Ltd was commissioned by Mountain Planning, on behalf of the proponent, Alex Lyons, to undertake a CHMP for the Activity Area.

Location

The Activity Area is located at 240 Malcolm Street, Mansfield, VIC 3722. The extent of the Activity Area covered by this CHMP is 2\LP80798, 1\TP244731, 2\TP244731 and Parish of Mansfield Allotment 75 75/PP3056.

Assessment

A Desktop Assessment was undertaken to provide background information on the activity and its impacts, other archaeological studies, previously recorded Aboriginal places, the environment and to develop a prediction model for the Activity Area. A Standard Assessment was undertaken to provide information on the ground surface visibility, previous disturbance to the Activity Area and identify areas of archaeological potential. A Complex Assessment was undertaken to test the prediction model and areas of archaeological potential within the Activity Area. Consultation with Taungurung Land and Waters Council (TLaWC) the Registered Aboriginal Party (RAP) representatives occurred throughout the CHMP.

Results

The Desktop Assessment found that disturbance from agricultural practices was likely to have occurred within the Activity Area. However, despite this disturbance, there was a probability of surface or subsurface lithic scatters at low or moderate densities to be present on the low rise, on the summit on the southern border of the Activity Area or in the vicinity of Owens Creek. It also noted that due to the remnant vegetation present in the Activity Area, there was a probability of some of these displaying cultural scarring.

The Standard Assessment further noted the importance of the low rise and summit within the Activity Area. No scarred trees or artefact scatters were found during the assessment; however, a limitation of the assessment was poor ground surface visibility with heavy grass cover present throughout the Activity Area. A number of areas of archaeological potential were identified during the Standard Assessment which were then further refined through the use of slope analysis.

The Complex Assessment was initially focussed on areas of potential impact; with excavations placed in the development parcels and the proposed road. Aboriginal cultural heritage material was found in three locations. Further testing was undertaken to identify areas where Aboriginal material was not present to avoid harm to areas with Aboriginal material identified. Development parcels were then modified to avoid harm to Aboriginal places. A total of 37 2x1 metre mechanical trenches and two 1x1 metre manual test pits were excavated. The Complex Assessment resulted in the registration of three Aboriginal places: **VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter)**, **VAHR 8123-0080 (Owens Creek 2)** and **VAHR 8123-0078 (Owens Creek LDAD)**.

Management conditions and contingency plans are laid out in Part 1 of this plan.

Acknowledgements

Biosis acknowledges the contribution of the following people and organisations in undertaking this CHMP:

- Alex Lyons (Sponsor)
- John Bruce and Wendy Fleming (tenants)
- Nick Vlahandreas (Mountain Planning)
- Daeyoo Kang, Sam Panter, Nina Matheis and Sally Mitchell (GIS, Biosis Pty Ltd)
- Joe Bright, Chris Hruska and Meg Lester (Archstone Pty Ltd)
- Sammy Fidge, Francisco Almeida, Michelle Monk, Troy Wilkinson, Matt Antonopoulos, Hesper Andrew, Shane Monk, Ashley Wilkinson, Georgia Cunningham, Daniel Young, Robjeet Singh, Tahnee Honeysett and Jack Honeysett and Alex Watson (TLaWC)

Abbreviations

ACHRIS	Aboriginal Cultural Heritage Register and Information System
AOP	Area of Potential (for archaeological deposits)
AP	Auger Probe
AAV	Aboriginal Affairs Victoria (now FP-SR)
AV	Aboriginal Victoria (now FP-SR)
CHMP	Cultural Heritage Management Plan
DBYD	Dial Before You Dig
DGPS	Differential Global Positioning System
DPC	Department of Premier and Cabinet
FP-SR	First Peoples – State Relations (formerly Aboriginal Victoria and Aboriginal Affairs Victoria)
GDA94	Geodetic Datum Australia 1994
HA	Heritage Advisor
LGA	Local Government Area
MGA	Map Grid of Australia
MT	Machine Trench
NOI	Notice of Intention
PGC	Primary Grid Coordinate
RAP	Registered Aboriginal Party
SGD	Significant Ground Disturbance
STP	Shovel Test Pit
SU	Survey Unit
TLaWC	Taungurung Land and Waters Council (Aboriginal Corporation)
TP	Test Pit
VAHR	Victorian Aboriginal Heritage Register

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PART 1 – CULTURAL HERITAGE MANAGEMENT CONDITIONS

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

The CHMP must be readily accessible to the Sponsor, and their employees and contractors when carrying out the activity.

1 General cultural heritage management requirements

The following management conditions have been agreed to by the Sponsor, in consultation with Taungurung Land and Waters Council (TLaWC) to manage potential risk to cultural heritage within the Activity Area. The Sponsor of this Cultural Heritage Management Plan (CHMP) is responsible for undertaking all general conditions and specific 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 2. Any changes to the Activity Area, the activity description or the approved specific management conditions will require an amendment to the CHMP or the preparation of a new CHMP.

1.1.1 Condition 1: Cultural Heritage Induction

To be undertaken prior to the activity

Prior to the commencement of the activity, a cultural heritage induction must be facilitated by a representative of TLaWC and assisted by a Heritage Advisor. TLaWC must be provided with at least two weeks' notice prior to the intended date of the cultural heritage induction. A booking form must be completed to book a cultural heritage induction (rapbookings@tlawc.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 take place on site within the Activity Area, or alternatively at a nearby undercover location in the event of inclement weather.

A cultural heritage induction booklet will be produced by the Heritage Advisor and must contain all relevant CHMP information, including a summary of the key management conditions and contingencies outlined in Part 1 of the CHMP. The cultural heritage induction booklet must be kept with a copy of the CHMP as per General Condition 3 (1.1.3). The Sponsor and Heritage Advisor will keep a record of inducted attendees (e.g. a sign-off sheet) and a copy of which will be sent to TLaWC via email, up to no more than 2 business days after the induction is held.

The induction will include:

1. A brief background of the Aboriginal cultural heritage of the Activity Area and broader region;
2. Examples of Aboriginal cultural heritage recorded in the region;
3. Specific details of all Aboriginal places located during the CHMP;
4. Summary of the assessments conducted during the CHMP;
5. Explanation of the conditions and contingency plans contained within the CHMP; and
6. 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 Condition 2: Notification of Commencement/Completion of the Activity

Prior to the Activity

The Sponsor must notify TLaWC, via email (careforculture@tlawc.com.au), at least 10 business days prior to the proposed start date of when the activity is expected to commence. The Sponsor must keep a record of this communication for reference if TLaWC Compliance Officers require this information.

After the Activity

The Sponsor must notify TLaWC, via email (careforculture@tlawc.com.au), up to no more than 10 business days after the activity has been completed. The Sponsor must keep a record of this communication for reference if TLaWC Compliance Officers require this information.

1.1.3 Condition 3: A Copy of the Approved CHMP to be Retained Onsite

Throughout Duration of the Activity

A hard of the approved CHMP must always be available and present onsite for the duration of the activity. An electronic copy can be made available at the discretion of the site supervisor. 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. This is to ensure that if in the event of identification of unknown Aboriginal cultural heritage, the contingency plans can be accessed and enacted quickly.

1.1.4 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.

TLaWC 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.

1. There shall be no communication, public release, or publishing of information within the CHMP, without the written permission of TLaWC - including for academic and commercial use.
2. There shall be no communication, public release, or publishing of information concerning Aboriginal cultural heritage, without the written permission of TLaWC - including academic and commercial use.
3. 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 TLaWC including academic and commercial use.

1.1.5 Condition 5: Compliance Inspections

Throughout duration of the Activity

A total of 3 heritage inspections may be undertaken during the activity. The RAP must provide the Sponsor with at least 3 business days' notice prior to the time they wish to enter the Activity Area.

1.1.6 Condition 6: Artefact repatriation

To be undertaken before, during or after the activity (where applicable)

All material collected from the Activity Area during the preparation of the CHMP must be returned to the RAP. This will take place in the following manner:

1. Within 3 months of the completion of the CHMP all Aboriginal material and non-artefactual material collected during the preparation of the CHMP must be returned to the RAP.
2. The return of the material must be accompanied by an accurate catalogue of the artefactual material.
3. This return will be to the RAP's office, or to a person at a location approved by the RAP.
4. If no RAP is appointed, the management of artefacts shall be as per Contingency 6 (Section 1.1.6)
5. After the completion of the Activity, the RAP may elect to rebury the artefacts and non-cultural material at a location within the Activity Area, which may be accompanied by a smoking ceremony.
6. Return, reburial and other elements associated with these tasks must be borne by the Sponsor.

2 Specific management conditions

2.1.1 Condition 7: Constraint of dwelling construction (applicable to VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter), VAHR 8123-0080 (Owens Creek 2) and VAHR 8123-0078 (Owens Creek LDAD))

To be undertaken before, during or after the activity

Dwellings must only be constructed within the delineated dwelling building envelopes as shown on Map 1. Other works such as driveways, subsurface services, fences and gardens may be undertaken outside of the dwelling building envelopes, but must not occur within designated no-go zones (see Condition 8).

If changes are made to the activity and/or Activity Area that require statutory authorisation, or which require changes to the specific management conditions, following the approval of the CHMP, then Contingency 1 will apply.

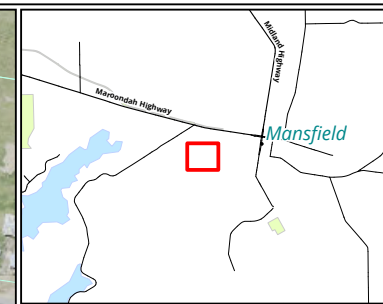
2.1.2 Condition 8: No-go zones - applicable to VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter), VAHR 8123-0080 (Owens Creek 2) and Sensitive Areas.

To be undertaken before and during the activity

No works or vehicle/plant movement associated with the activity as described in Section 4 of this CHMP are permitted to occur within the no-go zones as shown on Map 1.

The no-go zones will be defined and communicated in the following manner:

- The locations of the no-go zones must be marked on all design plans and denoted as "Cultural heritage no-go zones".
- The locations of no-go zones must be communicated to all owners of the land, workers and site contractors.
- The Sponsor (or their delegates) may elect to erect a physical barrier such as temporary fencing or bunting to delineate the extent of the no-go zones.
The Sponsor is responsible for all costs associated with the designation and communication of no-go zones.



Legend

- Activity Area
- ✕ Primary Grid Coordinate
- ★ VAHR_Places
- Place Extent
- No go zone
- Sensitive areas
- Current parcel boundary

Proposed development (client-provided data)

- Proposed parcel boundary
- Proposed building development envelope
- Proposed road

Topography

- Contour 10m interval
- ~ River or creek
- Lake / dam

Map 1 Management conditions



Metres
 Scale: 1:3,500 @ A3
 Coordinate System: GDA 1994 MGA Zone 55



Matter: 35858, CHMP: 18293,
 Date: 19 March 2024,
 Prepared for: DC, Prepared by: DK, Last edited by: nmatheis
 Layout: 35858_M1_ManagementConditions
 Project: P\35800s\35858\Mapping\35858_240MalcolmStMansfield_CHMP.aprx

3 Contingency plans

This section of the CHMP contains contingency plans to facilitate appropriate cultural 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 Taungurung Land and Waters Council (TLaWC). All references to 'the RAP' throughout this section of the CHMP are references to the TLaWC.

3.1.1 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 specific management conditions, following the approval of the CHMP, any changes to the Activity Area, the activity description or the approved specific management conditions will require an amendment to the CHMP or the preparation of a new 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.

3.1.2 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, 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 Contingency 7 (Section 3.2.4).
- 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 3 business days of 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, a Heritage Advisor will contact the Secretary. cultural heritage audit may also be ordered by the Minister under the *Aboriginal Heritage Act 2006*.

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

- i) The parties seeking advice from the Secretary to assist in resolution of the dispute; and
- j) 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.

3.1.3 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 offence 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 indicate that the conditions and contingency plans of the approved CHMP have been breached and remedial actions for non-compliance should be considered.

The RAP may undertake heritage inspections to monitor the progress of the activity and observe whether specific 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 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).

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 might 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 and First-Peoples State Relations at compliance.aboriginalvictoria@dpc.vic.gov.au
- Follow the contingency plans within this CHMP for discovery of unidentified Aboriginal cultural heritage during the activity (Section 3.2).
- Prepare a programme of remedial action in consultation with the RAP, Sponsor, and a Heritage Advisor if required.

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]
<i>Prior to the commencement of the activity</i>		
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?		
<i>During the course of the activity</i>		
Have the specific management conditions outlined in this CHMP, which are required to take place during the course of the activity been undertaken?		
<i>After the activity has been completed</i>		
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?		
<i>Changes to the activity or Activity Area</i>		
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?		
<i>If Aboriginal Cultural Heritage is discovered during the activity</i>		
<i>As per the contingency:</i>		

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?		
Have the Sponsor, Heritage Advisor and relevant RAP or Traditional Owner representatives have agreed that no further action is warranted?		
<i>If Aboriginal Ancestral Remains are discovered during the activity</i>		
<i>As per the contingency:</i>		
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?		

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

3.2.1 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 concentric 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 until the Impact Mitigation/Salvage phase .

Notification

- iv. The individual who uncovered or identified the suspected Aboriginal cultural heritage must notify the site manager and/or Sponsor of the discovery immediately.
- v. The Sponsor must notify the relevant RAP and a Heritage Advisor within one (1) business day of the discovery of the suspected Aboriginal cultural heritage.

Assessment

- vi. An appropriately qualified Heritage Advisor must be engaged to inspect the suspected Aboriginal cultural heritage within three (3) business days of notification.
- vii. The Relevant RAP must be provided the opportunity to participate in the inspection.
- viii. The Heritage Advisor will consult with the relevant RAP regarding the management, collecting and recording of the cultural material. The Heritage Advisor will notify the Secretary of the discovery and any agreements.
- ix. 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

- x. 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.
- xi. 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.
- xii. 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 in consultation with the Heritage Advisor and Sponsor.
 - b) Any salvage program must be undertaken in accordance with FP-SR's Practice Note: Salvage Excavations, by a suitably qualified archaeologist/Heritage Advisor with assistance from the RAP.
 - 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 three (3) weeks of the assessment. The Heritage Advisor must notify the RAP, 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 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

- xiii. 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.
 - 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 fourteen (14) business days of the assessment, and the forms have been approved.
 - e) The Sponsor, Heritage Advisor and the RAP 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 (Section 3.1.2).

3.2.2 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 309 519.

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

- d) If suspected human remains have been found, the State Coroner's Office (**1300 309 519**) and the Victoria Police (**000**) must be notified immediately.
- e) 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**.
- f) 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>).
- g) 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.
- h) All details of the location and nature of the human remains must be provided to the relevant authorities.

Impact Mitigation or Salvage

- i) 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*
- j) 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

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

Reburial

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

3.2.3 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 Aboriginal cultural heritage recovered during the preparation of this CHMP, see Condition 6.

Removal

Removal of Aboriginal cultural heritage identified during the activity must occur in accordance with contingency 5.

Custody

Aboriginal cultural heritage collected during the activity 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 its recovery).

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.

3.2.4 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 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 be 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:

<i>CHMP Contacts</i>		
TLaWC	Project Enquiries ie; Early engagement, CHMPs, CHP's, and General Enquiries	careforculture@tlawc.com.au
TLaWC	All emails relating to the following should be forwarded to this inbox: Meeting Bookings, Fieldwork Bookings, and Bookings Queries	RAPBookings@tlawc.com.au
Sponsor	Alex Lyons	alexlyons@outlook.com.au
<i>Emergency Contacts</i>		
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	Secretary represented by First Peoples State Relations	VAHR@dpc.vic.gov.au
Compliance	Department of Premier and Cabinet	compliance.aboriginalvictoria@dpc.vic.gov.au

3.2.5 Contingency 8: Subdivision

Schedule 2, Clause 13 (2) of the Aboriginal Heritage Regulations 2018 states -If the activity is a subdivision referred to in Regulation 49, the contingency plans must address:

- a) how each lot is intended to be used or developed by the Sponsor; or
- b) if a lot is not intended to be used or developed by the Sponsor, the use or development of the lot permitted by the relevant planning scheme.

The Sponsor intends to subdivide the land into 9 lots for rural living development. The Activity Area is zoned Rural Living Zone (RLZ) and the subdivision will be developed in accordance with the permitted uses for the current zoning as stated in the Mansfield planning scheme (Appendix 1).

PART 2 – CULTURAL HERITAGE ASSESSMENT

4 Introduction

4.1 Reasons for preparing the CHMP

This is a mandatory Cultural Heritage Management Plan (CHMP) under Section 46(1)(a) of the *Aboriginal Heritage Act 2006* and is required as per the Aboriginal Heritage Regulations 2018 (s.47). The Sponsor intends to develop a residential subdivision within the Activity Area.

The Regulations which have prompted the requirement for this plan are:

1. The activity is a high impact activity under Regulation 49 (Subdivision of land) of the Aboriginal Heritage Regulations 2018.
2. The Activity Area is in an area of cultural heritage sensitivity under Regulation 26 (Waterways, Owens Creek) of the Aboriginal Heritage Regulations 2018.

4.2 Notifications

In accordance with s.54(1)(a) of the *Aboriginal Heritage Act 2006*, a Notice of Intent (NOI) to Prepare a CHMP was submitted to the Secretary, Department of Premier and Cabinet (DPC) and Registered Aboriginal Party (RAP) 9 September 2021 (Appendix 2). In accordance with s.54(1)(d) of the *Aboriginal Heritage Act 2006* an NOI was submitted to Mansfield Shire Council Local Government Agency on 9 September 2021.

The Victorian Aboriginal Heritage Register (VAHR) has allocated CHMP number 18293 to this assessment.

4.3 Location of the Activity Area

The Activity Area is located at 240 Malcolm Street, Mansfield, VIC 3722 (Map 2). The Activity Area is located approximately 1.9 kilometres west of the Mansfield CBD and approximately 56 kilometres south of the nearest major town of Benalla. The Activity Area is 127 kilometres north-east of Melbourne CBD. Cadastral information for the Activity Area is detailed in Table 1.

Table 1 Cadastral information for the Activity Area

Address	240 Malcolm Street, Mansfield VIC 3722
Local Government Authority	Mansfield Shire Council
Lot/Plan	Parish of Maindample - 2\LP80798, 1\TP244731, 2\TP244731 Parish of Mansfield - Allotment 75 75\PP3056
Parish	Mansfield and Maindample
Planning Zone	RLZ- Rural Living Zone
Coordinates*	E416693.084 N5898300.108
VicRoads	63 C2

* All geographic coordinates in this CHMP are referenced to the Victorian Government Standard GDA94 MGA (Zone 55).

4.4 Sponsor

Alex Lyons

Email: Alexlyons@outlook.com.au

Phone: 0438 436 898

Postal Address: PO Box 585, Torquay, VIC, 3228

As the Sponsor is a natural person, an ABN is not required.

4.5 Sponsor's Agent

MountainPlan PTY LTD

ABN: 43 622 026 493

Contact: Nick Vlahandreas

Email: nickv@mountainplanning.com

Phone: 0409 723 259

4.6 Heritage advisors

Daniel Carpenter (B.Bus/GradCertArchae/GradDipArchHMgmt)

Daniel Carpenter has 6 years' experience working in cultural heritage management in Victoria. He has experience in Aboriginal and historic sites and has been involved in fieldwork and reporting for both. He has authored and project managed CHMPs, identified and registered a historic site with Heritage Victoria as well as assisting with numerous other projects. Daniel's qualifications include a Bachelor of Business from RMIT as well as postgraduate qualifications in heritage management. His archaeological training included writing cultural management plans, lithic identification and GIS.

Daniel is a qualified and listed Heritage Advisor pursuant to the *Aboriginal Heritage Act 2006*.

Lucy Amorosi BArch (Hons) La Trobe University 1997

Lucy has over 20 years of experience managing a wide variety of cultural heritage projects, including background research, artefact analysis, archaeological place recording, cultural heritage assessments, Cultural Heritage Management Plans (CHMPs), archaeological survey and subsurface testing for a range of corporate and governmental clients. Lucy received a BArch (Honours) from La Trobe University in which she investigated Aboriginal artefact collections in Western Victoria.

Lucy's professional experience in both Aboriginal and Historical field archaeology has seen her work on small and large scale archaeological surveys and excavations throughout Victoria and has authored numerous CHMPs and other heritage assessments. Lucy is a fully qualified and listed Heritage Advisor pursuant to the Victorian *Aboriginal Heritage Act 2006*.

Eleanor Riggall BArts (Hons)/Grad CertArchHerMgmt

Eleanor is a qualified archaeologist graduating from the University of Melbourne with a Bachelor of Arts (Honours) in Ancient World studies in 2021, and Flinders University with a Graduate Certificate in Archaeology and Heritage Management in 2022. Since graduating from her BA (Hons), Eleanor has undertaken archaeology work throughout regional and metropolitan Victoria. Eleanor has experience in the preparation of cultural heritage plans, due diligence and PAHT reports in addition to undertaking archaeological field surveys, subsurface testing programs and historical excavations.

Eleanor is listed as a Heritage Advisor under the *Aboriginal Heritage Act 2006*.

4.7 Owner/Occupier

Alex Lyons

Email: Alexlyons@outlook.com.au

Phone: 0438 436 898

Postal Address: PO Box 585, Torquay, VIC, 3228

4.8 Registered Aboriginal Party

The Taungurung Land and Waters Council Aboriginal Corporation is the RAP for the region that includes the Activity Area. The RAP elected to evaluate the plan on 14 September 2021 (Appendix 3).

4.9 Activity Advisory Group (AAG)

An AAG was not appointed for the plan.

5 Activity description

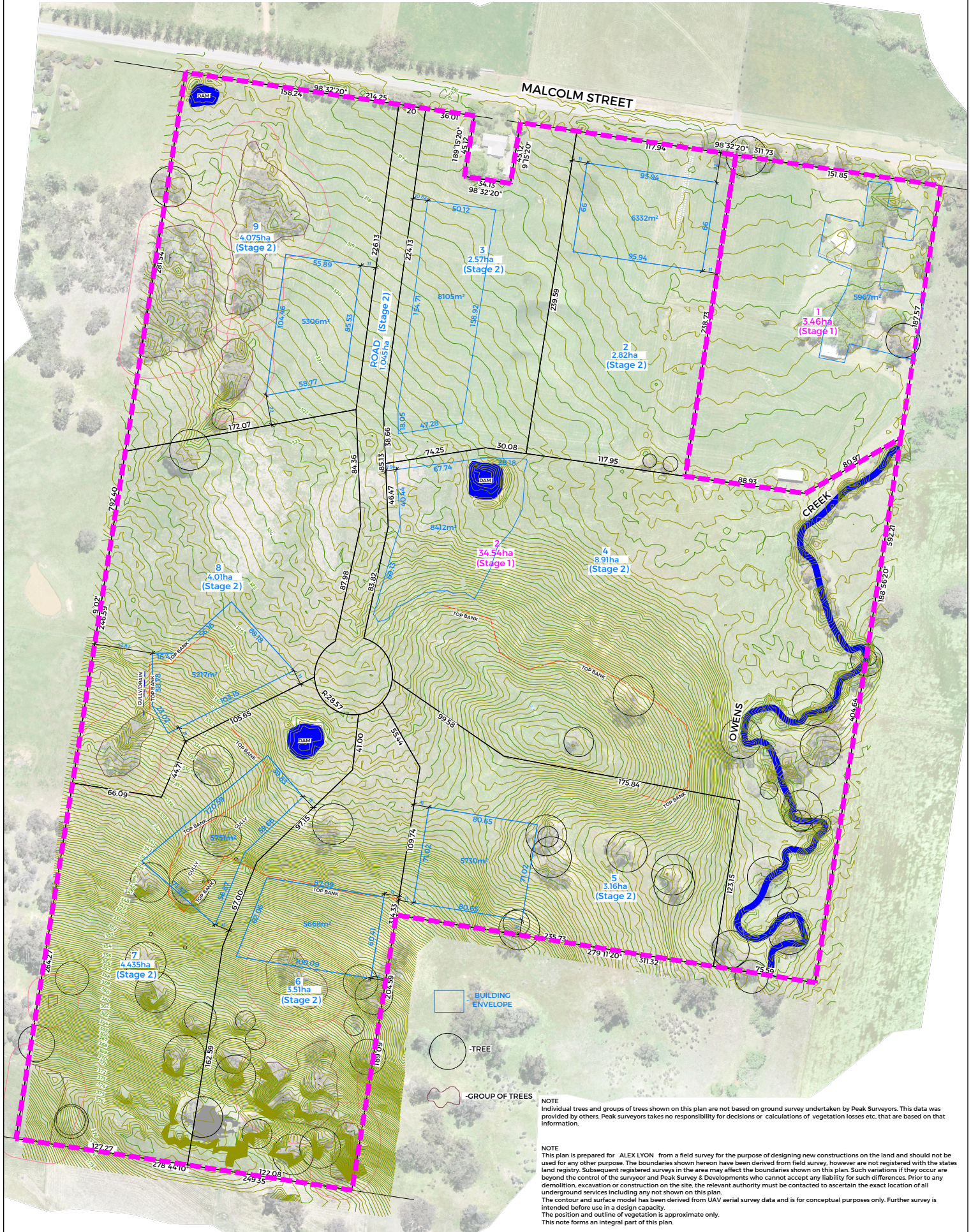
The proposed activity is for the development of a nine lot low density rural living subdivision at 240 Malcolm Street, Mansfield VIC 3722, located in a Rural Living Zone (RLZ) in the Mansfield Shire Council local government area (LGA). Rural residential developments are for dwellings in a rural setting that is not primarily associated with agriculture. While some agriculture could take place it would be for 'lifestyle' reasons and ancillary to the primary use as a property with a dwelling (see permitted uses in RLZ in the Mansfield Shire Planning Scheme in Appendix 1). Other uses could be for a garden or non-agricultural rural uses. Rural living subdivisions would need to provide for building construction, properly formed and constructed roads, effluent disposal, stormwater drainage, utility installation and water supply (DELWP Victoria 2015). While rural living subdivisions are designed to retain natural elements, such as waterways and native vegetation, these construction and installation activities will disturb the ground surface and subsurface soils. The construction of the road, installation of the services and construction of dwellings will also include, but not be limited to, site sheds, vehicle and plant movement, soil stockpiling and material laydown.

As the Sponsor will be selling vacant blocks of land, design plans for the individual dwellings do not yet exist. It is estimated that excavation to depths of up to 2 metres may be required, but potentially more depending on the nature of the excavations.

Construction of dwellings will be constrained to the identified development parcels and the construction of the internal road will be constrained to the identified road location (Map 1).

5.1 Likely impact on former or present land surfaces

It is anticipated that a small percentage of the Activity Area will be impacted by the Activity with dwellings and associated roads, driveways, gardens and subsurface services only covering a small amount of the Activity Area. In areas where the development will occur, the ground will be excavated, with soil removed or displaced which is likely to impact present and/or former land surfaces.



- BUILDING ENVELOPE
- TREE
- GROUP OF TREES

NOTE
Individual trees and groups of trees shown on this plan are not based on ground survey undertaken by Peak Surveyors. This data was provided by others. Peak surveyors takes no responsibility for decisions or calculations of vegetation losses etc, that are based on that information.

NOTE
This plan is prepared for ALEX LYON from a field survey for the purpose of designing new constructions on the land and should not be used for any other purpose. The boundaries shown hereon have been derived from field survey, however are not registered with the states land registry. Subsequent registered surveys in the area may affect the boundaries shown on this plan. Such variations if they occur are beyond the control of the surveyor and Peak Survey & Developments who cannot accept any liability for such differences. Prior to any demolition, excavation or construction on the site, the relevant authority must be contacted to ascertain the exact location of all underground services including any not shown on this plan. The contour and surface model has been derived from UAV aerial survey data and is for conceptual purposes only. Further survey is intended before use in a design capacity. The position and outline of vegetation is approximate only. This note forms an integral part of this plan.

MCA & AHD origin vide PM 49 (Published coordinates E 418 840.632 N 5898 288.472 RL 329.059), verified by PM 73

Designed	J.M
Checked	J.M
Drawn	J.M
Survey	J.M
Date	7/02/2024
Datum	AHD71



ALEX LYON
PROPOSED SUBDIVISION PLAN
LOT 2 LP80798, LOT 1 TP244731 & CA 75
PARISH OF MANSFIELD
240 MALCOLM STREET, MANSFIELD

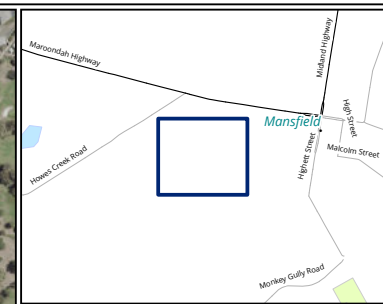


PO Box 7338, East Albury NSW 2640
Ph 0422 919 652
ABN 33 632 109 712
www.peaksurveyors.com.au

6 Extent of the Activity Area

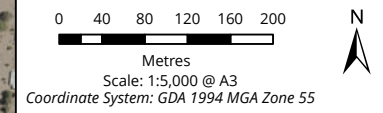

The extent of the Activity Area is shown in Map 2. It is located in the Central Victorian Uplands bioregion, with Owens Creek and its associated floodplain in the eastern extent and a small hill (380 metres above sea level) at the southern extent that is part of the Blue Range. The Activity Area is 38.26 hectares in size. The northern boundary of the Activity Area is Malcolm Street, the eastern and southern boundaries are freehold farming land, and several rural lifestyle properties abut the western side of the Activity Area.

Cadastral information for the Activity Area is detailed in Table 1.



- Legend**
- Activity Area
 - 200m buffer
 - ★ VAHR Place
 - Local government area
 - Contour 10m interval
- Hydrology**
- ~ River or Creek
 - Lake/Dam

Map 2 Extent of the Activity Area

Matter: 35858, CHMP: 18293,
 Date: 11 October 2021,
 Prepared for: LA/KN, Prepared by: SKM, Last edited by: smitchell
 Layout: 35858_M2_Extent_AA
 Project: P:\35800s\35858\Mapping\35858_240MalcolmStMansfield_CHMP.aprx

7 Documentation of consultation

7.1 Consultation in relation to the assessment

Table 2 Consultation in relation to the assessment

Date	Name and Title	Organisation	Nature of Consultation
9 September 2021	Lucy Amorosi (Heritage Advisor)	Biosis	Submits a notice of intent to prepare a CHMP on behalf of Sponsor. VAHR allocated CHMP number 18293
	Secretary	Department of Premier and Cabinet (DPC)	
	Sheree Brown, Administration Officer	Taungurung Land and Waters Council (TLaWC)	
	Alex Lyons, Sponsor	Sponsor	
	Administration	Mansfield Shire Council	
14 September 2021	Kylie McFadyen, Project Manager	Biosis	RAP has elected to evaluate the CHMP
	Sheree Brown, Administration Officer	Taungurung Land and Waters Council (TLaWC)	
11 October 2021	Kylie McFadyen, Project Manager	Biosis	Inception Meeting (via Teams Remote)
	Francisco Almeida (Heritage Advisor)	TLaWC	
	Michelle Monk (Elder)	TLaWC	
	Alex Lyons	Sponsor	
7 June 2022	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	Standard assessment results meeting
	Aaron Dalla-Vecchia (Heritage Advisor)	Biosis Pty Ltd	
	Michelle Monk (Elder)	TLaWC	
	Francisco Almeida (Heritage Advisor)	TLaWC	
2 March 2023	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	Complex Assessment methodology meeting
	Ash O'Sullivan (Heritage Advisor)	Biosis Pty Ltd	
	Hesper Andrew (Heritage Advisor)	TLaWC	

Date	Name and Title	Organisation	Nature of Consultation
	Shane Monk (Elder)	TLaWC	
	Alex Lyons	Sponsor	
18 July 2023	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	Complex Assessment methodology meeting
	Ash O'Sullivan (Heritage Advisor)	Biosis Pty Ltd	
	Hesper Andrew (Heritage Advisor)	TLaWC	
	Shane Monk (Elder)	TLaWC	
	Alex Lyons	Sponsor	
10 January 2024	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	Request for a statement of significance and oral history via email.
	Hesper Andrew (Heritage Advisor)	TLaWC	
18 January 2024	Hesper Andrew (Heritage Advisor)	TLaWC	Receipt via email of statement of significance
	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	

7.2 Participation in the conduct of the assessment

Table 3 Participation in the conduct of the assessment

Date	Name and Title	Organisation	Nature of Consultation
16 November 2021	Troy Wilkinson (field representative)	TLaWC	Participation in the Standard Assessment
	Matt Antonopoulos (field representative)	TLaWC	
	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	
14 March 2023	Ashley Wilkinson (field representative)	TLaWC	Participation in the Complex Assessment
	Georgia Cunningham (field representative)	TLaWC	
	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	
15 March 2023	Ashley Wilkinson (field representative)	TLaWC	

Date	Name and Title	Organisation	Nature of Consultation
	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	
16 March 2023	Ashley Wilkinson (field representative)	TLaWC	
	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	
17 March 2023	Ashley Wilkinson (field representative)	TLaWC	
	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	
27 March 2023	Matt Antonopoulos (field representative)	TLaWC	
	Ashley Wilkinson (field representative)	TLaWC	
	Eleanor Riggall (Heritage Advisor)	Biosis Pty Ltd	
28 March 2023	Matt Antonopoulos (field representative)	TLaWC	
	Ashley Wilkinson (field representative)	TLaWC	
	Eleanor Riggall (Heritage Advisor)	Biosis Pty Ltd	
29 March 2023	Matt Antonopoulos (field representative)	TLaWC	
	Ashley Wilkinson (field representative)	TLaWC	
	Eleanor Riggall (Heritage Advisor)	Biosis Pty Ltd	
30 March 2023	Matt Antonopoulos (field representative)	TLaWC	
	Georgia Cunningham (field representative)	TLaWC	
	Eleanor Riggall (Heritage Advisor)	Biosis Pty Ltd	
31 March 2023	Matt Antonopoulos (field representative)	TLaWC	
	Georgia Cunningham (field representative)	TLaWC	

Date	Name and Title	Organisation	Nature of Consultation
	Eleanor Riggall (Heritage Advisor)	Biosis Pty Ltd	
17 April 2023	Ashley Wilkinson (field representative)	TLaWC	
	Eleanor Riggall (Heritage Advisor)	Biosis Pty Ltd	
18 April 2023	Ashley Wilkinson (field representative)	TLaWC	
	Tahnee Honeysett (field representative)	TLaWC	
	Eleanor Riggall (Heritage Advisor)	Biosis Pty Ltd	
19 April 2023	Daniel Young (field representative)	TLaWC	
	Robjeet Singh (field representative)	TLaWC	
	Eleanor Riggall (Heritage Advisor)	Biosis Pty Ltd	
20 April 2023	Robjeet Singh (field representative)	TLaWC	
	Jack Honeysett (field representative)	TLaWC	
	Eleanor Riggall (Heritage Advisor)	Biosis Pty Ltd	
30 October 2023	Matt Antonopoulos (field representative)	TLaWC	
	Ashley Wilkinson (field representative)	TLaWC	
	Eleanor Riggall (Heritage Advisor)	Biosis Pty Ltd	
31 October 2023	Matt Antonopoulos (field representative)	TLaWC	
	Daniel Young (field representative)	TLaWC	
	Eleanor Riggall (Heritage Advisor)	Biosis Pty Ltd	

7.3 Consultation in relation to the conditions

Table 4 Consultation in relation to the conditions

Date	Name and Title	Organisation	Nature of Consultation
5 December 2023	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	Complex Assessment results/conditions meeting (via MS Teams)
	Eleanor Riggall (Heritage Advisor)	Biosis Pty Ltd	
	Ashley O'Sullivan (Heritage Advisor)	Biosis Pty Ltd	
	Shane Monk (Elder)	TLaWC	
	Alex Watson (Heritage Advisor)	TLaWC	
31 January 2024	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	Sending draft conditions to TLaWC for provisional endorsement via email
	Hesper Andrew (Heritage Advisor)	TLaWC	
21 February 2024	Sammy Fidge (Heritage Advisor)	TLaWC	Phone call between Sammy Fidge and Daniel Carpenter indicating that TLaWC approved of the conditions but reserved the right to request changes during the evaluation process.
	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	
6 June 2024	Sammy Fidge (Heritage Advisor)	TLaWC	Request for withdrawal of the CHMP for evaluation
	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	
6 June 2024	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	CHMP was withdrawn from evaluation
	Sammy Fidge (Heritage Advisor)	TLaWC	
18 June 2024	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	Phone conversation between Sammy Fidge and Daniel Carpenter
	Sammy Fidge (Heritage Advisor)	TLaWC	
20 June 2024	Sammy Fidge (Heritage Advisor)	TLaWC	Follow up email from Sammy Fidge to Daniel Carpenter
	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	
27 June 2024	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	Request to provide management conditions and mapping to Mansfield Shire Council

Date	Name and Title	Organisation	Nature of Consultation
	Sammy Fidge (Heritage Advisor)	TLaWC	
2 July 2024	Sammy Fidge (Heritage Advisor)	TLaWC	Approval to provide management conditions and mapping to Mansfield Shire Council
	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	
2 July 2024	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	Provision of Mansfield Shire Council email to TLaWC
	Sammy Fidge (Heritage Advisor)	TLaWC	
3 July 2024	Hayley McGowen (RAP Administration Officer)	TLaWC	Email approving that the Mansfield Shire Council's support of the conditions of this CHMP would be sufficient.
	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	

7.4 Summary of outcomes of consultation

7.4.1 Notifications

On 9 September 2021 Lucy Amorosi submitted a notice of intent to prepare a CHMP on behalf of the Sponsor. This notification was also provided to Mansfield Shire Council and the RAP, TLaWC. TLaWC elected to evaluate the plan on 14 September 2021.

7.4.2 Inception meeting

An inception meeting was undertaken remotely via Teams on 11 October 2021 with Biosis Project Manager Kylie McFadyen, TLaWC Heritage Advisor Francisco Almeida, Michelle Monk, TLaWC and the Sponsor Alex Lyons. The nature of the activity was discussed and an overview of the results of the Desktop Assessment provided. Oral history relating to the region relevant to the Activity Area was requested from the RAP by the Heritage Advisor. No oral history relating to the Activity Area was provided during the inception meeting.

7.4.3 Standard Assessment

A Standard Assessment undertaken on 28 October 2021. Participants of the Standard Assessment were Daniel Carpenter (Biosis Pty Ltd), Troy Wilkinson and Matt Antonopoulos (TLaWC). The Standard Assessment identified a number of areas of archaeological potential, namely an elevated area within the southern extent of the Activity Area (not intended to be impacted by the proposed works) and a low rise in the central section of the Activity Area where a development envelope was proposed. TLaWC representatives were given a brief of the proposed activity and oral history relating to the Activity Area was requested. No specific oral history was provided, however, the TLaWC representatives noted the importance of the elevated areas at the southern extent of the Activity Area and that visibility between other elevated areas in the region may have been important for communication.

7.4.4 Standard Assessment results meeting

A Standard Assessment results meeting was held via MS Teams on 7 June 2022. Present at this meeting was Daniel Carpenter (Biosis Pty Ltd), Michelle Monk and Francisco Almeida (TLaWC). The TLaWC team were presented with the results of the Standard Assessment and a methodology for the Complex Assessment was

discussed. Daniel presented a suggested Complex Assessment methodology which consisted of a series of 2x1 metre mechanical trenches and 1x1 metre manual trenches. Michelle responded that was TLaWC policy to conduct 5x1 metre mechanical trenches in a 20 metre grid in areas of cultural heritage sensitivity/area of archaeological potential and a 50 metre grid across the balance of the Activity Area. The result of the meeting was that the Sponsor would revise the development plan and that Daniel would communicate with TLaWC of any changes.

7.4.5 Complex Assessment methodology meeting

On 2 March 2023 after the project had been on a hiatus for some months, a Complex Assessment methodology meeting was held via MS Teams. Present at this meeting was Daniel Carpenter, Ashley O'Sullivan (Biosis Pty Ltd), Hesper Andrew, Shane Monk (TLaWC) and Alex Lyons (Sponsor). Since the previous meeting (held on 7 June 2022) the Sponsor had substantially reduced the development parcels in an effort to minimise the amount of subsurface testing required.

As well as this, Biosis's GIS team had conducted a slope analysis to review the areas of archaeological potential identified in the field during the Standard Assessment. The GIS team used a digital elevation model (DEM) to define any slope in the Activity Area that was greater than a 15 degree slope as this would have been unlikely to have been a suitable place for habitation and lithic deposits in these locations were unlikely. Areas of potential that had been noted during the Standard Assessment that were shown in the analysis to have a slope greater than 15 degrees were removed as an area of archaeological potential.

The result of the meeting was that an agreement was reached of the subsurface testing methodology which consisted of a series of 2x1 metre mechanical trenches and 1x1 metre manual trenches only in the development parcels and roadway.

7.4.6 Complex Assessment

The Complex Assessment was undertaken over 15 days on 14 – 17 March 2023, 27 - 31 of March 2023, 17 - 20 April 2023 and 30 and 31 October 2023. The field participants were Daniel Carpenter and Eleanor Riggall (Biosis Pty Ltd), Ashley Wilkinson, Matt Antonopoulos, Georgia Cunningham, Daniel Young, Robjeet Singh, Tahnee Honeysett and Jack Honeysett (TLaWC). Aboriginal material culture was located in three areas of the Activity Area: in the north-east corner of the Activity Area near Owens Creek, on the low rise in the central portion of the Activity Area and in the northern central portion of the Activity Area.

Interim Complex Assessment methodology meeting

After the identification of Aboriginal lithic artefacts in three locations during the Complex Assessment, an interim methodology meeting was held to investigate the possibility of avoiding harm to Aboriginal places and therefore waiving the need to conduct extent testing. This meeting was held via MS Teams on 18 July 2023 with participants being Daniel Carpenter, Ashley O'Sullivan (Biosis Pty Ltd), Hesper Andrew, Shane Monk (TLaWC) and Alex Lyons (Sponsor). The results of the consultation was that in Lot 1 if the development envelope could be constrained to the existing disturbed area it would be considered harm avoidance and no extent testing would be required. In Lots 2 and 4, further subsurface testing would be undertaken in areas that were thought to be of lower archaeological potential and the building envelopes placed in areas where no Aboriginal material was located.

7.4.7 Complex Assessment results/management conditions meeting

On 5 December 2023 a Complex Assessment results/management conditions meeting was held via MS Teams. Present at this meeting were Daniel Carpenter, Ashley O'Sullivan Eleanor Riggall (Biosis Pty Ltd), Shane Monk, Alex Watson (TLaWC) and Alex Lyons (Sponsor). At this meeting, Daniel presented an overview of the work undertaken and suggested development parcels and extents for place registrations. These suggestions

were accepted by TLaWC and management conditions were agreed to be standard TLaWC conditions (in draft at the time of the meeting) and avoidance of Aboriginal places. The outcome of the meeting was for TLaWC to send the draft conditions to Daniel, and then for Daniel to adapt them for the CHMP and then return them to TLaWC for provisional endorsement prior to formal submission for evaluation.

On 10 January 2024 Daniel Carpenter of Biosis Pty send an email to Hesper Andrew of TLaWC requesting a statement of significance for the three Aboriginal places identified during the preparation of the CHMP as well as a request for oral history. On 18 January 2024 Daniel received an email from Hesper containing a statement of significance for the CHMP and the artefacts found (see Appendix 8). No oral history was provided.

On 31 January 2024 Daniel Carpenter of Biosis Pty send an email to Hesper Andrew of TLaWC with draft management conditions and requested feedback on this prior to formal submission of the CHMP for evaluation. On 21 February a phone conversation took place between Daniel and Sammy Fidge of TLaWC regarding the project. In this call, Sammy indicated that the draft conditions met TLaWC approval but changes may be requested during the evaluation process.

7.4.8 Post-CHMP submission discussion of management conditions

On 6 June 2024 a request for withdrawal of the CHMP for evaluation was received by Daniel Carpenter of Biosis Pty Ltd. Daniel withdrew the CHMP for evaluation on the same day.

On 18 June 2024 a telephone conversation took place between Daniel Carpenter of Biosis Pty Ltd and Sammy Fidge of TLaWC where it was agreed that Daniel would advise the Sponsor to seek support from Mansfield Shire Council of the building envelopes and management conditions contained in the draft CHMP. Sammy followed up with a summary of the outcomes of this conversation in an email to Daniel on 20 June 2024.

On 27 June 2024 Daniel requested permission of Sammy to provide Mansfield Shire Council with a copy of the draft CHMP management conditions and mapping to assist in their understanding of TLaWC's request. Sammy provided approval on 2 July 2024 on the condition that no details of subsurface testing or Aboriginal places would be provided.

On 2 July 2024 Daniel provided email correspondence from Mansfield Shire Council that indicated their support of the draft management conditions to TLaWC with an enquiry if this would meet TLaWC's requirements. On 3 July 2024, Hayley McGowan of TLaWC sent confirmation by email that this would indeed meet TLaWC's requirements and that the correspondence should be included in the appendices of the CHMP. This correspondence can be found in Appendix 4.

8 Desktop Assessment

The following section contains the results of the Desktop Assessment. The Desktop Assessment was prepared in accordance with Regulation 61 and includes the information set out in Schedule 2 of the Aboriginal Heritage Regulations 2018.

8.1 Geographic region

The geographic region for the Activity Area has been selected to represent a range of landforms and resources that would be accessible from the Activity Area.

The Activity Area is located within both geomorphological unit (GMU) 1.3.3 *Terraces, fans and floodplains (Kiewa Valley, Wonnangatta Valley)* in roughly the north-east half, GMU 1.3.1 *Low relief landscapes at low elevation (Cann River south, Silvan, Templestowe)* which includes a hill from the Blue Range in the southern extent of the Activity Area. Owens Creek is partially within the Activity Area on the eastern boundary and a tributary of the creek extends west into the Activity Area. As such the geographic region has been chosen to encompass the extent of GMU 1.3.3 and GMU 1.3.1 including the lower hills of the Blue Range, as well as the Waterways GMU at the north-eastern Ford Creek Arm of Lake Eildon.

The boundary of the geographic region is defined by a 5 kilometre radius which includes the GMU 1.3.3, GMU 1.3.1 and Waterbody (Lake Eildon) to the south, west, north and west-south-west. In the north-east it follows the boundary of GMU 1.3.3 and GMU 1.3.2, and in the south-east it follows the boundary of GMU 1.3.3 and GMU 1.4.4. While GMU 1.4.4 *Deeply dissected ridge and valley landscapes* is close to the Activity Area, this GMU was excluded because the landforms in this GMU are higher, and more steeply dissected than the Activity Area and would not have been utilised and occupied in a similar way to the Activity Area. The extent of the geographic region measures approximately 72 kilometres squared.

The geographic region includes several prominent waterways and their tributaries, including Ford Creek Arm of Lake Eildon, Ford Creek, Black Creek and Owens Creek. Owens Creek is within the current Activity Area and is an area of cultural heritage sensitivity under Regulation 26 (within 200 metres of a waterway) of the Aboriginal Heritage Regulations 2018.

The geographic region is shown in Map 3.

8.2 Landforms and/or geomorphology of the Activity Area

The geology of the Activity Area is Quaternary alluvium (Qa1) alluvial floodplain deposits characterised by gravel, sand, silt including deposits of low terraces, in the north and along Owens Creek in the east, with the remainder (majority) being Snowy Plains Formation (Dams) characterised by mudstone, sandstone: red mudstone generally poorly bedded, sandstone pale-coloured, quartz-rich; upward-fining with minor conglomerate near base (Welch, Higgins, & Callaway 2011, Department of Jobs, Precincts and Regions 2021).

The Activity Area is located within the third tier GMU 1.3.3 *Terraces, fans and floodplains (Kiewa Valley, Wonnangatta Valley)* and GMU 1.3.1 *Low relief landscapes at low elevation (Cann River south, Silvan, Templestowe)*. These third tier units are part of the landscapes below 500 metres of low relief (GMU 1.3) within the broader tier of the Eastern Uplands (GMU 1).

The Eastern Uplands is centred on the Great Divide, which separates streams flowing southwards to the sea from those draining north to the Murray-Darling Basin. The uplands are broadly variable in height and

comprise of extensive areas of mountain ridges and high plateau surfaces. The geology over much of the Eastern Uplands is lower Palaeozoic sedimentary rock or regionally specific metamorphic derivative gneiss and schist. Within elevated areas, residual flat-lying Palaeogene basalt of low relief also occurs (Department of Economic Development, Jobs, Transport and Resources 2021).

There is low variation in bedrock and documented patterns of soil development in the Eastern Uplands. On drier slopes shallow, friable, stony red and brown gradation soils are dominant (Land Conservation Council 1977). These soils are gradational from weathered bedrock and are largely mineral in character. Moist slopes, lower gradient areas and increasing altitude show progressively increasing amounts of organic material in the upper soil profile, passing through a transition into the Alpine Humus Soils described by Costin (1986).

The Activity Area is located within GMU 1.3 *Landscapes below 500 m of low relief* that make up the lower parts of the Eastern Uplands geomorphological erosional sequence. In particular, the Activity Area is located within GMU 1.3.3 and GMU 1.3.1, which comprises of the lowest part of the Eastern Uplands where streams have reached a stable gradient and deposit sediments from the erosional processes occurring on steep slopes and widening of river channels. GMU 1.3.3 consists of alluvial sediments in the flood plains and terraces of the lower reaches of the main streams and the colluvial sediments of the fans between the alluvial plains and steeper side slopes and valleys. The remainder of GMU 1.3.3 is formed on predominantly Palaeozoic sedimentary and some granitic igneous rock. The southern streams of GMU 1.3.3 generally have a V-shaped cross section and lack sedimentary fill, with some streams with three narrow river terraces up to heights of 30 metres above the current stream level (Department of Economic Development, Jobs, Transport and Resources 2021). These terrace landforms may have provided elevated areas more suitable to occupation or temporary camping locations for past Aboriginal people and within close proximity freshwater and resources.

GMU 1.3.1 is situated north of the Divide with undulating plains and low hills cut into the Lower Palaeozoic sedimentary rocks and granites and descends into the Northern Plains. Vegetation is characterised mainly by typical open box-ironbark forest, and along drainage lines is forest Red Gums and open grassy forest or woodland (Department of Economic Development, Jobs, Transport and Resources 2021). The hill on the southern boundary is part of the Blue Range, and has a rocky outcrop at the crest within the Activity Area (Biosis 2021).

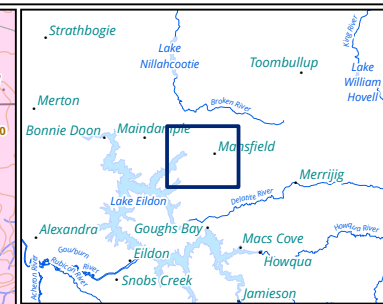
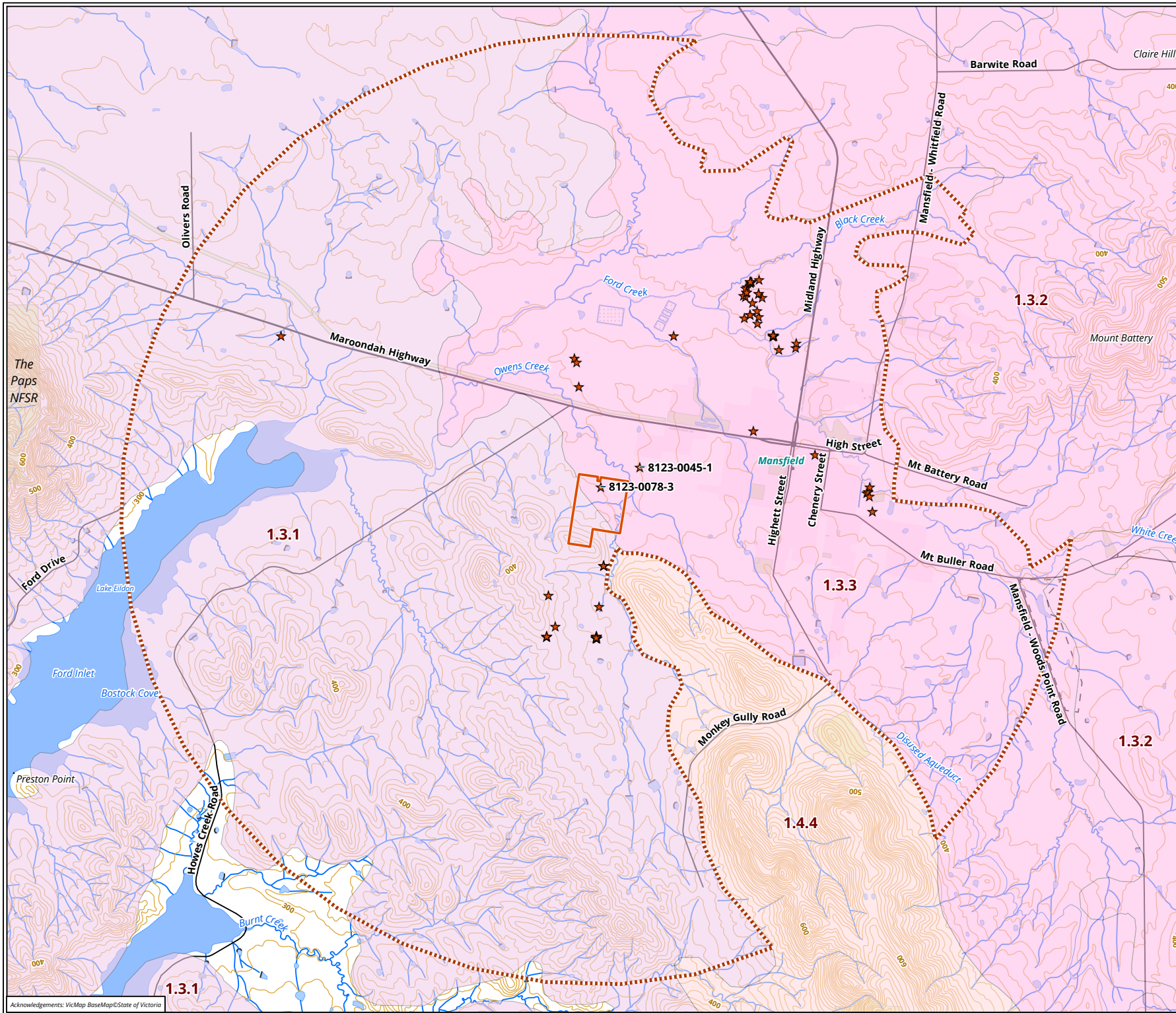
In the GMU 1.3.3 upper valleys, soils on upper terraces and older fans are generally red and brown gradational soils (Dermosols) on well-weathered sediments. On the drier parts of lower valleys, soils are typically red and brown acid texture contrast soils (Kurosols). On intermediate terrace and fan sequences, the soils are generally gradational soils with weak B-horizon structure (Kandosols). In flood plains, the soils are more recently deposited sediments that may show clear stratification (Stratic Rudosols) (Department of Economic Development, Jobs, Transport and Resources 2021). Soils in GMU 1.3.1 are predominantly Kurosols (yellow acidic texture soils) (Department of Economic Development, Jobs, Transport and Resources 2021).

Previous complex assessments from CHMPs in the geographic region indicate that soil profile is generally silty clay, silty loam or silty sand over sterile basal layers, which were sedimentary stone, such as mudstone and volcanic stone on the hills, and clay in the lower slopes, terraces and floodplains (Bell 2019, Ashton & Brooke 2017).

The geographic region includes major watercourses including Ford Creek, Black Creek, Owens Creek and their many tributaries, draining towards Lake Eildon in the west. Owens Creek, one of its tributaries and associated floodplains are within the Activity Area. Landforms in the Activity Area include the crest, upper slope. Mid slope and lower slope of the hill in the southern Activity Area and flood plains and possibly creek terraces near Owens Creek, which are typical landforms of GMU 1.3.3 and GMU 1.3.1.

The Activity Area is in the Central Victorian Uplands Bioregion. Pre-1750 ecological vegetation classes (EVC) show that the majority of the current Activity Area was once covered by Plains Grassy Woodland (EVC 55),

open woodland dominated by Forest Red Gum (*Eucalyptus tereticornis*), with the hill covered in Grassy Woodland (EVC 175). 2005 EVCs show that Plains Grassy Woodland is still present along Owens Creek, in the north-west and scattered throughout the Activity Area, and patches of Grassy Woodland remain on the hill (State of Victoria: Department of Environment, Land, Water and Planning 2021). An ecological survey recorded 63 remnant trees, including River Red Gum and Yellow Box, and areas of grasses (Spear Grass, Wallaby Grass, and Weeping Grass) from these EVCs are present within the Activity Area (Biosis 2021).



Legend

- Activity Area
- Geographic region
- Contour 10m interval

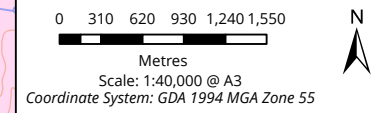
Hydrology

- Drain/channel
- River or creek
- Lake/Dam
- Sewage Filtration Beds
- Watercourse area (natural double sided stream)

Geomorphological units

- 1.3.1 Low relief landscapes at low elevation
- 1.3.2 Enclosed landscapes of low relief
- 1.3.3 Low elevation terraces fans and floodplains
- 1.4.4 Deeply dissected ridge and valley landscapes

Map 3 Victorian Aboriginal Heritage Register (VAHR) Places and geomorphology of the geographic region



Matter: 35858, CHMP 18293,
 Date: 01 February 2024,
 Prepared for: LA, Prepared by: SKM, Last edited by: nmatteis
 Layout: 35858_M3_GR_Geomorph_VAHR
 Project: P:\35800s\35858\Mapping\35858_240Malcolm5Mansfield_CHMP.aprx

Acknowledgements: VicMap BaseMap©State of Victoria

8.3 Historical and ethno-historical accounts in the geographic region

For the purposes of this assessment, information about Aboriginal Victorian pre and post contact history has been sourced from nineteenth and twentieth century primary and secondary ethnographic/historical records.

8.3.1 Ethno-historical accounts of Aboriginal people

Linguistic boundaries and social organisation

Prior to European colonisation, the Victorian landscape was delineated by socio-dialectical groups who shared a common language and who as a group identified as owning particular areas of land, with individually owned tracts of country. This was a system of spatial organisation based on land tenure (Clark 1990).

Aboriginal groups mapped natural features as boundaries for their ranges, estates and economic territories. The *Daung wurrung* held land encompassing the Activity Area and much of Victoria's central region. Ethnographic sources suggest that this group was composed of nine clans, occupying the Broken, Delatite, Goulburn, Coliban and Campaspe watersheds (Barwick 1984, Clark 1990, Muhlen-Schulte, Watt, & Brown 1995).

Land ownership and access rights or responsibilities centred on the smaller named groups that formed the broader language grouping. These groups are often called 'clans' or 'local descent groups', however as Wesson (2000) reasons, they are better described as 'named groups', as the membership structure of these groups, and their degree of division from other groups, could vary. In most instances, primary allegiance was owed to this named group, although this could vary according to context and location. Commonly, named groups were led by senior elders who exercised internal political and religious authority, as well as being recognised as their spokesperson when dealing with other groups (Atkinson & Berryman 1983). Particularly influential group leaders could also assume authority over the leaders of other culturally affiliated groups (Wesson 2000).

According to Clark (1990) the lands around Mansfield appear to have been occupied by the *Yowung-illam balug* named group of the *Daung wurrung*. This clan was known to have occupied land near the Howqua River quarry (*Yowung-illam* stone quarry), Mount Battery, Alexandra, the Upper Goulburn River at Mansfield, sources of the Goulburn River and Hunter and Watson's 'Wappan' Run (Clark 1990, Barwick 1984).

Social activity involving neighbouring named or socio-dialectical groups was usually held in warmer periods, held at the intersection of group boundaries and arranged by a person assigned of the responsibility of travelling between groups to organise the time, place, and events of the meeting. This person could speak a number of different dialects and acted as intermediaries in negotiations between the groups. Activities would include sports and dancing, with up to 500 men, women and children attending (Atkinson & Berryman 1983).

The succession or inheritance of lands and named-group estates could occur in a number of ways. Individuals and groups could inherit lands from their father, their mother, through their birthplace, conception place, the burial place of their ancestors, and through totemic connections (Wesson 2000). Access rights also crossed generations and marriage partners. Howitt (1996, p.106) wrote that:

The right to hunt and to procure food in any particular tract of country belonged to the group of people born there, and could not be infringed by others without permission. But there were places which such a group of people claimed for some special reason, and in which the whole of the tribe had interest. Such a place was the stone quarry at Mt. William near Lancefield, from which the material for making tomahawks was procured. The family proprietorship in the quarry had wide ramifications... when neighbouring groups wished for some stone they sent a messenger to Bill-billeri saying that they would send goods in exchange for it, for instance, skin-rugs.

People would often travel or reside in the territory of another named-group so that they could fulfil religious or family obligations, or exercise the privilege, granted to them by family or moiety associations, of exploiting the resources of another estate (Barwick 1984). For daily activities and the exploitation of local estates, people are thought to have travelled in small residential units or extended family groups - often termed bands (Wesson & New South Wales Government Office of Environment and Heritage 2005).

Belief systems

Knowledge of Aboriginal belief systems was recorded and maintained through visual and oral tradition which ensured the maintenance of social structures through generations. Such knowledge was not always readily shared with non-Indigenous social observers and as such limited written versions from early settlers, explorers or government employees exist for Victoria. Ceremonies were occasionally performed to entertain Europeans however the meaning behind these performances was never fully explained (Robinson 1840). Private ceremonies and locations, such as age initiations were actively kept secret (Presland 1994).

Higher ground to the east of the Activity Area at Mt Buller was used for traditional ceremonial purposes and also resource utilisation. Judy Monk, elder of the Taungurung people, states; "Ceremonies would take place when the Bogong moths came in; there would be a lot of negotiations and corroboree and business taking place between the clans during those times of plentiful food. Those were opportunities of bringing all the clan together, but there would be business done with the other tribes around Taunurung as well – like the Djaja Wurrung and Wurrendjeri" (Darby 2008). Judy Monk goes on to say that the elder men of the tribe would take the younger men to the top of peaks such as Mt Buller as part of their initiation, where they would be told the creation stories, the tracks and what the country was all about as a way of learning (Darby 2008).

Economy and resource utilisation

Certain individuals within Aboriginal groups had responsibilities assigned to them for the management of natural resources. Anthropogenic manipulation of the environment was observed by the first Europeans within northern Victoria, for example fire regimes which cleared tracks also aided in hunting and dissuaded settlers for entering Aboriginal territory (Atkinson & Berryman 1983).

Bogong moths were an important seasonal resource, and Flood (1980) proposed that the occupation of the South East Highland region was centred on their exploitation, where large numbers of people would gather annually at Mt Hotham and Mt Buffalo for the harvest. In contrast, Grinbergs (1992) argues that people had a more permanent occupation of the alpine region and Bowdler (1981) suggests Murnong (yam daisy) was the staple food in the highlands, with Bogong moths being a communion food associated with male ceremonies. In Jim Darby's account of the history of Mt Buller Judy Monk, elder of the Taungurung people, states the past use of the land utilised both the low and high ground for food exploitation taking particular advantage of the Bogong moths native to the area (Darby 2008). Fire was used at the end of the summer periods as a way to 'regenerate tucker' and to ensure that when the people came through in the next season there would be plentiful food (Darby 2008).

Canoes were cut from the bark of river red-gums and box trees in spring to early summer, hafted with stone axe heads, shaped over a fire, seasoned in the sun, then the end blocked with clay (Edwards 1975). Hooped nets made from fibre were used to catch crayfish, yabbies and fish, while cross-line nets were strung low above the water for catching ducks or below the water to catch schools of fish (Gott & Conran 1991). Line nets were also used to catch emus and kangaroos; a strategically placed group of people drove the animals towards the nets. Reed spears with hafted bone, carved barbs, stone pieces or hardened wooden points set into the head were used for catching larger marsupials. Oven mounds, an underground cooking pit, were then constructed to bake the game or large volumes of vegetables (Atkinson & Berryman 1983).

8.3.2 Historical accounts of Aboriginal people

The rapid spread of European colonisation altered Victorian Aboriginal society. The increased presence of settlers resulted in dispossession of Aboriginal people from their traditional land and diminished access to resources. These factors combined with population decline from introduced diseases and conflict, transformed Aboriginal society.

In 1839 an Aboriginal Protectorate Scheme was established in Victoria; the Protectorates provided religious instruction, rations, homes and medical care to Aboriginal people whilst recording population information (Broome 2005). Official inquiries into the welfare of Aboriginal people were held in 1849 and again in 1858. Although informants at the inquiries remarked on the rapid fall in the Aboriginal population, it was a number of years before any action was taken. The latter inquiry led to the formation of the Aboriginal Protection Board in 1860 which encouraged Aboriginal people to move onto reserves (Edwards 1988). In 1869, the Aborigines Act was passed to give the Governor of Victoria power to dictate where Aboriginal people could reside, what activities they could undertake on and off reserves and the authority to take charge of Aboriginal children (Edwards 1988). Some Taungurung people found refuge at Wappan Station, located at the head of the Hunter and Watson Run. John Bon, and later his wife, Anne, welcomed Taungurung people, particularly elders, to stopover when travelling through the region. Ceremonial gatherings seem to have taken place on Wappan run and during a visit to Taungurung country, William Barak, of the Wurundjeri balluk, met Annie Bon. They maintained a lasting friendship over four decades and Annie wrote to the Board of Protection of Aborigines a number of times regarding the conditions at Coranderrk. With no success, Annie Bon eventually became the first woman to join the Board of Protection of Aborigines in 1904 (National Foundation for Australian Women and The University of Melbourne 2021, Flanagan 2009).

Darby (2008) writes that in the early dates of European settlement the Delatite was known as the Devil's River, a name given by the early settlers because they would hear the *Yowung-illam-balluk* having a corroboree and think it was sounds of the devil.

Further impact to traditional Aboriginal ways of life in the region would have occurred during the era of highland cattle grazing with the first European settlers in the region (Marshall, Cusack, & Webb 1999). Massacres of Aboriginal people in the wider region of the highlands are described by Gardener (1992). Darby (2008) states that within two decades of contact, Taungurung land was taken with armed conflict, with the introduction of diseases and the reduction of resources impacting the lives of the Taungurung people.

8.4 Land use history of the Activity Area

8.4.1 Historical Land Use

European arrival in the Mansfield district came as a result of a search for straying stock. In 1839, Andrew Ewan, who was working for squatters on a run at Seven Creeks near Euroa, crossed the Strathbogie Ranges searching for straying horses and came across Wappan flats. A lush valley with good water, Wappan became, one of the earliest runs in the region (*Weekly Times* 1930a). The Activity Area was within Frederick Griffin's Preston Run (Spreadborough & Anderson 1983). The Squatters' Directory shows that Preston run was 30,000 acres and held 16 head of cattle and 10,000 sheep (Compiled from *Government Gazette* 1849).

The first European land use of the Mansfield region included sheep runs, the growing and milling of wheat and oats for flour, and cattle and dairy industries (*The Australasian* 1930). The spread of agriculture in the 1840s and the gold boom of the 1850s brought more people to the region. In 1851, the town centre of Mansfield was selected next to Ford Creek at the junction of four of the main runs in the area. In 1854 the first town lots were put for public auction. In 1865 Mansfield was created a district and in December 1866 Mansfield Shire was established (*Weekly Times* 1930b). In 1891 a railway between Mansfield and Melbourne was constructed (Darby 2008). In the early 20th Century Mansfield developed Mansfield from a grazing

community to a satellite tourist area for the Alpine ski fields, with an increase in the town density with the build-up of infrastructure.

An 1866 map of the Township of Mansfield and agricultural reserve shows that the land in the Activity Area labels the hill at the southern extent as the “point of the Blue Range” and the land around the creek is shown to be treed with “White & Red Gums & Honeysuckle with a few Stringy Bark” (Figure 2). The Activity Area includes Allotment 1B sold in the parish of Maindample, County of Delatite to F Griffin. F Griffin purchased several lots in Maindample and Mansfield parishes between 1864 and 1866, this allotment was likely purchased around this time. Griffin also purchased Allotment 76, Mansfield parish on 26 July 1866. Allotment 75, Mansfield parish was purchased by W Owens on 19 August 1864. The 1866 plan of Mansfield parish shows that W Owens purchased three allotments adjacent to Monkey Creek including Allotment 75 and the creek was also within two of F Griffin’s allotments including Allotment 76. The creeks name is likely to have been changed from Monkey Creek to reflect Owens’ purchase of part of the creek to the name Owens Creek at some stage after the plan was drawn in 1866 (see Figure 3).

The historic aerial photographs from 1944 and 1959 (Figure 4 & Figure 5) show little evidence of development within the Activity Area, which suggests that the Activity Area was most likely used for agricultural activities before 1944. They demonstrate that pre-1944 the land has been cleared of much of the native vegetation and was most likely being used for agricultural activities such as pastoral grazing or crops. Scattered trees are evident in the south on the hill, along Owens Creek in the east, in the north-west corner of the Activity Area, while the centre, where the tributary is located, and centre north are cleared. There does appear to be some development in the north-east corner, most likely of the residence that can be seen with a tree lined driveway in the 1959 and 1965 aerials (see Figure 5 and Figure 6). In the 1978 aerial photograph of the Activity Area a shed has been constructed south of the residence and two dams are in the centre of the Activity Area, while very little else has changed when compared to the aerial photographs from previous decades (Figure 7).

Aerial imagery from 2004 (Figure 8) shows little difference to the majority of the Activity Area since 1978 and the earlier aerial photographs. It is clear that the majority of the Activity Area is still being used for agricultural activities and little development has occurred. One of the dams is situated on the lower slopes of the hill and the other is just north of the tributary. The construction of the residence and shed, and driveway in the north-east extent of this property would have caused shallow ground disturbance, whereas the construction of the dam may have impacted deeper soil deposits. The 2017 aerial photograph shows the vegetation around the residence has grown, very little has changed in the Activity Area since 2004 (Figure 9). The aerial photographs from 1978, 2004 and 2017 show there are paddocks to the west of the residence, more recent satellite imagery shows that these paddocks have been ploughed (Figure 10).

Biosis (2021 in prep.) surveyed the Activity Area for the ecological assessment for the current development and described it as currently containing an existing farmhouse and shedding in the north-east part of the property, and introduced pasture throughout much of the remaining areas of the property. The Activity Area is generally flat in the northern half, and a seasonally wet depression occurs just below the break of slope, approximately in the middle of the property. The southern half of the property is a moderate slope with a treeless crest (part of the Blue Range) in the far south-west, which contains some rock outcrops. Areas of Plains Grassy Woodland (EVC 55) including 63 remnant trees, primarily River Red Gum and Yellow Box, are present across the Activity Area. Three farm dams are located on the property with the two central dams are heavily impacted by livestock trampling. Modern rubbish was noted to be dumped along sections of Owens Creek. This description indicates that the Activity Area has remained largely pastoral in nature, with the main land use disturbance around the housing and sheds, dam construction, tracks, driveway and sections of the creek where dumping has occurred.

By comparing the early parish maps and aerial photographs it is possible to determine that the course of Owens Creek has not overly changed since it was first surveyed in 1854. Overall, with the exception of the

residence, the Activity Area appears to have been used predominantly for agricultural activities in the past and continuing into the present. These agricultural activities, such as ploughing to the west of the residence, and grazing and stock trampling through the southern extent of the Activity Area, may have only caused shallow disturbance to the upper soil deposits in the area. The majority of the Activity Area to the south of the paddocks, along Owens Creek and in the north-west corner appears to have had very little impact to the ground with the exception of very early clearance of trees in some parts. The ecology survey by Biosis (2021 in prep) indicates that there is a considerable amount of remnant Plains Grassy Woodland and Grassy Woodland vegetation including a high number of trees which were utilised by Aboriginal people in the region and throughout Victoria. In the past, vegetation clearance may have removed any mature trees that may have been scarred trees. The construction of the residence and associated buildings and driveway may have caused deeper disturbance to soil deposits within the north-east extent.

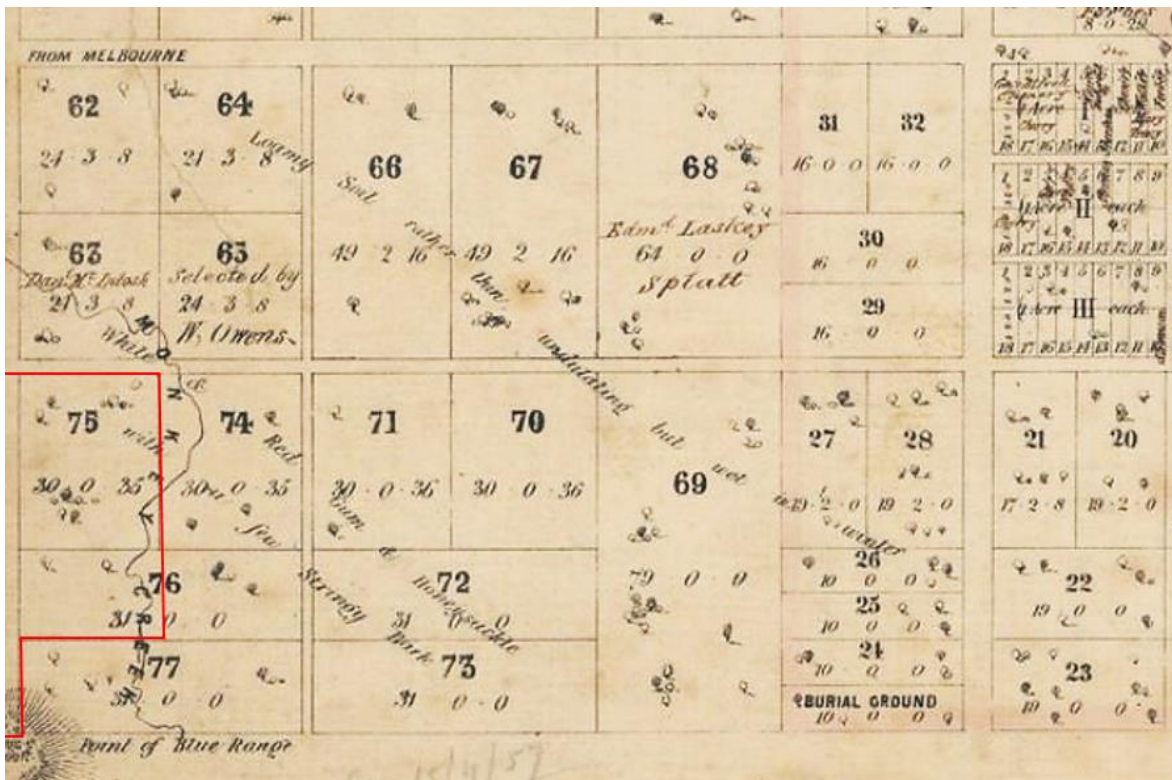


Figure 2 Detail from 1854 Township of Mansfield and agricultural reserve map (part Activity Area in red) (Surveyor General's Office 1854)

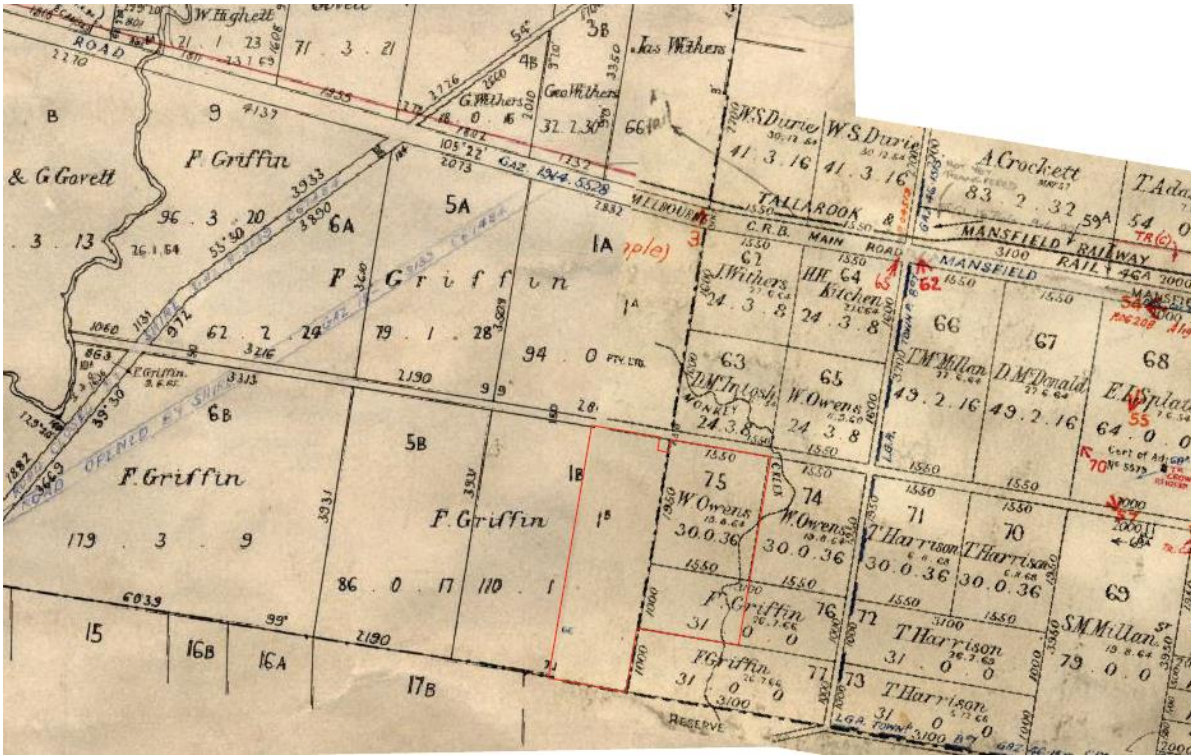


Figure 3 Composite of 1877 Parish of Maindample and 1886 Parish of Mansfield, County of Delatite map (Activity Area in red) (Department of Lands and Survey 1877, Department of Crown Lands and Survey 1932)



Figure 4 1944 Historical aerial photograph (Activity Area in red, white markings are from original photograph and right hand side of photograph is doubled) (Department of Environment, Land, Water and Planning 2021)



Figure 5 1959 Historical aerial photograph (approximate Activity Area in red, white markings are from original photograph) (Department of Crown Lands and Survey 1960)



Figure 6 1965 aerial photograph, Mount Buller Road project (north-east extent of Activity Area in red) (Department of Environment, Land, Water and Planning 2021)



**Figure 7 1978 aerial photograph, Lake Eildon project (approximate Activity Area in red)
(Department of Environment, Land, Water and Planning 2021)**

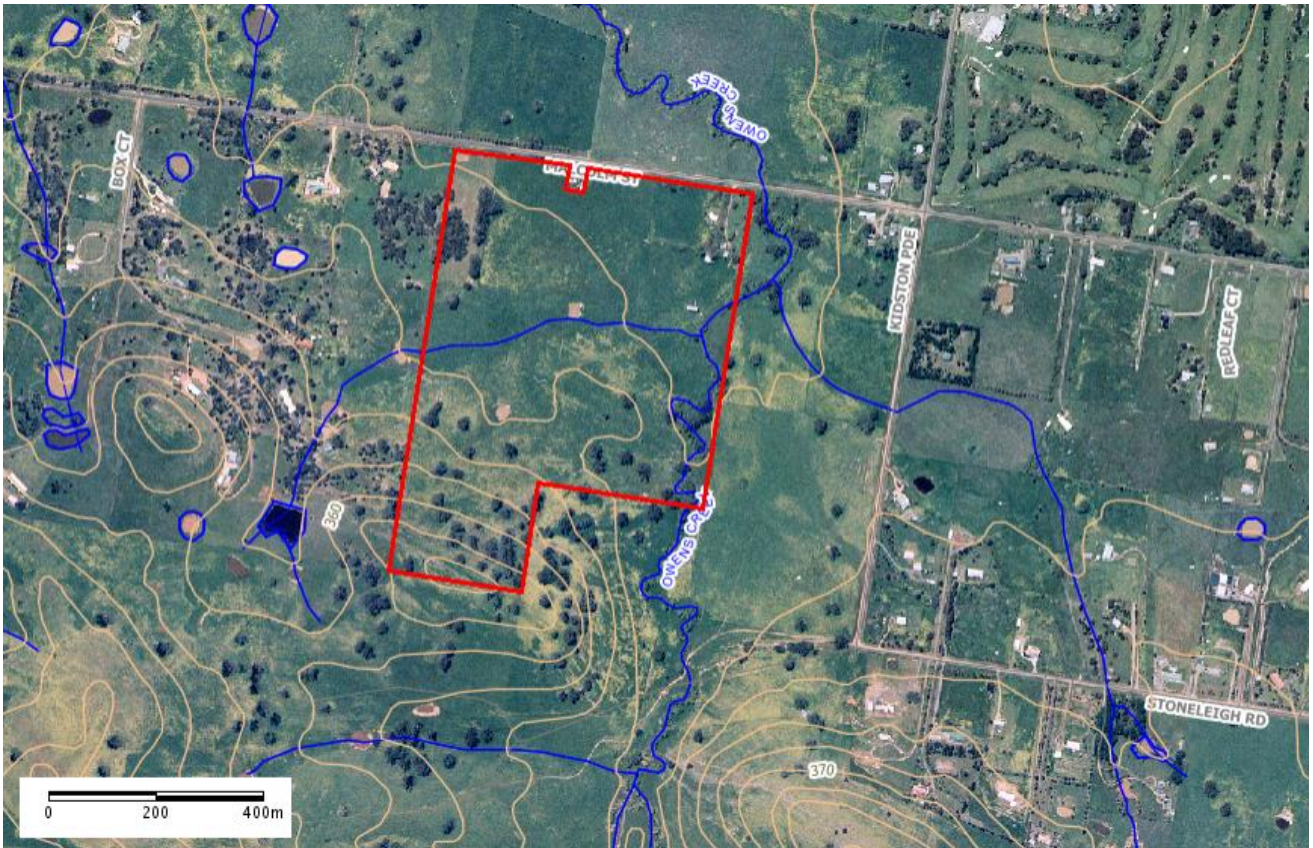


Figure 8 2004 Aerial photograph (Activity Area in red) (Department of Jobs, Precincts and Regions 2021)

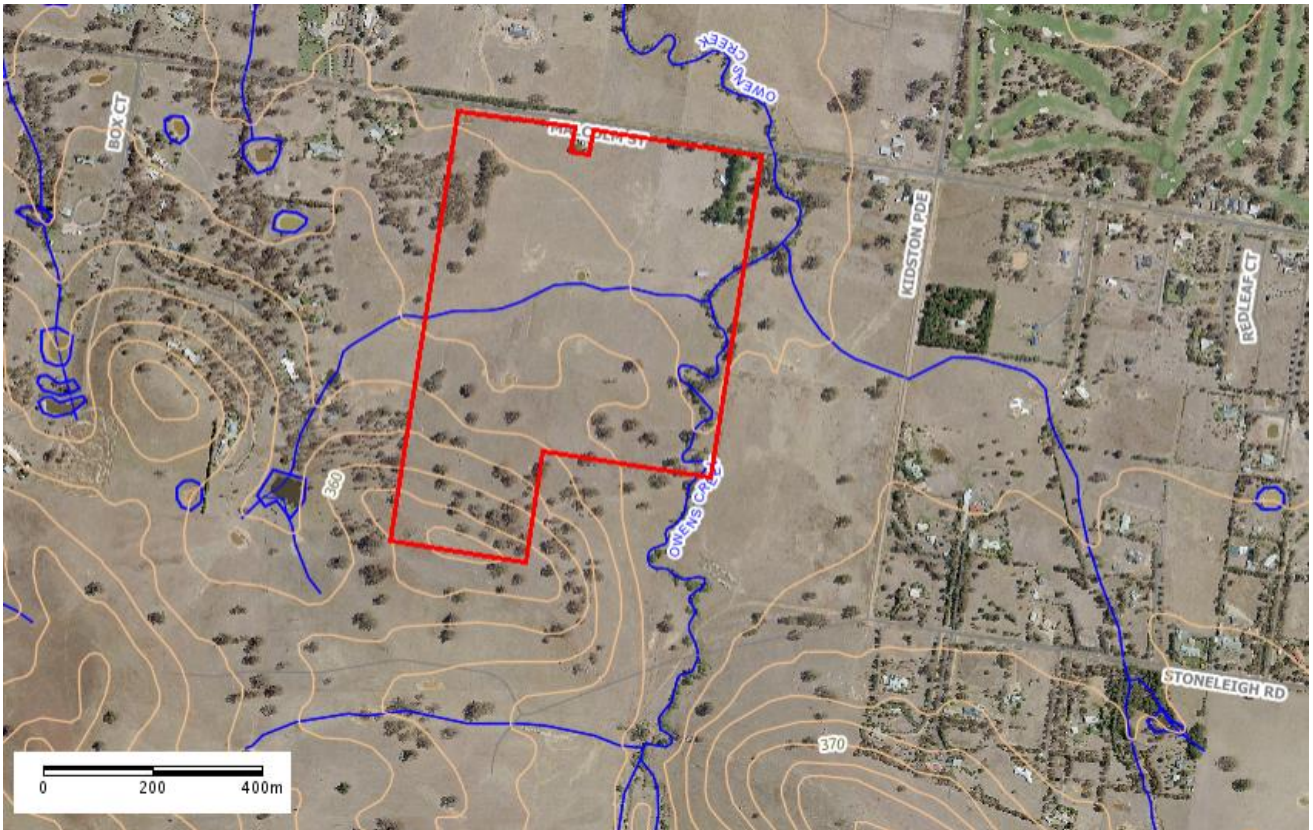


Figure 9 2017 Aerial photograph (Activity Area in red) (Department of Jobs, Precincts and Regions 2021)

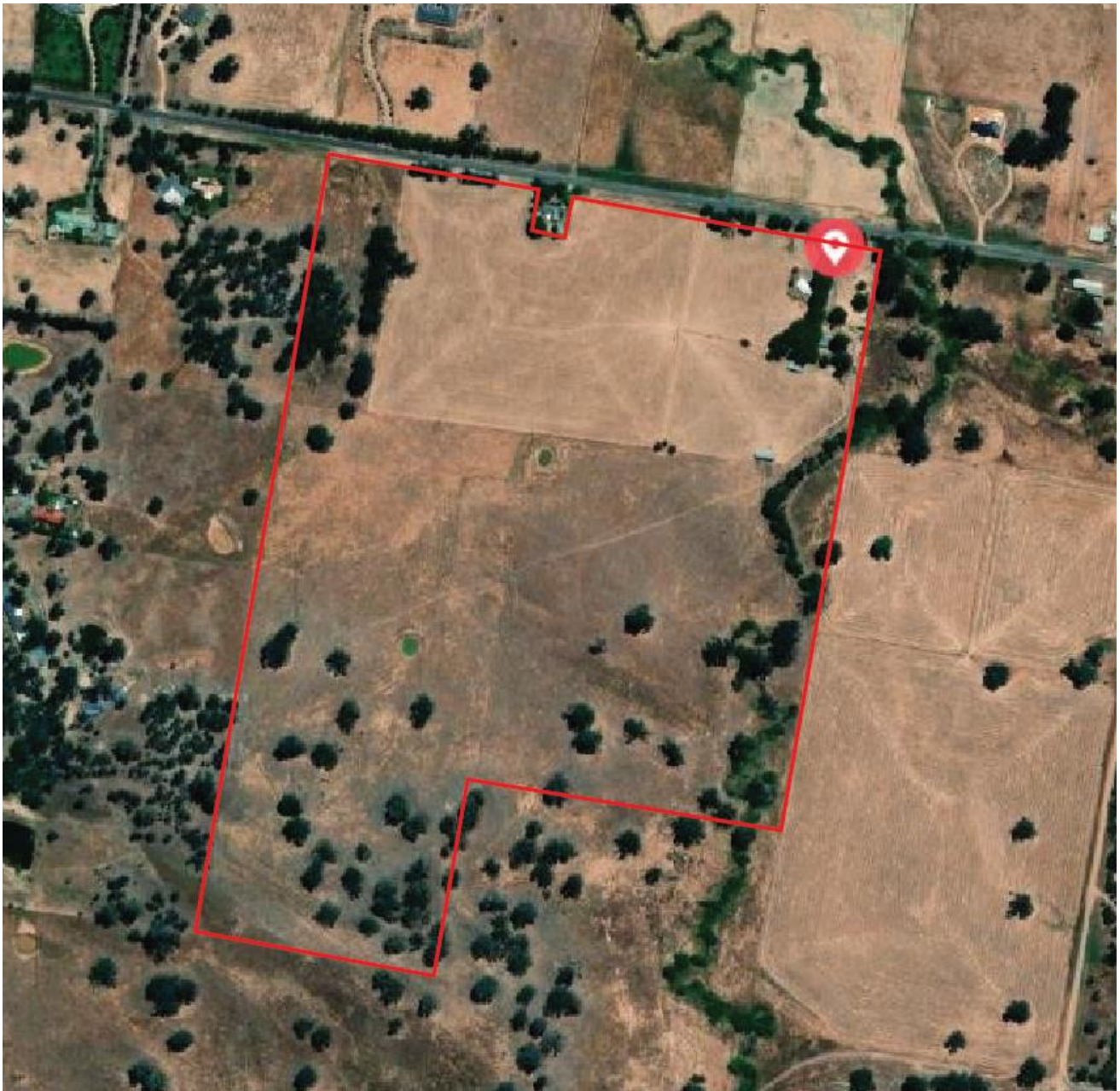


Figure 10 2021 Satellite imagery from ESRI satellite image (Activity Area in red) (DBYD 2021)

8.4.2 BYDA Results

A Before You Dig Australia (formerly DBYD) enquiry was lodged on 9 October 2021 by Lucy Amorosi. The results are summarised in Table 5.

Table 5 Results of Before You Dig Australia enquiry

Service	Authority	Response
Electricity	AusNet Electricity Services Pty Ltd	No assets present. However, it is likely that overhead power lines extend into the residence in the north-east of the Activity Area from Malcolm Street.

Water	Goulburn Valley Water	Assets present. A sewer mains and associated manholes and sewer service connections runs east-west into the Activity Area from Rowe Street before turning and continuing north-south following the west boundary of the Activity Area to provide sewer services to the properties along Rowe Street.
Council/Shire	Mansfield Shire Council	No assets present.
Communications	NBN Co, VicTas	Assets present: Two pits labelled 'B' are located within the Activity Area near the residence in the north-east corner south of Malcolm Street
Communications	Telstra VICTAS	Assets present: Conduit running into north-east corner of Activity Area from Malcolm Street with two pits labelled 'B' (probably the same as NBN) located near the residence in the north-east corner south of Malcolm Street).

8.5 Search of the Victorian Aboriginal Heritage Register

The VAHR contains information on all recorded Aboriginal cultural heritage within Victoria. It is accessed via the Aboriginal Cultural Heritage Register and Information System (ACHRIS), a web based tool with restricted access.

A search of the VAHR was undertaken by Lucy Amorosi, Biosis Pty Ltd on 5 October 2021. An updated search was performed by Daniel Carpenter of Biosis Pty Ltd on 31 January 2024.

8.6 Aboriginal places in the geographic region

A search of the VAHR record revealed 23 Aboriginal places, comprising of 69 components, have been previously registered within the geographic region (Table 6). The most common Aboriginal place component type are LDADs¹ (n=52, 75.4%), followed by artefact scatters, which comprise 13.0% (n=9) and scarred trees (n=7, 10.1%). Additionally there is a single object collection² registered within the geographic region, VAHR 8123-0051 (Info Centre - Scarred Tree – Mansfield), but this does not have implications for the potential of previously unrecorded Aboriginal places within the search area.

¹ A Low Density Artefact Distribution (LDAD) is the occurrence of stone artefacts at densities of up to 10 counted artefacts in an area of approximately 10x10 metres, including within a single test pit of $\leq 1\text{m}^2$.

² Object Collections represent places that have been removed from the context in which they were originally recorded. More specifically, they represent the location of stored artefacts (i.e. heritage consultancies, museums, private collections) or places where artefacts have been repatriated; therefore, Object Collections are not necessarily representative of the archaeological character of the region.

Table 6 Previously recorded Aboriginal places within the geographic region

Aboriginal Place Type	Total number of components	Total % of Aboriginal places
Low Density Artefact Distribution	52	75.4%
Artefact Scatter	9	13.0%
Scarred Tree	7	10.1%
Object Collection	1	1.4%
Total	69	100.0%

Within the geographic region, the majority of Aboriginal places are concentrated within 200 metres of the culturally sensitive waterbodies of Ford Creek, Owens Creek and Black Creek. Aboriginal places located outside the areas of cultural heritage sensitivity are generally scarred trees, and are usually within 400 metres of a waterway on the plains elevated above the waterways. These waterways would have provided a variety of resources for Aboriginal people to use in the region, and dry camping on the elevated creek terraces. Within the geographic region, the majority of Aboriginal places are located within GMU 1.3.3 (n=11, 78.7%), with one LDAD and scarred tree on GMU1.3.1 (14.3%), and one artefact scatter located on the waterbody of Lake Eildon, adjacent to Ford Creek. The registration of Aboriginal places is most likely limited by the locations of previous archaeological assessments across the geographic region, which are also concentrated within areas of cultural heritage sensitivity (200 metres of Ford Creek, Owens Creek and Black Creek). Scarred trees will have survived where remnant trees are located in the geographic region. Additionally, disturbances associated with the high degree of residential development in the geographic region may limit the preservation of Aboriginal places in undeveloped areas or reserves near waterways. These previously registered Aboriginal places are reflective of the Activity Area as many are located within the same area of cultural heritage sensitivity (Reg. 26 Waterways) as overlays the Activity Area and are on GMU 1.3.3 or GMU 1.3.1 on similar landforms, elevation and proximity to water, and therefore, may provide an indication of the potential for Aboriginal cultural heritage within the Activity Area. There are no previously registered Aboriginal places within, or within 200 metres of the Activity Area.

A list of relevant Aboriginal places within the geographic region has been summarised below, these places have also been tabulated in Appendix 5.

Aboriginal places in the geographic region

VAHR 8123-0004 (Eildon Weir Upr Goulburn R) is a surface artefact scatter located on a drainage line off a tributary of Ford Creek, approximately 3.63 kilometres west to west-north-west of the Activity Area. The recording of the artefact scatter was based on a literature reference in SR Mitchell's (1949) book, *Stone Age Craftsmen*, and described as Eildon Weir where hundreds of crude choppers and flakes were located along the river bed, with a predominance of flaked implements found of several distinct types (First Peoples – State Relations ACHRIS 2021). Mitchell was one of Victoria's most well-known stone artefact collectors of the early 20th century. Specific locations of Aboriginal places, particularly large surface artefact scatters, would rarely be provided to other collectors or archaeologists until collectors had picked over for their collections (Mulvaney in (Amorosi 1997)). The location and contents of VAHR 8321-0004 do not appear to have been documented by any later place inspection.

VAHR 8123-0026 (Reardon Reserve) is a surface artefact scatter 160x70 metres in size situated 225 metres north of Fords Creek on the northernmost arm of Lake Eildon, approximately 4.9 kilometres west of the Activity Area. It is noted to have been in fair condition when recorded by AAV (now FP-SR) staff in November

1997. The place was subject to erosion and sheet wash with artefacts potentially having moved downslope. Coarse grained and fine grained artefacts of quartz, silcrete, crystal quarts, hornfels and quartzite and included cores and flakes and burnt clay lumps were recorded (First Peoples – State Relations ACHRIS 2021).

VAHR 8123-0038 (Mansfield St 1) is a scarred tree located on a flat land landform approximately 1.23 kilometres north of the Activity Area and 355 metres north-east of Owens Creek. The tree is a species of River Red Gum in good health with a single scar of probable Aboriginal cultural origin. The tree had a girth of 6.4 metres at 1.5 metres height. One south-facing scar was recorded with a length of 1.3 metres and a width of 22 centimetres, with overgrowth measuring 25 centimetres at the top of the scar and 30 centimetres at the middle and bottom of the scar. The scar was described as being in good condition. Given the size and shape, the scar may have been used for the extraction of bark for a shelter. It was identified in 2002 by TerraCulture during an archaeological survey for a proposed extension of the Mansfield sewage treatment plant for Goulburn Valley Water (Hyett 2002a). It was recommended that the tree be fenced off and a botanist investigate the effect of irrigation with treated water on the health of the tree.

VAHR 8123-0039 (Mansfield St 2) is a scarred tree located on a flat land landform approximately 1.27 kilometres north of the Activity Area and 360 metres north-east of Owens Creek. The tree is recorded as a Red Gum in good health with a south facing scar of probable Aboriginal cultural origin. The tree had a girth of 7.3 metres at 1.5 metres height. The scar measured 2.1 metres in length and 40 centimetres in width, with overgrowth of 38 centimetres at the middle and 34 centimetres at the bottom of the scar, and described as being in good condition. Given the size and shape, the scar may have been used for the extraction of bark for a shelter. It was identified in 2002 by TerraCulture during an archaeological survey for a proposed extension of the Mansfield sewage treatment plant for Goulburn Valley Water (Hyett 2002a). It was recommended that the tree be fenced off and a botanist investigate the effect of irrigation with treated water on the health of the tree.

VAHR 8123-0040 (Mansfield St 3) is a scarred tree located on a flat land landform approximately 940 metres north of the Activity Area and 184 metres north-east of Owens Creek. The tree is recorded as a Red Gum in good health with a south facing scar of possible natural origin. The tree had a girth of 5.5 metres at 1.5 metres height. The scar measured 65 centimetres in length and 15 centimetres in width, with overgrowth of 8 centimetres at the top, 7 centimetres at the middle and 6 centimetres at the bottom of the scar, and described as being in good condition. It was identified in 2002 by TerraCulture during an archaeological survey for a proposed extension of the Mansfield sewage treatment plant for Goulburn Valley Water (Hyett 2002a). It was recommended that the tree be fenced off and a botanist investigate the effect of irrigation with treated water on the health of the tree.

VAHR 8123-0041 (Mansfield St 4) is a scarred tree located on a flat land landform approximately 1.7 kilometres north to north-north-east of the Activity Area and 86 metres north-east of a tributary of Ford Creek. The tree is recorded as a Red Gum in good health with a north facing scar of probable Aboriginal cultural origin. The tree had a girth of 7.2 metres at 1.5 metres height. The scar measured 1 metre in length and 30 centimetres in width, with overgrowth of 10 centimetres at the top, and 12 centimetres at the middle and bottom of the scar, and described as being in good condition. It was identified in 2002 by TerraCulture during an archaeological survey for a proposed extension of the Mansfield sewage treatment plant for Goulburn Valley Water (Hyett 2002a). It was recommended that the tree be fenced off as this section of the property would not be impacted.

VAHR 8123-0045 (Owens Creek 1) is a surface and subsurface artefact scatter located on creek terrace landform approximately 205 metres to the north-east of the Activity Area and 142 metres north-east of Owens Creek. It was recorded in 2008 during a Complex CHMP assessment for the proposed development of a retirement village (Edmonds 2008). It consists of 11 flaked artefacts identified above 200 millimetres depth. The artefacts were found within seven of the test pits excavated on the northern Owens Creek terrace

landform, with an additional surface artefact being identified during the complex assessment. The artefacts consisted of silcrete, quartz, quartzite and basalt flakes. The majority of artefacts were recovered from test pits located along the top of a low, elevated flat spur leading onto the floodplain but within close proximity to Owens Creek. The condition is described as poor due to erosion and stock trampling. As harm would be avoided to any Aboriginal cultural material identified over the course of this assessment and no further Aboriginal cultural heritage material is likely to be found within the study area, no management recommendations were provided. The place card states that the artefacts are reburied south of the Aboriginal place, however this information is not recorded with the VAHR.

VAHR 8123-0049 (Mansfield Shire Scarred Tree 1) is a scarred tree located on the undulating plains landform approximately 2.55 kilometres north-north-east of Activity Area and 287 metres south-east of Black Creek. The tree was first recorded in 2012 by an AV (now FP-SR) inspector, and then relocated in 2014 and 2017 during the field surveys of CHMP 13400 and 14836 (Brooke & Andrews 2015, Ashton & Brooke 2017). It is described as a standing dead trunk of an unspecified Box species with one scar of possible Aboriginal cultural origin located 25 centimetres from the ground surface. The tree had a girth of 4.5 metres at 1.5 metres height. The scar measured 1.6 metres in length and 75 centimetres in width, with overgrowth of 20 centimetres at the top, middle and bottom of the scar, and described as being in excellent condition. Given the size and shape, the scar may have been used for the extraction of bark for a canoe or shield. Fencing was erected around the tree to help protect it from damage. Harm is to be avoided and it was recommended that the tree be included in the land for council depot to ensure that it remains protected.

VAHR 8123-0051 (Info Centre - Scarred Tree - Mansfield) is an object collection comprising of a dead standing scarred tree located next to the Visitor Information Centre at 175 High Street, Mansfield, approximately 1.5 kilometres east-north-east of the Activity Area. The site card does not provide any information of whether the scarred tree originates from this location or whether it was moved to this location as part of the display for the Visitor Centre. The tree was recorded as a dead Grey Box with a girth of 3.73 metres at 1.5 metre height. The single scar was located at the ground surface and measured 4.06 metres in length and 60 centimetres in width, with overgrowth of 25 centimetres at the top, 20-40 centimetres at the middle and 40 centimetres at the bottom of the scar. The scar was described as in good condition and of definite Aboriginal cultural origin.

VAHR 8123-0057 (3 Collopy Street, Mansfield LDAD1) is a subsurface LDAD located on floodplain landform approximately 2.11 kilometres east-north-east of Activity Area and 220 metres south-west of Ford Creek. It was recorded in 2017 as part of a CHMP Complex Assessment for the proposed construction of a micro-brewery (Barker 2017). It consists of a single trachyte flake identified during subsurface testing within disturbed contexts found with bottle glass at 200 millimetres depth. It was considered to be not in situ and as such classified as having low scientific significance. Harm was not avoided and management conditions included a cultural induction, RAP inspection during works and custodianship of the artefact.

VAHR 8123-0058 (Fords Creek LDAD) is a surface and subsurface LDAD located on a crest of a slope and plains landform approximately 2.47 kilometres north-north-east of the Activity Area and 65/142 metres south-east of Black Creek/Ford Creek. The place was first recorded in 2014 during the CHMP 13400 survey and subsurface testing (discontinued) and again in 2017 during the subsurface testing of CHMP 14836, both for the proposed subdivision of Mansfield industrial estate (Brooke & Andrews 2015, Ashton & Brooke 2017). The artefact scatter is made up of 21 silcrete, basalt, quartz, quartzite flakes, and includes cores, two geometric microliths and a possible basalt/greenstone hammerstone. As part of CHMP 13400, six surface artefacts were identified during the survey and three subsurface artefacts were found in three of the STPs during the complex assessment, a hornfels flake at 300–400 millimetres depth, a quartz flake at 200 millimetres depth and a quartz flake at 0–100 millimetres depth. An additional 12 subsurface artefacts were found in 2017 during the complex assessment of CHMP 14836 at 10–400 millimetres depth, generally as isolated finds. It was concluded that the artefacts on the surface were likely to have been disturbed by natural

displacement via erosion, whereas the subsurface artefacts were likely in situ. The Aboriginal place was considered to have low scientific significance due to the low density nature or the artefact scatter. As there are no ground disturbance works taking place as part of the subdivision, harm will be avoided.

VAHR 8123-0059 (Mansfield Shire Scarred Tree 2) is a scarred tree located on the crest of a gradual slope landform approximately 2.45 kilometres north-north-east-east of the Activity Area and 150 metres south-east of Black Creek. The tree is recorded as a Grey Box in good health with a single east facing scar located 40 centimetres off the ground surface. The tree had a girth of 5 metres at 1.5 metres height. The scar measured 1.56 metres in length and 74 centimetres in width, with overgrowth of 74 centimetres at the top, 33 centimetres at the middle and 30 centimetres at the bottom of the scar, and described as being in excellent condition. Given its size and shape, the scar may have been used for the extraction of bark for a carrying device such as a coolamon. The scarred tree was recorded during the ground survey for CHMP 14836 (Ashton & Brooke 2017). Harm to the scarred tree was to be avoided so management conditions included permanent fencing around the tree for protection against livestock.

VAHR 8123-0060 (Stoneleigh Rd ST 1) is a living Red Gum with one scar located on a low rise in agricultural land recorded during CHMP 15399 (Bell 2019), approximately 945 metres south of the Activity Area. The tree has some damage from termites, burning and has little heartwood remaining. The tree has a girth of 5.99 metres and the buffer radius of the place is registered as 37.6 metres. The scar is 1.25 metres long, 0.5 metres wide and 1.13 metres above ground height. It was recommended that the tree remain preserved in situ. The tree was to be protected in the Development Plan, in addition fencing and 'no go zone' signage and addition to the design plan was recommended (Bell 2019).

VAHR 8123-0061 (Stoneleigh Road LDAD 1) is surface and subsurface LDAD of 19 components located on a upper slope, low rise and terrace in agricultural land in GMU 1.3.1. It was recorded during CHMP 15399 (Bell 2019), with the closest component approximately 265 metres south-east of the Activity Area. Artefacts were recorded between 0 and 300 millimetres. All subsurface artefacts were recorded in the shallow topsoil. Artefacts included ten quartz broken and complete flakes and angular fragment, one hornfels flake, one rhyolite flake, one multidirectional silcrete core, a silcrete flake, a quartzite multidirectional core and a broken flake. Recommendations were made to include sections of this place into adjacent exclusion zones, fenced and marked as 'no go zones'. Two sections of the place within proposed roadways could not have harm avoided and were to be salvaged according to methods outlined in CHMP 15399. All artefacts collected from complex testing, surface salvage collection and salvage excavation were to be retained by TLaWC until on-site reburial could occur (Bell 2019).

8.6.1 Aboriginal Historical References

There are no Aboriginal historical references within the geographic region.

8.7 Previous work in the geographic region

A search of the VAHR identified a total of 28 archaeological assessments that have previously taken place within the geographic region (Table 7). CHMP Complex Assessments are the most common type accounting for 50.0% of all reports (n=14). This was followed by Desktops/Papers/Due Diligence/Other (n=7, 25.0%), Surveys, CHMP Standard Assessments and CHMP Desktop Assessments (n=2, 7.1% for each type) and finally a single Heritage Management report (n=1, 3.6%).

Table 7 Previous archaeological assessments within the geographic region

Report Type	Total Number of Reports	Percentage of Total % of Report Type
CHMP Complex Assessment	7	36.8%
Desktop or Paper or Due Diligence or Other	7	36.8%
Survey	2	10.5%
Heritage Management	1	5.3%
CHMP Desktop Assessment*	1	5.3%
CHMP Standard Assessment	1	5.3%
Total	19	100%

*CHMP 13944 (Barker 2016) is listed as a CHMP Desktop Assessment with VAHR but included standard and complex assessment

Table 7 demonstrates that the geographic region has been subject to a limited number of previous archaeological assessments, however the development of Mansfield and the presence of multiple areas of cultural heritage sensitivity (within 200 metres of waterways Black Creek, Owens Creek and Ford Creek) in the geographic region has generated a number of CHMP assessments, the majority of which have gone to Complex Assessment. The nine CHMP assessments and two surveys will be summarised below to aid in developing a predictive statement for the types of Aboriginal heritage likely to be found in the Activity Area.

Hyett (2002a) conducted an archaeological survey (Report 1910) for a proposed extension of the Mansfield sewage treatment plant on behalf of Egis Consulting Australia. The study area was located approximately 1.25 kilometres north of the current Activity Area. The desktop assessment indicated that stone artefact scatters and scarred trees were the most common Aboriginal places within the region. During the field survey four Aboriginal scarred trees were recorded (**VAHR 8123-0038 (Mansfield St 1), VAHR 8123-0039 (Mansfield St 2), VAHR 8123-0040 (Mansfield St 3) and VAHR 8123-0041 (Mansfield St 4)**). The large amount of overgrowth on some of the scars suggested that the scars may have been of considerable age. The survey identified areas of disturbance from past European land use activities. Due to ongoing earthworks within the survey area, exposure was recorded as good but no subsurface Aboriginal cultural heritage was identified. Due to long grass, the banks of Ford Creek were excluded from the survey. During the survey a historic site H8123-0030 was recorded, comprising of a shed, bricks, footings, metal objects of the Nolan's Slaughter Yard site. It was recommended that the scarred trees be fenced with signage installed, and that prior to irrigation commencing in the area a botanist would provide advice on the effect the extra nutrients from the reclaimed water would have on the health of the trees, with regular monitoring. It was also recommended that the activity be redesigned in order to not impact H8123-0030 Nolan's Slaughter Yard site and, if not possible, to apply for a permit.

Hyett (2002b) conducted a survey assessment (Report 2274) for an extension to the Mansfield sewage treatment plant on behalf of Egis Consulting Australia. The survey took place approximately 560 metres north of the current Activity Area within the Brond property. The desktop assessment indicated that stone artefact scatters and scarred trees were the most common Aboriginal places within the region. No Aboriginal cultural material was found during the survey of the Brond property and the ground visibility was recorded as low due to grass cover. As there were no mature trees present due to land clearance, there was negligible possibility of scarred trees being identified. However, it was concluded that the study area had some archaeological potential due to the close proximity of scarred trees found during a survey of the neighbouring properties (Hyett 2002a). It was therefore recommended that monitoring by a qualified archaeologist and

Aboriginal community representative be conducted during earthworks as cultural heritage material may be exposed in subsurface deposits.

Edmonds (2008) conducted a CHMP Complex Assessment (CHMP 10255), approximately 290 metres north of the current Activity Area, for the proposed development of a retirement village in Mansfield. The desktop assessment predicted moderate likelihood for Aboriginal cultural heritage to be found within the study area, with scarred trees most likely present on the floodplain and artefact scatters likely to occur on drier elevated landforms adjacent to Owens Creek. The standard assessment comprised of a pedestrian survey. No Aboriginal places were identified during the standard assessment due to poor ground surface visibility (approximately 1%) and no mature trees were identified, most likely due to past European vegetation clearance. Based on the results of the desktop assessment, the well-defined southern terrace of Owens Creek was identified as a landform with low-moderate archaeological sensitivity. The northern section of the creek terrace was discounted due to its ill-defined nature dissected by very low natural drainage lines, making the area unsuitable for occupation. The complex assessment consisted of eighteen 50x50 centimetre test pits excavated across the Owens Creek terrace landform. During subsurface testing, the sediments were found to be relatively homogenous across the test pits, with shallow silts above clay deposits encountered between 130 and 150 millimetres, except where the ground surface was truncated within plough furrows. Eleven stone artefacts were identified within seven of the test pits within the northern Owens Creek terrace landform, with an additional surface artefact being identified during subsurface testing. The artefacts were recorded as artefact scatter **VAHR 8123-0045 (Owens Creek 1)**. The majority of stone artefacts were recovered from test pits located along the top of a low, elevated flat spur leading onto the floodplain but within close proximity to Owens Creek. The results of the complex assessment showed that low relief ridges leading down to floodplains and creek terraces were likely to contain stone artefacts, being a landform that would protect them from flooding events. As harm would be avoided to any Aboriginal cultural material identified over the course of this assessment and no further Aboriginal cultural heritage material is likely to be found within the study area, no management recommendations were provided.

Edmonds' (2008) cultural heritage assessment of the floodplains and creek terraces of Owens Creek are particularly significant for the current Activity Area. The identification and validation of the creek terraces as having cultural value is of relevance to the occurrence of this landform within the current Activity Area. Owens Creek is situated along the eastern boundary of the current Activity Area, and it can be expected that alluvial terraces will be present depending on the level of disturbance. Although Edmonds' findings were located in the low, elevated spurs leading onto the floodplain, the presence of the artefacts establishes nearby landforms (creek terraces, floodplains) as being culturally sensitive.

Grinter & Bell (2010) completed a CHMP Standard Assessment (CHMP 11121), approximately 2.24 kilometres east-north-east of the current Activity Area, for the proposed commercial development of 3-5 High Street, Mansfield that borders Ford Creek. During the desktop assessment, scarred trees and artefact scatters were the most common place type in the region. In the predictive model, the banks of Ford Creek were identified as areas of potential where remnant vegetation may occur contingent upon the alluvial creek terraces being undisturbed. The standard assessment consisted of a pedestrian survey and no Aboriginal cultural heritage was identified. The survey identified that the majority of the study area had been disturbed with the construction of the existing buildings and introduced fill used to build up the creek bank to resist flooding. Due to the widespread disturbance, no complex assessment was recommended. As no Aboriginal cultural heritage was identified during the assessment, no management recommendations were provided.

Biosis (2013) completed a Complex CHMP (12513), approximately 2.55 kilometres east of the current Activity Area, for the replacement of a 150mm PVC water pipeline along Rowe St, Mansfield and continuing across Ford Creek to the north to link the eastern end of High St with the water reticulation system. The desktop assessment identified that creek terrace landforms along Ford Creek may have archaeological potential depending on any disturbance to these landforms, as seen in **Edmonds (2008)** and **Grinter & Bell (2010)**.

The standard assessment consisted of a pedestrian survey and identified significant disturbance had occurred during the construction of Rowe St, adjacent buildings and underground works. The field survey concluded that the alluvial terrace on the north and south sides of Ford Creek were areas of sensitivity due to their being intact landforms. The park reserve on the north side showed evidence of significant landscaping and clearing. The complex assessment comprised of two 1x1 metre test pits on the north and south embankments of Ford Creek. Test Pit 1 was located on the embankment south of Ford Creek. The stratigraphy consisted of clayey silts increasing in compactness up to 600 millimetres depth, followed by silty clays with gravel and mudstone to 1200 millimetres depth and at 1600 millimetres depth river bed deposits were positively identified in the form of river rolled pebbles and cobbles, gravel and sand. It was determined that this gravel and sand layer likely represents the former stream bed composed of water worn Pleistocene deposits and an eroding sedimentary sandstone base. Test Pit 2 was located on a steep embankment north of Ford Creek and excavation was aided with a mechanical excavator. The stratigraphy consisted of a compact silt up to 100 millimetres depth, followed by a soft clumpy friable clayey silt to 600 millimetres depth with shattered glass and ceramics within the first 200mm, strongly cemented silts of contrasting colours were below 600 millimetres depth, with a diffused sandy grey lens occurring between 1200–1400 millimetres. At 2000 millimetres river bed deposits were positively identified in the form of river rolled pebbles and cobbles, gravel and sand. No Aboriginal archaeological material was recovered from either test pit. It was concluded that creek embankments north and south of Ford Creek had likely been prone to destructive natural processes such as flooding events that may have affected the integrity of any existing archaeological deposits. As no Aboriginal cultural heritage material was found during the course of the assessment, the only management recommendation was for a heritage induction by representatives of the RAP for all site workers.

Biosis (2013) suggested that the lack of cultural heritage identified may be a result of the flood prone nature of the creek terrace landforms on either side of Ford Creek. **Edmonds (2008)** subsurface data showed that low relief ridges leading down to floodplains and creek terraces were likely to contain stone artefacts, being a landform that would protect them from flooding events. As this type of landform was not present within the study area, it was concluded that any remaining cultural material may have washed away over time. Additionally, it was suggested that the disturbance noted in the upper 200 millimetres of Test Pit 2 demonstrates that the creek terraces may have been impacted during the development of Mansfield. Additionally, one of the property owners of the houses near the Rowe Street reserve area mentioned that the entire reserve on the south side had once had a swimming pool within it, a feature that would have required deep excavation during its installation. It was concluded that future studies along Ford Creek may yet find direct evidence of Aboriginal occupation in the alluvial fans landform or higher ridges overlooking the creek further away from Mansfield and European impacts.

Brooke & Andrews (2015) undertook a Complex CHMP (13400) since discontinued, approximately 2.12 kilometres north-north-east of the current Activity Area, for the proposed lot subdivision of the Mansfield industrial estate at 141 Lakins Rd, Mansfield, which includes the northern bank of Ford Creek. The desktop assessment identified a previously recorded Aboriginal place within the study area **VAHR 8123-0049 (Mansfield Shire Scarred Tree 1)** and concluded that artefact scatters and scarred trees are the most likely place type to be found. The prediction model suggested that there is moderate potential for large dense artefact scatters on river flats, particularly at raised landforms. It concluded that Aboriginal places are most likely to occur within 200 metres of waterways but there is a moderate to high potential that places may occur at greater distances on elevated terraces. The standard assessment consisted of a ground survey and it was noted that ground surface visibility was generally low for most of the study area with ground disturbance including vegetation clearance, the excavation of natural drainage lines and a dam, and the construction of buildings and tracks. During the standard assessment, the previously recorded scarred tree **VAHR 8123-0049 (Mansfield Shire Scarred Tree 1)** was relocated and two new Aboriginal places were identified; five surface silcrete and basalt flaked artefacts and a possible basalt or greenstone hammerstone were recorded as **VAHR 8123-0058 (Fords Creek LDAD)** and a single scarred tree **VAHR 8123-0059 (Mansfield Shire Scarred Tree 2)**.

The complex assessment comprised of one 1x1 metres test pit and 52 40x40 centimetre STPs in four transects spaced 20 metres apart. The complex assessment was not completed and the report was discontinued so no conclusions or management conditions were made.

Barker (2016) completed a CHMP Complex Assessment (Report 13944), approximately 2.35 kilometres east of the current Activity Area, for a proposed 11 lot residential subdivision at 15-19 Hunter Street, Mansfield. The desktop assessment identified artefact scatters and LDADs are the most likely Aboriginal place type to be present and that these stone artefact deposits are most likely to be present subsurface in alluvial deposits at a depth of 0–400 millimetres. However, due to previous land clearance and development of a residential subdivision, it was predicted unlikely that Aboriginal cultural material would be present within the study area. The standard assessment consisted of a pedestrian survey that was limited by poor ground surface visibility (1-5%) due to thick grass. The results of the field survey confirmed the results of the desktop assessment that extensive disturbance from the development of the residential lots and land clearance and no areas of cultural heritage potential were identified. The complex assessment comprised of the excavation of a 1x1 metre test pit and 14 40x40 centimetre shovel probes in a grid approximately 20 metres spaced. The stratigraphy of the test pit consisted of a brown silty loam topsoil up to 60/120 millimetres depth, overlying a light brown compact silt with clay inclusions up to 340/380 millimetres depth, overlying a very hard dense light brown basal clay with reddish brown inclusions at 430 millimetres depth. The stratigraphy for the shovel test pits were similar to the test pit. No Aboriginal cultural heritage was identified during subsurface testing. As no Aboriginal cultural heritage was identified during the assessment, it was concluded that the study area had low sensitivity to Aboriginal cultural heritage material. Management recommendations included providing fliers of cultural heritage identification information to be handed out by a qualified cultural heritage advisor and read by all site workers and the appointment of a qualified cultural heritage advisor for the duration of the project to advise if Aboriginal cultural heritage is discovered during the activity.

Carr et al. (2016) completed a CHMP Complex Assessment (Report 14160), approximately 620 metres north-east of the current Activity Area, for the construction of a proposed Mansfield Heavy Vehicle Bypass with upgrades to Dead Hose Lane and Withers Lane, Mansfield. The results of the desktop assessment concluded that artefact scatters and scarred trees are the most likely place type to be found and that raised terrace landforms within 200 metres of a waterway had increased potential for archaeological sensitivity. The prediction model suggested that there is moderate potential for large dense artefact scatters on river flats, particularly at raised landforms and there is a moderate-high potential that places may occur at greater distances on elevated terraces. The standard assessment comprised of a pedestrian survey and 49% overall effective survey coverage was achieved due to the good visibility and ground exposure (70%) of the unsealed road and road reserve. The standard assessment determined that the majority of the study area had been subject to ground disturbance from the construction of roads and underground services, and vehicle erosion. During the ground survey, two areas of potential archaeological deposits were identified based on the predictive modelling; an elevated terrace within 200 metres of Fords Creek (PAD 1) and an elevated terrace within 200 metres of Fords Creek tributary (PAD 2). No Aboriginal cultural heritage material was identified during the standard assessment. The complex assessment comprised of seven 50x50 centimetre STPs excavated at PAD 1, a 1x1 metre test pit and 16 50x50 centimetre STPs excavated at the PAD 2 and six 50x50 centimetre control STPs excavated along Withers Lane. The undisturbed area of the terrace PAD 1 landform was not large enough to excavate a 1x1 metre test pit. The stratigraphy at PAD 1 comprised of a loose humic layer overlying a compact silty loam to clay base at 350 millimetres depth. The stratigraphy at PAD 2 consisted of a brown loose humic loam to 100 millimetre depth, overlying a light brown silty loam, overlying a sterile clay base at 200 millimetre depth. The subsurface testing revealed a similar stratigraphy across all three areas of testing, with sterile clay identified at 50-350 millimetres depth. No Aboriginal cultural heritage material was identified during the complex assessment. Management recommendations included the creation of a No Go Zone and the construction of fencing during the course of the works in order to avoid harm to **VAHR 8123-**

0041 (Mansfield St 4), located 5 metres outside the Activity Area, and cultural heritage awareness training with a RAP representative for all site staff.

Ashton & Brooke (2017) completed a CHMP Complex Assessment (Report 14836), approximately 2.12 kilometres north-north-east of the current Activity Area, for the proposed lot subdivision of the Mansfield industrial estate at 141 Lakins Rd, Mansfield. This is a continuation of CHMP 13400 (Brooke & Andrews 2015) that was discontinued in 2015. The desktop assessment identified twelve Aboriginal places located within the geographic region comprising of seven scarred trees and five artefact scatters. A scarred tree, **VAHR 8123-0049 (Mansfield Shire Scarred Tree 1)**, was identified within the Activity Area. Based on the desktop assessment, it was concluded that Aboriginal places were likely to occur within 200 metres of Black and Fords Creeks or on the raised terraces associated with these waterways. During the standard assessment (from CHMP 13400 in 2015) two new Aboriginal places were identified, **VAHR 8123-0058 (Fords Creek LDAD)** and **VAHR 8123-0059 (Mansfield Shire Scarred Tree 2)**. **VAHR 8123-0058 (Fords Creek LDAD)** consists of two basalt flakes, three silcrete cores and a potential basalt or greenstone hammerstone. Each of the surface artefacts were identified in close proximity to Black Creek. A complex assessment was completed in two phases. The first in 2015 (CHMP 13400) consisted of one 1x1 metre test pit and 52 50x50 centimetre STPs, with three STPs containing artefacts. The subsequent testing in 2017 consisted of a further two test pits and 42 STPs, with twelve additional artefacts identified. All fifteen subsurface artefacts were recorded as **VAHR 8123-0058 (Fords Creek LDAD)**. These artefacts consisted of basalt, quartz, silcrete, quartzite and hornfels. The subsurface testing of the test pits established a stratigraphy of the sloping landform as a dry to damp, friable brown clayey silt overlying a very compact mottled silty clay between depths of 90–220 millimetres. The results of the complex assessment supported the predictive modelling, with the subsurface artefacts all being found within close proximity to Ford Creek, Black Creek and a tributary. Management conditions included the fencing off of scarred trees for protection during works and the repatriation and reburial of any artefacts removed during the assessment.

Barker (2017) completed a CHMP Complex Assessment (Report 14934), approximately 2.11 kilometres east-north-east of the current Activity Area, for the construction of a proposed microbrewery at 3 Collopy Street, Mansfield. The desktop assessment found that Aboriginal places are likely to be on elevated landforms on the margins of creeks. The predictive statement found that subsurface stone artefact deposits are the most likely Aboriginal place to be present at depths of 0–400 millimetres depth in undisturbed alluvial deposits, and that scarred trees are unlikely due to the extensive vegetation clearance and development of the area. The standard assessment comprised of a pedestrian survey and poor ground visibility (1%) was noted due to the covering of grass. The standard assessment confirmed that the study had been impacted by disturbance in the past including, clearing of native vegetation, construction of the existing house, agricultural activities and construction of a sewer. The complex assessment comprised of the excavation of 1x1 metre test pits and five 50x50 centimetre STPs. The stratigraphy of the study area was relatively uniform, comprising of a shallow silty loam topsoil overlying a light brown alluvial silt with clay inclusions overlying a hard dry light brown clay with reddish brown inclusions at depths of 120–390 millimetres. A single trachyte flake was identified in a sixth STP that was expanded to a second 1x1 metre test pit. The artefact was located within disturbed loam deposits mixed with bottle glass at a depth of 200 millimetres and recorded as **VAHR 8123-0057 (3 Collopy Street, Mansfield LDAD1)**. It was concluded that the study area has low potential for further Aboriginal cultural heritage material to be found due to the previous land use and disturbance. Due to the low scientific significance and as harm to **VAHR 8123-0057 (3 Collopy Street, Mansfield LDAD1)** could not be avoided, management conditions included a cultural induction, RAP inspection during works and custodianship of the artefact.

Bell (2019) prepared a Complex CHMP (15399) for a proposed 143 hectare residential development on Stoneleigh Road, Mansfield, immediately south of the current Activity Area. As with the current Activity Area, Owens Creek flows beside the eastern boundary of Bell's Activity Area with a tributary and Owens Creek

floodplain within it, and the southern side of the hill within the current Activity Area is within and to the north of a higher peak of the Blue Range. The hillslopes, crests, and floodplain are all landforms which are within the current Activity Area, and the GMU of Bell's Activity Area is GMU 1.3.1 as is the south-west of the Activity Area. The most likely Aboriginal place types to occur in Bell's Activity Area were noted to be scarred trees and artefact scatters on the hills or in close proximity to the waterways. During the standard assessment, visibility was very poor across the Activity Area the survey was undertaken by vehicle with ground inspection where there was visibility and with all mature trees were inspected. During the standard assessment one scarred tree **VAHR 8123-0060 (Stoneleigh Rd ST 1)**, a living Red Gum with one scar, and two surface artefacts were recorded as components of **VAHR 8123-0061 (Stoneleigh Road LDAD 1)**. The complex assessment included ten mechanical test pits (MTPs) and 32 shovel probes (SPs). Another 17 stone artefacts were recorded during the complex assessment in MTPs 6, 8 and 10, and in SPs 6W5, 8E10, 8N10, 8N15, 8S5 and 10S10. Excavations showed varied soil profiles due to the various landforms. Mechanical Test Pit 6 was excavated on the upper slope overlooking Owens Creek of the south-east side of the hill, of which the north side is in the current Activity Area. The soil profile in MTP 6 was brown silty sand over yellowish-red dense clay to 500 millimetres, artefacts were recorded at 200 millimetres. In MTP 8, which was on a rise overlooking Owens Creek, the soil deposit consisted of silty sand becoming harder and more compact with depth, over dense clayey sand. Two artefacts were recorded at 150 millimetres. On a large flat rise between the floodplain of Owens Creek and a steep hill MTP 10 was excavated into silty sand, which at 150 millimetres overlaid mudstone. Artefacts were recorded at 60 millimetres depth. Artefacts recorded during the complex assessment were all excavated in the shallow topsoil at depths between 50 and 300 millimetres. Shovel probes were excavated as radial probes around these MTPs that contained artefacts. There were four geological units within the Activity Area and depending on the location, basal layers comprised either mudstone, volcanics or weathered rock-derived clay.

The surface and subsurface artefacts were registered as and LDAD, **VAHR 8123-0061 (Stoneleigh Road LDAD 1)** and were manufactured from a variety of raw materials (quartz, silcrete, quartzite, hornfels and rhyolite) which included broken and complete flakes, multidirectional cores and an angular fragment. Although the tree was being protected under the Development Plan approved by Mansfield Council, recommendations for VAHR 8321-0060 included perimeter fencing and designating it as a 'no go' zone with signage, advising contractors and on design plans. Another tree was thought to potentially be a hollow occupation tree until the landowner explained that fire in 1981 had created the hollow. The tree was protected under the Development Plan. Of the 19 artefacts recorded at **VAHR 8123-0061 (Stoneleigh Road LDAD 1)** only the 17 artefacts from the complex assessment were collected. Recommendations for this place included the storage of the collected artefacts with TLaWC until reburial could take place. Area 2 and Area 3 of the place where artefacts were recorded was noted to be adjacent to exclusion zones and recommendation was made to extend the exclusion zones to incorporate these sections of the place and show these on the design plans, fence and make 'no go zones', and notify contractors of these in morning toolbox meetings. Salvage of the areas which could not have harm avoided by road construction was recommended. This was to be to depths of at least 600 millimetres (impact depth) and to be conducted under supervision by an archaeologist and TLaWC representatives, be mechanical scraped in 50 millimetre depths, with any artefacts found to be recorded, analysed and stored with TLaWC. The remaining two surface artefacts were to be collected and retained by TLaWC until reburial could occur after the development was completed. A salvage report was also recommended, at the time of the current CHMP (18293) there is no salvage report lodged on ACHRIS (First Peoples – State Relations ACHRIS 2021).

8.8 Prediction statement

Based on the above review of the geographic region, including its environment, recorded Aboriginal places, previous archaeological assessments and information on the activities of Aboriginal people, a place prediction

statement has been developed. This utilises the existing regional information in order to target landforms which might have archaeological potential during the Standard Assessment. The place prediction statement acts as a guideline for designing the ground survey strategy and identifies key points for consideration.

The Aboriginal place types likely to be found within the Activity Areas are listed in Table 8 below.

Table 8 Predicted Aboriginal place types in Activity Areas

Place type		
Artefact distributions	Artefact distributions consisting of one or more stone artefacts are associated with tool production, domestic activities and resource procurement. Scatters and isolated finds are most likely to occur on river or creek flats, terraces or slopes within 100 metres of major water courses.	<p>Owens Creek and its tributary are within the Activity Area. High ground overlooking Owens Creek and the surrounding region are situated in the southern extent of the Activity Area. Therefore, there is potential for both surface and subsurface low density artefact distributions and/or artefact scatters to be found on any creek terrace or bank landforms, and the hill within the Activity Area.</p> <p>Artefact scatters and LDADs in the geographic region are recorded in surface and subsurface contexts and are comprised of a variety of raw materials including, quartz, silcrete, quartzite, hornfels, crystal quartz, basalt, rhyolite and trachyte. Artefact distributions in the Activity Area are likely to be recorded in surface and subsurface contexts and include a one or more of the raw materials mentioned above.</p> <p>These areas of cultural heritage sensitivity within the Activity Area, combined with the findings of adjacent CHMP 15399, <i>there is potential</i> for artefact scatters or LDADs within these areas.</p>
Scarred trees	Scarred tree represent cultural modifications of trees to obtain the bark for use as shelters, canoes and shields. Despite widespread removal of native forest which has resulted in little remnant vegetation; scarred trees may occur where remnant vegetation exists.	Biosis (2021) ecological assessment (see Section 8.2) identified 63 remnant trees within the Activity Area, the main tree types are River Red Gum and Yellow Box. There are seven scarred trees recorded in the geographic region, five are Red Gums and the remainder are Box species. Therefore, <i>there is potential</i> for scarred tree/s within the Activity Area.

8.9 Summary and Conclusions from the Desktop Assessment

The Activity Area is located within geomorphological units (GMU) 1.3.3 *Terraces, fans and floodplains (Kiewa Valley, Wonnangatta Valley)* and GMU 1.3.1 *Low relief landscapes at low elevation (Cann River south, Silvan, Templestowe)*. The Mansfield floodplain is crossed by a number of prominent waterways (Ford Creek, Owens Creek, Black Creek) and their tributaries that would have provided a variety of plant foods and resources for the named group within this region, *Yowung-illam balug* of the *Daung wurrung* (Clark 1990). Owens Creek and

its tributary are within the Activity Area, which is likely to include creek terraces and other elevated landforms within close proximity to the creek that are typical of GMU 1.3.3 and the elevated ground on the lower slopes of the hill and the upper slope and crest of the hill, typical of GMU 1.3.1.

Past archaeological assessments within the geographic region have been limited; however, have demonstrated that landforms associated with waterways are sensitive to Aboriginal cultural heritage material, with all Aboriginal places found within 400 metres of a waterway. Within the geographic region, the most common Aboriginal place types are scarred trees and LDADs. Limited archaeological assessment of the lower slopes of Mt Battery, within GMU 1.3.2, has resulted in no Aboriginal cultural material recorded on this landform. All Aboriginal places within the geographic region are recorded within GMU 1.3.3.

The majority of Aboriginal places are found within 200 metres of culturally sensitive Ford Creek, Owens Creek and Black Creek. Adjacent to the Activity Area Aboriginal places were recorded on the hills of the Blue Range (Bell 2019). Within the geographic region, archaeological assessments within proximity to Ford Creek have found extensive disturbance and destructive flooding events along the embankments has resulted with no Aboriginal material found within the creek embankments (Grinter & Bell 2010, Biosis 2013). Past archaeological assessments have identified creek terraces and elevated landforms within 300 metres of waterways as being sensitive landforms for surface and subsurface artefact distributions. The hill within the Activity Area has also been shown to have archaeological potential with the recording of VAHR 8321-0061 in surface and subsurface contexts on the crest and upper slope of the south side of the same hill within the Activity Area (Bell 2019). These elevated landforms would have provided drier areas for camping locations within close proximity to freshwater and the resources associated with these waterways. The creek terrace and elevated landforms may also be more protected from destructive flooding events or agricultural activities such as ploughing and so archaeological deposits have the potential to remain in situ. All artefact distributions found within the geographic region are low to moderate density and are usually found between 0-400 millimetres depth. Artefacts are predominantly silcrete and quartz, but also include hornfels, basalt, quartzite, rhyolite, crystal quartz and trachyte. While surface artefacts may have been impacted by erosion and ploughing, within the geographic region the majority of subsurface artefacts were found in situ. Only one artefact was found in disturbed subsurface contexts within the developed area of Mansfield (Barker 2017).

Within the geographic region, the majority of scarred trees were recorded on the floodplain where there is no disturbance associated with past vegetation clearance and land use. Cultural scarring is found on mature Red Gum, River Red Gum and Box species, with the scars ranging in size and bark extracted for coolamons, shields and shelters.

Past land use within the Activity Area has included some land clearance, agricultural activities and the construction of a residence, sheds and associated driveway, as well as plantings. Past agricultural activities like ploughing, cropping and grazing of livestock may have shallowly disturbed the top soil deposits, leaving deeper soils and any potential archaeological deposits in the area in situ. Dam construction would have caused deeper disturbance to soil deposits and any archaeological materials present. However, several sections in the southern (Blue Range hill), eastern (Owens Creek), and north-western extents of the Activity Area have had very limited impact from post-Contact land use of clearance. The hill and Owens Creek in particular, has likely been used for pastoral activities since European farmers first arrived in the region. Areas of archaeological potential are subject to the varying levels of disturbance across the Activity Area from past land use, which has been limited to the above mentioned areas of past and more recent agricultural practices including ploughing and the construction of dams, and the construction of the residence and sheds. The hill and Owens Creek in particular, retain archaeological potential for less disturbed deposits of Aboriginal cultural material as there has been very little or no development in this part of the Activity Area. The past aerial photographs and the ecology survey (Biosis 2021) indicate there are a significant number of mature remnant trees that survived the vegetation clearance in the Activity Area.

Overall, the Activity Area has potential for low to medium density artefact distributions to be found within creek terrace and lower gentle hill slope landforms within 200–300 metres of Owens Creek, and on the crest and upper slope of the hill. These artefact distributions may be surface or subsurface, with the presence of surface artefacts likely to indicate the presence of subsurface artefact deposits. Artefacts are likely to be found in the silty soils above basal clay or mudstone deposits. While some paddocks and the lower slopes of the hill have been impacted by past vegetation clearance and agricultural land use, there are 63 remnant trees within the Activity Area (Biosis 2021). Therefore, the Activity Area also has high potential for scarred trees to be found where remnant trees are located.

The results of the Desktop Assessment have indicated that it is reasonably possible for unidentified Aboriginal cultural heritage material to be within the Activity Area. Therefore, as per r.62(1), it is necessary to undertake a Standard Assessment.

9 Standard Assessment

The following section contains the results of the Standard Assessment. The Standard Assessment was prepared in accordance with Regulation 63 and Clause 8(1), Schedule 2 of the Aboriginal Heritage Regulations 2018.

9.1 Aims

The aims of the Standard Assessment are to:

1. Identify and record any surface Aboriginal cultural heritage material.
2. Identify landforms with the potential for subsurface Aboriginal cultural heritage material.
3. Ascertain the extent of ground disturbance resulting from previous land use activities and natural processes.
4. Assess whether a Complex Assessment is required.

9.2 Methodology

The Standard Assessment was completed on 16th November 2021. The ground survey was supervised by Daniel Carpenter, Biosis Pty Ltd (see also Section 7.2 Participation in the conduct of the assessment). Also present were TLaWC field representatives Troy Wilkinson and Matt Antonopoulos.

For the purpose of the Standard Assessment, the Activity Area was divided into survey units (Table 9). This division enables better description of the two different landforms present within the Activity Area. Survey Unit 1 is the lower lying plains and Survey Unit 2 is the peaks and slope of up to 380 metres above sea level.

Table 9 Description of survey units in the Activity Area

Survey Units	Land form	Features	Size (sq/m)
Survey Unit 1	Plains	Current agricultural use	231,617.43
Survey Unit 2	Slopes and peaks	Current agricultural use. Mature eucalypts.	150,625.90

The Standard Assessment was completed using opportunistic methods by traversing the Activity Area on foot or by vehicle. As ground surface visibility was poor and limited pedestrian access was possible due to the presence of domestic animals, the survey targeted areas of potential that could be seen from the vehicle as well as mature native trees. Full survey coverage of the Activity Area was undertaken and views of the Activity Area were recorded using Nikon AW 120 camera. Field notes were also taken recording ground conditions, the vegetation type, landform and details of areas of archaeological potential for Aboriginal cultural heritage. The location of ground survey area is shown on Map 4.

Mature indigenous trees were inspected to determine if scars, carvings or other modifications were present and likely artefacts were inspected with a 10x hand lens for evidence of human modification.

Following the completion of the ground survey, discussions were held with the RAP to establish whether a Complex Assessment was required.

9.3 Results

9.3.1 Survey Unit 1

Table 10 Survey Unit 1

Survey team	
Heritage advisor	Daniel Carpenter
Aboriginal representatives	Troy Wilkinson and Matt Antonopoulos
Methodology	
Survey method	Opportunistic with a combination of vehicle and pedestrian survey
Date/s survey completed	16 November 2021
Attributes	
Limitations/ obstacles	Poor ground surface visibility, accessibility (i.e. presence of livestock)
Mature trees	A small number of mature native trees were present in SU1. These were all individually examined and no signs of cultural scarring was noted.
Caves or rock shelters	None found during the Standard Assessment
Assessment of archaeological potential	
One area of archaeological potential was identified in SU1. This was the area to the east of the low rise (SU2) and around the creek. This location would have provided access to both the fresh water source and the elevated point of the rise. If any lithic material was deposited at the top of the low rise, taphonomic factors would have caused these lithics to be washed downhill towards the creek. This location is marked as AoP1 on Map 4.	
Aboriginal Cultural Heritage	
No Aboriginal material culture was located in SU1.	

Discussion of Results of Survey Unit 1

Survey Unit 1 has been defined as the non-elevated areas mostly in the northern half of the Activity Area (Photograph 1), which includes the low-lying areas along Owens Creek (Photograph 2) and a treed area in the north-west corner (Photograph 3). At the time of the survey, SU1 had heavy grass cover with poor ground surface visibility (GSV 1%, Photograph 4). Owens Creek runs north to south close to the eastern border of the property, with a tributary marked on the map running east to west, though no evidence of this tributary was noted during the survey. Erosion is evident along the creek bank and it is likely that this has caused the creek to move its alignment over time (Photograph 5 & Photograph 6).

The land is currently being used for animal husbandry, with cows, sheep and alpacas being present on the property. The survey participants intended to survey the Activity Area on foot, however, after the participants became aware of the presence of livestock and particularly alpacas, it was decided to undertake the survey by vehicle.

The majority of the mature eucalypts that are present in the Activity Area are in SU2, although some were within SU1. Each of these were individually examined by the participants of the Standard Assessment and no signs of cultural scarring was found.

There is a house present on the north-east corner of SU1 with associated driveway and short internal road for animal transportation vehicles to access the property. Dumping of building waste is evident in a drainage line on the north-west corner of SU1, and judging from the types of material, dumping at this location had been ongoing for some decades (Photograph 7 & Photograph 8). Apart from the noted disturbances, SU1 appears to have been relatively undisturbed.

No Aboriginal material culture was located in SU1, however, one area of archaeological potential (AOP1) was noted (Table 10, Photograph 2). As ground surface visibility was poor (1%), if surface artefacts were present, it is unlikely that they would have been detected by the participants.



Photograph 1 Overview of SU1 from the northern border of the Activity Area with SU2 in the background (D.Carpenter, 16/11/2021, facing south)



Photograph 2 Border between SU1 and SU2 in AOP1 between Owens Creek and the low rise (D.Carpenter, 16/11/2021, facing north)



Photograph 3 Treed area in the north-west of SU1 (D.Carpenter, 16/11/2021, facing north)



Photograph 4 Typical ground surface visibility in SU1 (D.Carpenter, 16/11/2021)



Photograph 5 Owens Creek showing erosion of banks (D.Carpenter, 16/11/2021, facing west)



Photograph 6 Owens Creek showing erosion of banks (D.Carpenter, 16/11/2021, facing south)



Photograph 7 Building material dumping in drainage channel in north-west corner of SU1 (D.Carpenter, 16/11/2021, facing west)



Photograph 8 Building material dumping in drainage channel in north-west corner of SU1 (D.Carpenter, 16/11/2021, facing north-west)

9.3.2 Survey Unit 2

Table 11 Survey Unit 2

Survey team		
Heritage advisor	Daniel Carpenter	
Aboriginal representatives	Troy Wilkinson and Matt Antonopoulos	
Methodology		
Survey method	Opportunistic with a combination of vehicle and pedestrian survey	
Date/s survey completed	16 November 2021	
Attributes		
Limitations/ obstacles	Poor ground surface visibility, accessibility (i.e. presence of livestock)	
Mature trees	A large number (60 - 70) of mature native trees were present in SU1. These were all individually examined, and no signs of cultural scarring was noted.	
Caves or rock shelters	None found during the Standard Assessment	
Assessment of archaeological potential		
Five areas of archaeological potential were identified in SU2. These are marked on Map 4 and are listed below:		
Area of Potential	Level of potential	Description
AoP2:	Moderate/high	The low rise overlooking Owens Creek. Two mature eucalypts without cultural scarring.
AoP3:	Moderate	Flat area on the rise on the western side of SU2. Several mature eucalypts present.
AoP4:	Moderate	Slope of rise marked between the 340 and 370 metre contours. Many mature eucalypts present.
AoP5:	Moderate/high	Flat area on top of the rise, marked between the 370 and 380 metre contours. Several mature eucalypts present.
AoP6:	High	Peak of hill at the southern extend of Activity Area, marked at the 380 metre contour. Characterised by its elevation and the presence of exposed rocks.
Aboriginal Cultural Heritage		
No Aboriginal material culture was located in SU1 during the Standard Assessment.		

Discussion of Results of Survey Unit 2

Survey Unit 2 is characterised by the, slopes and peaks to the south of the Activity Area (Photograph 9, Photograph 10, Photograph 13 and Photograph 14) as well as low rise overlooking Owens Creek (Photograph 15 and Photograph 16).

The land is currently being used for animal husbandry, with cows, sheep and alpacas having access to SU2, though seeming to prefer the lower lying areas. The survey continued as a combination of vehicle and pedestrian access in the same manner as SU1. The slope and peak of the rise to the south of SU2 was more intensively surveyed on foot (Photograph 11 and Photograph 12). At the time of the survey, SU1 had heavy grass cover with poor ground surface visibility (GSV 1%, Photograph 17 and Photograph 18).

Evidence of earth or rock removal from the edges of slopes was noted in two locations in SU2. This removal was grassed over and was not recent (Photograph 19 and Photograph 20). Evidence of historic tree removal was noted throughout SU2 (Photograph 21 and Photograph 22). Apart from the tree removal and earth removal in discreet locations, SU2 appears to have been largely undisturbed. Numerous mature eucalypts (60-70) were present in SU2, mostly on the slope leading to the peak of the rise at the southern extent of SU2. Individual examination of these trees showed no signs of cultural scarring.

No Aboriginal material culture was located during the Standard Assessment. Five areas of potential were noted by the participants as having moderate to high likelihood of having Aboriginal material culture (Table 11). As ground surface visibility was poor (1%), if surface artefacts were present, it is unlikely that they would have been detected by the participants.



Photograph 9 Summit of rise at the southern end of SU2 (AoP5 & 6) (D.Carpenter, 16/11/2021, facing north)



Photograph 10 Summit of rise at the southern end of SU2 (AoP5 & 6) (D.Carpenter, 16/11/2021, facing west)



Photograph 11 Middle of rise at the southern end of SU2 (AoP4) (D.Carpenter, 16/11/2021, facing north)



Photograph 12 Middle of rise at the southern end of SU2 (AoP4) (D.Carpenter, 16/11/2021, facing south)



Photograph 13 Summit of rise at the southern end of SU2 (AoP5 & 6) (D.Carpenter, 16/11/2021, facing north-west)



Photograph 14 Summit of rise at the southern end of SU2 (AoP5 & 6), showing poor visibility with tree cover (D.Carpenter, 16/11/2021, facing north)



Photograph 15 Low rise (AoP2) (D.Carpenter, 16/11/2021, facing north)



Photograph 16 Low rise (AoP2) (D.Carpenter, 16/11/2021, facing south)



Photograph 17 Typical ground surface visibility in SU2 (D.Carpenter, 16/11/2021)



Photograph 18 Typical ground surface visibility in SU2 (D.Carpenter, 16/11/2021)



Photograph 19 Evidence of earth removal on low rise (AoP2) in SU2 (D.Carpenter, 16/11/2021, facing north)



Photograph 20 Evidence of earth removal on low rise (north of AoP3, marked in red) in SU2 (D.Carpenter, 16/11/2021, facing south-west)



Photograph 21 Evidence of historic tree removal in SU2 Typical ground surface visibility in SU2 (D.Carpenter, 16/11/2021, facing north-east)



Photograph 22 Evidence of historic tree removal in SU2 Typical ground surface visibility in SU2 (D.Carpenter, 16/11/2021, facing south)

9.4 On-site discussions with field representatives

Discussions with the field representative about traditional knowledge of the area occurred during the assessment. The participants stated that they had no specific knowledge of the Activity Area. They noted that the whole Activity Area was of significance and the elevated areas and particularly the highest point (AoP6) was of high significance. The field representatives noted that it was common practice for Taungurung people to be watchful for smoke, as this could indicate the campfires of visitors or intruders on their Country. It was discussed between the participants that these elevated areas may have provided a good vantage point to look for campfire smoke, depending on the tree cover at the time. They noted that because few archaeological projects had been conducted in the vicinity, subsurface testing was important to better understand the general area as well as the Activity Area.

9.5 Effective Survey Coverage

The survey effort assessed each survey unit within the Activity Area and factored in variables such as grass and how these have affected ground surface exposure. Both survey units were heavily covered in grass with very minimal ground exposure that would reveal and surface lithics. It has been estimated that ground surface visibility was approximately 1% across both survey units.

The effective survey coverage calculation assesses the average percentage of ground surface visibility across the areas covered during survey within the Activity Area. The Activity Area covers an area measuring 38,264 square metres and all of the total Activity Area was physically surveyed. The observed GSV was an average of 1% due to the dense grass cover. The effective survey coverage calculation for the entire Activity Area was 1% and 3,826.5 square metres.

9.6 Post-Standard Assessment revision of areas of archaeological potential

After the completion of the Standard Assessment a slope analysis was performed to review the areas of archaeological potential identified in the field during the Standard Assessment. Biosis's GIS team used a

digital elevation model (DEM) to define any slope in the Activity Area that was greater than a 15 degree slope as this would have been unlikely to have been a suitable place for habitation and lithic deposits in these locations were unlikely. This information was presented to the TLaWC team in the Complex Assessment methodology meeting on 2 March 2023 (see Section 7.4.5) and was used for the basis to develop the Complex Assessment methodology, which was endorsed by TLaWC. The slope analysis and results can be seen in Map 4.2 and Map 4.3.

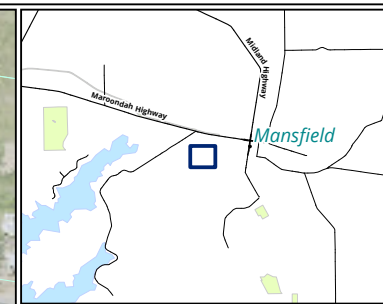
9.7 Conclusions from the Standard Assessment

The Standard Assessment was undertaken on 16 November 2021 by Daniel Carpenter (Biosis Pty Ltd) with the participation of Taungurung field representatives Troy Wilkinson and Matt Antonopoulos. An opportunistic survey method was employed with a combination of vehicular and pedestrian survey.

For reporting purposes, the Activity Area was divided into two survey units, with SU1 being defined as the lower-lying plains landform and SU2 being defined as the low rise, slopes and peak to the south of the Activity Area. Up to 70 mature eucalypts were present in the Activity Area, mostly in SU2. These were all individually examined and none were found to have signs of cultural scarring. No Aboriginal material culture was located during the Standard Assessment. Six areas of archaeological potential were identified.

Limitations for the assessment included the presence of domestic animals, which prompted the decision to conduct some of the survey by vehicle, and heavy grass cover that caused low ground surface visibility. Disturbance noted was the presence of a house, internal roads and outbuildings in the north-east corner of SU1, historic tree removal, excavations for soil or rock removal, construction debris dumping and erosion of the creek bank.

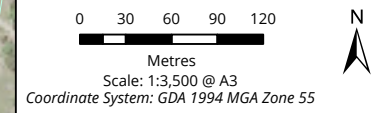
Given the identified areas of archaeological potential, the noted significance of the Aboriginal representatives and the limitation of poor ground surface visibility, it is reasonably likely that Aboriginal material culture is present in either surface or subsurface contexts within the Activity Area. Therefore, as per Regulation 64(1), a Complex assessment is required.



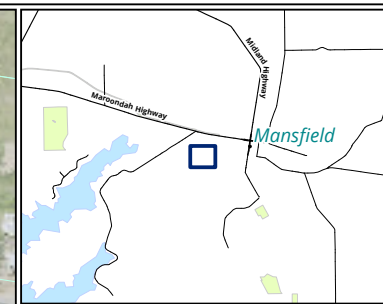
Legend

- Activity Area
 - Area of potential prior to slope analysis
 - Areas of ground disturbance
 - Survey Unit 1
 - Survey Unit 2
 - Current parcel boundary
- Topography**
- Contour 10m interval
 - River or creek
 - Lake/Dam

Map 4.1 Results of the Standard Assessment

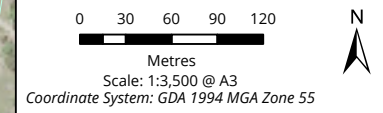


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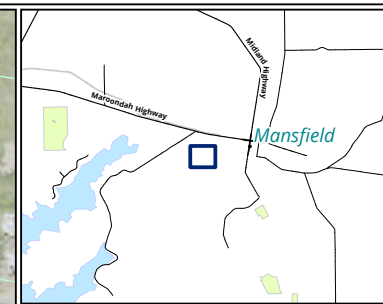
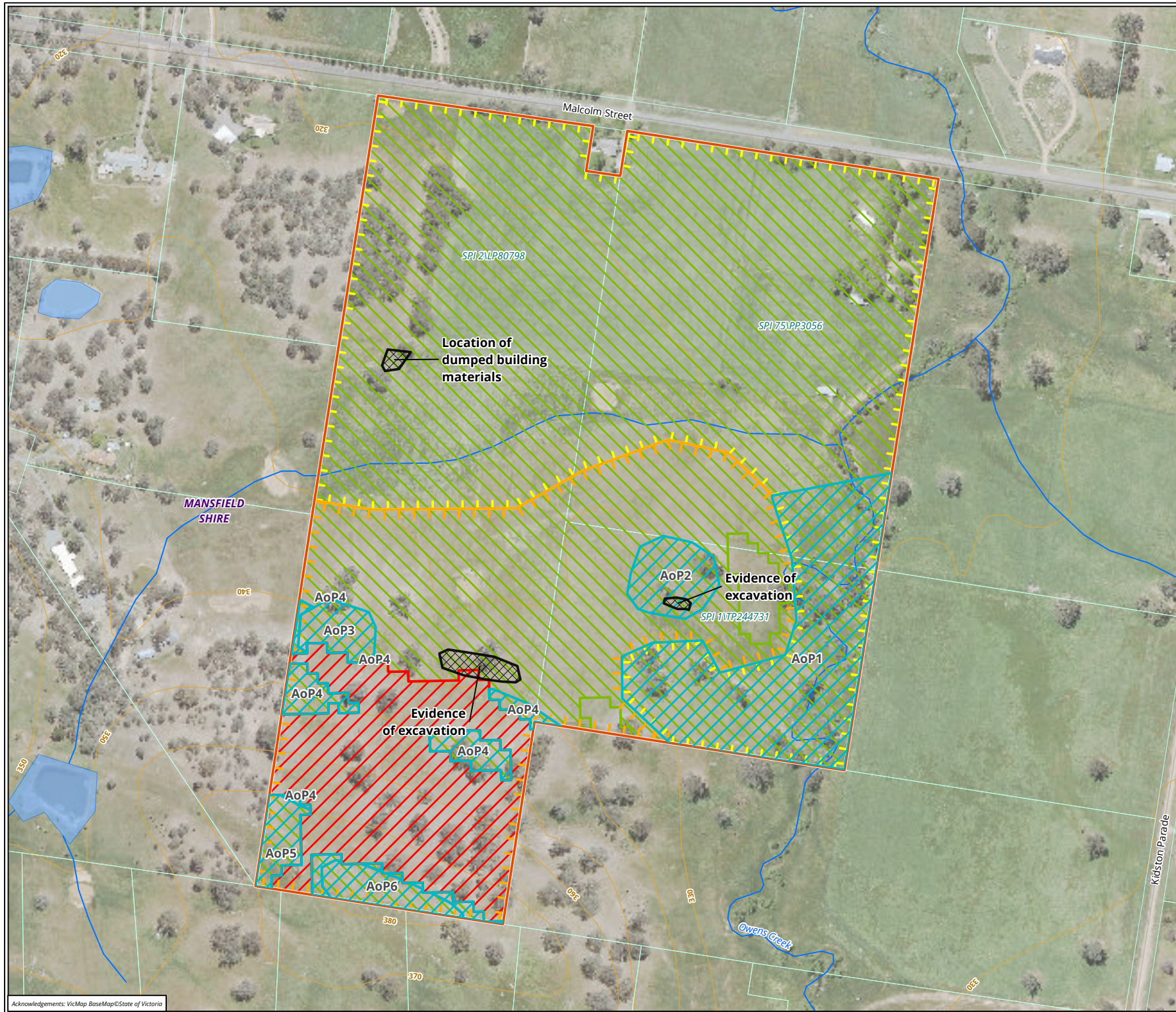


- Legend**
- Activity Area
 - Area of potential - Slope <15°
 - Slope ≤15° - AoP retained
 - Slope >15° - AoP removed
 - Areas of ground disturbance
 - Survey Unit 1
 - Survey Unit 2
 - Current parcel boundary
- Topography**
- Contour 10m interval
 - ~ River or creek
 - Lake/Dam

Map 4.2 Results of the Standard Assessment

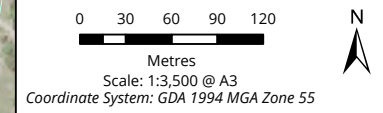


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- Legend**
- Activity Area
 - Slope $\leq 15^\circ$ - AoP retained
 - Slope $> 15^\circ$ - AoP removed
 - Area of potential - Slope $< 15^\circ$
 - Areas of ground disturbance
 - Survey Unit 1
 - Survey Unit 2
 - Current parcel boundary
- Topography**
- Contour 10m interval
 - ~ River or creek
 - Lake/Dam

Map 4.3 Results of the Standard Assessment



Matter: 35858, CHMP: 18293,
 Date: 01 March 2024,
 Prepared for: DC, Prepared by: NM, Last edited by: nmatheis
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10 Complex Assessment

The following section contains the results of the Complex Assessment. The Complex Assessment was prepared in accordance with Regulation 65 and Clause 9, Schedule 2 of the Aboriginal Heritage Regulations 2018.

10.1 Aims

The aims of the Complex Assessment are to:

1. Investigate the areas of archaeological potential.
2. Identify and record any subsurface Aboriginal cultural heritage material.
3. Ascertain the nature and extent of any Aboriginal places.
4. Ascertain the extent of ground disturbance resulting from previous land use activities and natural processes.

10.2 Methodology

The Complex Assessment was completed over four non-consecutive weeks and was directed by the results of the Desktop and Standard Assessments and the scope of the proposed activity. The methodology for subsurface testing was developed in consultation with Taungurung Land and Water Council to test areas using the TLaWC proposed testing methodology of 50 metre pit spacing which is reduced to 20 metres in areas of archaeological potential within the impact zone of the proposed activity. The subsurface testing was supervised by Daniel Carpenter and Eleanor Riggall (Biosis Pty Ltd) and was conducted according to proper archaeology practise as per Regulation 65(3) of the *Aboriginal Heritage Act 2006*. The following excavation techniques were employed.

The controlled excavation of 1x1 metre Test Pits (TPs) determined the stratigraphy and general subsurface nature of the Activity Area on the plains and elevations and rises landform that was likely to contain Aboriginal cultural heritage. Test Pit excavation also investigated the nature of archaeological deposits where subsurface artefacts were identified.

Machine Trenches (MTs) measuring 2x1 metres were completed by uncontrolled excavation within the areas of low to moderate archaeological potential.

The controlled manual excavations involved utilisation of a trowel, hand pick and shovel. The mechanical excavations were conducted with an excavator utilising a 1 metre wide bucket. All subsurface testing entailed excavation in arbitrary 100 millimetre spits or until change of context was apparent. Excavation of the landform evaluation test pits continued into basal clay for a depth of 360 millimetres to confirm culturally sterile stratigraphy. All other excavations continued to the maximum depth of 1.2 metres. All excavated soil from the controlled excavations was screened through 5 millimetre hand sieves; all excavated soil from the mechanical excavations was screened through 5 millimetre mechanical sieves. Spoil heaps were placed between 2-5 metres downwind of excavations and all spoil was returned to their point of origin upon completion of excavation records. A subsurface testing log was recorded with stratigraphic details including soil colour (Munsell), pH and description (Appendix 6). Each area of excavation was spatially recorded using a Trimble R1 GNSS receiver DGPS. The locations of subsurface testing and testing methods are shown on Map 5.

Locations of identified Aboriginal cultural heritage material were recorded in accordance with FP-SR's (2008, 2013) guidelines. The extent testing that forms part of these guidelines was not undertaken as the Sponsor elected to avoid areas where Aboriginal cultural heritage was located.

Following the completion of the subsurface testing, discussions were held with TLaWC representatives to establish cultural heritage management requirements for the Activity Area (refer to 7.3 Consultation in relation to the conditions).

10.2.1 Limitations

MT 22 had its position shifted slightly to the west due to the fence that was an obstacle in completing the trench in its proposed location. The trench was moved 10 metres west in order to avoid the electric fence that posed safety concerns with the machine and TLaWC representatives.

Excavation for MT17 ceased at 1200 millimetres depth due to WHS concerns (possible cave-in). As the Sponsor elected to avoid this area, further excavation was not undertaken.

As the methodology was initially focussed on areas where impacts would occur (building envelopes and roadway), large parts of the Activity Area were not subject to subsurface testing. Areas where Aboriginal cultural heritage was located were avoided and therefore extent testing was not undertaken. The final building envelopes location and extent were focussed on areas that were shown to not contain Aboriginal cultural heritage.

10.3 Complex Assessment Participants

The Complex Assessment was supervised by Daniel Carpenter and Eleanor Riggall (Biosis Pty Ltd) and completed on 14, 15, 16, 17, 27, 28, 29, 30 and 31 of March and 17, 18, 19 and 20 of April 2023 and 30 October and 31 October 2023 (15 days). The field participants are listed in Table 12 and Section 7.2. Requests were extended to all of the Aboriginal representatives for any oral history related to the area, none could be provided at the time of the field assessment.

Table 12 Field Participants

Subsurface testing team	
Heritage advisor	Daniel Carpenter and Eleanor Riggall
Aboriginal representatives	Ashley Wilkinson, Matt Antonopoulos, Georgia Cunningham, Daniel Young, Robjeet Singh, Tahnee Honeysett and Jack Honeysett

10.4 Results

A total of 39 subsurface archaeological investigations were undertaken as part of the Complex Assessment; 37 2x1 metre mechanical trenches and two 1x1 metre manual test pits. The subsurface testing took place in areas of high to low archaeological potential which were identified during the Standard Assessment on the two different landforms of plains (SU 1) and low rises and elevations (SU 2). Lithic artefacts were identified in MT 15, 16, 17, 18, 20, 30, 31, 32, 33 and MT 35.

As the stratigraphy varied between some trenches in each of the two sections of the Activity Area, descriptions of the two manual 1x1 metre trenches has been presented here (TP1 and TP2), along with a

selection of the mechanical trenches that had Aboriginal artefacts present on each distinct landform and differing stratigraphy (MT 7, MT 15, MT 16, MT 17, MT 18, MT 20, MT 30, MT 31, 32, 33 and 35). Full details about the stratigraphy of each trench can be found in Appendix 6.

Table 13 Number, type and location of archaeological trenches

	Survey Unit 1 (Plains)	Survey Unit 2 (Low rises and elevations)	Total
2x1 metre mechanical trenches	16	21	37
1x1 metre manual trenches	1	1	2
Total	17	22	39

10.4.1 Survey Unit 1 (Plains)

Survey Unit one was the northern section of the Activity Area that was delineated in the Standard Assessment including all the non-elevated landforms such as low-lying areas along Owens Creek and a treed area in the north-west corner.

Aboriginal cultural heritage was located in MT20 (Table 15, Photograph 25 and Photograph 26), MT30 (Table 16, Photograph 27 and Photograph 28, MT31 (Table 17, Photograph 29 and Photograph 30), MT32 (Table 18, Photograph 31 and Photograph 32) and MT33 (Table 19, Photograph 33 and Photograph 34) and detailed descriptions of these trenches and their stratigraphy has been included below. Details of all trenches can be found in Appendix 6.

Test Pit 2

Test Pit 2 was excavated within Survey Unit 1 within the plains of the Activity Area on the floodplains nearby Owens Creek. The location of the Test Pit had very poor GSV (<5%) due to grass cover. The details of excavations are presented in Table 14. No Aboriginal cultural material was identified in Test Pit 2.

Table 14 Test Pit 2

Attributes			
Coordinates	E: 416427.22 N: 5898058.43		
Size (sq/m)	1x1 metre		
Survey unit 1	Plains and low elevation landforms		
Stratigraphy	Context	Depth (mm)	Description
	1	0-60	Dry, medium compacted, fine silt with grass root inclusions
	2	60-300	Very compacted, cemented silty clay
	3	300-320(360)	Very compacted, cemented clay base
Aboriginal Cultural Heritage			
No Aboriginal cultural material was located in TP2.			

Test Pit 2

West Facing

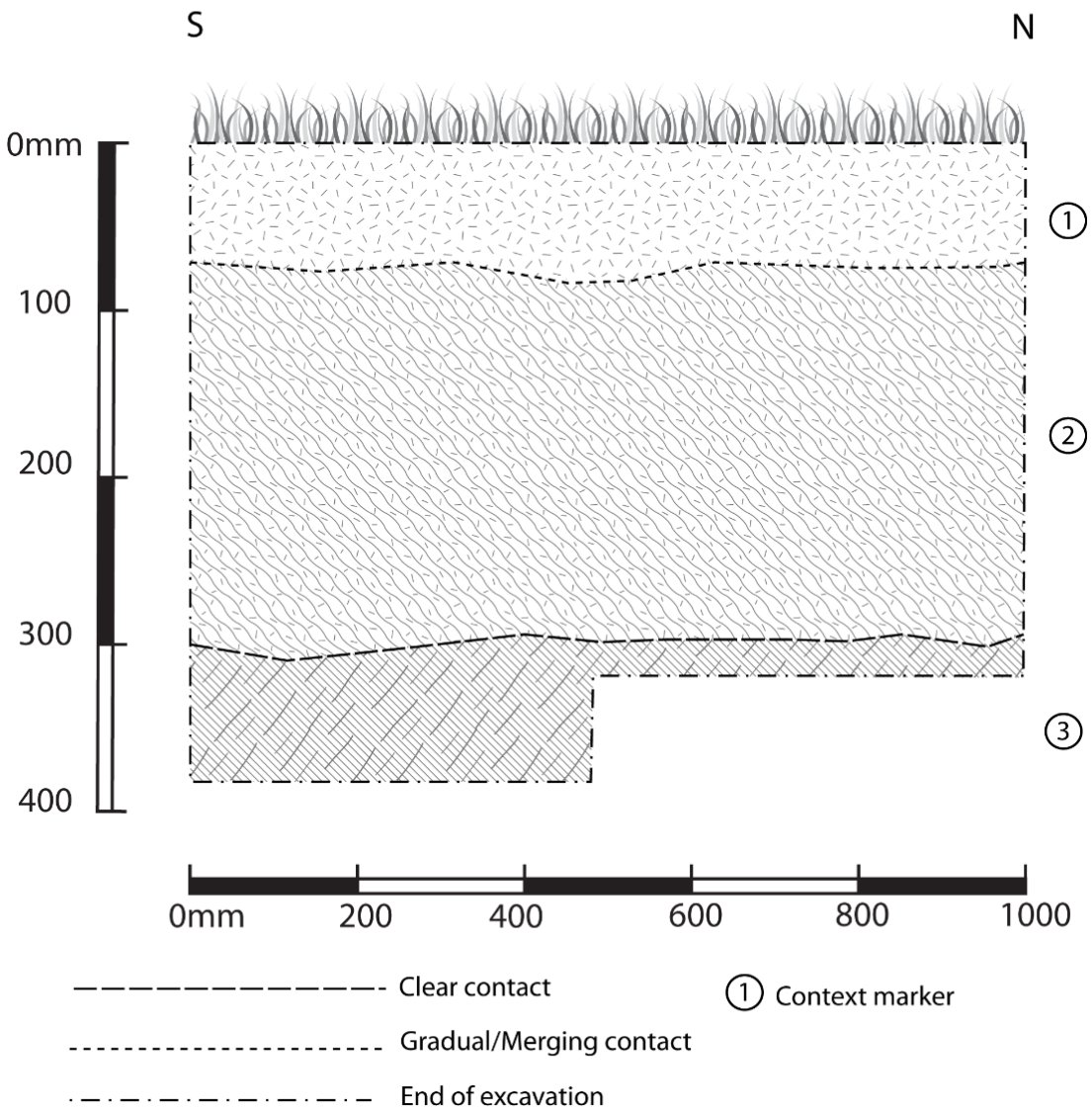


Figure 11 Stratigraphic illustration of Test Pit 2 (western wall)



Photograph 23 **Test Pit 2 (D. Carpenter 14/3/23)**



Photograph 24 **Test Pit 2 (D. Carpenter 14/3/23, facing west)**

Mechanical Trench 20

Table 15 Mechanical Trench 20

Attributes			
Coordinates	E: 416427.22 N: 5898058.43		
Size (sq/m)	2x1 metre		
Survey unit 1	Plains and low elevation landform		
Stratigraphy	Context	Depth (mm)	Description
	1	0-120	Damp, loose, soft clayey silt with some fine-grained sand content. Organic layer with inclusions of grass roots. Merging contact.
	2	120-390	Dry, slightly compacted, clayey silt. Inclusions of gravel and natural quartz. Merging contact.
	3	390-450	Dry, slightly compacted, concreted, silty clay with increasing clay content with depth. Inclusions of natural quartz. Diffuse level contact.
	4	450-500+	Dry, firm, compacted clay base.
Aboriginal Cultural Heritage			
A single medial silcrete flake was located in MT 20 at a depth of 200-300 millimetres and was registered as part of VAHR 8123-0078 (Owens Creek LDAD).			

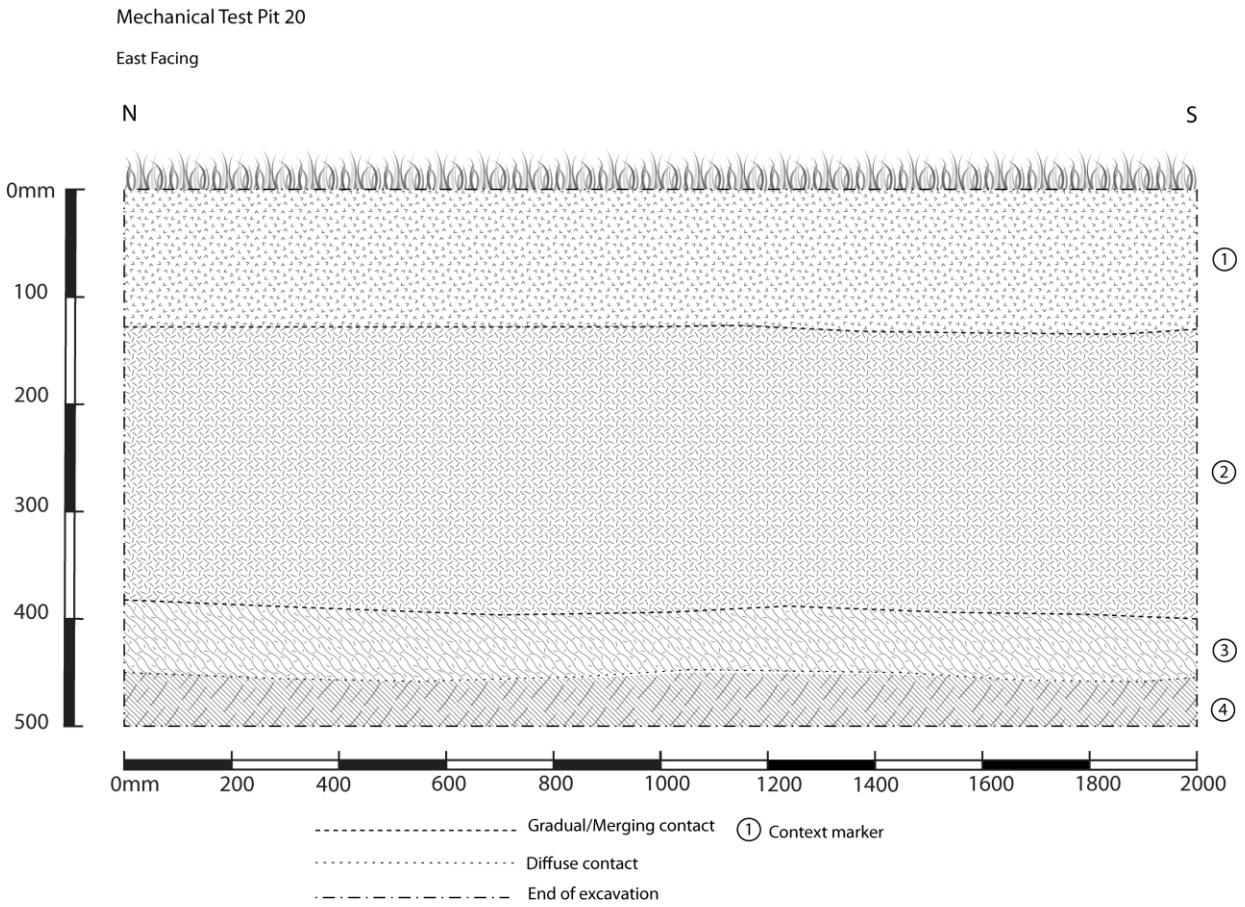


Figure 12 Stratigraphic illustration of MT 20 (eastern wall)



Photograph 25 Overview of MT 20 (E.Riggall 30/3/23, facing east)



Photograph 26 East trench wall of MT 20 (E. Riggall, 30.3.23)

Mechanical Trench 30

Table 16 Mechanical Trench 30

Attributes			
Coordinates	E: 417316.32 N: 5898067.18		
Size (sq/m)	2x1 metre		
Survey unit 1	Plains and low elevation landform		
Stratigraphy	Context	Depth (mm)	Description
	1	0-160	Loose, slightly damp organic layer silt with grass roots, glass fragments and plastic inclusions. Merging contact.
	2	160-420	Loose, dry clayey silt with slight sand content and gravel, charcoal and buckshot inclusions. Clear level contact.
	3	420+	Very dry, compacted clay base.

Aboriginal Cultural Heritage

There were 48 artefacts identified in MT 30 which were manufactured from silcrete, quartz and basalt. These were identified at depths of 0 to 300 millimetres. No extent testing was undertaken for MT 30. These artefacts were registered as artefact scatter VAHR 8123-0080 (Owens Creek 2).

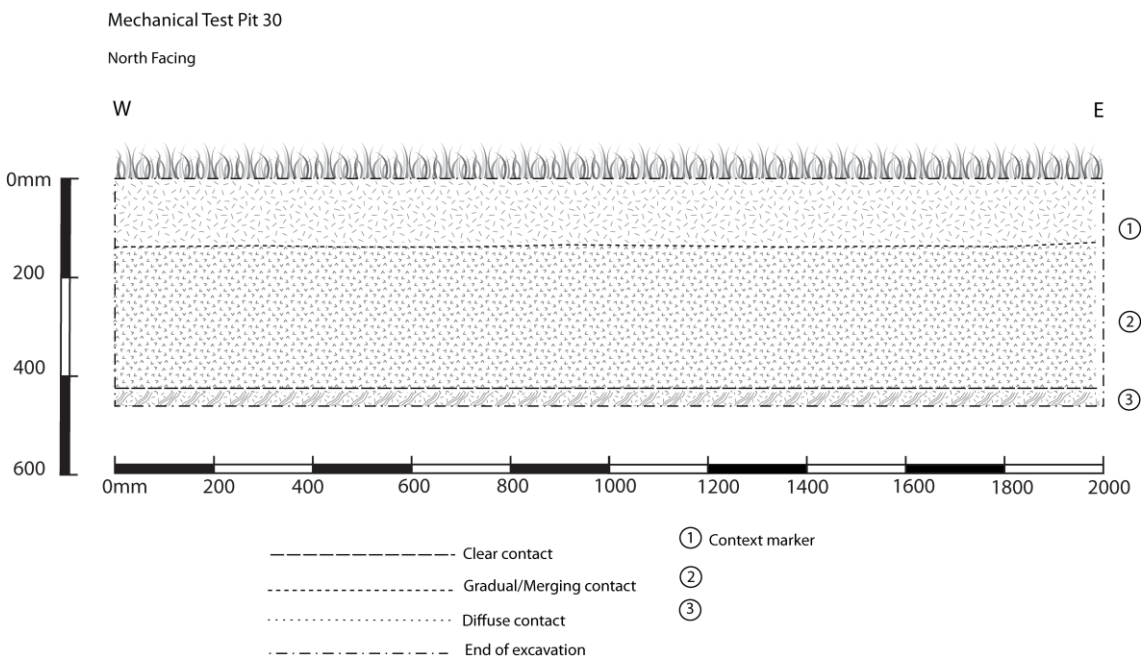


Figure 13 Stratigraphic illustration of MT 30 (northern wall)



Photograph 27 Overview of MT 30 (E.Riggall 19/4/23, facing north)



Photograph 28 Trench wall of MT 30 (E. Riggall, 19/4/23, facing north)

Mechanical Trench 31

Table 17 Mechanical Trench 31

Attributes			
Coordinates	E: 417316.32 N: 5898067.18		
Size (sq/m)	2x1 metre		
Survey unit 1	Plains and low elevation landform		
Stratigraphy	Context	Depth (mm)	Description
	1	0-110	Loose, slightly damp silt (organic layer) with grass roots and glass fragments inclusions. Diffuse level contact.
	2	110-360	Loose, very dry clayey, slightly sandy silt with charcoal, gravel and buckshot inclusions. Merging contact.
	3	360-450	Very dry, slightly compacted silty clay with gravel and buckshot inclusions. Clear level contact.
	4	450+	Very dry, very compacted clay base.
Aboriginal Cultural Heritage			
These 12 artefacts were manufactured from raw materials crystal quartz, quartz, silcrete and basalt identified between depths of 0 to 200 millimetres in MT 31. These artefacts were registered as artefact scatter VAHR 8123-0080 (Owens Creek 2).			

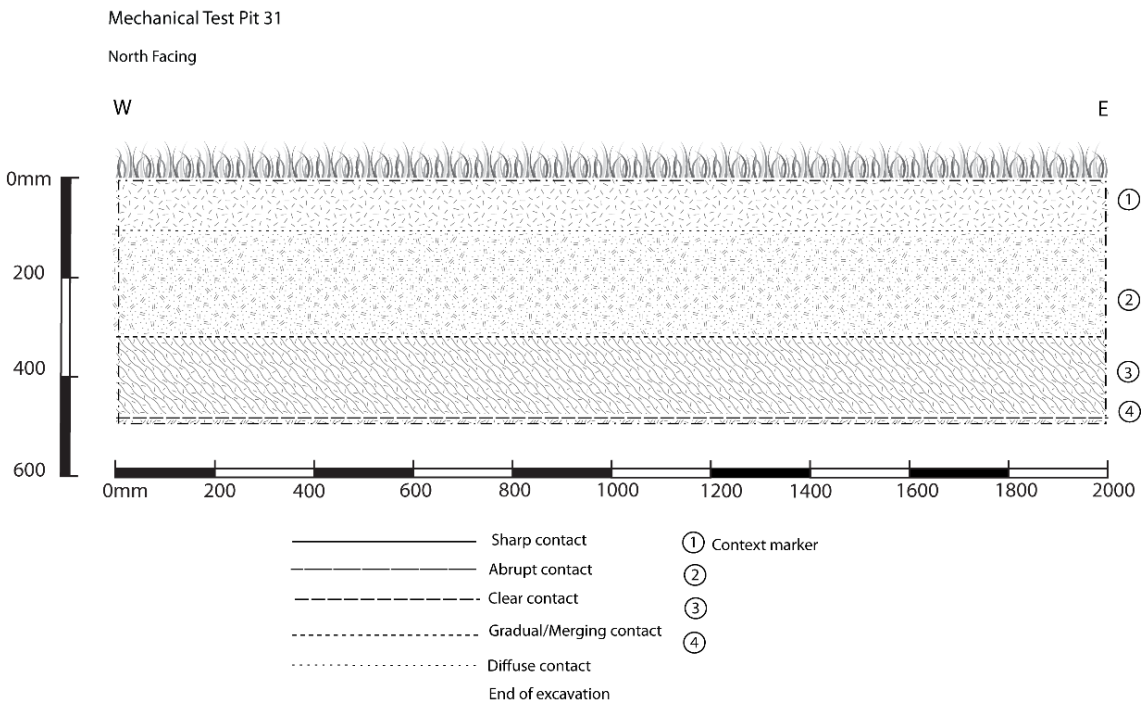


Figure 14 Stratigraphic illustration of MT 31 (northern wall)



Photograph 29 Overview of MT 31 (E.Riggall 20/4/23, facing north)



Photograph 30 Trench wall of MT 31 (E. Riggall, 20/4/23, facing north)

Mechanical Trench 32

Table 18 Mechanical Trench 32

Attributes			
Coordinates	E: 417316.32 N: 5898067.18		
Size (sq/m)	2x1 metre		
Survey unit 1	Plains and low elevation landform		
Stratigraphy	Context	Depth (mm)	Description
	1	0-80	Loose, slightly damp silt (organic layer) with grass roots and glass fragments inclusions. Diffuse level contact.
	2	80-300	Loose, very dry clayey, slightly sandy silt with gravel and buckshot inclusions. Merging contact.
	3	300-370	Very dry, slightly compacted silty clay with gravel and buckshot inclusions. Clear level contact.
	4	370+	Very dry, very compacted clay base.
Aboriginal Cultural Heritage			
23 artefacts manufactured from silcrete, crystal quartz and quartz were identified between depths of 0 to 300 millimetres in MT 32. These artefacts were registered as part of artefact scatter VAHR 8123-0080 (Owens Creek 2).			

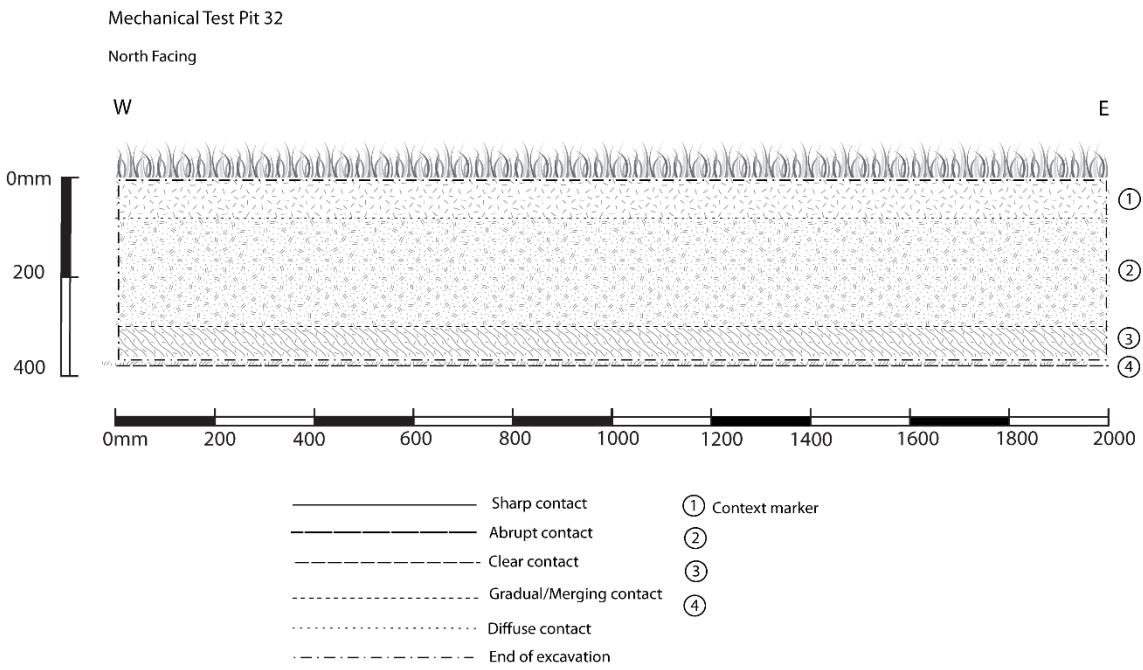


Figure 15 Stratigraphic illustration of MT 32 (northern wall)



Photograph 31 Overview of MT 32 (E.Riggall 20/4/23, facing north)



Photograph 32 Trench wall of MT 32 (E. Riggall, 20/4/23, facing north)

Mechanical Trench 33

Table 19 Mechanical Trench 33

Attributes			
Coordinates	E: 416427.22 N: 5898058.43		
Size (sq/m)	2x1 metre		
Survey unit 1	Plains and low elevation landform		
Stratigraphy	Context	Depth (mm)	Description
	1	0-100	Very dry, loose silt topsoil (organic layer) with grass roots and occasional quartz and gravel inclusions
	2	100-380	Very dry, slightly compacted clayey silt with increasing clay content with depth. Occasional gravel, buckshot and waterworn pebbles
	3	380-400	Slightly moist, compacted clay base.
	4	400+	End of excavation.
Aboriginal Cultural Heritage			
One siltstone angular fragment and one siltstone medial flake were identified in MT 33 between 200 to 300 millimetres. These artefacts were registered as part of VAHR 8123-0080 (Owens Creek 2).			

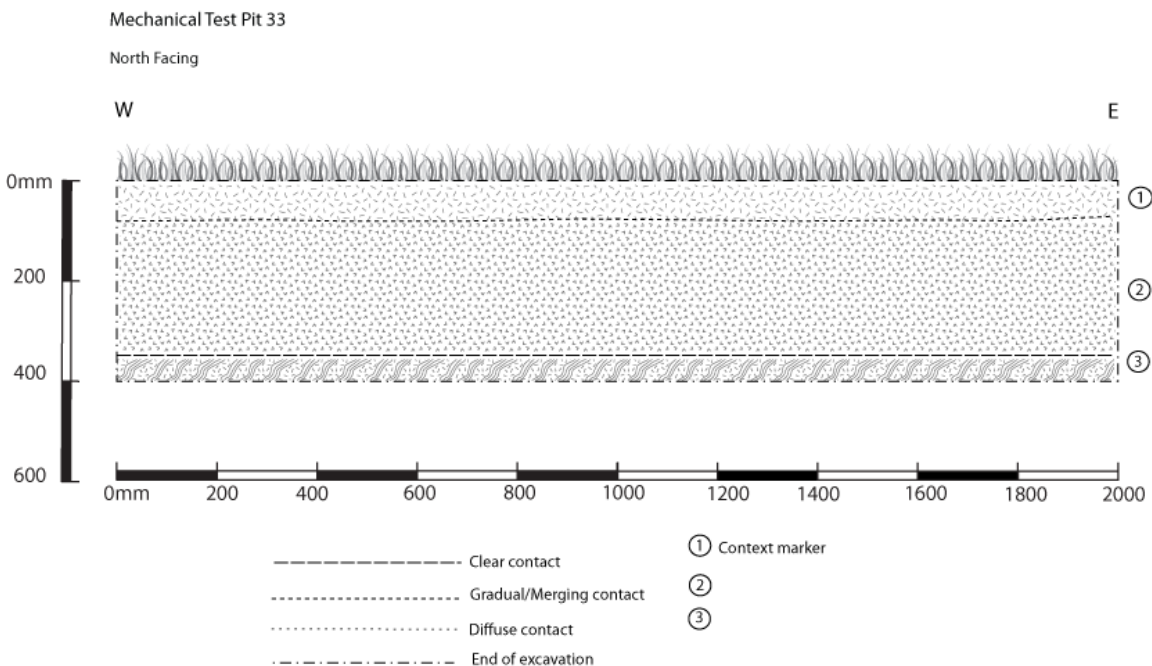


Figure 16 Scaled section drawing of MT 33 (north profile)



Photograph 33 Overview of MT 33 (E.Riggall, 30/10/23, facing south)



Photograph 34 Trench wall of MT 33 (E. Riggall, 30/10/23, facing south)

10.4.2 Survey Unit 2 (Slopes and peaks)

Survey Unit Two comprises of the slopes and peaks to the south of the Activity Area as well as low rise overlooking Owens Creek. Aboriginal cultural material was identified in TP 1 (Table 20 and Photograph 35), MT 15 (Table 21, Photograph 37 and Photograph 38), MT 16 (Table 22, Photograph 39 and Photograph 40), MT 17 (Table 23, Photograph 41 and Photograph 42), MT 18 (Table 24, Photograph 43 and Photograph 44) and MT 35 (Table 25, Photograph 45 and Photograph 46). Details of these pits positive for Aboriginal cultural material has been included below. Details of all trenches can be found in Appendix 6.

Test Pit 1

Test Pit 1 was excavated within Survey Unit 2 on the slope and rise overlooking Owens Creek to the south of the Activity Area. The location of Test Pit 2 was selected due to its location along the ridge of the slope overlooking the landscape and Owens Creek. The details of Test Pit 1 are presented in Table 20. No Aboriginal cultural material was identified in Test Pit 1.

Table 20 Test Pit 1

Attributes			
Coordinates	E: 416427.22 N: 5898058.43		
Size (sq/m)	1x1 metre		
Survey unit 2	Slopes and peaks as well as a low rise overlooking Owens Creek		
Stratigraphy	Context	Depth (mm)	Description
	1	0-60	Dry, medium compacted, fine silt with grass root inclusions
	2	60-240	Very compacted, cemented silty clay
	3	240-320 (360 SW)	Very compacted, cemented clay base
Aboriginal Cultural Heritage			
No Aboriginal cultural material was located in TP1.			

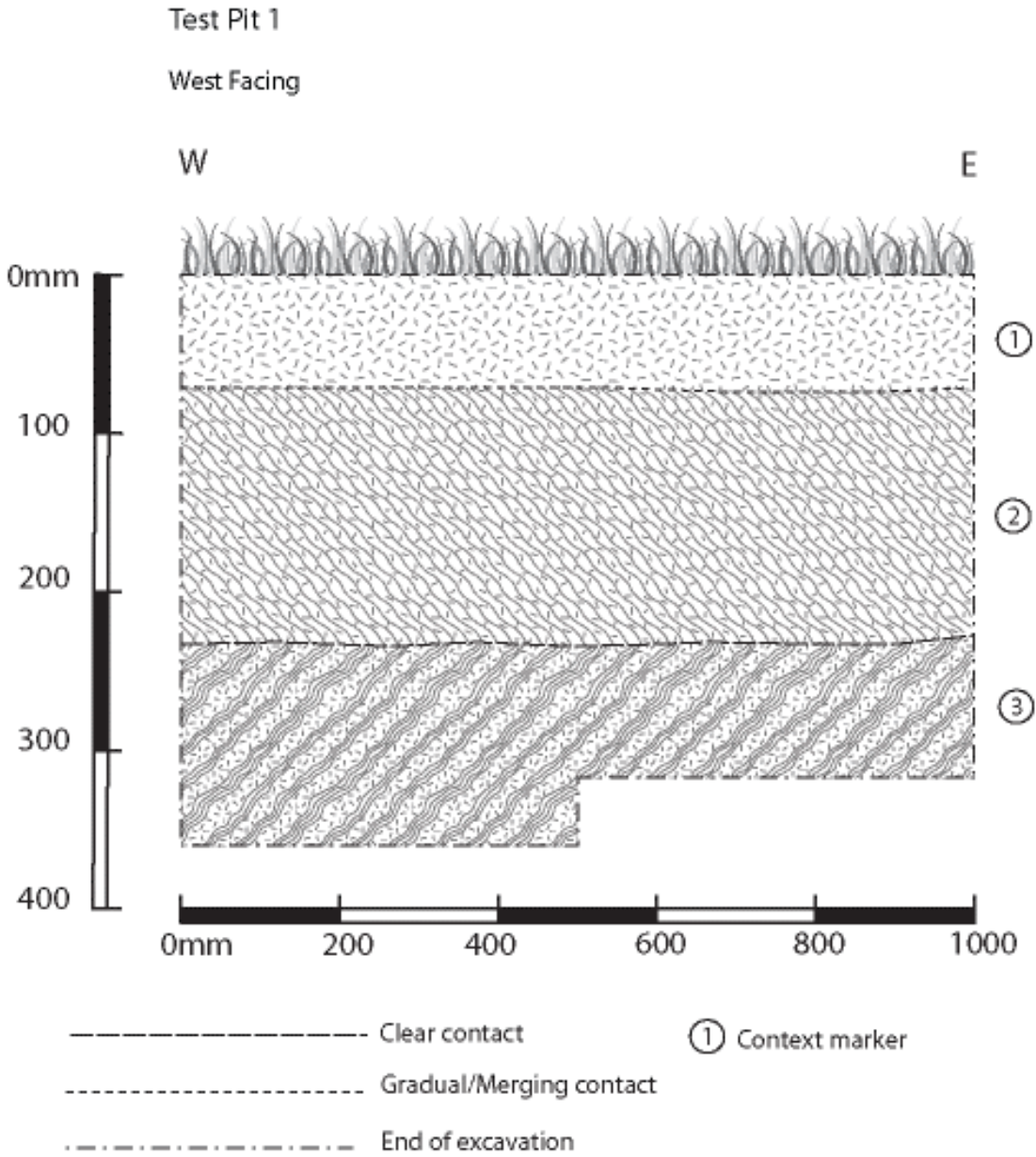


Figure 17 Stratigraphic illustration of Test Pit 1 (northern wall)



Photograph 35 **Test Pit 1 (D. Carpenter, 14/3/23, facing north)**



Photograph 36 **Test Pit 1 (D. Carpenter 14/3/23, facing west)**

Mechanical Trench 15

Table 21 Mechanical Trench 15

Attributes			
Coordinates	E: 416427.22 N: 5898058.43		
Size (sq/m)	2x1 metre		
Survey unit 2	Slopes and peaks as well as a low rise overlooking Owens Creek		
Stratigraphy	Context	Depth (mm)	Description
	1	0-90	Dry, loose, friable silt with grass rootlet inclusions. Merging contact.
	2	90-450	Dry, lightly compacted, clayey silt. Inclusions of gravel, natural quartz, and infrequent degrading basalt.
	3	450-600	Slightly moist, compacted, silty clay. Inclusions of large and frequent degrading basalt.
	4	600+	Compacted clay base.

Aboriginal Cultural Heritage

17 stone artefacts were identified in MT15 with raw materials such as crystal quartz, quartz and basalt. These artefacts were identified between depths of 0 to 400 millimetres and registered as artefact scatter VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter). No extent testing was conducted from MT 15.

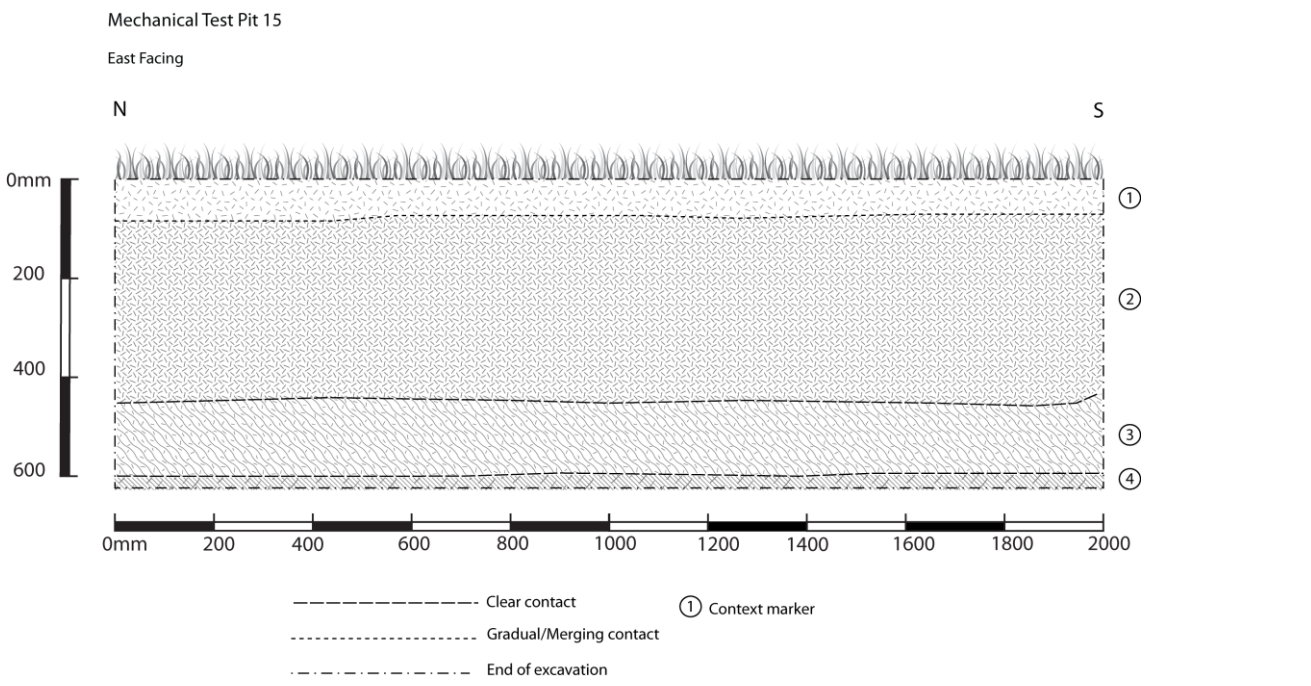


Figure 18 Stratigraphic illustration of MT 15 (eastern wall)



Photograph 37 Overview of MT 15 (E.Riggall 27/3/23, facing east)



Photograph 38 Trench wall of MT 15 (E. Riggall, 27/3/23, facing east)

Mechanical Trench 16

Table 22 Mechanical Trench 16

Attributes			
Coordinates	E: 416427.22 N: 5898058.43		
Size (sq/m)	2x1 metre		
Survey unit 2	Slopes and peaks as well as a low rise overlooking Owens Creek		
Stratigraphy	Context	Depth (mm)	Description
	1	0-180	Dry, loose, organic layer of silt with grass root inclusions. Merging contact.
	2	180-480	Dry, slightly compacted, clayey silt. Inclusions of natural quartz, charcoal, gravel, burnt clay nodules, and degrading basalt .
	3	480-560	Dry, compacted, firm silt clay. Inclusions of natural quartz, charcoal, burnt clay nodules and degrading basalt.
	4	560+	Dry, compacted, mottled clay base. Inclusions of burnt clay nodules and charcoal in base.
Aboriginal Cultural Heritage			
4 artefacts were identified within MT 16 with raw materials such as basalt and silcrete. These artefacts were identified between 0 to 200 millimetres. These artefacts were registered as part of artefact scatter VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter).			

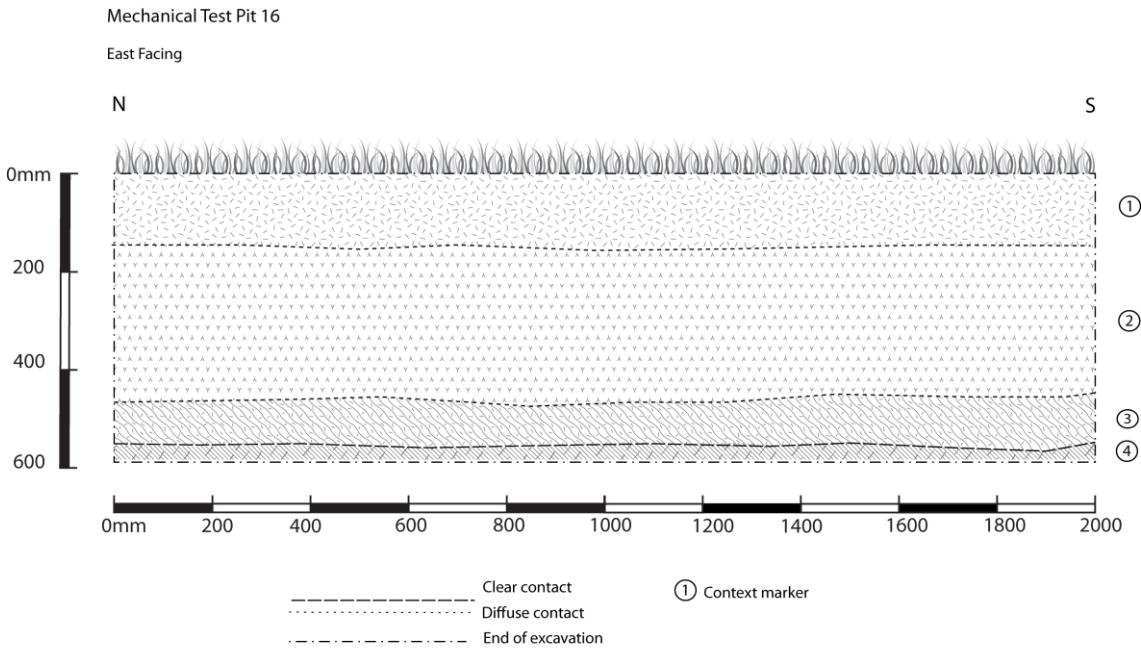


Figure 19 Stratigraphic illustration of MT 16 (eastern wall)



Photograph 39 Overview of MT 16 (E.Riggall 27/3/23, facing east)



Photograph 40 Trench wall of MT 16 (E. Riggall, 27/3/23, facing east)

Mechanical Trench 17

Table 23 Mechanical Trench 17

Attributes	
Coordinates	E: 416427.22 N: 5898058.43
Size (sq/m)	2x1 metre
Survey unit 2	Slopes and peaks as well as a low rise overlooking Owens Creek

Stratigraphy	Context	Depth (mm)	Description
	1	0-200	Dry, loose, organic layer of silt with grass root inclusions. Merging contact.
	2	200-450	Dry, slightly compacted clayey silt. Inclusions of charcoal, degrading ballast, natural quartz and gravel. Merging contact.
	3	450-1200	Dry, compacted clayey sandy silt with clayey silt mixed throughout. Inclusions of charcoal, degrading ballast, natural quartz and gravel.
	4	1200+	End of excavation due to OH + S.

Aboriginal Cultural Heritage

There were 11 artefacts that were identified in MT17 with raw materials including quartz, crystal quartz, and one chert ground edge axe. All artefacts were identified between depths of 0 to 300 millimetres. The artefacts from MT 17 were registered as artefact scatter VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter). No extent testing was conducted from MT 17.

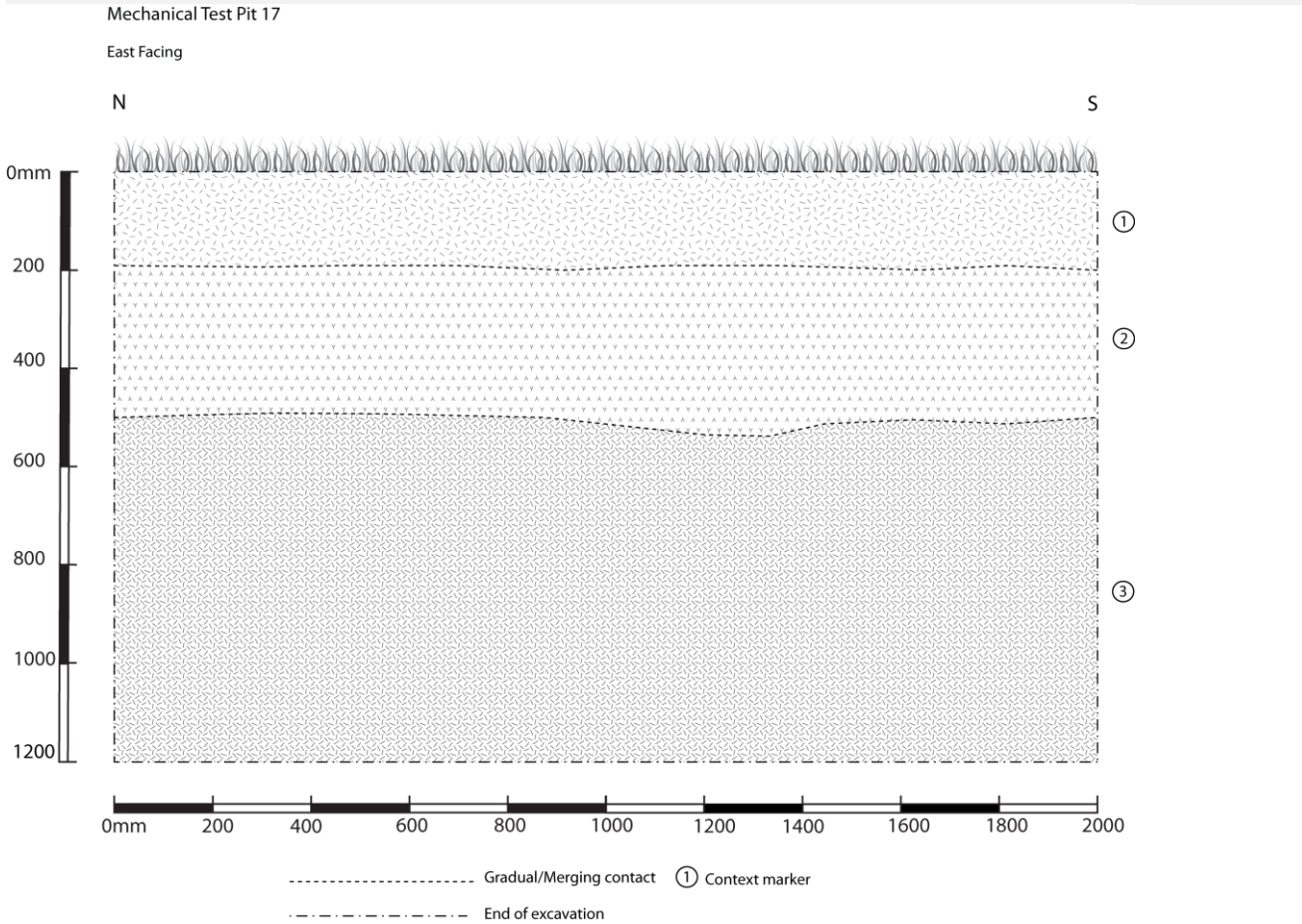


Figure 20 Stratigraphic illustration of MT 17 (eastern wall)



Photograph 41 Overview of MT 17 (E.Riggall, 27/3/23, facing east)



Photograph 42 Trench wall of MT 17 (E. Riggall, 27/3/23, facing east)

Mechanical Trench 18

Table 24 Mechanical Trench 18

Attributes			
Coordinates	E: 416427.22 N: 5898058.43		
Size (sq/m)	2x1 metre		
Survey unit 2	Slopes and peaks as well as a low rise overlooking Owens Creek		
Stratigraphy	Context	Depth (mm)	Description
	1	0-200	Slightly damp, loose silt (organic layer) with grass roots, natural quartz, charcoal and gravel inclusions. Merging contact
	2	200-450	Dry, loose clayey silt with degrading basalt content and natural quartz inclusions. Diffuse level contact
	3	450-590	Dry, loose, silty clay with degrading basalt content and large degrading basalt boulders.
	4	590+	Slightly moist, compact concreted clay base with eroding basalt boulders in base.
Aboriginal Cultural Heritage			
There were 57 artefacts identified in MT18, including raw materials such as quartz, crystal quartz, basalt and silcrete. These artefacts were identified between 0 to 400 millimetres and registered as part of VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter).			

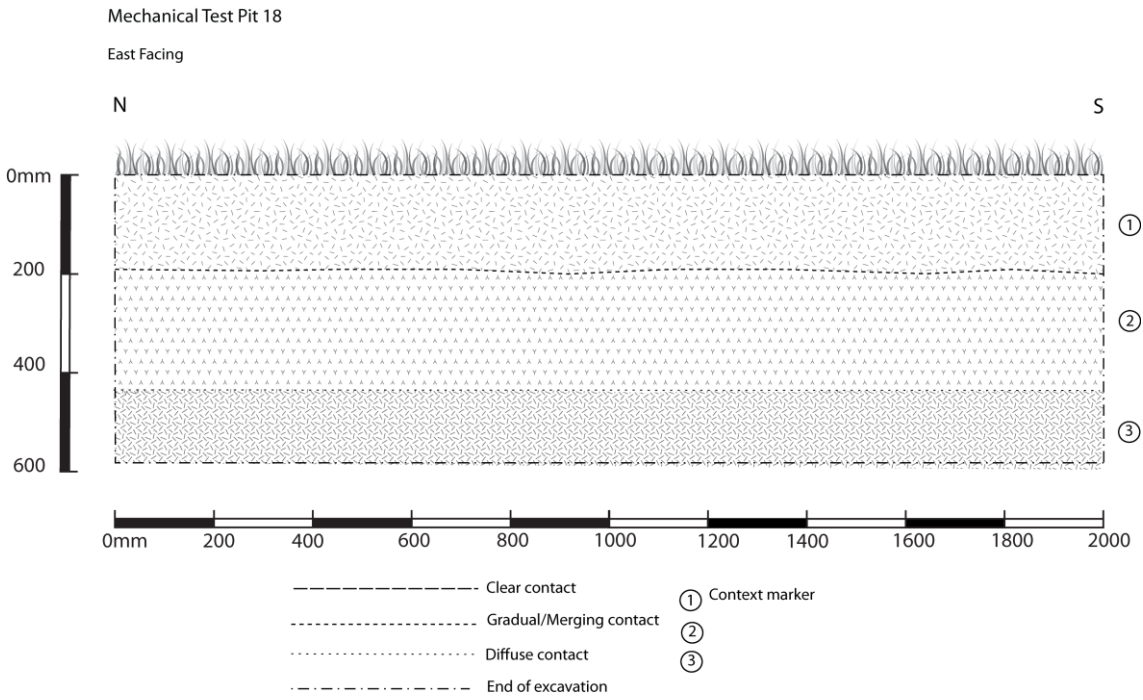


Figure 21 Stratigraphic illustration of MT 18 (eastern wall)



Photograph 43 Overview of MT 18 (E. Riggall, 20/4/23, facing east)



Photograph 44 Trench wall of MT 18 (E. Riggall, 20/4/23, facing east)

Mechanical Trench 35

Table 25 Mechanical Trench 35

Attributes	
Coordinates	E: 416427.22 N: 5898058.43
Size (sq/m)	2x1 metre

Survey unit 2	Slopes and peaks as well as a low rise overlooking Owens Creek		
Stratigraphy	Context	Depth (mm)	Description
	1	0-200	Very dry, compacted silt topsoil layer (organic layer) with grass roots and occasional gravel and natural quartz inclusions
	2	200-300	Very dry, slightly compacted clayey silt with increasing clay content with depth. Occasional gravel and ironstone inclusions.
	3	300-420	Slightly moist, compacted, firm clay base. End of excavation.
Aboriginal Cultural Heritage			
3 quartz artefacts were identified in MT 35 between 0 to 200 millimetres. These artefacts were registered as part of VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter).			

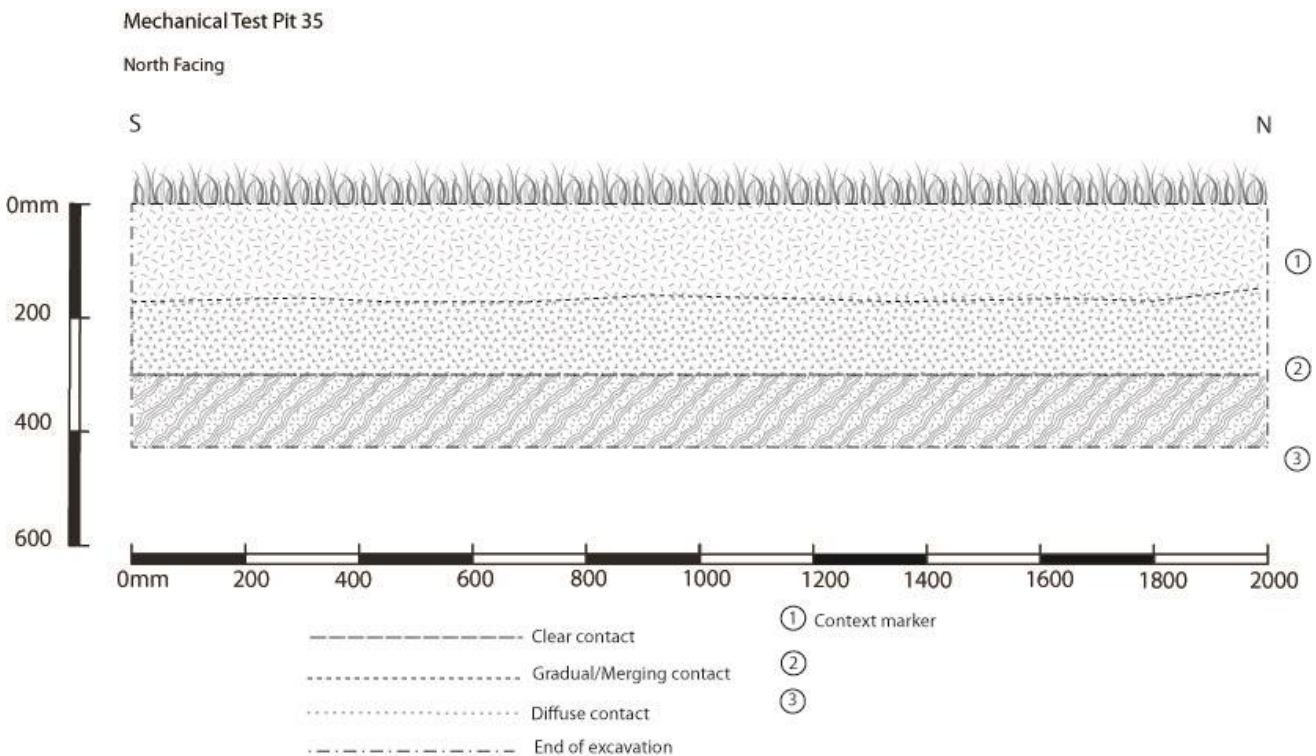


Figure 22 Scaled section drawing of MT 35 (west profile)



Photograph 45 Overview of MT 35 (E.Riggall 30/10/23, facing west)



Photograph 46 Trench wall of MT 35 (E. Riggall, 20/4/23, facing west)

10.5 Surface Artefacts

No surface artefacts were recorded outside of the subsurface testing areas during the Complex Assessment.

10.6 Conclusions of the Complex Assessment Results

The Complex Assessment was successfully carried out over thirteen days on the 14, 15, 16, 17, 27, 28, 29, 30 and 31 of March and 17, 18, 19 and 20 of April 2023 and 30 October and 31 October 2023. Consultation with TLaWC was undertaken throughout the assessment in the form of participation of TLaWC representatives and telephone and email consultation with TLaWC Heritage Advisors. The TLaWC Team communicated that they were satisfied with the level of testing undertaken.

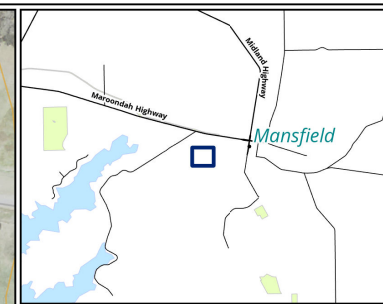
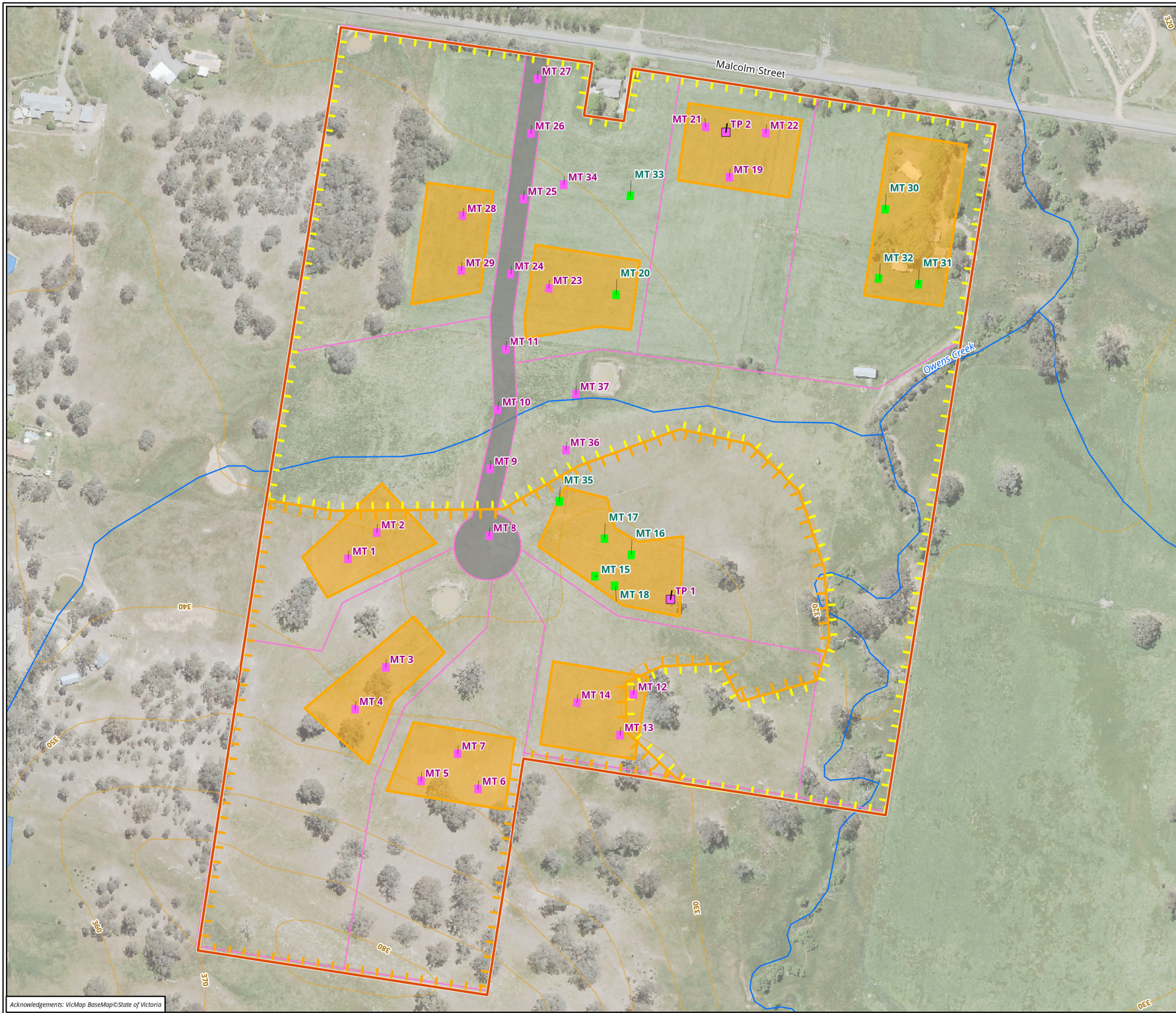
A total of 37 trenches were excavated which included 35 2x1 metre mechanical trenches, and two 1x1 metre manual trenches. 178 artefacts were found from between 0-400 millimetres depth in the Activity Area within MT 15, 16, 17, 18, 20, 30, 31, 32, 33 and 35. Artefacts were typically identified in brown silt along with the brown, friable silty clay deposits. The stratigraphy of the two survey units varied and a summary of the stratigraphy is presented in Table 26. Aboriginal cultural material was identified during the complex assessment on both distinct landforms named in the Standard Assessment.

The Desktop Assessment noted that there was the possibility of artefact scatters of low and medium density. This proved to be partially correct as two subsurface artefact scatters were registered VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter), VAHR 8123-0080 (Owens Creek 2) and one LDAD was registered: VAHR 8123-0078 (Owens Creek LDAD) as a result of the Complex Assessment. The Standard Assessment concluded that there were a low to moderate with a slightly raised probability (moderate to high potential) in proximity to Owens Creek and on the slopes and rises within the Activity Area. This was proved to be correct in a general sense, as Aboriginal cultural material was located within these pre-identified areas of archaeological potential including the low rise and within proximity of Owens Creek in the eastern section of the Activity Area.

The presence of Aboriginal cultural heritage confirms the predictions of the Desktop Assessment that the region surrounding Owens Creek would have been used by Aboriginal people in the past, with a higher density of artefacts along the Creek and on the elevated slope.

Table 26 Summary of Results

Survey unit	Landform/Area of Potential Description	No. of TPs	No. of MTs	Nature of Soil Profiles	Aboriginal Cultural Heritage Present
Survey Unit 1 (Plains)	Floodplains apart from area close to Owens Creek	One: (TP 2)	Thirteen: (MT 19, 20 , 21, 22, 23, 24, 25, 26, 27, 28, 29, 33 , 34)	Typically a brown slightly damp clayey silt with some fine grained sand content reaching depths between 0-100mm, overlying a light brown /yellowish red damp clayey silt with gravel and buckshot inclusions reaching 400mm in depth. This transitions to a slightly compacted, red silty clay with increasing clay content with depth until 500mm reaching a dry, compacted red clay base.	VAHR 8123-0078 (Owens Creek LDAD) Excavated areas positive for Aboriginal cultural heritage in bold
	Area close to Owens Creek	Zero	Three: (MT 30, 31, 32)	A loose brown slightly damp, organic silt layer with grass roots reaching depths of 80-160mm overlying a brown loose clayey (slightly sandy) silt at a depth of 360-420mm. This transitions to a very dry compacted, yellowish red clay base at a maximum depth between 450mm.	VAHR 8123-0080 (Owens Creek 2) Excavated areas positive for Aboriginal cultural heritage in bold
Survey Unit 2 (Slopes and peaks)	Elevated areas except for low rise	Zero	Fourteen: (MT 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14)	Generally a brown dry fine grained silt between 0-110mm, with compacted, dry brown silty clay beneath reaching depths of 550mm overlying a compacted reddish brown clay base at a maximum depth of 800mm There was no Aboriginal cultural material identified within these sediments.	None
	Low rise	One: (TP 1)	Seven: (MT 15, 16, 17, 18, 35, 36, 37)	Typically a dry, friable, brown silt reaching depths between 0-200mm, overlying a dry, firm silty clay with increasing clay content with depth with natural quartz inclusions at depths of 130-600mm. This overlies a compacted reddish brown clay base with a maximum depth of 600mm with MT 17 not reaching a sterile clay base at a maximum depth of 1200mm.	VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter). Excavated areas positive for Aboriginal cultural heritage in bold



Legend

- Activity Area
- Survey Unit 1
- Survey Unit 2
- Subsurface testing - artefact**
- Machine trench
- Subsurface testing - no artefacts**
- Test Pit
- Machine trench
- Proposed development (client-provided data)**
- Proposed parcel boundary
- Proposed road
- Client provided building envelopes
- Topography**
- Contour 10m interval
- Lake/Dam
- River or creek

Map 5 Results of the Complex Assessment

0 25 50 75 100
Metres
Scale: 1:3,000 @ A3
Coordinate System: GDA 1994 MGA Zone 55



Matter: 35858, CHMP: 18293,
Date: 07 March 2024,
Prepared for: DKG; Prepared by: NM; Last edited by: nmathes
Layout: 35858_MS_Complex_Assess
Project: P:\35800s\35858\Mapping\35858_240MalcolmStMansfield_CHMP.pprx

11 Details of Aboriginal cultural heritage in the Activity Area

The following section contains the information on the Aboriginal places found, discovered or subject to assessment. The information was prepared in accordance with Clause 8 and 11, Schedule 2 of the Aboriginal Heritage Regulations 2018.

11.1 Assessment of the Aboriginal cultural heritage

11.1.1 Artefact analysis

All artefacts identified during the CHMP were entered into a catalogue for analysis (Appendix 7). Cataloguing and analysis of these artefacts was conducted by Christine Morgan, Biosis Pty Ltd and based on stone artefact identification and terminology from Holdaway and Stern (2004).

The descriptions and analyses of the artefact assemblage aim to provide information on the context from which the artefacts were collected, and to draw conclusions regarding aspects of the prehistoric occupation of the Activity Area based on the information potential of the artefact assemblage. It is important to note that the analyses presented in this report are by no means an exhaustive treatment. Several lines of analysis refer to aspects of lithic technology that can be considered as standard reference points in the archaeological study of stone artefacts. These are explored below. Only artefacts found within the Activity Area during the assessment of CHMP 18293 are discussed.

A total of 178 artefacts were identified during the CHMP 18293 assessment and registered as three new Aboriginal places VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter), VAHR 8123-0080 (Owens Creek 2) and VAHR 8123-0078 (Owens Creek LDAD). The CHMP 18293 assemblage consists of 177 flaked artefacts and a single ground edge axe. The following analysis is limited by the small sample size of the assemblage.

Raw material

Table 27 summarises the raw materials of artefacts identified as part of the CHMP 18293 assessment. The assemblage is predominantly comprised of quartz (39.89%, n=71), silcrete (26.40%, n=47), and a fine grain basalt (19.66%, n=35). Other raw materials include crystal quartz (12.36%, n=22), siltstone (1.12%, n=2) and chert (0.56%, n=1).

Table 27 Raw material of the CHMP 18293 assemblage

Raw material	Total count of raw material of CHMP 18293 assemblage	Percentage of CHMP 18293 assemblage
Basalt	35	19.66%
Chert	1	0.56%
Crystal Quartz	22	12.36%
Quartz	71	39.89%
Silcrete	47	26.40%
Siltstone	2	1.12%
Total	178	100.00%

Figure 23 demonstrates the differences in raw material across the three registered Aboriginal places, with VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter) predominantly comprising of quartz (67.39%, n=62) and crystal quartz (19.57%, n=18) artefacts, whereas VAHR 8123-0080 (Owens Creek 2) comprises predominantly of silcrete (53.01%, n=44) and basalt (31.33%, n=26) artefacts. VAHR 8123-0078 (Owens Creek LDAD) comprises only three artefacts, including two siltstone artefacts (Figure 27) and a single silcrete artefact. The differences in raw material between the Aboriginal places may reflect a different occupation time or function of each place, or may be the result of random differences in deposition.

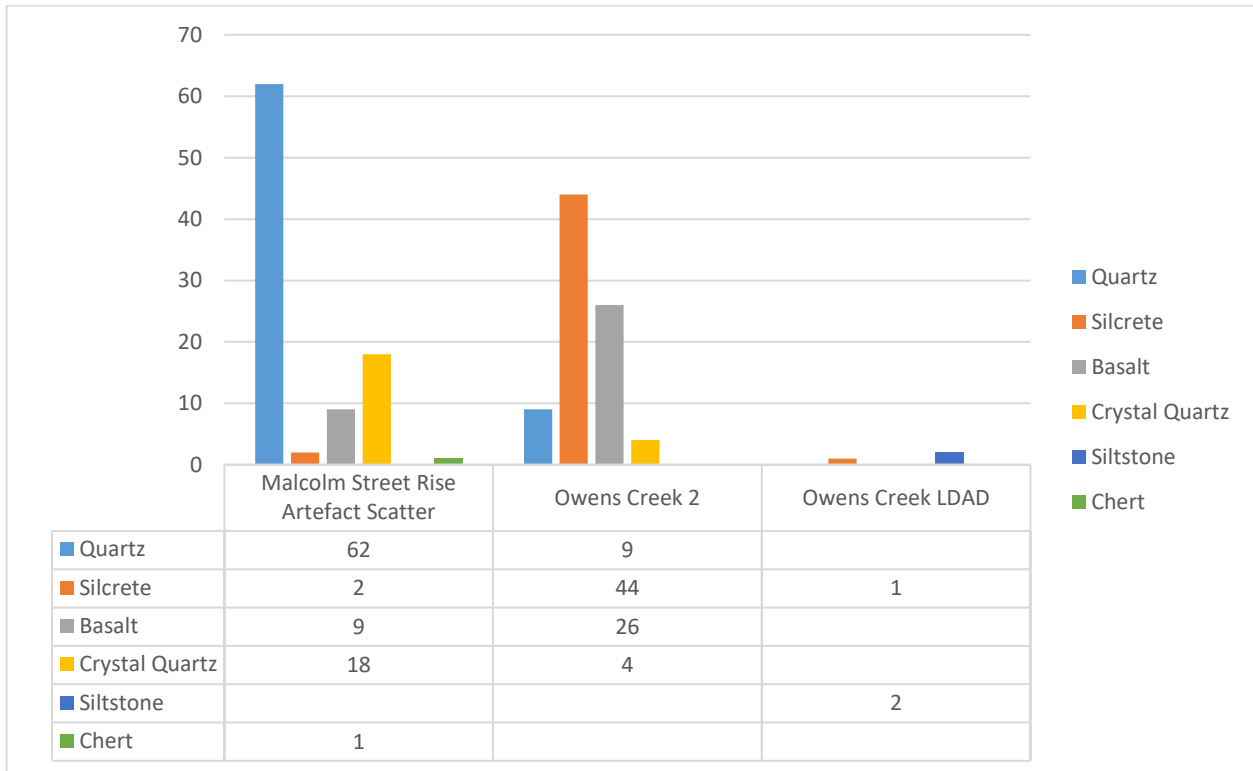


Figure 23 Raw material of each Aboriginal place in the Activity Area

Silcrete is common in Holocene archaeological assemblages across the south-east of Australia, however definition and terminology around this material vary greatly. Eggleton (2001, pp. 108) defines the term silcrete to be “strongly silicified, indurated regolith, generally of low permeability, commonly having a conchoidal fracture with a vitreous lustre. Silcrete appears to represent the complete or near-complete silicification of precursor regolith by the infilling of available voids, including fractures”. Thiry and Milnes (2016, pp. 1) highlight the operative phrase in this definition as “strongly indurated and silicified regolith”, which serves to exclude other silica rich materials found in archaeological assemblages like flint, chert and chalcedony from the class of silcrete. Unlike these other siliceous materials, which could be buried and exhumed by geological movement, silcrete formations as regolith features, are thought to have been highly visible in landscapes through time, and as such formed part of a socio-cultural understanding of place (Thiry & Milnes 2016). In Australia, these silcretes are typically present in the landscape in either “outcrop” features or extensive “gibber plains” of rounded silcrete cobbles (Douglas, Fanning, & Holdaway 2008, pp. 515). Outcropping silcrete is considered to be more difficult to exploit, in comparison to gibber cobbles, as the cobble sized shape of the gibber silcrete is more easily transported and reduced (Thiry & Milnes 2016).

Silcrete provides a superlative material for knapping. The production of stone tools is development on two main material characteristics - the hardness of the knapped material to form sharp edged durable tools, and the capacity of the material to produce regularly curved conchoidal fractures, allowing the detachment of consecutive long and thin blade forms (Domanski, Webb, & Boland 1994, Webb & Domanski 2008). Silcrete,

with its fine grain size and low porosity has amongst the best potential for production of large and reliable conchoidal vitreous fracture surface (Thiry & Milnes 2016). Technical efficacy may not however, have been the only determining factor of the selection of particular types of silcrete. As Mulvaney and Kamminga (1999) have highlighted, aesthetic and symbolic factors such as colour may have contributed to the selection of particular forms of silcrete. Silcrete is usually the most dominant form of raw material encountered in the south-eastern Australian archaeological record. Given the nature of the parent rock from which silcrete is formed, it can have variable flaking quality for the manufacture of artefacts. Generally, this flaking quality is dependent on the texture and composition of the silcrete.

There is variation in the type and quality of silcrete within the CHMP assemblage (Figure 24, Figure 25, Figure 26). The silcrete most common the in VAHR 8123-0080 (Owens Creek 2) was coarser and had large quartz clasts visible to the naked eye, compared to the more microcrystalline silcrete present in VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter) and VAHR 8123-0078 (Owens Creek LDAD).



Figure 24 Sample of silcrete material from VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter)



Figure 25 Sample of silcrete material from VAHR 8123-0080 (Owens Creek 2)

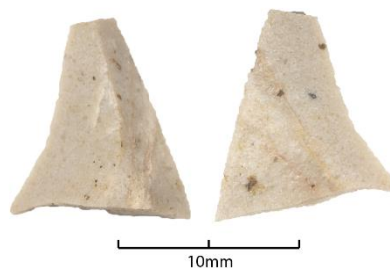


Figure 26 Sample of silcrete from VAHR 8123-0078 (Owens Creek LDAD)

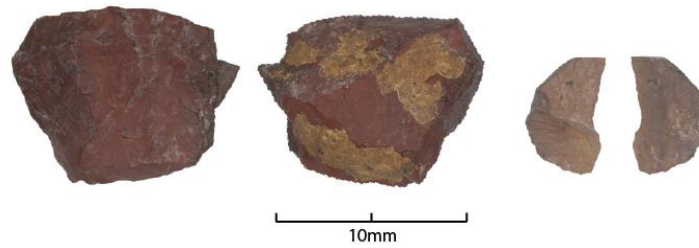


Figure 27 Sample of siltstone artefacts from VAHR 8123-0078 (Owens Creek LDAD)

Quartz is also another common raw material source for the region and is often present in the archaeological record. Whilst having highly variable flaking quality, quartz is probably the most readily available material and is typically well represented in virtually all late Holocene south-eastern Australian archaeological assemblages. The quartz recorded in the CHMP assemblage varies in quality between a high quality crystal quartz and a low quality, blocky and heterogeneous quartz with a large amount of fault lines (Figure 28 and Figure 29). These characteristics would have made the low quality quartz less predictable when knapping was taking place. Crystal quartz (see Figure 30) is a common colour variety of quartz. And is commonly used in both the Pleistocene and the Holocene periods in Australia (Holdaway & Stern 2004, pp. 24).

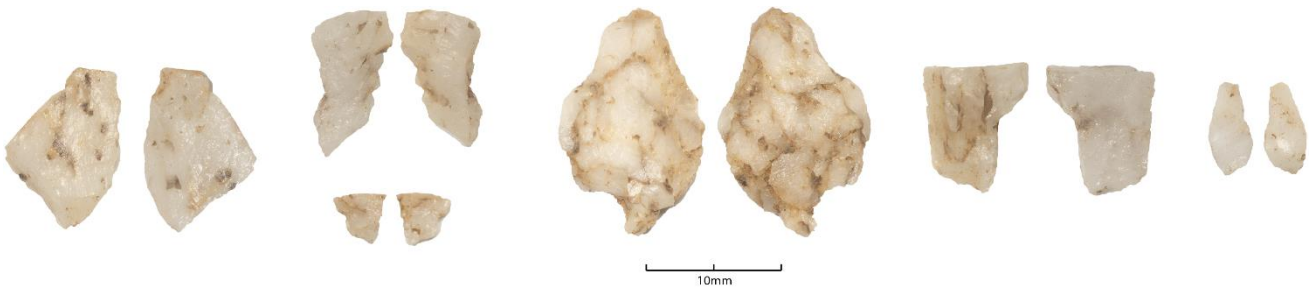


Figure 28 Sample of quartz material from VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter)



Figure 29 Sample of quartz material from VAHR 8123-0080 (Owens Creek 2)



Figure 30 Sample of crystal quartz material from VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter)

Basalt (see Figure 31) is a darker coloured volcanic rock that can be identified due to its fine grain and low silica content (Rapp, G. and Hill C. 2006, pp. 208, Holdaway & Stern 2004, pp. 22). Basalt is also the most common of the volcanic rocks (Holdaway & Stern 2004, pp. 20–21). Basalt contains rich amounts of magnesium and iron and have approximately 45%-55% silica content (Holdaway & Stern 2004, pp. 22). Basalt falls under the category of lava igneous rocks, which are formed by the cooling of magma close to the earth's surface. As the basalt forms closer to or on the surface it is an easily accessible material for stone-working. Due to its composition, the properties of basalt made the material suitable for stone knapping activities.



Figure 31 Sample of basalt artefacts from VAHR 8123-0080 (Owens Creek 2)

Cortex

The amount of cortex present on artefacts can be used to make inferences about whether or not raw materials are sourced locally, or whether they have been imported to the area. Generally, the further away it gets from a stone source the greater a raw material is curated, resulting in a distance decay of size and amount of cortex (Hiscock 1986).

Cortex, the outer weathered surface of raw unworked material, is present on 9.55% (n=17) of the CHMP assemblage (Table 28 and Figure 32). It is recorded as the amount of cortex that makes up the artefact, in low (1-32%), medium (33-66%) and high (67-99%) amounts. The percentage of cortex on flakes may identify their position in the reduction sequence of a core. High percentages of cortex reflect less previous flaking, indicating an earlier stage in the reduction sequence, while low percentages of cortex represent a later reduction stage (Doelman, Webb, & Domanski 2001). A low amount of cortex indicates that there has been previous reduction to the original core through either core preparation or extensive flake production occurring before the artefacts were made.

In the CHMP assemblage, the only raw materials to have cortex were quartz, basalt and 1 silcrete artefact (Table 28). Cortex was only present as a low amount (1-32%) within the assemblage. Apart from the single silcrete artefact, all cortex present on the remaining basalt and quartz artefacts was present as pebble cortex. This indicates that the basalt and quartz artefacts were manufactured from raw materials sourced from river pebbles (Figure 32).

Table 28 Cortex of raw material of the CHMP assemblage

Raw material	Low (1-32%)	None	Total
Basalt	6	29	35
Chert		1	1
Crystal Quartz		22	22
Quartz	10	61	71
Silcrete	1	46	47
Siltstone		2	2
Total	17	161	178

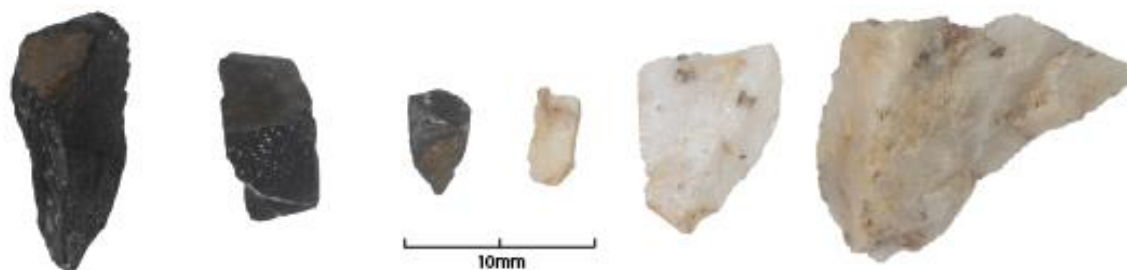


Figure 32 Sample of artefacts with pebble cortex (dorsal surface, left three basalt, right three quartz)

Typology

Flakes, tools and cores are the three most basic classes of stone artefact. They each represent stages in a continuum of artefact manufacture and discard. Cores are nuclear bodies of stone (usually small enough to be portable) from which flakes are knapped. Depending on the type and size of core they may produce anything from one or a few flakes or up to several tens of flakes. Flakes are the desired, sharp edged products of stone knapping, they may be discarded without being used, utilised without further modification and then discarded or their edges may be worked further by the stone knapper to form a tool. The exploitation of stone as a resource involves a reductive technology, in that each stage (e.g. the striking of a flake from a core) results in a reduction of the mass of the object being knapped. This can generally be considered a continuum of reduction, along which manufacturing stages (or place in the continuum) can be identified.

The distribution of primary forms for the salvage assemblage can be found in Table 29. In the 8123-0079 (Malcolm Street Rise Artefact Scatter) and VAHR 8123-0080 (Owens Creek 2) assemblages, the most frequent primary forms were distal flakes and complete flakes which made up a total of 32.58% and 25.28% of the total CHMP assemblage respectively. All three cores of the assemblage were recorded as part of VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter), and consisted of 2 basalt cores and a single silcrete core.

Table 29 Primary form of the CHMP 18293 assemblage

Primary form	VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter)	VAHR 8123-0080 (Owens Creek 2)	VAHR 8123-0078 (Owens Creek LDAD)	Total
Angular Fragment	0	3	1	4
Blade - Complete	4	5	0	9
Blade - Distal	1	4	0	5
Blade - Proximal	1	1	0	2
Core - Multidirectional	3	0	0	3
Flake - Complete	25	20	0	45
Flake - Distal	34	24	0	58
Flake - Longitudinal Split	1	2	0	3
Flake - Medial	13	14	2	29
Flake - Proximal	9	10	0	19
Ground edge axe	1	0	0	1
Total	92	83	3	178

Blades

Blade manufacture is seen as a more controlled method of flake manufacture, requiring premeditated and planned flake removal for the purpose of blade detachment. A small amount of blades are present in the CHMP assemblage (Table 29 and Figure 33), with 8.99% (n=16) of the assemblage identified as complete or broken blades. VAHR 8123-0080 (Owens Creek 2) has a slightly higher number of blades (n=10) than VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter) (n=6).

**Figure 33 Sample of blades from the CHMP 18293 assemblage**

Function

Retouch/usewear indicates a use or, an intention of use, of the particular flake or tool. Of the 178 artefacts in the CHMP assemblage, 4.49% (n=8) of artefacts were identified to have retouch or edge damage consistent with use (Figure 34 and Figure 35). The low proportion of artefacts within the assemblages with retouch/usewear suggests an opportunistic use of material. Of the seven artefacts with retouch, six artefacts

had a low (1-32%) amount of retouch/usewear, and a single artefact had a medium (33-66%) amount of retouch (Figure 34). Within the CHMP assemblage, retouch/usewear is only present on silcrete artefacts; seven recorded as part of VAHR 8123-0080 (Owens Creek 2) and a single silcrete artefact from VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter). This may reflect silcrete as a preferential material for more intensive use or may be a result of the high proportion of silcrete in the VAHR 8123-0080 (Owens Creek 2) assemblage. No artefacts with retouch were identified in VAHR 8123-0078 (Owens Creek LDAD).

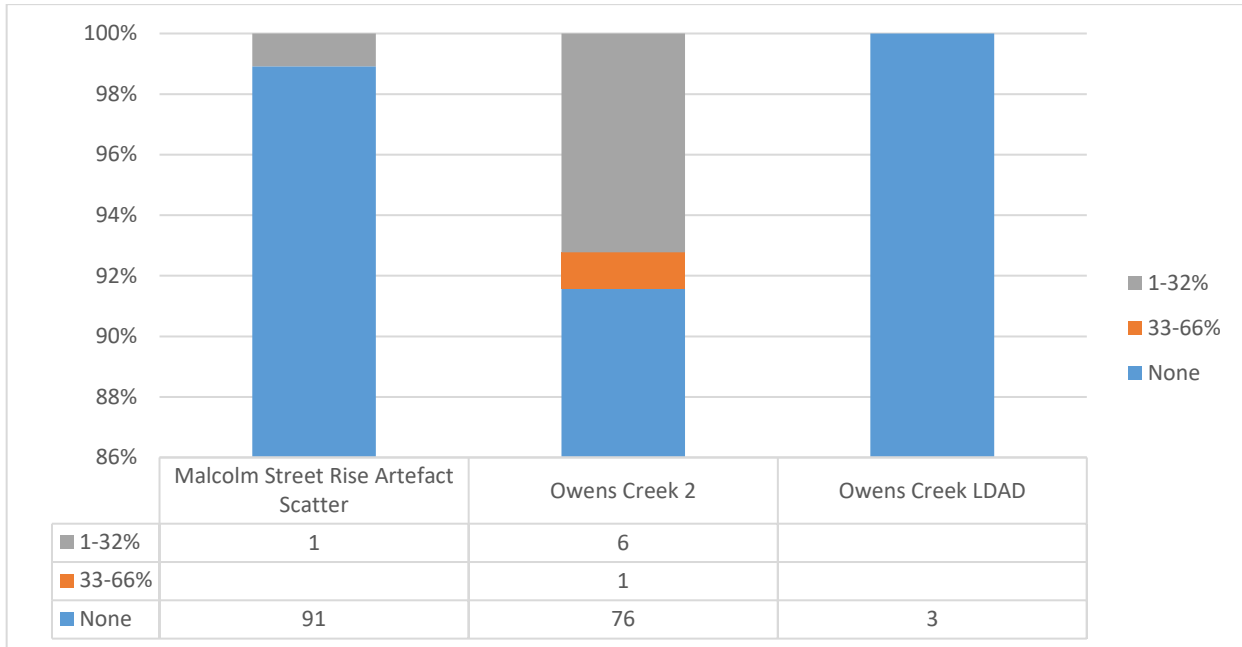


Figure 34 Proportion of artefacts with retouch/usewear of each Aboriginal place



Figure 35 Sample of artefacts with retouch from the CHMP 18293 assemblage

Formal tools

In the CHMP assemblage, only 2 formal tools (1.12%) were identified, including a single backed Bondi Point identified within VAHR 8123-0080 (Owens Creek 2), which is a characteristic tool type of the Australian Small Tool Tradition (ASTT), and commonly identified in Holocene deposits across south-eastern Australia.

Backing retouch generally refers to bi-directional flaking that produces a steep (90 degree) edge, made by supporting the edge on an anvil and using a hard hammer to strike or crush the edge. Bondi Points are defined as a backed artefact with backing along all or part of one lateral margin to form a longitudinally asymmetrical point with a triangular or flat trapezoidal cross section (Attenbrow, Doelman, & Corkill 2008, pp. 108). Bias in primary forms or “blanks” has been observed in assemblages dedicated to the production of these formal tool forms through secondary edge modification (Hiscock 1993). The function of bondi points, similar to geometric microliths, has been the subject of much academic discussion and speculation. As with

geometric microliths, the function of bondi points have been speculated to variously be points or barbs for spears, small cutting tools (hand held or hafted) or awls for skin working. Suggestions also include ceremonial objects or surgical implements, used for scarification (Attenbrow, Doelman, & Corkill 2008, pp. 113).

The abundance of this tool type in coastal archaeological deposits in Sydney has led to proposition that the bondi point formed the barb of fishing spears (Attenbrow, Doelman, & Corkill 2008, pp. 113). Use wear and residue analysis has confirmed many of the functional propositions, and serves to highlight the multifunctional nature of many of the formal tool types found in Australian archaeological sites. Recent use wear analysis of these forms have found they have been used as cutting tools, awls and drills, as well as points on single or multi-barbed spears. These tool forms were used to work many different many materials; faunal and floral, and sometimes a single implement has been found to have been used for more than one function and work a variety of materials (Attenbrow, Doelman, & Corkill 2008, pp. 113).

The presence of backed microliths is consistent with the presence of blade technology identified in the assemblage. The form of backed artefacts are a result of deliberate re-shaping of an artefact. Part of the Australian Small Tool Tradition, backed microliths were used in abundance during the mid- to late-Holocene across Australia. However, by European arrival they were no longer being used except in very few communities (Attenbrow, Robertson, & Hiscock 2009). Therefore, the function of these very specific tools remained unknown. Usewear and residue studies determine that they were used both by hand and as composite tools for use on a wide range of materials and a variety of tasks including cutting meat, scraping hide and woodworking (Robertson, Attenbrow, & Hiscock 2009). The Bondi Point of the CHMP assemblage was manufactured from silcrete and the tip had been “snapped” off (Figure 36 The Bondi Point was identified between 100-200 millimetres depth in MT 32.



Figure 36 Bondi Point, identified in MT 32 and registered as part of VAHR 8123-0080 (Owens Creek 2)

Additionally, a single chert ground edge axe was identified in VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter) (Figure 37). The axe is manufactured from a lighter coloured, slightly weathered siliceous material, best described as a chert. The polished, ground edge is straight and transcribes the length of the axe. Negative flake scars from the manufacture and shaping of the axe are present on both faces. No evidence of hafting is present. With a maximum dimension measured at 57.29 millimetres, the axe is relatively small compared to the typical greenstone axes recorded in artefact assemblages across Victoria. It is also unusual for ground edge axes to be manufactured from chert and other siliceous materials in Victoria. No other records for chert ground edge axes could be identified to the best of the author’s knowledge and at time of writing. Based on the size and raw material of the ground edge axe, it is a relatively rare representation of the usual ground edge axe in Victorian artefact assemblages. Further investigation is required to confirm the raw material of the ground edge axe, and if similar ground edge axes have been found in the region.

The hand axe has been a tool type used and made throughout the stone tool making history. Axes are not found in large quantities across the Victorian landscape when compared with other formal tool types. Past studies had concluded that hand axes were used for a range of tasks including heavy-butchery and

woodworking. There is still debate over the intended function of axes, whether they were intended to be used as functional cores or if they were deliberately shaped tools with long use-lives and specific functions.

No formal tools were identified in VAHR 8123-0078 (Owens Creek LDAD).



Figure 37 Ground edge axe, identified in MT 17 and registered as part of VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter)

Spatial and stratigraphic distribution

The spatial distribution of artefacts varied across excavation subsurface testing pits across the CHMP Activity Area (Table 30). The highest density of artefacts across the entire CHMP was from MT18 at VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter) (32.02% of the total CHMP assemblage and 61.96% of the Aboriginal place assemblage, n=57). There was also a relatively high density of artefacts in MT30 as part of VAHR 8123-0080 (Owens Creek 2) (26.97% of the total CHMP assemblage and 57.83% of the Aboriginal place assemblage, n=48). The relatively high density of artefacts at these Aboriginal places may suggest that primary manufacturing of artefacts occurred in the location of these MTs. However the artefact assemblage sample size of each of the three Aboriginal places is very low (<100). As such, it is difficult to determine whether patterns in spatial distribution are directly representative of human use in the areas or whether they are the result of sample bias or post-depositional processes.

During the CHMP assessment, artefacts were only identified subsurface, and predominantly identified between 0-300 millimetres depth (98.88%, n=176) (Figure 38). Within VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter), artefacts were predominantly identified between 200-300 millimetres depth (50.00% of place assemblage, n=46), while for VAHR 8123-0080 (Owens Creek 2), artefacts were predominantly identified between 100-200 millimetres depth (51.81% of place assemblage, n=43). Artefacts were only identified between 200-300 millimetres depth in VAHR 8123-0078 (Owens Creek LDAD). There is no significant difference in artefact and raw material types at each stratigraphic layer and the assemblage is too small to determine if there had been a change in raw materials manufacture techniques over time (Figure 38). Additionally, through the current subsurface testing it is not possible to determine that the spatial and stratigraphic distribution of the artefacts as part of the CHMP assemblage are a representation of differences in the post-depositional impacts to the Aboriginal places rather than differences in deposition of artefacts in these places over time.

Table 30 Spatial distribution of artefacts for each Aboriginal place

Aboriginal place	SST number	Count of artefacts	Percentage of artefacts
VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter)	Total	92	51.69% (of total CHMP assemblage)
	MT15	17	18.48%
	MT16	4	4.35%
	MT17	11	11.96%
	MT18	57	61.96%
	MT35	3	3.26%
VAHR 8123-0080 (Owens Creek 2)	Total	83	46.63% (of total CHMP assemblage)
	MT30	48	57.83%
	MT31	12	14.46%
	MT32	23	27.71%
VAHR 8123-0078 (Owens Creek LDAD)	Total	3	1.69% (of total CHMP assemblage)
	MT20	1	33.33%
	MT33	2	66.67%
Total		178	100.00%

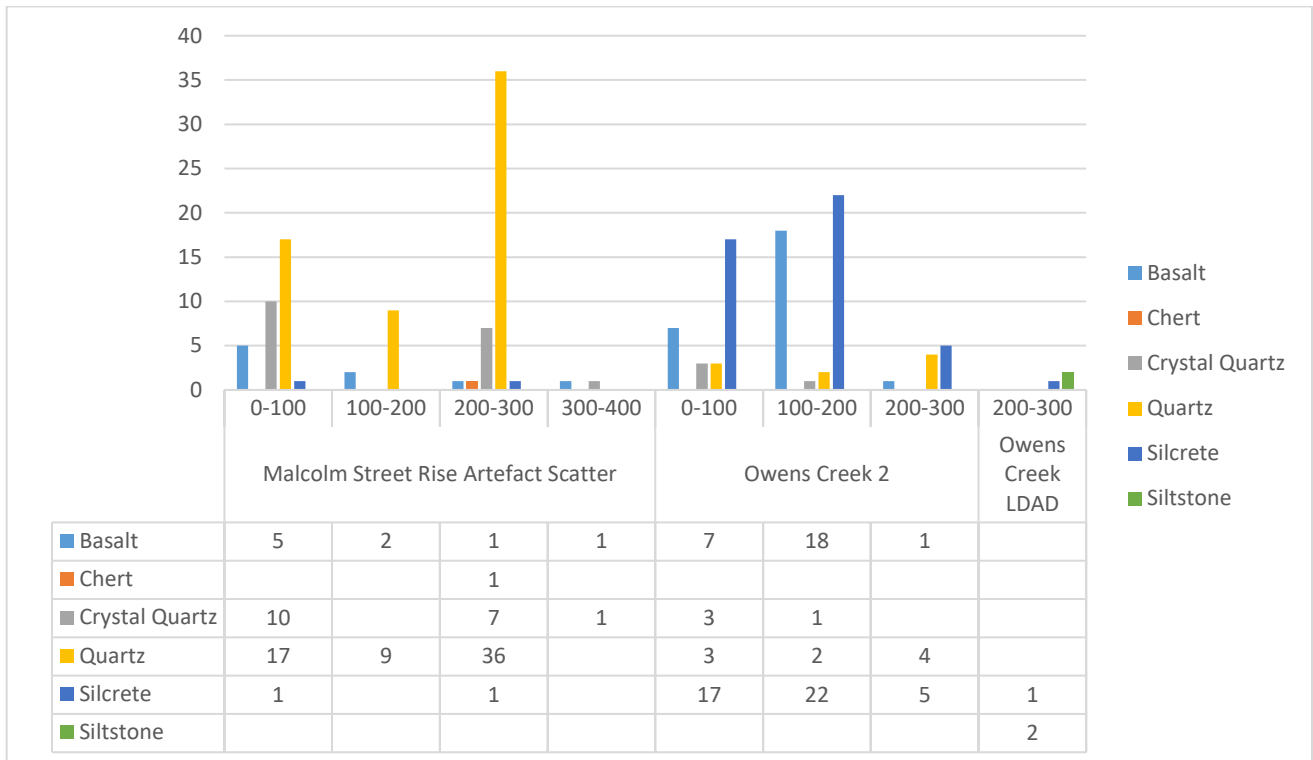


Figure 38 Stratigraphic distribution of artefacts and raw materials for the Aboriginal places

11.1.2 Site formation process

The purpose of identifying the site formation processes for each Aboriginal place is to understand their position within the landscape, determine if they have been impacted by taphonomic processes and analyse the deposition of artefactual material through time. Archaeological excavation is based on stratigraphic principles whereby successive strata of cultural materials represent different periods of deposition and site use (Schiffer 1987, pp. 9). The concept derives from the geological use of the idea that sedimentation takes place according to uniform principles. Archaeological stratification is the dynamic superimposition of single units of stratigraphy to interpret site formation process.

Implicit in the interpretation of site formation processes is a site’s taphonomy. Taphonomic processes are environmental factors that influence the spatial distribution of artefacts within an Aboriginal place. Examples of taphonomic processes include stock trampling, land clearance, pastoralism, burning and soil erosion (Lyman 2010).

VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter) is located on a low rise approximately 100 metres south of Owens Creek. The elevation of the rise would have provided an unhindered 360 degree view of the surrounding area and low area around Owens Creek. This low rise is further down slope from a steeper rise in the south of the CHMP Activity Area. These elevated landforms, with proximity to water, would have provided an ideal vantage point for Aboriginal people when hunting or travelling across this landscape. The presence of the chert ground edge axe from MT 18 within the place extent is rare for similar artefact scatter Aboriginal places in this region. Similarly, the three cores present within the CHMP assemblage were recorded within this place extent. The presence of pebble cortex on one of the fine grain basalt cores supports the possibility that the basalt artefacts were manufactured from pebbles found at local waterways, such as Owens Creek.

VAHR 8123-0080 (Owens Creek 2) is located on level ground approximately 100 metres west of Owens Creek, which generally curves around the place extent. The proximity to the creek would have provided easy access to freshwater and allowed past peoples to take advantage of resources including game and raw materials for artefact manufacture.

VAHR 8123-0078 (Owens Creek LDAD) is located on the mid slope approximately 100-200 metres north of Owens Creek.

The wider region would have provided Aboriginal people with ample supply of raw stone material suitable for stone tool production. Quartz, basalt and silcrete would have been available as pebbles and cobbles in local creek beds, reflected by the pebble cortex of the basalt and quartz artefacts in the assemblages of the CHMP assessment.

Given the large amounts of flakes within the CHMP assemblage, it is possible that many of these were not utilised before their cultural deposition or were used to process floral or faunal materials prior to their primary cultural deposition, due to breakage or unsuitability for a given task. Insights into this aspect of the cultural deposition cannot be furthered without detailed edge-wear and residue analysis studies of the formal components of this assemblage, which is beyond the remit of this study.

During and following the primary deposition of this material, the artefacts recorded in each of the three Aboriginal places would have been subject to natural site formation processes. VAHR 8123-0080 (Owens Creek 2) is located on the creek floodplain of Owen Creek, and so was likely to have been subject to accretional and erosional alluvial processes. Intermittent flooding of Owens Creek would have introduced alluvial sediments to the area and also removed sediments.

While accretional processes introduced alluvial sediments into the Activity Area, erosional colluvial processes likely occurred on the low rise of VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter) and the mid slopes of VAHR 8123-0078 (Owens Creek LDAD), to some degree. This would result in the translocation of some material down-slope from its primary discard location. It is unlikely this was a significant phenomenon in the Activity Area, prior to the colonial clearance of the land and its subsequent use for agriculture. However it is anticipated that this phenomenon has occurred in a more substantial fashion since this time. Due to the low artefact density, it is likely VAHR 8123-0078 (Owens Creek LDAD) is a result of this downslope erosional process and water run off.

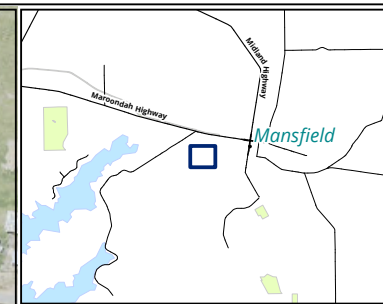
Since the arrival of Europeans in the region, the Activity Area has undergone impacts associated with agricultural land use, such as vegetation clearance, ploughing and stock trampling. Initial clearance of native vegetation and preparation of the land for agricultural and pastoral usage would have activated erosional processes through the removal of ground cover. This would then have been exacerbated by the continued ploughing, raking, harvesting and bailing activities. These disturbances are likely to have impacted the surface and shallow subsurface deposits at the three Aboriginal places recorded as part of the CHMP assessment.

11.2 RAP information about Aboriginal cultural heritage

TLaWC provided a statement of significance of the CHMP and the material found, noting the cultural significance of the location. This can be found in Appendix 8.

11.3 Results of the assessment of Aboriginal cultural heritage

A gazetteer of all Aboriginal places identified in this CHMP can be found in Appendix 8. These places are shown on Map 6. The scientific assessment for Aboriginal place is based on the descriptions in Appendix 9.



- Legend**
- Activity Area
 - ★ LDAD component
 - ✕ Primary Grid Coordinate
 - Place extent
- Topography**
- Contour 10m interval
 - ☪ Lake/Dam
 - ~ River or creek

Map 6 Aboriginal places in the Activity Area

0 25 50 75 100
 Metres
 Scale: 1:3,500 @ A3
 Coordinate System: GDA 1994 MGA Zone 55



Matter: 35858, CHMP: 18293,
 Date: 19 March 2024,
 Prepared for: DRC; Prepared by: NM; Last edited by: nmathis
 Layout: 35858_M6_AboriginalPlaces_AA
 Project: P\35800s\35858\Maping\35858_240Malcolms\Mansfield_CHMP.aprx

11.3.1 VAHR 8123-0079 Malcolm Street Rise Artefact Scatter

Extent

Artefacts were initially located in four positive trenches (MT15, MT16, MT17 and MT18) on the low rise in the Activity Area. A subsequent fifth positive trench was located to the north-west of this (MT35). The Sponsor elected to avoid this area and extent testing was therefore not required. By negotiation with TLaWC, the place extent was then defined by the 325 metre and 326 metre contours to the north and west, a negative trench to the west (TP1) and the edge of the proposed allotment to the south.

The cadastral details for this place are detailed in Table 31. The extent of this place is shown on Plan 1.

Table 31 VAHR 8123-0079 cadastral information

Lot/Plan	75\PP3056, 1\TP244731 and 2\LP80798
Coordinates	E: 416713.7049 N: 5898182.218

Nature

VAHR 8123-0079 is a subsurface artefact scatter from which 92 Aboriginal lithic artefacts were recovered from six excavation trenches (five 2x1 mechanical trenches and one 1x1 manual trench). Material consisted of quartz (n=62, 67.4%), crystal quartz (n=18, 19.6%), basalt (n=9, 9.8%), silcrete (n=2, 2.2%) and chert (n=1, 1.1%). Notably in the assemblage was a ground edged chert axe head that had a maximum dimension of 57.29 millimetres. All material was found between just under the surface to a maximum depth of 400 millimetres. A photograph of the location can be found in Photograph 47, an image of the axe in Figure 39 and a representative image of the quartz artefacts in Figure 40.



Photograph 47 VAHR 8123-0079 Malcolm Street Rise Artefact Scatter (facing south, D. Carpenter 16/11/2021)



Figure 39 Chert ground edge axe VAHR 8123-0079 Malcolm Street Rise Artefact Scatter

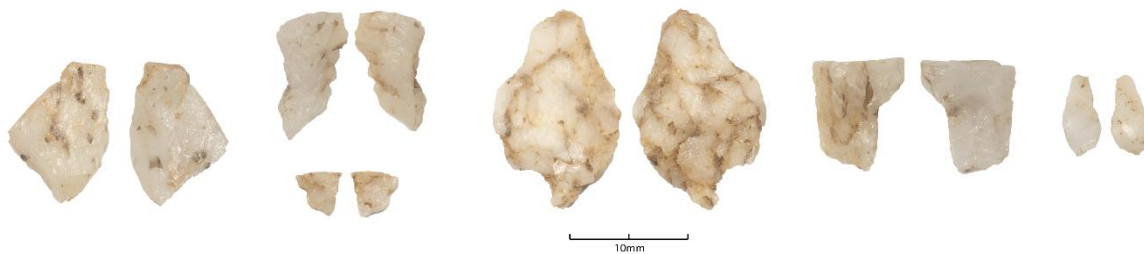


Figure 40 A representative sample of the quartz artefacts that make up part of VAHR 8123-0079 Malcolm Street Rise Artefact Scatter

Cultural heritage significance

Under Section 4 of the *Aboriginal Heritage Act 2006*, cultural heritage significance can refer to:

- a) archaeological, anthropological, contemporary, historical, scientific, social or spiritual significance; and
- b) significance in accordance with Aboriginal tradition

VAHR 8123-0079 is deemed to be of high archaeological (scientific) significance due to it containing information of Aboriginal people who were present at the location in the past (Table 32). Although it may also have anthropological, contemporary, historical, social or spiritual significance, none was noted during the preparation of the plan. TLaWC provided a statement of significance in accordance with Aboriginal tradition for the CHMP which can be found in Appendix 8.

Table 32 VAHR 8123-0079 archaeological (scientific) significance

Contents	Condition	Representativeness	Overall significance
3 - Place contains a large number and diverse range of cultural materials; and/or largely intact stratified deposit; and/or surface spatial patterning of cultural materials that still reflect the way in which the cultural materials were deposited.	2 - Place in a fair to good condition, but with some disturbance.	2 - Occasional occurrence	7 - 9 - High



- Legend**
- Activity Area
 - ✕ Primary Grid Coordinate (PGC)
 - Place Extent - PGC
 - ★ Aboriginal place
 - Place Extent - Aboriginal place
 - Current parcel boundary
- Subsurface testing - artefacts found**
- Machine Trench
- Subsurface testing - no artefacts**
- Machine Trench
 - Test Pit
- Hydrology**
- ~ River or creek
- Client provided data**
- Contours 1m interval
 - Proposed parcels

Aboriginal Place details:
 Malcolm Street Rise Artefact Scatter
 VAHR No. 8123-0079

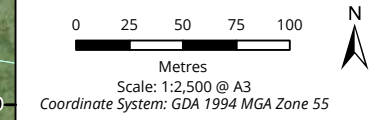
Easting: 416713.74
 Northing: 5898182.19

Site co-ordinates quoted in:
 GDA 1994 MGA Zone 55
 Co-ordinate information was collected with a
 GNSS device on 28/03/2023

Topographic map details: MANSFIELD
 8123-4-4

Municipality: MANSFIELD SHIRE

Plan 1
Malcolm Street Rise Artefact Scatter
VAHR No. 8123-0079



Acknowledgements: VicMap © State of Victoria

11.3.2 VAHR 8123-0080 Owens Creek 2

Extent

Artefacts were initially found in three positive trenches (MT31, 32 and 33). After the discovery of Aboriginal material culture in the area, the client elected to avoid harm and constrict the proposed development to existing disturbed area. Therefore, extent testing was not required and a place registration extent was negotiated with TLaWC of a 25 metre buffer around the three positive trenches, minus any existing disturbed areas.

The cadastral details for this place are detailed in Table 33. The extent of this place is shown on Plan 2.

Table 33 VAHR 8123-0080 cadastral information

Lot/Plan	75\PP3056
Coordinates	E: 416980.7155 N: 5898398.462

Nature

A total of 83 Aboriginal lithic artefacts were found between the three trenches. The majority of the raw material was silcrete (n=44) but basalt (n=29), quartz (n=9) and crystal quartz (n=4) were also present. Only n=5 (6.0%) of the assemblage showed some cortex, indicating that the material was not sourced locally and had undergone initial reduction at another location. Only n=7 (8.4%) artefacts showed some retouch/useware. A photograph of the location can be found in Photograph 48 and a representative image of the basalt artefacts in Figure 41.



Photograph 48 VAHR 8123-0080 (facing north-east, D.Carpenter 16/11/2021)



Figure 41 A representative sample of the basalt artefacts that make up part of VAHR 8123-0080 Owen Creek 2.

Cultural heritage significance

Under Section 4 of the *Aboriginal Heritage Act 2006*, cultural heritage significance can refer to:

- a) archaeological, anthropological, contemporary, historical, scientific, social or spiritual significance; and
- b) significance in accordance with Aboriginal tradition

VAHR 8123-0080 is deemed to be of high archaeological (scientific) significance due to it containing information of Aboriginal people who were present at the location in the past (Table 34Table 32). Although it may also have anthropological, contemporary, historical, social or spiritual significance, none was noted during the preparation of the plan. TLaWC provided a statement of significance in accordance with Aboriginal tradition for the CHMP which can be found in Appendix 8.

Table 34 VAHR 8123-0080 archaeological (scientific) significance

Contents	Condition	Representativeness	Overall significance
2 - Place contains a larger number, but limited range of cultural materials; and/or some intact stratified deposit remains; and/or rare or unusual example(s) of a particular artefact type.	2 - Place in a fair to good condition, but with some disturbance.	1 - Common occurrence	4 - 6 - Moderate



- Legend**
- Activity Area
 - ✕ Primary Grid Coordinate (PGC)
 - Place Extent - PGC
 - ★ Aboriginal place
 - Place Extent - Aboriginal place
 - Current parcel boundary
- Subsurface testing - artefacts found**
- ♣ Machine Trench
- Subsurface testing - no artefacts**
- ♣ Machine Trench
 - Test Pit
- Hydrology**
- ~ River or creek
- Client provided data**
- Contours 1m interval
 - Proposed parcels

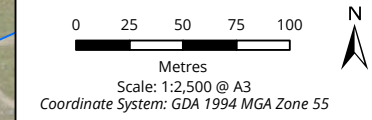
Aboriginal Place details:
 Owens Creek 2
 VAHR No. 8123-0080
 Easting: 416947.59
 Northing: 5898402.66

Site co-ordinates quoted in:
 GDA 1994 MGA Zone 55
 Co-ordinate information was collected with a
 GNSS device on 20/04/2023

Topographic map details: MANSFIELD 8123-4-4

Municipality: MANSFIELD SHIRE

**Plan 2 Owens Creek
 2 VAHR No.
 8123-0080**



Acknowledgements: VicMap ©State of Victoria

11.3.3 VAHR 8123-0078 Owens Creek LDAD

Extent

As VAHR 8123-0078 (Owens Creek LDAD) is a low density artefact distribution, it does not have an extent and is defined by its grid coordinates. The cadastral details for this place are detailed in Table 35 Table 31 and the locations can be found in Map 6.

Table 35 VAHR 8123-0078 cadastral information

Lot/Plan	75\PP3056	
Coordinates	Component 1	Component 3
	E: 416723.5896 N: 5898389.702	E: 416735.5871 N: 5898473.586

Nature

VAHR 8123-0078 (Owens Creek LDAD) is a subsurface low density artefact distribution consisting of three Aboriginal lithic artefacts: a silcrete medial flake, a siltstone medial flake and a siltstone angular fragment. Artefacts were recovered from two mechanical trenches (MT20 and MT33) and were located between 200 and 300 millimetres in depth. A photograph of the location can be found in Photograph 49 and a representative image of the silcrete artefact in Figure 42.



Photograph 49 VAHR 8123-0078 Owens Creek LDAD (facing west, D.Carpenter. 16/11/2021)

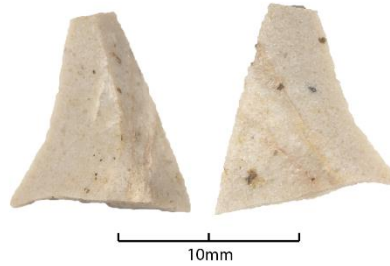


Figure 42 A representative sample of the silcrete artefact that make up part of VAHR 8123-0078 Owen Creek LDAD.

Cultural heritage significance

Under Section 4 of the *Aboriginal Heritage Act 2006*, cultural heritage significance can refer to:

- a) archaeological, anthropological, contemporary, historical, scientific, social or spiritual significance; and
- b) significance in accordance with Aboriginal tradition

VAHR 8123-0078 is deemed to be of high archaeological (scientific) significance due to it containing information of Aboriginal people who were present at the location in the past (Table 36Table 32). Although it may also have anthropological, contemporary, historical, social or spiritual significance, none was noted during the preparation of the plan. TLaWC provided a statement of significance in accordance with Aboriginal tradition for the CHMP which can be found in Appendix 8.

Table 36 VAHR 8123-0078 scientific significance

Contents	Condition	Representativeness	Overall significance
1 - Place contains a small number (e.g. 0-10 artefacts) or limited range of cultural materials with no evident stratification.	1 - Place in a deteriorated condition with a high degree of disturbance; some cultural materials remaining.	1 - Common occurrence	1 - 3 - Low

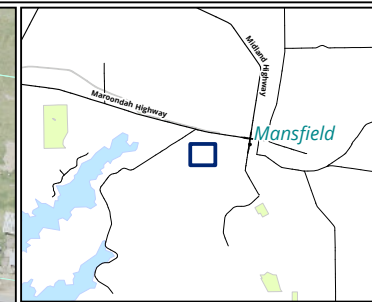
11.4 Sensitive areas not to be impacted by the activity

A number of areas that had been identified during the Standard Assessment as areas of archaeological potential (AoPs) were not tested during the Complex Assessment phase of the CHMP as they were not intended for development. The AoPs that were identified during the Standard Assessment can be found on Map 4.1. After the application of a slope analysis, AoPs 3, 4 and 5 were reduced (see Maps 4.2 and 4.3 and discussion in Section 9.6). Testing was undertaken in some of these reduced AoPs where these intersected with development parcels (AoPs 1, and 4). Where excavation occurred but no Aboriginal material culture was found, these were removed as areas of potential. As Aboriginal cultural material was found in parts of AoP2, the area of potential has been replaced by the registration of an Aboriginal place (VAHR 8123-0079). As these AoPs have undergone substantial modification, reduction and in some cases deletion, these have been revised into Sensitive Areas. These sensitive areas are discussed in Table 37 and displayed on Map 7. These sensitive areas are to be managed under Condition 8.

Table 37 Sensitive areas not to be impacted by the activity

Sensitive area	Relevant AoP from Standard Assessment	Reasoning behind identification and changes made	Description of sensitive area
Sensitive Area 1	AoP1	<p>Identified as AoP1 during the Standard Assessment as Aboriginal places within the geographic region would commonly occur on elevated areas overlooking waterways.</p> <p>AoP1 was partially reduced to the current extent (now Sensitive Area 1) on the south-western extent due to negative subsurface testing (MTs 12 and 13).</p>	Low-lying area to the east of the low rise and close to Owens Creek. An area close to a source of fresh water and would have had partial protection from westerly winds.
Sensitive Area 2	AoP4	<p>Identified as part of AoP4 during the Standard Assessment due to being an elevated area with a good vantage point, and Aboriginal places are likely to occur in such places within the geographic region.</p> <p>AoP4 was reduced after the application of the slope analysis which involved it being split into a number of different parts. Sensitive Area 2 was retained as it had a low gradient and therefore good place preservation potential. Excavation was not performed in this location due to impacts not being proposed and therefore it cannot be ruled out as a sensitive area.</p>	A flattish area on an elevated portion of the Activity Area in proximity to waterways.
Sensitive Area 3	AoP4	<p>Identified as part of AoP4 during the Standard Assessment due to being an elevated area with a good vantage point, and Aboriginal places likely to occur in such places within the geographic region.</p> <p>AoP4 was reduced after the application of the slope analysis which involved it being split into a number of different parts. Sensitive Area 3 was retained as it had</p>	A flattish area on an elevated portion of the Activity Area in proximity to waterways.

Sensitive area	Relevant AoP from Standard Assessment	Reasoning behind identification and changes made	Description of sensitive area
		a low gradient and therefore good place preservation potential. Excavation was not performed in this location due to impacts not being proposed and therefore it cannot be ruled out as a sensitive area.	
Sensitive Area 4	AoPs 4 and 5	Identified as part of AoP5 with sections of AoP4 during the Standard Assessment due to being an elevated area with a good vantage point, and Aboriginal places likely to occur in such places within the geographic region. AoPs 4 and 5 were reduced after the application of the slope analysis which involved AoP4 being split into a number of different parts and AoP5 being reduced. Sensitive Area 4 was retained as it had a low gradient and excavation was not performed in this location.	A flattish area on an elevated portion of the Activity Area in proximity to waterways.
Sensitive Area 5	AoPs 5 and 6	Identified as part of AoP5 and all of AoP6 with during the Standard Assessment due to being the summit of an elevated area. TLaWC field representatives commented that such vantage points with a good line of sight to other elevated areas would have been used for lookouts within the area. AoP5 was reduced after the application of the slope analysis but AoP6 was retained. Sensitive Area 6 was retained as it had a low gradient and excavation was not performed in this location.	Peak of hill at the southern extent of Activity Area, marked at the 380 metre contour. Characterised by its elevation and the presence of exposed rocks and its proximity to waterways.



- Legend**
- Activity Area
 - ★ VAHR place
 - ✕ Aboriginal place
 - Place extent
 - Sensitive area (No-go zone)
 - Current parcel boundary
- Hydrology**
- ~ River or creek
 - Lake/Dam

Map 7 Sensitive areas not to be impacted by the activity

0 30 60 90 120
Metres
Scale: 1:3,500 @ A3
Coordinate System: GDA 1994 MGA Zone 55



Matter: 35858, CHMP: 18293,
Date: 07 March 2024,
Prepared for: DC, Prepared by: NM, Last edited by: nmatheis
Layout: 35858_M7_SensitiveAreas
Project: P:\35800s\35858\Mapping\35858_240Malcolms\Mansfield_CHMP.aprx

12 Consideration of Section 61 matters – Impact Assessment

12.1 Section 61 matters in relation to VAHR 8123-0079 Malcolm Street Rise Artefact Scatter

12.1.1 Can harm be avoided?

The development has been modified to avoid harm to VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter), so harm will be avoided. VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter) is within a designated no-go zone for the duration of the activity. No works or vehicle/plant movement associated with the activity can take place within the designated no-go zones throughout the duration of the activity.

12.1.2 Can harm be minimised?

As harm will be avoided to VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter), no harm minimisation measures are required.

12.1.3 Are specific measures needed for mitigating harm?

As harm will be avoided to VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter), no harm mitigation measures are required.

12.2 Section 61 matters in relation to VAHR 8123-0080 Owens Creek 2

12.2.1 Can harm be avoided?

The development has been modified to avoid harm to VAHR 8123-0080 (Owens Creek 2), so harm will be avoided. VAHR 8123-0080 (Owens Creek 2) is within a designated no-go zone for the duration of the activity. No works or vehicle/plant movement associated with the activity can take place within the designated no-go zones throughout the duration of the activity.

12.2.2 Can harm be minimised?

As harm will be avoided to VAHR 8123-0080 (Owens Creek 2), no harm minimisation measures are required.

12.2.3 Are specific measures needed for mitigating harm?

As harm will be avoided to VAHR 8123-0080 (Owens Creek 2), no harm mitigations measures are required.

12.3 Section 61 matters in relation to VAHR 8123-0078 Owens Creek LDAD

12.3.1 Can harm be avoided?

The artefacts recorded from VAHR 8123-0078 (Owens Creek LDAD) were collected during the Complex Assessment. Upon consultation with the RAP, it was deemed that no further place management was required for this LDAD and that salvage had essentially occurred during the Complex Assessment. The location of the LDAD is outside the building envelope and has not been designated a no-go zone. The location of the LDAD components have potential to be impacted by works associated with driveways, underground assets, landscaping etc. Therefore, harm to the registered location of the LDAD components cannot be avoided.

12.3.2 Can harm be minimised?

While the artefacts recorded from VAHR 8123-0078 (Owens Creek LDAD) have been collected/salvaged during the Complex Assessment there is still potential for impacts associated with works outside the building envelope (i.e. assets, landscaping etc) to occur at the registered location of the LDAD components. As these locations will not be designated no-go zones, potential harm from the activity cannot be minimised.

12.3.3 Are specific measures needed for mitigating harm?

The artefacts from VAHR 8123-0078 (Owens Creek LDAD) were collected/salvaged during the Complex Assessment. After consultation with the RAP, it was decided that no further harm mitigation measures are required.

12.4 What are the cumulative impacts on Aboriginal cultural heritage in the Activity Area?

Aboriginal material was likely deposited on the low rise and in the vicinity of Owens Creek where there would have been a good vantage point, protection from prevailing weather in the lee of the low rise, and close proximity to fresh water and other resources. After the arrival of European people, these places would have likely been disturbed through tree clearance, the building of structures and excavation for dams and other purposes. These changes to the land would have likely had an impact on natural environmental processes and may have hastened erosion, further impacting Aboriginal places.

The proposed subdivision is in response for growing demand for accommodation in the greater Mansfield area as Australia's population continues to grow and there is an increased interest in regional areas and areas close to the snowfields. Although the Sponsor as elected to avoid development in areas where Aboriginal material culture was located, the excavation undertaken through the Complex Assessment has already removed and displaced Aboriginal material, causing harm. When compared to densely built urban areas, the cumulative impacts to Aboriginal cultural heritage in the Activity Area is low.

12.5 Are there particular contingency plans that might be necessary?

In accordance with Section 61 of the *Aboriginal Heritage Act 2006*, a CHMP must consider any contingency plans required in relation to disputes, delays and other obstacles that may affect the conduct of the activity. Contingencies plans are presented in full in Section 3.

12.6 What custody and management arrangements might be needed?

In accordance with Section 61 of the *Aboriginal Heritage Act 2006*, a CHMP must consider requirements relating to the custody and management of Aboriginal cultural heritage collected during the course of the CHMP and as a result of the fulfilment of conditions outlined in the CHMP (presented in Section 1). Contingency plans for the custody and management of Aboriginal cultural heritage collected during the activity are presented in full in Section 3.

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Appendix 1 Mansfield Shire RLZ schedule

35.03
31/07/2018
VC148

RURAL LIVING ZONE

Shown on the planning scheme map as **RLZ** with a number (if shown).

Purpose

To implement the Municipal Planning Strategy and the Planning Policy Framework.

To provide for residential use in a rural environment.

To provide for agricultural land uses which do not adversely affect the amenity of surrounding land uses.

To protect and enhance the natural resources, biodiversity and landscape and heritage values of the area.

To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.

35.03-1
01/01/2024
VC250

Table of uses Section 1 - Permit not required

Use	Condition
Automated collection point	<p>Must meet the requirements of Clause 52.13-3 and 52.13-5.</p> <p>The gross floor area of all buildings must not exceed 50 square metres.</p>
Bed and breakfast	<p>No more than 10 persons may be accommodated away from their normal place of residence.</p> <p>At least 1 car parking space must be provided for each 2 persons able to be accommodated away from their normal place of residence.</p> <p>Must be located more than 500 metres from the nearest title boundary of land on which a work authority has been applied for or granted under the <i>Mineral Resources (Sustainable Development) Act 1990</i> .</p>
Community care accommodation	<p>Must meet the requirements of Clause 52.22-2.</p> <p>Must be located more than 500 metres from the nearest title boundary of land on which a work authority has been applied for or granted under the <i>Mineral Resources (Sustainable Development) Act 1990</i> .</p>
Domestic animal husbandry (other than Domestic animal boarding)	<p>Must be no more than 2 animals.</p>
Dwelling (other than Bed and breakfast)	<p>The lot must be at least the area specified in a schedule to this zone. If no area is specified, the lot must be at least 2 hectares.</p> <p>Must be the only dwelling on the lot.</p> <p>Must meet the requirements of Clause 35.03-2.</p> <p>Must be located more than 500 metres from the nearest title boundary of land on which a work authority has been applied for or granted under the <i>Mineral Resources (Sustainable Development) Act 1990</i> .</p>
Home based business	

Use	Condition
Informal outdoor recreation	
Poultry farm	Must be no more than 100 poultry (not including emus or ostriches). Must be no more than 10 emus and ostriches.
Racing dog husbandry	Must be no more than 2 animals.
Railway	
Small second dwelling	Must be no more than one dwelling existing on the lot. Must be the only small second dwelling on the lot. Reticulated natural gas must not be supplied to the building, or part of a building, used for the small second dwelling. Must meet the requirements of Clause 35.03-2. Must be located more than 500 metres from the nearest title boundary of land on which a work authority has been applied for or granted under the <i>Mineral Resources (Sustainable Development) Act 1990</i> .
Tramway	
Any use listed in Clause 62.01	Must meet the requirements of Clause 62.01.

Section 2 - Permit required

Use	Condition
Accommodation (other than Community care accommodation, Dwelling and Small second dwelling)	
Agriculture (other than Domestic animal husbandry, Apiculture, Intensive animal production, Poultry farm, Racing dog husbandry and Timber production)	
Bar	The site must not have direct access to a rural freeway.
Broiler farm - if the Section 1 condition to Poultry farm is not met	Must be no more than 10,000 chickens.
Car park	Must be used in conjunction with another use in Section 1 or 2.

Use	Condition
Convenience shop	The leasable floor area must not exceed 80 square metres. The site must not have direct access to a rural freeway.
Domestic animal boarding	
Dwelling (other than Bed and breakfast) - if the Section 1 condition is not met	Must meet the requirements of Clause 35.03-2.
Freeway service centre	Must meet the requirements of Clause 53.05.
Hotel	The site must not have direct access to a rural freeway.
Leisure and recreation (other than Informal outdoor recreation and Motor racing track) Market Medical centre Place of assembly (other than Amusement parlour, Carnival, Cinema based entertainment facility, Circus and Nightclub) Plant nursery Postal agency Primary produce sales	
Racing dog husbandry – if the Section 1 condition is not met	Must meet the requirements of Clause 53.12.
Restaurant	The site must not have direct access to a rural freeway.
Rural industry (other than Abattoir and Sawmill)	
Service station	The site must either: <ul style="list-style-type: none"> ▪ Adjoin a commercial zone or industrial zone. ▪ Adjoin, or have access to, a road in a Transport Zone 2 or a Transport Zone 3. The site must not exceed either: <ul style="list-style-type: none"> ▪ 3000 square metres.

Use	Condition
	<ul style="list-style-type: none"> 3600 square metres if it adjoins on two boundaries a road in a Transport Zone 2 or a Transport Zone 3. <p>The site must not have direct access to a rural freeway.</p>
Store	Must be in a building, not a dwelling, and used to store equipment, goods, or motor vehicles used in conjunction with the occupation of a resident of a dwelling on the lot.
Timber production	Must meet the requirements of Clause 53.11.
Utility installation (other than Minor utility installation and Telecommunications facility) Any other use not in Section 1 or 3	
Section 3 - Prohibited	

Use
Abattoir
Amusement parlour
Cinema based entertainment facility
Industry (other than Automated collection point and Rural Industry)
Intensive animal production
Motor racing track
Nightclub
Office (other than Medical centre)
Retail premises (other than Bar, Convenience shop, Hotel, Market, Plant nursery, Postal agency, Primary produce sales and Restaurant)
Saleyard
Sawmill
Small second dwelling – if the Section 1 condition is not met
Transport terminal
Warehouse (other than Store)

35.03-2 Use of land for a dwelling or small second dwelling

14/12/2023
VC253

A lot used for a dwelling or small second dwelling must meet the following requirements:

- Access to the dwelling or small second dwelling must be provided via an all-weather road with dimensions adequate

to accommodate emergency vehicles.

- Each dwelling or small second dwelling must be connected to reticulated sewerage, if available. If reticulated sewerage is not available, all wastewater from each dwelling must be treated and retained within the lot in accordance with the requirements of the Environment Protection Regulations under the *Environment Protection Act 2017* for an on-site wastewater management system.
- The dwelling or small second dwelling must be connected to a reticulated potable water supply or have an alternative potable water supply with adequate storage for domestic use as well as for fire fighting purposes.
- The dwelling or small second dwelling must be connected to a reticulated electricity supply or have an alternative energy source.

35.03-3 Subdivision

14/12/2023
VC253

A permit is required to subdivide land.

Each lot must be at least the area specified for the land in a schedule to this zone. If no area is specified, each lot must be at least 2 hectares.

A permit may be granted to create smaller lots if any of the following apply:

- The subdivision is the re-subdivision of existing lots and the number of lots is not increased.
- The number of lots is no more than the number the land could be subdivided into in accordance with a schedule to this zone.
- The subdivision is by a public authority or utility service provider to create a lot for a utility installation.

A permit must not be granted which would allow a separate lot to be created for land containing a small second dwelling.

VicSmart applications

Subject to Clause 71.06, an application under this clause for a development specified in Column 1 is a class of VicSmart application and must be assessed against the provision specified in Column 2.

Class of application	Information requirements and decision guidelines
Subdivide land to realign the common boundary between 2 lots where: <ul style="list-style-type: none"> ▪ Each new lot is at least the area specified for the land in the zone or the schedule to the zone. ▪ The area of either lot is reduced by less than 15 percent. ▪ The general direction of the common boundary does not change. 	Clause 59.01
Subdivide land into 2 lots where each new lot is at least the area specified for the land in the zone or the schedule to the zone.	Clause 59.12

35.03-4 Buildings and works

14/12/2023
VC253

A permit is required to construct or carry out any of the following:

- A building or works associated with a use in Section 2 of Clause 35.03-1. This does not apply to:
 - An alteration or extension to an existing dwelling provided the floor area of the alteration or extension is not more than the area specified in a schedule to this zone or, if no area is specified, 200 square metres. Any area specified must be more than 200 square metres.
 - An out-building associated with an existing dwelling provided the floor area of the out-building is not more than the area specified in a schedule to this zone or, if no area is specified, 250 square metres. Any area specified must be more than 250 square metres.
 - An alteration or extension to an existing building used for agriculture provided the floor area of the alteration or extension is not more than the area specified in the schedule to this zone or, if no area is specified, 250 square metres. Any area specified must be more than 250 square metres. The building must not be used to keep, board, breed or train animals.
 - A rainwater tank.
- Earthworks specified in a schedule to this zone, if on land specified in a schedule.
- A building which is within any of the following setbacks:
 - The setback from a Transport Zone 2 or land in a Public Acquisition Overlay if the Head, Transport for Victoria is the acquiring authority and the purpose of the acquisition is for a road, specified in the schedule to this zone or, if no setback is specified, 30 metres.
 - The setback from any other road or boundary specified in the schedule to this zone.
 - The distance from a dwelling not in the same ownership specified in the schedule to this zone.
 - 30 metres from a small second dwelling not in the same ownership.
 - 100 metres from a waterway, wetlands or designated flood plain or, the distance specified in the schedule to this zone. Any distance specified must be less than 100 metres.
- A building or works associated with accommodation located within 500 metres from the nearest title boundary of land on which a work authority has been applied for or granted under the *Mineral Resources (Sustainable Development) Act 1990* .

VicSmart applications

Subject to Clause 71.06, an application under this clause for a development specified in Column 1 is a class of VicSmart application and must be assessed against the provision specified in Column 2.

Class of application	Information requirements and decision guidelines
Construct a building or construct or carry out works with an estimated cost of up to \$250,000 where: <ul style="list-style-type: none"> ▪ The land is not used for Domestic animal husbandry, Pig farm, Poultry farm, Poultry hatchery, Racing dog husbandry or Rural industry. ▪ The land is not within 30 metres of land (not a road) which is in a residential zone. ▪ The building or works are not associated with accommodation located within 500 metres from the nearest title boundary of land on which a work authority has been applied for or granted under the <i>Mineral Resources (Sustainable Development) Act 1990</i> . Any works must not be earthworks specified in the schedule to the zone.	Clause 59.13

35.03-5 Decision guidelines22/03/2022
VC219

Before deciding on an application to use or subdivide land, construct a building or construct or carry out works, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

General issues

- The Municipal Planning Strategy and the Planning Policy Framework.
- Any Regional Catchment Strategy and associated plan applying to the land.
- The capability of the land to accommodate the proposed use or development.
- Whether the site is suitable for the use or development and whether the proposal is compatible with adjoining and nearby land uses.
- The potential for accommodation to be adversely affected by vehicular traffic, noise, blasting, dust and vibration from an existing or proposed extractive industry operation if it is located within 500 metres from the nearest title boundary of land on which a work authority has been applied for or granted under the *Mineral Resources (Sustainable Development) Act 1990*.

Agricultural issues

- The capacity of the site to sustain the agricultural use.
- Any integrated land management plan prepared for the site.
- The potential for the future expansion of the use or development and the impact of this on adjoining and nearby agricultural and other land uses.

Environmental issues

- The impact on the natural physical features and resources of the area and in particular any impact caused by the proposal on soil and water quality and by the emission of noise, dust and odours.
- The impact of the use or development on the flora, fauna and landscape features of the locality.
- The need to protect and enhance the biodiversity of the area, including the need to retain vegetation and faunal habitat and the need to revegetate land including riparian buffers along waterways, gullies, ridgelines, property boundaries and saline discharge and recharge area.
- The location of on-site effluent disposal areas to minimise the impact of nutrient loads on waterways and native vegetation.

Design and siting issues

- The impact of the siting, design, height, bulk, colours and materials to be used, on the natural environment, major roads, vistas and water features and the measures to be undertaken to minimise any adverse impacts.
- The impact on the character and appearance of the area or features of architectural, historic or scientific significance or of natural scenic beauty or importance.
- The location and design of existing and proposed infrastructure including roads, gas, water, drainage, telecommunications and sewerage facilities.
- Whether the use or development will require traffic management measures.
- The need to locate and design buildings used for accommodation to avoid or reduce the impact from vehicular traffic, noise, blasting, dust and vibration from an existing or proposed extractive industry operation if it is located within 500 metres from the nearest title boundary of land on which a work authority has been applied for or granted under the *Mineral Resources (Sustainable Development) Act 1990*.

35.03-6 Signs31/07/2018
VC148

Sign requirements are at Clause 52.05. This zone is in Category 3.

Appendix 2 Notice of intention to prepare a CHMP

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:	Alex Lyons		
ABN/ACN:	n/a		
Contact Name:	Alex Lyons		
Postal Address	PO Box 585 Tourquay VIC, 3228		
Business Number:	0438 436 898	Mobile:	0438 436 898
Email Address:	Alexlyons@outlook.com.au		

Sponsor's agent (if relevant)

Company:	Mountain Planning		
Contact Name:	Nick Vlahandreas		
Postal Address			
Business Number:	0409 723 259	Mobile:	0409 723 259
Email Address:	nickv@mountainplanning.com		

SECTION 2 - Description of proposed activity and location

Project Name:	Subdivision at 240 Malcolm Street, Mansfield		
Municipal district:	Mansfield Shire Council		

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

Subdivision

SECTION 3 - Cultural Heritage Advisor

Lucy Amorosi	Biosis	lamorosi@biosis.com.au
<i>Name</i>	<i>Company</i>	<i>Email address</i>

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

Start Date:	09-Sep-2021	Finish Date:	09-Sep-2022
-------------	-------------	--------------	-------------

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.

TAUNGURUNG Clans Aboriginal Corporation

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**.*

Taungurung Clans Aboriginal Corporation

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**.*

Biosis will contact TLaWC, the RAP, formally inviting them to evaluate the CHMP. Up to three consultation meetings will be conducted and representatives of TLaWC will be invited to participate in the Standard Assessment and any subsequent levels of assessment if required.

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:

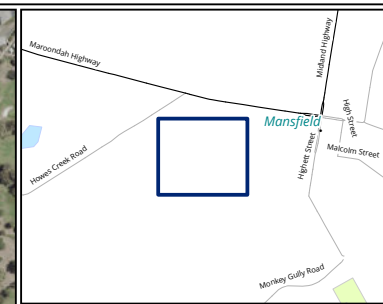
SECTION 10 - Notification checklist

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.)

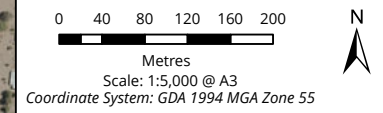

In addition to notifying the Deputy Director and any relevant registered Aboriginal party/ies, a Sponsor must also notify any owner and/or occupier of any land within the area to which the management plan relates. A copy of this notice with a map attached may be used for this purpose.

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.



- Legend**
- Activity Area
 - 200m buffer
 - ★ VAHR Place
 - Local government area
 - Contour 10m interval
- Hydrology**
- ~ River or Creek
 - Lake/Dam

Map 2 Extent of the Activity Area

Matter: 35858, CHMP: 18293,
 Date: 11 October 2021,
 Prepared for: LA/KN, Prepared by: SKM, Last edited by: smithell
 Layout: 35858_M2_Extent_AA
 Project: P:\35800s\35858\Mapping\35858_240MalcolmStMansfield_CHMP.aprx

146

Appendix 3 Notice to evaluate the CHMP



Tuesday, September 14, 2021

Dear Alex Lyons

Re: Notice of Intent – CHMP 18293
Proposed Subdivision at 240 Malcolm St, Mansfield

I refer to your notification to the Taungurung Land and Waters Council (TLaWC) to prepare a Cultural Heritage Management Plan for the above project, received on the 9 September 2021

Having reviewed this notice, I wish to advise that the TLaWC accepts this notice and will evaluate this CHMP. We advise that during the preparation of this plan, TLaWC requires regular consultations with the Heritage Advisor and the Sponsor in relation to the assessments of the activity area and the management recommendations before the plan is complete. TLaWC also requires that representatives of the Corporation participate in all field assessments.

Please note the following requirements as stipulated by the TLaWC Board:

Meetings

Inception Meeting:

In order to clarify the aims for this CHMP and discuss assessment methodologies it is a requirement that the Heritage Advisor who will be involved in the fieldwork and Sponsor attend an inception meeting at the TLaWC office **before** any fieldwork commences.

The TLaWC requires the following information before or at the Project Inception Meeting:

- an aerial photo and map of the Activity Area
- all Aboriginal site location data within a 5km radius of the Activity Area
- Aboriginal place cards for places already recorded in the Activity Area

Progress Meeting:

In order to discuss the fieldwork results for this CHMP the Heritage Advisor who was involved in the fieldwork must attend a progress meeting at the TLaWC office **after the fieldwork**.

Pre CHMP Submission Meeting:

In order to discuss the final Management requirements for CHMP the Heritage Advisor who was involved in the fieldwork must attend a meeting at the TLaWC office **before the CHMP is submitted for evaluation**. An on-site visit may be a preferable to an office meeting.

Meeting Bookings

Each meeting must be booked via the CHMP Meeting Request Form attached and emailed to the Administration Officer on the email address below.

Financial Payments

TLaWC's meeting and fieldwork fee schedule is attached.



TLaWC requires a flat fee of \$3,000 (excl GST) for meeting costs to be paid **before the project inception meeting**. This fee is for the time of two TLaWC representatives to attend the meetings and does not include travel expenses, including accommodation if required and mileage costs. These associated costs will be invoiced separately.

Once TLaWC has received the Inception Meeting booking form request and a copy of the remittance for the TLaWC CHMP meeting fees, our Administration Officer will organise a meeting time with you and your Heritage Adviser.

Please direct all project queries and requests to the TLaWC Administration Officer on 03 5784 1433 or 0427 832 241 or via email sbrown@taungurung.com.au please cc careforculture@taungurung.com.au in on any email correspondence. Please ensure the subject line includes the CHMP number.

Enclosed with this notice of intent response is the meeting booking form, the TLaWC schedule of fees and the field representative booking form. If you have any queries or concerns, please don't hesitate to let us know.

Yours sincerely,

Matthew Burns
Chief Executive Officer



TAUNGURUNG SCHEDULE OF FEES for 2020/2021

Cultural Heritage Management Plans	Amount
Consultation Process with Proponents, Cultural Heritage Advisor(s) & TLaWC Cultural Heritage Officers (x 2)	
Includes: <ul style="list-style-type: none"> • Inception Meeting prior to Project Commencement • Progress Meeting post site/survey work completed • Final Meeting prior to CHMP Report • Travel Expenses Including Mileage return @ \$0.95c per km and accommodation (if required) as per accommodation providers Invoice and Meal Allowance @ \$95.00 (if required) will be Invoiced separately 	\$3,000.00

Cultural Heritage Officer Fieldwork	Amount
Cultural Heritage Officers x 2 gross payment per day for field work NOTE: TLaWC Policy is 2 x TLaWC Reps per Archaeologist on site	\$3000.00
Plus Mileage both ways @ .95c per km	\$0.95
Plus \$95.00 per day per CHO (if overnight stay required)	\$95.00
Accommodation as per accommodation providers Invoice Progress payments must be made for work in excess of 5 days	TBC

Other	Amount
Cultural Heritage Site Inductions	\$800.00
Compliance Officer Inspection	\$1000.00
Artefact Repatriation – 2 x TLaWC Reps	\$800.00
Plus Mileage both ways per CHO (per km)	\$0.95
Plus meal allowance per day per CHO (if overnight stay required)	\$95.00
Accommodation as per accommodation provider Tax Invoice	TBA

All prices are **exclusive** of GST

Please note: failure to give **3 working days** cancellation notice will result in a **100% charge**.



REQUEST FORM FOR TAUNGURUNG FIELD REPRESENTATIVES

Organisation/ Company Making Request	Principal Contact: Organisation: Phone: Fax: Mobile: Email:		
Contact Person	<input type="checkbox"/> Same as above Mobile:		
Type of project	Name of Project:		CHMP#: (please ensure CHMP number is provided here)
	<input type="checkbox"/> CHMP Standard Assessment <input type="checkbox"/> CHMP Complex Assessment	<input type="checkbox"/> Inspection <input type="checkbox"/> Other.....	
Date Required			
Start/ Finish Time	Time Start:		Est. Time Finish:
Type of Meeting	<input type="checkbox"/> Survey <input type="checkbox"/> Monitoring Ground Disturbance <input type="checkbox"/> Excavation		
	<input type="checkbox"/> Salvage <input type="checkbox"/> Cultural Awareness Induction <input type="checkbox"/> Other (Specify).....		
Number of Reps Required (minimum of two reps per job)			
Meeting Location (please attach a map if no address)			
	Melways Reference:		Map Attached: <input type="checkbox"/>
Billing Details <i>NB. All bookings require 2 TLaWC CHOs</i>	Contact: Organisation: Address:		Fax:
	Phone:		Email:
	Mobile:		
	Purchase Order Number:		
Signature:			



REQUEST FORM FOR TAUNGURUNG MEETINGS

Organisation/ Company Making Request	Principal Contact: Organisation: Phone: _____ Fax: _____ Mobile: _____ Email: _____		
Contact Person	<input type="checkbox"/> Same as above	Mobile: _____	
Type of project	Name of Project:		CHMP#:
	(please ensure CHMP number is provided here)		
	Topics to be covered:		
Date Required			
Start/ Finish Time	Time Start:	Est. Time Finish:	
Type of Meeting	<input type="checkbox"/> Inception	<input type="checkbox"/> Onsite Inspection	<input type="checkbox"/> Post Field Work
	<input type="checkbox"/> Draft CHMP	<input type="checkbox"/> Other (Specify)	
Meeting Location (please attach a map if no address)			
	Melways Reference:	Map Axttached:	<input type="checkbox"/>
Billing Details <i>NB. All Meetings Require 2 TLWC CHOs</i>	Contact: Organisation: Address: Phone: _____ Fax: _____ Mobile: _____ Email: _____ Purchase Order Number: _____		
Signature:			

Appendix 4 Mansfield Shire Council correspondence

Daniel Carpenter

From: Planning Enquiries <planningenquiries@mansfield.vic.gov.au>
Sent: Tuesday, 2 July 2024 3:44 PM
To: alex@peg.com.au; 'Nick Vlahandreas'; Daniel Carpenter
Cc: 'Liz Davison'; 'Alex Duncan'
Subject: RE: DRAFT CHMP 18293 240 Malcolm Street, Mansfield

OFFICIAL

Good Afternoon Alex

Thank you for the time on the phone to provide some background and further clarity. Generally, Councils position is that any requirements out of a Cultural Heritage Management Plan can form part of relevant Permit Conditions. As such, I believe it would be appropriate for any application for a planning permit to include a proposed plan of subdivision with Exclusion Zones in accordance with the CHMP which could either be included in a Restriction on Title or through a Section 173 Agreement, as proposed by Nick in the email trail below.

I confirm that Council would be able to approve a Development Plan which included exclusion and protection areas for Cultural Heritage as well. Which would then dictate any requirement through the planning permit process.

As always, Council will be guided by directions from TLaWC and can include relevant requirements in any approvals we give.

I hope this helps and please advise TLaWC that they can contact me at anytime to discuss particulars if needed.

Kind Regards
Nicole



Mansfield Shire



Contact Council

Nicole Embling
Acting Manager Planning & Environment
Planning & Environment | Mansfield Shire Council

Phone: 03 5775 8524 | 0484 898 531
✉ Nicole.Embling@mansfield.vic.gov.au
🌐 mansfield.vic.gov.au



It's your Shire, and we're listening
Have your say and stay up to date on what matters to you

Mansfield Shire Council acknowledge the Taungurung people as the traditional owners of the land on which our offices are located. We pay respect to the Taungurung Elders, past, present and future and extend that respect to all Aboriginal and Torres Strait Islander peoples.

For information on Council's COVID-19 response visit www.mansfield.vic.gov.au/emergency. If you are deaf, or have a hearing or speech impairment contact us through the National Relay Service. For more information, visit www.relayservice.gov.au.

From: alex@peg.com.au <alex@peg.com.au>

Sent: Wednesday, June 26, 2024 3:43 PM

To: 'Nick Vlahandreas' <nickv@mountainplanning.com>; 'Daniel Carpenter' <DCarpenter@biosis.com.au>

Cc: Nicole Embling <Nicole.Embling@mansfield.vic.gov.au>; 'Liz Davison' <lizd@mountainplanning.com>; 'Alex Duncan' <alex@mountainplanning.com>

Subject: RE: DRAFT CHMP 18293 240 Malcolm Street, Mansfield

You don't often get email from alex@peg.com.au. [Learn why this is important](#)

External Message: This email originated from outside of the organisation. Do not reply, click links or open attachments unless you recognise the sender and know the content is safe.

Thanks Nick,

I've attached Daniel's email (for Nicole's reference) to the 2 x questions TLaWC were seeking clarification on.

To move forward... the items below can easily be documented and provide comfort for TLaWC.

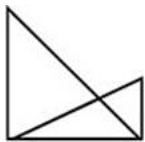
Nicole – can you please confirm council would support such approach.

I'm desperately trying to progress asap.

Regards

Alex Lyons

Managing Director



**PROPERTY
EXCHANGE
GROUP**

+61 438 436 898 | alex@peg.com.au

PO Box 585 Torquay, Vic 3228

peg.com.au

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From: Nick Vlahandreas <nickv@mountainplanning.com>

Sent: Wednesday, June 26, 2024 12:06 PM

To: Daniel Carpenter <DCarpenter@biosis.com.au>

Cc: alex@peg.com.au; Nicole Embling <Nicole.Embling@mansfield.vic.gov.au>; Liz Davison <lizd@mountainplanning.com>; Alex Duncan <alex@mountainplanning.com>

Subject: Re: DRAFT CHMP 18293 240 Malcolm Street, Mansfield

[Download full resolution images](#)

[Available until 26 Jul 2024](#)

Dear Daniel,

Thank you send through a copy of the draft Cultural Heritage Management Plan (CHMP) on 19 June 2024.

Our team has reviewed the draft CHMP and following our discussion with you this morning, we have a good handle of the matters the Taungurung Land and Waters Council (TLWC) seek clarification on.

It is proposed to undertake a 9 lot subdivision at the land located at 240 Malcolm Street, Mansfield.

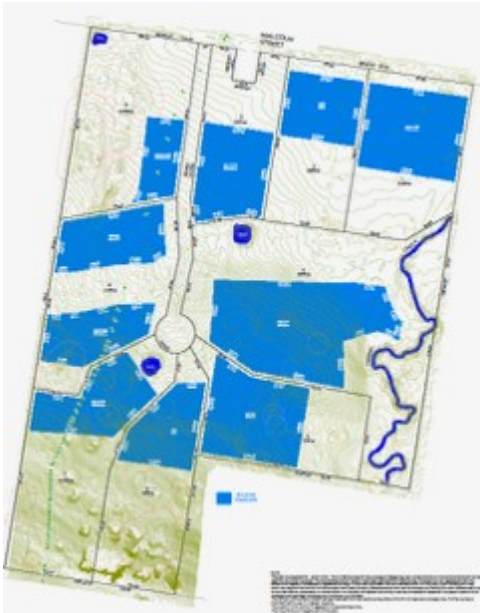
Mountain Planning carefully designed the proposed 9 lot subdivision and the proposed building envelopes.

The subject land is zoned Rural Living and is also covered by Schedule 3 to the Development Plan Overlay. Under the provisions of the Mansfield Planning Scheme there are no requirements for building envelopes to designed or imposed for a rural living subdivision. However, Mountain Planning designed building envelopes to protect critical elements of the site. These elements included:

- sufficient side and rear setbacks to reflect the low density of the subdivision;
- minimisation of impact on native vegetation;
- sufficient setbacks from waterways to promote water quality;
- prevention of buildings being located on the southern ridgeline; and,
- staggered alignment of building envelopes to create unique view corridors.

It also important to recognise that the design of the subdivision layout considered similar parameters and in particular the need to minimise impacts on native vegetation, waterways, the existing dwelling in the north east corner and the excised dwelling to the north of the property.

The original (8/11/2021) design and building envelopes are shown below (also attached):



The CHMP involved both a Standard Assessment and Complex Assessment. As a result, the building envelopes have altered since the original submission of the planning permit application. The revised plan with building envelopes is shown below and is Map 1 within the draft CHMP:



In comparing the two layouts there are some major differences as follows:

- Lot 3 building envelope is contained to the western boundary and extends further north due to the presence of VAHR places to the east
- Lot 1 building envelope is constrained to the existing dwelling and structures due to a “no go zone” being established to the west and south of the existing dwelling
- Lot 4 building envelope being relocated to the north west corner due to a “no go zone” being established in the south west corner
- Lot 5 building envelope being reduced in size and constrained to the west of the proposed allotment due to a “sensitive area” being established to the east of the allotment
- Reduction in the size of the building envelopes for lots 6 and 7
- Deletion of the northern building envelope for Lot 8 and a reduction in the size of the southern building envelope
- Small reduction in the size of the building envelope for Lot 9

My only concern with the revised building envelopes is that proposed for Lot 4. The proposed building envelope appears to cross the waterway which travels west to east across the subject land. It is best practice and indeed a State policy that buildings be setback 30m from a waterway. As such, we recommend the waterway be plotted by Peak and the building envelope setback 30m south of the waterway.

The building envelopes currently proposed are still quite large and range from 5,668 sqm (Lot 6) to 8,105 sqm (Lot 3). The rationale for the large building envelopes was that they are meant to be all encompassing. That is, it is intended for the building envelopes to contain all buildings, pools, tennis courts etc. This means, buildings will not be permitted outside of the building envelopes.

The TLaWC actually seeks the same outcome to protect the “sensitive areas” and “no go zones” shown on Map 1 within the draft CHMP.

The TLaWC and Biosis have requested advice from Mountain Planning on how the building envelopes and “no go zones” can be protected in perpetuity.

There are two tools which can be used to protect the objectives set by all parties. These include:

- The entering into a Section 173 Agreement under the *Planning and Environment Act* with attached Plan of Subdivision showing building envelopes and buildings and works exclusion zones.

The Section 173 Agreement would include specific restrictions and we would anticipate that these would specifically state that all buildings (as defined under the *Planning and Environment Act* http://www8.austlii.edu.au/cgi-bin/viewdoc/au/legis/vic/consol_act/paea1987254/s3.html) must be wholly contained within the building envelopes shown in the attached plan unless the written consent is obtained from Council and the TLaWC. The only exclusion would be fences which must only be constructed along the title boundaries; fencing within the building envelopes would be permissible.

We would also specify that no works are to occur within the specified “no go zones”.

The Section 173 Agreement is registered on each title and it appears as an encumbrance; this ensures that all landowners in the future are aware of the agreement and restrictions on each allotment.

- Plan of Creation of Restriction

The Plan of Creation of Restriction would have exactly the same building envelopes and no go zones as the Section 173 Agreement. Indeed, it would also have the same wording. However, in this instance I’m inclined to recommend a Section 173 Agreement over a Plan of Creation of Restriction and a plan can often be overlooked and it doesn’t appear on the Copy of Title as an encumbrance.

In summary, we believe that all parties seek the same objectives with this proposed subdivision in that all buildings are to be constrained within the specified building envelopes and no buildings and works are to occur in the specified no go zones and the appropriate tool to achieve these objectives is a Section 173 Agreement.

I have cc’d Nicole from Mansfield Shire Council and Nicole can jump in and provide Council’s advice.

It is important we have Council's advice as the draft CHMP will not be approved by the TLaWC until such advice is provided.

Should you require any further information then please do not hesitate to contact me.

Regards,

Nick

Nick Vlahandreas

Town Planner
Mountain Planning
Bright, Victoria, Australia

e. nickv@mountainplanning.com

p. 0409 723 259

[Click to Download](#)

J21186 - Proposed Plan of Sub V01 (1).pdf
3.4 MB

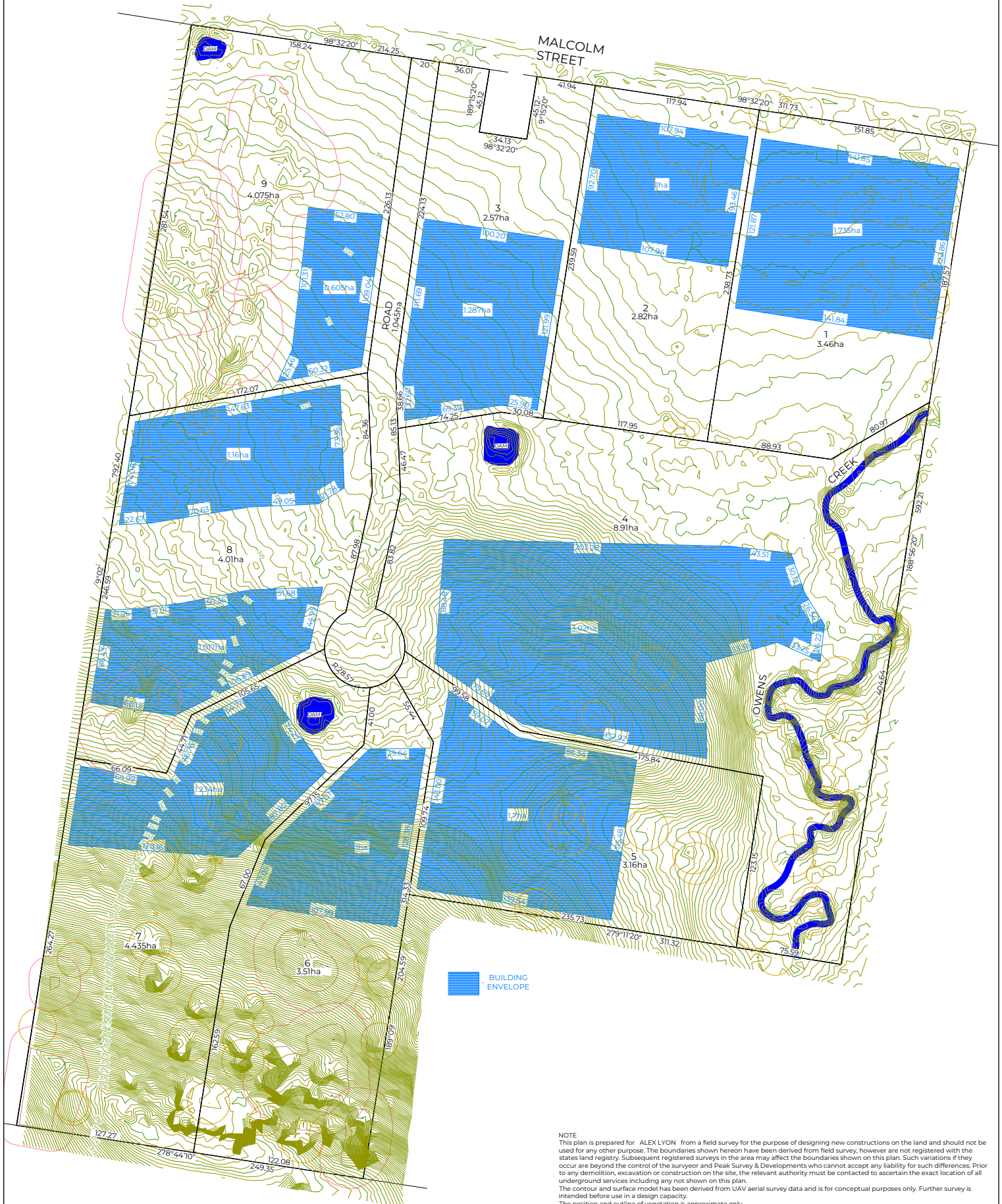
[Click to Download](#)

J21186 - UAV Survey Proposed Plan of Sub 7-02-2024.pdf
15.6 MB

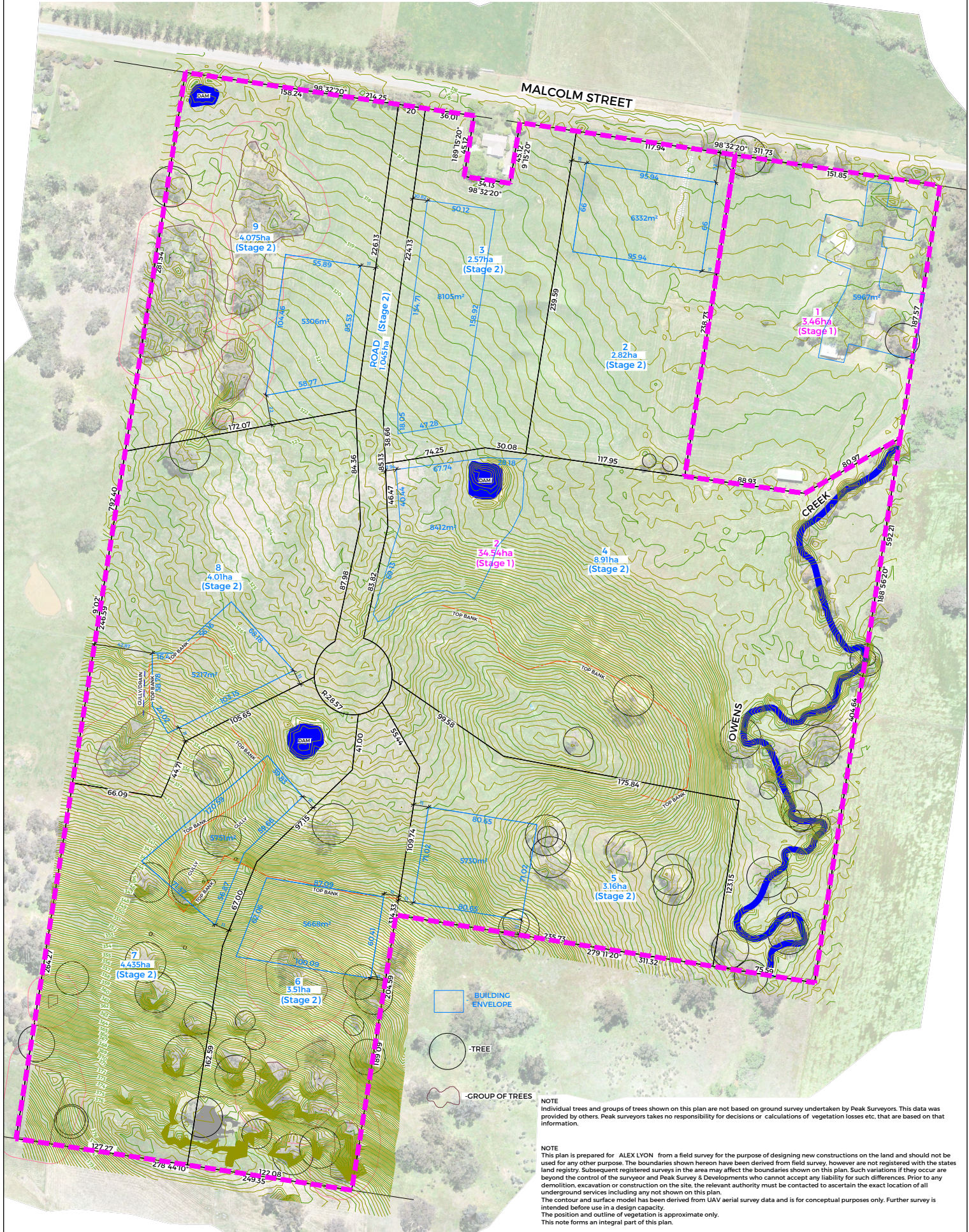
w. www.mountainplanning.com

f. www.facebook.com/mountainplan

We live and work in the mountains so we may take a day or so to reply to your email as we also like to play in the mountains.



NOTE
This plan is prepared for ALEX LYON from a field survey for the purpose of designing new constructions on the land and should not be used for any other purpose. The boundaries shown hereon have been derived from field survey, however are not registered with the states land registry. Subsequent registered surveys in the area may affect the boundaries shown on this plan. Such variations if they occur are beyond the control of the surveyor and Peak Survey & Developments who cannot accept any liability for such differences. Prior to any demolition, excavation or construction on the site, the relevant authority must be contacted to ascertain the exact location of all underground services including any not shown on this plan. The contour and surface model has been derived from UAV aerial survey data and is for conceptual purposes only. Further survey is intended before use in a design capacity. The position and outline of vegetation is approximate only. This note forms an integral part of this plan.



- BUILDING ENVELOPE
- TREE
- GROUP OF TREES

NOTE
Individual trees and groups of trees shown on this plan are not based on ground survey undertaken by Peak Surveyors. This data was provided by others. Peak surveyors takes no responsibility for decisions or calculations of vegetation losses etc, that are based on that information.

NOTE
This plan is prepared for ALEX LYON from a field survey for the purpose of designing new constructions on the land and should not be used for any other purpose. The boundaries shown hereon have been derived from field survey, however are not registered with the states land registry. Subsequent registered surveys in the area may affect the boundaries shown on this plan. Such variations if they occur are beyond the control of the surveyor and Peak Survey & Developments who cannot accept any liability for such differences. Prior to any demolition, excavation or construction on the site, the relevant authority must be contacted to ascertain the exact location of all underground services including any not shown on this plan. The contour and surface model has been derived from UAV aerial survey data and is for conceptual purposes only. Further survey is intended before use in a design capacity. The position and outline of vegetation is approximate only. This note forms an integral part of this plan.

MCA & AHD origin vide PM 49 (Published coordinates E 418 840.632 N 5898 288.472 RL 329.059), verified by PM 73

Designed	
Checked	J.M
Drawn	J.M
Survey	J.M
Date	7/02/2024
Datum	AHD71



ALEX LYON	
PROPOSED SUBDIVISION PLAN	
LOT 2 LP80798, LOT 1 TP244731 & CA 75	
PARISH OF MANSFIELD	
240 MALCOLM STREET, MANSFIELD	
Scale: 1:	SHEET 1 OF 2
	Original Sheet A1



PO Box 7338, East Albury NSW 2640
Ph 0422 919 652
ABN 33 632 109 712
www.peaksurveyors.com.au

Appendix 5 Aboriginal Places within the Geographic Region

VAHR Place	Place Name	Place Type
8123-0057	3 Collopy Street, Mansfield LDAD1	Low Density Artefact Distribution
8123-0077	Dead Horse Lane LDAD 1	Low Density Artefact Distribution
8123-0039	MANSFIELD ST 2	Scarred Tree
8123-0069	Ford Creek Rise Artefact Scatter	Artefact Scatter
8123-0040	MANSFIELD ST 3	Scarred Tree
8123-0041	MANSFIELD ST 4	Scarred Tree
8123-0045	OWENS CREEK 1	Artefact Scatter
8123-0038	MANSFIELD ST 1	Scarred Tree
8123-0058	Fords Creek LDAD	Low Density Artefact Distribution
8123-0049	Mansfield Shire Scarred Tree 1	Scarred Tree
8123-0074	Dead Horse Lane AS 1	Artefact Scatter
8123-0051	Info Centre - Scarred Tree - Mansfield	Object Collection
8123-0071	Ford Creek Artefact Scatter 2	Artefact Scatter
8123-0070	Ford Creek Artefact Scatter 1	Artefact Scatter
8123-0072	Ford Creek Artefact Scatter	Artefact Scatter
8123-0004	EILDON WEIR UPR GOULBURN R	Artefact Scatter
8123-0061	Stoneleigh Road LDAD 1	Low Density Artefact Distribution
8123-0075	Dead Horse Lane AS 2	Artefact Scatter
8123-0068	Ford Creek LDAD 1	Low Density Artefact Distribution
8123-0078	Owens Creek LDAD	Low Density Artefact Distribution
8123-0076	Dead Horse Lane AS 3	Artefact Scatter
8123-0059	Mansfield Shire Scarred Tree 2	Scarred Tree
8123-0060	Stoneleigh Rd ST1	Scarred Tree

Appendix 6 Subsurface testing catalogue

Table 38 Test pit log

No.	Location	Layer (mm)	Description	Munsell	pH	Artefacts
1	E 416769.6718 N 5898130.65	0-60	Silt with grass root inclusions.	2 YR 4/1 Dark Reddish Grey	6	No
		60-240	Silty clay with stone inclusions (between 50-100mm) and infrequent charcoal.	2 YR 5/2 Weak Red	6	No
		240-320 (360 SW)	Clay base.	2 YR 2.5/3 Dark Reddish Brown	6	No
2	E 416816.551 N 5898527.57	0-60	Dry, medium compacted, fine silt with grass root inclusions.	2.5 YR 5/2 Weak Red	6.5	No
		60-300	Very compacted, cemented, silty clay.	2.5 YR 6/1 Reddish Grey	6.5	No
		300-320 (360)	Very compacted, cemented clay base.	2.5 YR 5/4 Reddish Brown	5.5	No

Table 39 Machine trench log (bold trench number indicates the excavation contained Aboriginal cultural heritage)

No.	Location	Layer (mm)	Description	Munsell	pH	Artefacts
1	E 416495.779 N 5898165.071	0-90	Dry, fine grained silt with grass root inclusions.	2.5 YR 4/1 Dark Reddish Grey	5.5	No
		90-330	Very dry, very compact, cemented, medium grained silty clay. Approximately 50% of spit made up of gravel of varying sizes.	2.5 YR 7/2 Pale Red	5.5	No
		330-350+	Dry, compacted clay base.	2.5 YR 4/6 Red	5.5	No
2	E 416520.0962 N 5898187.399	0-80	Dry, fine grained silt with grass root inclusions.	2.5 YR 4/1 Dark Reddish Grey	5.5	No
		80-370	Very dry, very compact, cemented, medium grained silty clay. Approximately 30% of spit made up of gravel of varying sizes.	2.5 YR 7/2 Pale Red	5.5	No
		370-450	Dry, compacted clay base.	2.5 YR 4/6 Red	5.5	No
3	E 416527.6366 N 5898072.942	0-80	Dry, fine grained silt with grass root inclusions.	2.5 YR 4/1 Dark Reddish Grey	5.5	No

No.	Location	Layer (mm)	Description	Munsell	pH	Artefacts
		80-390	Very dry, very compact, cemented, medium grained silty clay. Approximately 30% of spit made up of gravel of varying sizes.	2.5 YR 7/2 Pale Red	5.5	No
		390-460	Dry, compacted clay base.	2.5 YR 4/6 Red	5.5	No
4	E 416501.7793 N 5898037.187	0-70	Dry, fine grained silt with grass root inclusions.	2.5 YR 4/1 Dark Reddish Grey	5.5	No
		70-300	Very dry, very compact, cemented, medium grained silty clay. Approximately 30% of spit made up of gravel of varying sizes.	2.5 YR 7/2 Pale Red	5.5	No
		300-360	Dry, compacted clay base.	2.5 YR 4/6 Red	5.5	No
5	E 416557.5964 N 5897976.351	0-110	Dry, fine grained silt with grass root inclusions.	2.5 YR 4/1 Dark Reddish Grey	5.5	No
		110-590	Very dry, very compact, cemented, medium grained silty clay. Heavy gravel fill layer (40%) commencing at 430mm.	2.5 YR 7/2 Pale Red	5.5	No
		590-630+	Dry, compacted clay base.	2.5 YR 4/6 Red	5.5	No
6	E 416605.8538 N 5897969.417	0-140	Dry, fine grained silt with grass root inclusions.	2.5 YR 4/1 Dark Reddish Grey	5.5	No
		140-480	Very dry, very compact, cemented, medium grained silty clay. Heavy gravel fill layer (40%) commencing at 400mm.	2.5 YR 7/2 Pale Red	5.5	No
		480-540	Dry, compacted clay base.	2.5 YR 4/6 Red	5.5	No
7	E 416588.626 N 5897999.483	0-90	Dry, fine grained silt with grass root inclusions.	2.5 YR 4/1 Dark Reddish Grey	5.5	No
		90-510	Very dry, very compact, cemented, medium grained silty clay. Heavy gravel fill layer (40%) commencing at 360mm.	2.5 YR 7/2 Pale Red	5.5	No
		510-530	Dry, compacted clay base.	2.5 YR 4/6 Red	5.5	No
8	E 416615.2992 N 5898184.711	0-50	Dry, fine grained silt with grass root inclusions.	2.5 YR 4/1 Dark Reddish Grey	5.5	No
		50-280	Very dry, very compact, cemented, medium grained silty clay. Pocket of heavy gravel fill in western side of spit.	2.5 YR 7/2 Pale Red	5.5	No
		280-310	Dry, compacted clay base.	2.5 YR 4/6 Red	5.5	No

No.	Location	Layer (mm)	Description	Munsell	pH	Artefacts
9	E 416616.1473 N 5898241.508	0-120	Dry, fine grained silt with grass root inclusions.	2.5 YR 4/1 Dark Reddish Grey	5.5	No
		120-300	Very dry, very compact, cemented, medium grained silty clay. Minimal gravel inclusions (10% of total spit).	2.5 YR 7/2 Pale Red	5.5	No
		300-350	Dry, compacted clay base.	2.5 YR 4/6 Red	5.5	No
10	E 416622.7772 N 5898291.707	0-100	Dry, fine grained silt with grass root inclusions.	2.5 YR 4/1 Dark Reddish Grey	5.5	No
		100-500	Very dry, very compact, cemented, medium grained silty clay. Layer of gravel and charcoal between 300 and 350mm..	2.5 YR 7/2 Pale Red	5.5	No
		500-550	Dry, compacted clay base.	2.5 YR 4/6 Red	5.5	No
11	E 416629.5207 N 5898343.235	0-80	Dry, fine grained silt with grass root inclusions.	2 YR 5/2 Weak Red	5.5	No
		80-550	Very dry, very compact, cemented, medium grained silty clay. Frequent gravel throughout spit, Pocket between 350 and 800mm.	2 YR 6/2 Pale Red	6	No
		550-800	Dry, compacted clay base. Pocket between 350 and 800mm.	2 YR 3/4 Dark Reddish Brown.	6	
12	E 416738.3078 N 5898049.737	0-100	Dry, fine grained silt with grass root inclusions.	2 YR 5/2 Weak Red	5.5	No
		100-400	Very dry, very compact, cemented, medium grained silty clay. Frequent gravel inclusions throughout spit and sheep skeletal element.	2 YR 6/2 Pale Red	6	No
		400-500	Dry, compacted clay base. Pocket between 350 and 800mm.	2 YR 3/4 Dark Reddish Brown.	6	No
		150-260	Possible trench mix of context 2 and context 3.			No
13	E 416726.9148 N 5898015.143	0-80	Dry, loose, organic layer of clayey silt. Inclusions of grass rootlets. Merging contact.	10 YR 5/2 Greyish Brown	6	No
		80-380	Dry, loose, clayey silt. Inclusions of gravel. Merging contact.	10 YR 7/4 Very Pale Brown	6	No
		380-480	Dry, loose silt clay with increasing clay content with depth. Frequent gravel and ironstone inclusions.	10 YR 3/8 Brownish Yellow	6.5	No

No.	Location	Layer (mm)	Description	Munsell	pH	Artefacts
			Undulating diffuse contact.			
		480+	Firm, compact clay base. End of excavation.	10 YR 4/6 Brownish Yellow, mottled with 10 YR 3/6 Yellowish Brown.	6.5	No
14	E 416690.3647 N 5898042.754	0-100	Dry, loose, 0 horizon, clayey silt. Inclusions of grass rootlets. Merging contact.	10 YR 5/2 Greyish Brown	6	No
		100-500	Dry, loose, clayey silt. Inclusions of gravel. Merging contact.	10 YR 7/4 Very Pale Brown	6	No
		500-580	Dry, loose silt clay with increasing clay content with depth. Inclusions of gravel and ironstone. Undulating diffuse contact.	10 YR 3/8 Brownish Yellow	6.5	No
		580+	Firm, compact clay base. End of excavation.	10 YR 4/6 Brownish Yellow, mottled with 10 YR 3/6 Yellowish Brown.	6.5	No
15	E 416705.443 N 5898150.3	0-90	Dry, loose, friable silt with grass rootlet inclusions. Merging contact.	7.5 YR 3/3 Dark Brown	6.5	Yes
		90-450	Dry, lightly compacted, clayey silt. Inclusions of gravel, natural quartz, and infrequent degrading basalt.	2.5 YR 4/6 Red	6.5	Yes
		450-600	Slightly moist, compacted, silty clay. Inclusions of large and frequent degrading basalt.	2.5 YR 4/6 Red	6.5	Yes
		600+	Compacted clay base. End of excavation.	2.5 YR 4/6 Red	6	No.
16	E 416736.383 N 5898168.454	0-180	Dry, friable, slightly loose, silt with grass rootlet inclusions. Merging contact.	7.5 YR 4/2 Brown	6.5	Yes
		180-480	Dry, slightly compacted, clayey silt. Inclusions of natural quartz, charcoal, gravel, burnt clay nodules, and degrading basalt .	5 YR 4/6 Yellowish Brown	6.5	Yes
		480-560	Dry, compacted, firm silt clay. Inclusions of natural quartz, charcoal, burnt clay nodules and degrading basalt.	7.5 YR 4/6 Strong Brown	6.5	No

No.	Location	Layer (mm)	Description	Munsell	pH	Artefacts
		560+	Dry, compacted, mottled clay base. Inclusions of burnt clay nodules and charcoal in base. End of excavation.	5 YR 4/3 Reddish Brown	7.5	No.
17	E 416713.7049 N 5898182.218	0-200	Dry, loose, organic layer of silt with grass root inclusions. Merging contact.	5 YR 4/3 Reddish Brown	6	Yes
		200-450	Dry, slightly compacted clayey silt. Inclusions of charcoal, degrading ballast, natural quartz and gravel. Merging contact.	2.5 YR 3/6 Dark Red	6	Yes
		450-1200	Dry, compacted clayey sandy silt with clayey silt mixed throughout. Inclusions of charcoal, degrading ballast, natural quartz and gravel.	10 YR 7/6 Yellow	6.5	No
		1200+	End of excavation due to OH + S.			
18	E 416723.1125 N 5898141.454	0-200	Slightly damp, loose silt (organic layer) with grass roots, natural quartz, charcoal and gravel inclusions. Merging contact	7.5YR 3/3 Dark Brown	6.5	Yes
		200-450	Dry, loose clayey silt with degrading basalt content and natural quartz inclusions. Diffuse level contact	2/5YR 4/8 Red	6.0	Yes
		450-590	Dry, loose, silty clay with degrading basalt content and large degrading basalt boulders. Clear level contact.	5YR 5/8 Yellowish Red	6.5	No
		590+	Slightly moist, compact concreted clay base with eroding basalt boulders in base.	2.5YR 4/8 Red	6.5	No
19	E 416819.4977 N 5898489.342	0-130	Damp, loose, soft clayey silt with some fine-grained sand content. Organic layer with inclusions of grass roots. Merging contact.	7.5 YR 4/4 Brown	6.5	No
		130-280	Dry, slightly compacted, clayey silt. Inclusions of gravel and natural quartz. Merging contact.	7.5 YR 6/3 Light Brown.	6.5	No
		280-400	Dry, slightly compacted, concreted, silty clay with increasing clay content with depth. Inclusions of	7.5 YR 6/4 Light Brown	6.5	No

No.	Location	Layer (mm)	Description	Munsell	pH	Artefacts
			natural quartz. Diffuse level contact.			
		400+	Dry, firm, compacted clay base. End of excavation.	5 YR 5/6 Yellowish Red	6.5	No
20	E 416723.5896 N 5898389.702	0-120	Damp, loose, soft clayey silt with some fine-grained sand content. Organic layer with inclusions of grass roots. Merging contact.	7.5 YR 4/4 Brown	6.5	No
		120-390	Dry, slightly compacted, clayey silt. Inclusions of gravel Merging contact.	7.5 YR 6/3 Light Brown.	6.5	Yes
		390-450	Dry, slightly compacted, concreted, silty clay with increasing clay content with depth. Inclusions of gravel. Diffuse level contact.	7.5 YR 6/4 Light Brown	6.5	No
		450-500	Dry, firm, compacted clay base. End of excavation.	5 YR 5/6 Yellowish Red	6.5	No
21	E 416799.456 N 5898532.218	0-100	Damp, loose, soft clayey silt with some fine-grained sand content. Organic layer with inclusions of grass roots. Merging contact.	7.5 YR 4/4 Brown	6.5	No
		100-300	Soft, loose, clayey silt. Inclusions of gravel and natural quartz. Merging contact.	5 YR 5/4 Brown	6.5	No
		300-420	Dry, compact, firm, silty clay with gravel inclusions. Merging contact.	2.5 YR 5/6 Red	6.5	No
		420+	Compact, firm clay base.	2.5 YR 4/6 Red	6	No
		520	End of excavation at sterile clay base.			
22	E 416850.3473 N 5898527.053	0-120	Slightly damp, loose, clayey silt with grass root inclusions. Merging contact.	7.5 YR 5/3 Brown	6	No
		120-330	Dry, loose, clayey silt. Inclusions of charcoal and gravel. Merging contact.	7.5 YR 6/4 Light Brown	6	No
		330-400	Dry, compacted, silty clay with increasing clay content with depth. Inclusions of charcoal and gravel. Clear level contact.	5 YR 5/6 Yellowish Red	6	No
		400+	Dry, firm, compacted undulating clay base with burnt tree root and	2.5 YR 4/6 Red	6.5	No

No.	Location	Layer (mm)	Description	Munsell	pH	Artefacts
			charcoal inclusions in base. End of excavation			
23	E 416666.4932 N 5898395.042	0-180	Slightly damp, loose, clayey silt with grass root and gravel inclusions. Merging contact.	7.5 YR 5/3 Brown	6	No
		180-380	Dry, loose, clayey silt. Inclusions of charcoal and gravel. Merging contact.	7.5 YR 6/4 Light Brown	6	No
		380-500	Dry, compacted, silty clay with increasing clay content with depth. Inclusions of charcoal and gravel. Clear level contact.	5 YR 5/6 Yellowish Red	6	No
		500+	Dry, firm, compacted undulating clay base with burnt tree root and charcoal inclusions in base. End of excavation	2.5 YR 4/6 Red	6.5	No
24	E 416633.7727 N 5898407.177	0-180	Slightly damp, loose, clayey silt with grass root, charcoal, and gravel inclusions. Merging contact.	7.5 YR 5/3 Brown	6	No
		180-320	Dry, loose, clayey silt. Inclusions of frequent buckshot, charcoal and gravel. Merging contact.	7.5 YR 6/4 Light Brown	6	No
		320-540	Dry, compacted, silty clay with increasing clay content with depth. Inclusions of charcoal and gravel. Clear level contact.	5 YR 5/6 Yellowish Red	6	No
		540-660	Dry, firm, compacted undulating clay base. Inclusions of charcoal and a potential tree root in base. End of excavation	2.5 YR 4/6 Red	6.5	No
25	E 416645.0085 N 5898470.86	0-160	Very damp, loose, organic silt layer with slight clay content. Grass root, gravel and charcoal inclusions Merging contact	7.5YR 3/4 Dark Brown	6.5	No
		160-340	Damp, sticky, friable clayey silt with coal and charcoal, gravel and buckshot inclusions. Diffuse level contact	5YR 4/6 Yellowish Red	6.5	No
		340-400	Slightly compacted, dry silty clay with increasing clay content with depth and gravel and buckshot inclusions.	2.5 YR 4/6 Red	6.5	No

No.	Location	Layer (mm)	Description	Munsell	pH	Artefacts
			Clear level contact.			
		400-480	Dry, compacted sticky clay base with an old tree root causing discoloration in base. End of excavation	2.5 YR 4/6 Red	6.0	No
26	E 416651.342 N 5898526.523	0-180	Very damp, loose, organic silt layer with slight clay content. Grass root, gravel and water worn pebble inclusions Merging contact	7.5YR 3/4 Dark Brown	6.5	No
		180-350	Damp, sticky, friable clayey silt with gravel and water worn pebble inclusions. Diffuse level contact	5YR 4/6 Yellowish Red	6.5	No
		350-500	Slightly compacted, dry silty clay with increasing clay content with depth and gravel and water worn inclusions. Clear level contact.	2.5 YR 4/6 Red	6.5	No
		500+	Dry, compacted sticky clay base. End of excavation.	2.5 YR 4/6 Red	6.0	No
27	E 416656.9165 N 5898572.995	0-180	Very damp, loose, organic silt layer with slight clay content. Grass root, gravel and water worn pebble inclusions Merging contact	7.5YR 3/4 Dark Brown	6.0	No
		180-400	Damp, sticky, friable clayey silt with gravel, water worn pebbles and buckshot. Diffuse level contact	5YR 4/6 Yellowish Red	6.0	No
		400-480	Slightly compacted, dry silty clay with increasing clay content with depth and gravel and buckshot. Clear level contact.	2.5 YR 4/6 Red	6.0	No
		480+	Dry, compacted sticky clay base. End of excavation.	2.5 YR 4/6 Red	6.5	No
28	E 416593.0582 N 5898456.259	0-120	Very damp, loose, organic silt layer with slight clay content. Grass root inclusions Merging contact	7.5YR 3/4 Dark Brown	6.0	No
		120-380	Damp, sticky, friable clayey silt with gravel and buckshot.	5YR 4/6 Yellowish Red	6.0	No

No.	Location	Layer (mm)	Description	Munsell	pH	Artefacts
			Diffuse level contact			
		380-540	Slightly compacted, dry silty clay with increasing clay content with depth and gravel, water worn pebbles and buckshot. Clear level contact.	2.5 YR 4/6 Red	6.0	No
		540+	Dry, compacted sticky clay base. End of excavation.	2.5 YR 4/6 Red	6.5	No
29	E 416591.7477 N 5898410.164	0-100	Very damp, loose, organic silt layer with slight clay content. Grass root inclusions Merging contact	7.5YR 3/4 Dark Brown	6.5	No
		100-280	Damp, sticky, friable clayey silt with gravel and buckshot. Diffuse level contact	5YR 4/6 Yellowish Red	6.0	No
		280-350	Slightly compacted, dry silty clay with increasing clay content with depth and gravel, buckshot and water worn pebbles. Clear level contact.	2.5 YR 4/6 Red	6.5	No
		350-420	Dry, compacted sticky clay base. End of excavation.	2.5 YR 4/6 Red	6.5	No
30	E 416952.5351 N 5898462.144	0-160	Loose, slightly damp organic layer silt with grass roots, glass fragments and plastic inclusions. Merging contact	7.5YR 4/4 Brown	6.0	Yes
		160-420	Loose, dry clayey silt with slight sand content and gravel, charcoal and buckshot inclusions. Clear level contact.	7.5YR 6/4 Light Brown	6.5	Yes
		420+	Very dry, compacted clay base. End of excavation.	5YR 4/6 Yellowish Red	6.0	No
31	E 416980.7155 N 5898398.462	0-110	Loose, slightly damp silt (organic layer) with grass roots and glass fragments inclusions. Diffuse level contact.	7.5YR 4/4 Brown	6.0	Yes
		110-360	Loose, very dry clayey, slightly sandy silt with charcoal, gravel and buckshot inclusions. Merging contact.	7.5YR 4/6 Strong Brown	6.0	Yes
		360-450	Very dry, slightly compacted silty clay with gravel and buckshot	5YR 4/6 Yellowish Red	6.5	No

No.	Location	Layer (mm)	Description	Munsell	pH	Artefacts
			inclusions. Clear level contact.			
		450+	Very dry, very compacted clay base. End of excavation.	2.5YR 4/4 Reddish Brown	6.5	No
32	E 416947.593 N 5898402.655	0-80	Loose, slightly damp silt (organic layer) with grass roots and glass fragments inclusions. Diffuse level contact.	7.5YR 4/4 Brown	6.0	Yes
		80-300	Loose, very dry clayey, slightly sandy silt with charcoal, gravel and buckshot inclusions. Merging contact	7.5YR 4/6 Strong Brown	6.5	Yes
		300-370	Very dry, slightly compacted silty clay with gravel and buckshot inclusions. Clear level contact.	5YR 4/6 Yellowish Red	6.0	No
		370+	Very dry, very compacted clay base. End of excavation.	2.5YR 4/4 Reddish Brown	6.0	No
33	E 416735.5871 N 5898473.586	0-100mm	Very dry, loose silt topsoil (organic layer) with grass roots and occasional quartz and gravel inclusions	5YR 4/4 Reddish Brown	6.0	No
		100-380mm	Very dry, slightly compacted clayey silt with increasing clay content with depth. Occasional gravel, buckshot and waterworn pebbles	5YR 4/4 Reddish Brown	6.5	Yes
		380-400mm	Slightly moist, compacted clay base.	5YR 4/6 Yellowish Red	6.5	No
		400mm+	End of excavation			
34	E 416679.1551 N 5898483.097	0-180mm	Very dry, loose silt topsoil layer (organic layer) with grass roots and occasional gravel inclusions	5YR 4/4 Reddish Brown	6.5	No
		180-440mm	Very dry, slightly compacted clayey silt with increasing clay content with depth. Occasional gravel,	5YR 4/4 Reddish Brown	6.0	No
		440-580mm	Slightly moist, compacted clay base.	5YR 4/6 Yellowish Red	6.5	No
		580mm+	End of excavation.			
35	E 416675.5775 N 5898213.834	0-200mm	Very dry, compacted silt topsoil layer (organic layer) with grass	5YR 4/6 Reddish Brown	6.5	Yes

No.	Location	Layer (mm)	Description	Munsell	pH	Artefacts
			roots and occasional gravel and natural quartz inclusions			
		200-300mm	Very dry, slightly compacted clayey silt with increasing clay content with depth. Occasional gravel and ironstone inclusions.	5YR 4/4 Reddish Brown	6.0	No
		300-420mm	Slightly moist, compacted, firm clay base. End pf excavation.	5YR 4/6 Yellowish Red	6.0	No
36	E 416681.0953 N 5898257.538	0-500mm	Slightly compacted, very dry, slightly clayey silt with occasional gravel and natural quartz and frequent basalt inclusions.	5YR 4/3 Reddish Brown	5.5	No
		500-600mm	Slightly compacted, very dry silty clay with frequent gravel and basalt inclusions	5YR 4/6 Yellowish Red	5.5	No
		600-700mm	Compacted and dry clay base	5YR 4/6 Yellowish Red	6.0	No
		700mm+	End of excavation			
37	E 416689.3848 N 5898304.991	0-80mm	Very dry fine grained silt with grass roots, gravel and charcoal inclusions	7.5YR 5/3 Brown	6.0	No
		80-180mm	Dry, fine grained clayey silt with gravel and charcoal inclusions	7.5 YR 5/4 Brown mottled with 7.5YR 5/6 Strong Brown	5.5	No
		180-400mm (east side)	Damp slightly compacted, silty clay with gravel and charcoal inclusions	7.5YR 5/3 Brown	6.0	No
		180-400mm (west side)	Slightly moist, sticky silty clay (not natural) with gravel and charcoal inclusions	5YR 4/6 Yellowish Red	6.5	No
		400-500mm	Damp, compacted clay base	7.5YR 5/2 Brown	6.5	No
		500mm+	End of excavation			

Appendix 7 Artefact catalogue

Table 40 Artefact catalogue

<i>Easting</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416705.44 3	5898150.3	55	MT1 5	0-100	Basalt	Flake - Complete	None	None	Plain	Feather					14.6 3	11.0 3	1.79	18.0 4
416705.44 3	5898150.3	55	MT1 5	0-100	Basalt	Flake - Medial	None	None							11.1 3	18.9 4	4.88	21.4 9
416705.44 3	5898150.3	55	MT1 5	0-100	Basalt	Core - Multidirectional	1-32%	None			5	12.0 7			26.2 6	19.5 6	14.5	26.2 6
416705.44 3	5898150.3	55	MT1 5	0-100	Crystal Quartz	Flake - Proximal	None	None	Crushed						7.97	11.0 6	1.68	12.9 9
416705.44 3	5898150.3	55	MT1 5	0-100	Quartz	Flake - Distal	None	None		Feather					6.46	11.0 4	1.15	12
416705.44 3	5898150.3	55	MT1 5	0-100	Quartz	Flake - Distal	None	None		Feather					7.36	7.74	1.58	9.74
416705.44 3	5898150.3	55	MT1 5	0-100	Quartz	Flake - Complete	None	None	Crushed	Feather					25.7 2	17.2 2	8.46	27.3 8
416705.44 3	5898150.3	55	MT1 5	100- 200	Basalt	Flake - Complete	None	None	Plain	Feather					19.6 9	11.1 9	4.05	20.2

<i>Eastings</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416705.44 3	5898150.3	55	MT1 5	100- 200	Quartz	Flake - Medial	1-32%	None							7.76	6.67	3.35	8.98
416705.44 3	5898150.3	55	MT1 5	100- 200	Quartz	Flake - Complete	1-32%	None	Crushed	Feather					13.1 5	17.2 4	6.8	19.8 6
416705.44 3	5898150.3	55	MT1 5	100- 200	Quartz	Flake - Proximal	1-32%	None	Cortex						19.6 8	29.8 3	7.83	35.0 6
416705.44 3	5898150.3	55	MT1 5	100- 200	Quartz	Flake - Distal	None	None		Feather					5.05	9.12	2.18	9.39
416705.44 3	5898150.3	55	MT1 5	100- 200	Quartz	Flake - Proximal	None	None	Crushed						7.9	7.56	1.5	9.25
416705.44 3	5898150.3	55	MT1 5	200- 300	Crystal Quartz	Flake - Distal	None	None		Feather					9.04	7.37	2.03	11.7 6
416705.44 3	5898150.3	55	MT1 5	200- 300	Quartz	Flake - Distal	None	None		Feather					9.58	11.7 6	3.03	14.3 5
416705.44 3	5898150.3	55	MT1 5	200- 300	Quartz	Flake - Distal	1-32%	None		Feather					12.3 1	23.6 2	7.65	24.9 2
416705.44 3	5898150.3	55	MT1 5	300- 400	Basalt	Core - Multidirectional	None	None			2	14.7			24.8 1	19.7 1	12.5 7	24.8 1
416736.38 3	5898168.4 54	55	MT1 6	0-100	Basalt	Flake - Distal	1-32%	None		Feather					12.8 4	9.98	2.74	20.0 5
416736.38 3	5898168.4 54	55	MT1 6	0-100	Basalt	Blade - Complete	None	None	Plain	Feather					28.0 7	4.96	6.09	30.3 8

<i>Eastings</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416736.38 3	5898168.4 54	55	MT1 6	0-100	Silcrete	Core - Multidirectional	None	None			3	9.61			21.4 9	14.7 4	6.24	21.4 9
416736.38 3	5898168.4 54	55	MT1 6	100- 200	Basalt	Flake - Complete	None	None	Plain	Feather					10.7 7	6.18	1.61	11.3 2
416713.70 49	5898182.2 18	55	MT1 7	0-100	Quartz	Flake - Complete	None	None	Plain	Feather					11.6	8.14	2.43	13.1 3
416713.70 49	5898182.2 18	55	MT1 7	0-100	Crystal Quartz	Flake - Distal	None	None		Feather					6.69	5.86	1.33	7.2
416713.70 49	5898182.2 18	55	MT1 7	0-100	Crystal Quartz	Flake - Complete	None	None	Flaked	Feather					13.9 9	8.51	4.49	17.9 6
416713.70 49	5898182.2 18	55	MT1 7	0-100	Crystal Quartz	Flake - Complete	None	None	Plain	Feather					5.71	9.9	2.65	10.9 9
416713.70 49	5898182.2 18	55	MT1 7	0-100	Quartz	Flake - Complete	None	None	Crushed	Feather					9.33	9.1	5.23	14.9 9
416713.70 49	5898182.2 18	55	MT1 7	0-100	Quartz	Flake - Complete	None	None	Crushed	Feather					23.8	10.0 1	8.59	27.8 5
416713.70 49	5898182.2 18	55	MT1 7	0-100	Quartz	Flake - Distal	1-32%	None		Feather					11.6 9	17.6 5	6.99	23.8 1
416713.70 49	5898182.2 18	55	MT1 7	100- 200	Quartz	Flake - Complete	None	None	Crushed	Feather					11.2 7	11.0 4	7.3	14.2 1
416713.70 49	5898182.2 18	55	MT1 7	100- 200	Quartz	Flake - Distal	None	None		Feather					8.27	7.67	4.63	10.3 8

<i>Easting</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416713.70 49	5898182.2 18	55	MT1 7	100- 200	Quartz	Flake - Complete	None	None	Plain	Feather					19.0 1	16.3 7	2.87	24.2 7
416713.70 49	5898182.2 18	55	MT1 7	200- 300	Chert	Cobble or Pebble	None	None					Axe - Ground Edge		57.2 9	35.6 7	11.5 5	57.2 9
416723.11 25	5898141.4 54	55	MT1 8	0-100	Crystal Quartz	Flake - Proximal	None	None	Plain						6.09	11.1 5	1.28	15.0 1
416723.11 25	5898141.4 54	55	MT1 8	0-100	Crystal Quartz	Flake - Proximal	None	None	Plain						8.95	8.22	1.66	9.75
416723.11 25	5898141.4 54	55	MT1 8	0-100	Quartz	Flake - Distal	None	None		Feather					6.11	10.7 4	1.14	12.4 5
416723.11 25	5898141.4 54	55	MT1 8	0-100	Crystal Quartz	Flake - Proximal	None	None	Crushed						10.5	7.16	1.29	10.6 8
416723.11 25	5898141.4 54	55	MT1 8	0-100	Crystal Quartz	Flake - Medial	None	None							7.07	6.5	0.95	8.13
416723.11 25	5898141.4 54	55	MT1 8	0-100	Crystal Quartz	Flake - Complete	None	None	Crushed	Feather					7.88	12.7 3	2.8	15.8 7
416723.11 25	5898141.4 54	55	MT1 8	0-100	Crystal Quartz	Blade - Complete	None	None	Plain	Step					13.6	6.78	2.61	13.6
416723.11 25	5898141.4 54	55	MT1 8	0-100	Quartz	Flake - Distal	None	None		Feather					5.81	6.94	2.09	8

<i>Eastings</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416723.11 25	5898141.4 54	55	MT1 8	0-100	Quartz	Flake - Medial	None	None							8.48	9.58	3.14	13.3 8
416723.11 25	5898141.4 54	55	MT1 8	0-100	Quartz	Flake - Medial	None	None							5.55	12.6 2	3.61	13.9 4
416723.11 25	5898141.4 54	55	MT1 8	0-100	Quartz	Flake - Distal	None	None		Feather					9.54	10.0 8	3.41	12.4 8
416723.11 25	5898141.4 54	55	MT1 8	0-100	Quartz	Flake - Distal	None	None		Feather					6.81	11.8 6	3.19	14.5 6
416723.11 25	5898141.4 54	55	MT1 8	0-100	Quartz	Flake - Distal	None	None		Feather					8.68	12.2 8	2.41	
416723.11 25	5898141.4 54	55	MT1 8	0-100	Quartz	Flake - Distal	None	None		Feather					6.76	10.3 1	3.13	11.4 6
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Basalt	Blade - Distal	None	None		Feather					25.3 3	7.67	5.53	28.1
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Silcrete	Flake - Complete	None	1-32%	Plain	Feather					13.2	12.9 2	2.54	17.8
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Crystal Quartz	Flake - Distal	None	None		Feather					13.2 2	9.81	4.86	14.9 9
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Crystal Quartz	Flake - Complete	None	None	Plain	Feather					12.2 7	7.5	1.97	12.9 3
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Crystal Quartz	Flake - Complete	None	None	Crushed	Feather					9.65	7.07	1.03	9.99

<i>Easting</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	None	None		Feather					4.68	7	3.74	7.21
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Crystal Quartz	Flake - Proximal	None	None	Plain						10.0 5	7.74	1.26	10.3 2
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Crystal Quartz	Flake - Distal	None	None		Feather					5.98	9.64	2.59	12.6 5
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Crystal Quartz	Flake - Distal	None	None		Feather					5.65	13.3 8	2.97	14.9 2
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Complete	None	None	Crushed	Feather					23.8 5	19.7 3	6.54	31.2 6
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	1-32%	None		Feather					16.9 8	12.7 8	3.55	22.6 9
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	1-32%	None		Feather					10.9 4	8.8	5.64	13.1 1
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Blade - Complete	None	None	Plain	Feather					12.1 9	4.2	1.32	12.3 4
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Blade - Complete	None	None	Plain	Feather					16.6	4.94	2.72	16.9 6
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	None	None		Feather					9.75	8.29	2.56	12.3 4
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	None	None		Feather					4.68	6.68	1.3	8.55

<i>Easting</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Blade - Proximal	None	None	Plain						10.2 7	4.31	3.16	12.7 9
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Medial	None	None							4.29	11.4 9	2.63	11.3 8
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	None	None		Crushed					5.9	8	3.05	8.18
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Medial	None	None							5.84	6.86	2.4	9.07
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Medial	None	None							5.49	9.03	2.32	9.1
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Medial	None	None							7.18	17.7 1	4.9	18.9 3
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Complete	None	None	Crushed	Crushed					21.1 7	15.0 7	7.86	21.4 6
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Proximal	None	None	Plain						12.2 2	16.6	5.86	23.8 6
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	1-32%	None		Feather					12.2 8	12.8 6	5.94	17.8 8
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	1-32%	None		Feather					5.15	9.6	3.27	11.1 1
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Complete	None	None	Plain	Feather					7.87	5.33	3.54	10.1 9

<i>Eastings</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Medial	1-32%	None							6.79	15.7 6	6.07	16.6 4
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Complete	None	None	Plain	Feather					15.1 4	7.44	3.8	21.2 5
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Complete	None	None	Crushed	Feather					15.0 4	12.5 3	5.36	16.8
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	None	None		Crushed					7.5	10.9 2	5.74	14.3 6
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	None	None		Feather					8.91	7.52	4.27	10.7 8
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	None	None		Feather					4.05	4.88	1.92	7.26
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	None	None		Feather					15.1 8	9.75	4.71	19.0 7
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Medial	None	None							4.53	9.58	3.79	11.1 2
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Complete	None	None	Crushed	Feather					7.01	15.9 9	4.47	19.1 4
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	None	None		Feather					5.6	8.13	1.42	8.12
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	None	None		Feather					4.63	9.59	2.1	10.5 9

<i>Easting</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Distal	None	None		Feather					6.35	5.36	1.13	8.56
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Medial	None	None							3.63	11.0 7	2.31	11.6
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Medial	None	None							5.65	12.6	2.82	14.2 1
416723.11 25	5898141.4 54	55	MT1 8	200- 300	Quartz	Flake - Proximal	None	None	Plain						8.82	13.1 9	5.74	13.4 5
416723.11 25	5898141.4 54	55	MT1 8	300- 400	Crystal Quartz	Flake - Complete	None	None	Crushed	Feather					6.13	12.0 4	2.77	15.6 2
416723.58 96	5898389.7 02	55	MT2 0	200- 300	Silcrete	Flake - Medial	None	None							18.1 7	10.9 9	5.43	22.2 5
416952.53 51	5898462.1 44	55	MT3 0	0-100	Silcrete	Flake - Distal	None	None		Feather					11.0 3	6.35	1.6	11.3 8
416952.53 51	5898462.1 44	55	MT3 0	0-100	Silcrete	Flake - Complete	None	None	Plain	Feather					8.12	10.4 3	0.84	13.2 3
416952.53 51	5898462.1 44	55	MT3 0	0-100	Silcrete	Flake - Complete	None	None	Plain	Feather					13.9	9.13	1.24	17.7 9
416952.53 51	5898462.1 44	55	MT3 0	0-100	Silcrete	Flake - Distal	None	1-32%		Feather					17.7 3	10.9 4	3.24	19.1 4
416952.53 51	5898462.1 44	55	MT3 0	0-100	Silcrete	Flake - Proximal	None	None	Plain						11.8 8	8.21	1.31	12.6 4

<i>Easting</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416952.53 51	5898462.1 44	55	MT3 0	0-100	Silcrete	Flake - Complete	None	None	Plain	Feather					5.59	8.82	0.66	10.9
416952.53 51	5898462.1 44	55	MT3 0	0-100	Silcrete	Flake - Proximal	None	None	Plain						6.93	14.8 8	3.62	16.1 3
416952.53 51	5898462.1 44	55	MT3 0	0-100	Silcrete	Blade - Complete	None	None	Plain	Feather					18.0 2	8.06	2.07	20.8 3
416952.53 51	5898462.1 44	55	MT3 0	0-100	Basalt	Flake - Distal	1-32%	None		Feather					25.4 5	17.1 1	12.4 1	35.1
416952.53 51	5898462.1 44	55	MT3 0	0-100	Basalt	Flake - Complete	None	None	Plain	Feather					15.5 7	14.0 8	4.06	22.7 9
416952.53 51	5898462.1 44	55	MT3 0	0-100	Basalt	Blade - Distal	None	None		Feather					15.3 6	6.42	2.41	18.6 8
416952.53 51	5898462.1 44	55	MT3 0	0-100	Basalt	Flake - Distal	None	None		Feather					14.7	12.4 2	1.93	23.2
416952.53 51	5898462.1 44	55	MT3 0	0-100	Basalt	Flake - Complete	None	None	Plain	Feather					12.3 2	11.5 1	1.07	16.3 4
416952.53 51	5898462.1 44	55	MT3 0	0-100	Basalt	Flake - Complete	None	None	Plain	Feather					8.06	11.3 2	5.11	12.3 2
416952.53 51	5898462.1 44	55	MT3 0	0-100	Basalt	Flake - Distal	None	None		Feather					9.44	7.94	1.73	9.66
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Silcrete	Flake - Complete	None	None	Plain	Hinge					13.0 6	12.5 2	1.46	15

<i>Easting</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Silcrete	Flake - Medial	None	None							10.7 7	12.7 5	2.28	17.3 3
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Silcrete	Flake - Medial	None	1-32%							7.11	9.26	1.44	12.8 3
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Silcrete	Flake - Distal	None	None		Feather					6.92	10.1 5	1.64	13.9 5
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Silcrete	Flake - Medial	None	None							15.5 2	7.93	3.64	16.2
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Silcrete	Flake - Medial	None	None							6.4	10.4 6	1.64	12.8 5
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Silcrete	Blade - Distal	None	None		Hinge					10.8 7	5.31	3.98	11.3 6
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Silcrete	Flake - Distal	None	None		Hinge					14.9 5	10.8	5.89	18.0 5
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Silcrete	Flake - Distal	None	1-32%		Feather					15.7 2	12.6	5.66	19.1 2
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Silcrete	Blade - Proximal	None	None	Plain						25.3	11.3 9	6.14	26.1 8
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Silcrete	Flake - Proximal	None	None	Plain						12.2 6	9.43	2.13	14.3 2
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Quartz	Blade - Complete	None	None	Crushed	Step					18.8 9	7.8	2.94	20.1 1

<i>Eastings</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Blade - Distal	None	None		Feather					15.2 4	4.47	3.65	15.5 1
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Distal	None	None		Feather					7.18	6.1	1.73	11.6 9
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Distal	None	None		Feather					14.2 8	11.6 3	2.84	21.5 4
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Medial	None	None							6.95	15.1 1	3.34	16.2 4
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Blade - Distal	None	None		Feather					18.2 4	6.99	7.05	18.7 4
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Distal	1-32%	None		Feather					28.4 8	11.4 3	5.3	29.5 1
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Medial	None	None							11.4 9	9.22	2.46	13.4 7
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Medial	1-32%	None							5.56	16.6 4	7.99	19.6
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Distal	None	None		Feather					10.0 5	6.75	3.95	10.7 7
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Distal	None	None		Feather					7.66	6.67	3.57	10.4 9
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Distal	None	None		Feather					12.5 2	9.52	5.07	15.1 8

<i>Eastings</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Complete	None	None	Plain	Feather					8.25	5.32	1.65	10.3 4
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Distal	None	None		Feather					17.0 1	13.0 7	2.9	23.4 6
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Distal	None	None		Feather					18.3 6	11.4	3.36	20.7 1
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Complete	None	None	Plain	Feather					9.31	4.72	4.61	17.0 9
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Distal	1-32%	None		Feather					6.57	9.64	5.18	12.1 9
416952.53 51	5898462.1 44	55	MT3 0	100- 200	Basalt	Flake - Distal	None	None		Feather					11.7 8	11.8 9	5.57	17.9 7
416952.53 51	5898462.1 44	55	MT3 0	200- 300	Basalt	Flake - Distal	None	None		Feather					8.96	6.36	3.25	10.2 7
416952.53 51	5898462.1 44	55	MT3 0	200- 300	Silcrete	Flake - Medial	None	1-32%							10.5 6	6.61	1.99	11.3 4
416952.53 51	5898462.1 44	55	MT3 0	200- 300	Silcrete	Flake - Complete	None	None	Plain	Feather					8.36	6.26	0.63	8.65
416952.53 51	5898462.1 44	55	MT3 0	200- 300	Quartz	Flake - Complete	None	None	Crushed	Feather					10.1 7	18.6 9	3.29	19.4
416980.71 55	5898398.4 62	55	MT3 1	0-100	Crystal Quartz	Flake - Proximal	None	None	Flaked						14.3 2	15.3 8	4.1	22.2 2

<i>Eastings</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416980.71 55	5898398.4 62	55	MT3 1	0-100	Crystal Quartz	Flake - Proximal	None	None	Plain						11.9 1	10.7 8	5.15	14.4 5
416980.71 55	5898398.4 62	55	MT3 1	0-100	Quartz	Flake - Complete	None	None	Plain	Feather					7.61	8.17	3.07	8.07
416980.71 55	5898398.4 62	55	MT3 1	0-100	Silcrete	Flake - Distal	None	None		Feather					15.0 3	9.31	2.02	20.3 3
416980.71 55	5898398.4 62	55	MT3 1	0-100	Silcrete	Blade - Complete	None	None	Flaked	Step					23.7 5	11.4 6	3.57	24.9 1
416980.71 55	5898398.4 62	55	MT3 1	0-100	Silcrete	Flake - Medial	None	1-32%							10.6 9	12.1 7	2.57	15.6 9
416980.71 55	5898398.4 62	55	MT3 1	0-100	Silcrete	Flake - Longitudinal Split	None	None	Plain	Feather					17.7 7	7.46	2.05	17.7 8
416980.71 55	5898398.4 62	55	MT3 1	0-100	Silcrete	Flake - Distal	None	None		Feather					10.5 2	10.7 9	1.16	12.5 4
416980.71 55	5898398.4 62	55	MT3 1	100- 200	Silcrete	Flake - Complete	1-32%	None	Plain	Hinge					20.6 3	20.7 7	5.37	26.8 5
416980.71 55	5898398.4 62	55	MT3 1	100- 200	Silcrete	Flake - Medial	None	None							4.24	8.96	1.13	10.7 4
416980.71 55	5898398.4 62	55	MT3 1	100- 200	Crystal Quartz	Blade - Complete	None	None	Crushed	Feather					18.3 7	8.54	4.44	18.5 8
416980.71 55	5898398.4 62	55	MT3 1	100- 200	Basalt	Blade - Complete	None	None	Plain	Feather					23.7 4	7.85	5.94	24.7 1

<i>Eastings</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416980.71 55	5898398.4 62	55	MT3 2	0-100	Silcrete	Flake - Proximal	None	None	Plain						11.7 1	11.3 4	1.78	13.3 2
416980.71 55	5898398.4 62	55	MT3 2	0-100	Silcrete	Flake - Distal	None	None		Feather					11.0 4	6.53	1.65	12.7 7
416980.71 55	5898398.4 62	55	MT3 2	0-100	Silcrete	Flake - Longitudinal Split	None	None	Plain	Step					11.4 3	8.36	1.4	12.5 7
416980.71 55	5898398.4 62	55	MT3 2	0-100	Silcrete	Flake - Complete	None	None	Plain	Feather					16.5 9	10.0 3	3.84	17.9 2
416980.71 55	5898398.4 62	55	MT3 2	0-100	Quartz	Flake - Complete	None	None	Plain	Feather					8.82	14.3 4	3.93	14.9 9
416980.71 55	5898398.4 62	55	MT3 2	0-100	Crystal Quartz	Flake - Medial	None	None							12.8 2	11.4	2.8	14.8
416980.71 55	5898398.4 62	55	MT3 2	0-100	Quartz	Angular Fragment	None	None							16.6 9	15.2 9	2.34	16.6 9
416980.71 55	5898398.4 62	55	MT3 2	100- 200	Silcrete	Flake - Complete	None	None	Plain	Feather					21.9 9	15.1 2	2.98	24.6 5
416980.71 55	5898398.4 62	55	MT3 2	100- 200	Silcrete	Flake - Complete	None	None	Plain	Step					11	14.0 1	4.73	18.1 4
416980.71 55	5898398.4 62	55	MT3 2	100- 200	Silcrete	Flake - Medial	None	33-66%					Backed - Bondi Point		15.3 5	11.0 2	2.31	17.7 2

<i>Easting</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416980.71 55	5898398.4 62	55	MT3 2	100- 200	Silcrete	Flake - Complete	None	None	Plain	Feather					16.7 3	10.8 1	4.42	18.8 7
416980.71 55	5898398.4 62	55	MT3 2	100- 200	Silcrete	Flake - Proximal	None	None	Plain						6.87	7.65	1.06	7.67
416980.71 55	5898398.4 62	55	MT3 2	100- 200	Silcrete	Flake - Proximal	None	None	Plain						8.36	8.04	1.41	10.0 2
416980.71 55	5898398.4 62	55	MT3 2	100- 200	Silcrete	Flake - Distal	None	None		Step					13.2 6	7.98	1.09	14.7 7
416980.71 55	5898398.4 62	55	MT3 2	100- 200	Silcrete	Flake - Proximal	None	1-32%	Plain						10.8 9	9.75	1.95	12.6 5
416980.71 55	5898398.4 62	55	MT3 2	100- 200	Silcrete	Flake - Complete	None	None	Plain	Plunge					22.8 2	11.7 4	6.33	24.9 8
416980.71 55	5898398.4 62	55	MT3 2	100- 200	Quartz	Flake - Medial	None	None							7.5	7.04	2.16	9.13
416980.71 55	5898398.4 62	55	MT3 2	200- 300	Silcrete	Flake - Proximal	None	None	Flaked						14.4 9	11.1 9	2.5	19.0 9
416980.71 55	5898398.4 62	55	MT3 2	200- 300	Silcrete	Flake - Medial	None	None							5.04	7.86	1.69	9.11
416980.71 55	5898398.4 62	55	MT3 2	200- 300	Silcrete	Flake - Complete	None	None	Plain	Feather					13.1	6.52	1.39	14.1 9
416980.71 55	5898398.4 62	55	MT3 2	200- 300	Quartz	Angular Fragment	None	None							7.36	5.47	2.76	7.36

<i>Easting</i>	<i>Northing</i>	<i>Zone</i>	<i>Trench</i>	<i>Depth (mm)</i>	<i>Raw Material</i>	<i>Primary Form</i>	<i>Cortex %</i>	<i>% of edge with retouch/ usewear (flakes, blades and angular fragments only)</i>	<i>Flake Platform (complete and proximal flakes and blades only)</i>	<i>Flake Termination (complete, distal and longitudinal split flakes and blades only)</i>	<i>Number of complete scars (cores only)</i>	<i>Longest scar (axial mm) (cores only)</i>	<i>Formal Tool/ Core Type (if any)</i>	<i>Secondary Modification (if any)</i>	<i>Length - axial for flakes and blades (mm)</i>	<i>Width - axial for flakes and blades (mm)</i>	<i>Thickness (mm)</i>	<i>Maximum Dimension (mm)</i>
416980.71 55	5898398.4 62	55	MT3 2	200- 300	Quartz	Angular Fragment	None	None							8.08	5.85	2.29	8.08
416980.71 55	5898398.4 62	55	MT3 2	200- 300	Quartz	Flake - Distal	None	None		Feather					9.33	6.12	1.89	11.6 4
416735.58 71	5898473.5 86	55	MT3 3	200- 300	Other	Flake - Medial	None	None							12.2 8	6.24	1.5	13.0 2
416735.58 71	5898473.5 86	55	MT3 3	200- 300	Other	Angular Fragment	None	None							24.7 7	18.0 1	10.6 5	24.7 7
416675.57 75	5898213.8 34	55	MT3 5	0-100	Quartz	Flake - Complete	None	None	Crushed	Feather					11.2 9	7.56	1.69	12.2 3
416675.57 75	5898213.8 34	55	MT3 5	0-100	Quartz	Flake - Longitudinal Split	None	None	Crushed	Feather					18.4 2	6.74	3.75	18.7 2
416675.57 75	5898213.8 34	55	MT3 5	100- 200	Quartz	Flake - Complete	None	None	Crushed	Feather					28.6 5	23.8 9	12.2 1	33.4 6

Appendix 8 Gazetteer

Table 41 Aboriginal place gazetteer

Aboriginal place	Location	Type	Landform	Scientific significance
VAHR 8123-0079 (Malcolm Street Rise Artefact Scatter)	E: 416713.7049 N: 5898182.218	Artefact Scatter	Low rise	High
VAHR 8123-0080 (Owens Creek 2)	E: 416980.7155 N: 5898398.462	Artefact Scatter	Plains	Moderate
VAHR 8123-0078 (Owens Creek LDAD)	E: 416723.5896 N: 5898389.702	Low density artefact distribution	Plains	Low

Appendix 9 TLaWC statement of significance

Statement of Significance

240 Malcolm Street, Mansfield (CHMP 18293)

CHMP 18293 ‘240 Malcolm Street, Mansfield’ is a place of cultural significance for Taungurung people. The location of the activity area falls in a place of cultural importance for the Taungurung community and must be considered in the context of the Taungurung cultural landscape, to ensure that Taungurung cultural values are reflected (see Bird et al. 2019:3). In recognition of Taungurung values, this statement of significance aligns with the recommendations outlined in the Burra Charter (2013) which emphasises the importance of recognising and preserving Aboriginal cultural heritage.

CHMP 18293 offers valuable insight into the past lifestyles of Taungurung Ancestors. The lives of past Taungurung Elders remain inscribed upon the landscape, their stories embedded for future generations. As Taungurung Land and Waters Council looks to the future, the knowledges, teachings, memories, Lore and Ancestors of past Elders is safeguarded for their emerging leaders. For Taungurung people, the land is not just a resource but an integral part of their identity and culture. As Elder Uncle Ernie Innes prosed;

*“The river has spirit, it has a soul,
Its ancient peoples history is still being told,
Where the plants, animals, birds and fish belong,
The dreaming stories are told in dance and song”*

The activity area associated with CHMP 18293 is found in a region that includes landforms that have supported Taungurung lifeways for generations. The utilization of the general area associated with CHMP 18293 by the Taungurung people has been further supported by its biodiversity, environmental context and lithic artefact material, in the Owens creek region. Particularly notable is the chert ground edge axe found, which builds upon our current understanding of artefact typologies found on Taungurung country, thus showcasing the diversity of technologies and materials used by Taungurung Ancestors.

The environment in the region is characterised by shrubs, grasses and herbs which provide fertile land for foods. These include Kangaroo Grass, and golden wattle. Further this region is populated by Swamp Gum and Manna Gum which can be utilised for shelter, shields, containers, the preparation of pelts, and canoes which would have been crucial for the ancestors’ lifestyles. Evidence for using this resource for cultural practice can be seen in the presence of scar tree’s recorded along the Owens River. Further, the region has historical documentation of contemporary and continual Taungurung occupation of the region.

As such, given the cultural significance of the activity area, along with the potential to contain significant cultural heritage beyond the material culture, it is recommended the protections and management strategies discussed in this Cultural Heritage Management Plan (CHMP) are observed to ensure mitigation of harm to any potential cultural heritage. Protecting and conserving these sites will ensure the continued transfer of Taungurung heritage and maintain their cultural identity for future generations.

References

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Appendix 10 Significance assessment criteria

Assessing the heritage significance of an Aboriginal place is undertaken to make decisions about the best way to protect and manage the place. The assessment of significance can be complex and include a range of heritage values. The heritage values are broadly defined in the Burra Charter, the set of guidelines on cultural heritage management and practice prepared by the Australia International Council on Monuments and Places, as the ‘aesthetic, historic, scientific or social values for past, present or future generations’ (Australia ICOMOS 2013, pp. 21). Many Aboriginal places also have significance to a specific Aboriginal community.

Although there are no formal guidelines for the assessment of significance of Aboriginal archaeological places in Victoria, the definition of ‘cultural heritage significance’ under Section 4 of the *Aboriginal Heritage Act 2006* includes:

1. Archaeological, anthropological, contemporary, historical, scientific, social or spiritual significance; and
2. Significance in accordance with Aboriginal tradition.

Scientific significance is based on the capacity of Aboriginal places to provide us with historical, cultural or social information. The following evaluation will assess the scientific significance of the Aboriginal places recorded during this CHMP. The scientific significance assessment methodology outlined below is based on scores for research potential (divided into place contents and place condition) and for representativeness. This system is derived from Bowdler (1981).

Place contents refer to all cultural materials and organic remains associated with human activity at a place. Place condition refers to the degree of disturbance to the contents of a place at the time it was recorded. The representativeness of an Aboriginal place is assessed by whether the place is common, occasional, or rare in a given region. It is noted that assessments of representativeness are subjectively biased by current knowledge of the distribution and number of Aboriginal places and varies from place to place depending on the extent of archaeological research.

The determination of cultural significance for an Aboriginal place is expressed as a statement of significance. Nomination of the level of value—high, moderate, low or not applicable—for each relevant category is presented in Table 42.

Table 42 Scientific significance assessment criteria

Place Contents	Place Condition	Representativeness	Overall Significance
0 - No cultural material remaining.	0 - Place destroyed.		
1 - Place contains a small number (e.g. 0–10 artefacts) or limited range of cultural materials with no evident stratification.	1 - Place in a deteriorated condition with a high degree of disturbance; some cultural materials remaining.	1 - Common occurrence	1 - 3 - Low
2 - Place contains a larger number, but limited range of cultural materials; and/or some intact stratified deposit remains; and/or rare or unusual example(s) of a particular artefact type.	2 - Place in a fair to good condition, but with some disturbance.	2 - Occasional occurrence	4 - 6 - Moderate

<p>3 - Place contains a large number and diverse range of cultural materials; and/or largely intact stratified deposit; and/or surface spatial patterning of cultural materials that still reflect the way in which the cultural materials were deposited.</p>	<p>3 - Place in an excellent condition with little or no disturbance. For surface artefact scatters this may mean that the spatial patterning of cultural materials still reflects the way in which the cultural materials were deposited.</p>	<p>3 - Rare occurrence</p>	<p>7 - 9 - High</p>
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Appendix 11 Glossary

The glossary provides definitions of various terms used in this CHMP. There is often a degree of confusion about the use of terms such as *heritage place*, *historical place*, *archaeological place*. The definitions of these terms, as used in this report, have been included in the glossary. The term used most consistently is *heritage place*. For the purpose of discussion in this plan 'heritage place' can be subdivided into Aboriginal place and Historic place.

Heritage place: A place that has aesthetic, historic, scientific or social values for past, present or future generations – '...this definition encompasses all cultural places with any potential present or future value as defined above' (Pearson & Sullivan 1995, pp. 7).

Aboriginal place: Aboriginal place is defined under Section 5 of the *Aboriginal Heritage Act 2006* as follows:

5 What is an Aboriginal place?

- (1) For the purposes of this Act, an Aboriginal place is an area in Victoria or the coastal waters of Victoria that is of cultural heritage significance to the Aboriginal people of Victoria.
- (2) For the purposes of subsection (1), *area* includes any one or more of the following—
 - (a) an area of land;
 - (b) an expanse of water;
 - (c) a natural feature, formation or landscape;
 - (d) an archaeological place, feature or deposit;
 - (e) the area immediately surrounding anything referred to in paragraphs (c) and (d), 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;
 - (f) land set aside for the purpose of enabling Aboriginal human remains to be re-interred or otherwise deposited on a permanent basis;
 - (g) a building or structure.

Alluvial terrace: a platform created from deposits of alluvial material along river banks.

Angular fragment: a piece of stone that is blocky or angular, not flake-like.

Archaeology: the study of the remains of past human activity.

Artefact scatter: a surface scatter of cultural material. Aboriginal artefact scatters are defined as being the occurrence of five or more items of cultural material within an area of about 100 square metres. Artefact scatters are often the only physical remains of places where people have lived camped, prepared and eaten meals and worked.

Backed piece: a flake or blade that has been abruptly retouched along one or more margins opposite an acute (sharp) edge. Backed pieces include backed blades and geometric microliths. They are thought to have been hafted onto wooden handles to produce composite cutting tools. Backed pieces are a feature of the 'Australian small tool tradition', dating from between 5,000 and 1,000 BP in southern Australia (Holdaway & Stern 2004).

Blade: a flake at least twice as long as it is wide.

Burial place: usually a sub-surface pit containing human remains and sometimes associated artefacts.

Contact place: see 'Aboriginal historical archaeological place'.

Core: an artefact from which flakes have been detached using a hammerstone. Core types include single platform, multi-platform and bipolar forms.

Cortex: original or natural (unflaked) surface of a stone.

Cortical: refers to the cortex.

Flake: a stone piece removed from a core by percussion (striking it) or pressure. It is identified by the presence of a striking platform and bulb of percussion, not usually found on a naturally shattered stone.

Flaked piece: a piece of stone with definite flake surfaces, which cannot be classified as a flake or core.

Formal tool: an artefact that has been shaped by flaking, including retouch, or grinding to a predetermined form for use as a tool. Formal tools include scrapers, backed pieces and axes.

Geocentric Datum of Australia 1994 (GDA94): a system of latitudes and longitudes, or east and north coordinates, centred at the centre of the earth's mass. GDA94 is compatible with modern positioning techniques such as the Global Positioning System (GPS). It supersedes older coordinate systems (AGD66, AGD84). GDA94 is based on a global framework, the IERS Terrestrial Reference Frame (ITRF), but is fixed to a number of reference points in Australia. GDA94 is the Victorian Government Standard and spatial coordinates for excavations, transects and places in CHMP documents.

Geometric microlith: a small tool that has been fashioned from breaking apart a microblade. The piece is then retouched or backed and a small tool formed.

Grindstones: upper (handstone) and lower (basal) stones used to grind plants for food and medicine and/or ochre for painting. A handstone sometimes doubles as a hammerstone and/or anvil.

Hearth: usually a sub-surface feature found eroding from a river or creek bank or a sand dune - it indicates a place where Aboriginal people cooked food. The remains of a hearth are usually identifiable by the presence of charcoal and sometimes clay balls (like brick fragments) and hearth stones. Remains of burnt bone or shell are sometimes preserved within a hearth.

Isolated artefact: the occurrence of less than five items of cultural material within an area of about 100 square metres. It/they can be evidence of a short-lived (or one-off) activity location, the result of an artefact being lost or discarded during travel, or evidence of an artefact scatter that is otherwise obscured by poor ground visibility.

Manuport: foreign fragment, chunk or lump of stone that shows no clear signs of flaking but is out of geological context and must have been transported to the place by people.

Map Grid of Australia (MGA): The official coordinate projection for use with the Geocentric Datum of Australia 1994 (GDA94).

Mound: these places, often appearing as raised areas of darker soil, are found most commonly in the volcanic plains of western Victoria or on higher ground near bodies of water. The majority were probably formed by a slow build-up of debris resulting from earth-oven cooking; although some may have been formed by the collapse of sod or turf structures.

Percussion: the act of hitting a core with a hammerstone to strike off flakes.

Platform preparation: removal of small flake scars on the dorsal edge of a flake, opposite the bulb of percussion. These overhang removal scars are produced to prevent a platform from shattering.

Pre-contact: before contact with non-Aboriginal people.

Post-contact: after contact with non-Aboriginal people.

Quarry (stone/ochre source): a place where stone or ochre is exposed and has been extracted by Aboriginal people. The rock types most commonly quarried for artefact manufacture in Victoria include silcrete, quartz, quartzite, chert and fine-grained volcanics such as greenstone.

Rejuvenation flake: a flake that has been knapped from a core solely for the purpose of preparing a new platform and making it easier to get flakes off a core, as it reduces the angle between platform and core surface.

Retouch: a flake, flaked piece or core with intentional secondary flaking along one or more edges.

Rock art: 'paintings, engravings and shallow relief work on natural rock surfaces' (Rosenfeld 1988, pp. 1). Paintings were often produced by mineral pigments, such as ochre, combined with clay and usually mixed with water to form a paste or liquid that was applied to an unprepared rock surface. Rock engravings were made by incising, pounding, pecking or chiselling a design into a rock surface. Rare examples of carved trees occasionally survive.

Rock shelter: may contain the physical remains of camping places where people prepared meals, flaked stone, etc. They are often classed as a different type of place due to their fixed boundaries and greater likelihood of containing sub-surface deposits. Rock shelters may also contain rock art.

Scarred tree: scars on trees may be the result of removal of strips of bark by Aboriginal people e.g. for the manufacture of utensils, canoes or for shelter; or resulting from small notches chopped into the bark to provide hand and toe holds for hunting possums and koalas. Some scars may be the result of non-Aboriginal activity, such as surveyors' marks.

Scraper: a flake, flaked piece or core with systematic retouch on one or more margins.

Shell midden: a surface scatter and/or deposit comprised mainly of shell, sometimes containing stone artefacts, charcoal, bone and manuports. These place types are normally found in association with coastlines, rivers, creeks and swamps – wherever coastal, riverine or estuarine shellfish resources were accessed and exploited.

Significance: the importance of a heritage place or place for aesthetic, historic, scientific or social values for past, present or future generations.

Striking platform: the surface of a core, which is struck by a hammerstone to remove flakes.

Structures (Aboriginal): can refer to a number of different place types, grouped here only because of their relative rarity and their status as built structures. Most structures tend to be made of locally available rock, such as rock arrangements (ceremonial and domestic), fishtraps, dams and cairns, or of earth, such as mounds or some fishtraps.

Stratified deposit: material that has been laid down, over time, in distinguishable layers.

Transect: A fixed path along which one records archaeological remains.

Utilised artefact: a flake, flaked piece or core that has irregular small flake scarring along one or more margins that does not represent platform preparation.