

# Proposed Numurkah Flood Mitigation Project Stage 1 - Levee Construction, Numurkah, VIC 3636

Cultural Heritage Management Plan No: 19665

**Activity Size:** Medium

**Assessment:** Desktop & Standard

**Sponsor:** Moira Shire Council

(ABN/ACN: 20 538 141 700)

**Heritage Advisor:** Damian Wall

**Authors:** Damian Wall, Olivia Hynam  
& Jacqui Durrant

**Version 2**

**Date:** 8/3/24

94 Kirby Flat Road,  
Yackandandah, VIC 3749  
Phone: 0402 344 574  
ABN: 797 823 838 29  
damian.wall@red-gum.com.au





**YORTA YORTA NATION ABORIGINAL CORPORATION**

(under special administration)  
ABN: 55 942 996 311 - ICN: 3279

## Aboriginal Heritage Act 2006

Section 63(1)

### **Cultural Heritage Management Plan - Notice of Approval Yorta Yorta Nation Aboriginal Corporation**

**Cultural Heritage Management Plan number: 19665**

**Title:**

Proposed Numurkah Flood Mitigation Project Stage 1 - Levee Construction, Numurkah

**Cover Date:** 23/11/2023 **Pages:** 78

**Sponsor:** Moira Shire Council

**ACN/ABN:** 20 538 141 700

**Heritage Advisor(s):** Damian Wall

**Author(s):** Damian Wall, Olivia Hynam & Jacqui Durrant

I have considered the Evaluation Report for this CHMP.

I am satisfied that the CHMP has been prepared in accordance with the standards prescribed for the purposes of section 53 and adequately addresses the matters set out in section 61 of the *Aboriginal Heritage Act 2006*.

I, Lance James, Member, Board of Directors, Yorta Yorta Nation Aboriginal Corporation, hereby give notice to the Sponsor of the decision to approve the Cultural Heritage Management plan referred to above.

Signed:

**Lance James**

**Board Member, Board of Directors**

**Date: 18/03/2024**

**Shepparton Depot**  
2 Neptune Court  
Shepparton Vic 3630  
PO Box 1363 Shepparton VIC 3632  
PH: 03 5832 0222  
[reception@yynac.com.au](mailto:reception@yynac.com.au)

**Barmah Head Office**  
35 Schier Street  
Barmah Vic 3639  
PO Box 1363 Shepparton VIC 3632  
PH: 03 5832 0222  
[reception@yynac.com.au](mailto:reception@yynac.com.au)  
[web: www.yynac.com.au](http://www.yynac.com.au)

**Yenbena Training Centre**  
2-8 Schier Street  
Barmah Vic 3639  
PH: 03 5869 3336  
[reception@yynac.com.au](mailto:reception@yynac.com.au)

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**Assessment:** Desktop & Standard

**Sponsor:** *Moira Shire Council (ABN/ACN: 20538141700)*

**Heritage Advisor:** Damian Wall

**Authors:** Damian Wall, Olivia Hynam & Jacqui Durrant

**Aboriginal Cultural Heritage in the Activity Area:**  
None.

**Version 2**

**Date:** 8/3/24

## EXECUTIVE SUMMARY

Compliance requirements are set out in Part 1 of the Cultural Heritage Management Plan. Part 2 describes the Assessment undertaken within the Activity Area.

### Activity Area

The Activity area is the proposed alignment for a 3.5km Flood Mitigation levee located within the township of Numurkah. VIC, 3636. The activity area intersects several planning zones within the LGA of the Moira Shire: Public Park and Recreation Zone, General Residential Zone - Schedule 1, Commercial 1 Zone, Mixed Use Zone, Industrial 1 Zone and Public Use Zone – Transport. The levee will add to existing park infrastructure and trail networks along Broken Creek within the activity area boundary. The development is located within Goulburn Broken catchment and Moira shire council in Victoria.

### The Sponsor

The sponsor for this CHMP is Moira Shire Council (ABN/ACN: 205 381 417 00).

### The Activity

Moira Shire Council (“the Sponsor”) is proposing the construction of approximately 3.5 kilometres of mounded-earth levees and levee walls which will be located north of Broken Creek, to protect the township of Numurkah in the event of a flood. This is a voluntary Cultural Heritage Management Plan (CHMP) under Section 45 of the *Aboriginal Heritage Act 2006* as ‘Flood levees’ are not a listed high impact activity in the Regulations. The works will include approximately 1.9 kilometres of one-metre-high permanent mounded-earth levee, approximately 1.5 kilometres of one-metre-high permanent concrete wall levee and eleven (one-metre-high) temporary wall levees. Specific impacts are detailed in **Section 4** of this CHMP.

### Assessment Undertaken & Results

A Desktop and a Standard Assessment were undertaken as part of the preparation of this voluntary CHMP. The results of the desktop Assessment determined that, despite the likely disturbance within the Activity area, it is possible that Aboriginal cultural heritage is present, therefore a Standard assessment was required pursuant to r.62(1) of the Aboriginal Heritage Regulations 2018.

The standard assessment demonstrated that the land has been subject to varying levels of disturbance associated with the existing park infrastructure, township infrastructure, railway infrastructure, neighbouring roads and major flood events. Ground surface visibility encountered was variable, ranging from areas of good visibility (50-70%) to poor (10-30%) in areas of mown exotic grasses, along with some areas with no/zero visibility due to road infrastructure. It was recommended that additional on-site monitoring (Management Condition 4 & 5) will be required in the paddock survey unit (Survey Unit D) due to it having the highest potential for cultural heritage.

*In accordance with the Aboriginal Heritage Regulations 2018, the CHMP determined that further surface or sub-surface Aboriginal cultural heritage was not ‘reasonably possible’ (r.62), or likely to occur (r. 64) within the activity area. Therefore, a Complex Assessment was ‘not required’.*

### Aboriginal Cultural Heritage in the Activity Area

None.

## **Contributors**

Ms Jacqui Durrant' sole and specific attribution to this CHMP is Section 6.3 *Historical and Ethno-historical accounts in the geographic region*.

## **ACKNOWLEDGEMENTS**

Shannon Atkinson - Cultural Heritage Manager, Yorta Yorta Nation Aboriginal Corporation

Nathan Bourke - Cultural Heritage Officer, Yorta Yorta Nation Aboriginal Corporation

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## Part 1. Cultural Heritage Conditions

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

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

# 1 Cultural Heritage Management Conditions

The *Aboriginal Heritage Act 2006* requires a CHMP to set out Management Conditions for measures to be taken before, during and after the activity. No Aboriginal cultural heritage was identified during the Desktop or Standard Assessment, and no areas are identified as likely to contain Aboriginal cultural heritage. No specific cultural heritage management activities are provided; however, some general cultural heritage management conditions have been detailed below.

## 1.1 Management Condition 1: Cultural Heritage Induction

Given that Aboriginal cultural heritage material may still be located during the proposed activity, all persons undertaking the project works need to be adequately trained to respond to the discovery of any cultural heritage material. Consequently, prior to the commencement of the activity, induction training must be presented by a Yorta Yorta Nation Aboriginal Corporation (YYNAC) representative to all site supervisors of the primary contractors and any sub-contractors who are undertaking any ground disturbance works within the Activity area. A list of personnel that have attended the induction is to be maintained by the Sponsor and made available to YYNAC on request. The induction must include:

1. A brief history of the Aboriginal occupation of the activity area and broader region;
2. A summary of the archaeological investigations conducted within the activity area;
3. A summary of the conditions and contingencies contained within the CHMP; and
4. The obligations of site workers/contractors and Sponsors under the *Aboriginal Heritage Act 2006* (Vic) (No. 020, 2016).

The main aim of the cultural heritage induction is to:

- Explain the procedures outlined in the CHMP;
- Show the site contractors examples of the most likely Aboriginal cultural heritage material to be located within the Activity Area; and
- Explain the procedure outlined in the Contingency Plan section of the CHMP in the unlikely event that this material is uncovered by them during the course of construction works.

The cost of the Cultural Heritage Induction will be borne by the Sponsor and a minimum of two (2) weeks of notice must be given to YYNAC representatives via a booking form submitted to the YYNAC office administration and Heritage Manager. YYNAC must also be given two (2) weeks notice before any works commence on site and also be notified of works completion no longer than two (2) weeks post the official completion date.

## 1.2 Management Condition 2: Cultural Heritage Management Plan to be available onsite

A hard copy or digital copy of this approved Cultural Heritage Management Plan (management plan) must be held onsite at all times within the on-site construction office or with the site manager if an office is not provided, where it will remain readily available to all construction staff.

### 1.3 Management Condition 3: Approval Required for Changes to the Proposed Activity

Should any changes be necessary to the activity in terms of the nature and extent that the ground is to be affected, the Sponsor must obtain statutory approval and may be required to submit a new CHMP if the changes do not qualify as an exempt activity as listed in the *Aboriginal Heritage Act 2018* Division 2 Regulations 8-22. However, it should be noted that amendments to this CHMP can be sought, as per s45A of the *Aboriginal Heritage Act 2006* (Vic) (No. 020, 2016) and Schedule 3 of the *Aboriginal Heritage Regulations 2018* (Vic) (No. 59, 2018).

### 1.4 Management Condition 4: Monitoring in Sandy Red Low Rises & Creek Line Complex Landform (Survey Unit B)

Works are permitted within the extent of the paddock survey unit (Survey Unit D) provided the Sponsor ensures the following:

1. Prior to commencing works within this section, the works zone must be sprayed and mown (if required) to clearly define the alignment through the mapped extent of Survey Unit D shown in **Map A**;
2. The works zone must be highlighted on all construction plans as a 'ACH Management Zone' and all site personnel working in this zone must have completed the Cultural Heritage Induction (**Condition 1**);

Prior to ground-disturbing works in Survey Unit D, a two-stage monitoring program must be completed within the extent shown in **Map A**. No ground-disturbing works can occur until all stages of the monitoring have been 100% completed. A notification period of at least 2 weeks must be provided to YYNAC before works commence to arrange on-site representation of two (2) RAP representatives per Heritage Advisor on site for the works. The monitoring within Survey Unit D must be conducted as follows:

- Stage 1 of the monitoring consists of a pedestrian surface inspection within the survey unit shown in **Map A**. During the pedestrian survey, if any artefacts or other material is retrieved, all materials must be appropriately conserved in good quality conservation bags which are clearly labelled with location details using indelible pen. Each bag must be labelled with the Date, Project name, Site VAHR Number/Field Name and location recorded in Eastings & Northings (GDA94 MGA zone 54).
- Stage 2 consists of stripping the topsoil over alignment for the length of the alignment within **Survey Unit D (Map A)** by a single grader pass to a depth of between 50 and 100mm, immediately followed by pedestrian survey. During the pedestrian survey, if any artefact or other material is retrieved, all materials must be appropriately conserved in good quality conservation bags which are clearly labelled with location details using indelible pen. Each bag must be labelled with the Date, Project name, Site VAHR Number/Field Name, Transect ID and Depth at Recovery (in millimetres).

Any Aboriginal cultural heritage recovered during the monitoring inspection must be managed in accordance with Section 2.3 (Discovery of Aboriginal cultural heritage during works) and Section 2.5 (Management and custody of Aboriginal cultural heritage) of this CHMP and all costs associated with this Management Condition are to be borne by the Sponsor.

**1.5 Management Condition 5: Works Completion Inspection in Paddock Survey Unit (Survey Unit D)**

One (1) inspection must be undertaken within the Activity area by a maximum of two (2) representatives of YYNAC after works have been completed within the area shown in **Map A**. During the pedestrian survey, if any artefact or other material is retrieved, all materials must be appropriately conserved in good quality conservation bags which are clearly labelled with location details using indelible pen. Each bag must be labelled with the Date, Project name, Site VAHR Number/Field Name, Transect ID and Depth at Recovery (in millimetres).

Any Aboriginal cultural heritage recovered during the inspection must be managed in accordance with Section 2.3 (Discovery of Aboriginal cultural heritage during works) and Section 2.5 (Management and custody of Aboriginal cultural heritage) of this CHMP and all costs associated with this Management Condition are to be borne by the Sponsor



Map A: Survey Unit D monitoring start and end point (Management Condition 4-5). Scale 1:1,400.

## 2 Cultural Heritage Management Contingencies

Clause 13(1) Schedule 2 of the Aboriginal Heritage Regulations 2018 requires that the management plan must contain a contingency plan for the matters referred to in Section 61 of the Aboriginal Heritage Act 2006, the resolution of disputes between the sponsor and the RAP, reviewing compliance with the CHMP including mechanisms for non-compliance, the management of Aboriginal cultural heritage identified during the activity, and the notification requirements in regards to the identification of Aboriginal cultural heritage during the activity.

Note that any notification and/or communication required as a result of adhering to these contingencies should refer to **Appendix 6** for relevant contacts.

### 2.1 Contingency 1: Discovery of Aboriginal Cultural Heritage

If any Aboriginal cultural heritage sites are located during the proposed works, all actions implemented must take steps to avoid and minimise harm, as required under s.61 of the Aboriginal Heritage Act 2006. In accordance with s.61, the following actions must be undertaken:

1. All works within 10m of the known extent of the relevant discovery area must cease immediately and protective fencing must be erected around the relevant area. No-go zone signage that is visible always must be erected around the fenced area.
2. A suitably qualified heritage advisor must be engaged by the project Sponsor to record and assess the findings and advise on possible management strategies (see Section 2.5: Contingency Plan Regarding Non-Compliance).
3. The person making the discovery must immediately notify the nominated project delegate for YYNAC as well as the project delegate for the Sponsor.
4. While works are suspended, the nominated project delegates and the heritage advisor must evaluate the Aboriginal cultural heritage.

As far as practicable, a heritage advisor and YYNAC representatives must inspect the site within five working days of being notified. During this inspection, the management of any Aboriginal cultural heritage will be discussed and agreed to. If possible, the activity should avoid impact to the newly located site. The heritage advisor will be required to record the nature and extent of the site during the initial inspection or, if this is not possible, as soon as practicable after the initial inspection is undertaken. Documentation of the site may include subsurface testing to establish the temporal and spatial extent of the site. If the Aboriginal cultural heritage is determined to be scientifically significant (that is, an intact cultural deposit), YYNAC may require site protection measures. If harm cannot be avoided to the site, a sample salvage excavation, undertaken by a suitably qualified and experienced archaeologist, may be required to obtain adequate data prior to works proceeding. YYNAC will advise the Sponsor's delegate when suspended construction works can recommence.

Failure of parties to reach an agreed course of action will be classed as a dispute (Section 2.4: Contingency – Dispute Resolution). Work may recommence within the 10 m buffer of the known extent of the site when:

1. Appropriate protective measures have been undertaken;
2. The relevant records for the Aboriginal cultural heritage have been completed by the heritage advisor; and
3. Any dispute has been resolved.

The heritage advisor, the Sponsor and YYNAC must ensure that all these measures are followed, and that legal obligations and requirements are complied with at all times. The heritage advisor must submit all relevant site records, including VAHR forms, to First State People Relations (FSPR) within 14 days of completing the assessment of the cultural heritage site. If salvage is required, the following process/methodology will be applied by a suitable heritage advisor unless changes are requested due to consultation with YYNAC:

1. The soil from each spit will be placed in a bucket, weighed and then sieved. All soil (100%) will be sieved through 5 mm aperture sieves.
2. Excavations will continue until the underlying B horizon (subsoil) is reached. At the completion of each spit, base photographs will be taken, and excavation sheets will be completed, noting changes in stratigraphic horizons (soil colour and texture), rocks, gravel and other materials not of cultural origin. Munsell (soil colour) and pH levels will also be taken. Sieving will be conducted at a reasonable distance from the excavation area to avoid backfilling the square.
3. Upon the completion of the excavation to the B horizon, stratigraphic contexts will be identified and profiles of two of the trench walls will be drawn to provide a concise schematic representation of the stratigraphy as well as to complement the photographs and relate stratigraphic horizons to excavation notes and descriptions.
4. All artefacts will be bagged with date, spit number and site name clearly labelled. An extensive analysis of any collected material will be conducted at a location to be decided upon by the Aboriginal field assistants and the heritage advisor.
5. A detailed artefact analysis will be conducted by the heritage advisor. Analysis methodology will be formalised at a later date; however, it is expected that analysis of artefacts will focus on the presence or absence of striking platforms, bulbs of percussion, termination types, raw material type, number of negative flake scars, artefact types, type of reduction technique, edge damage, etc. Length, width, thickness and weight scales will also be recorded, and conjoining analysis will also be undertaken, if appropriate. If relevant to the research questions, use-wear analysis will be conducted on a sample of the artefacts using either x20 or x40 magnification on a stereomicroscope. Images of any edge damage or use-wear will be provided and detailed in the salvage report. This will facilitate determinations of which type of stone raw materials were used at the site, the type of artefact technologies manufactured from them and what function (if any) the artefacts may have performed. Artefact types and attributes will be identified using Holdaway and Stern (2004), where possible, and artefact terminology will derive from the same source. The cost of these analyses is to be met by the Sponsor.
6. The archaeological material located will be curated and stored appropriately by the Heritage Advisor; this is a matter for discussion between the heritage advisor and YYNAC.
7. If enough samples can be recovered during the salvage program, then any charcoal or other datable material must be collected in the appropriate manner and submitted for radiocarbon (<sup>14</sup>C) dating. The cost of this testing is to be met by the Sponsor. Dates can be obtained from charcoal samples of 1 g; however, an 8-10 g sample is deemed optimal. Any faunal remains that may be excavated can also be used for dating purposes. The minimum sample weight for <sup>14</sup>C radiometric dating of bone is 50 g, with the ideal sample weight being 100-200 g. For smaller samples of charcoal or faunal skeletal remains, accelerator mass spectrometry (AMS) dating is also available. In this case, the minimum sample size for charcoal is 100 mg, while for bone it is 1.0-5.0 g.



8. A summary review of the information gathered will be given to all stakeholders. Copies of all reports associated with the salvage program will be lodged with FSPR. This must be completed within 6 months after the completion of the salvage excavations

## 2.2 Contingency 2: Removal, Curation, Custody and Management of Aboriginal Cultural Heritage

Any Aboriginal cultural heritage recovered or salvaged prior to or during the proposed works, will remain the property of YYNAC. The custody and management of Aboriginal cultural heritage during the course of the activity should comply with the requirements established by the *Aboriginal Heritage Act 2006* (Vic) (No. 020, 2016) and be assigned according to the following order of priority: YYNAC; any relevant registered native title holder; any relevant native title party; relevant Aboriginal person with traditional or familial links; an Aboriginal body with historical or contemporary links; the owner of the land; Museum of Victoria. For this activity area, it will be the responsibility of the heritage advisor to:

1. Catalogue the Aboriginal cultural heritage
2. Label and package the Aboriginal cultural heritage with reference to provenance
3. Arrange storage of the Aboriginal cultural heritage in a secure location together with copies of the catalogue and assessment documentation.

### Contact details for YYNAC are:

**Contact:** Shannon Atkinson (YYNAC Cultural Heritage Unit)

**Address:** 2 Neptune Court, Shepparton, VIC 3630

**Phone:** (03) 5832 0222

**Email:** [shannon.a@yynac.com.au](mailto:shannon.a@yynac.com.au)

### Contact details the Sponsor are:

**Contact:** Paul Diffey (Moirra Shire Council)

**Address** PO Box 578, Cobram, Vic 3643

**Phone:** 03 5871 9222

**Email:** [pdiffey@moira.vic.gov.au](mailto:pdiffey@moira.vic.gov.au)

## 2.3 Contingency 3: Discovery of Aboriginal Ancestral Remains

If suspected human remains are discovered, you must contact Victoria Police and the State Coroner's Office immediately. If there are reasonable grounds to believe that the remains are Aboriginal, the Coronial Admissions and Enquiries hotline must be contacted on **1300 888 544**. The following contingency plan is provided in the event of any such discovery within the activity area.

### **Discovery**

- All activity in the vicinity of the suspected human remains must cease to ensure minimal damage to the remains.
- The remains must be left in place and protected from harm or damage.

### Notification

- The Coronial Admissions and Enquiries office and Victoria Police must be notified immediately. The State Coroner's Office may be contacted at any time on **1300 888 544**. Victoria Police may be contacted on **000**.
- The details of the location and nature of the human remains must be provided to the relevant authorities.
- If it is confirmed by these authorities that the discovered remains are Aboriginal ancestral remains, the person responsible for the activity must report the existence of human remains to the Victorian Aboriginal Heritage Council (VAHC) in accordance with s17 of the *Aboriginal Heritage Act 2006* (Vic) (No. 020, 2016) s17.

### Impact mitigation or salvage

1. The VAHC, after taking reasonable steps to consult with any Aboriginal person or body with an interest in the Aboriginal ancestral remains, will determine the appropriate course of action as required by s18(2)(b) of the *Aboriginal Heritage Act 2006* (Vic) (No. 020, 2016).
2. Note: In consultation with any relevant traditional owner group(s), a Sponsor may consider incorporating a contingency plan to reserve an appropriate area for reburial of any recovered ancestral remains that may be discovered during the activity. This may assist the VAHC in determining an appropriate course of action.
3. An appropriate impact mitigation or salvage strategy as determined by the VAHC must be implemented by the Sponsor.

### Curation and further analysis

- The treatment of ancestral remains must be in accordance with the direction of the VAHC and in accordance with s18(2)(b) of the *Aboriginal Heritage Act 2006* (Vic) (No. 020, 2016).

### Reburial

- Any reburial site(s) must be fully documented by an experienced and qualified archaeologist, clearly marked, and all details provided to FSPR.
- Appropriate management measures must be implemented to ensure that the remains are not disturbed in the future. Do not touch or otherwise interfere with the remains, other than to safeguard them from further disturbance. Do not contact the media.

## 2.4 Contingency 4: Dispute Resolution

In the event of a dispute between the Sponsor and the Registered Aboriginal Party during the implementation of this CHMP, the following process must be implemented:

1. The parties must agree to use their best endeavours to resolve the dispute in good faith.
2. Initially the parties must identify the nature of the matter in dispute. The parties should agree in writing as to the nature of the matter in dispute within five working days of the dispute arising, with reference to the specific conditions or requirements in the CHMP.
3. Once the nature of the dispute is identified, the parties should meet within five working days to discuss any options or remedial actions that may resolve the matter/s in dispute.

4. If agreement can be reached between the parties in relation to remedial actions, this agreement should be recorded in writing and include a programme for the implementation of the action. In these circumstances, the Registered Aboriginal Party agree that it will use its best endeavours to ensure there are no avoidable delays to the schedule for the works.
5. If an agreement cannot be reached in relation to remedial actions, the parties agree to appoint (at a shared cost) an independent mediator to oversee a meeting between the parties.
6. The mediation meeting should be scheduled as soon as practicable.
7. The parties must attend the mediation meeting in good faith and use their best endeavours to resolve the dispute.
8. If agreement can be reached at the mediation meeting, this agreement should be recorded in writing and include a programme for the implementation of any remedial actions. In these circumstances the Registered Aboriginal Party agree that it will use its best endeavours to ensure there are no avoidable delays to the schedule for the works.
9. If a mediated solution cannot be reached between the parties, any matter of non-compliance may be pursued under the *Aboriginal Heritage Act 2006* (Vic) (No. 020, 2016).

## 2.5 Contingency 5: Non-Compliance with the Cultural Heritage Management Plan

Although no further archaeological investigation has been recommended in this CHMP, it is possible that cultural heritage material may be uncovered during the proposed works. In order to inform the Sponsor of their legal responsibilities regarding cultural heritage management, specific legislative requirements are provided below. In addition, a checklist referring to matters that must be complied with under the CHMP is included in **Appendix 5**. The monetary value of all listed penalties is current at the time of writing.

### Aboriginal Cultural Heritage

Causing harm to Aboriginal cultural heritage is an offence under the *Aboriginal Heritage Act 2006* (Vic) (No. 020, 2016). Under s81, the Minister may order a cultural heritage audit to be carried out if there is reason to believe that the Sponsor has contravened, or is likely to contravene, the conditions contained in this CHMP.

#### *PART 3—PROTECTION OF ABORIGINAL CULTURAL HERITAGE*

A penalty unit as of July 2018 is worth \$161.19.

#### Division 1—Protection from harm

s27 Harming Aboriginal cultural heritage unlawful

(1) A person is guilty of an offence if—

- a) the person by an act or omission harms Aboriginal cultural heritage; and
- b) at the time of the act or omission the person knew that the act or omission was likely to harm Aboriginal cultural heritage.

(2) A person who is guilty of an offence under subsection (1) is liable to a penalty not exceeding—

- a) in the case of a natural person, 1800 penalty units;
- b) in the case of a body corporate, 10,000 penalty units

(3) A person is guilty of an offence if—

- a) the person by an act or omission harms Aboriginal cultural heritage; and
- b) at the time of the act or omission the person was reckless as to whether the act or omission was likely to harm Aboriginal cultural heritage.

(4) A person who is guilty of an offence under subsection (3) is liable to a penalty not exceeding—

- a) in the case of a natural person, 1200 penalty units or;
- b) in the case of a body corporate, 6000 penalty units.

(5) A person is guilty of an offence if—

- a) the person by an act or omission harms Aboriginal cultural heritage; and
- b) at the time of the act or omission the person was negligent as to whether the act or omission was likely to harm Aboriginal cultural heritage.

(6) A person who is guilty of an offence under subsection (5) is liable to a penalty not exceeding—

- a) in the case of a natural person, 600 penalty units or;
- b) in the case of a body corporate, 3000 penalty units.

(7) An offence under this section is an indictable offence.

Note:

1. The provisions of Division 12 Part 1 of the Crimes Act 1958 (which deal with attempts) apply to indictable offences against this Act.
2. Section 187A applies to an offence against subsection (1), (3) or (5).

### **s28A person must not harm Aboriginal cultural heritage**

A person must not do an act that harms or is likely to harm Aboriginal cultural heritage.

Penalty: In the case of a natural person, 60 penalty units. In the case of a body corporate, 300 penalty units.

Note: Section 187A applies to an offence against this section

## *PART 2—OWNERSHIP AND CUSTODY OF ABORIGINAL CULTURAL HERITAGE*

### Division 4—Aboriginal Places and Objects

s24 Reporting discovery of Aboriginal places and objects

(1) This section applies if—

- a) a person discovers an Aboriginal place or object; and
- b) the person knows that the place or object is an Aboriginal place or object.

(2) The person must report the discovery to the Secretary as soon as practicable unless, at the time of making the discovery, the person has reasonable cause to believe that the Register contained a record of the place or object.

Penalty: In the case of a natural person, 60 penalty units;

In the case of a body corporate, 300 penalty units.

Note: Section 187A applies to an offence against this subsection.

- (3) If a discovery of an Aboriginal place or object is made in the course of works being carried out on any land, the person in charge of the works is deemed for the purposes of this section to be the person who discovered the place or object.

## **2.6 Contingency 6: Mechanism for remedying non-compliance**

The Sponsor or nominated Activity Project Manager is responsible for remedying non-compliance with this CHMP. If the conditions or contingencies set out in this CHMP are not adhered to, all works must cease and the YYNAC contacted immediately. A record of the breach must be documented, and immediate action taken to remedy the breach, under the direction of the YYNAC. The record of the breach must include the reasons for non-compliance. The Sponsor or nominated Activity Project Manager must take immediate action to remedy non-compliance in accordance with the relevant condition or contingency. All acts of non-compliance must be reported to both the YYNAC and AV, which may result in an investigation by an Authorised Officer or Aboriginal Heritage Officer.

A record of CHMP compliance must always also be maintained by the Sponsor or nominated Activity Project Manager and must be available for inspection by either an Authorised Officer or Aboriginal Heritage Officer under the Act or any other representative of the YYNAC or the Secretary.

## **2.7 Contingency 7: Provision for Review**

Review of this plan can be undertaken at any time by project delegates representing the Sponsor and YYNAC or an agreed independent reviewer, to ensure that all parties are complying with the terms of the plan.

## Part 2. Assessment

### 3 Introduction

Moira Shire Council (“the Sponsor”) is proposing the construction of approximately 3.5 kilometres of mounded-earth levee and levee walls which will be located north of Broken Creek, to protect the township of Numurkah in the event of a flood. The works will include approximately 1.9 kilometres of one-metre-high permanent mounded-earth levee, approximately 1.5 kilometres of one-metre-high permanent concrete wall levee and eleven (one-metre-high) temporary wall levees. Specific impacts are detailed in **Section 4** of this CHMP.

#### 3.1 The reasons for preparing a Cultural Heritage Management Plan

This CHMP is being voluntarily prepared under r. 67(1)(a) and section 45 of the Act and assesses the impacts associated with the proposed development. The Activity area intersects areas of cultural heritage sensitivity in accordance with r.26 of the Regulations, those being:

- The Activity area is located within an area of cultural heritage sensitivity in accordance with:

*r.26 – Subject to sub regulation (2), land within 200 metres of a waterway is an area of cultural heritage sensitivity (Broken Creek & Lake Numurkah).*

##### 3.1.1 Voluntary Cultural Heritage Management Plan

Based on an analysis of the proposed activity and the requirements set out by the Regulations of the Aboriginal Heritage Act 2006, a Cultural Heritage Management Plan (CHMP) is **NOT** a mandatory requirement for the works being proposed. The proposed activity is not a high impact activity under the *Aboriginal Heritage Regulations 2018* as ‘Flood levees’ are not a listed high impact activity in the Regulations, and an earth resource authorisation was not required for this activity (which would otherwise be a high impact activity under r. 51).

*However, the Sponsor has requested a voluntary CHMP be undertaken to manage the risk of uncovering Aboriginal cultural heritage during works on the Activity area.*

#### 3.2 Notice of Intention to prepare a Cultural Heritage Management Plan

The Registered Aboriginal Party (RAP) for the area is Yorta Yorta Nation Aboriginal Corporation (YYNAC). A Notice of Intention (NoI) to prepare a plan was provided to the Secretary of the Department of Premier and Cabinet (DPC) on 6<sup>th</sup> July 2023. This NoI was forwarded to YYNAC, to which they replied with the intention to evaluate the CHMP on 7<sup>th</sup> July 2023. A copy of the NoI is in **Appendix 1**. A copy of the intention to evaluate is in **Appendix 1a**.

#### 3.3 Location and Extent of the Activity area

The proposed activity is located within the township of Numurkah, VIC, 3636 on the banks of the Broken Creek and Lake Numurkah. The activity area is zoned as Public Park and Recreation Zone, General Residential Zone - Schedule 1, Commercial 1 Zone, Mixed Use Zone, Industrial 1 Zone and Public Use Zone – Transport within the LGA of the Moira Shire. The development is located within Goulburn Broken catchment and Moira shire council in Victoria.

### 3.4 Sponsor

The Sponsor for this CHMP is Moira Shire Council (ABN: 20 538 141 700). The contact is:

**Contact:** Phil Diffey

**Address:** Moira Shire Council Municipal Offices, 44 Station Street, Cobram, VIC 3644

**Phone:** 03 5871 9222

**Email:** [pdiffey@moira.vic.gov.au](mailto:pdiffey@moira.vic.gov.au)

### 3.5 Owners and occupiers of the land

The activity area intersects several planning zones within the LGA of the Moira Shire: Public Park and Recreation Zone, General Residential Zone - Schedule 1, Commercial 1 Zone, Mixed Use Zone, Industrial 1 Zone and Public Use Zone – Transport. The activity area is managed by Moira Shire Council.

### 3.6 Heritage Advisor & Author

**Damian Wall** (Red-Gum Environmental Consulting Pty Ltd) has 18 years' field experience in Archaeological practice, is a Full Member of the Australian Association of Consulting Archaeologists Inc (AACAI) and has a Graduate Certificate in Cultural Heritage Management from Flinders University (SA). Damian is suitably qualified under section 189 of the *Aboriginal Heritage Act 2006* and appropriately qualified in archaeology to supervise excavation for a complex assessment as specified in Aboriginal Heritage Regulation 2018, s.61(3).

### 3.7 Registered Aboriginal Parties

Currently, the Registered Aboriginal Party (RAP) for the Activity Area, is the Yorta Yorta Nation Aboriginal Corporation (YYNAC) as appointed by the Aboriginal Heritage Council under the *Aboriginal Heritage Act 2006*. No activity advisory group was appointed by the Secretary in relation to this CHMP (Regulation 68a) and as such the content of the CHMP must be in the approved form.

YYNAC have been involved with all aspects of this CHMP, including all fieldwork components, determination of management conditions and contingencies for the development and evaluation of this CHMP.





Map 1: Location of Activity Area. Scale: 1:10,000. Source: NearMap, 2023

## 4 Activity Description & Potential Impacts

Moira Shire Council (“the Sponsor”) is proposing the construction of approximately 3.5 kilometres of mounded-earth levee and levee walls which will be located north of Broken Creek, to protect the township of Numurkah in the event of a flood. The works will include approximately 1.9 kilometres of one-metre-high permanent mounded-earth levee, approximately 1.5 kilometres of one-metre-high permanent concrete wall levee and eleven (one-metre-high) temporary wall levees. Specific impacts are detailed in **Section 4** of this CHMP.

### 4.1 Statement of Potential Impacts

The proposed activity is the construction of a 3.5km long flood mitigation levee on the banks of Broken Creek and Lake Numurkah in Numurkah, VIC, 3636.

Three types of levee construction will be installed over a three-hectare footprint (**Map 2A & 2B**) these include:

- Approximately 1.9 kilometres of one-metre-high permanent mounded-earth levee with a three-metre-wide crest and three-metre-wide battered slopes either side forming a total width of approximately 9 metres. The levee core will be composed of clay, with batter-fill drawn from existing site material (sandy clay). The clay core will be excavated to a depth of 0.6 metres before installation, and topsoil either side of the core will be stripped to 0.15 metres. The earth levee will require a three-metre construction buffer either side during the build process (meaning a total impact width of 12 metres). The earth levee maintenance will occur via vehicle access along the levee itself on the 3-metre crest, which will act as walking track/maintenance track/emergency access.
- Approximately 1.5 kilometres of one-metre-high permanent concrete wall levee with a one-metre-wide and 0.45 metres deep footing on top of 0.15 metres of Fine Crushed Rocks (FCR) bedding. Total excavation width to one-metre-wide to a depth of 0.6 metres. The permanent concrete wall levee will require a 3-metre construction buffer either side during the build process (meaning a total impact width of seven metres). No maintenance access is not required for concrete wall sections as all wall sections are adjacent to existing roads.
- Eleven (one-metre-high) temporary wall levees to be installed across existing roads/access points prior to and during flood events, totalling approximately 0.14 kilometres. These will be completely removed when floodwaters have receded. As these temporary levees will not impact any existing biodiversity or native vegetation, they have been excluded from this assessment.

The proposed development will involve the disturbance of topsoil for the construction of the clay core and footings to a maximum depth 0.6m. This will involve mechanically excavating, scrapping and levelling the existing ground surface and importing of concrete and materials. It is anticipated that a bobcat and or 20t excavator will be used for excavation works, in addition to trucks and tippers for cartage. The proposed works will require ground disturbance within an already modified area. The use of areas containing existing infrastructure, will limit the degree of further ground disturbance to any ‘natural surfaces’ that may remain in the Activity area (**Figure 1A - 1D**).

These activities have the potential to impact on the current land surface, subsurface deposits, any buried land surfaces and surface and/or subsurface Aboriginal cultural heritage that may be present in the activity area.



Figure 1A: Concept designs. Source: Moira Shire Council 2023

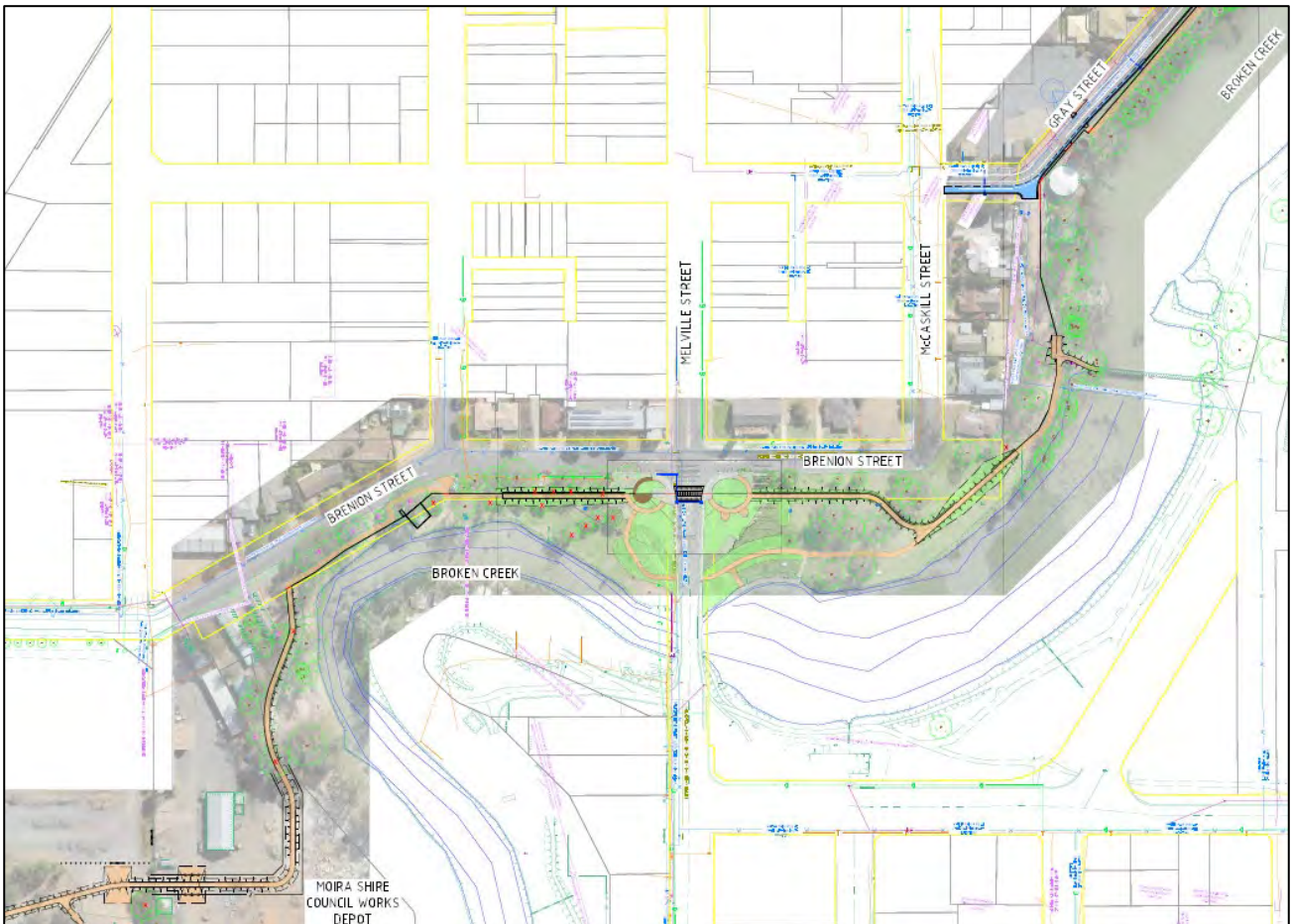


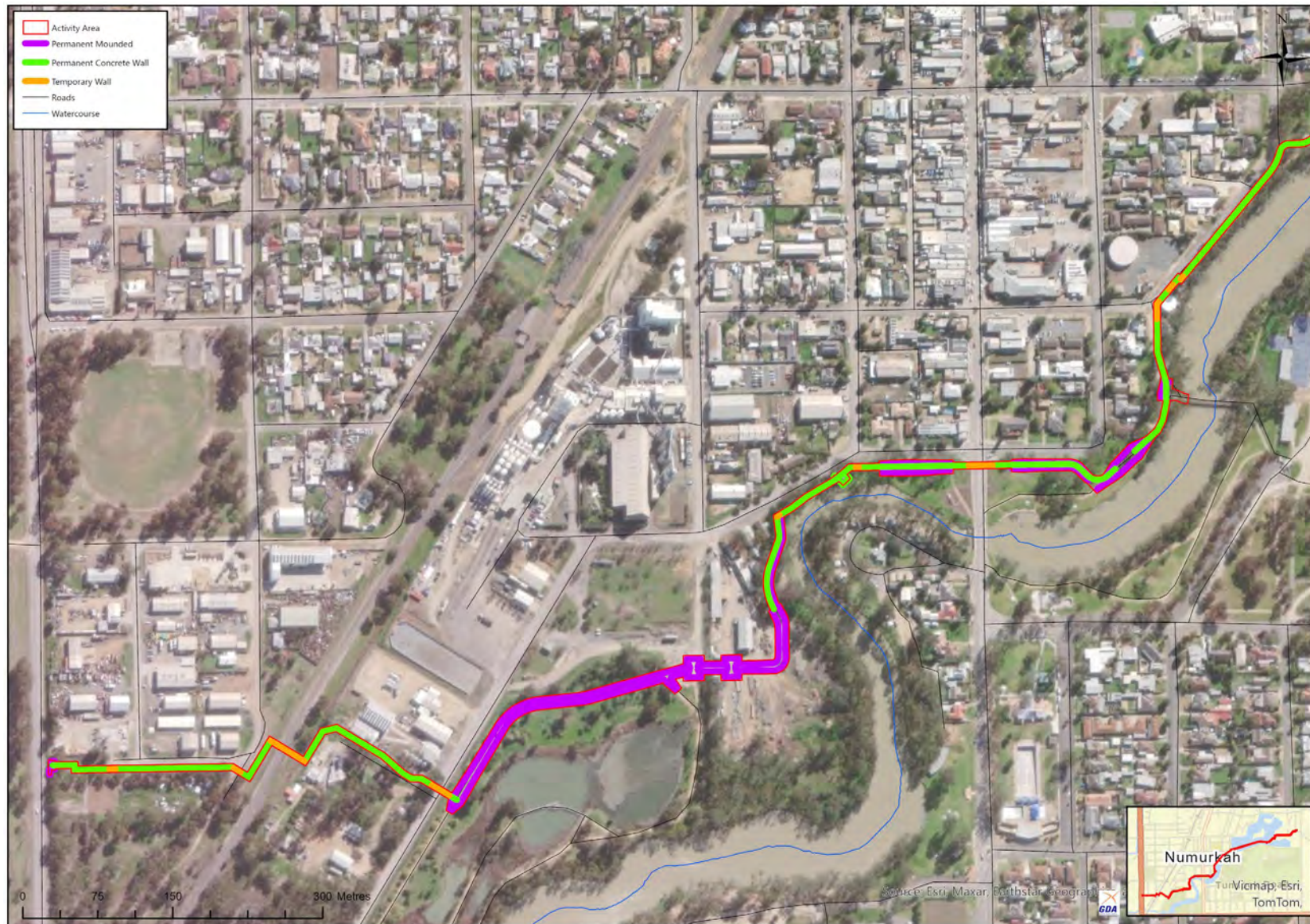
Figure 1B: Concept designs. Source: Moira Shire Council 2023



**Figure 1C: Concept designs. Source: Moira Shire Council 2023**



**Figure 1D: Concept designs. Source: Moira Shire Council 2023**





Map 2B: Proposed construction types of each section of the proposed levee. Source: Esri, 2024. Scale: 1:4,500

## 5 Documentation of Consultation in Relation to the Assessment

A Notice of Intent to Prepare a Management Plan (NOI) was submitted to the Secretary of the Department of Premier and Cabinet (DPC) on 6<sup>th</sup> July 2023 in accordance with s. 54 of the Act (**Appendix 1**). The NOI was also forwarded to YYNAC on 6<sup>th</sup> July 2023 and a Notice to Evaluate email was received on 7<sup>th</sup> July 2023 (**Appendix 1A**).

An inception meeting between Damian Wall (Red-Gum Environmental Consulting Pty Ltd), and Shannon Atkinson (Cultural Heritage Manager, Yorta Yorta Nation Aboriginal Corporation) and Nathan Bourke (Cultural Heritage Officer, Yorta Yorta Nation Aboriginal Corporation) was held on site on 12<sup>st</sup> October 2023.

### 5.1 Fieldwork Participation

A Standard Assessment was undertaken on the 12<sup>th</sup> October 2023 with participants: Damian Wall (Red-Gum Environmental Consulting Pty Ltd), Nathan Bourke & Shannon Atkinson (YYNAC Field Representatives).

A meeting to discuss the standard assessment results was held between Damian Wall (Red-Gum Environmental Consulting Pty Ltd), Nathan Bourke & Shannon Atkinson (YYNAC Field Representatives), on site on 12<sup>th</sup> October 2023. The meeting concluded that a *complex assessment* was not required due to the low impact nature of the proposed construction, disturbance levels and deposition of fill due to flood events within the Activity area.

### 5.2 Consultation in relation to the Management Conditions

A meeting was held between Damian Wall (Red-Gum Environmental Consulting Pty Ltd), Nathan Bourke & Shannon Atkinson (YYNAC Field Representatives) on site on 12<sup>th</sup> October 2023. Management conditions were discussed and agreed upon and the CHMP was to be completed as a Desktop and Standard Assessment only.

### 5.3 Summary of outcomes

Following consultation with YYNAC during the preparation of the CHMP and during the fieldwork stage, Management Conditions and contingencies were developed for the activity. A summary of consultation is presented in **Appendix 2**..

## 6 Aboriginal Cultural Heritage Desktop Assessment

### 6.1 Introduction

Under Part 3 of the *Aboriginal Heritage Regulations 2018*, a CHMP must include a desktop assessment and if required, also a Standard Assessment and/or a Complex Assessment. The desktop assessment was undertaken by Damian Wall (Red-Gum Environmental Consulting Pty Ltd) to determine the likelihood of the activity area containing Aboriginal cultural heritage and to assist in assessing the significance of any heritage that may be found. Desktop research provides information enabling predictions to be made as to whether a place may contain Aboriginal cultural heritage. This research involves the following:

- Investigating the site registry.
- Reviewing other cultural heritage reports undertaken within the geographic area.
- Reviewing local ethnographic histories of the area.
- Research into past historic land use.
- Reviewing local histories of the area.
- Researching the geomorphology and geology of the region encompassing the Activity area.

### 6.2 The Geographic region

For the purposes of this report, the geographic region is the portion of the Broken Creek floodplain within 10km of the activity area (**Map 3**). This area is considered to contain representative landforms as present in the activity area, as well as a broader landscape understanding to provide an effective sample of comparative information regarding resources which would have been available to Aboriginal people. This also allows predictive statements to be made about Aboriginal place types and areas of potential for Aboriginal cultural heritage.

#### 6.2.1 Historical and ethno-historical accounts in the geographic region

The Activity Area falls within a geographical area that, on the basis of ethnohistorical evidence, can be considered to be central to 'Bangerang' lands — Bangerang denoting a cluster of contiguous local groups (often referred to as 'clans') which spoke Yorta Yorta language,<sup>1</sup> (the name 'Yorta Yorta' being a reduplication of that language's word for 'No'). The names of these local groups are readily identifiable through the suffix —pan / —ban.<sup>2</sup>

According to an 1883 map by Edward Curr,<sup>3</sup> a squatter who had occupied Bangerang lands decades earlier, the Activity Area at Numurkah is situated at a boundary between four Yorta Yorta speaking groups: Wongatpan to the west, Boongatpan to the north, Toolinyagan (Ulupna mob) to the east, and Towroonban to the south. This implies that Numurkah may have been a significant boundary area in pre-European times for the Bangerang (Yorta Yorta-speaking) peoples. In fact, once outlining the bounds of Bangerang (Yorta Yorta) country, Numurkah occupies a central position, if only in simple geographical terms. **[Figure 2]**

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<sup>1</sup> Heather Bowe and Stephen Morey, *The Yorta Yorta (Bangerang) language of the Murray Goulburn, Including Yabula Yabula*, Pacific Linguistics Research School of Pacific and Asian Studies, The Australian National University, Canberra, 1999, p.1.

<sup>2</sup> *ibid.*

<sup>3</sup> 'Map Showing approximately the country which used to be occupied by the Bangerang tribes, and by five of the Ngooraialum speaking tribes,' contained in E. M. Curr, *The Australian Race, its origins, languages, customs, place of landing in Australia, and the routes by which it spread itself over that continent*, John Ferres, Government Printer, Melbourne, Volume 3, 1887.



J.F.H. Mitchell's Aboriginal dictionary gives the meaning of 'Numurkah' as 'a shield in war',<sup>4</sup> which if correct, is suggestive of a location in which there may have been battles (or performative 'sham fights'). However, in their study of Yorta Yorta language, Bowe and Morey were unsure of the precise linguistic correspondence, as they found that the word for shield was *malka*.<sup>5</sup>

In 1883, Edward Curr wrote of the Bangerang, 'there were nine tribes whose speech was either pure Bangerang [ie: Yorta Yorta] or dialects of that tongue, and that they occupied the country between the Goulburn and the Murray rivers from their confluence, and a little below that point, as far east as may be defined by a line drawn from Yarrawonga, on the Murray, to Toolamba on the Goulburn...'<sup>6</sup>

Although Curr was writing well after his occupation of Bangerang lands during the 1840s, his description of Bangerang lands as extending as far east along the Murray River as Yarrawonga is supported by information collected by the Chief Protector of Aborigines for the Port Phillip Aboriginal Protectorate, George Augustus Robinson, who visited the area in 1843 and again in 1847.

On 22 March, 1843, Robinson 'left Le Souf' at the Murchison Aboriginal Protectorate Station, travelling downstream along the Goulburn River, passing through Innes' station at Toolamba, and the following day, Cowper's Ardpatrik station at Mooroopna to Mr Holms' station [Benjamin Holmes, St. Germain's], Manton's station [presumably Wyuna] and finally on to Edward Curr's Tongala station.<sup>7</sup>

On 25 March 1843, at Curr's Tongala station on the lower Goulburn River, Robinson met and conversed with a number of 'Pingerines' (Bangerang) from whom he collected vocabulary. The following day, he and Curr travelled to the 'Moirra', at which place, on the following day of the 27 March 1843, Robinson recorded a list of group names. Of this he wrote: 'Got the names of the sections of the Pinegerines as far as the Quart Quart nation.'<sup>8</sup> These names were as follows (with E. M. Curr's corresponding 1887 names in adjoining brackets<sup>9</sup>):

Dare in bun

Wongot bun [Wangatpan]

Merdider bun [Moitheriban]

Mud de mower row [Ngarrimowro?]

Yune got ban [Boongatpan]

Biggo lat ban [Pikkolatpan]

Un gid der ro ban [Angootheraban]

Mo-at-ban

Dur en at ban

Tole lin gar bun [Toolinyagan]

Tare re mat ban

Wal le dig gun [Wollithiga]

Tar rin ban [Towroonban]

<sup>4</sup> J.F.H. Mitchell, *Aboriginal Dictionary, Woradgergy Tongue*, J. Walker, Albury, c.1912, p.23.

<sup>5</sup> Heather Bowe and Stephen Morey, *op cit.*, p.128.

<sup>6</sup> E. M. Curr, *Recollections of squatting in Victoria, then called the Port Phillip District (from 1841 to 1851)*, Melbourne : George Robertson, 1883, p.301.

<sup>7</sup> Ian Clark (ed.), *The Journals of George Augustus Robinson, Chief Protector, Port Phillip Aboriginal Protectorate, 1839-1852*, Ian Clark, Melbourne, 2014, entries for: 22 & 24 March, 1843.

<sup>8</sup> *ibid.*, entry for: 27 March 1843.

<sup>9</sup> 'Map Showing approximately the country which used to be occupied by the Bangerang tribes, and by five of the Ngooraialum speaking tribes,' E. M. Curr, 1887, *op cit.* It is uncertain which of these names listed by Robinson related to the Kailtheban.

On 28 March 1843, after three days with Curr, Robinson finally left Tongala run, travelling to the junction of the Goulburn and Murray Rivers. Here he wrote, 'Country at the junction with Murry belong on both sides of the Goulburn to the Wal le dig ger, a section of the Goulburn blacks; it extends along the Murray to the Campaspe... from the junction travelled along bank of Murray for 6 miles then struck off through the forest to the Campaspe plains...' (The location of Robinson's 'Wallediggers' aligns well with the location of 'Wollithiga' on the map presented in E. M. Curr's 1887 map.<sup>10</sup>)

Later Robinson would write a report of these travels, which went into the NSW Governors' Dispatches of 1844<sup>11</sup> (the governors of New South Wales regularly forwarded dispatches to the British Government giving detailed reports on all matters of major and minor importance). The report, as printed in the House of Commons Session 1844, Papers Relative to the Aborigines, Australian Colonies, read in part:

'The Pinegerines, a people comprised within 11 or 12 sections and numbering about 250 souls, occupy the country extending east from the junction of the Goulburn for 20 miles; from thence towards the junction of the Ovens is the Quart-Quart, who speak a language different to the tribes on the Upper Goulburn. Between the junction of the Campaspe and the Goulburn are the Walledrigger... [Wollithiga]'

Robinson was almost certainly in error about the entire Bangerang/Yorta Yorta nation only extending 20 miles beyond the junction of the Goulburn and Murray Rivers. However, historian Ian Clark has argued convincingly that 'Quart Quart' is a cognate of 'Yorta Yorta',<sup>12</sup> in which case this description given by Robinson concurs with that given by Curr: that Bangerang/Yorta Yorta country stretched from Wollithiga country on the lower Campaspe, east towards the junction of the Ovens and Murray rivers.

This outline of Bangerang country is confirmed by a description of peoples situated along the Murray River from its junction with the Darling River heading upstream, given to Alfred Howitt by Wotjobaluk [Wergaia] man Sergeant Major, who listed the 'Woola-thara' (Wollithiga) as bounded by the Baraba-Baraba (Bapara Barapa), Ngari-lei-an (Ngurai-ilam) in the west, and the You-angootha (Angootheraban) as bounded by the Pal-on-gan-mi-tha (Pallangan-mittang [Waywurr]), Gin-ong-math-ong (Dyinning-mittang [Dhudhuroa]) in the east.<sup>13</sup>

The differentiation between 'Bangerang' and 'Yorta Yorta' may be explained firstly by the fact that, as Curr explained, 'What was properly called the Bangerang ...[was] a tribe composed of two sections, named respectively Wongatpan and Towroonban. Collectively they spoke of themselves as, and were called, Bangerang.'<sup>14</sup> These were two powerful groups centred around the junction of the Goulburn and Murray Rivers, known as 'the Moira', were surrounded on all sides by other Yorta Yorta speakers. Secondly, Curr reports that 'the Pikkolatpan [on the northern side of the Murray River centred on Tocumwal] used to speak of the Bangerang as the "Yoorta" or "no" blacks'.<sup>15</sup> This provides an example of 'Yorta' being utilised as another term for the 'Bangerang', by other people who in fact spoke (with minor dialectical differences) the same language. Therefore, in broad terms, Yorta Yorta (or as Robinson recorded it 'Quart Quart') is synonymous with Bangerang.

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<sup>10</sup> E. M. Curr, Map, 1887, op cit.

<sup>11</sup> British Parliamentary Papers, *Despatches of Governors of Australian Colonies, illustrative of Condition of Aborigines*, House of Commons Paper Series: House of Commons Papers, Paper Type: Accounts and Papers Parliament: 1844, pp.281-282.

<sup>12</sup> Ian Clark, 'Aboriginal languages in North-east Victoria - the status of "Waveru" reconsidered', *Journal of Australian Indigenous Issues*, 2011, Vol. 14(4). In 1974, Norman Tindale rendered 'Quart Quart' as 'Kwat Kwat', but his mapping did not concur with either Robinson's reportage nor Curr's.

<sup>13</sup> Alfred William Howitt Papers, 1837-1930, 'Notes on Wotjobaluk from Sergeant Major.' MS9356, Box 1053, Folder 6(a), State Library Victoria.

<sup>14</sup> E. M. Curr, 1883, op cit., p.231.

<sup>15</sup> E. M. Curr, 1887, op cit., p.569.

The Bangerang were culturally differentiated from their immediate neighbours in the first instance by their language, Yorta Yorta. Linguists Stephen Morey and Heather Bowe have stated, 'It appears that the Yorta Yorta language was something of a language isolate within the Pama-Nyungan family of Australian languages. It shares little common vocabulary with its neighbours on any side. Lexical comparisons of Yorta Yorta with neighbouring languages yield... very low levels of common vocabulary... Pallanganmiddang [ie: Waywurru] shows the greatest degree of overlap with Yorta Yorta of all the neighbouring languages; however, the small amount of grammatical morphology evident in the recorded Pallanganmiddang material does not seem at all similar.'<sup>16</sup>

Anthropologist Rod Hagen observed that unfortunately neither Curr nor Robinson provided any significant information about many important aspects of Bangerang social organisation: 'Apart from a brief mention of patrilineality in "tribal" or "section" membership,' he writes, 'there is no discussion of how groups were constituted, or of the nature and extent of reciprocal obligations, rights acquired through birth, maternal or grand paternal and maternal affiliations, or the existence and nature of moiety or other divisions etc, typically found amongst Aboriginal groups.'<sup>17</sup>

However, it is clear that Bangerang was culturally differentiated from neighbouring groups of different languages by their separate moiety (or 'class') system. Bangerang's Taungurung-speaking neighbours (including Ngurai-illum), along with their Pallanganmiddang [ie: Waywurru] neighbours, had a moiety system of patrilineal descent which was based on the division of bunjil (eaglehawk) and waa[ng] (crow). In a letter to ethnographer R. H. Matthews from the Cumeroogunga [Cummergusonja reserve] teacher Thomas Shadrach James in 1897, James explained that, where Bangerang was concerned, 'there existed here among the Chiefs only something similar to the caste-system in India. One chief would pride himself as belonging to the Emu class (the highest caste) another to the White Cockatoo and so on, the Crow being the lowest caste. I have made [indecipherable] inquiries in class names, viz. Murri, Kubbi, Ippai & Kurabo... The class system of the Wiradjuri tribe is not known here.'<sup>18</sup>

Hagen has provided a useful summary of the Bangerang's use of natural resources in the region they owned, occupied and managed, based on accounts given by Robinson, Curr and other early observers: Hagen states that possums and fish [including mussels and crustaceans] were staple items of diet; but that other animal species were consumed included kangaroos, emus, manna, eggs, kangaroo-rats, field-rats, birds, tadpoles, grubs, snakes, and the larvae of ants. Specific mention of plants for consumption include wild fruits, yams and roots [including those of cumbungi]. Possums or kangaroos also provided rugs, cloaks, belts, sewing materials, balls for recreation, body decorations, and weaving yarn. Bark from trees was used to make canoes and huts; timber was used for construction of huts and to make weapons; and shells, bone and stone were used as tools or manufacturing purposes. Ochres and pipeclay were used for decoration; reeds were used to make spears, knives and beads for necklaces; and in particular, reed spears were used as an item of trade with other groups. Rights of individual ownership of resources existed with respect to items such as fishing weirs within broader subgroup and group interests. Finally, Bangerang people of the area actively managed some of the resources of their environment using a range of mechanisms including 'fire-stick farming' and fishing weirs.<sup>19</sup>

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<sup>16</sup> Bowe and Morey, op cit. p.4.

<sup>17</sup> Rod Hagen, *Yorta Yorta claims to areas in the Murray Lower Goulburn region of Victoria and New South Wales pursuant to the Native Title Act, 1993 (Commonwealth). Report on anthropological and socio-historical issues.* Report filed in the case for the claimants in the Federal Court of Australia in the Native Title case 'The Members of the Yorta Yorta Aboriginal Community and the State of Victoria and Others,' 1996. [unpublished]

<sup>18</sup> Thomas Shadrach James, 'Letter to R.H. Mathews September 27 1897', Mathews Papers Ms 8006 Series 2, National Library of Australia, Canberra.

<sup>19</sup> Rod Hagen, *ibid.*

Building on this generalised picture of resource utilisation, Marian Quartly (nee Aveling) has keenly highlighted a gendered aspect of Bangerang life, writing that:

‘The richness of the rivers’ resources meant a modification of that distinction, general to Aboriginal society, between men as hunters of meat and women as gatherers of vegetable food. The women were less dependent upon the men for meat, and especially fish, while men still relied on women for the vegetable food basic to everyone’s diet. In a society based on the exchange of women between distant clans, in which women spent their married lives in family groups of which they could never be full members, the Bangerang women’s relative independence as food gatherers may have given them some day-to-day autonomy.’<sup>20</sup>

### 6.2.2 Climate

Climate conditions have been sourced from the nearest weather observation station in Numurkah. Average daytime maximum temperatures in Yarrawonga are 23 °C with summer time average maximums reaching 31.1 °C and prevailing winds from the northwest (BOM, February 2024). Rain typically falls as thunderstorms in the summer, and in winter with cold fronts, with February the driest month and August the wettest (BOM, February 2024). Rainfall averages out to 450 millimetres (17 in) a year, most of which falls in winter with passing frontal systems; however, these can occur at any time of year, and the main form of rainfall in spring and summer is from thunderstorms (BOM, February 2024).

Aboriginal people have been in Australia for at least 40–60,000 years and possibly longer (Allen 1989; Jones 1995). This period falls within the last world climatic downturn or glacial period, which commenced about 80,000 years ago. During the glacial period, the climate was up to 6°C lower in the southern hemisphere, the tree line was lowered, and large glaciers formed in Tasmania and on the Great Divide (Gibson et al. 1987). Greater amounts of water held within the large glaciers and ice sheets led to lower sea levels and Tasmania and Papua New Guinea were joined to Australia by land bridges.

The climate was much drier and cooler and landmasses stretched to the edge of the continental shelf. After 26,000 years before present (BP) the climatic downturn became more severe and sea levels were at their lowest and the climate at its coldest at 18,000 BP (Bowler et al. 1976: 374; Dodson et al. 1992: 117; Freslov 2018: 27).

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<sup>20</sup> Marian Aveling, ‘Nanny — Daughter of the Bangerang,’ in Marilyn Lake and Farley Kelly (eds.), *Double Time — Women in Victoria, 150 Years*, Penguin, Melbourne, 1985.

Temperatures were up to 6°C lower than today and while Tasmania was heavily glaciated, on the mainland cirque glaciers were only found at Mount Kosciusko (Peterson 1968: 74–75). As conditions ameliorated following the last glacial, it became milder, but wetter and the tree line increased to its present altitude.

Vegetation dependant on wetter conditions expanded, including rainforests and wet sclerophyll forests, reaching its maximum extent during the mid-Holocene at 5000 BP (Gell & Stuart 1989: Figures 6–11). Since 5000 BP, conditions have been cooler and drier, with the ENSO (El Nino Southern Oscillation) weather pattern becoming more dominant (Rowland 1999: 18; Sandweiss et al. 1996). Increased fire risks and extensive fires are associated with a periodic but severe ENSO weather pattern (Freslov & Goulding 2002; Freslov 2018: 27).

### 6.2.3 *Geomorphology & Geology*

The activity area is located on the Northern Riverine Plain geomorphological unit (**Map 4**). The Riverine Plain of New South Wales and Victoria is a very extensive and complex alluvial plain associated with the River Murray and its tributaries which developed following the retreat of the Neogene (Pliocene) sea from the Murray Basin. Although the plain is predominantly alluvial in origin, episodes of windblown deposition did occur during arid times (VRO. 2020).

The Riverine Plain consists essentially of two geological formations (**Map 5**). The most extensive and older is the Shepparton Formation of late Neogene (Pleistocene), and the Recent Coonambidgal Formation. Low residual hills occur within the Riverine Plain but these are mostly comprised of Palaeozoic rocks. Apart from the alluvial fans and aprons, the Shepparton formation may be subdivided into three units – plains with small, meandering, leveed stream channels, which died out as distributaries away from their uplands source, plains without channels which are often treeless, and plains with lakes and lunettes. Many of the present lakes in the Murray Basin are ephemeral or relict features, evidence of much more efficient hydrological regimes during the Neogene (Middle and Late Pleistocene). Most are now either permanently dry or episodically filled by floodwaters (VRO 2020).

The geological mapping for the area indicates that the activity area is located on the geomorphological unit 4.2.1 Plains with leveed channels, sometimes source-bordering dunes (Tatura, Naneela). Plains with largely inactive leveed channels of various ages are a characteristic of earlier stream deposition that predate the present flood plains. These are referred to here as the prior stream plains. They emanated from the foothills at about the same location as each of the present streams but, unlike the present streams, the stream pattern traversing the plain is distributary and/or divergent. The prior streams and associated levees are generally recognizable features on aerial photographs and contour maps and are seen as low winding ridges up to 2 km wide and up to 3 m above the level of the surrounding flood plain. Coarse material was deposited nearest to the stream channel forming levees with finer material overflowing onto the plain. In this way prior streams built up levees and clayey flood plains. Eventually the streams abandoned these courses and new courses developed in the lower land between the ridges. The most extensive area of plains with leveed channels occurs east of the Campaspe River and is associated with former courses of the Goulburn River.

### 6.2.4 *Vegetation*

The ecological vegetation class (EVC) projections, prior to European contact the Activity area would have primarily consisted of EVC 259 Plains Grassy Woodland/Gilgai Wetland Mosaic & EVC 867 Shallow Sands Woodland/Plains Woodland Mosaic (**Map 6**). Mosaics are a combination of EVCs.

EVC 55 Plains Grassy Woodland is an open, eucalypt woodland to 15 m tall. Occupies well drained, fertile soils on flat or gently undulating plains at low elevations in areas with >600 mm annual rainfall. The understorey consists of a few sparse shrubs over a species-rich grassy and herbaceous ground layer characterised by summer-growing grasses. Canopy species include River Red Gum (*Eucalyptus camaldulensis*) & Yellow Box (*Eucalyptus melliodora*).

Gilgai Wetland occurs along ephemeral drainage lines. Soils are generally poorly drained heavy clays which form distinctive “gilgai” crests and troughs. The understorey consists of few, if any shrubs while the ground layer is made up of a combination of “dryland” herbs/grasses and amphibious herbs/grasses tolerant of seasonal inundation.

EVC 882 Shallow Sands Woodland consists of woodland or open-forest to 15 m tall, with a sparse shrub layer of heathy, ericoid shrubs and a species-rich ground cover dominated by grasses and annual herbs. Typically it occurs between the heavier soils of the plains and the deep-sand aeolian dunefields which overlay these plains, but also occurs on broader areas of plains covered by shallow fluvial, outwash or aeolians and overlaying drainage-impeding clays. Canopy species include Yellow Box (*Eucalyptus melliodora*), Buloke (*Allocasuarina luehmannii*), White Cypress-pine (*Callitris glaucophylla*)

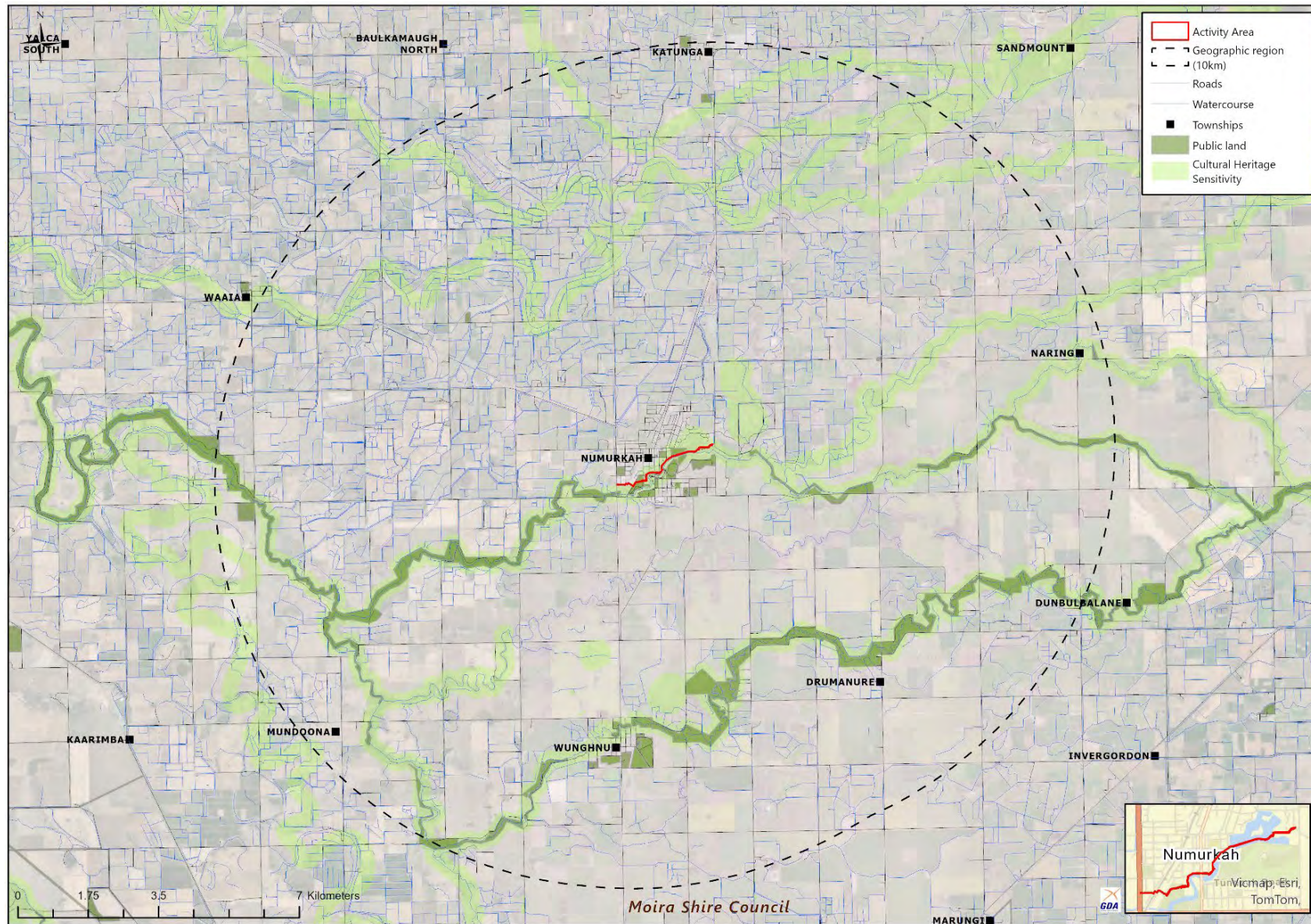
EVC 803 Plains Woodland is an open, eucalypt woodland to 15 m tall occurring on a number of geologies and soil types. Occupies fertile clays and clay loam soils on flat or gently undulating plains at low elevations in areas with <600 mm annual rainfall. The understorey consists of a few sparse shrubs over a species-rich grassy and herbaceous ground layer and chenopods are often present. Canopy species include Grey Box (*Eucalyptus macrocarpa*), Yellow Box (*E. melliodora*), River Red Gum (*E. camaldulensis*), Black Box (*E. largiflorens*), Yellow Gum (*E. leucoxylon*) & Buloke (*Allocasuarina luehmannii*).

Pre-settlement Aboriginal peoples would have had access to a variety of faunal sources, such as possums, sugar gliders, wombats, bush rats, rosellas, and skinks. They would also have had access to a wider variety of floral sources than are currently present in the Activity area as the species present were highly desired by European settlers and were therefore cleared very soon after settlement (Clark et al. 2003). These floral remains would have a variety of uses, such as food sources, in tool production, weaving, and medicines.

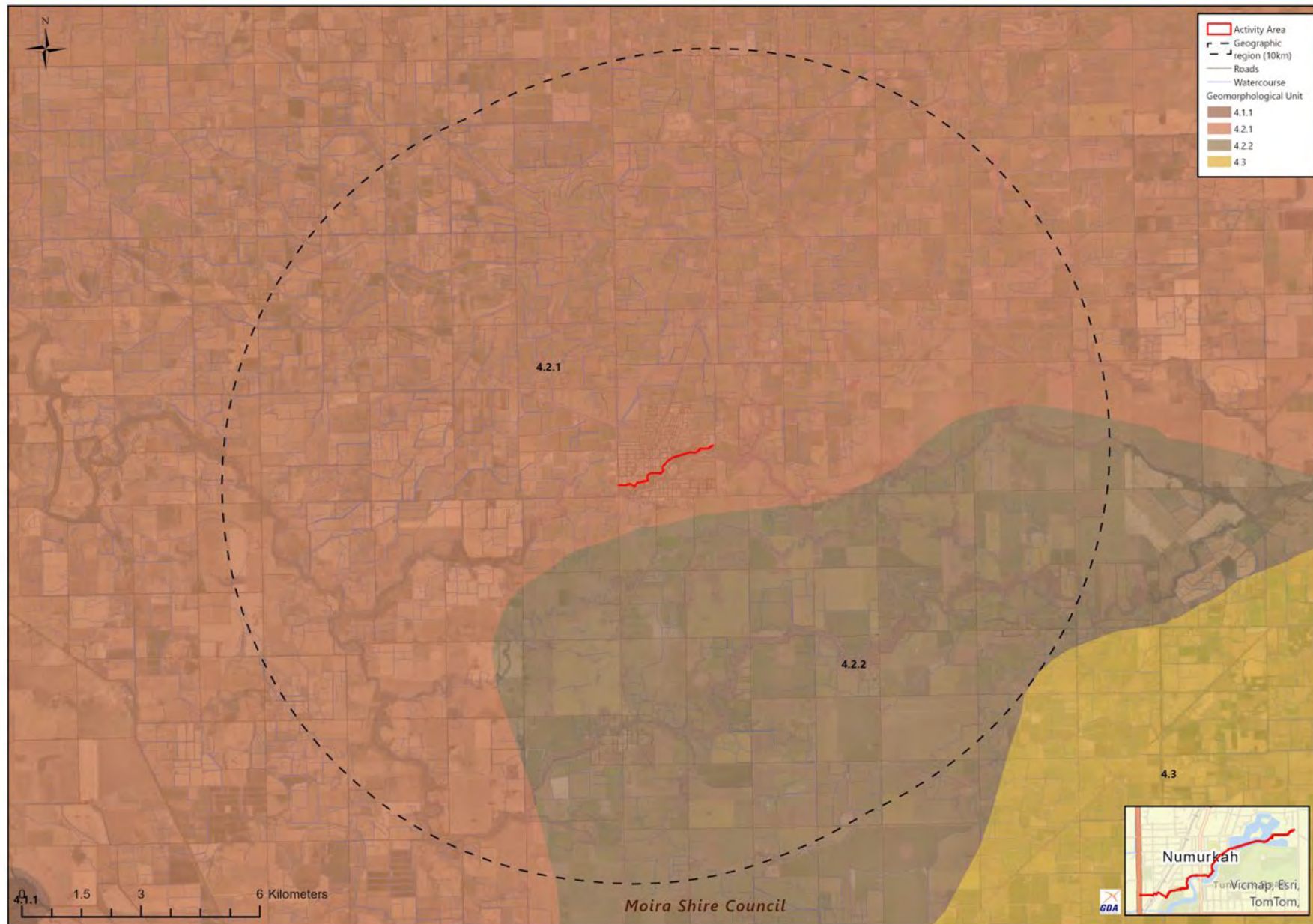
These vegetation communities, in close proximity to the activity area, would have provided a diverse suite of species that could be used as food, fibres, materials, and medicines, along with providing habitat for a range of animal species. The diversity of grasses present would have been a good source for fibre, and could be split, woven and wound. For example, Kangaroo Grass (*Themeda triandra*) was used in the manufacture of fishing nets (Zola and Gott 1992: 58). The wood from the River Red Gum (*Eucalyptus camaldulensis*) was used to fashion a variety of implements, such as clubs and spear throwers.

The sap was used as a medicine for burns and the leaves could be burnt to keep away insects and used as a medicine when placed in hot water, as a steam bath (Conran and Gott, 1998: 61). The gum from Golden Wattle (*Acacia pycnantha*) can be eaten or mixed with water to make a sweet drink, while the bark is high in tannin and could be used for fibre and medicine (Conran and Gott, 1998: 45).

These vegetation systems would have supported a range of floral and faunal resources for local Aboriginal communities to exploit. Aboriginal people would have used the roots, tubers, seeds and leaves of many of these plants for food and medicinal purposes, as well as raw materials in the manufacture of tools, baskets and ornaments (Zola & Gott 1992).

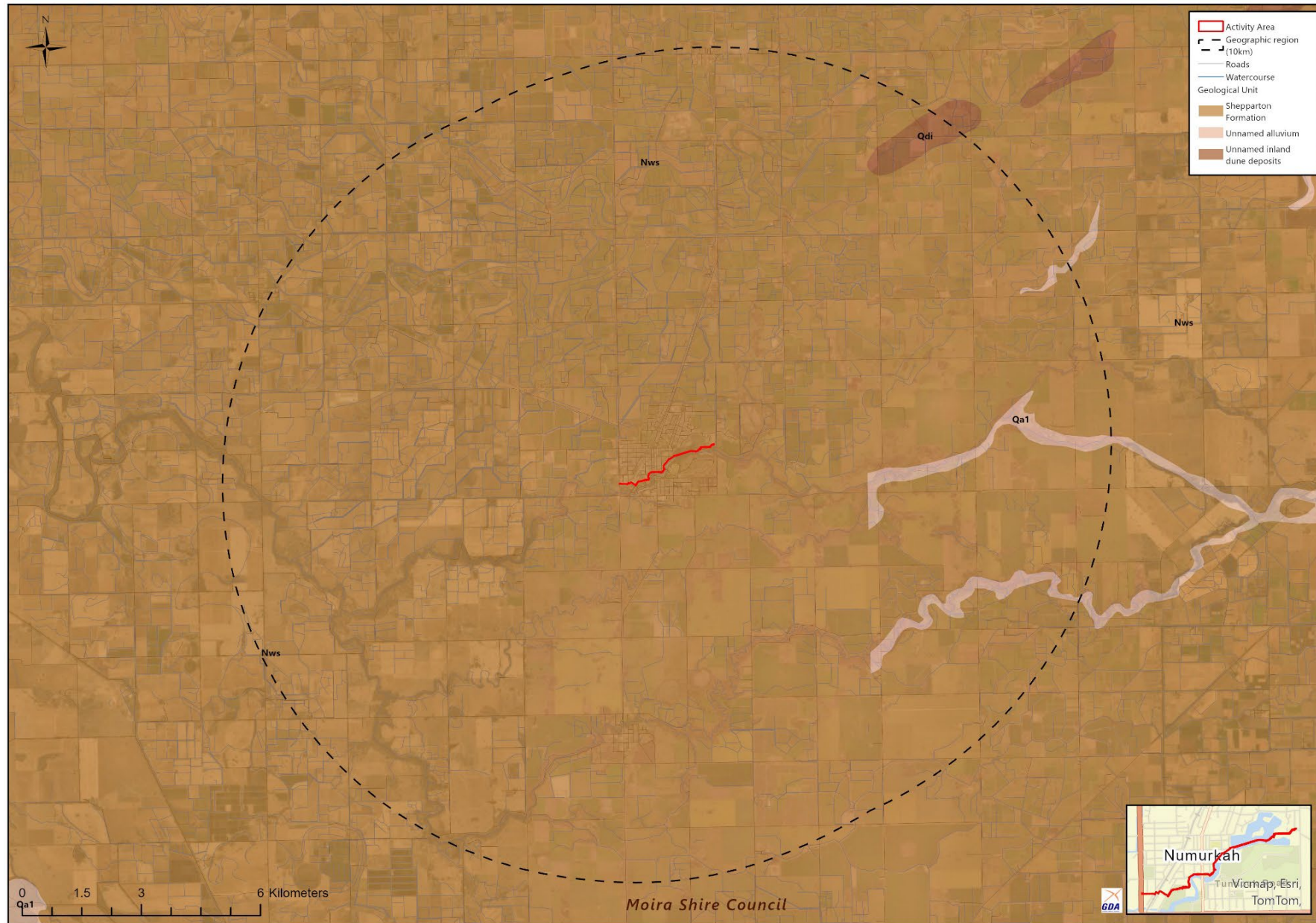


Map 3: Geographic Region of the Activity Area. Source: Esri, 2024. Scale: 1:112,000.



Map 4: Geomorphological units of the activity area and surrounding region. Source: Esri 2024. Scale: 1:113,000.





Map 5: Geology of the Activity area and surrounding region. Source: Esri 2024. Scale: 1:113,000.



### **6.2.5 Aboriginal Honorary Correspondent Depots “Cummeragunja Mission”**

In 1858 the Victorian Government recommended the formation of a Central Board to replace the Protectorate system and take over responsibility for the protection of Aboriginal people within the colony. In 1860 the Central Board appointed to watch over the interests of Aborigines in the Colony of Victoria (CBA) was established. An Aboriginal protectorate station was operated at Murchison between 1840 and 1848 (Massola 1969). During the 1850s there was no official government responsibility towards Aboriginal people in the Geographic region although it is likely that both Aboriginal men and women employed during this period as station hands and domestic staff (Long 1996: 14).

The CBA was also responsible for allocating reserves of land variously known as stations, missions or reserves on which Aboriginal people were encouraged to settle. After the 1860s Aboriginal people in the Murray Valley were forced to move into government or mission-controlled stations, such as Murchison; Coranderrk, near Healesville; and Cummeragunja, in NSW near Barmah (Long 1996:14). Established in 1881, the Cummeragunja Mission or Station consisted of a 1,800 acre wheat, wool and dairy farm. Many of the mostly Yorta Yorta residents had come from the nearby Maloga Mission (Koori History Online. 2020). In 1915 the New South Wales Aboriginal Protection Board increased its control of Cummeragunja and residents were subjected to ‘confining and restrictive conditions’ (Koori History Online. 2020). Money raised from the farm went to the Board, which doled out inadequate and unhealthy rations to workers (Koori History Online 2020).

By the 1930s conditions had deteriorated with residents being confined to the station and prevented from seeing their relatives (ABC et. al. 2004 online). Tuberculosis and whooping cough began to spread among the elderly and the young. Tired of the poor conditions and treatment, over 150 residents left the station in protest (ABC et. al. 2004 online). The ‘Cummeragunja Walk-Off’ was ‘the first-ever mass strike of Aboriginal people in Australia’ (Koori History Online 2020). A majority of the families who left Cummeragunja never returned. They built new communities in Mooroopna, Shepparton, and beyond.

Following WWII, the Government handed parcels of land at Cummeragunja and other Aboriginal reserves over to the benefit of returned servicemen and their families as part of the Soldier Settlement Scheme. This was a form of land grant that was not available to Koori returned servicemen, inclusive of those Cummeragunja residents who had served their country. In 1983 the title deeds to Cummeragunja were returned to the Yorta Yorta people via the newly created Yorta Yorta Land Council. A number of Yorta Yorta families live there today (Koori History Online 2020).

European colonisation and forced cultural integration stripped the Aboriginal people of their way of life, causing the surviving population to become dependent on government aid (Broome 2002). Prior to European arrival, the Aboriginal population of Victoria was estimated at 10,000–20,000 people (Presland 2010: 90).

By 1861, some 540,000 Europeans immigrants were living in Victoria and fewer than 2,000 Victorian Aboriginal people remained (Presland 2010: 90). At the beginning of the 20th century, when the colonies of Australia became a federation, the reported number of Aboriginal people in the entire state of Victoria was estimated to be 650 (Presland 2010: 90). European Contact had taken a deathly toll on the Aboriginal peoples of Victoria.

## 6.3 Land use history of the Activity area

### 6.3.1 Early Pastoral History, 1840

Numurkah was first occupied by Europeans as a part of the pastoral run originally known as 'Strathmerton' [Figure 3], first taken up under pastoral license by squatter Lundy in 1840. Despite the run covering a massive 192,000 acres, stretching between the Murray River to the 'Back Creek' (Baala or Broken Creek), the 'back part' of the run was described as 'scrubby and devoid of water, and ... only useful to drive the stock upon, when the low country is flooded, which occurs annually.'<sup>21</sup> This meant that the bulk of the grazing was done along the Murray River, and to a lesser extent on the Broken Creek.

In 1842, Lundy on-sold the run to pastoral magnate Benjamin Boyd. It was held in the Boyd family until 1848<sup>22</sup> — two years before Boyd's retributive murder, which occurred after his party had a violent skirmish with locals on Guadalcanal, Solomon Islands, in 1851.<sup>23</sup> Boyd was known for his 'black-birding' activities: in 1847 he kidnapped and enslaved 65 South Sea Islanders, some of whom he forced to work as shepherds on his pastoral runs on the Murray and Edwards Rivers,<sup>24</sup> possibly including Strathmerton. In 1930, historian Frank Whitcombe noted that the run had been 'fenced with chock and log by Fijians 75 years ago'.<sup>25</sup>

Following Boyd's ownership of Strathmerton, the pastoral run was sold and resold nine times before being subdivided into East and West blocks in 1861. Numurkah was on the dividing line between the blocks, falling into the East block.<sup>26</sup>

Strathmerton East was purchased by Thomas Brown, who then sold a half-share to James Rutherford (of Cobb & Co Coach fame). Brown and Rutherford broke it up into two areas, each with its own homestead: Ulupna and Bajanna.<sup>27</sup> Numurkah fell into the Bajanna section (which contained the old Strathmerton homestead, about six miles from Numurkah<sup>28</sup>).

In summary, the Numurkah area was occupied by pastoralists from 1840 into 1875, and as the Baala (Broken) Creek was a major water source in an otherwise often dry landscape, its banks would have seen traffic from livestock.

### 6.3.2 Freehold Selection under the Land Acts, 1890s

Bajanna station was eventually whittled away by freehold selection under a series of Land Acts which were introduced throughout the 1860s. However, in the Katunga Shire, through which the Activity Area runs [Figure 4], large Lots of farm land were generally not alienated from the Crown until the late 1880s. This accounts for the area remaining uncleared of native forest until the late 19th century.

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<sup>21</sup> 'PORT PHILLIP GOVERNMENT GAZETTE. (Published by Authority.) PORT PHILLIP. Superintendent's Office, Melbourne, 26th July, 1848. CLAIMS TO LEASES OF CHOWN LAND BEYOND THE SETTLED DISTRICTS. MURRAY DISTRICT.' *The Melbourne Argus*, Tuesday 25 July 1848 - Page 1.

<sup>22</sup> R. V. Billis, and A. S. Kenyon, *Pastoral Pioneers of Port Phillip*, Macmillan & Company Ltd., Melbourne, 1932, pp:253-254.

<sup>23</sup> G. P. Walsh, 'Boyd, Benjamin (Ben) (1801-1851)', *Australian Dictionary of Biography*, National Centre of Biography, Australian National University, <https://adb.anu.edu.au/biography/boyd-benjamin-ben-1815/text2075>, published first in hardcopy 1966, accessed online 19 November 2023.

<sup>24</sup> Marion Diamond, *The Seahorse and the Wanderer. Ben Boyd in Australia*, University of Melbourne Press, Melbourne, 1988, pp.128-129.

<sup>25</sup> 'The History of Numurkah By FRANK WHITCOMBE', *Weekly Times*, Sat 4 Oct 1930, Page 9.

<sup>26</sup> Billis and Kenyon, op cit., pp:253-254.

<sup>27</sup> 'THE NORTH-EASTERN AND GOULBURN VALLEY DISTRICTS', No VII. *The Australasian*, Saturday 30 August 1879 - Page 24.

<sup>28</sup> 'A HORRIBLE OUTRAGE. (FROM OUR OWN CORRESPONDENT.) ECHUCA, 14th November.' *Bendigo Advertiser*, Saturday 15 November 1884 - Page 1.

### 6.3.3 Township of Numurkah, 1875

The township of Numurkah was proclaimed in 1875, and the township was surveyed. However, for a couple of years, the only building was bark shanty erected by Peter McCaskill, which served for a butcher, baker, and general store.<sup>29</sup> By 1879, Numurkah, which was 'only a little over three years in existence, consist[ed] of three hotels, a general store, two blacksmiths' shops, a State school and four or five residences. The township ha[d] suffered very much from the failure of the crops through rust and the scarcity of water in the district.'<sup>30</sup>

In particular, at this stage, the township on the northern bank of the Baala (Broken) Creek was not surveyed any further south than Brenion Street. This means that the section of Activity Area which runs along Station Street to Needham Street was, at this time, un-surveyed and vacant.

### 6.3.4 Seymour and Tocumwal Railway, 1881

In 1881 the Seymour and Tocumwal Railway opened, with Numurkah Station as the terminus.<sup>31</sup> The construction of the Numurkah Railway Station meant that the street layout was extended southwards to include Station Street, with the first allotments sold in 1883.<sup>32</sup> The Activity Area runs along and across a section of the Railway reserve, and takes in a section of unnamed road reserve before crossing Station Street, which were developed at this time. **[Figure 5]**

### 6.3.5 Stream side water reserve, 1881

In 1881, water frontages along all creeks and streams were permanently reserved for public purposes by a parliamentary Order-in-Council on 23 May 1881. The reserves were usually one, one and a half or two chains wide (one chain = roughly 20 metres) on both banks of the stream.<sup>33</sup> On the Baala (Broken) Creek at Numurkah, the reserve was 1 1/2 chains wide, with the exception of two strips which are road reserves — one of these being along the northern edge of the lagoon (these may have been retrospectively removed from the stream side reserve scheme). **[Figure 6]**

### 6.3.6 Numurkah, 1888

An aerial illustration published as a Supplement to the *Numurkah Standard* in January 1888, provides a good illustration of which sections of the Activity Area were substantially cleared of vegetation at this time, which was most of the stream side between its intersection with McDonald Street and the former end of Quinn Street (ie: before it meets the current Numurkah Ornamental Lake reserve).

Two sections of what is now the Activity Area remained forested at this time: the section where the Activity Area passes what is now the Ornamental Lake Reserve, running up Kinnaird's Road; and the land between the south side of Station and Brenion Streets and the Baala (Broken) Creek. **[Figure 7]**

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<sup>29</sup> 'The History of Numurkah By FRANK WHITCOMBE', op cit.

<sup>30</sup> 'SETTLEMENT ON THE LOWER GOULBURN.' *Leader*, Saturday 26 July 1879 - Page 6.

<sup>31</sup> 'OPENING OF THE NUMURKAH RAILWAY.' *The Age*, Tuesday 6 September 1881 - Page 3.

<sup>32</sup> Comparing original survey of Numurkah Township, 1875 to 'Township of Numurkah, Parish of Katunga, County of Moira', 1918, State Library of Victoria.

<sup>33</sup> Philippa Nelson and Lesley Alves, *Lands Guide, A guide to finding records of Crown land at Public Record Office Victoria*, Public Record Office Victoria (in association with Gould Genealogy and History) Melbourne, 2009, p.338.

### 6.3.7 The 'Great Flood' of 1889, and other floods on the Baala Creek

The most significant historical environmental impact on the Activity Area as a whole relates to flood events. Numurkah has experienced a number of severe floods, the environmental impacts of which most likely have been exacerbated by the clearance of stream side vegetation. As a consequence of these floods, Numurkah also has a history of agitation for flood mitigation and prevention, from at least 1902 onwards.<sup>34</sup>

The earliest recorded major in the area occurred in 1870.<sup>35</sup> However, this was surpassed in January 1889, when it was reported that there were 'extensive floods' whereby 'the lagoon at Numurkah began to overflow, and since then the various creeks and other waterway have been all running over their banks and a number of houses are swamped.'<sup>36</sup> A second flood in May 'assumed unparalleled proportions. On Friday night a heavy fresh came down Baala Creek and on Saturday morning the formation in South Numurkah, which had never before been flooded, was found to be under 2ft. of water, a very strong stream having broken away from the main creek a short distance above the bridge. The large flat in South Numurkah was submerged, and in some places the stream was about half-a-mile wide.'<sup>37</sup>

In 1912 the 'street drains were flooded and the bowling green covered with 6 inches of water',<sup>38</sup> but in September 1916, it was reported that 'The biggest flood in the history of Numurkah [was] coming down the Baala Creek. All the people living in the outlying country have been warned to leave before it is too late.'<sup>39</sup>

Floodwaters down the Broken Creek at Numurkah in 1926 were a mile wide.<sup>40</sup> In 1931, it was reported that flood waters had encroached on 'residences on the outskirts of Numurkah, and, [were] right across the road between the town and South Numurkah, which is a residential area. The race course, golf links and rifle range [were] under water.'<sup>41</sup> The cemetery also flooded.<sup>42</sup>

In 1939, Numurkah was again surrounded by flood water on three sides. **[Figure 8]** The railway line near the station was flooded, and water had entered houses in the lower lying parts of town.<sup>43</sup> In the 1950s, the government had to establish a flood relief fund for soldier settlers in the region who had suffered major losses due to floodwaters.<sup>44</sup> In 2012 Numurkah experienced devastating floods which saw a large portion of the town flooded, including the local hospital which was demolished as a result.

<sup>34</sup> 'FLOOD PREVENTION AT NUMURKAH.' *The Age*, Thursday 27 March 1902 - Page 7.

<sup>35</sup> 'Great Floods at Numurkah. NUMURKAH, THURSDAY.' *Weekly Times*, Saturday 25 May 1889, Page 11.

<sup>36</sup> 'Items Of News.' *Hamilton Spectator*, Thursday 10 January 1889 - Page 2.

<sup>37</sup> 'FLOODS IN VICTORIA. ENORMOUS DAMAGE TO PROPERTY. (BY TELEGRAPH.)' *The Daily Telegraph*, Tuesday 28 May 1889 - Page 6.

<sup>38</sup> 'BIG FLOOD AT NUMURKAH. NUMURKAH, Thursday.' *The Ballarat Courier*, Friday 29 September 1916 - Page 5.

<sup>39</sup> 'FLOOD AT NUMURKAH. NUMURKAH, Monday.' *The Age*, Tuesday 19 November 1912 - Page 9.

<sup>40</sup> 'Goulburn River in Flood.' *The Age*, Tuesday 29 June 1926 - Page 11.

<sup>41</sup> 'FLOOD WATERS AT NUMURKAH. Much Damage to Crops.' *The Age*, Tuesday 30 June 1931 - Page 8.

<sup>42</sup> 'In Numurkah District.' *The Age*, Wednesday 1 July 1931 - Page 10.

<sup>43</sup> 'NUMURKAH HOMES FLOODED', *The Age*, Tuesday 18 April 1939 - Page 14.

<sup>44</sup> 'Soldier settler flood relief', *The Argus*, Thursday 11 February 1954 - Page 11.

### 6.3.8 Township Water Supply Reserve, 1902

Numurkah residents initially relied for its water supply on the lagoon in the Baala Creek (now Broken Creek) and a well on the southwest corner of Quinn and Gray Streets outside the Bible Christian parsonage.<sup>45</sup> The lagoon would sometimes run dry, so a Weir was constructed to dam the lagoon, some time between 1885 and 1888.<sup>46</sup> [Figure 8]

In October 1888 tenders were called for a water tank, tower, engine-house and settling tanks at Numurkah, to provide reticulated water to the town. The 70-foot tower was constructed with 70,000 bricks and iron tank on top. The water tower was built between the Broken Creek and Grey Street, on the bank of the Baala (Broken) Creek, in an area exempt from stream side reservation (Grey Street Road Reserve). [Figure 8]

In the meantime the Shire engineer had set up a steam pump on the bank of the lagoon to pump water into the system.<sup>47</sup>

A Reserve for Water Supply purposes of about 9 acres between Brenion Street and the Broken Creek at the end of Melville and McCaskill Streets was officially gazetted in 1902.<sup>48</sup> Presumably, this was intended to house additional water supply infrastructure such as a pump house. This Activity Area runs through this former reserve, which is now parkland. [Figure 5]

### 6.3.9 Saleyards, 1940

In the early 20th century, two parcels of land between the south side of Station and Brenion Streets and the Baala (Broken) Creek were reserved as a State School site (gazetted in 1926, for a Higher Elementary School, proclaimed in 1924<sup>49</sup>) and Public Recreation Reserve (in 1915) with a road reserve (an extension of McDonald Street) in between these two un-numbered Lots.<sup>50</sup> [Figure 5]

These two Lots were amalgamated and gazetted as Sale Yards for livestock in 1940. However, by 1945, no development had taken place on site.<sup>51</sup> The Activity Area runs below this former Sale Yards area. [Figure 5]

### 6.3.10 Landscape alterations up to 1945

An aerial photomap taken in 1945 illustrates several alterations to the landscape contained within the Activity Area, compared to the mapping undertaken to create the Parish map in 1918. These alterations relate indirectly to the growth of the Numurkah district as an irrigation area, and as a solidier settlement area post-World War Two.

The aerial photomap shows that by 1945, a section of the Broken Creek above the weir has been made into a straight channel with an embankment separating it from the wetlands immediately north which would become the Numurkah Ornamental Lake (the Activity Area runs along this embankment). However, as yet, the road running along the embankment is quite informal. [Figure 9]

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<sup>45</sup> Robyn Ballinger, *Gannawarra Shire Heritage Study Stage One, Volume One: Thematic Environmental History*, Gannawarra Shire, December 2008, p.107-8.

<sup>46</sup> This article: 'THE WATER SUPPLY COMMISSION. TOUR OF INSPECTION. (BY TELEGRAPH FROM OUR CORRESPONDENT.) REPORTER.) TUNGAMAH, WEDNESDAY.' *The Argus*, Thursday 30 April 1885 - Page 6; does not mention a weir at Numurkah, but it has been built by the time the town is illustrated in 1888.

<sup>47</sup> Robyn Ballinger, op cit., p.107-8.

<sup>48</sup> 'Township of Numurkah, Parish of Katunga, County of Moira', 1918, State Library of Victoria.

<sup>49</sup> *Victorian Government Gazette*, Gazette 50, Wednesday, February 27th 1924, p.815.

<sup>50</sup> 'Township of Numurkah, Parish of Katunga, County of Moira', 1918, State Library of Victoria.

<sup>51</sup> 'Numurkah Township plan, Imperial measure 5607,' 1948, Public Records Office Victoria.

In addition, a section of Number 6 Main Channel had been created, but it appears as if the section of channel running off Number 6 Main Channel along the west side of Kinnairds Road as far south as Wattle Drive had not yet been constructed. More generally, all of the land as well as road reserves immediately north of the town, which were illustrated as forested in 1888, are virtually entirely clear of native vegetation. This clearing has been extensive and uniform in any area that is not a wetland.

#### **6.3.11 Landscape alterations up to 1971**

An aerial photomap taken in 1971 shows further development of the landscape applicable to the Activity Area. Firstly, the Needham Street road reserve, through which the Activity Area runs, has been developed. Also, the area of land through which the Activity Area runs, between the railway line and Station Street, is showing early signs of industrial use. **[Figure 10]**

The sale yards have been constructed. However, the area just south of the sale yards, through which the Activity Area runs, remain in part as vacant land. The area immediately west of the McDonald Street extension is cleared and has a number of buildings, having the appearance of some kind of a depot site. **[Figure 10]** Secondly, there is now an irrigation channel running along the west side of the Kinnaird Road reserve, which comes off Number 6 Main Channel. This channel appears to connect with the Baala (broken) Creek. **[Figure 11]**

#### **6.3.12 Conclusion**

The Activity Area, by virtue of being associated with a planned levee, traverses a long and narrow strip of land mainly relating to the Broken Creek. The Creek and its banks have long been a central feature of Numurkah, serving both utilitarian and recreational functions. As a consequence of this centrality, the associated Activity Area has seen numerous, distinctive changes of use since European settlement. Only a negligible amount of land within the Activity Area, if any, remains undisturbed by recent historical usage and natural disasters such as flood.

Certainly, the worst flooding in Numurkah had been experienced in South Numurkah; however successive flood events have placed pressure on the main channel of the Broken Creek, meaning that both north and south banks will have been impacted. These impacts could vary from soil deposition to soil erosion; the latter exacerbated in severity by vegetation clearance by 1888.

The section of the Activity Area, south of what was previously developed as a sale yards complex, and was, prior to the existence of these sale yards, vacant land (ie: 1945), has since been developed into parklands, with a landscaped pathway. This section of the Activity Area connects to an informal round-about the termination of McDonald Street, continuing into an area which has housed a number of semi-industrial building since at least the early 1970s. This area now has the appearance of having been heavily impacted by heavy vehicle traffic, and the storage of road-making/landscaping materials.

As the Activity Area swings north, rounding a bend in the Broken Creek to head east, it runs along the creek bank through what is technically a part of the Brenion Street road reserve, connecting to a larger area, which was previously reserved for 'water supply', but which has since been redeveloped into a public gardens (the rose gardens on either side of Melville Street). This area may have been associated with water supply infrastructure in the early 20th century.



The Activity Area then takes in an existing pathway, to join what is now Stringer Walk. This section of the Activity Area runs alongside the bank of the Baala (Broken) Creek from the footbridge to the old water tower on the Gray Street road reserve. This section of the Activity Area effectively runs along the edge of the lagoon, which was dammed in the 1880s to improve water supply, as it was the main source of town water. Although the edge of this lagoon area (through which the Activity Area runs) now has some tree coverage, this is regrowth from post-1888.

Continuing to run eastwards, the Activity Area traverses the artificial embankment which runs between the banks of the Baala (Broken) Creek and what is now the Numurkah Ornamental Lake and Park area. This embankment has existed since the Broken Creek was modified into a straight channel, sometime prior to 1945. The continuation of the road across this embankment (ie: Quinn Street), while extant in 1945, may have been formalised relatively recently (post-1971).

From the far eastern side of the Lake complex, the Activity Area runs along an old road reserve, which although now a continuation of 'Quinn Street', existed historically (on paper at least) as an extension of Saxton Street from at least 1918, and was made into a formed road by 1945.

Sections of the Activity Area at both western and eastern ends, run through road and railway reserves. These areas have been subject to road-making and railway-making impacts such as clearing, grading and other earthworks.

In all, the Activity Area traverses a series of public reserved areas (water reserves, road reserves, railway reserves and so on), which have all seen — either directly or in close proximity to the Activity Area — some form of landscaping, be it the construction of roadways, pathways, railways, or landscape modification in the form of embankments and irrigation channels.



**Figure 2: Excerpt from 'Map Showing approximately the country which used to be occupied by the Bangerang tribes, and by five of the Ngooraialum speaking tribes,' contained in E. M. Curr, *The Australian Race*, Volume 3, 1887, illustrating the location of the Activity Area in relation to Yorta Yorta speaking 'clans'.**

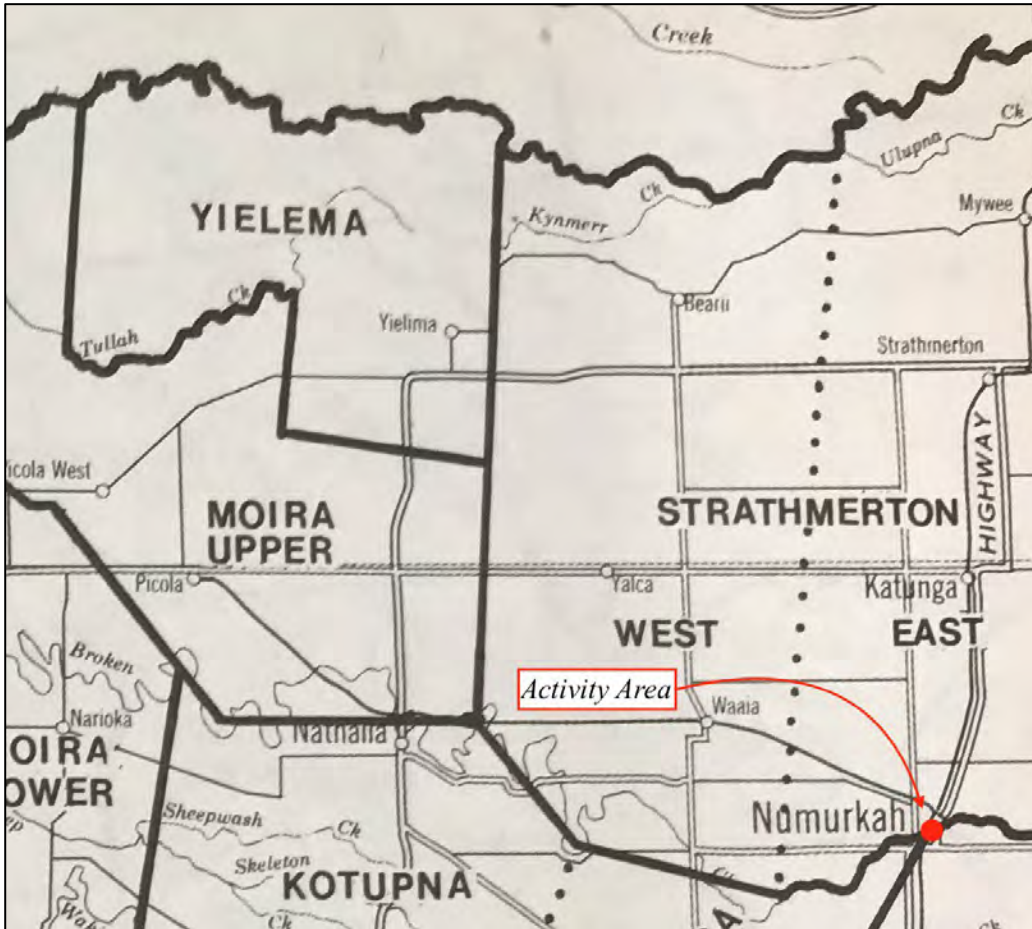


Figure 3: Excerpt from R. Spreadborough, and H. Anderson, *Victorian Squatters*, Red Rooster Press, Ascot Vale, 1983, illustrating the location of the Activity Area in relation to Strathmerton pastoral run, 1840.

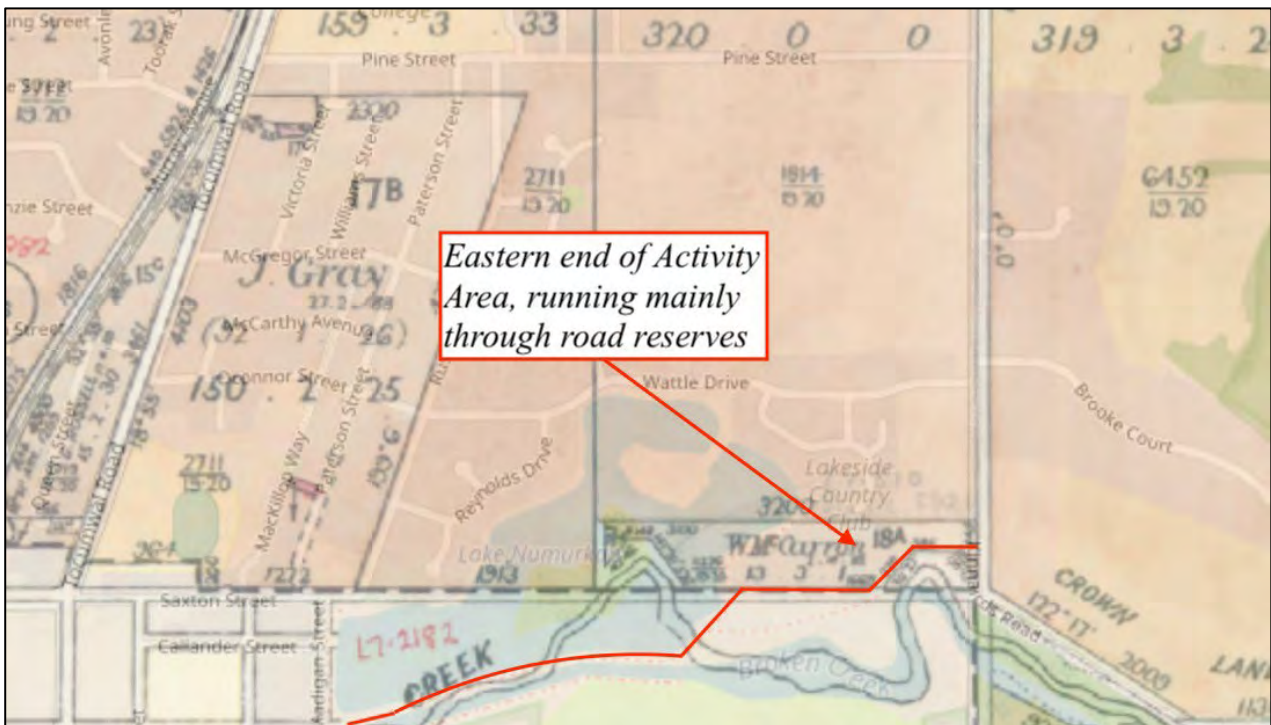


Figure 4: Excerpt from 'Katunga Parish Plan, Imperial measure 2852', 1963, illustrating the eastern section of the Activity Area.

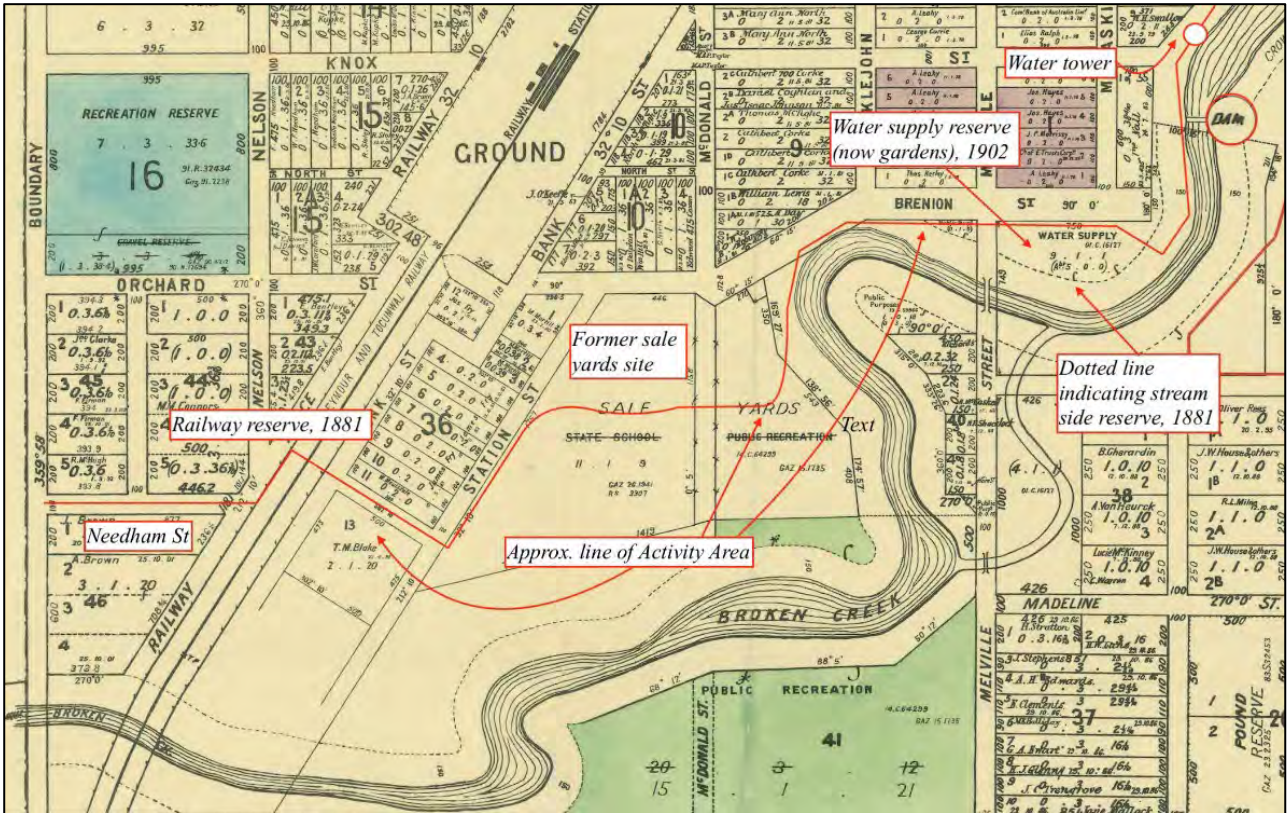


Figure 5: Excerpt from ‘Township of Numurkah, Parish of Katunga, County of Moira’, 1918, illustrating the Activity Area with key features.

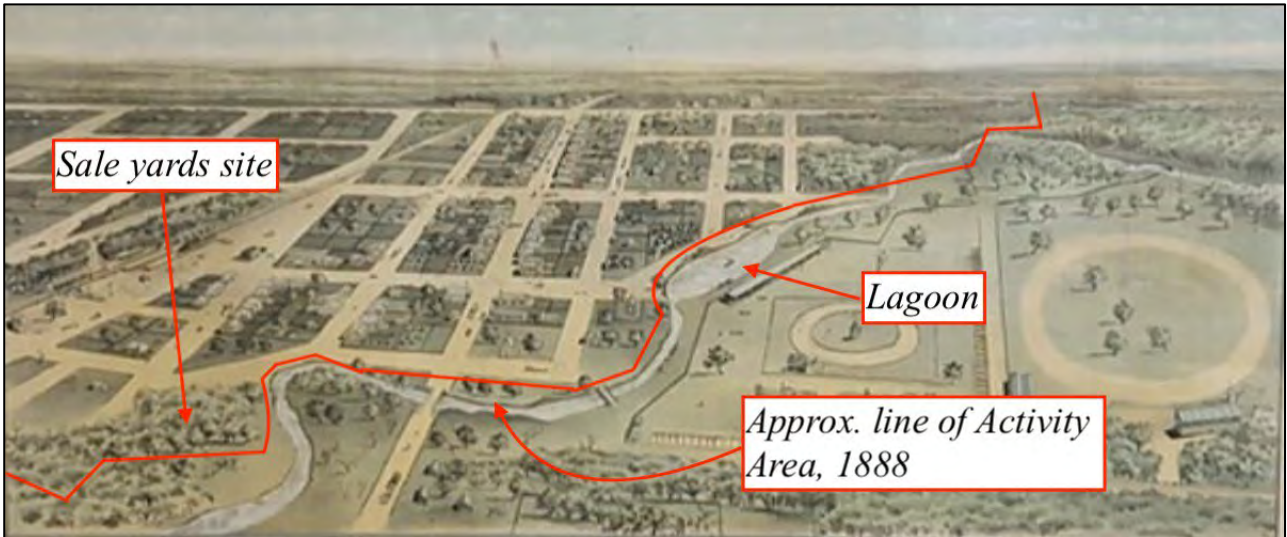


Figure 6: Illustration of the township of Numurkah, Supplement to the Numurkah Standard, January 1888, illustrating the Activity Area, and in particular vegetation clearance.



Figure 7: 'Floods in Numurkah', 1939, from the Adelaide Chronicle, Thursday 17 August 1939.

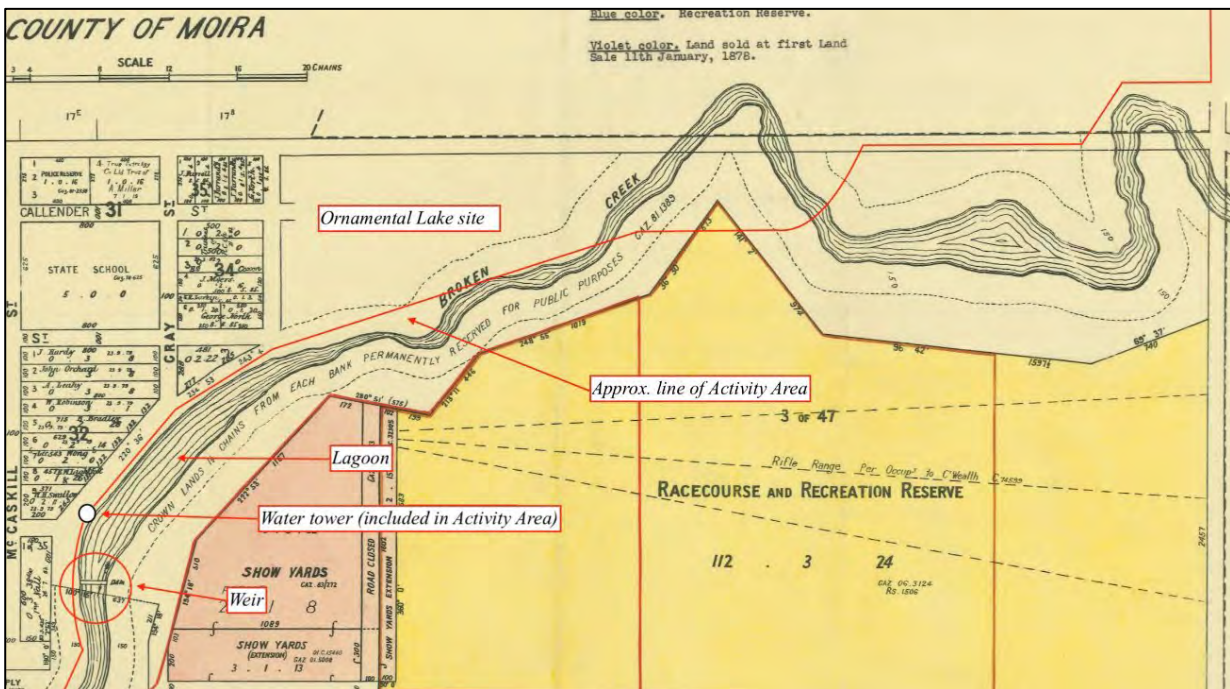
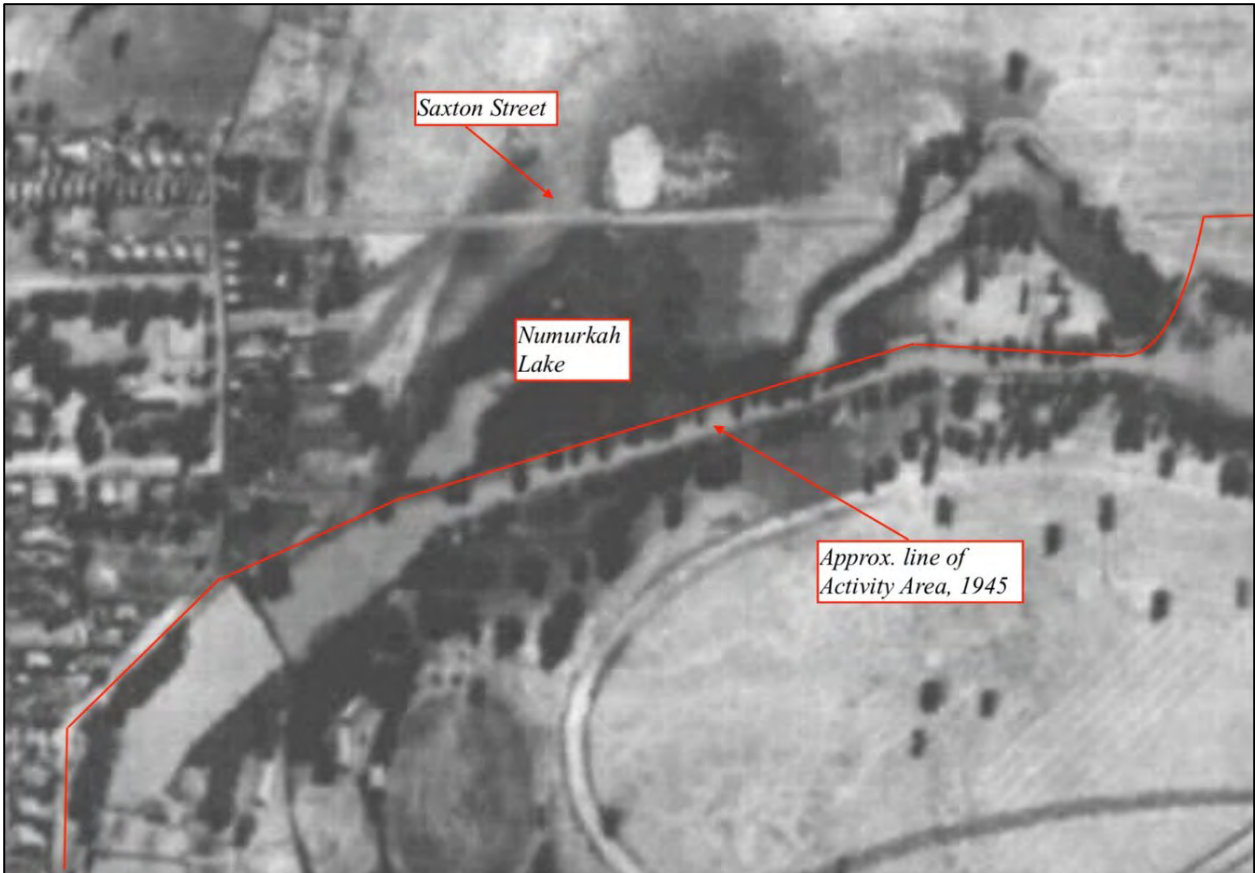


Figure 8: Excerpt from 'Township of Numurkah, Parish of Katunga, County of Moira', 1918, illustrating the Activity Area with key features.



**Figure 9: Excerpt from 'NATHALIA\_779B4,' 1945, Historical Photo-Map, illustrating the Activity Area with key features.**



**Figure 10: Excerpt from 'Katunga', photomap prepared by Department of Crown Lands and Survey, 1971, illustrating the the Activity Area with key features.**



*Figure 11: Excerpt from 'Katunga', photomap prepared by Department of Crown Lands and Survey, 1971, illustrating the Activity Area with key features*

#### 6.4 Search of the Victorian Aboriginal Heritage Register

The Victorian Aboriginal Heritage Register (VAHR) was searched on 6<sup>th</sup> February 2024 by Damian Wall. A total of thirty-one (31) Aboriginal places have previously been recorded within the defined Geographic region, consisting of Artefact scatters (N=9), Low Density Artefact Distributions (N=3), Object Collections (N=1), Aboriginal Historical Place (N=1), Scarred trees (N=15), Aboriginal Ancestral Remains (Burial) (N=1) and Aboriginal Ancestral Remains (Reinterment) (N=1) (**Table 1**).

VAHR 7925-0644 "Numurkah Burial ground" is the closest registered aboriginal place, recorded as Aboriginal Ancestral Remains (Burial) located 500m south of the Activity area.

**Table 1: Registered Aboriginal Places within 10km of activity area.**

Aboriginal Place Number	Aboriginal Place Number	Component Number	Component Type	Distance from AA (m)
7925-0644	Numurkah Burial ground	7925-0644-1	Aboriginal Ancestral Remains (Burial)	0.5
7925-0644	Numurkah Burial ground	7925-0644-2	Aboriginal Ancestral Remains (Reinterment)	1
7925-0128	NUMURKAH 1	7925-0128-1	Artefact Scatter	1.6
7925-0655	Wunghnu LDAD 1	7925-0655-1	Object Collection	4.4
7925-0655	Wunghnu LDAD 1	7925-0655-5	Low Density Artefact Distribution	4.4
7925-0137	BLACK SWAMP 9	7925-0137-1	Artefact Scatter	4.9
7925-0136	BLACK SWAMP 8	7925-0136-1	Artefact Scatter	5.1
7925-0135	BLACK SWAMP 7	7925-0135-1	Artefact Scatter	5.2
7925-0654	Wunghnu 1	7925-0654-1	Scarred Tree	5.3
7925-0130	BLACK SWAMP 2	7925-0130-1	Scarred Tree	5.3
7925-0134	BLACK SWAMP 6	7925-0134-1	Artefact Scatter	5.3
7925-0133	BLACK SWAMP 5	7925-0133-1	Artefact Scatter	5.3
7925-0132	BLACK SWAMP 4	7925-0132-1	Artefact Scatter	5.4
7925-0129	BLACK SWAMP 1	7925-0129-1	Scarred Tree	5.4
7925-0131	BLACK SWAMP 3	7925-0131-1	Artefact Scatter	5.4
7925-0655	Wunghnu LDAD 1	7925-0655-4	Low Density Artefact Distribution	5.7
7925-0655	Wunghnu LDAD 1	7925-0655-3	Low Density Artefact Distribution	5.8
7925-0598	WUNGHNU CAMP	7925-0598-1	Aboriginal Historical Place	5.8
7925-0444	NINE MILE CREEK	7925-0444-1	Scarred Tree	6.6
8025-0284	LORENZ ROAD SCAR TREE 2	8025-0284-1	Scarred Tree	7.4
8025-0242	LORENZ RD SCAR TREE	8025-0242-1	Scarred Tree	7.5
8025-0285	LORENZ ROAD SCAR TREE 3	8025-0285-1	Scarred Tree	7.5
8025-0244	LORENZ RD RESERVE SCAR TREE TWO	8025-0244-1	Scarred Tree	7.7
8025-0243	LORENZ RD RESERVE SCAR TREE ONE	8025-0243-1	Scarred Tree	7.7
7925-0001	MUNDOONA	7925-0001-1	Scarred Tree	7.9
7925-0067	CENTRAL MUNDOONA RD 5	7925-0067-1	Scarred Tree	8
8025-0247	MUCKATAH 2/8P 1	8025-0247-1	Artefact Scatter	9.6
7925-0063	CENTRAL MUNDOONA RD 1	7925-0063-1	Scarred Tree	9.6
7925-0066	CENTRAL MUNDOONA RD 4	7925-0066-1	Scarred Tree	9.6
7925-0065	CENTRAL MUNDOONA RD 3	7925-0065-1	Scarred Tree	9.6
7925-0064	CENTRAL MUNDOONA RD 2	7925-0064-1	Scarred Tree	9.6



Map 7: Previously recorded Aboriginal Places within the geographic region. Scale 1:88,000. Source: ACHRIS 2024.



## 6.5 Aboriginal places identified in the geographic region

In Victoria and including the broader geographic region surrounding the Activity area, the following types of Aboriginal places have been recorded and registered:

**Aboriginal Historical Places:** An Aboriginal historical place is a location that is important because of its associations with, and cultural significance to, Aboriginal people. Aboriginal historical places include building foundations, sites of historical events, such as massacres, and may have no extant archaeological evidence remaining. Examples of such places are locations where Aboriginal people have lived and worked, missions, protectorate stations and ration supply depots, places or monuments linked to Aboriginal self-determination, meeting places where people carried out traditional practices, and places linked with significant individuals.

**Aboriginal Artefact Scatters:** Artefact scatters are the material remains of past Aboriginal people's activities. Scatter sites usually contain stone artefacts, but other material such as charcoal, animal bone, shell and ochre may also be present. Artefact scatters may vary over the ground surface from one square metre to one hectare and contain few or thousands of artefacts. Artefacts often are chipped stone artefacts and occasionally, animal bone, shell, charcoal, hearth stones, clay balls and ochre.

**Low Density Artefact Distributions** A Low-Density Artefact Distribution (LDAD) is the occurrence of stone artefacts at densities of up to 10 counted artefacts in any area of approximately 10m x 10m, or 100m<sup>2</sup>, including within a single test pit of  $\leq 1\text{m}^2$ . As a distribution, the LDAD does not have an 'extent' but each individual artefact is accorded an area of Aboriginal cultural heritage sensitivity.

**Aboriginal Scarred Trees:** Aboriginal scarred trees are the result of people marking or removing bark from a tree for a wide range of uses. Scarring exposes the sapwood on the trunk or branch of a tree, with the tree healing over a period of time, generally leaving a prominent scar. Mature trees with scars are located across Victoria, and more commonly are present on box and red gum eucalypts that occur along the margins of rivers, lakes and floodplains.

**Aboriginal Ancestral Remains (Burials):** Often located near or within Aboriginal occupation sites such as oven mounds, shell middens or artefact scatters, Aboriginal burials are normally found as human bones eroding from the ground, or exposed during ground disturbance. Aboriginal customs for honouring and disposing of the dead varied greatly across Victoria, but burial was common. Aboriginal burial sites normally contain the remains of one or two people, although cemeteries that contain the remains of hundreds of people buried over thousands of years have been found.

## 6.6 Previous archaeological work in the geographic region

Localised and regional archaeological investigations have established the general character of Aboriginal sites located within the same Geographic Region as the Activity Area. This information, together with an environmental context, histories of land use, and historical and ethnohistorical sources can be used to form the basis for a site prediction statement. The most relevant reports to the Activity Area, which included all CHMPs undertaken within the Geographic Region at the time of the Desktop Assessment and previous archaeological investigations in the region relating to the geomorphology of the Activity Area, are summarised below. Only the most relevant reports have been included in the following sections. Recent studies have shown that there is a high probability that Aboriginal Cultural Heritage Places will occur in landforms in association waterways and that the most common Aboriginal Cultural Heritage Place types are likely to be scarred trees and subsurface artefact scatters. Those considered most relevant to the current study are discussed herein.

### 6.6.1 Regional Studies

**Zobel (1984)** undertook a desktop-based study of the Aboriginal occupation of north-east Victoria for the Land Conservation Council (Report No. 036). A summary of the Aboriginal & colonial history of the north east was presented in the study. Zobel identified 83 Aboriginal places within the area of the study, which consisted of 10 art/rockshelter places, 25 surface artefact scatters, 2 mounds, 1 mound with burial, 1 quarry, 13, isolated artefacts, 1 rock arrangement, 26 scarred trees and 1 exposure (Zobel 1984: 27). Zobel identified that Aboriginal sites could be expected across most ecological zones of the north east but that burial sites were more likely to be found in association with flood plains (Zobel 1984: 34 – 36).

**Bird (1992)** undertook a desktop-based study of the Broken River Basin as it was termed (Report No. 592). The environment, Aboriginal history, archaeology and management of archaeology places are discussed in the study. Bird identified 312 Aboriginal places of occurring within the Broken Basin study area. Of these 254 occurred on a riverine plain landform, 53 on plains and hills landforms and 2 on upland landforms. Site within the study area consist of 5 surface scatters, 87 mounds, 8 shell middens, 16 isolated artefacts, 4 isolated hearths, 5 rock wells, 174 scarred trees, 3 quarries and 10 burials (Bird 1992): The riverine plain was identified as being the most culturally sensitive landform in the study area, but this was attributed, in part to the ease with which scarred trees can be identified.

<sup>52</sup>**Atkinson & Berryman (1983)** prepared a report (63) on, *Aboriginal Association with the Murray Valley Study Area* for the Victorian Land Conservation Council, and utilised archaeological evidence, anthropology, historical records and oral history in its consideration of traditional life of Aboriginal groups in the area. It examines the ‘traditional Aboriginal perspective’ through geological evidence, geophysical evidence, climate, living zones, boundaries and population levels, economy, material culture and cultural heritage, social organization and relations, and world view. The post-contact period is also examined through population change, frontier conflict, protection, forced removal, Maloga and Cummeragunga, and present day Indigenous association with the Murray Valley.

<sup>53</sup>**Russell (1992)** prepared a report (576) for an archaeological survey for Optical fibre cable between Tallygaroopna and Cobram passing through Wunghnu in north central Victoria. One archaeological site, a scar tree (VAHR 7926-184) was recorded during the survey. Any other areas with mature native trees also need to be assessed for scar trees. There is also a medium archaeological potential in source bordering dunes, and relict waterways. This includes where the study area intersects the Nine Mile Creek and associated drain near Wunghnu. Finally, the report concluded that a surface survey does not exclude the possibility for the presence of subsurface archaeological deposits.

<sup>54</sup>**Lusty (1992)** prepared a report for a desktop study for a proposed community surface drain (Drain 17G) in the Shepparton Irrigation Region for the Rural Water Corporation and Department of Food and Agriculture, Victoria. The results of the desktop study revealed five archaeological sites (scarred trees) were located in the proposed drainage area. A total of 28 sites were located in the Shepparton region and all were considered of high cultural significance. The recommendation of the desktop report was that drain construction should avoid mature trees, areas of raised lands, banks of prior and existing waterways in order to minimise impacts on cultural resources.

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<sup>52</sup> Summary from: Sonogo, L, Allison, L & Sexton, N. 2022. 184 Campbell Road, Cobram Residential Subdivision. CHMP No. 18835. Report by Andrew Long + Associates Pty Ltd for Gaage Developments Pty Ltd.

<sup>53</sup> Summary from: Fordyce, B; Brown, S & Sanders, N. 2018. Proposed Solar Farm, Wunghnu. CHMP No. 15381. Report by Terra Rosa Consulting for X-Elio.

<sup>54</sup> Summary from: Fordyce, B; Brown, S & Sanders, N. 2018. Proposed Solar Farm, Wunghnu. CHMP No. 15381. Report by Terra Rosa Consulting for X-Elio.

<sup>55</sup>**Robinson & Mann (1996)** prepared a report (1251) on Natural Values of the Public Lands Along the Broken, Boosey and Nine Mile Creeks of North-eastern Victoria, prepared by Goulburn Valley Environmental Group and funded by Australian Heritage Commission. This report is a desktop and biological survey of the natural values, human uses and threatening processes found along the creeks. The report also gives recommendations for future management. The biological survey of the area of remnant vegetation along 360km of creek concluded that this region is one of the largest areas of grassy woodlands in the north plains and the largest area remnant vegetation in Victoria. It is distinguished from other areas because of its Grey Box vegetation and a higher proportion of old-growth woodlands. The report also briefly discusses the cultural significance of the area but mainly concentrated on biological values. The report recommended that the study area is managed for conservation with significant natural elements of the creeks system being incorporated into a State Park. It was also recommended that the creeks system not be used for industrial uses.

### 6.6.2 Localised Studies

**Johnson (2019)** prepared a CHMP (16499) for the proposed Works at Wunghnu Solar Farm. Desktop, standard and complex assessments were undertaken. The Activity Area had experienced extensive ground disturbance from stock grazing, ploughing and cropping, drainage constructions, fencing and access track construction. Intact subsurface deposits may be present at a depth below this disturbance particularly around parts of the ephemeral waterways that have not been altered for drainage or irrigation. The Complex Assessment consisted of the excavation of one 1x1m TP and 25 STPs across the Activity Area. Disturbance was noted in some areas as a result of previous agricultural use, as well as the historical use of the northern Activity Area as rubbish dump. As no Aboriginal Cultural Heritage was located in the Activity Area and the Complex Assessment has shown that the landforms within the Activity Area are unlikely to contain Aboriginal Cultural Heritage.

<sup>56</sup>**Patton (2018)** prepared a CHMP (15769) for a proposed residential development at Numurkah. This Assessment involved a survey of the study area that did not record any Aboriginal Cultural Heritage within the area. The surveyed area had good GSV at the time of the survey and extensive disturbance was noted across the area. This disturbance included deep ripping as a result of previous and current agricultural use of the property, as well as excavation and trenching for the installation of services. Cracking clays were observed across the ground surface of the area. Soil piles had also been introduced to the area as a result of previous works.

<sup>57</sup>**Bell (2018)** undertook a Standard Assessment (CHMP 15563) for a proposed residential subdivision. This Assessment did not identify any Aboriginal Cultural Heritage as a result of the survey. GSV during the survey was very good to excellent with only short patches of grass intermittently present across the ground surface. The ground surface appeared to be largely fill introduced to the area as a result of surrounding development and contained fragments of glass, brick and ceramic. A Desktop Assessment showed that the area had also been historically disturbed as a result of sand extraction and other earthworks associated with surround development and utility installations within the area. The area also featured an asphalt roadway that crisscrossed the area and four existing dwellings.

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<sup>55</sup> Summary from: Fordyce, B; Brown, S & Sanders, N. 2018. Proposed Solar Farm, Wunghnu. CHMP No. 15381. Report by Terra Rosa Consulting for X-Elio.

<sup>56</sup> Summary from: Johnson, R. 2019. Proposed Works at Wunghnu Solar Farm. CHMP No. 16499. Report by ACHM for X-Elio.

<sup>57</sup> Summary from: Johnson, R. 2019. Proposed Works at Wunghnu Solar Farm. CHMP No. 16499. Report by ACHM for X-Elio.

**Barker (2019)** prepared a CHMP (16357) for Proposed Rowe St Drainage Basin Extension, Numurkah. Desktop, standard and complex assessments were undertaken. Effective ground surface coverage was estimated to be less than 1% due to dense grass, hence a complex assessment was recommended. The Complex saw the excavation of ten 3m x 1m Machine Pits in the Activity Area. The machine pits confirmed a history of disturbance.

**Fordyce, Brown, Sanders (2018)** prepared a CHMP (15381) for proposed solar farm, Wunghnu. Desktop and standard assessments were undertaken. The desktop assessment showed that region has a long history of land clearing for agricultural use and the activity area has a history of farming use. Two surface Aboriginal heritage places were identified within the activity area, VAHR 7925-0654 – Wunghnu 1 (scarred tree), VAHR 7925-0655 – Wunghnu LDAD 1 (low density artefact scatter). There was significant disturbance to the area by farming and agricultural activities, and the construction of associated infrastructure such as dams and cleared tracks; and an unnamed relict water source (the swamp) is located in the northeast corner of the activity area and two paleo channels were identified through the central portion of the activity area. These features were identified as areas of archaeological sensitivity and have the potential to contain subsurface cultural material. Subsurface investigation (a complex assessment) was deemed to be required if these areas could not be avoided.

**Barker & Young (2018)** prepared a CHMP (15208) for Proposed Five Re-Configurations Plans, Carag Carag, Kyabram, Cobram East and Katunga. The desktop assessment determined a number of areas of high archaeological potential, hence a standard assessment was undertaken. The standard assessment identified three sections that required a complex assessment. Three (3) 1m x 1m Test Pits (TP) and sixty-seven (67) 50cm x 50cm shovel test pits (STP). VAHR 8025-0316 (Kododa Road LDAD1) was recorded as a result, comprising a low-density surface artefact concentration located in a disturbed surface context.

**Hill (2017)** prepared a CHMP (14870) for Channel Remediation Program 2017, Cohuna to Cobram. The desktop assessment indicated that Aboriginal cultural heritage could potentially be present in the activity area due to some sections being in close proximity to a major waterway in Gunbower Creek, A selective survey of the activity area was undertaken during the standard assessment focussing upon the areas of CHS. The majority of the activity area was found to have been subject to some form of disturbance and modification. One new Aboriginal Place (The Flume Scarred Tree 1; VAHR 7726-0516) was identified. No areas of archaeological sensitivity with the potential for sub-surface deposits were identified during the standard assessment.

**Hill (2010)** prepared a CHMP (11227) for Numurkah Raw Water Storage Transfer Pipeline: Numurkah, Northern Victoria. Desktop & standard assessments were undertaken. The entire Activity Area has undergone a level of ground disturbance that would qualify as 'significant ground disturbance'. There were no Aboriginal scarred trees recorded during the survey due to the absence of mature native trees within the Activity Area. There were no earth features such as mounds, hearths or exposed soil deposits identified during the survey (earth features may contain burnt clay, burnt rocks or charcoal; whether intact, eroded or levelled). No caves, cave entrances or rockshelters were recorded during the archaeological survey.

**Grinter, Edwards, Bell (2016)** prepared a CHMP (14301) for the proposed Free Range Pig Farm, 712 Sellicks Road, Drumanure. Desktop & standard assessments were undertaken. The desktop determined that while the activity area has been subject to some disturbance, the activity area contained landforms that are known to contain Aboriginal cultural heritage. No Aboriginal cultural heritage was located in the activity area. All mature trees were examined for cultural scarring, however no scarred trees were identified. No areas with the potential to contain Aboriginal cultural heritage were identified.

**Barker (2016)** prepared a CHMP (14154) for the Proposed Goulburn Valley ARC, 104 Watters Road, Numurkah. The results of the standard assessment indicate that the activity area comprises land that has been disturbed directly by land clearance, stock grazing and disturbance for the construction of a house and outbuildings in the northwest corner of the Activity Area. The northern section of the activity area is considered to be an area of archaeological sensitivity due to its close proximity to Nine Mile Creek. A 1x1m test pit and 45 shovel test pits were excavated during the complex assessment. No Aboriginal cultural heritage was recorded.

### 6.7 Oral history

No oral history information was collected during the desktop assessment.

### 6.8 Obstacles encountered in completing the desktop assessment

No obstacles were encountered in completing the desktop assessment.

### 6.9 Conclusions from the Desk-top Assessment

The implications for the Aboriginal sites are as follows:

- There is one (1) statutory areas of cultural heritage sensitivity within the activity area, being land within 200 metres of a waterway (Broken Creek) is an area of *Aboriginal Cultural Heritage Sensitivity*;
- Generally speaking, Aboriginal places would be expected to be situated close to either an ephemeral or permanent water source (Broken Creek), providing adequate shelter from the elements and rising floodwaters, and have access to a food source.
- Additionally, for Aboriginal places to remain in these situations through time, the landscape will not have sustained significant ground disturbance activities.
- Any mature, remnant trees that remain within the activity area have the potential to be culturally scarred.
- Historically, the Broken creek and wider Goulburn River corridor would have provided a wide range of food and material resources for Aboriginal people across a range of habitats given the landforms in close proximity to the activity area (i.e. swampy low areas, permanent watercourses and associated tributaries, woodland habitats);
- A total of thirty-one (31) Aboriginal places have previously been recorded within the defined Geographic region, consisting of Artefact scatters (N=9), Low Density Artefact Distributions (N=3), Object Collections (N=1), Aboriginal Historical Place (N=1), Scarred trees (N=15), Aboriginal Ancestral Remains (Burial) (N=1) and Aboriginal Ancestral Remains (Reinterment) (N=1); There are no (zero) previously registered places within the Activity area;
- Given the proximity to the Activity area of previously identified places and the pattern of place distribution in the wider geographic region - Aboriginal cultural material, in the form of Scarred trees and/or artefact scatters were considered the most likely site type to occur in the Activity area.

*The results of the desktop Assessment determined that, despite the likely disturbance within the Activity area, it is possible that Aboriginal cultural heritage is present, therefore a Standard assessment was required pursuant to r.62(1) of the Aboriginal Heritage Regulations 2018.*

## 7 Standard Assessment

The results of the desktop assessment indicated that a standard assessment was required to further investigate the potential for Aboriginal cultural heritage to be located within the activity area. The specific aims of the survey are to identify and investigate the following:

- All areas of high ground surface visibility for targeted detailed surface inspection;
- Ground disturbance;
- Any surface or obtrusive cultural heritage places, if present;
- Landform patterns and elements;
- Areas of proposed activities that would result in ground disturbance; and
- Test the site prediction model generated by the desktop assessment.

### 7.1 Methodology

The pedestrian survey was conducted in a systematic manner and in accordance with proper archaeological practice. All areas were examined to determine areas of good ground surface visibility and/or high potential archaeological sensitivity for Aboriginal cultural material. The pedestrian survey examined all accessible areas, landform patterns, elements and attributes. The fieldwork participants (**Section 5.1**) were spaced at approximately 2m apart during the survey and the entire activity area was surveyed as reasonably practical.

Detailed notes were taken, including descriptions of landform elements, ground surface visibility, ground disturbance, vegetation, water sources and potential Aboriginal cultural heritage sensitivity (Burke & Smith 2004). The standard assessment was recorded using recording forms to note features and disturbance within the activity area. The location of the features and disturbance were recorded using a dGPS. Photographs of the activity area were also taken using a digital camera.

### 7.2 Fieldwork participants

A Standard Assessment was undertaken on the 12<sup>th</sup> October 2023 with participants: Damian Wall (Red-Gum Environmental Consulting Pty Ltd), Nathan Bourke & Shannon Atkinson (YYNAC Field Representatives).

### 7.3 Oral history

No oral history information was provided during the standard assessment.

### 7.4 Obstacles encountered in completing the standard assessment

No obstacles were encountered in completing the standard assessment.

## 7.5 Ground Surface Visibility, Survey Areas and Effective Survey Coverage

Archaeological visibility refers to the amount of ground surface that is clearly visible for inspection. The greater the ground surface visibility, the more effective are surface surveys. Examples of high surface visibility are vehicular & pedestrian tracks, dune blow outs (100% per m<sup>2</sup>); and examples of poor visibility are areas of heavy vegetation cover (0-10% per m<sup>2</sup>) (Murphy & Thomson 2016).

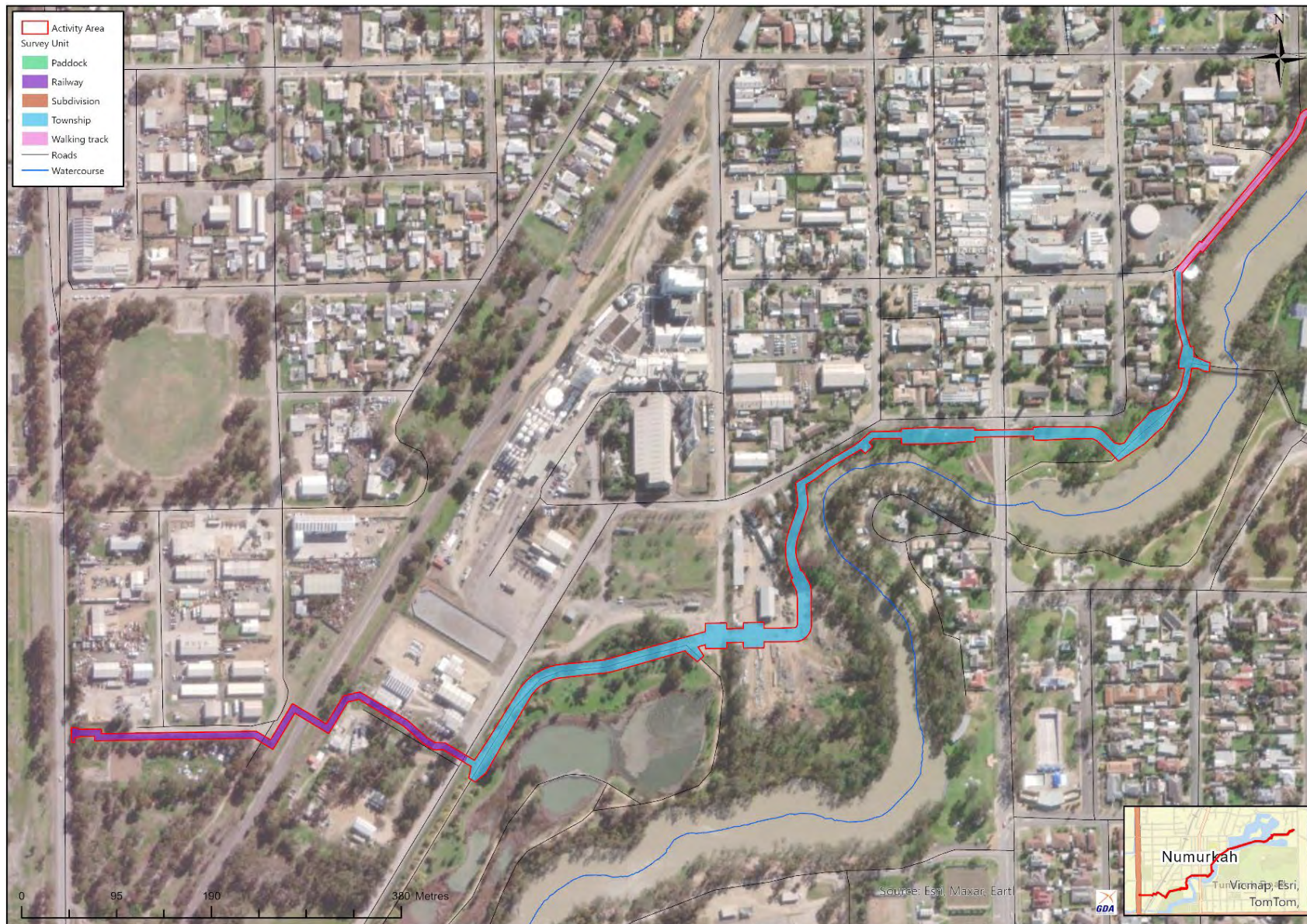
Unfortunately, it is often the case that highly visible Aboriginal cultural heritage places are also often highly disturbed. High ground surface visibility (GSV) is therefore often related to the amount of disturbance that has occurred. This disturbance may be manmade (such as drainage lines, vehicle tracks), by stock (overgrazing, tracks), or due to natural processes (erosion by wind or water). The level of GSV is typically assessed as is shown in **Table 2**. Effective Survey Coverage (ESC) is a measure of each Survey Unit (identified in the Activity area – **Map 8A & 8B**) that was adequately surveyed during the Standard Assessment by the survey team (**Table 3**).

**Table 2: Ground Surface Visibility (GSV)**

%	0%	0 – 10%	10 – 30%	30 – 50%	50 – 70%	70 – 90%	90 – 100%
<b>Rating</b>	No visible ground surface	Very poor	Poor	Fair	Good	Very good	Excellent

**Table 3: Effective Survey Coverage**

Survey Unit	Area of Survey Unit (m <sup>2</sup> )	Area Surveyed (m <sup>2</sup> )	% Surveyed
<b>A</b> (Railway)	3291.6	3291.6	100%
<b>B</b> (Township)	13,788.8	13788.8	100%
<b>C</b> (Walking track)	12,026.8	12,026.8	100%
<b>D</b> (Paddock)	4321	4321	100%
<b>E</b> (Subdivision)	2386.2	2386.2	100%
Totals	<b>35,814.5</b>	<b>35,814.5</b>	<b>100%</b>

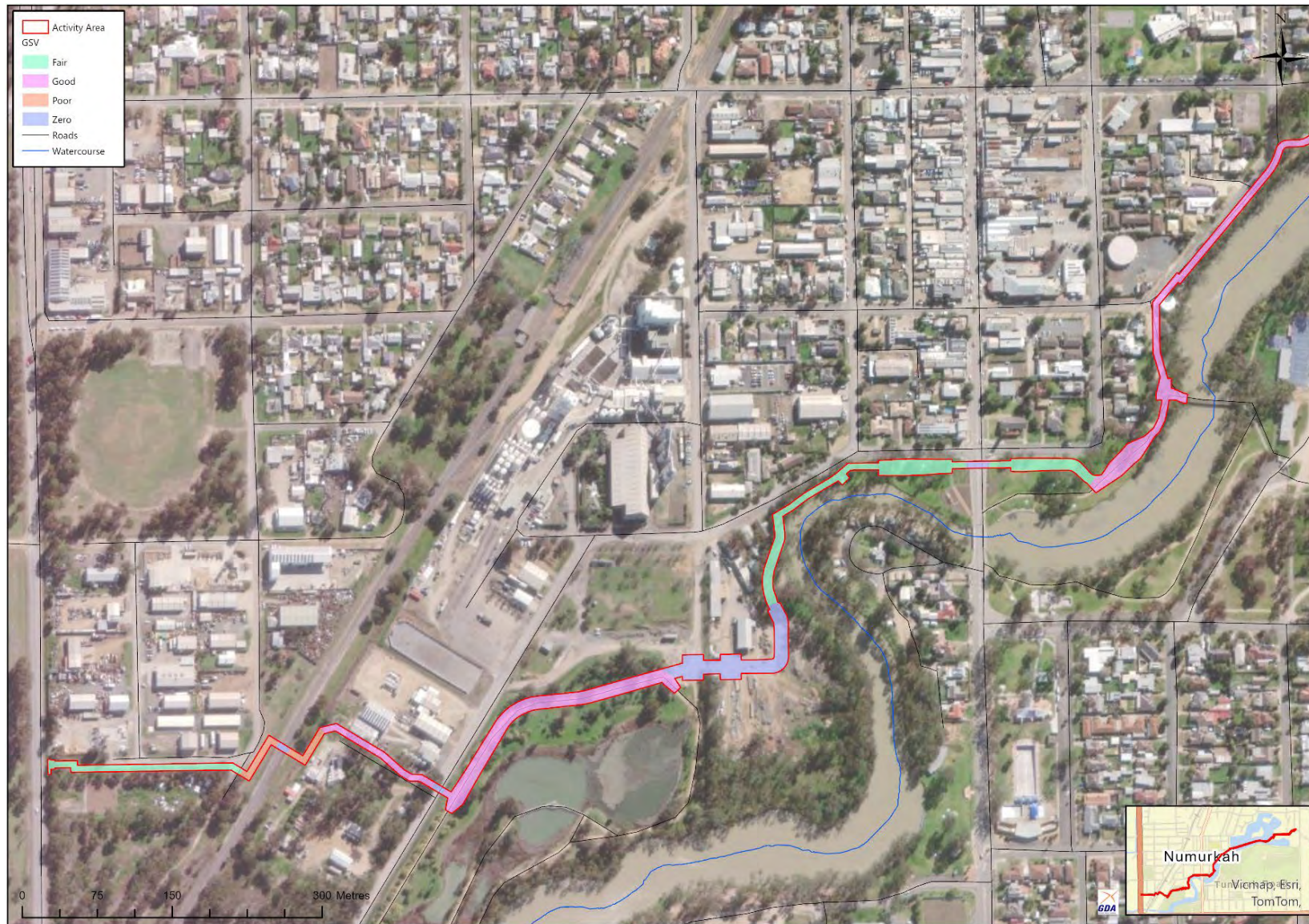


Map 8A: Survey Units in the Activity area. Scale 1: 4,500. Source: Esri 2023.





Map 8B: Survey Units in the Activity area. Scale 1: 4,500. Source: Esri 2023.



**Map 9A: Ground Surface Visibility in the Activity Area. Scale 1:4,500. Source: ESRI 2023**



Map 9B: Ground Surface Visibility in the Activity Area. Scale 1:4,500. Source: ESRI 2023

## 7.6 Results of the Standard Assessment

The Desktop indicated the potential for the Activity area to contain landforms that may contain Aboriginal cultural heritage, in-situ or otherwise. The survey team observed that major flooding events over many decades post the advent of river regulation for irrigation downstream, have altered the appearance of the landform by means of deposition of fill and scouring of the river edges and immediate terrace above the main watercourse such that the area is unlikely to be representative of an entirely 'undisturbed' landform (**Photo 8**).

Site inspection revealed that the activity area has been subject to various degrees of disturbance, including construction of roads and railways, trenching related to subsurface services and drainage, construction of existing walking track network, and construction of existing structures and facilities associated with the foreshore park. Sections of the Activity area have also been subject to numerous major flooding events, evident in the deposition of fill across the site post flooding.

Ground surface visibility encountered was variable ranging from areas of good visibility (50-70%) to poor (10-30%) in areas of mown exotic grasses, along with some areas with no/zero visibility due to sealed roads.

The Activity area and immediate surrounds retains large mature (>100 years) native trees of which some may be required to be removed. All trees were inspected for potential scarring with no culturally scarred or modified trees identified as a result. There were no rock shelters or caves and there are no naturally occurring waterholes or soaks present within the Activity area.



**Photo 1: Site conditions, Needham St roadside, imported gravel fill. Good GSV. Photo: D.Wall, 2023**



**Photo 2: Site conditions along railway corridor, evidence of trenching/drain construction, exotic dominated ground cover. Fair GSV. Photo: D.Wall, 2023.**



**Photo 3: Site conditions, existing building/infrastructure. Fair GSV. Photo: D.Wall, 2023.**



**Photo 4: Site conditions, existing walking/access track, imported fill. Good GSV. Photo: D.Wall, 2023.**



**Photo 5: Site conditions, existing walking/access track, imported fill. Good GSV. Photo: D.Wall, 2023.**



**Photo 6: Site conditions along creek corridor, exotic dominated ground cover. Poor GSV. Photo: D.Wall, 2023.**



**Photo 7: Site conditions along foreshore walking track/park, imported gravel fill, exotic dominated ground cover. Good GSV. Photo: D.Wall, 2023.**



**Photo 8: Site conditions near old water tank off Gray St, imported gravel fill. Good (Gravel) to Zero (Asphalt) GSV. Photo: D.Wall, 2023.**



**Photo 9: Site conditions, existing walking track, imported gravel fill. Good (Gravel) to Poor (Exotic grasses) GSV. Photo: D.Wall, 2023.**





**Photo 10: Site conditions, open paddock, minimal evidence of disturbance, recommended monitoring per Management conditions 4 & 5. Poor GSV. Photo: D.Wall, 2023.**

### **7.7 Areas likely to contain Aboriginal cultural heritage & Aboriginal cultural heritage scientific sensitivity model**

Generally speaking, Aboriginal places would be expected to be situated close to either an ephemeral or permanent water source, providing adequate shelter from the elements and rising floodwaters, and have access to a food source. For intact Aboriginal places to remain in these areas, the landscape will not have sustained ground disturbing activities. Where they do remain in disturbed landscapes or contexts, they are not likely to be *in situ*. The results of the desktop assessment indicate that the Activity area comprises mostly a 'alluvial plains' landform with no rock features, caves elevated areas, soaks or springs.

There are also no registered Aboriginal places within the Activity area, but a search of ACHRIS within a 10km range reported that a total of thirty-one (31) Aboriginal places have previously been recorded within the defined Geographic region, consisting of Artefact scatters (N=9), Low Density Artefact Distributions (N=3), Object Collections (N=1), Aboriginal Historical Place (N=1), Scarred trees (N=15), Aboriginal Ancestral Remains (Burial) (N=1) and Aboriginal Ancestral Remains (Reinterment) (N=1). The results of the standard assessment have been used to refine the desktop assessment Aboriginal cultural heritage prediction model (**Section 6.9**). The Activity area is naturally a riverine floodplain landform.

Consultation with YYNAC Field representatives on site confirmed that the riverine floodplain landform has been significantly modified by the development of the Numurkah township and associated infrastructure over many decades which has altered the appearance of the landform. Further, the existing railway and township infrastructure, park infrastructure, tracks and roads have impacted the ground surface at varying levels. The survey team were also satisfied that the proposed works are minor in nature, construction will be mostly built up and will not result in major disturbance to the ground surface beyond that which has already been disturbed historically.

## 7.8 Conclusions from the Standard Assessment

The standard assessment has demonstrated that in relation to the Activity area:

- The land has been subject to varying levels of disturbance associated with the development of the township of Numurkah, the existing foreshore park/walking track infrastructure, roads/railways and major flood events.
- Ground surface visibility encountered was variable ranging from areas of good visibility (50-70%) to poor (10-30%) in areas of mown exotic grasses, along with some areas with no/zero visibility due to road infrastructure.
- The entirety of the Activity area once consisted of a riverine floodplain landform;
- The survey team confirmed that the landform had been subject to major disturbance due to the development of Numurkah, the existing levee and associated infrastructure.
- All mature native trees were inspected for potential scarring and no culturally scarred or modified trees identified as a result.
- No rock shelters or caves and there are no naturally occurring waterholes or soaks present within the Activity area;
- *In accordance with the Aboriginal Heritage Regulations 2018, the CHMP has determined that further surface or sub-surface Aboriginal cultural heritage is not 'reasonably possible' (r.62), or likely to occur (r. 64) within the activity area. Therefore, a Complex Assessment is 'not required'.*

## 8 Consideration of Section 61 matters

In accordance with Section 61 of the *Aboriginal Heritage Act 2006* an assessment must be made as to whether the proposed activity will be conducted in a way that avoids harm to Aboriginal cultural heritage, or be conducted in a way that minimises harm to Aboriginal cultural heritage.

The purpose of the Act is to provide for the protection of Aboriginal cultural heritage in Victoria. In the first instance, harm to Aboriginal cultural heritage should be avoided. This may be achieved through appropriate management strategies (or specific measures) in relation to the Aboriginal Places and the activity, the use of protective fencing during construction or restricting access, in addition to cultural awareness training for contractors. In the second instance, harm to Aboriginal cultural heritage must be minimised. This may be achieved through re-aligning infrastructure, locating public open space areas over cultural values (if appropriate) or using less invasive construction methods. The final resort is the salvage of cultural heritage where appropriate.

This CHMP has undertaken desktop and standard assessments in order to investigate the nature and extent of any Aboriginal cultural heritage values of the Activity area and to mitigate the risks to these Aboriginal Places through appropriate management strategies. No Aboriginal cultural heritage was discovered during the Standard assessment.

### 8.1 Can Harm to Identified Cultural Heritage Places be Avoided?

The proposed activity will not harm Aboriginal cultural heritage places as there were no Aboriginal cultural heritage places identified within the Activity area.

### 8.2 Can Harm to Identified Cultural Heritage Places be Minimised?

No specific measures are required as no Aboriginal cultural heritage material was identified.

### 8.3 Are Specific Measures Needed for the Management of Identified Cultural Heritage Places?

No specific measures are required as no Aboriginal cultural heritage material was identified.

### 8.4 Are There Particular Contingency Plans That Might be Necessary?

Processes to be followed in relation to disputes, delays and other obstacles are outlined in the management conditions in Section 2. Procedures are outlined for factors that may affect the conduct of the activity. These include procedural guidelines in the event that suspected human remains are discovered, as well as safety requirements.

### 8.5 What Custody and Management Arrangements Might be Needed?

The custody and management of Aboriginal cultural heritage are addressed in Section 2.2.

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### **Legislation**

Aboriginal Heritage Act 2006 (Vic)

Aboriginal Heritage Regulations 2018 (Vic)

### **Websites**

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Victorian Resources Online 2023: Northern Riverine Plain.

[http://vro.agriculture.vic.gov.au/dpi/vro/vrosite.nsf/pages/landform\\_geomorphological\\_framework\\_4](http://vro.agriculture.vic.gov.au/dpi/vro/vrosite.nsf/pages/landform_geomorphological_framework_4)

## **10 Appendices**

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**Appendix 1: Notice to prepare Cultural Heritage Management Plan**Premier  
and Cabinet

## 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: Moira Shire Council  
 ABN/ACN: 20 538 141 700  
 Contact Name: Phil Hoare  
 Postal Address: PO Box 578, Cobram, Vic 3643  
 Business Number: 03 5871 9222 Mobile: 0409438320  
 Email Address: phoare@moira.vic.gov.au

### Sponsor's agent (if relevant)

Company: \_\_\_\_\_  
 Contact Name: \_\_\_\_\_  
 Postal Address: \_\_\_\_\_  
 Business Number: \_\_\_\_\_ Mobile: \_\_\_\_\_  
 Email Address: \_\_\_\_\_

### SECTION 2 - Description of proposed activity and location

Project Name: Proposed Redevelopment of the Numurkah Town Levee, Numurkah, VIC 3636  
 Municipal district: Moira Shire Council

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

Other \_\_\_\_\_

### SECTION 3 - Cultural Heritage Advisor

Damian Wall Red-Gum Environmental Consulting Pty Ltd damian.wall@red-gum.com.au  
*Name* *Company* *Email address*

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

Start Date: 06-Jul-2023 Finish Date: 30-Sep-2023

Submitted on: 06 Jul 2023



Premier and Cabinet

**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.*

YORTA YORTA Nation 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.*

Yorta Yorta Nation 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.*

*The entire CHMP process will be in partnership with the RAP*

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

*The plan is to be evaluated by:*

- Joint - Registered Aboriginal Party AND The Secretary
- A Registered Aboriginal Party  
 If checked, list the relevant Registered Aboriginal Party Evaluating:
- The Secretary
- Victorian Aboriginal Heritage Council

**SECTION 9 – Preliminary Aboriginal Heritage Tests (PAHTs)**

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

**SECTION 10 - Notification checklist**

Submitted on: 06 Jul 2023



**Appendix 1A: Notice to Evaluate****YORTA YORTA NATION ABORIGINAL CORPORATION**

ABN: 55 942 996 311 - ICN: 3279 - RTO: 20994

Phil Hoare  
Moira Shire Council  
PO Box 578  
Cobram Vic 3643

Dear Mr Hoare

**Re: Notice of Intent to prepare a Cultural Heritage Management Plan number: 19665 for the Proposed Redevelopment of the Numurkah Town Levee, Numurkah, VIC 3636**

Yorta Nation Aboriginal Corporation (YYNAC) received a Notice of Intent (NOI) on 6/07/2023 from Moira Shire Council to prepare a Cultural Heritage Management Plan (CHMP) for the abovenamed activity.

In accordance with Section 55(2) of the *Aboriginal Heritage Act 2006*, Yorta Yorta Nation Aboriginal Corporation is the Registered Aboriginal Party (RAP) for the land including the proposed activity area and hereby notifies you that the RAP intends to evaluate CHMP 19665.

Yorta Yorta Nation Aboriginal Corporation further notifies you of the following important matters:

- Works for the proposed activity including ancillary works (inclusive of demolition, ground clearance, geotechnical testing, signage installation, fencing, laydown areas, borrow pits and other ground disturbing works) must not commence until:
  - The CHMP is approved and a copy of the CHMP with a copy of the notice of approval received by the Sponsor under section 63(1)(b) is lodged with the Secretary; and
  - The general conditions and specific measures contained in Part 1 of the approved CHMP that must be undertaken before works for the activity commence have been implemented in compliance with the requirements.
- It is expected that the Sponsor and/or their representative or agent, and their Heritage Advisor will attend all consultation meetings to contribute to a consistent and informed understanding the activity and the preparation progress of the CHMP.
- All invoices for cultural heritage services (including consultation meetings, field assessments and implementation of CHMP requirements) will be directed to the Sponsor for payment.
- Your Heritage Advisor is responsible for ensuring that booking request forms for all meetings and field assessments for the preparation of the CHMP are provided giving a minimum of two weeks' notice in advance of requested services.

Yours Sincerely,

**Shannon Atkinson**  
**Cultural Heritage Officer**  
**Cultural Heritage Unit – Yorta Yorta Nation Aboriginal Corporation.**  
**7/07/2023**

**Shepparton Depot**  
2 Mercury Drive  
Shepparton Vic 3630  
PO Box 1363 Shepparton VIC 3632  
PH: 03 5832 0222  
[reception@yynac.com.au](mailto:reception@yynac.com.au)

**Barmah Office**  
35 Schier Street  
Barmah Vic 3639  
PH: 03 5869 3353  
[reception@yynac.com.au](mailto:reception@yynac.com.au)  
web: [www.yynac.com.au](http://www.yynac.com.au)

**Yenbena Training Centre**  
**YYNAC RTO**  
2-8 Schier Street  
Barmah Vic 3639  
PH: 03 5869 3336  
[reception@yynac.com.au](mailto:reception@yynac.com.au)

**Appendix 2: Summary of Consultation**

Date	Time	Type	Name	Party	Discussion/Details
6/07/23	10:00	Email	D. Wall	Red-Gum	DW sent NOI to YYNAC & FPSR
7/07/23	9:00	Email	S. Atkinson	YYNAC	Shannon sent the Notice to Evaluate
7/10/23	9:30	Email	D. Wall	Red-Gum	DW emailed YYNAC and arranged a CHMP inception meeting and standard assessment for the 12/10/23.
12/10/23	11:20	On site	D. Wall	Red-Gum	DW & YYNAC field representatives undertook CHMP inception meeting and standard assessment. A meeting to discuss the Standard was held onsite and management conditions agreed upon.
			S. Atkinson N. Bourke	YYNAC	

### **Appendix 3: Qualifications of Heritage Advisors**

#### **Damian Wall**

*Managing Director - Red-Gum Environmental Consulting Pty Ltd*

##### Qualifications

- Bachelor of Applied Science (Parks, Recreation & Heritage), CSU Albury, 1996
- Master Environmental Management and Restoration, CSU, 2005
- Certified Environmental Practitioner (CENVP), Environment Institute of Australia & New Zealand, 2008
- Full Member Australian Association of Consulting Archaeologists Inc (AACAI)
- Graduate Certificate in Cultural Heritage Management (CHM), Flinders University, 2011
- Heritage Advisor as defined under section 189(1) of the Aboriginal Heritage Act 2006.

**Appendix 4: Glossary of terms**

<b>Activity</b>	The development or use of land
<b>Activity Area</b>	The area or areas to be used or developed for an activity
<b>Archaeology</b>	The study of the past through the systematic recovery and analysis of material culture.
<b>Artefact Scatter</b>	A group of stone or other artefacts found scattered on the ground surface.
<b>Assemblage</b>	A collection of artefacts that are derived from the same Aboriginal place.
<b>Burial (Aboriginal Ancestral Remains)</b>	Usually represented by a concentration of human bones or teeth. Burials can be associated with charcoal or ochre, shell, animal bone or stone tools. They tend to be located in sandy areas, which were easy to dig or in rock shelters or tree hollows. They are usually exposed through earthworks or erosion.
<b>Culturally Modified Tree</b>	See Scarred Tree
<b>Earth Feature</b>	Includes mounds, rings, hearths, post holes and ovens.
<b>Excavation</b>	The systematic recovery of archaeological data through the exposure of buried sites and artefacts.
<b>Low Density Artefact Deposit (LDAD)</b>	Artefact deposit with average stone density of less than 10 artefacts in a 10m x 10m area.
<b>Material culture</b>	The tangible evidence or cultural remains that are produced by human activity.
<b>Object Collection</b>	A collection of Aboriginal cultural heritage objects.
<b>Quarry</b>	A location from which Aboriginal people have extracted stone for making stone artefacts or mineral such as ochre for use in painting.
<b>Rock Art</b>	Paintings or engravings on the surface of caves or rock shelters, created by Aboriginal people in the past.
<b>Scarred Tree</b>	Trees from which bark has been removed for the manufacture of utilitarian items such as containers, shelter sheets, canoes or medicine.
<b>Shell Midden</b>	A midden is the remains of a meal. In the case of shell middens, marine or freshwater molluscs are the dominant component.
<b>Stone Feature</b>	Rock art consisting of stones arranged in a pattern.

**Appendix 5: Compliance Review Checklist**

COMPLIANCE CHECK LIST CHMP 19665						
Item	Date	Compliance (Y/N)	Issue/reason for non-compliance	Action	Person supervising action	Date to be completed by
<b>Management Conditions</b>						
Have YYNAC been organised to present the Cultural Heritage Induction with two weeks' notice? (Section 1.1)						
Has the CH Induction been attended by all senior staff and supervisors? (Section 1.1)						
Has a clear chain of command been established & communicated for site personnel? (Section 1.1)						
Is a copy of this CHMP stored at all times in the site construction office? (1.2)						
Has monitoring been booked with YYNAC reps? Has said monitoring been completed post soil stripping? (1.4)						
Has the Post works Monitoring been completed with YYNAC reps? (1.5)						
<b>Contingencies</b>						
If any skeletal remains area identified during the activity have all works ceased & the remains been protected <i>in situ</i> ? (Section 2.3)						
If any skeletal remains area identified during the activity have all appropriate notifications been made? (2.3)						

COMPLIANCE CHECK LIST CHMP 19665						
Item	Date	Compliance (Y/N)	Issue/reason for non-compliance	Action	Person supervising action	Date to be completed by
If Aboriginal cultural material (non-skeletal) is found during the activity have all works ceased within 10m and appropriate notifications been made? (Section 2.1)						
Have appropriate and required VAHR forms been completed and submitted as per Section 2.1?						
Has compliance with the CHMP been reviewed? (Section 2.5)						
If any non-compliance has been identified have works ceased?						
Have any non-compliance issues been managed as per Section 2.6?						
Has any Aboriginal cultural material (other than skeletal remains or secret or sacred objects) identified during the activity been managed according to Section 2.2?						
Comments (can the process be improved)						
<b>Signature:</b>			<b>Date:</b>			

**Appendix 6: Communication Contact Table**

Name	Role	Company	Phone	Address	Email
Shannon Atkinson	YYNAC Cultural Heritage Unit	Yorta Yorta Nation Aboriginal Corporation	(03) 5832 0222	2 Mercy Drive, Shepparton, VIC 3630	<a href="mailto:reception@yynac.com.au">reception@yynac.com.au</a>
Phil Diffey	Sponsor Contact	Moira Shire Council	03 5871 9222	Municipal Offices, 44 Station Street, Cobram, VIC 3644	<a href="mailto:pdiffey@moira.vic.gov.au">pdiffey@moira.vic.gov.au</a>