



**Echoes**  
Cultural Heritage Management



# Yindjibarndi / Main Roads Aboriginal Heritage Management Plan

## Manuwarra Red Dog Highway Project

### Stage 4 Revised Proposal: First Ten Kilometres

November 2023

## LIST OF ACRONYMS AND TERMS

Term / Acronym	Definition
ACHC	Aboriginal Cultural Heritage Committee. Established under the <i>Aboriginal Heritage Act 1972 (WA)</i> . The ACHC advises the Minister for Indigenous Affairs on matters relating to Aboriginal cultural heritage.
ACHIS	Aboriginal Cultural Heritage Information System, maintained by the DPLH.
AHMP	Aboriginal Heritage Management Plan (term used by the EPA in Ministerial Consent 677, understood here to be ostensibly the same as a CHMP with the addition of consideration of the EPA's objective for Social Surroundings)
AHMP Area	The first ten kilometres of the Revised Proposal located in the Yindjibarndi section of the combined Ngarluma/Yindjibarndi (WCD2005/001) native title Determination Area
Archaeological Site	Any location where evidence of past human activity is preserved. This can be in the form of material culture (i.e., artefacts), but may also include evidence of alteration of the landscape (e.g. trenches and dams)
Burra Charter	Australia ICOMOS Charter that defines procedures and principles for the conservation of Australian heritage places.
Cultural Heritage Value	Meanings/values applied to heritage by individuals/groups (e.g., historical, aesthetic, social, spiritual, scientific)
CHMP	Cultural Heritage Management Plan
DPLH	Department of Planning, Lands and Heritage (Previously Department of Sites, Department of Indigenous Affairs and Department of Aboriginal Affairs).
DPLH ID	Identification number for ACH listed on the ACHIS.
EPA	Environmental Protection Authority
EP Act	<i>Environmental Protection Act 1986</i>
Ministerial Statement 1205	Assessment report prepared by the EPA under s 44 of the EP Act, describing the outcomes of the EPA's assessment the Revised Proposal.
FPIC	Free, Prior and Informed Consent – a principle protected by human rights standards stating the right to self-determination and pursuing economic, social and cultural development.
GIS	Geographic Information System.
Knowledge Holders	Aboriginal people who may have cultural and/or historical associations with an area or place that bestows upon them certain rights, such as authority to speak for the area and be involved in decisions regarding land use in the area. Knowledge Holders may have been granted custodianship over certain places or parts of the area by the Traditional Owners and/or native title claimants/holders.
Native Title Group	A group of persons on whose behalf a native title claim is made or, in the event that a determination of native title has been made, the persons holding the rights comprising the native title rights and interests, as identified in the determination.

Term / Acronym	Definition
Registrar	The Registrar of Aboriginal Sites (Registrar) is appointed under the <i>Aboriginal Heritage Act 1972 (WA)</i> to administer the day to day operations of the ACMC and also to perform other functions as allocated to the Registrar under the <i>Aboriginal Heritage Act 1972 (WA)</i> .
Revised Proposal	Main Roads' proposal for Stage 4 upgrade for the Manuwarra Red Dog Highway, revised from original proposal submitted in 1998 (and approved in 2005)
Section 18 Notice	Where land users conclude that impact to an Aboriginal cultural heritage site is unavoidable, the Minister for Indigenous Affairs' consent could be sought under s. 18 of the <i>Aboriginal Heritage Act 1972 (WA)</i> to impact the Aboriginal site, by giving notice to the ACMC.
Section 16 Authorisation	Permission granted by the Registrar, on the advice of the ACMC, to enter an Aboriginal cultural heritage site and excavate, examine or remove anything on or under the site in a manner and subject to conditions stipulated by the ACMC.
UNDRIP	United Nations Declaration on the Right of Indigenous Peoples

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# 1 INTRODUCTION

This Aboriginal Heritage Management Plan (AHMP) has been prepared in response to the Environmental Protection Authority's (EPA) Report 1736 (Ministerial Statement 1205) regarding Main Roads Western Australia's (Main Roads) Manuwarra Red Dog Highway: Revised Proposal (Revised Proposal).

Main Roads submitted a proposal for the staged upgrade of the Karratha-Tom Price Road (now Manuwarra Red Dog Highway) to the EPA in September 1998, with the EPA's finalised decision released in 2005 and conditional Ministerial approval via Ministerial Statement 677 granted in April 2005. Ministerial Statement 677 required preparation and implementation of an AHMP ('in compliance with the *Aboriginal Heritage Act 1972 (WA)*') with the most recent version of this document being Preller (2018). The 2018 AHMP covers all of Stage 3 and most of Stage 4 of the proposal located on Yindjibarndi country.

The alignment for Stage 4 has been revised following consultation with various stakeholders and therefore differs from the original proposal. Main Roads therefore referred Stage 4 of the Manuwarra Red Dog Highway under section 38 of the EP Act as a Revised Proposal.

The first ten kilometres of the Revised Proposal, located in the Yindjibarndi section of the combined Ngarluma/Yindjibarndi (WCD2005/001) native title Determination Area, is due to commence in the first quarter of 2024. Main Roads engaged Yindjibarndi Ngurra Aboriginal Corporation (YNAC) and Echoes Cultural Heritage Management (ECHM) to prepare an AHMP for the proposed footprint for the first ten kilometres of the Manuwarra Red Dog Highway: Revised Proposal (Revised Proposal). As such, this AHMP relates only to the portion of the Revised Proposal that is the first ten kilometres in Yindjibarndi Country (AHMP Area).

This document should be used in conjunction with any existing and future protocols and / or agreements developed by Main Roads through consultation with the Yindjibarndi People and their representative body, YNAC.

## 1.1 Key Environmental Factor

The EPA Key Environmental Factor relevant to this AHMP is Social Surroundings, defined in the *Environmental Protection Act 1986 (WA)* (EP Act) as follows:

'In the case of humans, the reference to social surroundings in the definition of environment in subsection (1) is a reference to aesthetic, cultural, economic and other social surroundings to the extent to which they directly affect or are affected by physical or biological surroundings'.

## 1.2 Purpose and Principles

The AHMP is predicated on a cooperative and collaborative approach to cultural heritage management by Main Roads and the Yindjibarndi People. Yindjibarndi are responsible for their heritage and Main Roads are responsible for demonstrating the appropriate respect in seeking out meaningful engagement and approval throughout the construction and operations of the Revised Proposal in Yindjibarndi country.

The purpose of the AHMP is to:

- outline identified Yindjibarndi cultural heritage values within (or near to) the AHMP Area, identify the potential risks, and outline protocols and management actions to facilitate the avoidance or minimise the direct / indirect impacts to these cultural heritage values through construction and operation of the Revised Proposal; and
- assist Main Roads in meeting the EPA environmental objective for social surroundings, being 'to protect social surroundings from significant harm'.

Ministerial Statement 1205 suggests that Main Roads adhering to stated conditions 'would ensure the proposal is consistent with the EPA objective for social surroundings' (Environmental Protection Authority 2023, 76). Specifically, the EPA advise that Main Roads should:

- (a) Avoid, where practicable, or otherwise minimise disturbance to significant sites within Yindjibarndi country;
- (b) Prepare an updated AHMP in consultation with representatives of the Yindjibarndi People prior to ground disturbing activities; and
- (c) Ensure no interruption of ongoing access to land used for traditional use or custom.

Ministerial Statement 1205 additionally states that Main Roads should 'avoid, where possible, and otherwise minimise indirect impacts to Aboriginal cultural heritage within and surrounding the development envelope' (Environmental Protection Authority 2023, 93).

### **1.3 Objectives**

The AHMP has been prepared to ensure that Main Roads:

- Conduct all proposed activities in consultation with the Yindjibarndi People;
- Meets their legal, cultural, scientific and social obligations in relation to the preservation and management of Yindjibarndi cultural heritage;
- Has agreed strategies in place for the remediation of any impacts to Yindjibarndi cultural heritage; and
- Has specific management strategies for identified Yindjibarndi cultural heritage within (or close to) the AHMP Area.

## 2 LEGISLATIVE FRAMEWORK AND UNDERLYING PRINCIPLES

Main Roads are obliged to comply with the following legislation and regulations that relate to the protection of Aboriginal cultural heritage. In addition, there are guidelines and principles relating to cultural significance and best practice, also considered relevant to Aboriginal cultural heritage, including social surroundings, that are outlined below.

- *Aboriginal Heritage Act 1972 (WA) and Aboriginal Heritage Regulations 1974 (WA)*;
- *Environmental Protection Act 1986 (WA)*;
- *Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth)*;
- *Native Title Act 1993 (Cth)*; and
- *Environmental Protection and Biodiversity Conservation Act 1999 (Cth)*.

The *Aboriginal Heritage Act 1972 (WA)* was enacted to protect places and objects of significance to Aboriginal people on behalf of the community. Under s.5 of the *Aboriginal Heritage Act 1972 (WA)*, Aboriginal cultural heritage sites or places are defined as:

- a) Any place of importance and significance where persons of Aboriginal descent have, or appear to have, left any object, natural or artificial, used for, or made or adapted for use, any purpose connected with the traditional cultural life of the Aboriginal people, past or present;
- b) Any sacred, ritual or ceremonial site, which is of importance and special significance to persons of Aboriginal descent;
- c) Any place which, in the opinion of the Committee, is or was associated with the Aboriginal people and which is of historical, archaeological or ethnographic interest and should be preserved because of its importance and significance to the cultural heritage of the State; and
- d) Any place where objects to which this Act applies are traditionally stored, or to which, under the provisions of this Act, such objects have been taken or removed.

Objects are defined according to s.6 (1) of the *Aboriginal Heritage Act 1972 (WA)* as objects, whether natural or artificial which are or have been of sacred, ritual or ceremonial significance to persons of Aboriginal descent, or which are or were used for, or made or adapted for use for, any purpose connected with the traditional cultural life of the Aboriginal people past or present.

Other sections of the *Aboriginal Heritage Act 1972 (WA)* that have particular effect on Main Roads' Heritage Program include sections 15 to 19 of Part IV.

- Under s.15, any person with knowledge of the existence of an Aboriginal site must report it to the Aboriginal Sites Registrar (DPLH) or the police;

- Section 16 refers to the conditions under which an Aboriginal site may be excavated, or objects removed from a site;
- Section 17 covers offences relating to Aboriginal Sites;
- Section 18 sets out conditions and processes under which consent to certain uses may be granted for an Aboriginal site; and
- Section 19 makes provision for the declaration of Aboriginal sites that are of outstanding importance to be Protected Areas. These are gazetted areas of land with defined boundaries.

The *Aboriginal Heritage Act 1972 (WA)* is prescriptive in nature which means that it is a criminal offence to disturb a protected place or object, and strict liability is imposed for a breach of the *Aboriginal Heritage Act 1972 (WA)*. Under s.17 of the *Aboriginal Heritage Act 1972 (WA)* it is an offence to:

- Excavate, destroy, damage, conceal or in any way alter any Aboriginal site; or
- In any way alter, damage, remove, destroy, conceal or deal with in a manner not sanctioned by relevant custom, assume the possession custody or control of any object on or under an Aboriginal site without the prior authorisation of the Registrar under s.16 of the consent of the Minister under s.18.

Any land development that may impact upon an Aboriginal site must therefore be approved by the Minister of Indigenous Affairs under s.18 (2) of the *Aboriginal Heritage Act 1972 (WA)*. The one site within, and none of the sites within <500 m of, the AHMP Area are currently registered with the DPLH, and none are currently subject to any Section 18 Consents.

### **2.1.1 ENVIRONMENTAL PROTECTION ACT 1986 (WA)**

The *Environmental Protection Act 1986 (WA)*; the EP Act) provides for the protection of the environment and the prevention, control, and moderation of environmental harm. The *Environmental Protection Act 1986 (WA)* allows for the protection of 'social surroundings' defined in s.3(2) as follows:

*In the case of humans, the reference to social surroundings in the definition of environment in subsection (1) is a reference to aesthetic, cultural, economic and other social surroundings to the extent to which they directly affect or are affected by physical or biological surroundings.*

Under Part IV of the *Environmental Protection Act, 1986 (WA)*, proposed new or major projects must be submitted through an Environmental Impact Assessment (EIA), for assessment by the statutory body, the Environmental Protection Authority (EPA). Social Surroundings is one of fourteen key environmental factors that the EPA considers when it is assessing an EIA.

The EPA's environmental objectives for social surroundings are broadly set out within Environmental Factor Guideline: Social Surrounds (EPA, 2023). The EPA's environmental objective for this Key Environmental Factor is 'to protect social surroundings from significant harm'.

Typically, assessments of social surroundings address distinct categories; heritage sites, amenity, economic surroundings, dust impacts and natural impacts. From a



Yindjibarndi perspective, the natural, cultural, and economic are interconnected and assessment of these as distinct is imposed by the separation of cultural and environmental legislation. This AHMP recognises social surroundings as the connection and associated values that Yindjibarndi People have with the physical/natural environment (i.e. the interaction of the cultural and physical landscape). The Yindjibarndi People have the traditional association and knowledge to identify these values and to enhance understandings of the material expressions of these values across the landscape. The Yindjibarndi People are therefore afforded primacy in decisions relating to the management of social surroundings values and are considered here to constitute experts in determining what constitutes harm to these values in the AHMP Area.

### **2.1.2 OTHER RELEVANT ACTS**

Several other Acts interact with, and influence how proponents manage, Aboriginal cultural heritage, including social surroundings values. Aboriginal cultural heritage protection is additionally provided by the *Native Title Act 1993* (Cth), which is a Commonwealth legislation that provides a framework for recognising and protecting traditional rights and interests of Aboriginal and Torres Strait Islander people on areas of land and waters where native title has not been extinguished. The *Native Title Act 1993* affords cultural heritage protection only to those lands and waters where native title has been recognised (through either a Registered or Determined claim), whereas the *Aboriginal Heritage Act 1972* (WA) applies to all land in Western Australia. As per Schedule 5B of the Regulations to the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth), regardless of the status of native title within any given area, Aboriginal people are the primary source of information on the value of their heritage. Therefore, the active participation of Aboriginal people in the identification, assessment and management of Aboriginal cultural heritage is integral to the effective protection of Aboriginal cultural heritage values. The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cth) is legislation passed by the parliament of the Commonwealth of Australia to enable the Commonwealth to intervene and, where necessary, preserve and protect areas and objects of particular significance to Australia's Aboriginal or Torres Strait Islander peoples from being desecrated or injured. It is generally considered a last resort where relevant state legislation has failed.

### **2.1.3 THE BURRA CHARTER**

We suggest that, for a best practice approach to discussing, quantifying, and managing Aboriginal cultural heritage, including social surroundings, consideration should be given to the *Australia ICOMOS Burra Charter 2103* (the Burra Charter). The Burra Charter is a document that, while not being legally binding, provides guidance for the conservation and management of cultural heritage places in Australia. As the EP Act and several of the associated Guidelines refer to *Aboriginal Heritage Act 1972* (WA), and Aboriginal heritage conceptions of heritage are much broader than that allowed for this Act, the Burra Charter has been used here as the source of many key definitions.

The Burra Charter, also known as The Australia ICOMOS Charter for Places of Cultural Significance (the Charter), is a document that ‘...provides guidance for the conservation and management of cultural significance (cultural heritage places) ...’ (Australia ICOMOS 2013:1). ICOMOS (International Council on Monuments and Sites) is an independent professional body with close links to UNESCO (United Nations Educational, Scientific and Cultural Organization) based in Paris. The Charter was initially adopted by the Australian ICOMOS branch in 1979 with minor revisions made in 1981 and 1988 and substantial modifications made in 1999. The version of the

Charter that was current at the time of writing (May 2020) was adopted in October 2013. The Charter comprises only 10 pages although Australia ICOMOS provides a range of Practice Notes on their website that flesh out the substance of the charter and provide advice and information for heritage professionals.

Although the Charter's primary concern is to provide direction for the conservation and management of places of cultural significance, there are several definitions provided in the Charter that are of interest here. In particular, the definitions of place, cultural significance and fabric used in the Charter offer a framework for assessing the significance of places that is arguably more consistent with the values of the broader community than approaches that privilege scientific values, such as that found in the *Aboriginal Heritage Act 1972 (WA)*.

Article 1.1 of the Charter defines 'Place' as:

'...a geographically defined area. It may include elements, objects, spaces and views. Place may have tangible and intangible dimensions.'

The Explanatory Notes on the Charter for the definition of place states that:

'Place has a broad scope and includes natural and cultural features. Place can be large or small: for example, a memorial, a tree, an individual building or group of buildings, the location of an historical event, an urban area or town, a cultural landscape, a garden, an industrial plant, a shipwreck, a site with *in situ* remains, a stone arrangement, a road or travel route, a community meeting place, a site with spiritual or religious connections.'

(Australia ICOMOS 2013:2)

Article 1.2 of the Charter defines 'Cultural significance' as '...aesthetic, historical, scientific, social or spiritual value for past, present or future generations' (Australia ICOMOS 2013:2). Furthermore, '...Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.' Additionally, the Explanatory Notes on the Charter for the definition of cultural significance state that cultural significance '...may change over time' (Australia ICOMOS 2013:2).

Article 1.3 of the Charter defines Fabric as '...all the physical material of the place including elements, fixtures, contents and objects'. The Explanatory Notes significantly expand this definition and state that:

Fabric includes building interiors and sub surface remains, as well as excavated material. Natural elements of a place may also constitute fabric. For example, the rocks that signify a Dreaming place. Fabric may define spaces and views and these may be part of the significance of the place.

(Australia ICOMOS 2013:2)

The Charter repeatedly emphasises that the significance of heritage places should not be assessed in isolation. Article 1.13 defines the term 'Related place' as '...a place that contributes to the cultural significance of another place.' Article 1.14 defines 'Related object' as '...an object that contributes to the cultural significance of a place but is not at the place.' Similarly, article 1.15 defines 'Associations' as '...the connections that exist between people and a place.' The Explanatory Notes note that '...associations may include social or spiritual values and cultural responsibilities for a place.' Article 1.16 defines 'Meanings' as '...what a place signifies, indicates, evokes or expresses to people, and the Explanatory Notes add that '...meanings generally relate to intangible dimensions such as symbolic qualities and memories.'

We suggest that the Burra Charter has considerable utility in social surroundings consultations and is therefore employed here.

#### **2.1.4 FREE, PRIOR AND INFORMED CONSENT**

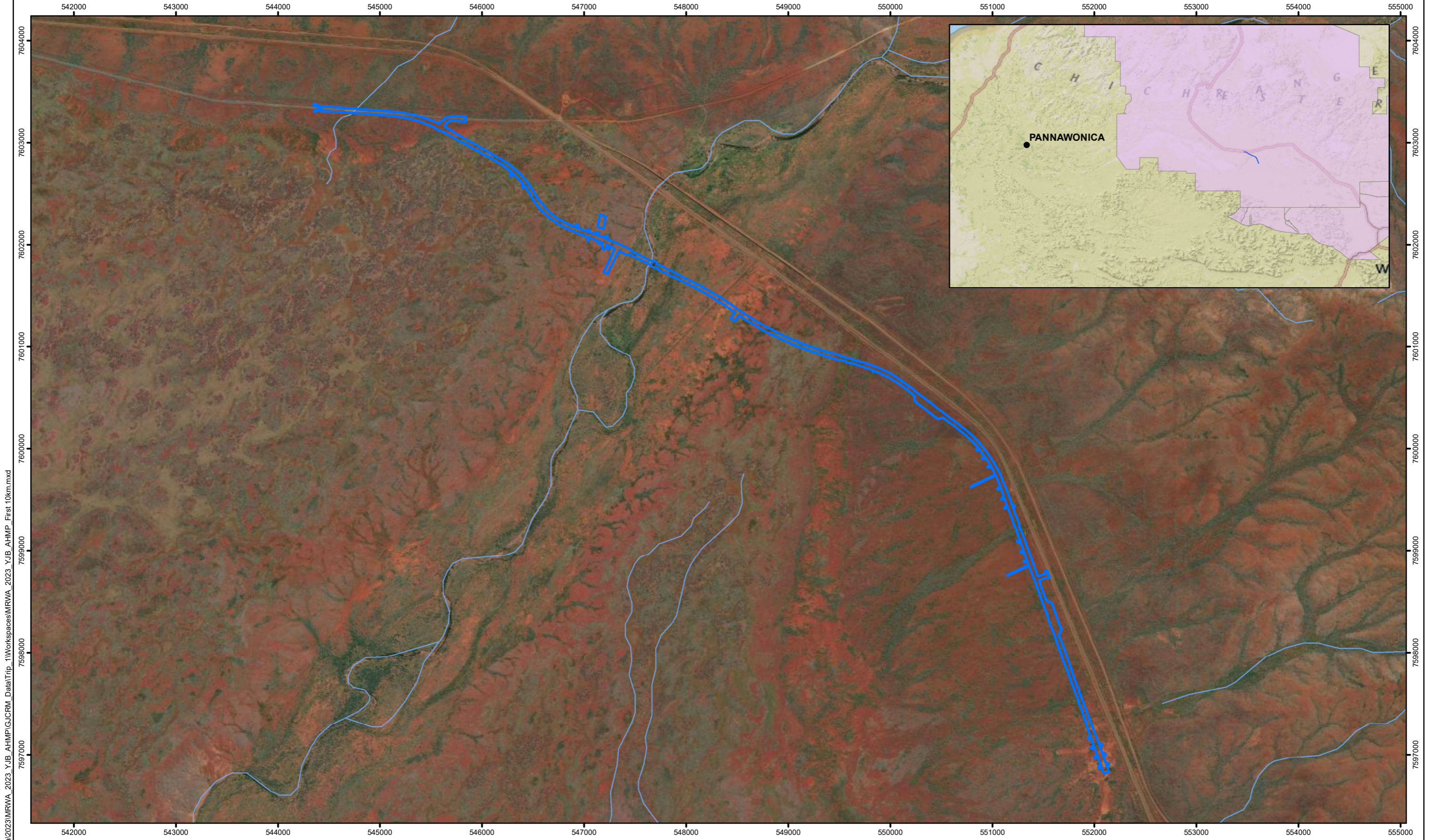
Free, Prior and Informed Consent (FPIC) relates to the right of indigenous people to give or withhold consent to projects on their Country and is recognised in the United Nations Declaration on the Right of Indigenous Peoples (UNDRIP). FPIC ensures that negotiations to be community directed, free from coercion and externally imposed timelines, sufficiently in advance of the proposed project commencing, with all available project information provided and with a collective decision made by the appropriate members as recognised by the relevant community.

### **3 AHMP AREA**

The AHMP covers the first ten kilometres of Stage 4 of the Manuwarra Red Dog Highway: Revised Proposal located in the Yindjibarndi section of the combined Ngarluma/Yindjibarndi (WCD2005/001) native title Determination Area (AHMP Area). The AHMP Area starts at the Roebourne Wittenoom Road, approximately 2 km west of the Mr Tom Price Railway and 110 km north of Tom Price. The AHMP Area is located on the western side of the Mt Tom Price Railway, running generally parallel for 9 km to the south.

The AHMP Area is 0.573 km<sup>2</sup> and includes a road corridor and areas for material pits.





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MRDH\_Footprint  
 Watercourses

- Heritage Sites and Surveyed Areas recorded in the field using GPS devices  
- DPLH Sites provided by Dept of Planning, Lands and Heritage, WA  
- Roads, Tracks, Railways and Native Title Claims provided by Geoscience Australia  
- Aerial photography provided by ESRI



0 0.5 1 1.5  
Kilometres  
Scale 1 : 34,555 @ A3  
GDA 1994 MGA Zone 50



## **4 DEVELOPMENT OF AHMP**

### **4.1 Consultation**

The AHMP Area is located within the Yindjibarndi section of the combined Ngarluma/Yindjibarndi (WCD2005/001) native title Determination Area. Yindjibarndi are represented by YNAC in respect of heritage matters, native title rights and interests.

Main Roads informed YNAC of their intent to prepare this AHMP in June 2023. The consultation process is ongoing and will continue throughout the life of this document and this document may be updated accordingly.

Cultural heritage surveys have been undertaken for purposes related to the Karratha Tom Price Road since 2002. Four surveys, all undertaken for the purpose of the Revised Proposal, intersect the AHMP Area (see Table 1). A previous CHMP for the proposed Stages 3 and 4a upgrades was developed and approved by the EPA in 2018 (Preller 2018). The reports from these surveys and the previous CHMP have been considered in the compilation of this AHMP. However, the AHMP is principally a collaborative document produced by YNAC and ECHM.

### **4.2 Limitations**

Ministerial Statement 677 required the compiling of an AHMP 'in compliance with the *Aboriginal Heritage Act 1972 (WA)*'. It has never been a requirement of the *Aboriginal Heritage Act 1972 (WA)* for proponents to develop an AHMP (or CHMP; both being understood to be documents that apply to the management of heritage places within the legislative framework of Western Australia). Therefore, a document 'in compliance with the *Aboriginal Heritage Act 1972 (WA)*' might be understood to be one that manages the heritage sites in accordance with the requirements of the AHA (i.e. avoid or seek authorisation to impact).

The most recently approved CHMP (Preller 2018), has been compiled principally from desktop research using the reports from heritage surveys and the extent of direct contribution / participation of YNAC / the Yindjibarndi People is unclear. The AHMP / CHMP from Ministerial Statement 677 (assumed to be compiled in 2005) has not been sighted.

To date, no specific surveys or consultations have been conducted to address 'social surroundings' and these elements have been inferred from heritage survey reports or through the collaborative authorship of this document. While this has been agreed to be adequate for the AHMP Area (i.e. the first ten kilometres of the Revised Proposal), additional consultation will be required for the broader Revised Proposal.

**Table 1: Summary of Survey Reports**

<b>Author (Year)</b>	<b>Survey Type</b>	<b>Report</b>
Drummond-Wilson, M., Ryan, P. and Raines, T. (October 2020)	Archaeological	Report of an Aboriginal archaeological Site Avoidance survey of works associated with the Karratha to Tom Price Road Stage 4 Alignment Corridor (Roebourne Wittenoom Rd SLK68-74 & Tom Price Railway Rd SLK51-108), Pilbara, Western Australia (Trip 2)
Drummond-Wilson, M. and Raines, T. (January 2021)	Archaeological	Report of an Aboriginal archaeological Site Avoidance survey of works associated with the Karratha to Tom Price Road Stage 4 Alignment Corridor (Roebourne Wittenoom Rd SLK68-74 & Tom Price Railway Rd SLK51-108), Pilbara, Western Australia (Trip 3)
Raines, T. (November 2021)	Archaeological	Report of an Aboriginal archaeological Site Avoidance survey of works associated with the Karratha to Tom Price Road Stage 4 Alignment Corridor (Roebourne Wittenoom Rd SLK68-74 & Tom Price Railway Rd SLK51-108), Pilbara, Western Australia (Trip 5)
Dudenhoeffer, L., Quinn, N. Raines, T. and Ryan, T. (June 2023)	Ethnographic	Report of an Aboriginal ethnographic Site Identification survey: Karratha Tom Price Stage 4 Yindjibarndi Material Pits, Pilbara Region of Western Australia

## **5 ROLES AND RESPONSIBILITIES**

The implementation of this AHMP is principally the responsibility of Main Roads in accordance with direction from the Yindjibarndi People. The following parties have responsibilities and accountabilities in this AHMP:

### **5.1 Responsible People**

#### **Principal Heritage Officer for Main Roads:**

Responsible for:

- providing technical advice, support and guidance to the Project Manager with regard to Aboriginal heritage and Native Title aspects of the Project; and
- liaising with DPLH and other government agencies for Aboriginal heritage and Native Title matters.

#### **Principal Environmental Officer for Main Roads:**

Responsible for:

- providing technical advice, support and guidance to to the CEO or Delegate with regard to environmental aspects of the Project; and
- liaising with the EPA and other government agencies for Environmental matters.

#### **CEO or Delegate for the Revised Proposal:**

Responsible for:

- ensuring that all aspects relating to the management of cultural heritage with regards to the Revised Proposal are properly executed and that there are no breaches of any Acts or regulations; and
- familiarity with all issues and activities regarding Aboriginal heritage, consultation with the Yindjibarndi People and any other aspect of the Revised Proposal that may relate to cultural heritage matters.

#### **Yindjibarndi People:**

The Yindjibarndi People will engage and meet (as required) with Main Roads to monitor and review the implementation of the AHMP. The Yindjibarndi People will provide input into all stages of the development and implementation of the AHMP.

#### **Yindjibarndi Ngurra Aboriginal Corporation:**



The Yindjibarndi People are represented by YNAC in respect of heritage matters, native title rights and interests.

## **6 IMPACT ASSESSMENT**

### **6.1 Existing Impact**

The AHMP Area is located along the western side of the Mt Tom Price Railway, running generally parallel for 9 km to the south. The AHMP Area is located between 1 m and 1 km from the edge of the railway and associated Tom Price Railway Road. The Robe Rail Duplication is located parallel to the Mt Tom Price Railway and runs along the eastern side of the railway. The first kilometre of the AHMP Area is located along the Roebourne Wittenoom Road. Existing disturbance within the AHMP Area and surrounds is associated principally with road and railway infrastructure.

### **6.2 Proposed Activity**

The Manuwarra Red Dog Highway is proposed to be a 7 m wide two-lane sealed road, with 1 m wide shoulders and associated cut or fill batters, table drains and offshoot drains. Material pits will require a 1 km wide construction approval corridor.

Construction works will include (Boulden and Beckett 2023, 6):

- clearing and topsoil removal;
- blasting;
- material pits;
- water abstraction;
- creation of temporary side-tracks and turnaround locations;
- off formation drainage;
- accommodation works (i.e. fencing) and potential relocation of services;
- site office and construction compound establishment;
- construction of the road formation, including application of asphalt and bitumen;
- haulage of construction materials and any excess materials generated on site;
- stockpiling and laydown areas (mulch, aggregate, material);
- landscaping and revegetation; and
- ongoing maintenance activities.

### **6.3 Potential Impact**

The potential impacts from the Revised Proposal within the AHMP Area, as these relate to Social Surroundings, are summarised in Table 2, below.

**Table 2: Summary of Potential Impacts of the Revised Proposal to Social Surroundings Elements**

Social Surroundings Element	Potential Impacts (Direct / Indirect)
Yindjibarndi Heritage Sites	<p><u>Direct:</u></p> <ul style="list-style-type: none"> <li>• Loss of physical cultural heritage places;</li> <li>• Unauthorised access to culturally restricted places;</li> <li>• Restricted access to places of cultural significance; and</li> <li>• Direct physical impact to places/values/landscape</li> </ul> <p><u>Indirect:</u></p> <ul style="list-style-type: none"> <li>• Visual obstructions that impact on cultural heritage values;</li> <li>• Vibration impacts (from blasting and vehicles);</li> <li>• Accumulation of dust/sediment/debris from construction activities; and</li> <li>• Changes to hydrology, including interruptions to water flow</li> </ul>
Access to Country	Temporary or permanent disruption of access to Country
Plants and Animals	<p><u>Direct:</u></p> <ul style="list-style-type: none"> <li>• Loss of culturally significant flora or fauna;</li> <li>• Destruction of habitat; and</li> <li>• Machine / vehicle caused fatalities</li> </ul> <p><u>Indirect:</u></p> <ul style="list-style-type: none"> <li>• New road impacting ability to disperse</li> </ul>
Water	<p><u>Direct:</u></p> <ul style="list-style-type: none"> <li>• Changes to water quality or impediments to water flow</li> </ul> <p><u>Indirect:</u></p> <ul style="list-style-type: none"> <li>• Changes to water quality downstream;</li> <li>• Contamination through accidental spills; and</li> <li>• Contamination through increased traffic volume</li> </ul>

## 7 KEY SOCIAL SURROUNDINGS FACTORS

The following social surroundings factors have been identified through heritage surveys conducted throughout the AHMP Area and through the collaborative authorship of this document.

### 7.1.1 Heritage Sites

There is one Yindjibarndi heritage site, MR\_YIN\_23\_012, that intersects the AHMP Area. Additionally, nine (9) Yindjibarndi heritage sites, MR\_YIN\_20\_011, MR\_YIN\_20\_010, MR\_YIN\_20\_013, MR\_YIN\_20\_014, MR\_YIN\_20\_015, MR\_YIN\_21\_002, MR\_YIN\_21\_003, MR\_YIN\_23\_009 and MR\_YIN\_23\_010 are located within 550 m of the AHMP Area and have been considered in relation to indirect impacts (see Map 2).

None of these Yindjibarndi heritage sites are listed on the ACHIS maintained by the DPLH.

### 7.1.2 Access to Country

Ministerial Statement 1205 requires Main Roads ensure no interruption of ongoing access to land used for traditional use or custom.

### 7.1.3 Plants and Animals

The supporting referral document prepared by environmental consulting company Jacobs (Boulden and Beckett 2023, 64) identifies six fauna species as being at risk of significant impact by the Revised Proposal. These are: Northern Quoll (*Dasyurus hallucatus*), Ghost Bat (*Macroderma gigas*), Pilbara Leaf-nosed Bat (*Rhinonictis aurantia*), Olive Python (*Liasis olivaceus barroni*), Night Parrot (*Pezoporus occidentalis*) and Grey Falcon (*Falco hypoleucos*).

The Western pebble-mound mouse (*Pseudomys chapmani*) species, while listed as likely to occur within the Revised Proposal (Boulden and Beckett 2023, 46), do not meet the requirement for specific environmental management. The Western pebble-mound mouse (or *Gurdi*) is of particular significance to the Yindjibarndi, however, with a continuing reciprocal relationship of responsibility. Although not recognised as Aboriginal sites under s 5 of the AHA, where identified, *Gurdi Maya* (pebble mouse mounds) are recorded as Yindjibarndi heritage sites.

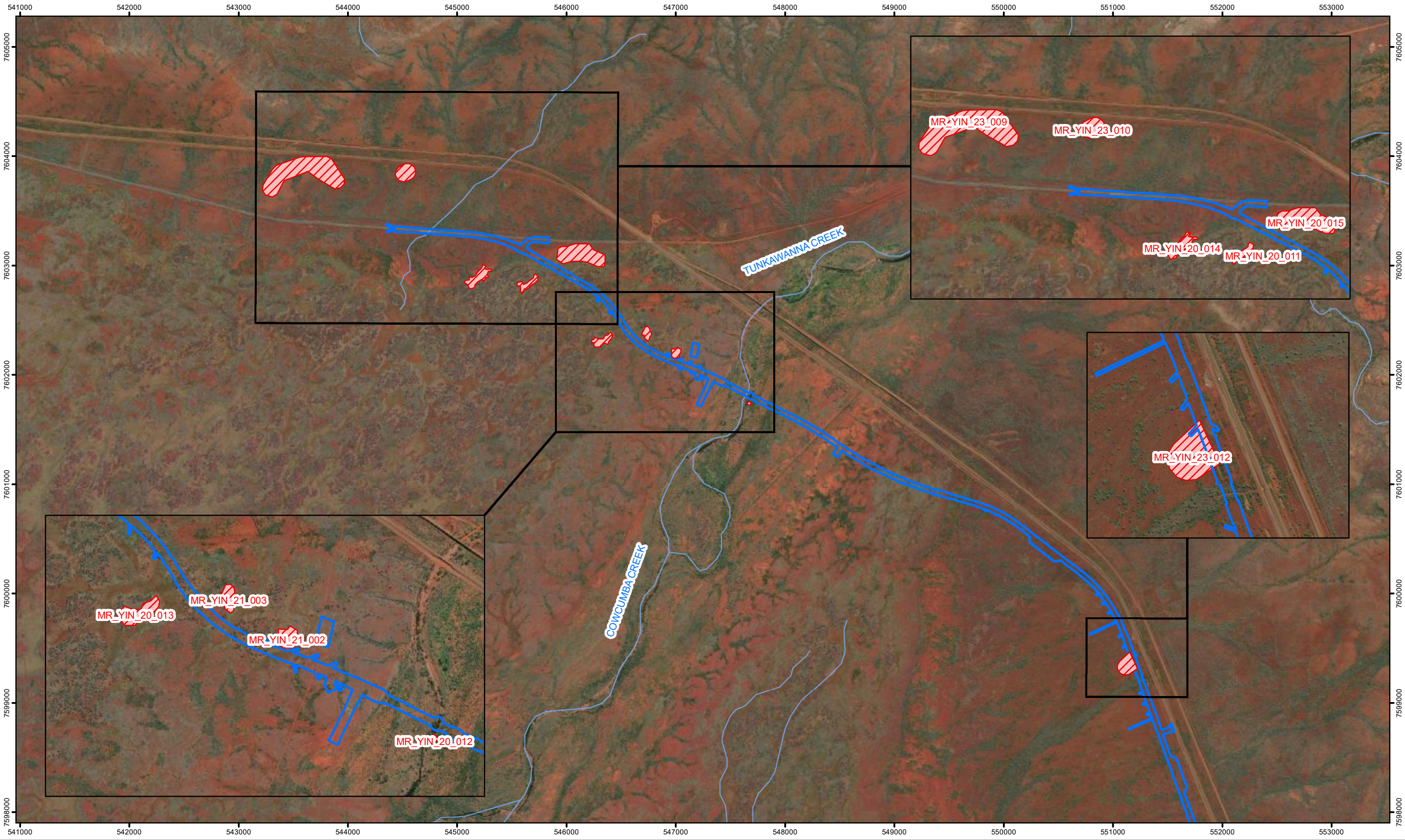
No specific plants have been identified as of cultural significance within the AHMP Area. The Yindjibarndi have requested, however, that large trees be avoided where practicable. Any further flora and fauna undertaken by Main Roads should be conducted with Yindjibarndi involvement, with details to be determined in consultation with YNAC.

### 7.1.4 Water

The AHMP Area is intersected by Cowcumba / Tunkawanna Creek (see Map 2), a tributary of the Fortescue River that is oriented generally southwest / northeast through the northern portion of the AHMP Area. Cowcumba / Tunkawanna Creek generally holds water only for a short time following seasonal rain.

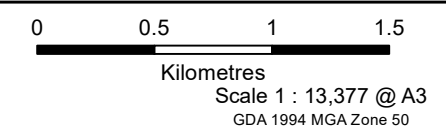
The Yindjibarndi People have stressed the importance of ensuring the Revised Proposal does not decrease the water quality or impede surface water flow.





▨ Heritage Sites    ▭ MRDH\_Footprint  
— Watercourses

- Heritage Sites and Surveyed Areas recorded in the field using GPS devices  
 - DPLH Sites provided by Dept of Planning, Lands and Heritage, WA  
 - Roads, Tracks, Railways and Native Title Claims provided by Geoscience Australia  
 - Aerial photography provided by ESRI



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## **8 CULTURAL HERITAGE MANAGEMENT**

The management approach is based on the hierarchy of avoidance and minimisation of impacts to Yindjibarndi cultural heritage. The Revised Proposal has been designed and will be constructed to prioritise avoidance of direct impact to identified Yindjibarndi heritage sites.

However, all Yindjibarndi Country is significant, important, and integrally linked and Yindjibarndi are concerned with the management of all Country, not just areas containing identified heritage sites. As such, the underlying principle for management of all cultural heritage within the AHMP Area is through direct and ongoing consultation between Main Roads and Yindjibarndi.

### **8.1 Minimising Impacts to Identified Cultural Heritage Values**

#### **8.1.1.1 GIS and Heritage Sites Database**

Main Roads maintain a geospatial database to record the location of identified Yindjibarndi cultural heritage places and surveyed areas.

#### **8.1.1.2 Fencing and Signage**

Yindjibarndi cultural heritage sites near development activities may be fenced, at the discretion of the Yindjibarndi People, to further ensure protection.

Where appropriate, and at the discretion of the Yindjibarndi People, Yindjibarndi cultural heritage sites may be demarcated using heritage signs stating, for example, "Aboriginal Heritage Site: Restricted Access".

#### **8.1.1.1 Inductions and Cultural Awareness Training**

All Main Roads personnel and contractors will complete cultural awareness training with Yindjibarndi representatives.

### **8.2 Monitoring**

Yindjibarndi heritage monitors will be present during the construction phase of the Revised Proposal and may wish to inspect heritage sites and waterways on an annual basis.

The Yindjibarndi Ranger Program monitor active mounds and population numbers of *Gurdi* to ensure the ongoing health of the population. Main Roads will facilitate access (if required) and this AHMP will be updated where there is feedback resulting from the monitoring program (especially regarding potential impacts resulting from the Revised Proposal).

**Table 3: Identified Yindjibarndi Heritage Sites within 550 m of the AHMP Area**

Site Name	Recording Level	Site Type	Location in Relation to AHMP Area	Potential Impacts (Direct / Indirect)	Management Actions
MR_YIN_20_011	Site Avoidance	Artefact Scatter	<150 m	Minimal	As needs basis monitoring by Yindjibarndi
MR_YIN_20_012	Site Avoidance	Modified Tree	<20 m	Direct: disturbance of site through ongoing increased pedestrian traffic Indirect: damage through dust and vibration during construction phase	Appropriate fencing and signage Yindjibarndi monitoring of site condition through construction phase and annually thereafter
MR_YIN_20_013	Site Avoidance	Artefact Scatter	<110 m	Minimal	As needs basis monitoring by Yindjibarndi
MR_YIN_20_014	Site Avoidance	Artefact Scatter	<250 m	Minimal	As needs basis monitoring by Yindjibarndi
MR_YIN_20_015	Site Avoidance	Artefact Scatter	<50 m	Direct: disturbance of site through ongoing increased pedestrian traffic Indirect: damage through dust and vibration during construction phase	Appropriate fencing and signage Yindjibarndi monitoring of site condition through construction phase
MR_YIN_21_002	Site Avoidance	Artefact Scatter	<10 m	Direct: disturbance of site through ongoing increased pedestrian traffic Indirect: damage through dust and vibration during construction phase	Appropriate fencing and signage Yindjibarndi monitoring of site condition through construction phase
MR_YIN_21_003	Site Avoidance	Artefact Scatter	< 50 m	Direct: disturbance of site through ongoing increased pedestrian traffic Indirect: damage through dust and vibration during construction phase	Appropriate fencing and signage Yindjibarndi monitoring of site condition through construction phase
MR_YIN_23_009	Site Identification	<i>Gurdi Maya</i> (Pebble Mouse Mound)	<530 m	Indirect: interrupted access to mounds for mice	Monitoring of mounds and mouse population by Yindjibarndi Ranger Program
MR_YIN_23_010	Site Identification	<i>Gurdi Maya</i> (Pebble Mouse Mound)	<425 m	Indirect: interrupted access to mounds for mice	Monitoring of mounds and mouse population by Yindjibarndi Ranger Program
MR_YIN_23_012	Site Identification	<i>Gurdi Maya</i> (Pebble Mouse Mound)	Overlaps ~ 20 m	Direct: disturbance of potentially active <i>Gurdi Maya</i> Indirect: interrupted access to mound	Appropriate fencing along northeastern boundary Monitoring of mounds and mouse population by Yindjibarndi Ranger Program

**Table 4: Management Actions for Social Surroundings within the AHMP Area**

Objective: Avoid, where practicable, or otherwise minimise disturbance to significant sites					
Management Action	Management Targets	Monitoring	Reporting	Timing	Responsibility
Conduct heritage surveys with Yindjibarndi People to identify heritage sites	Revised Proposal redesigned to avoid heritage sites, where possible	Review survey data	Heritage reports for AHMP Area (first ten kilometres of Revised Proposal) indicate AHMP Area avoid all heritage sites except MR_YIN_23_012	Prior to ground disturbing activities	Principal Heritage Officer
Record identified heritage sites on GIS database	Accurate boundaries recorded in Main Roads' GIS system	Principal Heritage Officer for Main Roads undertakes regular audits of GIS database	GIS database / maps	GIS database updated after heritage surveys	Principal Heritage Officer
Undertake consultation to determine impacts to heritage site MR_YIN_23_012	Minimise impacts to MR_YIN_23_012		Documentation of consultation	Prior to ground disturbing activities	Principal Heritage Officer
If required, physical demarcation of boundary of MR_YIN_23_012	No unauthorised access or impact to MR_YIN_23_012 Demarcation to not impact access to mound by pebble mice			Prior to ground disturbing activities	Principal Heritage Officer
Monitoring of MR_YIN_23_012	No unauthorised impact to MR_YIN_23_012			During ground disturbing works	Principal Heritage Officer
Where requested, inspection of MR_YIN_23_012	No unauthorised impact to MR_YIN_23_012 Demarcation of boundary intact			Needs basis, as requested by YNAC	Principal Heritage Officer
Inductions and cultural awareness training	All personnel and contractors inducted prior to working in AHMP Area Promote knowledge, understanding and respect for Yindjibarndi culture and heritage No breaches of this AHMP	Induction records confirm all personnel are inducted prior to working in AHMP Area	Induction material / cultural awareness training material reviewed with YNAC	Prior to personnel working in AHMP Area	Principal Heritage Officer
Objective: Avoid, where possible, and otherwise minimise indirect impacts to Aboriginal cultural heritage within and surrounding the development envelope					
Management Action	Management Targets	Monitoring	Reporting	Timing	Responsibility
Undertake consultation with Yindjibarndi to determine indirect impacts of the Revised Proposal within the AHMP Area	Avoid / minimise indirect impacts to heritage sites in line with Yindjibarndi requirements		Compliance Assessment Report	Prior to ground disturbing activities	Principal Heritage Officer



Minimise indirect impacts, including visual, dust, noise, and vibration, to places of cultural significance within and surrounding the AHMP Area	Avoid / minimise indirect impacts to heritage sites in line with Yindjibarndi requirements	Monitoring to be undertaken by suitably qualified personnel and with Yindjibarndi representatives (where required)	Compliance Assessment Report	Construction phase and annually thereafter	Principal Heritage Officer
Implement management actions for other heritage sites in line with Table 3	Avoid / minimise indirect impacts to heritage sites in line with Yindjibarndi requirements	Review and document the status of implementation of management measures until the measures have been implemented or are otherwise agreed by YNAC and Main Roads to no longer be relevant	Compliance Assessment Report		Principal Heritage Officer
Objective: Maintain water quality and flow of creeks and tributaries					
<b>Management Action</b>	<b>Management Targets</b>	<b>Monitoring</b>	<b>Reporting</b>	<b>Timing</b>	<b>Responsibility</b>
Maintain natural flow of water through east/west running creeks and tributaries	Maintain natural flow of water through east/west running creeks and tributaries	Monitoring to be undertaken by suitably qualified personnel and with Yindjibarndi representatives (where required)	Compliance Assessment Report		Principal Environmental Officer
Objective: Minimise loss of culturally significant flora and / or fauna					
<b>Management Action</b>	<b>Management Targets</b>	<b>Monitoring</b>	<b>Reporting</b>	<b>Timing</b>	<b>Responsibility</b>
Identify active pebble mouse mounds within AHMP Area	Avoid impacts to any active pebble mouse mounds	Yindjibarndi Rangers to monitor pebble mouse mounds	Pebble mouse mounds identified during heritage surveys and recorded as heritage sites Environmental surveys to report on active pebble mouse mounds and pebble mouse numbers	Prior to ground disturbing activities	Principal Heritage Officer
Where practicable, apply a 50 m 'no go' zone around active pebble mouse mounds		Yindjibarndi Rangers to monitor pebble mouse mounds			Principal Heritage Officer
Manage ground disturbing activities to minimise impacts to identified flora of importance Avoid large trees	Impacts to flora in line with Yindjibarndi expectations for disturbance	Principal Environmental Officer			Principal Environmental Officer
Objective: Ensure no interruption of ongoing access to land used for traditional use or custom					
<b>Management Action</b>	<b>Management Targets</b>	<b>Monitoring</b>	<b>Reporting</b>	<b>Timing</b>	<b>Responsibility</b>
Consult with YNAC regarding requirements for access within the AHMP Area	Autonomous access to Country Yindjibarndi People	YNAC to raise with Main Roads should this become an issue	Compliance Assessment Report	Prior to ground disturbing activities	Principal Heritage Officer

## **9 NEW CULTURAL HERITAGE**

### **9.1 Unsurveyed Areas**

Five small portions of the AHMP Area, with a combined area of 0.0023 km<sup>2</sup>, have not been covered by the archaeological and ethnographic surveys to date (see Map 3).

#### **9.1.1 Strategy for Unsurveyed Areas**

Aboriginal cultural heritage surveys of **all unsurveyed areas** should be conducted, in line with a method agreed with Yindjibarndi, prior to any new ground disturbance.

#### **9.1.2 Strategies for Unidentified Heritage Locations**

The AHMP Area has been archaeologically and ethnographically surveyed. However, there is always the possibility that previously unrecorded or unidentified Aboriginal sites may be located through ground disturbing works or monitoring of works. If a new site or sites are located during the above monitoring process, the following procedures shall apply.

##### **9.1.2.1 Procedure if an Aboriginal Site is Located**

In the event of the discovery of a new Aboriginal site within the AHMP Area during any stage development works, the following steps must be followed:

- Immediately cease all works in the vicinity;
- Inform Principal Heritage Officer for Main Roads;
- Principal Heritage Officer for Main Roads Inform YNAC;
- Arrange inspection and recording with YNAC; and
- Incorporate into the GIS database and the AHMP.

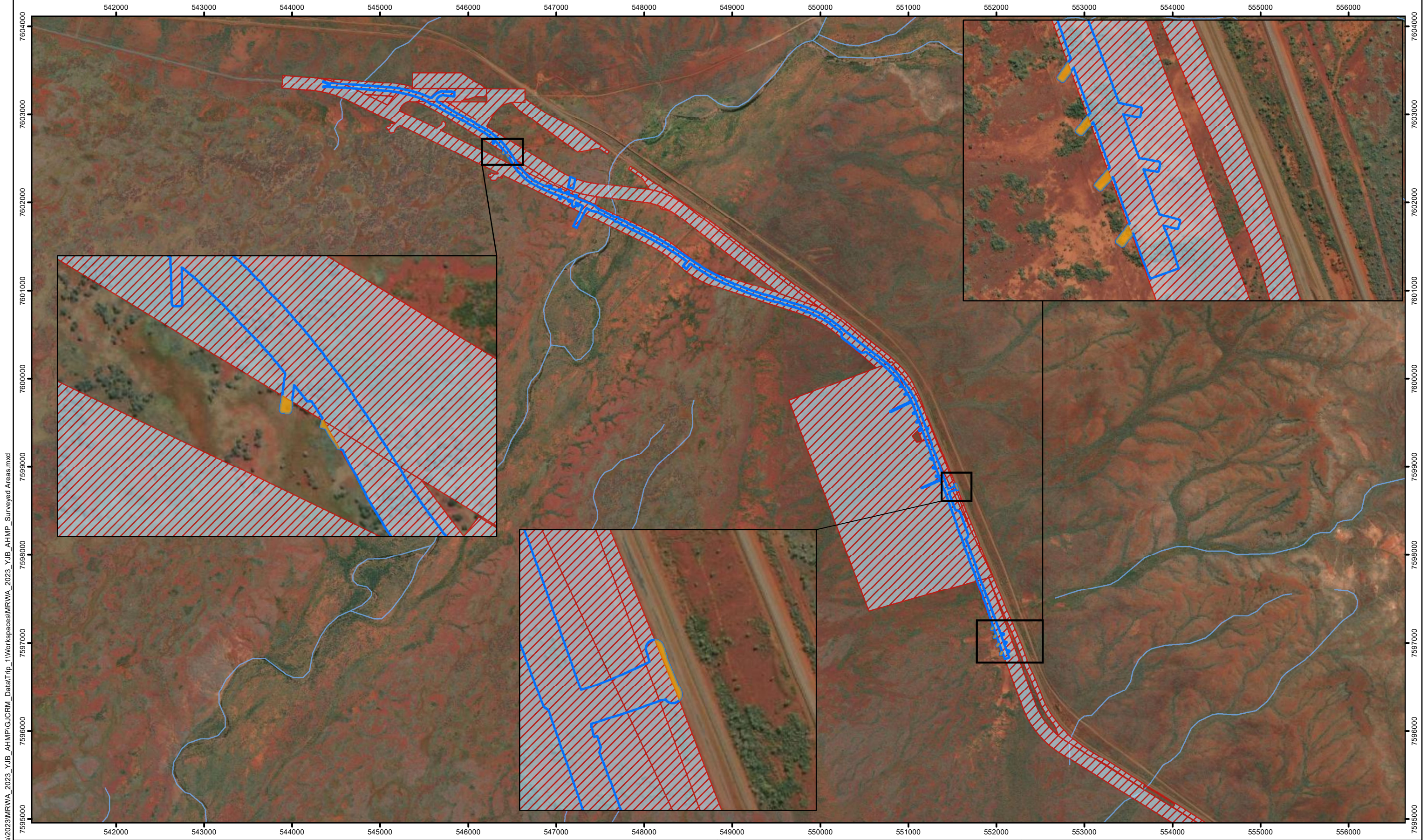
##### **9.1.2.2 Procedure if Human Remains are Discovered**

In the event of the discovery of human skeletal remains within the AHMP Area, the following steps must be followed:

- Immediately cease all works in the vicinity;
- Inform Principal Heritage Officer for Main Roads;
- Principal Heritage Officer for Main Roads to inform YNAC;
- Principal Heritage Officer for Main Roads to inform Western Australian Police Service. When informing Police, indicate that the remains are likely to be of Aboriginal origin and that an archaeologist(s) and Aboriginal representative(s) should be present during any handling of the remains; and

- Principal Heritage Officer for Main Roads must ensure the remains are managed in accordance with the wishes of the Yindjibarndi People.

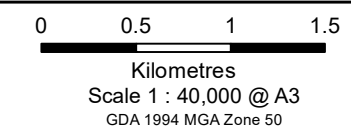




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Not Surveyed Areas
  Surveyed Areas
  MRDH\_Footprint
  Watercourses

- Heritage Sites and Surveyed Areas recorded in the field using GPS devices  
 - DPLH Sites provided by Dept of Planning, Lands and Heritage, WA  
 - Roads, Tracks, Railways and Native Title Claims provided by Geoscience Australia  
 - Aerial photography provided by ESRI





## **10 COMPLIANCE REPORTING**

Main Roads must provide an annual Compliance Assessment Report to the EPA and to YNAC (to the General Manager: Yindjibarndi Culture & Heritage) to demonstrate the management measures implemented through the AHMP meet the conditions of Ministerial Statement 1205.

The Compliance Assessment Report will outline implementation of management actions, details of monitoring programs, potential incidents of non-achievement of management targets (and corrective / preventative actions taken), and any concerns raised by Yindjibarndi.

### **10.1 Reporting of Potential Non-Compliance**

Main Roads must advise YNAC and the EPA of any suspected non-compliance with management targets within 24 hours of the non-compliance being known. The cause of the non-compliance will be investigated and any necessary revisions or additions to the management actions proposed and updated as necessary.

## 11 ADAPTIVE MANAGEMENT

Adaptive management is an approach that allows for improving heritage outcomes, learning from monitoring and evaluating the implemented management practices and adjusting these as required, and continually refining this AHMP in response to the requirements of Yindjibarndi.

Adaptive management in relation to this AHMP includes:

- Monitoring and evaluating, in collaboration with the Yindjibarndi People, the implemented management against the target objectives
- Adjusting the management actions and monitoring (if required) to meet the target objectives, based on:
  - the above evaluation and feedback from Yindjibarndi
  - external changes (e.g. technical advances, newly identified cultural heritage, changes in area covered by the AHMP)

## **12 SCHEDULE FOR REVIEW**

The AHMP applies to the first ten kilometres of the Revised Proposal activity phase and will come into effect immediately after ratification by all stakeholders and approval by the EPA. The AHMP is expected to continue until an authorised revision is activated.

The AHMP shall be reviewed and updated in consultation with YNAC and the Yindjibarndi People when:

- additional heritage surveys or consultations within the AHMP have been completed (where required);
- there are changes to any of the relevant legislation;
- monitoring and evaluation demonstrate that objectives are not being met;
- in response to accidental breaches; and
- there are changes to representative Aboriginal Organisations.

## REFERENCES CITED

- Boulden L., and Beckett C. 2023. *Manuwarra Red Dog Highway s38 Referral Supporting Information Revision 1*, Report Prepared for Main Roads Western Australia.
- Environmental Protection Authority. 2023. *Manuwarra Red Dog Highway – Revised Proposal, Commissioner of Main Roads Western Australia, Report 1736*, Assessment Report Produced by the Environmental Protection Authority.
- Preller G. 2018. *Cultural Heritage Management Plan for the Proposed Stages 3 and 4a Upgrade of the Karratha - Tom Price Road in the Pilbara Region of Western Australia*, Unpublished Report Prepared for GHD on Behalf of Main Roads Western Australia.