



Plan

North Star Extension Social Cultural Heritage Management Plan

Cultural Heritage

15 April 2025

NS-0000-PL-HE-0001

Rev 1



Acknowledgement

Fortescue Metals Group Ltd (Fortescue) acknowledges the Native Title holders, Nyamal, as the Traditional Custodians of the land on which it intends to develop and operate its North Star Magnetite Project.

Fortescue respects that Country forms an integral part of Nyamal's spiritual and traditional culture, and any impact to the land and the waters may impact the mental and physical well-being of the Nyamal people. The social, cultural, and heritage values of the Nyamal people comes from their ancestors and their ongoing connection to Country. Through traditional lore and custom, the Nyamal people exert their cultural obligation to look after Country and ensure the continuation of their culture and a healthy Country for future generations.

These values and connection to Country are recognised in this Social Cultural Heritage Management Plan.



30 June 2023

Ms Natasha Sanders
Principal North Heritage Assessments & Approvals
Fortescue Metals Group Limited
Level 2, 87 Adelaide Terrace
East Perth WA 6004

Dear Natasha

Thank you for sending the draft SCHMP on the 16 May 2023 and for following NAC's request to present the SCHMP to the Nyamal Heritage Sub-Committee which occurred on the 7 June 2023.

The Nyamal Heritage Sub-Committee have confirmed that FMG went through the SCHMP in details and that they are comfortable for FMG to finalise the Plan and start with the implementing process.

Please accept this letter as confirmation that Nyamal Aboriginal Corporation and the Nyamal Heritage Sub-Committee are satisfied with the SCHMP.

Yours faithfully

A handwritten signature in blue ink, appearing to read 'Barry Taylor', is positioned above a short horizontal line.

Barry Taylor
Nyamal Heritage Manger

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ACRONYMS & TERMS

The following acronyms are used throughout this document.

Term	Meaning
AHA	<i>Aboriginal Heritage Act 1972 (WA)</i>
CAR	Compliance Assessment Report
Cth	Commonwealth
DPLH	Department of Planning, Lands and Heritage
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EPA	Environmental Protection Authority
EP Act	Environmental Protection Act 1986 (WA)
ERD	Environmental Review Document
Exclusion Zone	Heritage Exclusion Zone
Fortescue	Fortescue Metals Group Limited or Fortescue Metals Group Iron Bridge (Australia) Pty Ltd
GDE	Groundwater Dependent Ecosystems
GIS	Geographic Information System
LUC	Land Use Certificate
MDE	Mine Development Envelope.
MS	Ministerial Statement
Native Title holder / Traditional Owner	The relevant Native Title holders, Traditional Custodians, Traditional knowledge holders, or representatives, that speak for or have interest in the land on which the Proposal is located.
Nyamal	The Nyamal People
SCHMP	Social Cultural Heritage Management Plan
the Minister	The Minister of Aboriginal Affairs
the Proposal	The North Star Magnetite Project (including the proposed amendment, North Star Extension)
the Proposed Amendment	North Star Extension
WA	Western Australia

DEFINITIONS

The following definitions are relevant to this Social Cultural Heritage Management Plan (SCHMP). These definitions have been developed using relevant cultural heritage and social surroundings guidelines and legislation, and in consultation with Nyamal.

Aboriginal cultural heritage

Aboriginal cultural heritage means the tangible and intangible elements that are important to Aboriginal people of the State, and is recognised through social, spiritual, historical, scientific, or aesthetic values (including contemporary values), as part of Aboriginal tradition.

Activity Area

An area where ground disturbing works or other works associated with implementation of the Proposal may be undertaken.

Areas to undertake traditional activities

A defined area or place where the Traditional Custodians to which this SCHMP is relevant, wish to maintain access to undertake traditional activities. These areas may be identified as individual locations or in connection to other Aboriginal cultural heritage or Heritage Places. See below for the meaning of **traditional activities**.

Areas to undertake traditional activities will be managed as Heritage Places or Heritage Restriction Zones (HRZs) within Fortescue's Geographic Information System (GIS) database.

Blast Exclusion Zone

A defined area within which there is a risk of adverse effects from blasting as stipulated on the applicable blast notice. When places of cultural significance identified as vibration sensitive fall within the blast exclusion zone, blasting activities must be designed to meet the maximum (or below) vibration level outlined in Fortescue's *Blasting Near Heritage Places Procedure* (100-PR-EN-0003) and the *Iron Bridge Blasting Operation Management Plan* (IB-1200-PL-OP-0001_0_IFU_02).

Cultural Receptor

An area or place containing social, cultural, and / or heritage values that is of a particular sensitivity and may be susceptible to impact (direct or indirect) by Fortescue activity. These may include places of high cultural significance; places containing visual, noise, dust, or vibration sensitive features; areas to undertake traditional activity; areas containing culturally significant flora or fauna; or culturally significant water sources.

Culturally significant flora / fauna

Any species of flora or fauna associated with cultural tradition and / or spiritual belief (e.g., bush medicine, bush tucker), or is of contemporary use and is considered to be of cultural significance to the Traditional Custodians to which this SCHMP applies.

In instances where a defined area containing culturally significant flora / fauna is identified, these will be managed as Heritage Places or HRZs within Fortescue's GIS database.

Culturally significant water source

A water source containing social, cultural, or heritage values to the Traditional Owners for the area. Culturally significant water sources may include creeks, rivers, and semi-permanent and permanent pools. In some cases, these water sources may be associated with Aboriginal cultural material such as artefact scatters, grinding patches, or engravings.

Culturally significant water sources are managed as Heritage Places or HRZs within Fortescue's GIS database.

Demarcation of places

Demarcation of places means the physical delineation of the boundary defined for a place of cultural significance to ensure its location is clearly visible. Physical demarcation of places may be undertaken by Fortescue to provide additional protection from unauthorised disturbance, and in some instances, to restrict unauthorised access. Demarcation may take the form of star pickets with pink and black flagging, restricted or no access signage, fencing, windrows, or a combination of these markers, delineated along the place boundary itself, associated HRZ or Exclusion Zone boundary, or as requested by the Traditional Custodians during heritage surveys or consultation.

Where required, demarcation of a place boundary may include complete demarcation (whereby the full extent of the boundary is delineated), or partial demarcation. Partial demarcation of a place boundary may be undertaken where the boundaries of a place are extensive and cover a large area, where the physical terrain is difficult or unsafe to access, or only a portion of the place is required to be delineated.

Direct Impacts

Direct impacts are taken to mean any impact to the physical environment within a defined place of cultural significance (i.e. at the source) resulting from Fortescue activity during implementation of the Proposal.

Heritage Exclusion Zone

A defined area where no development of the Proposal is to occur. Heritage Exclusion Zones (Exclusion Zones) are recorded within Fortescue's GIS database and excluded from any ground disturbance activities or proposed works (including those that may result in indirect environmental impacts) associated with implementation of the Proposal.

As an additional layer of protection, HRZs may also be applied over Exclusion Zones. Application of a HRZ over an Exclusion Zone may be considered where ground disturbing works are required within proximity to the Exclusion Zone boundary, but restrictions apply to undertake these works, or a HRZ has been requested by the relevant Traditional Custodians.

Heritage Place

Fortescue's internal reference for a defined area containing social, cultural, or heritage values as defined under s5 of the *Aboriginal Heritage Act 1972 WA* (AHA) (see also definition for places of cultural significance below). Heritage Places are stored on Fortescue's GIS database and may further be defined as archaeological or ethnographic places.

To provide an additional layer of protection, HRZs or Exclusion Zones may also be applied to Heritage Places.

Heritage Restriction Zone

A defined area containing social, cultural, or heritage values whereby restrictions (or preceding actions) may apply prior to the commencement of any works within the HRZ boundary. Restrictions applied to HRZs are determined in consultation with the Traditional Custodians for the area and may include:

- Further consultation or recording of cultural values contained within;
- Limitations or restrictions on access requirements; or
- Limitations on the types of works that may be undertaken within the HRZ boundary.

HRZs are an internal management measure implemented by Fortescue to provide an additional layer of protection for places of cultural significance. The extent of a HRZ is determined by, or in consultation with, the Traditional Custodians during heritage surveys or consultation.

Hydrological regime

For the purpose of this SCHMP, hydrological regime is taken to mean the quantity (including flow and level) and quality of a culturally significant water source. Impacts are considered to be any change to the hydrological regimes of culturally significant water sources greater than predicted in the [Section 38 Significant Amendment to Approved Proposal – Environmental Review Document](#) (662NS-0000-AE-EN-0001), or as determined by the management targets in this SCHMP, as a result of Fortescue activity during implementation of the Proposal within the North Star Extension Mine Development Envelope (MDE).

Impact to places of cultural significance

For the purpose of this SCHMP, impact to places of cultural significance is taken to mean the **unauthorised impact** (direct or indirect) to a place of cultural significance, resulting from Fortescue activity in relation to implementation of the Proposal within the North Star Extension MDE.

Indirect Impacts

Indirect impacts are taken to mean any impact resulting from Fortescue activities (during implementation of the Proposal) that originates from a secondary or tertiary location in relation to that place (i.e., outside of the place boundary), and may cause harm to the values or cultural significance of that place.

Land Use Certificate Process

The Land Use Certificate (LUC) process forms part of Fortescue's Land Management System and is utilised across multiple areas of the business to manage activities on land in which Fortescue has tenure. A LUC is required to be submitted for any activity that includes access (such as monitoring and compliance activities), ground disturbing works, maintenance (where earth movement is required but does not increase the disturbance area), or rehabilitation.

LUC applications must be approved by the nominated Fortescue employees within the Environment, Heritage, Tenements, Pastoral Access, State Agreement, and Water Infrastructure departments. During the approval process, approvers may include conditions / management measures on the LUC that must be accepted by the applicant before the LUC can be approved.

The LUC process allows for the thorough and careful screening of activities being undertaken on Fortescue tenured or managed land to ensure that any potential risks that may occur from implementation of that activity have been identified and the appropriate management measures have been applied.

Place of cultural significance

Any defined area of land or water containing social, cultural, or heritage values to the Traditional Custodians in which this SCHMP applies. For the purpose of this SCHMP, places of cultural significance include:

- Aboriginal sites or places containing Aboriginal cultural heritage as defined under the AHA;
- Any area identified during social surrounds consultation containing social, cultural, or heritage values (including sensitive receptors, areas of culturally significant flora or fauna, culturally significant waterways, and areas to undertake Traditional activities); and
- Any place managed in Fortescue's GIS system as a Heritage Place, HRZ, or Exclusion Zone. See definitions above for the meanings of these terms.

Stringent approvals processes both internally and through the regulator for Aboriginal cultural heritage, the Department of Planning, Lands and Heritage (DPLH), are followed to ensure no unauthorised disturbance to places of cultural significance occurs as a result of Fortescue activity. Where places of cultural significance contain environmental features of social, cultural, or heritage value, these places are also managed under the Social Surroundings environmental factor and relevant environmental approvals may also apply.

Social Surroundings

Under the *Environmental Protection Act 1986*, Social Surroundings forms part of the environment and is defined as:

“The social surroundings of man are his aesthetic, cultural, economic, and social surroundings to the extent that those surroundings directly affect or are affected by his physical or biological surroundings”.

For impacts to Social Surroundings to be considered, there must be a clear link between a proposal or project’s impacts on the physical or biological surroundings and the subsequent impact on a person’s aesthetic, cultural, economic, or social surroundings.

Traditional activities

Traditional activities are taken to mean any activities relating to cultural traditions, observances, customs, beliefs, values, knowledge, and skills of the Nyamal people that contributes to the ongoing connection with their cultural heritage and identity.

Unauthorised access

Unauthorised access is taken to mean any entry to a defined place of cultural significance by a Fortescue staff / contractor who is not a member of the relevant Native Title Group or is not required access to undertake approved activities agreed to between Fortescue and the Native Title holders as directed by relevant access agreements and / or consultation, or as outlined by the relevant Regulators and / or approvals.

Unauthorised disturbance

Unauthorised disturbance is taken to mean any impact (direct or indirect) to a defined place of cultural significance resulting from Fortescue activity during implementation of the Proposal without relevant consent and approvals.

For places of cultural significance under the AHA (whether assessed by the ACMC or not), **unauthorised** is taken to mean without authorised Ministerial Consent from the Minister of Aboriginal Affairs (the Minister) under s18 of the AHA.

Where places of cultural significance are not managed under the above legislation, **unauthorised** is taken to mean without consent from the Native Title holders for the area or outside of acceptable disturbance as outlined in this SCHMP.

Vibration Sensitive Sites

Vibration Sensitive Sites (VSS) are Heritage Places or HRZs where the place itself, or feature(s) of the place, have the potential to be impacted by vibrations. VSS places are identified by site type and include places that are, or contain, structures (e.g., rock shelters, stone arrangements, walled niches etc). Places that are of high cultural significance or contain culturally sensitive features may also be

identified as VSS by the Traditional Custodians (e.g., burials and rock art sites containing engravings or paintings). A list of VSS place types is provided in Attachment 1.

To reduce the risk of indirectly impacting vibration sensitive places, these are identified within Fortescue's GIS database as VSS. Vibration monitoring is required for all VSS places that fall within the Blast Exclusion Zone (see definition above for this term).

1 INTRODUCTION

Fortescue Iron Bridge Australia Pty Ltd (Fortescue) is seeking an extension to its existing North Star Magnetite Project (the Proposal), located approximately 110 km southeast of Port Hedland in the Pilbara region of Western Australia (Figure 1).

The Proposal was referred under Part IV of the *Environmental Protection Act 1986* (EP Act) in October 2012 and was assessed by the Environmental Protection Authority (EPA) through a Public Environmental Review (PER). The EPA published its Report and Recommendations (Report 1514) in June 2014, and the North Star Magnetite Project was approved in 2015, with the issue of Ministerial Statement 993 (MS 993). The approved Proposal comprises of the following elements:

- Mine Development Envelope (MDE) for open cut mine pit, waste rock dumps, Tailings Storage Facility (TSF) and associated infrastructure.
- Water Corridor Development Envelope (WCDE) for the Canning Basin and Mine Area borefield, water supply pipelines, and associated infrastructure.
- Slurry Corridor Development Envelope (SCDE) for the slurry pipeline, natural gas pipeline, access road, and associated infrastructure.
- Infrastructure Corridor Development Envelope (ICDE) for access roads, transmission pipelines, gas pipeline and slurry pipeline.

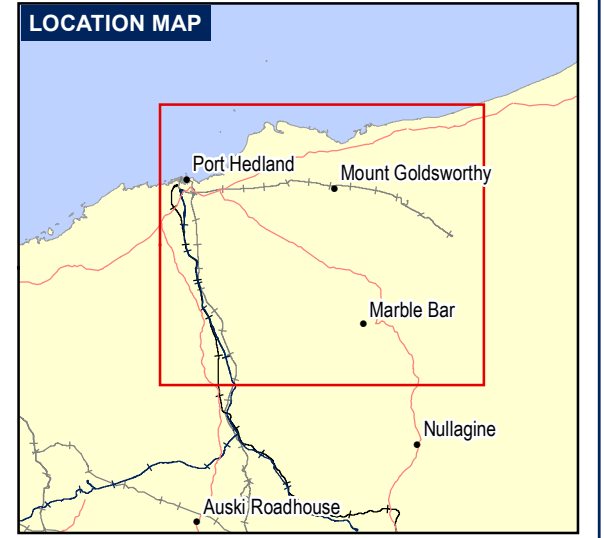
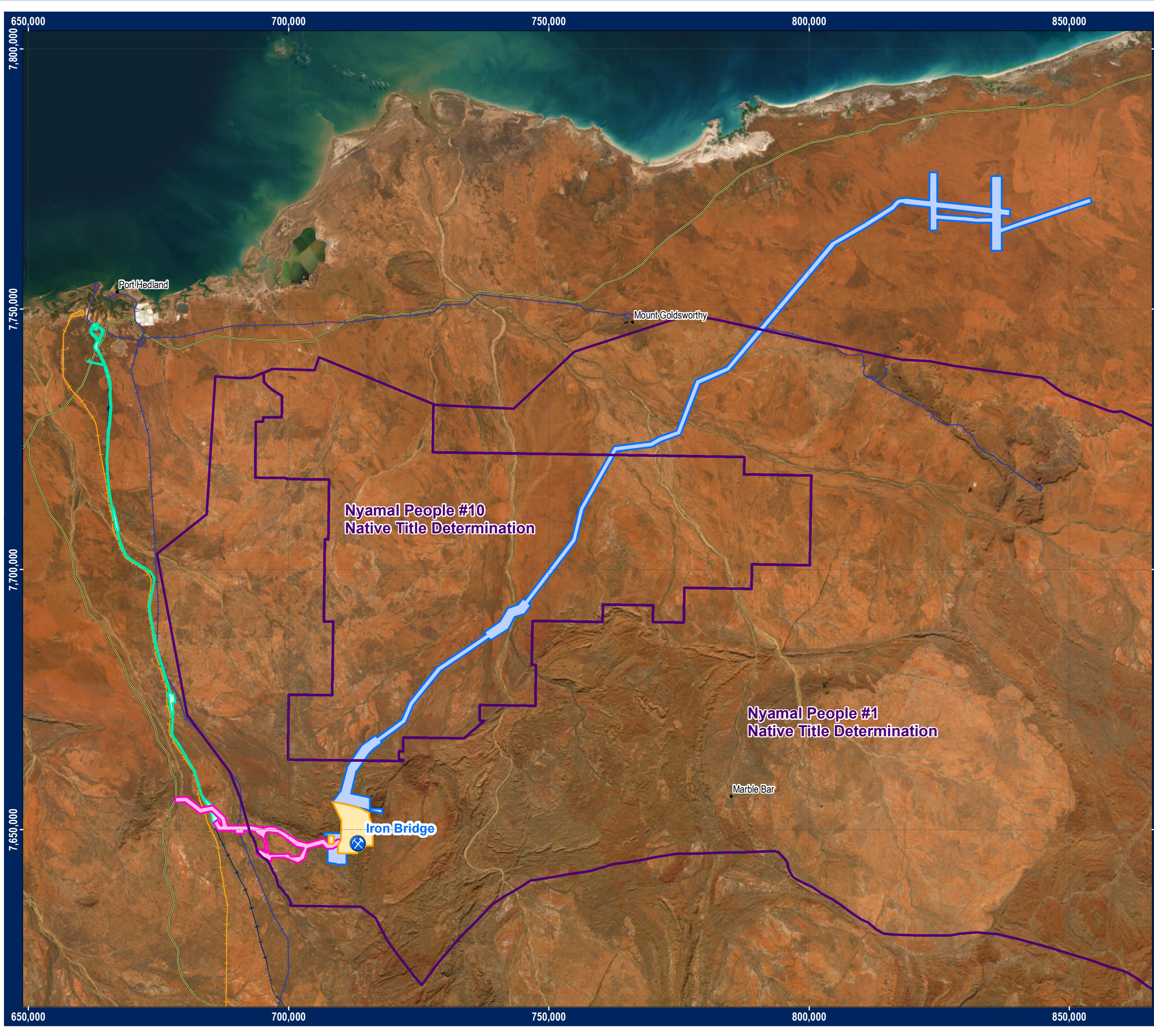
The Proposed Amendment (North Star Extension) is to extend the approved MDE to include development of new mine pits, an extension of the Waste Rock Dump (WRD), and ancillary infrastructure (Figure 2). Full details of the North Star Extension project are outlined in the [Section 38 Significant Amendment to Approved Proposal – Environmental Review Document](#) (662NS-0000-AE-EN-0001).

A summary of the Proposal (which includes the extension) as submitted under Part IV of the Environmental Protection Act (EP Act) is provided in Table 1 below.

Table 1: Summary of Proposal

Proposal Title	Short Description
North Star Magnetite Project	Construction and operation of an open cut iron ore mine site and associated infrastructure (roads, administration buildings, accommodation camp, aerodrome, borefield and slurry pipeline) approximately 110 kilometres south-south-east of Port Hedland.

The overall Proposal is located within the Kariyarra native title determination area (WCD2018/015) and the Nyamal People #1 and Nyamal #10 native title determination areas (Figure 1). The portion of the Proposal that relates to this SCHMP is solely located within the Nyamal #1 native title determination area and is relevant to the Nyamal people. This SCHMP relates to social surroundings values within and surrounding the North Star Extension MDE (Figure 2).



LEGEND

- FMG Mines
- GOV_Towns
- FMG Rail
- BHP Rail
- Rio Tinto Rail
- Roy Hill Rail
- Highway
- Native Title Determination (Registered)
- Infrastructure Development Envelope
- Mine Development Envelope
- Slurry Corridor Development Envelope
- Water Corridor Development Envelope

Data Source(s):
 Aerial, ESRI, 2023
 NTD, NNTT, 2023
 Tenure, DMIRS, 2023,
 Topography, GSA, 2003
 All other data, FMG, 2023

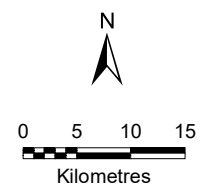
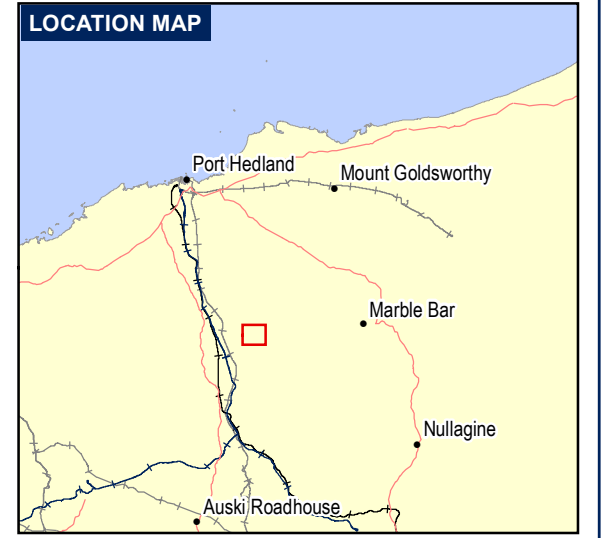
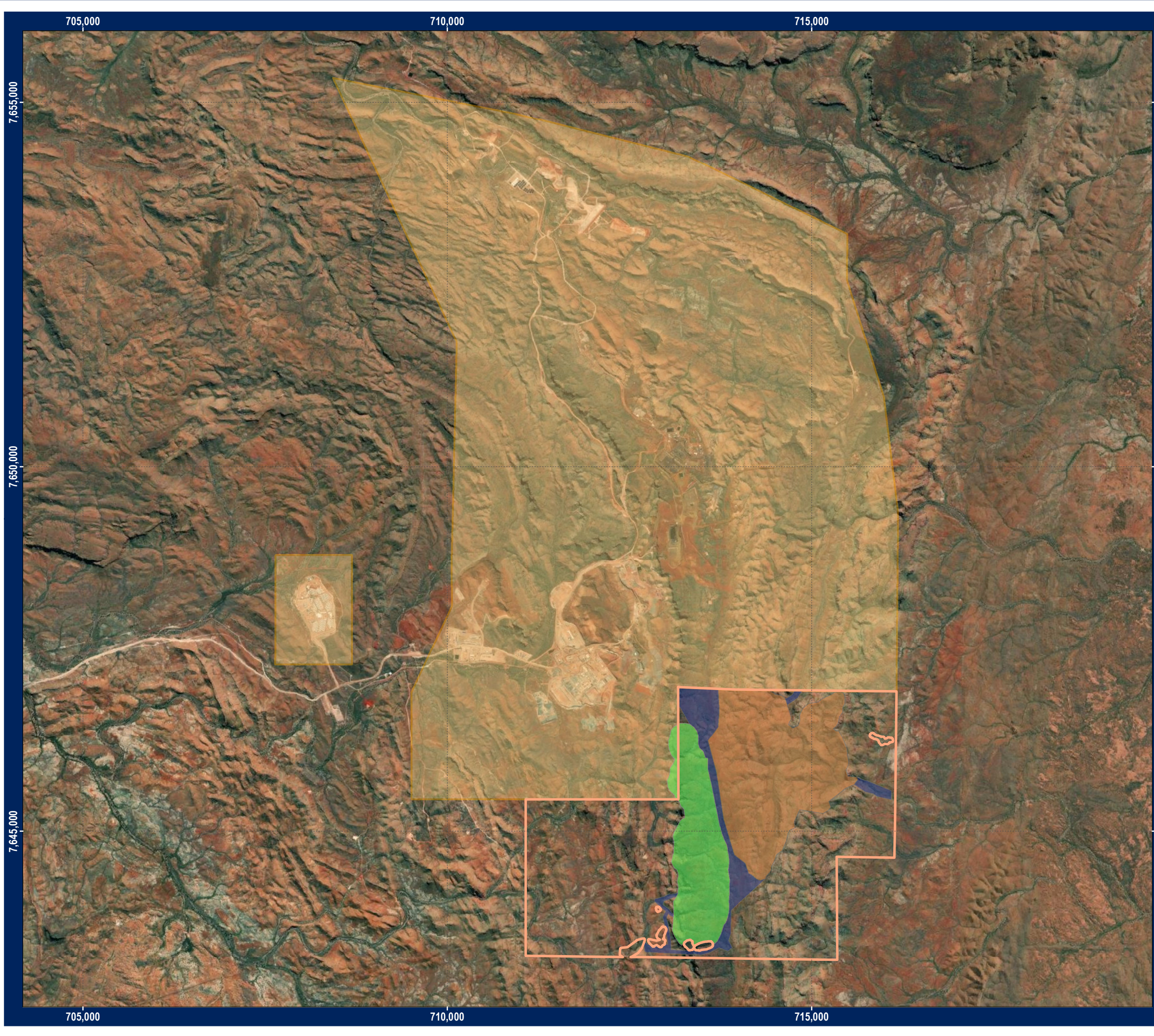


Figure 1 Approved North Star Magnetite Project

Requested By: N. Sanders	Date: 10/05/2023
Drawn By: S. Bowyer	Size: A3L
Revised By: sarfuso	Revision: 0
Approved By:	Confidentiality: 0
Scale: 1:700,000	
Coordinate System: GDA 1994 MGA Zone 50	
Document Name: 662NS_0000_MP_HE_0100.001_r0	

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- LEGEND**
- North Star Extension Mine Development Envelope
 - Pits
 - WRD
 - Infrastructure
 - North Star Mine Development Envelope (approved)

Data Source(s):
 Aerial, ESRI, 2023
 NTD, NNTT, 2023
 Tenure, DMIRS, 2023,
 Topography, GSA, 2003
 All other data, FMG, 2023

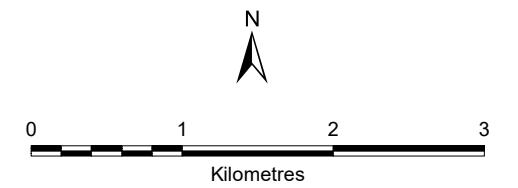


Figure 2 North Star Extension Mine Development Envelope

Requested By: N. Sanders	Date: 10/05/2023
Drawn By: S. Bowyer	Size: A3L
Revised By: sarfuso	Revision: 0
Approved By:	Confidentiality: 0
Scale: 1:50,000	
Coordinate System: GDA 1994 MGA Zone 50	
Document Name: 662NS_0000_MP_HE_0100.002_r0	

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1.1 Management Plan Requirements

This document is to satisfy Fortescue’s requirements to prepare an environmental management plan (EMP) to minimise impacts to Social Surroundings and provide an ongoing consultation framework with the relevant Native Title holders on the development and implementation of this plan.

Table 2 below outlines the requirements of this SCHMP. These requirements have been developed in accordance with the EPA’s [How to Prepare Environmental Protection Act 1986 Part IV Environmental Management Plans Instructions](#) (EPA 2021) and Fortescue’s commitment for the continued improvement of consultation with our Native Title partners. The content and structure of this SCHMP has been developed in consultation with Nyamal and includes additional information as requested. As such this SCHMP may differ slightly from the EPA’s instructions for environmental management plans however, all relevant information is provided.

Table 2: Key Requirements of this SCHMP

Management Plan Requirements	Reference
Prior to implementation of the Proposal, Fortescue will prepare and submit an environmental management plan, outlining mitigation measures to minimise impacts to Social Surroundings within the North Star Extension MDE.	This SCHMP
The Social Cultural Heritage Management Plan will:	Section 2.1
(1) Specify the management objectives to be achieved;	
(2) Specify measurable management target(s) to determine the effectiveness of the management actions;	Section 2.1
(3) Specify appropriate management actions, including performance indicators and timeframes, to achieve the management objectives and targets outlined in this plan;	Section 3.1
(4) Specify appropriate monitoring programs or procedures to measure the effectiveness of management actions against the management targets.	Section 3.2
(5) In the event that the management targets are not achieved, outline a process of investigation to determine the cause of the non-achievement;	Section 3.3
(6) Specify a process for reviewing the effectiveness of management actions and changes to project activities in relation to the management strategies outlined in this plan;	Section 4
(7) Where appropriate, identify early response indicators to initiate early response actions before (or at) the onset of a potential impact at sensitive receptors;	Section 4.1
(8) Provide evidence of consultation regarding the Proposal (as it relates to this plan) and development of this SCHMP;	Section 5
(9) Specify a framework for ongoing consultation with the relevant Native Title holders regarding the Proposal.	Section 5.1

(10) Outline commitments and opportunities for the relevant Native Title holders to participate in monitoring and management activities in relation to the Proposal and this plan;	Section 5.2
(11) Outline a reporting process to demonstrate that management objectives have been met for the reporting period in accordance with the Ministerial Statement (or as outlined in this plan).	Section 6.1
In the event that monitoring, tests, surveys or investigations indicate a non-achievement of management target(s), or that one or more management actions specified in this plan have not been implemented, Fortescue must: (1) Provide a report on the non-achievement of the management targets or non-implementation of the management actions in accordance with timeframes specified in the Ministerial Statement.	Section 6.2
In addition to annual environmental compliance reporting, Fortescue will prepare an annual SCHMP Compliance Report for the relevant Native Title holders to which this plan applies.	Section 6.3
Establish a review process to revise the SCHMP as required through the adaptive management process or as directed by the Native Title holders or regulator.	Section 7

1.2 Legislative Context

Fortescue employees and contractors are obliged to comply with all relevant environmental Commonwealth and State legislation. In relation to the management of Social Surroundings, additional heritage legislation also applies. Legislation relevant to this SCHMP is provided in Table 3 below.

In addition to the state and commonwealth legislations outlined below, relevant charters and guidelines pertaining to cultural significance and Social Surroundings were also considered in preparation of this SCHMP. These are also provided in Table 3 below.

Table 3: Relevant Legislation and Guidelines

Legislation / Guidelines	Application
<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i> (Cth)	An Act to preserve and protect places, areas, and objects of particular significance to Aboriginal peoples and Torres Strait Islanders in accordance with Aboriginal tradition.
<i>Aboriginal Cultural Heritage Act 2021</i> (WA)	A reformed Act that provides a modern framework for the recognition, protection, conservation, and preservation of Aboriginal cultural heritage while recognising the fundamental importance of Aboriginal cultural heritage to Aboriginal people.
<i>Aboriginal Heritage Act 1972</i> (WA)	An Act to make provision for the preservation of places and objects customarily used by, or traditional to, the original inhabitants of Australia or their descendants. This Act will be replaced by the Aboriginal Cultural Heritage Act 2021 however, is still the active heritage legislation until such time.

<i>Environmental Protection Act 1986 (WA)</i>	An Act for the prevention, control, and abatement of pollution and environmental harm, for the conservation, preservation, protection, enhancement, and management of the environment, and for matters incidental to or connected with the foregoing.
<i>Environment Protect and Biodiversity Conservation Act 1999</i>	An Act to protect and manage nationally and internationally important flora, fauna, ecological communities, and heritage places, defined as 'matter of national environmental significance'.
<i>Mining Act 1978 (WA) and Mine Safety and Inspection Act 1994 (WA)</i>	An Act outlining the responsibility of Registered Managers and will impose reasonable limits on access to areas within development mining activity.
<i>Native Title Act 1993 (Cth)</i>	An Act for the advancement and protection of Aboriginal peoples and Torres Strait Islanders and is intended to further advance the process of reconciliation among all Australians.
ICOMOS Burra Charter 2013	Provides guidance for the conservation and management of places of cultural significance within Australia.
Social Surroundings Environmental Factor Guidelines	Provides guidance on how the Social Surroundings environmental factor is considered by the Environmental Protection Authority (EPA) in the environmental impact assessment process.
EPA Technical guidance of EIA of Social Surroundings – Aboriginal Cultural Heritage (Nov 2023)	Considers Aboriginal Heritage in the Environmental Approvals process when heritage values are linked to the environment.
How to prepare <i>Environmental Protection Act 1986</i> Part IV Environmental Management Plans Instructions	Provide guidance for the information required by the EPA for inclusion in an Environmental Management Plan.

1.3 Key Environmental Factors

In accordance with the EP Act, an Environmental Review Document (ERD) was prepared outlining the amendment to the North Star Magnetite Project and its likely effect on the environment. The [Section 38 Significant Amendment to Approved Proposal – Environmental Review Document \(662NS-0000-AE-EN-0001\)](#) was submitted to the EPA for assessment on 27 July 2022.

As part of the submission process, several environmental factors were identified as having the potential to be impacted by the Proposed Amendment (North Star Extension). These factors are outlined in Table 4 below.

Table 4: Key Environmental Factors (for the North Star Extension project)

Key Environmental Factor	Description of Potential Impacts ¹
Flora and Vegetation	Direct impacts associated with clearing of native vegetation.

¹ Full summary of potential impacts to the Key Environmental Factors is outlined in the [Section 38 Significant Amendment to Approved Proposal – Environmental Review Document \(662NS-0000-AE-EN-0001\)](#).

	Indirect impacts associated with groundwater abstraction, changes to surface water regimes, fragmentation and degradation, and increases in weed diversity and extent.
Terrestrial Fauna	<p>Direct impacts associated with loss of habitat, and mortality during implementation of the Proposal, with particular regard to Matters of National Environmental Significance.</p> <p>Indirect impacts associated with increase in feral animal occurrence and vehicle strike.</p>
Inland Waters	<p>Direct impacts to water regimes associated with groundwater drawdown, mine void development, alteration of surface water flows, discharge of excess water, and creation of permanent pit lakes.</p> <p>Indirect impacts to water quality as a result of Acid and Metalliferous Drainage (AMD) seepage from waste rock and degradation of water within mine pit voids after closure.</p>
Social Surroundings	<p>Direct impacts from clearing of places of cultural significance and culturally significant flora, loss of culturally significant fauna, and changes to water regimes associated with culturally significant water sources. Loss of access to country and culturally significant places.</p> <p>Indirect impacts including noise, dust, vibration, and visual amenity.</p>
Greenhouse Gas Emissions	Contribution to Greenhouse Gas Emissions through combustion of fossil fuels for operation of plant machinery, mine vehicles, and auxiliary mobile generators, and emissions associated with vegetation clearing.

This management plan addresses the **Social Surroundings** environmental factor. It is acknowledged that social surroundings values may relate to other environmental factors considered by the Proposal. Where these shared values are managed under another management plan, these plans are referenced throughout the SCHMP.

1.4 Social Surroundings Context

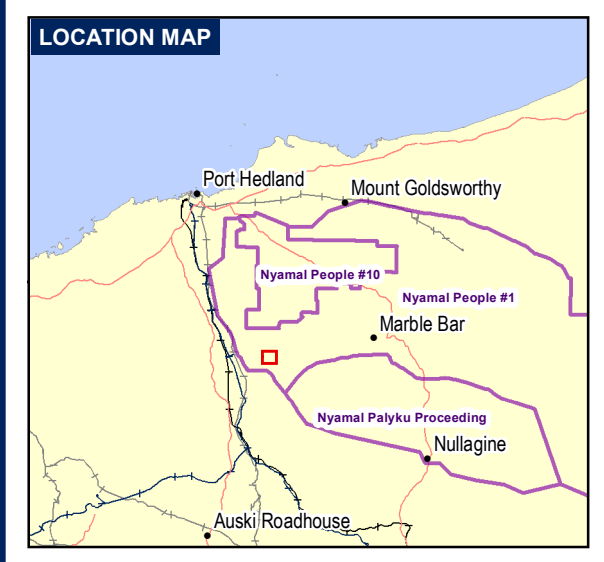
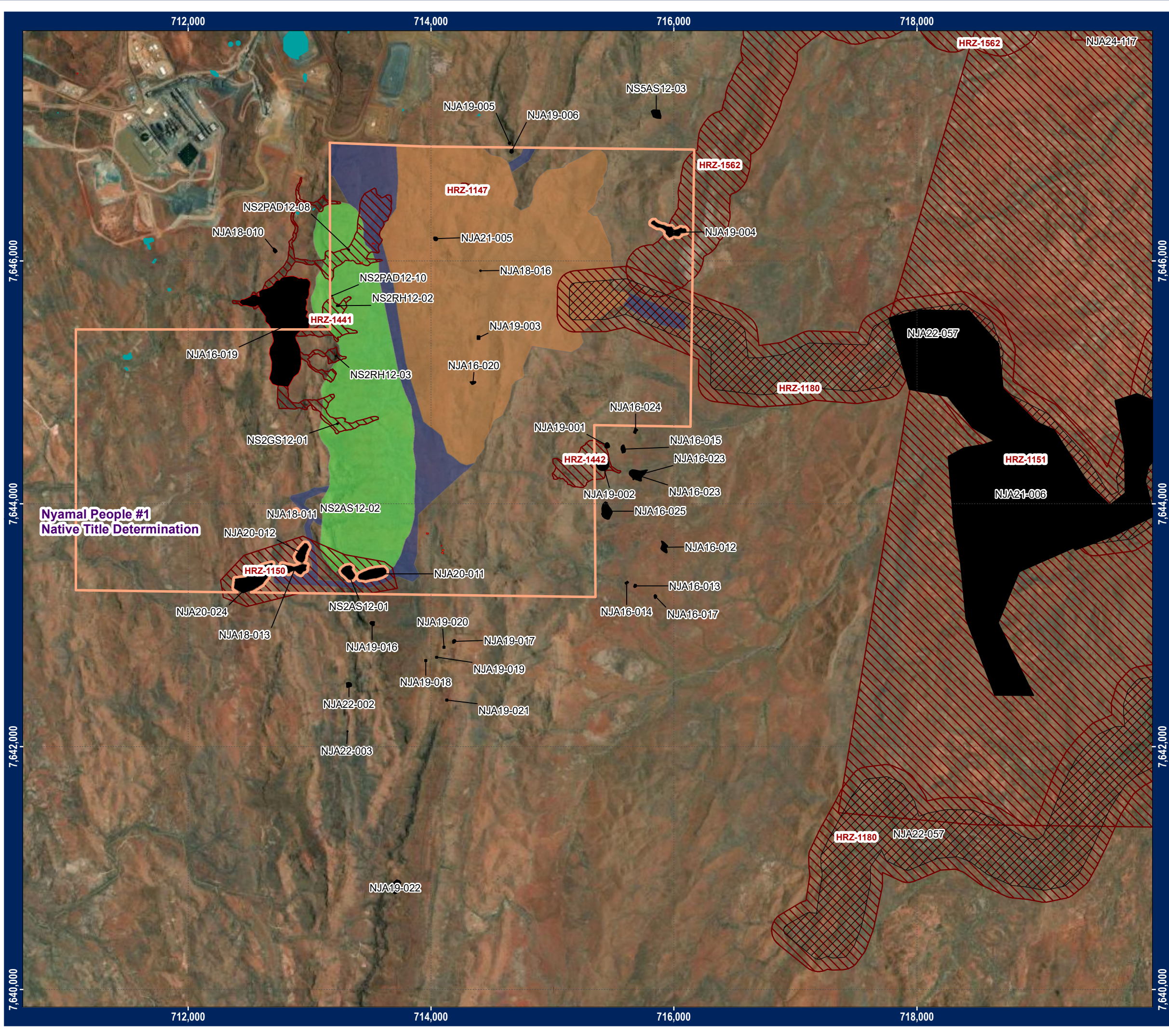
To assess potential impacts to the Social Surroundings environmental factor, consultation was undertaken with Nyamal knowledge holders for the development area to understand the values important to Nyamal that may be impacted by the North Star Extension project.

The following values have been identified by Nyamal as being of importance within and surrounding the North Star Extension Mine Development Envelope (MDE):

- Heritage Places and the integrity of heritage values within;
- Maintaining important water sources on Country;
- Health of water sources (and supporting ecosystems);
- Mythological values connected to water sources;
- Availability of culturally significant flora and fauna;
- Ability to enjoy and use Country and important places (aesthetics), and to share natural landscape with future generations; and

- Continued access to Country and important places.

Heritage Places, culturally significant water sources, and sensitive receptors (i.e., dust, noise, vibration, and visually sensitive places) identified in consultation date are illustrated in Figures 3 to 7 below. These maps will be updated in future revisions of this plan as per the adaptive management and review process (see Sections 4 and 7), where required.



LEGEND

- North Star Extension Mine Development Envelope
- Archaeological Heritage Places
- Ethnographic Heritage Places
- Deemed NOT an Arch Site
- Deemed NOT an Ethno Site
- FMG Heritage Restricted Zone
- FMG Heritage Exclusion Zone
- FMG Salvaged Heritage Places
- Native Title Determination (Register)
- Pits
- WRD
- Infrastructure

Data Source(s):
 Aerial, ESRI
 NTD, NNTT, 2024
 Tenure, DEMIRS, 2024
 Topography, GSA, 2003
 All other data, FMG, 2024

N

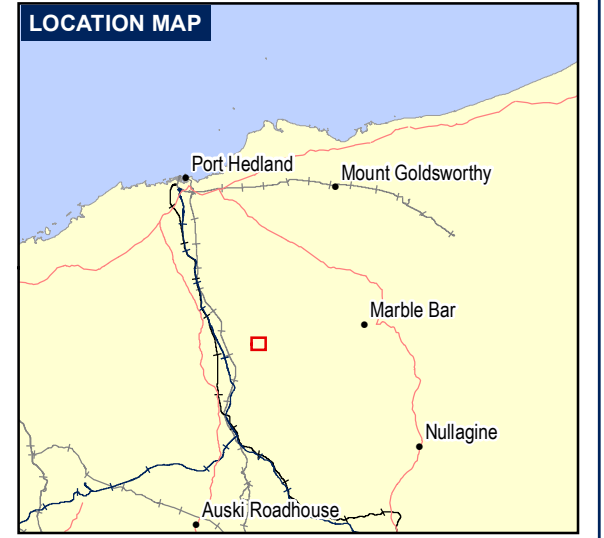
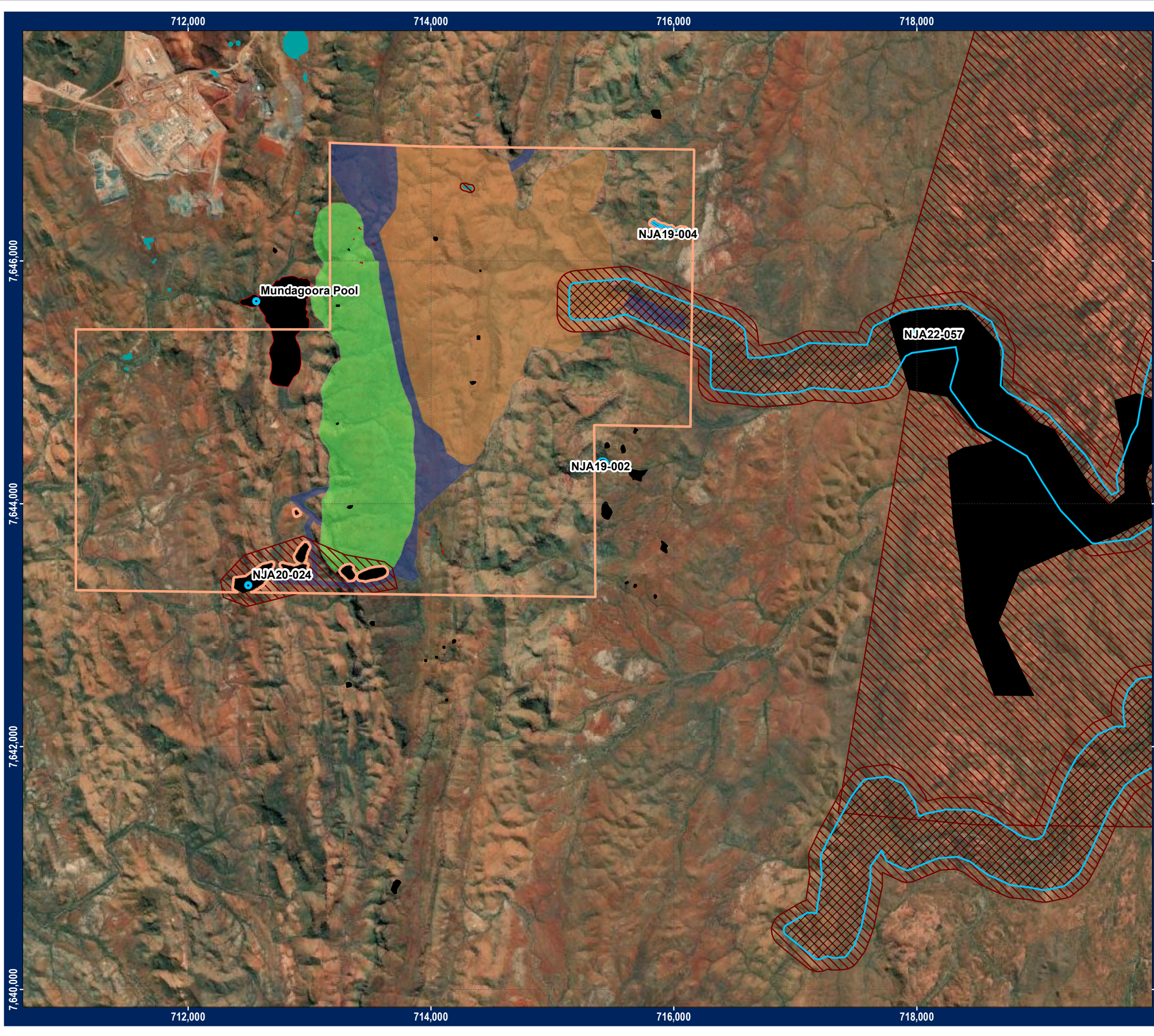
0 0.5 1 1.5
Kilometres

Figure 3: North Star Extension Places of Cultural Significance

Requested By: N. Sanders	Date: 13/09/2024
Drawn By: S. Bowyer	Size: A3L
Revised By: sconolly	Revision: 2
Approved By:	Confidentiality: 0
Scale: 1:30,000	
Coordinate System: GDA 1994 MGA Zone 50	
Document Name: 662NS_0000_MP_HE_0100.003_r2	

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- LEGEND**
- Culturally Significant Pools
 - North Star Extension Mine Development Envelope
 - Culturally Significant Waterways
 - Archaeological Heritage Places
 - Ethnographic Heritage Places
 - Deemed NOT an Arch Site
 - Deemed NOT an Ethno Site
 - FMG Heritage Restricted Zone
 - FMG Heritage Exclusion Zone
 - FMG Salvaged Heritage Places
 - Pits
 - WRD
 - Infrastructure

Data Source(s):
 Aerial, ESRI, 2023
 NTD, NNTT, 2023
 Tenure, DMIRS, 2023
 Topography, GSA, 2003
 All other data, FMG, 2023

N

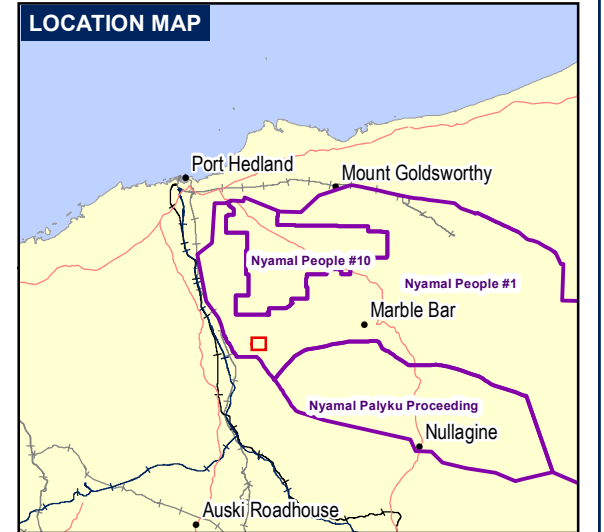
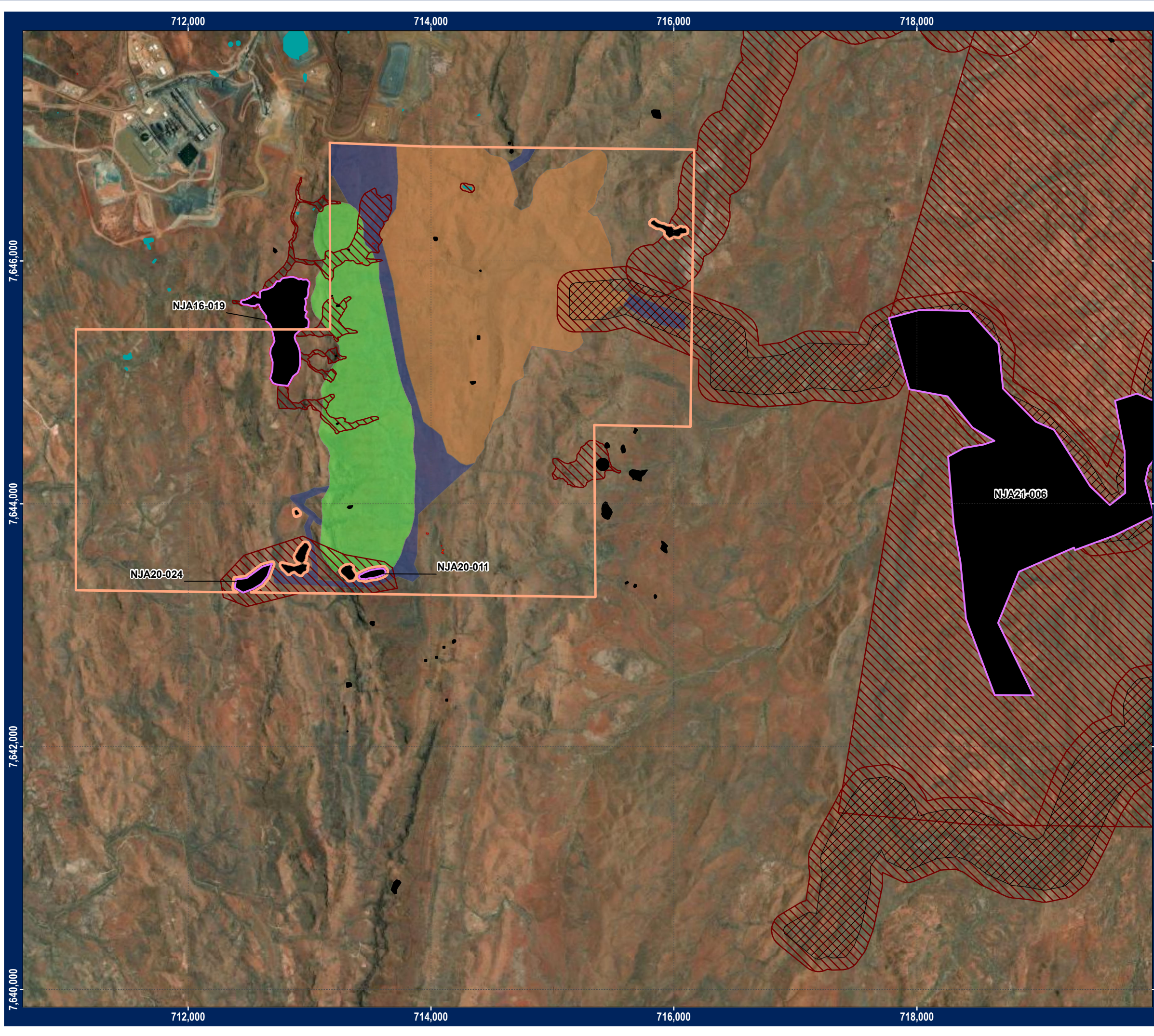
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Kilometres

Figure 4 North Star Extension Culturally Significant Water Sources

Requested By: N. Sanders	Date: 23/06/2023
Drawn By: S. Bowyer	Size: A3L
Revised By: hwallace	Revision: 1
Approved By:	Confidentiality: 0
Scale: 1:30,000	
Coordinate System: GDA 1994 MGA Zone 50	
Document Name: 662NS_0000_MP_HE_0100.004_r1	

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LEGEND

- North Star Extension Mine Development Envelope
- Noise Sensitive Receptors
- Archaeological Heritage Places
- Ethnographic Heritage Places
- Deemed NOT an Arch Site
- Deemed NOT an Ethno Site
- FMG Heritage Restricted Zone
- FMG Heritage Exclusion Zone
- FMG Salvaged Heritage Places
- Pits
- WRD
- Infrastructure

Data Source(s):
 Aerial, ESRI, 2023
 NTD, NNTT, 2023
 Tenure, DMIRS, 2023
 Topography, GSA, 2003
 All other data, FMG, 2023

N

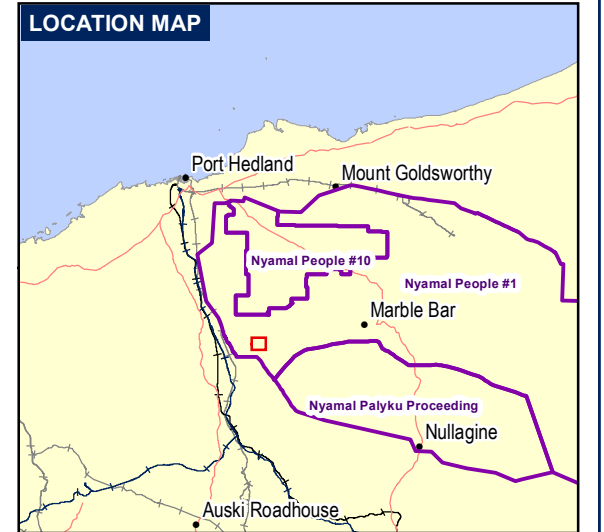
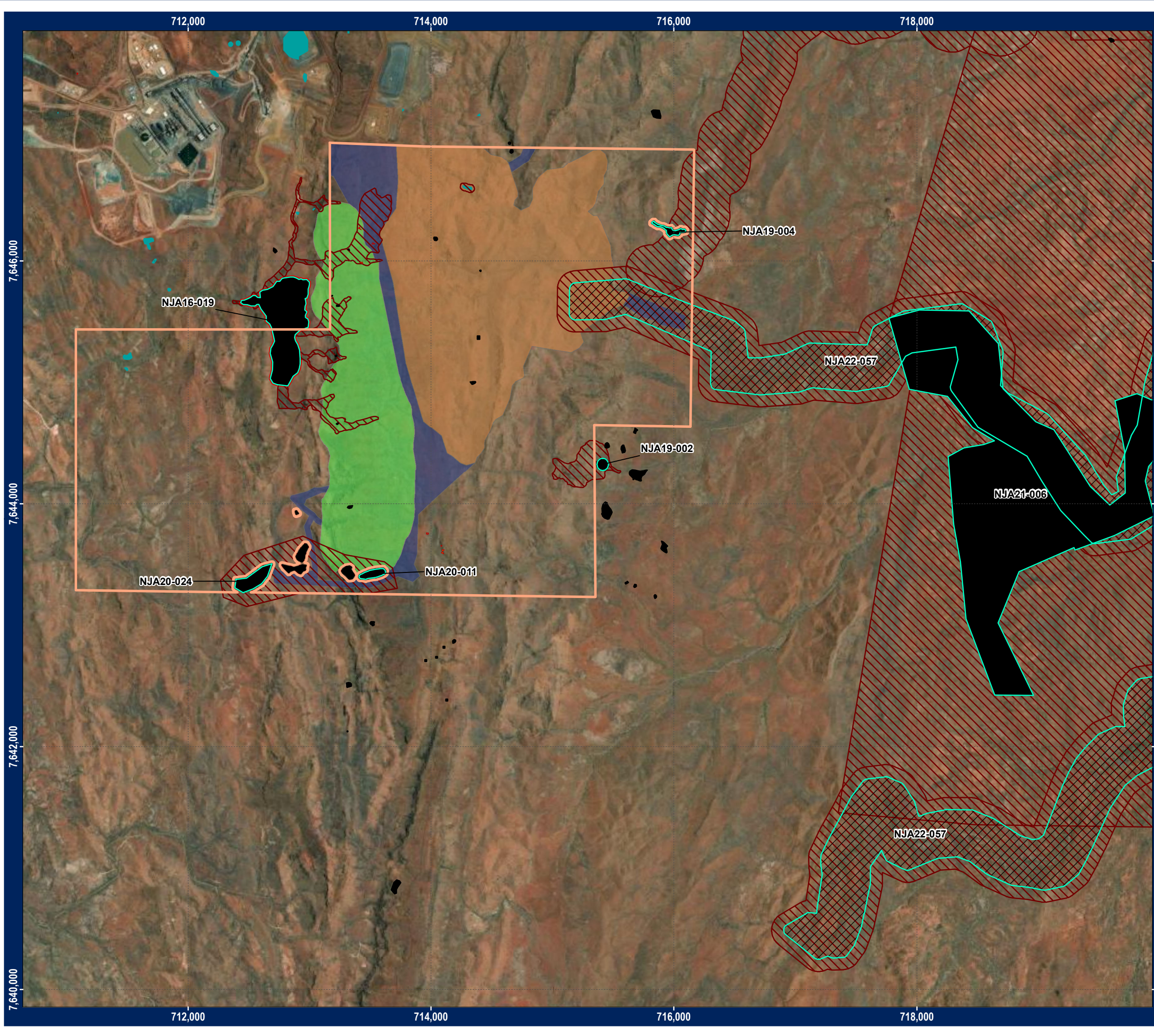
0 0.5 1 1.5
Kilometres

Figure 5: North Star Extension Noise Sensitive Places

Requested By: N. Sanders	Date: 13/09/2024
Drawn By: S. Bowyer	Size: A3L
Revised By: sconolly	Revision: 2
Approved By:	Confidentiality: 0
Scale: 1:30,000	
Coordinate System: GDA 1994 MGA Zone 50	
Document Name: 662NS_0000_MP_HE_0100.005_r2	

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- LEGEND**
- North Star Extension Mine Development Envelope
 - Visual Sensitive Receptors
 - Archaeological Heritage Places
 - Ethnographic Heritage Places
 - Deemed NOT an Arch Site
 - Deemed NOT an Ethno Site
 - FMG Heritage Restricted Zone
 - FMG Heritage Exclusion Zone
 - FMG Salvaged Heritage Places
 - Pits
 - WRD
 - Infrastructure

Data Source(s):
 Aerial, ESRI, 2023
 NTD, NNTT, 2023
 Tenure, DMIRS, 2023
 Topography, GSA, 2003
 All other data, FMG, 2023

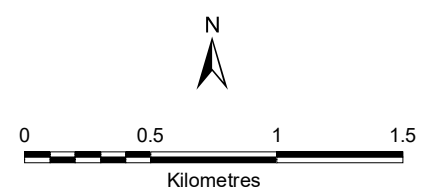
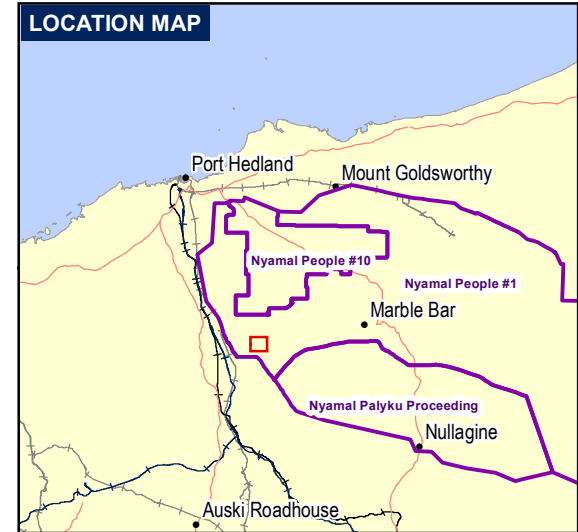
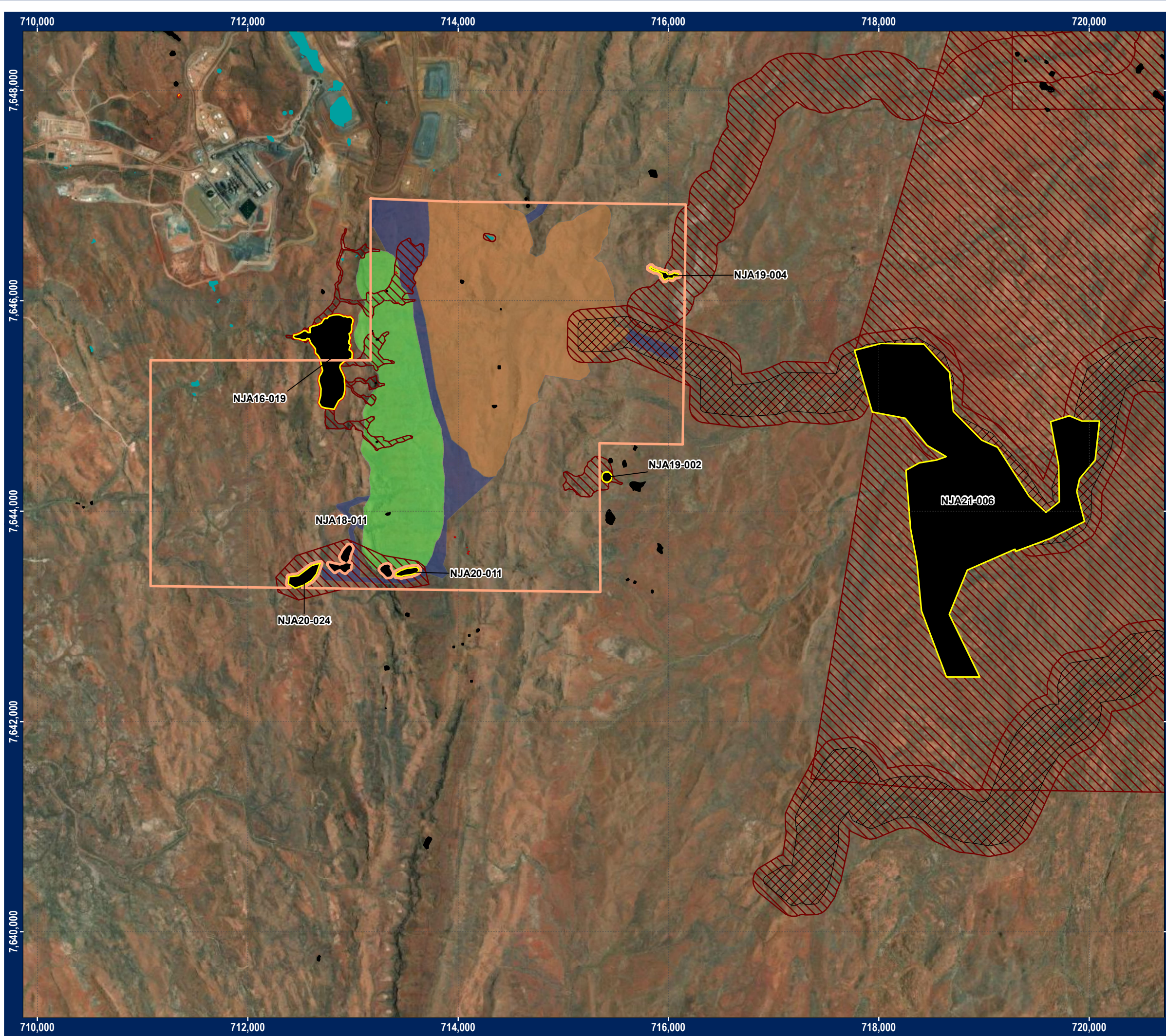


Figure 6: North Star Extension Visual Sensitive Places

Requested By: N. Sanders	Date: 13/09/2024
Drawn By: S. Bowyer	Size: A3L
Revised By: sconolly	Revision: 2
Approved By:	Confidentiality: 0
Scale: 1:30,000	
Coordinate System: GDA 1994 MGA Zone 50	
Document Name: 662NS_0000_MP_HE_0100.006_r2	

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LEGEND

- North Star Extension Mine Development Envelope
- Dust Sensitive Receptors
- Archaeological Heritage Places
- Ethnographic Heritage Places
- Deemed NOT an Arch Site
- Deemed NOT an Ethno Site
- FMG Heritage Restricted Zone
- FMG Heritage Exclusion Zone
- FMG Salvaged Heritage Places
- Pits
- WRD
- Infrastructure

Data Source(s):
 Aerial, ESRI, 2023
 NTD, NNTT, 2023
 Tenure, DMIRS, 2023,
 Topography, GSA, 2003
 All other data, FMG, 2023

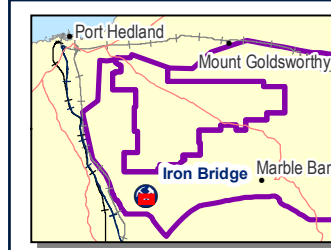
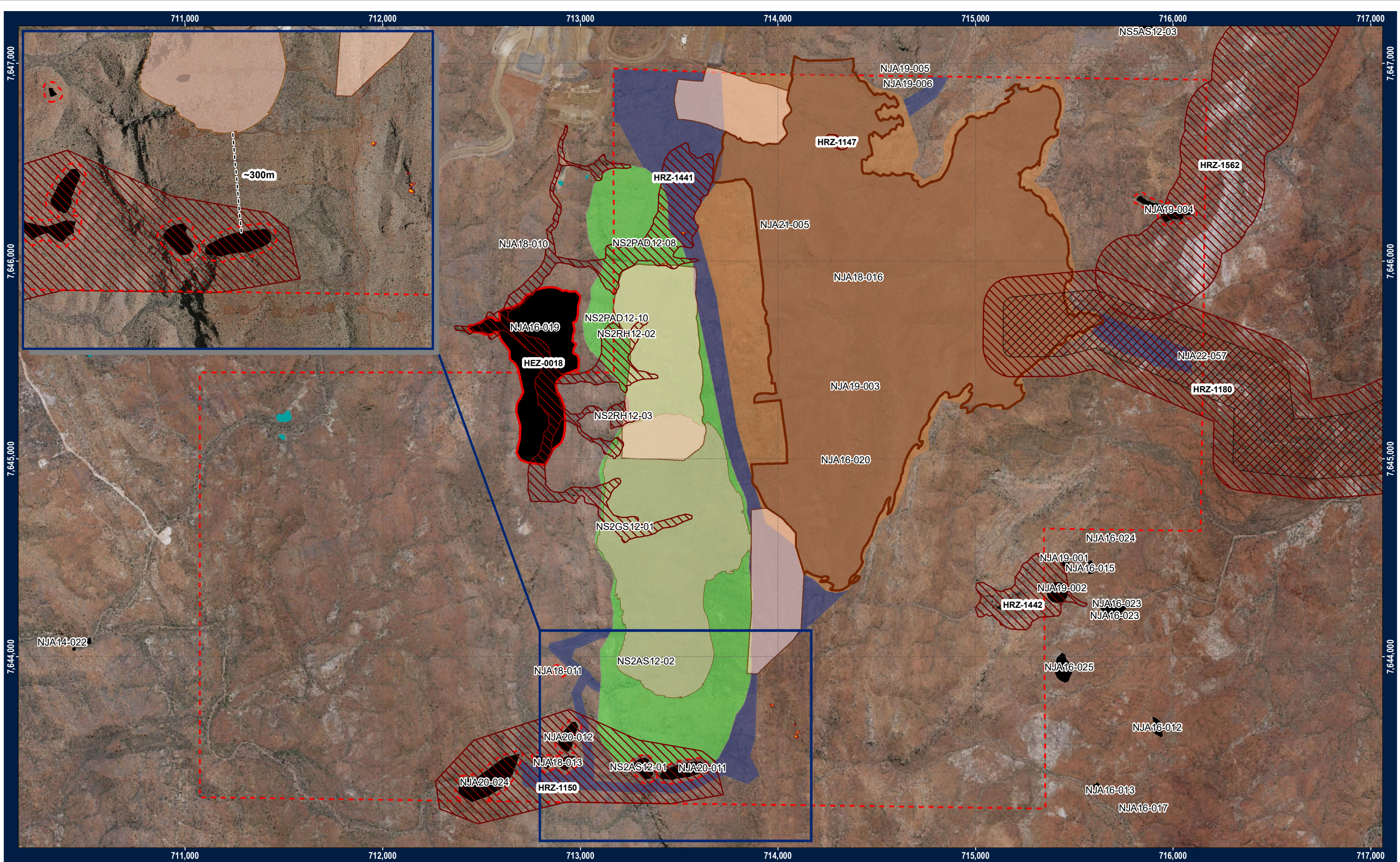


Figure 7: North Star Extension Dust Sensitive Places

Requested By: N. Sanders	Date: 13/09/2024
Drawn By: S. Bowyer	Size: A3L
Revised By: sconolly	Revision: 2
Approved By:	Confidentiality: 0
Scale: 1:35,000	
Coordinate System: GDA 1994 MGA Zone 50	
Document Name: 662NS_0000_MP_HE_0100.007_r2	

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Legend

FMG Heritage Restricted Zone	FMG Salvaged Heritage Places	Pits
FMG Heritage Exclusion Zone	Native Title Determination (Register)	Proposed Amendment
Archaeological Heritage Places	Iron Bridge 10 Yr Mine Plan	Disturbance Footprint
Ethnographic Heritage Places	Infrastructure	Pits
Deemed NOT an Arch Site	Waste Dumps	WRD
Deemed NOT an Ethno Site	Waste Dumps	Infrastructure

Data Source(s):
 Native Title, NNTT, 2024
 All other data, Fortescue, 2024

0 0.5 1
 Kilometres

Requested By: N. Sanders
 Drawn By: N. Sanders
 Revised By: nasanders
 Approved By:
 Scale: 1:17,609
 Coordinate System: GDA 1994 MGA Zone 50
 Document Name: Figure 8_NJA20-011

Date: 15/09/2024
 Size: A3L
 Revision: 4
 Confidentiality: No

GDA94

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Figure 8
 North Star Extension
 NJA20-011 Distance from Mine Pit

Fortescue.

1.4.1 Potential Impacts

Table 5 below outlines the potential impacts to Nyamal’s social surroundings values that may result from implementation of the Proposal within the North Star Extension MDE.

Table 5: Potential impacts to Nyamal’s social surroundings values in relation to North Star Extension

Value	Potential Impact
Heritage Places (and places of cultural significance)	<ul style="list-style-type: none"> • Unauthorised disturbance or clearing of Heritage Places and places of cultural significance. • Unauthorised access into Heritage Places and places of cultural significance by contractors and Fortescue personnel.
Access to Country	<ul style="list-style-type: none"> • Temporary and / or permanent disruption of access to Country and places of cultural significance
Ability to enjoy Country (aesthetics)	<ul style="list-style-type: none"> • Changes to local landforms impacting on aesthetics and visual amenity, such as construction of waste rock dump and associated infrastructure. • Construction and operational activities resulting in air quality, noise, and vibration impacts. • Dust deposition resulting in reduced aesthetics and visual impacts.
Plants and animals	<ul style="list-style-type: none"> • Loss of culturally significant flora and / or fauna species • Unauthorised disturbance or clearing of areas of culturally significant flora or fauna habitat.
Water	<ul style="list-style-type: none"> • Changes to hydrological regimes of culturally significance waters sources, including alteration of surface water and groundwater quantity, and water quality. • Seepage of acid rock, or spills, leaks, or overflow of hydrocarbons or chemicals resulting in degradation and contamination of surface water and groundwater

The management actions included in this have been developed to avoid or reduce these potential impacts and thus adequately manage Nyamal’s social surroundings values within and surrounding the North Star Extension MDE.

2 OBJECTIVES AND SCOPE

This SCHMP addresses the EPA's key objective for the Social Surroundings environmental factor:

“To protect social surroundings from significant harm”

The scope of this SCHMP is to identify management actions and targets to minimise direct and indirect impacts to the social, cultural, and heritage values of the Nyamal people, resulting from implementation of the Proposal within and surrounding the North Star Extension MDE. Objective-based mitigation measures have been developed to ensure the management objectives are met and must be implemented by Fortescue during construction, operation, and closure of the development.

2.1 Rationale and Approach to Social Surroundings

To reduce significant impacts to social, cultural, and heritage values within a development or project area, Fortescue has developed a Social Surroundings management framework for Native Title stakeholders.

The underlying principles of this management framework are:

- Identify the social, cultural, and heritage values within and surrounding the Project.
- Identify the potential risks / threats to those values resulting from the Project.
- Undertake relevant assessments to determine the level of impact (direct, indirect, and cumulative) to those values.
- Develop appropriate management strategies to avoid or minimise impacts to social, cultural, and heritage values.
- Establish an ongoing consultation framework for the implementation and review of the SCHMP.

To comply with these underlying principles, Fortescue has developed key management objectives which form the basis of the management framework and can be adjusted to align with the management objectives of the Native Title holders. Appropriate management targets and actions are then established to ensure Fortescue meets these objectives and delivers on its commitments to the Native Title holders to minimise impacts to social, cultural, and heritage values. The management framework also acknowledges that management strategies can evolve and change as our understanding of the effectiveness of these strategies is understood, or as new information or technology becomes available. As such, this SCHMP is understood to be a “living document” and will change over the life of the project.

The management objectives and target established for this SCHMP are outlined in Section 2.1, below. Management actions and performance indicators to ensure these objectives are met, are outlined in Section 3.

2.2 Management Objectives and Targets

A series of management objectives and targets have been developed to mitigate potential environmental impacts to social, cultural, and heritage values resulting from implementation of the North Star Magnetite within and surrounding the North Star Extension MDE.

Table 6: Management Objectives and Targets

Management Objective	Management Target
<p>Protect places of cultural significance within and surrounding the North Star Extension MDE and develop management strategies to;</p> <ul style="list-style-type: none"> a) Minimise disturbance to places of cultural significance resulting from Fortescue activity in relation to the Proposal. b) Minimise unauthorised entry to places of cultural significance by Fortescue employees or contractors. 	<p>No unauthorised disturbance to places of cultural significance resulting from implementation of the Proposal.</p> <p>No implementation of the Proposal within the boundaries of Heritage Exclusion Zones (where identified).</p> <p>No unauthorised entry to places of cultural significance by Fortescue employees or contractors.</p>
<p>Minimise indirect impacts, including visual, dust, noise, and vibration, to places of cultural significance within and surrounding the North Star Extension MDE and develop management strategies to minimise these impacts in areas identified as high risk².</p>	<p>Develop management targets for visual and noise impacts prior to implementation of the Proposal within and surrounding the North Star Extension MDE.</p> <p>Vibration levels do not exceed peak particle velocity of 25 millimetres per second (mm/s) at places of cultural significance identified as Vibration Sensitive Sites (VSS) that fall within Blast Exclusion Zones³.</p> <p>Dust levels do not exceed an interim target⁴ of 4 grams(g)/m²/month over three consecutive monitoring periods at dust sensitive sites during construction or operation of the Proposal (where identified).</p> <p>Develop appropriate monitoring programs to detect any impacts / change resulting from exceedance of interim target levels.</p>
<p>Minimise potential loss of access to Country (including places of cultural significance) within and surrounding the North Star Extension MDE and develop management strategies to maintain access (where appropriate and required⁵).</p>	<p>Access to key areas or places of cultural significance is maintained during construction and operation of the Proposal (where identified and safe to do so).</p> <p>Access to areas or places of cultural significance is maintained after closure.</p>
<p>Minimise loss of culturally significant flora and / or fauna within and surrounding the North Star Extension MDE and</p>	<p>No significant loss of culturally significant flora species resulting from ground clearing activities or implementation of the Proposal.</p>

² High risk areas are areas where activities likely to result in impact (direct and indirect) to social, cultural, and heritage values may be undertaken.

³ The Blast Exclusion Zone for the Proposal is 600 m (min). Any deviation to this must follow the risk assessment process in accordance with the *Iron Bridge Blasting Operations Management Plan* (IB-1200-PL-OP-0001).

⁴ Due to the lack of studies and guidelines relating to dust impacts on heritage places in the Pilbara, an interim target level has been set until sufficient data can be collected to confirm the interim target or identify a more appropriate target level (ETA 2023). Any changes to target levels will follow the Adaptive Management and Review Process outlined in this plan (see Sections 4 and 7).

⁵ Access to places will be maintained in accordance with relevant Native Title access agreements and closure plans, or where the Native Title holders have requested access to a specific place to undertake a particular purpose during construction and operation of the Proposal (where safe to do so).

<p>develop management strategies to minimise impacts within areas identified as high risk.</p>	<p>No significant loss of culturally significant fauna habitat resulting from ground clearing activities or implementation of the Proposal.</p> <p>No unauthorised disturbance to areas of culturally significant flora and fauna resulting from implementation of the Proposal.</p> <p>Establish appropriate criteria to monitor areas of culturally significant flora and / or fauna within high-risk areas prior to implementation of the Proposal (where identified).</p>
<p>Maintain hydrological regimes including quality, and quantity of culturally significant water sources within and surrounding the North Star Extension MDE.</p> <p>Maintain ecological health of culturally significant water sources within and surrounding the North Star Extension MDE to the extent that existing and potential uses, and reliant ecosystems are protected.</p>	<p>No significant change to surface water or groundwater quality or quantity of culturally significant water sources resulting from implementation of the Proposal greater than predicted⁶.</p> <p>Establish appropriate criteria to monitor ecological health of culturally significant water sources prior to implementation of the Proposal.</p> <p>Establish trigger targets and / or threshold criteria, including contingency actions, to monitor for changes to natural variation of water quality and quantity of culturally significant water sources resulting from implementation of the Proposal.</p>

⁶ Changes to Inland Waters are predicted to result in no significant loss of environmental or cultural values and no significant decrease in surface water or groundwater quality due to implementation of the Proposal. Refer to [Section 38 Significant Amendment to Approved Proposal – Environmental Review Document](#) (662NS-0000-AE-EN-0001).

3 MANAGEMENT OF SOCIAL SURROUNDINGS

For each objective outlined in Table 6 above, management actions and performance indicators have been developed to ensure environmental impacts resulting from Fortescue’s implementation of the Proposal within and surrounding the North Star Extension MDE are managed effectively, and that appropriate monitoring activities, reporting, and contingency actions are applied to support the successful application of mitigation measures.

This management process ensures that appropriate mitigation measures have been identified and that evaluation and review of the management process is undertaken effectively to adapt and improve on the implementation of this SCHMP as required.

Key elements of the management process associated with each objective is described in Table 7.

Table 7: Key Elements of the Management Process

Element	Description
Objective	What is intended to be achieved.
Management Action	Tasks undertaken to enable the objective and target level(s) to be met.
Performance Indicators	Metrics for measuring if the management action has been achieved.
Reporting Evidence	Demonstrates that the management action has been applied and the outcome meets the target level and performance indicator.
Timing	Period during which the management action must be undertaken.
Responsibility	Accountability for ensuring the management action is completed. In some instances, the responsible role is dependent on project timing.

3.1 Management Actions

Table 8 below outlines the management actions that will be implemented to manage direct and indirect impacts to Social Surroundings resulting from implementation of the Proposal within and surrounding the North Star Extension MDE. Appropriate performance indicators, reporting evidence, timing provisions, and responsibilities for each management action is also described below.

Table 8: Management Actions and Performance Indicators for Social Surroundings Management within and surrounding the North Star Extension MDE

Reference	Management Action	Performance Indicators	Reporting / Evidence	Timing	Responsibility
Objective 1	Protect places of cultural significance within and surrounding the North Star Extension MDE and develop management strategies to: a) Minimise disturbance to places of cultural significance resulting from Fortescue activity in relation to the Proposal. b) Minimise unauthorised entry to places of cultural significance by Fortescue employees or contractors.				
1.1	Undertake relevant heritage surveys and site consultation to identify places of cultural significance.	<ul style="list-style-type: none"> Heritage surveys and site visits are undertaken (where required). Places of cultural significance are documented (where identified). 	<ul style="list-style-type: none"> GIS database Map showing outcomes of surveys / consultation Heritage surveys / site visits 	Relevant heritage surveys and consultation undertaken prior to ground disturbing activities or during the approvals process (where applicable).	<ul style="list-style-type: none"> Manager Heritage Approvals
1.2	Places of cultural significance to be recorded in Fortescue's GIS system as Heritage Places, Heritage Restriction Zones (HRZs), and / or Heritage Exclusion Zones (Exclusion Zones).	<ul style="list-style-type: none"> Where identified, Heritage Place, HRZ, and Exclusion Zone boundaries recorded accurately in Fortescue's GIS system. 	<ul style="list-style-type: none"> GIS database Map showing location of places 	<p>GIS system updated within one month of receiving spatial data from external consultants and / or Nyamal.</p> <p>Annual review of spatial data during construction and operation phase.</p>	<ul style="list-style-type: none"> Manager Heritage Approvals Manager Heritage Compliance
1.3	Mine plans are developed to ensure no direct disturbance to places of cultural significance resulting from implementation of the Proposal (where practicable ⁷). Mine plans are developed to ensure no direct disturbance to Exclusion Zones resulting from implementation of the Proposal.	<ul style="list-style-type: none"> Mine plans are developed to avoid places of cultural significance (where practicable). Mine plans are developed to avoid Exclusion Zones. 	<ul style="list-style-type: none"> Mine plans showing location of Heritage Places, HRZs, and Exclusion Zones 	Revision of mine plans prior to ground disturbance activities or as required through the approvals process.	<ul style="list-style-type: none"> Manager Heritage Approvals Manager Mine Planning
1.4	Mine plans are developed to ensure the proposed North Star Extension pit crest is not within 100 m of NJA20-011 boundary (unless otherwise authorised ⁸).	<ul style="list-style-type: none"> Southern pit boundary is at least 100 m from NJA20-011. 	<ul style="list-style-type: none"> Map showing pit location 	Revision of mine plans prior to ground disturbance activities or as required through the approvals process.	<ul style="list-style-type: none"> Manager Heritage Approvals Manager Mine Planning
1.5	Undertake relevant impact assessments or studies to assess potential impacts (direct and indirect) to places of cultural significance resulting from implementation of the Proposal.	<ul style="list-style-type: none"> Relevant impact assessments are undertaken prior to ground disturbing works (where required). 	<ul style="list-style-type: none"> Impact assessments / studies Risk Assessments 	Relevant assessments or studies to be undertaken prior to ground disturbing works or as mine plan / activities change (where required).	<ul style="list-style-type: none"> Manager Heritage Approvals
1.6	Where places of cultural significance cannot be avoided, seek heritage approvals (as required) in accordance with relevant heritage legislation.	<ul style="list-style-type: none"> Relevant heritage approvals are obtained. 	<ul style="list-style-type: none"> Heritage approval 	Relevant heritage approvals are sought prior to activities commencing in the area.	<ul style="list-style-type: none"> Manager Heritage Approvals
1.7	Where required, physical demarcation of place boundaries in proximity to ground disturbing activities or activity area ⁹ (or a combination of both), may be undertaken to ensure no unauthorised disturbance or access to places of cultural significance resulting from implementation of the Proposal.	<ul style="list-style-type: none"> Where applied, demarcation of places of cultural significance recorded in Fortescue's Business Management System (BMS) and GIS system. Where applied, demarcation of activity areas recorded in Fortescue's LMS system. 	<ul style="list-style-type: none"> BMS GIS database LMS system 	<p>Demarcation of place boundaries prior to ground disturbing activities or as required.</p> <p>Demarcation of activity area in accordance with LUC conditions prior to ground disturbing activities.</p> <p>Annual review of spatial data during construction and operation phase.</p>	<ul style="list-style-type: none"> Manager Heritage Compliance
1.8	Utilise Fortescue's LUC process to apply heritage management measures on activities requested to be undertaken on Fortescue tenured land where these activities have the potential to impact Aboriginal cultural heritage (known and unknown).	<ul style="list-style-type: none"> Heritage conditions applied to LUCs (where applicable). 	<ul style="list-style-type: none"> LUCs 	Relevant heritage conditions to be applied during LUC assessment process (where applicable).	<ul style="list-style-type: none"> Manager Heritage Approvals

⁷ Where possible, Fortescue aims to avoid all places of cultural significance. However, in some instances, the design or location of proposed activities cannot avoid impact (direct or indirect) to these places. The approvals process ensures the Native Title holders are consulted on these impacts and all relevant heritage approvals are sought prior to ground disturbance activities commencing.

⁸ Should mine plans require the pit boundary to be within 100 m of NJA20-011, consultation with Nyamal on the mine plan will occur.

⁹ The requirement for physical demarcation of places of cultural significance and / or LUC activity areas will be assessed during the LUC approvals process and takes into consideration the proposed activity and proximity to places of cultural significance.

1.9	Undertake assessment of aerial photography to verify that there has been no unauthorised development or clearing to places of cultural significance within and surrounding the North Star Extension MDE.	<ul style="list-style-type: none"> No unauthorised clearing or development within places of cultural significance. 	<ul style="list-style-type: none"> Aerial images / maps 	Quarterly disturbance reconciliation during construction and operation (or as required).	<ul style="list-style-type: none"> Manager Heritage Compliance
1.10	Undertake on-ground inspection of highly sensitive receptors ¹⁰ (where identified) within and surrounding the North Star Extension MDE to ensure no unauthorised disturbance has occurred during implementation of the Proposal.	<ul style="list-style-type: none"> No unauthorised clearing or development within places of cultural significance 	<ul style="list-style-type: none"> Place Assessment Condition form 	Quarterly inspection of highly sensitive receptors during construction and operation phase (or as required).	<ul style="list-style-type: none"> Manager Heritage Compliance
1.11	Mobilisation inductions for personnel travelling to site to include cultural heritage awareness and the LUC process.	<ul style="list-style-type: none"> All personnel travelling to site complete general and project inductions prior to mobilisation (where required). Induction package includes up to date cultural heritage awareness and LUC process awareness information. 	<ul style="list-style-type: none"> Training register Induction package 	Completion of general and project inductions before mobilisation to site.	<ul style="list-style-type: none"> Project Manager (Construction) General Manager (Operation) Group Manager Cultural Heritage
1.12	Where requested, develop site-specific access protocols to ensure the cultural safety of authorised personnel entering places of high cultural significance (including mythological places). Where applicable, site-specific access protocols to include provisions for Fortescue employee and contractor access when Nyamal representatives cannot be present.	<ul style="list-style-type: none"> Site-specific Cultural Access Protocol developed for key places of high cultural significance (where requested). 	<ul style="list-style-type: none"> Site-specific Cultural Access Protocol 	Site-specific Cultural Access Protocol to be developed within 1 year of this SCHMP being approved or within 1 year of request (where agreed) thereafter.	<ul style="list-style-type: none"> Manager Heritage Compliance
Objective 2	Minimise indirect impacts, including visual, dust, noise, and vibration, to places of cultural significance within and surrounding the North Star Extension MDE and develop management strategies to minimise these impacts in areas identified as high risk.				
Reference	Management Action	Performance Indicators	Reporting Evidence	Timing	Responsibility
2.1	Identify places of cultural significance that may be considered dust, noise, vibration, or visual sensitive receptors within and surrounding the North Star Extension MDE.	<ul style="list-style-type: none"> Dust, noise, vibration, and visual sensitive receptors are recorded in Fortescue's GIS system (where identified). 	<ul style="list-style-type: none"> GIS database Map showing sensitive receptors 	Identification of dust, noise, vibration, or visual sensitive receptors to be undertaken prior to ground disturbance activities or during the approvals process (where applicable).	<ul style="list-style-type: none"> Manager Heritage Approvals
2.2	Undertake relevant assessments or studies to assess potential indirect impacts (including dust, visual, noise, and vibration) to sensitive receptors resulting from implementation of the Proposal within and surrounding the North Star Extension MDE (where required).	<ul style="list-style-type: none"> Relevant impact assessments are undertaken prior to ground disturbing works (where required). 	<ul style="list-style-type: none"> Impact assessments Risk assessments 	Relevant assessments or studies to be undertaken prior to ground disturbance activities or as mine plan / activities change (where required).	<ul style="list-style-type: none"> Manager Heritage Approvals
2.3	Establish appropriate management targets and mitigation measures to avoid or reduce impacts to noise and visual sensitive receptors resulting from implementation of the Proposal within and surrounding the North Star Extension MDE.	<ul style="list-style-type: none"> Noise and visual management targets and mitigation controls identified (where required). 	<ul style="list-style-type: none"> Management targets 	Management targets and mitigation controls to be identified within 1 year of undertaking relevant assessments or prior to ground disturbing works (where required).	<ul style="list-style-type: none"> Manager Heritage Approvals
2.4	Undertake baseline dust monitoring at dust sensitive receptors within and surrounding the North Star Extension MDE to establish appropriate dust target levels for ongoing monitoring during implementation of the Proposal (where required).	<ul style="list-style-type: none"> Appropriate target levels for ongoing dust monitoring established (where required). 	<ul style="list-style-type: none"> Dust monitoring results Management targets 	Target levels for dust monitoring established prior to undertaking dust generating activities.	<ul style="list-style-type: none"> Manager Heritage Approvals Manager Environment Approvals / Operations

¹⁰ Highly sensitive receptors are places of cultural significance identified by the Native Title holders as being of particularly high cultural importance, located in proximity to ongoing operations / activities and are at risk for potential impact by Fortescue's activities.

2.5	<p>Manage dust generating activities to minimise indirect impacts of dust on places of cultural significance identified as dust sensitive within and surrounding the North Star Extension MDE. Management measures may include:</p> <ul style="list-style-type: none"> • Dust suppression activities, such as the use of water carts. • Traffic management activities, such as vehicle speed restrictions to reflect road conditions. • Implementation of Fortescue's <i>Mine and Rail Dust Management Plan</i> (IO-PL-EN-0001). • Implementation of contingency actions in response to target exceedances. 	<ul style="list-style-type: none"> • Dust management measures are implemented to ensure interim targets are not exceeded (see Table 6). 	<ul style="list-style-type: none"> • Dust monitoring results 	<p>Monthly dust monitoring during construction and operation phase (or as required¹¹).</p>	<ul style="list-style-type: none"> • Project Manager (Construction) • General Manager (Operation)
2.6	<p>Manage blasting activities in accordance with <i>Blasting Near Heritage Places Procedure</i> (100-PR-HE-0003) and <i>Iron Bridge Blasting Operations Management Plan</i> (IB-1200-PL-OP-0001) to minimise indirect impacts of vibration on places of cultural significance identified as vibration sensitive within and surrounding the North Star Extension MDE. Management measures may include:</p> <ul style="list-style-type: none"> • Controlled blasting activities. • Vibration monitoring undertaken for all blasts where VSS places and / or unsurveyed land falls within the Blast Exclusion Zone. • Undertake condition assessment of VSS places within the Blast Exclusion Zone prior to blasting activities. • Implementation of contingency actions in response to target exceedances (see Table 10 below). 	<ul style="list-style-type: none"> • Vibration monitoring results do not exceed targets outlined in Table 6 above. 	<ul style="list-style-type: none"> • Place Condition Assessment • Vibration monitoring results 	<p>Condition assessments of VSS places within the Blast Exclusion Zone prior to blasting activities.</p> <p>Vibration monitoring of VSS places within the Blast Exclusion Zone is undertaken during blasting activities.</p>	<ul style="list-style-type: none"> • Project Manager (Construction) • General Manager (Operation) • Quarry Manager • Manager Heritage Compliance
Objective 3	Minimise potential loss of access to Country (including places of cultural significance) within and surrounding the North Star Extension MDE and develop management strategies to maintain access (where appropriate and required).				
Reference	Management Action	Performance Indicators	Reporting Evidence	Timing	Responsibility
3.1	<p>Identify areas to undertake traditional activities including (but not limited to) hunting or camping grounds, ceremonial purposes, or other traditional and contemporary use within and surrounding the North Star Extension MDE.</p> <p>Where identified record areas to undertake traditional activities in Fortescue's GIS system as Heritage Places or HRZs.</p>	<ul style="list-style-type: none"> • Where identified, boundaries of areas to undertake traditional activities are recorded accurately within Fortescue's GIS system (where identified). 	<ul style="list-style-type: none"> • GIS database • Map showing location of places 	<p>GIS system updated within one month of receiving spatial data from external consultants and / or Nyamal.</p> <p>Annual review of spatial data during construction and operation phase.</p>	<ul style="list-style-type: none"> • Manager Heritage Approvals • Manager Heritage Compliance
3.2	<p>Identify places of cultural significance within and surrounding the North Star Extension MDE requiring access during implementation of the Proposal.</p>	<ul style="list-style-type: none"> • Places of cultural significance requiring access are identified. 	<ul style="list-style-type: none"> • GIS database • Map showing location of places 	<p>GIS system updated within one month of receiving spatial data from external consultants and / or Nyamal.</p> <p>Annual review of spatial data during construction and operation phase.</p>	<ul style="list-style-type: none"> • Manager Heritage Approvals • Manager Heritage Compliance

¹¹ Where evaluation of the monitoring data or modelling shows that sensitive receptors are no longer at risk from implementation of the Proposal, ongoing monitoring may cease.

3.3	Where possible (and safe to do so), develop mine and closure plans to maintain access to places of cultural significance and areas to undertake traditional activities within and surrounding the North Star Extension MDE (where identified).	<ul style="list-style-type: none"> Mine and closure plans are developed to maintain access to places of cultural significance and traditional areas (where possible and safe to do so). 	<ul style="list-style-type: none"> Map showing access 	Annual review and update of access map (as required ¹²).	<ul style="list-style-type: none"> Manager Heritage Approvals Manager Operations Planning Manager Long Term Planning
3.4	Fortescue to develop an Access Protocol in consultation with Nyamal outlining the process for accessing key places of cultural significance (including areas to undertake traditional activities) within and surrounding the North Star Extension MDE during implementation of the Proposal (where required).	<ul style="list-style-type: none"> Access Protocol is developed and implemented 	<ul style="list-style-type: none"> Access Protocol 	Access Protocol to be developed within 1 year of this SCHMP being approved.	<ul style="list-style-type: none"> Manager Heritage Compliance
Objective 4	Minimise loss of culturally significant flora and / or fauna within and surrounding the North Star Extension MDE and develop management strategies to minimise these impacts within areas identified as high risk.				
Reference	Management Action	Performance Indicators	Reporting Evidence	Timing	Responsibility
4.1	Identify flora species of traditional value within and surrounding the North Star Extension MDE. Where areas of culturally significant flora are identified, record these in Fortescue's GIS system as Heritage Places or HRZs.	<ul style="list-style-type: none"> Culturally significant flora species are documented (where identified). Areas of culturally significant flora are recorded accurately in Fortescue's GIS system (where identified). 	<ul style="list-style-type: none"> GIS database Map showing location of places Relevant surveys 	GIS system updated within one month of receiving spatial data from external consultants and / or Nyamal. Annual review of spatial data during construction and operation phase.	<ul style="list-style-type: none"> Manager Heritage Approvals Manager Heritage Compliance
4.2	Identify fauna species of traditional value within and surrounding the North Star Extension MDE. Where areas or habitats of culturally significant fauna are identified, record these in Fortescue's GIS system as Heritage Places or HRZs.	<ul style="list-style-type: none"> Culturally significant fauna species are documented (where identified). Areas of culturally significant fauna are recorded accurately in Fortescue's GIS system (where identified). 	<ul style="list-style-type: none"> GIS database Map showing location of places Relevant surveys 	GIS system updated within one month of receiving spatial data from external consultants and / or Nyamal. Annual review of spatial data during construction and operation phase.	<ul style="list-style-type: none"> Manager Heritage Approvals Manager Heritage Compliance
4.3	Undertake relevant assessments to assess potential impacts to culturally significant flora and fauna resulting from implementation of the Proposal within and surrounding the North Star Extension MDE.	<ul style="list-style-type: none"> Relevant impact assessments are undertaken prior to ground disturbing works (where required). 	<ul style="list-style-type: none"> Impact assessments Risk assessments 	Relevant assessments or studies to be undertaken prior to ground disturbing works or as mine plan / activities change (where required).	<ul style="list-style-type: none"> Manager Heritage Approvals
4.4	Establish appropriate criteria to monitor areas of culturally significant flora and / or fauna that may be impacted by implementation of the Proposal within and surrounding the North Star Extension MDE.	<ul style="list-style-type: none"> Criteria and target levels to monitor areas of culturally significant flora and / or fauna identified (where applicable). 	<ul style="list-style-type: none"> Management targets 	Management targets and mitigation controls to be identified within 1 year of undertaking relevant assessments or prior to ground disturbing works (where required).	<ul style="list-style-type: none"> Manager Heritage Approvals
4.5	Manage ground disturbing activities to minimise loss of culturally significant flora identified within and surrounding the North Star Extension MDE. Management measures may include: <ul style="list-style-type: none"> Minimise clearing and disturbance to ensure no significant loss of native flora. Implement <i>Iron Bridge Weed Management Plan</i> (IB-0000-PL-EN-0002) to maintain representation and biodiversity of native flora. Implement <i>Iron Bridge Veg Health Monitoring & Management Plan</i> (IB-0000-PL-EN-0002) to ensure no decline in veg health and biodiversity to Groundwater Dependent Ecosystems (GDE). 	<ul style="list-style-type: none"> Ground disturbing activities are undertaken to minimise loss of culturally significant flora species and impacts to areas of culturally significant flora. 	<ul style="list-style-type: none"> Monitoring results (where applicable) Mine plans showing location of places 	Monitor areas of culturally significant flora during construction and operation phase (where identified). Revision of mine plans prior to ground disturbance activities or as required through the approvals process.	<ul style="list-style-type: none"> Manager Environment Operations / Governance Manager Mine Planning Manager Heritage Approvals Manager Heritage Compliance

¹² Maps showing access locations will be provided during the construction or operation phase of the Proposal where new areas to requiring access have been identified or as requested by Nyamal.

	<ul style="list-style-type: none"> Infrastructure and mine plans are designed to avoid or minimise impacts to areas of culturally significant flora (where identified). Progressively rehabilitate disturbed land that is not required to support ongoing operations with local native plant species that support native fauna foraging and area amenity. 				
4.6	<p>Manage ground disturbing activities to minimise loss of culturally significant fauna identified within and surrounding the North Star Extension MDE. Management measures may include:</p> <ul style="list-style-type: none"> Minimise clearing and loss of native fauna habitat to ensure no significant loss of native fauna. Implement a feral animal program to manage and control feral animals to minimise impacts on native fauna. Minimise potential impacts to populations of the Northern Quoll in accordance with the <i>Northern Quoll Management Plan</i> (662MI-5500-PL-EN-0001). Infrastructure and mine plans are designed to avoid or minimise impacts to areas of culturally significant fauna (where identified). Monitor trenching activities to clear open trenches of fauna daily and prior to backfilling or install ramps or other devices. 	<ul style="list-style-type: none"> Ground disturbing activities are undertaken to minimise loss of culturally significant fauna species and impacts to areas of culturally significant fauna. 	<ul style="list-style-type: none"> Monitoring results (where applicable) Mine plans showing location of sensitive receptors 	<p>Monitor areas of culturally significant flora during construction and operation phase (where identified).</p> <p>Revision of mine plans prior to ground disturbance activities or as required through the approvals process.</p>	<ul style="list-style-type: none"> Manager Environment Operations / Governance Manager Mine Planning Manager Heritage Approvals Manager Heritage Compliance
4.7	Consult with Nyamal on rehabilitation programs and where possible, incorporate native flora species.	<ul style="list-style-type: none"> Where rehabilitation plans are required, plans incorporate native flora species (where possible) Nyamal is consulted on rehabilitation plans 	<ul style="list-style-type: none"> Rehabilitation plans 	Where required, develop rehabilitation plans in collaboration with Nyamal prior to implementing progressive rehab works.	<ul style="list-style-type: none"> Manager Heritage Approvals Manager Environment Operations / Governance
Objective 5	<p>Maintain hydrological regimes, including water quality and quantity (flow and level), of culturally significant water sources within and surrounding the North Star Extension MDE.</p> <p>Maintain ecological health of culturally significant water sources within and surrounding the North Star Extension MDE to the extent that existing and potential uses, and reliant ecosystems are protected.</p>				
Reference	Management Action	Performance Indicators	Reporting Evidence	Timing	Responsibility
5.1	<p>Undertake relevant heritage surveys and consultation to identify culturally significant water sources within and surrounding the North Star Extension MDE.</p> <p>Where culturally significant water sources are identified, record these in Fortescue's GIS system as Heritage Places or HRZs.</p>	<ul style="list-style-type: none"> Culturally significant water sources are documented (where identified). Culturally significant water sources are recorded accurately in Fortescue's GIS system (where identified). 	<ul style="list-style-type: none"> GIS database Map showing location of places 	<p>GIS system updated within one month of receiving spatial data from external consultants and / or Nyamal.</p> <p>Annual review of spatial data during construction and operation phase.</p>	<ul style="list-style-type: none"> Manager Heritage Approvals Manager Heritage Compliance
5.2	Undertake relevant assessments or studies to assess potential impacts (direct and indirect) to culturally significant water sources that may be impacted by implementation of the Proposal (where required).	<ul style="list-style-type: none"> Relevant impact assessments are undertaken prior to ground disturbing works or groundwater abstraction (where required). 	<ul style="list-style-type: none"> Impact assessments Risk assessments 	Relevant assessments or studies to be undertaken prior to groundwater abstraction or ground disturbing works or as mine plan / activities change (where required).	<ul style="list-style-type: none"> Manager Heritage Approvals Senior Manager Water Planning
5.3	Establish appropriate criteria and target levels to manage ecological health of culturally significant water sources that may be impacted by implementation of the Proposal (where identified).	<ul style="list-style-type: none"> Criteria and target levels to manage ecological health of culturally significant water sources identified (where applicable). 	<ul style="list-style-type: none"> Management targets 	Criteria and target levels to be understood within 1 year of relevant studies being completed or prior to ground disturbing works within high-risk areas.	<ul style="list-style-type: none"> Manager Heritage Approvals Manager Environment Operations / Governance

5.4	Undertake baseline monitoring to establish trigger targets and / or threshold criteria, including contingency actions, to monitor for changes to natural variation of water quality and quantity (flow and level) of culturally significant water sources within the North Star Extension MDE resulting from implementation of the Proposal.	<ul style="list-style-type: none"> • Trigger targets, threshold criteria, and contingency actions identified (where applicable). 	<ul style="list-style-type: none"> • Trigger targets / Threshold criteria • Contingency actions 	Trigger targets / Threshold criteria to be understood within 1 year of relevant studies being completed or prior to ground disturbance activities within high-risk areas.	<ul style="list-style-type: none"> • Manager Heritage Approvals • Manager Environment Operations / Governance
5.5	<p>Manage mining activities to minimise impacts to hydrological regimes, including quality and quantity (flow and level) of culturally significant water sources within and surrounding the North Star Extension MDE. Management measures may include:</p> <ul style="list-style-type: none"> • Minimise impacts to water catchments containing culturally significant water sources. • Avoid as far as practicable, interactions with significant water features and water flow of water sources. • Infrastructure and mine plans are designed to allow flow of water to and from culturally significant water sources. • Infrastructure and mine plans are designed to avoid or minimise impacts to water quality or quantity of significant pools (including discharge, sediment release and / or seepage). • Implement mitigation controls to reduce sediment runoff resulting from mining activities into culturally significant pools. • Periodically model and review surface water and groundwater predictions during the mine life and as part of Closure Plan to ensure no significant change to culturally significant water sources greater than predicted. • Implement mining and water management activities in accordance with <i>Surface Water Management Plan</i> (NS-00000-PL-EN-0001), <i>Site 12 Pool Water Quality and Quantity Management Plan</i> (662MI-5700-PL-WM-0001), and <i>North Star Groundwater Operating Strategy</i> (661MI-0000-PL-HY-000). 	<ul style="list-style-type: none"> • No loss of permanent culturally significant pools resulting from implementation of the Proposal • No contamination to downstream surface water systems or groundwater resulting from implementation of the Proposal. • No significant interruption of water flow to culturally significant pools resulting from implementation of the Proposal. 	<ul style="list-style-type: none"> • Monitoring results • Surface water and groundwater assessments • Mine plans showing location of places 	<p>Water monitoring undertaken in accordance with relevant monitoring program during construction and operation phase (or as required).</p> <p>Revision of mine plans prior to ground disturbance activities or as required through the approvals process.</p>	<ul style="list-style-type: none"> • Manager Environment Approvals / Operations • Senior Manager Water Planning • Manager Heritage Approvals • Manager Heritage Compliance
5.6	Undertake consultation with Nyamal to establish appropriate locations for discharge of excess water to minimise environmental and ecological risk to culturally significant water sources.	<ul style="list-style-type: none"> • Appropriate discharge locations identified in consultation with Nyamal. 	<ul style="list-style-type: none"> • Approved discharge locations 	Consultation with Nyamal prior to discharge of excess water during construction and operation of the Proposal.	<ul style="list-style-type: none"> • Manager Heritage Approvals • Manager Environment Approvals / Operations

3.2 Monitoring Guidelines

Monitoring programs are required to measure the effectiveness of management actions to meet the following targets:

- Dust levels do not exceed interim target of $4\text{g}/\text{m}^2/\text{month}$ (over three consecutive monitoring periods) at dust sensitive places;
- Vibration monitoring results do not exceed peak particle velocity of 25 mm / s for VSS places within the Blast Exclusion Zone;
- No significant loss of culturally significant flora and / or fauna species; and
- No significant change greater than predicted to hydrological regimes of culturally significant water sources resulting from implementation of the Proposal.

Where management targets have yet to be identified for the management objectives (see Table 6 above), any required monitoring programs will be determined once these targets have been set.

The outcomes from these monitoring programs will contribute to ongoing improvements in the management actions to ensure an adaptive management approach is applied. Monitoring guidelines for the above monitoring programs are outlined in the relevant environmental management plans or procedures developed for the Proposal and thus are not provided in detail in this SCHMP. Where applicable, reference to the relevant management plan or procedure has been provided.

Table 9 below outlines the target area, parameters being measured, and corresponding management plans and / procedures where the monitoring guidelines have been described.

Table 9: Summary of Relevant Monitoring Programs

Area / Aspect to be Measured	Location	Monitoring Parameters	Collection Method	Frequency	Monitoring Guideline Reference
Dust Monitoring					
Dust deposition	Dust sensitive receptors within the MDE.	Insoluble solids	Dust deposition gauge	Monthly	<i>Dust Deposition Monitoring Procedure (45-PR-EN-0032)</i>
Vibration Monitoring					
Vibration levels	VSS places within Blast Exclusion Zones	Peak particle velocity	Vibration monitors (digital field recordings)	During blasting activity	<i>Blasting Near Aboriginal Heritage Places Procedure (100-PR-HE-003)</i>
Flora and Veg Monitoring					
Vegetation Health	Riparian vegetation of significant surface water pools	Primary – Condition and health, leaf water potential.	Pre-dawn and midday collection of leaf shoots from canopy and tested using a pressure chamber Visual assessment ¹³ NDVI ¹⁴ analysis	Annually	<i>Iron Bridge Vegetation Health Monitoring & Management Plan (662NS-0000-PL-EN-0004)</i> <i>Iron Bridge Surface Water Management Plan (NS-00000-PL-EN-0001)</i>
		Secondary – Surface water flow, groundwater	Peak level indicator or pressure transducer (surface water flows) Groundwater level measured at identified monitoring bores ¹⁵	As per Surface Water monitoring (see below)	
	Riparian vegetation (inclusive of GDE) downstream of waste rock dump and processing infrastructure	Primary – Condition and health	NDVI analysis	Annually	
		Secondary – Surface water flow (where available)	Peak level indicator or pressure transducer (surface water flows)	As per Surface Water monitoring (see below)	
Fauna Monitoring					
Northern Quolls	Established Quoll monitoring locations within MDE Department of Parks and Wildlife (DPAW) control sites	Population	Trapping Remote camera / motion sensors Active searches (for scat and other signs)	April to Sept	<i>Northern Quoll Management Plan (662MI-5500-PL-EN-0001)</i>
		Behaviour / movement	Radio collar tracking Remote camera / motion sensors	April to Sept	
Surface Water Monitoring					
Major waterways – downstream of development areas	Culturally significance water sources within the MDE ¹⁶	Surface water level and quality (Field Measurement using calibrated instruments Pressure transducers (water level) Rising stage samplers (water quality)	15 min automatic water level logging Quarterly or event-based water sample / field measurement	<i>Iron Bridge Surface Water Management Plan (NS-00000-PL-EN-0001)</i>

¹³ Parameters used for visual assessment of condition and health are outlined in the Iron Bridge Veg Health Monitoring & Management Plan (662NS-0000-PL-EN-0004)

¹⁴ NDVI relates to the Normalised Difference Vegetation Index

¹⁵ Groundwater monitoring bore locations are outlined in the *North Star Groundwater Operating Strategy (661MI-0000-PL-HY-0001)*

¹⁶ Full list of monitoring sites is outlined in the *Iron Bridge Surface Water Management Plan (NS-00000-PL-EN-0001)*

Unimpacted Pools	NJA19-002 NJA19-004	Surface water level	Pressure transducers (water level)	3 hr automatic water level logging
Potentially impacted pools	Culturally significant water sources within the MDE	Surface water level and quality (Physicals, Nutrients, Ions, Metal suite)	Field Measurement using calibrated instruments Pressure transducers (water level) Grab water samples	3 hr automatic water level logging Biannually and / or event based
		Ecosystem health	Visual inspection Aquatic macroinvertebrates sampling Fish community sampling Diatom community sampling Grab water samplers	Biannually
Centroid, upper reaches of catchments. On high ground away from buildings, vegetation etc.	Nate Tower	Rainfall	Local weather stations (including Nate Communication Tower and aerodrome Met Station) Tipping bucket rain gauge	Continuous
Drainage infrastructure	Culverts, bunds, levees, bridge guide banks	Structural integrity Accumulation of sediment and vegetation debris	Field assessment	Annually
	Floodways, diversions, and stormwater drains	Structural integrity Accumulation of sediment and vegetation debris		

3.3 Contingency Actions

Contingency actions will be initiated during construction and operation of the Proposal within and surrounding the North Star Extension MDE when exceedance of a target is identified, and monitoring indicates that implemented management actions are not successfully mitigating impacts (direct and indirect) on Social Surroundings and / or the management objectives are not being achieved.

Where triggers or exceedance limits have not yet been identified for management actions, these will be determined during relevant assessments and ongoing consultation with Nyamal and their representative body, Nyamal Aboriginal Corporation (NAC). The need for additional contingency actions identified at any stage of implementing this SCHMP will trigger the review process outlined in Section 7 below.

Contingency actions for the management of Social Surroundings within and surrounding the North Star Extension MDE are outlined in Table 10 below.

Table 10: Contingency Actions and Trigger Criteria

Management Objective	Trigger Criteria	Contingency Actions
<p>Protect places of cultural significance within and surrounding the North Star Extension MDE and develop management strategies to;</p> <p>a) Minimise disturbance to places of cultural significance resulting from Fortescue activity in relation to the Proposal.</p> <p>b) Minimise unauthorised entry to places of cultural significance by Fortescue employees or contractors.</p>	<p>Unauthorised disturbance to places of cultural significance resulting from implementation of the Proposal.</p> <p>Unauthorised entry to places of cultural significance by Fortescue employees or contractors.</p>	<ul style="list-style-type: none"> • Implement <i>Heritage Incident Investigation and Reporting Procedure</i> (100-PR-HE-0020). Investigation process includes: <ul style="list-style-type: none"> ○ Immediate stop works within the defined area and incident reported to Fortescue’s Heritage Compliance team. ○ Undertake investigation to determine if an incident has occurred, including on-site inspection where required¹⁷. ○ Where determines to be an incident, details of incident to be loaded into BMS¹⁸. ○ Further investigation to establish the cause of the incident. • Where the exceedance or incident was deemed to be a procedural breach (or non-achievement of a management action) and did not cause physical disturbance to a place of cultural significance: <ul style="list-style-type: none"> ○ Review the LUC conditions in the context of the activities being undertaken and determine if the management actions are adequate to reduce the potential for reoccurrence. ○ Follow reporting requirements as per the <i>Heritage Incident Investigation and Reporting Procedure</i> (100-PR-HE-0020). • Where the exceedance or incident caused indirect impacts to a place of cultural significance resulting from implementation of the Proposal: <ul style="list-style-type: none"> ○ Review the exceedance / incident within the context of the activity being undertaken and determine if the management actions are appropriate to reduce the potential for reoccurrence.

¹⁷ Where required, Nyamal representatives will participate in on-site inspections.

¹⁸ BMS is Fortescue’s Business Management System used to record safety, environment, and heritage incidents

		<ul style="list-style-type: none"> ○ Implement measures to correct the impacted area / feature to its prior state (where appropriate and in consultation with Nyamal). ● Where the exceedance / incident results in a breach of the AHA, report the breach in accordance with legislative requirements. ● Opportunities for Nyamal to participate in the investigation will be provided as per the Adaptive Management and Review Processes outlined in this plan.
<p>Minimise indirect impacts, including visual, noise, dust, and vibration impacts to places of cultural significance within and surrounding the North Star Extension MDE and develop management strategies to minimise impacts within areas identified as high risk.</p>	<p>Vibration levels exceed peak particle velocity of 25 mm/s within Blast Exclusion Zones containing places of cultural significance identified as VSS.</p> <p>Dust levels exceed interim target of 4g/m²/month over three consecutive monitoring periods at dust sensitive sites during construction and operation.</p>	<p>Vibration Exceedance:</p> <ul style="list-style-type: none"> ● Implement <i>Heritage Incident Investigation and Reporting Procedure</i> (100-PR-HE-0020) as per above. ● If (and when) required, expert opinion will be sought, to guide contingency measures or management controls which may include further studies or assessments. ● Where the exceedance or incident was deemed to be a procedural breach (or non-achievement of a management action) and did not cause physical disturbance to a place of cultural significance: <ul style="list-style-type: none"> ○ Review the exceedance in the context of the activities being undertaken and determine if the management actions are adequate to reduce the potential for reoccurrence. ○ Follow reporting requirements as per the <i>Heritage Incident Investigation and Reporting Procedure</i> (100-PR-HE-0020). ● Where the exceedance or incident caused indirect impacts to a place of cultural significance resulting from implementation of the Proposal: <ul style="list-style-type: none"> ○ Review the exceedance / incident within the context of the activity being undertaken and determine if the management actions are appropriate to reduce the potential for reoccurrence. ○ Implement measures to correct the impacted area / feature to its prior state (where appropriate and in consultation with Nyamal).

		<ul style="list-style-type: none"> • Where the exceedance / incident results in a breach of the AHA, report the breach in accordance with legislative requirements. • Opportunities for Nyamal to participate in the investigation will be provided as per the Adaptative Management and Review Processes outlined in this plan. <p>Dust Exceedance:</p> <ul style="list-style-type: none"> • As target levels for dust are interim, trigger levels are yet to be determined. • Contingency actions for interim dust levels will follow Early Response Indicators as outlined in Table 11 below).
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4 ADAPTIVE MANAGEMENT

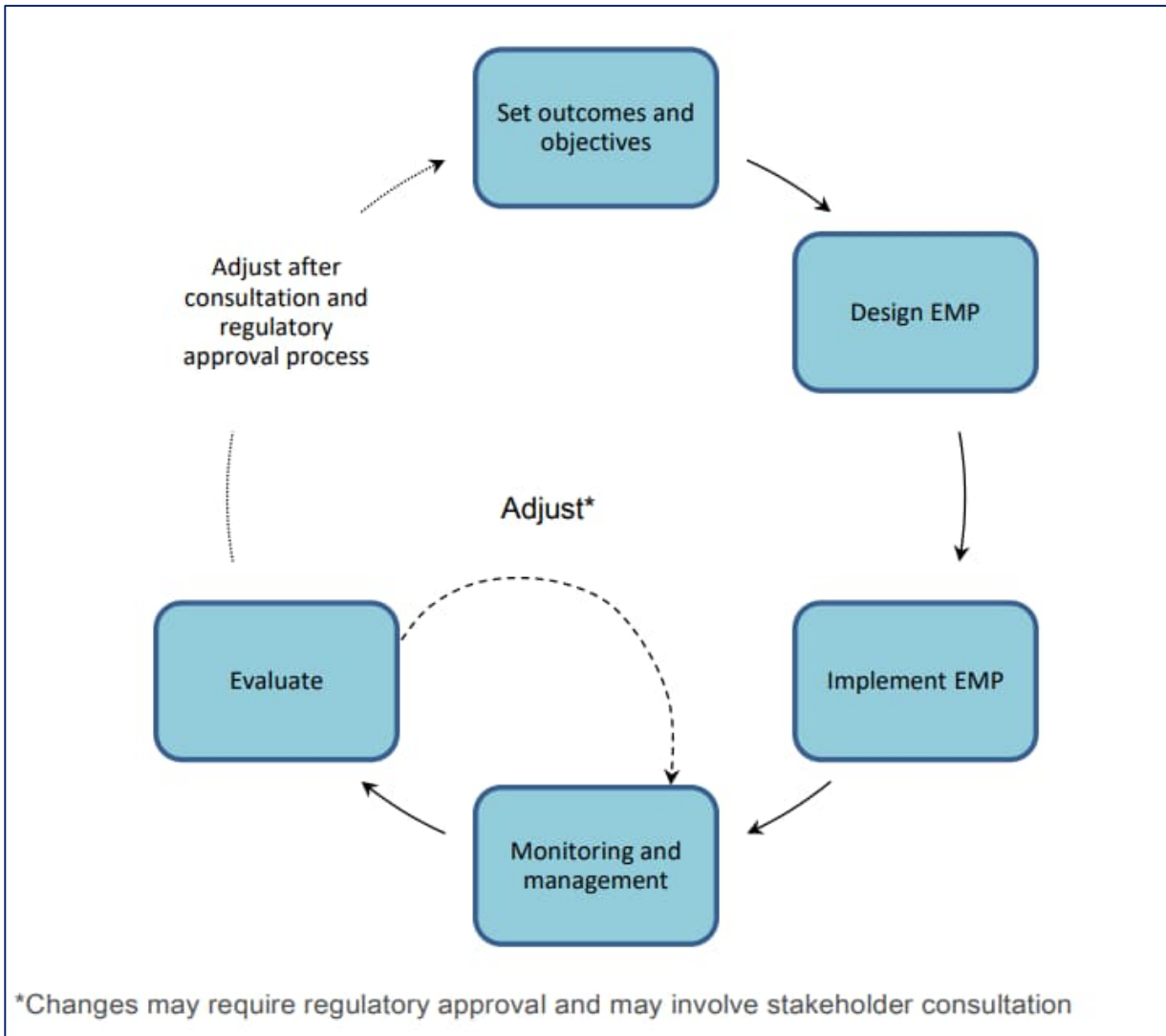
Fortescue will implement adaptive management practices to learn from the implementation of mitigation measures, monitoring activities, and evaluation against management targets, to meet management objectives more effectively. Adaptive management practices that may be assessed for the management and monitoring activities as part of this approach include:

- Evaluation of the monitoring activities, data, and comparison to baseline data and reference sites on an annual basis to verify whether responses to project activities are the same or similar to predictions;
- Review of data and information gathered over the review period that has increased our understanding of potential environmental impacts to places of cultural significance resulting from implementation of the Proposal;
- Review of management actions as the Proposal matures, and new management measures and technologies become available that may be more effective;
- Assessment of changes which are outside the control of the project and the management measures identified (i.e., a new project within the area or region; regional change affecting management);
- Discovery of new Aboriginal cultural heritage i.e., Heritage Places, suspected skeletal remains etc; and
- Concerns raised by the Nyamal and / or their representative body, Nyamal Aboriginal Corporation (NAC), regarding the implementation of management actions or monitoring activities.

The adaptative management process is illustrated in Figure 8 below.

In addition to the adaptative management process, Fortescue has developed a framework for ongoing consultation with Nyamal and their representative body, NAC, regarding implementation of this SCHMP (see Section 5 below). This framework has been developed to ensure that Nyamal have the opportunity to participate in the evaluation and review of the management actions and contingency actions throughout all stages of implementing this SCHMP.

Figure 8: Adaptive Management Cycle for Environmental Management Plans



Taken from How to Prepare EP Act Part IV Environmental Management Plans (EPA 2021).

4.1 Early Response Indicators

Early response indicators can be implemented for key environmental impacts that require additional or more frequent monitoring / management. Within the North Star Extension MDE, early response indicators have been identified for the following environmental impacts (see Table 11).

Table 11: Early Response Indicators

Environmental Impact	Early Response Indicator	Early Response Actions
Dust	Exceedance of, or near exceedance of, 4g / m ² / month at any stage during the monitoring program.	<ul style="list-style-type: none"> • Review weather conditions to determine if exceedance was result of natural event • Review dust suppression controls and increase (where required). • Confirm effectiveness of actions against next month's monitoring results. • If still exceeding, or near exceedance, continue adjusting management controls.

5 CONSULTATION

Consultation regarding the Proposal and development of this SCHMP has been undertaken with Nyamal and their representative body NAC. Where advised by NAC, consultation with Nyamal was directed through NAC's heritage service provider, Barlbimbiny Aboriginal Corporation (BAC). Engagement of Nyamal commenced during the tenure acquisition phase and has continued through development planning and approvals. Information generated from this consultation was used to identify risks and determine appropriate mitigation strategies.

Engagement and consultation with Nyamal is a continuous process that will be conducted throughout the life of the Proposal. A framework for ongoing consultation is outlined in Section 5.1 below.

A consultation register is provided in Table 12 below. This table outlines the consultation undertaken to date with Nyamal, their representative body NAC, and heritage service provider BAC, regarding the development of this SCHMP. Ongoing consultation with Nyamal regarding this SCHMP will be documented through the SCHMP Compliance Report (see Section 6.3) or future revisions of this plan.

Table 12: Consultation Register

Date	Description	Stakeholder	Discussion Items	Proponent Comments	Stakeholder Response
1 Dec 2020	Meeting	Nyamal Heritage Sub-committee (HSC)	Introduction to Social Surroundings and consultation process	Fortescue will seek to undertake social surroundings consultation with Nyamal as part of environmental approvals process.	Nyamal welcomed the opportunity to participate in this consultation.
24-25 Feb 2023	Meeting	Nyamal HSC	Social Surroundings Workshop (2021_NJA_SSC_Workshop1) provided an overview of environmental approvals process and proposed project development. An overview of known cultural values in the project area and discussion of requirements for on-country consultation also provided.	Fortescue to engage Nyamal for on-country consultation to identify social surroundings values within the project area and understand concerns Nyamal may have regarding the development.	Nyamal confirmed target areas for consultation for Trip 1.
22-26 Mar 2021	Fieldwork	Nyamal Traditional Owners	Social Surroundings Trip 1 (2021_NJA_SSC_Trip1) – On-country consultation with Nyamal Traditional Owners and elected heritage. Trip 1 included on-site presentation of to update on the proposed North Star Extension project and social surrounds process.	Key objectives to understand social surroundings values within and surrounding the North Star Extension MDE and identify key concerns Nyamal may have regarding the implementation of the Proposal.	Nyamal comments and views are outlined in the consultant report for this trip (Terra Rosa 2021).
7 May 2021	Meeting	BAC representative	Meeting held with BAC representative and heritage consultants to discuss feedback on draft report for Trip 1.	Amendments to the report required to summarise results and clarify key concerns / issues raised.	Nyamal request Fortescue provide feedback on assessments required to address concerns / issues raised as part of report responses.

Date	Description	Stakeholder	Discussion Items	Proponent Comments	Stakeholder Response
18 May 2021	Email	BAC representative	BAC requested Social Surroundings Trip 2 be postponed until after report has been presented to Nyamal HSC to discuss outcomes of Trip 1 and next steps.	Fortescue agreed to postpone Trip 2 to present outcomes of Trip 1 to Nyamal HSC and discuss requirements for Trip 2.	Nyamal to confirm meeting date.
7 July 2021	Email	BAC representative	Feedback on Trip 1 report	Fortescue feedback on Trip 1 report provided. Responses outline further consultation or assessments required to address Nyamal's concerns and recommendations.	Continuation of social surrounds consultation to action further works.
27 July 2021	Meeting	Nyamal HSC	Update on outcomes of Trip 1 and the requirements for ongoing assessments to address concerns raised by Nyamal representatives.	Several studies and assessments required to address concerns raised by Nyamal regarding potential impacts to Social Surroundings values within and surrounding the North Star Extension MDE. These works will be ongoing and done in consultation with the Nyamal.	Nyamal looking forward to participating in further studies / assessments required and the continued collaboration with Fortescue regarding the Proposal. Nyamal confirmed proposed scope for Trip 2.
6-11 Sept 2021	Fieldwork	Nyamal Traditional Owners	Social Surroundings Trip 2 (2021_NJA_SSC_Trip2) – On-country consultation with Nyamal Traditional Owners and elected heritage advisors. Continued social surrounds consultation to discuss potential impacts and concerns to social surroundings values within the North Star Extension MDE.	Key objectives of fieldwork to provide further information on surface water and groundwater studies in relation to culturally significant water sources identified within and surrounding the North Star Extension MDE.	Nyamal comments and views are outlined in the consultant report for this trip (Terra Rosa 2022).

Date	Description	Stakeholder	Discussion Items	Proponent Comments	Stakeholder Response
2 Nov 2021	Meeting	Nyamal HSC	Update on preliminary outcomes of Trip 2 (pending final report), and upcoming social surrounds consultation for 2022.	<p>Confirmed further assessments required to address concerns raised by Nyamal regarding potential impacts to Social Surroundings values within and surrounding the North Star Extension MDE. These works will be ongoing and done in consultation with the Nyamal.</p> <p>Any mitigation measures resulting from these assessments to be included in the SCHMP.</p> <p>Addressed importance of receiving revised Social Surrounds Trip 2 report to understand any further requirements to address concerns.</p>	<p>Nyamal looking forward to participating in further studies / assessments required and the continued collaboration with Fortescue regarding the Proposal.</p> <p>Trip 2 report pending.</p>
22 Nov 2021	Email	BAC Representative	Feedback on Trip 2 report.	Fortescue feedback on Trip 2 report provided. Responses request further information on outcomes of the consult.	BAC representative to inform consultants of feedback.
3 May 2022	Meeting	Nyamal HSC	Update on North Star Extension and social surroundings consultation to date, current studies being undertaken (e.g. dust, noise, and visual impact assessments), and further studies required (e.g. ethnobotanical and ethnoecological. Geotech assessment).	<p>Further clarification required to finalise Trip 2 report. Consultation planning can proceed while report is being revised.</p> <p>Timeline for undertaking remaining studies and assessments to be provided to Nyamal including relevant workshops to develop the SCHMP.</p>	<p>BAC to address Trip 2 report with consultants.</p> <p>Continued social surrounds consultation on required studies and assessments to develop SCHMP.</p>

Date	Description	Stakeholder	Discussion Items	Proponent Comments	Stakeholder Response
22 June 2022	Meeting	NAC Board	Update on social surroundings consultation for North Star Extension.	Fortescue to proceed with social surroundings consultation as outlined.	NAC Board confirmed social surroundings request to go through NAC Heritage Manager who will engage BAC as required.
19 July 2022	Meeting	Nyamal HSC	Update on North Star Extension and studies being undertaken.	Fortescue proposed workshop to discuss preparation of SCHMP.	Nyamal to provide dates for workshop.
18 Aug 2022	Meeting	NAC Heritage Manager	Update on North Star Extension social surroundings consultation to date and environmental approvals process.	Confirmed progress of consultation and required assessments to develop the SCHMP.	Pleased with level of engagement done to date.
7 Nov 2022	Email	BAC Representative	Request from Nyamal to forgo SCHMP workshop pending review of the draft SCHMP.	Fortescue agreed to provide draft SCHMP prior to holding a workshop.	BAC to assess requirement for workshop after review of SCHMP.
19 Dec 2022	Meeting	NAC CEO and Heritage Manager	General introductions and discussion on engagement process with NAC, in particular for ongoing social surroundings consultation.	Fortescue to proceed with social surrounds consultation and heritage matters as outlined.	NAC CEO confirmed all requests for heritage and social surroundings to be provided to NAC Heritage Manger who will direct to BAC and the Nyamal HSC.
14 Feb 2023	Meeting	NAC Board	Update on North Star Extension project and social surroundings consultation.	Several impacts assessments have commenced with fieldwork to be scheduled soon. Nyamal will be involved in fieldwork.	NAC Board was pleased with social surroundings consultation to date and look forward to ongoing engagement with Fortescue.
28 Feb – 2 Mar 2023	Meeting	Nyamal HSC	Update on North Star Extension project and social surroundings consultation.	Fortescue seeking Nyamal availability to undertake fieldwork required for Visual Impact Assessment (VIA) site visit and installation of noise monitors.	Nyamal confirmed availability for fieldwork.

Date	Description	Stakeholder	Discussion Items	Proponent Comments	Stakeholder Response
17 April 2023	Email	NAC / BAC	Delivery of draft SCHMP	Fortescue request review of draft SCHMP and feedback	NAC and BAC to provide feedback.
15 May 2023	Email	NAC / BAC	Nyamal request presentation of SCHMP at Nyamal HSC prior to providing feedback and signing off on SCHMP.	Fortescue agreed to present SCHMP to Nyamal HSC.	Nyamal HSC meeting set for 7 June 2023.
7 June 2023	Meeting	Nyamal HSC	Presentation of SCHMP to Nyamal HSC, including content of the document, management actions to address Nyamal's concerns, monitoring program, ongoing consultation regarding the plan, and the revision process.	Fortescue seeking confirmation Nyamal understand the management actions and commitments outlined in the SCHMP and seek Nyamal's approval of the plan.	<p>Nyamal HSC confirmed they understood the management actions presented.</p> <p>Nyamal HSC confirmed support of the SCHMP in its current form and understand this is a living document that can be revised through the ongoing consultation framework.</p> <p>No comments or feedback provided on the SCHMP.</p>
30 June 2023	Email	NAC / BAC	Nyamal provided letter of support for inclusion in SCHMP.	SCHMP finalised with letter of support. Fortescue to commence implementation of SCHMP.	Nyamal approved SCHMP.

Date	Description	Stakeholder	Discussion Items	Proponent Comments	Stakeholder Response
7 Sept 2024	Meeting	Nyamal Heritage Sub-Committee	<p>Fortescue presented on the proposed increase in abstraction from the Near Mine borefield, the potential impacts from the cumulative drawdown from the Approved Proposal and Proposed Amendment, and the proposed management measures to avoid significant impacts to social surroundings values, including Mundagoora Pool.</p> <p>Fortescue also presented updates to this SCHMP including removing reference to the superseded <i>Aboriginal Cultural Heritage Act 2021</i> and updates to maps to include heritage place places.</p>	<p>Fortescue reiterated their commitment to reducing the risk to places of cultural significance and maintaining the hydrological regimes and ecological health of culturally significant water sources within and surrounding the Proposed Amendment area via the implementation of this SCHMP endorsed by Nyamal HSC in June 2023.</p>	<p>Nyamal HSC supported proposed management strategies presented regarding the Near Mine Borefield, including potential supplementation if Mundagoora Pool if required.</p> <p>Nyamal HSC endorsed the minor updates to this SCHMP.</p>

5.1 Ongoing Consultation Framework

Fortescue is committed to ongoing consultation with Nyamal and their representative body NAC in relation to implementation of the Proposal and this SCHMP. The consultation framework provided below has been developed in accordance with (or exceeding) the requirements of the Project Area Agreement (PAA) between Fortescue and Nyamal. A summary of consultation and reporting requirements is outlined in Table 13 below.

Consultation thus far with NAC has identified a preference for regular consultation regarding the Proposal rather than consultation timing to be linked only to project stages. Ongoing consultation with Nyamal has also been considered in development of the management and contingency actions outlined in Section 3 above. Therefore, the timing for ongoing consultation with Nyamal, their representative body NAC, and their heritage service provider BAC (where directed), will be undertaken in accordance with:

- Relevant management and contingency actions outlined in this plan;
- Relevant Native Title access agreement(s) with Nyamal; or
- As requested by Nyamal.

The adaptive management process and review process outlined for this SCHMP adds further to the framework for ongoing consultation with Nyamal. Refer to Sections 6 and 7 below, for details outlining the engagement of Nyamal within these processes.

5.1.1 Consultation Objectives

The objectives for on-going consultation with Nyamal include:

- Provide updates on implementation of the SCHMP and outcomes of monitoring programs;
- Include Nyamal in adaptive management processes and contingency actions (where appropriate and available);
- Update on project progress including changes to mine plan designs and new developments;
- Commitment to consult on Mine Closure and potential environmental risks after mining; and
- Identify new sites and continue to develop understanding of social surrounds values within and surrounding the project (where required).

5.1.2 Consultation Process

Fortescue shall consult with Nyamal in accordance with the following process:

- Regular group meetings with elected committees or working groups (at least three times per year or otherwise agreed);

- It is acknowledged that at different stages of the Proposal's development there may be a requirement for more than three meetings. As such, either party may request more meetings to address matters that arise out of the mine development;
- Where appropriate, or as requested, meetings will be held on-country which may include a site inspection of a particular area (or areas) as requested by Nyamal;
- Fortescue shall ensure that the appropriate Fortescue staff are available for meetings. Where technical information is being presented, Fortescue will ensure relevant subject matter experts attend meetings to address any technical questions;
- Where appropriate, or as requested, the implementation of the SCHMP will be a standing agenda item at group meetings; and
- The timing and details of meetings can be amended by agreement between NAC and Fortescue. Such information will be reported in the SCHMP Compliance Report.

5.1.3 Consultation Material

Where appropriate, the following consultation materials may be prepared to facilitate discussions with Nyamal and better inform decision making processes:

- Pre-meeting reports;
- Presentations will be used to deliver content for consultation, including maps and other imagery where available (and suitable);
- Information sheets and plain English summaries to explain technical information or processes. These may be supplied ahead of meetings or used during presentations;
- 3D consultation maps to better illustrate the proposed development or activities within the context of Country.

Table 13: Summary of Ongoing Consultation and Reporting Requirements

Type of Consultation	Reporting Evidence	Timing	Responsibilities
Regular meetings with NAC Working Group, Board, and Nyamal HSC as agreed to, or requested.	Consultation Register	At least three times per year (unless otherwise agreed), or as requested.	Heritage Manager – All project consultation and amendments to this plan. Heritage Compliance Manager – implementation of this plan.
Participation in monitoring programs and assessments outlined in this plan.	Consultation Register SCHMP Compliance Report	As required by this plan.	
Changes / updates to mine plan design.	Consultation Register	Updates provided at regular meetings or as required through standalone consultation.	
New or amended approvals relevant to the Proposal (including primary and secondary approvals).	Consultation Register	Updates provided at regular meetings or as required through standalone consultation.	
Mine Closure	Consultation Register	Ongoing consultation through life of project.	
Site visits and on-country inspections	Consultation Register SCHMP Compliance Report	As required by this plan.	
Review and amendments to this plan.	Consultation Register This SCHMP	As required by Adaptive Management and Review Process outlined in this plan.	
Water management strategies, including dewatering, abstraction, reinjection, and discharge (where applicable).	Consultation Register	Ongoing consultation through life of project.	

5.2 Opportunities

Fortescue is committed to providing opportunities for Nyamal people to participate in monitoring and management activities related to implementation of this SCHMP.

Participation of Nyamal in management activities has been factored into Fortescue's management process for implementation of the Proposal and this SCHMP. Throughout this process, Nyamal will be engaged to participate in the evaluation and review of management and contingency actions as part of the adaptive management and review process. This method allows for a collaborative approach to the management of Social Surroundings within and surrounding the North Star Extension MDE. The adaptive management and review processes are outlined in Sections 6 and 7 below.

In addition to participation in the management process, and in consultation with Nyamal, Fortescue has identified several opportunities for Nyamal people to participate in monitoring activities in relation to implementation of this SCHMP. These monitoring opportunities are outlined in Table 14 below.

Table 14: Monitoring Opportunities for Nyamal Participation

Monitoring Opportunity	Activity Description	Performance Indicator
On-country inspections	Fortescue to facilitate site-inspections to places of cultural significance within and surrounding the MDE (as requested).	<ul style="list-style-type: none"> • No unauthorised disturbance to places of cultural significance resulting from Fortescue activities. • No implementation of the Proposal within Exclusion Zones. • Nyamal representatives engaged to undertake inspections of places of cultural significance (as requested). • Nyamal representatives participate in incident investigations at places of cultural significance.
Monitoring Programs	<p>Fortescue will provide opportunity for up to two Nyamal persons to participate in monitoring of matters contained in this SCHMP.</p> <p>Fortescue will engage NAC to discuss support of Nyamal's Ranger Program (including a funding structure where required), and collaborative working relationship to implement opportunities for future work which incorporates monitoring activities.</p>	<ul style="list-style-type: none"> • Engage up to two Nyamal participants for monitoring programs outlined in this SCHMP (where available). • Support capacity building and training of Nyamal's Ranger Program to deliver monitoring programs (and other related works where available).

6 REPORTING

This section outlines Fortescue's reporting requirements for compliance with this management plan.

6.1 Annual Compliance Reporting

Fortescue is required to report against its compliance with all environmental obligations in an annual Compliance Assessment Report (CAR) prepared in accordance with the EPA's [Post Assessment Guideline for Preparing a Compliance Assessment Report](#) (EPA 2012). Annual CARs are required to be submitted in accordance with the Condition 4-6 of MS 993.

In the event that management targets were exceeded during the reporting period, the CAR will include a description of the effectiveness of the contingency actions that have been implemented to manage the impact and any adaptive management measures applied as a result of the exceedance.

All compliance reporting in accordance with Ministerial Statement conditions is undertaken by Fortescue's Environment team, and supported by the relevant subject matter experts.

6.2 Non-Compliance Reporting

In the event that monitoring activities, tests, surveys, or investigations indicate non-achievement of one or more management targets (as described in Table 6), Fortescue will report on the non-compliance in accordance with the relevant Ministerial Statement.

Where the exceedance is attributable to construction, operation or decommissioning activities, report the exceedance in writing to DWER within 7 days of the exceedance being identified in accordance with Condition 4-5 of MS 993.

6.3 SCHMP Compliance Reporting

Fortescue will prepare an annual SCHMP Compliance Report for Nyamal Aboriginal Corporation (NAC).

The report will document on:

- Implementation of the management actions outlined in this plan;
- Details of the monitoring programs undertaken in relation to this plan;
- Any potential incidents or non-achievement of management targets and the corrective and preventative actions undertaken to address these;
- Any concerns raised by the native title holders and the agreed corrective measures undertaken to address these;
- On-going consultation in relation to this plan; and
- Any reporting evidence relevant to this plan (as required or requested).

The first compliance report is to be submitted to NAC on 31 March in the calendar year following approval of this SCHMP, and then annually on the prescribed date thereafter.

7 REVIEW PROCESS

Review and revision of this SCHMP will be undertaken in consultation with Nyamal and their representative body, NAC (unless otherwise advised).

Review of this SCHMP will be undertaken in response to:

- Revision of the management actions due to performance indicators, monitoring, tests, and investigations indicating non-achievement of the management targets;
- Review of triggers and contingency actions in response to investigation;
- Monitoring program review, inclusive of:
 - Baseline data capture (new monitoring parameters or targets identified);
 - Site-specific target development for key places of cultural significance; and
 - Identification of places of cultural significance or Aboriginal cultural heritage with the potential to be impacted by implementation of the Proposal;
- Conditions to implementation of the Proposal change and there are unknowns to the potential impacts to Social Surroundings values;
- Adaptive management response triggers evaluation and review process; and
- Consideration of concerns raised by Nyamal and their representative body, NAC, regarding implemented management actions and monitoring activities outlined in this plan.

Revisions of this SCHMP will be submitted to the relevant State regulator for approval, in accordance with relevant approval conditions (where required).

Fortescue will continue to implement the latest revision of the SCHMP, to ensure management of Social Surroundings within and surrounding the North Star Extension MDE.

8 REFERENCES

- Environmental Technologies & Analytics, 2023, *North Star Project – Site Specific Dust Study: Desktop Assessment*, unpublished report prepared for Fortescue Iron Bridge Pty Limited.
- Terra Rosa, 2021, *Preliminary assessment of Social Surroundings values within the proposed North Star Extension project area*, unpublished report prepared for Fortescue Metals Group Limited.
- Terra Rosa, 2022, *Consultation of Social Surroundings values within the proposed North Star Extension project area*, unpublished report prepared for Fortescue Metals Group Limited.

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North Star Extension Social Cultural Heritage Management Plan			
Document & Revision Number	NS-0000-PL-HE-0001	Rev 1	15/04/2025
Status	IFU - Issued for Use		
Summary of Changes	Minor updates to maps to add new Heritage Places and HRZs. Update to consultation table.		
Author	Natasha Sanders		
Checked or Squad Review# (if applicable)	n/a		
Approved	Denis Coutant		
Next Review Date (if applicable)	As required (refer to Section 7)		

Revision History (to be completed for each version retained by Document Control)					
Author	Checker	Approver	Rev No.	Status	Issued Date
N. Sanders	Technical Review	n/a	a	DRAFT	17/04/2023
N. Sanders	Squad Check (Cultural Heritage)	n/a	b	DRAFT	17/04/2023
N. Sanders	n/a	D. Coutant	0	IFU	4/7/2023
R. Couzens	N. Sanders	N. Sanders	1	IFU	15/4/2025

This document and all supporting documents will be managed as per Fortescue Document Standards.

APPENDIX A VSS PLACES BY SITE TYPE

Place Type	Place Type Abbreviation	Blast Sensitivity
Artefacts	AS	None
Burial / Potential Remains	B	VSS
Cache / Walled Niche	WN	VSS
Ceremonial	C	None
Engraving / Painting	EN / P	VSS
Fish Trap	FT	None
Grinding	G	None
Law Ground	LG	None
Midden	M	None
Modified / Scarred Tree	ST	None
Mythological	MY	None
Named Place	NP	None
Potential Archaeological Deposit	PAD	VSS
Quarry	Q	None
Ritual	R	None
Rock Hole	RH	None
Rock Shelter / Walled Rock Shelter	RS	VSS
Stone Arrangement	SA	VSS
Storage Location	SL	None
Thalu	T	None
Water Source	WS	None
Wooden Structure	WST	VSS

*Consultation with the Native Title holders may identify other site types / places as being vibration sensitive. Where identified, these will be noted within Fortescue's GIS system as VSS and managed accordingly.