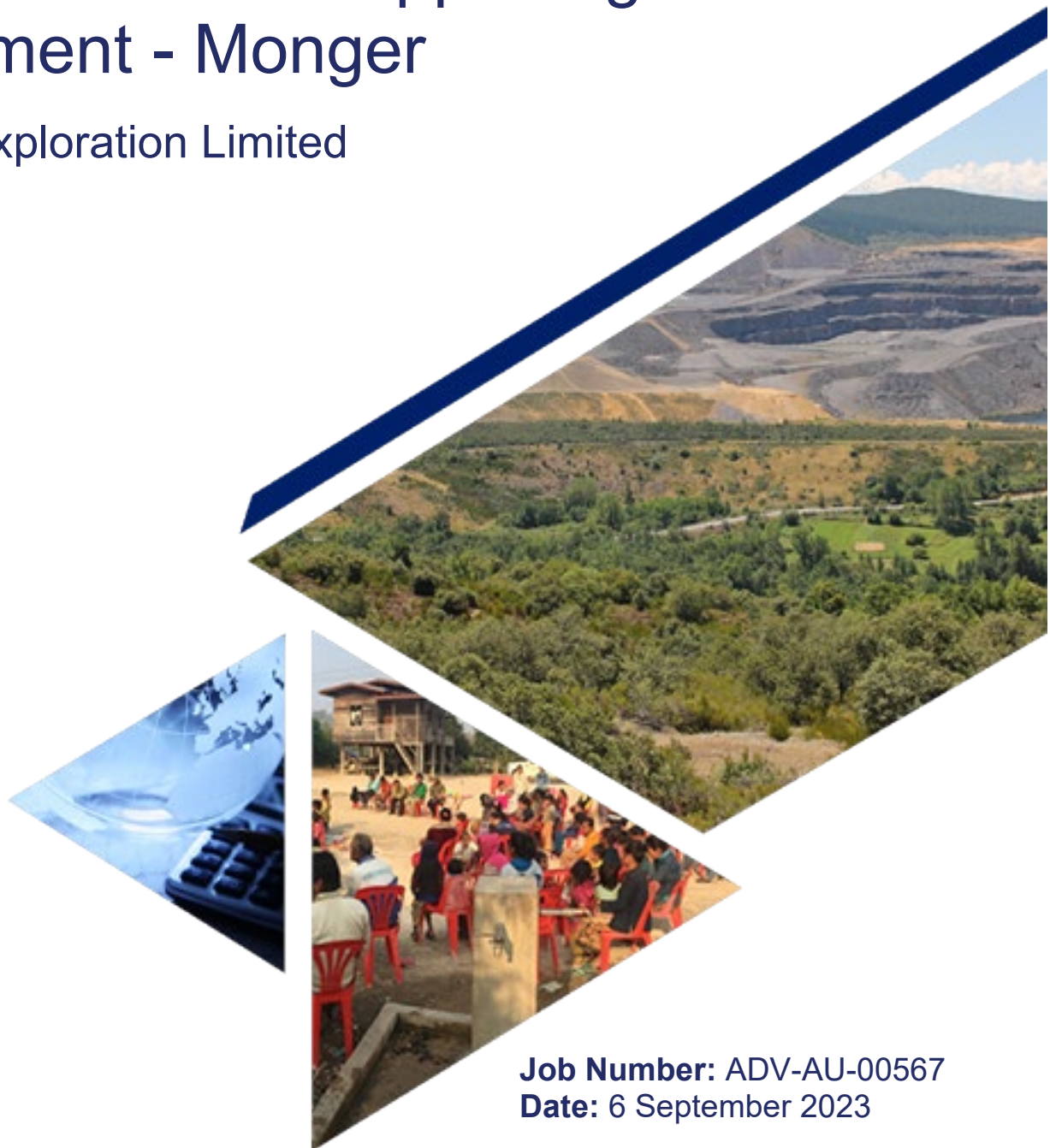




# Purpose Permit Supporting Document - Monger

Lefroy Exploration Limited



**Job Number:** ADV-AU-00567  
**Date:** 6 September 2023

## DOCUMENT CONTROL SHEET

|                                             |                     |
|---------------------------------------------|---------------------|
| <b>Client</b>                               |                     |
| Lefroy Exploration Limited                  |                     |
| <b>Report Name</b>                          | <b>Date</b>         |
| Purpose Permit Supporting Document - Monger | 6 September 2023    |
| <b>Job No.</b>                              | <b>Revision No.</b> |
| ADV-AU-00567                                | 0                   |
| <b>File Name:</b>                           |                     |
| Monger NVCP Supporting Document             |                     |

| Authorisations |               |                              |           |            |
|----------------|---------------|------------------------------|-----------|------------|
| Name           |               | Position                     | Signature | Date       |
| Prepared By:   | Anton Smit    | Senior Environmental Advisor | AS        | 21/08/2023 |
| Reviewed By    | Craig Roberts | Consulting Director          | CR        | 22/08/2023 |
| Approved By    |               |                              |           | 4/09/2023  |

| Distribution               |                                                              |                    |                          |         |
|----------------------------|--------------------------------------------------------------|--------------------|--------------------------|---------|
| Organisation               | Recipient                                                    | No. Of Hard Copies | No. Of Electronic Copies | Comment |
| Lefroy Exploration Limited | Wade Johnson                                                 | 0                  | 1                        | -       |
| DWER                       | <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a> | 0                  | 1                        | -       |
|                            |                                                              |                    |                          |         |
|                            |                                                              |                    |                          |         |

## Executive Summary

Monger Exploration Pty Ltd (Monger), a wholly owned subsidiary of Lefroy Exploration Limited (Lefroy), has acquired the gold and other mineral rights on Lot 45 on Plan 226298 (Lot 45) between Kalgoorlie and Kambalda in Western Australia (WA). As Lot 45 is pre-1899 freehold land and not subject to the *Mining Act 1978*, the clearing permit exemption in Regulation 20 of *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (WA) does not apply and a clearing permit is required for mineral exploration activities.

Monger is seeking a purpose permit for clearing of up to 125 ha of native vegetation inside a 7,632-ha Permit Area comprising all of Lot 45. At the same time, Hampton Metals Limited (Hampton) which holds the nickel, rare earth elements, and lithium rights on Lot 45 is also seeking a permit to clear 125 ha of native vegetation for mineral exploration purposes. This document has been prepared to support the clearing permit application by Monger.

Flora and fauna studies over Lot 45 have identified:

- Seven vegetation types and nine vegetation groups, none of which are considered restricted.
- No Threatened or Priority Ecological Communities.
- No Threatened flora listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth) (EPBC Act) or *Biodiversity Conservation Act 2016* (WA) (BC Act).
- No flora considered priority species by the Department of Biodiversity, Conservation, and Attractions (DBCA), although one Priority 3 species (*Eremophila arachnoides* subsp. *tenera*) is considered likely to occur.
- One Threatened Fauna species (Malleefowl, *Leipoa ocellata* – Vulnerable under BC Act and EPBC Act) is considered likely to occur:
  - A single inactive mound was located on Lot 45 in 2012.
  - Malleefowl have been recorded nearby and there is a suitable habitat present.
- One species listed as Marine under the EPBC Act (Rainbow Bee-eater, *Merops ornatus*) and one species listed as specially protected under the BC Act (Peregrine Falcon, *Falco peregrinus*) potentially occur.
- Two priority species potentially occur:
  - Western Rosella, *Platycercus icterotis* (Priority 4).
  - Central Long-eared Bat, *Nyctophilus major tor* (Priority 3).

An assessment of the ten clearing Principles is provided in Section 5. The proposed clearing of 125 ha by Monger for mineral exploration purposes is not likely to be at variance with any clearing principles.

## TABLE OF CONTENTS

|                                                           |           |
|-----------------------------------------------------------|-----------|
| <b>EXECUTIVE SUMMARY .....</b>                            | <b>II</b> |
| <b>1. INTRODUCTION .....</b>                              | <b>1</b>  |
| 1.1 Background.....                                       | 1         |
| 1.2 Proponent .....                                       | 1         |
| 1.3 Location, Access, and Tenure .....                    | 2         |
| 1.4 Historic Native Vegetation Clearing Permits .....     | 2         |
| <b>2. ENVIRONMENTAL SETTING .....</b>                     | <b>5</b>  |
| 2.1 Regional Setting .....                                | 5         |
| 2.2 Geology .....                                         | 5         |
| 2.3 Climate.....                                          | 5         |
| 2.4 Soils .....                                           | 6         |
| 2.5 Hydrology.....                                        | 6         |
| 2.6 Hydrogeology.....                                     | 7         |
| 2.7 Flora and Vegetation .....                            | 7         |
| 2.8 Fauna and Habitat .....                               | 15        |
| 2.9 Heritage and Social Setting .....                     | 23        |
| <b>3. PROPOSED LAND CLEARING AND REHABILITATION .....</b> | <b>25</b> |
| <b>4. ENVIRONMENTAL MANAGEMENT MEASURES .....</b>         | <b>26</b> |
| <b>5. ASSESSMENT OF CLEARING PRINCIPLES.....</b>          | <b>28</b> |
| <b>6. REFERENCES .....</b>                                | <b>32</b> |

## LIST OF TABLES

|           |                                                                 |    |
|-----------|-----------------------------------------------------------------|----|
| Table 2-1 | Vegetation Types in the Permit Area .....                       | 9  |
| Table 2-2 | NVS Vegetation Types .....                                      | 10 |
| Table 2-3 | Summary of Vegetation and Disturbance on Lot 45.....            | 12 |
| Table 2-4 | Conservation Significant Flora.....                             | 14 |
| Table 2-5 | GHD Habitat Types.....                                          | 16 |
| Table 2-6 | BCE Vegetation and Substrate Associations .....                 | 19 |
| Table 2-7 | Conservation Significant Vertebrate Fauna Likely to Occur ..... | 22 |
| Table 4-1 | Environmental Management Measures.....                          | 26 |
| Table 5-1 | Native Vegetation Clearing Principles .....                     | 29 |

## LIST OF FIGURES

|            |                                                                    |    |
|------------|--------------------------------------------------------------------|----|
| Figure 1-1 | Location Plan .....                                                | 3  |
| Figure 1-2 | Proposed and Existing Clearing Permit Purpose Areas .....          | 4  |
| Figure 2-1 | Kalgoorlie-Boulder Airport (012038) Climate Data (BOM, 2023) ..... | 6  |
| Figure 2-2 | Pre-European Vegetation .....                                      | 8  |
| Figure 2-3 | Vegetation Survey Results .....                                    | 11 |
| Figure 2-4 | Vegetation Condition .....                                         | 13 |
| Figure 2-5 | Fauna Habitats and Conservation Significant Fauna .....            | 20 |
| Figure 2-6 | Aboriginal and State Heritage.....                                 | 24 |

## LIST OF APPENDICES

- Appendix A. Important Information about this Document
- Appendix B. Certificate of Title
- Appendix C. Access Authority
- Appendix D. Flora and Fauna Assessment (GHD 2018)
- Appendix E. Level 1 Flora and Vegetation Survey of the Mt Martin Mining Area
- Appendix F. Fauna Assessment of the Mt Martin Area

## 1. Introduction

### 1.1 Background

RPM Advisory Services Pty Ltd (“RPM”) has been engaged by Lefroy Exploration Limited (“Lefroy” or the “Client”) to complete an Purpose Permit Supporting Document - Monger (hereafter referred to as the “Report”) to support a Native Vegetation Clearing Permit (NVCP) Application for Monger Exploration Pty Ltd (Monger) for mineral exploration activities on Lot 45 on Plan 226298 (Lot 45) as part of the East Lefroy Project (the Project).

The low impact nature of mineral exploration is recognised in Regulation 20 of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations) which exempts mineral exploration from needing a clearing permit provided it is approved under the *Mining Act 1978* (Mining Act) and not in an Environmentally Sensitive Area (ESA). There are no ESAs on Lot 45, however Lot 45 is pre-1899 freehold land and not subject to the Mining Act.

Two wholly owned subsidiaries of Lefroy have purchased the mineral rights on Lot 45 from the titleholder, Franco Nevada Australia Pty Ltd (Franco Nevada):

- Hampton Metals Ltd (Hampton), which holds the rights for nickel, rare earth elements and lithium.
- Monger, which holds the rights for gold and other minerals.

The previous mineral rights holder, Northern Star (HBJ) Pty Ltd (Northern Star), holds purpose permits over most of Lot 45, however there are no provisions in the *Environmental Protection Act 1986* (EP Act) that allow purpose permits to be transferred. As Northern Star no longer has authority to access Lot 45, existing purpose permits can no longer be used, and new applications are required.

Hampton and Monger are both applying for approval to clear up to 125 ha of native vegetation inside a purpose permit application area (Permit Area) of 7,632 ha. The proposed Permit Area is Lot 45.

A separate application will be submitted for each entity. This supporting document has been prepared to support the application for 125 ha of clearing by Monger. A similar, separate application will be submitted for 125 ha of clearing by Hampton.

### 1.2 Proponent

The proponent is Monger Exploration Pty Ltd. All compliance and regulatory requirements regarding this assessment document should be forwarded by email, post, or courier to the following address:

**Proponent:** Monger Exploration Pty Ltd  
**Address:** Level 3, 7 Rheola St West Perth WA 6005 Australia  
**Contact:** Mr Wade Johnson  
**Position:** Managing Director  
**Telephone:** +61 8 9321 0984  
**Email:** [wjohnson@leeroyex.com](mailto:wjohnson@leeroyex.com)

The owner of Lot 45 is Franco Nevada Australia Pty Ltd (Franco Nevada). A copy of the certificate of title is provided in **Appendix B**.

A copy of Monger’s authority to access Lot 45 is provided in **Appendix C**.

### 1.3 Location, Access, and Tenure

The Project is located on Lot 45 ~35 kilometres (km) south-southeast of Kalgoorlie and ~20 km north of Kambalda in Western Australia. Access is via the Goldfields Highway and Mount Martin Road. The location is shown on **Figure 1-1**. The Permit Area is shown on **Figure 1-2**. The Mt Martin Mine, currently in care and maintenance is in the west of Lot 45.

### 1.4 Historic Native Vegetation Clearing Permits

Northern Star holds the following NVCPs on Lot 45:

- Purpose permit CPS8232 that allows the clearing of up to 200 ha for mineral exploration before 26 September 2029.
- Purpose permit CPS2473 that allows clearing of up to 250 ha for mineral production, exploration activities, associated infrastructure, and waste dumps before 19 July 2030.

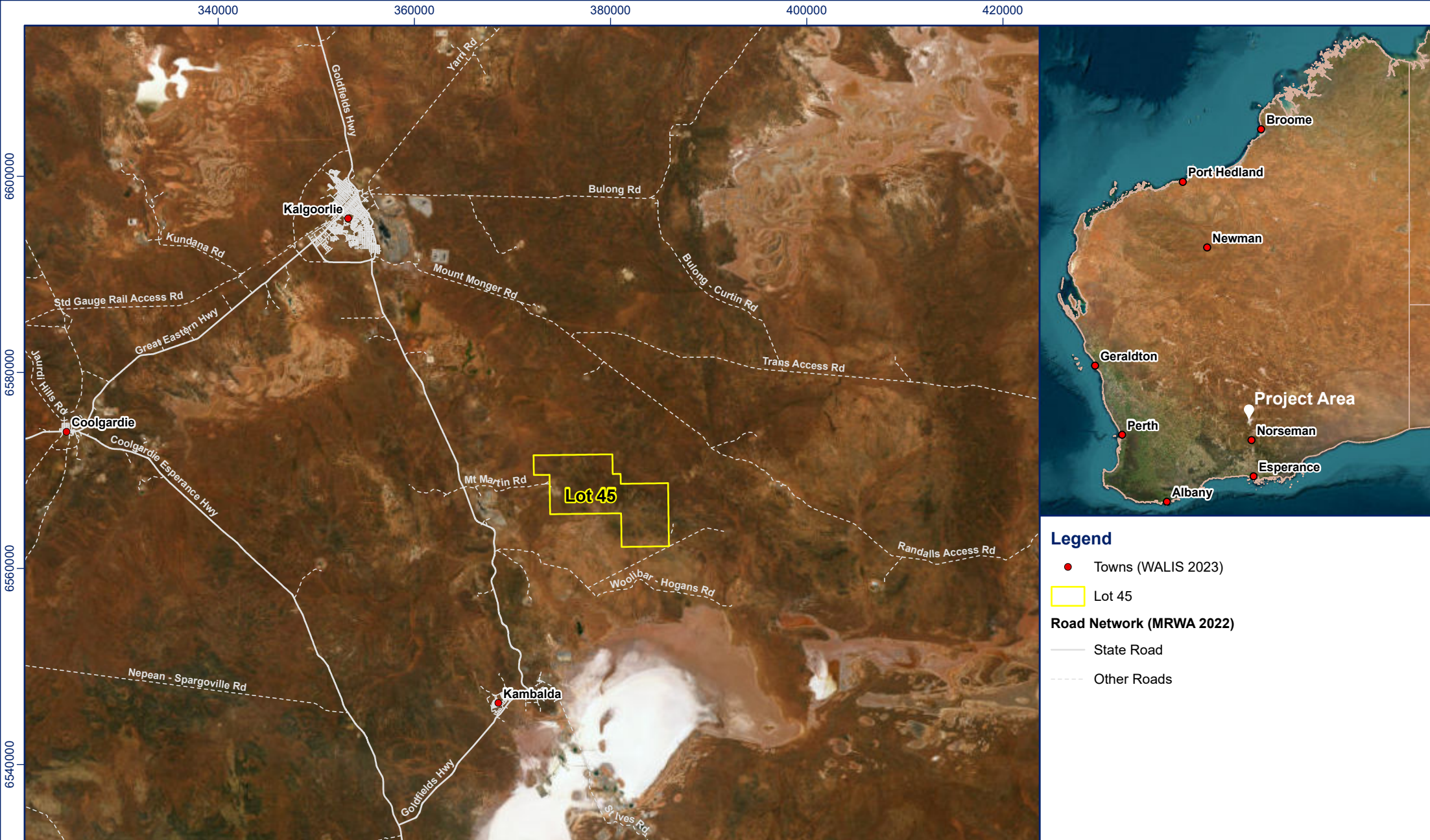
Information on how much clearing has been undertaken under these permits is not publicly available and is unknown to Monger. Disturbance mapping, undertaken since Monger acquired the mineral rights indicates that ~250 ha on Lot 45 have been disturbed. Not all of this disturbance is due to mineral exploration.

The purpose permit boundaries for CPS8232 and CPS2473 are shown in **Figure 1-2**. These cover all of Lot 45 apart from:

- Areas of the Mount Martin Mine that have already been cleared.
- A small section in the west of the property.
- A small area around the Mt Martin Mine where the boundaries of CPS8232 and CPS2473 do not coincide.

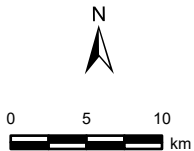
Northern Star has sold the mineral rights to Monger and Hampton and no longer has authority to access Lot 45. This is shown in the certificate of title provided in **Appendix B**.

As there is no provision in the EP Act for the transfer of these purpose permits which are effectively void.

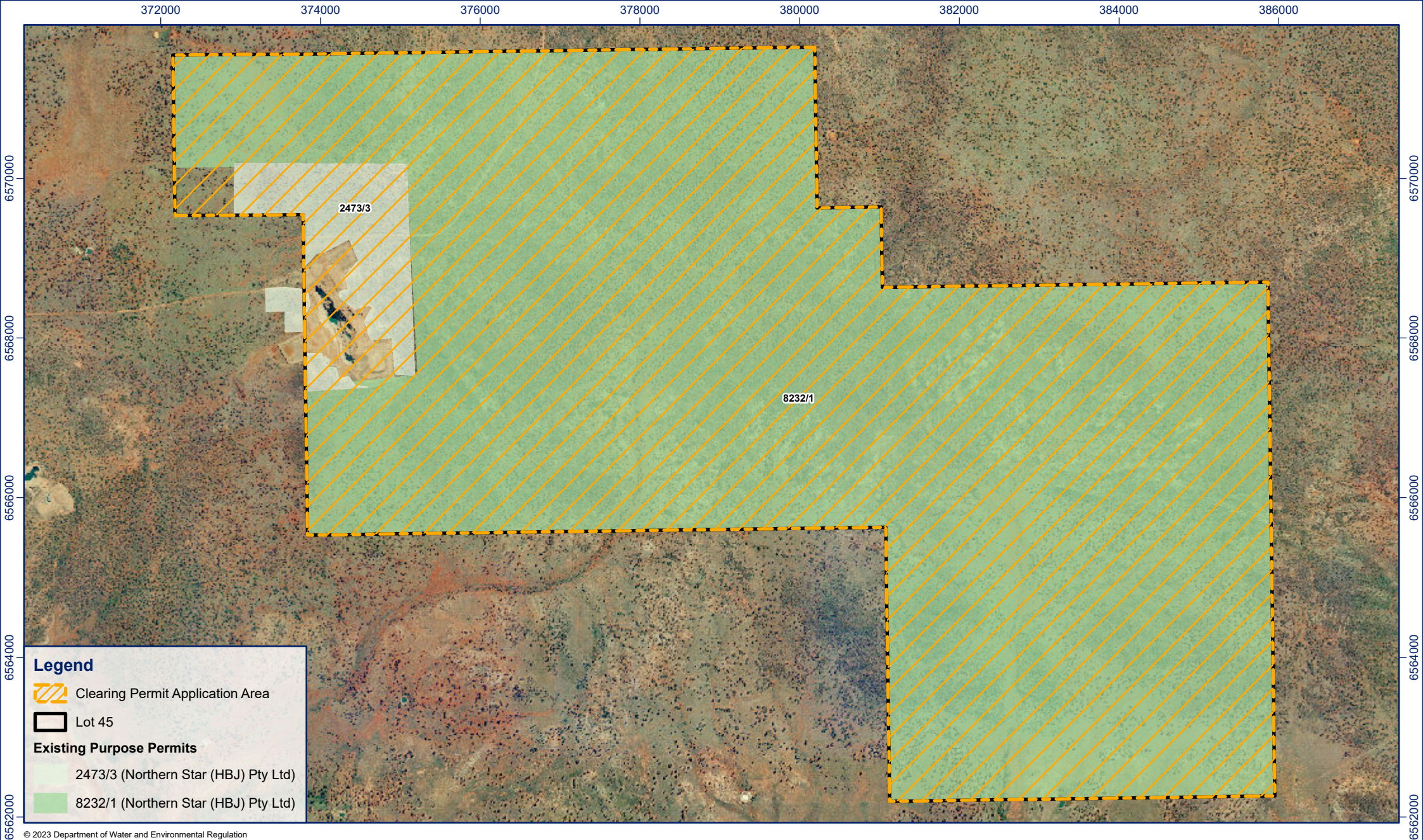


© 2023 Western Australian Land Information Authority. © 2022 Main Roads Western Australia

Scale: 1:500,000  
Projection: GDA2020 MGA Zone 51  
Created/Reviewed By: HC/CR  
Aerial: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



| PROJECT        |                                            | CLIENT                                                                                                             |
|----------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| September 2023 | Lefroy - ESG - Clearing Permit - Documents | <br><b>Lefroy</b> Exploration |
| Figure 1-1     |                                            |                                                                                                                    |
| ADV-AU-00567   | Location Plan                              |                                                                                                                    |



© 2023 Department of Water and Environmental Regulation

| <div>Scale: 1:60,000</div> <div>Projection: GDA2020 MGA Zone 51</div> <div>Created/Reviewed By: HC/CR</div> <div>Aerial: December 2001</div> <div></div> | <div></div> <div></div> | PROJECT        |                                                     | CLIENT |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------|-----------------------------------------------------|--------|
|                                                                                                                                                          |                         | September 2023 | Lefroy - ESG - Clearing Permit - Documents          |        |
|                                                                                                                                                          |                         | Figure 1-2     |                                                     |        |
|                                                                                                                                                          |                         | ADV-AU-00567   | Proposed and Existing Clearing Permit Purpose Areas |        |

## 2. Environmental Setting

### 2.1 Regional Setting

The Project is in the Eremaean Botanical Province of Western Australia (Beard, 1990) and the Eastern Goldfields Subregion of the Coolgardie Bioregion according to the Interim Biogeographic Regionalisation of Australia (IBRA; DoEE 2012).

Mining, particularly of gold and nickel, is common in the Coolgardie bioregion and other land tenure includes pastoral leases; Aboriginal land; and national parks and reserves; freehold land; and unallocated crown land (Cowan, 2002).

Vegetation in the Eastern Goldfields subregion is dominated by Mallees, *Acacia* thickets, and shrub heaths on sandplains. Diverse *Eucalyptus* woodlands occur around salt lakes, on ranges, and in valleys and dwarf shrublands of samphire are common in salt areas (Cowan, 2002).

The Project area is also in the Great Western Woodlands, which is the largest area of intact temperate woodland remaining on Earth. The Woodlands cover almost 16 million ha, stretching from the edge of the Wheatbelt to Kalgoorlie-Boulder in the north, to inland deserts to the northeast and the Nullarbor Plain to the east. The area has high floral diversity with more than 3,000 species recorded and is a centre for eucalypt diversity (Watson et al., 2008; Thomas-Dans et al., 2012).

### 2.2 Geology

The Eastern Goldfields IBRA subregion is in the Yilgarn Craton's 'Eastern Goldfields Terrains'. This comprises gently undulating plains with low hills and ridges in the west, as well as large playa lakes. The underlying geology is gneisses and granites which have eroded into a flat plane and are covered with tertiary soils with scattered exposures of bedrock. The dominant soils are calcareous earths which cover most of the greenstone areas and plains (Cowan, 2002).

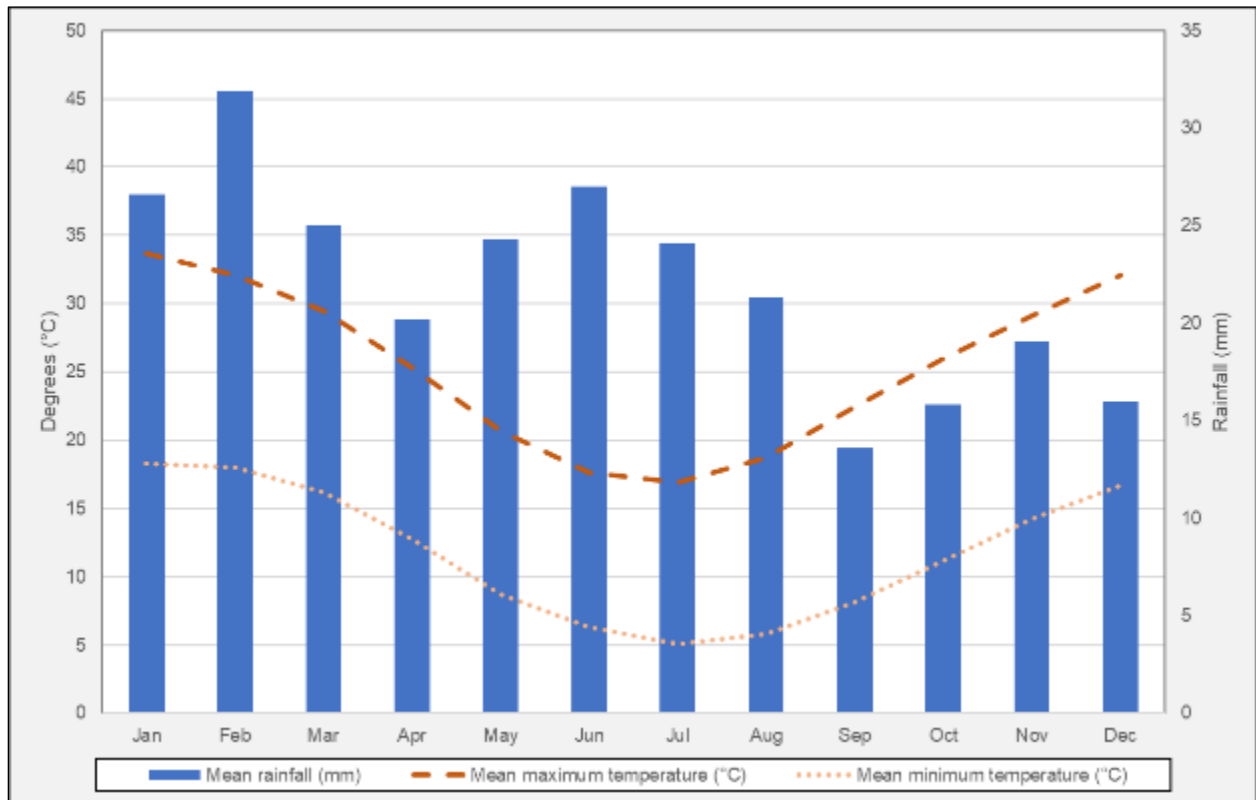
### 2.3 Climate

The closest Bureau of Meteorology (BOM) weather recording station to the Project is the Kalgoorlie-Boulder Airport (station number: 012038), located approximately 45 km from the Project which has records from 1939, with the latest available data from 13 July 2023.

The climate of the Goldfields region is mostly hot and dry, with highly variable rainfall throughout the year. Kalgoorlie has a semi-arid climate with hot summers and mild winters, and an average rainfall of 265 mm relatively evenly distributed throughout the year. Rainfall can however be highly erratic year to year.

Climate data (BOM, 2023) are shown in **Figure 2-1**. Annual average rainfall is 265 mm. The highest monthly average is in February (31.9 mm) and the lowest monthly average is in September (13.6 mm). The annual average number of days of rain is 39.3 days. Average monthly temperatures range from a mean maximum of 33.7°C in January to 16.9°C in July. On average, there are 41.6 days per year with temperatures above 35°C. The hottest average month is January with 12.5 days above 35°C.

**Figure 2-1 Kalgoorlie-Boulder Airport (012038) Climate Data (BOM, 2023)**



## 2.4 Soils

The Permit area is in the Southern Cross Zone of the Kalgoorlie Province, which is described as rises and low hills on Archaean greenstones, with broad valleys often containing salt lake chains. Soils are usually red, loamy to clayey, and calcareous (GHD Pty Ltd (GHD), 2018).

Desktop assessment by GHD indicates that five soil landscape types occur in the survey area:

- Moriarty – low greenstone rises and stony plains supporting Chenopod shrublands with patchy Eucalypt overstoreys.
- Gumland – extensive pedepains supporting Eucalypt woodlands with halophytic and non-halophytic shrub understoreys.
- Graves – basalt and greenstone rises and low hills supporting Eucalypt woodlands with prominent Saltbush and Bluebush understoreys.
- Bevon – irregular low ironstone hills with stony lower slopes supporting Mulga shrublands.
- Gundockerta System – extensive, gently undulating calcareous stony plains supporting Bluebush shrublands.

According to the Department of Water and Environmental Regulation (DWER) Acid Sulphate Soil Risk Map (DWER 2017), there are no known occurrences of acid sulphate soils in the Permit Area.

## 2.5 Hydrology

There are no wetlands in the Permit Area. GHD noted several minor, ephemeral drainage lines that generally flow in a south-east direction towards Lake Lefroy. Clearing of watercourses is likely to be limited to crossings of these ephemeral drainage lines.

## 2.6 Hydrogeology

As clearing is for mineral exploration purposes, limited hydrogeology impacts are anticipated. Aquifers in the Goldfields are typically hypersaline, and Monger will ensure that water airlifted during drilling is retained in sumps.

Monger does not currently propose to abstract any groundwater to support mineral exploration. Should abstraction be required in future, 26D and 5C licences under the *Rights in Water and Irrigation Act 1914* will be obtained.

## 2.7 Flora and Vegetation

GHD undertook an enhanced reconnaissance survey in March 2018, which included desktop assessment followed by field assessment. The survey area included most of the Permit Area, with the exception of areas around the Mt Martin Mine. The report (GHD 2018) is provided in **Appendix D**. Unless otherwise referenced, the text in this section is from this report.

Native Vegetation Solutions (NVS) undertook a Level 1 flora survey of the areas around the Mt Martin Mine in 2012. This includes the areas not included in the GHD survey, as well as parts of the GHD survey area. The report (NVS 2012) is attached as **Appendix E**.

The survey areas are shown on **Figure 2-3**.

### 2.7.1 Vegetation Communities

There are two vegetation associations in the Permit area as mapped by Beard (1972) and DPIRD (2019). These are shown on **Figure 2-2**:

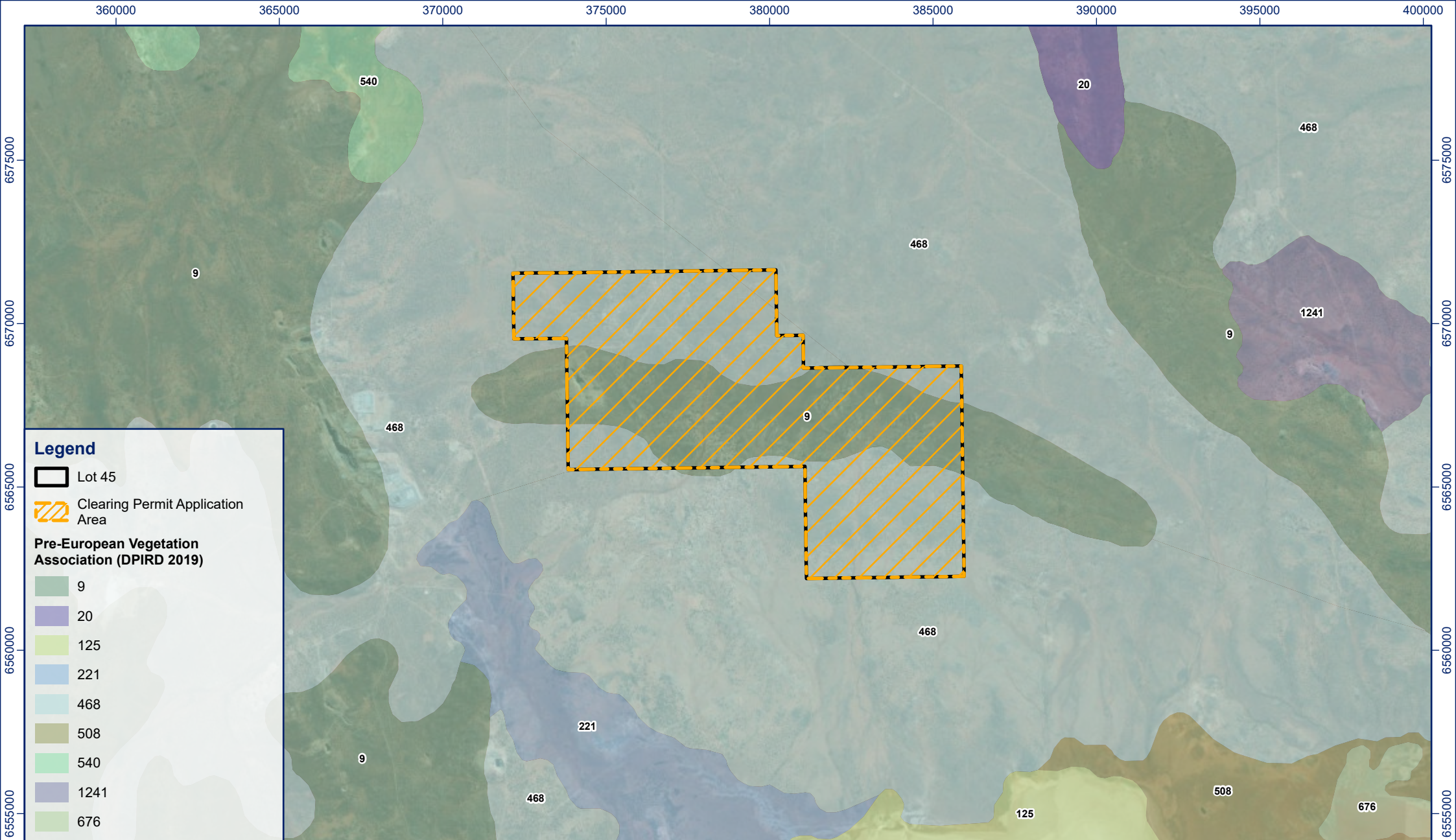
- Medium woodland: Coral Gum (*Eucalyptus torquata*) and Goldfields Blackbutt (*E. lesouefii*) (association 9) – intersects the middle of the Project area. According to WALGA (2020), 97.6% of the 234,739 ha pre-European extent of this association remains in Coolgardie bioregion.
- Medium woodland: Salmon Gum and Goldfields Blackbutt (association 468) – intersects the northern and southern sections of the Project area. According to WALGA (2020) 98.6% of the 575,360 ha pre-European extent of this association remains in Coolgardie bioregion 98.6% remaining in the Coolgardie bioregion according to WALGA (2020).

GHD mapped seven vegetation types in the Permit area which are described in **Table 2-1** and shown on **Figure 2-3**. Of these, six vegetation types describe variations in *Eucalyptus* spp. Woodlands. The seventh (VT-07) describes modified vegetation associated with anthropogenic water sources. Note that the areas in **Table 2-1** are lower than in the GHD survey report as the spatial data has been updated to include mapping of disturbance areas by Lefroy in 2023. The locations of the artificial water sources mapped by GHD are shown in **Figure 2-3**, however, have been mapped as disturbed areas, rather than as a vegetation type.

NVS mapped nine major vegetation groups in a smaller survey area of 423 ha which includes areas of Lot 45 not surveyed by GHD. These vegetation types are described in **Table 2-2** and shown in **Figure 2-3**. Note that the areas in **Table 2-2** are less than in the NVS survey report as they exclude areas that were also mapped by GHD as well as areas outside of Location 45. Disturbance mapping by Lefroy in 2023 has also been incorporated into the original NVS mapping.

Note that the original spatial data from GHD and NVS was not available and the updated totals in **Table 2-1** and **Table 2-2** have been obtained by digitisation of relevant maps in the survey reports.

A summary of remnant vegetation, disturbance and unmapped parts of the Permit area is provided in **Table 2-3**.

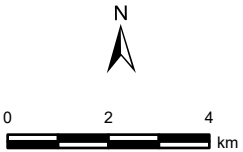


© 2019 Department of Primary Industries and Regional Development

Scale: 1:150,000  
Projection: GDA2020 MGA Zone 51  
Created/Reviewed By: HC/CR  
Aerial: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Copyright © 2023 RPMGlobal Holdings Limited, Brisbane Australia. All Rights Reserved.



| PROJECT        |                                            | CLIENT |
|----------------|--------------------------------------------|--------|
| September 2023 | Lefroy - ESG - Clearing Permit - Documents |        |
| Figure 2-2     |                                            |        |
| ADV-AU-00567   | Pre-European Vegetation                    |        |

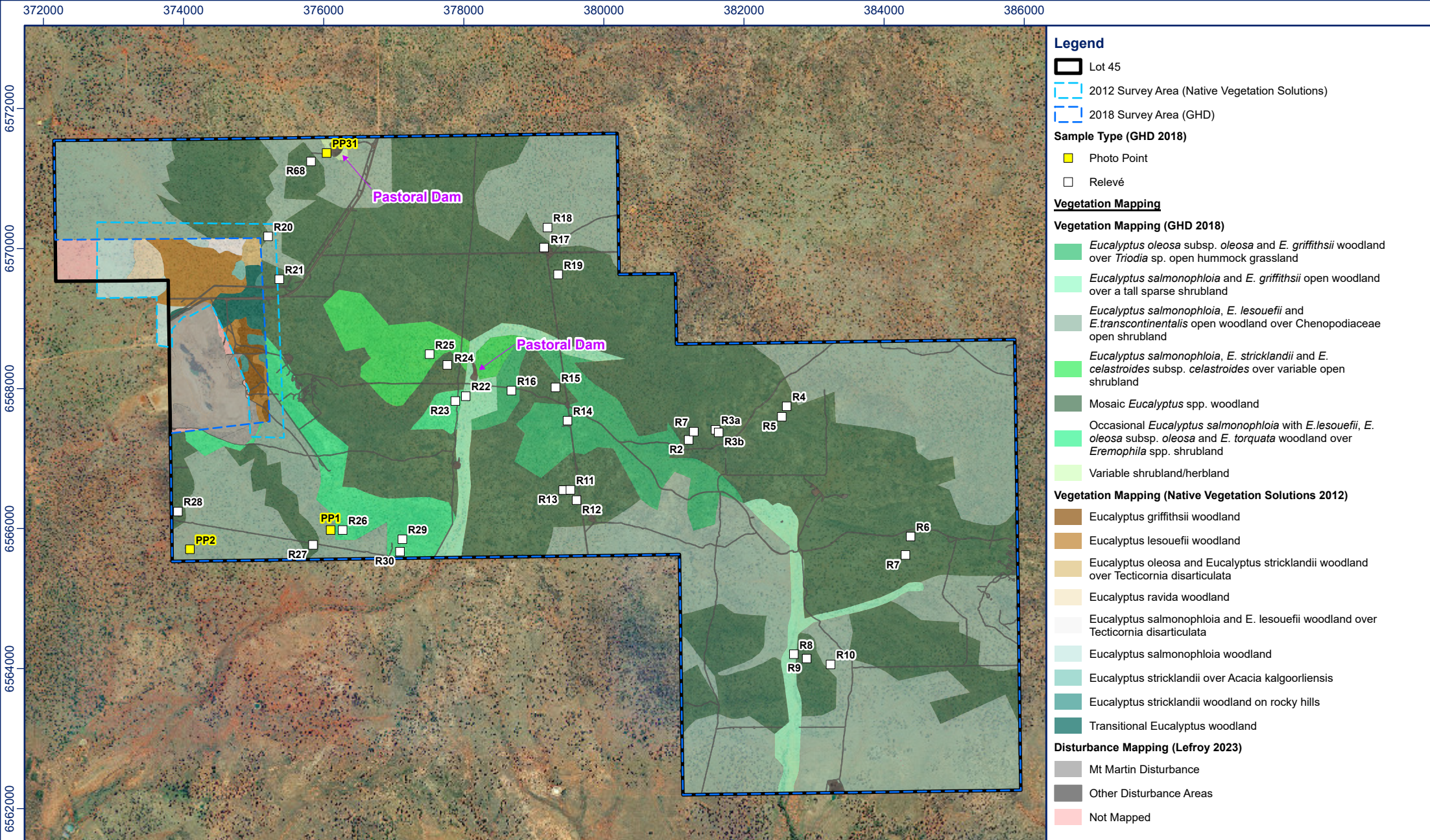
C:\Users\Rashleigh\Documents\03-Projects\Australia-WA\LefroyGoldProject\ADV\00567\01-ESRI\ADV\00567.aprx

Table 2-1 Vegetation Types in the Permit Area

| No           | Vegetation Type                                                                                                                                                                    | Description                                                                                                                                                                                                                                                                                                                                                      | Landform and Substrate                                                                                      | Pre-European Vegetation Association | Area (ha)     |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------|
| VT01         | <i>Eucalyptus salmonophloia</i> , <i>E. lesouefii</i> and <i>E. transcontinentalis</i> open woodland over Chenopodiaceae open shrubland.                                           | <i>Eucalyptus salmonophloia</i> , <i>E. lesouefii</i> , <i>E. transcontinentalis</i> open woodland over <i>Eremophila oldfieldii</i> subsp. <i>angustifolia</i> , <i>Eremophila oppositifolia</i> subsp. <i>angustifolia</i> sparse tall shrubland over <i>Atriplex nummularia</i> subsp. <i>spathulata</i> , <i>Maireana sedifolia</i> mid chenopod shrubland.  | Plains with silty orange soils, occasional conglomerate sandstone rocks.                                    | 468                                 | 2,652.9       |
| VT02         | Occasional <i>Eucalyptus salmonophloia</i> with <i>E. lesouefii</i> , <i>E. oleosa</i> subsp. <i>oleosa</i> and <i>E. torquata</i> woodland over <i>Eremophila</i> spp. shrubland. | <i>Eucalyptus salmonophloia</i> isolated trees with <i>E. lesouefii</i> , <i>E. oleosa</i> subsp. <i>oleosa</i> , <i>E. torquata</i> woodland over <i>Eremophila interstans</i> subsp. <i>virgata</i> tall sparse shrubland over <i>E. scoparia</i> , <i>E. glabra</i> subsp. <i>glabra</i> , <i>E. parvifolia</i> subsp. <i>auricampa</i> low to mid shrubland. | Slopes and outcrops with a combination of quartz and conglomerate sandstone rocks over silty orange soil.   | 9                                   | 245.5         |
| VT03         | Mosaic <i>Eucalyptus</i> spp. woodland.                                                                                                                                            | <i>Eucalyptus</i> spp. woodland over <i>E. ravida</i> , isolated clumps of trees over <i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i> and/or <i>Melaleuca sheathiana</i> tall, isolated shrubs over <i>Atriplex nummularia</i> subsp. <i>spathulata</i> , <i>Tecticornia halocnemoides</i> low to mid shrubland.                                      | Combination of plains and slopes localised patches of 2-30 % quartz cobbles/ stones over silty orange soil. | 9 & 468                             | 3,463.7       |
| VT04         | <i>Eucalyptus salmonophloia</i> and <i>E. griffithsii</i> open woodland over a tall sparse shrubland.                                                                              | <i>Eucalyptus salmonophloia</i> , <i>E. griffithsii</i> open woodland over <i>Acacia jennerae</i> tall sparse shrubland over variable open grassland / herb land.                                                                                                                                                                                                | Drainage line, silty orange soil.                                                                           | 9 & 468                             | 227.2         |
| VT05         | <i>Eucalyptus oleosa</i> subsp. <i>oleosa</i> and <i>E. griffithsii</i> woodland over <i>Triodia</i> sp. open hummock grassland.                                                   | <i>Eucalyptus oleosa</i> subsp. <i>oleosa</i> , <i>E. griffithsii</i> woodland over <i>Acacia</i> spp. tall open shrubland over <i>Scaevola spinescens</i> , <i>Frankenia interioris</i> var. <i>interioris</i> , <i>Dodonaea microzyga</i> var. <i>acrolobata</i> low shrubland over <i>Triodia</i> sp. open hummock grassland.                                 | Upper slopes with conglomerate sandstone rocks over silty orange soil.                                      | 9                                   | 306.3         |
| VT06         | <i>Eucalyptus salmonophloia</i> , <i>E. stricklandii</i> and <i>E. celastroides</i> subsp. <i>celastroides</i> over variable open shrubland.                                       | <i>Eucalyptus salmonophloia</i> , <i>E. stricklandii</i> , <i>E. celastroides</i> subsp. <i>celastroides</i> open woodland over <i>Acacia</i> spp., <i>Eremophila</i> spp., <i>Ptilotus</i> spp. mixed mid to low shrubland.                                                                                                                                     | Ironstone gravel over silty orange soil.                                                                    | 9                                   | 183.1         |
| VT07         | Variable shrubland / herb land                                                                                                                                                     | <i>Acacia jennerae</i> , * <i>Nicotiana glauca</i> tall shrubland over *the declared * <i>Xanthium spinosum</i> , <i>Swainsona canescens</i> herb land.                                                                                                                                                                                                          | Silty orange soils.                                                                                         | 9 & 468                             | 5.9           |
| <b>Total</b> |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                             |                                     | <b>7084.6</b> |

Table 2-2 NVS Vegetation Types

| Vegetation Type                                                                                        | Flora Diversity                       | Dominant Species                                                                                                                                                                                                                                                                                   | Area (ha)    |
|--------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <i>Eucalyptus lesouefii</i> woodland.                                                                  | 19 Families, 29 Genera and 52 Species | <i>Eucalyptus lesouefii</i> , <i>E. cylindriflora</i> , <i>Eremophila interstans</i> subsp. <i>virgata</i> and <i>Maireana sedifolia</i> .                                                                                                                                                         | 101.6        |
| Salmon Gum ( <i>Eucalyptus salmonophloia</i> ) woodland                                                | 13 Families, 18 Genera and 31 Species | <i>Eucalyptus salmonophloia</i> , <i>E. lesouefii</i> , <i>Maireana sedifolia</i> , <i>Eremophila interstans</i> subsp. <i>virgata</i> , and <i>Sclerolaena diacantha</i> .                                                                                                                        | 35.8         |
| Transitional Eucalyptus woodland                                                                       | 13 Families, 19 Genera and 35 Species | <i>Eucalyptus transcontinentalis</i> , <i>E. lesouefii</i> , <i>E. salmonophloia</i> , <i>E. oleosa</i> , <i>Eremophila interstans</i> subsp. <i>virgata</i> , <i>E. oldfieldii</i> subsp. <i>angustifolia</i> , <i>Acacia erinacea</i> , and <i>Senna artemisioides</i> subsp. <i>Filifolia</i> . | 38.3         |
| <i>Eucalyptus griffithsii</i> woodland                                                                 | 9 Families, 12 Genera and 20 Species  | <i>Eucalyptus griffithsii</i> , <i>Acacia erinacea</i> , <i>Scaevola spinescens</i> , <i>Olearia muelleri</i> , <i>Senna artemisioides</i> subsp. <i>filifolia</i> , and <i>Dodonaea lobulate</i> .                                                                                                | 27.4         |
| <i>Eucalyptus salmonophloia</i> and <i>E. lesouefii</i> woodland over <i>Tecticornia disarticulata</i> | 13 Families, 17 Genera and 28 Species | <i>Eucalyptus salmonophloia</i> , <i>E. lesouefii</i> , <i>Tecticornia disarticulata</i> , and <i>Eremophila interstans</i> subsp. <i>Virgata</i> .                                                                                                                                                | 10.0         |
| <i>Eucalyptus ravidia</i> woodland                                                                     | 9 Families, 12 Genera and 19 Species  | <i>Eucalyptus ravidia</i> , <i>Eremophila interstans</i> subsp. <i>virgata</i> , <i>Maireana sedifolia</i> , <i>M. triptera</i> , and <i>Sclerolaena diacantha</i> .                                                                                                                               | 22.4         |
| <i>Eucalyptus stricklandii</i> woodland over <i>Acacia kalgoorliensis</i> .                            | 10 Families, 10 Genera and 16 Species | <i>Eucalyptus stricklandii</i> , <i>Acacia kalgoorliensis</i> , <i>Eremophila oldfieldii angustifolia</i> , and <i>Eremophila decipiens</i> subsp. <i>Decipiens</i> .                                                                                                                              | 4.0          |
| <i>Eucalyptus stricklandii</i> woodland on rocky hills.                                                | 11 Families, 13 Genera and 22 Species | <i>Eucalyptus stricklandii</i> , <i>Leucopogon</i> sp. Clyde Hill, <i>Dodonaea lobulata</i> , <i>Acacia andrewsii</i> , <i>A. erinacea</i> , <i>Scaevola spinescens</i> , and <i>Olearia muelleri</i> .                                                                                            | 9.0          |
| <i>Eucalyptus oleosa</i> and <i>E. stricklandii</i> woodland over <i>Tecticornia</i> .                 | 12 Families, 16 Genera and 23 Species | <i>Eucalyptus oleosa</i> , <i>E. stricklandii</i> , <i>Tecticornia disarticulata</i> , and <i>Eremophila interstans</i> subsp. <i>Virgata</i> .                                                                                                                                                    | 9.8          |
| <b>Total</b>                                                                                           |                                       |                                                                                                                                                                                                                                                                                                    | <b>258.3</b> |



© 2012 Native Vegetation Solutions, © 2018 GHD

| <div>Scale: 1:70,000</div> <div>Projection: GDA2020 MGA Zone 51</div> <div>Created/Reviewed By: HC/CR</div> <div>Aerial: December 2001</div> | <div><div>N</div><div></div><div>0 500 1,000 2,000</div><div> m</div></div> | PROJECT        |                                            | CLIENT                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                              |                                                                                                                                                                                                                                                   | September 2023 | Lefroy - ESG - Clearing Permit - Documents | <div></div> <div>Lefroy Exploration</div> |
|                                                                                                                                              |                                                                                                                                                                                                                                                   | Figure 2-3     |                                            |                                                                                                                                |
|                                                                                                                                              |                                                                                                                                                                                                                                                   | ADV-AU-00567   | Vegetation Survey Results                  |                                                                                                                                |

**Table 2-3 Summary of Vegetation and Disturbance on Lot 45**

| Aspect                          | Area (ha)      |
|---------------------------------|----------------|
| Remnant vegetation GHD          | 7,084.6        |
| Remnant vegetation NVS          | 258.3          |
| <b>Total Remnant Vegetation</b> | <b>7,342.9</b> |
| Mt Martin Mine                  | 174.5          |
| Other disturbance               | 75.0           |
| <b>Total Disturbance</b>        | <b>249.5</b>   |
| Unmapped areas                  | 39.3           |
| <b>Area of Lot 45</b>           | <b>7,631.7</b> |

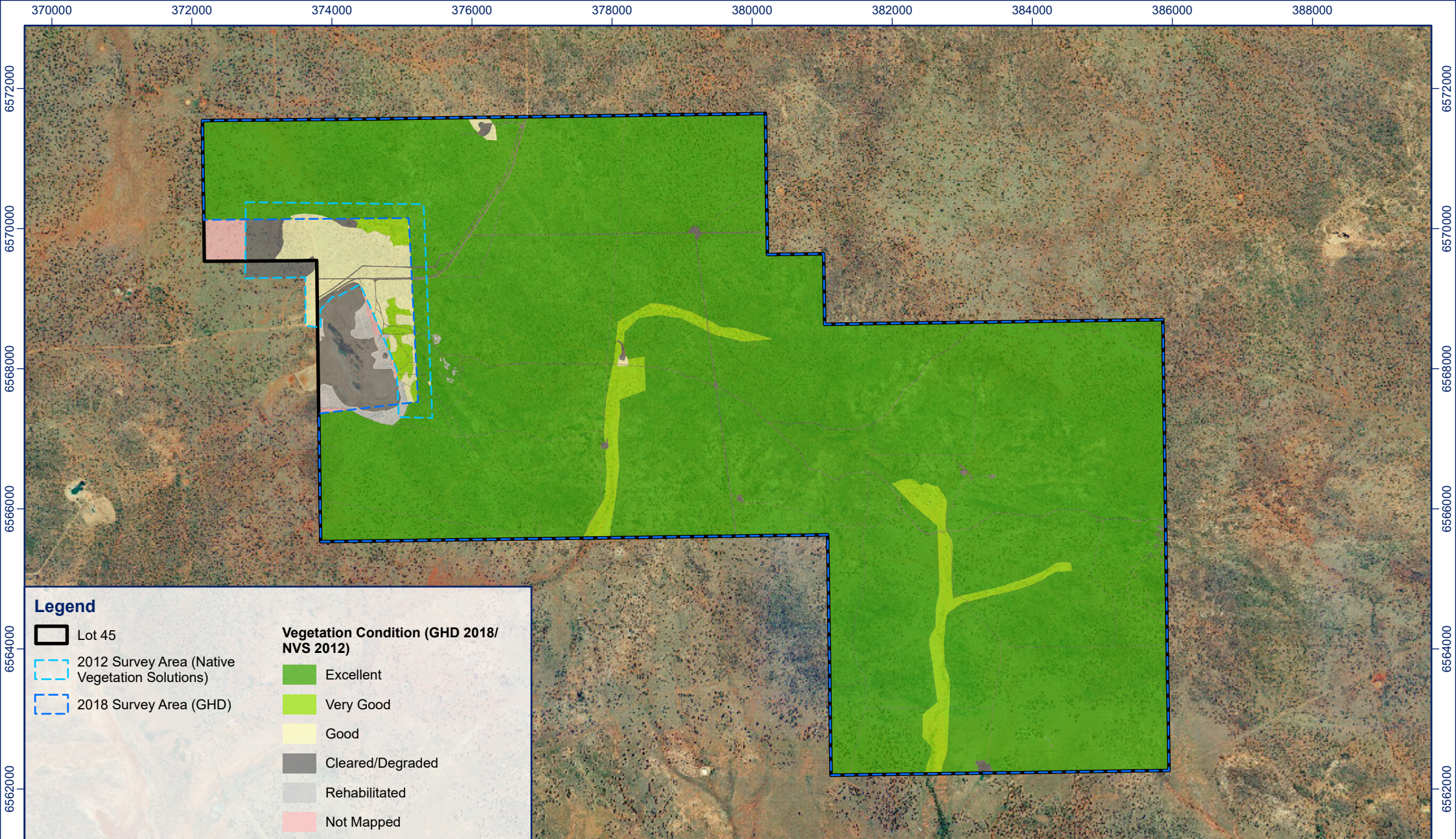
None of the vegetation types identified by GHD or NVS were aligned with any known federal or state-listed Threatened Ecological Communities (TECs) or state-listed Priority Ecological Communities (PECs) (NVS 2012; GHD 2018).

Vegetation association VT-04 grows in association with ephemeral drainage lines that feed into Lake Lefroy in the south of the Project area, however GHD (GHD 2018) considered that this vegetation is not riparian.

GHD assessed the majority of vegetation as in Excellent condition with very little weed invasion. Vegetation association VT-04 was rated Very Good due to the increased presence of weeds in the area. Vegetation surrounding anthropogenic water sources were in "Good" condition as these areas had been historically cleared and were also under pressure from cattle using the water source. As a result, the area was dominated by opportunistic shrubs and weeds. Vegetation condition is shown in **Figure 2-4**.

Disturbance mapping undertaken by Lefroy in 2023 is shown on **Figure 2-3** and disturbance areas are provided in **Table 2-3**. Approximately 250 ha have been disturbed on Lot 45. The majority (174.5 ha) is associated with the Mt Martin Mine. The remaining 75 ha are mostly fence-lines and tracks attributed to pastoral and exploration activities.

NVS assessed the vegetation around the Mt Martin Mine as in Degraded to Very Good condition. Disturbances noted included historic mining, exploration, and grazing. Vegetation condition is shown in **Figure 2-4**.



**Legend**

 Lot 45

 2012 Survey Area (Native Vegetation Solutions)

 2018 Survey Area (GHD)

**Vegetation Condition (GHD 2018/ NVS 2012)**

 Excellent

 Very Good

 Good

 Cleared/Degraded

 Rehabilitated

 Not Mapped

© 2012 Native Vegetation Solutions, © 2018 GHD

| PROJECT                                                                                                   |                                                                                                                                                                                         |                                                                         | CLIENT                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scale: 1:70,000<br>Projection: GDA2020 MGA Zone 51<br>Created/Reviewed By: HC/CR<br>Aerial: December 2001 | <div><div><div></div><div><div>0</div><div>1,000</div><div>2,000</div></div><div>m</div></div></div> | <div>September 2023</div> <div>Figure 2-4</div> <div>ADV-AU-00567</div> | <div>Lefroy - ESG - Clearing Permit - Documents</div> <div>Vegetation Condition</div> <div></div> |

## 2.7.2 Conservation Significant Flora

GHD identified 109 plant species from 59 genera and 32 families within 20 km of the Permit area in desktop survey. Five conservation significant taxa were identified (**Table 2-4**). Of these one was considered likely to occur in the Permit Area:

- *Eremophila arachnoides* subsp. *tenera* (Priority 3). Note this was Priority 1 at the time of the survey.

**Table 2-4 Conservation Significant Flora**

| Species                                                         | Conservation Status |    | Description (WA Herbarium, 1998)                                                                                                                              | Likelihood of Occurrence | Notes                                                                                                 |
|-----------------------------------------------------------------|---------------------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------------|
|                                                                 | Cmth                | WA |                                                                                                                                                               |                          |                                                                                                       |
| <i>Gastrolobium graniticum</i>                                  | En                  | Vu | Erect, open shrub, to 2.5 m high. Flower is yellow and orange and red, Aug to Sep. Sand, sandy loam, granite. Margins of rock outcrops, along drainage lines. | Unlikely                 | Species previously recorded > 20 km from the Project area.                                            |
| <i>Calandrinia lefroyensis</i> <sup>1</sup>                     |                     | P1 | Herb to 30 cm tall, 10 - 20 cm wide. Flowers purple. Commonly found growing in amongst <i>Tecticornia</i> shrubs.                                             | Possible                 | Species previously recorded < 20 km from the survey area and some suitable habitat exists.            |
| <i>Cyathostemon divaricatus</i>                                 | -                   | P1 | Erect straggly shrub to 80 cm high, 80cm wide, white to pale pink flowers.                                                                                    | Possible                 | Species previously recorded < 20 km from the Project area and some suitable habitat exists.           |
| <i>Eremophila arachnoides</i> subsp. <i>tenera</i> <sup>2</sup> | -                   | P3 | Broom-like shrub, to 3 m high, branches with tubercles often elongated and coalescing. Flower is white/blue-purple.                                           | Likely                   | Species previously recorded < 20 km from the Project area and large areas of suitable habitat exists. |
| <i>Eremophila praecox</i>                                       | -                   | P2 | Broom-like shrub, 1.5-3 m high. Flower is purple, Oct or Dec. Red/brown sandy loam. Undulating plains.                                                        | Unlikely                 | Species previously recorded > 20 km from the Project area.                                            |
| <i>Ricinocarpos digynus</i> <sup>3</sup>                        |                     | P1 | Erect shrub to 2 m high x 2 m wide. Fl. Yellow, Mar. Rocky hillslope. Dry red-brown sandy loam over felsic and mafic volcanics.                               | Unlikely                 | Species previously recorded > 20 km from the survey area.                                             |
| <i>Tecticornia flabelliformis</i>                               | Vu                  | P2 | Erect shrub, to 0.2 m high. Clay. Saline flats.                                                                                                               | Unlikely                 | Species previously recorded > 20 km from the Project area.                                            |

CR = Critically Endangered; En = Endangered; Vu = Vulnerable; Mi = Migratory; P = Priority

<sup>1</sup> *Calandrinia* sp. *Widgiemooltha* at time of survey

<sup>2</sup> *Eremophila arachnoides* subsp. *Tenera* was a Priority 1 species at time of survey

<sup>3</sup> *Ricinocarpos* sp. *Eastern Goldfields* at time of survey

Field assessment by GDG identified the following in the Permit Area:

- 84 flora taxa (including subspecies and varieties) from 40 genera and 20 families. Dominant families recorded were Scrophulariaceae (15 taxa), Chenopodiaceae (14 taxa), and Myrtaceae (11 taxa).
- No EPBC Act or BC Act listed flora were recorded within the Project area during the field survey.
- No Priority Flora were identified.

NVS identified 74 species from 36 genera and 20 families. No Threatened or Priority species were identified.

### 2.7.3 Weeds

GHD recorded three introduced flora taxa during field survey. One of these, *\*Xanthium spinosum* (Bathurst Burr) is listed as a Declared Pest under the *Biosecurity and Agriculture Management Act 2007*. No Weeds of National Significance (WONS) were recorded.

The other two introduced taxa (*\*Salvia verbenaca* and *\*Nicotiana glauca*) are considered environmental weeds and have been previously recorded within the Coolgardie IBRA bioregion.

NVS did not record any introduced flora species.

## 2.8 Fauna and Habitat

GHD undertook a Level 1 fauna assessment over the majority of the Lot 45 in 2018 that included targeted fauna desktop and field survey. The report (GHD 2018) is provided in **Appendix D**. Unless otherwise referenced, the text in this section is from this report.

Bamford Consulting Ecologists (BCE) undertook a Level 1 fauna survey of the Mt Martin Mine area in 2012 that included areas of Lot 45 not surveyed by GHD. The survey report (BCE 2012) is attached as **Appendix E**. The GHD and BCE survey areas are shown in **Figure 2-5**.

### 2.8.1 Fauna Habitats

GHD identified seven broad fauna habitat types in a ~7,168 ha survey area over the majority of Lot 45. These habitats corresponded closely with vegetation types and are described in **Table 2-5** and shown in **Figure 2-5**. Note that the original spatial data were not available and relevant figures from the report have been digitised with updated disturbance mapping by Lefroy in 2023 included.

Two habitat types, comprising ~492 ha was identified as suitable for Malleefowl foraging and breeding, although no Malleefowl or Malleefowl mounds were recorded:

- Mixed Eucalyptus woodland over mixed shrubs.
- Mixed Eucalyptus woodland over spinifex.

Table 2-5 GHD Habitat Types

| Habitat Type                                | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Vegetation Associations | Conservation Significant Species                                            | Area1 (ha) |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------|------------|
| Mixed Eucalyptus woodland over chenopod     | <p>Open Eucalypt woodland consisting of <i>Eucalyptus salmonophloia</i>, <i>E. lesouefii</i> and <i>E. transcontinentalis</i> over sparse shrubland dominated by <i>Atriplex</i>, <i>Eremophila</i> and <i>Maireana</i> species.</p> <p>Very little leaf litter is available in this habitat type, however there is some woody debris.</p> <p>These low shrublands provide foraging opportunities and smaller refuge areas for ground-dwelling fauna such as reptiles.</p> <p>Seasonal inundation is likely to provide seasonal variation in the micro-habitat features available to fauna species.</p> <p>Shows little evidence of disturbance and is well-represented throughout the region.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | VT01                    | None recorded.                                                              | 2,669.6    |
| Mixed Eucalyptus woodland over mixed shrubs | <p>A mosaic of Eucalyptus woodlands, consisting of <i>Eucalyptus salmonophloia</i>, <i>E. stricklandii</i> and <i>E. celastroides</i> subsp. <i>celastroides</i> over mixed shrubs, including <i>Eremophila</i> spp.</p> <p>The diversity of shrubby understory species provides a variety of different shelter and food resources, thereby increasing the availability of food sources for fauna throughout the year. There is a broad structural diversity in the survey area, including variation in tree canopy height and density, a variety of structural layers (trees, large and small shrubs, scattered grasses and herbs), a wide range of age classes in most flora species and ground cover/ refuge including logs, branches, patches of leaf litter (in a variety of patch size, type and thickness).</p> <p>Most of the <i>Eucalyptus</i> species in this woodland habitat readily form hollows that are utilised by fauna, particularly birds (owls and parrots). Where these hollow branches fall to the ground, the fallen timber provides a valuable microhabitat feature for ground-dwelling fauna. Fallen logs, branches and leaf litter are critical habitat components for many fauna species and are readily available in this habitat type throughout the survey area.</p> <p>This habitat type is well represented in the survey area and broader area.</p> | VT06                    | <p>None recorded.</p> <p>Suitable for Malleefowl foraging and breeding.</p> | 184.5      |

| Habitat Type                                           | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Vegetation Associations | Conservation Significant Species                                            | Area1 (ha) |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------|------------|
| Mixed Eucalyptus woodland over spinifex                | <p>Mallee eucalypts over a mid-layer of shrubs and spinifex.</p> <p>A range of age classes in most flora species and ground cover/ refuge including some logs, branches, patches of leaf litter (in a variety of patch size, type and thickness) was present. There are a range of micro-habitat features in this habitat type including fallen logs, branches and patches of leaf litter and the low growing clumps of <i>Triodia</i>.</p> <p>This habitat type is well represented in the survey area and broader area.</p>                                                                                                                                                                                                                                                                                                                                              | VT05                    | <p>None recorded.</p> <p>Suitable for Malleefowl foraging and breeding.</p> | 307.8      |
| Mixed <i>Eucalyptus</i> woodland over rocky hillslopes | <p>Patches of low broken rocky formations where the topography is slightly elevated, which add diversity to the micro-habitats available.</p> <p>There are some larger Eucalypt trees, including <i>Eucalyptus salmonophloia</i>, <i>E. lesouefii</i>, <i>E. oleosa</i> subsp. <i>oleosa</i> and <i>E. torquata</i> in this habitat type with the shrub layers including a mosaic of tall shrubs and lower shrubs.</p> <p>The vegetation in this habitat type ranges from sparse to dense and provides good cover for fauna species in areas and there is continuous connectivity between this habitat type and other habitats within the survey area. The value of this habitat has been impacted by historical disturbance particularly felling of timbers for mining and grazing.</p> <p>This habitat type is well represented in the survey area and broader area.</p> | VT02; VT03              | None recorded.                                                              | 3,740.0    |
| Eucalypt-lined creek lines                             | <p><i>Eucalyptus salmonophloia</i> and <i>E. griffithsii</i> open woodland over a tall sparse shrubland adjacent to dry creeklines and drainage areas.</p> <p>The Eucalypts were often present in dense patches along the creeklines with scattered patches of dense shrubby understory and leaf litter. Few of the Eucalypt species in this habitat contained hollows. High numbers of birds and bird species were recorded using this habitat type. Feral cat tracks were also recorded along the creekline.</p>                                                                                                                                                                                                                                                                                                                                                         | VT04                    | None recorded.                                                              | 227.0      |

| Habitat Type            | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Vegetation Associations | Conservation Significant Species | Area <sup>1</sup> (ha) |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------|------------------------|
| Artificial water source | <p>There are two artificial water sources within Location 45, one in the centre of the survey area and one in the north-west corner.</p> <p>This habitat is dominated by shrubs, herbs and trees surrounding the water sources, both of which contain water. These water sources provide habitat and water for native fauna, including birds. A suite of water birds recorded during the survey were only recorded in this habitat.</p> <p>Artificial water sources also provide water for introduced fauna, including cattle which were sighted at dams during the field survey.</p> | VT07                    | None Recorded                    | 11.0                   |
| Cleared areas           | <p>Throughout the survey area there are highly modified areas that have been cleared or disturbed in the past for the development of mining access tracks, haul roads and fence lines.</p> <p>These areas cover a small percentage of the survey area and provide little to no habitat value for fauna species and are largely devoid of native vegetation. There are trees and shrubs alongside these areas that provide cover for birds and reptiles.</p> <p>Dingo tracks were recorded along vehicle access tracks throughout the survey area.</p>                                 | Cleared/track/road      |                                  | 28.5                   |
| <b>Total</b>            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                         |                                  | <b>7,168.4</b>         |

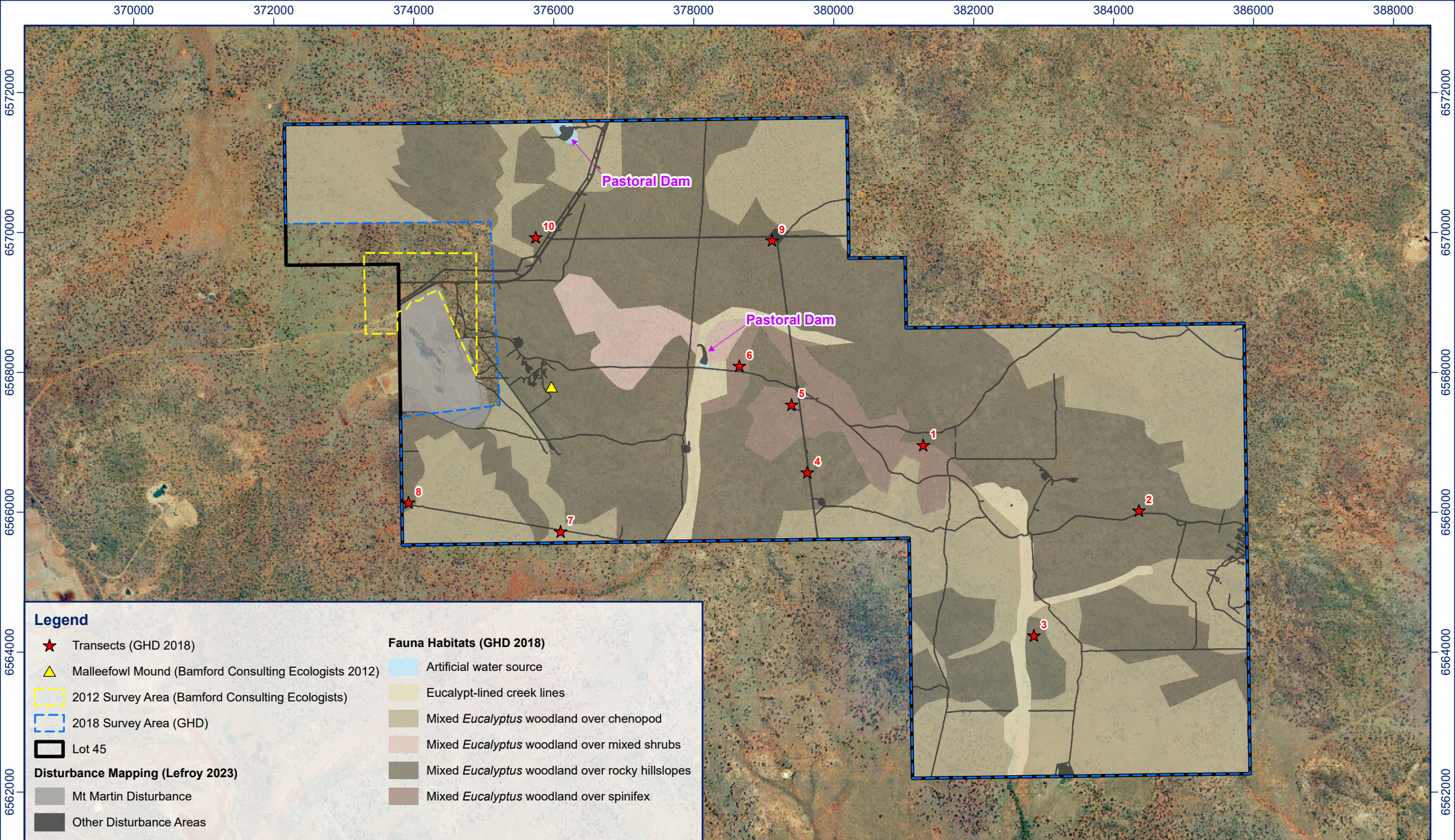
<sup>1</sup>Fauna habitat areas are as per the original mapping by GHD (2018).

GHD noted ~29 ha of disturbance attributed to haul roads, access tracks, fence lines and man-made dams with minimal disturbance outside of these areas. Fauna habitat quality and connectivity within the Project area was assessed as high and habitats were intact, and contiguous within the region. Updated disturbance mapping by Lefroy in 2023 indicates ~258 ha of disturbance on Lot 45. The majority (174.5 ha) is associated with the Mt Martin Mine, outside of the GHD survey area. Updated disturbance mapping is shown on **Figure 2-5**.

BCE identified five Vegetation and Substrate Associations in a ~175 ha survey area. These are described in **Table 2-6**.

**Table 2-6 BCE Vegetation and Substrate Associations**

| VSA                                                                                                                                            | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Greenstone hills and ridges supporting Eucalypt Woodlands, with areas of dense <i>Acacia</i> spp. and <i>Allocasuarina</i> sp.                 | <p>A series of greenstone hills and ridges occur in the south-east corner of the survey area. These flank Mount Martin, the summit of which lies just to the south-east of the survey area.</p> <p>Vegetation includes Eucalypt Woodlands on the hill slopes with the crests typically supporting dense shrublands of <i>Acacia</i> (<i>Acacia</i> spp.) and <i>Allocasuarina</i> (<i>Allocasuarina</i> spp.).</p> <p>The ridge crests contain some minor areas of outcropping, with boulders and small caves.</p> <p>Some minor drainage lines occur in gullies between the ridges and support Eucalypt Woodlands with a dense shrub layer.</p> |
| Stony lower slopes and adjacent stony plains supporting Woodlands of <i>Eucalyptus torquata</i> , <i>E. lesouefii</i> with sclerophyll shrubs. | <p>Occurs adjacent to the greenstone hills and extends north from the south-east corner of the survey area.</p> <p>Vegetation is dominated by Woodlands of <i>Eucalyptus torquata</i>, <i>E. lesouefii</i> with sclerophyll shrubs. Thickets of Boree (<i>Melaleuca pauperiflora</i>) and areas of <i>Casuarina pauper</i> occur on minor stony rises.</p>                                                                                                                                                                                                                                                                                       |
| Eucalypt Woodlands with a sclerophyll understorey on deep alluvial clays and loams.                                                            | <p>Occurs across the northern parts of the survey area and occurs in areas of deep alluvial clays and loams.</p> <p>Vegetation comprises mixed Eucalypt Woodlands (including <i>Eucalyptus lesouefii</i>, <i>Eucalyptus torquata</i> and <i>Eucalyptus salmonophloia</i>) with a variable understorey dominated by non-halophytic shrubs (<i>Melaleuca</i> spp., <i>Eremophila</i> spp., <i>Acacia</i> spp.).</p>                                                                                                                                                                                                                                |
| Salmon Gum ( <i>Eucalyptus salmonophloia</i> ) Woodland with <i>Maireana sedifolia</i> .                                                       | <p>Occurs in the north-west of the survey area.</p> <p>Vegetation is dominated by <i>E. salmonophloia</i> over Bluebush (<i>Maireana</i> species particularly <i>Maireana sedifolia</i>) with areas of Saltbush (<i>Atriplex nummularia</i>, <i>A. vesicaria</i>). The woodland becomes open towards the western boundary.</p>                                                                                                                                                                                                                                                                                                                   |
| Minor drainage tracts supporting mixed shrublands on red loam.                                                                                 | <p>A wide, minor drainage tract occurs across the north of the survey area.</p> <p>Vegetation includes shrublands of dense <i>Acacia</i>, Saltbush (<i>Atriplex</i> spp.), <i>Pittosporum angustifolium</i> and <i>Eremophila</i> and <i>Senna</i> species.</p>                                                                                                                                                                                                                                                                                                                                                                                  |



**Legend**

- ★ Transects (GHD 2018)
- ▲ Malleefowl Mound (Bamford Consulting Ecologists 2012)
- 2012 Survey Area (Bamford Consulting Ecologists)
- 2018 Survey Area (GHD)
- Lot 45
- Disturbance Mapping (Lefroy 2023)**
  - Mt Martin Disturbance
  - Other Disturbance Areas

**Fauna Habitats (GHD 2018)**

- Artificial water source
- Eucalypt-lined creek lines
- Mixed *Eucalyptus* woodland over chenopod
- Mixed *Eucalyptus* woodland over mixed shrubs
- Mixed *Eucalyptus* woodland over rocky hillslopes
- Mixed *Eucalyptus* woodland over spinifex

© 2012 Bamford Consulting Ecologists, © 2018 GHD

| PROJECT                         |                |                                                   | CLIENT                                                                                |
|---------------------------------|----------------|---------------------------------------------------|---------------------------------------------------------------------------------------|
| Scale: 1:70,000                 | September 2023 | Lefroy - ESG - Clearing Permit - Documents        |  |
| Projection: GDA2020 MGA Zone 51 | Figure 2-5     |                                                   |                                                                                       |
| Created/Reviewed By: HC/CR      | ADV-AU-00567   | Fauna Habitats and Conservation Significant Fauna |                                                                                       |
| Aerial: December 2001           |                |                                                   |                                                                                       |

### 2.8.2 Fauna Species Assemblage

Desktop assessment by GHD identified 86 terrestrial vertebrate fauna species previously recorded within the Permit area consisting of 72 birds and 14 reptiles. Field survey identified the following in the Permit area:

- A total of 37 species, consisting of 26 birds, seven mammals, and four reptiles.
- Four introduced species: the Feral Cat (*Felis catus*); Cow (*Bos taurus*); Feral Goat (*Capra hircus*); and European Rabbit (*Oryctolagus cuniculus*).
- No conservation significant fauna species were recorded.

Field Survey by BCE identified:

- 47 species – 6 reptiles; 29 birds; 8 native mammals and 4 introduced mammals.
- An old inactive Malleefowl mound, although no Malleefowl were recorded in the survey area.

Desktop assessment by GHD identified 10 conservation significant species that may occur in the Permit Area. After field assessment, eight of these were considered unlikely or highly unlikely to occur and two species were considered likely to occur. BCE identified four conservation significant species as likely to have resident populations in the survey area. Species considered likely to occur are detailed in **Table 2-7**.

Note that since the BCE field survey:

- The Carpet Python (*Morelia spilota imbricata*) is no longer listed as threatened.
- The Western Rosella (*Platycercus icterotis*), is no longer listed as threatened and is a Priority 4 species.
- Major Mitchell's Cockatoo (*Lophochroa leadbeateri*), is no longer listed as threatened.
- Bush Stone-curlew (*Burhinus grallarius*) is no longer considered a priority species.
- Shy Heathwren (*Hylacola cauta whitlocki*) is no longer considered a priority species.
- The Central Long-eared Bat, identified as *Nyctophilus timoriensis* (Priority 4) is now *Nyctophilus major tor* (Priority 3).
- The Western Rosella (*Platycercus icterotis*) is no longer listed as Threatened and is a Priority 4 species.

**Table 2-7 Conservation Significant Vertebrate Fauna Likely to Occur**

| Species                                                | Conservation Status* |        |      | Habitat Preferences                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Assessed by | Notes                                                                                                                         |
|--------------------------------------------------------|----------------------|--------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------|
|                                                        | EPBC Act             | BC Act | DBCA |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |                                                                                                                               |
| <i>Leipoa ocellata</i><br>(Malleefowl)                 | Vu                   | Vu     |      | Occurs in semi-arid areas of Western Australia, from Carnarvon to southeast of the Eyre Bird Observatory (southeast WA). It occupies shrublands and low woodlands that are dominated by mallee vegetation, as well as native pine <i>Callitris</i> woodlands, <i>Acacia</i> shrublands, Broombush <i>Melaleuca uncinata</i> vegetation or coastal heathlands. The nest is a large mound of sand or soil and organic matter. They prefer vegetation with a dense understory of shrubs. Breeding habitat is characterised by light soil and abundant leaf litter, which is used in the construction of nesting mounds. Density of the canopy cover is an important feature associated with high breeding densities, with grazed areas generally have much lower densities. In the WA Wheatbelt, distribution is associated with landscapes with lower rainfall, greater amounts of mallee and shrubland that occur as large remnants, and lighter soil surface textures (GHD 2018). | GHD; BCE    | Malleefowl was not recorded in field surveys. BCE located an old, inactive mound.<br><br>There is suitable habitat on Lot 45. |
| <i>Merops ornatus</i><br>(Rainbow Bee-eater)           | Ma                   |        | -    | The Rainbow Bee-eater is found throughout the state except in desert regions, particularly in open forests and woodlands, with sandy, loamy soil, but also sandridges, sandpits, riverbanks, mangroves, rainforest shrublands, and in various cleared or semi-cleared habitats, including farmland and areas of human habitation. They also inhabit sand dune systems in coastal areas and at inland sites that are in close proximity to water (GHD 2018).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | GHD         | Species known from the region. Suitable habitat present.                                                                      |
| <i>Falco peregrinus</i><br>(Peregrine Falcon)          | -                    | OS     |      | Rocky ridges, major drainage lines, woodland (BCE 2012).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | BCE         | May occasionally visit (BCE)                                                                                                  |
| <i>Platycercus icterotis</i><br>(Western Rosella)      |                      |        | P4   | Eucalypt and Sheoak Woodlands (BCE 2012).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | BCE         | May occasionally visit (BCE)                                                                                                  |
| <i>Nyctophilus major</i><br>tor Central Long-eared Bat |                      |        | P3   | Woodlands, shrublands (BCE 2012).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | BCE         | Suitable habitat present (BCE)                                                                                                |

Vu = (Vulnerable); Ma (Marine); OS = other specially protected; P = priority

### **2.8.3 Short Range Endemics**

Habitat types in the Permit area are regionally common and there is a high degree of habitat connectivity in the Permit Area (GHD 2018). While a Short Range Endemic (SRE) assessment has not been undertaken, the high habitat connectivity in the Permit area makes it unlikely that any SRE species present are restricted to the Project area.

### **2.8.4 Subterranean Fauna**

Exploration activities are not anticipated to have a significant impact on subterranean fauna and no subterranean fauna assessments have been undertaken.

## **2.9 Heritage and Social Setting**

### **2.9.1 Land Use and Community**

The Permit area is located in City of Kalgoorlie-Boulder between the mining towns of Kalgoorlie and Kambalda. Mining, prospecting, and mineral exploration are common in the region. Other activities include pastoralism and traditional land uses.

Franco-Nevada also leases Lot 45 out for agistment. Lefroy will liaise with the pastoralist to ensure that exploration activities have minimal impact on livestock.

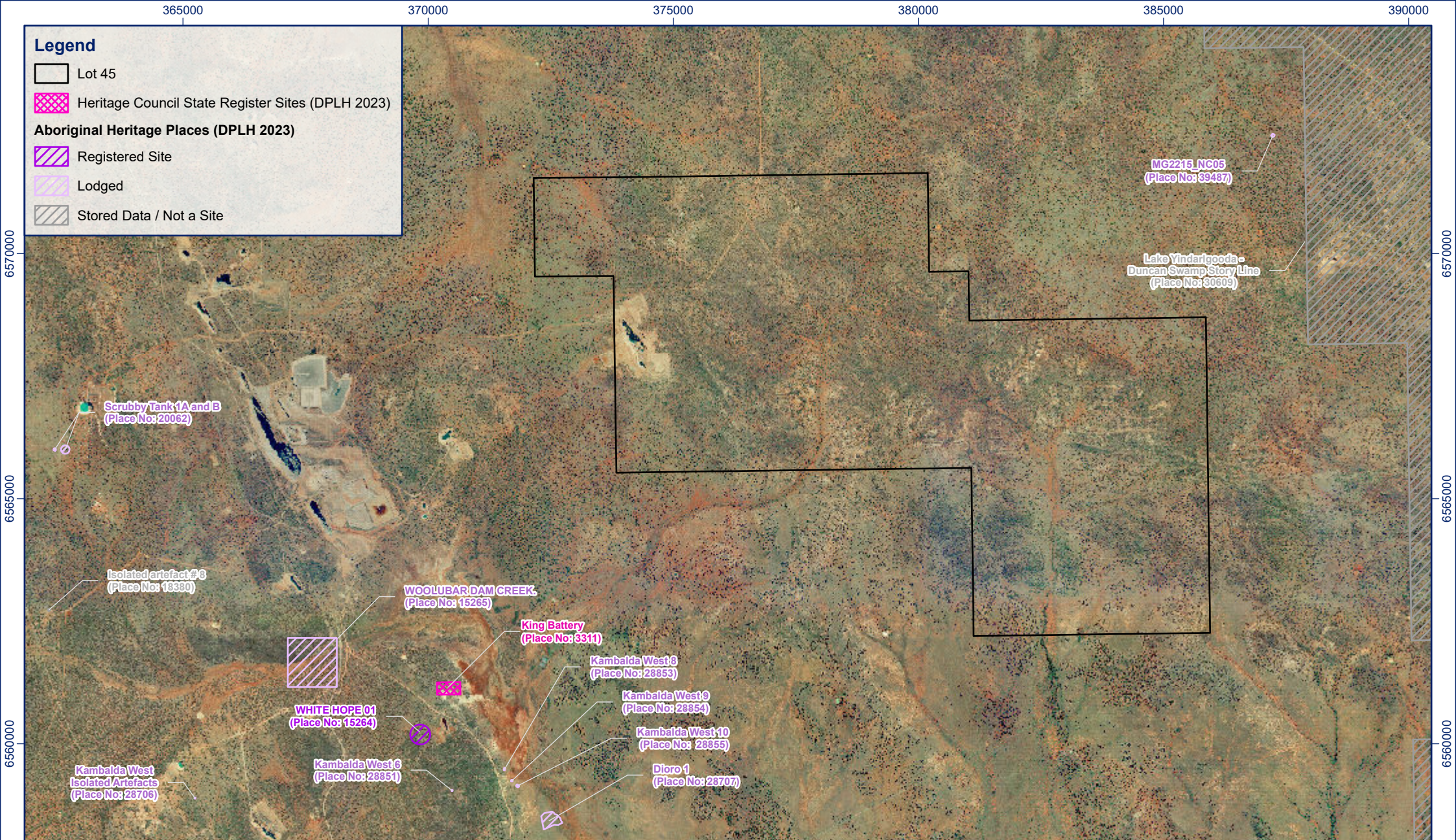
### **2.9.2 Aboriginal Heritage**

A search of the Department of Planning, Lands and Heritage (DPLH 2023) Aboriginal Heritage Inquiry System (AHIS) did not identify any heritage sites on Lot 45 (**Figure 2-6**).

Monger will ensure that appropriate heritage surveys have been undertaken prior to any disturbance to ensure that impacts to Aboriginal heritage are avoided.

### **2.9.3 European Heritage**

The Heritage Council State Heritage Office inHerit database (Heritage Council, 2023) was checked. There are no European heritage sites on Lot 45. The closest heritage site is King Battery, approximately 6 km southwest of Lot 45 (**Figure 2-6**).



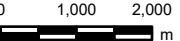
© 2023 Department of Planning, Lands and Heritage

Scale: 1:100,000

Projection: GDA2020 MGA Zone 51

Created/Reviewed By: HC/CR

Aerial: December 2001





| PROJECT        |                                            | CLIENT                                                                                |
|----------------|--------------------------------------------|---------------------------------------------------------------------------------------|
| September 2023 | Lefroy - ESG - Clearing Permit - Documents |  |
| Figure 2-6     |                                            |                                                                                       |
| ADV-AU-00567   | Aboriginal and State Heritage              |                                                                                       |

### **3. Proposed Land Clearing and Rehabilitation**

Monger proposes to clear up to 125 ha inside a 7,632 ha Permit Area that comprises all of Lot 45. Clearing will be undertaken progressively in a series of exploration campaigns. The purpose of land clearing is for mineral exploration purposes including:

- Drill pads.
- Access Tracks.
- Supporting infrastructure including laydown areas, parking areas, bag farms and core yards.

Clearing will typically be undertaken using a bulldozer, loader or grader. Where practicable raised blade clearing will be used. Where this is not practicable topsoil will be stripped and stockpiled for use in rehabilitation.

Clearing will be kept to the minimum required for safe exploration. Clearing areas will be rehabilitated within six months of no longer being required. Rehabilitation will typically consist of:

- Drill collars will be cut no less than 400 mm below the surface then securely capped and backfilled to form a water-shedding mound above the natural ground level.
- Sumps will be backfilled.
- Topsoil and vegetation will be respread over cleared areas.
- Windrows will be back-bladed onto tracks.
- Tracks will be scarified if required.

Under the Mineral Rights Agreement with Franco Nevada, Monger is liable for the rehabilitation of any disturbances on Lot 45 that it creates.

## 4. Environmental Management Measures

Exploration activities by Lefroy and its subsidiaries are undertaken in accordance with the Exploration Environmental Management Plan: Eastern Lefroy Project (Blueprint, 2020). Environmental management measures that will be undertaken during and after the completion of the Project are summarised in Table 4-1.

**Table 4-1 Environmental Management Measures**

| Environmental Aspect             | Management Measures                                                                                                                                                                                                     |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Clearing and Topsoil Disturbance | Disturbance areas will be kept to the minimum required and existing disturbance used where possible.                                                                                                                    |
|                                  | Monger and Hampton will co-ordinate activities such that drill lines can be used for both gold and nickel exploration where possible.                                                                                   |
|                                  | Clearing areas will be clearly demarcated prior to clearing or machines will be led by a spotter with a GPS.                                                                                                            |
|                                  | When clearing tracks and drill lines, the path of least resistance through the vegetation will be chosen to minimise disturbance.                                                                                       |
|                                  | Cutting of branches will be favoured over removing entire trees.                                                                                                                                                        |
|                                  | Designated access routes to clearing areas will be used.                                                                                                                                                                |
|                                  | Raised-blade clearing will be used wherever practicable.                                                                                                                                                                |
|                                  | Vegetation will be cleared and stockpiled for use in rehabilitation.                                                                                                                                                    |
|                                  | Where raised-blade clearing is not practicable, topsoil will be removed and stockpiled for future rehabilitation.                                                                                                       |
|                                  | A toolbox meeting will be held between the supervising geologist/field assistant and the clearing contractor to ensure that the operator is aware of the approved clearing areas and any areas that need to be avoided. |
| Weeds                            | Disturbance areas will be recorded.                                                                                                                                                                                     |
|                                  | Disturbed areas will be rehabilitated within six months of no longer being required.                                                                                                                                    |
|                                  |                                                                                                                                                                                                                         |
| Fauna General                    | All vehicles and equipment arriving on site will be free of soil, weeds, seeds, and vegetative matter.                                                                                                                  |
|                                  | Weed infestations will be treated.                                                                                                                                                                                      |
|                                  | Personnel will be required to adhere to speed limits and drive to road / weather conditions to minimise risks of fauna injuries or death due to traffic.                                                                |
|                                  | Speed limits will be assigned and enforced.                                                                                                                                                                             |
|                                  | Any death or injury of fauna will be recorded.                                                                                                                                                                          |
|                                  | Waste management measures will be implemented.                                                                                                                                                                          |
| Malleefowl                       | Feeding and unnecessary handling of fauna will be banned.                                                                                                                                                               |
|                                  | All drill holes will be plugged immediately after completion of the hole.                                                                                                                                               |
|                                  | At least one side of each sump will be ramped to allow fauna egress.                                                                                                                                                    |
| Air Quality and Noise            | Targeted searches for Malleefowl mounds will be undertaken no more than one month prior to clearing by traditional owners or suitably qualified personnel.                                                              |
|                                  | All Malleefowl mounds will be avoided.                                                                                                                                                                                  |
|                                  | No activities will occur within 50 m of any active Malleefowl mounds.                                                                                                                                                   |
|                                  | Disturbance areas will be kept to the minimum required and existing disturbance used where possible.                                                                                                                    |
|                                  | Disturbed areas will be rehabilitated within six months of no longer being required.                                                                                                                                    |
|                                  | Topsoil stripping and spreading activities will be restricted if dust cannot be adequately controlled during high winds.                                                                                                |

| Environmental Aspect | Management Measures                                                                                                              |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------|
|                      | Vehicles and mobile plant will be maintained as per manufacturer specifications to ensure noise and air emissions are minimised. |
| Heritage             | All proposed operations will be carried out in accordance with the provisions of the <i>Aboriginal Heritage Act 1972</i> .       |
|                      | Monger will ensure that all areas have been surveyed for heritage prior to clearing.                                             |
|                      | If required, heritage monitors will be invited to be present during ground disturbance.                                          |

## 5. Assessment of Clearing Principles

Clearing applications are assessed against ten principles outlined in Schedule 5 of the *Environmental Protection Act 1986* (EP Act) (**Table 5-1**). These principles aim to ensure that all potential impacts resulting from the removal of native vegetation can be assessed in an integrated way and applied to all lands in Western Australia. The principles address the four main environmental areas of biodiversity significance, land degradation, conservation estate and ground and surface water quality.

Information regarding the potential impact of clearing up to 125 ha for exploration activities by Monger against each of these principles is provided in **Table 5-1**. Monger considers that the proposed activities are not at variance with the clearing principles.

**Table 5-1 Native Vegetation Clearing Principles**

| Clearing Principle                                                                                                                                        | Assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Assessed Outcome                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| a) Native vegetation should not be cleared if it comprises a high level of biological diversity.                                                          | <ul style="list-style-type: none"> <li>The vegetation associations located in the Project area are well represented at local and regional scales (i.e., state, IBRA bioregion, IBRA subregion and Local Government Area (LGA)) with greater than 96% of the pre-European extents remaining.</li> <li>No Commonwealth or State TECs and / or State listed PECs have been identified on Lot 45.</li> <li>Desktop searches by GHD identified 109 native plant taxa within 20 km of Lot 45. The field survey recorded 84 native flora taxa. Lot 45 is considered to have a moderate-high level of flora biodiversity.</li> <li>No EPBC Act or BC Act-listed flora species have been recorded on Lot 45 in field surveys by NVS and GHD.</li> <li>One conservation significant species is likely to occur on Lot 45 - <i>Eremophila arachnoides</i> subsp. <i>tenera</i> (P3).</li> <li>There are no reserves, conservation areas, or other DBCA-managed estates on Lot 45.</li> <li>Fauna species recorded on Lot 45 during field surveys have previously been recorded in the Coolgardie IBRA bioregion and are not considered to be dependent on the resources in the Project area.</li> <li>The Project area does not contain vegetation in better condition than that in the surrounding region.</li> </ul> | <p>Unlikely to be at variance.</p> <p>The proposed clearing is unlikely to significantly impact biodiversity at a local or regional level.</p>         |
| b) Native vegetation should not be cleared if it comprises the whole or part of, or is necessary for the maintenance of, a significant habitat for fauna. | <ul style="list-style-type: none"> <li>One Threatened fauna species was considered likely to occur (Malleefowl, Vulnerable under the BC Act and EPBC Act). <ul style="list-style-type: none"> <li>One old, inactive Malleefowl mound has been identified by BCE.</li> <li>Malleefowl were recorded within Location 53 West, located approximately 26 km west of the Project area. Suitable similar habitat is present on Lot 45, and Malleefowl are likely to occur.</li> <li>Two habitat types present are suitable foraging and breeding habitat. Both are common locally and regionally.</li> <li>No individuals or breeding mounds were recorded in the Project area during field surveys by GHD and BCE.</li> </ul> </li> <li>Monger will undertake targeted searches of disturbance areas and will avoid all Malleefowl mounds identified.</li> <li>No activities will occur within 50 m of any active mounds identified.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                  | <p>Unlikely to be at variance.</p> <p>The proposed clearing is unlikely to significantly impact the habitat of fauna at a local or regional level.</p> |
| c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.                              | <ul style="list-style-type: none"> <li>No Conservation Significant flora species have been recorded in the Permit area.</li> <li>One Priority 3 species (<i>Eremophila arachnoides</i> subsp. <i>tenera</i>) is considered likely to occur.</li> <li>No Threatened species are considered likely to occur.</li> <li>Low-impact, raised-blade clearing will be used to the extent practicable</li> <li>The proposed clearing is unlikely to significantly impact conservation significant flora at a local or regional level.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <p>Unlikely to be at variance</p>                                                                                                                      |

| Clearing Principle                                                                                                                               | Assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Assessed Outcome            |
|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary, for the maintenance of a TEC.                | <ul style="list-style-type: none"> <li>No TECs or PECs have been recorded in the Project area.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Not at variance.            |
| e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.  | <ul style="list-style-type: none"> <li>The Project area is located within the Coolgardie IBRA bioregion. This IBRA bioregion has approximately 96% of its pre-European extent remaining (GHD 2018). Broad scale vegetation mapping of the area undertaken by Beard (1972) identified two vegetation associations within the Project area: <ul style="list-style-type: none"> <li>Medium Woodland; coral gum and goldfields blackbutt (association 9).</li> <li>Medium woodland; Salmon Gum and Goldfields Blackbutt (association 468).</li> </ul> </li> <li>These associations are considered well-represented at all levels (state, IBRA bioregion, IBRA sub-region and LGA) with greater than 97% of their pre-European extents remaining (WALGA 2020). The Project area is surrounded by intact native vegetation and is well connected to the surrounding vegetation.</li> <li>The proposed clearing is unlikely to significantly impact remnant vegetation at a local or regional level.</li> </ul> | Unlikely to be at variance. |
| f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland. | <ul style="list-style-type: none"> <li>There are no permanent drainage channels or wetlands within or in the vicinity of the survey area, however there are several ephemeral drainage lines.</li> <li>A distinct vegetation association occurs over two ephemeral drainage lines (<i>Eucalyptus salmonophloia</i> and <i>E. griffithsii</i> open woodland over a tall sparse shrubland). However, the taxa recorded are not considered wetland species and the vegetation is not considered riparian vegetation.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Unlikely to be at variance  |
| g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.                    | <ul style="list-style-type: none"> <li>While clearing may cause soil and wind erosion, exploration clearing of tracks and drill pads will not result in large areas of cleared land.</li> <li>Watercourses in the Permit area are minor and ephemeral.</li> <li>DWER mapping indicates there are no known occurrences of Acid Sulphate Soils in Lot 45.</li> <li>Clearing will be undertaken progressively as areas are required. Disturbed areas will be rehabilitated once they are no longer required.</li> <li>Raised-blade clearing with minimal soil disturbance will be used wherever practicable.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                     | Unlikely to be at variance. |

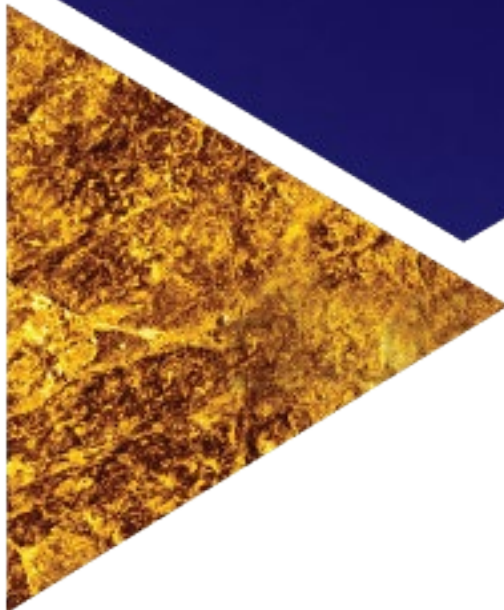
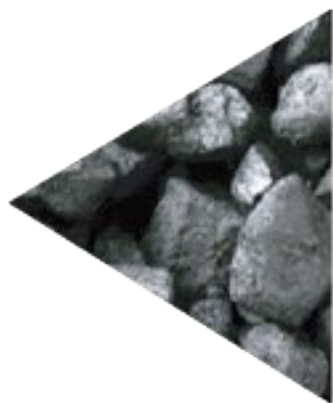
| Clearing Principle                                                                                                                                                                | Assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Assessed Outcome            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area. | <ul style="list-style-type: none"> <li>There are no reserves, conservation areas or DBCA-managed lands in the Permit Area. The closest conservation areas are: <ul style="list-style-type: none"> <li>Kambalda Nature Reserve is approximately 14 km southwest.</li> <li>Lakeside Timber Reserve, approximately 14.5 km northwest.</li> <li>Majestic Timber Reserve approximately 12.6 km northeast.</li> </ul> </li> <li>The proposed clearing is unlikely to impact on the environmental values of any adjacent or nearby conservation areas.</li> <li>The Permit Area is largely surrounded by remnant native vegetation. The proposed exploration clearing is unlikely to create a significant barrier to fauna movement or habitat linkage.</li> </ul>                                        | Unlikely to be at variance. |
| i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.                     | <ul style="list-style-type: none"> <li>There are no large rivers in the Permit Area.</li> <li>Ephemeral drainage lines in the Permit area flow into Lake Lefroy approximately 8 km south. These are dry and only flow for short periods after heavy rainfall events.</li> <li>No lakes or wetlands or natural water bodies were recorded in the Permit area which contains three man-made dams.</li> <li>The proposed clearing is unlikely to result in any significant deterioration in surface water or groundwater quality.</li> </ul>                                                                                                                                                                                                                                                          | Unlikely to be at variance. |
| j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.                                               | <ul style="list-style-type: none"> <li>The climate is semi-arid with an average annual rainfall under 300 mm. Rainfall may be received throughout the year and a significant portion of annual rainfall can be received in a single event.</li> <li>Minor, ephemeral drainage lines in the Permit area have small catchments and are expected to hold water for short periods after heavy rainfall events.</li> <li>Native vegetation is largely intact in and around the Permit area and it is likely to retain a large proportion of run-off.</li> <li>The permit area predominantly consists of flat to gently undulating plains and minimal surface flows are anticipated.</li> <li>It is unlikely that the proposed clearing will cause, or exacerbate, the incidence of flooding.</li> </ul> | Unlikely to be at variance. |

## 6. References

- Bamford Consulting Ecologists (BCE) (2012) *Fauna Assessment of the Mount Martin Survey Area*. Perth.
- Beard, J. S. (1972) *The vegetation of the Kalgoorlie area, Western Australia : map and explanatory memoir, 1:250,000 series*. Sydney.
- Beard, J. S. (1990) *Plant Life of Western Australia*. Perth: Kangaroo Press.
- Blueprint (2020) *Exploration Environmental Management Plan: Eastern Lefroy Project*. Environmental Management Plan prepared for Lefroy Exploration Limited by Blueprint Environmental Strategies, West Perth.
- Bureau of Meteorology (BOM) (2023) *Climate statistics for Australian locations*. [Online] [Accessed on 14th July 2023] [http://www.bom.gov.au/climate/averages/tables/cw\\_012038.shtml](http://www.bom.gov.au/climate/averages/tables/cw_012038.shtml).
- Cowan, M. (2002) 'Coolgardie 3 (COO3 – Eastern Goldfields subregion).' In May, J. and McKenzie, N. (eds) *A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002*. Perth: Department of Conservation and Land Management, pp. 156–169.
- Department of Planning, L. and H. (DPLH) (2023) *Aboriginal Heritage Enquiry System*. [Online] [Accessed on 29th June 2023] <https://maps.daa.wa.gov.au/AHIS/>.
- Department of Primary Industries and Regional Development (2019) *Pre-European Vegetation (DPIRD-006)*. Data WA. [Online] [Accessed on 14th August 2023] <https://catalogue.data.wa.gov.au/dataset/pre-european-dpird-006>.
- Department of Water of Environmental Regulation (DWER) (2017) *Acid Sulfate Soil Risk Map 50K (DWER-049)*. Data WA. [Online] [Accessed on 18th August 2023] <https://catalogue.data.wa.gov.au/dataset/acid-sulfate-soil-risk-map-50k-dwer-049>.
- DoEE (Department of Environment and Energy) (2012) *Interim Biogeographic Regionalisation for Australia, Version 7*. Commonwealth of Australia.
- GHD Pty Ltd (GHD) (2018) *WestGold - Location 45 Flora and Fauna Assessment*. Perth.
- Heritage Council (2023) *InHerit Database*. [Online] [Accessed on 4th July 2023] <http://inherit.stateheritage.wa.gov.au/Public>.
- Native Vegetation Solutions (NVS) (2012) *Level 1 Flora and Vegetation Survey for the Expansion of Mt Martin Mining Area, Alacer Gold South Kalgoorlie Operations (M26/132)*. Kalgoorlie.
- Thomas-Dans, C., Storrie, A., Brown, A., Chapman, A., Copp, I., Ennis, A., Friend, T., Gleeson, D., Keighery, K., Herford, I., Hunter, J., Hussey, P., Keally, I., Pearson, D., Pronk, G., Winfield, C. and Wentzel, K. (2012) *Guide to the Great Western Woodlands*. Bentley: Department of Environment and Conservation (DEC).
- Watson, A., Judd, S., Watson, J., Lam, A. and Mackenzie, D. (2008) *The Great Western Woodlands*.
- Western Australian Local Government Association (WALGA) (2020) *2020 Vegetation retention status for Beard Associations and by IBRA Regions*. Data WA. [Online] [Accessed on 18th August 2023] <https://catalogue.data.wa.gov.au/dataset/2020-vegetation-retention-status-for-beard-associations-and-by-ibra-regions>.
- Western Australian (WA) Herbarium (1998) *Florabase—the Western Australian Flora*.

# Appendix A.

## Important Information about this Document



## **IMPORTANT INFORMATION ABOUT THIS DOCUMENT**

### **Our Client**

*This report has been produced by or on behalf of RPM Advisory Services Pty Ltd ("RPM") solely for Lefroy Exploration Limited (the "Client").*

#### **1. Client Use**

*The Client's use and disclosure of this report is subject to the terms and conditions of the engaging Agreement under which RPM prepared the report.*

#### **2. Notice to Third Parties**

*RPM prepared this report for the Client only. If you are not the Client:*

- *RPM has prepared this report having regard to the particular needs and interests of the Client, and in accordance with the Client's instructions and in accordance with the terms and conditions of its engagement. It did not draft this report having regard to any other person's particular needs or interests. Your needs and interests may be distinctly different to the Client's needs and interests, and the report may not be sufficient, fit or appropriate for your purposes.*
- *Other than as expressly agreed by RPM in writing, RPM does not authorise, nor does it accept any liability to any party other than the Client who chooses to rely on this Report. Any such reliance is at the user's sole and exclusive risk.*
- *RPM does not make and expressly disclaims from making any representation or warranty to you – express or implied – regarding this report or the conclusions or opinions set out in this report (including without limitation any representation or warranty regarding the standard of care used in preparing this report, or that any forward-looking statements, forecasts, opinions or projections contained in the report will be achieved, will prove to be correct or are based on reasonable assumptions).*
- *RPM expressly disclaims any liability to you and any duty of care to you.*
- *RPM does not authorise you to rely on this report. If you choose to use or rely on all or part of this report, then any loss or damage you may suffer in so doing is at your sole and exclusive risk.*

#### **3. Independence**

*RPM provides advisory services to the mining and finance sectors. Within its core expertise it provides independent technical reviews, resource evaluation, mining engineering, environmental assessments and mine valuation services to the resources and financial services industries.*

*RPM have independently assessed the subject of the report (the "Project") by reviewing pertinent data, which may include Resources, Reserves, existing approvals, licences and permits, manpower requirements and the life of mine plans relating to productivity, production, operating costs and capital expenditures. All opinions, findings and conclusions expressed in this report are those of RPM and specialist advisors.*

*Drafts of this report were provided to the Client, but only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in this report.*

*RPM has been paid, and has agreed to be paid, professional fees for the preparation of this report. The remuneration for this report is not dependent upon the findings of this report. RPM does not have any economic or beneficial interest (present or contingent), in the Project, in securities of the companies associated with the Project or the Client*

#### **4. Inputs, subsequent changes and no duty to update**

*RPM has created this report using data and information provided by or on behalf of the Client. Unless specifically stated otherwise, RPM has not independently verified that data and information. RPM accepts no liability for the accuracy or completeness of that data and information, even if that data and information has been incorporated into or relied upon in creating this report (or parts of it).*

*The conclusions and opinions contained in this report apply as at the date of the report. Events (including changes to any of the data and information that RPM used in preparing the report) may have occurred since that date which may impact on those conclusions and opinions and make them unreliable. RPM is under no duty to update the report upon the occurrence of any such event, though it reserves the right to do so.*

## **5. Inherent Mining Risks**

*Mining is carried out in an environment where not all events are predictable.*

*Whilst an effective management team can identify the known risks and take measures to manage and mitigate those risks, there is still the possibility for unexpected and unpredictable events to occur. It is not possible therefore to totally remove all risks or state with certainty that an event that may have a material impact on the operation of a mine, will not occur.*

*The ability of any person to achieve forward-looking production and economic targets is dependent on numerous factors that are beyond RPM's control and that RPM cannot anticipate. These factors include, but are not limited to, site-specific mining and geological conditions, management and personnel capabilities, availability of funding to properly operate and capitalize the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, unforeseen changes in legislation and new industry developments. Any of these factors may substantially alter the performance of any mining operation.*

## **6. Limitations and Exclusions**

*RPM 's report is based on data, information reports, plans and tabulations, as applicable, provided by Client or on behalf of the Client. The Client has not advised RPM of any material change, or event likely to cause material change, to the operations or forecasts since the date of assets inspections.*

*The work undertaken for this report is that required for a technical review of the information, coupled with such inspections as RPM considered appropriate to prepare this report.*

*Unless otherwise stated specifically in writing, the report specifically excludes all aspects of legal issues, commercial and financing matters, land titles and agreements, except such aspects as may directly influence technical, operational or cost issues and where applicable to the JORC Code guidelines.*

*RPM has specifically excluded making any comments on the competitive position of the relevant assets compared with other similar and competing producers around the world. RPM strongly advises that any potential investors make their own comprehensive assessment of the competitive position of the relevant assets in the market.*

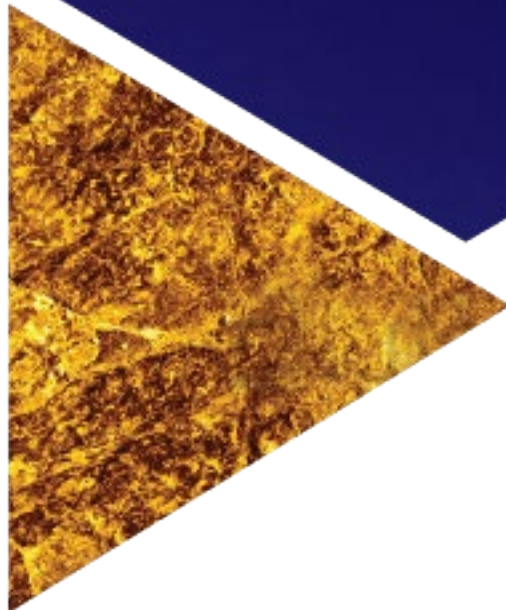
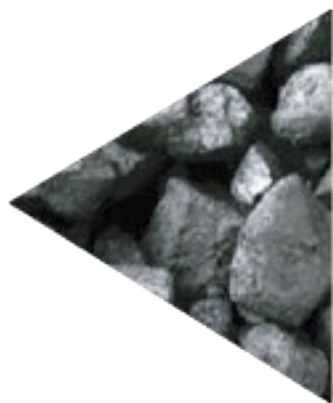
## **7. Indemnification**

*The Client has indemnified and held harmless RPM and its subcontractors, consultants, agents, officers, directors and employees from and against any and all claims, liabilities, damages, losses and expenses (including lawyers' fees and other costs of litigation, arbitration or mediation) arising out of or in any way related to:*

- RPM 's reliance on any information provided by Client; or*
- RPM 's services or materials; or*
- Any use of or reliance on these services or materials by any third party not expressly authorised by RPM,*

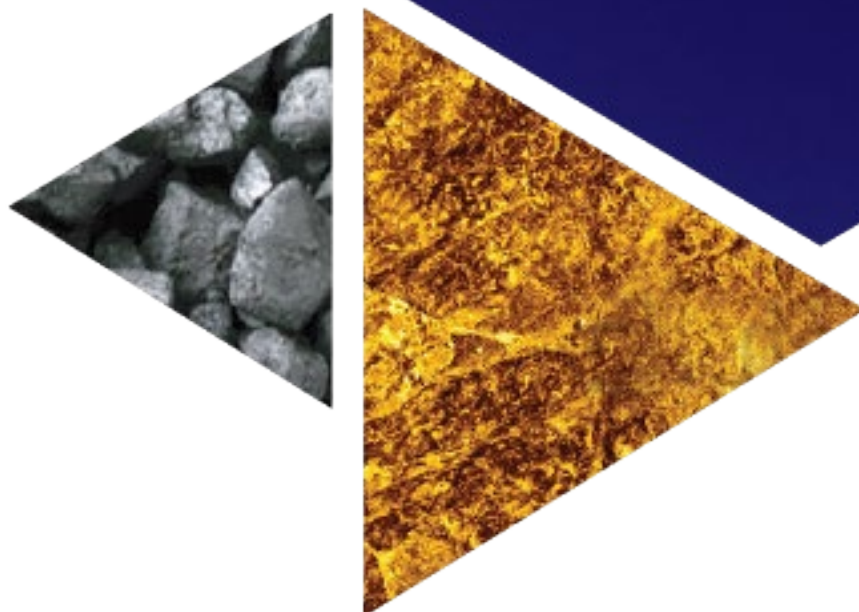
*save and except in cases of death or personnel injury, property damage, claims by third parties for breach of intellectual property rights, gross negligence, wilful misconduct, fraud, fraudulent misrepresentation or the tort of deceit, or any other matter which be so limited or excluded as a matter of applicable law (including as a Competent Person under the Listing Rules) and regardless of any breach of contract or strict liability by RPM.*

# Appendix B. Certificate of Title

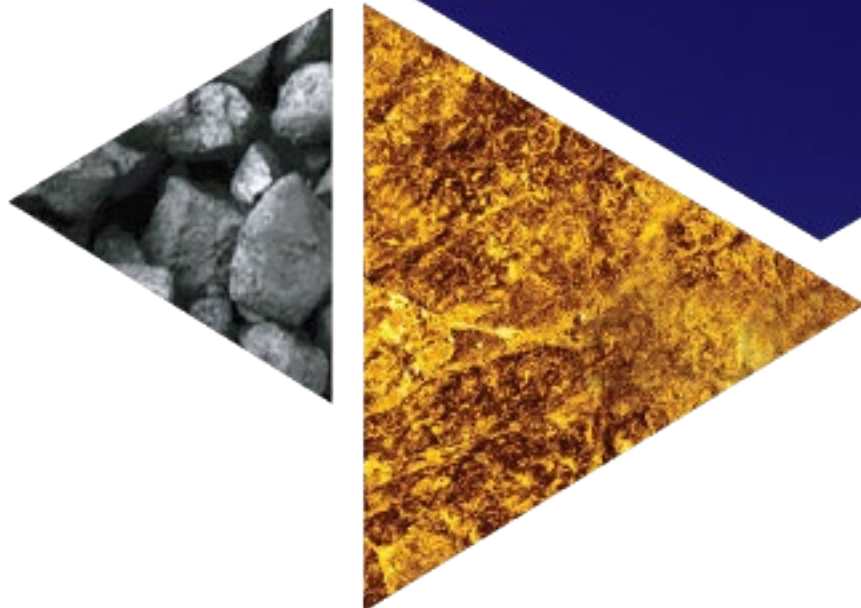


# Appendix C.

## Access Authority

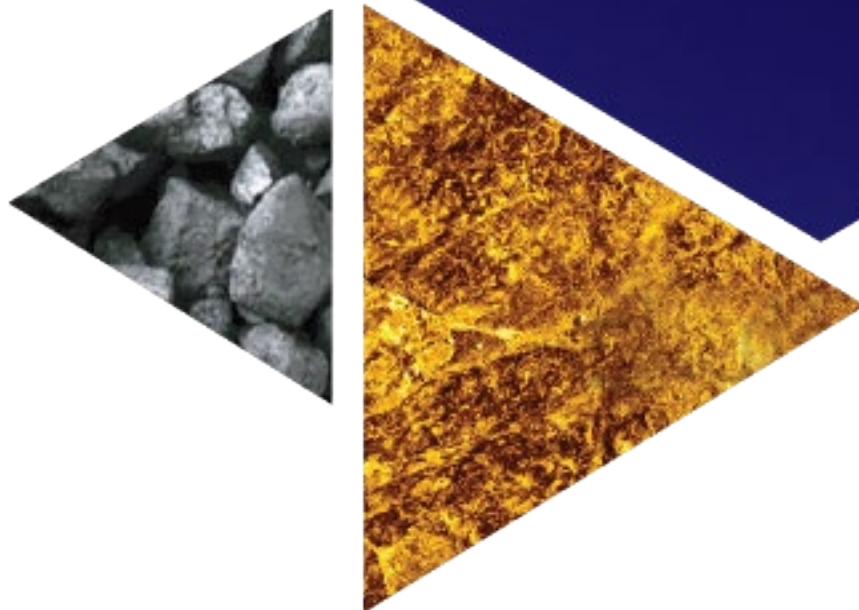


# Appendix D. Flora and Fauna Assessment (GHD 2018)



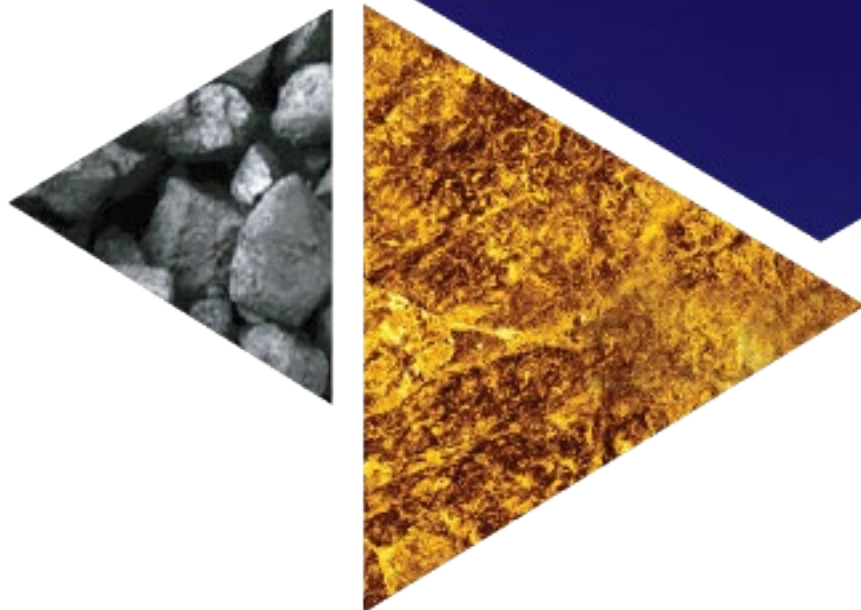
# Appendix E.

## Level 1 Flora and Vegetation Survey of the Mt Martin Mining Area



# Appendix F.

## Fauna Assessment of the Mt Martin Area





– END OF REPORT –

**RPM**GLOBAL

[www.rpmglobal.com](http://www.rpmglobal.com)

AUSTRALIA | BRAZIL | CANADA | CHILE | CHINA | HONG KONG | INDIA | INDONESIA  
MONGOLIA | RUSSIA | SOUTH AFRICA | TURKEY | USA