Caledonia North Extended (CNX) Project Works Approval Supporting Document

Prepared by Astill Consultants for Focus Operations Pty Ltd

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Disclaimer

Executive Summary

Focus Operations Pty Ltd, a wholly owned subsidiary of Focus Minerals Ltd, is proposing to develop the Caledonian North Extended (CNX) Project, located in the Eastern Goldfields region of Western Australia. The CNX Project includes development of an existing historically mined open pit and will require dewatering as a supporting activity.

Focus is applying for a Works Approval pursuant to Part V of the *Environmental Protection Act 1986* which includes one category as described within Schedule 1 of the *Environmental Protection Regulations 1987*. Activity categories proposed in this application are summarised as follows:

Category	Description	Production or design capacity	Nominated production or design capacity
6	Mine dewatering	50,000 tonnes or more per year	270,000 tonnes per year

This document has been prepared to support the Works Approval application and includes all required Attachments, as specified in form IR-F09.

Predominant potential environmental emissions / discharges relevant to this Works Approval application can be summarised as:

- Containment of hypersaline water; and
- Inadvertent spill of hydrocarbons

There is no critical containment infrastructure associated with any of the proposed activities in this application and activities are considered low risk to the surrounding environment.

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Abbreviations

Abbreviation	Description
BoM	Bureau of Meteorology
bgl	Below ground level
CGO	Coolgardie Gold Operations
DEMIRS	Department of Energy, Mines, Industry Regulation and Safety
DWER	Department of Water and Environmental Regulation
EMS	Environmental Management System
EPA	Environmental Protection Authority
EP Act	*Environmental Protection Act 1986*
ESA	Environmentally Sensitive Area
Focus	Focus Operations Pty Ltd
KHTR	Kangaroo Hills Timber Reserve
kL	Kilolitres
km	Kilometres
MWP	Mine water pond
MCP	Mine Closure Plan
MP	Mining Proposal
NVCP	Native vegetation clearing permit
Project	Caledonian North Extended (CNX) Project
RIWI Act	*Rights in Water and Irrigation Act 1914*
SWL	Standing water level
TDS	Total dissolved solids
tpa	Tonnes per annum
TMH	Three Mile Hill
TLO	Time limited operations
WRL	Waste rock landform

1 Introduction

Focus Operations Pty Ltd (Focus), a wholly owned subsidiary of Focus Minerals Ltd, is proposing to cut back the existing Caledonian North Extended (CNX) Project (the Project). The Project will see extraction of gold ore during mining of CNX open pit for processing at the nearby Three Mile Hill (TMH) mill (TMH covered under existing environmental approvals).

Focus intends to undertake a cutback of the existing CNX pit. Other landforms and activities that form part of this open pit project include:

- Waste rock landforms (WRL);
- Run-of-mine pad;
- Dewatering pipelines;
- Topsoil stockpiles;
- Surface water diversion channels or drains; and
- Other ancillary infrastructure.

The Project is expected to have a mine life of approximately two years, inclusive of construction and operations and will operate seven days per week.

As part of these mining activities it is considered possible that excess mine water will be encountered, and therefore approvals for potential discharge of mine dewatering is needed.

1.1 Location

The Project is located approximately 2 km northeast of Coolgardie and 40 km west of Kalgoorlie-Boulder in the eastern Goldfields region of Western Australia. The Project is situated within the Shire of Coolgardie local government area and accessed via the public Great Eastern Highway and Cairns Rd. The Project forms part of a broader tenement package covering the Coolgardie Gold Operations (CGO), owned wholly by Focus and its subsidiaries. A map of the Project regional location and prescribed premises boundary is provided in Figure 1.

1.2 Works Approval application

Focus is seeking to construct and operate supporting mine activities which will result in the Project becoming a prescribed premises under Part V of the *Environmental Protection Act 1986* (EP Act). Discharge of mine dewater as defined within Schedule 1 of the *Environmental Protection Regulations 1987* are proposed to occur as outlined in Table 1 below. Figure 2 (Attachment 2) depicts the proposed prescribed premises layout with activities.

Table 1: Proposed prescribed premises categories

Category	Description	Production or design capacity	Nominated production or design capacity
6	Mine dewatering	50,000 tonnes or more per year	270,000kL/annum

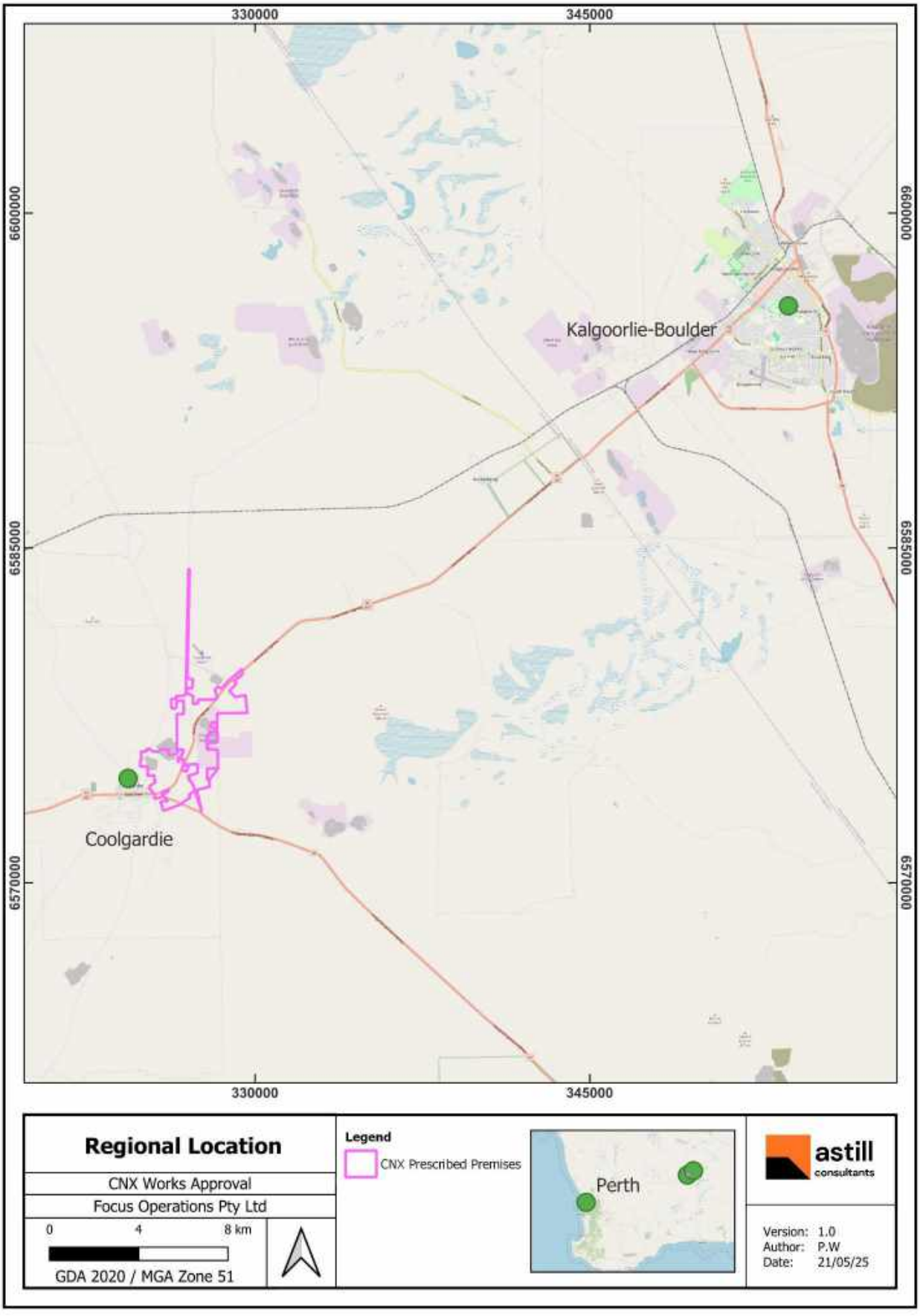

Figure 1: Regional location

1.1 Applicant details

1.1.1 Applicant Name

The proponent is Focus Operations Pty Ltd (ACN 115 821 255) a wholly owned subsidiary of Focus Minerals Ltd (ACN 005 470 799).

1.1.2 Occupier Details

The proposed prescribed premises is contained within tenements wholly owned by Focus as detailed in Table 2 below. These tenements align with the prescribed premises boundary of licence L8249/2008/3 held by Focus, with an intention that this licence be amended to bring in the works approval infrastructure following construction and commissioning. Proposed activities are limited to six tenements.

Proof of tenement and occupier status are included as **Appendix A** and **Appendix B** respectively.

Table 2: Tenement details

Tenement ID	Holder 1	Holder 2	Area (ha)	Expiry
L 15/95	Focus Minerals Ltd	Focus Operations Pty Ltd	55.00	28/03/2029
L15/161	Focus Minerals Ltd	Focus Operations Pty Ltd	15.00	15/02/2028
M15/154	Focus Minerals Ltd	Focus Operations Pty Ltd	22.99	02/04/2027
M 15/645	Focus Minerals Ltd	Focus Operations Pty Ltd	721.60	25/03/2035
M 15/1432	Focus Minerals Ltd	Focus Operations Pty Ltd	5.77	30/09/2045
M15/1788	Focus Minerals Ltd	Focus Operations Pty Ltd	424.15	15/07/2031

Focus' Western Australian corporate office is located at:

Level 5,
8 St Georges Terrace
Perth WA 6000

1.1.3 Authorised Representative

All correspondence and enquiries pertaining to this works approval application should be addressed to:

[redacted]
Environment Manager
08 9215 7888
gblick@focusminerals.com.au

2 Attachment 2: Premises Maps

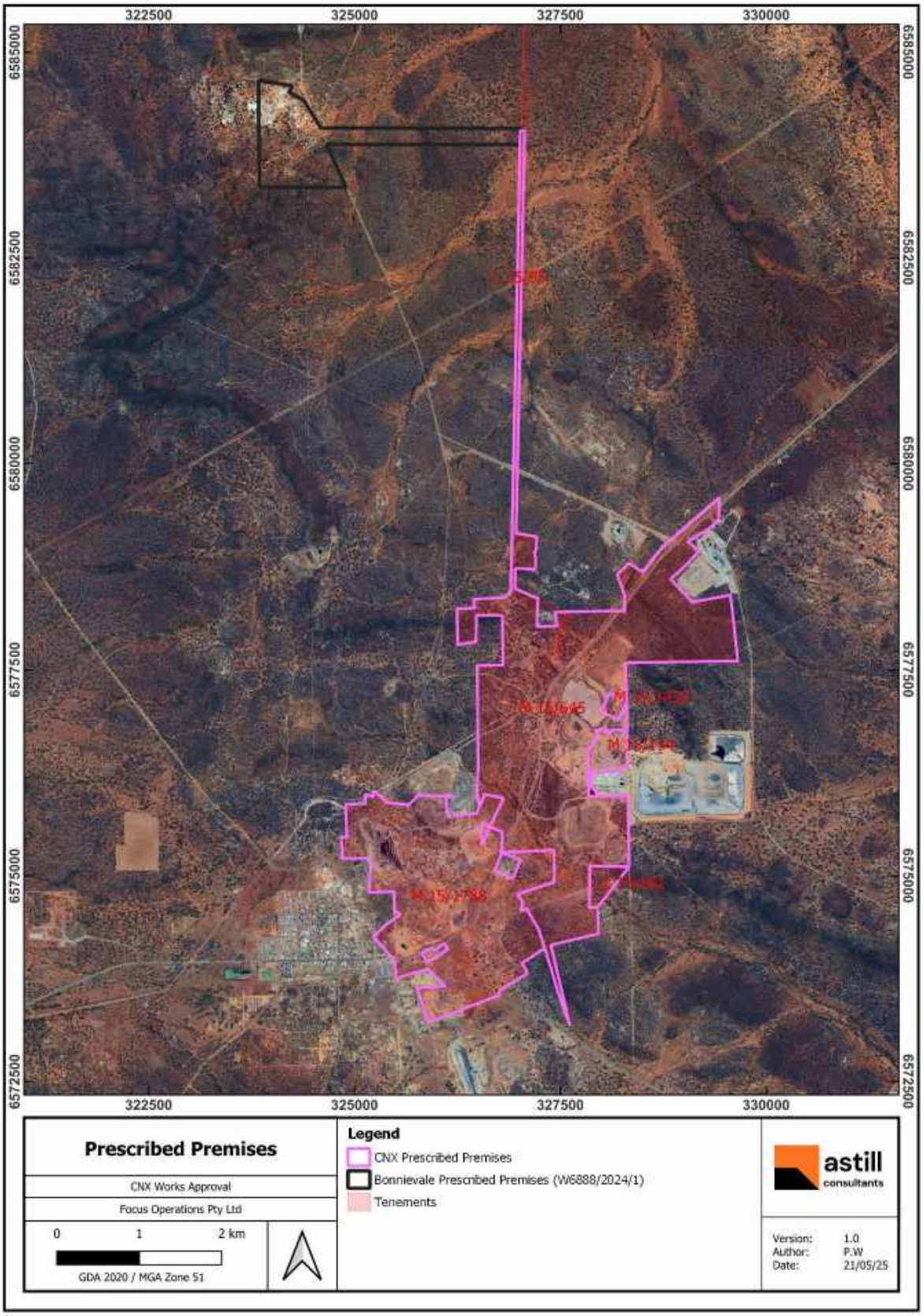

Figure 2: Prescribed premises layout

3 Attachment 3A – Environmental Commissioning Plan

3.1 Introduction

This Environmental Commissioning Plan supports the Works Approval application and outlines how Focus will undertake commissioning of infrastructure associated with this Works Approval, as well as how Focus will operate infrastructure during Time Limited Operations (TLO) prior to licensing.

The proposed works involve construction of a dewatering pipeline, from Lindsays Pit, via CNX Pit ultimately connecting to dewatering pipeline at Bonnievale Underground. Pending regulatory approval, establishment of the dewatering infrastructure is tentatively proposed for Quarter 4 of the 2025 calendar year (October – December).

This pipeline network is intended to primarily facilitate mining at Bonnievale underground, connecting this works approval to the already granted Bonnievale works approval, and to facilitate the imminent CNX open pit cutback. This application also incorporates minor back-up discharge points of Greenfields pit for small volumes if required, and larger volumes at Lindsays pit if required. Maintaining numerous discharge and abstraction points will allow Focus to have a flexible approach to the mining sequence without disrupting operations.

3.2 Construction and Commissioning Stages

Tentative construction and commissioning stages are indicated in Table 3 below. It is important to note that this schedule is indicative, as timing will be adjusted to suit the mining schedule, however, the broad sequence will remain. All prescribed activities are expected to complete construction within one year of commencement of the Project.

Table 3: Indicative commissioning schedule

Project stage	Indicative schedule
Construction of dewatering infrastructure (pipeline, breather valves, scour pits and pump installation)	October – December 2025
Commissioning of dewatering infrastructure	January - March 2026

3.3 Emissions and Discharges

The anticipated emissions and / or discharges expected to occur during commissioning with inputs and outputs during this commissioning process summarised in Table 4 below.

Table 4: Inputs and outputs summary

Activity	Inputs	Potential outputs (discharges / emissions)
Mine dewatering	• Hydrocarbon fuels and oils (for operation of diesel generator) • Saline to hypersaline water	• Hydrocarbon emissions (spills) • Noise • Saline to hypersaline water

3.4 Management and Monitoring

The following management objectives will be assessed during commissioning and TLO phases as outlined in Table 5 below.

Table 5: Emission / discharge and commissioning objectives

Equipment	Emission / discharge	Commissioning objective
Saline pipeline and diesel generated pump	• Hypersaline water • Diesel emissions from generator	• All equipment is operating in line with manufacturer's specifications • Pipeline inspections are completed daily during commissioning phases

Control and mitigation strategies during commissioning phases of the Project can be summarised in Table 6.

Table 6: Commissioning monitoring and management measures

Emission	Proposed controls	Frequency
Hydrocarbon emissions / spills	• Equipment pre-started and used in line with manufacturer's specifications. • Spill kits available or nearby to areas where there is a risk of hydrocarbon spill.	Daily
Saline to hypersaline water	• Pipeline inspections to ensure breather valves are not leaking and pipeline integrity is intact. • Inspection of scour pits to ensure they are not at risk of overflowing.	Daily

3.5 Incidents and Reporting

All incidents during the commissioning phases (including any complaints received) will be documented in Focus' internal reporting system, and managed in accordance with incident management procedures, as outlined in the environmental management system (EMS). Any incidents that have a potential to cause environmental harm will be reported to DWER, as outlined in Section 72 of the *Environmental Protection Act 1972*. A summary of any incidents during commissioning will be provided in the future licence application.

4 Attachment 3B – Proposed Activities

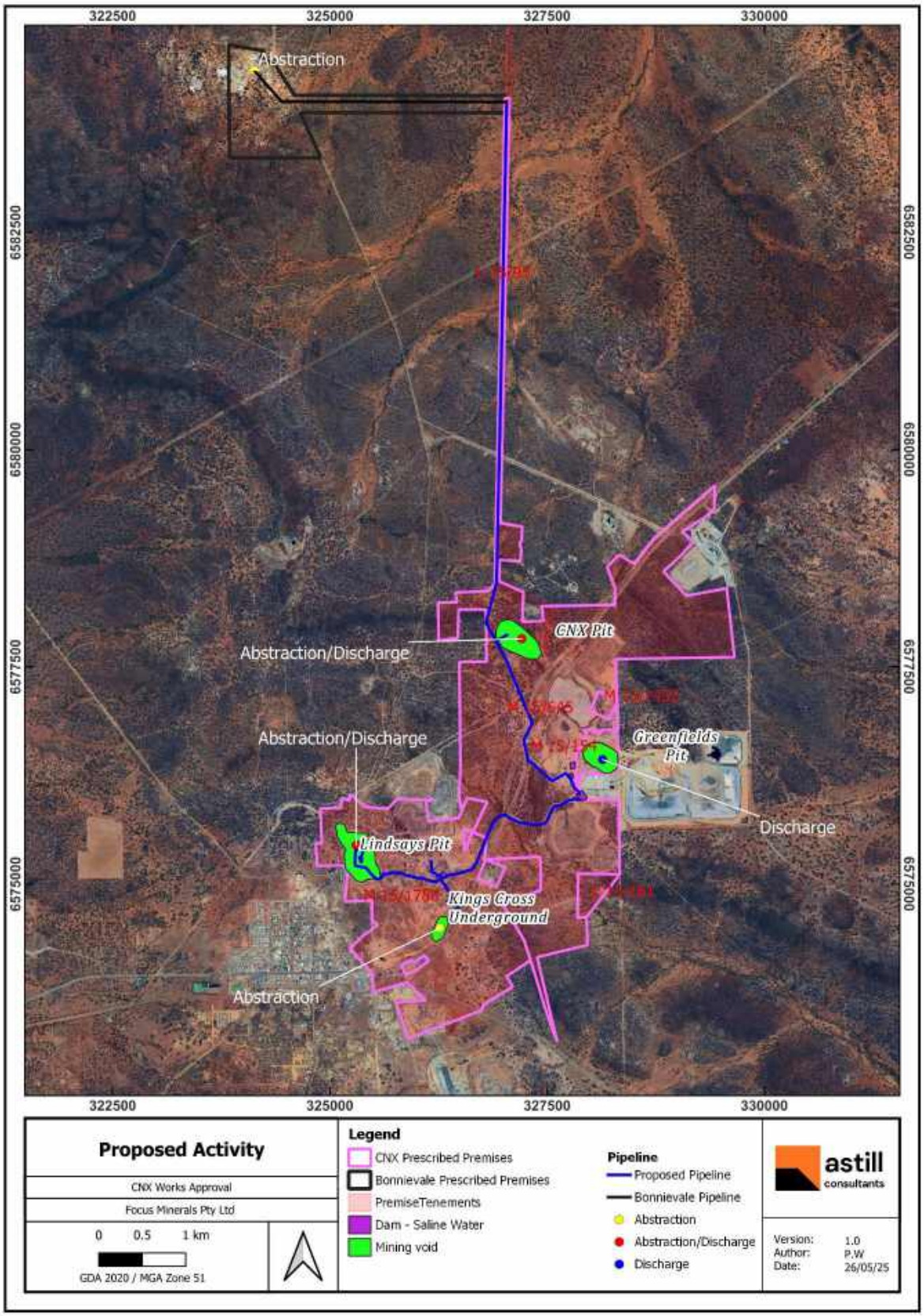

Figure 3: Proposed activities

4.1 Category 6 – Mine Dewatering

Focus will undertake dewatering at the CNX project for up to a two-year duration of the project to manage groundwater inflows and maintain groundwater levels below active mining zones. Dewatering will begin once groundwater is intercepted, using sump pumps to transfer water to a Mine water pond (MWP). Extracted water will be either used on site for dust suppression or discharged into inactive pits.

AquaGeo modelled peak dewatering rates and aquifer drawdown associated to dewatering as part of a groundwater study for the CNX Project. The modelling results showed that a peak abstraction rate will be reached in Year 2 of the Project as maximum annual abstraction reached 135,000 kL per annum (370 kL per day). The hydrogeological report is attached as **Appendix C.**

Due to low hydraulic conductivity in the region associated with fractured rock aquifers, the cone of depression from dewatering is likely to be steep-sided and limited to a few hundred metres from pits. The area surrounding CNX pit contains no identified groundwater dependent ecosystems (GDEs), the groundwater table lies at depths exceeding 40 m, and the groundwater itself is hypersaline. Due to these factors, there is no anticipated beneficial use for the groundwater outside of mining operations. Accordingly, the planned dewatering activities are not expected to result in adverse impacts to local groundwater resources.

4.1.1 Abstraction Volumes

To determine groundwater abstraction rates required, Focus engaged AquaGeo to develop a groundwater model for the proposed peak dewatering rates and aquifer drawdown associated with dewatering.

The modelling results demonstrated that dewatering will reach a peak during the second year. A 50% contingency has been added to the estimated dewatering volume for both years, described below in Table 7. A large contingency factor has been applied to incorporate the requirement to move a small volume of groundwater out of CNX pit to commence mining and then maintain an ongoing abstraction volume.

Table 7: Modelled dewatering abstraction rates

Project year	Dewatering volume (m^3 / year)	Highest monthly requirement + 50% contingency (m^3 / month)	Dewatering volume + 50% contingency (m^3/year)
1	32,000	5,333	64,000
2	135,000	22,500	270,000

Focus' existing operating licence for the TMH mill (L8249/2008/3) allows for up to 475,000 kL of mine dewatering per annum. Focus is likely to request an increase to this limit when applying for a licence amendment to include additional dewatering requirements from the Project should the current allocation be utilised on top of existing allocation.

4.1.2 Dewatering Process

Focus seeks flexibility to utilise numerous pits as both abstraction and or/discharge locations to support regional groundwater management, particularly as mining activities commence and conclude at different locations in the mining schedule. Dewatering will follow a staged approach, aligned with the progression of pit development.

Ponds will be constructed using compacted clay placed over in-situ transitional material and lined with a high-density polyethylene (HDPE) liner of at least 1 mm thickness to minimise seepage (see Figure 4). MWPs will include a standpipe and pump for watercart filling, with embankments constructed to a maximum 2:1 batter slope using competent waste rock. Perimeter fencing will be installed to deter fauna ingress.

Focus proposes to dewater active pits via sump pumping to already existing lined surface MWPs and designated inactive mining voids. In-pit sumps equipped with float systems will be constructed to collect and centralise groundwater and surface inflows, with sufficient capacity to pump water to the pit crest. Water collected in MWPs will be used primarily for on-site dust suppression; when reuse is not required, surplus water will be transferred to inactive pits. A conceptual overview of the dewatering system is shown in Figure 5.

To ensure containment during rainfall events, all MWPs will maintain a minimum operational freeboard of 300 mm, sufficient to manage a 1:100 AEP event.

A dedicated pipeline will connect CNX Pit to Greenfields, Bonnievale, and Lindsays Pit, enabling flexible water transfer. Receiving pits will maintain a minimum 6 m freeboard to accommodate inflows and prevent overtopping during extreme rainfall.

Lindsay's Pit is considered the most suitable primary discharge location for the Project, owing to its significant storage capacity. The following estimation provides a basis to support Lindsays Pit being used as the primary location for discharge volume in the absence of topographic survey data.

The reported surface area of Lindsay's Pit is approximately 20 hectares (200,000 m²), and its depth ranges from 90 m to 150 m below the groundwater table (AquaGeo, 2021). As a detailed survey pickup of the pit is not available, these figures are based on desktop estimates and include assumptions regarding pit shape and dimensions. The average depth is calculated as the midpoint between the minimum and maximum depths:

$$\text{Average depth} = \frac{90\ m + 150\ m}{2} = 120\ m$$

Allowing for a 6 m freeboard, the effective storage depth is reduced to 114 m. Using this adjusted depth, the indicative storage volume is approximately 22.8 million cubic metres:

$$\text{Volume} = 200{,}000\ m2 \times 114\ m = 22{,}800{,}000\ m3$$

To account for the narrowing geometry of the pit toward the base, a shape correction factor of 70% is applied, resulting in a more conservative estimate of approximately 15.96 million cubic metres of effective storage volume:

$$\text{Adjusted Volume} = 22{,}800{,}000\ m3 \times 0.70 = 15{,}960{,}000\ m3$$

It should be noted that this volume represents a theoretical capacity based on simplified geometric assumptions and does not account for variations in pit shape or internal features. Nevertheless, this substantial capacity is expected to be more than sufficient to accommodate the Project's discharge requirements.

Figure 4: Typical mine water pond

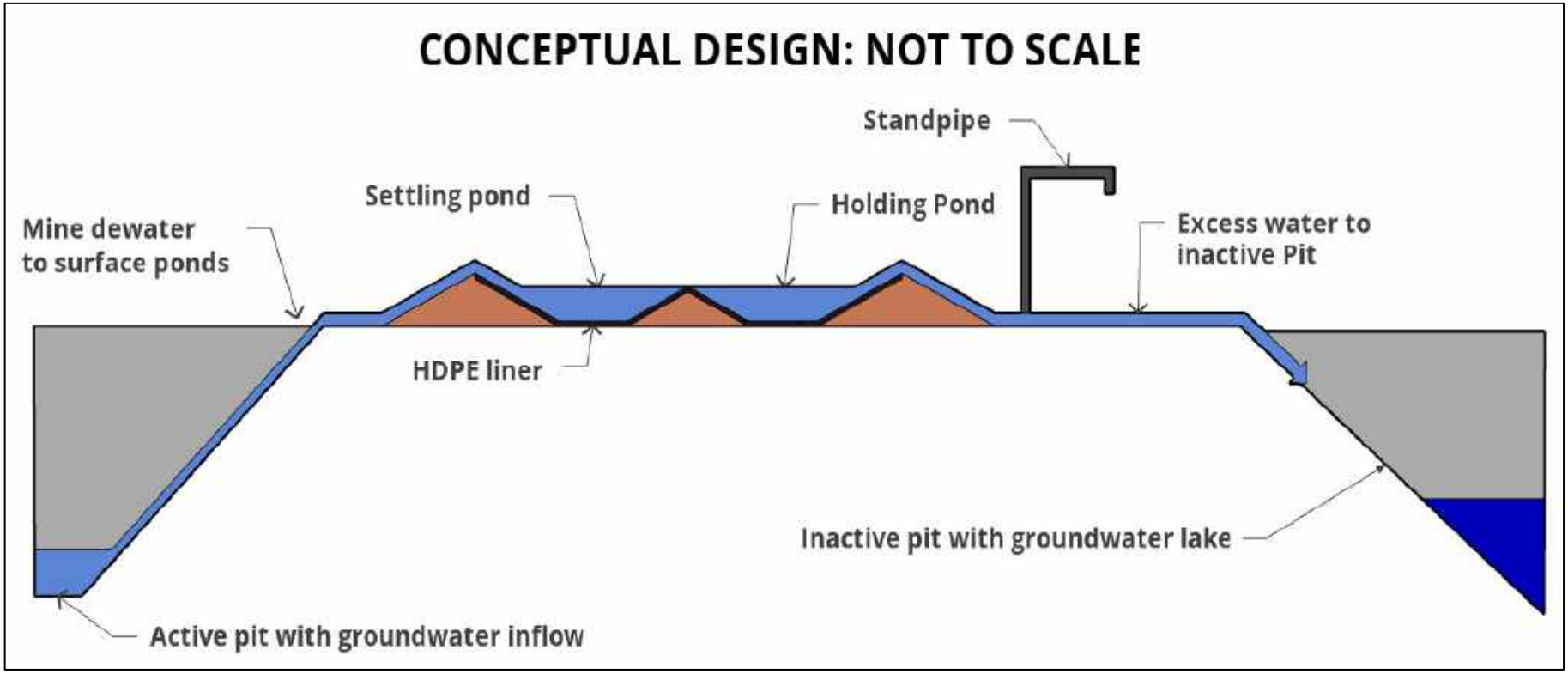

Figure 5: Mine dewatering conceptual design

5 Attachment 5 – Other Approvals and Consultation Documentation

5.1 Relevant Environmental Approvals

Focus is aware of its legal obligation to consult and seek approvals and comply with requirements under various Federal and State Legislation in addition to this approval. A broad range of environmental legislation has been considered in the submitted Mining Proposal with a subset directly relevant to the activities detailed in this Works Approval summarised in Table 8 below.

Table 8: Relevant environmental approvals

Government agency	Act / regulation	Approval	Relevance
DEMIRS	*Mining Act 1978*	Mining proposal (MP)	Focus has received approval for an MP (Reg ID 500394) pursuant to the *Mining Act 1978* for all activities required for the project.
		Mine closure plan (MCP)	The CGO MCP was updated and approved in October 2024 and includes all applicable activities within the MP and broader CGO.
DWER	*Environmental Protection (Clearing of Native Vegetation) Regulations 2004*	Native vegetation clearing permit (NVCP)	A NVCP application was submitted to allow for clearing of vegetation within the prescribed premises boundary (CPS 10870/1).
	Environmental Protection Act 1986 (Part V)	Operating licence	A licence amendment application will be submitted either during TLO to amend licence L8249/2008/3 to incorporate the Works Approval activities.
	Rights in Water and Irrigation Act 1914	5C licence	Focus maintains groundwater licences 160936 and 205789 with 3,215,000 kL and 225,000 kL allocations respectively to abstract groundwater from pits.

5.2 Stakeholder Consultation

Focus aim to engage openly with all identified stakeholders throughout and beyond the approvals process and to work openly with communities in which it operates, as well as with government departments to contribute to economic and social development to build positive reputation and social licence to operate.

5.2.1 Stakeholder Engagement Principles

Consultation with stakeholders regarding proposed activities is important at all operational stages from exploration, planning and approvals; to construction, commissioning, and operation; to final

decommissioning and closure. Focus is committed to developing relationships and maintaining regular communication with stakeholders, in accordance with the stakeholder engagement principles outlined in Table 9.

Table 9: Stakeholder engagement principles

Principle	Requirement
Communication	Communication must be open, accessible, clearly defined, two-way and appropriate.
Transparency	The process and outcomes of community and stakeholder engagement should, wherever possible, be made open and transparent, agreed upon and documented.
Collaboration	A cooperative and collaborative approach to seek mutually beneficial outcomes is considered key to effective engagement.
Inclusiveness	Inclusiveness involves identifying and involving communities and stakeholders early and throughout the process, in an appropriate manner.
Integrity	Community and stakeholder engagement should establish and foster mutual trust and respect.

5.2.2 Stakeholder Engagement Strategy

The purpose of this Stakeholder Engagement Strategy is to ensure effective involvement of stakeholders throughout the proposed life of Focus' operations. This involvement is required for all phases of the operation from exploration, planning and approvals; to construction, commissioning, and operation; to final decommissioning and closure.

The Stakeholder Engagement Strategy is used to:

- Identify the full range of stakeholders with an interest in the project;
- Establish and maintain a consistent and coordinated approach for communication with the local community, government agencies, special interest groups and industry;
- Identify known and emerging environmental, social and cultural heritage aspects of the Project which might be of interest or concern to stakeholders;
- Inform stakeholders about key environmental, social and cultural heritage factors associated with the Project, the potential impacts and management strategies to minimise or mitigate the potential impacts;
- Consider stakeholder concerns during all phases of the Project decision making process; and
- Ensure that there is timely and accurate feedback and provision of information on how any impacts and issues will be managed.

Stakeholder engagement and consultation activities related to Focus' activities are active and ongoing. Focus maintains a stakeholder engagement register for documenting all communications with stakeholders. A summary of stakeholder engagement relevant to the Project is shown below in Table 10.

Table 10: Summary of stakeholder engagement

Stakeholder group	Communication period	Number of communications	Description of engagement	Relevant topic(s) discussed	Outcomes achieved
Coolgardie Community	September 2023 – September 2024	1	In-person	CGO mining plans and community impacts	Focus held a stall at Coolgardie Day to discuss relevant future mining plans and activities with interested community members. No adverse outcomes raised by community members.
DEMIRS	March 2021 – Ongoing	4	Meeting	Coolgardie restart Clearing permits CGO MCP submission CNX MP Submission	Discussion on proposed mining restart of CGO and applicable approval requirements and require referring projects in proximity to Coolgardie townsite to EPA.
DWER	March 2021 – Ongoing	2	Meeting	Dewatering and discharge points Works Approval / Licence Amendment	This Works Approval application and subsequent Licence Amendment application.
Main Roads WA (MRWA)	October 2024 – Ongoing	2	Submissions and emails	Coolgardie–Esperance Highway haul road crossing	Focus have discussed application process for working near assets.
Marlinyu Ghoorlie NTCG	June 2021 – Ongoing	17	Email Meetings Phone	Aboriginal heritage Native Title agreement	Briefed on mining plans in CGO. Heritage surveys organised over Project area through Terra Rosa Consulting.

Stakeholder group	Communication period	Number of communications	Description of engagement	Relevant topic(s) discussed	Outcomes achieved
					Terms for Native Title agreement for pending tenements in in negotiation.
Shire of Coolgardie (SoC)	May 2021 – Ongoing	4	Email Presentation	Accommodation CNX mining plans Communication Haulage	Renewed agreement to utilise public roads for haulage raised (to be finalised) Discussion on proposed mining restart of CGO and benefits to SoC and opportunities for collaboration (i.e., local accommodation use, Shire landfill) Potential concerns for the Shire and residents identified (i.e., traffic).
Water Corporation	October 2024	5	Email Phone Submissions	Discussions of vibration in the area and the impact on pipeline	Orica study to confirm vibration (<5mm/s ppv) is suitable. Submission of WNA application.

6 Attachment 6A – Emissions and Discharges

6.1 Category 6 – Mine Dewatering

Potential environmental emissions arising from the proposed activities include dust, noise, hydrocarbon spills, and saline water release. The following sections address the potential emissions and proposed controls.

6.1.1 Saline Water

Transfer of saline water between pits has a potential to impact on native vegetation and soil resources in the event of a pipeline leak or rupture. In addition, the use of saline water for dust suppression via watercart has potential to cause overspray into the environment, also resulting in potential impacts on vegetation and soil resources.

Risks of pipeline failure will be minimised by using HDPE installed in accordance with AS2033:2024 and with an appropriate pressure rating (PN6.3).

Verification of Competency will be utilised as a management tool to ensure operators are sufficiently qualified to operate watercarts prior to usage to reduce risk of overspray into the environment. Visual inspections will be used to identify any areas of saline overspray and ensure that rectification methods, such as use of dribble bars, are put in place to prevent further incidents. Vegetation condition is monitored and reported on as per Department of Energey, Mines, Industry Regulation and Safety (DEMIRS) annual environmental reporting requirements.

6.1.1.1 Bunding and V-drains

All dewatering pipelines will be placed in earthen v-drains with scour pits constructed at appropriate intervals and low points, with sufficient capacity to contain spillage for the duration of approximately 12 hours in the event of a pipeline failure. Inspections will be carried out twice per 24-hour period when in operation. This provides a contingency for spills to be captured and dewatering activities ceased in the event of a pipeline rupture.

6.1.2 Noise

During construction and operations there will be multiple noise sources generated on site resulting from activities not associated with the proposed prescribed activities. Diesel generators used for pumping of mine dewater between pits are unlikely to cause excessive noise compared to other mining activities (i.e. haulage, dumping etc.)

6.1.3 Dust

Clearing of native vegetation and related stripping of topsoil required for construction of pipeline infrastructure is likely to generate dust. Any visual dust emissions from construction activities will be managed through dust suppression via water carts if required. Visual dust monitoring will determine whether construction activities need to be ceased in high wind or extremely dry conditions, depending on any potential impacts to surrounding environments.

6.2 Summary of Controls

A summary of controls to manage or prevent the risk of emissions and changes are provided in Table 11 below.

Table 11. Summary of controls

Prescribed activity	Emission or discharge	Summary of controls
Mine dewatering	Hypersaline water	Daily inspections for visual integrity and leaks (during operation)
		Scour pits placed where required at low points over the pipeline route, with sufficient capacity to contain a spill event between routine inspections (twice daily)
		Activities that cause visual dust ceased during periods of high wind conditions
		Minimum 6m freeboard maintained in CNX discharge points during operation

7 Attachment 7 – Siting and Location

7.1 Sensitive Land Uses

The Project is located approximately 3.9 km from the nearest sensitive receptor, a residential property on Ford Street in Coolgardie. Impacts to this receptor from mine dewatering activities are expected to be minimal.

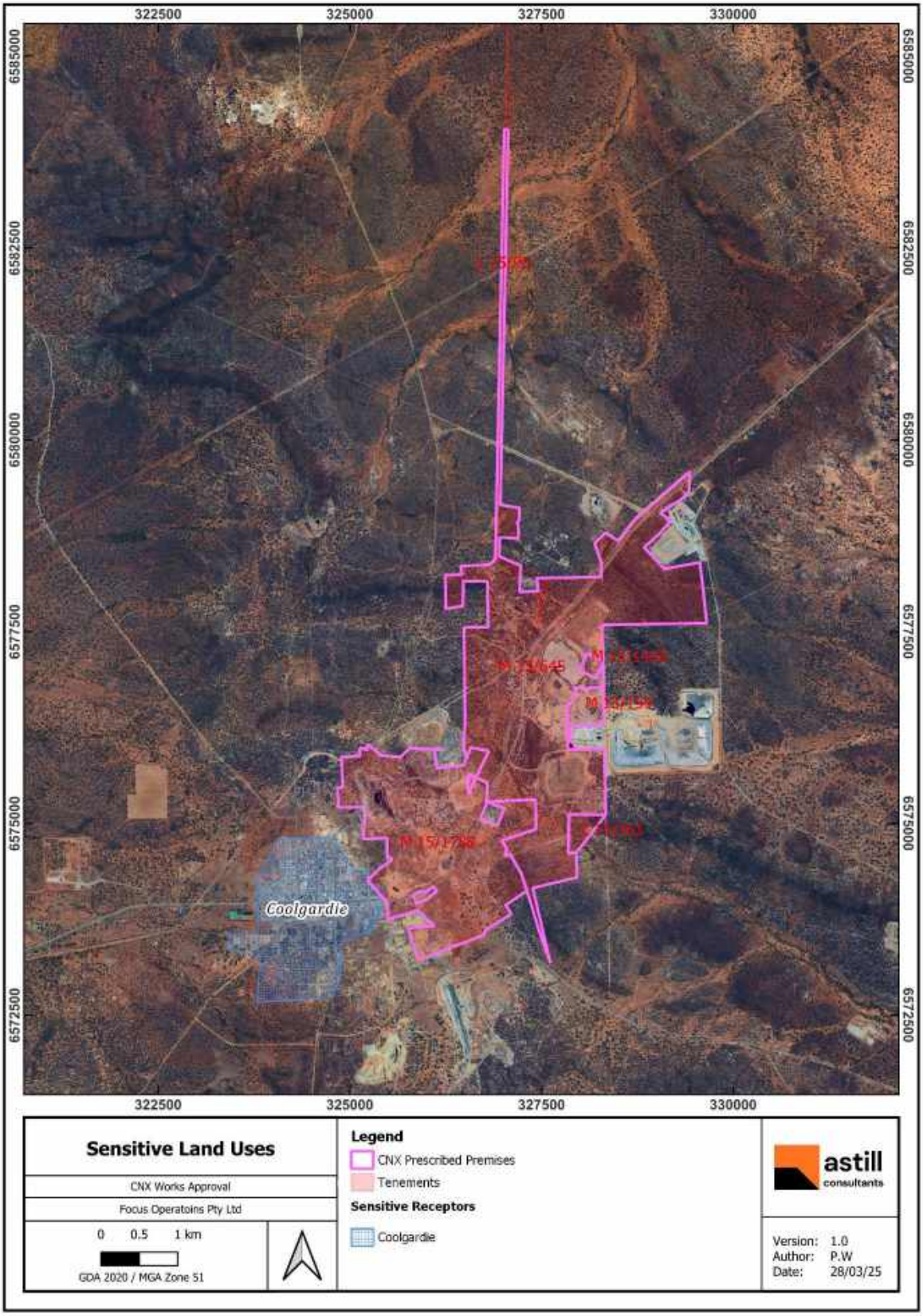

Figure 6: Sensitive land uses

7.1.1 Noise Emissions

Noise and vibration have the potential to adversely affect the amenity of residential areas and are regulated under the Environmental Protection (Noise) Regulations 1997 (Noise Regulations) when noise generated from one premises impacts another. Noise and vibration from implementing the proposal will be minimal, as only mobile diesel generators and vehicular movement are involved. Nearby sites Alicia and Dreadnought underwent noise emissions studies, and were able to demonstrate adherence to the Regulations. The CNX project is located further away from the nearest sensitive receptor, hence noise is not considered an impact.

7.1.2 Dust Emissions

Dust emission studies at nearby sites such as Alicia, Dreadnought and Big Blow, all located significantly closer to sensitive receptors, concluded that dust and noise impacts were negligible and within acceptable limits.

7.2 Physical Environment

7.2.1 Climate

The climate of the Eastern Goldfields subregion is characterised as an arid to semi-arid climate of hot summers and mild winters with annual rainfall of approximately 200 - 300 mm (Beard, 1990; Cowan, 2001a). Climate data from the Coolgardie weather station (#12018) located approximately 5 km southwest shows a long-term annual rainfall of 270 mm (1898 – 2020) and is summarised in Figure 7 below.

The average long-term annual rainfall is exceeded by the average annual evaporation rate (approximately 2,640 mm) by a factor of almost 10 to 1. Evaporation exceeds rainfall in all months of the year, with June having the lowest daily evaporation and January having the highest daily evaporation.

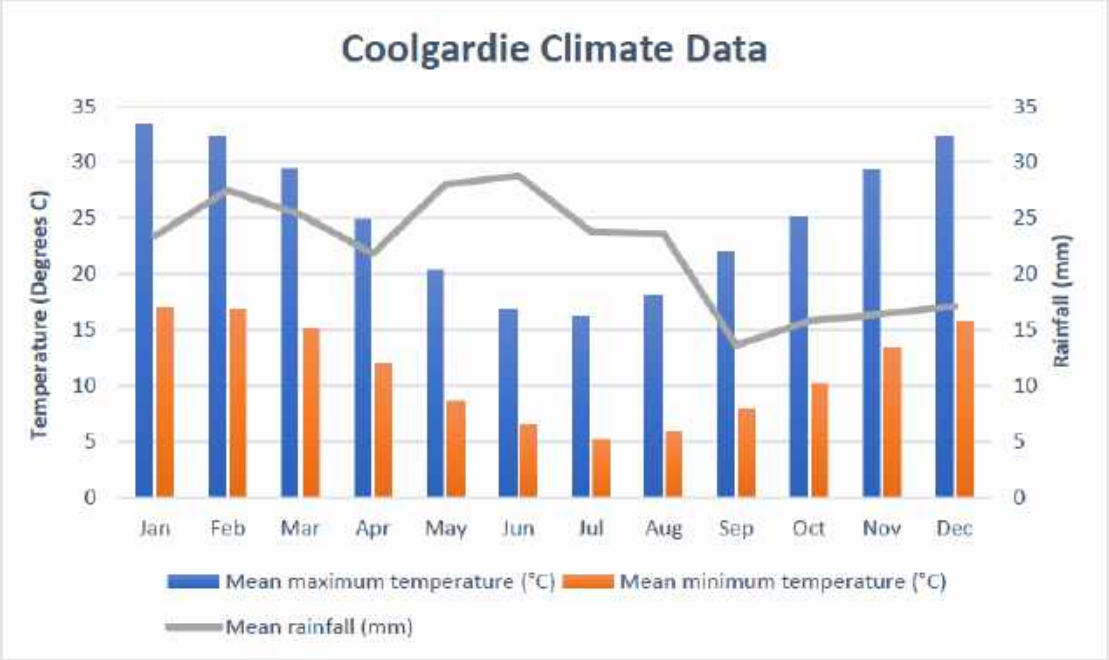

Figure 7: Coolgardie climate data

7.2.2 Landscape

The Interim Biogeographic Regionalisation of Australia (IBRA) divides Australia into 89 bioregions based on major biological, geographical and geological attributes. These bioregions are subdivided into 419 subregions as part of a refinement of the IBRA framework (IBRA 2010).

The Project occurs within the Coolgardie bioregion and Eastern Goldfields subregion (COO3). The Eastern Goldfields subregion lies on the Yilgarn Craton's 'Eastern Goldfields Terrains'. Relief is subdued and comprises of gently undulating plains interrupted to the west with low hills and ridges of Archaean greenstones and east by a horst of Proterozoic basic granulite. The underlying geology of gneisses and granites eroded into a flat plane covered with tertiary soils and with scattered exposures of bedrock. Calcareous earths are the dominant soil group and cover much of the plains and greenstone areas. A series of large playa lakes in the western half are remnants of an ancient major drainage line (Cowan, 2001).

The vegetation of the subregion is dominated by Mallees, Acacia thickets and shrub-heaths on sandplains. Diverse Eucalyptus woodlands occur around salt lakes, on ranges, and in valleys. Salt lakes support dwarf shrublands of samphire. Woodlands and *Dodonaea* shrubland occur on basic graninulites of the Fraser Range.

7.2.3 Geology

Regionally, the deposit lies on the western margin of the Menzies-Norseman Greenstone Belt, Eastern Goldfields Province within the Coolgardie Domain of the Kalgoorlie Terrane, a sub-division of the Menzies-Norseman Greenstone Belt. The Coolgardie Domain comprises a belt of complexly deformed mafics and ultramafics with minor black shale, overlain by felsic volcaniclastics and

metasediments, intruded by a suite of felsic to mafic sills and dykes and tholeiitic dolerites and gabbros.

Asbestiform minerals are not particularly stable and are easily altered in hydrothermal systems associated with gold deposition. Given the large-scale pit exposure of potential host units at CGO and the lack of historically recognised asbestiform mineralogy likely indicates that conditions were not optimal for asbestiform mineral growth and, or hydrothermal overprint has destroyed any asbestiform minerals that may have existed prior to gold mineralisation. As a result, there is low risk of asbestiform minerals present, however ongoing grade control sampling and waste characterisation work will be completed by the geology department as part of mining operations, and any identified asbestiform materials will not be crushed or screened.

7.2.4 Soils

The Coolgardie Goldfields are dominated by calcareous earths which cover much of the plains and greenstone areas. Within Focus' CGO, surface soils tend to comprise red, moist, and well graded sands and sandy gravels with traces of silt and clay. The underlying geology is of gneisses and granites eroded into a flat plane covered with tertiary soils and with scattered exposures of bedrock.

The Project area lies entirely within the BB5 land system, as classified by the soil landscapes and land mapping system provided from Department of Primary Industries and Regional Development BB5 is characterised by rocky ranges and hills of greenstones with basic igneous rocks as well as sandplains with brown calcareous loams.

Soil characterisation undertaken by Mine Earth in September 2021 determined that most soils within the Project area have a pH of 8.5 – 9.0 (moderately alkaline), an EC of 0.090 – 1.673 dS / m (non-saline to extremely saline), and a total organic carbon of 0.57 – 2.21 %. These parameters are considered typical for weathered soils within the Goldfields and are accordingly most topsoils will be stripped and used for subsequent rehabilitation. Topsoils will not be stored adjacent to any pipelines or infrastructure where saline spills are possible.

7.2.5 Hydrology

Focus engaged 360 Environmental to undertake a hydrology study of the project in February 2023. The purpose of this study was to characterise the surface water flows in the Project area to inform design and siting of mine infrastructure to prevent risks of flooding and ponding of water. A combination of topographic data including site based 1 m contours and 1 x 1 m digital terrain model, and regional 10 m contours derived from Landgate were merged and used in the modelling.

There are no natural surface water bodies within the Project area or broader CGO, however numerous ephemeral salt lakes are present within the surrounding area. Ephemeral creeks within the Project area feed into these salt lake systems and only drain following high rainfall events. Significant water bodies in the regional vicinity of the project include Brown Lake (8 km east), Red Lake (36 km east), White Flag Lake (31 km northeast) and Lake Douglas (20 km northeast).

There are no surface water resources within the study area. A minor non-perennial watercourse flows through the northern portion of the prescribed premises, regional drainage around the Project area is shown below in Figure 8.

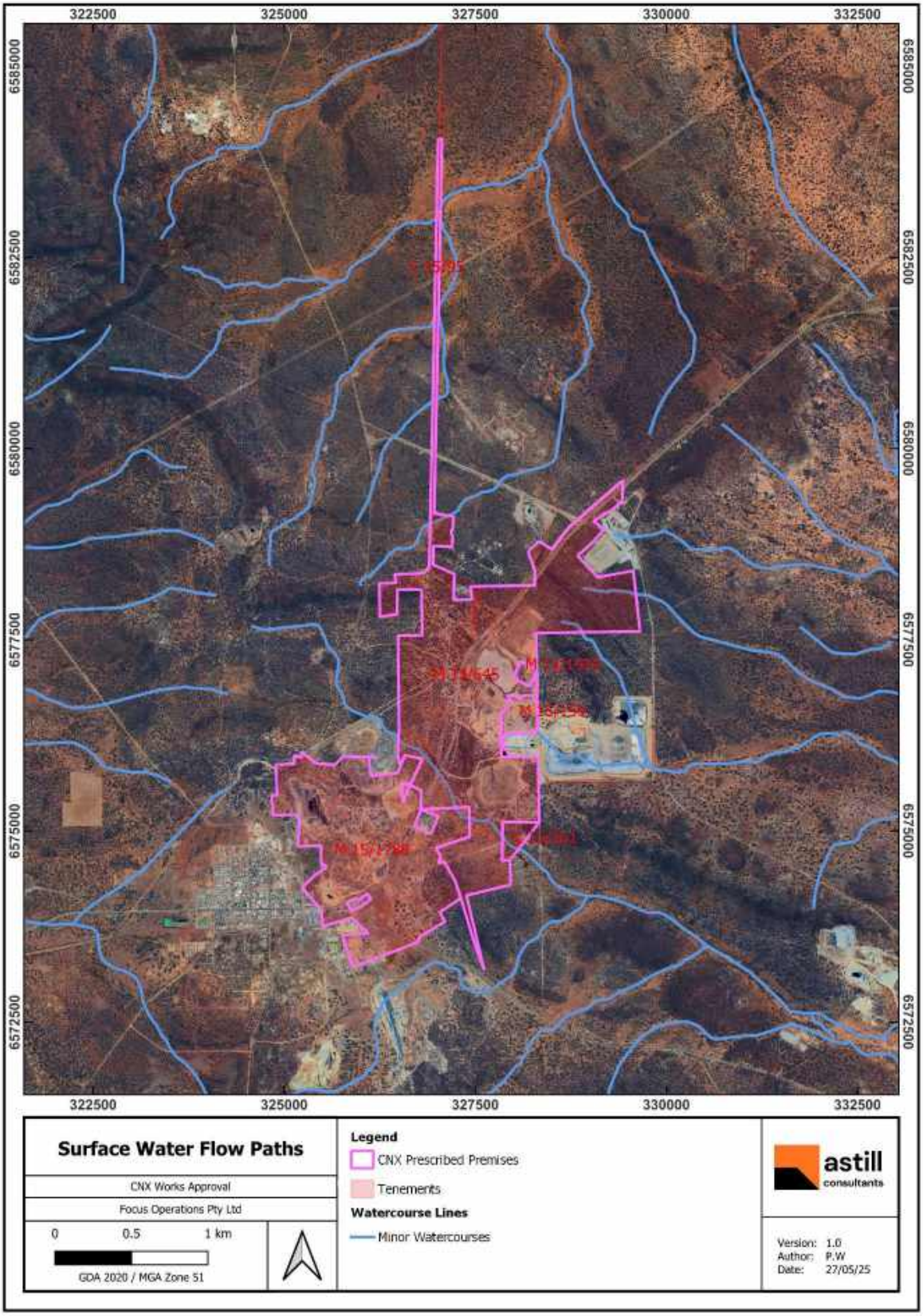

Figure 8: Surface water flow paths

7.2.6 Hydrogeology

The Project area is located within the Goldfields declared groundwater area. Greenstone rocks in the Kalgoorlie 1:250,000 sheet area, which includes Coolgardie are described as generally hosting local aquifers containing saline to hypersaline groundwater (Kern, 1995). Groundwater storage is limited to secondary porosity present in discrete, local-scale fractures. The identification of aquifer boundaries during test pumping in adjacent deposits demonstrates the limited areal extent of the aquifers. Based on limited interconnectivity of the aquifer zone aquifer, recharge is likely to be local (Kern, 1995).

CNX pit has formed a groundwater lake since mining has ceased with a relatively small volume of water currently contained, which will require to be moved prior to mining commencing. Pits demonstrate drawdown based on their static water level, due to the significantly higher evaporation than rainfall experienced in the region (AquaGeo 2021).

Water quality data is available for primary abstraction and discharge pits in Table 12, hydrogeological report is available as **Appendix C.**

Table 12. Groundwater Quality

	CNX (abstraction and discharge)	Lindsays (abstraction and discharge)	Kings Cross (abstraction only)	Greenfields (discharge only)
Standing Water Level	390.4mRL (24.6mbgl)	271mRL (144mbgl)	DRY	277.5mRL (119.5mbgl)
pH	6.63	N/A	N/A	6.22
TDS (mg / L)	57,000	N/A	N/A	72,000

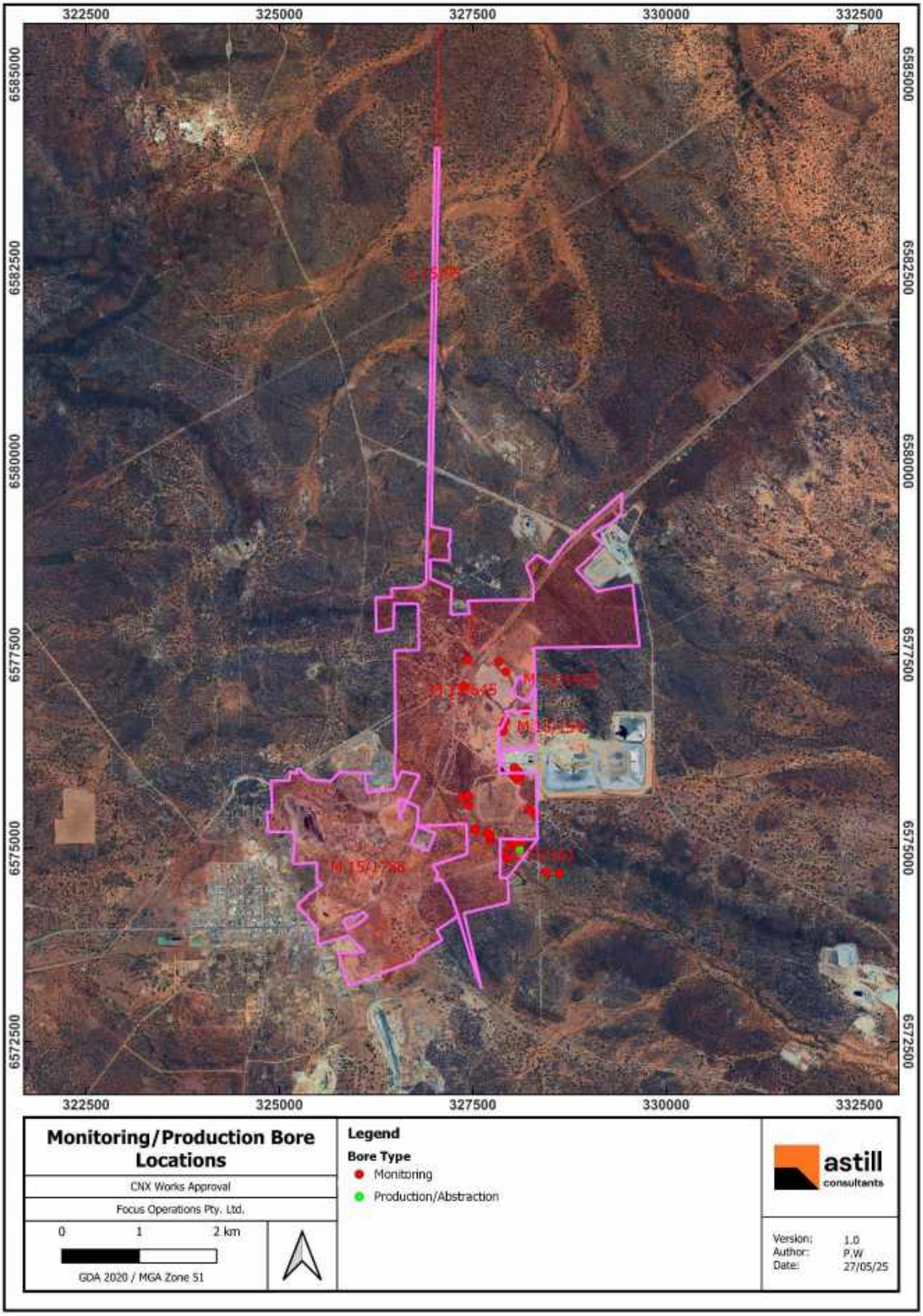

Figure 9: Groundwater monitoring/water abstraction locations

7.3 Biological Environment

7.3.1 Biological Surveys

Native vegetation clearing is required to facilitate development of the Project. A new NVCP application (CPS 10870/1) has been submitted by Focus to allow for clearing of up to 120 ha in an envelope of 227 ha – more than required for the Project to allow for future flexibility on provision of changes.

Biological surveys have been undertaken over the Project area with a summary detailed in Table 13 below. Surveys include both desktop and field assessments to determine the likelihood of significant vegetation, flora and fauna within the Project area. It is noted that several of these surveys specifically cover only areas within the Project, while one historical survey covers broader areas including areas outside the Project. Recent biological survey areas commissioned by Focus are shown in Figure 10 and Figure 11 which exclude areas already disturbed by previous mining activities Biodiversity surveys are attached in **Appendix D**.

Table 13: Biological surveys

Survey area	Survey title	Fieldwork date	Limitations identified	Author / reference
CGO (including CNX)	Level 1 Fauna Risk Assessment	October 2009	Several identified of negligible impact	Terrestrial Ecosystems (2009)
CNX	Desktop Assessment for Subterranean Fauna	N/A	Desktop level assessment only	Invertebrate Solutions (2022)
	CNX Three Mile Hill Coolgardie Gold Project – Biological Surveys	October 2021	Nil identified	360 Environmental (2022a)
	Coolgardie *Camponotus sp. nr. Terebrans* Targeted Survey	December 2021	Nil identified	360 Environmental (2022b)

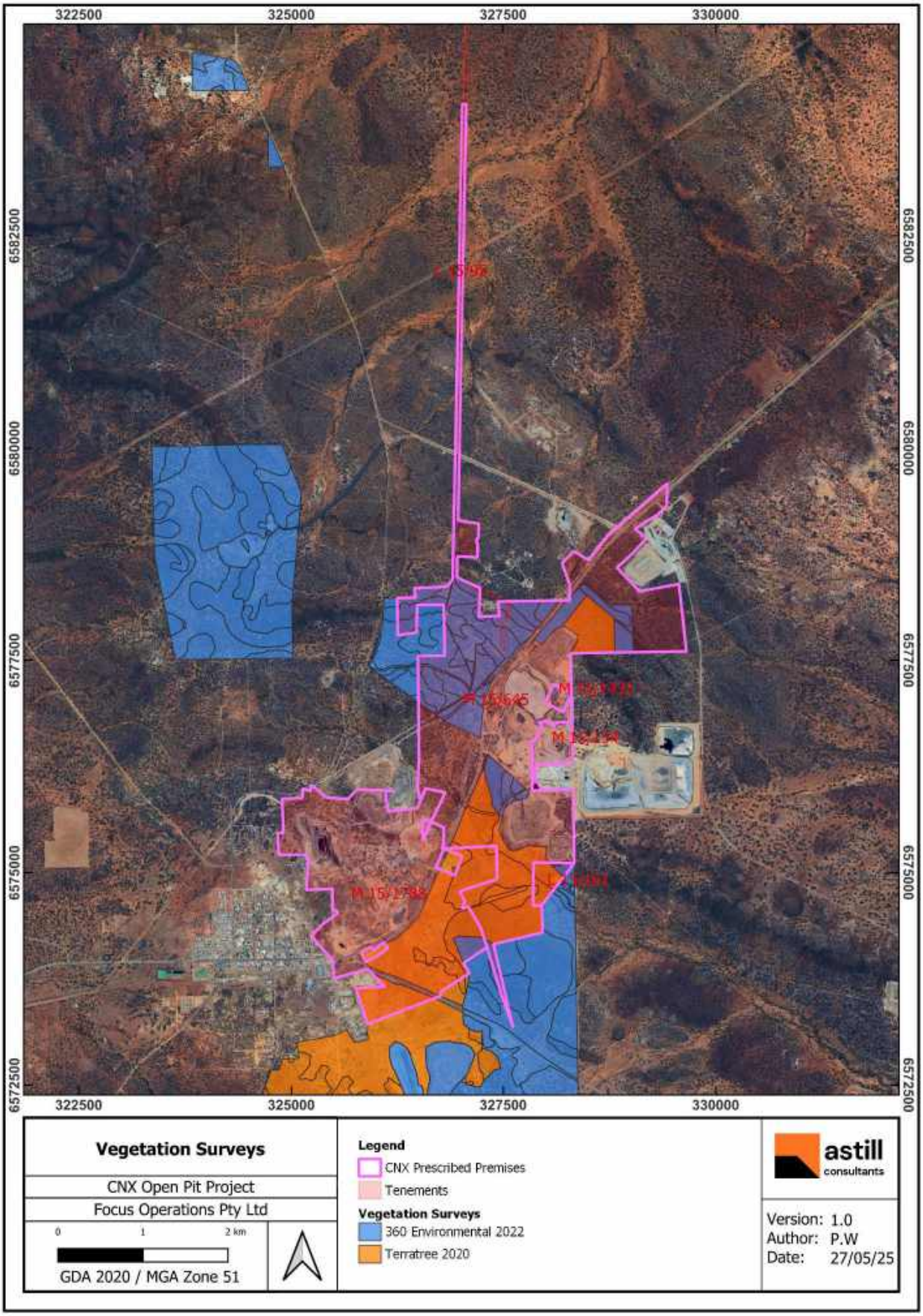

Figure 10: Flora & vegetation surveys

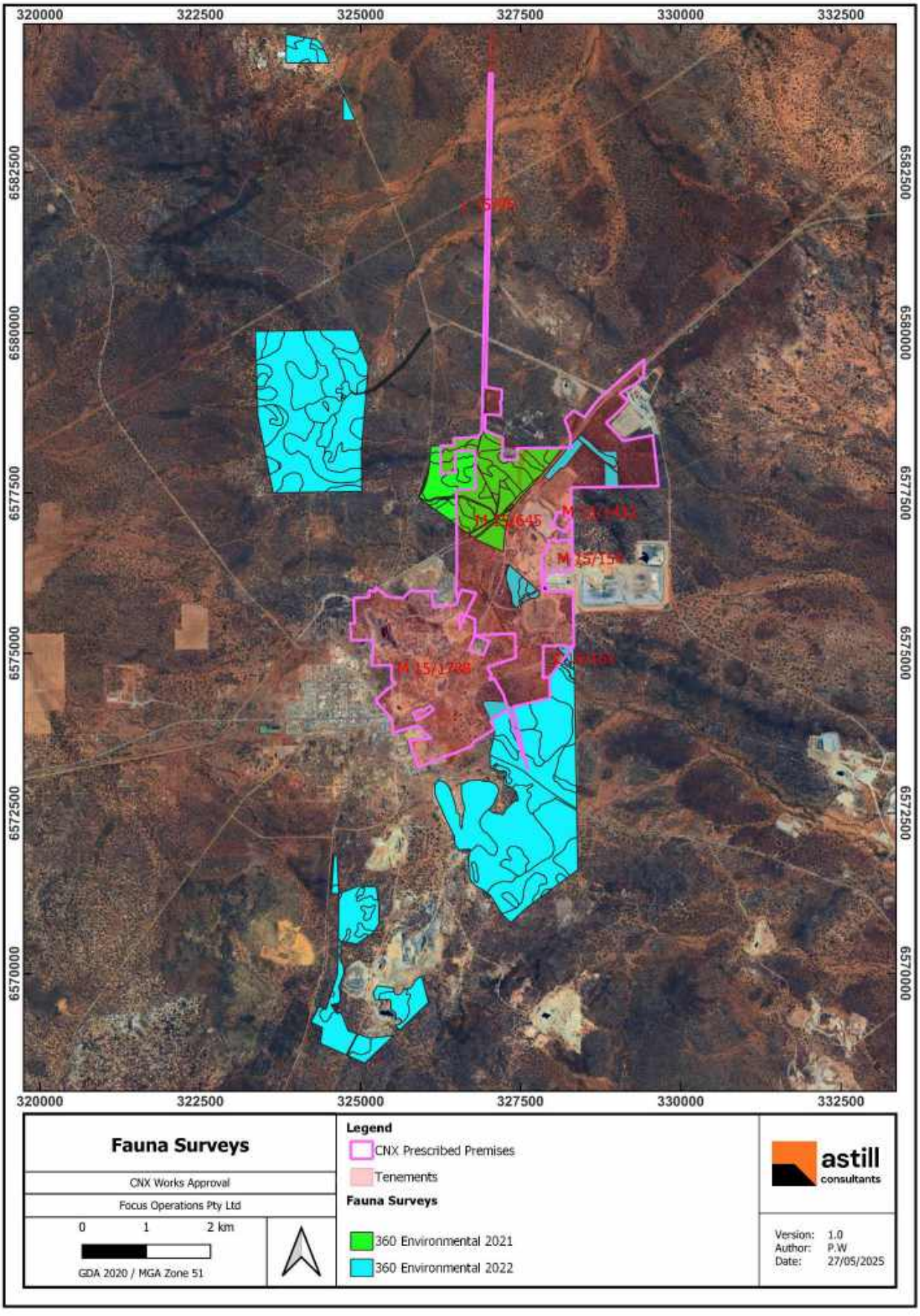

Figure 11: Fauna surveys

7.3.2 Vegetation

The Project is located within the Coolgardie Botanical District of the Southwestern Interzone (Beard 1990). This district is comprised primarily of Eucalypt woodlands that become more open with an increase in calcareous soils, and an understorey of bluebush and salt bush becomes more evident. The dominant families and genera include the *Mimosaceae* (*Acacia* spp.), *Myrtaceae* (*Eucalyptus* spp.), *Chenopodiaceae* (*Atriplex* spp. and *Maireana* spp.) and *Myoporaceae* (*Eremophila* spp.).

Pre-European vegetation association dataset (DPIRD, 2019) indicates that the Project area is located within one vegetation association known as 'Coolgardie 9'. Areas retaining less than 30% of their pre-European vegetation extent generally experience exponentially accelerated species loss, while areas with less than 10% are considered "endangered" (EPA, 2000). The vegetation association within the prescribed premises retains > 95% of the pre-European extent as seen in Table 14. Development within the prescribed premises will not significantly reduce the extent of pre-European vegetation associations or increase risk of loss given the vast extent remaining. Coolgardie 9 association extent is shown in Figure 12.

Table 14. Pre-European vegetation association

Vegetation association	Structural description	Floristic description	Extent remaining (%) (Western Australia)
Coolgardie 9	Woodland other	*Eucalyptus* woodland / *Eremophila* sparse shrubland. Associated species are coral gum (*E. torquata*) and Goldfields blackbutt (*E. lesouefii*)	97.78

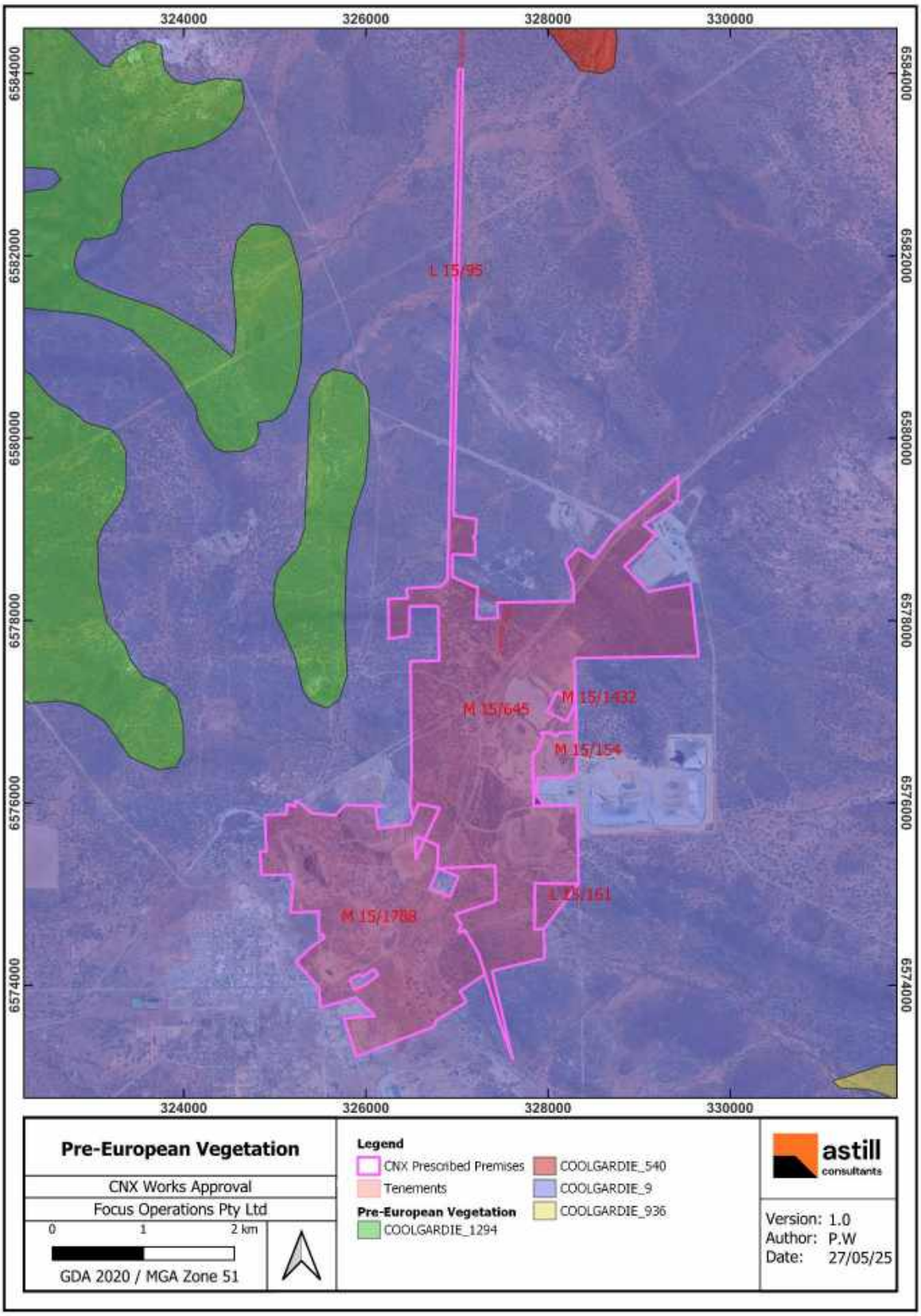

Figure 12: Pre-European vegetation associations

Vegetation assessments were undertaken via establishment of strategically placed quadrats to ensure all distinct vegetation communities within the survey areas were characterised. Four vegetation communities were mapped within the 360 Environmental (2022a) survey. Vegetation communities within the Project area are described in Table 15 below.

Table 15. Vegetation communities

Survey Area	Name	Landscape position	Community description
360 Environmental (2022a)	EsppEiiSaa	Plains, low hills	*Eucalyptus salmonophloia* mid isolated trees over a mosaic of *E. celastroides, E. clelandiorum,* and *E. torquata* low open woodland over *Eremophila interstans* subsp. *interstans* (*Eremophila parvifolia* subsp. *auricampi*) mid isolated shrubs over *Senna artemisioides* subsp. *artemisioides, S. artemisioides* subsp. *filifola,* and *Atriplex vesicaria* low open shrubland.
	EsEiiAv	Plains	*Eucalyptus salmonophloia* mid open woodland over *Eremophila intertans* subsp. *interstans* (*Eremophila parvifolia* subsp. *auricampi, Senna artemisioides* subsp. *filifola*) tall to mid isolated shrubs over *Atriplex vesicaria* low open shrubland.
	AcEoaDl	Rocky hills	*Acacia collegialis (A. acuminata)* tall shrubland over *Eremophila oldfieldii* subsp. *angustifolia, E. georgei, A. tetragonophylla (Senna artemisioides* subsp. *filifolia, Exocarpos aphyllus)* mid shrubland over *Dodonea lobulata (Atriplex vesicaria, Ptilotus obovatus* var. *obovatus)* low shrubland.
	EtEaEpa	Plains, lower slopes of rocky hills	*Eucalyptus torquata* low open woodland over *Exocarpos aphyllus* mid isolated shrubs over *Eremophila parvifolia* subsp. *auricampi, Westringia rigida,* and *Scaevola spinescens* (*Olearia muelleri*) low open shrubland.
	Cleared	Plains	Cleared or historically cleared areas including mine pits and borrow pits (often filled with water), bitumen roads, and dirt tracks. Some of these areas were showing signs of revegetation. With occasional *Eucalyptus griffithsii, Atriplex vesicaria, Maireana* spp., and assorted weed species.

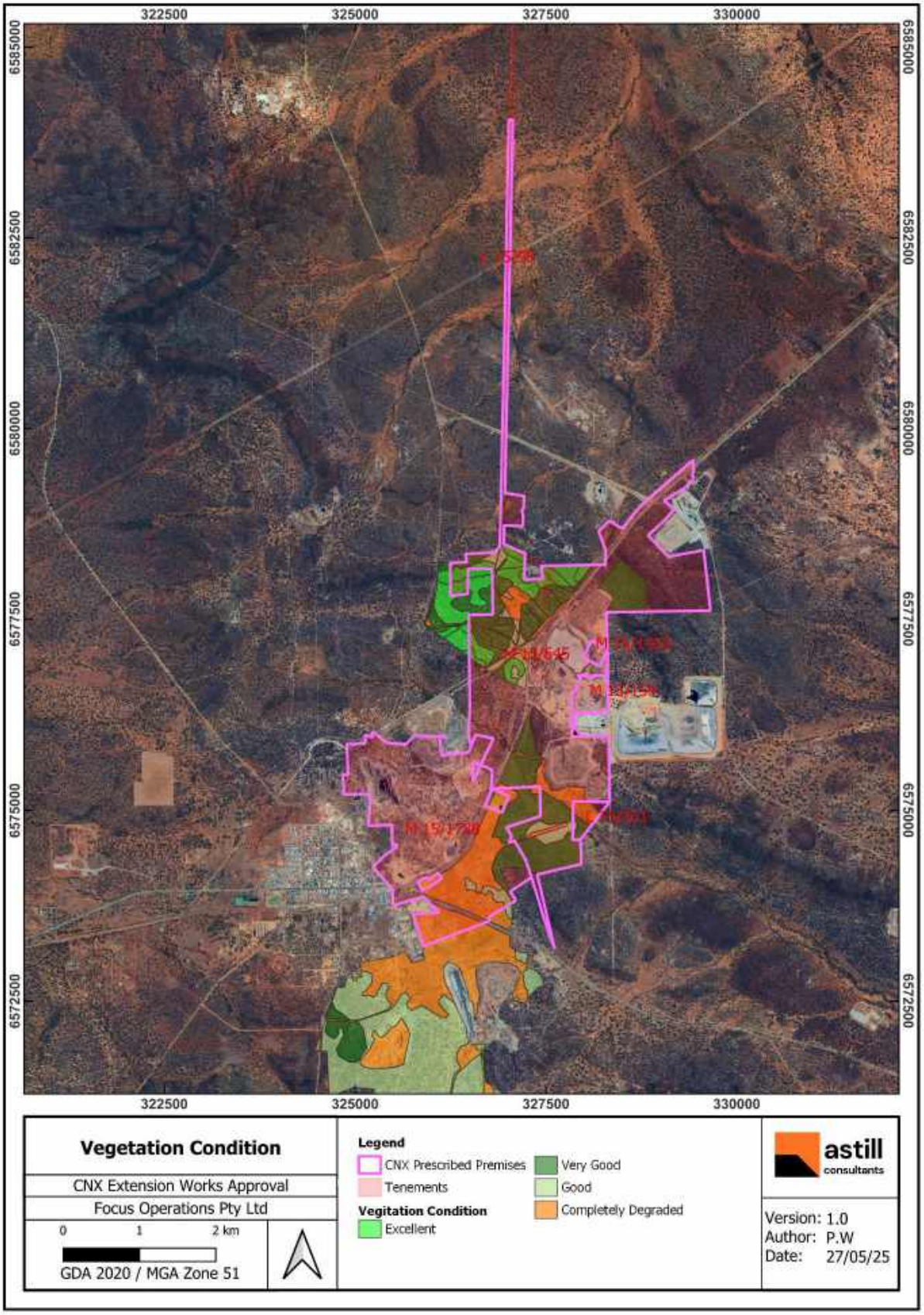

Figure 13: Vegetation condition

The Project area has been subjected to historical and more recent mining disturbances, and accordingly the vegetation condition varies from excellent to completely degraded with degraded areas including mine workings, grazing, vehicle tracks, weeds and rubbish. Notwithstanding, most of the vegetation remaining is of good to excellent condition as summarised in below.

Mining activities are centred in an area of mixed condition, with expansions on areas disturbed by previous mining activities primarily in good to degraded vegetation areas. Almost all pipeline infrastructure is sited within or adjacent to previously disturbed areas and will not contribute to vegetation degradation.

None of the vegetation types mapped are analogous to conservation significant ecological communities. Desktop searches identified no threatened or priority ecological community within 50 km of the Project area. The nearest Environmentally Sensitive Area (ESA) is Rowles Lagoon, located approximately 60 km northwest of the Project.

The BoM Groundwater Dependent Ecosystem (GDE) Atlas identified that the Project area does not contain any GDEs. Vegetation surveys support that there is no vegetation associated with GDEs within the Project area and accordingly no GDEs will be impacted by mining or dewatering activities.

The location of nearby ESAs and legislated lands and waters are shown in Figure 14.

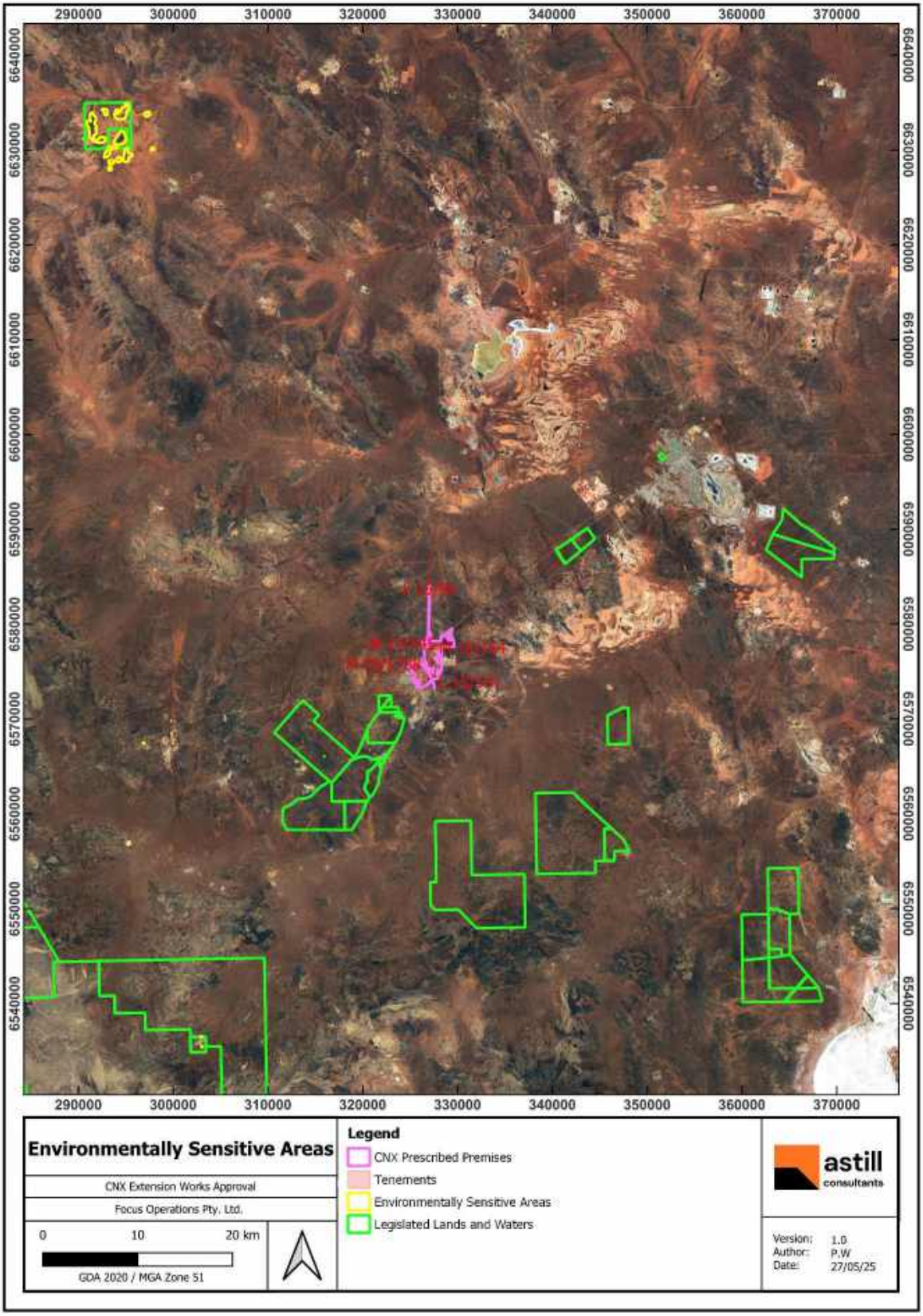

Figure 14: Environmentally sensitive areas

7.3.3 Flora

360 Environmental (2022) surveyed a broader area including Bonnievale, Brilliant, CNX, Three Mile Hill, Lady Loch, Perseverance, Dreadnought and Alicia and accordingly the larger number of taxa identified (149) includes species from outside the Project area. Dominant families included *Chenopodiaceae* (26 taxa) and *Myrtaceae* (15 taxa). The most dominant genera were Eucalyptus (12 taxa) and Eremophila (10 taxa).

The suite of flora taxa recorded during the survey is considered typical for the area (Beard 1990). A summary of the flora survey is presented in Table 20 below.

Table 16. Flora abundance

Survey	Species number (Field search)				
	Total	Genera	Families	Unidentified	Dominant families
360 Environmental (2022a)*	149	78	35	18	Chenopodiaceae (26 taxa) Myrtaceae (15 taxa)

*includes areas outside of the Project area within broader CGO survey area

7.3.3.1 Threatened and Priority Flora

Eighteen taxa could not be identified to species level because they were sterile at the time of survey during the 360 Environmental survey. None of the unknown flora taxa were analogous to Threatened or Priority flora taxa identified by the database searches as likely to occur within the survey area, nor were they representative of flora of other significance.

One Priority taxon was recorded within the Survey Area. A population consisting of approximately 10 individuals of *Austrostipa blackii* (P3) was recorded in quadrat C1Q01. This taxon is a tufted, perennial, grass, typically growing up to 1 m high that flowers between September and November.

At the time of the field survey, this species was listed as a Priority 3 but has since been downgraded in status to "Not Threatened."

Therefore, there are no Threatened or Priority species in the project area.

7.3.3.2 Introduced Flora

A total of four introduced flora species were recorded by 360 Environmental within the Project area. A summary of introduced flora identified within the survey area are provided in Table 17.

Table 17: Introduced flora

Survey area	Species name	Common name	WoNS
360 Environmental (2022a)	*Carrichtera annua*	Ward's weed	No
	Centaurea melitensis	Maltese Cockspur	No
	Nicotiana glauca	Tree Tobacco	No
	Rumex vesicaria	Ruby Dock	No

7.3.4 Fauna

Fauna surveys over the Project area have included basic fauna assessments (previously known as level 1 fauna assessments), targeted survey for *Camponotus* sp. nr. *terebrans*, and a subterranean fauna desktop review. Fauna surveys have demonstrated that most fauna identified during field observations are considered to be common and widespread, with fauna abundance by taxa summarised in Table 18 below.

Table 18: Fauna abundance

Survey	Species number (desktop search)	Species Number (Field Search)				
		Total	Amphibians	Birds	Mammals	Reptiles
360 Environmental (2022a)*	311	61	0	42	10	9

*includes areas outside of the Project area within broader CGO survey area

7.3.4.1 Significant Fauna

Based on the combined desktop and field assessments across surveys, an assessment was carried out on the likelihood of significant fauna species occurring in the Project area in Table 19 below. It should be noted that while habitats onsite are considered possibly suitable for significant fauna, some or all may be marginal in extent / quality and therefore the fauna species considered as possibly occurring may in fact only visit the area for short periods as infrequent vagrants. This is expected to occur less frequently during mining operations where factors including noise and light are likely to deter fauna interactions until mining ceases.

Table 19: Significant fauna likelihood

Species name	Common name	Conservation status		Assessment	Likelihood
		EPBC Act	BC Act		
Leipoa ocellata	Malleefowl	VU	VU	Recent records within 1km of the survey area. Suitable habitat present, unburned mallee and woodland with abundant litter and low scrub.	High
Apus pacificus	Pacific Swift (Fork-tailed Swift)	MI, MA	IA	Three records within 100km of the survey area. Species may fly over the survey area as it covers a wide range of airspace over varied habitat.	Low

Species name	Common name	Conservation status		Assessment	Likelihood
		EPBC Act	BC Act		
Dasyurus geoffroii fortis	Chuditch	VU	VU	Some suitable habitat present – mallee shrubland. Unidentified scat collected during survey, not genetically tested to confirm ID. SLR have advised Chuditch would not occur within the survey area. Further assessments have been completed via camera trap surveys to confirm utilisation of habitat. See **Appendix D**.	Low
Jalmenus aridus	Inland Hairstreak		P1	Nearest record 19km NE of the survey area. Majority of habitat present within the survey area is unsuitable for this species. Further advice on likelihood of presence confirmed impractical to test presence further. See **Appendix D**.	Low
Ogyris subterrestris petrina	Arid Bronze Azure Butterfly	CR	CR	Targeted survey carried out for host ant *Camponotus sp. nr. Terebrans*. No ants found. See **Appendix D**.	Low
Migratory Shorebirds (Various species)		MI	MI	While there are records of migratory shorebirds within 15 km of the Project area, these are associated with waterbodies (i.e., lakes and dams). Given the lack of watercourses or waterbodies there is no suitable habitat for migratory shorebird or waterbird species in the Project area.	Low
Zanda latirostris	Carnaby's Cockatoo	EN	EN	This species was recorded 30km NE of the survey area in Kalgoorlie. However, these records occur well outside the known distribution of the species and likely represent a vagrant occurrence of the taxon.	Low
Falco hypoleucos	Grey Falcon	VU	VU	No recent nearby records. Some records within 100km of the survey area. Preferred nesting habitat absent. May use survey area for hunting.	Low
Myrmecobius fasciatus	Numbat	EN	EN	No nearby records. Some suitable habitat is present, "i.e." eucalypts and wandoo woodland. The only natural population exist well outside the survey area in the far north of WA.	Low
Macrotis lagotis	Bilby	VU	VU	No nearby records. No suitable habitat present.	Low

EN = Listed as Endangered under the EBPC Act and BC Act, VU = Listed as Vulnerable under the EBPC Act and BC Act, MI = Listed as Migratory under the EBPC Act and BC Act

7.3.4.2 Short Range Endemics

Habitat types in the Project area are regionally common and with a high degree of habitat connectivity, and therefore it is unlikely that any short-range endemic (SRE) species are restricted to the Project area.

7.3.4.3 Subterranean Fauna

Invertebrate Solutions (2021) undertook a desktop assessment for subterranean fauna (stygofauna and troglofauna) for the broader CGO, including the Project area. Searches of the Western Australian Museum databases for Crustaceans and Arachnids / Myriapods were undertaken for a rectangular area approximately 250,000 ha, centred on Coolgardie townsite. A combination of regional information, geological, hydrogeological and database searchers were used to inform the likelihood of subterranean fauna in the project area.

The absence of stygofauna and troglofauna records from the Coolgardie and Kalgoorlie area would suggest that stygofauna habitat, and therefore subterranean fauna is generally absent or present in very low abundance, although it is unknown what sampling intensity has previously been undertaken, and it may be due to a paucity of sampling. It is however reasonable to conclude that subterranean fauna has a low likelihood of occurrence within the Project areas, when considering the absence of potential voids and the hypersaline nature of the groundwater present. Consequently, dewatering activities are unlikely to impact any subterranean fauna.

7.4 Heritage

7.4.1 Aboriginal Heritage

There is no Native Title Determination across the Project area. There is one registered Native Title claim over the Project area, Marlinyu Ghoorlie Claim (WC2017/007) and Focus are currently negotiating an agreement with Marlinyu Ghoorlie Native Title Claimant group.

A search of DPLH Aboriginal Cultural Heritage Inquiry System (ACHIS) in May 2025 identified that two registered Aboriginal site boundaries and two lodged place boundaries interact with the prescribed premises, however proposed works will not disturb any sites of significance.

Focus have completed Aboriginal heritage surveys over the prescribed premises area and maintain these reports in a confidential manner. Focus is aware of the actual site locations listed within the ACHIS and will not be disturbing any as part of the proposed works.

7.4.2 European Heritage

A search of the State Heritage Office's inHerit database in May 2025 identified one statutory heritage Listing within the prescribed premises boundary. The State Battery (Place No. 557) listed on the State Heritage Register, is located partly within the south-western boundary of the premises, approximately 770 m south of Kings Cross Pit. Focus is aware of the historical significance of this location and confirms that it will not be impacted by any dewatering activities associated with the CNX Project.

The location of The State Battery, along with DPLH Registered and Lodged boundaries, are shown in Figure 15.

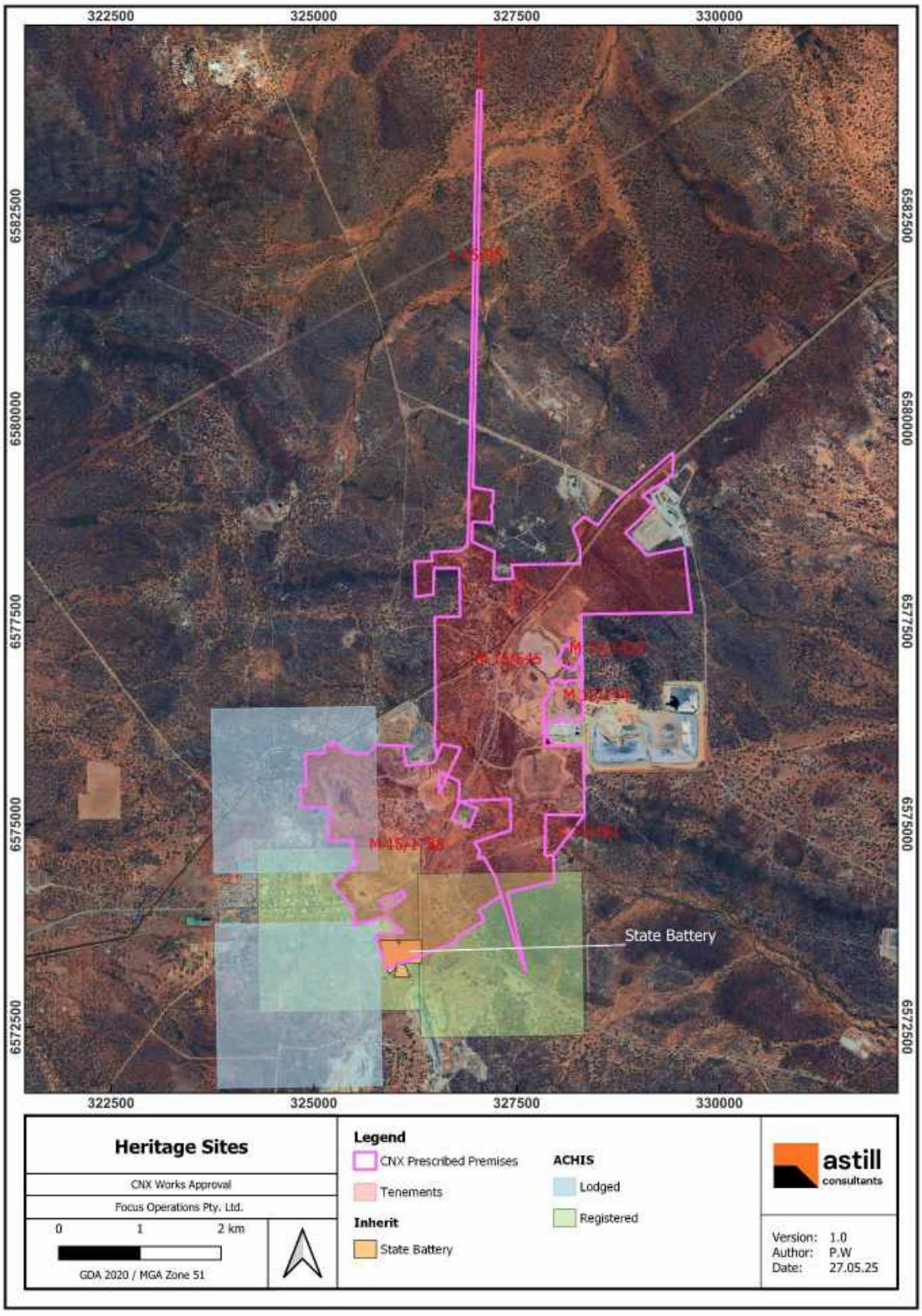

Figure 15: Heritage sites

7.5 Environmentally Sensitive Receptors

A summary of environmentally sensitive receptors and aspects are detailed in Table 20.

Table 20: Environmentally sensitive receptors

Type	Description	Distance and direction to premises boundary	Proposed controls
Environmentally sensitive areas	The nearest ESA is Rowles Park Lagoon	> 50 km northwest	No specific controls required
Threatened ecological communities	Across all surveys none of the vegetation types mapped are analogous to conservation significant ecological communities. Desktop searches identified no threatened or priority ecological community within 50 km of the Project area.	> 50 km	No specific controls required
Threatened and / or priority fauna	One species of significance (Malleefowl) may occur within the Project area, based on previous record and suitable habitat in the broader region. Migratory shorebird or waterbird species have been previously recorded however given the lack of watercourses or waterbodies there is no suitable habitat for migratory shorebird or waterbird species in the Project area.	0 km (not identified within Project area)	Native vegetation clearing permit application (clearing to occur under approved NVCP conditions).
Aboriginal and other heritage sites	Two registered Aboriginal sites and two lodged places intersect with the prescribed premises boundary, however, the actual sites will not be impacted by the proposed works.	0 km (within prescribed premises boundary but not impacted by proposed activities.)	Locations of heritage sites recorded on internal databases and exclusion areas applied to mining disturbance envelopes. Clearing and mining activities limited to approved boundaries.
Public drinking water source areas	The nearest public drinking water source area is the Broad Arrow Dam Catchment Area (priority not assigned)	40 km northeast	No specific controls required
Rivers, lakes, oceans, and other bodies of surface water, etc.	No permanent surface water features in the vicinity of the Project, nearest being Brown Lake which forms part of a broader salt lake system which are only inundated following large rainfall events.	8 km east	No specific controls required
Acid sulfate soils	The Atlas of Australian Acid Sulfate Soils shows there is 'extremely low probability' of occurrence of acid sulfate soils within the prescribed premises. The nearest area of high probability is located at Roger Spring.	10 km northeast	No specific controls required

8 Risk Assessment

A risk assessment was completed in accordance with the DWER Guidance Statement: Environmental Risk Assessment Framework (2017).

Likelihood and consequence categories were derived from the DWER Guidance Statement and are demonstrated in Figure 16 and Figure 17 below. The risk assessment identified the following:

- The sources of emissions and, where available, the quantification;
- The pathway which pollution follows; and
- Potential receptors which may be impacted by the emission.

The risk assessment is provided in Table 21, noting that it does not consider risks managed under other approvals i.e. mechanical vegetation clearing which is managed under NVCP.

Consequence

The department will use the following criteria to assess the consequences of a risk event occurring:

	Environment	Public health* and amenity (such as air and water quality, noise and odour)
Severe	• Onsite impacts: **catastrophic** • Offsite impacts local scale: **high level or above** • Offsite impacts wider scale: **mid level or above** • **Mid to long-term or permanent impact to an area of high conservation value or special significance^** • **Specific Consequence Criteria (for environment) are significantly exceeded**	• **Loss of life** • Adverse health effects: **high level or ongoing medical treatment** • **Specific Consequence Criteria (for public health) are significantly exceeded** • Local scale impacts: **permanent loss of amenity**
Major	• Onsite impacts: **high level** • Offsite impacts local scale: **mid level** • Offsite impacts wider scale: **low level** • **Short-term impact to an area of high conservation value or special significance^** • **Specific Consequence Criteria (for environment) are exceeded**	• Adverse health effects: **mid level or frequent medical treatment** • **Specific Consequence Criteria (for public health) are exceeded** • Local scale impacts: **high level impact to amenity**
Moderate	• Onsite impacts: **mid level** • Offsite impacts local scale: **low level** • Offsite impacts wider scale: **minimal** • **Specific Consequence Criteria (for environment) are at risk of not being met**	• Adverse health effects: **low level or occasional medical treatment** • **Specific Consequence Criteria (for public health) are at risk of not being met** • Local scale impacts: **mid level impact to amenity**
Minor	• Onsite impacts: **low level** • Offsite impacts local scale: **minimal** • Offsite impacts wider scale: **not detectable** • **Specific Consequence Criteria (for environment) likely to be met**	• **Specific Consequence Criteria (for public health) are likely to be met** • Local scale impacts: **low level impact to amenity**
Slight	• Onsite impact: **minimal** • **Specific Consequence Criteria (for environment) met**	• Local scale: **minimal impacts to amenity** • **Specific Consequence Criteria (for public health) criteria met**

Likelihood

The department will use the following criteria to assess the likelihood of a risk event occurring

Almost certain	**The risk event is expected to occur in most circumstances**
Likely	**The risk event will probably occur in most circumstances**
Possible	**The risk event could occur at some time**
Unlikely	**The risk event will probably not occur in most circumstances**
Rare	**The risk event may only occur in exceptional circumstances**

Figure 16: Risk criteria from DWER guidance statement

Likelihood	Consequence				
	Slight	Minor	Moderate	Major	Severe
Almost certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	High	Extreme
Possible	Low	Medium	Medium	High	Extreme
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Medium	Medium	High

Figure 17: Risk rating matrix from DWER guidance statement

Table 21: Risk assessment

Subject	Risk pathway	Impact	Inherent risk			Treatment	Residual risk		
			Likelihood	Consequence	Risk		Likelihood	Consequence	Risk
Groundwater	Hypersaline or saline water spill from pipeline or storage infrastructure failure or leak (i.e., ponds, mobile tanks)	Saline water released to the environment may impact soil and vegetation. Groundwater in the area is saline. There are very few beneficial users or sensitive receptors of groundwater abstraction outside mining.	Possible	Moderate	Medium	• Groundwater abstraction will be managed in accordance with the Groundwater Licences and Operating Strategy • Saline water managed as per Environmental Management System • All pipelines are placed in v-drains with scour pits located at low points at appropriate intervals • Spills resulting in environmental harm are reported to relevant authorities within one business day • If a spill occurs, contaminated material is removed and buried and area remediated	Unlikely	Moderate	Medium
Groundwater	Hypersaline water spill from dam or pit overtopping	Saline water released to the environment may impact soil and vegetation. Localised hydrology may be adversely affected from an overtopping event. Groundwater in the area is saline to hypersaline.	Unlikely	Moderate	Medium	• Groundwater abstraction will be managed in accordance with the Groundwater Licences and Operating Strategy. • Saline water managed as per Environmental Management System • Pond and or pit volume availability is known and 6m operational freeboard is maintained pits, and 300 mm for ponds. • Spills resulting in environmental harm are reported to relevant authorities within one business day • If a spill occurs, contaminated material is removed and buried and area remediated	Rare	Moderate	Low
Groundwater	Altering the quality of groundwater	Changes in groundwater quality may have adverse impacts to groundwater dependent ecosystems and vegetation. Groundwater in the area is saline to hypersaline. There are very few beneficial users or sensitive receptors of groundwater abstraction outside mining.	Unlikely	Moderate	Medium	• Groundwater abstraction, sampling and monitoring will be managed in accordance with the Groundwater Licences and Operating Strategy • Monitoring of standing water level and volume of dewatering water will occur quarterly in according with Groundwater Operating Strategy. • Elements suite sampling will be undertaken as per approved Groundwater Operating Strategy and Operating Licence conditions	Possible	Slight	Low
Hydrocarbons	Release of hydrocarbons into the environment or into the dewatering network from water pump	Hydrocarbons released to the environment may contaminate soils, surface water and groundwater. Hydrocarbon contamination may impact the health of vegetation, flora, fauna and biodiversity. Hydrocarbons can be a fire risk. Non-compliance with WA contaminated sites legislation, potential contaminated site liability and increased remediation costs.	Possible	Minor	Medium	• Spill management as per Environmental Management System • Hydrocarbons should be stored in bunded areas with a holding capacity of 110% • All workshops and hydrocarbon storage areas are required to have spill kits and all chemicals are to be correctly labelled • Pumps and vehicles are inspected and serviced regularly • Hydrocarbon management is included in inductions, training and awareness on site • Hydrocarbon liquids and materials are disposed of offsite by an external provider, unless licenced for use onsite (OWS discharge etc) • Significant hypersaline spills leading to environmental harm are reported to relevant authorities within one business day	Rare	Minor	Low
Noise	Noise from water pump	Noise can disrupt fauna behaviour and reduce amenity of nearby receptors. The nearest residential receptor is located > 500m outside the prescribed premises boundary.	Rare	Slight	Low	• Adherence to Fauna Management Plan, part of Environmental Management System • Adherence to *Environmental Protection (Noise) Regulations 1997* • If required, a pump noise barrier can be placed around the pump	Rare	Slight	Low
Dust	Dust emissions	Increase in dust emissions at nearby residential receptors Dust accumulation in the environment can smother vegetation Dust emissions may migrate and become a nuisance	Possible	Minor	Medium	• Reducing dust generation by working to weather conditions and driving on established roads. • Dust suppression using water carts. • Daily observations of dust within work area and additional measures implemented if required.	Unlikely	Minor	Low

9 Attachment 10 – Proposed Fee Calculation

9.1 Estimated Cost

The pipeline will be constructed by Focus staff or contractors when this works approval is granted. The v-drain will be constructed by use of a grader and/or excavator. Maintenance staff will install flow meters, breathers and carry out welding of the pipeline. Pumps will be utilised, maintaining a flow rate of 20-25 L/s. Approximately 13 km of 280 mm HDPE polypipe (DN280PN6.3) will be required to construct the pipeline. Estimated costs are shown Table 22. Focus proposes to undertake a commissioning phase once pipelines are constructed.

Table 22: Estimated construction cost

Parameter	Estimated Cost
280 mm HDPE polypipe fully supplied and installed (pipeline, fittings, earthworks,	$685,000
Pump hire / purchase (during construction)	$40,000
Freight	$50,000
Total estimated construction cost	$775,000
Fee units ($43.45 per unit)	125
Works Approval fee	$5,431.25

9.2 Proposed Fee

The proposed Works Approval fee is calculated using the cost of the works, including all capital costs associated with the construction and establishment of the works proposed under the Works Approval application.

The estimated cost of works is more than $500,000 but not more than $5,000,000 which is 125 fee units plus 20 for every $500,000 above $500,000.

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11 Appendices

Appendix A – Attachment 1A Proof of Occupier Status

Appendix B - Attachment 1B ASIC Company Extract

Appendix C – Hydrogeological Report

Appendix D – Biodiversity Survey