

DIGBY WELLS
ENVIRONMENTAL

Your Preferred Environmental
and Social Solutions Partner

Providing innovative and sustainable
solutions throughout the resources sector

Environmental Authorisation Process for the Expansion of the Copper Sunset Mining Right Area

Notification of Intent to Develop

Prepared for:

Copper Sunset Sands (Pty) Ltd

Project Number:



COP6679

February 2021



This document has been prepared by Digby Wells Environmental.

Report Type:	Notification of Intent to Develop
Project Name:	Environmental Authorisation Process for the Expansion of the Copper Sunset Mining Right Area
Project Code:	COP6679

Name	Responsibility	Signature	Date
Shannon Hardwick HRM Consultant ASAPA Member: 451	Report Compilation		February 2021
Justin du Piesanie Divisional Manager: Social and Heritage Services ASAPA Member 270	Technical Review		

This report is provided solely for the purposes set out in it and may not, in whole or in part, be used for any other purpose without Digby Wells Environmental prior written consent.

TABLE OF CONTENTS

1	Introduction	1
2	Project Details	1
3	Illustrative Material	3
4	Assessment Process.....	6
4.1	NHRA Section 38(1) activities	6
4.2	EIA Regulations listed activities.....	7
4.3	Identified and known heritage resources and potential impacts	10
5	Recommendation	12

LIST OF TABLES

Table 1: Project Location Details.....	2
Table 2: Current assessment processes	6
Table 3: NHRA Section 38 triggers	7
Table 4: Identified listed activities.....	8
Table 5: Identified heritage resources in terms of Section 3 of the NHRA	10
Table 6: Specialist heritage recommendations.....	12

LIST OF PLANS

Plan 1: Regional and Local Setting	4
Plan 2: Proposed Project Design	5

1 Introduction

Copper Sunset (Pty) Ltd (hereinafter Copper Sunset) holds an approved Mining Right¹ (MR) and Environmental Management Programme (EMPr) in terms of the Mining and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA) for the mining of sand in Viljoensdrift in the Free State Province. The MR has subsequently been amended to incorporate additional areas.

Copper Sunset now intends to expand the Mining Right Area (MRA) to incorporate adjacent properties (the extension area) to extend the Life of Mine (LoM) of the current operation (the Project). The extension area covers approximately 2 821 ha and the proposed Project triggers activities included in Listing Notice 1 and Listing Notice 2 of the Environmental Impact Assessment (EIA) Regulations, 2014, (Government Notice Regulations [GN R] 982 of 04 December 2014 as) (EIA Regulations, 2014, as amended) promulgated under the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA).

To this end, Copper Sunset appointed Digby Wells Environmental (hereinafter Digby Wells) to undertake the Scoping and EIA process required for Environmental Authorisation (EA) for the Project to go ahead. As part of this application, Digby Wells will consolidate all existing EAs and EMPs into one EMPR applicable to the current operation and the extension area.

The EIA process includes a specialist Heritage Resources Management (HRM) process in compliance with the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA). This document comprises the Notification of Intent to Develop (NID) to notify the Heritage Resource Authorities (HRAs) of the proposed Project in compliance with Section 38(1) of the NHRA.

2 Project Details

The Copper Sunset sand mining operation and the proposed extension area are located in Viljoensdrift in the Metsimaholo Local Municipality (MLM). This is located within the Fezile Dabi District Municipality (FDDM) in the Free State Province. The Project is located near the Vaal River and the Lethabo Power Station. Table 1 presents a summary of the details of the Project location and Plan 1 presents these details graphically.

At present, there are approximately 9 months left in the LoM in the current operation. Copper Sunset therefore intends to include additional properties comprising approximately 2 821 ha in the sand mining operation which will extend the LoM by approximately 20 years. These properties include the Remaining Extent (RE) of Portion 9 of the Farm Bankfontein No. 1849 (1 642 ha) and a portion of the RE of the farm Zandfontein No. 259.

¹ Reference Number: FS30/5/1/1/2/164 MR

Table 1: Project Location Details

Name of property/ies	Copper Sunset sand mine and extension area
Street address or location (e.g.: Off R44)	West of the R82 regional road and is south and east of the Vaal River. The Project area is south of the Lethabo Power Station and is bisected by the R716 regional road.
Erf or farm number/s	Authorised: - Part of Bankfontein No. 9; - Part of the Remaining Extent (RE) of Bankfontein No. 9; - The farm Bankfontein No. 1849; - A portion of the farm Rietfontein No. 152; - RE of Zandfontein No. 259.
	Extension Area: - The RE of Portion 9 of Bankfontein No. 1849; - A portion of RE of Zandfontein No. 259.
Coordinates of approximate centre of project area	26°45'51.24"S
	27°57'38.65"E
Town or District	Viljoensdrift Vereeniging (8 km north); Vanderbijlpark (10 km northwest), Sasolburg (13 km southwest)
Responsible Municipality	MLM in the FDDM
Extent of property	2 826 ha
Maximum extent of proposed development	2 186 ha
Current use	Agriculture
Predominant land use/s of surrounding properties	Agriculture, mining (coal and sand), industrial and urban settlement and associated infrastructure.

Copper Sunset will use the infrastructure at the current operation and no permanent infrastructure will be constructed for the Project – all machinery will be mobile. Copper Sunset will establish a mobile office at the entrance to the new mining area, hydrocarbon storage tanks and refuelling area within the MRA. The operation will mine plaster sand, building sand and clay at depths between 0.4 and 2.5 m below the surface. Copper Sunset will recover the sand resource through utilising the following strip-mining method:

- Stripping and stockpiling of topsoil;
- Construction of a temporary haul road (approximately 20 m wide and 6 km long), which will move as the mine progresses;

- Mining of the sand resource;
- Screening of the sand resource;
- Backfilling of the mined excavations using the stockpiled topsoil; and
- Concurrent rehabilitation.

3 Illustrative Material

Illustrative material is provided in Plan 1 and Plan 2. The illustrative material demonstrates the general Project locality and the proposed Project layout.

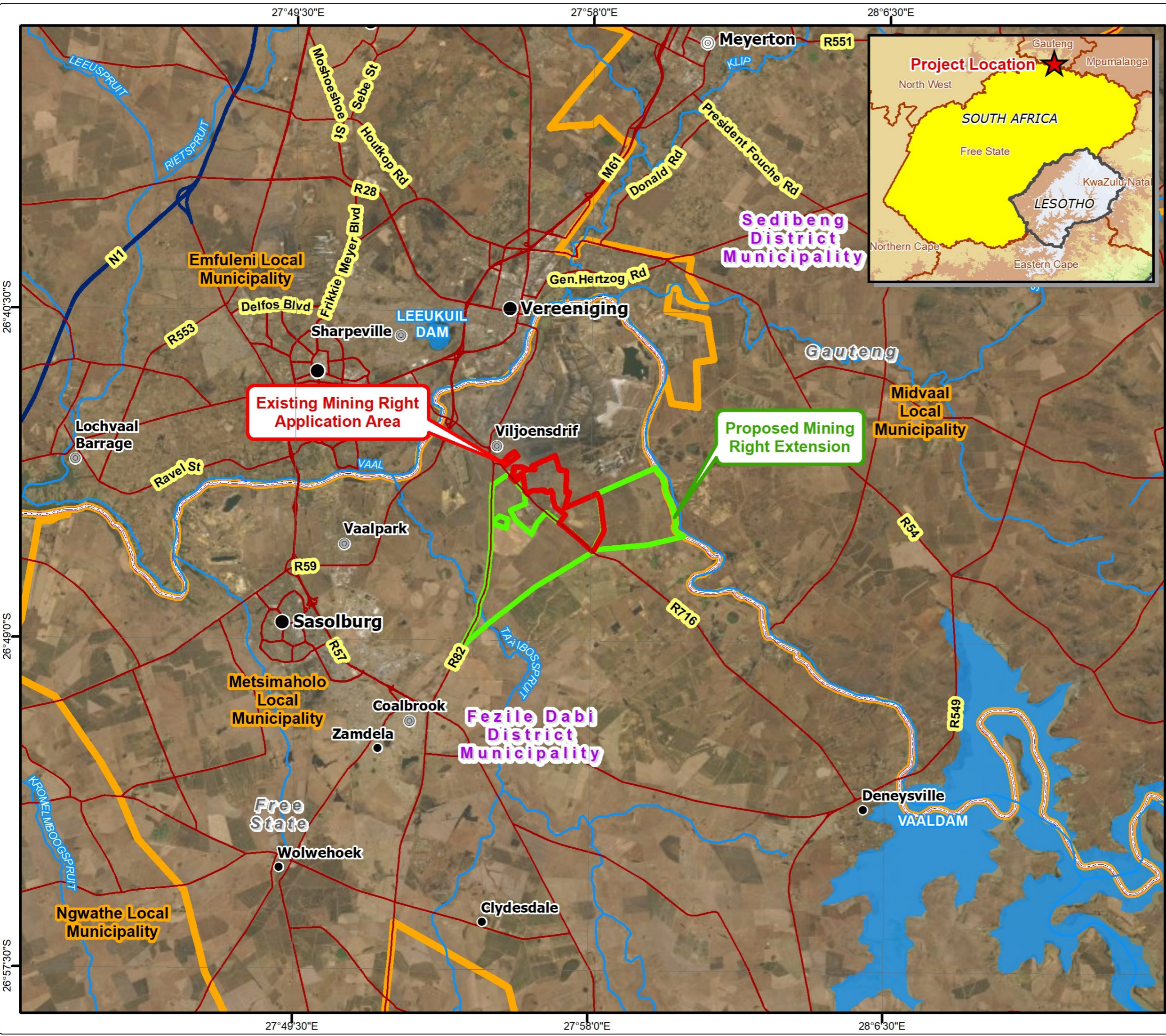
Copper Sunset Sand Mining Right Extension Application

Regional Setting

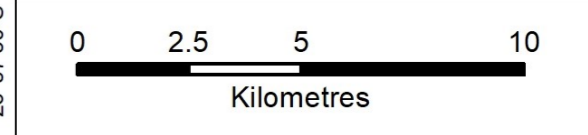


Legend

- Existing Mining Right Application Area
- Proposed Mining Right Extension Area
- Major Town
- Secondary Town
- Other Town
- Settlement
- Main Road
- National Road
- River
- Dam / Lake
- Local Municipal Boundary (2016)
- District Municipal Boundary (2016)
- Provincial Boundary (2016)



Projection: Transverse Mercator
 Datum: WGS 1984
 Central Meridian: 27°E
 Date: 10/12/2020
 Ref #: COP6679_Reg2.2_01_KR



Copper Sunset Sand Mining Right Extension Application Infrastructure Layout

Legend

- Existing Mining Right Application Area
 - Proposed Mining Right Extension Area
 - Main Road
 - Secondary Road
 - ++ Railway Line
 - Non-Perennial River / Stream
 - Perennial River / Stream
 - Dam / Lake
 - Marsh / Swamp
 - Non-Perennial Pan
- ### Proposed Infrastructure
- Permanent Haul Road
 - Temporary Haul Road
 - Areas not to be Mined
 - Areas to be Mined
 - Site Infrastructure & Offices

Areas Not To Be Mined

Site Infrastructure - 1ha
(14000l Hydrocarbon Tanks,
Solar Panel Machinery)

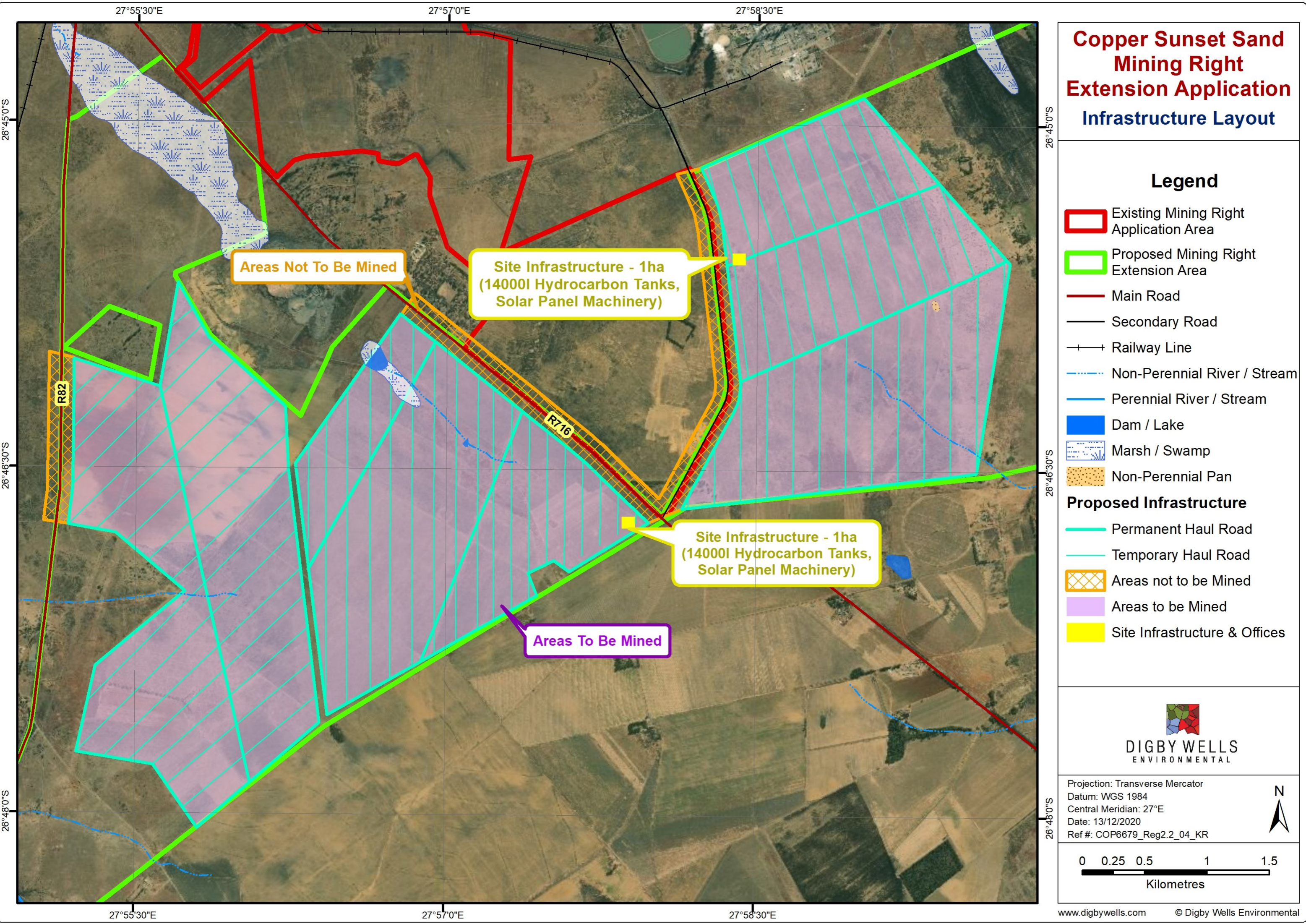
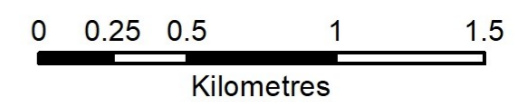
Site Infrastructure - 1ha
(14000l Hydrocarbon Tanks,
Solar Panel Machinery)

Areas To Be Mined

R82

R716

Projection: Transverse Mercator
Datum: WGS 1984
Central Meridian: 27°E
Date: 13/12/2020
Ref #: COP6679_Reg2.2_04_KR



4 Assessment Process

Table 2 summarises the impact assessment processes that are currently being conducted for the proposed project.

Table 2: Current assessment processes

Legislation (e.g., NEMA, MPRDA)	Current phase of assessment process (e.g., Scoping, EIA)	Authorities receiving information	Capacity of Authorities
MPRDA	Scoping	Department of Mineral Resources and Energy (DMRE)	Licencing
NEMA	Scoping	DMRE	Licencing
NHRA	Scoping	South African Heritage Resources Agency (SAHRA)	Commenting
	Scoping	Heritage Free State (HFS)	Noting

These assessments are required in terms of legislated and / or regulated activities outlined in Sections 4.1 to 4.3 below.

4.1 NHRA Section 38(1) activities

Table 3 presents the activities listed in Section 38(1) of the NHRA which will be triggered by the Project and which generally require heritage assessments be undertaken.

Table 3: NHRA Section 38 triggers

		NHRA Section 38 (1) Activities / Triggers		Summary description (e.g., 500 m conveyor belt, open cast pit)
<input checked="" type="checkbox"/>	a	Any linear development or barrier >300 m		The proposed temporary haul road is expected to be 6 km in length.
<input type="checkbox"/>	b	Any bridge or similar structure >50 m		
<input type="checkbox"/>	c	Any development or activity that will change the character of a site:		
	<input checked="" type="checkbox"/>	i	≥5 000m ² in extent	The proposed Project activities will extend over 5 000 m ² and will change the character of the site from agriculture to sand mining.
	<input type="checkbox"/>	ii	Involving ≥3 existing erven/ subdivisions	
	<input type="checkbox"/>	iii	Involving ≥3 or more erven/ divisions consolidated within past 5 years.	
<input type="checkbox"/>	d	Rezoning of a site ≥10 000m ² in extent.		
<input checked="" type="checkbox"/>	e	Other triggers, in terms of other legislation, (e.g.: National Environment Management Act)		MPRDA and NEMA

4.2 EIA Regulations listed activities

Table 4 presents the Listed Activities included in the EIA Regulations (2014) as amended triggered by the proposed Project and which generally require impact assessments.

Table 4: Identified listed activities

NEMA Activity	NHRA Trigger	Description	Expected duration/phase
Listing Notice 1 Activity 24	38(1)(a) 38(1)(e)	<p><i>The development of a road—</i></p> <p><i>(i) for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or</i></p> <p><i>(ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres;</i></p> <p><i>but excluding a road—</i></p> <p><i>(a) which is identified and included in activity 27 in Listing Notice 2 of 2014;</i></p> <p><i>(b) where the entire road falls within an urban area; or</i></p> <p><i>(c) which is 1 kilometre or shorter.</i></p>	Construction
Listing Notice 1 Activity 28	38(1)(e)	<p><i>Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development:</i></p> <p><i>(i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or</i></p> <p><i>(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;</i></p> <p><i>excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.</i></p>	Construction
Listing Notice 1 Activity 30	38(1)(e)	<p><i>Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004).</i></p>	Construction

NEMA Activity	NHRA Trigger	Description	Expected duration/phase
Listing Notice 2 Activity 15	38(1)(e)	<p><i>The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for—</i></p> <p><i>(i) the undertaking of a linear activity; or</i></p> <p><i>(ii) maintenance purposes undertaken in accordance with a maintenance management plan.</i></p>	Construction
Listing Notice 2 Activity 17	38(1)(e)	<p><i>Any activity including the operation of that activity which requires a mining right as contemplated in section 22 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including—</i></p> <p><i>(a) associated infrastructure, structures and earthworks, directly related to the extraction of a mineral resource; or</i></p> <p><i>(b) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing;</i></p> <p><i>but excluding the secondary processing of a mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource in which case activity 6 in this Notice applies.</i></p>	Construction Operation

4.3 Identified and known heritage resources and potential impacts

Certain categories of heritage resource, if existing and identified, generally require heritage assessments to be completed before any development may take place. These categories may be formally or generally protected in terms of the NHRA. Table 5 presents an overview of such heritage resources identified within the Project area.

Table 5: Identified heritage resources in terms of Section 3 of the NHRA

	Section	Description
☒	3(2)(a)	Places, buildings, structures and equipment of cultural significance
		Description of resource: the historical built environment constitutes a significant portion of the cultural landscape. No such heritage resources have been identified within the Project area at this stage.
		Potential impact: None identified to date, but this must be assessed in the Impact Assessment phase following in-field assessment.
☐	3(2)(b)	Places to which oral traditions are attached or which are associated with living heritage
		Description of resource: None identified
		Potential impact: None
☐	3(2)(c)	Historical settlements and townscapes
		Description of resource: None identified
		Potential impact: None
☐	3(2)(d)	Landscapes and natural features of cultural significance
		Description of resource: None identified
		Potential impact: None
☒	3(2)(e)	Geological resources of scientific or cultural importance
		Description of resource: The Project area is underlain by geological strata of very high palaeosensitivity.
		Potential impact: The Project has potential to directly impact fossil heritage. This will be assessed in more detail in the Impact Assessment phase.
☒	3(2)(f)	Archaeology and/or palaeontology (Including archaeological sites and material, fossils, rock art, battlefields & wrecks)
		Description of resource: Archaeological resources constitute a minor portion of the cultural landscape. No such heritage resources have been identified within the Project area at this stage.
		Potential impact: None identified to date, but this must be assessed in the Impact Assessment phase following in-field assessment.

	Section	Description
<input checked="" type="checkbox"/>	3(2)(g)	Graves and burial grounds (e.g., ancestral graves, graves of victims of conflict, historical graves & cemeteries)
		Description of resource: Burial grounds and graves constitute a significant portion of the cultural landscape. No such heritage resources have been identified within the Project area at this stage.
		Potential impact: None identified to date, but this must be assessed in the Impact Assessment phase following in-field assessment.
<input type="checkbox"/>	3(2)(h)	Other human remains
		Description of resource: None identified
		Potential impact: None
<input type="checkbox"/>	3(2)(i)	Sites of significance relating to the history of slavery in South Africa
		Description of resource: None identified
		Potential impact: None
<input type="checkbox"/>	3(2)(j)	Movable objects
		Description of resource: None identified
		Potential impact: None

5 Recommendation

Table 6 presents a summary and motivation of the specialist recommendations.

Table 6: Specialist heritage recommendations

Is a Heritage Impact Assessment required?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
If NO, provide motivation: Not applicable.			
If YES, provide suggested components that may be required or undertaken during HIA.			
<input checked="" type="checkbox"/>	Archaeology	<input type="checkbox"/>	Architecture
<input checked="" type="checkbox"/>	Built Environment	<input checked="" type="checkbox"/>	Burial Grounds and Graves
<input checked="" type="checkbox"/>	Palaeontology	<input type="checkbox"/>	Public Participation
<input type="checkbox"/>	Townscapes	<input type="checkbox"/>	Visual Impact
<input type="checkbox"/>	Other:		
Recommendation made by:			
Name: Shannon Hardwick		Name: Justin du Piesanie	
Capacity: HRM Consultant		Capacity: Divisional Manager: Social and Heritage Services	