PROPOSED EXTENSION OF MOSSDUSTRIA AND THE ESTABLISHMENT OF A RACEWAY ON THE REMAINDER OF PORTION 8 OF THE FARM RIETVALLEY 225, MOSSEL BAY, WESTERN CAPE PROVINCE

WATER USE LICENSE APPLICATION (WULA): WULA TECHNICAL REPORT

DWS REFERENCE NO: WU51639

DRAFT

AUGUST 2026

PREPARED FOR: MOSSEL BAY LOCAL MUNICIPALITY

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TITLE AND APPROVAL PAGE

Project Name:	Proposed Extension of Mossdustria and the Establishment of a Raceway on the Remainder of Portion 8 of the Farm Rietvalley 225, Mossel Bay, Western Cape Province
Report Title:	Water Use License Application (WULA): WULA Technical Report
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Applicant:	Mossel Bay Local Municipality

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EXECUTIVE SUMMARY

A. PROJECT BACKGROUND AND MOTIVATION

GIBB Environmental (Pty) Ltd (GIBB), now part of Nemai Consulting (Pty) Ltd, has been appointed as the independent Environmental Consultants by the Mossel Bay Local Municipality to undertake the Water Use License Application (WULA) process in terms of the National Water Act (Act No. 36 of 1998) (NWA) for water uses associated with the proposed extension of the Mossdustria industrial area, establishment of an alternative energy facility (solar photovoltaic (PV) facility) and development of a motorsport facility on the Remainder Portion 8 of Farm Rietvalley 225, Mossel Bay, Western Cape Province, South Africa (the "Project"). The responsible authority for the WULA is the Breede-Olifants Catchment Management Agency (BOCMA).

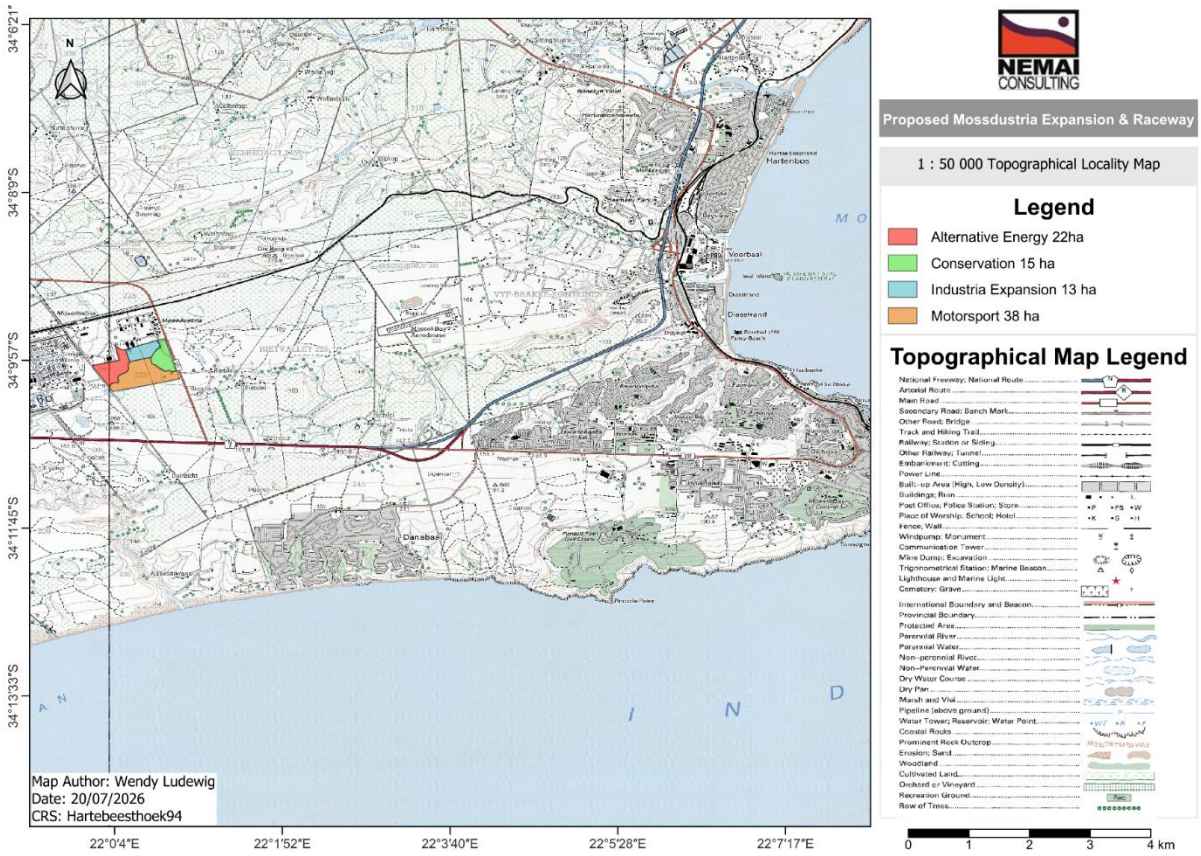
The Mossel Bay Local Municipality (MBLM) is proposing the extension of the Mossdustria industrial area, together with the establishment of a motorsport arena, a solar PV facility, and associated infrastructure to support economic growth, investment, and employment creation within the municipality. The Project is driven by the need to expand the existing industrial area, attract local and foreign investment, and maximise the economic potential of Mossel Bay through the development of a dedicated economic zone.

The proposed Project aligns with national, provincial and municipal development objectives, including the promotion of Special Economic Zones (SEZs), inclusive economic growth, job creation, investment attraction and regional economic development. Mossel Bay is considered strategically located due to its harbour, airport, and major transport routes, while the motorsport arena has been identified as a catalytic project within the Municipal Spatial Development Framework (MSDF) expected to support tourism and local business growth. The Project also includes a solar PV facility to promote renewable energy generation and improve energy sustainability.

Overall, the proposed Project seeks to stimulate long-term economic growth, create employment opportunities, support tourism, enhance industrial development and contribute to the municipality's broader vision for sustainable economic development.

B. PROJECT LOCATION

Mossdustria is an existing industrial within the urban edge of MBLM, situated adjacent to and east of the Petroleum Oil & Gas Corporation of South Africa (PetroSA) Refinery, on the outskirts of Mossel Bay. The proposed site is approximately 14 km west of Mossel Bay, along the N2 Freeway.
The proposed development site occurs on the Remainder of Portion 8 of the Farm Rietvalley 225, which measures approximately 90 ha in extent, and is located to the south of the existing Mossdustria Facility.



Regional Locality Map

C. LEGISLATION AND GUIDELINES CONSIDERED

Pertinent legislation that may affect the proposed Project from an environmental perspective is discussed in the Environmental Impact Assessment (EIA) Report. This Report discusses the relationship between the Project and the NWA, as well as the relevant regulations and guidelines associated with the NWA. Based on the legislation and guidelines considered and in consultation with BOCMA, the Project must undergo a full WULA, and a General Authorisation (GA) is not applicable.

D. PROJECT DESCRIPTION

The proposed development entails the extension of the Mossdustria industrial area, establishment of a solar PV facility and a motorsport facility on the Remainder of Portion 8 of Farm Rietvalley 225 (+/- 90 ha in extent). An existing overhead power line (OHL) will connect the development to an existing municipal substation on Portion 6 of Farm 225 in Mossdustria. The development will include the following, as outlined in the table below.

Overview of Proposed Project Components

Component	Description / Dimension
Industrial expansion with associated infrastructure (+/- 12 ha)	▪ This area is currently zoned as "Agricultural Zone 1", however, it is located in the Urban Edge according to the MBLM SDF and is earmarked for Urban Expansion; ▪ The proposal is to develop 27 new industrial erven ranging from 2000 m^2 to 14000 m^2; ▪ Erven will be fully serviced, and access will be via a newly constructed public street; ▪ The developer/ owner of the erf/ erven will be responsible for installing the top structures.
Alternative Energy Production Area (+/- 22 ha)	▪ Solar PV facility with a capacity of 16 MW; ▪ Intake 16 Mega Volt Ampere (MVA) Municipal Substation; ▪ Eight (8) smaller two (2) MVA internal distribution substation; ▪ Each internal distribution substation has a step-up transformer from 400 volts to 11 000 volts; ▪ 11 kV Cables for internal reticulation; ▪ The intake municipal substation would have sixteen (16) MVA switchgear to be connected to the existing municipal grid; and ▪ Stormwater infrastructure.
Conservation area (+/- 15 ha)	▪ This area contains critically endangered Mossel Bay Shale Renosterveld; ▪ This area is currently zoned as "Agricultural Zone 1" and is located within the urban edge and area identified for future urban expansion in terms of the MBLM SDF; ▪ This section will be rezoned to "Open Space Zone III" to allow the area to be used for nature conservation; ▪ A management plan will be developed to ensure the conservation area is correctly managed
Motorsport arena (+/- 38 ha)	▪ 80 erven for workshops, covering 0.8 ha; ▪ Showrooms/ workshops (11 sites); ▪ Parking area with 1 980 bays; ▪ Parking (grass, 5Ha); ▪ Tar racetrack of 3320 m; ▪ Drag strip of 1 000 m; ▪ Spinning track of 21 000 m^2; ▪ Tar go-carting of 600 m; ▪ Gravel go-carting of 350 m; ▪ Tar pits (8 000 m^2); ▪ Gravel pits (5 000 m^2); ▪ Pavilions large – 300 m in length (2); ▪ Pavilions medium – 150 m in length (5); ▪ Pavilions small – 50 m in length (5); ▪ Ablutions – x 1 (400 m^2); ▪ Ablutions – x 7 (75 m^2); ▪ Vendor stalls/ shops (10 x 25 m^2); ▪ Fuel storage up to 5 000 litres; ▪ Gatehouse – x2 (250 m^2).
Area occupied by both permanent and construction laydown areas	▪ Temporary laydown and staging area (approximately 50x50 m) in parking area. ▪ Construction camp laydown of approximately 50x50 m in parking area
Length of internal roads	▪ 25 m roads x 200 m ▪ 20 m roads x 650 m ▪ 12 m roads x 1.8 km
Width of roads	▪ 25 m roads ▪ 20 m roads ▪ 12 m roads
Water Requirements	▪ Potable water will be supplied from the MBLM water reticulation network within the Bartelsfontein Supply Zone via a connection to the existing municipal water infrastructure north of the site.

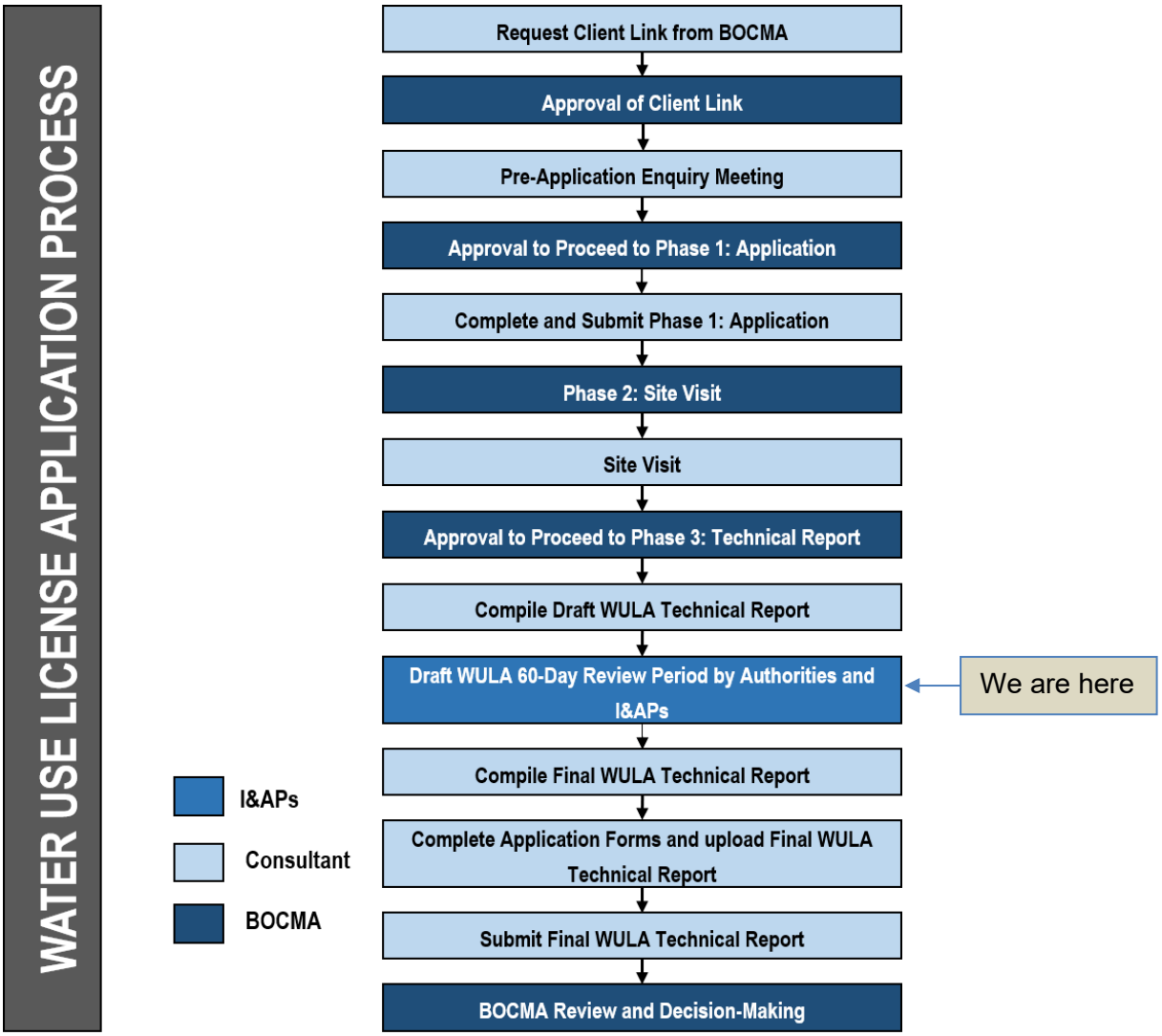
Component	Description / Dimension
	▪ The total potable water demand for the development is estimated at approximately 688.56 kL/day. ▪ The Motorsport Arena is the largest water user, with an estimated demand of 437.30 kL/day based on an annual event attendance of 5 000 people. ▪ Fire water requirements for the development have been estimated at 100 L/s for a duration of 6 hours, requiring approximately 2.16 ML of fire water storage.
Services Required	▪ Potable water will be supplied via a proposed 3.5 km long, 160 mm diameter water main connecting the development to the existing municipal water reticulation network. ▪ Wastewater generated by the development will be discharged to the existing Mossdustria municipal sewerage system and conveyed to the Mossdustria Sewer Pump Station and subsequently the Pinnacle Point Wastewater Treatment Works. ▪ Approximately 1.9 km of 160 mm diameter sewer pipeline will be required to convey wastewater from the development to the existing municipal sewer infrastructure. ▪ Stormwater generated by the development will be managed through an internal stormwater reticulation network comprising approximately 7 km of 450 mm diameter stormwater pipelines, attenuation ponds, and associated stormwater management infrastructure. ▪ A primary attenuation pond with a storage capacity of approximately 24 000 m3 and a secondary attenuation pond with a capacity of approximately 200 m3 will be required for stormwater management. ▪ An oil separation system will be required to treat stormwater runoff from the motorsport facilities prior to discharge to the attenuation pond system. ▪ The development will require connection to the existing road network via a new primary access from the R327 and an emergency route for the motorsports arena and access route for the industrial and alternative energy area via the extension of Barrier Street.

E. PROFILE OF THE RECEIVING AQUATIC ENVIRONMENT

This WULA Technical Report describes the status quo of the receiving environment in the Project area. In the context of the WULA, this report focuses primarily on the water resources that may be affected by the Project. The EIA Report considers all the attributes of the receiving environment.

F. WULA PROCESS

The process for seeking a Water Use License (WUL) for the Project under NWA is being undertaken in accordance with the WULA Regulations. In terms of NWA, the responsible authority for this application is BOCMA. Based on the nature of the water uses triggered for this Project, a WUL is required. Therefore, the WULA Process being undertaken is outlined in the Figure below.



Overall WULA Process

G. WATER USES

The water uses associated with the proposed Project, as outlined in Section 21 of the NWA, are listed in the table below. This WULA Technical Report provides the details of these water uses.

Overview of Water Uses Triggered by the proposed Project

Section 21 of NWA	Water Use Description	Applicability/Relevance
c	Impeding or diverting the flow of water in a watercourse.	These water uses relate to the construction, operation, maintenance and location of the following Project components that occur within the regulated area of a watercourse: ▪ Conservation Area; ▪ Alternative Energy Area; and ▪ Motorsports Arena.
i	Altering the bed, banks, course or characteristics of a watercourse.	

The process to seek authorisation was initiated via the Department of Water and Sanitation (DWS) Electronic Water Use License Application and Authorisation System (EWULAAS) (DWS reference no. WU51639).

H. SPECIALIST STUDIES

The following specialist studies were undertaken as part of the Scoping and Environmental Impact Reporting (S&EIR) Process undertaken for the proposed Project in accordance with the National Environmental Management Act (Act No. 107 of 1998) (NEMA) and the Environmental Impact Assessment Regulations (EIA) of 2014 (as amended) (EIA Regulations):

- Aquatic Ecology Impact Assessment;
- Geohydrology Impact Assessment;
- Terrestrial Ecology Impact Assessment;
- Noise Impact Assessment;
- Avifaunal Impact Assessment;
- Landscape/Visual Impact Assessment;
- Archaeological/Heritage Walkdown Report;
- Palaeontology Desktop Assessment;
- Socio-Economic Impact Assessment;
- Agricultural Compliance Statement;
- Land Use Planning Risk Assessment; and
- Traffic Study

In terms of the WULA, only the Aquatic Ecology Impact Assessment and Geohydrology Impact Assessment are discussed further below. Refer to the EIA Report for further information regarding the other specialist studies.

The information obtained from the respective specialist studies was incorporated into the WULA Technical Report in the following manner:

- The assumptions and limitations identified in each study were included in **Section 5**;
- The information was used to complete the profile of the receiving environment (**Section 7**) in a more detailed and site-specific manner;
- A summary of each specialist study is contained in the **Section 11.3** to **Section 11.4** below, focusing on the approach to each study, key findings and conclusions drawn;
- The specialists' impact assessments and the identified mitigation measures were included in the overall project impact assessment contained in **Section 12** below;
- Specialist input was obtained to address comments made by Interested and Affected Parties (I&APs) that related to specific environmental features pertaining to each specialist discipline during the S&EIR Process; and
- Salient recommendations made by the specialists were taken forward to the final Conclusions in the **Section 15** below.

I. IMPACT ASSESSMENT

The WULA Technical Report assessed the pertinent environmental impacts in relation to the water resources that could potentially be caused during the pre-construction, construction and operational phases of the Project.

Potential impacts were identified as follows:

- Impacts identified during the S&EIR Process;
- An appraisal of the Project's activities and proposed infrastructure;
- An assessment of the receiving environments;
- Findings from specialist studies;
- Issues highlighted by environmental authorities; and
- Comments received during public participation from I&APs as part of the S&EIR and WULA Processes.

The criteria used to assess the potential environmental impacts associated with the Project in relation to the water resources included the extent, magnitude, duration, probability and significance. Appropriate measures were identified to manage the environmental risks and impacts in accordance with the mitigation hierarchy. The proposed mitigation of the impacts associated with the Project includes specific measures identified by the technical team (including engineering solutions) and environmental specialists, stipulations of environmental authorities and environmental best practices. The impact assessment considered the significance ratings before and after mitigation and also determined the residual impacts.

The significance ratings of all the impacts assessed as part of the WULA in relation to the water resources were deemed to be low to moderate post-mitigation.

The implications of the "no-go option" were also assessed. The "no-go option" was considered in light of the Project's motivation. While the "no-go option" eliminates the potential environmental impacts of the proposed Project, it also precludes the realisation of the Project's benefits. The Project is preferred over the "no-go option", provided that the management measures outlined in the WULA Technical Report, EIA Report and the Environmental Management Programme (EMPr) are successfully implemented.

Cumulative impacts on the water resources affected by the Project were assessed in the WULA Technical Report, and mitigation measures were developed for each impact category. The specialists' findings were incorporated into the assessment of cumulative impacts.

J. ALTERNATIVES

Alternatives were considered during the EIA process, including location, land use, layout, technology and the no-go alternative. No feasible location alternatives were identified, as the Project is intended

to expand the existing Mossdustria industrial area and therefore requires a location adjacent to the current industrial footprint. The proposed site is strategically located on municipally owned land, adjacent to the N2 and within an area identified by the Mossel Bay Local Municipality for future industrial expansion. Similarly, no alternative land uses were considered, as the industrial expansion area, motorsport arena, renewable energy facility and conservation area each serve a specific development, economic or environmental purpose within the overall Project concept.

Layout alternatives were, however, assessed and refined through specialist input and consultation with authorities. The preferred layout (Layout 3) was selected as it provides the most appropriate balance between development objectives and environmental protection. The layout avoids the majority of the most sensitive terrestrial biodiversity areas and incorporates a dedicated conservation area of approximately 15 ha to protect and manage remnant Mossel Bay Shale Renosterveld. Layouts 1 and 2 were not preferred due to the greater loss of sensitive habitat and reduced environmental benefits.

The no-go alternative would avoid the environmental impacts associated with the Project but would also forgo the anticipated socio-economic benefits, including industrial expansion, employment creation, investment opportunities, tourism development and renewable energy generation. Furthermore, the formal protection and management of the proposed 15 ha conservation area would not be realised. Consequently, the preferred Project alternative was found to provide the most balanced outcome when considering environmental, social and economic factors.

K. PUBLIC PARTICIPATION

The Public Participation Process followed for the Project is governed by the NWA and the WULA Regulations and is being undertaken in conjunction with the Public Participation Process for the S&EIR Process. Therefore, the draft EIA Report and draft WULA Technical Report are being lodged for public review at the same time, with the draft EIA Report out for a 30-day review period and the draft WULA Technical Report out for a 60-day review period.

The purpose of the Public Participation Process for the Project included:

- Providing Interested and Affected Parties (I&APs) with an opportunity to obtain information about the Project;
- Allowing I&APs to express their views, issues and concerns with regard to the WULA for the Project;
- Granting I&APs an opportunity to recommend measures to avoid or reduce adverse impacts and enhance positive impacts associated with the WULA for the Project; and
- Enabling Nemai Consulting and the Project team to incorporate I&APs' needs, concerns, and recommendations into the Project, where feasible.

The steps followed for the Public Participation Process for this WULA (in conjunction with the S&EIR Process) included:

- Identifying and compiling an I&APs Database;

- Placement of Site Notices for notification of the Public Review Period;
- Placing hard copies of the draft WULA Report for Public Review at the Mossel Bay Library;
- Publishing Newspaper Adverts in the Mossel Bay Advertiser Newspaper for the notification of the Public Review Period *(It is noted that this was done for the review of the draft Scoping Report during the S&EIR Process, which included mention of the NWA and relevant WULA Regulations)*;
- Facilitating the 60-day Public Review Period that commenced on 2**8 August 2026 and finishes on 28 October 2026**; and
- Compiling and updating a Comments and Response Report which will summarise the salient issues raised by I&APs with Nemai Consulting and the Project team's responses to these matters.

L. CONCLUSION AND RECOMMENDATIONS

The following key tasks were undertaken during the WULA Process for the proposed Project:

- The specialist studies were undertaken, and the findings were incorporated into the WULA Report to understand the environmental status quo and sensitive features, assess potential impacts, and establish concomitant mitigation measures related to water resources.
- Potentially significant impacts on water resources during the pre-construction, construction, and operational phases of the Project were identified and assessed, and mitigation measures were provided.
- Alternatives for achieving the objectives of the proposed activity were considered, and the preferred option was identified.

Attention is drawn to specific water resources-related environmental features for which mitigation measures are included in the WULA Technical Report, EIA Report, and EMPr. Combined sensitivity maps for water resources are shown, and an Environmental Impact Statement regarding water resources is also provided.

Based on the specialist studies and the outcomes of the WULA, it is concluded that the WUL may be granted for the Project, provided that all identified environmental management measures are implemented and complied with. The period for which the WUL is required is as long as BOCMA can provide.

AMENDMENTS PAGE

Date	Nature of Amendment	Amendment No.
27 August 2026	Draft WULA Technical Report for Authorities and Public Review	00

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LIST OF ACRONYMS & ABBREVIATIONS

ADWF	Average Dry Weather Flow
amsl	above mean sea level
AQMP	Air Quality Management Plan
BOCMA	Breede-Olifants Catchment Management Agency
CBA	Critical Biodiversity Area
CRR	Comments and Responses Report
DEADP	Department of Environmental Affairs and Development Planning Western Cape
DEL	Department of Employment and Labour
DFFE	Department of Forestry, Fisheries and the Environment
DWAF	Department of Water Affairs and Forestry
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EAPASA	Environmental Assessment Practitioners Association of South Africa
ECA	Environment Conservation Act (Act 73 of 1989)
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EIA Regulations	Environmental Impact Assessment Regulations, 2014 (as amended)
EIS	Ecological Importance and Sensitivity
EMPr	Environmental Management Programme
EMS	Environmental Management System
ESA	Ecological Support Area
EWULAAS	Electronic Water Use License Application and Authorisation System
FEPA	Freshwater Ecosystem Priority Area
GA	General Authorisation
GDP	Gross Domestic Product
GIBB	GIBB Environmental (Pty) Ltd
GIS	Geographical Information Systems
GN	Government Notice
GRDM	Garden Route District Municipality
Ha	Hectares
HGM	Hydrogeomorphic
HIA	Heritage Impact Assessment
HWC	Heritage Western Cape
I&APs	Interested and Affected Parties
IBAs	Important Bird Areas
IDP	Integrated Development Plan
LCAs	Landscape Character Areas
LMV	Light Motor Vehicle
Mbgl	Meters Below Ground Level
MBLM	Mossel Bay Local Municipality
MSc	Master of Science
MVA	Mega Volt Ampere
NDP	National Development Plan
NEMA	National Environmental Management Act, 1998 (Act 107 of 1998)
NEM:AQA	National Environmental Management Air Quality Act, 2004 (Act 39 of 2004)
NEM:BA	National Environmental Management: Biodiversity Act (Act No. 10 of 2004)

NEM:PAA	National Environmental Management Protected Areas Act, 2003 (Act 57 of 2003)
NEM:WA	National Environmental Management Waste Act, 2008 (Act 59 of 2008)
NFEPA	National Freshwater Ecosystem Priority Areas
NGA	National Groundwater Archive
NHRA	National Heritage Resources Act , 1999 (Act 25 of 1999)
NID	Notice of Intent to Develop
NPAES	National Protected Area Expansion Strategy
NSDF	National Spatial Development Framework
NSR	Noise Sensitive Receptors
NVM	National Vegetation Map
NWA	National Water Act, 1998 (Act 36 of 1998)
NWM5	National Wetland Map 5
OHL	Overhead Powerline
OHS	Occupational Health and Safety
PAOI	Project Area of Influence
PetroSA	Petroleum Oil and Gas Corporation of South Africa
PES	Present Ecological State
PHC	Primary Health Care
PSDF	Provincial Spatial Development Framework
PV	Photovoltaic
SABAP2	Southern African Bird Atlas Project
SACNASP	South African Council for Natural Scientific Professions
S&EIR	Scoping and Environmental Impact Reporting
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System
SANBI	South African National Biodiversity Institute
SANLC	South African National Land Cover
SAPAD	South African Protected Areas Database
SCC	Species of Conservation Concern
SDF	Spatial Development Framework
SEI	Site Ecological Importance
SEZ	Special Economic Zone
SOTER	Soil and Terrain
SSV	Site Sensitivity Verification
WARMS	Water Use Authorisation and Registration Management System
WCBSP	Western Cape Biodiversity Spatial Plan
WUL	Water Use License
WULA	Water Use License Application
ZTV	Zone of Theoretical Visibility

1 INTRODUCTION

1.1 Purpose of this Document

GIBB Environmental (Pty) Ltd (GIBB), now part of Nemai Consulting (Pty) Ltd, has been appointed as the independent Environmental Consultants by Mossel Bay Local Municipality (MBLM) (the "Applicant") to undertake the Water Use License Application (WULA) process in terms of the National Water Act (Act No. 36 of 1998) (NWA) for water uses associated with the proposed **Extension of the Mossdustria Industrial Area, Establishment of an Alternative Energy Facility (Solar Photovoltaic (PV) Facility) and Development of a Motorsport Facility on the Remainder Portion 8 of Farm Rietvalley 225, Mossel Bay, Western Cape Province, South Africa** (the "Project"). The responsible authority for the WULA is the Breede-Olifants Catchment Management Agency (BOCMA).

This document serves as the **draft WULA Technical Report** for the proposed Project, as required in terms of the Regulations Regarding the Procedural Requirements for Water Use License Applications and Appeals (Government Notice (GN) No. R. 267 of 24 March 2017) (the WULA Regulations).

The WULA Technical Report provides the following information (amongst others):

- Overview of the proposed Project;
- Overview of the relevant legislation;
- Description of the water uses associated with the proposed Project;
- Description of the overall WULA Process followed for this application;
- Description of the receiving environment related to the water uses;
- Summary of the findings of the specialist studies related to the water uses;
- Assessment of the potential impacts associated with the water uses;
- Description of public participation process; and
- Recommendations and suggested conditions for the Water Use License (WUL).

1.2 Document Roadmap

Table 1 below shows where the information required in terms of the WULA Regulations for the WULA Technical Report is contained within this document.

Table 1: Information provided in terms of the WULA Regulations

Chapter	Title	WULA Regulation	
1	Introduction	Annexure D	Checklist for Technical Report
2	Project Background and Motivation	Annexure D	Checklist for Technical Report
3	Project Location	Annexure D	Checklist for Technical Report

Chapter	Title	WULA Regulation	
4	Legislation and Guidelines Considered	-	
5	Assumptions and Limitations	-	
6	Project Description	Annexure D	Checklist for Technical Report
7	Profile of the Receiving Environment	-	
8	Water Use License Application Process	Annexure A	Summary of timeframes for receiving and steps in processing of a water use license application
		Annexure B	Forms and reports to be completed in respect of a particular water use application
		Annexure C	Checklist for evaluation of application prior to acceptance
9	Locations of Water Uses	Annexure B	Forms and reports to be completed in respect of a particular water use application
		Annexure D	Checklist for Technical Report
10	Section 27 of the National Water Act, 1998	-	
11	Summary of Specialist Studies	Annexure D	Table of Contents of Technical Reports for minimum information requirements to be submitted: ▪ Biodiversity and Water Resources Impact Assessment ▪ Desktop Hydrology Assessment ▪ Desktop Geohydrology Assessment ▪ Desktop Hydropedology Assessment
12	Impact Assessment	Annexure D	Table of Contents of Technical Reports for minimum information requirements to be submitted: ▪ Biodiversity and Water Resources Impact Assessment ▪ Desktop Hydrology Assessment ▪ Desktop Geohydrology Assessment ▪ Desktop Hydropedology Assessment
13	Analysis of Alternatives	Annexure D	Checklist for Technical Report
14	Public Participation	Annexure D	Table of Contents of Technical Reports for minimum information requirements to be submitted: ▪ Public Participation Report
15	Conclusions & Recommendations	-	

1.3 Applicant

The details of the Applicant are tabulated below (**Table 2**).

Table 2: Applicant details

Applicant:	Mossel Bay Local Municipality
Contact Person:	Mr Jaco Roux
Address	101 Marsh Street, Mossel Bay, 6500
Telephone:	(044) 606 5071
Email:	jroux@mosselbay.gov.za

1.4 Environmental Consultant

Nemai Consulting (it is noted that GIBB Environmental was acquired by Nemai Consulting) was appointed by the Applicant as the independent Environmental Consultant to undertake the WULA Process in accordance with the NWA and associated WULA Regulations.

Nemai Consulting is an independent, specialist environmental, social development and Occupational Health and Safety (OHS) consultancy. The company is a 100% black female-owned company, with a level 1 BBBEE rating. The company is directed by a team of experienced and capable environmental engineers, scientists, and specialists. The company has offices in Randburg (Gauteng) and Durban (Kwa-Zulu Natal).

The core members of Nemai Consulting who are involved with the WULA Process for the proposed Project WULA are captured in **Table 3.**

Table 3: Nemai Consulting WULA Core Team Members

Name	Role in Project	Professional Registration	Qualifications	Selected Experience
D. Henning (25 years' experience)	Registered EAP	Environmental Assessment Practitioners Association of South Africa (EAPASA) Reg. no. 2020/1217 South African Council for Natural Scientific Professions (SACNASP) Pr.Sci.Nat Reg no: 400108/17	Master of Science (MSc) (River Ecology)	▪ Matjhabeng 400 MW Solar PV Power Plant with 80 MW (320 MWh) Battery Energy Storage Systems, Free State Province, SA. ▪ Beaufort West 75MW Solar PV Project, Western Cape, SA. ▪ Extraction of Gas and Electric Power Production Plant in the Rubavu District, Rwanda. ▪ Impompomo Hydropower Plant, Mpumalanga, SA. ▪ Hydropower Plant within Hydraulic Network at Rand Water's Zoekfontein Site, Gauteng Province, SA.

Name	Role in Project	Professional Registration	Qualifications	Selected Experience
				▪ uMkhomazi Water Project Phase 1 with hydropower facilities, KwaZulu-Natal, SA. ▪ Neptune-Poseidon Transmission Line, including 200km of 400 kV transmission line, Eastern Cape, SA. ▪ Makalu B (Igesi) Substation and Associated Transmission Loop-In Lines, Free State Province, SA. ▪ Anderson Dinaledi Transmission Line, including 80km of 132 kV transmission line with substations, North-West Province, SA.
W.L. Ludewig (2-3 years' experience)	Candidate EAP	EAPASA Reg. No. 2024/8548 SACNASP Candidate Nat. Sci. Reg. No. 169572	MSc (Geographical Information Systems (GIS) and Remote Sensing)	▪ Proposed Damara I up to 240 MW Solar Energy Facility, up to 960 MWh Battery Energy Storage System and 33/132 kV Independent Power Producer Substation, Northern Cape, South Africa. ▪ Proposed Altina 120 MW Solar PV & 40 MW BESS, Free State Province ▪ Proposed Paradise 100MW Solar PV & 40MW BESS, Free State Province ▪ Proposed Sulphonation Plant in Wadeville, Ekurhuleni Metropolitan Municipality, Gauteng

2 PROJECT BACKGROUND AND MOTIVATION

The MBLM is proposing the extension of the existing Mossdustria industrial area, together with the establishment of a motorsport arena, a solar PV facility, and associated infrastructure, on the Remainder of Portion 8 of Farm Rietvalley 225, Mossel Bay, Western Cape Province. The proposed Project forms part of the Municipality's broader economic development strategy aimed at expanding industrial opportunities within the Mossel Bay region and creating an environment that supports investment, employment creation and long-term economic growth.

The primary motivation for the proposed Project is the Municipality's intention to establish a dedicated economic zone that maximises the value and development potential of the existing Mossdustria industrial area while attracting much-needed local and external investment. The Project is further aligned with the Western Cape Government's strategic drive to establish Special Economic Zones (SEZs), which are geographically designated areas intended to stimulate targeted economic activities, promote national economic growth and exports, and attract both domestic and foreign investment. The objectives associated with SEZ development include targeted industrial growth, provision of world-class infrastructure, accelerated economic development, employment creation, resource beneficiation, increased investment, and balanced regional development.

MBLM considers Mossel Bay strategically positioned for future economic expansion due to the presence of key regional infrastructure, including the harbour, airport, and major highway connections. The municipality further notes that there are currently no SEZs located between Cape Town and Gqeberha (Port Elizabeth), creating an opportunity for Mossel Bay to fulfil a strategic regional economic role. The proposed Project is therefore intended to strengthen the municipality's industrial capacity and enhance its competitiveness as an investment destination within the Western Cape and broader South African economy.

The proposed Project is also consistent with the objectives of the National Spatial Development Framework (NSDF) (2019), which identifies the need for inclusive economic growth, sustainable urban development, support for emerging economic nodes and the promotion of investment in regions with growth potential. In this regard, the Project seeks to contribute towards economic diversification, facilitate movement and trade, support employment creation and provide a differentiated response to socio-economic challenges within the municipality, including unemployment and exclusion. The proposed motorsport arena, in particular, is intended to establish a centre of innovation and excellence that can contribute to the regional economy and attract visitors from across the Western Cape and internationally.

The motorsport facility is identified as one of ten catalytic Projects within the Mossel Bay Spatial Development Framework (SDF) and is being pursued in collaboration with the private

sector to stimulate economic growth within the municipality. The facility is expected to serve as a tourist attraction that will support existing tourism-related businesses, including accommodation establishments, restaurants, and other hospitality services. In addition, the expansion of Mossdustria through the provision of new industrial erven is anticipated to encourage industrial investment and contribute to both direct and indirect employment opportunities within the local economy.

The Project also incorporates a renewable energy component in the form of a solar PV facility. The inclusion of the solar PV facility aligns with the 2022 SDF's objective of facilitating opportunities for renewable energy development. The facility is intended to supply electricity to the proposed Project and contribute energy to the national grid, thereby supporting broader energy resilience and sustainability objectives within the municipality.

The Project furthermore aligns with the objectives of the National Development Plan (NDP) 2030, which promotes economic growth, investment, job creation, collaboration between the public and private sectors, and poverty reduction. Through the creation of development opportunities, industrial investment, renewable energy infrastructure and tourism-related activities, the proposed Project aims to contribute to local economic development while supporting broader national development priorities. Once operational, the Project is expected to contribute towards economic growth, job creation and increased investment within the Mossel Bay region.

Overall, the proposed Project is motivated by the need to expand industrial development opportunities, attract investment, create employment, promote tourism, encourage renewable energy generation and support long-term economic growth within the Mossel Bay municipal area. The Project is considered aligned with municipal, provincial, and national development objectives aimed at improving economic resilience and facilitating sustainable development within the region.

3 PROJECT LOCATION

3.1 Location of Project in relation to the Existing Industrial Area

Mossdustria is an existing industrial area within the urban edge of MBLM, situated adjacent to and east of the Petroleum Oil & Gas Corporation of South Africa (PetroSA) Refinery, on the outskirts of Mossel Bay.

The proposed Project site is adjacent to the south of the existing Mossdustria industrial area and is approximately 14 km west of Mossel Bay, along the N2 Freeway (refer to **Figure 1**). **Figure 2** shows the proposed Project site in relation to the existing Mossdustria industrial area.

Figure 1: Location of the existing Mossdustria area (green) and the proposed Project site (blue) in relation to the N2

Figure 2: The proposed Project site (blue) in relation to the existing Mossdustria area (green)

3.2 Geographical Context

The Project is located in Ward Number 7 of the MBLM, Garden Route District Municipality (GRDM), in the Western Cape Province. The Project site is located approximately 1 km to the north of the N2 and approximately 14 km to the west of Mossel Bay along the N2 (**Figure 3**).

The proposed Project occurs on the Remainder of Portion 8 of Farm Rietvalley 225 (C05100000000022500008), which measures approximately 90 ha in extent, and is located to the south of the existing Mossdustria Facility. The Project Footprint in relation to the property boundaries is illustrated in **Figure 4**.

The coordinates of the Project and the various components are provided in **Table 4** and shown in **Figure 5** and **Figure 6**. The coordinates of the approximate centre point of the site are 34˚10'1.96"S 22˚0'18.88"E (Centre Point in **Figure 5**/**Figure 6**).

Table 4: Coordinates of the proposed Project

Feature	Latitude (S)	Longitude (E)
Project Area		
Corner 1 (NW)	34˚10'0.34"S	21˚59'49.25"E
Corner 2 (NE)	34˚9'44.55"S	22˚0'36.7"E
Corner 3 (SE)	34˚10'8.97"S	22˚0'45.81"E
Corner 4 (SW)	34˚10'17.14"S	22˚0'2.45"E
Centre Point	34˚10'1.96"S	22˚0'18.88"E
Alternative Energy Production Area		
Point 1	34˚10'0.34"S	21˚59'49.25"E
Point 2	34˚9'56.92"S	22˚0'6.61"E
Point 3	34˚9'46.98"S	22˚0'3.77"E
Point 4	34˚9'49.97"S	22˚0'10.78"E
Point 5	34˚9'58.24"S	22˚0'13.69"E
Point 6	34˚10'3.77"S	22˚0'12.26"E
Point 7	34˚10'6.8"S	22˚0'6.77"E
Point 8	34˚10'9.13"S	22˚0'6.03"E
Point 9	34˚10'11.14"S	22˚0'6.33"E
Point 10	34˚10'12.04"S	22˚0'1.93"E
Point 11	34˚10'14.18"S	22˚0'0.12"E
Conservation Area		
Point 1	34˚9'45.17"S	22˚0'32.19"E
Point 2	34˚9'44.55"S	22˚0'36.7"E
Point 3	34˚10'3.5"S	22˚0'43.77"E

Feature	Latitude (S)	Longitude (E)
Point 4	34˚10'3.88"S	22˚0'43.51"E
Point 5	34˚10'4.36"S	22˚0'41.1"E
Point 6	34˚10'3.63"S	22˚0'39.06"E
Point 7	34˚10'4.2"S	22˚0'36.45"E
Point 8	34˚10'3.79"S	22˚0'34.97"E
Point 9	34˚10'2.91"S	22˚0'34.68"E
Point 10	34˚9'59.58"S	22˚0'28.98"E
Point 11	34˚9'59.35"S	22˚0'27.92"E
Point 12	34˚9'55.18"S	22˚0'26.81"E
Point 13	34˚9'55.04"S	22˚0'27.47"E
Point 14	34˚9'51.74"S	22˚0'29.44"E
Point 15	34˚9'50.45"S	22˚0'30.94"E
Point 16	34˚9'49.67"S	22˚0'30.65"E
Point 17	34˚9'49.03"S	22˚0'33.23"E
Point 18	34˚9'48.62"S	22˚0'33.49"E
Motorsports Arena		
Point 1	34˚10'8.97"S	22˚0'45.81"E
Point 2	34˚10'17.13"S	22˚0'2.44"E
Point 3	34˚10'14.18"S	22˚0'0.12"E
Point 4	34˚10'12.04"S	22˚0'1.93"E
Point 5	34˚10'11.14"S	22˚0'6.33"E
Point 6	34˚10'7.86"S	22˚0'6.03"E
Point 7	34˚10'3"S	22˚0'12.72"E
Point 8	34˚9'57.86"S	22˚0'13.58"E
Point 9	34˚9'55.18"S	22˚0'26.81"E
Point 10	34˚9'59.35"S	22˚0'27.92"E
Point 11	34˚10'3.84"S	22˚0'34.94"E
Point 12	34˚10'3.63"S	22˚0'39.06"E
Point 13	34˚10'4.37"S	22˚0'41.11"E
Point 14	34˚10'3.5"S	22˚0'43.77"E
Industrial Expansion Area		
Point 1	34˚9'50.07"S	22˚0'10.85"E
Point 2	34˚9'44.31"S	22˚0'31.04"E
Point 3	34˚9'45.63"S	22˚0'31.53"E
Point 4	34˚9'45.52"S	22˚0'32.33"E
Point 5	34˚9'48.62"S	22˚0'33.49"E
Point 6	34˚9'49.03"S	22˚0'33.23"E
Point 7	34˚9'49.67"S	22˚0'30.65"E

Feature	Latitude (S)	Longitude (E)
Point 8	34˚9'50.45"S	22˚0'30.94"E
Point 9	34˚9'51.74"S	22˚0'29.44"E
Point 10	34˚9'55.04"S	22˚0'27.47"E
Point 11	34˚9'57.86"S	22˚0'13.58"E

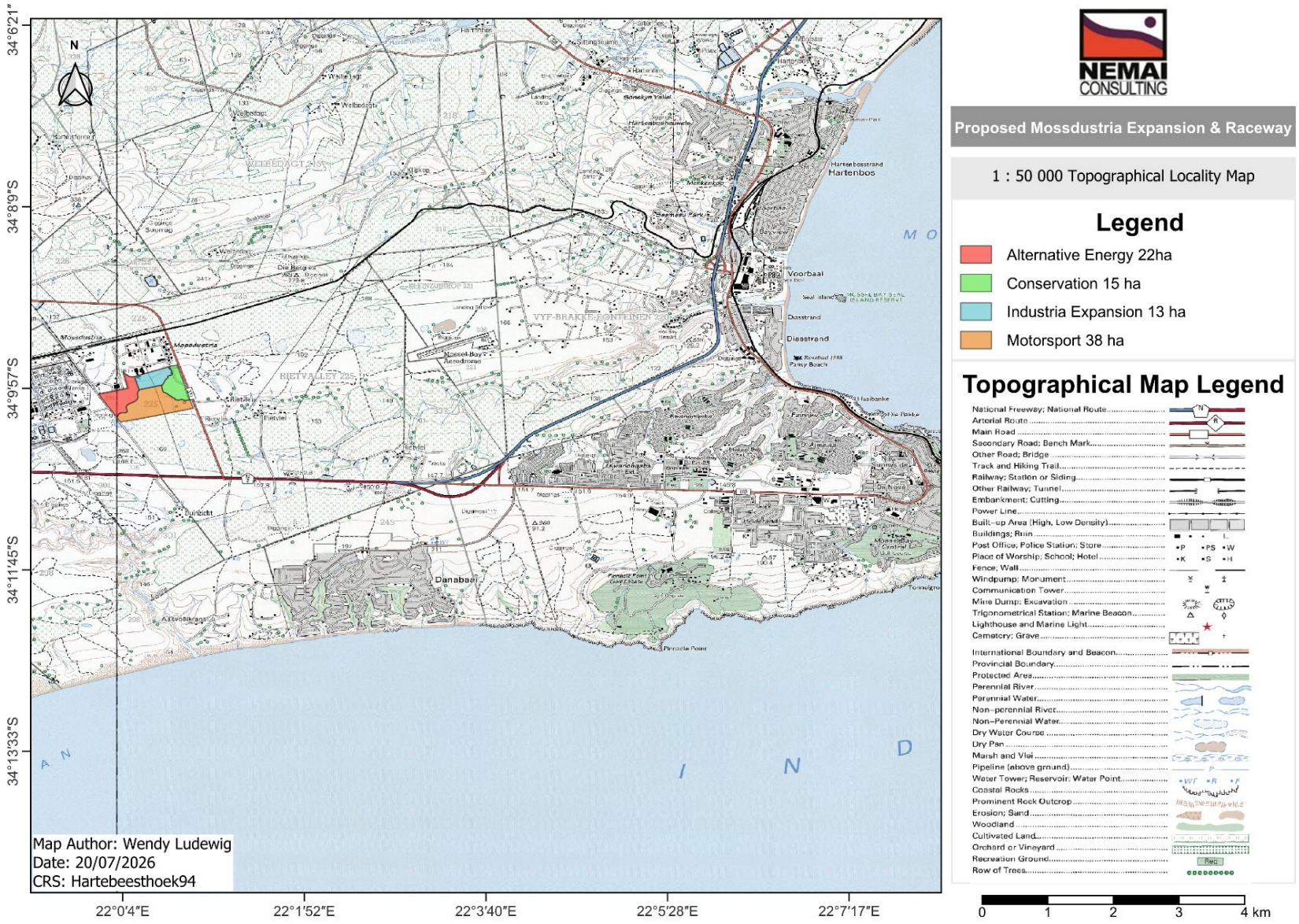

Figure 3: 1:50 000 Topographical Map for Regional Locality

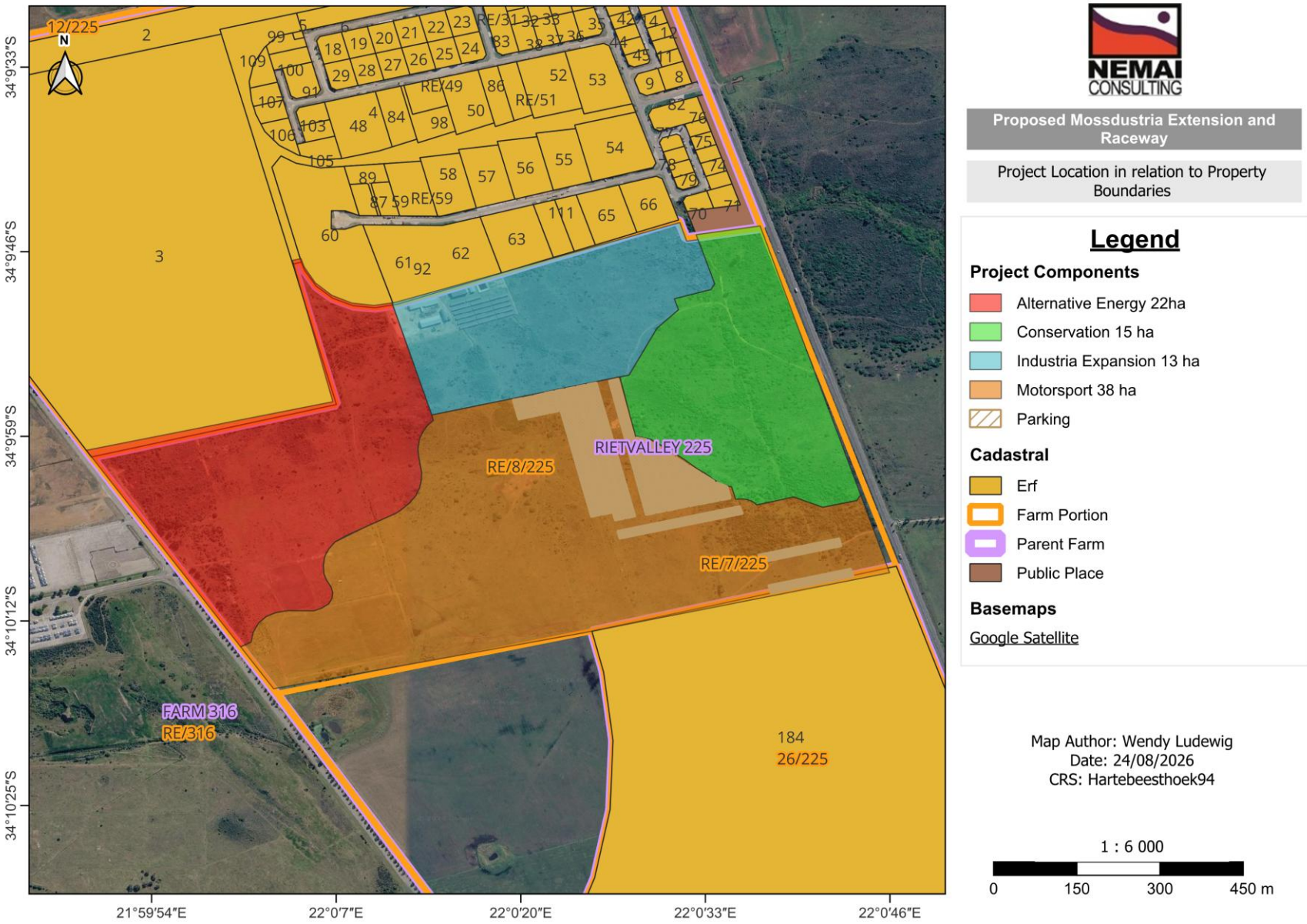

Figure 4: Project Layout in relation in Property Boundaries

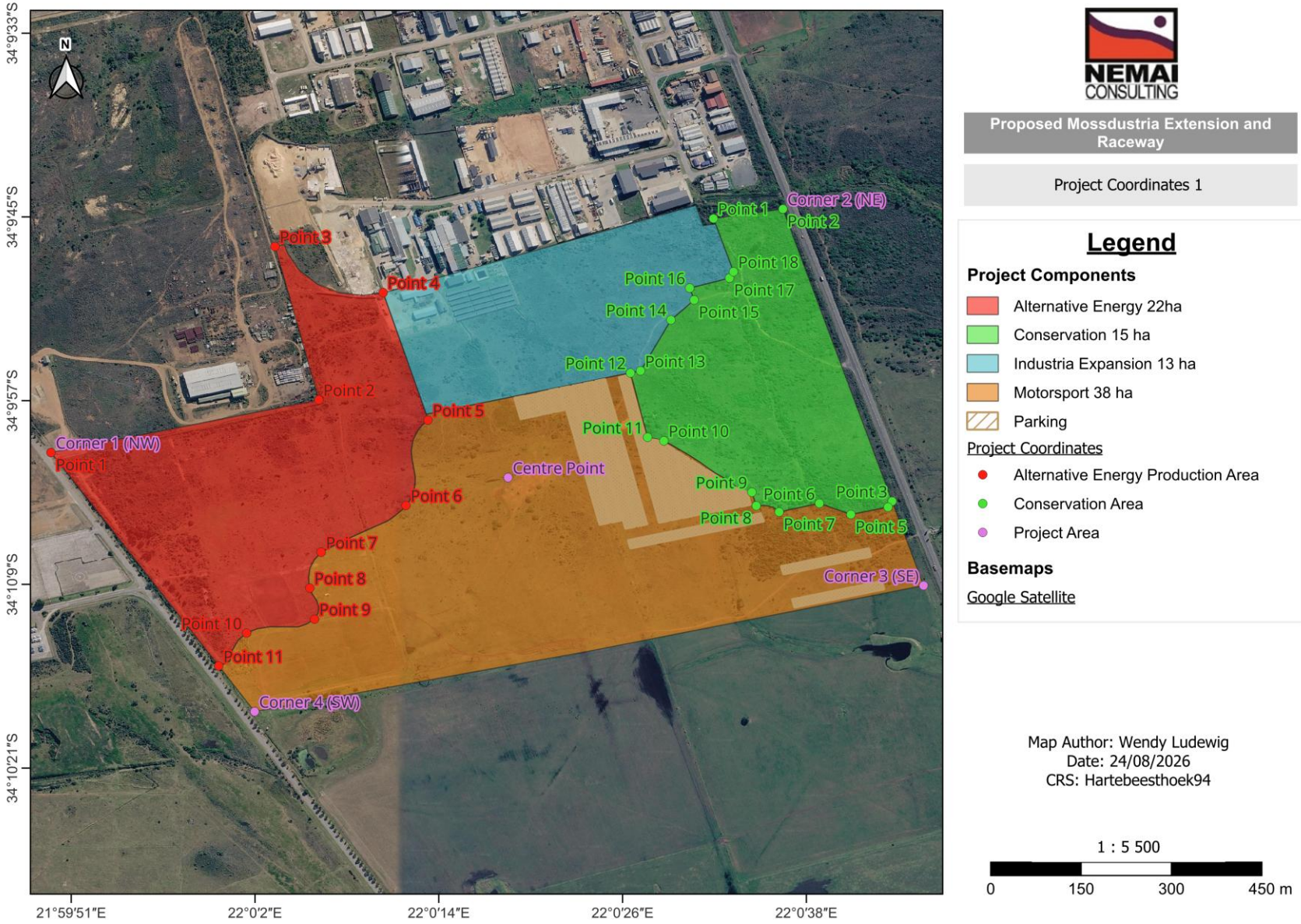

Figure 5: Project Coordinates Points for the Alternative Energy Area, Conservation Area and General Project Area

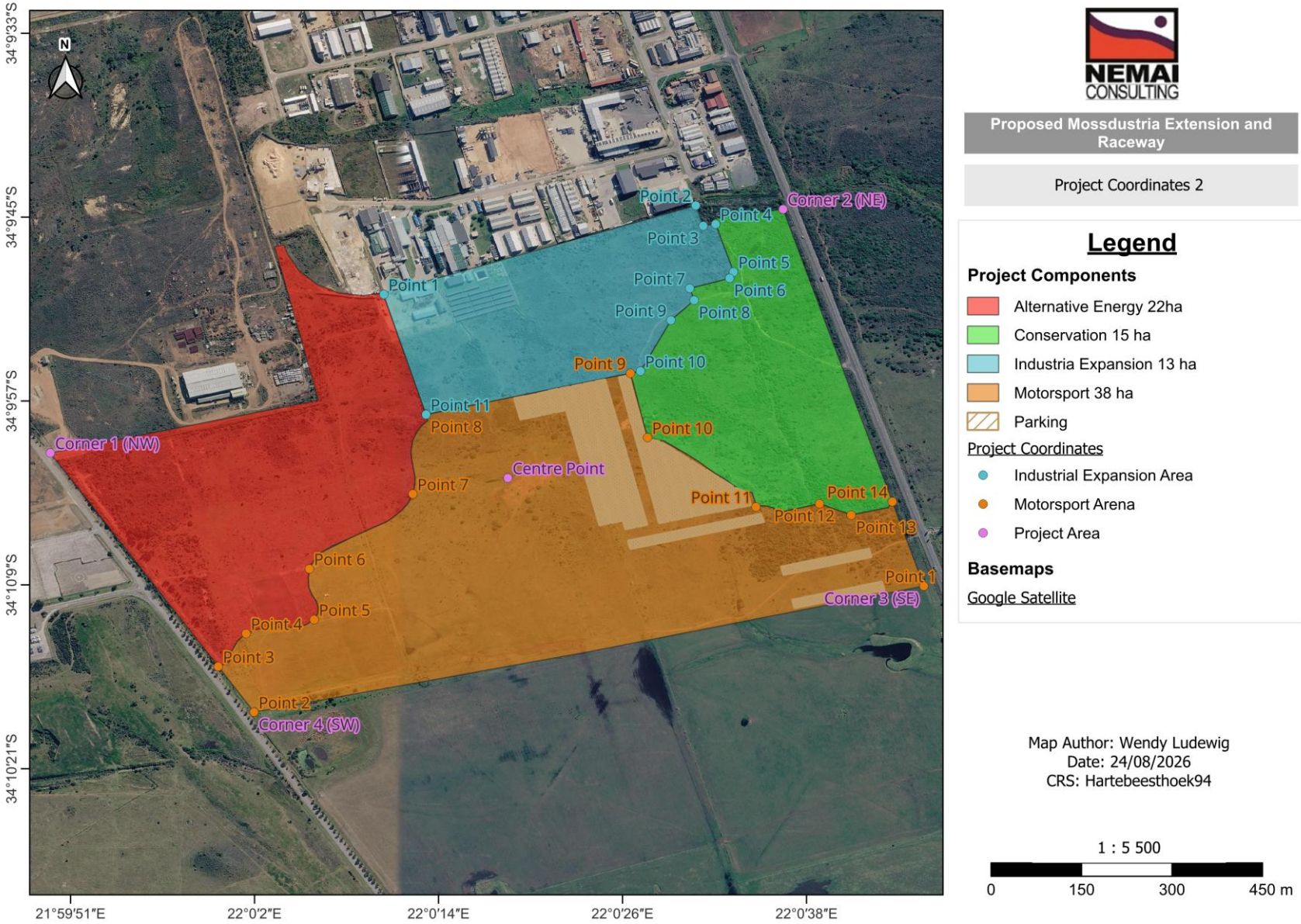

Figure 6: Project Coordinates Points for the Industrial Expansion Area, Motorsports Arena and General Project Area

4 LEGISLATION AND GUIDELINES CONSIDERED

4.1 Legislation

The EIA Report explains the legislation that may have an environmental bearing on the proposed Project, and the reader is referred to this document for further information.

Only the relationship between the Project and the NWA is discussed further in **Section 4.2**.

4.2 National Water Act, 1998

The purpose of the NWA is to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled in ways which take into account the following:

- Meeting the basic human needs of present and future generations;
- Promoting equitable access to water;
- Redressing the results of past racial and gender discrimination;
- Promoting the efficient, sustainable and beneficial use of water in the public interest;
- Facilitating social and economic development;
- Providing for growing demand for water use; protecting aquatic and associated ecosystems and their biological diversity;
- Reducing and preventing pollution and degradation of water resources;
- Meeting international obligations;
- Promoting dam safety; and
- Managing floods and droughts.

The Department of Water and Sanitation (DWS) is the custodian of South Africa's water resources.

Some key definitions from the NWA and associated regulations include:

- "Pollution" – the direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it (a) less fit for any beneficial purpose for which it may reasonably be expected to be used; or (b) harmful or potentially harmful;
- "Regulated area of a watercourse" means:
  - (a) The outer edge of the 1 in 100-year flood line or delineated riparian habitat, whichever is the greatest distance, measured from the middle of the watercourse of a river, spring, natural channel, dams and iakes;
  - (b) In the absence of a determined 1 in 100-year flood line or riparian area as contemplated in (a) above the area within 100m distance from the edge of a watercourse where the edge of the watercourse (excluding flood plains) is the first identifiable annual bank fill flood bench (subject to compliance to section 144 of NWA); and
  - (c) In respect of a wetland: a 500 m radius around the delineated boundary (extent) of any wetland (including pans).

- "Reserve" means the quantity and quality of water required:
  - To satisfy basic human needs by securing a basic water supply, as prescribed under the Water Services Act (Act No. 108 of 1997), for people who are now or who will, in the reasonably near future, be relying upon, taking water from or being supplied from, the relevant water resource; and
  - To protect aquatic ecosystems in order to secure ecologically sustainable development and use of the relevant water resource.
- "Waste" – includes any solid material or material that is suspended, dissolved or transported in water (including sediment) and which is spilt or deposited on land or into a water resource in such volume, composition or manner as to cause, or to be reasonably likely to cause, the water resource to be polluted;
- "Water resource" – includes a watercourse, surface water, estuary, or aquifer;
- "Watercourse" –
  (a) a river or spring;
  (b) a natural channel in which water flows regularly or intermittently;
  (c) a wetland, lake or dam into which, or from which, water flows; and
  (d) any collection of water which the Minister may, by notice in the Gazette, declare to be a watercourse,
  and a reference to a watercourse includes, where relevant, its bed and banks;
- "Water Management Area" is an area established as a management unit in the national water resource strategy within which a catchment management agency will conduct the protection, use, development, conservation, management and control of water resources; and
- "Wetland" means land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil.

Section 19 of the NWA addresses pollution prevention, in particular, situations in which pollution of a water resource occurs or may occur as a result of activities on land. The person who owns, controls, occupies or uses the land in question is responsible for taking measures to prevent pollution of water resources.

Section 20 of the NWA addresses pollution of water resources following an emergency incident, such as an accident involving the spillage of a harmful substance that has entered or may enter a water resource. The responsibility for remedying the situation rests with the person responsible for the incident or the substance involved.

Sections 21(a) to (k) of the NWA identify 11 consumptive and non-consumptive water uses that must be authorised under a tiered authorisation system. This authorisation system includes scheduled uses that are subject to registration or licensing, as well as general authorisations (Section 39). In general, a water use must be licensed unless it is listed in Schedule 1, is an existing

lawful use, is permissible under a general authorisation, or if a responsible authority waives the need for a license.

The NWA mandates the establishment of Catchment Management Agencies (CMAs) to decentralise the management of water resources. One of the CMAs' roles is to act as the responsible authority for WULAs. This Project falls under the jurisdiction of the BOCMA.

The water uses that are associated with the Project, in terms of Section 21 of the NWA, as discussed with BOCMA, are listed in **Table 5**.

Table 5: Water uses associated with the proposed Project in terms of Section 21 of the NWA

Section 21 of NWA	Water Use Description	Applicability/Relevance
c	Impeding or diverting the flow of water in a watercourse.	These water uses relate to the construction, operation, maintenance and location of the following Project components that occur within the regulated area of a watercourse: ▪ Conservation Area; ▪ Alternative Energy Area; and ▪ Motorsports Arena.
i	Altering the bed, banks, course or characteristics of a watercourse.	

Based on the proposed Project requirements and consultation with BOCMA, a Water Use License (WUL) will be required prior to commencing any activities. As such, an application must be lodged with the BOCMA in order to obtain the necessary WUL prior to the commencement of the Project.

The WULA Technical Report will be submitted to the BOCMA to seek authorisation under the NWA for the above-mentioned water uses.

The process to seek authorisation for the water uses was initiated via the DWS Electronic Water Use Licence Application and Authorisation System (EWULAAS). (reference no. WU51639).

The WULA Regulations prescribe the procedure and requirements for a WULA in terms of Section 41 of the NWA, as well as an appeal in terms of Section 41(6) of the NWA.

5 ASSUMPTIONS AND LIMITATIONS

The following assumptions and limitations accompany the WULA Process:

- ❑ As the design of the project components is still in feasibility stage, and due to the dynamic nature of the planning environment, the dimensions and layout of the infrastructure may change during the detailed design phase.
- ❑ Regardless of the analytical and predictive method employed to determine the potential impacts associated with the Project, the impacts are only predicted on a probability basis. The accuracy of the predictions is largely dependent on the availability of environmental data and the degree of understanding of the environmental features and their related attributes.
- ❑ The following assumptions, gaps and limitations were noted as part of the specialist studies:
  - Aquatic Ecology Impact Assessment (Colloty, 2026a) –
    - A comprehensive understanding of flora and fauna communities, including endemic, rare, and threatened species, ideally requires assessments conducted over different seasons and years, with repeated sampling.
    - Due to time and Project constraints, long-term ecological studies are not always feasible and are commonly replaced by instantaneous sampling during impact assessment studies.
    - While this limitation is recognised, the findings are considered sufficient to support decision-making regarding Project acceptability, unless otherwise stated.
    - A long-term investigation of the proposed Project site was not possible within the scope and Terms of Reference of this study.
    - Despite these constraints, a concerted effort was made to:
      - Assess as much of the proposed Project site as possible;
      - Utilise available literature;
      - Review species distribution data; and
      - Incorporate aerial photography into the assessment.
    - The information and findings presented in this report apply only to the study area shown on the accompanying maps.
    - The results cannot be extrapolated or applied to other areas without undertaking a detailed site-specific investigation.
  - Geohydrology Impact Assessment (Oberholzer *et al.,* 2026) –
    - The geological interpretation is based on the available 1:50 000 geological mapping and the information available for the study area. Geological contacts and subsurface conditions may vary locally from those depicted on the regional geological map.
    - Available data was sourced from the relevant groundwater databases and sources. The aquifer vulnerability, yield and quality data are predominantly accurate, albeit mapped at a regional scale.
    - The presence of dense clay-rich material encountered during augering is interpreted to potentially restrict vertical infiltration and promote shallow runoff, ponding and perched water. However, the extent of the cover across the site is not confirmed.

- The groundwater quality was derived from one set of test results. Seasonal changes may occur in the chemistry of the water from the borehole, and this has not been accounted for.
- It was not possible to collect a rainfall sample as part of the isotope investigation; therefore, site-specific precipitation isotopes were not available for comparison.
- The coordinates of the NGA boreholes are sometimes found to be inaccurate. Hence, it was difficult to incorporate the NGA data accurately into the field hydrocensus.
- Limited water level data could be obtained through the NGA database as well as through the hydrocensus, and assumptions had to be made without this data available.
- The stable isotope dataset comprises a limited number of samples and therefore provides an indication of water sources and potential interaction but cannot conclusively establish groundwater-surface water flow directions or hydraulic connectivity.
- The assessment of potential impacts is based on the proposed development footprint and activities available at the time of the investigation. Changes to the development layout, excavation depths, stormwater infrastructure or below-ground services may require the geohydrological assessment to be revisited.

6 PROJECT DESCRIPTION

The information presented in this section was supplemented with information from the Project's technical team and relevant Engineering Reports (Bezuidenhout, 2026; Godoka and Bezuidenhout, 2026).

6.1 Summary of the Proposed Project Components

The proposed development entails the extension of the Mossdustria industrial area, establishment of a solar PV facility and a motorsport facility on the Remainder of Portion 8 of Farm Rietvalley 225 (+/- 90 ha in extent). An existing overhead powerline (OHL) will connect the development to an existing municipal substation on Portion 6 of Farm 225 within Mossdustria. An overview of the proposed Project is summarised in **Table 6** below. The overall preliminary layout of the proposed Project is illustrated in **Figure 7**.

Table 6: Overview of Proposed Project Components

Component	Description / Dimension
Industrial expansion with associated infrastructure (+/- 12 ha)	▪ This area is currently zoned as "Agricultural Zone 1", however, it is located in the Urban Edge according to the MBLM SDF and is earmarked for Urban Expansion; ▪ The proposal is to develop 27 new industrial erven ranging from 2000 m^2 to 14000 m^2; ▪ Erven will be fully serviced, and access will be via a newly constructed public street; ▪ The developer/ owner of the erf/ erven will be responsible for installing the top structures.
Alternative Energy Production Area (+/- 22 ha)	▪ Solar PV facility with a capacity of 16 MW; ▪ Intake 16 Mega Volt Ampere (MVA) Municipal Substation; ▪ Eight (8) smaller two (2) MVA internal distribution substation; ▪ Each internal distribution substation has a step-up transformer from 400 volts to 11 000 volts; ▪ 11 kV Cables for internal reticulation; ▪ The intake municipal substation would have sixteen (16) MVA switchgear to be connected to the existing municipal grid; and ▪ Stormwater infrastructure.
Conservation area (+/- 15 ha)	▪ This area contains critically endangered Mossel Bay Shale Renosterveld; ▪ This area is currently zoned as "Agricultural Zone 1" and is located within the urban edge and area identified for future urban expansion in terms of the MBLM SDF; ▪ This section will be rezoned to "Open Space Zone III" to allow the area to be used for nature conservation; ▪ A management plan will be developed to ensure the conservation area is correctly managed
Motorsport arena (+/- 38 ha)	▪ 80 erven for workshops, covering 0.8 ha; ▪ Showrooms/ workshops (11 sites); ▪ Parking area with 1 980 bays; ▪ Parking (grass, 5Ha); ▪ Tar racetrack of 3320 m; ▪ Drag strip of 1 000 m; ▪ Spinning track of 21 000 m^2;

Component	Description / Dimension
	▪ Tar go-carting of 600 m; ▪ Gravel go-carting of 350 m; ▪ Tar pits (8 000 m^2); ▪ Gravel pits (5 000 m^2); ▪ Pavilions large – 300 m in length (2); ▪ Pavilions medium – 150 m in length (5); ▪ Pavilions small – 50 m in length (5); ▪ Ablutions – x 1 (400 m^2); ▪ Ablutions – x 7 (75 m^2); ▪ Vendor stalls/ shops (10 x 25 m^2); ▪ Fuel storage up to 5 000 litres; ▪ Gatehouse – x2 (250 m^2).
Area occupied by both permanent and construction laydown areas	▪ Temporary laydown and staging area (approximately 50x50 m) in parking area. ▪ Construction camp laydown of approximately 50x50 m in parking area
Length of internal roads	▪ 25 m roads x 200 m ▪ 20 m roads x 650 m ▪ 12 m roads x 1.8 km
Width of roads	▪ 25 m roads ▪ 20 m roads ▪ 12 m roads
Water Requirements	▪ Potable water will be supplied from the MBLM water reticulation network within the Bartelsfontein Supply Zone via a connection to the existing municipal water infrastructure north of the site. ▪ The total potable water demand for the development is estimated at approximately 688.56 kL/day. ▪ The Motorsport Arena is the largest water user, with an estimated demand of 437.30 kL/day based on an annual event attendance of 5 000 people. ▪ Fire water requirements for the development have been estimated at 100 L/s for a duration of 6 hours, requiring approximately 2.16 ML of fire water storage.
Services Required	▪ Potable water will be supplied via a proposed 3.5 km long, 160 mm diameter water main connecting the development to the existing municipal water reticulation network. ▪ Wastewater generated by the development will be discharged to the existing Mossdustria municipal sewerage system and conveyed to the Mossdustria Sewer Pump Station and subsequently the Pinnacle Point Wastewater Treatment Works. ▪ Approximately 1.9 km of 160 mm diameter sewer pipeline will be required to convey wastewater from the development to the existing municipal sewer infrastructure. ▪ Stormwater generated by the development will be managed through an internal stormwater reticulation network comprising approximately 7 km of 450 mm diameter stormwater pipelines, attenuation ponds, and associated stormwater management infrastructure. ▪ A primary attenuation pond with a storage capacity of approximately 24 000 m^3 and a secondary attenuation pond with a capacity of approximately 200 m^3 will be required for stormwater management. ▪ An oil separation system will be required to treat stormwater runoff from the motorsport facilities prior to discharge to the attenuation pond system.

Component	Description / Dimension
	▪ The development will require connection to the existing road network via a new primary access from the R327 and an emergency route for the motorsports arena and access route for the industrial and alternative energy area via the extension of Barrier Street.

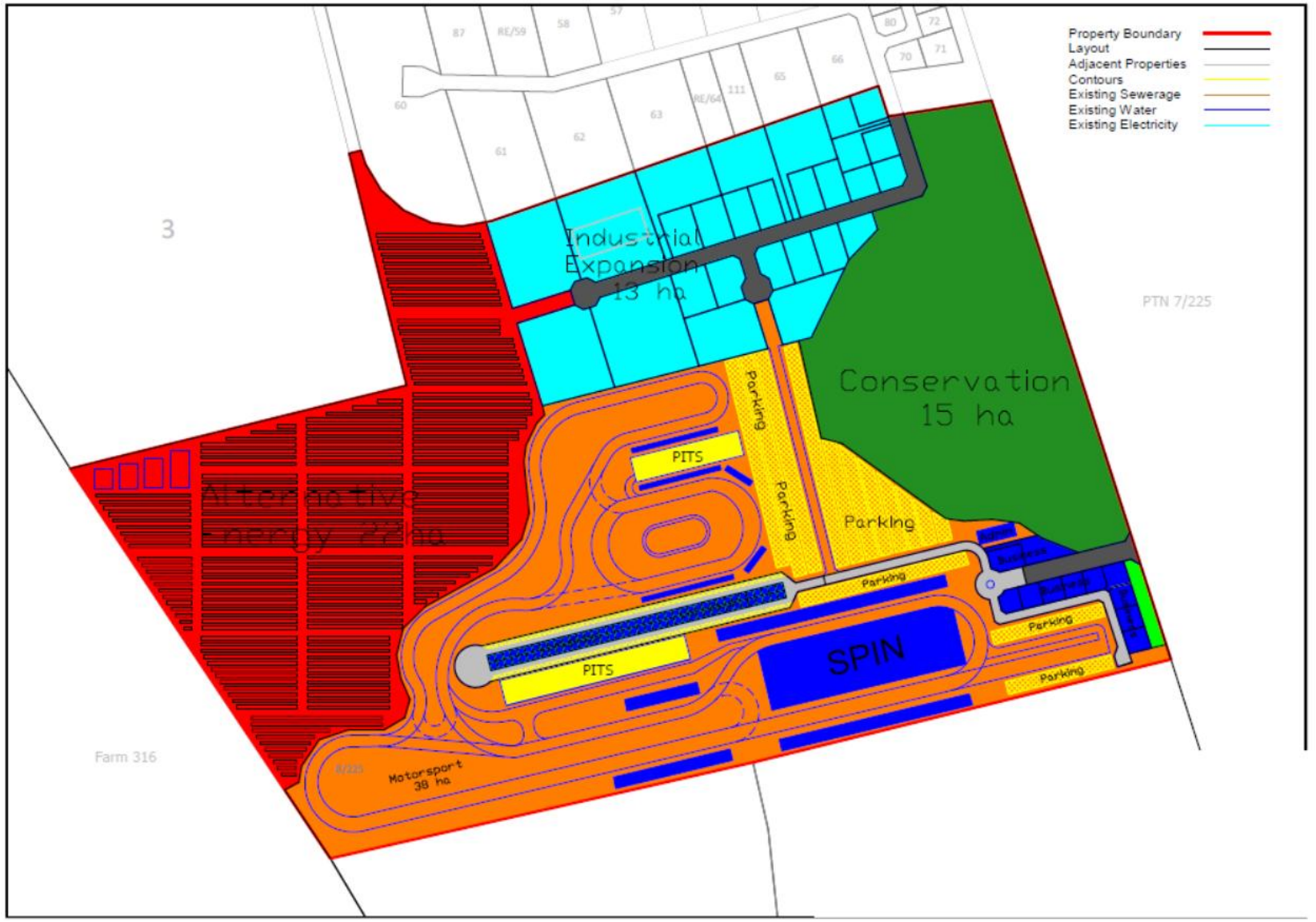

Figure 7: Preliminary layout of the proposed Project

6.2 Industrial Expansion Area

The proposed Industrial Expansion Area forms a key component of the overall Mossdustria development and will occupy approximately 13 ha of the broader development footprint (refer to the blue polygon in **Figure 7**). The expansion area is currently zoned “Agricultural Zone 1”; however, it is located within the MBLM Urban Edge and has been identified within the Municipal SDF as an area earmarked for future urban and industrial expansion. The proposed Project will facilitate the extension of the existing Mossdustria industrial node through the establishment of 27 new industrial erven, ranging in size from approximately 2 000 m² to 14 000 m².

The Industrial Expansion Area is intended to provide additional serviced industrial land to support future economic growth and investment within the Mossel Bay region. The proposed erven will be fully serviced with the necessary municipal engineering infrastructure, including water supply, sewer reticulation, stormwater management systems, electricity distribution infrastructure, and access roads. Access to the industrial erven will be provided via a newly constructed public street that will integrate with the existing Mossdustria road network and surrounding municipal transport infrastructure.

Development within the Industrial Expansion Area will focus on the provision of serviced industrial platforms, with the construction of individual top structures to be undertaken by future erf owners or developers in accordance with applicable land use rights, engineering service requirements, and municipal development controls. As such, the current application seeks authorisation for the establishment and servicing of the industrial expansion area, while the nature and scale of specific industrial activities and buildings will be determined during subsequent development phases.

The Industrial Expansion Area forms part of the broader vision to consolidate and expand the existing Mossdustria industrial precinct, creating opportunities for industrial growth while utilising land that has already been identified for urban expansion within municipal planning frameworks. Its location immediately adjacent to the existing industrial area enables the efficient extension of municipal services and infrastructure networks and supports the continued development of Mossdustria as a strategic industrial node within the MBLM.

6.3 Alternative Energy Production Area

The proposed Alternative Energy Production Area will occupy approximately 22 ha of the overall development footprint and is intended to provide a dedicated renewable energy generation facility to support the electrical requirements of the broader development (refer to the red polygon in **Figure 7**). The facility is proposed as a solar PV installation with a generation capacity of approximately 16 MW and forms part of the integrated development concept for the expansion of Mossdustria. The facility has been strategically located within the

development area to optimise solar energy generation while making use of available land identified for future development within the MBLM.

The solar energy facility will comprise a solar PV array, associated electrical reticulation infrastructure, substations, transformers, switchgear, and supporting infrastructure required for the generation and distribution of electricity. In terms of the preliminary design, the facility will include a 16 MVA intake municipal substation, eight internal 2 MVA distribution substations, step-up transformers increasing voltage from 400 V to 11 kV, and an internal 11 kV reticulation network connecting the various components of the facility. The intake municipal substation will be connected to the existing municipal electricity network to facilitate the distribution and utilisation of generated electricity.

The preliminary layout indicates that the solar PV facility will consist of multiple arrays arranged in rows across the 22 ha development area, together with electrical infrastructure positioned throughout the site to optimise energy collection and distribution. The layout includes the intake substation and a number of internal distribution substations that will collect electricity generated by the solar arrays before transferring power through the internal reticulation network (**Figure 8**).

Electricity generated by the facility will contribute towards the energy requirements of the proposed Project, reducing reliance on conventional grid-supplied electricity while supporting the incorporation of renewable energy infrastructure within the Project. The proposed facility has been designed as an integrated component of the broader development and will include associated stormwater infrastructure and access requirements necessary for its operation and maintenance.

The development of the Alternative Energy Production Area aligns with national, provincial and local objectives aimed at increasing the use of renewable energy technologies, improving energy security, and promoting sustainable development. Furthermore, the incorporation of a renewable energy generation facility within the broader Mossdustria expansion supports long-term infrastructure resilience and contributes towards the diversification of energy supply within the area.

As with the Industrial Expansion Area, the current application seeks authorisation for the establishment of the Alternative Energy Production Area and its associated infrastructure footprint. The detailed engineering design, including the final arrangement of solar panels, electrical equipment, and supporting infrastructure, may be refined during the detailed design phase, provided that such refinements remain within the assessed development footprint and authorised development parameters.

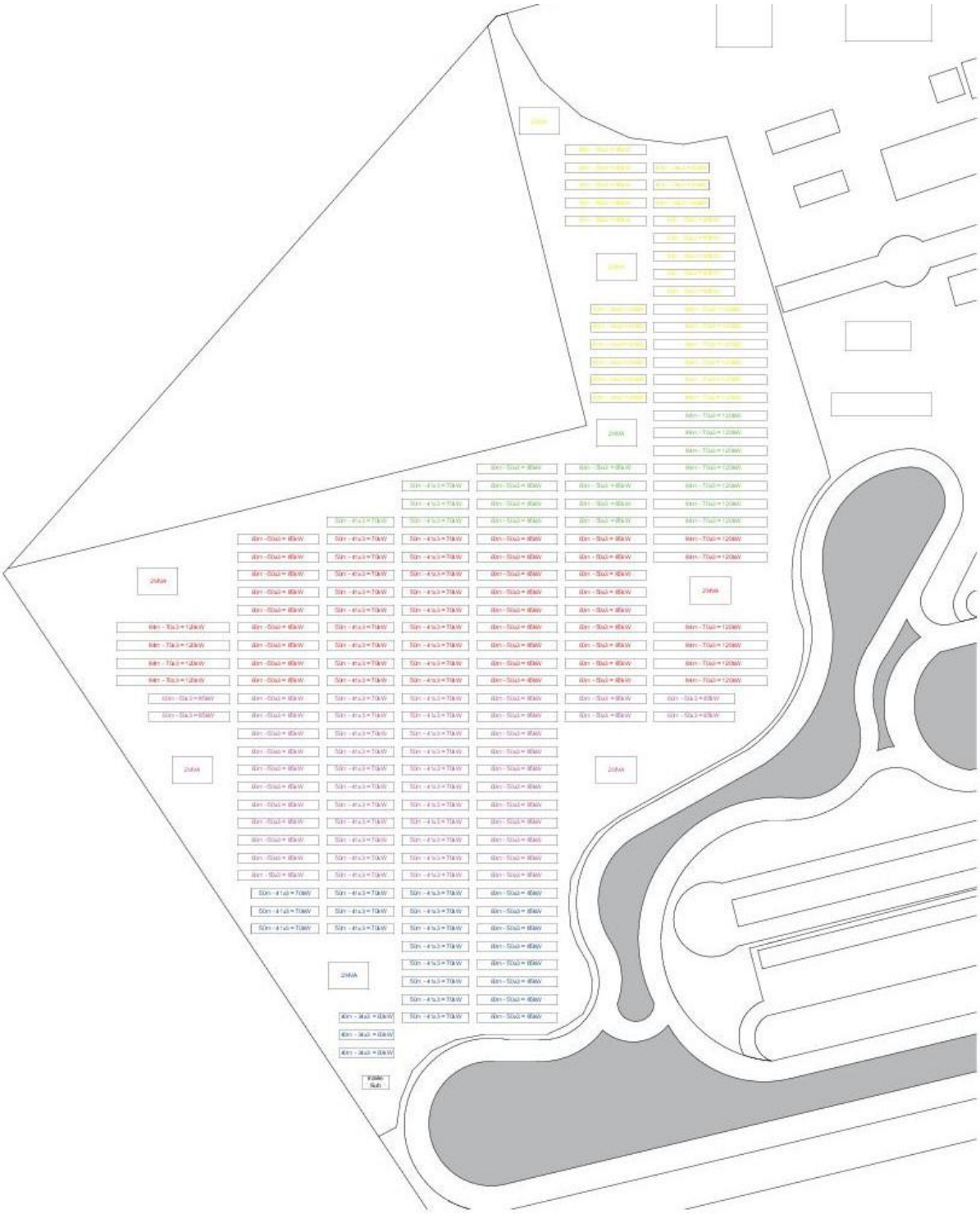

Figure 8: Preliminary Layout of the Alternative Energy Facility

6.4 Conservation Area

The proposed Conservation Area will occupy approximately 15 ha of the overall development footprint and has been incorporated into the Project layout to ensure the long-term protection and management of environmentally sensitive areas within the site (refer to the green polygon in **Figure 7**). The conservation area contains remnants of Critically Endangered Mossel Bay

Shale Renosterveld, a vegetation type of high conservation importance that has experienced significant historical transformation. As such, the conservation area has been specifically identified for biodiversity conservation and ecological management within the broader development.

Although the area is currently zoned Agricultural Zone 1, it falls within the MBLM Urban Edge and is located within an area identified for future urban expansion in terms of the Municipal SDF. Notwithstanding its strategic location, the proposed Project seeks to retain this portion of the site as a dedicated conservation area in recognition of its ecological value and contribution to maintaining biodiversity within the Mossel Bay region.

As part of the proposed development, the conservation area will be rezoned to Open Space Zone III to provide a formal land use mechanism for the long-term protection of the identified sensitive vegetation and associated ecological processes. The establishment of the conservation area represents an important environmental offsetting and avoidance measure within the overall Project design, ensuring that ecological resources of conservation significance are retained and managed into the future.

The conservation area also contributes to the creation of an environmental buffer within the broader development footprint and supports the maintenance of habitat connectivity and ecosystem functioning within the site. By retaining this area in a natural state, the development seeks to balance the expansion of industrial, renewable energy and recreational land uses with the conservation of important environmental resources.

To ensure the long-term protection and effective management of the conservation area, a dedicated management plan will be developed and implemented. The management plan will guide ongoing conservation actions, including the management of invasive alien plant species, ecological monitoring, site access control, fire management where appropriate, and the maintenance of the ecological integrity of the retained Mossel Bay Shale Renosterveld habitat.

6.5 Motorsports Arena

The proposed Motorsport Arena will occupy approximately 38 ha of the overall development footprint and is envisaged as a purpose-designed motorsport and recreation facility that will complement the broader industrial expansion and renewable energy components of the Project (refer to the orange polygon in **Figure 7**). The facility has been incorporated into the development concept to create a regional motorsport destination capable of hosting a variety of racing, recreational, commercial, and support activities within a single integrated precinct. The Motorsport Arena forms a key component of the proposed development and is intended to contribute to tourism growth, economic development, and employment creation within the Mossel Bay area.

The facility will comprise a range of motorsport-related infrastructure designed to accommodate both competitive and recreational activities. The proposed raceway infrastructure includes a 3 320 m tarred racetrack, a 1 000 m drag strip, a 21 000 m² spinning track, a 600 m tar go-kart track, and a 350 m gravel go-kart track. In addition, the facility will include tarred and gravel pit areas to support racing and vehicle preparation activities.

To support the operational requirements of the arena, a range of permanent structures and associated facilities are proposed. These include 80 workshop erven, 11 showroom and workshop sites, two large pavilions, five medium pavilions, five small pavilions, eight ablution facilities, vendor stalls, gatehouses, fuel storage facilities of up to 5 000 litres, and associated operational infrastructure. The facility has been designed to provide adequate support services for competitors, spectators, event organisers, and commercial operators.

The Motorsport Arena will also provide substantial parking facilities to accommodate event attendance and daily operational requirements. The proposed development includes approximately 1 980 formal parking bays and a 5 ha grass parking area that can be utilised during major events. The parking facilities are intended to accommodate visitor demand while ensuring efficient traffic circulation within the development.

Internal access throughout the Motorsport Arena will be facilitated through the proposed road network and supporting infrastructure planned for the broader development. Associated engineering services, including electricity supply, potable water, sewerage infrastructure, stormwater management systems, and telecommunications infrastructure, will be integrated into the facility as part of the overall development servicing strategy.

The proposed Motorsport Arena has been developed in response to an identified need for dedicated motorsport and recreational facilities within the region. The development is expected to attract local, regional, and potentially national motorsport events, thereby supporting tourism-related expenditure and providing opportunities for associated commercial activities. Through increased visitor numbers and event hosting opportunities, the facility has the potential to contribute to local economic development and strengthen the tourism offering of the Mossel Bay area. Furthermore, the development is anticipated to generate both direct and indirect employment opportunities during the construction and operational phases.

The Motorsport Arena has been located within the broader Project area to maximise compatibility with the adjoining industrial expansion area while allowing for the inclusion of the proposed conservation area and renewable energy facility. Integrating these land uses within a single development footprint supports the creation of a multifunctional development node that aligns with municipal planning objectives and broader economic development initiatives for the MBLM.

The current application therefore seeks environmental authorisation for the establishment and operation of the Motorsport Arena and its associated infrastructure within the defined development footprint. Detailed design elements may be refined during subsequent engineering design phases, provided that such refinements remain within the approved development footprint and assessed environmental parameters.

6.6 Associated Infrastructure

6.6.1 Roads

The proposed Project will utilise both existing and new road infrastructure to provide access to the various land use components. Access to the broader Project area is provided via the existing provincial road network, with the site being accessible from the R327, which connects directly to the N2 approximately 2 km south of the site. Existing access to the Mossdustria industrial area is currently provided via Unicorn Street.

The proposed road network includes the extension of the existing Barrier Street road reserve to provide access to the Industrial Expansion Area and portions of the broader development. Internal roads will be constructed to provide access to the proposed industrial erven, motorsport facilities, parking areas, workshops, business precinct and associated infrastructure. The conceptual road layout is shown in the Roads Layout Plan (**Figure 9**).

Access to the Motorsport Arena will be provided through a primary access point on the R327 opposite the existing Reed Valley Farm access road. The proposed intersection will operate under stop control, with the R327 retaining priority. The access road will comprise one inbound lane and separate outbound left- and right-turn lanes. A secondary access route is proposed through the extension of Barrier Street, which may function as an alternative and emergency access route.

The Traffic Impact Assessment (GPL Consulting, 2023) undertaken for the development assessed the operational performance of the surrounding road network and proposed access arrangements. The assessment identified the need for upgrades to the N2/R327 intersection, including the provision of a left-turn slip lane and a separate right-turn lane on the R327 approach to the N2. These upgrades are intended to accommodate projected future traffic volumes associated with both background traffic growth and the proposed Project.

Internal roads associated with the Motorsport Arena are proposed to provide circulation between the various facilities, parking areas and activity nodes within the development. The road network has been conceptually designed to accommodate passenger vehicles, service vehicles, emergency vehicles and larger vehicles associated with motorsport-related activities.

The Alternative Energy Production Area is anticipated to generate limited vehicle movements during operation. Access to this area may be provided via the internal road network associated

with the development or through an access route connected to existing infrastructure in the surrounding area.

The final design and specification of all roads, intersections and associated traffic infrastructure will be finalised during the detailed engineering design phase and will be subject to the requirements and approval of the relevant road authorities.

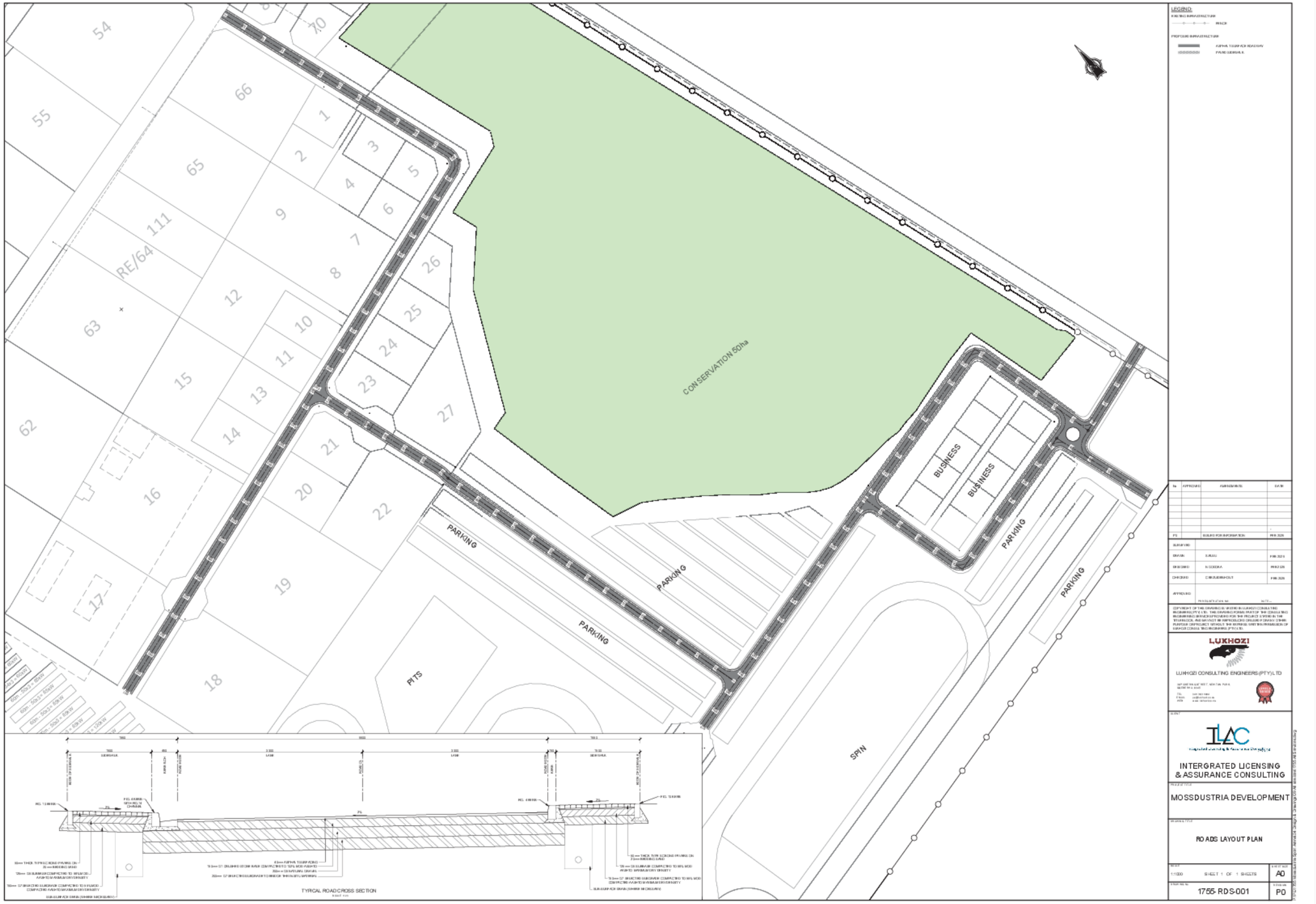

Figure 9: Conceptual Roads Layout Plan (Bezuidenhout, 2026)

6.6.2 Stormwater

Stormwater infrastructure will be developed as part of the proposed Project to collect, convey and manage runoff generated from the Industrial Expansion Area, Motorsport Arena, Alternative Energy Production Area and associated infrastructure. The proposed stormwater system will comprise a network of piped stormwater infrastructure, attenuation ponds, stormwater inlets and associated drainage structures located throughout the Project footprint.

The proposed stormwater reticulation system will consist of approximately 7 km of 450 mm diameter stormwater pipelines which will convey runoff from developed areas to designated attenuation and storage facilities. The stormwater network will be supplemented by overland flow routes located within road reserves and open channels to accommodate major storm events that exceed the capacity of the piped system.

Attenuation infrastructure is proposed within the development to temporarily store stormwater runoff prior to controlled discharge. The main attenuation facility will comprise a stormwater pond with a total storage capacity of approximately 24 000 m³, which will be integrated into portions of the Motorsport Arena layout. A smaller attenuation pond with a storage capacity of approximately 250 m³ is proposed adjacent to the Motorsport Business Development area near the main site entrance.

A further outflow pond is proposed in the south-western portion of the site to facilitate the controlled release of stormwater and to provide opportunities for the storage and reuse of stormwater for non-potable uses. The feasibility of incorporating an existing pond located immediately south of the project boundary into the proposed stormwater system will be assessed during the detailed design phase.

Stormwater associated with the Motorsport Arena and other operational areas will be directed through dedicated treatment infrastructure prior to discharge into the attenuation system. This infrastructure will include an oil separation facility designed to remove hydrocarbons, oils, grease and fuel residues from runoff generated by motorsport-related activities and associated hardstand areas. The conceptual stormwater infrastructure layout is illustrated in the Stormwater Reticulation Layout Plan (**Figure 10**).

The final design, sizing and alignment of the stormwater infrastructure will be confirmed during the detailed engineering design phase and will be informed by detailed topographical, geotechnical and hydraulic investigations.

Figure 10: Conceptual Stormwater Layout Plan (Godoka and Bezuidenhout, 2026)

6.6.3 Sewer / Wastewater

The proposed Project will be serviced by the existing municipal wastewater network within the existing Mossdustria industrial area. The site is currently traversed by a gravity sewer system that conveys wastewater to the Mossdustria Sewer Pump Station, from where sewage is pumped to the Pinnacle Point Wastewater Treatment Works for treatment. The proposed Project has been designed to integrate with this existing municipal sewerage system.

The proposed Project will require the extension of sewer infrastructure to service the Industrial Expansion Area, Motorsport Arena, Alternative Energy Production Area and associated facilities. A sewer reticulation network is proposed throughout the development footprint to collect and convey wastewater generated by the various land use components to the existing municipal sewer network.

The Civil Engineering Services Report (Bezuidenhout, 2026) estimates that the development will generate an Average Dry Weather Flow (ADWF) of approximately 619 kL/day. Based on the preliminary assessment, this will result in an additional hydraulic loading of approximately 7.2 L/s on the Mossdustria Sewer Pump Station.

To accommodate the projected wastewater volumes, approximately 1.9 km of 160 mm diameter sewer pipeline is proposed within the Project area. The proposed sewer reticulation network will collect wastewater from the various development components and convey it to the existing municipal sewer infrastructure for onward transmission to the wastewater treatment works. The conceptual layout of the proposed sewer infrastructure is illustrated in the Sewer Reticulation Layout Plan (**Figure 11**). The final design, sizing and alignment of the sewer infrastructure will be confirmed during the detailed engineering design phase.

Figure 11: Conceptual Sewer Reticulation Layout Plan (Bezuidenhout, 2026)

6.6.4 Water

The proposed Project will obtain potable water from the existing MBLM water supply network within the Bartelsfontein Supply Zone. The area is currently supplied from the Bartelsfontein Reservoir, located approximately 1 km north of the site, which has an existing storage capacity of approximately 5 ML. The 2025 Water Master Plan identifies an approved future upgrade of the reservoir to a capacity of 25 ML, which is intended to support anticipated growth within the area.

The existing municipal water reticulation network, located immediately north of the proposed Project area, will serve as the connection point for the proposed Project. The Civil Engineering Services Report (Bezuidenhout, 2026) notes that verification of the existing water infrastructure, including pipe diameters and available capacity, will be required during the detailed design phase prior to finalising the connection design.

The total potable water demand associated with the proposed Project has been estimated at approximately 688.56 kL/day. This demand comprises the Industrial Expansion Area, Alternative Energy Production Area, Motorsport Workshop Area, Motorsport Business Development Area and Motorsport Arena. The Motorsport Arena represents the largest water demand component, with an estimated requirement of approximately 500 kL/day during major events.

To distribute potable water throughout the development, a proposed 3.5 km long, 160 mm diameter water main will connect the site to the existing municipal water reticulation network north of the development area. The bulk water main will supply the internal water reticulation network servicing the various development components. The conceptual water reticulation network is illustrated in the Water Reticulation Layout Plan (**Figure 12**).

In addition to potable water requirements, provision will be made for firefighting purposes. Based on the proposed land uses, including industrial activities and motorsport facilities, the development has been classified as a high-risk fire area. The preliminary assessment identified a fire flow requirement of 100 L/s for a duration of six hours, resulting in a fire water storage requirement of approximately 2.16 ML. The Civil Engineering Services Report recommends that the provision of dedicated on-site fire water storage be considered during the detailed design phase.

The final design of the water reticulation system, including final pipeline alignments, connection points, storage requirements and any upgrades to existing municipal infrastructure, will be undertaken during the detailed engineering design phase and will be subject to the requirements and approval of Mossel Bay Municipality.

Figure 12: Conceptual Water Layout Plan (Bezuidenhout, 2026)

6.7 Proposed Access to the Proposed Project

Access to the proposed Project area will be provided via the existing regional road network, with the site being accessible from the R327 Provincial Road, which connects directly to the N2 National Road approximately 2 km south of the development area. Access to the existing Mossdustria industrial area is currently provided via Unicorn Street, which links the industrial precinct to the R327.

The proposed Industrial Expansion Area will be accessed through the extension of Barrier Street southwards from the existing Mossdustria industrial area, providing direct access to the proposed industrial erven and associated infrastructure. Access to the Motorsport Arena and associated business precinct will be provided via a new primary access intersection on the R327, located opposite the existing Reed Valley Farm access road. A secondary access route is also proposed via the extension of Barrier Street, which may serve as an alternative and emergency access to the development.

The proposed internal road network will provide circulation between the various development components, including the Industrial Expansion Area, Motorsport Arena, Alternative Energy Production Area and Conservation Area. The conceptual road layout and access arrangements are illustrated in the Roads Layout Plan (**Figure 9**).

6.8 Preliminary Implementation Programme

The preliminary implementation programme is as follows *(please note due to the dynamic nature of the process, dates are subject to change)*:

- Statutory Approvals: May 2027 – June 2027
- Engineering Designs: November 2028
- Services Construction: November 2030 (Budget and phasing dependent)
- Top structure Construction: November 2030 – November 2033 (Budget and phasing depending on the tender processes this could possibly be done in parallel to the services construction).

6.9 Resources and Services Required for Construction and Operation

6.9.1 Water

Construction

Water for construction will be sourced from the existing municipal water reticulation network, located immediately north of the proposed Project area. Should the Applicant consider abstracting groundwater, then the Applicant will be required to comply with the NWA and apply for the relevant authorisation/license. The required water volume will be determined during detailed design and tender award for construction.

Operation

The proposed development will obtain potable water from the existing MBLM water supply network within the Bartelsfontein Supply Zone, supplied from the Bartelsfontein Reservoir located approximately 1 km north of the site.

The total operational potable water demand for the development is estimated at approximately 688.56 kL/day, comprising:

- Industrial Development: 169 kL/day;
- Alternative Energy Area: 0.66 kL/day;
- Motorsport Workshop Area: 16.8 kL/day;
- Motorsport Business Development Area: 2.1 kL/day; and
- Motorsport Arena: 500 kL/day.

To supply this demand, a proposed 3.5 km long, 160 mm diameter bulk water main will connect the development to the existing municipal water reticulation network north of the site.

Fire water is also required for the Project as it is classified as a high-risk fire area due to the industrial and motorsport land uses. The following has been noted to be required:

- A fire flow of 100 L/s;
- A six-hour supply duration; and
- Approximately 2.16 ML of fire water storage.

6.9.2 Sanitation

Construction

The sanitation requirements associated with construction activities have not yet been quantified. Temporary sanitation facilities will be required for the construction workforce, and the final sanitation arrangements and wastewater management measures will be determined during the detailed design and construction planning phase.

Operation

The proposed Project will be serviced by the existing MBLM wastewater network serving the Mossdustria industrial area. Wastewater generated by the Industrial Expansion Area, Motorsport Arena, Alternative Energy Production Area and associated facilities will be collected via an internal sewer reticulation network and conveyed to the existing municipal sewer system. The development is expected to generate an ADWF of approximately 619 kL/day, resulting in an additional hydraulic load on the existing sewer network. To accommodate these flows, approximately 1.9 km of 160 mm diameter sewer pipeline is proposed within the Project footprint. Wastewater will ultimately be conveyed to the Mossdustria Sewer Pump Station and thereafter to the Pinnacle Point Wastewater Treatment Works for treatment. The final design of the sewer reticulation network and final connection arrangements will be confirmed during the detailed engineering design phase.

6.9.3 Waste

Construction

Construction waste will include waste generated from site preparations (e.g. plant material), domestic waste, surplus and used building material, and hazardous waste (e.g. chemicals, oils, soil contaminated by spillages, diesel rags). Solid waste generated during the construction phase will be temporarily stored at suitable locations (e.g. at the construction camp) and will be removed at regular intervals and disposed of at approved waste disposal sites. All the waste disposed of will be recorded.

Construction-related wastewater, which refers to any water adversely affected in quality through construction activities and human influence, will include the following:

- Sewage;
- Water used for washing purposes (e.g., equipment, staff); and
- Drainage over contaminated areas (e.g., cement batching / mixing areas, workshop, equipment storage areas).

Specific measures for the management of construction-related waste and wastewater is provided in the EMPr.

Operation

Operational waste will include waste generated from the motorsport arena, industrial facilities, workshops, showrooms, commercial activities, administration, maintenance activities and visitor-related activities. General waste may include food waste, paper, cardboard, plastics, glass, packaging materials and other domestic-type waste generated by staff, visitors, spectators and tenants. Hazardous waste may include waste oils, lubricants, fuels, oil filters, tyres, batteries, contaminated absorbent materials, solvents, cleaning chemicals and other hydrocarbon-contaminated materials generated through vehicle maintenance, workshop activities, motorsport events and industrial operations. The generation of waste may increase during motorsport events and periods of high visitor attendance. The temporary storage of waste will occur at designated waste storage areas prior to removal by appropriately authorised waste service providers for recycling, treatment or disposal at approved facilities. All waste disposal activities will be recorded.

- Operational wastewater, which refers to water adversely affected in quality through operational activities and human influence, may include the following:
- Sewage generated from ablution and sanitation facilities;
- Wastewater generated from vehicle washing, workshop and maintenance activities;
- Stormwater runoff contaminated with hydrocarbons, oils, fuels and other pollutants associated with motorsport, industrial and parking areas; and
- Drainage from areas used for the storage and handling of fuels, oils, chemicals and other hazardous substances.

The EMPr and Stormwater Management Plan provide specific measures for managing operational waste and wastewater. The Project incorporates attenuation ponds and oil separation systems to assist in the management of potentially contaminated runoff generated during the operational phase.

6.9.4 Roads

Construction

The proposed development site is currently accessible via the existing road network serving the Mossdustria area, including the R327 Provincial Road, the N2 National Road and Unicorn Street, which provides access to the existing industrial area. During construction, access to the site will be obtained via this existing road network and associated access routes within the Mossdustria precinct. To support the proposed Project development, the extension of Barrier Street and the development of new internal roads are required as components of the proposed road infrastructure.

Operation

During operation, access to the proposed Project will be provided through a combination of existing and new road infrastructure. The Industrial Expansion Area will be accessed via the extension of Barrier Street southwards from the existing Mossdustria industrial area. Access to the Motorsport Arena and associated business precinct will be provided via a new primary access intersection on the R327 opposite the existing Reed Valley Farm access, together with a secondary access route via the extension of Barrier Street which may serve as an alternative and emergency access. Internal roads will be developed throughout the site to provide access to the Industrial Expansion Area, Motorsport Arena, Alternative Energy Production Area and Conservation Area.

6.9.5 Stormwater

Construction

Best environmental practices will be implemented during construction to manage stormwater, which will be included in the EMPr.

Operation

Stormwater generated by the proposed development will be managed through a dedicated stormwater reticulation network comprising approximately 7 km of 450 mm diameter stormwater pipelines, stormwater inlets, attenuation ponds and associated drainage infrastructure. Stormwater runoff from the various development components will be conveyed to attenuation facilities designed to temporarily store runoff prior to controlled discharge. The proposed stormwater infrastructure includes a primary attenuation pond with a storage capacity of approximately 24 000 m³ and a smaller attenuation pond of approximately 250 m³

associated with the Motorsport Business Development area. An additional outflow pond is proposed in the south-western portion of the site. Stormwater generated within the Motorsport Arena will also be directed through an oil separation facility prior to entering the attenuation system. The final design and final configuration of the stormwater infrastructure will be confirmed during the detailed engineering design phase. The Stormwater Management Plan is contained in **Appendix D**.

6.9.6 Electricity

Construction

Electricity will be obtained from diesel generators or temporary electricity connections during the construction phase.

Operation

Electricity supply infrastructure forms part of the proposed Project and includes the development of an Alternative Energy Production Area comprising a 16 MW solar PV facility. The proposed electricity infrastructure includes a 16 MVA municipal intake substation, eight 2 MVA distribution substations, associated transformers and an internal electrical reticulation network. The solar PV facility is intended to generate electricity for use within the broader development and will be supported by the associated electrical distribution infrastructure located within the Alternative Energy Production Area. The electrical infrastructure will be distributed throughout the development to service the Industrial Expansion Area, Motorsport Arena, Alternative Energy Production Area and associated facilities.

6.9.7 Construction Camp & Laydown Area

A temporary laydown and staging area of approximately 50 m × 50 m is proposed within the designated parking area on the site. In addition, a construction camp laydown area of approximately 50 m × 50 m is proposed within the same designated parking area to support the construction phase of the development.

7 PROFILE OF THE RECEIVING ENVIRONMENT

7.1 Introduction

This section provides a general description of the status quo of the aquatic receiving environment in the Project area. For other aspects of the receiving environment, refer to the EIA Report. The potential impacts on the aquatic receiving environment are discussed in **Section 12**.

7.2 Land Use

The current land uses within the proposed Project footprint comprise natural veld, grazing land, ostrich farming, and abandoned cultivated areas (Bouwer, 2023). The surrounding land uses are predominantly agricultural and industrial in nature. Photographs illustrating the existing infrastructure, land uses, and vegetation within the Project area are provided in **Figure 13** below.

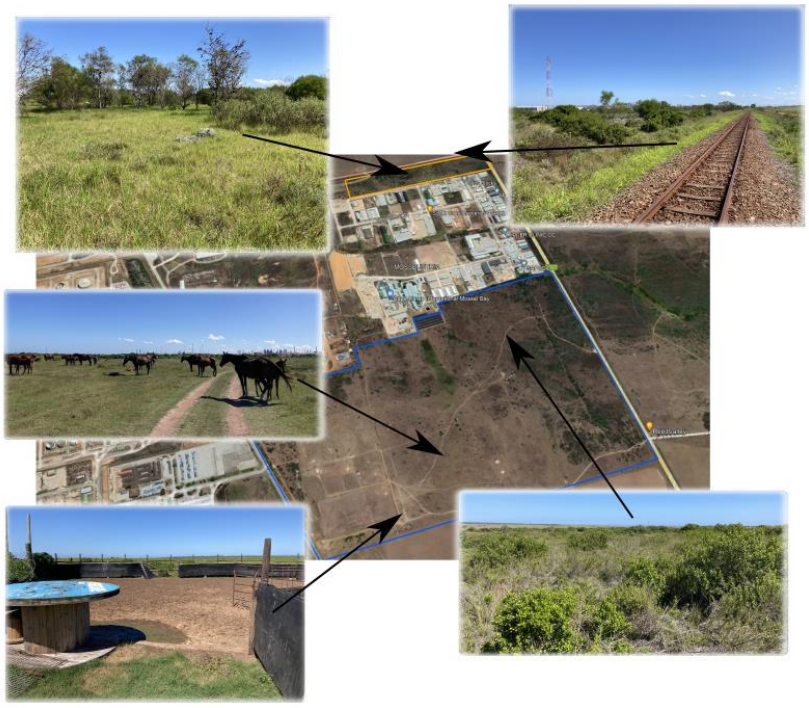

Figure 13: Existing land uses identified on the proposed Project site (Bouwer, 2023)

The proposed Project site, located within the Mossdustria area, has also been identified as an urban expansion area within the Industrial Expansion Zone in the MBLM IDF (2025-2026) (MBLM, 2025) (refer to **Figure 14** below).

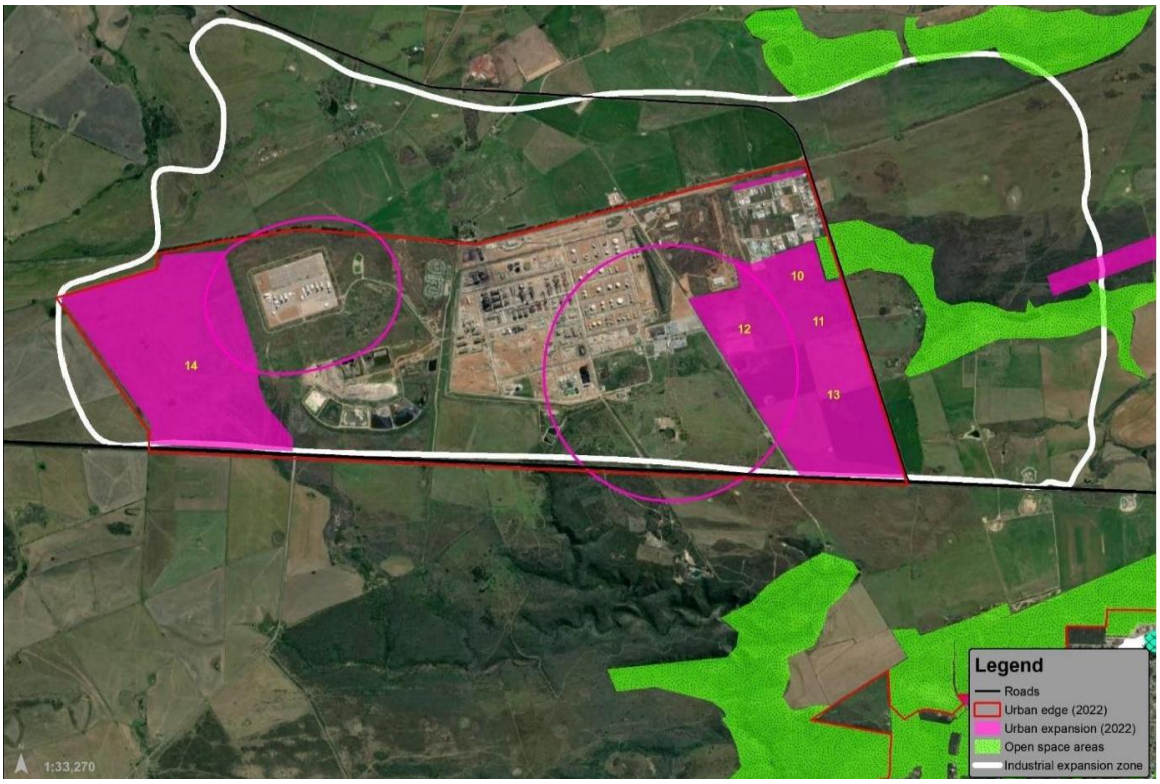

Figure 14: Mossdustria Spatial Proposal including Urban Edge, Urban Expansion and Industrial Expansion Zones (MBLM, 2025)

7.3 Climate

7.3.1 Prevailing Climatic Conditions

The Mossel Bay area is characterised by a warm temperate climate, with a mean annual temperature of approximately 17°C and an average annual rainfall of approximately 534 mm. Average summer temperatures are approximately 21°C, while average winter temperatures are approximately 13°C. Average monthly rainfall is approximately 42 mm during summer and 45 mm during winter, indicating a relatively uniform distribution of rainfall throughout the year. A climatic overview of the area is provided in **Figure 15** below.

	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature °C (°F)	21 °C (69.7) °F	21.1 °C (70) °F	20 °C (68) °F	17.9 °C (64.2) °F	15.8 °C (60.5) °F	13.4 °C (56.2) °F	12.8 °C (55.1) °F	13.4 °C (56.1) °F	14.5 °C (58.2) °F	16.5 °C (61.7) °F	17.8 °C (64.1) °F	19.9 °C (67.8) °F
Min. Temperature °C (°F)	17 °C (62.6) °F	17.2 °C (63) °F	16.1 °C (61) °F	13.7 °C (56.7) °F	11.5 °C (52.7) °F	8.7 °C (47.7) °F	8.1 °C (46.6) °F	8.6 °C (47.5) °F	9.9 °C (49.8) °F	12.1 °C (53.9) °F	13.6 °C (56.5) °F	15.8 °C (60.4) °F
Max. Temperature °C (°F)	25.8 °C (78.4) °F	26 °C (78.8) °F	24.9 °C (76.9) °F	22.9 °C (73.2) °F	21.1 °C (70) °F	18.8 °C (65.9) °F	18.4 °C (65) °F	19 °C (66.1) °F	19.9 °C (67.8) °F	21.6 °C (70.8) °F	22.7 °C (72.9) °F	24.8 °C (76.6) °F
Precipitation / Rainfall mm (in)	42 (1)	36 (1)	47 (1)	50 (1)	43 (1)	41 (1)	42 (1)	51 (2)	37 (1)	48 (1)	56 (2)	41 (1)
Humidity(%)	70%	72%	72%	73%	70%	68%	68%	68%	69%	70%	69%	69%
Rainy days (d)	6	6	6	6	5	5	6	6	6	6	6	6
avg. Sun hours (hours)	8.9	8.3	8.0	7.8	7.8	7.6	7.6	7.9	8.3	8.7	9.4	9.5

Data: 1991 - 2021 Min. Temperature °C (°F), Max. Temperature °C (°F), Precipitation / Rainfall mm (in), Humidity, Rainy days. Data: 1999 - 2019: avg. Sun hours

Figure 15: Climate Overview of Mossel Bay (https://en.climate-data.org/africa/south-africa/western-cape/mossel-bay-914458/)

7.3.2 Climate Change Considerations

The MBLM Area is characterised by a warm temperate coastal climate with moderate rainfall distributed throughout the year. According to the MBLM IDP (MBLM, 2025), climate change is recognised as a key environmental consideration that may influence future development, infrastructure planning and service delivery within the municipality. Anticipated climate-related risks include increasing temperatures, changes in rainfall patterns, prolonged drought periods, increased pressure on water resources, more frequent extreme weather events, and the potential for flooding associated with intense rainfall events.

The municipality's coastal location also creates additional climate-related vulnerabilities, particularly in relation to coastal processes, sea-level rise and the resilience of infrastructure. Climate change may affect the availability of water resources, biodiversity, agriculture, municipal services and economic activities throughout the region. These considerations are particularly relevant given the importance of water security, ecological conservation and infrastructure development within the Mossel Bay area.

The proposed Project area is located within an existing industrial expansion node where future development will need to consider climate resilience, sustainable resource use and the long-term adaptability of infrastructure. The surrounding environment includes natural ecosystems, agricultural land and municipal infrastructure that may be sensitive to changing climatic conditions.

7.4 Geology and Soil

The Project area is situated within the southern Cape Fold Belt and is underlain by a combination of unconsolidated surficial deposits and sedimentary bedrock of the Cape Supergroup. The site is mapped predominantly as Tertiary to Quaternary-aged loam and

sandy loam soils (T-QI), comprising sandy loam with varying clay content that forms a shallow cover over the underlying bedrock.

The underlying bedrock is dominated by the Skurweberg Formation of the Table Mountain Group, consisting of thick-bedded quartzitic sandstone with minor conglomerate. A prominent ridge of this formation traverses the central and eastern portions of the site. The Bokkeveld Group, comprising mudrock, shale and sandstone, occurs in the south-eastern portion of the site and is associated with the development of wetlands due to its relatively low permeability. Additional regional geological units include formations of the Karoo, Uitenhage and Bredasdorp Groups, although these occur outside the Project footprint. **Figure 16** outlines the regional geology of the area in relation to the Project footprint.

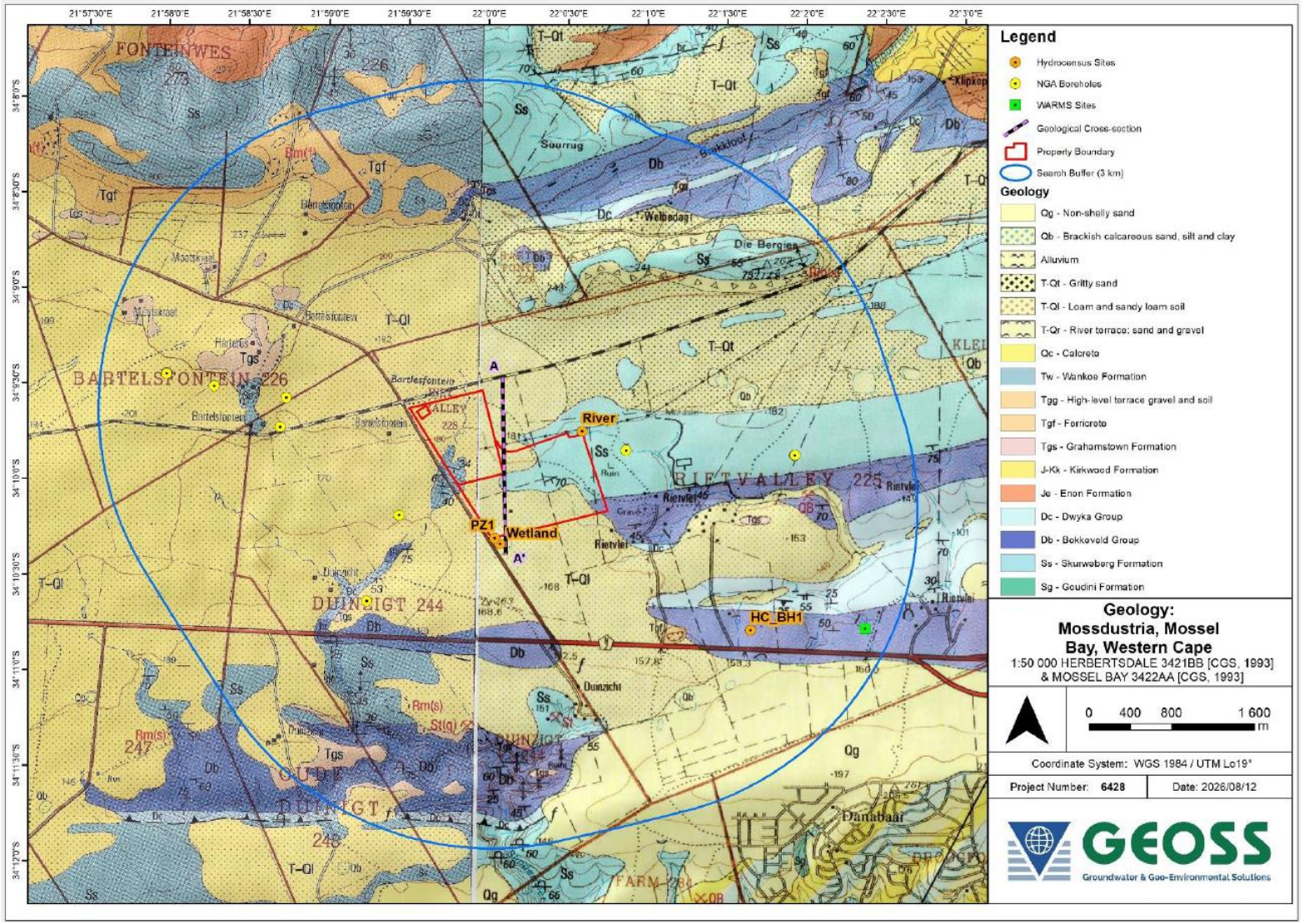

Figure 16: Geological setting of the study site and the production borehole (Oberholzer *et al.*, 2026)

The proposed Project site falls within the North Langeberg Sandstone Fynbos vegetation type. According to Mucina and Rutherford (2006), this vegetation type is typically associated with acidic lithosol soils derived from the Ordovician sandstones of the Table Mountain Group within the Cape Supergroup. These soils are generally shallow and well-drained, reflecting the underlying sandstone geology.

As part of the Agricultural Compliance Statement, the site was identified as occurring predominantly within the Db Land Type (Land Type Survey Staff, 1972-2002), as illustrated in **Figure 17**. Db Land Types comprise more than 50% duplex soils, characterised by a sandy topsoil abruptly overlying a more clay-rich subsoil. Less than 50% of the duplex soils within this land type contain non-red B horizons (Bouwer, 2023).

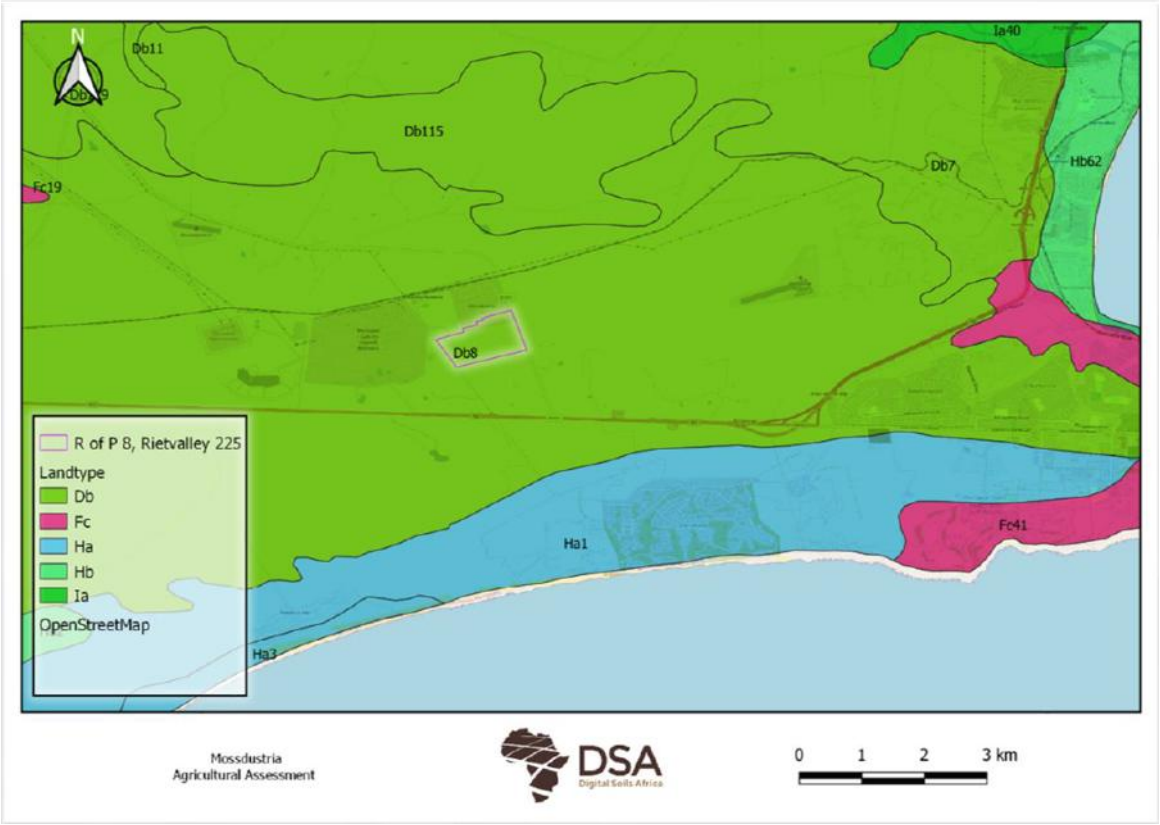

Figure 17: Land types found in the study area and the surrounding area (Land Type Survey Staff, 1972-2002) (Bouwer, 2023)

A site-specific soil investigation undertaken as part of the Agricultural Compliance Statement found that the study area is dominated by shallow Mispah soils, with Glenrosa and Westleigh soils occurring in portions of the site (Bouwer, 2023). The Mispah and Glenrosa soils are generally shallow, sandy soils associated with underlying bedrock, while Westleigh soils occur within localised depressions and are characterised by deeper soil profiles and signs of seasonal wetness. Soil depths across the site vary considerably, with the shallow Mispah and Glenrosa soils generally exhibiting low agricultural potential and limitations to root development. The occurrence of Westleigh soils within depressional areas is indicative of

wetter conditions. Overall, the site is characterised by soils of generally low agricultural capability, largely as a result of shallow soil depths, limited water-holding capacity and underlying geological constraints.

7.5 Geohydrology

Some of the information included in the following paragraphs was obtained from the Geohydrological Impact Assessment (Oberholzer *et al.,* 2026) (report contained in **Appendix B2**). Refer to **Section 11.4** and **Section 0** below for a synopsis of the study and a related impact assessment, respectively.

7.5.1 Aquifer Yield

The Project area is underlain by a fractured bedrock aquifer associated primarily with the Skurweberg Formation. Groundwater occurrence within this formation is controlled by fractures, joints and weathered zones rather than primary pore spaces within the rock. Regional hydrogeological mapping indicates that the area generally exhibits low to moderate groundwater potential, with average borehole yields ranging between approximately 0.5 and 2.0 L/s (**Figure 18**). Groundwater yields are expected to vary depending on the density and connectivity of fractures within the underlying bedrock. The overlying loam and sandy loam soils may contain localised shallow groundwater following rainfall events but do not constitute a significant groundwater resource.

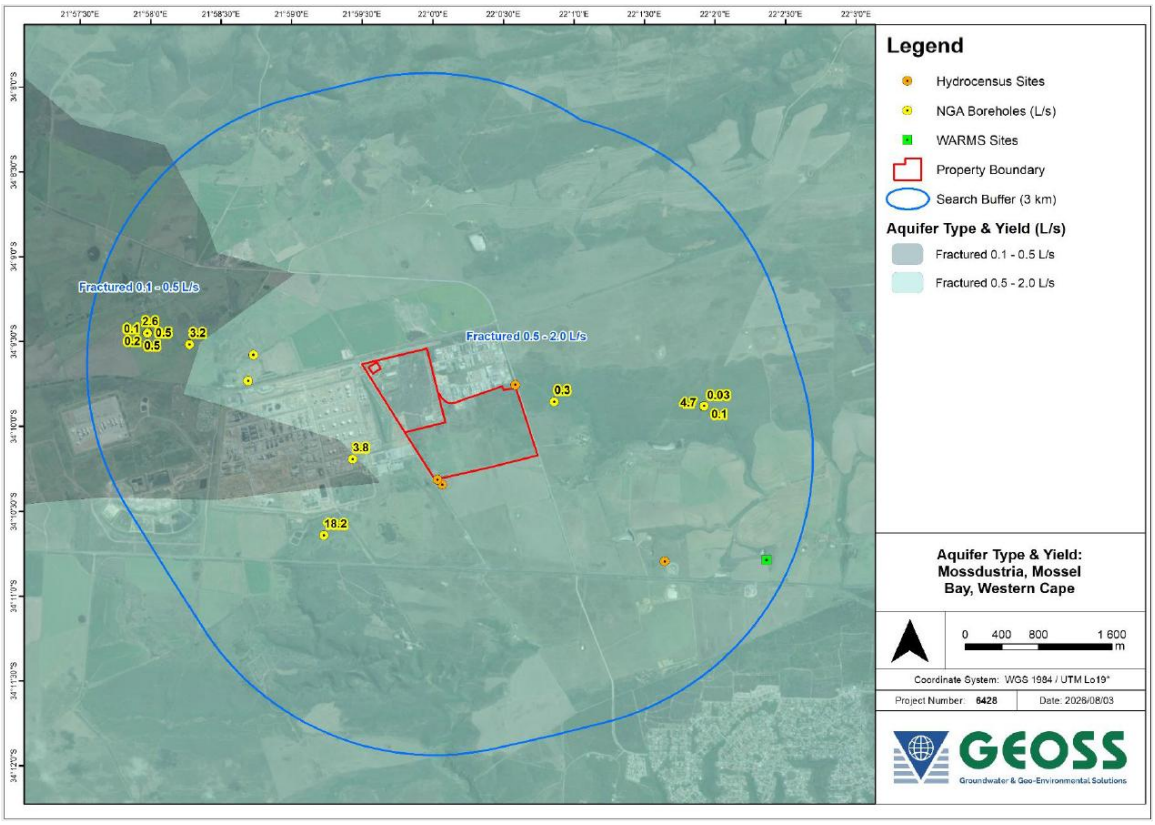

Figure 18: Regional aquifer yield (L/s) (Oberholzer *et al.,* 2026)

7.5.2 *Aquifer Quality*

Regional groundwater quality within the area ranges from marginal to poor and exhibits considerable spatial variability (**Figure 19**). Historical groundwater records from the surrounding area indicate elevated salinity levels in some boreholes. Field investigations undertaken as part of the geohydrological assessment (Oberholzer *et al.,* 2026) identified relatively fresh shallow groundwater within the near-surface deposits, while groundwater sampled from a deeper borehole was found to be highly mineralised. These findings indicate that groundwater quality differs between the shallow and deeper groundwater systems and is influenced by local geological and hydrogeological conditions. As no groundwater abstraction is proposed as part of the Project, the groundwater quality data provide a baseline against which any future changes can be assessed.

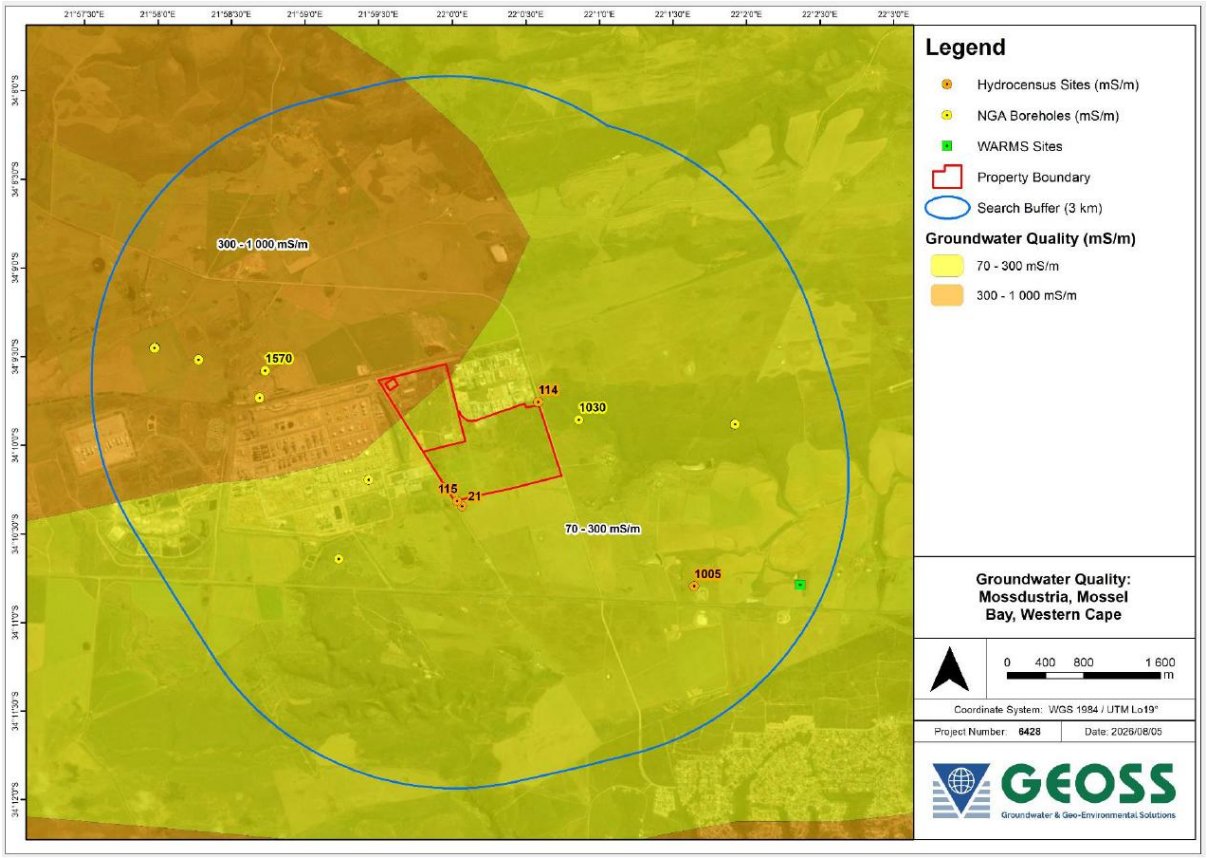

Figure 19: Regional groundwater quality (EC in mS/m) (Oberholzer *et al.*, 2026)

7.5.3 *Aquifer Vulnerability Classification*

National-scale groundwater vulnerability mapping indicates that most of the Project area falls within a very low groundwater vulnerability zone, with portions of the eastern area classified as having low to medium vulnerability (**Figure 20**). This relatively low vulnerability is attributed to the presence of clay-rich loam and sandy loam soils that overlie the fractured bedrock

aquifer and provide a degree of natural protection from surface-derived contaminants. Groundwater vulnerability may be locally elevated where the Skurweberg Formation is exposed at surface or where the protective soil cover is thin. It is further noted that shallow groundwater and associated wetland systems are inherently more susceptible to contamination than the deeper fractured aquifer and therefore require particular protection from potential pollution sources.

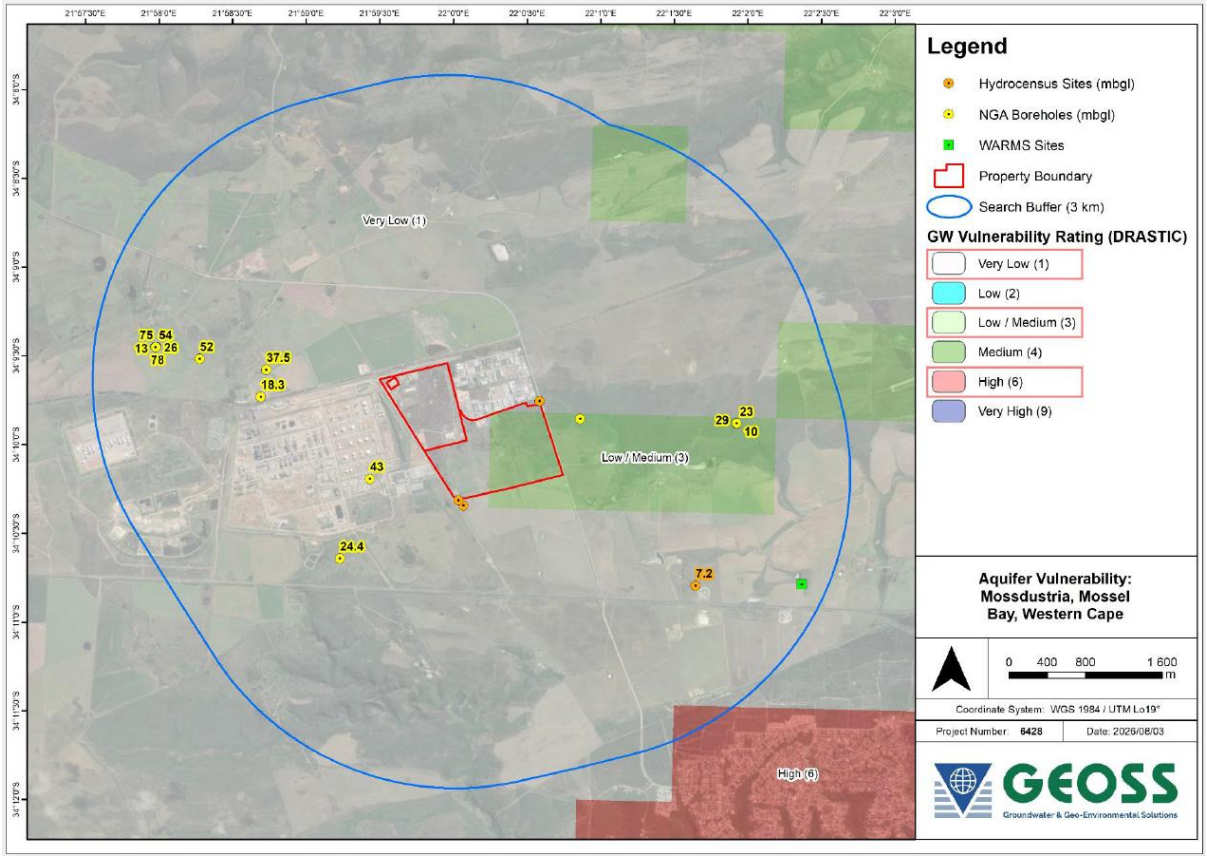

Figure 20: Vulnerability rating and groundwater depths (mbgl) (Oberholzer *et al.*, 2026)

7.6 Topography

The proposed Project site exhibits relatively gentle topographical variation. Elevations across the site range from approximately 168 m above mean sea level (amsl) in the western portion of the site to approximately 171 m amsl in the east, representing an elevation increase of approximately 3 m. In a north-south direction, elevations decrease from approximately 177 m amsl in the north to approximately 165 m amsl in the south, resulting in an overall elevation difference of approximately 12 m across the site. These elevation profiles are illustrated in **Figure 21** and **Figure 22**.

The southern boundary of the site is located approximately 3 km inland from the Indian Ocean coastline. According to the Soil and Terrain (SOTER) Database, the site is classified as a medium-gradient hill, as shown in **Figure 23**.

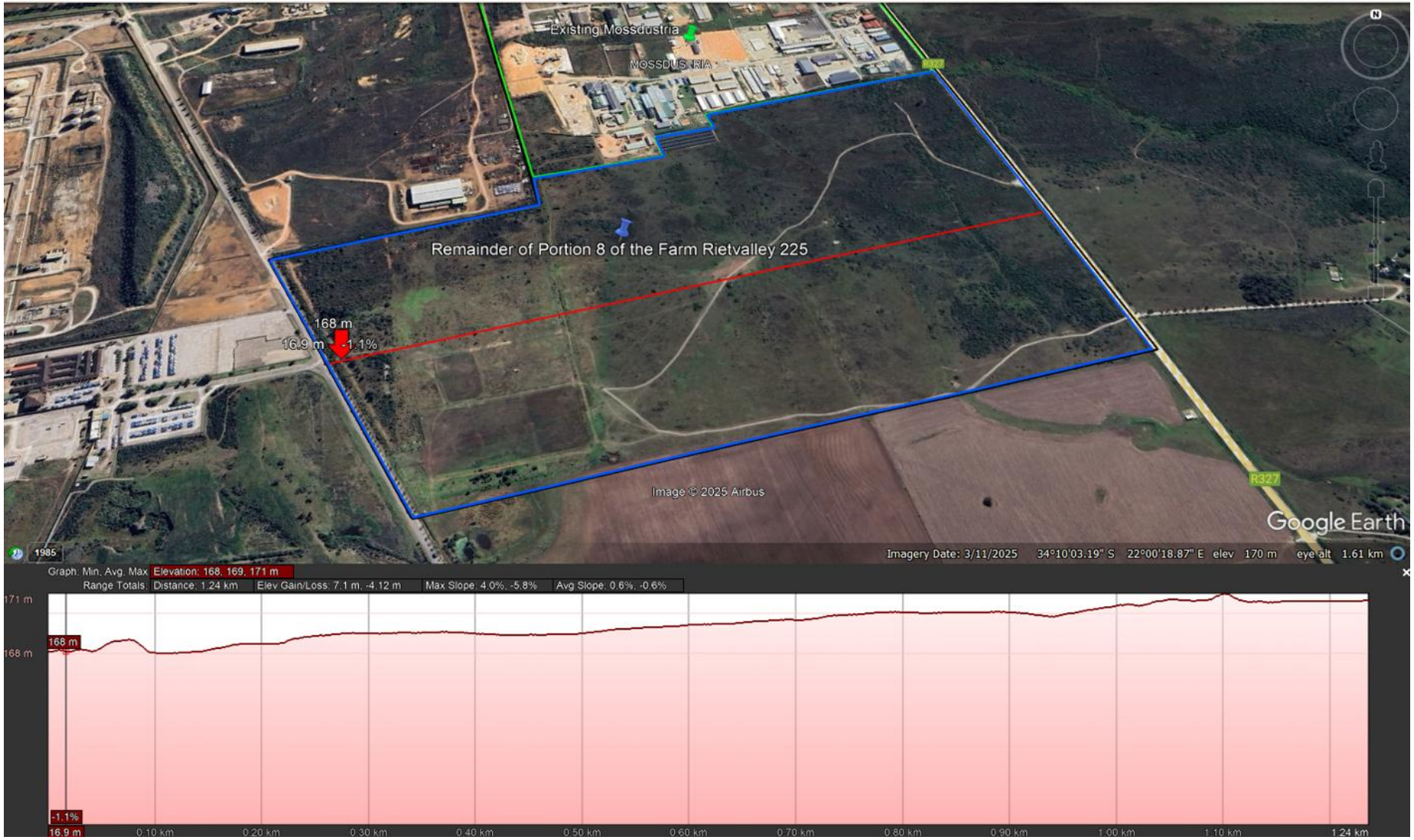

Figure 21: West to East Elevation Profile of the Project site from Google Earth

Figure 22: North to South Elevation Profile of the Project site from Google Earth

Figure 23: Topography of the Project site from the SOTER Landforms Database

7.7 Surface Water

Some of the information included in the following sub-sections was obtained from the Aquatic Ecology Impact Assessment (Colloty, 2026a) (report contained in **Appendix B1**). Refer to **Section 11.3** and **Section 0** below for a synopsis of the study and a related impact assessment, respectively.

7.7.1 Hydrological Setting

The Project site falls within the K10A subquaternary catchment located within the BOCMA jurisdiction (**Figure 24**). This catchment is a small localised coastal catchment that drains the region in an easterly direction through the Tweekuilen River, which ends near Dias Beach in Mossel Bay (more than 9km from the Project site) (**Figure 24**).

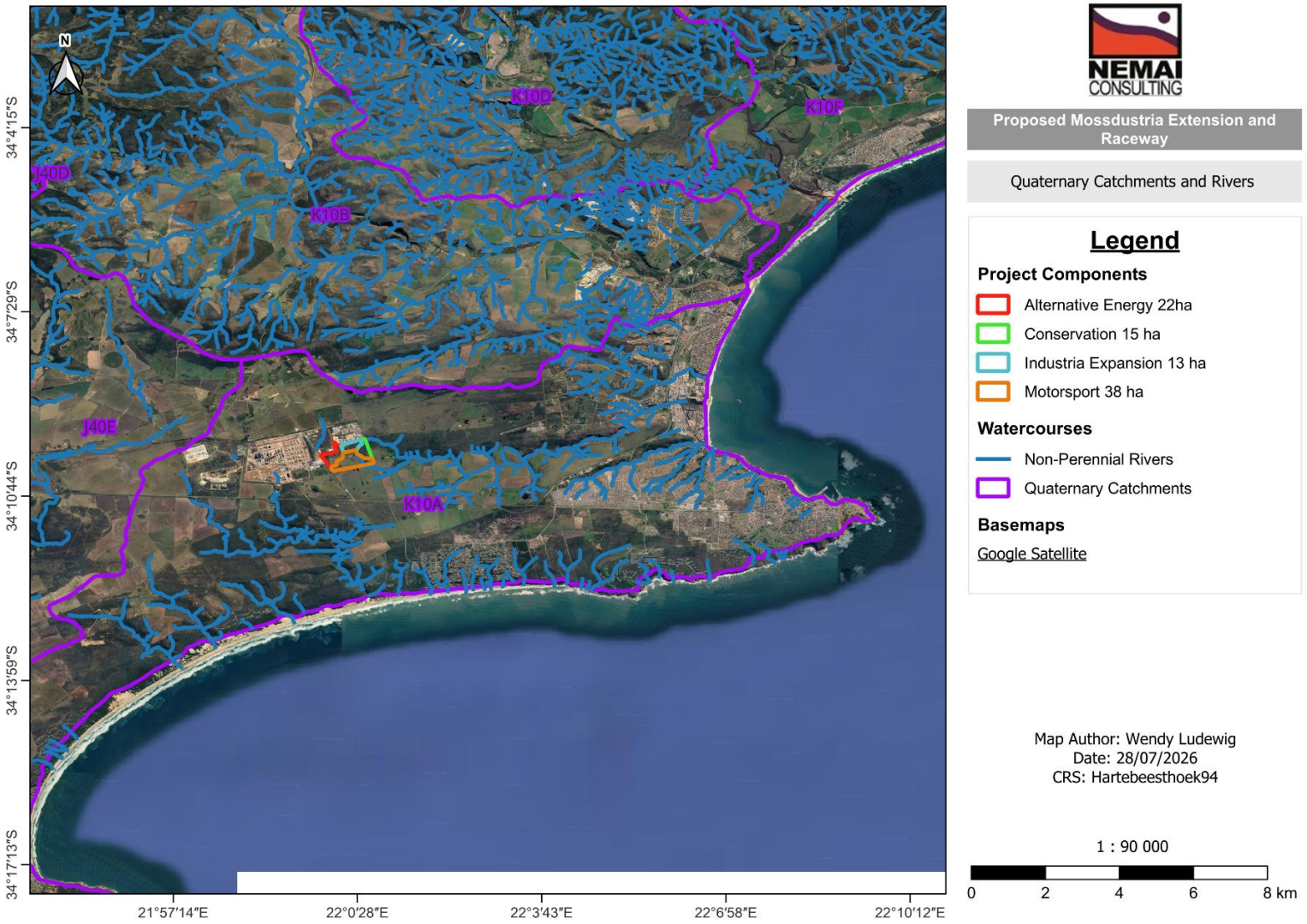

Figure 24: The Quaternary Catchments and Rivers near the Project site

7.7.2 Watercourses

According to the National Wetland Map 5 (NWM5), there is a channel-valley Bottom wetland to the northeast of the Project site, a seep wetland to the southeast and a depression wetland in the southeast corner. According to the National Freshwater Ecosystem Priority Areas (NFEPA) Wetlands, the wetlands are located in the same places as the NWM5-identified wetlands, but they are all classified as seep wetlands. **Figure 25** illustrates the NWM5 and NFEPA wetlands in relation to the Project site.

The Aquatic Ecological Impact Assessment (Colloty, 2026a) delineated 3 depression wetlands, two riverines and two artificial stormwater drainage systems (**Figure 26**). It is noted that all of these watercourses occur outside of the Project footprint. Therefore, the Project does not directly impact any watercourses but rather occurs within the regulated area of the watercourses according to the NWA (within 500m of the depression wetlands and within 100m of the riverines). Although the riverine to the south of the Project site looks like it extends into the Project footprint, it is noted that this small portion is part of the artificial dam embankment and therefore no natural watercourses occur on the Project site (Colloty, 2026a).

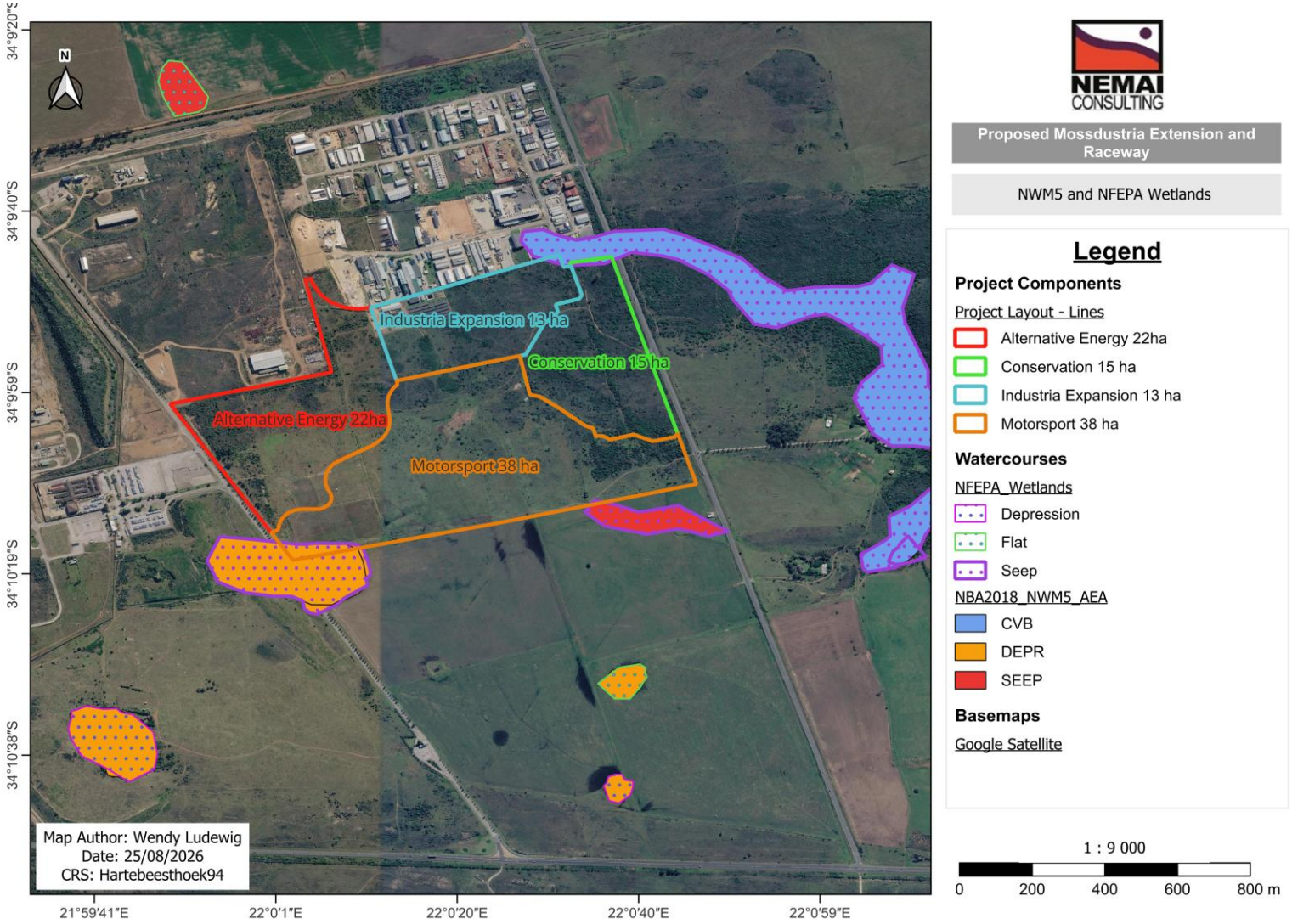

Figure 25: The NWM5 and NFEPA Wetlands near the Project Site

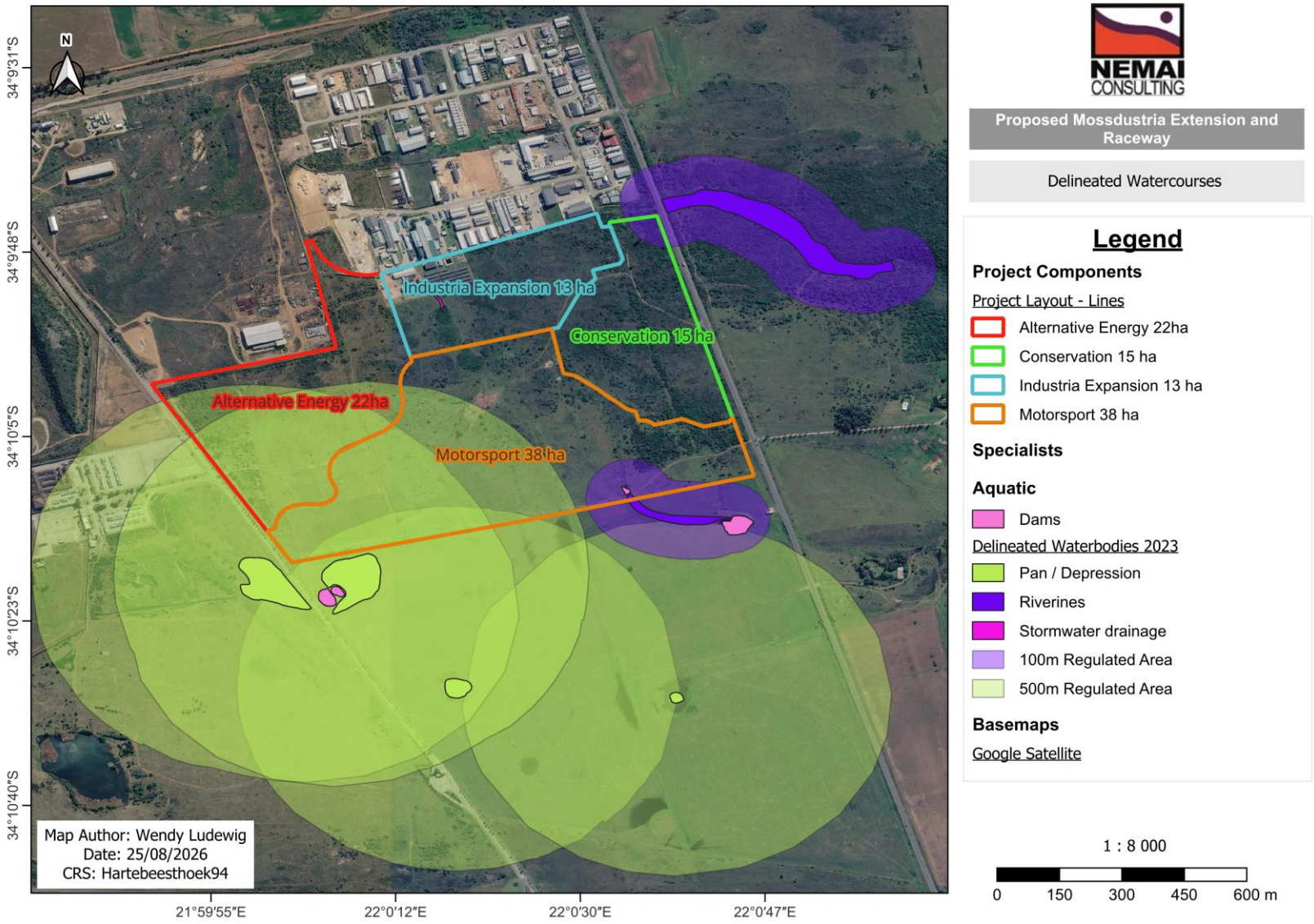

Figure 26: Delineated watercourses in relation to the Project site

7.8 Terrestrial Biodiversity

Some of the information included in the following sub-sections was obtained from the Terrestrial Ecology Impact Assessment (Colloty, 2026b).

7.8.1 Biomes and Vegetation Types

The proposed Project area is situated within the Southern Fynbos Bioregion, a region recognised for its exceptionally high biodiversity and conservation importance at both a national and global scale. Despite its ecological significance, the area has been subject to extensive historical transformation associated with agriculture, infrastructure development and industrial expansion, resulting in habitat loss and fragmentation. Historical land uses within and surrounding the site have included livestock grazing, cultivation, industrial development and transport infrastructure, all of which have influenced the present ecological condition of the area.

According to the South African National Vegetation Map (NVM) 2018, the Project area is associated primarily with the North Langeberg Sandstone Fynbos and Hartenbos Dune Thicket vegetation types (**Figure 27**). However, the Terrestrial Ecological Impact Assessment (Colloty, 2026b) indicates that the site's vegetation is more accurately classified as Mossel Bay Shale Renosterveld, a threatened vegetation type that occurs within the Southern Cape lowlands. Mossel Bay Shale Renosterveld is listed as an Endangered ecosystem in terms of the national list of Threatened Terrestrial Ecosystems, with approximately 49% of its original extent remaining and no formal protection currently in place. As a result, the vegetation type is considered vulnerable to further transformation and habitat loss.

The specialist further notes that the Fine Scale Vegetation Map for the Riversdale Plain provides a more accurate representation of the vegetation occurring within the study area than the NVM 2018. This mapping identifies the dominant vegetation type as PetroSA Fynbos Renosterveld, with Proteus Fynbos Renoster Thicket occurring within the north-eastern portion of the site, together with localised riparian and pan-associated habitats (**Figure 28**). The vegetation of the site is therefore characterised by a mosaic of fynbos, renosterveld and thicket elements, reflecting the transitional nature of the receiving environment.

Field assessments undertaken as part of the Terrestrial Ecological Impact Assessment (Colloty, 2026b) identified four broad vegetation and habitat units within the study area, namely: Fynbos Renosterveld, Proteoid Renosterveld Thicket, Grassy Fynbos/Disturbed Renosterveld, and Transformed Areas (**Figure 29**). The Fynbos Renosterveld and Proteoid Renosterveld Thicket units represent the most intact vegetation communities on site and support moderate to high species diversity and structural complexity. These areas contain a variety of characteristic renosterveld, fynbos and thicket species, including numerous geophytes, succulents and woody shrub species, and are considered to be of high ecological importance.

Areas of Grassy Fynbos and Disturbed Renosterveld occur primarily where previous agricultural activities, grazing and vegetation clearing have modified the natural vegetation. Although these areas exhibit reduced species richness and structural diversity compared to the more intact vegetation units, they retain remnants of indigenous species and may contribute to ecological functioning and rehabilitation potential. In contrast, portions of the site have been extensively transformed through historical agricultural activities and livestock farming and are currently characterised by pasture grasses and low botanical diversity.

The ecological assessment (Colloty, 2026b) found that the northern and eastern portions of the property support the most intact natural habitat, comprising a mosaic of thicket, renosterveld and fynbos vegetation. In contrast, the western portions of the site have experienced greater levels of disturbance associated with historic agriculture, ostrich farming and associated infrastructure. Alien invasive plant species, including Acacia saligna, Acacia cyclops and kikuyu grass (Pennisetum clandestinum), were identified within portions of the site and have contributed to habitat degradation in some areas.

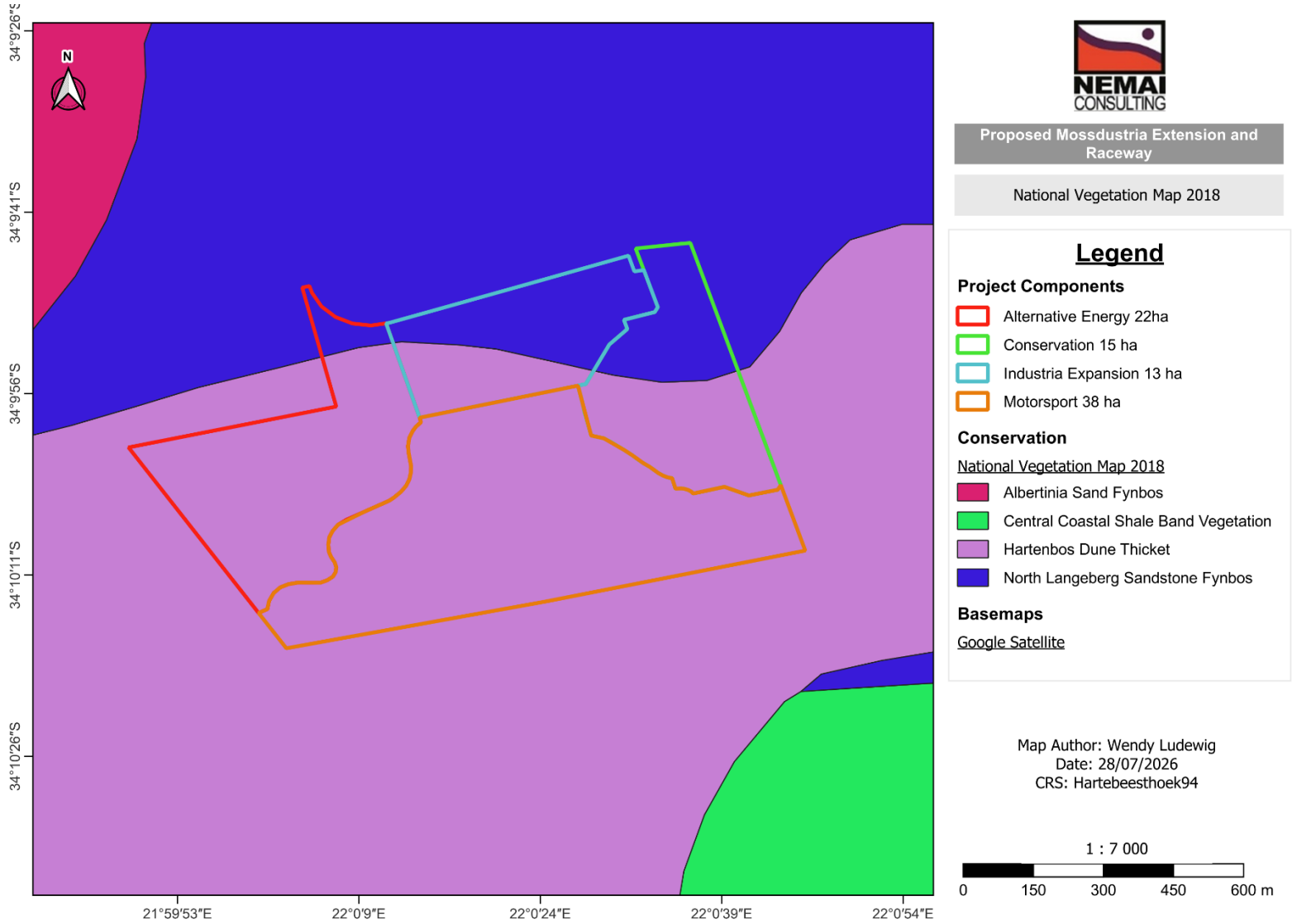

Figure 27: The vegetation type associated with the Project area according to the NVM 2018

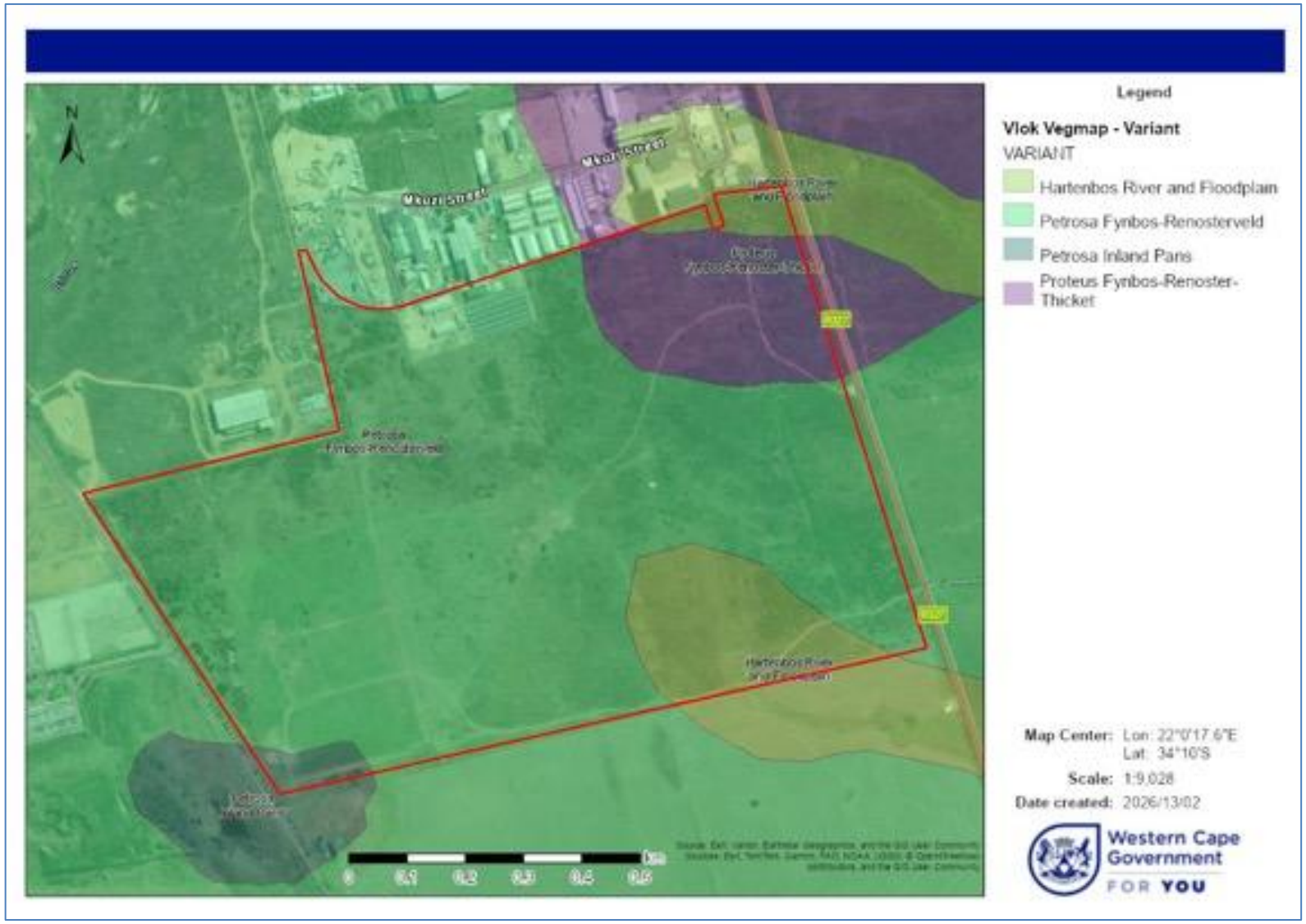

Figure 28: The Project Site in relation to Fine Scale Vegetation Map for the Riversdale Plain (Vlok & de Villiers, 2007) (Colloty, 2026b)

Figure 29: The vegetation types delineated by the terrestrial specialist from multiple site visits ground truthing the terrestrial environment (the remaining areas are all transformed)

7.8.2 Protected Areas

According to the spatial data for the South African Protected Area Database (2026) (SAPAD), no protected areas lie within 5 km of the Project site (**Figure 30**).

The site is located within a Priority Focus Area in terms of the NPAES (**Figure 31**), which identifies landscapes that may contribute to future protected area expansion initiatives. While the site has been partially fragmented by roads, rail infrastructure, industrial development and historic cultivation, the remaining intact habitat patches continue to provide ecological value within the regional context. The inclusion of a dedicated conservation area within the preferred Project layout is intended to retain and protect these higher sensitivity habitats and maintain ecological functioning within the site.

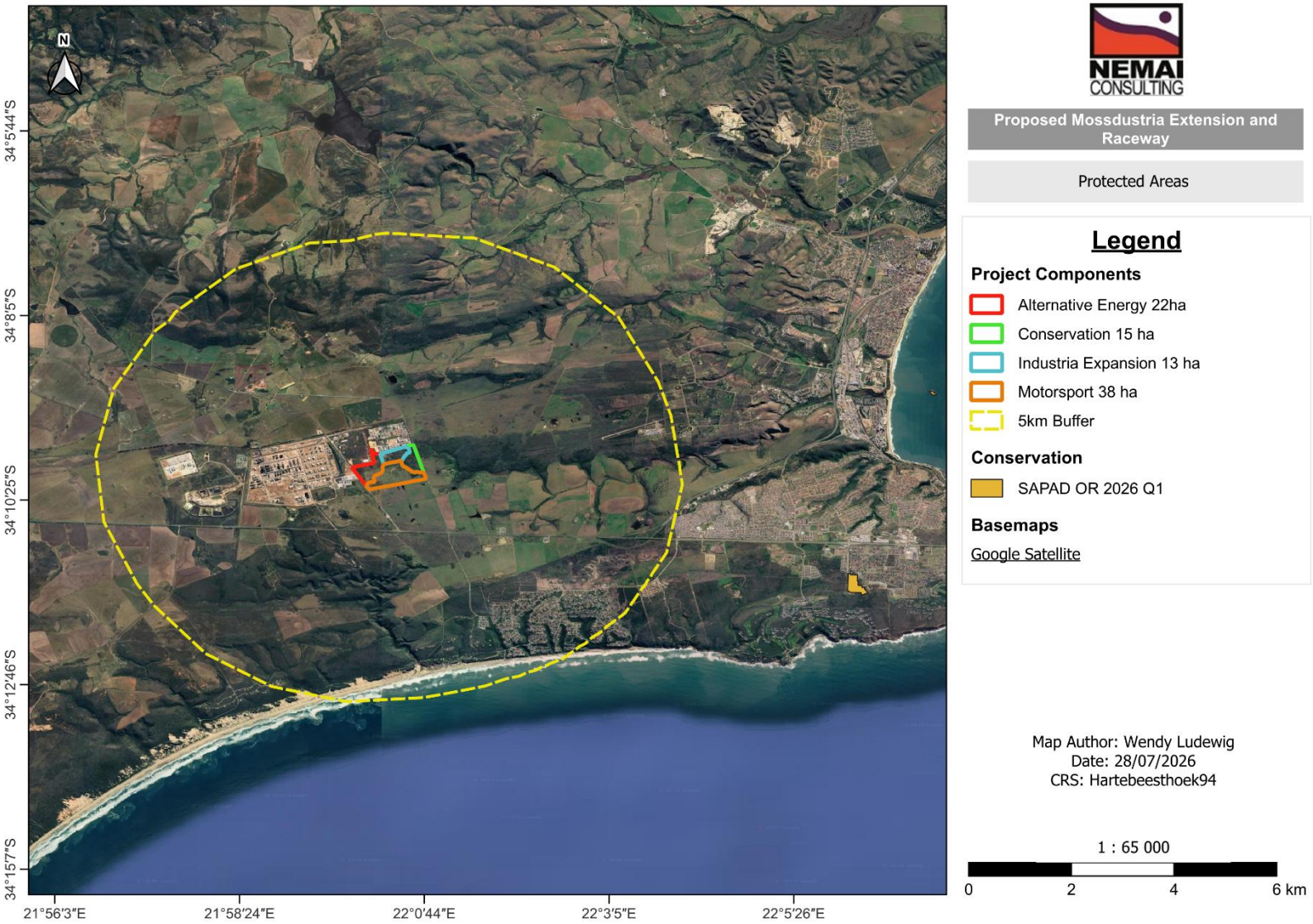

Figure 30: The Project area in relation to the nearest protected area

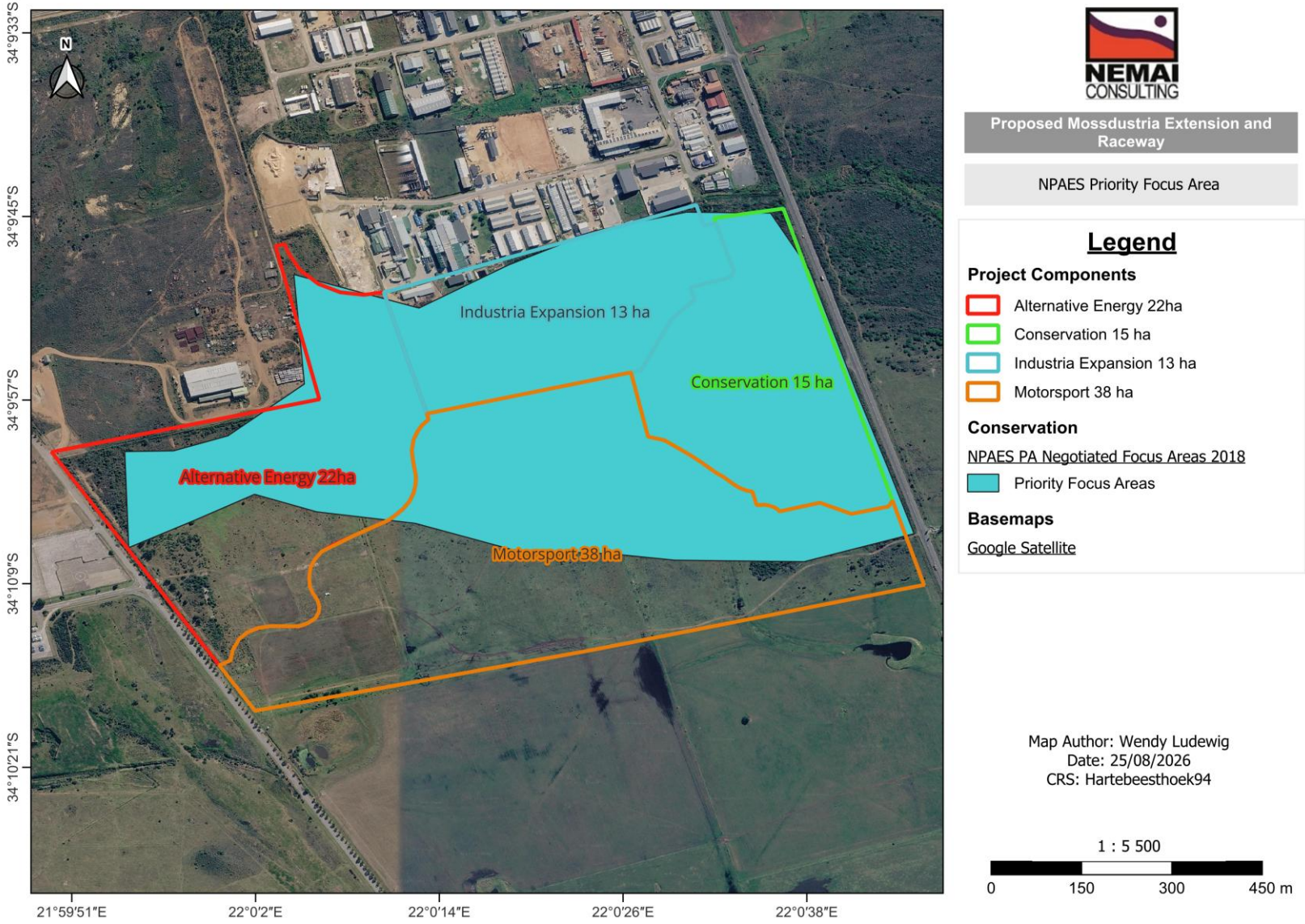

Figure 31: The Project site in relation to the NPAES Priority Focus Areas

7.8.3 Western Cape Biodiversity Spatial Plan

The WCBSP (CapeNature, 2024) identifies portions of the study area as Critical Biodiversity Areas (CBAs) (CBA 1 and CBA 2) and Ecological Support Areas (ESAs) (**Figure 32**). These areas have been identified as important for achieving biodiversity conservation targets, maintaining ecological processes, supporting landscape connectivity and enhancing ecosystem resilience. CBA 1 areas are generally considered to be in a near-natural condition and are required to meet biodiversity pattern and ecological process targets, while CBA 2 areas comprise degraded or modified habitat that still retains conservation value. ESAs, although not essential for meeting biodiversity targets, play an important role in supporting the ecological functioning of CBAs and protected areas.

According to the WCBSP, the biodiversity importance of the site is associated with the occurrence of Critically Endangered PetroSA Fynbos-Renosterveld, Critically Endangered Hartenbos Dune Thicket, and Southern Sandstone Fynbos Seep habitat. Although portions of the site have been historically disturbed by agricultural activities and livestock farming, the northern and eastern sections retain areas of relatively intact natural habitat that contribute to the conservation value of the surrounding landscape.

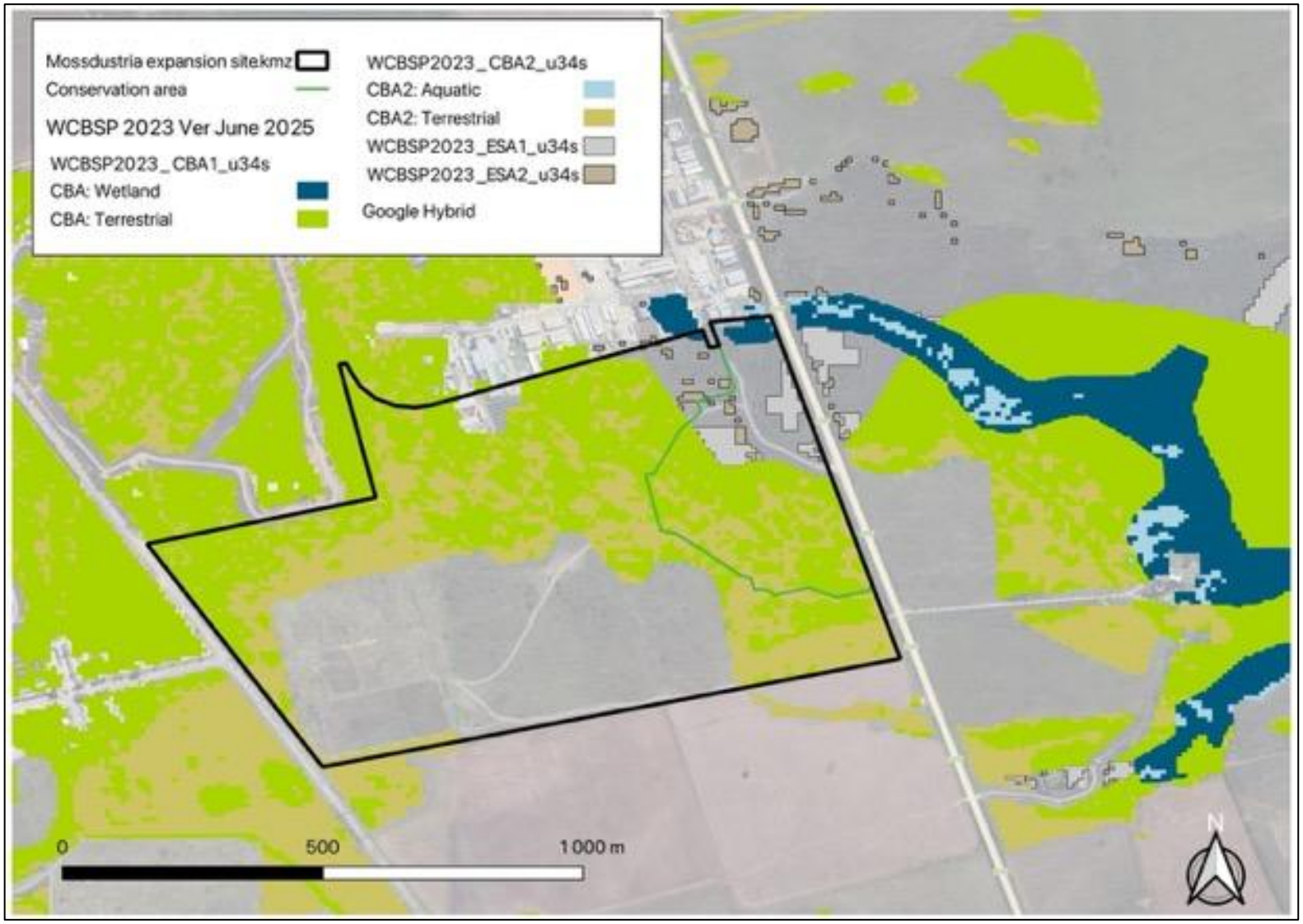

Figure 32: Map of the CBAs and ESAs relative to the Project Site (WCBSP, 2023 as amended 2025) (Colloty, 2026b)

7.9 Socio-Economic Environment

Some of the information included in the following sub-sections was obtained from the Socio-Economic Impact Assessment (Kempthorne and Sondwana, 2023).

7.9.1 Overview

The proposed Project is located within the MBLM in the Western Cape Province, which forms part of the Garden Route District Municipality. The municipality is characterised by a diversified economy supported by agriculture, manufacturing, petrochemical industries, tourism, trade, and business services. The Project area is situated adjacent to existing industrial infrastructure, including the established Mossdustria industrial area, and has been identified by the municipality as a strategic growth area for future industrial and economic development.

The municipality supports a growing population and a relatively large working-age cohort. However, unemployment, particularly amongst the youth population, remains a key socio-economic challenge within the municipal area. Educational attainment levels indicate that a substantial proportion of residents have completed secondary education, while opportunities for employment creation and skills development remain important priorities for local economic development.

Households within the municipality generally have access to basic services, including electricity and potable water, although income levels remain variable across the municipal area. The local economy is supported by a combination of agricultural activities, industrial development, commercial enterprises and tourism-related activities. The agricultural sector remains important in the broader region, while industrial activities associated with the petrochemical sector and related service industries contribute significantly to local economic output and employment.

The Project area forms part of a broader municipal development vision aimed at promoting industrial expansion, economic diversification, employment creation and investment attraction. Municipal planning instruments, including the IDP and SDF, identify the Mossdustria area as a priority development node intended to support future industrial growth and associated economic opportunities within the municipality. The receiving socio-economic environment is therefore characterised by an established industrial setting, existing transport infrastructure, surrounding agricultural activities and a socio-economic context that is supportive of further economic and employment-generating development.

7.9.2 Population and Demographics

The MBLM covers an area of approximately 2 007 km² and, as of 2022, supports a population of approximately 140 075 people residing in 52 985 households. The municipality has experienced steady population growth and is expected to continue growing over the coming

years, resulting in increased demand for housing, infrastructure, employment opportunities and municipal services. Population density within the municipality is approximately 44 persons per km^2.

The age profile of the municipality indicates that approximately 66.7% of the population falls within the economically active age group of 15 to 64 years, while 27.9% comprises children between the ages of 0 and 14 years. Persons aged 65 years and older account for approximately 15.4% of the municipal population. The relatively large working-age population represents an important labour resource, while the municipality's dependency ratio highlights the need for sustained economic growth and employment creation to support dependent population groups.

7.9.3 Employment and Income

Unemployment remains a significant socio-economic challenge within the MBLM. The Socio-Economic Impact Assessment indicates an unemployment rate of approximately 22.9%, with youth unemployment representing a particular concern. Of the economically active youth population, approximately 29.9% are unemployed, highlighting the continued need for employment opportunities and skills development initiatives within the municipal area.

Educational attainment levels indicate that approximately 34% of residents have completed Grade 12, while approximately 15% have attained a higher education qualification. Conversely, approximately 18% of the population has received either no formal schooling or only partial primary education (**Table 7**). These figures demonstrate the availability of both skilled and semi-skilled labour within the municipality, while also highlighting opportunities for further educational advancement and workforce development.

Table 7: Levels of Education (Kempthorne and Sondwana, 2023)

	Western Cape	Garden Route District	Mossel Bay Local Municipality	Mossel Bay
No schooling	7%	44%	8%	4%
Some primary	9%	4%	10%	8%
Complete primary	5%	5%	5%	4%
Some secondary	32%	7%	27%	23%
Grade 12	31%	11%	34%	42%
Higher	16%	13%	15%	19%
Unspecified	0%	16%	0%	0%

Income levels across the municipality are slightly varied, but mostly household income falls within the low-income category at 87% (**Table 8**). While 1% are classified as middle-income households and 0% as high-income households. In addition, approximately 11% of

households have no reported income. These socio-economic characteristics indicate the importance of economic development initiatives that can contribute towards employment creation and improved household income levels.

Table 8: Household Income (Kempthorne and Sondwana, 2023)

	Western Cape	Garden Route District	Mossel Bay Local Municipality	Mossel Bay
No income	7%	8%	11%	13%
Low-income	91%	91%	87%	84%
Middle-income	2%	1%	1%	2%
High-income	0%	0%	0%	0%

7.9.4 Economic Profile

The economy of the MBLM is diverse and is supported by a combination of agricultural, industrial, commercial and tourism-related activities (**Table 9**). Agriculture remains an important economic sector within the broader region and includes livestock farming, dairy production, ostrich farming, viticulture, crop production, forestry and fishing activities. Industrial activity is concentrated around established industrial areas and includes petrochemical and manufacturing-related enterprises that contribute significantly to local economic output and employment.

The local economy is also supported by wholesale and retail trade, finance and business services, community services and tourism. Mossel Bay's location along the Garden Route continues to promote tourism-related economic activity, while existing industrial infrastructure and strategic transport routes support industrial expansion and investment attraction. The municipality's economic structure therefore reflects a balance between traditional agricultural activities, established industrial development and a growing service-based economy.

Table 9: Sectoral Gross Value Added contribution (Kempthorne and Sondwana, 2023)

	Western Cape	Garden Route District	Mossel Bay Local Municipality
Agriculture, forestry and fishing	8.1%	6.8%	9.4%
Mining and quarrying	4.0%	3.8%	3.8%
Manufacturing	12.5%	13.0%	11.0%
Electricity, gas and water	10.1%	9.4%	7.9%
Construction	3.4%	1.8%	-1.0%
Wholesale and retail trade, catering and accommodation	16.4%	16.3%	16.1%
Transport, storage and communication	6.5%	6.5%	6.7%
Finance, insurance, real estate and business services	8.5%	9.3%	9.4%

General government	4.1%	3.5%	3.1%
Community, social and personal services	11.4%	11.0%	11.5%

7.9.5 Land Use and Development Context

The proposed Project area is located adjacent to the existing Mossdustria industrial area and forms part of a broader municipal growth corridor identified for future industrial expansion. The Project area is situated in proximity to major industrial infrastructure, including the PetroSA refinery and Gourikwa Power Station (**Figure 33**), and has been identified by the MBLM as a strategic development area capable of supporting additional industrial, commercial and economic activities.

Figure 33: Project site in relation to surrounding developments (Kempthorne and Sondwana, 2023)

Municipal planning frameworks, including the IDP and SDF, identify the Mossdustria area as a priority node for economic development and industrial expansion (**Figure 14**). The municipality's long-term development vision seeks to promote investment, support industrial growth, create employment opportunities and diversify the local economy. The proposed Project area is therefore situated within an environment that is already characterised by industrial land uses, supporting infrastructure and strategic planning initiatives aimed at facilitating economic growth and development.

The surrounding land uses comprise a combination of industrial, agricultural and infrastructure-related activities, reflecting the transitional nature of the area between existing industrial development and the broader rural landscape. As a result, the site is located within

a socio-economic setting that has been identified for future growth and investment, consistent with municipal development objectives.

7.10 Air Quality

The proposed Project area is located within the MBLM area, where air quality is managed in terms of the NEM:AQA, the MBLM Air Quality Control By-Law and the Municipal Air Quality Management Plan (AQMP). The AQMP aims to minimise the impact of atmospheric emissions on both the natural environment and surrounding communities while maintaining acceptable ambient air quality within the municipal area. MBLM identifies air quality management as a key environmental function and has appointed Air Quality Officers responsible for implementing and monitoring air quality management initiatives within the municipal jurisdiction (MBLM, 2025).

As part of the 2019 AQMP review, a comprehensive regional air quality assessment was undertaken by Lethabo Air Quality Specialists (Pty) Ltd on behalf of the Garden Route District Municipality. The assessment included a review of existing air quality management practices, development of an emissions inventory and atmospheric dispersion modelling for the district. The findings indicated that the majority of objectives of the previous AQMP had been achieved and that air quality management systems within MBLM are generally well established (MBLM, 2025).

Dispersion modelling undertaken for the AQMP indicated that ambient air quality within the municipality is generally acceptable. However, certain potential areas of concern were identified within the broader municipal area. These include locations where odour thresholds may occasionally be exceeded and areas along the R102 in Heiderand where nitrogen dioxide (NO_2) concentrations were predicted to approach approximately 80% of the applicable air quality standard. The AQMP further notes that long-term monitoring indicates generally acceptable air quality conditions within the municipality, although targeted short-term monitoring is recommended in identified potential problem areas (MBLM, 2025).

The receiving environment surrounding the proposed Project is characterised by a combination of industrial, transportation and natural land uses. Existing sources of atmospheric emissions within the broader area are likely to include vehicular traffic, industrial activities associated with the Mossdustria area, domestic fuel combustion, and periodic emissions associated with wildfires, which are recognised within the municipal emissions inventory (MBLM, 2025). Despite these emission sources, no widespread air quality exceedances have been identified within the municipal AQMP assessment.

7.11 Visual Quality

Some of the information included in the following paragraphs was obtained from the Landscape/Visual Impact Assessment (Marshall, 2023).

The proposed Project area is located approximately 5.3 km west of Mossel Bay and directly south of the existing Mossdustria Industrial Area. The site forms part of a broader landscape characterised by a combination of industrial, agricultural, transportation and open-space land uses. Existing industrial developments within the surrounding area include the Mossdustria Industrial Area, PetroSA facilities and the Gourikwa Power Plant (**Figure 33**), all of which contribute to the established visual character of the receiving environment.

The site is situated on a plateau above the coastal plain. The surrounding topography is characterised by a gradual fall in elevation towards the coastline to the south and east, while a minor ridgeline occurs approximately 2 km north of the site (**Figure 34**). These landform features contribute significantly to the visual character of the area and influence the extent to which surrounding landscapes are visible from various viewpoints.

The predominant land cover surrounding the site consists of low shrubland vegetation, much of which has been transformed for agricultural purposes including livestock grazing and ostrich farming. Areas of the coastal plain are developed predominantly for residential use, while industrial and associated infrastructure developments are concentrated around the Mossdustria industrial precinct. Major transport infrastructure within the area includes the N2 national road located south of the site, the R327 regional road which extends along the eastern boundary of the site, and the railway line situated north of the existing industrial area (**Figure 35**).

The broader landscape can be described as comprising three primary Landscape Character Areas (LCAs), namely an urban landscape associated with Mossel Bay and surrounding residential settlements, an industrial landscape associated with Mossdustria, PetroSA and the Gourikwa Power Plant, and a rural landscape characterised by agricultural activities, open space and remnant natural vegetation. Together, these landscape elements create a mixed visual environment in which industrial development is already an established component of the existing landscape character.

The study area falls within the Gouritz Cluster Biosphere Reserve, which encompasses a mosaic of natural, rural, urban and industrial landscapes. Although the area is not recognised as a scenic landscape of exceptional visual significance, the existing open spaces, agricultural land and separation between industrial and residential areas contribute to the visual character and sense of place of the surrounding environment (Marshall, 2023).

Key visual receptors within the receiving environment include surrounding rural homesteads, residents of nearby residential areas, users of the N2 and R327 road corridors, travellers utilising the One Stop and Petroport service stations, and visitors to the Reed Valley venue located east of the site. These receptors represent the primary groups from which the existing landscape and visual environment are experienced (Marshall, 2023).

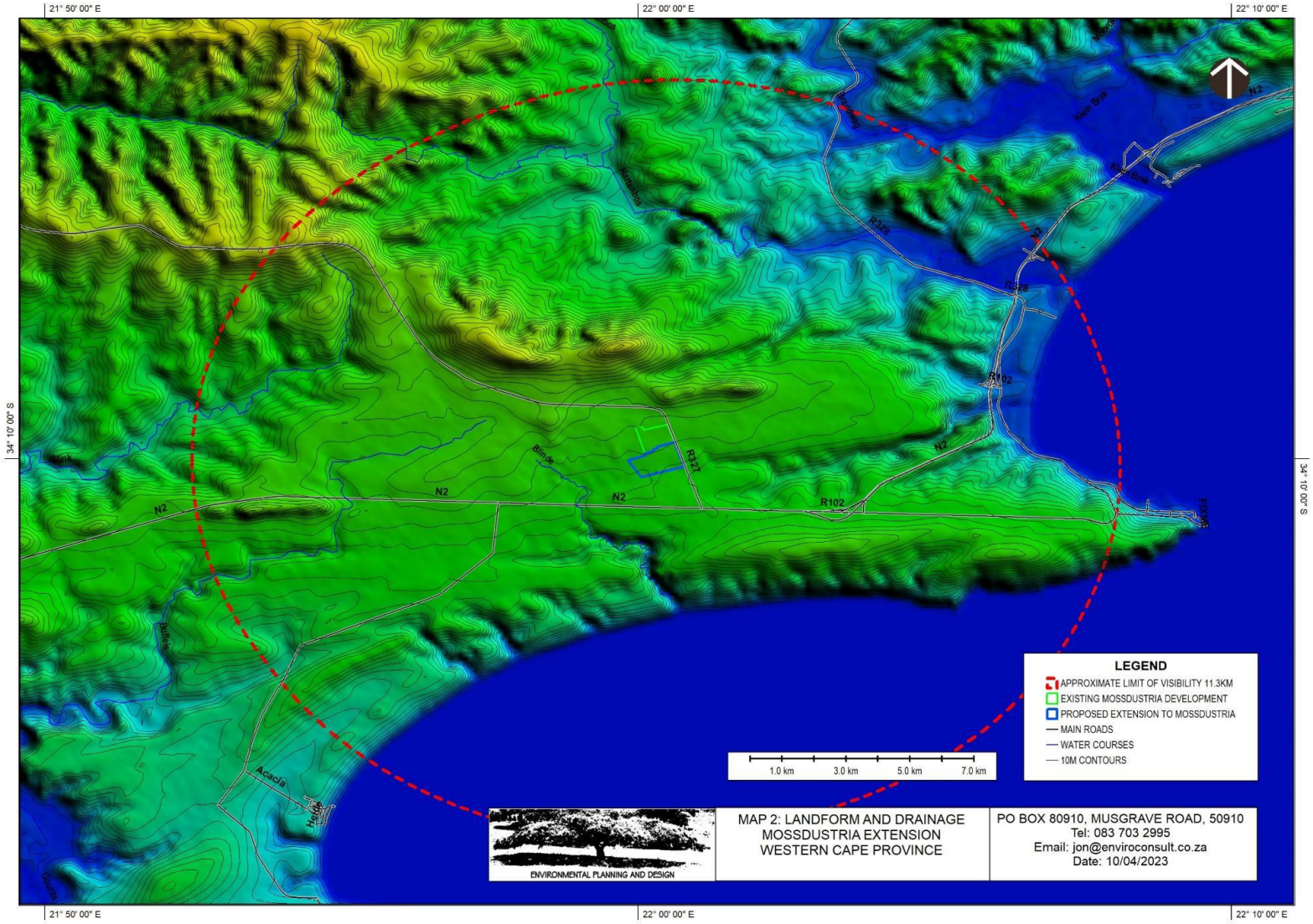

Figure 34: Digital Elevation Model and Contour Lines for Project site and surrounding area (Marshall, 2023)

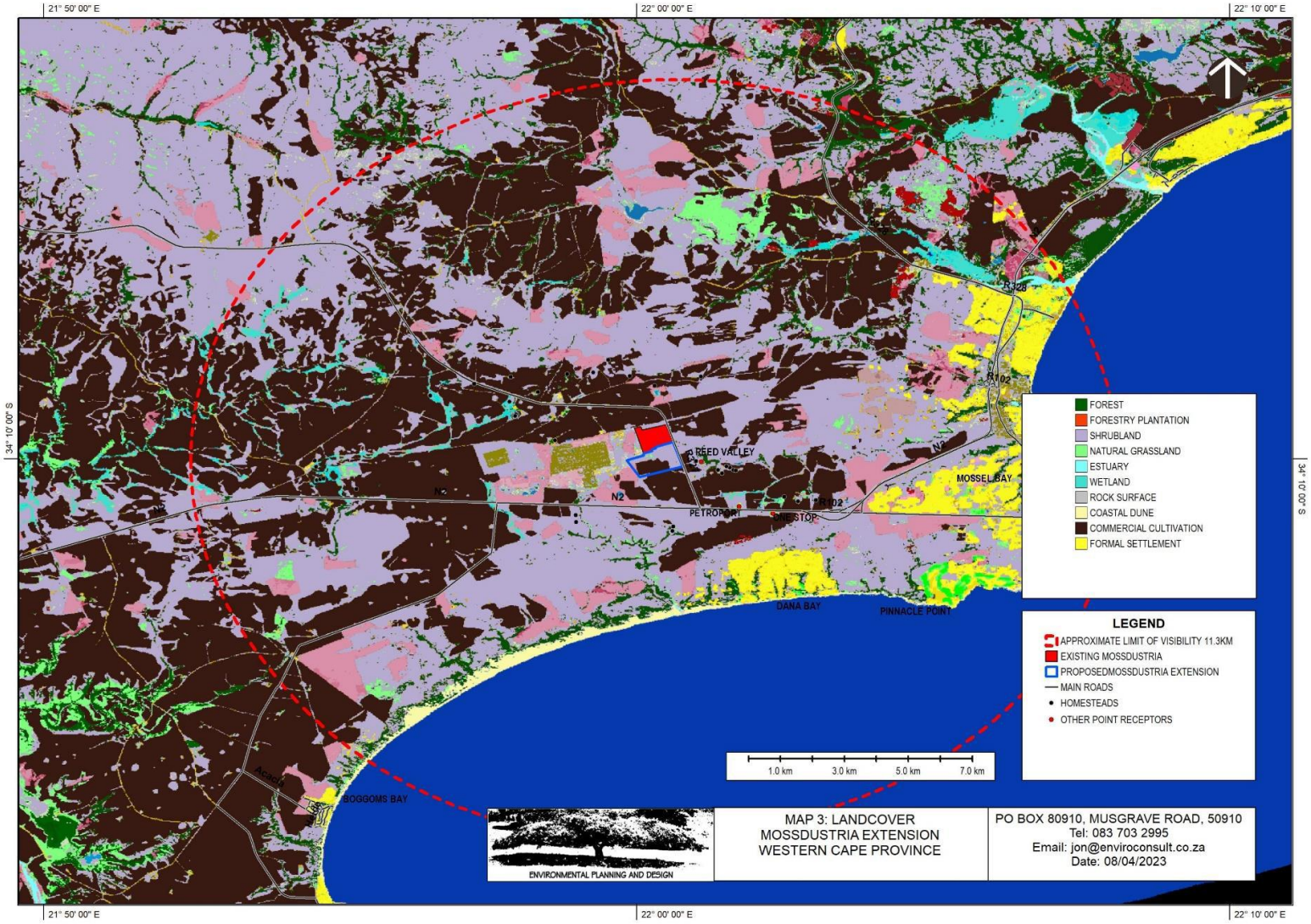

Figure 35: Landcover of the Project site and surrounding area (Marshall, 2023)

Figure 36 below includes photographs taken on site showing the surrounding visual characteristics of the Project site: A: represents the view from the N2 looking across the site and existing Mossdustria to the minor ridgeline approximately 2km to the north; B: illustrates cattle grazing on land to the east of the proposed site; C: is of the Gourika Power Plant to the left of the picture and the PetroSA to the right of the Picture as seen from the N2; D: Is of the N2; and, E: is of the railway running immediately north of the existing Mossdustria.

Figure 36: Photographs of the visual characteristics of the Project site (Marshall, 2023)

7.12 Noise & Vibration

Some of the information included in the following paragraphs was obtained from the Noise Impact Assessment (De Jager, 2026).

The proposed Project area is situated within a mixed rural-industrial landscape located adjacent to the existing Mossdustria Industrial Area and in proximity to major transportation infrastructure, including the N2 national road, the R327 regional road and an existing railway line. The acoustic environment is influenced by both natural and anthropogenic sound sources, resulting in a variable soundscape that differs according to location, time of day, weather conditions and seasonal factors (De Jager, 2026).

The Noise Impact Assessment (De Jager, 2026) notes that environmental sound levels within the study area are affected by a range of natural factors, including wind, temperature, humidity, seasonal variations and faunal activity. In less developed portions of the site and surrounding rural areas, ambient sound is typically influenced by bird calls, insects, livestock and wind interacting with vegetation, while the contribution of these sound sources may vary between seasons and throughout the day. Ambient sound levels are generally higher during warmer months due to increased faunal activity and lower during colder periods.

Field measurements undertaken as part of the specialist assessment (De Jager, 2026) indicate that the existing acoustic environment is largely dominated by road traffic associated with the N2 and R327 road corridors (refer to **Figure 37** for the locations of monitoring locations). Traffic noise was identified as the dominant sound source at several monitoring locations, with vehicle movements creating relatively constant background noise conditions in areas located close to these transport routes. Additional sound sources recorded during the monitoring period included birds, livestock, domestic animals, wind-induced noise, and low levels of industrial activity associated with the existing Mossdustria Industrial Area.

The specialist assessment (De Jager, 2026) further notes that ambient sound levels in the vicinity of the Project area are elevated in comparison to a typical rural environment due to the influence of surrounding transportation and industrial infrastructure. Measurements collected near the R327 and N2 confirmed that road traffic represents a significant contributor to the existing sound environment, while locations further removed from these transport corridors exhibited a greater influence from natural ambient sound sources.

Noise monitoring undertaken at receptor locations surrounding the site recorded a sound environment characterised by a combination of continuous traffic-related noise and intermittent natural sounds. At monitoring locations near Reed Valley and surrounding rural properties, dominant sound sources included passing vehicles on the N2 and R327, bird activity, livestock, occasional domestic animal noises and, in some instances, low-level industrial hums originating from the existing industrial area.

A long-term monitoring location established within the rural portion of the study area identified bird and faunal activity as the predominant source of ambient sound, with road traffic from the N2 remaining audible despite the monitoring location being partially sheltered from direct road noise. The monitoring results indicate that the receiving environment exhibits characteristics

of both rural and industrialised environments, reflecting the transitional nature of the broader landscape surrounding the existing Mossdustria precinct.

The existing vibration environment is primarily associated with vehicular movement along the N2 and R327 road networks, together with activities associated with existing industrial operations in the area. No significant baseline vibration sources were identified within the specialist assessment (De Jager, 2026) beyond those typically associated with transportation infrastructure and established industrial land uses.

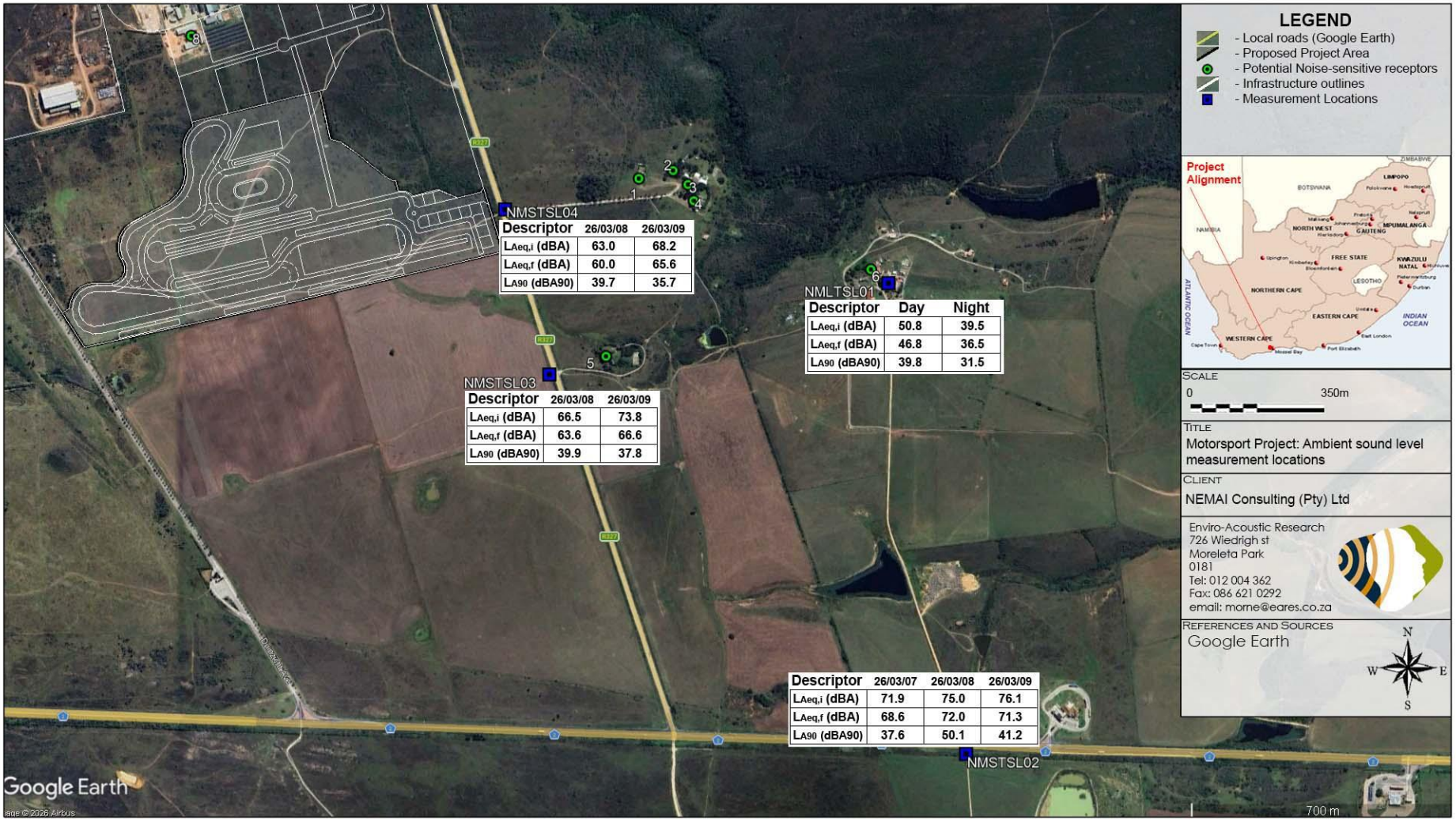

Figure 37: Location where ambient sounds (residual noise) levels were measured during March 2026 (De Jager, 2026)

7.13 Agriculture

Some of the information included in the following sub-sections was obtained from the Agricultural Compliance Statement (Bouwer, 2023).

The proposed Project area occurs within a mixed landscape comprising industrial land uses, open space, natural vegetation and agricultural land. Agricultural activities within the broader area are generally associated with livestock grazing and limited cultivation, with portions of the surrounding landscape having historically been utilised for agricultural production.

The climate of the area is classified as semi-arid, which limits the productivity of dryland cultivation and places constraints on crop production without supplementary water inputs. The climate capability of the area has been classified as moderate (Bouwer, 2023).

The study area is situated within the Db Land Type (**Figure 17**), which is characterised by a predominance of duplex soils where sandy surface horizons overlie more clay-rich subsoils. Regional soil capability mapping indicates a generally low to low-moderate soil capability across the site (**Figure 38**). Terrain capability is classified as moderate to high, reflecting generally favourable topographic conditions for agricultural use (**Figure 39**). Together, the interaction of climate, soil and terrain characteristics contributes to the overall agricultural potential of the area.

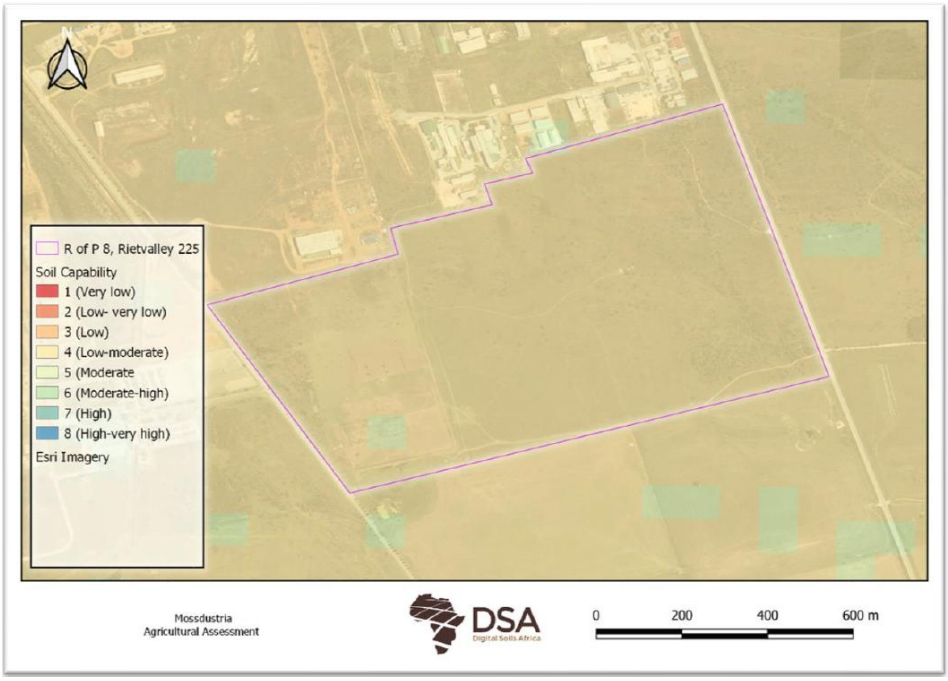

Figure 38: The Soil Capability of the site and surrounding area (Bouwer, 2023)

Figure 39: The Terrain Capability of the site and surrounding area (Bouwer, 2023)

The agricultural land capability within the study area is generally low (Bouwer, 2023). Land capability mapping indicates that most of the site falls within land capability classes ranging from 4 to 6, representing very low to low-moderate agricultural potential (**Figure 40**). The shallow nature of the dominant Mispah and Glenrosa soils constrains cultivation potential, while Westleigh soils are associated with localised depressions and wetter conditions.

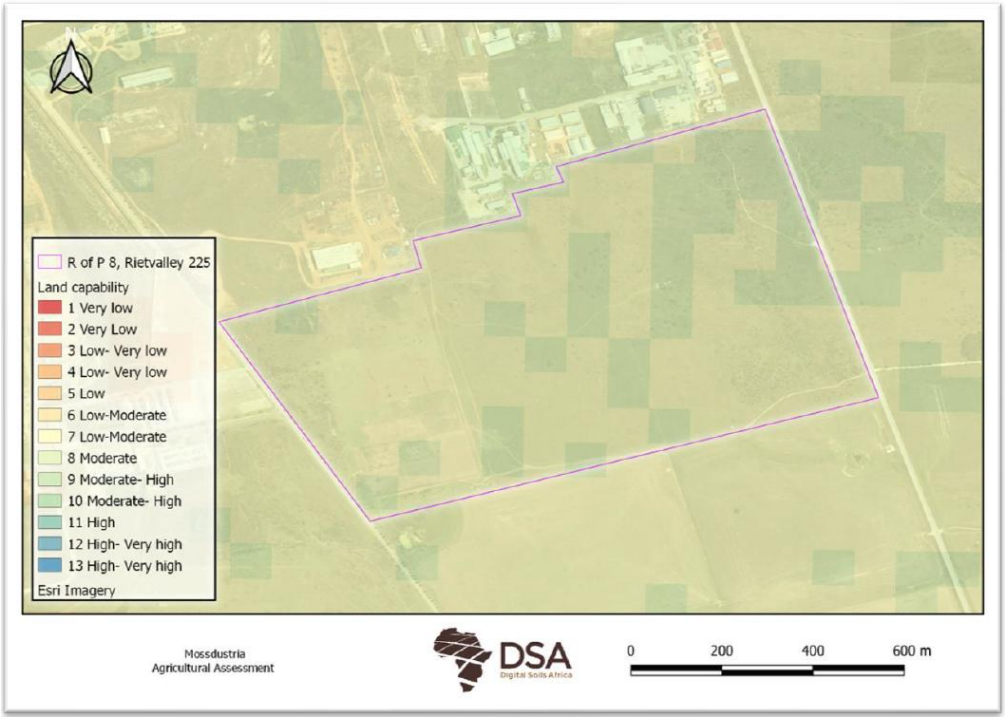

Figure 40: Land Capability Class Map of the study area (Bouwer, 2023)

The grazing capacity of the area is relatively low, with the broader area having a grazing capacity of approximately 40 hectares per large stock unit (ha/LSU). Existing agricultural land use within and surrounding the site consists primarily of natural veld and grazing land. Historical cultivation activities have occurred on portions of the property; however, site verification undertaken during the specialist assessment (Bouwer, 2023) indicated that these cultivated areas are currently abandoned and overgrown, with no active crop production occurring at the time of the survey. Evidence of livestock farming, including horse and ostrich grazing, was observed within the broader property. Infrastructure associated with these activities includes fencing, kraals and water troughs (**Figure 13**).

Land cover mapping indicates that the site and surrounding area comprise a mixture of low shrubland vegetation, cultivated commercial annual croplands and industrial land uses. The agricultural landscape has therefore already undergone varying degrees of transformation, particularly in areas adjacent to the existing Mossdustria industrial precinct (Bouwer, 2023).

7.14 Planning

7.14.1 Western Cape Provincial Spatial Development Framework

The Western Cape PSDF provides the long-term spatial vision for growth and development within the province. The proposed Project area is located within the Mossel Bay regional growth area and forms part of an existing development corridor associated with industrial, commercial and infrastructure-related land uses. The PSDF promotes compact and efficient settlement patterns, investment within existing development nodes, and the protection of environmentally sensitive areas. The proposed conservation area within the Project footprint contributes towards the protection of ecological resources, while the expansion of the Mossdustria Industrial Area supports the PSDF objective of directing growth towards established economic nodes.

7.14.2 Mossel Bay Municipal Spatial Development Framework

According to the MBLM SDF, the proposed Project area is situated adjacent to the existing Mossdustria Industrial Area and falls within an area identified for future urban expansion (**Figure 14**). The SDF recognises the need for additional industrial development land to support economic growth, employment creation and business investment within the municipality. The proposed industrial expansion area, renewable energy component and supporting infrastructure are therefore aligned with the intended spatial growth direction reflected in the SDF. In addition, the retention of a dedicated conservation area supports the SDF objective of protecting environmentally sensitive areas and maintaining ecological connectivity.

7.14.3 Mossel Bay Municipal Integrated Development Plan

The MBLM IDP identifies economic development, investment attraction, infrastructure expansion and job creation as key municipal development priorities. The municipality recognises the importance of providing land and infrastructure to stimulate industrial growth and strengthen the local economy. The proposed Project area forms part of the broader Mossdustria industrial precinct, which constitutes an established economic node within the municipality. As such, the proposed Project is consistent with the development objectives and growth priorities identified in the IDP.

7.14.4 Land Use and Zoning Context

The Project area comprises a combination of existing industrial, agricultural and open space land uses. The proposed Project includes an expansion of the established Mossdustria industrial area, a motorsport arena, a renewable energy facility and a conservation area. Portions of the site are currently zoned Agricultural Zone I, while the proposed conservation area containing critically endangered Mossel Bay Shale Renosterveld is intended to be retained and rezoned to Open Space Zone III. The site is located immediately adjacent to existing industrial development and associated infrastructure, supporting its role as a logical extension of the existing urban-industrial environment.

7.15 Waste

According to the Mossel Bay Municipality IDP (2025/2026), waste management services are provided by the MBLM as part of its basic service delivery mandate. The MBLM is responsible for refuse collection, street cleaning, operation of waste disposal facilities, implementation of waste minimisation initiatives and the management of illegal dumping within its jurisdiction. The MBLM further seeks to promote integrated waste management through recycling initiatives, waste reduction programmes and the development and maintenance of waste management infrastructure (MBLM, 2025).

The IDP (MBLM, 2025) identifies environmental sustainability and effective service delivery as key municipal objectives. In support of these objectives, the Municipality continues to implement waste management programmes aimed at improving refuse collection services, reducing illegal dumping, increasing recycling rates and ensuring the availability of adequate waste disposal infrastructure. Waste management services are provided to urban, industrial and commercial areas throughout the municipality, including the Mossdustria industrial precinct.

The proposed Project area is located adjacent to the existing Mossdustria Industrial Area, where waste management services are already established as part of the municipal service network. It is, however, noted that the Project area falls outside the 5 km buffer of formal waste drop-off facilities (MBLM, 2025). The surrounding area is characterised by industrial,

commercial, transportation and agricultural land uses, all of which generate general waste streams that are managed through the municipal waste management system and licensed waste disposal facilities serving the MBLM area.

7.16 Transportation

Some of the information included in the following section was obtained from the Traffic Impact Assessment (GPL Consulting, 2023) (report contained as Appendix B to the Civil Engineering Services Report contained in **Appendix E**).

The proposed Project area is accessible via the National Route N2 and Provincial Road R327. The site is situated immediately south of the existing Mossdustria Industrial Area and forms part of a broader area identified by the MBLM for future industrial, commercial, tourism and associated development.

The transportation environment surrounding the site is characterised by a regional road network that provides connectivity between Mossel Bay, surrounding towns and the existing industrial activities within Mossdustria. The primary roads serving the area consist of the N2, the R327 and the internal Mossdustria road network (**Figure 41**). The N2 functions as a major east-west transportation corridor linking Mossel Bay with Albertinia and other regional centres, while the R327 provides access between the N2, Mossdustria and Herbertsdale.

The N2 is classified as a Rural Class 1 Principal Arterial road and carries high volumes of regional traffic. In the vicinity of the study area, the road comprises a four-lane surfaced carriageway with turning lanes provided at the intersection with the R327. The road serves as an important transportation route for passenger vehicles, freight transport and industrial traffic moving through the Mossel Bay region. The posted speed limit along this section of the N2 is 100 km/h (GPL Consulting, 2023).

The R327 is classified as a Rural Class 3 Minor Arterial road and serves as the primary access route to Mossdustria. The road comprises a two-lane surfaced roadway with painted shoulders and links directly to the N2 approximately 2 km south of the proposed Project area. The R327 currently provides access to existing industrial properties, agricultural landholdings and rural developments within the surrounding area. No formal pedestrian sidewalks or street lighting are present along this section of the road. The posted speed limit is 100 km/h (GPL Consulting, 2023).

Access to the existing Mossdustria Industrial Area is provided via Unicorn Street, which intersects with the R327. Unicorn Street is classified as an Urban Class 4A Collector Street and currently represents the principal access point to the established industrial area. The road is surfaced, accommodates two-way traffic movement and is equipped with street lighting.

However, no formal pedestrian walkways are currently provided. The speed limit on Unicorn Street is 60 km/h (GPL Consulting, 2023).

The key transportation nodes within the study area comprise the N2/R327 intersection (**Figure 42**) and the R327/Unicorn Street intersection (**Figure 43**). Both intersections currently operate under stop control on the minor road approaches and provide access between the regional road network and the Mossdustria precinct (GPL Consulting, 2023).

Public transport services are currently present within the study area, with minibus taxi services operating between Mossdustria and Mossel Bay via the N2 and R327 corridors. However, there are currently no formal public transport facilities, dedicated pedestrian walkways or formal pedestrian crossing infrastructure along the N2, R327 or within portions of the existing Mossdustria road network (GPL Consulting, 2023). The transportation environment is therefore predominantly vehicle-orientated, with access to the area largely reliant on private vehicles and informal public transport services.

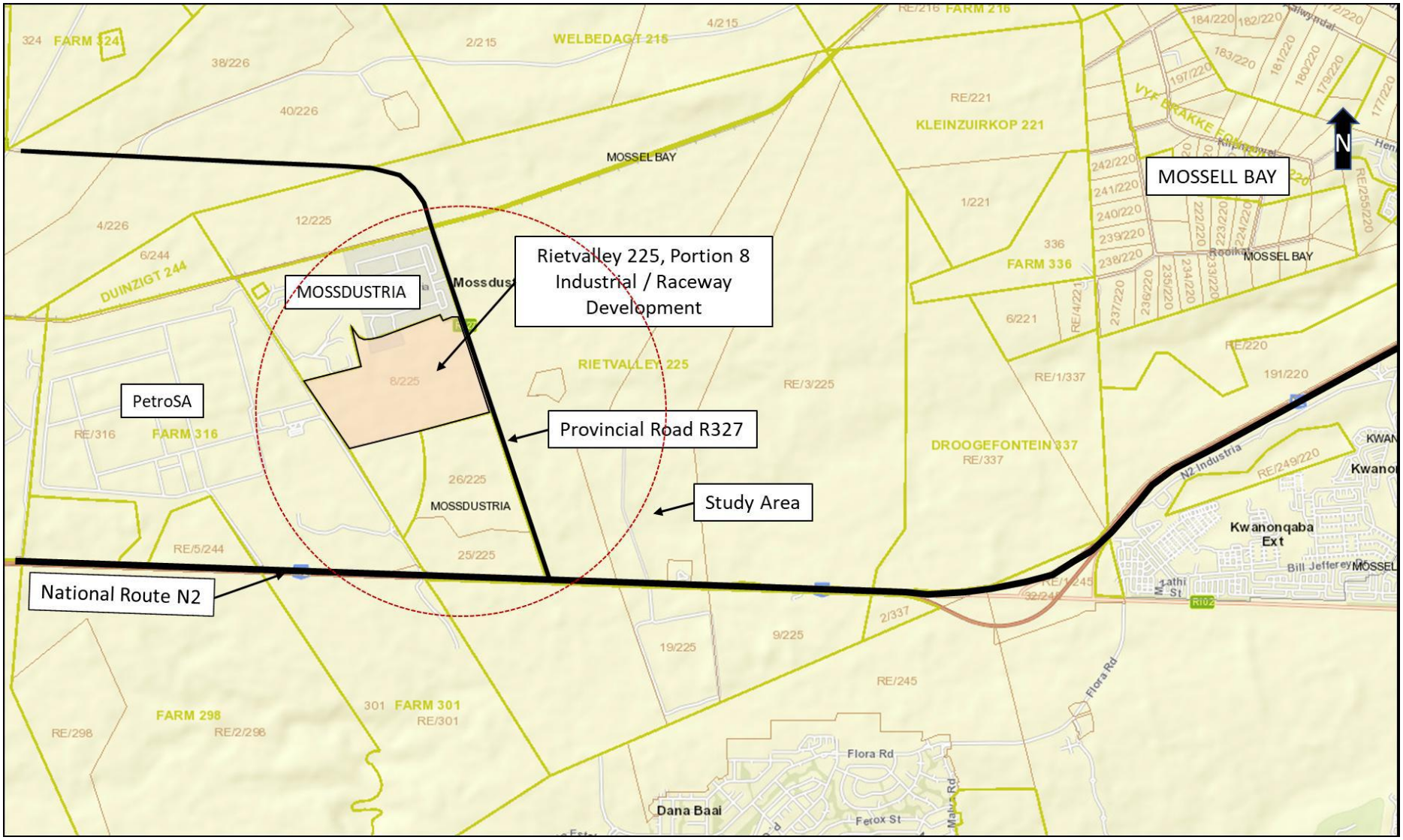

Figure 41: The Project Area in relation to the surrounding transportation network (GPL Consulting, 2023)

Figure 42: N2/R327 Existing Intersection Layout (GPL Consulting, 2023)

Figure 43: R327/Unicorn Street Existing Intersection Layout (GPL Consulting, 2023)

7.17 Heritage and Palaeontology

Some of the information included in the following sub-sections was obtained from the Archaeological Walkdown Report (Webley, 2023) and the Palaeotological Desktop Assessment (Butler, 2023).

7.17.1 Archaeology and Heritage

The surrounding landscape of the Project site is characterised by a mixture of industrial, agricultural and rural land uses. A historic farmstead associated with Rietvalley Farm, currently operating as Reed Valley Wines, is situated approximately 500 m east of the site and forms part of the broader historical landscape of the area (Webley, 2023).

The site has been subject to extensive historical transformation as a result of agricultural activities and more recent land uses. Evidence of former agricultural practices includes cleared agricultural lands, stone heaps associated with land clearing activities, an old reservoir, animal watering infrastructure and remnants of former ostrich farming operations. The western portion of the property was previously utilised as an ostrich quarantine facility, while portions of the site are currently utilised for horse grazing. Refuse dumping, building rubble and other disturbance were observed across sections of the property. These activities have contributed to the modified character of the receiving environment (Webley, 2023).

The archaeological context of the broader Mossel Bay area is associated with a long history of human occupation extending from the Early Stone Age through to more recent periods. The wider region contains important archaeological resources, including occurrences of Early Stone Age, Middle Stone Age and Late Stone Age artefacts. Of particular significance is the Pinnacle Point complex located approximately 8 km southeast of the study area, which is recognised internationally for its archaeological importance and evidence of early modern human occupation (Webley, 2023).

Previous archaeological investigations undertaken within the Mossel Bay region have recorded dispersed scatters of Stone Age artefacts associated with agricultural landscapes and exposed ground surfaces. Similar archaeological resources have been identified in areas surrounding the proposed Project site, particularly within previously cultivated lands. The archaeological landscape of the area is therefore representative of the broader archaeological context associated with the southern Cape coastal forelands.

The archaeological walkdown survey (Webley, 2023) undertaken across the site identified a small number of isolated Early Stone Age quartzite artefacts, including handaxes, flakes and cores, primarily within the southern portions of the property where quartzite cobbles occur naturally. Additional features observed included stone heaps associated with historical agricultural land clearing activities and remnants of former farming infrastructure.

7.17.2 Palaeontology

The proposed Project area is situated within a region underlain by sedimentary rocks of the Cape Supergroup, specifically formations of the Table Mountain Group and the Nardouw Subgroup. According to regional geological mapping, the site is underlain by the Peninsula Formation, Tchando Formation and Rietvlei Formation. These geological units form part of the broader geological framework of the southern Cape and record approximately 170 million years of Earth history dating from the Ordovician to Carboniferous periods (**Figure 16**).

The geological environment of the area is characterised predominantly by quartzitic sandstones with subordinate shale and conglomerate horizons. The Rietvlei Formation includes braided fluvial and shallow marine-influenced sandstone deposits, while the Peninsula Formation is associated with quartz arenite and related sedimentary deposits (Butler, 2023). These geological formations are important because they provide the conditions under which palaeontological resources may occur within the broader region.

The palaeontological record associated with the Cape Supergroup is largely represented by trace fossils and marine invertebrate fossils preserved within suitable sedimentary horizons. Fossils recorded from the broader geological units include burrows, arthropod trackways, trilobite traces and other ichnofossils, together with marine invertebrate remains preserved within fine-grained sedimentary deposits. These resources contribute to the scientific understanding of ancient shallow marine, estuarine and fluvial environments that existed in the region during the Palaeozoic Era (Butler, 2023).

The SAHRIS PalaeoMap (**Figure 44**) identify areas of high, moderate and low palaeontological sensitivity associated with the underlying formations across the Project site.

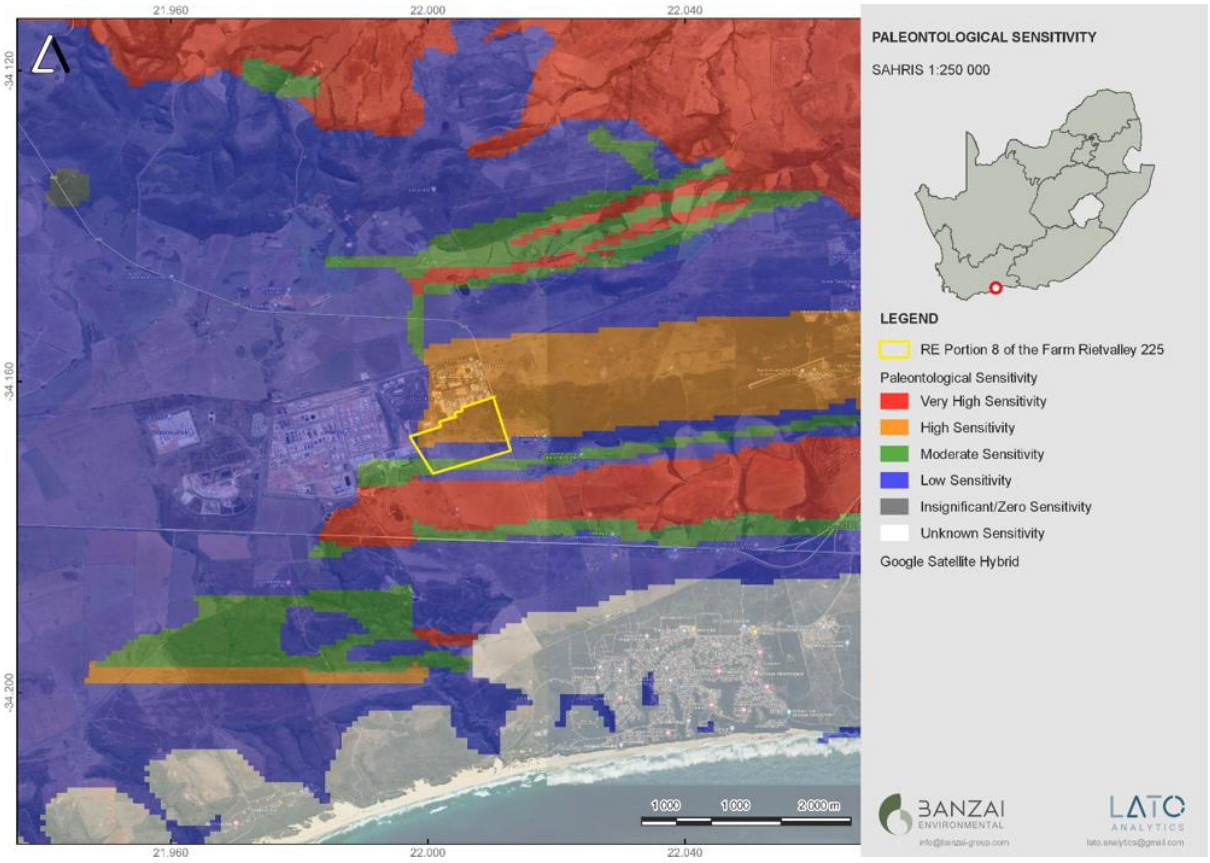

Figure 44: SAHRIS Palaeosensitivity Map (Butler, 2023)

7.18 Existing Structures and Infrastructure

The proposed Project area is located immediately south of the existing Mossdustria Industrial Area and is situated within an established municipal services and infrastructure corridor. The surrounding area contains a range of industrial, transportation, energy and municipal infrastructure associated with the existing Mossdustria precinct, PetroSA facilities and the Gourikwa Power Station. Access to the site is provided via the regional road network comprising the N2 National Road, the R327 and the existing Mossdustria internal road network. These facilities contribute to a well-established infrastructure environment surrounding the proposed Project area.

The Project site itself has historically been utilised for agricultural purposes and, more recently, for ostrich farming activities. Existing structures and infrastructure identified on the property include remnants of former ostrich farming infrastructure, fencing, an old reservoir, animal drinking troughs and associated agricultural features and an existing powerline that traverses the site (**Figure 45**). Evidence of historical land transformation is also present in the form of stone heaps resulting from previous land clearing activities. These structures are primarily associated with the historical agricultural use of the property, except for the powerline that traverses the site.

Figure 45: Existing powerlines within the Project site

7.19 Health

Within the MBLM, the public healthcare network comprises (MBLM, 2025):

- 5 fixed Primary Health Care (PHC) clinics
- 11 mobile PHC clinics
- 2 Community Day Centres
- 1 District Hospital
- 3 Emergency Medical Services Ambulances

The MBLM IDP (MBLM, 2025) identifies several planned healthcare initiatives and facility upgrades within the municipal area, including the expansion of existing clinics and the proposed development of additional healthcare infrastructure to support future population growth and community health needs.

The Project site is located 2 km north of the N2 and only 8 km to the west of Mossel Bay. Therefore, the Project site is in close proximity (via vehicle) to the major private and public healthcare services networks available to residents, employees and visitors within the MBLM.

8 WATER USE LICENSE APPLICATION PROCESS

8.1 Section 21 Water Uses

Chapter 4 of the NWA describes the basis for regulating water use, and Section 21 of this Act lists 11 types of water use. The water uses that are associated with the proposed Project are listed in **Table 10**.

Table 10: Water uses associated with the proposed Project

Section 21 of NWA	Water Use Description	Applicability/Relevance
c	Impeding or diverting the flow of water in a watercourse.	These water uses relate to the construction, operation, maintenance and location of the following Project components that occur within the regulated area of a watercourse: ▪ Conservation Area; ▪ Alternative Energy Area; and ▪ Motorsports Arena.
i	Altering the bed, banks, course or characteristics of a watercourse.	

BOCMA confirmed that this application must follow the full WULA process. The process followed for this WULA is outlined in **Sections 8.2** to **Section 8.5**.

8.1.1 Section 21 (c) – Impeding or diverting the flow of water in a watercourse

The following definitions apply to Section 21 (c) water uses, in accordance with the Government Notice No. 4167 published within Government Gazette No. 49833 on 8 December 2023:

- "Construction" means any works undertaken to initiate or establish impeding, diverting, or modifying resource quality, for the first time, including vegetation removal, site preparation and ground levelling;
- "Diverting" means to, in any manner, cause the instream flow of water to be rerouted temporarily or permanently; and
- "Impeding" means to, in any manner, hinder or obstruct the instream flow of water temporarily or permanently, but excludes the damming of flow so as to cause storage of water.

This water use is applied for because the proposed Project occurs within the 500 m regulated area of 2 pan/depression wetlands and within the 100 m regulated area of 2 riverines as delineated by the aquatic specialist.

8.1.2 Section 21 (i) – Altering the bed, banks, course or characteristics of a watercourse

The following definitions apply to Section 21 (i) water uses, in accordance with the Government Notice No. 4167 published within Government Gazette No. 49833 on 8 December 2023:

- "Characteristics of a watercourse" means the resource quality of a watercourse within the extent of a watercourse;
- "Delineation of a wetland and riparian habitat" means delineation of wetlands and riparian habitat according to the methodology as contained in the Department of Water Affairs and Forestry, 2008 publication: A Practical Field Procedure for Delineation of Wetlands and Riparian Areas or amended version;
- "Extent of a watercourse" means:
  (a) The outer edge of the 1 in 100-year flood line or delineated riparian habitat, whichever is the greatest distance, measured from the middle of the watercourse of a river, spring, natural channel, dams and lakes; and
  (b) Wetlands (including pans): the delineated boundary (extent) of any wetland or pan
- "Flow-altering" means to, in any manner, alter the instream flow route, speed or quantity of water temporarily or permanently;
- "Regulated area of a watercourse" means:
  (a) The outer edge of the 1 in 100-year flood line or delineated riparian habitat, whichever is the greatest distance, measured from the middle of the watercourse of a river, spring, natural channel, dams and lakes;
  (b) In the absence of a determined 1 in 100-year flood line or riparian area as contemplated in (a) above the area within 100m distance from the edge of a watercourse where the edge of the watercourse (excluding flood plains) is the first identifiable annual bank fill flood bench (subject to compliance to section 144 of the National Water Act 36 of 1998); and
  (c) In respect of a wetland: a 500 m radius around the delineated boundary (extent) of any wetland (including pans).
- "Resource quality" of a watercourse means the quality of all the aspects of a water resource, including
  (a) the quantity, pattern, timing, water level and assurance of instream flow;
  (b) the water quality, including the physical, chemical and biological characteristics of the water;
  (c) the character and condition of the instream and riparian habitat; and
  (d) the characteristics, condition and distribution of the aquatic biota;

This water use is applied for because the proposed Project occurs within the 500 m regulated area of 2 pan/depression wetlands and within the 100 m regulated area of 2 riverines as delineated by the aquatic specialist.

8.2 Online Application Process

DWS EWULAAS provides an online portal for applicants to register and subsequently submit their applications for water-use authorisation or licensing. The EWULAAS is accessible through https://ewulaas.dws.gov.za/ewulaasprod/house.aspx. The online application process consists of the following:

- Step 1: Verify your profile information;

- Step 2: Verify the profile information of your clients (Consultants);
- Step 3: Apply for water uses –
  - Pre-application enquiry;
  - Phase 1: Application (information to be submitted includes details of water uses, property and property owner information and administrative documents);
  - Phase 2: Site visit arrangement and conclusion; and
  - Phase 3: Technical Report and final assessment (information to be submitted includes required technical documents and reports, any other relevant supporting documentation and required application forms).

8.3 Water Use Entitlements

According to Section 22 of the NWA, a person may only use water under the following circumstances:

- Without a license –
  - If that water use is permissible under Schedule 1;
  - If that water use is permissible as a continuation of an Existing Lawful Use; or
  - If that water use is permissible in terms of a General Authorisation (GA) issued under section 39.
- If the water use is authorised by a license under this Act; or
- If the responsible authority has dispensed with a license requirement under Section 22(3).

In this Project, a full WUL is required to undertake the water uses associated with the Project, based on the likely risk, nature, and extent of the proposed Project's potential impacts on the affected water resources. BOCMA confirmed that the application will follow the full WULA process, as outlined below.

8.4 Overall Water Use License Application Process

The broad administrative process for a WULA is illustrated in **Figure 46**.

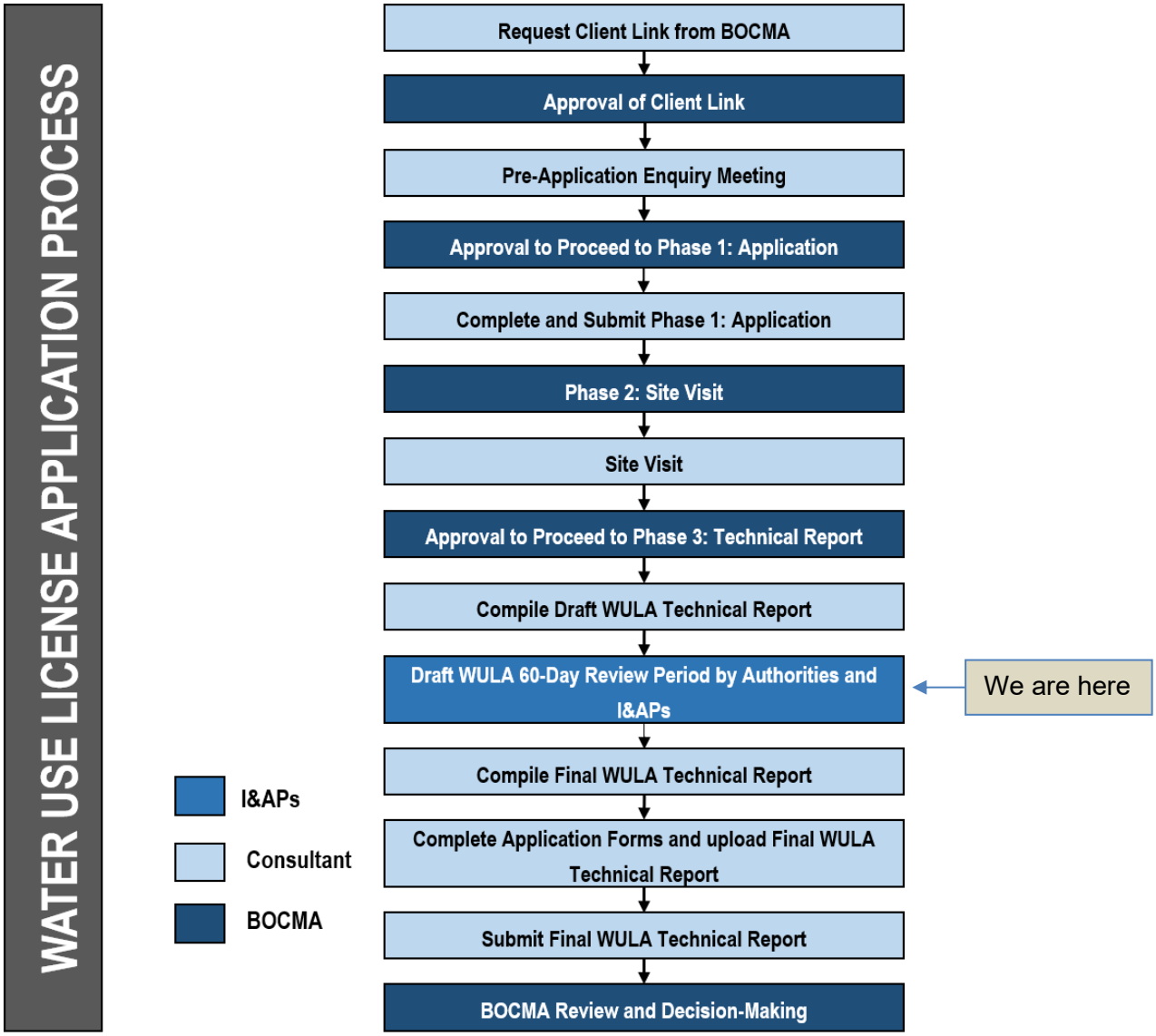

Figure 46: Overall WULA Process

8.5 Detailed Process followed for this Water Use License Application

The steps undertaken for this Project's WULA Process are outlined in the subsections to follow.

8.5.1 Pre-Application Phase

The WULA process was initiated via DWS EWULAAS (reference no. WU51639). The Pre-Application Phase information was completed and submitted to the responsible authority via EWULAAS. BOCMA correspondence is available online via EWULAAS.

An online Pre-Application Meeting was held with BOCMA on 13 May 2026. Based on the outcome of this Meeting the water uses were logged on Phase 1 of EWULAAS.

8.5.2 Site Visit/Inspection

A Site Visit with the BOCMA case officer, Nemai Consulting and the Applicant was completed on 04 August 2026. The aim of the Site Visit was to ensure that BOCMA understood the scope of the Project and could accurately advise on the water uses triggered by the Project, as well as the Technical Documentation required for the WULA.

8.5.3 Information Gathering

The primary sources of information presented in the WULA Technical Report include the following:

- ❑ Desktop evaluation (via literature review, specialist input, GIS spatial data, topographical maps and aerial photography) and site investigations;
- ❑ Technical information received from the Engineers and the Applicant; and
- ❑ Specialist Studies.

The Technical Report incorporated information from the following documentation (amongst others):

1. Locality Maps (**Appendix A**);
2. Aquatic Ecology Impact Assessment (**Appendix B1**);
3. Geohydrology Impact Assessment (**Appendix B2**);
4. EIA Report;
5. Environmental Management Programme (**Appendix C**);
6. Stormwater Management Plan (**Appendix D**); and
7. Civil Engineering Services Report (**Appendix E**).

Table 11 contains a list of the requested technical information from BOCMA, as well as the response from the Environmental consultants, the Applicant and the project team.

Table 11: BOCMA Requested Technical Documents

No.	Requested Information	Response
1	engineering designs	**Appendix E** and the Project description contained in **Section 6**
2	Environmental Management Plan Report	**Appendix C**
3	Fresh Water Report	**Appendix B1**
4	Geohydrological Report	**Appendix B2**
5	Proof of payment of licence processing fee/Letter of waiver from DWS	Uploaded onto EWULAAS
6	Public Participation Advert Notice	To be included in the Final WULA Technical Report
7	Public participation comments and response report.	To be included in the Final WULA Technical Report
8	Storm Water Management Plan	**Appendix D**
9	Wetland Assessment Report	**Appendix B1**
10	WULA Summary Report	To be uploaded to EWULAAS, based on the content of this Report

8.5.4 License Application Forms

The following WULA Forms will be completed on the EWULAAS as part of the WULA (to note is that relevant forms will be generated automatically on the EWULAAS, and hardcopy forms will not be submitted to DWS):

- Part 1:
  - DW757 – Registration/Licensing Part 1 – Water Services Provider.
- Part 2: Application forms for WUL:
  - DW901 – Property where water use occurs;
  - DW902 – Details of Property Owner;
  - DW763 – Information regarding Section 21 (c) application; and
  - DW768- Information regarding Section 21 (i) application.

8.5.5 Screening Assessment and Decision

This step involves screening, review, and assessment of the WULA Technical Report, followed by a decision by the designated official at the BOCMA.

The official will evaluate the WULA Technical Report to check whether it meets the formal requirements of the WULA Regulations. The official will then either:

- **Accept** the WULA Technical Report if it satisfies the regulated requirements, followed by a technical assessment of the report and a decision on the application; or
- **Reject** the application in writing if the WULA Technical Report does not meet regulated requirements.

The regulated timeframe for screening the WULA Technical Report and for the subsequent assessment and decision is 90 days. The WUL decision will be returned to the relevant delegated authority by the official at the BOCMA, who will then inform the Applicant of the decision.

8.5.6 Appeals

The Applicant or a person who objected to an application and who is aggrieved by the decision of the BOCMA on a WULA may lodge an appeal with the Water Tribunal, as contemplated in the WULA Regulations.

9 LOCATIONS OF WATER USES

Table 12 below provides the details of Section 21 (c) and (i) water uses associated with the Project. **Figure 47** below shows the points for each water use as labelled in **Table 12** in reference to the Project components, delineated wetlands, and their regulated areas. The relevant forms for Section 21(c) and (i) water uses have been completed on EWULAAS.

The locations of the Section 21(c) and (i) water uses are based on the location of the Project components in relation to the affected delineated watercourses (see **Figure 47**).

Table 12: Water Use Table for the proposed Project

Water use(s) activities	Name	Map Ref	Purpose	Property Description	Co-ordinates
Section 21 c & i					
For the location, construction, maintenance and operation of the alternative energy facility within 500m of the transformed pans	Alternative Energy Facility within regulated area of Transformed Pans	1	To generate and supply renewable solar energy to the municipal grid.	Portion 8 of Farm Rietvalley 225 (C05100000000022500008)	34˚10'5.67"S 22˚0'2.41"E
For the location, construction, maintenance and operation of the motorsports area within 500m of the transformed pans	Motorsports Area within 500m of Transformed Pans	2	To provide a dedicated venue for motorsport events, vehicle testing, racing activities, and associated spectator facilities.	Portion 8 of Farm Rietvalley 225 (C05100000000022500008)	34˚10'9.32"S 22˚0'16.39"E
For the location, construction, maintenance and operation of the motorsports area within 100m of the watercourse 2	Motorsport Area with regulated area of Watercourse 2	3	To provide a dedicated venue for motorsport events, vehicle testing, racing activities, and associated spectator facilities.	Portion 8 of Farm Rietvalley 225 (C05100000000022500008)	34˚10'8.56"S 22˚0'33.48"E
For the location, construction, maintenance and operation of the motorsports area within 500m of the pan 2	Motorsports Area within regulated Area of Pan 2	4	To provide a dedicated venue for motorsport events, vehicle testing, racing activities, and associated spectator facilities.	Portion 8 of Farm Rietvalley 225 (C05100000000022500008)	34˚10'13.68"S 22˚0'14.67"E
For the location, construction, maintenance and operation of the conservation area within 100m of the watercourse 1	Conservation Area within 100m of Watercourse 1	5	To conserve and protect the critically endangered Mossel Bay Shale Renosterveld through formal conservation management.	Portion 8 of Farm Rietvalley 225 (C05100000000022500008)	34˚9'44.94"S 22˚0'35.74"E

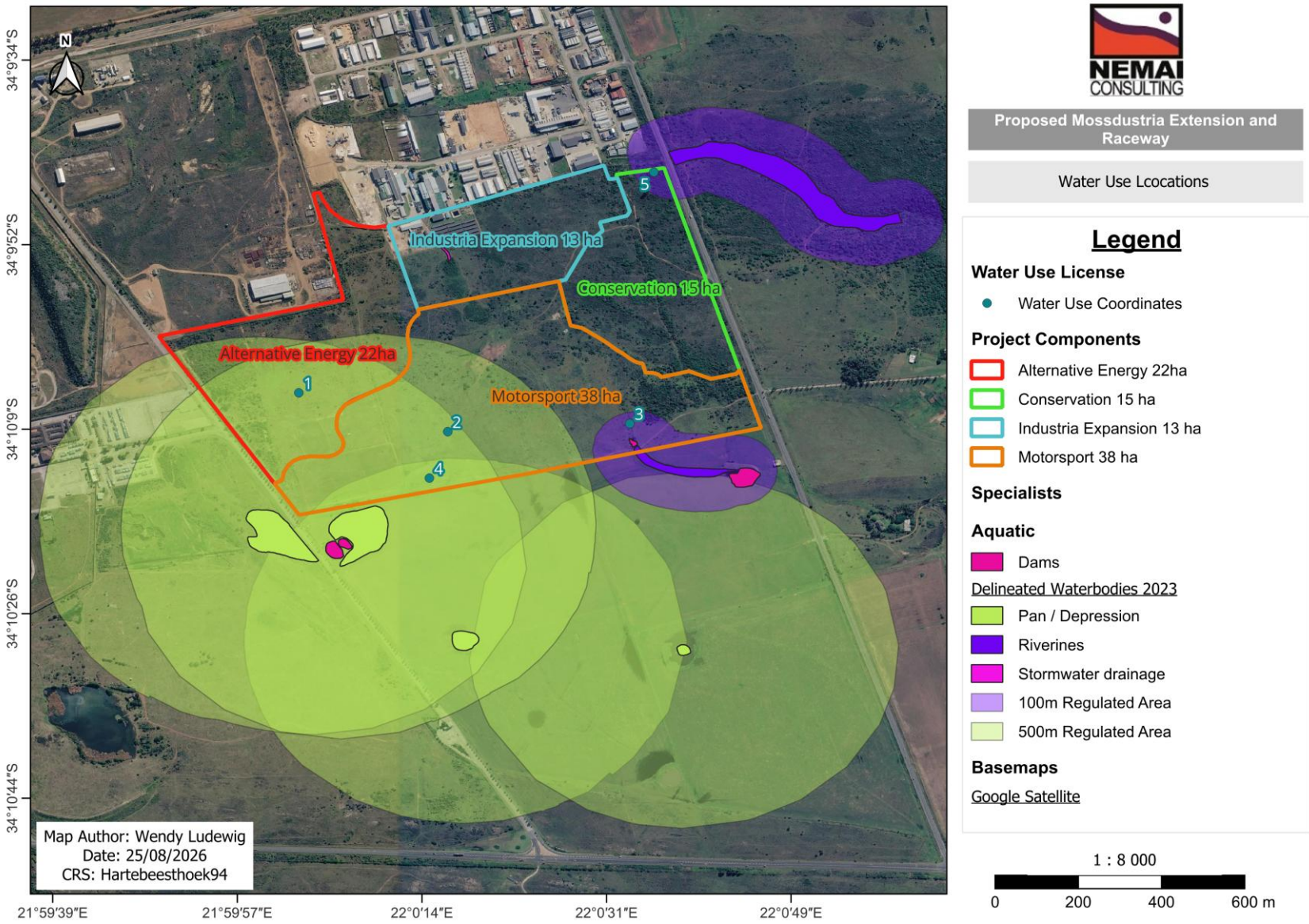

Figure 47: Water Uses Locality Map for the proposed Project

10 SECTION 27 OF THE NATIONAL WATER ACT, 1998

This section provides the necessary information to address the factors listed in Section 27 of the NWA that the BOCMA must consider when issuing a WUL for the proposed Project.

Section 27(1)(a) Existing Lawful Water Users

The proposed Project is located on Portion 8 of Farm Rietvalley 225 and requires authorisation for Section 21(c) (impeding or diverting the flow of water in a watercourse) and Section 21(i) (altering the bed, banks, course or characteristics of a watercourse) water uses associated with the location, construction, operation and maintenance of the proposed Alternative Energy Facility, Motorsport Facility and Conservation Area within the regulated areas of identified watercourses.

The Project area falls within the K10A Subquaternary Catchment. The local drainage network is associated with a small coastal catchment that drains eastwards via the Tweekuilen River system towards the coastline near Dias Beach. The downstream catchment has been identified as a NFEPA due to the importance of the associated riverine and estuarine systems and the role these systems play in supporting aquatic biodiversity.

Existing downstream water users are expected to include agricultural, industrial and ecological users that rely on the broader catchment. Downstream ecological receptors include the Tweekuilen River system and associated freshwater and estuarine habitats. The aquatic specialist confirmed that the catchment contributes to the maintenance of flows that support fish, amphibian, bird and invertebrate habitat within downstream receiving environments.

The Aquatic Ecology Impact Assessment and Geohydrology Impact Assessment assessed the potential impacts of the proposed water uses on affected water resources. Potential impacts relating to altered runoff, sedimentation, erosion and water quality deterioration were identified and assessed. Following implementation of the recommended mitigation measures, including stormwater management controls and pollution prevention measures, all aquatic impacts are anticipated to be of low significance.

As this application relates only to Section 21(c) and (i) water uses and does not include the abstraction or storage of water, significant impacts on existing lawful downstream water users are not anticipated. The specialist assessment concluded that there is limited to no direct connection between the development footprint and functional aquatic systems and that downstream water resources are not expected to be materially affected, provided that the mitigation and management measures contained in the specialist studies, EIA Report, EMPr and WULA Technical Report are implemented.

No existing Water Use License or other water use authorisation associated with the proposed Section 21(c) and (i) water uses on the property has been identified during the WULA process. This application therefore seeks authorisation for the proposed Section 21(c) and Section 21(i) water uses associated with the Project.

Section 27(1)(b) Contributions to Redress the Results of Past Racial and Gender Discrimination

Employment opportunities that address past racial and gender discrimination may be created during the construction and operation phases.

Section 27(1)(c) Efficient and Beneficial Use of Water in the Public Interest

The proposed Project comprises the expansion of the Mossdustria Industrial Area, the establishment of an Alternative Energy Facility and the development of a Motorsport Facility. The Project is expected to facilitate economic development within the MBLM through investment, employment creation during the construction and operational phases, increased tourism in the area due to the events associated with the Motorsport Facility, and the provision of industrial, recreational and renewable energy infrastructure. As such, the benefits of the Project are expected to extend beyond a limited number of individuals and contribute to broader socio-economic development within the region.

The water uses applied for relate only to Section 21(c) and Section 21(i) activities associated with infrastructure located within the regulated areas of identified watercourses. The application does not involve the abstraction or storage of water and is therefore not expected to reduce the availability of water to downstream users.

The Aquatic Ecology Impact Assessment concluded that the proposed development footprint is largely located within already disturbed areas and has limited connectivity with natural functional aquatic systems. Potential impacts associated with stormwater runoff, sedimentation, erosion and water quality deterioration were assessed and can be effectively managed through the implementation of the recommended mitigation measures, including stormwater management controls, pollution prevention measures and ongoing environmental management. Following mitigation, the identified aquatic impacts are anticipated to be of low significance.

The identified risks to water resources have been assessed and appropriate mitigation measures have been incorporated into the project design, EMPr and WULA Technical Report.

Section 27(1)(d) (i) The Socio-Economic Impact of the Water Use/s if Authorised

Authorisation of the proposed Section 21(c) and Section 21(i) water uses will enable the implementation of the proposed expansion of the Mossdustria Industrial Area, Alternative Energy Facility and Motorsport Facility. The Project is aligned with national, provincial and

local development objectives that seek to promote economic diversification, investment, employment creation and sustainable development within the Mossel Bay region.

The Socio-Economic Impact Assessment identified significant positive economic benefits associated with the Project. During the construction phase, the Project is expected to contribute approximately R7.1 billion in production and business sales, R2.2 billion in GDP contribution, approximately 8,763 temporary employment opportunities and approximately R1.0 billion in household income. During the operational phase, the Project is expected to contribute approximately R218.8 million per annum in production and business sales, R92.5 million per annum in GDP contribution, approximately 277 sustained employment opportunities and approximately R40.4 million per annum in household income.

The approval of the proposed water uses will therefore facilitate socio-economic development at a local and regional level by enabling investment, business growth, employment creation and expanded economic opportunities. Specialist studies undertaken as part of the WULA process indicate that the potential impacts on water resources can be appropriately managed through the implementation of the recommended mitigation measures.

Section 27(1)(d) (ii) The Socio-Economic Impact of the Water Use if not Authorised

Failure to authorise the proposed Section 21(c) and Section 21(i) water uses would prevent the implementation of the proposed expansion of the Mossdustria Industrial Area, Alternative Energy Facility and Motorsport Facility. As a result, the Project would not realise the associated socio-economic benefits. These include the anticipated investment in the area, economic diversification opportunities, and employment creation during both the construction and operational phases.

The Socio-Economic Impact Assessment found that the Project has the potential to generate substantial economic benefits, including increased production, GDP contribution, employment opportunities and household income within the MBLM and broader regional economy. Should the licence application be declined, these economic benefits would not be realised, and opportunities to support local and regional development objectives would be reduced.

Should the licence application not be authorised, the proposed development would not proceed, and the associated economic and employment opportunities identified in the Socio-Economic Impact Assessment would not be realised.

Section 27(1)(e) Relevant Catchment Management Strategies and Local Government Planning Frameworks that Support the Proposed Water Use/s

The proposed Project falls within the jurisdiction of BOCMA, which is responsible for the management of water resources within the applicable Water Management Area. The WULA process has therefore been undertaken in consultation with BOCMA and in accordance with the requirements of the NWA and associated WULA Regulations.

Historically, a Catchment Management Strategy (CMS) was developed for the former Breede-Gouritz Catchment Management Agency. However, following the amalgamation of the Breede-Gouritz and Olifants Catchment Management Agencies into BOCMA, a consolidated CMS for the newly established BOCMA has not been identified as publicly available at the time of compiling this report. It is understood that steps have been initiated by BOCMA towards the development of a Catchment Management Strategy for the amalgamated management area.

In the absence of a formally adopted and publicly available BOCMA CMS, the Project has been assessed within the context of the applicable legislative framework, specialist studies and water resource management requirements administered by BOCMA (refer to **Section 4**). The Aquatic Ecology Impact Assessment and Geohydrology Impact Assessment informed the assessment of water resource impacts and the identification of mitigation measures aimed at protecting the integrity and functioning of the affected water resources (refer to **Section 11** for the summary of the specialist studies and **Section 12** for the associated impact assessment).

Section 27(1)(f) The Likely Effect of the Water Use on the Water Resource and on Other Water Users

The proposed Section 21(c) and Section 21(i) water uses are associated with the location, construction, operation and maintenance of the proposed Conservation Area, Alternative Energy Facility, Motorsport Facility and associated infrastructure within the regulated areas of 2 delineated pans/depression wetlands and 2 riverines. The proposed water uses do not include abstraction or storage and are therefore not expected to affect water availability to downstream users.

The Aquatic Ecology Impact Assessment identified potential impacts on water resources associated with construction and operational activities, including increased stormwater runoff, erosion, sedimentation, habitat disturbance and potential deterioration in water quality (refer to **Section 11.3**). The affected aquatic features comprise transformed pan/depression wetlands and riverine systems that form part of the local drainage network (refer to **Figure 26**).

The Aquatic Ecology Impact Assessment and Geohydrology Impact Assessment concluded that, with the implementation of the recommended mitigation measures, potential impacts on both surface water and groundwater resources can be appropriately managed. Potential impacts include localised changes to runoff characteristics, increased sedimentation, deterioration in surface water quality, contamination of groundwater from hazardous substances, and alterations to shallow groundwater movement associated with construction activities. The implementation of stormwater management controls, erosion prevention measures, rehabilitation of disturbed areas, pollution prevention measures and groundwater protection measures is expected to reduce the majority of identified impacts to low

significance, although certain groundwater-related impacts may remain of low to moderate significance following mitigation (refer to **Section 12** for the full impact assessment).

As a result, significant impacts on downstream water users or the broader receiving environment are not anticipated, provided that the mitigation and management measures contained in the WULA Technical Report, EIA Report, specialist studies and EMPr are implemented.

Section 27(1)(g) Class and Resource Quality Objectives (RQOs) of the Water Use/s

The proposed Project is located within the K10A Subquaternary Catchment (SQ9292), which forms part of a NFEPA catchment associated with the Tweekuilen River system. According to the Aquatic Impact Assessment, the affected catchment has a Present Ecological State (PES) of D (Largely Modified), a Moderate Ecological Importance rating and a High Ecological Sensitivity rating. The delineated aquatic features associated with the Project area, including Pan 2, Pan 3, the Transformed Pan, Watercourse 1 and Watercourse 2, were similarly assessed as having a PES of D and an overall Moderate Ecological Importance and Sensitivity rating.

The Aquatic Impact Assessment identified potential impacts on the aquatic environment associated with increased stormwater runoff, erosion, sedimentation, habitat disturbance and deterioration in water quality during the construction and operational phases. However, the specialist concluded that the proposed development footprint is largely located within transformed and previously disturbed areas with limited connectivity to functional aquatic systems. The implementation of the recommended mitigation measures is expected to reduce the significance of aquatic impacts to acceptable levels (See **Section 12** for the full impact assessment).

The Geohydrological Assessment further noted that the deeper groundwater resource generally exhibits low vulnerability to contamination, although shallow groundwater and associated wetland systems are inherently more vulnerable to surface-derived contamination. Appropriate management measures relating to hazardous substances, spill prevention, stormwater management and groundwater protection have therefore been recommended to minimise risks to water resources (See **Section 12** for the full impact assessment).

Section 27(1)(h) Investments already made and to be made by the Water User in respect of the proposed Water Use in question

The proposed Project has progressed through various stages of planning, design and environmental assessment, representing a significant investment by MBLM and the wider project team. To date, investments have been made in project planning, engineering investigations, environmental studies and regulatory processes required to support the proposed development and associated WULA.

The Project has been supported by a range of specialist investigations, including the Aquatic Ecology Impact Assessment, Geohydrological Impact Assessment, Socio-Economic Impact Assessment and other specialist studies undertaken as part of the EIA and WULA processes. These studies have informed the project design, impact assessment and the development of mitigation measures aimed at protecting water resources and ensuring compliance with applicable environmental legislation.

If the required authorisations are obtained, further investment will be made to implement the proposed Project, including the construction of associated infrastructure, municipal services, internal road networks, stormwater management infrastructure and supporting operational facilities. The proposed development will therefore require capital investment beyond the planning and environmental authorisation phases already completed.

Section 27(1)(i) The Strategic Importance of the Water Use/s to be Authorised

The proposed Section 21(c) and Section 21(i) water uses are required for the development of the proposed Project. The proposed Project site has been identified as an urban expansion area within the industrial expansion zone of the MBLM and has therefore been identified as an area where industrial and urban development are encouraged.

From a strategic planning perspective, MBLM seeks to establish a dedicated economic zone to attract investment and maximise the economic returns associated with the existing Mossdustria area. The Project supports this objective and aligns with the Western Cape Government's strategic drive to establish special economic zones and stimulate economic development within the region.

The Project also aligns with broader national and provincial planning objectives. The National Spatial Development Framework identifies the need for inclusive growth within the Mossel Bay area, while the National Development Plan 2030 promotes economic growth, investment, employment creation and the strengthening of links between economic and social development objectives. In addition, the Western Cape Provincial Spatial Development Framework identifies Mossel Bay as a settlement with Very High Growth Potential.

The Project is expected to contribute towards these objectives through industrial expansion, employment creation, increased tourism associated with the motorsport facility, business opportunities for local enterprises and service providers, and improved energy resilience through the proposed 16 MVA Solar PV facility.

Section 27(1)(j) Quality of Water in the Water Resource which may be required for the reserve and for Meeting International Obligations

The proposed Section 21(c) and Section 21(i) water uses do not involve the abstraction or storage of water and are therefore not expected to affect water availability for the Reserve. Potential impacts on water resources are primarily associated with construction and

operational activities, including increased stormwater runoff, erosion, sedimentation and potential deterioration in surface water and groundwater quality.

The Aquatic Ecology Impact Assessment concluded that the proposed development footprint is largely located within disturbed areas and has limited connectivity to functional aquatic systems. The implementation of mitigation measures, including stormwater management controls, erosion prevention measures, rehabilitation of disturbed areas and pollution prevention measures, is expected to minimise impacts on downstream water quality.

The Geohydrological Assessment identified that the deeper groundwater resource generally exhibits low vulnerability to contamination, although shallow groundwater and associated wetland systems are inherently more vulnerable to surface-derived contamination. Appropriate management measures relating to hazardous substances, spill prevention and groundwater protection have therefore been recommended.

The study area is located within a NFEPA sub-catchment associated with the Tweekuilen River system, which contributes to downstream aquatic ecosystems. However, no international obligations, including transboundary water agreements or internationally recognised protected aquatic systems, were identified as being affected by the proposed water uses.

The Geohydrological Assessment further identified numerous groundwater users within the surrounding area. Provided that the recommended mitigation and management measures are implemented, significant impacts on downstream water users or other lawful water users are not anticipated.

Section 27(1)(k) The Probable Duration of any Undertaking for which a Water Use is to be Authorised

The proposed Section 21(c) and Section 21(i) water uses are associated with the construction, operation, and maintenance of the proposed Project components, including the Alternative Energy Area, Motorsports Facility, and Conservation Area. Based on the preliminary implementation programme, statutory approvals are anticipated between May 2027 and June 2027, with detailed engineering design anticipated to be completed by November 2028. Services construction is currently anticipated to commence by November 2030, followed by top structure construction between November 2030 and November 2033, subject to budgeting, project phasing and procurement processes.

The authorised water uses will be required during the construction phase and will continue throughout the operational life of the development. As the application relates to permanent infrastructure associated with conservation, renewable energy and recreational land uses, the water uses are expected to remain in place for the duration of the Project's operational lifespan.

The proposed Project site has been identified as an urban expansion area within the industrial expansion zone of MBLM and forms part of the planned expansion of the Mossdustria area. The development is therefore intended as a long-term investment that will support ongoing industrial, economic and infrastructure development within the area.

11 SUMMARY OF SPECIALIST STUDIES

11.1 Overall Specialist Studies undertaken

The following specialist studies were undertaken as part of the S&EIR Process for the proposed Project:

- Aquatic Ecology Impact Assessment;
- Geohydrology Impact Assessment;
- Terrestrial Ecology Impact Assessment;
- Noise Impact Assessment;
- Avifaunal Impact Assessment;
- Landscape/Visual Impact Assessment;
- Archaeological/Heritage Walkdown Report;
- Palaeontology Desktop Assessment;
- Socio-Economic Impact Assessment;
- Agricultural Compliance Statement;
- Land Use Planning Risk Assessment; and
- Traffic Study.

In terms of the WULA, only the Aquatic Ecology Impact Assessment (Colloty, 2026a) and Geohydrology Impact Assessment are discussed further below. Refer to the EIA Report for further information regarding the other specialist studies.

11.2 Incorporating the Findings from Specialist Studies

The information obtained from the respective specialist studies was incorporated into the WULA Technical Report in the following manner:

- The assumptions and limitations identified in each study were included in **Section 5** above;
- The information was used to complete the profile of the receiving environment (**Section 7**) in a more detailed and site-specific manner;
- A summary of each specialist study is contained in the sub-sections to follow (**Section 11.3** to **Section 11.4** below), focusing on the approach to each study, key findings and conclusions drawn;
- The specialists' impact assessments and the identified mitigation measures were included in the overall project impact assessment contained in **Section 12** below;
- Specialist input was obtained to address comments made by Interested and Affected Parties (I&APs) that related to specific environmental features pertaining to each specialist discipline during the S&EIR Process; and
- Salient recommendations made by the specialists were taken forward to the final Conclusions in **Section 15** below.

11.3 Aquatic Ecology Impact Assessment

A summary of the Aquatic Ecology Impact Assessment (Colloty, 2026a) (contained in **Appendix B1**) follows.

11.3.1 Details of Specialist

The details of the specialists who undertook the Aquatic Ecology Impact Assessment are outlined in **Table 13**.

Table 13: Aquatic Specialist Details

Organisation	EnviroSci (Pty) Ltd
Name	Dr Brian Colloty
Qualification	PhD (Botany – Estuaries & Mangroves)
Affiliation (if applicable)	SACNASP Professional Scientist (Ecological Science - 400268/07)

11.3.2 Objectives of the Study

The following tasks were completed in fulfilment of the terms of reference for this study:

- Delineate wetlands and other aquatic features occurring within and surrounding the study area in accordance with DWS guidelines.
- Identify and classify aquatic ecosystems and determine their hydrogeomorphic (HGM) characteristics.
- Verify the aquatic biodiversity sensitivity assigned by the Screening Tool and assess the aquatic sensitivity of the site.
- Assess the Present Ecological State (PES), ecological integrity, ecological importance and sensitivity (EIS) of identified aquatic features.
- Evaluate the ecosystem services provided by wetlands and aquatic habitats within the study area.
- Determine the potential interaction between the proposed Project and aquatic ecosystems.
- Identify aquatic constraints and provide recommendations to minimise impacts on wetlands and watercourses.

11.3.3 Methodology

The assessment included the following tasks (amongst others):

- Review of relevant legislation, policies, aquatic databases and biodiversity planning tools, including the National Wetland Inventory, NFEPA datasets, WCBSP and the Screening Tool outputs.
- Desktop assessment of hydrology, topography, vegetation, wetlands, catchments and aquatic features occurring within and surrounding the study area.
- Field investigations undertaken during multiple site visits in April 2022, October 2022 and May 2025 to ground-truth desktop information and verify aquatic features.

- Wetland identification and delineation using Department of Water Affairs and Forestry wetland delineation methodologies, including assessment of terrain position, hydromorphic soils, soil wetness indicators and hydrophytic vegetation.
- HGM classification of aquatic systems using the National Wetland Classification System and associated wetland classification protocols.
- Assessment of ecological integrity and PES using WETLAND-IHI and WET-Health methodologies.
- Evaluation of EIS of identified aquatic features and associated catchments.
- Assessment of ecosystem services provided by wetlands using the WET-EcoServices methodology.
- Mapping of aquatic features, regulated areas and aquatic sensitivities in relation to the proposed Project layout.

11.3.4 Key Findings of the Study

11.3.4.1 Aquatic Setting and Sensitivity Verification

The DFFE Screening Tool identified the study area as having Very High aquatic sensitivity, driven by the presence of wetland and aquatic biodiversity features, including wetland CBAs, ESAs and a FEPA sub-catchment. However, following detailed field verification, the specialist determined that the proposed Project footprint is largely located within previously disturbed areas and does not directly affect functional aquatic ecosystems. The aquatic sensitivity of the Project footprint was therefore downgraded to Moderate/Medium sensitivity (**Figure 48**).

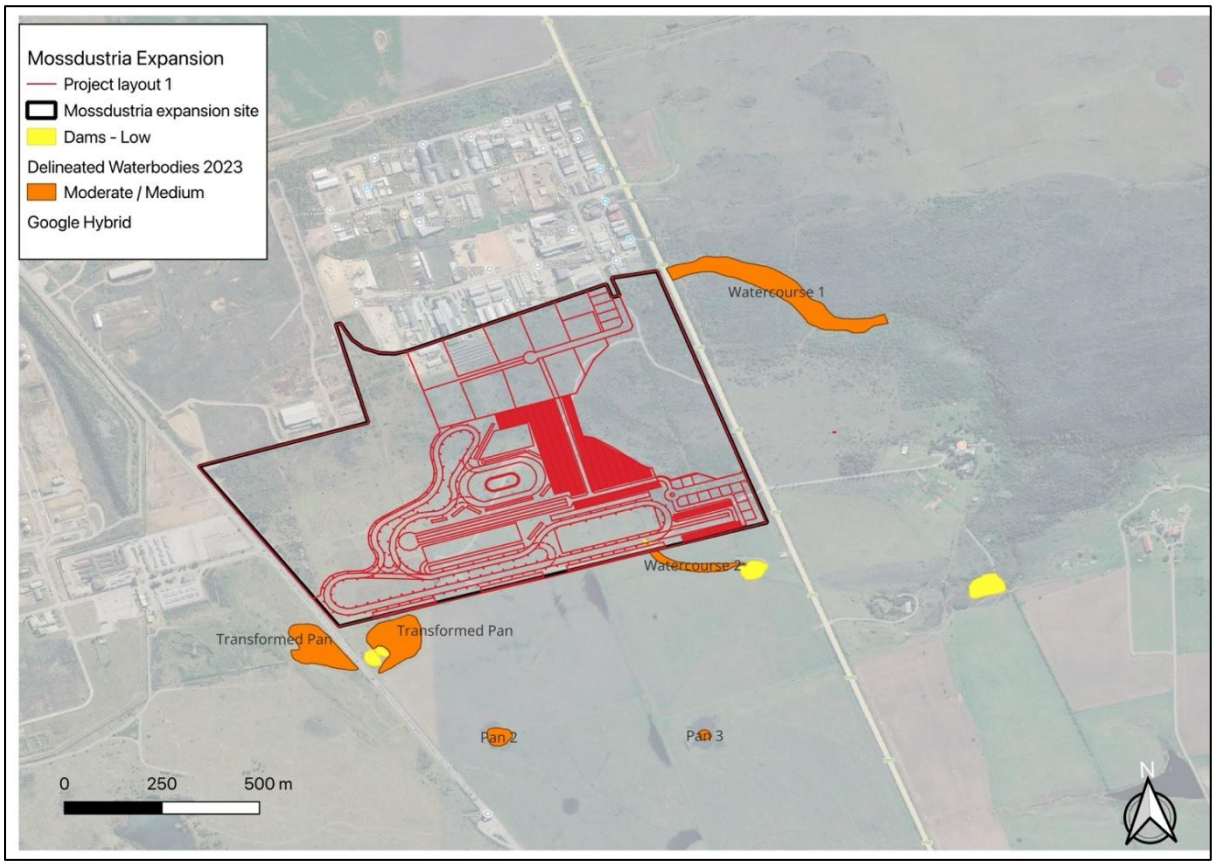

Figure 48: Overall Aquatic Sensitivity in relation to the Project layout (Colloty, 2026a)

11.3.4.2 Aquatic Features Identified

Desktop assessments, including the National Wetland Inventory, biodiversity planning datasets and the Screening Tool outputs, identified a number of wetlands, drainage features and aquatic biodiversity features within the broader study area and surrounding catchment. These findings resulted in the site being assigned a Very High aquatic sensitivity rating and necessitated a detailed aquatic assessment.

During the detailed field investigations undertaken in April 2022, October 2022 and May 2025, the majority of the aquatic features initially identified through desktop mapping were found to occur outside the proposed Project footprint or within highly modified areas influenced by historical agricultural activities, industrial development and stormwater infrastructure.

Although several minor ephemeral drainage lines and watercourse features were identified within the broader landscape, field investigations confirmed that no functional natural wetlands occur within the proposed Project footprint itself. Areas that appeared as watercourses or wetland features on desktop datasets were found to comprise shallow drainage pathways with no distinct instream habitat, no obligate riparian vegetation and limited evidence of wetland functionality. The specialist therefore concluded that these features do not constitute significant natural aquatic systems within the Project area.

The assessment further found that reed-dominated areas associated with stormwater drainage infrastructure were not natural wetlands but rather artificial systems that have developed in response to altered hydrological conditions created by previous development activities. In particular, the reedbeds dominated by *Phragmites australis* and *Typha capensis* occur adjacent to culverts and engineered stormwater channels and are associated with concentrated runoff from the existing Mossdustria development. These systems are indicative of disturbed hydrological conditions and elevated nutrient inputs rather than naturally functioning wetland ecosystems.

Natural aquatic features identified within the broader area comprise three isolated depression wetlands (pans) and two riverine systems associated with the Tweekuilen catchment (**Figure 26** and **Figure 49** illustrates the delineated watercourses found on site). These features occur outside the proposed Project footprint and are sufficiently separated from the proposed infrastructure such that no direct impacts are anticipated.

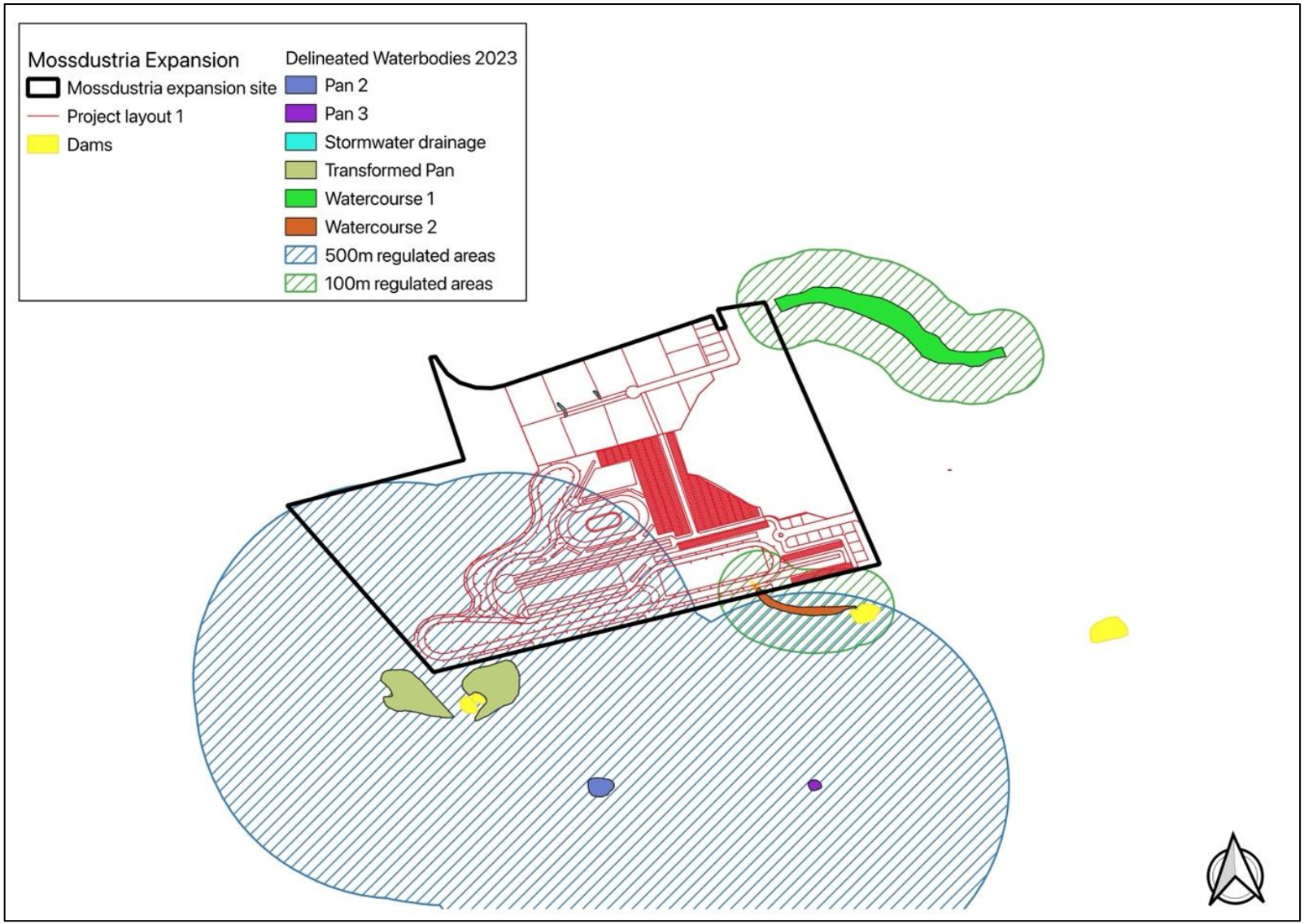

Figure 49: The Delineated Aquatic Features within the PAOI and their regulated zones (Colloty, 2026a)

11.3.4.3 Aquatic Habitat Characteristics

The aquatic environment is characterised by minor ephemeral watercourses, isolated depressions and localised reedbed systems associated with stormwater drainage infrastructure. The reedbed systems are dominated by species such as *Phragmites australis* and *Typha capensis*, which are indicative of disturbed or nutrient-enriched environments. Natural riverine habitats and pan systems support typical indigenous vegetation associated with the Southern Coastal Belt Ecoregion.

No listed aquatic plant species were recorded during the surveys. Although protected amphibian species have previously been recorded within the broader catchment, these were associated with aquatic habitats located beyond the Project footprint.

11.3.4.4 Ecological Condition and Sensitivity

Assessment of the broader aquatic systems indicated that the surrounding watercourses and wetlands are generally in a PES Category D (Largely Modified), with Moderate Ecological Importance and High Ecological Sensitivity at the catchment scale. Localised impacts associated with agriculture, alien invasive vegetation and catchment fragmentation have contributed to the modified condition of these systems.

At the feature scale, all identified pans and watercourses were assessed as having Moderate overall sensitivity, reflecting their ecological functionality despite existing modification. The specialist nevertheless confirmed that these features occur outside the proposed Project footprint and are unlikely to experience direct impacts. **Table 14** summarises the determined PES and EIS for the delineated watercourses.

Table 14: PES/EIS Summary of the Delineated Watercourses (Colloty, 2026a)

Feature Number	HGM Type	PES	EIS	Overall Sensitivity	Buffer as per Macfarlane & Bredin (2017) Model (m)
Pan 2	Pan / Depression	D	Moderate	Moderate	Not applicable as these are beyond the site or fragmented in such a way that no direct impacts are expected
Pan 3	Pan / Depression	D	Moderate	Moderate	
Transformed Pan	Pan / Depression	D	Moderate	Moderate	
Watercourse 1	Riverine	D	Moderate	Moderate	
Watercourse 2	Riverine	D	Moderate	Moderate	

11.3.4.5 Ecosystem Services

The WET-EcoServices assessment found that the identified wetlands and depressions provide relatively limited ecosystem service benefits. Most regulating, supporting, provisioning

and cultural ecosystem services were rated as Very Low. The primary ecological function identified for these systems relates to localised attenuation and temporary storage of surface water.

11.3.5 Impact Assessment

Please refer to **Section 0** for the results from the impact assessment from this study.

11.3.6 Conclusions

The Aquatic Ecology Impact Assessment concluded that although desktop screening tools and biodiversity datasets identified aquatic features and assigned a Very High aquatic sensitivity rating to the broader study area, detailed field investigations confirmed that the proposed Project footprint does not contain significant natural wetland systems or watercourses. Features initially identified through desktop mapping were either located outside the Project footprint or were found to comprise artificial or highly modified drainage features associated with historical land use activities, stormwater infrastructure and previous development. Consequently, the aquatic sensitivity of the Project footprint was verified as being lower than that indicated by the Screening Tool.

The study confirmed the presence of aquatic ecosystems within the broader area, including three depression/pan wetlands and two riverine systems linked to the Tweekuilen River catchment. These systems retain ecological value and perform important hydrological functions; however, they are located outside the Project footprint and are not affected directly by the Project. The aquatic features identified within the broader catchment are generally in a modified ecological condition, reflecting the influence of historical agricultural activities, invasion by alien vegetation and altered hydrological processes.

Based on the findings of the assessment, the specialist concluded that the proposed Project is appropriately located within previously disturbed areas and avoids direct impacts on functional aquatic ecosystems. The specialist is of the opinion that no fatal flaws or aquatic constraints exist that would preclude the proposed Project, provided that the recommended stormwater management, erosion control and aquatic protection measures are incorporated into the EMPr and implemented throughout the Project lifecycle.

11.4 Geohydrology Impact Assessment

A summary of the Geohydrology Impact Assessment (Oberholzer *et al.,* 2026) (contained in **Appendix B2**) follows.

11.4.1 Details of Specialist

The details of the specialists that undertook the Geohydrology Impact Assessment are outlined in **Table 15**.

Table 15: Geohydrologist Specialist Details

Organisation	GEOSS South Africa (Pty) Ltd		
Name	Jana Oberholzer	Lizanne Smit	Julian Conrad
Qualification	BSc (Geo-Environmental Science)	MSc (Natural Sciences: Integrated Water Management)	MSc (Hydrogeology)
Affiliation (if applicable)	SACNASP Candidate Scientist (Earth Science - 171408)	SACNASP Professional Scientist (Earth Science – 126348)	SACNASP Professional Scientist (Earth Science – 400159/05)

11.4.2 Objectives of the Study

The following tasks were completed in fulfilment of the terms of reference for this study:

- Characterise the geohydrological setting of the study area and describe the underlying aquifer systems.
- Assess the importance, sensitivity and vulnerability of groundwater resources within and surrounding the site.
- Determine the potential interaction between groundwater, wetlands and surface water features associated with the site.
- Establish baseline groundwater quality conditions through field investigations and water quality sampling.
- Assess the hydrogeological implications of the proposed Project and associated water uses requiring authorisation under Section 21(c) and (i) of the NWA.
- Identify groundwater-related risks associated with the proposed Project, including impacts on groundwater quality, shallow groundwater flow and wetland systems.
- Provide groundwater management and monitoring recommendations to protect groundwater and associated aquatic resources throughout the project lifecycle.

11.4.3 Methodology

The assessment included the following tasks (amongst others):

- Review of existing groundwater, hydrogeological, geological and climatic information relevant to the study area.
- Assessment of regional groundwater information through interrogation of the National Groundwater Archive (NGA) and Water Use Authorisation and Registration Management System (WARMS) databases to identify nearby groundwater users, boreholes and historical groundwater information.
- Review of regional aquifer yield, groundwater quality and groundwater vulnerability mapping compiled by the Department of Water Affairs and Forestry (DWAF).

- Site investigations undertaken on 29 July 2026, including a hydrocensus, borehole inspections, groundwater level observations and collection of groundwater and surface water samples.
- Installation and logging of a shallow piezometer through hand-auger investigations to evaluate subsurface conditions, shallow groundwater occurrence and infiltration characteristics.
- Collection of groundwater, wetland and surface water samples for laboratory analysis, including inorganic water quality analyses and stable isotope assessments.
- Assessment of groundwater quality against SANS 241:2015 and DWAF (1998) water quality guidelines.
- Evaluation of groundwater-surface water interactions using hydrochemical information, isotope analysis, geological information and observed site conditions.
- Development of a conceptual hydrogeological model describing groundwater occurrence, recharge mechanisms, groundwater flow pathways and the relationship between groundwater and wetland systems.

11.4.4 Key Findings of the Study

11.4.4.1 Hydrogeological Setting

The study found that the site is predominantly underlain by Tertiary-Quaternary loam and sandy loam soils overlying the fractured quartzitic sandstones of the Skurweberg Formation, which forms the principal aquifer within the area. Groundwater occurrence within the Skurweberg Formation is primarily controlled by fractures, joints and weathered zones rather than primary pore spaces. The fractured Skurweberg Formation therefore represents the main groundwater resource beneath the site.

Field investigations identified dense clay-rich material interbedded with very fine sand to a depth of approximately 1.7 meters below ground level (mbgl). The presence of these low-permeability materials is considered important from a hydrogeological perspective as they may restrict vertical infiltration, promote surface runoff and contribute to the development of shallow perched water and wetland conditions.

11.4.4.2 Groundwater Resources and Aquifer Characteristics

The regional groundwater resource is characterised as a fractured aquifer system exhibiting generally low to moderate groundwater potential, with average expected yields ranging between approximately 0.5 and 2.0 L/s. Historical borehole information within the surrounding area indicates considerable variability in borehole yields, reflecting the importance of local fracture development in controlling groundwater occurrence.

Desktop investigations identified numerous groundwater users and boreholes within the surrounding area, highlighting the presence of groundwater-dependent activities in the

broader region. The assessment therefore recognised the importance of protecting groundwater quality within both the local and regional aquifer systems.

11.4.4.3 Groundwater Quality

Groundwater quality investigations revealed notable differences between shallow and deeper groundwater conditions. The shallow groundwater intercepted during the site investigation exhibited relatively fresh water characteristics with electrical conductivity values of approximately 115 mS/m. In contrast, groundwater sampled from the deeper fractured aquifer was found to be highly mineralised, exhibiting elevated salinity, sodium and chloride concentrations (refer to **Table 16**).

Laboratory analyses indicated that the deeper groundwater exceeds several SANS 241 drinking water guideline thresholds and is not suitable for domestic use without treatment (**Table 16**). The groundwater chemistry is characterised by a sodium-chloride hydrochemical signature and reflects an evolved groundwater system that has undergone extensive groundwater-rock interaction and potentially some marine influence associated with the coastal setting of the site.

Table 16: Groundwater quality analysis results according to SANS 241-1:2015

Analyses	HC_BH1	SANS 241-1:2015
Date Sampled	31 Jul 2026	
pH (at 25°C)	7.28	≥5 - ≤9.7 Operational
Conductivity (mS/m) (at 25°C)	1 065.00	≤170 Aesthetic
Total Dissolved Solids (mg/L)	7 220.70	≤1 200 Aesthetic
Turbidity (NTU)	12.10	≤1 Operational; ≤5 Aesthetic
Colour (mg/L as Pt)	<15	≤15 Aesthetic
Langelier Saturation Index (at 25°C)	0.24	
Sodium Adsorption Ratio (at 25°C)	29.38	
Sodium (mg/L as Na)	2 078.00	≤200 Aesthetic
Potassium (mg/L as K)	40.00	
Magnesium (mg/L as Mg)	156.00	
Calcium (mg/L as Ca)	122.00	
Chloride (mg/L as Cl)	3 426.09	≤300 Aesthetic
Free Chlorine (mg/L as Cl)	0.02	≤5 Chronic Health
Sulphate (mg/L as SO_4)	466.05	≤250 Aesthetic; ≤500 Acute Health
Combined Nitrate & Nitrite Nitrogen (as ratio)	0.08	≤1 Acute Health
Nitrate Nitrogen (mg/L as N)	<0.70	≤11 Acute Health
Nitrite Nitrogen (mg/L as N)	<0.05	≤0.9 Acute Health
Ammonia Nitrogen (mg/L as N)	1.34	≤1.5 Aesthetic
Total Alkalinity (mg/L as $CaCO_3$)	351.00	
Total Hardness (mg/L as $CaCO_3$)	944.60	

Analyses	HC_BH1	SANS 241-1:2015
Fluoride (mg/L as F)	1.00	≤1.5 Chronic Health
Aluminium (mg/L as Al)	0.106	≤0.3 Operational
Chromium (mg/L as Cr)	<0.01	≤0.05 Chronic Health
Manganese (mg/L as Mn)	0.634	≤0.1 Aesthetic; ≤0.4 Chronic Health
Iron (mg/L as Fe)	0.705	≤0.3 Aesthetic; ≤2 Chronic Health
Nickel (mg/L as Ni)	<0.05	≤0.07 Chronic Health
Copper (mg/L as Cu)	<0.05	≤2 Chronic Health
Zinc (mg/L as Zn)	<0.05	≤5 Aesthetic
Arsenic (mg/L as As)	0.014	≤0.01 Chronic Health
Selenium (mg/L as Se)	0.035	≤0.04 Chronic Health
Cadmium (mg/L as Cd)	<0.003	≤0.003 Chronic Health
Antimony (mg/L as Sb)	<0.013	≤0.02 Chronic Health
Mercury (mg/L as Hg)	<0.001	≤0.006 Chronic Health
Lead (mg/L as Pb)	<0.01	≤0.01 Chronic Health
Uranium (mg/L as U)	<0.028	≤0.03 Chronic Health
Cyanide (mg/L as CN^-)	<0.01	≤0.2 Acute Health
Boron (mg/L as B)	1.772	≤700 Chronic Health
Barium (mg/L as Ba)	0.057	≤2400 Chronic Health
Total Organic Carbon (mg/L as C)	6.80	≤10 Chronic Health
Charge Balance (%)	-0.81	≥ -5 to ≤ 5 Recommended

11.4.4.4 Groundwater Vulnerability and Sensitivity

The regional groundwater vulnerability assessment classified the majority of the site as having Very Low groundwater vulnerability, with portions of the eastern area classified as Low to Medium vulnerability. This generally low vulnerability is attributed to the protective characteristics of the clay-rich loam and sandy-loam soils that overlie the fractured bedrock aquifer.

However, the specialist emphasised that groundwater vulnerability may increase where the Skurweberg Formation is exposed and where protective soil layers are thin or absent. The assessment further highlighted that shallow groundwater systems and associated wetlands are inherently more vulnerable to contamination than the deeper fractured aquifer and therefore require particular protection from contamination sources.

11.4.4.5 Groundwater and Surface Water Interaction

Stable isotope analyses indicated that both groundwater and surface water within the study area are predominantly derived from meteoric (rainfall) recharge. The isotope results suggest that rainfall represents the primary source of recharge to both the shallow and deeper groundwater systems.

The assessment found that the shallow groundwater and wetland systems are likely influenced by local rainfall, surface runoff and shallow infiltration processes, whereas the deeper groundwater occurs within the fractured Skurweberg aquifer system. Although the sampled water sources share a common meteoric origin, the available data do not demonstrate direct hydraulic connectivity between the shallow groundwater system, wetlands and the deeper groundwater aquifer.

The specialist concluded that shallow perched groundwater conditions may occur locally above low-permeability clay-rich layers, which may contribute to wetland formation and hydrological functioning within lower-lying portions of the site.

11.4.5 Impact Assessment

Please refer to **Section 0** for the results from the impact assessment from this study.

11.4.6 Conclusions

The geohydrological assessment concluded that the proposed Project is located within a hydrogeological environment dominated by a fractured sandstone aquifer associated with the Skurweberg Formation and a shallow near-surface layer of loam, sandy loam and clay-rich material. The assessment confirmed that groundwater recharge is derived predominantly from rainfall and that local hydrogeological conditions include the potential for shallow perched groundwater and groundwater contributions to adjacent wetland systems.

The specialist found that the deeper groundwater system exhibits generally low vulnerability to contamination due to the protective characteristics of the overlying soils, although localised areas of increased vulnerability may occur where the fractured Skurweberg Formation is exposed. The shallow groundwater and wetland systems were identified as more sensitive receptors that require protection from contamination and hydrological disturbance.

The assessment further concluded that no groundwater abstraction is proposed and that the primary groundwater-related considerations for the project relate to the protection of groundwater quality, maintenance of shallow groundwater flow pathways and protection of wetland hydrological functioning. The specialist is of the opinion that these considerations can be effectively managed through the implementation of appropriate stormwater controls, pollution prevention measures, groundwater monitoring and the recommended Groundwater Management Plan. Continued groundwater and wetland monitoring is recommended to verify baseline conditions and identify any unforeseen changes during construction and operation.

12 IMPACT ASSESSMENT

12.1 General

Within the context of the WULA, this section focuses only on the pertinent environmental impacts that could be caused to water resources during the pre-construction, construction, and operational phases of the Project. The other impacts are discussed in the EIA Report.

Note that an 'impact' refers to the change to the environment resulting from an environmental aspect (or activity), whether desirable or undesirable. An impact may be the direct or indirect consequence of an activity.

Potential impacts were identified as follows:

- Impacts identified during the S&EIR Process;
- An appraisal of the Project's activities and proposed infrastructure;
- An assessment of the receiving environments;
- Findings from specialist studies;
- Issues highlighted by environmental authorities; and
- Comments received from I&APs during the public participation process of the S&EIR and WULA Processes.

12.2 Project Activities

In order to understand the impacts related to the Project it is necessary to unpack the activities associated with the Project life-cycle, as done in the sub-sections to follow.

12.2.1 Project Phase: Pre-Construction

Some of the main Project activities, as well as high-level environmental activities, to be undertaken in the pre-construction phase are listed in **Table 17**.

Table 17: Simplified list of activities associated with Pre-Construction Phase

Project Phase: Pre-construction
Project Activities
Detailed engineering design, including road and stormwater infrastructure detailed designs
Detailed geotechnical investigations
Topographical and as-built infrastructure surveys
Procurement process for Contractor
Review Contractor's method statements (as relevant)
The building of a site office and ablution facilities
Confirmation of the location and condition of all structures and infrastructure on the Project site
Determining and documenting the conditions of the roads to be used during construction
Delineation and pegging of infrastructure footprints, servitudes and access routes
Site establishment planning and demarcation of contractor laydown areas, material storage areas and site access points

Project Phase: Pre-construction
Establishment of survey control points and setting out of infrastructure.
High Level Environmental Activities
Appointment of an Environmental Control Officer (ECO).
Environmental induction and awareness training for contractors and site personnel
Diligent compliance monitoring of the EMPr, Environmental Authorisation and other relevant environmental legislation
Pre-construction photographic condition surveys of environmentally sensitive features and adjacent infrastructure
Demarcation of construction footprints, no-go areas and environmentally sensitive areas
Demarcation and establishment of Conservation Area, including creation of Management Plan for the Conservation Area
Other activities as per EMPr for Pre-Construction Phase

12.2.2 Project Phase: Construction

Some of the main Project activities, as well as high-level environmental activities, to be undertaken in the construction phase are listed in **Table 18**.

Table 18: Simplified list of activities associated with Construction Phase

Project Phase: Construction
Project Activities
Site establishment including construction camps, temporary offices, ablutions, laydown areas and material storage areas.
Prepare access roads
Establish construction laydown area
Construction employment
Site clearing (as necessary)
Earthworks, Excavation, levelling and shaping of development platforms
Concrete Works
Mechanical and Electrical Works
Electrical supply
Construction of the industrial expansion area and associated municipal services.
Construction of the motorsport arena and associated infrastructure, including tracks, workshops, showrooms, parking areas, pavilions, ablution facilities and gatehouses.
Construction of the solar PV facility and associated electrical infrastructure.
Construction and upgrading of access roads, internal roads, intersections, traffic circles and parking areas.
Construction of stormwater infrastructure, including pipelines, attenuation ponds and oil separation systems.
Construction of sewer reticulation infrastructure and connection to the existing municipal sewer network.
Construction of potable water reticulation infrastructure and associated bulk water connections.
Installation of electrical reticulation and grid connection infrastructure.
Transportation, storage and handling of construction materials, fuel, equipment and personnel.
Waste generation, storage, handling and disposal associated with construction activities.
Stockpiling
High Level Environmental Activities
Diligent compliance monitoring of the EMPr, Environmental Authorisation, and other relevant environmental legislation
Monitoring of construction activities by the ECO
Dust, erosion, stormwater and pollution management

Project Phase: Construction
Management of waste, hazardous substances and wastewater.
Rehabilitation of disturbed areas not required for permanent infrastructure.
Management of construction traffic and access routes.
Monitoring of impacts on sensitive environmental features and adjacent land uses.
Implement Environmental Management Plan for the Conservation Area
Other activities as per EMPr for Construction Phase

12.2.3 Project Phase: Operation

Some of the main Project activities, as well as high-level environmental activities, to be undertaken in the operational phase are listed in **Table 19**.

Table 19: Simplified list of activities associated with Operational Phase

Project Phase: Operation
Project Activities
Controlling vegetation
Operation of the industrial expansion area and associated industrial activities.
Operation of the motorsport arena, including motorsport events, workshops, showrooms, spectator facilities and parking areas.
Operation of the solar PV facility and associated electrical infrastructure.
Operation and maintenance of roads, parking areas and access infrastructure.
Operation and maintenance of potable water, sewer and stormwater infrastructure.
Operation of attenuation ponds, stormwater management systems and oil separation infrastructure.
Water use, wastewater generation and municipal service consumption by the various development components.
Operation of public facilities, ablutions, commercial activities and tourism-related facilities.
Vehicle access, traffic circulation, parking and spectator movement associated with normal operations and events.
Routine maintenance of infrastructure, buildings, services and landscaped areas.
High Level Environmental Activities
Diligent compliance monitoring of the EMPr, Environmental Authorisation, and other relevant environmental legislation
Implement Environmental Management Plan for the Conservation Area to ensure the conservation area is conserved appropriately
Maintenance and inspection of stormwater, sewer and water infrastructure.
Monitoring and management of pollution risks, including hydrocarbons associated with motorsport activities.
Waste management and housekeeping.
Monitoring of rehabilitation areas and conservation areas.
Ongoing environmental compliance auditing and reporting.
Other activities as per EMPr for Operational Phase

12.3 Environmental Aspects

Environmental aspects are regarded as those components of an organisation's activities, products and services that are likely to interact with the environment and cause an impact.

The environmental aspects that have been identified for the proposed Project, which are linked to the Project activities, are provided in **Table 20**. Note that only high-level aspects are provided.

Table 20: Environmental Aspects associated with Project life-cycle

Project Phase: Pre-construction
Environmental Aspects
Inadequate consultation with relevant stakeholders
Inadequate environmental and compliance monitoring
Poor construction site planning and layout
Site-specific environmental issues not fully understood
Land occupancy by temporary buildings, provisional on-site facilities and storage areas
Poor waste management
Absence of ablution facilities
Traffic and transport associated with specialist investigations, surveying and site preparation activities
Noise generation from survey, testing and investigation activities
Project Phase: Construction
Environmental Aspects
Inadequate environmental and compliance monitoring
Lack of environmental awareness creation
Indiscriminate site clearing
Poor site establishment
Poor management of access and use of access roads
Disruptions to traffic
Air emissions and dust generation from construction activities and vehicle movement
Noise and vibration associated with construction machinery and equipment
Poor transportation practices
Increased traffic and transportation of labour, materials and equipment.
Poor fencing arrangements
Disturbance, compaction and erosion of soils
Excavation, earthworks and alteration of surface topography
Disruptions to existing services
Disturbance of remaining topsoil
Poor management of excavations
Inadequate storage and handling of material
Inadequate storage and handling of hazardous material
Poor maintenance of equipment and plant
Poor management of labour force
Pollution from ablution facilities
Inadequate management of construction camp
Poor waste management practices – hazardous and general solid, liquid
Wastage of water
Poor management of pollution generation potential
Damage to significant flora
Damage to significant fauna
Inadequate stormwater management
Consumption of water, fuel and construction materials.
Increased traffic and transportation of labour, materials and equipment.
Visual intrusion associated with construction activities and temporary infrastructure.
Damage to cultural heritage and palaeontological features (if encountered)
Poor reinstatement and rehabilitation
Failure to comply with mitigation measures specified in the EMPr

Project Phase: Pre-construction
Project Phase: Operation
Environmental Aspects
Inadequate environmental and compliance monitoring
Inadequate management of access, routine maintenance and maintenance works
Inadequate management of invasive alien plants
Inadequate stormwater management
Operation of industrial activities
Operation of the motorsport arena and associated tourism and recreational facilities
Operation of the solar PV facility and associated electrical infrastructure
Increased traffic volumes, vehicle movement and parking activities
Generation of operational noise from motorsport, industrial and associated activities
Atmospheric emissions and dust associated with vehicle movements and racing activities
Stormwater generation and management from developed surfaces
Generation and management of wastewater
Water consumption and utilisation of municipal services
Storage and handling of fuels and hazardous substances
Risk of accidental spills and contamination of soil, surface water and groundwater
Generation and management of general and hazardous waste
Maintenance of infrastructure and landscaped areas
Operation and maintenance of stormwater attenuation ponds and oil separation infrastructure
Failure to comply with health, safety and environmental specifications
Failure to comply with Conservation Area Management Plan, EA and other relevant environmental legislation
Failure to comply with required monitoring measures

12.4 Potentially Significant Environmental Impacts

Environmental Impacts can be defined as the changes to the environment resulting from an environmental aspect, whether desirable or undesirable.

The potentially significant environmental impacts related to water resources that are associated with the Project are listed in **Table 21** below.

Table 21: Potentially Significant Environmental Impacts Associated with the Project

Environmental Factor	Construction Phase Potential Issues / Impacts	Operational Phase Potential Issues / Impacts
Geology and Geohydrology	▪ Deterioration of groundwater quality resulting from accidental spills or leaks of fuels, hydrocarbons, chemicals or other contaminants. ▪ Interception or alteration of shallow groundwater flow through excavation and construction of below-ground infrastructure. ▪ Disturbance of natural recharge and drainage processes through vegetation clearing, earthworks and soil compaction.	▪ Continued risk of groundwater contamination from fuels, hydrocarbons, chemicals and other hazardous substances associated with industrial and motorsport activities. ▪ Localised alteration of shallow groundwater flow in areas occupied by permanent infrastructure. ▪ Reduced groundwater recharge within areas affected by

Environmental Factor	Construction Phase Potential Issues / Impacts	Operational Phase Potential Issues / Impacts
		permanent surface hardening and infrastructure development.
Soil	▪ Disturbance and removal of topsoil during site clearing, excavation and earthworks. ▪ Soil compaction resulting from the movement of construction vehicles, machinery and equipment. ▪ Increased susceptibility of exposed soils to erosion and degradation. ▪ Mixing, loss or deterioration of soil horizons through construction activities. ▪ Localised soil contamination from accidental spills of fuels, oils, chemicals and other hazardous substances. ▪ Permanent loss of soil resources beneath buildings, roads and associated infrastructure	▪ Permanent sealing and loss of soil resources beneath operational infrastructure. ▪ Reduced soil functionality within developed portions of the site. ▪ Soil contamination resulting from hydrocarbon spills, fuel storage, vehicle maintenance activities and hazardous substances associated with industrial and motorsport activities. ▪ Continued soil degradation in areas affected by accidental spills or inappropriate waste management practices.
Surface Water	▪ Increased erosion of exposed soils and disturbed areas resulting from vegetation clearing and earthworks. ▪ Increased sedimentation of downstream drainage features and aquatic habitats due to sediment-laden runoff from construction areas. ▪ Deterioration of surface water quality due to sediment transport and uncontrolled stormwater runoff. ▪ Pollution of surface water resources through accidental spills or leakages of fuels, oils, cement, chemicals, wastewater, and other hazardous substances associated with construction activities.	▪ Alteration of existing surface water runoff patterns due to the establishment of hard surfaces, roads, buildings and associated infrastructure. ▪ Increased stormwater runoff volumes and flow velocities resulting from reduced infiltration across developed areas. ▪ Increased erosion and sediment transport associated with concentrated stormwater discharges. ▪ Deterioration of downstream water quality due to contaminated stormwater runoff. ▪ Pollution of surface water resources through hydrocarbons, oils and other contaminants associated with the industrial and motorsport activities. ▪ Potential indirect impacts on downstream aquatic ecosystems resulting from altered hydrological processes and reduced water quality.
Socio-Economic Environment	▪ Positive Impacts – Direct employment creation. – Indirect and induced employment opportunities. – Increased household income and spending.	▪ Positive Impacts – Sustained employment opportunities. – Long-term economic growth and investment.

Environmental Factor	Construction Phase Potential Issues / Impacts	Operational Phase Potential Issues / Impacts
	– Skills development and transfer. – Increased expenditure within the local economy. – Support for local businesses and suppliers. ▪ Negative Impacts – Construction-related noise, dust and disturbance. – Increased traffic volumes and road safety risks. – Increased pressure on local infrastructure and services. – Potential public health and social risks associated with the influx of workers.	– Increased tourism expenditure associated with the motorsport arena. – Growth of local businesses and enterprise development. – Increased municipal revenues and economic activity. – Improved energy resilience through the solar PV facility. – Increased recreational and community opportunities. ▪ Negative Impacts – Increased traffic volumes associated with operational activities and events. – Increased demand on local infrastructure and municipal services. – Noise nuisance associated with motorsport activities.
Hazardous Substances & Waste	▪ Generation of general construction waste. ▪ Generation of hazardous waste, including waste oils, fuels, and contaminated materials. ▪ Soil contamination resulting from accidental spills or leaks of fuels, oils and hazardous substances. ▪ Surface water and groundwater contamination resulting from improper waste management or accidental spillages. ▪ Health and safety risks associated with the handling and storage of hazardous substances. ▪ Visual and environmental nuisance resulting from poor waste management practices.	▪ Generation of hazardous waste associated with motorsport, workshop, industrial and maintenance activities. ▪ Generation of general waste associated with daily operations and visitors to the motorsport facility. ▪ Soil contamination resulting from spills or leaks of fuels, hydrocarbons, oils and chemicals. ▪ Surface water and groundwater contamination resulting from accidental releases of hazardous substances. ▪ Increased environmental and health risks associated with the storage and handling of hazardous substances. ▪ Pollution resulting from the improper storage, handling or disposal of hazardous and general waste.

The cumulative impacts are discussed in **Section 12.14**.

12.5 Impact Assessment Methodology

The impacts and the proposed management thereof are first discussed in **Section 12.7** to **Section 12.14** below on a qualitative level and thereafter quantitatively assessed by evaluating the nature, extent, magnitude, duration, probability and ultimately the significance of the impacts (refer to methodology provided in **Table 22** below). Where applicable, the

impact assessments and significance ratings provided by the respective specialists are included.

The assessment considers impacts before and after mitigation, where in the latter instance the residual impact following the application of the mitigation measures is determined.

In the case of the specialist studies, some of the impact assessment methodologies deviated from the approach shown in **Table 22** below. However, the quantitative basis for these specialist evaluations of the impacts to specific environmental features still satisfied the intention of the impact assessment.

Table 22: Quantitative Impact Assessment Methodology

Nature (/Status) The project could have a positive, negative or neutral impact on the environment.
Extent ▪ Local - extend to the site and its immediate surroundings. ▪ Regional - impact on the region but within the province. ▪ National - impact on an interprovincial scale. ▪ International - impact outside of SA.
Magnitude Degree to which impact may cause irreplaceable loss of resources. ▪ Low - natural and social functions and processes are not affected or minimally affected. ▪ Medium - affected environment is notably altered; natural and social functions and processes continue albeit in a modified way. ▪ High - natural or social functions or processes could be substantially affected or altered to the extent that they could temporarily or permanently cease.
Duration ▪ Short term - 0-5 years. ▪ Medium term - 5-11 years. ▪ Long term - impact ceases after the operational life cycle of the activity either because of natural processes or by human intervention. ▪ Permanent - mitigation either by natural process or by human intervention will not occur in such a way or in such a time span that the impact can be considered transient.
Probability ▪ Almost certain - the event is expected to occur in most circumstances. ▪ Likely - the event will probably occur in most circumstances. ▪ Moderate - the event should occur at some time. ▪ Unlikely - the event could occur at some time. ▪ Rare/Remote - the event may occur only in exceptional circumstances.
Significance Provides an overall impression of an impact's importance, and the degree to which it can be mitigated. The range for significance ratings is as follows- 0 – Impact will not affect the environment. No mitigation necessary. 1 – No impact after mitigation. 2 – Residual impact after mitigation. 3 – Impact cannot be mitigated.

12.6 Impact Mitigation

Impacts are to be managed by assigning suitable mitigation measures, where the objectives are to:

- Find more environmentally sound ways of executing an activity;
- Enhance the environmental benefits of a proposed activity;
- Avoid, minimise or remedy negative impacts; and
- Ensure that residual negative impacts are within acceptable levels.

Mitigation should strive to abide by the following hierarchy – (1) prevent; (2) reduce; (3) rehabilitate (or remediate); and/or (4) compensate for the environmental impacts. The proposed mitigation of the impacts associated with the Project includes specific measures identified by the technical team (including engineering solutions) and environmental specialists, stipulations of environmental authorities and environmental best practices.

The mitigation measures are outlined in the **Sections 12.7** to **Section 12.14**. However, the EMPr, which is contained **Appendix C**, provides a comprehensive list of mitigation measures for specific elements of the Project and the receiving environment, which extends beyond the impacts evaluated in the WULA Report.

12.7 Soils

12.7.1 Impact Description

The proposed Project has the potential to impact soil resources through vegetation clearing, earthworks, excavation, construction activities and the establishment of permanent infrastructure. These activities may result in the disturbance, compaction, erosion, loss and sealing of soils within the Project footprint.

The study area is dominated by shallow Mispah and Glenrosa soils, with more limited occurrences of Westleigh soils associated with wetter portions of the landscape. The soils generally have low agricultural potential owing to their shallow depth, limited water-holding capacity and restrictions to root development. Despite their low agricultural capability, these soils perform ecological functions and may be vulnerable to degradation if disturbed during construction activities.

Construction activities may result in the removal and compaction of topsoil, increased susceptibility to erosion on exposed surfaces, and the permanent loss of soil resources beneath buildings, roads and other infrastructure. In addition, the movement and storage of materials, vehicles and machinery may further degrade soil quality through compaction and disturbance.

During operation, impacts on soil resources are expected to be associated primarily with the permanent sealing of soils beneath infrastructure and the potential for soil contamination resulting from hydrocarbons, fuels, chemicals and waste associated with industrial and motorsport activities.

12.7.2 Impact Assessment

Table 23 to **Table** 24 contain the results of the impact assessment conducted for the impacts of the Project on soils.

Table 23: Soil Construction Phase Impacts

Environmental Feature	**Soils**
Relevant Alternatives & Activities	Construction activities
Project life-cycle	Construction phase
Potential Aspects & Impacts	**Proposed Management Objectives / Mitigation Measures**
▪ Disturbance and removal of topsoil during site clearing, excavation and earthworks. ▪ Soil compaction resulting from the movement of construction vehicles, machinery and equipment. ▪ Increased susceptibility of exposed soils to erosion and degradation. ▪ Mixing, loss or deterioration of soil horizons through construction activities. ▪ Localised soil contamination from accidental spills of fuels, oils, chemicals and other hazardous substances. ▪ Permanent loss of soil resources beneath buildings, roads and associated infrastructure.	▪ Restrict vegetation clearing and earthworks to the approved Project footprint. ▪ Strip, stockpile and preserve topsoil separately for use during rehabilitation (where applicable). ▪ Limit vehicle and machinery movement to designated access routes to reduce soil compaction. ▪ Implement erosion control measures on exposed surfaces and slopes. ▪ Store fuels, oils and hazardous substances in designated, bunded areas. ▪ Immediately contain and remediate any hydrocarbon or chemical spills.

	+/- Impacts	**Extent**	**Magnitude**	**Duration**	**Probability**	**Significance**
Before Mitigation	-	local	medium-high	short-term	likely	3
After Mitigation	-	local	low	short-term	unlikely	1

Table 24: Soil Operation Phase Impacts

Environmental Feature	**Soils**
Relevant Alternatives & Activities	Operational activities
Project life-cycle	Operation phase
Potential Aspects & Impacts	**Proposed Management Objectives / Mitigation Measures**
▪ Permanent sealing and loss of soil resources beneath operational infrastructure. ▪ Reduced soil functionality within developed portions of the site.	▪ Maintain stormwater management systems to prevent erosion, soil degradation and soil contamination from motorsport operations. ▪ Store fuels, oils and hazardous materials in appropriately bunded areas.

▪ Soil contamination resulting from hydrocarbon spills, fuel storage, vehicle maintenance activities and hazardous substances associated with industrial and motorsport activities. ▪ Continued soil degradation in areas affected by accidental spills or inappropriate waste management practices.	▪ Ensure appropriate waste storage and disposal practices to prevent soil contamination. ▪ Monitor and repair leaks from vehicles, equipment, tanks and associated infrastructure.

	+/- Impacts	Extent	Magnitude	Duration	Probability	Significance
Before Mitigation	-	local	medium-high	long-term	likely	3
After Mitigation	-	local	low	long-term	unlikely	1

12.8 Geohydrology

The findings from the Geohydrological Impact Assessment (Oberholzer *et al.,* 2026) follow. The specialist report is contained in **Appendix B2**.

12.8.1 Impact Description

The proposed Project is underlain by loam and sandy loam soils overlying the fractured sandstone aquifer of the Skurweberg Formation, which represents the principal groundwater-bearing formation in the area. The site also contains shallow clay-rich layers which may locally restrict infiltration, promote surface runoff and contribute to the development of perched groundwater and wetland systems. Groundwater vulnerability across most of the site is generally rated as very low to low; however, the shallow groundwater and wetland systems are considered inherently more vulnerable to contamination and hydrological disturbance.

The proposed Project does not require groundwater abstraction. However, construction and operation activities may influence groundwater and wetland systems through the alteration of surface runoff patterns, interception of shallow groundwater, modification of drainage pathways, and accidental releases of hydrocarbons, fuels, chemicals or other contaminants. These activities may affect groundwater quality, shallow groundwater movement and the hydrological functioning of nearby wetlands and watercourses.

The principal geohydrological impacts therefore relate to potential contamination of groundwater resources, alteration of wetland flow and water quality, and the interception or diversion of shallow groundwater associated with excavation and below-ground infrastructure.

12.8.2 Impact Assessment

Table 25 to **Table** 27 contain the results of the impact assessment which were obtained from the Geohydrology Impact Assessment (Oberholzer *et al.,* 2026).

Table 25: Geohydrology Impact on wetland flow and water quality (Oberholzer *et al.,* 2026)

Impact on wetland flow and water quality	
Potential impact and risk:	Negative – reduced runoff and alteration of shallow flow pathways and contaminant mobilisation during construction could affect wetland hydrology and water quality.
Nature of impact:	Direct
Extent and duration of impact:	Local, short- to medium-term, primarily during construction, with potential long-term effects.
Consequence of impact or risk:	Moderate
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	The impact is unlikely to cause any irreplaceable loss of the wetland if appropriate mitigation measures are implemented.
Degree to which the impact can be reversed:	The impact is largely reversible.
Consequence of impact or risk:	Alteration of wetland hydrological functioning and potential deterioration of water quality.
Significance rating of impact prior to mitigation	**Moderate**
Degree to which the impact can be avoided:	Partially avoidable
Degree to which the impact can be managed:	Fully manageable
Degree to which the impact can be mitigated:	Fully mitigatable
Proposed mitigation:	Natural drainage pathways towards the wetland must be maintained where practicable. Appropriate stormwater, erosion and sediment-control measures must be implemented during construction. Fuels, chemicals and other potentially contaminating materials must be appropriately stored and handled and spills must be promptly contained and remediated. The wetland should be regularly inspected during construction for changes in flow, sedimentation and water quality, with corrective measures implemented where required.
Residual impacts:	Localised alteration of wetland flow and water quality may remain during ongoing operation.
Significance rating of impact after mitigation	**Very low**

Table 26: Geohydrology Impact of groundwater quality deterioration

Impact of groundwater quality in the deeper Skurweberg formation	
Potential impact and risk:	Negative – accidental spills or releases of hydrocarbons, chemicals or other contaminants during construction could infiltrate through the subsurface and potentially affect groundwater quality within the fractured Skurweberg Formation.
Nature of impact:	Direct
Extent and duration of impact:	Local to regional, Long term >15 years but less than <30.
Consequence of impact or risk:	Moderate
Probability of occurrence:	Unlikely
Degree to which the impact may cause irreplaceable loss of resources:	The impact is highly unlikely to cause any irreplaceable loss of resources.
Degree to which the impact can be reversed:	The impact is partially reversible.
Consequence of impact or risk:	Potential deterioration of groundwater quality within the deeper fractured-rock aquifer.
Significance rating of impact prior to mitigation	**Moderate**
Degree to which the impact can be avoided:	Fully avoidable
Degree to which the impact can be managed:	Fully manageable
Degree to which the impact can be mitigated:	Fully mitigatable
Proposed mitigation:	Good construction practices and due diligence must be followed to prevent the release of hydrocarbons, chemicals and other potential contaminants. Hazardous substances should be stored appropriately and spill response equipment should be available on site
Residual impacts:	Decreased groundwater quality.
Significance rating of impact after mitigation	**Very low**

Table 27: Geohydrology Impact of interception or alteration of shallow groundwater flow

Interception or alteration of shallow groundwater flow	
Potential impact and risk:	Negative – excavation and below-ground infrastructure may intercept or divert shallow groundwater and perched water, potentially altering the flow of water towards nearby wetlands and drainage features.
Nature of impact:	Direct
Extent and duration of impact:	Local, short- to medium-term during construction.
Consequence of impact or risk:	Moderate
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	The impact is unlikely to cause irreplaceable loss of groundwater or wetland resources if shallow groundwater pathways are appropriately managed.

Interception or alteration of shallow groundwater flow	
Degree to which the impact can be reversed:	The impact is partially reversible.
Consequence of impact or risk:	Localised alteration of shallow groundwater flow and potential reduction of groundwater contribution to nearby wetland areas.
Significance rating of impact prior to mitigation	**Moderate**
Degree to which the impact can be avoided:	Partially avoidable
Degree to which the impact can be managed:	Partially manageable
Degree to which the impact can be mitigated:	Partially mitigatable
Proposed mitigation:	Excavations and below-ground infrastructure must be designed to minimise disruption of shallow groundwater flow. Where shallow groundwater is encountered, natural flow pathways must be maintained or reinstated following construction. Unnecessary disturbance of low-permeable clay layers should be avoided and any required dewatering should be avoided where possible. Areas surrounding the major excavations should be inspected for changes in groundwater levels and wetland flow. Remedial measures should be implemented where significant changes are observed.
Residual impacts:	Localised alteration of shallow groundwater flow may remain in areas directly affected by permanent infrastructure.
Significance rating of impact after mitigation	**Moderate to Low**

12.9 Surface Water

The findings from the Aquatic Ecology Impact Assessment (Colloty, 2026a) follow. The specialist report is contained in **Appendix B1**.

12.9.1 Impact Description

The proposed Project may affect surface water resources through changes to existing stormwater runoff patterns, increased erosion and sediment transport, and potential deterioration of water quality. The Project will introduce additional hard surfaces and infrastructure that may increase the volume and rate of surface water runoff and alter local drainage characteristics.

During construction and operation, exposed surfaces and disturbed areas may result in increased sediment generation and erosion, which could affect downstream watercourses and aquatic habitats. There is also a risk of surface water contamination associated with the storage, handling, and accidental spillage of fuels, oils, hydrocarbons, cement, and other

pollutants. Contaminated runoff has the potential to negatively affect the ecological functioning and water quality of downstream aquatic systems.

Although the proposed Project footprint avoids direct impacts on identified natural aquatic features, indirect impacts on the receiving surface water environment may occur if stormwater, sediment, and potential pollutants are not appropriately managed.

12.9.2 Impact Assessment

Table 28 to **Table 31** contain the results of the impact assessment which were obtained from the Aquatic Ecology Impact Assessment (Colloty, 2026a). The results of the DWS Risk Assessment Matrix (RAM) are contained in **Table 32**.

Table 28: Surface Water Impact 1 - Habitat fragmentation - Direct during construction and operation phases (Colloty, 2026a)

Environmental Impact:	Activity/Aspect & Impact Source:	Proposed Mitigation:
Based on the information collected during the assessment, that contained and substantiated by national databases, it is unlikely any impact will occur within the aquatic environment	Due to the nature of the project this will persist in the long term into the operational phase impact. The past disturbance and avoidance of any aquatic environment that has already occurred would not be exacerbated during the proposed activities	All alien cover must be removed and then be allowed to fully recover and revegetate with climax fynbos species. These areas should remain free form alien plants and be monitored for any erosion. Where soils are slow to revegetate, these areas should be grubbed and planted with species suited to the region. In adhering to the above, habitat fragmentation within, and more importantly the connection with intact habitats still surrounding the site, will be promoted, assuming that the areas around the site will remain undeveloped in the near future. i.e. integrated into regional conservation plans for the municipality.

Impact Significance							
	Extent	**Duration**	**Severity**	**Reversibility**	**Irreplaceable Loss**	**Probability**	**Impact Significance**
Without Mitigation:	Site (1)	Long-term (4)	Moderate (4)	Completely (0)	Partly (0.5)	Definite (5)	Moderate (47.5)
With Mitigation:	Site (1)	Long-term (4)	Minor (2)	Completely (0)	Partly (0.5)	Probable (3)	Low (22.5)
Potential to Mitigate: Moderate potential / easy to mitigate				***Assessment Confidence:*** Complete			

Table 29: Surface Water Impact 2 - Surface water runoff patterns - Direct during operation phase (Colloty, 2026a)

Environmental Impact	Activity/Aspect & Impact Source:	Proposed Mitigation:
The clearing of dense vegetation that will be replaced with hard surfaces has the ability to increase run-off due to reduced vegetation cover / change in vegetation cover. By intercepting and slowing precipitation hitting the ground, vegetation substantially reduces the volume and rate of runoff. This then prevents soil erosion.	Due to the nature of the project this will persist in the long term in the operational phase impact.	No run-off should be allowed to leave the site directly. Any flows should be contained using the detention ponds as part of a stormwater management plan, especially if any runoff may contain any hydrocarbons that may be generated by the raceway.

Impact Significance							
	Extent	**Duration**	**Severity**	**Reversibility**	**Irreplaceable Loss**	**Probability**	**Impact Significance**
Without Mitigation:	Site (1)	Long-term (4)	Moderate (4)	Completely (0)	Partly (0.5)	Definite (5)	Moderate (47.5)
With Mitigation:	Site (1)	Long-term (4)	Minor (2)	Completely (0)	Partly (0.5)	Probable (3)	Low (22.5)
Potential to Mitigate: Moderate potential / easy to mitigate				***Assessment Confidence:*** Complete			

Table 30: Surface Water Impact 3: Increase in sedimentation and erosion – Direct during operation phase (Colloty, 2026a)

Environmental Impact:	Activity/Aspect & Impact Source:	Proposed Mitigation:
Increase amount of siltation in downstream areas when increased volumes of water are generated by the site.	Due to the nature of the project this will persist in the long term in the operational phase impact.	Suitable stormwater management must be included such as the stormwater detention ponds. This will trap sediment, coupled to revegetation of bare soil areas with local plant species.

Impact Significance							
	Extent	**Duration**	**Severity**	**Reversibility**	**Irreplaceable Loss**	**Probability**	**Impact Significance**
Without Mitigation:	Site (1)	Long-term (4)	Moderate (4)	Completely (0)	Partly (0.5)	Definite (5)	Moderate (47.5)
With Mitigation:	Site (1)	Long-term (4)	Minor (2)	Completely (0)	Partly (0.5)	Probable (3)	Low (22.5)
Potential to Mitigate: Moderate potential / easy to mitigate				***Assessment Confidence:*** Complete			

Table 31: Surface Water Impact 4: Water Quality Impacts - Indirect during construction phase (Colloty, 2026a)

Environmental Impact:	Activity/Aspect & Impact Source:	Proposed Mitigation:
This impact is mostly related to use of substances such as cement, oils and hydrocarbons during the construction process and, to a limited degree, solid waste.	Due to the nature of the project this will persist in the short term in the construction phase.	Due care to prevent accidental leakage of pollutants (e.g. oil, fuel, cement), must be an utmost priority during the construction phase and operational phases of the raceway in particular Proper solid waste disposal (e.g. bins, no littering or burning policy and the maintenance of ablution facilities, including the disposal of liquid and hazardous waste at a licensed waste disposal site must be adhered to by the contractors. No re-fuelling of construction vehicles or maintenance activities to occur proximate to the watercourse near the site.

Impact Significance							
	Extent	**Duration**	**Severity**	**Reversibility**	**Irreplaceable Loss**	**Probability**	**Impact Significance**
Without Mitigation:	Site (1)	Long-term (4)	Moderate (4)	Completely (0)	Partly (0.5)	Definite (5)	Moderate (47.5)
With Mitigation:	Site (1)	Long-term (4)	Minor (2)	Completely (0)	Partly (0.5)	Probable (3)	Low (22.5)
Potential to Mitigate: Moderate potential / easy to mitigate				***Assessment Confidence:*** Complete			

Table 32: DWS RAM (Colloty, 2026)

Phase	Activity	Impact	Potentially affected watercourses			Intensity of Impact on Resource Quality					Overall Intensity (max = 10)	Spatial scale (max = 5)	Duration (max = 5)	Severity (max = 20)	Importance rating (max = 5)	Consequence (max = 100)	Likelihood (Probability) of impact	Significance (max = 100)	Risk Rating	Confidence level
						Abiotic Habitat (Drivers)			Biota (Responses)											
			Name/s	PES	Overall Watercourse Importance	Hydrology	Water Quality	Geomorph	Vegetation	Fauna										
CONSTRUCTION	Physical Disturbance of Aquatic Systems	Potential impact on wetlands, however works will only take place within the 500m regulated areas	Wetland_Pans	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
	Changes to local hydrological regimes	Impact as a result of concentrated flows due to stormwater runoff	Wetland_Pans	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
	Potential impacts on water quality	Increased runoff may result in erosion and downstream sedimentation	Wetland_Pans	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
		Accidental spills such as fuels, oils and or chemicals from construction plant or works areas (concrete & cement)	Wetland_Pans	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
OPERATIONAL	Changes to local hydrological regimes	Impact as a result of concentrated flows due to stormwater runoff	Wetland_Pans	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
	Potential impacts on water quality	Increased runoff may result in erosion and downstream	Wetland_Pans	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High

		sedimentation																			
		Accidental spills such as fuels, oils and or chemicals from construction plant or works areas (concrete & cement)	Wetland_Pans	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
									1												
DECOMMISSIONING	Physical Disturbance of Aquatic Systems	Potential impact on wetlands, however works will only take place within the 500m regulated areas	Wetland_Pans	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
	Changes to local hydrological regimes	Impact as a result of concentrated flows due to stormwater runoff	Wetland_Pans	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
	Potential impacts on water quality	Increased runoff may result in erosion and downstream sedimentation	Wetland_Pans	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
		Accidental spills such as fuels, oils and or chemicals from construction plant or works areas (concrete & cement)	Wetland_Pans	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High

Phase	Activity	Impact	Potentially affected watercourses			Intensity of Impact on Resource Quality					Overall Intensity (max = 10)	Spatial scale (max = 5)	Duration (max = 5)	Severity (max = 20)	Importance rating (max = 5)	Consequence (max = 100)	Likelihood (Probability) of impact	Significance (max = 100)	Risk Rating	Confidence level
						Abiotic Habitat (Drivers)			Biota (Responses)											
			Name/s	PES	Overall Watercourse Importance	Hydrology	Water Quality	Geomorph	Vegetation	Fauna										
CONSTRUCTION	Physical Disturban	Potential impact on	All	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High

	ce of Aquatic Systems	watercourses 1 & 2, however works will only take place within the 100m regulated areas																				
	Changes to local hydrological regimes	Impact as a result of concentrated flows due to stormwater runoff	All	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
	Potential impacts on water quality	Increased runoff may result in erosion and downstream sedimentation	All	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
		Accidental spills such as fuels, oils and or chemicals from construction plant or works areas (concrete & cement)	All	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
OPERATIONAL	Changes to local hydrological regimes	Impact as a result of concentrated flows due to stormwater runoff	All	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
	Potential impacts on water quality	Increased runoff may result in erosion and downstream sedimentation	All	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
		Accidental spills such as fuels, oils and or chemicals from construction plant or works areas	All	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High

		(concrete & cement)																			
											1										
DECOMMISSIONING	Physical Disturbance of Aquatic Systems	Potential impact on watercourses 1 & 2, however works will only take place within the 100m regulated areas	All	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
	Changes to local hydrological regimes	Impact as a result of concentrated flows due to stormwater runoff	All	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
	Potential impacts on water quality	Increased runoff may result in erosion and downstream sedimentation	All	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High
		Accidental spills such as fuels, oils and or chemicals from construction plant or works areas (concrete & cement)	All	D	Moderate	0	0	0	0	0	**0**	1	1	**2**	**3**	**6**	20%	**1,2**	**L**	High

12.10 Hazardous Substances & Waste

12.10.1 Impact Description

The proposed Project has the potential to generate both hazardous and general waste during the construction and operational phases. Construction activities may result in waste streams including building rubble, packaging materials, scrap materials, waste oils, fuels, and other construction-related wastes. In addition, the handling, storage, and use of fuels, hydrocarbons, chemicals, and hazardous substances during construction may create a risk of accidental spills, leaks, or contamination of the receiving environment.

During operation, hazardous substances and waste may be generated through the operation of the motorsport arena, industrial facilities, workshops, vehicle maintenance activities, fuel storage facilities and associated infrastructure. These activities may result in the generation of waste oils, hydrocarbons, contaminated materials, hazardous chemicals and general waste. If not appropriately managed, hazardous substances and waste have the potential to contaminate soils, surface water, groundwater and surrounding habitats, as well as create health and safety risks.

Overall, the primary impacts associated with hazardous substances and waste relate to the generation of hazardous and general waste, accidental spills and leaks, contamination of environmental resources, and the improper storage, handling or disposal of hazardous substances and waste materials.

12.10.2 Impact Assessment

Table 33 to
Table 34 contain the results of the impact assessment conducted for the impacts of the Project on hazardous substances and waste.

Table 33: Hazardous Substances & Waste Construction Phase Impacts

Environmental Feature	Hazardous Substances & Waste
Relevant Alternatives & Activities	Storage and use of hazardous substances & generation of waste
Project life-cycle	Construction phase
Potential Aspects & Impacts	**Proposed Management Objectives / Mitigation Measures**
▪ Generation of general construction waste. ▪ Generation of hazardous waste, including waste oils, fuels, and contaminated materials. ▪ Soil contamination resulting from accidental spills or leaks of fuels, oils and hazardous substances.	▪ Store fuels, oils and hazardous substances in designated bunded areas. ▪ Maintain spill kits on site and ensure personnel are trained in spill response procedures. ▪ Immediately contain and clean up all spills and leaks. ▪ Segregate hazardous and general waste streams.

▪ Surface water and groundwater contamination resulting from improper waste management or accidental spillages. ▪ Health and safety risks associated with the handling and storage of hazardous substances. ▪ Visual and environmental nuisance resulting from poor waste management practices.	▪ Dispose of all waste at appropriately licensed waste disposal facilities. ▪ Prohibit the burning and unlawful disposal of waste on site. ▪ Inspect storage areas regularly for signs of leaks or damage.

	+/- Impacts	Extent	Magnitude	Duration	Probability	Significance
Before Mitigation	-	local	medium	medium-term	moderate	3
After Mitigation	-	local	low	short-term	unlikely	1

Table 34: Hazardous Substances & Waste Operation Phase Impacts

Environmental Feature	Hazardous Substances & Waste
Relevant Alternatives & Activities	Storage and use of hazardous substances & generation of waste
Project life-cycle	Operation phase
Potential Aspects & Impacts	**Proposed Management Objectives / Mitigation Measures**
▪ Generation of hazardous waste associated with motorsport, workshop, industrial and maintenance activities. ▪ Generation of general waste associated with daily operations and visitors to the motorsport facility. ▪ Soil contamination resulting from spills or leaks of fuels, hydrocarbons, oils and chemicals. ▪ Surface water and groundwater contamination resulting from accidental releases of hazardous substances. ▪ Increased environmental and health risks associated with the storage and handling of hazardous substances. ▪ Pollution resulting from the improper storage, handling or disposal of hazardous and general waste.	▪ Store hazardous substances in accordance with applicable safety and environmental requirements. ▪ Maintain bunding around fuel storage and hazardous substance storage areas. ▪ Implement hazardous waste and general waste management procedures. ▪ Ensure hazardous waste is collected and disposed of by appropriately authorised service providers. ▪ Implement spill prevention and spill response procedures for all motorsport, workshop and industrial activities. ▪ Regularly inspect fuel storage areas, pipelines, equipment and infrastructure for leaks. ▪ Maintain adequate waste storage facilities and ensure routine waste removal. ▪ Train operational personnel in hazardous substance handling and emergency response procedures. ▪ Implement adequate stormwater management procedures in accordance with the stormwater management plan.

	+/- Impacts	Extent	Magnitude	Duration	Probability	Significance
Before Mitigation	-	local	medium-high	long-term	likely	3
After Mitigation	-	local	low	long-term	unlikely	2

Residual Risk	Although a residual impact remains, it is associated with the ongoing storage, handling and use of fuels, hydrocarbons and other hazardous substances required for the operation of the industrial facilities and motorsport arena. While the implementation of appropriate storage, handling, spill prevention and emergency response measures substantially reduces the likelihood and consequence of contamination incidents, the risk cannot be completely eliminated due to the nature of the activities undertaken on site. The residual impact is therefore considered to be of low significance, localised in extent and manageable through the continued implementation of environmental management measures.

12.11 Existing Structures and Infrastructure

12.11.1 Impact Description

The proposed Project is located within an area characterised by existing industrial, commercial and service infrastructure associated with the Mossdustria Industrial Area, PetroSA, the Gourika Power Plant and associated municipal infrastructure. Construction and operation of the Project have the potential to place additional demands on existing infrastructure and services, whilst also introducing new infrastructure that must integrate with the existing built environment.

During construction, activities may temporarily affect existing infrastructure through increased construction traffic, utility connections and works undertaken in proximity to existing services. During operation, the Project may result in increased utilisation of road infrastructure, municipal services and associated utilities. However, the Project includes receiving confirmation from the MBLM that the existing infrastructure has the capacity for the proposed Project and is located adjacent to an established industrial area where infrastructure already exists.

Overall, the primary impacts associated with existing structures and infrastructure relate to temporary disruption of existing infrastructure during construction, increased demand on existing infrastructure and services during operation, and the integration of the proposed Project with the existing built environment.

12.11.2 Impact Assessment

Table 35 to
Table 36 contain the results of the impact assessment conducted for the impacts of the Project on existing structures and infrastructure.

Table 35: Existing Structures and Infrastructure Construction Phase Impacts

Environmental Feature	Existing structures and infrastructure
Relevant Alternatives & Activities	Construction activities

Project life-cycle	Construction phase
Potential Aspects & Impacts	**Proposed Management Objectives / Mitigation Measures**
▪ Temporary disruption or damage to existing services and utilities during earthworks and construction activities. ▪ Temporary disruption to access routes and existing infrastructure during construction. ▪ Increased pressure on existing road and service infrastructure due to construction traffic and workforce activities. ▪ Potential conflicts with existing underground and above-ground infrastructure during installation of new services.	▪ Identify and record existing services and infrastructure. ▪ Conform to requirements of relevant service providers and infrastructure custodians (e.g., Eskom, Sasol, Telkom, etc.). ▪ Ensure access to infrastructure is always available to service providers. ▪ Immediately notify service providers of disturbance to services. Rectify disturbance to services, in consultation with service providers. Maintain a record of all disturbances and remedial actions on site. ▪ Implement measures to protect existing infrastructure from accidental damage during construction

	+/- Impacts	**Extent**	**Magnitude**	**Duration**	**Probability**	**Significance**
Before Mitigation	-	local	low	short-term	moderate	2
After Mitigation	-	local	low	short-term	unlikely	1

Table 36: Existing Structures and Infrastructure Operation phase Impacts

Environmental Feature	**Existing structures and infrastructure**
Relevant Alternatives & Activities	Operation activities
Project life-cycle	Operation phase
Potential Aspects & Impacts	**Proposed Management Objectives / Mitigation Measures**
▪ Increased demand on existing municipal and service infrastructure. ▪ Increased utilisation of road infrastructure and associated services. ▪ Potential service interruptions if infrastructure is not adequately maintained or upgraded. ▪ Permanent integration of new industrial, motorsport and solar infrastructure within the existing built environment.	▪ Ensure that all infrastructure upgrades recommended by the engineering and traffic assessments are implemented prior to operation. ▪ Maintain infrastructure in accordance with approved operational and maintenance plans. ▪ Monitor infrastructure performance and implement corrective measures where deficiencies are identified. ▪ Ensure adequate capacity is available to support the operational requirements of the Project. ▪ Coordinate future infrastructure expansion with the relevant service providers and authorities.

	+/- Impacts	**Extent**	**Magnitude**	**Duration**	**Probability**	**Significance**
Before Mitigation	-	local	medium	Long-term	Almost certain	2
After Mitigation	-	local	low	Long-term	likely	1

12.12 Social Environment

The findings from the Socio-Economic Impact Assessment (Kempthorne & Sondwana, 2023) follow.

12.12.1 Impact Description

The proposed Project has the potential to result in a range of positive and negative socio-economic impacts during both the construction and operational phases. Positive impacts are primarily associated with employment creation, skills development, increased household income, economic stimulation, business development, tourism growth and investment within the Mossel Bay area. The Project is also expected to contribute towards industrial expansion, recreational opportunities and improved energy security through the establishment of the solar PV facility.

Potential negative socio-economic impacts may arise from construction-related disturbance, increased traffic volumes, pressure on local infrastructure and services, noise, dust, and potential public health risks associated with the influx of workers. During operation, the motorsport arena may generate noise impacts and increased traffic associated with events, while the Project may also contribute to changes in land use character and local development patterns.

Overall, the primary socio-economic impacts relate to employment creation, economic growth, tourism and business development, skills transfer, improved energy resilience, increased demand for infrastructure and services, and temporary construction- and operational-related nuisance impacts.

12.12.2 Impact Assessment

Table 37 and **Table 38** contain a summary of the results of the impact assessment that was undertaken in the Socio-Economic Impact Assessment (Kempthorne & Sondwana, 2023). For further detail on the impact assessment, refer to the EIA Report.

Table 37: Summary of Socio-Economic Construction Phase Impacts

Construction Phase Impacts									
Impact	**Mitigation Measures / Monitoring Requirements**								
Temporary Impact on Production and Local Economy (GVA)	▪ The developer should encourage the contractor to increase local procurement practices and promote the employment of people from local communities, as far as feasible, to maximise the benefits to the local economies. ▪ The developer should engage with local authorities and business organisations to investigate the possibility of procuring construction materials, goods, and products from local suppliers. ▪ The Environmental Compliance Officer will create a Monitoring and Evaluation Programme, which will be monitored by the holder of the EA. This will ensure that the mitigation measures proposed will be adhered to and monitored.								
	Nature	**Extent**	**Duration**	**Intensity**	**Probability**	**Confidence**	**Reversibility**	**Replicability**	**Significance**
Without Mitigation	+	Regional (3)	Short to medium-term (2)	Medium-High (8)	Highly Likely (4)	High	Benefits are sustained only over project's lifespan	Yes	Medium (52)
With Mitigation	+	Regional (3)	Short to medium-term (2)	High (10)	Highly Likely (4)	High	Benefits are sustained only over project's lifespan	Yes	Medium (60)
Impact	**Mitigation Measures / Monitoring Requirements**								
Temporary Impact on Employment Provision	▪ Co-ordinate with the local municipality and relevant labour unions to inform the local labour force about the proposed project and the jobs that can potentially ensue. ▪ Establish a local skills desk in Mossel Bay to determine the potential skills that could be sourced in the area. ▪ Recruit local labour as far as feasible. ▪ Employ labour-intensive methods in construction where feasible. ▪ Sub-contract to local construction companies, particularly SMMEs and BBBEE compliant enterprises, where possible. ▪ Use local suppliers where feasible and arrange with the local SMMEs to provide transport, catering, and other services to the construction crews. ▪ Set clear expectations with contractors to promote fair recruitment of both women and men for suitable construction roles, and avoid unnecessary barriers that exclude women. ▪ Provide a safe, respectful working environment through a code of conduct that prohibits discrimination, harassment and gender-based violence, with simple reporting and follow-up procedures. ▪ Ensure basic gender-sensitive facilities and conditions on site, including appropriate PPE, safe sanitation and secure transport arrangements for all workers.								

Construction Phase Impacts									
	▪ Offer basic training and on-the-job learning opportunities that are open to women as well as men, helping to improve longer-term employability in the construction sector. ▪ The Environmental Compliance Officer will create a Monitoring and Evaluation Programme, which will be monitored by the holder of the EA. This will ensure that the mitigation measures proposed will be adhered to and monitored.								
	Nature	**Extent**	**Duration**	**Intensity**	**Probability**	**Confidence**	**Reversibility**	**Replicability**	**Significance**
Without Mitigation	+	Regional (3)	Short to medium term (2)	Medium-High (8)	Highly Likely (4)	High	Benefit terminated with end of construction	Yes	Medium (52)
With Mitigation	+	Regional (3)	Short to medium term (2)	High (10)	Highly Likely (4)	High	Benefit terminated with end of construction	Yes	Medium(60)
Impact	**Mitigation Measures / Monitoring Requirements**								
Temporary Impact on Household Income	▪ Recruit local labour as far as feasible. ▪ Employ labour-intensive methods in construction where feasible. ▪ Sub-contract to local construction companies, particularly SMMEs and BBBEE compliant enterprises, where possible ▪ Use local suppliers where feasible and arrange with the local SMMEs to provide transport, catering, and other services to the construction crews. ▪ The Environmental Compliance Officer will create a Monitoring and Evaluation Programme, which will be monitored by the holder of the EA. This will ensure that the mitigation measures proposed will be adhered to and monitored.								
	Nature	**Extent**	**Duration**	**Intensity**	**Probability**	**Confidence**	**Reversibility**	**Replicability**	**Significance**
Without Mitigation	+	Regional (3)	Short to medium term (2)	Medium-High (8)	Highly Likely (4)	High	Benefit terminated with end of construction	Yes	Medium (52)
With Mitigation	+	Regional (3)	Short to medium term (2)	High (10)	Highly Likely (4)	High	Benefit terminated with end of construction	Yes	Medium(60)
Impact	**Mitigation Measures / Monitoring Requirements**								

Construction Phase Impacts									
Temporary Impact on noise, dust, and pollution	▪ Implement suitable dust management and prevention measures during the construction phase. ▪ Normal working hours(07H00-17H00) should be adhered to at all times, and changes to these times should be communicated in advance. ▪ The Environmental Compliance Officer will create a Monitoring and Evaluation Programme, which will be monitored by the holder of the EA. This will ensure that the mitigation measures proposed will be adhered to and monitored.								
	Nature	**Extent**	**Duration**	**Intensity**	**Probability**	**Confidence**	**Reversibility**	**Replicability**	**Significance**
Without Mitigation	-	Regional (3)	Short to medium term (2)	Medium-High (8)	Definite (5)	High	Impact terminated with end of construction	Yes	High (65)
With Mitigation	-	Regional (3)	Short to medium term (2)	Medium (6)	Highly Likely (4)	High	Impact terminated with end of construction	Yes	High (44)
Impact	**Mitigation Measures / Monitoring Requirements**								
Sustainable Impact on Traffic Flows Along Access Routes	▪ Mitigation measures as per the traffic study (refer to Appendix B of the Civil Engineering Report contained in **Appendix E**, the EIA Report and the EMPr contained in **Appendix C**).								
	Nature	**Extent**	**Duration**	**Intensity**	**Probability**	**Confidence**	**Reversibility**	**Replicability**	**Significance**
Without Mitigation	-	Site (2)	Long-term (4)	Low-Medium (4)	Likely (3)	High	Issue sustained over project lifespan	Yes	Low (3)
With Mitigation	-	Site (2)	Long-term (4)	Low (2)	Likely (3)	High	Issue sustained over project lifespan	Yes	Low (24)
Impact	**Mitigation Measures / Monitoring Requirements**								
Impact on HIV/ Aids, STDs and Tuberculosis in Local Area due to	▪ Assess, in consultation with the local municipality, whether nearby towns and settlements have the capacity to accommodate the anticipated number of construction workers, and consider a well-managed construction camp if local capacity is inadequate, to minimise unmanaged interaction and associated HIV, TB, and STI/STD risks.								

Construction Phase Impacts	
Presence of Construction Workers.	▪ Require contractors to implement a locals-first recruitment policy for semi- and low-skilled positions to reduce the number of non-resident workers and associated social and health risks, including the transmission of HIV, TB, and STIs/STDs. ▪ Establish a Monitoring Forum before construction, including community representatives, Councillors, farmers, and the contractor, to oversee construction activities, monitor HIV, TB, and STI/STD-related risks, and track implementation of mitigation measures. ▪ Develop and enforce a construction-phase code of conduct, in consultation with the Monitoring Forum, that clearly prohibits high-risk behaviour, including sexual exploitation, harassment, and discrimination against people living with HIV, TB, or STIs/STDs, with sanctions for non-compliance that remain consistent with labour legislation. ▪ Implement a comprehensive HIV/AIDS, TB, and STI/STD awareness programme for all workers at induction and through regular toolbox talks, covering prevention, symptoms, testing, treatment, and the importance of adherence. ▪ Facilitate confidential voluntary counselling and testing (VCT) for HIV, together with regular TB symptom screening and sexual health awareness, in partnership with local health facilities, and ensure clear referral pathways for diagnosis and treatment. ▪ Ensure free, discreet access to condoms at the construction site, worker accommodation, and key local venues, coupled with ongoing education to encourage correct and consistent use and reduce the risk of HIV and STI/STD transmission. ▪ Manage and monitor worker movement on and off site through organised transport, and allow non-local workers to return home regularly, for example on weekends or agreed cycles, thereby limiting the formation of risky, transient relationships that may increase the transmission of HIV, TB, and STIs/STDs. ▪ Prohibit non-essential overnight stays on site, except for critical or security staff, to support effective management of worker behaviour and reduce the potential for unregulated, high-risk interactions with nearby communities. ▪ The Environmental Compliance Officer will create a Monitoring and Evaluation Programme, which will be monitored by the holder of the EA. This will ensure that the mitigation measures proposed will be adhered to and monitored.

	Nature	Extent	Duration	Intensity	Probability	Confidence	Reversibility	Replicability	Significance
Without Mitigation	-	Regional (3)	Short Term (1) for the community as a whole Long Term (4) for individuals who may be affected by HIV/	Medium (6)	Likely (3)	High	Issue remains long term	Yes	Medium (30) for community as a whole Medium (39) may be affected by HIV/ AIDS and TB

Construction Phase Impacts									
			AIDS and TB						
With Mitigation	-	Regional (3)	Short Term (1) for the community as a whole Long Term (4) for individuals who may be affected by HIV/ AIDS and TB	Low-Medium (4)	Possible (2)	High	Issue remains long term	Yes	Low (16) for community as a whole Low (22) may be affected by HIV/ AIDS and TB

Table 38: Summary of Socio-Economic Operation Phase Impacts

Operation Phase Impacts									
Impact	**Mitigation Measures / Monitoring Requirements**								
Sustainable Impact on Production and Local Economy (GVA)	▪ The developer of the proposed development should be encouraged to, as far as possible, procure materials, goods and products required for the operation and maintenance of the facility from local suppliers to increase the positive impact in the local economy. ▪ The Environmental Compliance Officer will create a Monitoring and Evaluation Programme, which will be monitored by the holder of the EA. This will ensure that the proposed mitigation measures are adhered to and monitored.								
	Nature	**Extent**	**Duration**	**Intensity**	**Probability**	**Confidence**	**Reversibility**	**Replicability**	**Significance**
Without Mitigation	+	Regional (3)	Long-term (4)	Medium (4)	Highly Likely (4)	High	Benefits are sustained only over project's lifespan	Yes	Medium (44)

Operation Phase Impacts									
With Mitigation	+	Regional (3)	Long-term (4)	Medium-High (8)	Highly Likely (4)	High	Benefits are sustained only over project's lifespan	Yes	Medium-High (60)
Impact	**Mitigation Measures / Monitoring Requirements**								
Sustainable Impact on Employment Provision	▪ Where possible, local labour should be considered for employment so as to increase the positive impact on the local economy. ▪ As far as possible, local small and medium enterprises should be approached to investigate the opportunities for supplying inputs required for the maintenance and operation of the development. ▪ Adopt and enforce a clear gender equity and non-discrimination policy, with zero tolerance for harassment and gender based violence. ▪ Use fair, transparent, skills-based recruitment and promotion processes, and set internal goals to increase women's participation across suitable operational roles. ▪ Provide targeted training and mentoring for women to support entry into, and progression within, operational and supervisory positions. ▪ Ensure safe, supportive working conditions for all staff, including appropriate facilities, safe transport where relevant, and confidential grievance mechanisms. ▪ Regularly monitor workforce data by gender and engage with employees to identify barriers, then adjust policies and practices to improve gender equity over time. ▪ The Environmental Compliance Officer will create a Monitoring and Evaluation Programme, which will be monitored by the holder of the EA. This will ensure that the mitigation measures proposed will be adhered to and monitored.								
	Nature	**Extent**	**Duration**	**Intensity**	**Probability**	**Confidence**	**Reversibility**	**Replicability**	**Significance**
Without Mitigation	+	Regional (3)	Long-term (4)	Low-medium (4)	Highly Likely (4)	High	Benefits are sustained only over project's lifespan	Yes	Medium (44)
With Mitigation	+	Regional (3)	Long-term (4)	Medium (6)	Highly Likely (4)	High	Benefits are sustained only over project's lifespan	Yes	Medium (52)
Impact	**Mitigation Measures / Monitoring Requirements**								

Operation Phase Impacts									
Sustainable Impact on Household Income	▪ Where possible, the local labour supply should be considered for employment opportunities to increase the positive impact on the area's economy. ▪ As far as feasible, local small and medium enterprises should be approached to investigate the opportunities for supply inputs required for the maintenance and operation of the facilities. ▪ The Environmental Compliance Officer will create a Monitoring and Evaluation Programme, which will be monitored by the holder of the EA. This will ensure that the mitigation measures proposed will be adhered to and monitored.								
	Nature	**Extent**	**Duration**	**Intensity**	**Probability**	**Confidence**	**Reversibility**	**Replicability**	**Significance**
Without Mitigation	+	Regional (3)	Long-term (4)	Low (2)	Highly Likely (4)	High	Benefits are sustained only over project's lifespan	Yes	Medium (36)
With Mitigation	+	Regional (3)	Long-term (4)	Low-medium (4)	Highly Likely (4)	High	Benefits are sustained only over project's lifespan	Yes	Medium (44)
Impact	**Mitigation Measures / Monitoring Requirements**								
Sustainable Landscape & Visual Impact Assessment	▪ Mitigation measures as per the Landscape/Visual Impact Assessment (refer to the EIA Report and the EMPr contained in **Appendix C**).								
	Nature	**Extent**	**Duration**	**Intensity**	**Probability**	**Confidence**	**Reversibility**	**Replicability**	**Significance**
Without Mitigation	Neutral	Regional (3)	Long-term (4)	Low-Medium (2)	Possible (2)	High	Issue sustained over project lifespan	No: Affected environment is irreplaceable.	Low (18)
With Mitigation	Neutral	Regional (3)	Long-term (4)	Low (2)	Improbable (1)	High	Issue sustained over project lifespan	No: Affected environment is irreplaceable.	No impact (9)
Impact	**Mitigation Measures / Monitoring Requirements**								

Operation Phase Impacts	
Sustainable Impact on Mossel Bay Tourism	▪ Mossel Bay Tourism should update their marketing media to include the motorsport racing as an activity. ▪ Mossel Bay Tourism should actively market Mossel Bay as a destination for motorsport racing in order to attract sponsors, race companies, etc. ▪ There should be engagement with broader tourism organisations, such as Wesgro to assist in promoting motorsport. ▪ For tourism to make even greater contributions to regional economies, close cooperation is required between key regional role players such as the business community via business chambers, provincial and local government, and local communities. ▪ An effective regional tourism organisation that has as its goals as sustainable tourism development is important. It could help promote the region, initiate new regional projects, share information, and improve coordination among industry leaders. ▪ Cooperation between the public and private sectors could ensure natural environment protection, leading to a more attractive and marketable region. ▪ In order to maximise the tourism benefits that flow from motor sport events and activities in the region, there needs to be joint working between the motor sport venues and tourism related businesses ▪ The Environmental Compliance Officer will create a Monitoring and Evaluation Programme, which will be monitored by the holder of the EA. This will ensure that the mitigation measures proposed will be adhered to and monitored.

	Nature	Extent	Duration	Intensity	Probability	Confidence	Reversibility	Replicability	Significance
Without Mitigation	+	Regional (3)	Long-term (4)	Medium (6)	Likely(3)	High	Benefits are sustained only over project's lifespan	Yes	Medium (39)
With Mitigation	+	Regional (3)	Long-term (4)	Medium-High (8)	Highly Likely (4)	High	Benefits are sustained only over project's lifespan	Yes	Medium-High (60)

Impact	Mitigation Measures / Monitoring Requirements
Sustainable Impact on Alternative Energy Supply	▪ No mitigation measures required

	Nature	Extent	Duration	Intensity	Probability	Confidence	Reversibility	Replicability	Significance
Without Mitigation	+	Site (2)	Long-term (4)	High (10)	Definite (5)	High	Benefits are sustained only over	Yes	High (80)

Operation Phase Impacts									
							project's lifespan		
With Mitigation	+	Site (2)	Long-term (4)	High (10)	Definite (5)	High	Benefits are sustained only over project's lifespan	Yes	High (80)

Impact	Mitigation Measures / Monitoring Requirements
Sustainable Impact on Local Business Development in Mossel Bay	▪ Mossel Bay Local Municipality, provincial and national government (Department of Economic Development and Department of Small Business Development) should offer start-up incentives for emerging entrepreneurs, especially those who want to start their own businesses in the industrial area. ▪ Local governments could organise platforms where representatives of local businesses could come, network with each other, exchange good practices and ideas, and identify ways of supporting each other. Within the hubs, new initiatives related to innovation and sustainability could be initiated and promoted. ▪ The Department of Economic Development and Department of Small Business Development in Mossel Bay and the local government in Mossel Bay should dedicate spaces where local businesses could come and promote themselves and interact with customers and business partners. ▪ The Environmental Compliance Officer will create a Monitoring and Evaluation Programme, which will be monitored by the holder of the EA. This will ensure that the mitigation measures proposed will be adhered to and monitored.

	Nature	Extent	Duration	Intensity	Probability	Confidence	Reversibility	Replicability	Significance
Without Mitigation	+	Regional (3)	Long-term (4)	Medium-High (8)	Definite (5)	High	Benefits are sustained only over project's lifespan	Yes	High (75)
With Mitigation	+	Regional (3)	Long-term (4)	High (10)	Definite (5)	High	Benefits are sustained only over project's lifespan	Yes	High (85)

Impact	Mitigation Measures / Monitoring Requirements
Sustainable Impact on Mossdustria	▪ No mitigation measures required

Operation Phase Impacts									
	Nature	**Extent**	**Duration**	**Intensity**	**Probability**	**Confidence**	**Reversibility**	**Replicability**	**Significance**
Without Mitigation	+	Site (2)	Long-term (4)	Low-Medium (4)	Likely (3)	High	Benefits are sustained only over project's lifespan	Yes	Medium (30)
With Mitigation	+	Site (2)	Long-term (4)	Low-Medium (4)	Likely (3)	High	Benefits are sustained only over project's lifespan	Yes	Medium (30)

12.13 "No-Go" Impacts

The "no-go option" is the alternative of not implementing the activity/development. The "no-go option" also provides the baseline against which the impacts of other alternatives are compared.

The "no-go option" needs to be considered in light of the Project motivation (**Section 2**) and the implications outlined in **Section 13.6**. The implications of the "no-go option" are discussed in **Section 13.6** below. While the 'no-go option' eliminates the potential environmental impacts of the proposed Project, it also precludes the realisation of the benefits associated with the construction and operation of the proposed Project.

Potentially significant environmental impacts were identified for the Project, including noise impacts, terrestrial biodiversity impacts and traffic impacts (amongst others). Based on the specialists' findings, these impacts can be mitigated to a satisfactory level. This included optimising the layout to include a 15ha conservation area to conserve the more natural vegetation found on site, namely the Proteoid Fynbos Thicket. All the mitigation measures required to mitigate the impacts to a satisfactory level are contained in the EMPr (**Appendix C**).

In light of the above, the Project is preferred over the 'no-go option', provided that the management measures outlined in the EIA Report and EMPr are successfully implemented.

12.14 Cumulative Impacts

12.14.1 Introduction

A cumulative impact, in relation to an activity, means the past, current and reasonably foreseeable future impact of an activity, considered together with the impact of activities associated with that activity that in itself may not be significant, but may become significant when added to the existing and reasonably foreseeable impacts eventuating from similar or diverse activities.

According to the International Finance Corporation (IFC) Good Practice Handbook (Cardinale & Greig, 2013), cumulative impacts are context-specific and encompass a broad spectrum of effects across different spatial and temporal scales. The spatial area of influence encompasses the geographical area impacted by the Project. The timescale over which the Project is likely to cause impacts includes the construction and operational phases of these activities.

The potential cumulative impacts in relation to the water resources are listed in **Section 12.14.3** and **Section 12.14.4** below, based on the current understanding of the Project and the receiving environment, which includes the findings of the specialist studies. The adverse cumulative impacts are addressed through the management measures contained in the EMPr.

12.14.2 Past, Current and Reasonably Foreseeable Projects and Activities

Negative cumulative impacts can be identified by combining the potential adverse environmental implications of the Project with the impacts of projects and activities that have occurred in the past, are currently occurring, or are proposed in the future within the Project's area of influence. It is noted that the accurate characterisation of the future state of the Project Area is inherently speculative to an extent, due to the dynamic nature of future decisions related to land use (e.g., PetroSA gas fields viability for future production), water use (consumptive, waste-related and encroachments), protection of aquatic biological resources, etc.

The following is noted in terms of past, current and reasonably defined/foreseeable third-party projects within the Project's area of influence:

- The St Blaize development occurs on RE of Portion 7 of Farm 255 and the future expansion of this development occurs directly south of this proposed Project. The St Blaize development is a Global Business Services Campus including (amongst others) the development of the reception, retail, medical, restaurants, offices, etc., and parking area, as well as the road upgrades required for access from the N2 and Herbertsdale road;
- PetroSA occurs directly west of the proposed Project site. It is noted that the PetroSA gas field has not been delivering processable volumes of gas and there is an expectation of substantial job losses should this trend continue;
- The existing Mossdustria Industrial Area occurs directly north of the Project site;
- According to the MBLM IDP (2025-2026), the Project site forms part of the Mossdustria Special Expansion Zone (refer to Figure 51); and
- The ReedValley venue occurs across the R327 to the east of the Project site. ReedValley is a wine estate and entertainment venue that combines fine wine, food, and live entertainment with a countryside setting.

Figure 50 below shows the Project site in relation to surrounding proposed/current developments.

Figure 50: Project site in relation to surrounding proposed/current developments (MBLM, 2026)

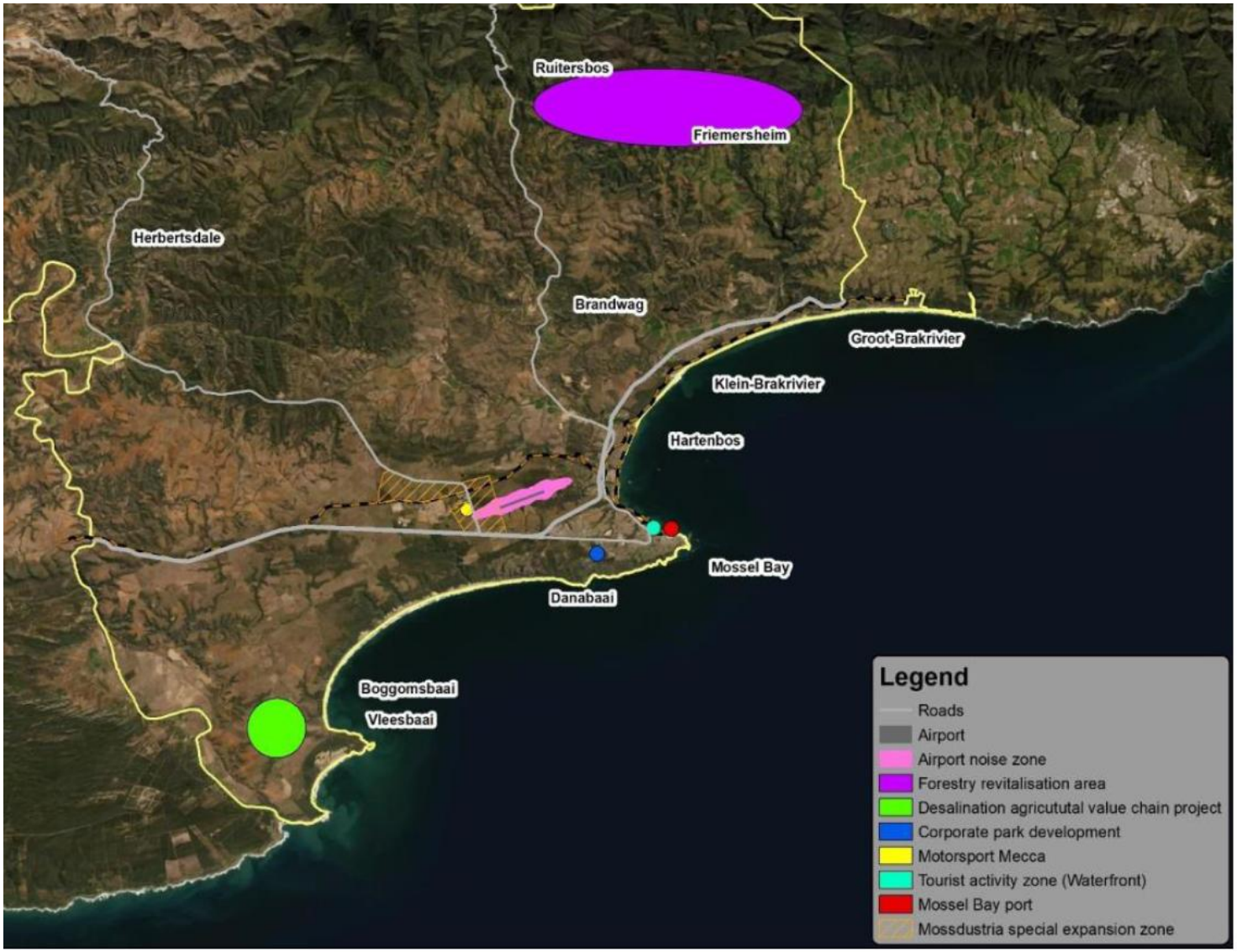

Figure 51: Proposed Project site in relation to the Mossdustria special expansion zone (MBLM, 2025)

12.14.3 Negative Cumulative Impacts

12.14.3.1 Aquatic Biodiversity

The evaluation of cumulative impacts from the Aquatic Ecology Impact Assessment (Colloty, 2026a) (refer to the report contained in **Appendix B1**) is presented below.

Environmental Impact:			Activity/Aspect & Impact Source:		Proposed Mitigation:		
The cumulative impacts are related to the loss of any aquatic habitats			Due to the nature of the project, this will persist in the long term in the operational phase impact.		Ideally, all areas rated as HIGH should be excluded from the Project footprint. Construction must be limited to the footprint only to minimise secondary disturbance, thus reducing the size of the areas that require revegetation to a minimum.		
Impact Significance							
	Extent	**Duration**	**Severity**	**Reversibility**	**Irreplaceable Loss**	**Probability**	**Impact Significance**
Without Mitigation:	Site (1)	Long-term (4)	Moderate (4)	Completely (0)	Partly (0.5)	Definite (5)	Moderate (47.5)
With Mitigation:	Site (1)	Long-term (4)	Minor (2)	Completely (0)	Partly (0.5)	Probable (3)	Low (22.5)
Potential to Mitigate: Moderate potential / easy to mitigate				***Assessment Confidence:*** Complete			

12.14.3.2 Geohydrology

The evaluation of cumulative impacts from the Geohydrology Impact Assessment (Oberholzer *et al.,* 2026) (refer to the report contained in **Appendix B2**) is presented below.

The Geohydrological Assessment considered the potential cumulative effects of the Project on groundwater resources, shallow groundwater systems and associated wetlands. The assessment found that cumulative impacts may arise through the combined effects of land transformation, increased hardened surfaces, stormwater infrastructure, excavation activities and the potential release of contaminants associated with construction and operational activities. Existing and foreseeable industrial and commercial development within the broader Mossdustria area may contribute to similar pressures on local groundwater resources and hydrological processes. The assessment recognised that shallow groundwater and wetland systems are inherently more vulnerable to surface-derived contamination and disturbance than the deeper fractured-rock aquifer.

The specialist identified the cumulative alteration of wetland flow and water quality as a potential impact associated with multiple construction activities and increased hardened areas that may collectively alter runoff patterns, shallow flow pathways and the movement of sediment or contaminants towards wetlands. Similarly, repeated or multiple contaminant releases associated with development activities could cumulatively affect groundwater quality within the deeper

Skurweberg Formation aquifer if not appropriately managed. The assessment also found that multiple excavations, roads, services and other infrastructure may collectively alter shallow groundwater flow pathways and reduce natural hydrological connectivity between recharge areas and nearby wetlands.

The Geohydrological Assessment concluded that these cumulative impacts can be effectively managed through the implementation of appropriate stormwater management measures, protection of natural drainage pathways, pollution prevention measures, groundwater and wetland monitoring programmes and careful management of excavation activities. Following the implementation of the recommended mitigation measures, cumulative impacts on wetland hydrological functioning, groundwater quality and shallow groundwater flow are expected to be low to negligible.

12.14.3.3 Socio-Economic

The evaluation of cumulative impacts from the Socio-Economic Impact Assessment (Kempthorne & Sondwana, 2023) (refer to the EIA Report for further detail) is summarised below.

The Socio-Economic Impact Assessment identified a number of potential cumulative adverse socio-economic impacts that may arise when the Project is considered together with existing and foreseeable development within the broader area. Increased economic activity and development may contribute to additional pressure on municipal infrastructure and services, including transportation networks, water supply, sanitation services and other public infrastructure. Cumulative increases in traffic volumes may also result in greater congestion and travel delays on sections of the surrounding road network if infrastructure upgrades are not implemented timeously.

The concentration of development activities within the area may also contribute to cumulative nuisance impacts, including increased noise, dust and visual intrusion experienced by surrounding receptors. Furthermore, the influx of construction workers and job seekers associated with multiple developments may place additional pressure on available housing, community facilities and social services. The assessment also notes the potential for increased health and safety risks associated with growing population movements and economic activity within the area.

Notwithstanding these potential adverse effects, the assessment found that the identified cumulative socio-economic impacts are generally capable of being managed through appropriate planning, infrastructure provision and the implementation of the recommended mitigation measures. In addition, the assessment concluded that the positive cumulative impacts are expected to provide substantial long-term benefits and the overall cumulative socio-economic effect of the Project is considered to be positive.

12.14.4 Positive Cumulative Impacts

The Socio-Economic Impact Assessment found that the proposed Project, together with existing and reasonably foreseeable developments within the broader Mossdustria area, has the potential to generate significant cumulative socio-economic benefits. The combined effect of ongoing industrial expansion, commercial investment and tourism-related activities is expected to contribute to increased employment opportunities during both the construction and operational phases, resulting in improved household incomes and enhanced economic resilience within surrounding communities.

The Project is also expected to contribute cumulatively to local economic growth through increased expenditure, procurement opportunities and demand for goods and services. In combination with other existing and planned development initiatives in the area, the Project may support the growth of local businesses and SMMEs, promote skills development and capacity building, and stimulate further investment within the Mossel Bay region. The motorsport component of the development is further anticipated to contribute to increased visitor numbers and tourism-related expenditure, providing additional benefits to the local hospitality, retail and service sectors.

Overall, the assessment concludes that the cumulative positive socio-economic impacts associated with employment creation, economic diversification, business development, tourism stimulation and improved economic activity are expected to result in a net positive contribution to the local and regional economy.

13 ANALYSIS OF ALTERNATIVES

13.1 Introduction

Alternatives are the different ways in which the Project can be executed to ultimately achieve its objectives. Examples could include carrying out a different type of action, choosing an alternative location or adopting a different technology or design for a project. This section presents the Project's alternatives, as considered during the EIA Phase of the S&EIR Process which informs the layout used in the WULA Process.

13.2 Project Location Alternatives

No location alternatives were considered for the proposed Project. This is primarily because a key component of the proposed Project involves the expansion of the existing Mossdustria industrial area, which necessitates its location adjacent to the current industrial footprint (refer to **Figure 2**Figure 2). The proposed site is situated on municipally owned land, enhancing the financial feasibility of the development, and is strategically located in close proximity to the N2, providing suitable access and connectivity.

During the early planning stages, it was identified that the proposed motorsport arena has the potential to generate elevated noise levels. Consequently, locating this component adjacent to an established and expanding industrial area was considered the most appropriate land use option. The proposed site and surrounding area have been identified for industrial expansion in the MBLM IDP (MBLM, 2025), which supports the intended land use (**Figure 52**). Furthermore, rezoning the site and adjacent properties for industrial purposes will help prevent potentially incompatible land uses, such as residential development, from encroaching into the area in the future. The proposed industrial expansion area is intended to consolidate industrial development within a defined region and support large-scale employment creation and economic growth within the municipality.

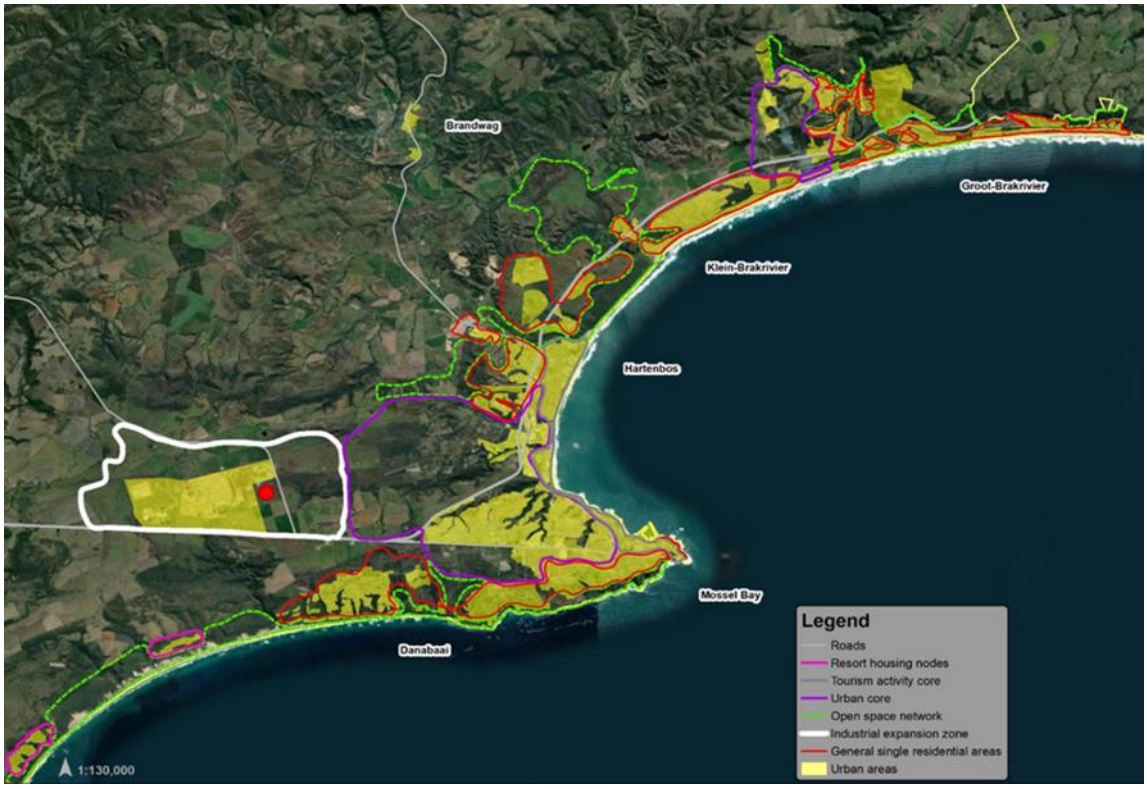

Figure 52: Proposed industrial expansion zone (Project site shown by the red dot) (MBLM, 2025)

13.3 Land Use Alternatives (Type of Activity)

No alternative land use options were considered for the proposed Project, as each of the four project components addresses a specific identified need and serves a distinct purpose within the broader development concept. The expansion of the existing Mossdustria industrial area is proposed in response to the shortage of available industrial stands within the MBLM, with the provision of additional industrial land expected to attract investment, stimulate economic growth and create long-term employment opportunities.

The proposed motorsport arena has been identified by the MBLM as a strategic project aimed at promoting tourism and supporting local economic development through the creation of both direct and indirect employment opportunities. Similarly, the renewable energy facility is proposed to contribute towards addressing the current national electricity generation constraints by providing a reliable PV energy source for the development, while also enabling the supply of electricity to the national grid.

In addition, a conservation area has been incorporated into the development layout to protect a remnant patch of critically endangered Mossel Bay Shale Renosterveld located within the northeastern portion of the site. Due to the ecological importance and conservation status of this vegetation, alternative land uses were not considered appropriate for this area. The conservation area will be managed in accordance with a site-specific management plan to ensure the long-term protection and appropriate management of this sensitive habitat.

13.4 Design / Layout Alternatives

Several layout alternatives were considered during the project planning phase and were refined through consultation with the relevant specialists and commenting authorities. The preferred layout has been designed to balance the financial viability of the proposed Project with the need to avoid and protect environmentally sensitive areas, particularly the critically endangered Mossel Bay Shale Renosterveld located on portions of the site.

The layout alternatives were developed in response to the environmental sensitivity profile of the site, as identified through specialist studies. The north-eastern portion of the site was identified as being highly sensitive, with sensitivity decreasing towards the west where the site becomes increasingly disturbed (Colloty, 2026b) (**Figure 53**). Consequently, the preferred layout seeks to avoid and protect the most sensitive areas while accommodating development within areas of lower environmental sensitivity.

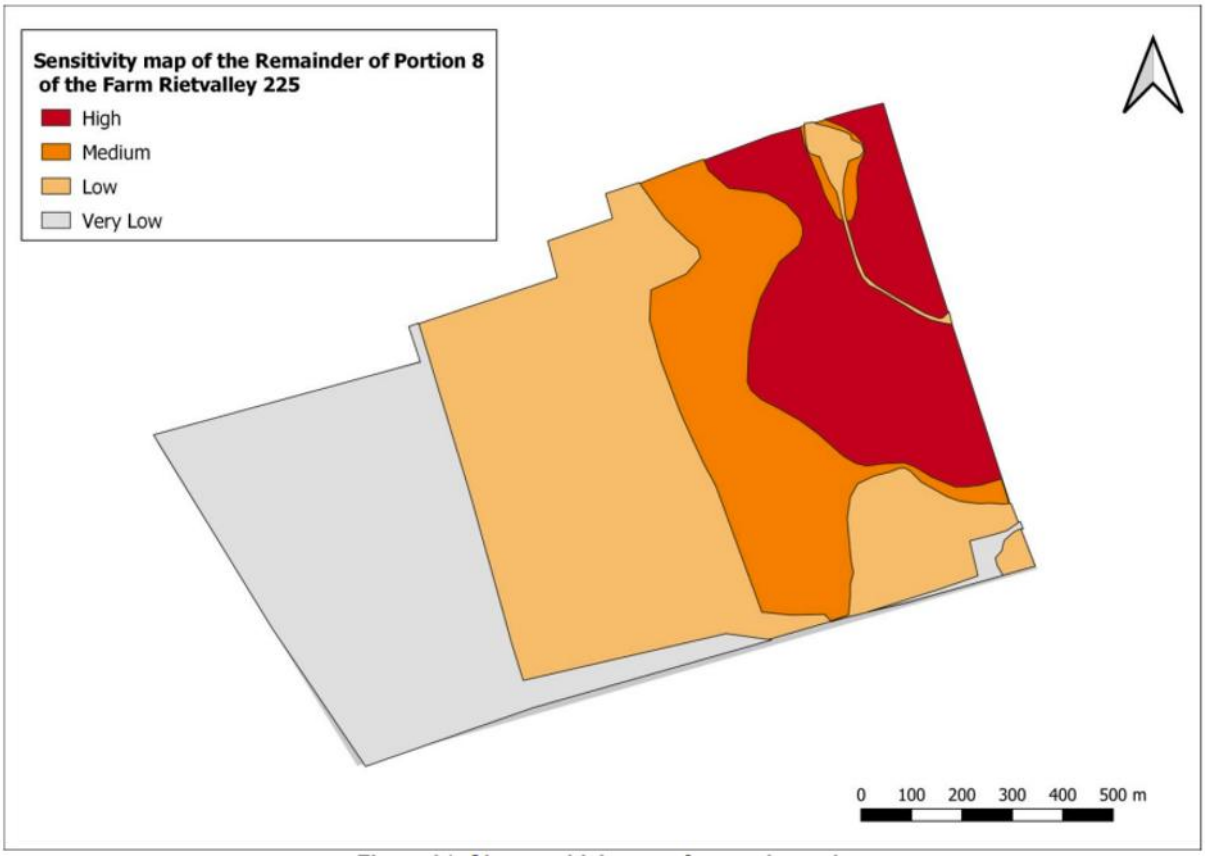

Figure 53: Terrestrial Biodiversity Site Sensitivity as confirmed through specialist studies (Colloty, 2026b)

13.4.1 Layout 1 (Not Preferred)

Layout 1 (refer to **Figure 54**) provides the largest area for the proposed motorsport arena and industrial development and is therefore considered the most favourable option from a development and financial viability perspective. However, this layout is the least preferred alternative from an environmental perspective, as it would result in the loss of a substantial portion of the intact Mossel Bay Shale Renosterveld present on site. Under this layout, approximately 4.2 ha of Mossel Bay Shale Renosterveld would be retained within a designated conservation area. The associated loss of critically endangered vegetation was identified as having a significant environmental impact and was therefore not considered an acceptable development option.

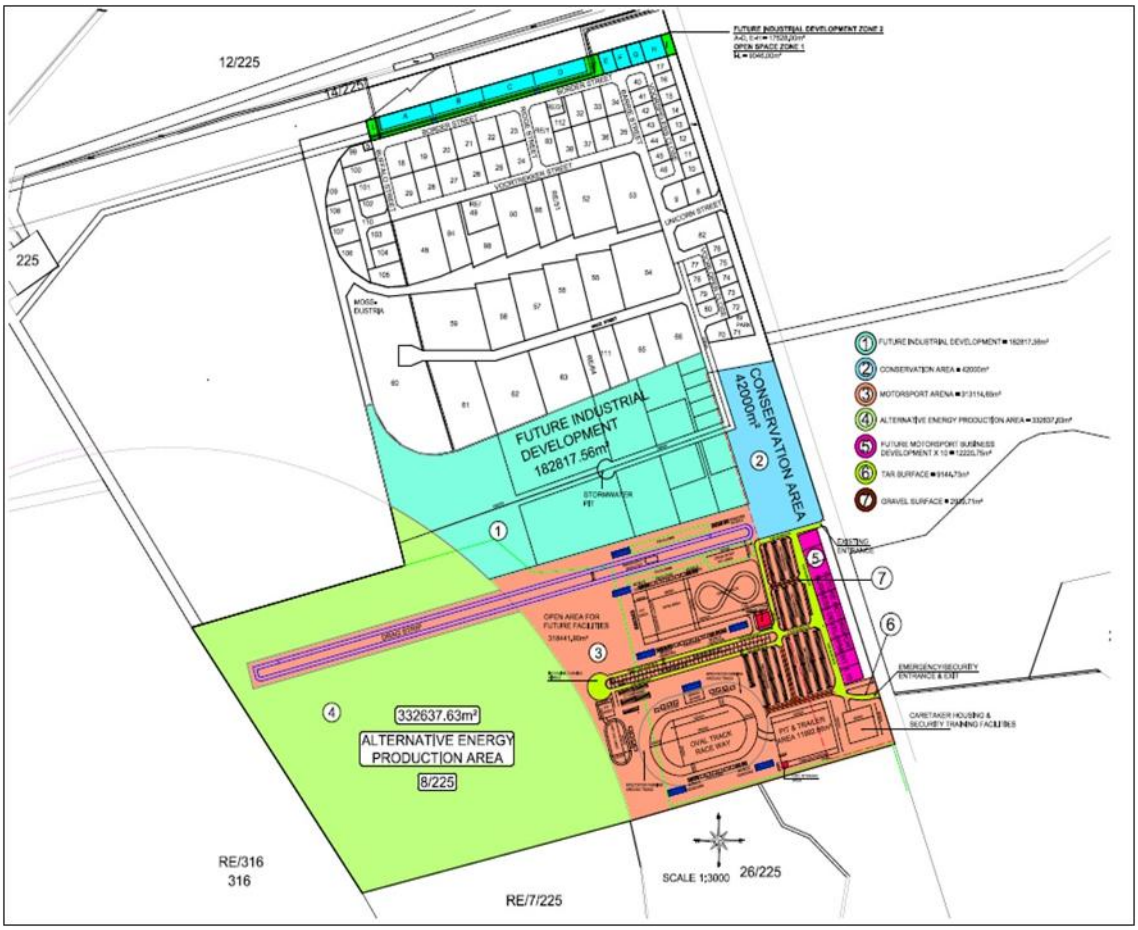

Figure 54: Layout 1 (not preferred for environmental reasons)

13.4.2 Layout 2 (Not Preferred)

Layout 2 (refer to **Figure 55**) increases the extent of the proposed conservation area to approximately 7.7 ha, compared to the 4.2 ha retained under Layout 1. Although this layout represents an improvement in terms of conserving a larger extent of Mossel Bay Shale Renosterveld, concerns remain regarding the long-term ecological viability of the retained vegetation patch if the surrounding areas are cleared and developed. The larger conservation area also results in a reduction in the land available for future industrial development. As a result, while

environmentally preferable to Layout 1, Layout 2 was not considered the preferred layout alternative.

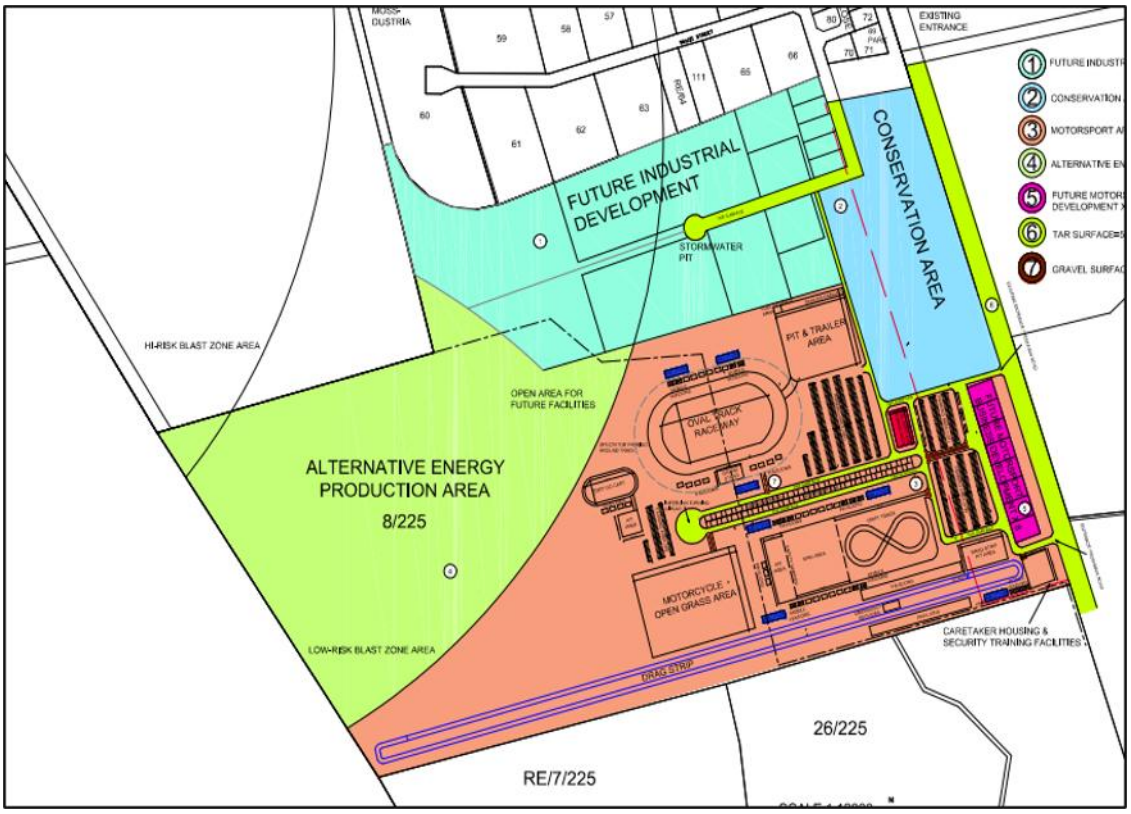

Figure 55: Layout 2 (not preferred for environmental reasons)

13.4.3 Layout 3 (Preferred)

Layout 3 (refer to **Figure 56**) was identified as the preferred layout alternative during the Scoping Phase and achieves the most favourable balance between development objectives and environmental considerations. Approximately 15 ha has been set aside as a conservation area, allowing the majority of the high-sensitivity Mossel Bay Shale Renosterveld to be retained and protected. To accommodate the larger conservation area, the footprints of the remaining development components have been reduced. Consultation undertaken during the planning process established that any further reduction in the area allocated to the motorsport arena would compromise the viability of the facility. Consequently, Layout 3 represents the maximum extent of conservation that can be achieved while maintaining the feasibility of the proposed Project.

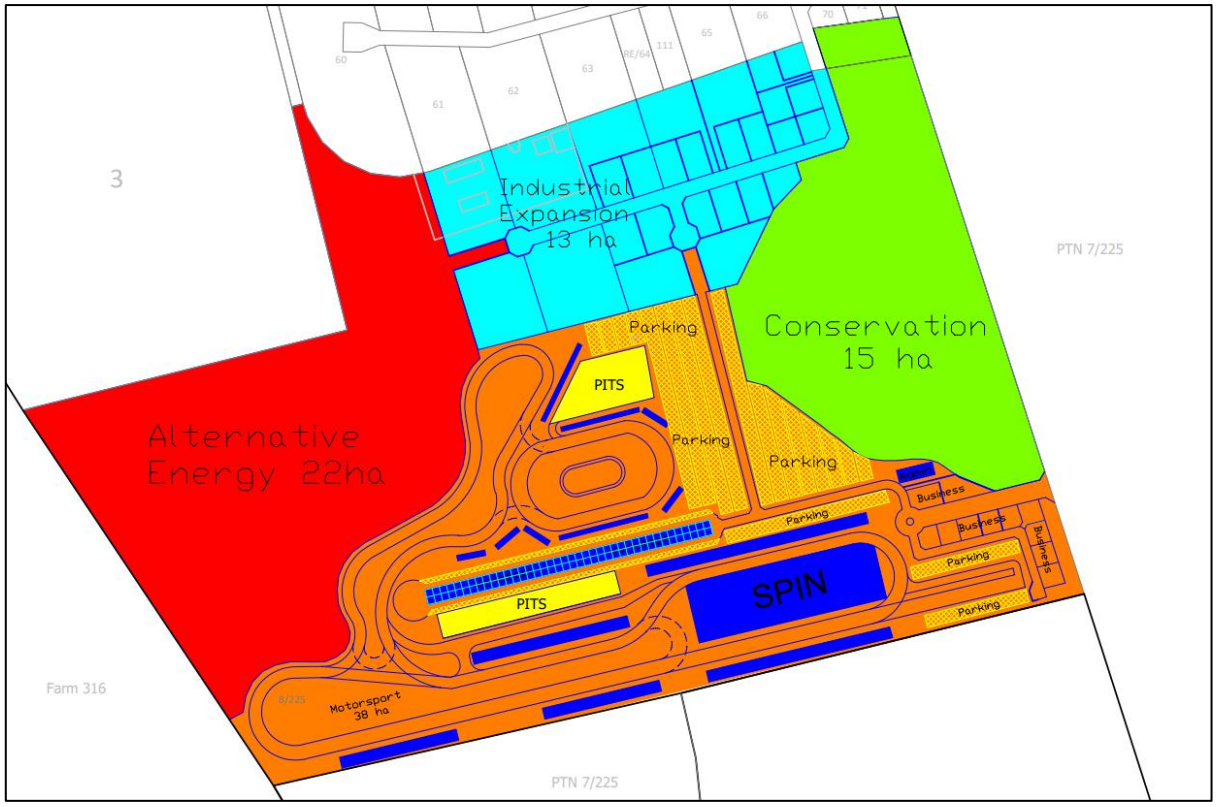

Figure 56: Layout 3 (Preferred Layout Identified During the Scoping Phase)

Following completion of the Scoping Phase, the preferred layout was further refined during the EIA Phase through amendment of the Site Development Plan (SDP). The revised SDP is presented in **Figure 57**. It should be noted that the development layout assessed during the Scoping Phase has not fundamentally changed. The amendment relates specifically to the alignment and configuration of the proposed raceway track, together with a reduction in the size of the proposed parking and pit areas and the realignment of the proposed pavilion.

The revised SDP remains within the broader development footprint assessed during the Scoping Phase and does not alter the overall development concept, land use composition or intended activities associated with the Motorsport Mecca, Alternative Energy and Industrial Expansion Area. The amendment was undertaken to improve the functionality and operational requirements of the motorsport facility through the provision of a slightly longer raceway track.

The revised raceway alignment introduces an additional slow-speed technical corner to complement the medium- and high-speed sections already incorporated into the circuit. This refinement provides a more varied and technically challenging track configuration, improves the suitability of the facility for a wider range of motorsport disciplines and events, and enhances the overall motorsport experience. The revised design further improves the competitiveness, marketability and long-term viability of the proposed motorsport facility and increases its potential to attract regional and national motorsport events, thereby supporting the broader economic and tourism objectives of the development.

The amended raceway alignment may marginally increase the area occupied by raceway-related infrastructure and require minor adjustments to associated infrastructure and operational planning. However, these changes are limited in extent and do not alter the overall development footprint or development concept. The revised track alignment and its implications were considered as part of the Noise Impact Assessment undertaken during the EIA process.

The Noise Impact Assessment (De Jager, 2026) assessed both the raceway alignment presented during the Scoping Phase and the refined alignment proposed during the EIA Phase. The assessment concluded that the same mitigation measures would apply to both alignments and confirmed that the recommended measures would effectively reduce potential noise impacts for either configuration. The refinement of the raceway alignment was therefore undertaken primarily to improve the functionality and operational performance of the motorsport facility rather than as a result of environmental constraints identified through the specialist studies.

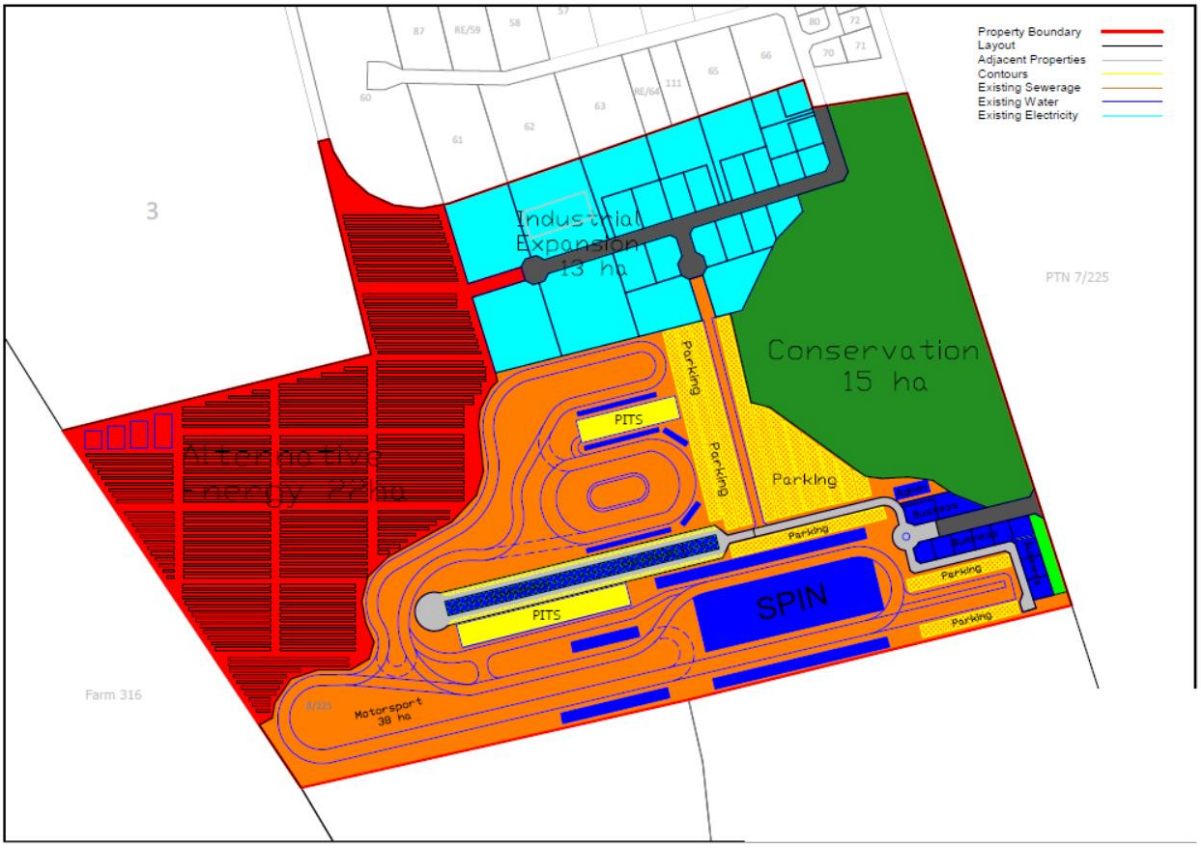

Figure 57: Layout 3 (Refined Preferred Layout Assessed During the EIA Phase)

Layouts 1 and 2 were not considered environmentally acceptable due to the extent of impacts associated with the loss of critically endangered Mossel Bay Shale Renosterveld. Layout 3, as refined through the amended SDP presented in **Figure 57**, is therefore the preferred layout alternative and the only layout carried forward for detailed assessment in the S&EIR process. The refined layout retains the environmental benefits associated with the preferred layout identified during Scoping while improving the functionality, competitiveness and long-term operational viability of the proposed motorsport facility.

13.5 Technology Alternatives

No feasible or reasonable technology alternatives were considered for the proposed Project. The proposed infrastructure will be designed and constructed in accordance with applicable industry standards and engineering requirements, which prescribe the technologies to be utilised. Accordingly, technology alternatives were not assessed further.

13.6 No-Go Option

As standard practice and to satisfy regulatory requirements, the option of not proceeding with the Project is included in the evaluation of the alternatives. The no-go alternative can be regarded as the baseline scenario against which the impacts of the Project are evaluated. This implies that the current status and conditions associated with the proposed Project footprint will be used as the benchmark against which to assess the possible changes (impacts) associated with the Project.
In contrast, should the proposed Project not go ahead, any potentially significant environmental issues would be irrelevant, and the status quo of the local receiving environment would not be affected by the Project-related activities.

The implementation of the no-go alternative would avoid the environmental impacts associated with the construction and operation of the proposed Project. However, it would also result in the loss of the socio-economic benefits anticipated from the Project. These include the provision of additional industrial land within the MBLM, the attraction of new investment, the creation of employment opportunities, and the tourism and economic development benefits associated with the proposed motorsport arena. In addition, the opportunity to contribute towards electricity generation through the proposed PV facility would not be realised.

From an ecological perspective, the no-go alternative would retain the existing vegetation and associated ecological features within the development area. However, the preferred development layout incorporates a dedicated conservation area of approximately 15 ha that has been specifically designed to protect and manage the majority of the remaining high-sensitivity Mossel Bay Shale Renosterveld occurring on the site. The establishment of this conservation area would facilitate the long-term management and protection of this critically endangered vegetation type through the implementation of appropriate management measures.

The no-go alternative would therefore not achieve the identified objectives of the proposed Project, including the expansion of industrial land within the municipality, the promotion of economic growth and tourism, the creation of employment opportunities, the generation of renewable energy, and the benefits associated with the establishment of the conservation area. While the no-go alternative would maintain the status quo, it would not realise the socio-economic benefits and formal conservation management measures associated with the proposed Project.

In light of the above, and the points raised in **Section 12.13**, the Project is preferred over the 'no-go option', provided that the management measures outlined in the WULA Technical Report, EIA Report and EMPr are successfully implemented.

14 PUBLIC PARTICIPATION

14.1 Introduction

This section outlines the Public Participation Process that was followed for this Project. The Public Participation Process followed for the Project is governed by the NWA and the WULA Regulations and is being undertaken in conjunction with the Public Participation Process for the S&EIR Process which is governed by the Environmental Impact Assessment (EIA) Regulations of 2014, published under Government Notice No. 982 in Gazette No. 38282 of 4 December 2014 and amended by Government Notice No. 326 of 7 April 2017 published in Gazette No. 40772 (the “EIA Regulations”). The EIA Regulations were promulgated under the National Environmental Management Act (No. 107 of 1998) (NEMA). Therefore, the section to follow outlines the public participation process that is being undertaken for both the S&EIR Process and the WULA Process combined.

14.2 Objectives of Public Participation

The purpose of public participation included the following:

1. To provide I&APs with an opportunity to obtain information about the Project;
2. To allow I&APs to express their views, issues, and concerns regarding the Project;
3. To grant I&APs an opportunity to recommend measures to avoid or reduce adverse impacts and enhance positive impacts associated with the Project; and
4. To enable the Applicant to incorporate the needs, concerns, and recommendations of I&APs into the Project, where feasible.

The PPP that is being undertaken is governed by NEMA and the EIA Regulations as well as the NWA and WULA Regulations. **Figure 58** below outlines the public participation process for the S&EIR and WULA Processes.

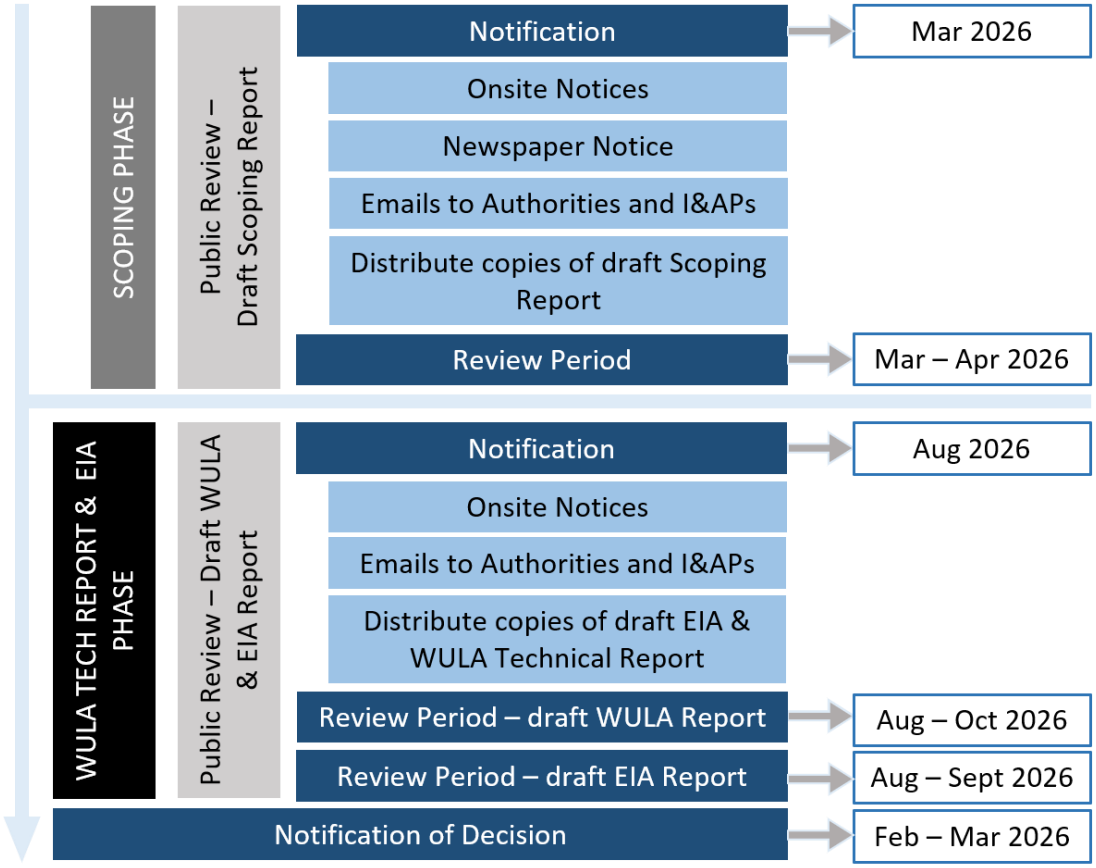

Figure 58: Outline of public participation process *(Note dates are subject to change)*

14.3 Public Participation during the Scoping Phase

The primary tasks undertaken as part of public participation during the Scoping Phase include the following (details provided in the Scoping Report):

1. Compiling a database of organs of state and I&APs;
2. Lodging the draft Scoping Report for public review by placing notices in newspapers, erecting site notices and emailing notifications to organs of state and I&APs; and
3. Compiling and maintaining a CRR (which will be appended to the Final WULA Technical Report).

14.4 Public Participation during the EIA Phase & WULA Technical Report

14.4.1 Maintenance of I&APs Database

A database of I&APs, which includes authorities, different spheres of government (national, provincial and local), parastatals, Ward Councillors, stakeholders, landowners, interest groups and members of the general public, is being maintained during the S&EIR and WULA public participation review processes and is contained in **Appendix F**.

14.4.2 Period to Review the draft EIA Report

In accordance with Regulation 43(1) of the EIA Regulations, I&APs are granted an opportunity to review and comment on the draft EIA Report from **28 August to 29 September 2026**.

14.4.3 Period to Review the draft WULA Technical Report

In accordance with the WULA Regulations, I&APs are granted an opportunity to review and comment on the draft WULA Technical Report for a 60-day review period from **28 August to 28 October 2026**.

14.4.4 Notification of Review of draft EIA Report and draft WULA Technical Report

Authorities and I&APs contained in the database (refer to **Appendix F**) were notified of the review of the draft EIA Report and draft WULA Technical Report through email notifications. In addition, Site Notices were placed at relevant locations around the Project site. Proof of notification will be appended to the final EIA Report and to the final WULA Technical .

14.4.5 Accessing the draft EIA Report and the draft WULA Technical Report

During the review period, the draft EIA Report and the draft WULA Technical Report is accessible as follows:

- A hard copy of the report was placed at the Mossel Bay Public Library; and
- An electronic copy was uploaded to the following website, for downloading purposes: https://nemai.co.za/downloads/.

14.4.6 Commenting on the draft EIA Report and the draft WULA Technical Report

Comments on the draft EIA Report and the draft WULA Technical Report need to be forwarded in writing to the contact person stated in **Table 39** within the review period stipulated in **Section 14.4.2** and **Section 14.4.3**, as relevant, above.

Table 39: Public Participation Contact Person Details

Contact Person:	Donavan Henning
Telephone Number:	011 781 1730
Email Address:	DonavanH@nemai.co.za
Postal Address	PO Box 1673, Sunninghill, 2157

The comments raised by authorities and I&APs to date during the execution of the S&EIR Process are captured in the CRR (which will be appended to the Final WULA Technical Report). The CRR will be updated to include all comments received from authorities and I&APs during the review

period of the draft EIA Report and the draft WULA Technical Report. The updated CRR and the comments that will be received verbatim will be appended to the final WULA Technical Report.

14.4.7 Virtual Public Meeting to Present the draft EIA Report

A virtual public meeting will be held during the review period to present the draft EIA Report (which includes the findings of the WULA Technical Report) and to provide I&APs with a platform for project related discussions.

The details of the virtual public meeting are as follows:

- Date: **15 September 2026**
- Time: 10:00am to 12:00pm
- Venue: Virtual Platform (MS Teams)
- RSVP by **04 September 2026**. The meeting link will only be shared with the pre-registered parties.

The minutes of the meeting will be included in the final WULA Technical Report that will be submitted to BOCMA for decision-making.

14.5 Notification of Decision

Registered I&APs will be notified after receiving written notice from DEADP (in terms of NEMA) and BOCMA (in terms of NWA) on the final decision for the Project in terms of the Environmental Authorisation and the Water Use License, respectively. The notifications will include the appeal procedure for the decisions and key reasons for the decision.

15 CONCLUSIONS & RECOMMENDATIONS

15.1 Outcomes of the WULA

The following key tasks were undertaken during the WULA Process for the proposed Project:

- The specialist studies were undertaken, and the findings were incorporated into the WULA Report to understand the environmental status quo and sensitive features, assess potential impacts, and establish concomitant mitigation measures related to water resources.
- Potentially significant impacts related to the pre-construction, construction, and operational phases of the Project concerning water resources were identified and assessed, and mitigation measures were provided.
- Alternatives for achieving the objectives of the proposed activity were considered, and the preferred option was identified.

The outcomes of these tasks are captured below.

15.2 Sensitive Environmental Features

The following sensitive environmental features associated with the Project's aquatic receiving environment are highlighted, for which mitigation measures are included in the WULA Technical Report, EIA Report and EMPr:

- Drainage features and aquatic habitats occur within the broader Project Area and contribute to ecological functioning within the receiving environment.
- Watercourses delineated by the aquatic specialist occur outside of the proposed development footprint and comprise three depression/pan features and two riverine systems classified as being of medium sensitivity.

The combined sensitivity map in terms of water resources is provided in **Figure 59** below.

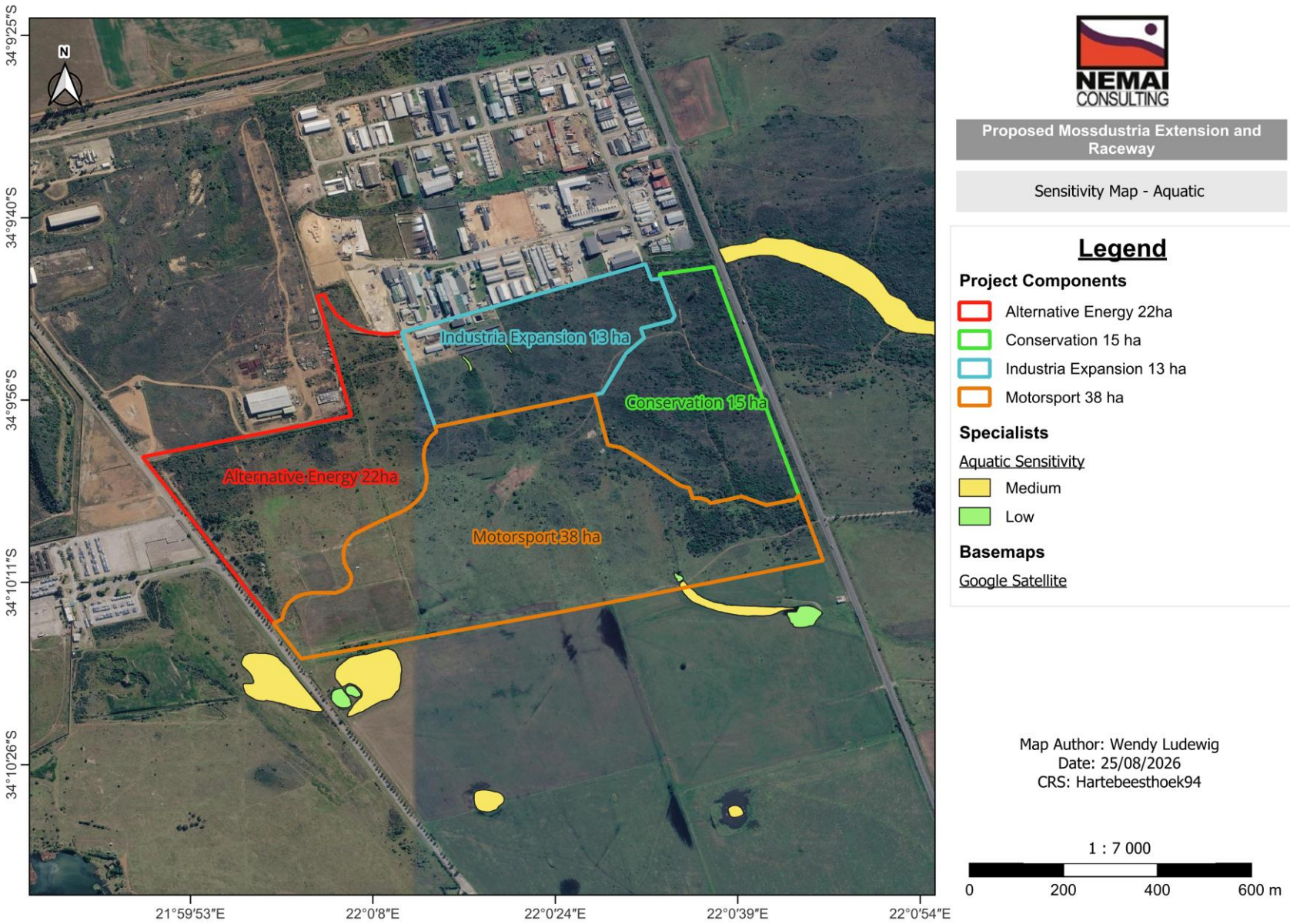

Figure 59: Combined sensitivity map – water resources

15.3 Environmental Impact Statement in relation to Water Resources

The WULA process for the proposed Project has described the status quo of the receiving aquatic environment and assessed the expected impacts of the Project to the aquatic environment for both the construction and operation phases.

The following studies related to the water resources were undertaken for the Project, in addition to various technical studies:

- Aquatic Ecology Impact Assessment; and
- Geohydrology Impact Assessment.

A range of alternatives were considered during the S&EIR and WULA process, including layout, technology and the no-go alternative. No feasible location alternatives were identified due to the requirement that the industrial expansion occur adjacent to the existing Mossdustria industrial area. Layout alternatives were refined through an iterative design process informed by specialist input and consultation with commenting authorities. Layout 3 was identified as the preferred alternative as it achieves the most appropriate balance between environmental protection and development objectives through the retention of approximately 15 ha as a conservation area and the avoidance of the majority of the site's sensitive terrestrial biodiversity features.

The impact assessments identified both positive and negative impacts associated with the Project in relation to water resources. The principal positive impacts relate to employment creation, local economic development, tourism stimulation, business and investment opportunities, renewable energy generation and the establishment of a formally managed conservation area.

The principal negative impacts to water resources identified during the assessment include the potential impacts on aquatic features and groundwater pollution, and temporary construction-related impacts. Based on the findings of the specialist studies, the majority of impacts were assessed as being of low to moderate significance following the implementation of mitigation measures.

The no-go alternative would avoid the environmental impacts associated with the Project but would not achieve the key project objectives, including industrial expansion within the municipality, economic growth, employment creation, tourism development, renewable energy generation and the implementation of formal conservation management measures for the retained renosterveld habitat. Consequently, the no-go alternative was not identified as the preferred option.

Based on the findings of the specialist studies and the outcomes of the WULA and S&EIR Processes, it is concluded that the WUL may be granted for the Project, provided that all identified environmental management measures are implemented and complied with. The period for which the WUL is required is as long as BOCMA can provide.

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