

# LION PRIDE EXTENSION TOWNSHIP DEVELOPMENT

MOGALE EXTENSIONS 54 - 59

ON PART OF THE REMAINDER OF PORTION 23, PART OF PORTION 162 AND PART OF  
THE REMAINDER OF PORTION 196 OF THE FARM NOOITGEDACHT 534-JQ,  
MOGALE CITY LOCAL MUNICIPALITY, GAUTENG PROVINCE

**GAUT 002/21-22/E3122**

## DRAFT SCOPING REPORT

SEPTEMBER 2022

COMPILED BY ENVIRONMENTAL ASSESSMENT PRACTITIONERS



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## LIST OF ABBREVIATIONS

C-Plan	Conservation Plan
CARA	Conservation of Agricultural Resources Act 1983 (Act no 43 of 1983)
CoC	Chain of Custody
COJ	City of Johannesburg Metropolitan Municipality
DALRRD	Department of Agriculture, Land Reform and Rural Development
DFFE	Department of Forestry, Fisheries and the Environment
DEMC	Desired Ecological Management Class
DoE	Department of Energy
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EAPASA	Environmental Assessment Practitioners Association of South Africa
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EIS	Ecological Importance and Sensitivity
EMF	Environmental Management Framework
EMP/EMPr	Environmental Management Plan/Programme
Ext	Extension
GAPA	Gauteng Agricultural Potential Atlas
GAUTRANS	Gauteng Department of Roads and Transport
GDARD	Gauteng Department of Agriculture and Rural Development
GDRT	Gauteng Department of Roads and Transport
GPEMF	Gauteng Provincial Management Framework
GSDF	Gauteng Spatial Development Framework
GIDP	Gauteng Integrated Development Plan
GIS	Geographic Information Systems
ha	Hectare(s)
HIA	Heritage Impact Assessment
I&APs	Interested and Affected Parties
m <sup>3</sup>	Cubic metres
masl	Meters above sea level
MCLM	Mogale City Local Municipality
n/a	Not applicable
NEMA	National Environmental Management Act, 1998 (Act No 107 of 1998)
NEMBA	National Environmental Management Biodiversity Act, 2004 (Act No 10 of 2004)
NEMWA	National Environmental Management: Waste Act, 2008 (Act No 59 of 2008)
NWA	National Water Act, 1998 (Act No 36 of 1998)
OHSA	Occupational Health & Safety Act, 1993 (Act Nr 181 of 1993)
PEMC	Present Ecological Management Class
PHRA-G	Provincial Heritage Resources Agency, Gauteng
SACNASP	South African Council for Natural Scientific Professions
SAHRA	South African Heritage Resources Agency
SANBI	South African National Biodiversity Institute
SANS	South African National Standards
SDF	Strategic Development Framework
UDB	Urban Development Boundary
WULA	Water Use License Application
WUA	Water Use Authorisation

# LION PRIDE EXTENSION TOWNSHIP DEVELOPMENT (MOGALE EXTENSIONS 54-59)

## EXECUTIVE SUMMARY

### PROJECT DESCRIPTION

The proposed Lion Pride Extension Township Development is a residential development on Part of the Remainder of Portion 23, Part of Portion 162 and Part of the Remainder of Portion 196 of the farm Nooitgedacht 534-JQ, within the jurisdiction of the Mogale City Local Municipality. The property area involves approximately 41,2ha.

It involves the establishment of six townships namely Mogale Ext 54, Mogale Ext 55, Mogale Ext 56, Mogale Ext 57, Mogale Ext 58 and Mogale Ext 59. It comprises 3x medium density townships (Mogale Extensions 54 to 56) with a density of 40 units per hectare; and 3x high density townships (Mogale Extensions 57 to 59) with a density of 130 units per hectare. A total of 1 961 residential opportunities will be provided.

### GENERAL ENVIRONMENTAL DESCRIPTION

The project area is situated south of the N14 Highway, with Malibongwe Drive forming the eastern boundary. The site is not fenced, communal cattle grazing take place throughout the year and some sections had been excavated. A wetland divides the site from north to east. It consists mostly of a narrow stream with two old but broken farm dams with dense poplar trees in the north.

Lion Pride Extension is surrounded by residential development to the east and south and by non-residential and agricultural uses to the south-west. The following surrounding land uses are relevant.

- Lion Park Informal Settlement to the east across Malibongwe Drive
- Lion Pride Lifestyle Estate to the south-east
- The N14 Freeway to the north
- An industrial development, Scaffolding Pty Ltd, to the south-west
- Agricultural land to the south west
- La Vue Guest Lodge and Function Venue south-west of the site

### LEGAL REQUIREMENT

This application is done in terms of the National Environmental Management Act, 1998 (Act No 107 of 1998) (NEMA) and the 2014 Environmental Impact Assessment (EIA) Regulations, as amended. At this stage the following activities are considered relevant and will be confirmed during the EIA process:

- Listing Notice 1: Activities Nr 9, Nr 10, Nr 19 and Nr 28
- Listing Notice 2: Activity Nr 15
- Listing Notice 3: Activities Nr 4 and Nr 12

The application for environmental authorisation is lodged with the Gauteng Department of Agriculture and Rural Development (GDARD). A Full Scoping and Environmental Impact Assessment process is required.

Additional key legislative requirement associated with this project includes the following:

- The National Water Act, 1998(Act No 36 of 1998)
- The National Heritage Resources Act (Act 25 of 1999)
- The Subdivision of Agricultural Land Act, 1970 (Act No 70 of 1970)

The following specialist reports are submitted as part of the Draft Scoping Report:

- Ecological Report on the Flora & Fauna
- Watercourse & Delineation Assessment
- Heritage Impact Specialist
- Agricultural Agro-Ecosystem Assessment

## KEY ISSUES

### **Town Planning: Land Use Planning Objectives:**

- The proposed development promotes the goals of the National Development Plan (NDP) 2030 by providing housing opportunities closer to places of work.
- The proposed development is in line with the Mogale City Spatial Development Framework:
  - The development is situated within the urban development boundary.
  - It falls within a “Mixed Use Development Zone”.
- According to the Gauteng Environmental Management Framework (EMF) the site falls within Zone 1: Urban Development Zone. The intention with Zone 1 is to streamline urban development activities in it and to promote infill development, densification and concentration of urban development within the urban development zones as defined in the Gauteng Spatial Development Framework (GSDF).
- The provision of a medium density development comprising simplexes, duplexes and walk ups (4 storeys) should not negatively impact the surrounding area since it is an extension of existing and planned land use in the macro area. It will not result in frog-leap development.
- The project will contribute to the upgrading of engineering services as the developer will construct a new reservoir and waste water treatment plant.

### **Engineering Services**

- Bulk and Link services for regional water supply, sewage disposal outfall sewers, wastewater treatment works, roads network and stormwater attenuation facilities are to be constructed. Currently a cross border agreement between Mogale City and Johannesburg Water is in place with Johannesburg Water supplying the Muldersdrift area with water from Cosmo City. This water supply is under pressure due to limited availability from Johannesburg Water and no additional supply will be made available for future developments. No sewage disposal network or wastewater treatment works are currently available.
- It is proposed that the developer construct a 10 ML Water Reservoir on behalf of Mogale City Local Municipality in the proximity of the Nooitgedacht Primary School.
- A site was identified outside the Lion Pride Extension area to construct a 7ML mechanical dewatering, wastewater treatment works. 3 Sewer pump stations will also have to be constructed as part of the required sewer network. This WWTW will be constructed in phases of 1ML as the development of the proposed townships progress. It will form part of a separate EA.
- Main access to the proposed development is from an approved and existing intersection with Malibongwe Drive.
- Eskom is the electrical supply authority for the proposed development. The proposed development falls within the feeder area of the Eskom owned Cosmo City Substation, and supply will be made available from there.

## **Specialists**

- The ecologist (fauna, flora and aquatics) for the project confirmed the following:
  - The development of the degraded areas with low ecological sensitivities on the study site should not have a negative impact on the environment provided that the mitigation measures as indicated in his report is incorporated into the management plan and adhered to.
  - The area of high conservation value is the delineated wetland and 32m buffer zone. No development may take place within the area without water use authorisation from the Department of Water & Sanitation.
- The aquatic specialist delineated the wetland area and provided a 32m buffer zone in which development should not take place. He also recommended that alien vegetation should be eradicated and/or controlled as per legal requirement.
- The heritage consultant for the project confirmed the following:

*No heritage resources of significance had been identified within the study area. According to the SAHRA Paleontological Sensitivity Map, the study area is of insignificant paleontological significance. No adverse impact on heritage resources is expected by the project and it is recommended that the project can commence on condition that general mitigation measures provided are included in the Environmental Management Plan, inclusive of comment from South African Heritage Resources Agency (SAHRA).*
- The agricultural impact specialist confirmed the following:

*It was confirmed that no crop production took place on the site in the past five years; there is no evidence of livestock farming on the site and the grazing capacity of the entire site would allow for 4 head of cattle. The Lion Pride Extension is considered a viable land use option for the area. It was recommended that the application be considered favourably, permitting that soil management measures are followed to prevent soil erosion and pollution. The project infrastructure should also remain within the development area boundaries indicated in the project layout.*

## **Township Layout**

The concept township layout has been determined mainly by the following issues:

- Applicant requirement for a residential development
- Access from an approved and existing intersection with Malibongwe Drive
- The wetland and 32m buffer zone are excluded from the developable area. The 1:100 year floodline had also been determined. No development will be allowed in within these regulated areas- whichever is the largest, without Water Use Authorisation.

## **STAKEHOLDER CONSULTATION**

The first round of public participation was concluded (newspaper advertisement, onsite notices and notification to key stakeholders). No objection had yet been received. This Draft Scoping Report is now distributed for comment and all written communication received will be included and addressed in the Final Scoping Report that will be submitted to GDARD for approval.



## SUMMARY OF EXPECTED IMPACTS

The main potential negative impacts associated with the project are the following:

### **Design & Planning Phase**

(Critical issues that need to be addressed during the design and planning phase)

- Impact on the wetland
- Impact on terrestrial ecology (fauna and flora)
- Loss of agricultural land
- Risk for impact on groundwater
- Increased run-off resulting in erosion and a loss of soil

### **Construction Phase**

- Health & Safety risk during construction
- Impact on the natural habit (wetland, fauna & flora)
- Increased risk for groundwater pollution
- Increased risk for erosion resulting from construction activities
- Influx of labourers with associated crime, access control, risk for habitat destruction
- Impacts associated with construction activities such as noise and dust
- Impact on heritage resources

### **During Operational Phase**

- Continuous risk for disturbance to the riverine area
- Continuous risk for groundwater pollution (*associated with the sewage treatment plant, if relevant*)
- Increased risk for impact on surrounding environment (i.e. habitat destruction and veld fires)
- Increased run-off resulting in erosion

### **Cumulative Impact**

- Increased traffic
- Increased pressure on municipal infrastructure

The **positive impacts** associated with the proposed project on the environment include the following:

- Residential opportunities of any significant scale are still lacking in Gauteng and the proposed development is ideally located to cater in the needs of the Mogale City Local Municipality.
- The use of existing resources and infrastructure such as roads, transportation and economic and social support will be maximised. It is evident that the developer must contribute towards the establishment (installation) of bulk engineering services in order to develop the Lion Pride Extension Township Development.
- Easily accessible land relatively close to work opportunities (as is the case with this property) is always under risk for settlement of squatters with associated negative social impact (i.e. increased crime and safety risk) and degradation of the environment in the absence of sufficient engineering services (water supply, sewage and waste disposal), i.e. collection of firewood, use of the watercourse for ablution activities, placement of snares, etc. Illegal dumping can no longer take place.
- The riverine area is at risk of deterioration because it is easily accessible by the public. By following the correct planning principles in cooperation with the Department of Water & Sanitation will ensure that measures are in place to restrict impact as far as reasonable and practical on the watercourse.
- A strong "indigenous only" approach will be followed with landscaping and as much as practical existing indigenous vegetation will be incorporated into the development.
- A green architectural approach is also proposed (in terms of water saving, electricity saving, restriction of light pollution, waste management, etc.).

## **THE PLAN OF STUDY FOR THE ENVIRONMENTAL IMPACT PHASE OF THE APPLICATION**

The Plan of Study provided as part of the Scoping Report is aimed to confirm that the expected negative impacts associated with the project can be mitigated to acceptable levels. The Environmental Impact Report must therefore ensure the following:

- That all the relevant information is supplied by the project planners and engineers to ensure that all potential negative impact on the environment is properly assessed and sufficient mitigation measures proposed.
- All the conditions and comments of the key commenting authorities must be integrated in the final layout plan and design of the township.
- It should effectively be illustrated (with specialist and key stakeholder support) that all expected negative impact could be mitigated to acceptable levels.
- Objections from stakeholders must be addressed in a reasonable and fair manner.
- Compliance with all legislative requirements of all relevant organs of state must be demonstrated.

## **CONCLUSION BY AND RECOMMENDATION BY THE EAPs**

- The proposed Lion Pride Extension Township Development is planned in a legal, pro-active and structured manner taking all development components, environmental features, site potential and restrictions into account.
- No significant impact on the environment had been identified that could not be mitigated to an acceptable level. This will also be confirmed during the Public Participation Process.
- All relevant legal requirement in terms of the Scoping Phase as per the Environmental Impact Assessment Regulations published on 4 December 2014 as per the National Environmental Management Act, 1998 (Act No 107 of 1998) as amended is complied with.
- The Plan of Study was compiled with sufficient consideration of potentially relevant legal requirement in terms of this type and scale of project, as well as due consideration of the key issues associated with this project (i.e. engineering infrastructure).

The EAPs recommend this Scoping Report together with the Plan of Study for the EIA Phase for approval by the Gauteng Department of Agriculture and Rural Development.

# 1. INTRODUCTION

## 1.1 Background

The Lion Pride Extension Township Development on Part of the Remainder Portion 23, Part of Portion 162 and Part of the Remainder of Portion 196 of the Farm Nooitgedacht 534-JQ is planned as mixed land use township on 41.2 hectares, situated along the eastern border of Mogale City Local Municipality. The proposed development is located in close proximity to the newly developed Lion Pride Lifestyle Estate.

Part of the Remainder of Portion 23, Part of Portion 162 and Part of the Remainder of Portion 196 of the Farm Nooitgedacht 534-JQ are registered in the name of “Cosmopolitan Projects Johannesburg (Pty) Ltd” (Registration Number 2005/013577/07) via Deed of Transfer T26272/2021. The proposed township consists of six separate townships called Mogale Ext 54, Mogale Ext 55, Mogale Ext 56, Mogale Ext 57, Mogale Ext 58 and Mogale Ext 59.

Isquare (in association with Landscape Dynamics) was appointed in February 2022 to apply for Environmental Authorisation for the Lion Pride Extension Township Development.

## 1.2 Objectives and Content of the Scoping Report

### 1.2.1 Objectives of the Scoping Report

According to the NEMA 2014 Regulations, Appendix 2.1 the objectives of the Scoping Process are, through a consultative process, to:

- (a) Identify the relevant policies and legislation relevant to the activity;
- (b) Motivate the need and desirability of the proposed activity, including the need and desirability of the activity in context of the preferred location;
- (c) Identify and confirm the preferred activity and technology alternative through an impact and risk assessment and ranking process;
- (d) Identify and confirm the preferred site, through a detailed site selection process, which includes an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified alternatives focusing on the geographical, physical, biological, social, economic and cultural aspects of the environment;
- (e) Identify the key issues to be addressed in the assessment phase;
- (f) Agree on the level of assessment to be undertaken, including the methodology to be applied, the expertise required as well as the extent of further consultation to be undertaken to determine the impacts and risks the activity will impose on the preferred site through the life of the activity, including the nature, significance, consequence, extent, duration and probability of the impact to inform the location of the development footprint within the preferred site; and
- (g) Identify suitable measures to avoid, manage or mitigate identified impacts and to determine the extent of the residual risks that need to be managed and monitored.

### 1.2.2 Content of the Scoping Report

According to the NEMA 2014 Regulations, Appendix 2.2, a Scoping Report must contain all the information that is necessary for a proper understanding of the nature of issues identified during scoping and must include the specific items stated below. These items are listed below with appropriate reference to the section in the Scoping Report where the item is addressed. In addition, a Scoping Report must take into account any guidelines applicable to the kind of activity which is the subject of the application.

REGULATION REQUIREMENT	Section in Scoping Report where addressed
(a) Details of – (i) the EAP who prepared the report; and (ii) the expertise of the EAP to carry out scoping procedures	Appendix F(2)
(b) The location of the activity, including (i) the 21 digit Surveyor general code of each cadastral land parcel; (ii) where available the physical address and farm name; and (iii) where the required information in items (i) and (ii) is not available, the coordinates of the boundary of the property of properties	Chapter 2, Paragraph 2.2.1
(c) A plan which locates the proposed activity or activities applied for at an appropriate scale, or, if it is – (i) A linear activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken; or (ii) On land where the property has not been defined, the coordinates within which the activity is to be undertaken; or (iii) On land where the property has not been defined, the coordinates within which the activity is to be undertaken.	Chapter 2.2.2 & Appendix A(1)
(d) A description of the scope of the proposed activity, including – (i) All listed and specified activities triggered; (ii) A description of the activities to be undertaken, including associated structures and infrastructure.	Chapter 1, Paragraph 1.3.1 Chapter 2, Paragraph 2.2.2
(e) A description of the policy and legislative context within which the development is proposed including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and are to be considered in the assessment process.	Chapter 1, Paragraph 1.3
(f) A motivation for the need and desirability for the proposed development including the need and desirability of the activity in the context of the preferred location.	Chapter 2, Paragraph 2.1
(g) A full description of the process followed to reach the proposed preferred activity, site and location within the site, including- (i) Details of all alternatives considered; (ii) Details of the public participation process undertaken in terms of regulation 41 of the Regulations, including copies of the supporting documents and inputs; (iii) A summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them; (iv) The environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects; (v) The impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration, and probability of the impacts, including the degree to which the impacts- (aa) can be reversed; (bb) may cause irreplaceable loss of resources; and (cc) can be avoided, managed, or mitigated. (vi) The methodology used in deterring and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks associated with the alternatives; (vii) Positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected focusing on the geographic, physical, biological, social, economic, heritage and cultural aspects;	Chapter 3 Chapter 5, Paragraph 5.2 & Appendix E Chapter 5, Paragraph 5.3 Chapter 4 Chapter 6 Chapter 6, Paragraph 6.1 Chapter 6, Paragraph 6.2.1 & 6.2.2

REGULATION REQUIREMENT	Section in Scoping Report where addressed
<ul style="list-style-type: none"> <li>(viii) The possible mitigation measures that could be applied and level of residual risk;</li> <li>(ix) The outcome of the site selection matrix;</li> <li>(x) If no alternatives, including alternative locations for the activity were investigated, the motivation for not considering such and;</li> <li>(xi) A concluding statement indicating the preferred alternatives, including preferred location of the activity.</li> </ul>	<p>Chapter 6, Paragraph 6.3 Not applicable Chapter 3, Paragraph 3.1 Chapter 8, Paragraph 8.1</p>
<p>(h) A <u>Plan of Study</u> for undertaking the environmental impact assessment process to be undertaken including-</p> <ul style="list-style-type: none"> <li>(i) A description of the alternatives to be considered and assessed within the preferred site, including the option of not proceeding with the activity;</li> <li>(ii) A description of the aspects to be assessed as part of the environmental impact assessment process;</li> <li>(iii) Aspects to be assessed by specialists;</li> <li>(iv) A description of the proposed method of assessing the environmental aspects, including a description of the proposed method of assessing the environmental aspects including aspects to be assessed by specialists;</li> <li>(v) A description of the proposed method of assessing duration and significance;</li> <li>(vi) An indication of the stages at which the competent authority will be consulted;</li> <li>(vii) Particulars of the public participation process that will be conducted during the environmental impact assessment process;</li> <li>(viii) A description of the tasks that will be undertaken as part of the environmental impact assessment process;</li> <li>(ix) Identify suitable measures to avoid, reverse, mitigate or manage identified impacts and to determine the extent of the residual risks that need to be managed and monitored.</li> </ul>	<p>Chapter 7, Paragraph 7.2.2 Chapter 7, Paragraph 7.2.2 Chapter 7, Paragraph 7.2.2 &amp; 7.2.5 Chapter 7, Paragraph 7.2.5 Chapter 7, Paragraph 7.2.5 Chapter 1, Paragraph 1.5 Chapter 7, Paragraph 7.2.6 Chapter 7, Paragraph 7.2 Chapter 7.2.8</p>
<p>(i) An undertaking under oath or affirmation by the EAP in relation to-</p> <ul style="list-style-type: none"> <li>(i) The correctness of the information provided in the report;</li> <li>(ii) The inclusion of the comments and inputs from stakeholders and interested and affected parties; and</li> <li>(iii) Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties.</li> </ul>	<p>Chapter 8, Paragraph 8.2.1</p>
<p>(j) An undertaking under oath or affirmation by the EAP in relation to the level of agreement between the EAP and interested and affected parties on the plan of study for undertaking the environmental impact assessment.</p>	<p>Chapter 8, Paragraph 8.2.2</p>
<p>(k) Where applicable, any specific information required by the competent authority.</p>	<p>Not yet received – to be included in the Final Scoping Report</p>
<p>(l) Any other matter required in terms of section 24(4) (a) and (b) of the Act.</p>	<p>Not applicable</p>

### 1.3 Legal Requirement

Legal requirement directly related to the Environmental Impact Assessment process is described in paragraphs 1.3.1 – 1.3.4.

#### 1.3.1 National Environmental Management Act (Act 107 of 1998)

This application is done in terms of the National Environmental Management Act, 1998 (Act No 107 of 1998) (NEMA) and the 2014 Environmental Impact Assessment (EIA) Regulations, as amended. At this stage the following activities are considered relevant – these could be amended as engineering details becomes available:

GOVERNMENT NOTICE 983: LISTING NOTICE 1	
<p><b>Activity Number 9</b></p> <p>The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water—</p> <p>(i) with an internal diameter of 0,36 metres or more; or</p> <p>(ii) with a peak throughput of 120 litres per second or more;</p> <p>Excluding where -</p> <p>(a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or</p> <p>(b) where such development will occur within an urban area.</p>	<p><i>During the EIA Phase when more engineering information (routes and capacity of pipelines) will become available, the EAPs will confirm if listed activities are triggered.</i></p>
<p><b>Activity Number 10</b></p> <p>The development and related operation of infrastructure exceeding 1 000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes –</p> <p>(i) with an internal diameter of 0,36 metres or more; or</p> <p>(ii) with a peak throughput of 120 litres per second or more;</p> <p>Excluding where -</p> <p>(a) such infrastructure is for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve or railway line reserve; or</p> <p>(b) where such development will occur within an urban area.</p>	<p><i>During the EIA Phase when more engineering information (routes and capacity of pipelines) will become available, the EAPs will confirm if listed activities are triggered.</i></p>
<p><b>Activity Number 19</b></p> <p>The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse; but excluding where such infilling, depositing, dredging, excavation, removal or moving —</p> <p>(a) will occur behind a development setback;</p> <p>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan;</p> <p>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</p> <p>(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</p> <p>(e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.</p>	<p><i>The existing road that crosses the wetland needs to be upgraded and this will result in the infilling and depositing of material of more than 10 cubic metres in the wetland area. Engineering infrastructure will also be required to cross the watercourse and this could also result in infilling or depositing of material in the watercourse. The extent and method will be confirmed during the EIA process.</i></p>
<p><b>Activity Nr 28</b></p> <p>Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development:</p> <p>(i) Will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or</p> <p>(ii) Will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.</p>	<p><i>The development is for the construction of a residential development on land zoned for agriculture (where there are signs that limited agricultural activities did take place since 1998); the site falls within the urban edge and it is bigger than 5ha.</i></p>

**GOVERNMENT NOTICE 984: LISTING NOTICE 2 (Requiring a Full Scoping & EIR Process)**

<p><b>Activity Number 15</b></p> <p>The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for</p> <p>(i) the undertaking of a linear activity; or</p> <p>(ii) maintenance purposes undertaken in accordance with a maintenance management plan.</p>	<p><i>The total development property is 41.2 hectares in extent and most of this land (which includes indigenous vegetation) will be cleared.</i></p>
<p align="center"><b>GOVERNMENT NOTICE 985: LISTING NOTICE 3</b></p>	
<p><b>Activity Number 4</b></p> <p>The development of a road wider than 4 meters with a reserve less than 13.5 meters,</p> <p>(c) Gauteng in</p> <ul style="list-style-type: none"> <li>* National Protected Area Expansion Strategy Focus Area</li> <li>* Sites identified as Critical Biodiversity Areas (CBA's or Ecological Support Areas (ESA's)</li> </ul> <p>in the Gauteng Conservation Plan or in bioregional plans</p>	<p><i>According to the DFFE Screening Tool Report (Appendix A(3)(b)), the site falls within the following zones:</i></p> <ul style="list-style-type: none"> <li>* Critical Biodiversity Area 2</li> <li>* Ecological Support Area</li> <li>* Endangered ecosystem</li> <li>* Protected Areas Expansion Strategy</li> </ul> <p><i>The CBA and ESA status are also confirmed in the SANBI and GDARD C-Plan databases.</i></p>
<p><b>Activity Number 12</b></p> <p>The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</p> <p>(c) Gauteng</p> <ul style="list-style-type: none"> <li>* Within any critically endangered or endangered ecosystem listed in terms of Section 52 of NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004.</li> <li>* Within Critical Biodiversity Areas (CBA's) or Ecological Support Areas (ESA's) in the Gauteng Conservation Plan or in bioregional plans.</li> </ul>	<p><i>According to the DFFE Screening Tool Report (Appendix A(3)(b)), the site falls within the following zones:</i></p> <ul style="list-style-type: none"> <li>* Critical Biodiversity Area 2</li> <li>* Ecological Support Area</li> <li>* Endangered ecosystem</li> <li>* Protected Areas Expansion Strategy</li> </ul> <p><i>The CBA and ESA status are also confirmed in the SANBI and GDARD C-Plan databases.</i></p> <p><i>The total area to be cleared is more than 300m<sup>2</sup>.</i></p>

In terms of the NEMA legislation, application for environmental authorisation is lodged with the Gauteng Department of Agriculture and Rural Development (GDARD). A Full Scoping and Environmental Impact Assessment process is required. GDARD is required to evaluate this Scoping Report and based on the findings and proceedings documented in the Scoping Report supply the Environmental Assessment Practitioner (EAP) with a decision to proceed with the EIA or to amend the Scoping Report.

The following departments and government institutions are commenting authorities in the EIA process:

- Mogale City Local Municipality
  - Department of Integrated Environmental Management
  - Development and Planning
  - Public Works, Roads and Transport
  - Ward Councillor
- City of Johannesburg Metropolitan Municipality
  - Department Environment and Infrastructure Services
  - Department Environmental Impact Management
  - Land Use Development Management
- The Department of Water and Sanitation (DWS)
- Department of Agriculture, Land Reform and Rural Development: Director Land Use and Soil Management
- Department of Mineral Resources
- South African Heritage Resources Agency (SAHRA)

- The Provincial Heritage Resources Agency- Gauteng (PHRA-G)
- Rand Water
- ESKOM SOC Limited
- Gauteng Provincial Department Roads and Transport
- Transnet SOC Limited (Division: Pipelines)
- Transnet Freight Rail
- South African National Roads Agency (Northern Region)

### 1.3.2 *The National Water Act, 1998(Act No 36 of 1998)*

The National Water Act (NWA) guides the management of water in South Africa as a common resource. The Act aims to regulate the use of water and activities which may impact on water resources through the categorisation of 'listed water uses' encompassing water extraction, flow attenuation within catchments as well as the potential contamination of water resources. The **Department of Water & Sanitation (DWS)**, is the administering body in this regard.

Water Use Authorisation will be required in terms of the following:

- Development in close proximity to the watercourse:
  - Section 21(c): Impeding or diverting the flow of water in a watercourse
  - Section 21(i): Altering the bed, banks, course or characteristics of a watercourse
- Sewage infrastructure could be required inside the regulated area of the watercourse. This implies that General Authorisation will not be applicable.
- The proposed Waste Water Treatment Works (WWTW) and disposal of treated sewage might also trigger additional activities in terms of the Act.
- An Integrated Water Use License Application (WULA) will have to be submitted to the DWS.

### 1.3.3 *The National Heritage Resources Act (Act 25 of 1999)*

The proposed project falls within the scope of Section 38 of the National Heritage Resources Act, (NHRA), (Act 25 of 1999) and the applicable activities are:

- the construction of a road, wall, power line, pipeline, canal or similar form of linear development or barrier exceeding 300m in length
- any development or other activity which will change the character of a site-
  - exceeding 5 000m<sup>2</sup> in extent
  - involving three or more existing erven or subdivisions thereof
- the re-zoning of a site exceeding 10 000m<sup>2</sup> in extent

The Cultural-Heritage Resources Impact Assessment in Appendix C(3) will be submitted to the SAHRA and PHRA-G for comment and/or approval during the Public Participation Programme for this project.



### 1.3.4 Additional Relevant Acts, Frameworks and Guidelines

Title of Legislation, Policy or Guideline	Applicability to Project	Regulating Authority
National Environmental Management Act, 1998 (Act No 107 of 1998) (NEMA) and the Environmental Impact Assessment Regulations published in Government Notice No. R.982, December 2014, as amended in April 2017	Authorisation is required – refer to Paragraph 1.3.1 above	Gauteng Department of Agriculture and Rural Development (GDARD)
Occupational Health and Safety Act, 1993 (Act Nr 85 of 1993)	The development must be planned ensuring the health and safety of all employees and residents of the townships.	Department of Labour
Gauteng Environmental Management Framework Standard, 2 May 2018	The project area falls within Gauteng EMF Zone 1: Urban Development Zone	Gauteng Department of Agriculture and Rural Development
The National Water Act, 1998 (Act No 36 of 1998)	Water use authorisation would be required– refer to Paragraph 1.3.2 above.	The Department Water and Sanitation
National Heritage Resources Act, (NHRA), (Act 25 of 1999)	Comment/ approval must be obtained – refer to paragraph 1.3.4 above.	South African Heritage Resources Agency (SAHRA) Provincial Heritage Resources Authority-Gauteng (PHRA-G)
The Subdivision of Agricultural Land Act, 1970 (Act No 70 of 1970)	The application that deals with the loss of agricultural land forms part of the SPLUMA application to be submitted to the DALRRD by the town planner.	Department of Agriculture, Land Reform and Rural Development: Director Land Use and Soil Management
National Environmental Management: Waste Act (Act No. 59 of 2008) 2008	Authorisation is not required.	Department of Forestry, Fisheries and Environmental Affairs
National Forests Act (No 84 of 1998) and Government Notice 1339 of 6 August 1976 (promulgated under the Forest Act (No 122 of 1984) for protected tree species), the removal, relocation or pruning of any protected plants	No protected trees had been identified that requires a permit to remove, cut and/or damage.	Department of Environmental Affairs, Forestry and Fisheries
Fencing Act (No 31 of 1963) Amended by the Agricultural Laws Rationalisation Act, Act No 72 of 1998	Section 17: Any person erecting a boundary fence may clean any bush along the line of the fence up to 1.5m on each side thereof and remove any tree standing in the immediate line of the fence. However, this provision must be read in conjunction with the environmental legal provisions relevant to protection of flora.	South African Government
South African National Standard Civil Engineering Standards and Publications	To be implemented in the design, construction and operational phases of the project.	South African Bureau of Standards
National Development Plan (NDP) (2030)	To be considered.	South African National Government
Mogale City Spatial Development Framework 2022-2027 as approved by the Mogale City Local Municipality	To be considered as part of the SPLUMA Application for approval of the townships.	Mogale City Local Municipality
Section 51 of the Mogale City Local Municipality Spatial Planning and Land Use Management By-law, 2018	To be considered as part of the SPLUMA Application for approval of the townships.	Mogale City Local Municipality
The Spatial Planning and Land-use Management Act, 2013 (Act 16 of 2013) (SPLUMA)	A township application is prepared in terms of SPLUMA requirement.	The National Department of Rural Development and Land Reform (DRDLR)

## 1.4 Project Team

### 1.4.1 Details of the Environmental Assessment Practitioner

The Environmental Assessment Practitioners (EAPs) for this project are as follows.

The Primary EAP is Ms Ronel Dreyer from Isquare Environmental Planning & GIS (“Isquare”). The project is undertaken in association with Ms Annelize Erasmus from Landscape Dynamics Environmental Consultant (“Landscape Dynamics”). They are both registered Environmental Assessment Practitioners with EAPASA. Their Curriculum Vitae’s are attached in Appendix F(2).

**Isquare** was founded in September 2001 and specialises in Environmental Planning and Geographic Information Systems (GIS). Isquare has been involved with the Department of Water & Sanitation on several projects pertaining to Water Services Development Planning. During the last two years the focus has changed to the field of Environmental Impact Assessments and Environmental Monitoring and Control. Isquare is based in Gauteng but has been active on various projects throughout South Africa.

**Landscape Dynamics** is an environmental consultancy firm established in May 1997 with its main focus the compilation of environmental impact assessments. Landscape Dynamics has a broad client base from both the private and government sectors. The operating base for Landscape Dynamics is the entire South Africa, with local representation at the head office in Gauteng.

### 1.4.2 Professional Team

The impact that this project might have on the environment can only effectively be assessed if all the environmental project components had satisfactorily been identified and considered. A multi-disciplinary approach is therefore required for this Environmental Impact Assessment. The EIA Project Team members are the following:

COMPANY NAME	CONTACT PERSONS	RESPONSIBILITY/PROJECT COMPONENT
<b>Environmental Assessment Practitioners</b>		
Isquare Information Systems cc Landscape Dynamics Environmental Consultants cc	Primary EAP: Ms Ronel Dreyer Supporting EAP: Ms Annelize Erasmus	* EIA Project Management * Environmental Assessment Practitioners * Public Participation Programme
<b>Environmental Specialist Team</b>		
Enviroguard Ecological Services cc	Dr Leslie Brown / Mr C Cook 082 464 1021, envguard@telkomsa.net	* An Ecological Assessment of the Flora & Fauna * Watercourse Delineation and Assessment
Beyond Heritage	Mr Jaco van der Walt 082 373 8491 jaco@heritageconsultants.co.za	Heritage Impact Specialist
TerraAfrica	Me Marine Pienaar 082 828 3587, mpienaar@terraafrica.co.za	Agricultural Agro-Ecosystem Assessment
To be confirmed	To be confirmed	Water Use License Application
<b>The EIA Project Team is supported by the following professional team members</b>		
Cosmopolitan Projects Johannesburg (Pty) Ltd	Mr Ian Janse van Rensburg 083 413 1329, lan.j@cosmopro.co.za	Project Applicant Representative
SMR Town & Environmental Planning	Ms Sonja Meissner-Roloff 082 451 9585 / 012 665 2330 smeissner@icon.co.za	Town Planning Application with Midvaal Local Municipality
Infraconsult Engineering cc	Mr M Jansen 011 873 8126, infraconsult@infraconsult.co.za	Bulk Engineering Services Report
ELR (Eksteen & Le Roux) Consulting Engineers	Mr Ed Kotze 082 724 4261 / 012 665 3494 ed@elr.co.za	Electrical Statement
Intraconsult cc	Mr Dave Buttrick 011 469 0854, intrac@mweb.co.za	Geotechnical Investigations
SVR Land Surveyors	Mr Eamon Swart 082 551 1215, egssvr@mweb.co.za	Contour map

## 1.5 Working Programme

Note that the dates provided can be affected should GDARD require additional specialist input /studies to be undertaken. The following programme is pursued in this Environmental Impact Assessment process:

<b>ACTIVITY</b>	<b>PLANNED</b>
<b>Project Management</b>	<b>Date completed</b>
Date of Appointment	16 February 2022
Date of Site Investigation with Specialists	20 August 2021
<b>Initial Advertising (Notification Phase)</b>	<b>Date Completed</b>
Compilation of General Stakeholder (I&AP) and Landowner List	24 February 2022
Placement of on-site notices	1 March 2022
Placement of newspaper advertisement	28 February 2022
Notification letter distributed to I&APs and Landowner List	2 March 2022
<b>Specialist Studies</b>	<b>Date completed</b>
Vegetation, Faunal & Watercourse Assessments	May 2021
Agricultural Assessment	June 2022
Heritage Impact Assessment & Paleontology Desktop Study	June 2022
<b>Scoping Phase</b>	<b>Expected Date for Completion</b>
Draft Development Layouts Town planning statement letter Engineering services statement letter	August 2022
Draft Scoping Report to I&APs and GDARD (with the Application) for comment (30 days commenting period)	September 2022
Final Scoping Report for approval to GDARD	October 2022
Approval of Scoping Report by GDARD	November 2022
<b>Environmental Impact Assessment Phase</b>	<b>Expected Date for Completion</b>
Communicate Draft EIR with I&APs	December 2022
Final EIR to GDARD for consideration of authorisation	January 2023
Date of Environmental Authorisation issued and received	May 2023
Notification of EA to all I&APs with right to appeal	May/June 2023

## 2. PROJECT INFORMATION

### 2.1 Need and Desirability

The need and desirability of the proposed development (preferred land use alternative of a mixed land use township) can be motivated as follows:

- The proposed Lion Pride Extension Township Development is planned in a legal, pro-active and structured manner taking all development components, potential and restrictions into account.
- The proposed development site is strategically located within the jurisdiction of the Mogale City Local Municipality, close to main arterial roads that link work and residential opportunities.
- The use of existing resources and infrastructure such as roads, transportation and economic and social support will be maximised.
- The concept site layout plan of the preferred alternative takes due cognisance of the environmental sensitivities as identified by the specialists with an appropriate buffer zone to prevent unnecessary potential impact on the residents and users of the land, as well as the watercourse.
- Unutilised land which is at risk of illegal settlements and illegal dumping. This land will now be developed in a structured manner according to appropriate planning, design and management principles.
- The riverine area is at risk of further deterioration. By following the correct planning principles in cooperation with the Department of Water & Sanitation will ensure that measures are in place to restrict impact as far as reasonable and practical on the watercourse.
- The creation of more job opportunities is a high priority for this area. Jobs and financial opportunities will be created during all phases of project development.
- The proposed development is in line with the Gauteng Provincial Environmental Management Framework (GPEMF) Standard, May 2018. The development site falls within the “Environmental Management Zone 1 - Urban Development Zone”.

It is however important that all the conditions and comments of the key commenting authorities are integrated in the final layout plan and design of the township. The consultation with the key stakeholders during the Public Participation Process of this EIA will be important to obtain relevant requirement so that it could effectively be illustrated (with specialist and key stakeholder support) that all expected negative impact could be mitigated to acceptable levels. No opposition from key stakeholders with due justification must be relevant; and compliance with all relevant legislative requirements of an organ of state must be demonstrated.

### 2.2 Project Description

#### 2.2.1 21 SG Digit Codes

The properties involved in this development are:

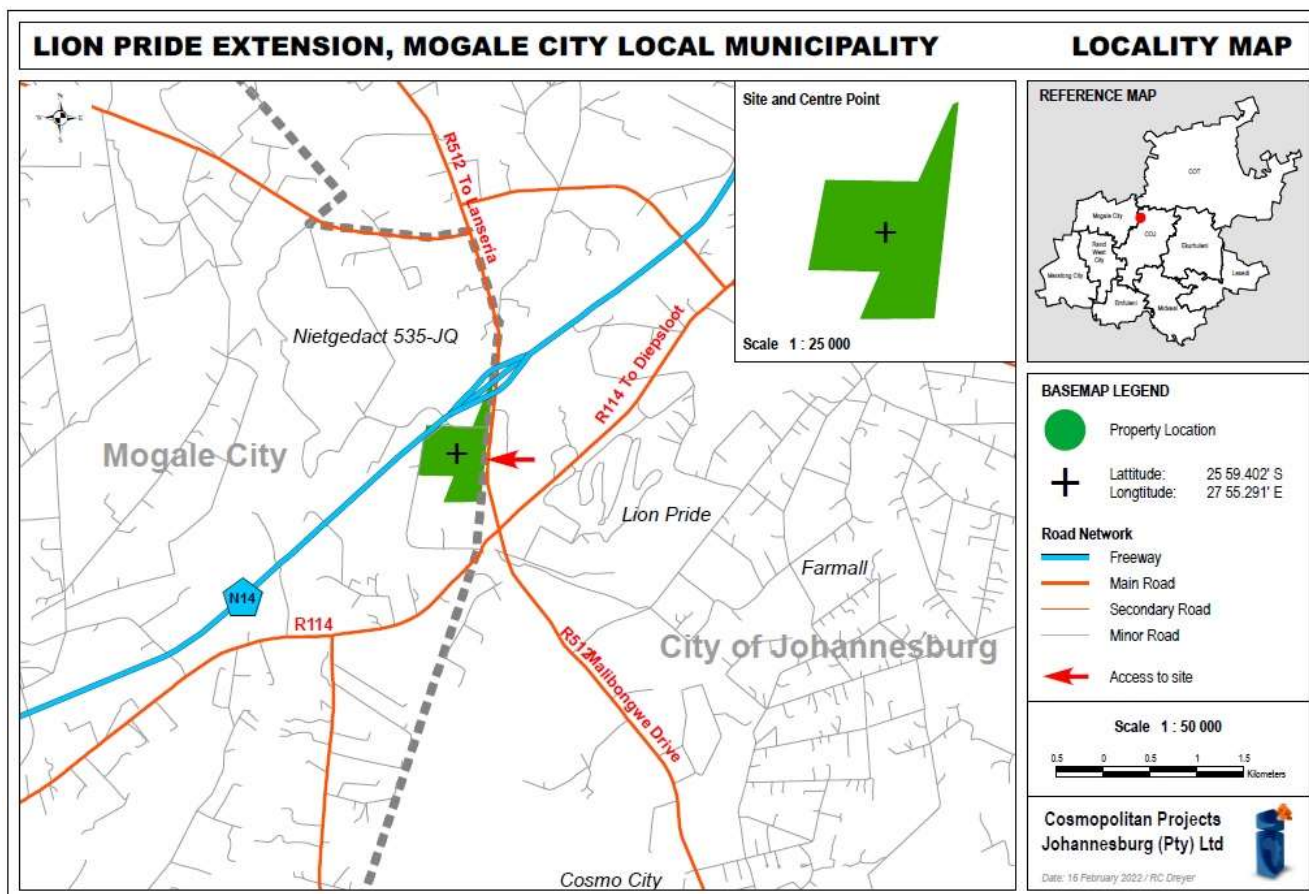
- Portion 162 of the farm Nooitgedacht 534-JQ
- The Remaining Extent of Portion 23 of the farm Nooitgedacht 534-JQ
- The Remaining Extent of Portion 196 of the farm Nooitgedacht 534-JQ

T	O	J	Q	0	0	0	0	0	0	0	0	5	3	4	0	0	1	6	2
T	O	J	Q	0	0	0	0	0	0	0	0	5	3	4	0	0	0	2	3
T	O	J	Q	0	0	0	0	0	0	0	0	5	3	4	0	0	1	9	6

#### 2.2.2 Locality & Regional Context

The proposed township falls within the area of jurisdiction of the Mogale City Local Municipality which falls within the West Rand District Municipality.

Refer to the locality maps provided in Appendix A(1) and A(2).



### 2.2.3 Project Components

The proposed township development includes the following land uses (also refer to Appendix B(1) for the concept layout plan for Lion Pride Extension Township Development.

Township	Residential Zoning & Density	Size (Extent)
Mogale Extension 54	Residential 3 @ 40 units/ha	9,5500ha
Mogale Extension 55	Residential 3 @ 40 units/ha	7,6777ha
Mogale Extension 56	Residential 3 @ 40 units/ha	13,4183ha
Mogale Extension 57	Residential 4 @ 130 units/ha	3,9301ha
Mogale Extension 58	Residential 4 @ 130 units/ha	2,5654ha
Mogale Extension 59	Residential 4 @ 130 units/ha	2,7314ha
Total Number of Units		1 961

### 2.2.4 Design, Construction and Operational Targets

It is planned to have all authorisations and engineering designs in place by the **second quarter of 2023**. Construction of the services and structures as well and marketing should commence as early as possible thereafter.

## 2.3 Town Planning Application

A Town Planning Application has been submitted to Mogale City Local Municipality in August 2022 and the process is being dealt with via stipulations in the Spatial Planning and Land-use Management Act, 2013 (Act 16 of 2013) (SPLUMA), the relevant Municipal Land-use Management By-laws for Mogale City Local Municipality, as well as the relevant Town-planning Scheme.

The Motivating Memorandum of Rietspruit is included in Appendix D(1) and it illustrates how the proposed development conforms to the planning guidelines and objectives of the following relevant acts, policies and frameworks:

- National Development Plan (NDP) (2030)
- Gauteng Spatial Development Framework (SDF) 2030
- National Development Plan (NDP) (2030)
- Mogale City Spatial Development Framework 2022-2027 as approved by the Mogale City Local Municipality
- Section 51 of the Mogale City Local Municipality Spatial Planning and Land Use Management By-law, 2018
- The Spatial Planning and Land-use Management Act, 2013 (Act 16 of 2013) (SPLUMA)

## 2.4 Bulk Engineering Services

Ruimsig Infrastructure Consultants was appointed by Cosmopolitan Projects Johannesburg Pty Ltd to act as consulting engineers for the proposed development. They have compiled a report named “Bulk Services Outline Scheme Report” for the proposed Lion Pride Extension Project dated July 2022r 2021 (refer to Appendix D(2)(a)). A confirmation letter re bulk electrical supply is included as Appendix D(2)(b).

### 2.4.1 Water Supply

The water supply of the Muldersdrift area east of Beyers Naude Drive is currently being supplied by Johannesburg Water via Cosmo City. Currently no water supply or water storage facilities are available from Mogale City in this area. It is therefore proposed that the developer construct a 10 ML Water Reservoir on behalf of Mogale City Local Municipality in the proximity of the Nooitgedacht primary school. The average daily water flow for the proposed development will be 8,751 ML. The proposed 10 ML reservoir will accommodate 24 hours of storage capacity as well as 1,249 ML spare capacity. The size of the reservoir could be increased to 12 ML should additional development opportunities become available to the developer. This reservoir will be supplied via a proposed 315mm / 400mm dia reservoir feeder line. It is proposed to connect this feeder line onto the existing Rand Water Weltevreden Park – Cosmo City Reservoir feeder line on the corner of Aureole Avenue and Boundary Road. Mogale City will apply at Rand Water for a metered bulk water connection onto the Weltevreden Park – Cosmo City Reservoir feeder line. The bulk infrastructure will be financed and constructed by the developer. Payment of bulk contribution / handing over of the infrastructure to Mogale City will be negotiated prior to the signing of a service level agreement.

The Johannesburg Water (Pty) Ltd Design Guidelines, the “Red Book”, the JWater Drawing Nos.1 to 7 as well as the SABS 1200 Series are used as a basis for the design of the water infrastructure.

*(Note that the construction of the reservoir does not form part of this application for environmental authorisation.)*

### 2.4.2 Sewer Reticulation

Currently no bulk sewer infrastructure is available in the proximity of the proposed development. A site was identified outside the Lion Pride Extension area to construct a 7ML mechanical dewatering, wastewater treatment works. 3 Sewer pump stations will also have to be constructed as part of the required sewer network. This WWTW will be constructed in phases of 1ML as the development of the proposed townships progress.

The “Red Book”, the Wastewater Department’s “Township Sewer Design Standards and Procedures”, as well as the SABS 1200 Series will be used as a basis for the design of the sewer reticulations.

### 2.4.3 Stormwater Management

A comprehensive stormwater management plan serving the entire catchment area of the proposed development will be submitted to Mogale City Local Municipality, Roads and Surface Drainage Section, for approval after finalization of the Site Development Plan and prior to the submission of detail construction drawings. Provision for attenuation ponds will be made during the finalization of the various Site Development Plans according to the requirements of Mogale City Local Municipality, Roads and Surface Drainage Section. The attenuation ponds will be designed so that the 1:25 year post-development stormwater discharge after attenuation will not exceed the 1:5 year pre-development discharge.

#### 2.4.4 Electricity

The proposed development falls within the municipal boundaries of the Mogale City Local Municipality but falls in the Eskom area of electrical supply. Eskom is the electrical supply authority for the proposed development. The proposed development falls within the feeder area of the Eskom owned Cosmo City Substation, and supply will be made available from there.

#### 2.4.5 Roads and Access

A Comprehensive the development of this Lion Pride Extension Project was done by Dhubecon Consulting Engineers and will be submitted to the Mogale City Local Municipality, Roads and Surface Drainage Section, for approval.

The site falls under the jurisdiction of the Mogale City Local Municipality. The boundary between Mogale City and the City of Johannesburg is however situated in the vicinity of the site and even though the subject site falls under the jurisdiction of the MCLM, most of the existing analysed key intersections falls under the CoJ's and Gautrans' jurisdiction. As a result, this report will be submitted to Mogale City as well as the City of Johannesburg and Gautrans for comments and/or approvals on the TIA.

Malibongwe Drive (R512 / P103-1 / K29) is a Class 2 road which implies that no direct access to individual properties will be allowed off this higher order road. Therefore, in order to provide access to the proposed townships (entire site) as a whole, one access intersection is proposed to tie in with the existing road network, which will be provided off Malibongwe Road (R512 / P103-1 / K29). The required upgrades are provided in the TIA. This intersection of the proposed main access road to the Lion Pride Project and Malibongwe Drive (R512 / P103-1) is already present and the location of this intersection coincides with Gautrans planning of the K29 road.

Design and construction will be in accordance with the Mogale City Local Municipality, Roads and Surface Drainage Section standards and specifications and relevant SABS 1200 specifications.

### 2.5 Geotechnical Conditions

General recommendations have been supplied to address potentially problematic soils which mantle the bedrock over large portions of the site. The implementation of the mitigation measures should form part of the requirements of the EMPr of the EIR. Measures are provided in terms of foundation designs, road construction and installation of underground services, possible seismic activity and drainage. In addition, a competent specialist should inspect excavations during the construction phase to ensure specific conditions of the sit and identify additional mitigation measures if required.

### 2.6 Sustainability Approach

In the light of the present and future situation with power and water supply in Gauteng Province and the country in general, all measures of power and water conservation should be implemented in any new development. The following relevant guidelines are proposed:

#### 2.6.1 Electricity Management

- Solar water heaters for economic housing of at least 100 litres insulated storage capacity with at least 2m<sup>2</sup> solar panel per household are proposed. This will be the greatest single factor in energy savings in an average household.
- The following is recommended for the hot water systems at each unit:
  - Geyser blankets should be installed
  - At least the first 1,5m of hot water outlet pipes should be insulated
- All buildings and sites to be orientated to the north and all living area windows to face north with sufficient roof overhangs. If these recommendations are met, no additional heating is generally required in this climate zone.
- Roof insulation equivalent of at least 40 mm glass wool compulsory should be compulsory and wall insulation (e.g. cavity walls) is recommended on south and west walls.
- Kitchen stoves to be gas fired, not electrical. Gas is a more efficient heat generator than electricity. It also renders the user less vulnerable to electricity supply failures.
- Low energy lights are compulsory. No incandescent bulbs should be fitted.

- Exterior lighting must be directed downwards and be of low wattage. This will prevent light pollution and the user has no benefit of light that is spilled up in the air and is wasted.

### **2.6.2 Water Management**

Water saving measurements are recommended as follows:

- All roofs to be fitted with gutters and down pipes, leading to rain water storage tanks of sufficient capacity (as near as possible to ½ cubic meter per 1 m<sup>2</sup> of roof area). This rain water should be used for building purposes, gardening, washing and toilet flushing. Minimal municipal water should be allowed for these functions. This measure results in saving on running cost and less vulnerability to service failures. It also results in savings on storm water infrastructure. Any form of rainwater retention is the best mitigation against the effects of desertification.
- The use of grey water (the use of water from showers, baths and basins) for irrigation purposes should be encouraged.
- Dual flush toilets to be installed.
- Low-flow shower heads must be installed.
- Tap aerators should be used.
- 'Water wise', indigenous plants must be given priority in the landscaping design for the development.

### **2.6.3 Landscaping**

- A strong indigenous approach (water-wise gardening) should be encouraged in any landscaping.
- It should be aimed to keep integrate as many of the existing trees in the development as possible.

### **2.6.4 Waste Management**

- Construction waste should as far as practical be re-used or sold for recycling purposes.
- Waste separation should be encouraged for recycling purposes. A designated area should be identified in the townships where waste could be dropped in different holders for different materials (i.e. paper, plastics and cans). This area should be surfaced and accessible to waste collectors.
- Liquid waste (grey water) must be used for irrigation purposes.



## 3. ALTERNATIVES

### 3.1 Consideration of Alternatives

The final preferred alternative that will be presented in the Environmental Impact Report for this project will be determined based on the following:

#### 3.1.1 Site Selection

The proposed development site is owned by a private company, Cosmopolitan Projects Johannesburg (Pty) Ltd for the purpose of establishing a residential land use township based on the need for development of housing opportunities in the macro area. The site is the ideal for the purpose of a residential development because to the following key factors:

- Direct access from Malibongwe Drive is available
- It is situated within the urban edge
- It is a natural extension of landuse development in the macro area
- It is close to work opportunities and/or main routes towards work opportunities

#### 3.1.2 Land Use

##### 3.1.2.1 Residential Township (Preferred Land Use)

The preferred land use is based on the following:

- This developer/applicant forms part of a group of companies whose key business is the development of residential opportunities throughout the Gauteng Province.
- Residential opportunities of any significant scale are still lacking in Gauteng and the proposed development is ideally located to cater in the needs of the Mogale City Local Municipality.
- The proposed township will ensure sustainable livelihoods through the development of high quality and sustainable residential units as provision is made for two primary schools, one secondary school, a community facility and other supportive land uses.
- The use of existing resources and infrastructure such as roads, transportation and economic and social support will be maximised. It is evident that the developer will contribute towards the establishment (installation) of bulk engineering services in order to develop the Lion Pride Extension township.
- Easily accessible land relatively close to work opportunities (as is the case with this property) is always under risk for settlement of squatters with associated negative social impact (i.e. increased crime and safety risk) and degradation of the environment in the absence of sufficient engineering services (water supply, sewage and waste disposal), i.e. collection of firewood, use of the watercourse for ablution activities, placement of snares, etc. Illegal dumping can no longer take place.

##### 3.1.2.2 Agriculture

An Agricultural Agro-Ecosystem Specialist Assessment is attached as Appendix C(3). The specialist confirmed the following:

- The proposed Lion Pride Extension project area is located on natural soil forms (Glenrosa, Mispah, Katspruit and Oakleaf forms) as well as soils already affected by human activities (Urban Technosols).
- The area has no evidence of agricultural activities as shown by historical imagery. No agricultural production figures for the past 5 years are available but from the observations made during the site visit, the following conclusions were reached:
  - No crop production took place on the site in the past five years.
  - There is no evidence of livestock farming on the site.
  - The grazing capacity of the entire site would allow for 4 head of cattle.
  - It is anticipated that job opportunities will be created during the construction and operational phases of the development.

The Lion Pride Extension Township Development is considered a viable land use option for an area where it is evident that no agricultural activities occurred for many years and located near other businesses (i.e. 1.9 km from Kwikspar Lanseria).

It was recommended that the application be considered favourably, permitting that the soil management measures are followed to prevent soil erosion and pollution.

### 3.1.3 Site Layout

The concept township layout has been determined by the following issues:

- Applicant requirement for a residential development
- Access from an approved and existing intersection with Malibongwe Drive
- The wetland and 32m buffer zone are excluded from the developable area. The 1:100 year floodline had also been determined. No development will be allowed in within these regulated areas- whichever is the largest, without Water Use Authorisation.

The site layout can be amended without having a significant impact on the environment, as long as the above components / issues are excluded from the development area.

It is expected that the site layout could be amended as comment is received from key stakeholders. If changes are made to the existing layout, it will be considered and assessed in the Environmental Impact Report.

### 3.1.4 NO GO Alternative

This is the “do nothing” alternative. Under these circumstances the residential township will not be established and the site of approximately 41,2ha will remain agricultural land, which should be weighed up against the need for a financial investment with economic and housing opportunities in the macro area.

If the “No Go” alternative is followed, then the following would be applicable:

- No opportunities to home-owners and affordable housing of good quality would be provided.
- Unutilised land in a prime location will not be developed to its full potential.
- It will remain at risk for illegal squatters to settle
- The site remains at risk for illegal dumping of waste.
- No measures will be in place to prevent deterioration of the watercourse.
- No job and financial opportunities would be created.

Generally the No Go alternative should be considered should the proposed development:

- have a significant negative impact that cannot be adequately mitigated against;
- have opposition from I&APs with due justification;
- result in non-compliance with certain legislative requirements of an organ of state.

At this stage, with the input from relevant specialists, it is evident that no significant negative impact on the environment will occur that cannot be mitigated to acceptable levels; no opposition and/or objections have been received at this stage; and the project is planned in a formal and pro-active manner taking all legal requirement and potential restrictions of the site into account. This will again be confirmed during the EIA phase of the project.

## 3.2 Concluding Statement Regarding Alternatives

The proposed Lion Pride Extension Project is planned in a legal, pro-active and structured manner taking all development components, environmental features, site potential and restrictions into account.

Given the site location, convenient access, and potential for significant financial investment in terms of the engineering services; and considering it is a natural extension of residential land use in the macro area, it is the opinion of the EAP that a good business and development opportunity for both the Applicant and the Mogale City Local Municipality could be missed, if the No Go alternative is pursued.

It is however important that all the requirements of the key commenting authorities are integrated in the layout plan and design of the township. During the EIA phase of the project, the EAPs need to confirm/illustrate effectively (with specialist and key stakeholder support where relevant) that all expected negative impact could be mitigated to acceptable levels according to relevant legislation, norms and standards. The Environmental Management Programme to be included in the Final EIR must contain all the proposed mitigation measures to ensure that negative impact is restricted to acceptable levels and/or prevented.

## 4. STATUS QUO OF RECEIVING ENVIRONMENT

### 4.1 General Description of the Site and Study Area

The project area is situated south of the N14 Highway, with Malibongwe Drive forming the eastern boundary. The site is not fenced, communal cattle grazing take place throughout the year and some sections had been excavated. A wetland divides the site from north to east. It consists mostly of a narrow stream with two old but broken farm dams with dense poplar trees in the north.

Lion Pride Extension is surrounded by residential development to the east and south and by non-residential and agricultural uses to the south-west. The following surrounding land uses are relevant:

- Lion Park Informal Settlement to the east across Malibongwe Drive
- Lion Pride Lifestyle Estate residential development to the south
- The N14 Freeway to the north
- An industrial development, Scaffolding Pty Ltd, to the south-west
- Agricultural land to the south west
- La Vue Guest House south-west of the site.

### 4.2 Geotechnical Investigation

The site is located on Halfway House Granite and related soil derivatives. The site is mantled by alluvium and colluvium in the floodplain of the stream that traverses the site from north to south. The terrain slopes gently at approximately 2% from the west (1 432 masl) to east (also 1 437 masl) with the lowest point being the stream (1 404 masl). The presence of open-textured (potentially collapsible) and active (potentially swelling and shrinking) near surface soils are discussed in more technical detail in the report.

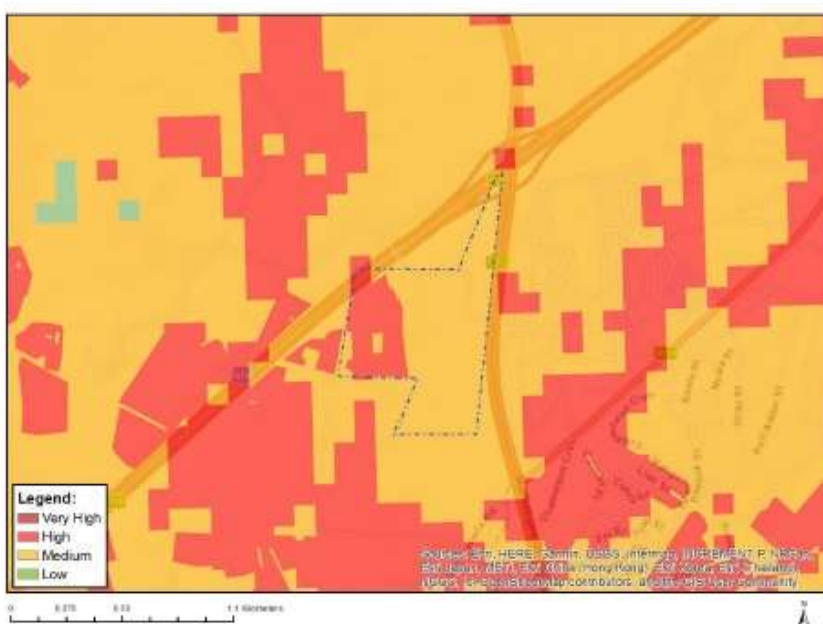
Although well-developed pedocretes mantle the residua granite (varying refusal depths) over some sections of the site, the thickness of the pedocretes are known to vary and to be completely absent on some areas. A Phase 2 Stage Geotechnical Study is therefore required during the design phase to refine and finalise the individual Soil Site Classifications for housing foundation design.

### 4.3 Ecological Reports

#### 4.3.1 DFFE Screening Tool Report

The Agricultural Theme Sensitivity is considered high.

MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



The Aquatic Biodiversity Combined Sensitivity is very high because of the watercourse and wetland running through the site.

**MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY**



The following components are relevant and considered to be Very High in significance for the Terrestrial Biodiversity Theme:

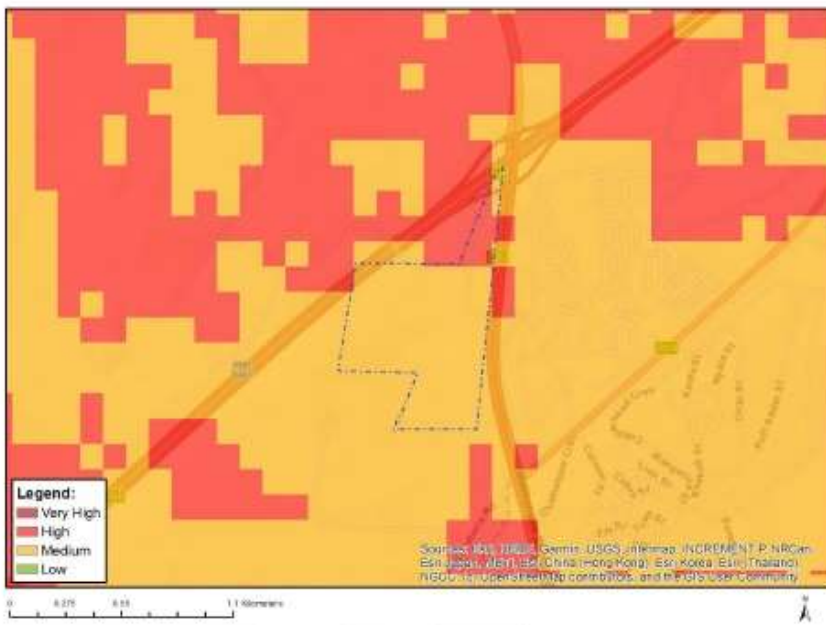
- Critical Biodiversity Area 2
- Ecological Support Area
- Critically Endangered Ecosystem
- Protected Areas Expansion Strategy

**MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY**



The site is classified as having a high Animal Species Combined Sensitivity.

#### MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



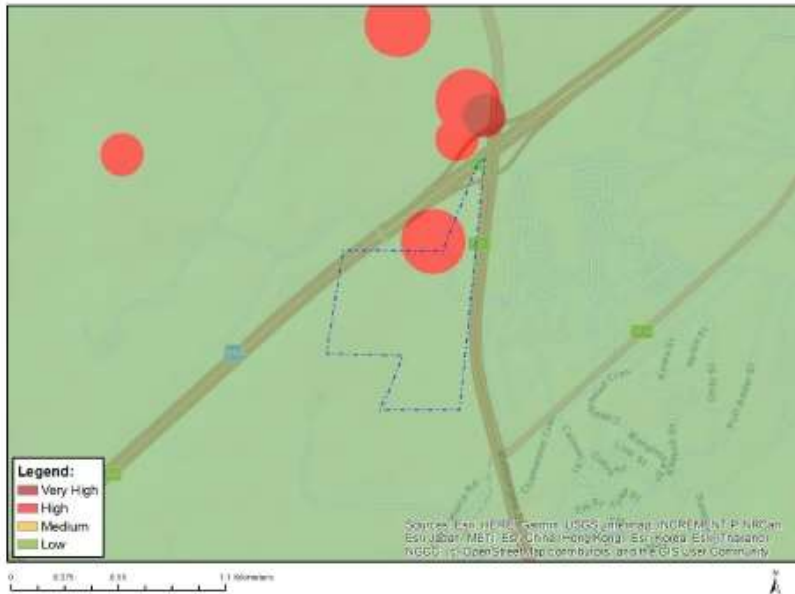
The relevant Plant Species Combined Sensitivity Theme is considered medium.

#### MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



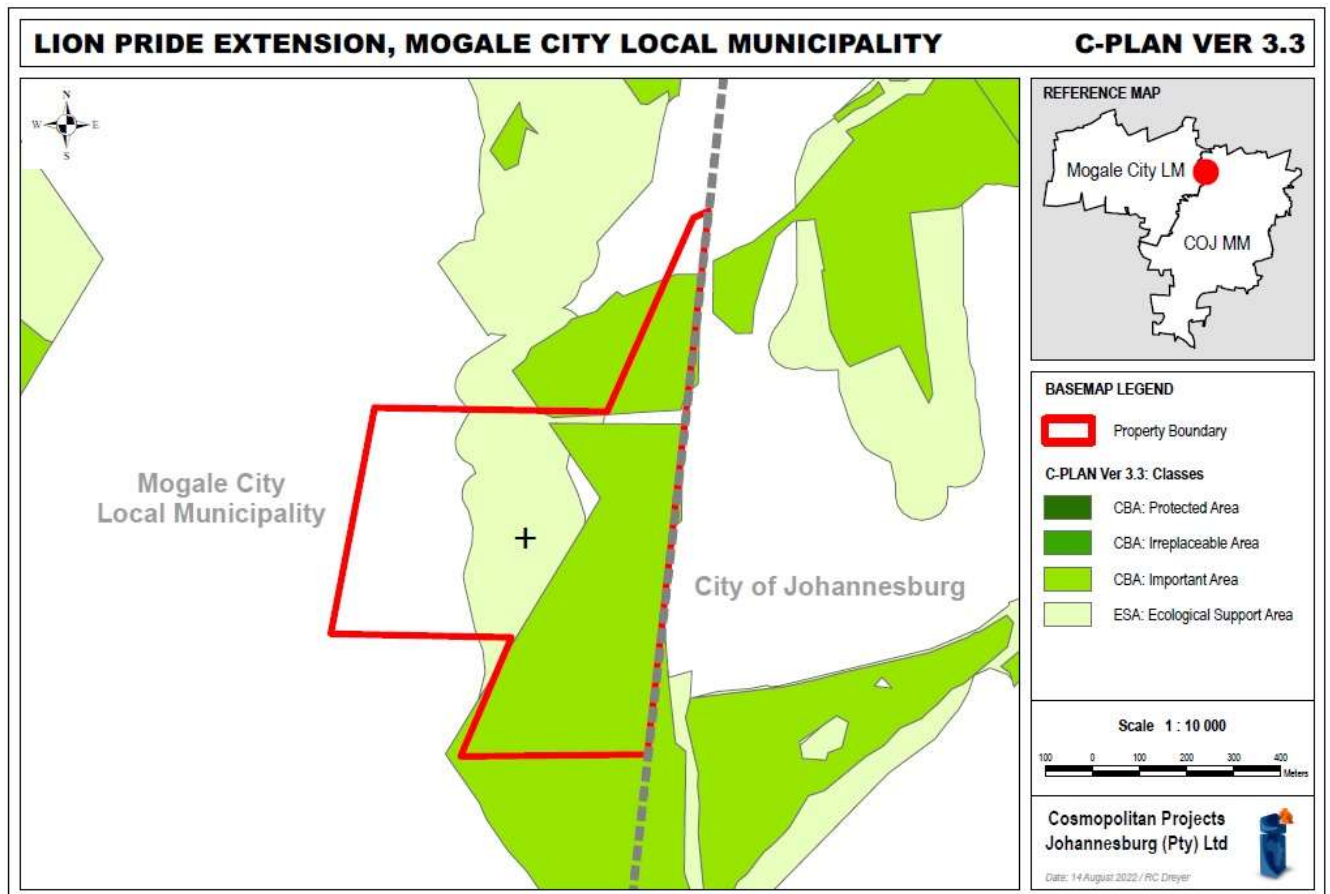
The site is classified as having a high sensitivity for the Heritage Theme.

#### MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



#### 4.3.2 GDARD C-Plan Version 3.3

The wetland area and watercourse is considered as an Ecological Support Area with the eastern part of the site being classified as a Critical Biodiversity Area (Important Area).



### 4.3.3 An Ecological Assessment of the Flora & Fauna

Enviroguard Ecological Services CC was appointed to present an ecological report on the flora and fauna of Portion 162, Remainder of Portion 23 and Remainder of Portion 196 of the Farm Nooitgedacht 534-JQ, Gauteng Refer to the report in Appendix C(1). The report comprises of a northern section that does not form part of this application.

The objectives of this study were to:

- Identify, describe and delineate the different vegetation units present on the study site.
- Provide a description of the fauna (**mammals, avifauna (birds), reptiles, amphibians**) occurring within the study area.
- Identify species of conservation importance that could possibly occur on the proposed site.
- To provide a sensitivity map of the study area (where applicable).
- To provide management recommendations to mitigate negative and enhance positive impacts of the proposed development.

The study site is surrounded by various agricultural holdings and residential/informal settlement areas. The area is not fenced, and access is easily obtained. Large sections of the site have been previously ploughed and planted with pastures while other have been grazed and harvested for fodder with the furrows that were ploughed still visible in some areas. There are various roads and footpaths that transect the area. Herders from the nearby informal settlement east of the site use the area for grazing throughout the year. The cattle graze and trample the area and as a result the wetland area is trampled in some places, but not with large-scale degradation, though the grass layer is degraded with mostly secondary successional species. Based on their plant species composition, conservation value and sensitivity analysis the different vegetation units in the study area has the following ecological sensitivities:

**Vegetation unit 2 (Old fields)** comprises the largest parts of the study area. This area has been actively ploughed and grazed in the past and has been left fallow for many years. This has resulted in the anthropogenic grass *Hyparrhenia hirta* establishing and becoming dominant which is typical for highveld grassland once disturbed. The secondary successional grass *Eragrostis chloromelas* and the grass *Cymbopogon caesius* (that can also indicate degraded conditions) are prominent in sections. Small grazing lawns are present throughout this unit due to continuous grazing practices. These "lawns" are dominated by the pioneer grass *Cynodon dactylon* and will increase in size as the grazing continues over the years. This grassland has a low species richness and also a low ecological sensitivity.

**The Developed area and the Degraded area (vegetation units 3 & 5)** have been developed in the past with some sections landscaped (unit 3), while illegal dumping and settlement has taken place in others (unit 6). As a result, these areas are dominated by a large number of alien invasive trees and shrubs with a degraded herbaceous layer consisting of secondary successional and pioneer grass and forb species. These areas have a low species richness and is regarded as having a low ecological sensitivity.

**The Wetland unit (4)** occurs in the central part of the study area in the south and forms the western boundary of the study site in the northern section. Whereas the northern section comprises three artificial dams, a channel, an old borrow pit and a large *Populus alba* woodland, the southern section comprises a longer channel, and old broken dam wall and an old borrow pit. These areas are grazed by cattle that also use it for drinking purposes. The vegetation in the wet areas and dams are mostly obligate wetland species while a mixture of hydrophilic and terrestrial species occurs along the edges of the system. Trampling by cattle is evident throughout the wetland area. As a result of the degraded condition of the vegetation, the sensitivity analysis resulted in a medium sensitivity, however watercourses are extremely important and threatened ecosystems that have an important ecological function. Not only do they channel surface water to larger water systems, but they play a role on filtering water, water retention and also provide habitat to a variety of insects and aquatic species. This area can be rehabilitated by removing the alien invasive vegetation and preventing the overgrazing taking place. The wetland area also provides habitat for various aquatic species and insects increasing the biodiversity of the unit. This vegetation unit is therefore regarded as having a high ecological sensitivity.

No threatened species were found to be present on the site while the medicinal plants identified are not threatened and occur abundantly throughout the Province. The wetland falls within the area zoned by GDARD as a CBA area, however, although indicated as a CBA area vegetation unit 2 is degraded and has limited connectivity with natural areas or areas resembling native vegetation.

The large number of alien plant species present throughout the area especially units 3 & 5, are a cause for concern since these species are not only spreading into the adjacent vegetation units, but also spread their seeds via the wetland system during high rainfall events. It is therefore important that these species are eradicated from the property as a high priority especially in vegetation units 1 and 4.

It is not thought that development of the degraded areas with low ecological sensitivities on the study site should have a negative impact on the environment provided that the mitigation measures as indicated in this report is incorporated into the management plan and adhered to.

#### 4.3.4 Watercourse Delineation and Assessment

Enviroguard Ecological Services CC was appointed to compile a Watercourse Delineation and Assessment for the project. Refer to Appendix C(2). The report also addresses portions of the wetland system north of the N4 which does not form part of this application.

The wetland area of the study site used to be just a narrow wetland, however due to two artificial dams in the northern section the area has expanded and developed into a wider wetland system. The dam wall areas are overgrown with the alien invasive kikuyu grass (*Pennisetum clandestinum*). Soil excavation has taken place in the past within the channel and adjacent to it, which has changed the waterflow through the area. The large *Populus alba* forest area has displaced most of the native plant species and has dried up sections of the wetland. Cattle graze these areas on a regular basis and have trampled the channels in both sections. Land infill along its edges in the past has also negatively affected the ecosystem. This area is permanently wet and do provide habitat for various aquatic and insect species. This area is the most impacted by human actions and was therefore confirmed as being largely modified with a change in ecosystem processes and resultant loss of natural habitat and biota. Despite some areas of the different water courses on the study site being degraded and impacted by anthropogenic influences (past and current), water systems fulfil important roles in the environment. Not only do they channel and store water, but they also play a role in the purification of polluted water, flood attenuation, and provide habitat for various plant and animal species with a variety of aquatic species dependant on these systems for their survival. The water systems on the study site, although some are impacted by human activities, are all functioning and provide various ecological functions. These systems should be managed to improve their condition that will enhance the ecological and conservation value even more.

It is therefore important that no development is allowed within these ecosystems and that a 32 m buffer zone is implemented around the edge of this system within which no development should be allowed. All alien invasive plants within these systems should be controlled as prescribed by law.

#### 4.3.5 Conclusion of the Ecological Studies

The sensitive areas that include the Critical Biodiversity Areas, Ecological Support Areas together with the wetland and 32m buffer zone as proposed by the ecologists for the project should effectively be integrated with the layout of the township.

### 4.4 Cultural Heritage Resources Impact Assessment

A Heritage Impact Assessment was compiled by BEYOND HERITAGE (Mr Jaco van der Walt), and is included as Appendix C(3). It was required to ensure compliance with the National Heritage Resources Act because the project triggers the following relevant activities:

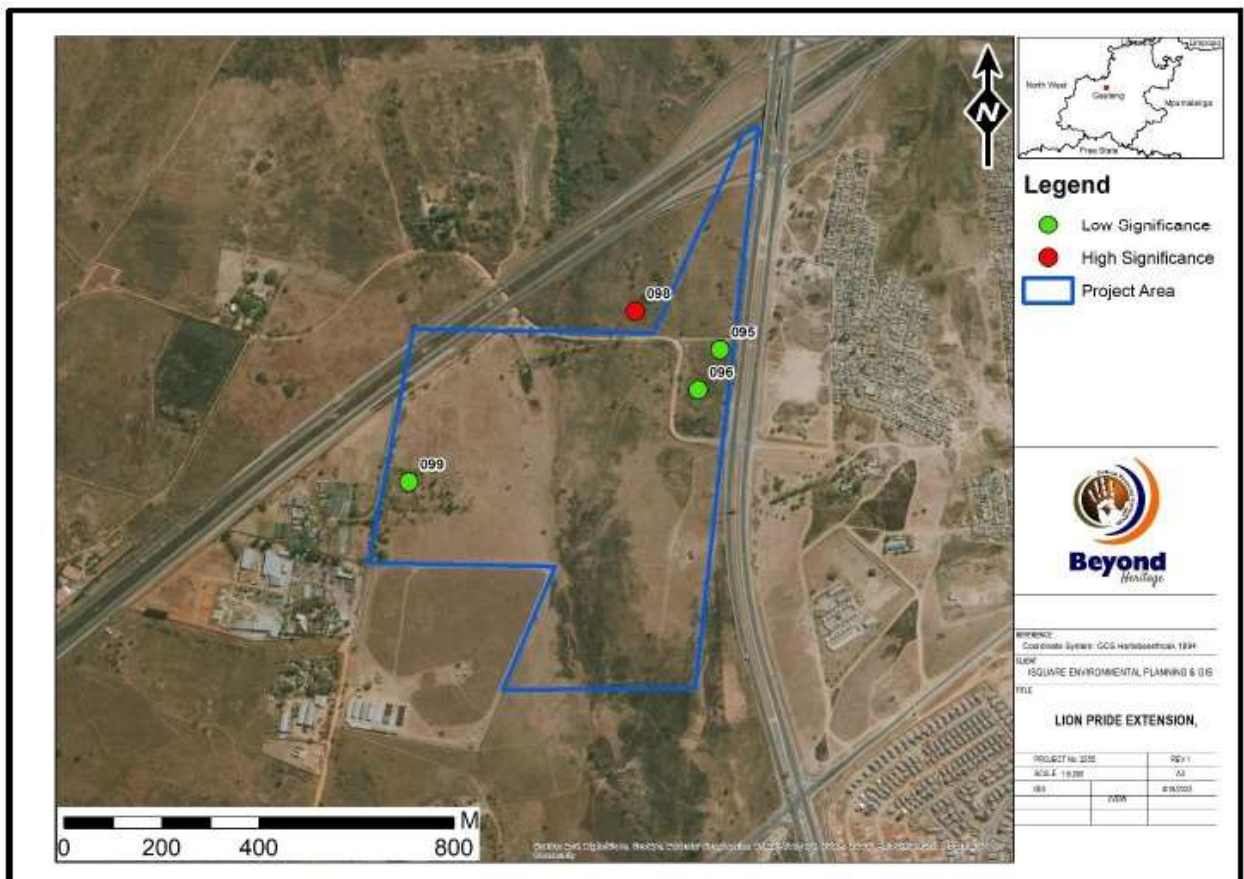
- The construction of a linear development (road, wall, power line canal etc.) exceeding 300m in length.
- Any development or other activity that will change the character of a site and exceed 5 000m<sup>2</sup> or involve three or more existing erven or subdivisions thereof.
- Re-zoning of a site exceeding 10 000 m<sup>2</sup>.

Mr van der Walt concluded the following:

- The Project area has no focal points like rocky outcrops or hills that could have attracted human occupation in antiquity and is considered to be of low archaeological potential. This was confirmed during the field survey and no archaeological sites of significance were noted and finds were limited to the ephemeral remains of demolished structures (Waypoint 095, 096 and 099 indicated on map below) and a burial site (Waypoint 098) located outside of the Project footprint. The recorded ruins' potential to contribute to aesthetic, historic, scientific, and social aspects are non-existent, and it is therefore of low heritage significance unless associated with burial sites (e.g., still born graves) in which case the burial sites are of high social significance. The graves are of high significance and should be avoided.
- According to the SAHRA Paleontological sensitivity map the study area is of insignificant paleontological significance, no further studies are required for this aspect.



- No adverse impact on heritage resources is expected by the project and it is recommended that the project can commence on the condition that the recommendations (Section 10 of Appendix C(3)) are implemented as part of the EMP and based on approval from SAHRA.



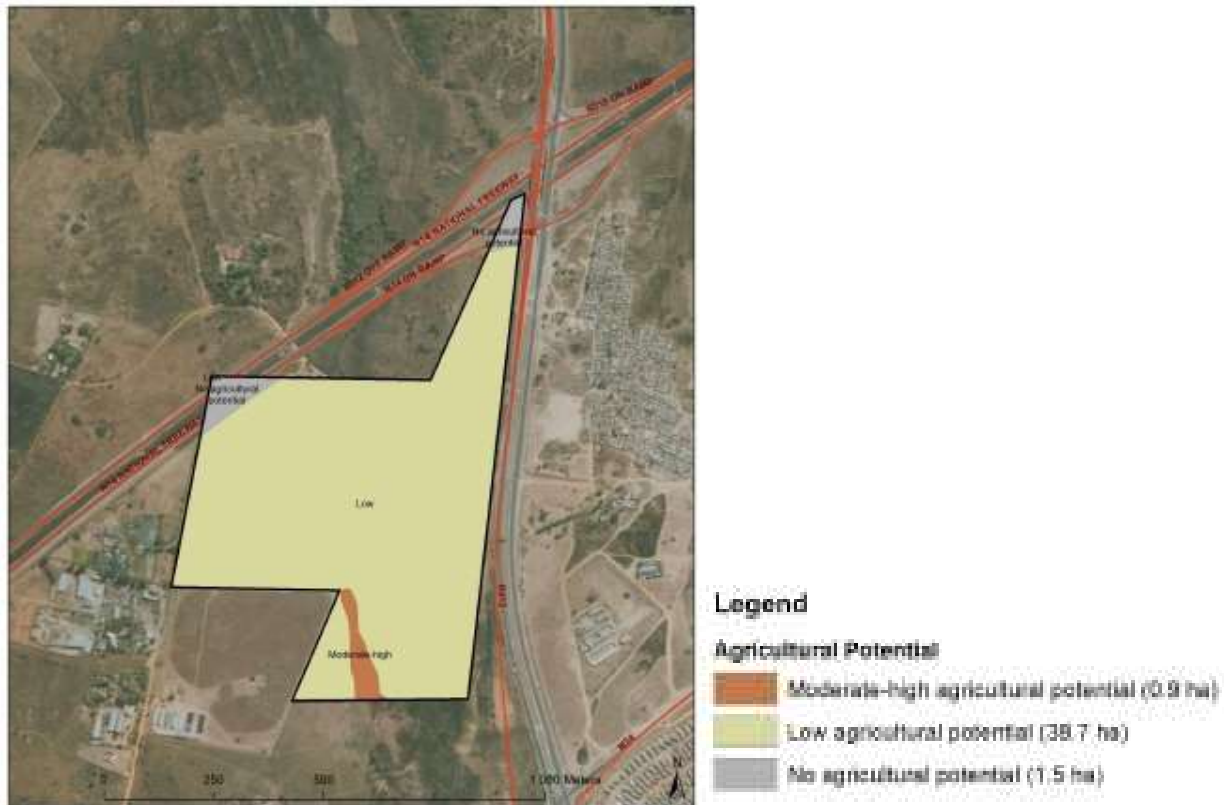
The following recommendations for Environmental Authorisation apply and the project may only proceed based on approval from SAHRA:

- Avoidance of burial sites (Waypoint 098) with a 30 m buffer zone and access for family members.
- Implementation of a Chance Find Procedure for the project (as outlined in Section 10.2 of Appendix C(3)).
- The project area should be monitored by the ECO.

#### 4.5 Agricultural Agro-Ecosystem Specialist Assessment

Terra-Africa was assigned by Cosmopolitan Projects Johannesburg (Pty) Ltd to conduct an Agricultural Agro-Ecosystem Assessment on the proposed mixed land use township, “Lion Pride Extension”, on Portion 162, remainder of Portion 23 and remainder of Portion 196 of the farm Nooitgedacht 534-JQ within the jurisdiction of Mogale City Local Municipality, Gauteng Province. The proposed development involves the development of Residential 1 and Residential 3 land use township on approximately 41 hectares with the current land use zoned as “Agriculture”. Refer to the report in Appendix C(4).

Following the soil and land capability classification, the Lion Pride Extension area was classified according to its agricultural potential. The agricultural potential of the site specifically refers to its suitability for rainfed crop production. The area can be divided into three agricultural potential classes (refer to figure below). The largest portion of the area has Low agricultural potential because the shallow, rocky soil profiles are not suitable for crop cultivation and have low water-holding capacity.



The proposed Lion Pride Extension Township Development is located on natural soil forms (Glenrosa, Mispah, Katspruit and Oakleaf forms) as well as soils already affected by human activities (Urban Technosols). The grazing capacity of the entire area is 6 (ha/LSU) and the site therefore has grazing available for 7 head of cattle. However, no evidence of current cattle (or other livestock) has been observed on site.

The area has no evidence of agricultural activities as shown by historical imagery. No agricultural production figures for the past 5 years are available but from the observations made during the site visit, the following conclusions were reached:

- No crop production took place on the site in the past five years.
- There is no evidence of livestock farming on the site.
- The grazing capacity of the entire site would allow for 4 head of cattle.
- It is anticipated that job opportunities will be created during the construction and operational phases of the development. No figures were received from the applicant but can be added to the report as soon as it become available.

The Lion Pride Extension is considered a viable land use option for an area where it is evident that no agricultural activities have occurred for many years and located near other businesses (1.9 km from Kwikspar Lanseria). It is the specialist's professional opinion that this application be considered favourably, permitting that the soil management measures are followed to prevent soil erosion and pollution. The project infrastructure should also remain within the development area boundaries indicated in the project layout.

## 5. PUBLIC PARTICIPATION

### 5.1 Objectives of the Public Participation Programme

The main aim of public participation is to ensure transparency throughout the EIA process. The objectives of public participation in this EIA are the following:

#### 5.1.1 During the Scoping Phase

- To identify all potentially directly and indirectly affected stakeholders, government departments, municipalities and landowners;
- To communicate the proposed project in an objective manner with the aim to obtain informed input;
- To assist the Interested & Affected Parties (I&APs) with the identification of issues of concern, and providing suggestions for enhanced benefits and alternatives;
- To obtain the local knowledge and experience of I&APs;
- To verify that the concerns and issues raised by I&APs define and guide the scope of further studies to be undertaken during the Impact Assessment;
- To ensure that all reasonable alternatives are identified for assessment in the EIA Phase.

#### 5.1.2 During the Environmental Impact Assessment Phase

- To communicate the progress of the EIA study as well as the proceedings and findings of the specialist studies;
- To ensure that informed comment is possible;
- To ensure that all concerns, comment and objections raised are appropriately and satisfactorily documented and addressed;

### 5.2 Process Followed

Timeframes of advertising periods had been confirmed with GDARD at the commencement of the project. The Public Participation Plan and the approval thereof is provided in Appendix E(1). The process followed in the Public Participation Process (as approved by GDARD) undertaken for this project involves the following:

#### 5.2.1 Phase 1 PPP - Initial Advertising Process

- Compilation of a Register of Interested & Affected Parties  
A complete list of Key Stakeholders and Interested & Affected Parties was compiled and is being maintained throughout the entire project period.
- Onsite notification  
Two laminated A2 onsite notification posters had been placed on site on 1 March 2022. A 30 day advertising period for registration as a stakeholder was stated on the notices.
- Newspaper Advertisement  
A newspaper advertisement was placed in the Citizen on 28 February 2022 with an invitation to register as a stakeholder. A 30 day period was allowed.

#### 5.2.2 Phase 2 PPP - Scoping Phase

- Distribution of the Draft Scoping Report for comment will be done via e-mail to everyone on the Register of Interested & Affected Parties.
- Should any of the stakeholders not have access to e-mails and the internet, they will be notified telephonically of the availability of the Draft Scoping Report at a publicly accessible venue close to the proposed development site. This venue will, if relevant, be identified in cooperation with the relevant Ward Councillor(s).
- A 30 day period will apply for comment on the Draft Scoping Report.

### 5.2.3 Phase 3 PPP - EIR Phase

- Distribution of the Draft Environmental Impact Report (EIR) for comment will be done via e-mail to everyone on the Register of Interested & Affected Parties.
- Should any of the stakeholders not have access to e-mails and the internet, they will be notified telephonically of the availability of the Draft Environmental Impact Report at the publicly accessible venue at the previously public accessible confirmed venue.
- A 30 day period will apply for comment on the Draft EIR.
- All communication received on the Draft EIR will be included in the Final EIR to be submitted to GDARD for their consideration for Environmental Authorisation. Only if significant changes that change the recommendations made in the Draft EIR are relevant, will it again be communicated and/or circulated for comment to the relevant stakeholders.

### 5.2.4 Notification of Environmental Authorisation

All registered Interested & Affected Parties will be informed of the decision of the Gauteng Department of Agriculture and Rural Development (GDARD) as soon as Environmental Authorisation had been received. All stakeholders will also be notified of the relevant appeal procedure.

### 5.2.5 Special Instructions from GDARD

GDARD approved the above Public Participation Plan with the following additional instruction:

- No public meetings to be held.
- Only virtual meetings are permitted.

### 5.2.6 Proof of Actions taken

Documentation of the relevant info and actions taken are included in Appendix E of the Scoping and EIR Reports.

## 5.3 Issues Raised During the Scoping Phase

### 5.3.1 Written Communication during the Initial Advertising Period up to the Distribution of the Draft Scoping Report

**Initial comment on the project was received from the following stakeholders Government, Institutions and Municipalities:**

- Rand Water
- Gauteng Department of Roads and Transport (GPDRT)
- Mogale City Local Municipality
- SANRAL
- Stor-Now (Pty) Ltd, care of Mr Scott Griffith
- Magnum Pumps, care of Mr Wynand Erasmus

### **Rand Water, Me Natalie Koneight (dated 2 March 2022)**

- Me Koneight requested that the following be provided in order to determine whether Rand Water will be affected:
  - Shape files and/or kmz files of area
  - Locality Map
  - The Application

#### **Response from EAP:**

*The client instructed the EAP to wait while the layout is being finalized. On 30 May 2022 the following files were emailed to Me Koneight:*

- *Lion Pride Ext Bnd.kml*
- *Appendix A(1) Locality Map.pdf*
- *LionPrideExt\_EIR\_NotificationLetter.pdf*

### **Gauteng Department of Roads and Transport (GPDRT), Ms Itumeleng Moresele (dated 8 March 2022)**

- Ms Itumeleng Moresele, Directorate Transport Infrastructure Planning (via email on 8 March 2022)  
She confirmed that the Gauteng Strategic Transportation Network namely, provincial roads the P158/2, K29 and K52 are potentially affected. An application for a township establishment or change in land use must be lodged in terms of the Gauteng Transport Infrastructure Act, 2001 (Act No 8 of 2001). The said application must be lodged with this Department for evaluation.

#### ***Response from EAP:***

- *The Applicant has been informed of the requirements by the Department.*
- *This Scoping Report (with all the relevant appendices) will be communicated with the GPDRT during the stakeholder communication which forms part of the application for environmental authorisation.*

### **Mogale City Local Municipality, Thabang Matlala (dated 9 March 2022)**

- Email was received from Thabang Matlala with a letter from the Acting Executive Manager, S Mdlalose with the following:
  - He requested that the Department: Integrated Environmental Management (DIEM) of MCLM be registered as an I&AP.
  - That the EAP liaise closely with the office throughout the process.
  - The relevant documentation be forwarded to the Department for their input.

#### ***Response from EAP:***

- *DIEM was added to the I&AP Register.*
- *Once the layout and relevant specialist reports have been finalised, a meeting will be scheduled with the Department.*
- *Once the Draft Scoping Report has been submitted to GDARD, it will also be distributed to all I&APs for their comment.*

### **SANRAL, Ms Ria Barkhuizen (dated 18 March 2022)**

- On 18 March 2022 Ms Ria Barkhuizen confirmed that SANRAL is not affected.

#### ***Response from EAP***

*The Applicant was informed that SANRAL is not affected. No further actions required.*

### **STOR-NOW, Mr Scott Griffith (dated 17 March 2022)**

- Mr Scott Griffith from Stor-Now requested via email to be registered as an I&AP. He also supplied all the relevant contact details.

#### ***Response from EAP***

*He was added to the I&APs Register and the Draft Scoping Report will be submitted once compiled.*

### **Magnum Pumps, Mr Wynand Erasmus, care of Antoinette van Wyk (dated 3 March 2022)**

- Mr Wynand Erasmus requested to be registered as an I&AP.

#### ***Response from EAP***

*He was added to the I&APs Register.*

- He was also interested to know if the access road into his property will remain as is.

#### ***Response from EAP***

*At the time of the email, the layout had not yet been finalised. Once the Draft Scoping Report has been submitted to GDARD, it will also be distributed to all I&APs for discussion.*

### **5.3.2** *Comment Received on the Draft Scoping Report*

All comment received on the Draft Scoping Report will be included and addressed in the Final Scoping Report that will be submitted to GDARD for approval.

### **5.3.3** *Comment Received on the Draft Environmental Impact Report*

All comment received on the Draft EIR will be included and addressed in the Final EIR that will be submitted to GDARD for approval.

## **5.4 Conclusion of Public Participation during the Scoping Phase**

Even though the project was advertised widely as described above, relative few comments had been received during the initial advertising of the project. Note however that the commenting period on the Draft Scoping Report is still applicable and all communication received will be documented and addressed in the Final Scoping Report to be submitted to GDARD for approval.

## 6. IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

### 6.1 Methods Used to Identify Impact

Environmental issues and impacts will be identified through the following means:

- Evaluation of the facility in terms of process, layout and operation methodology.
- Consultation with the Project Team.
- Findings and recommendations of the specialist studies.
- Evaluation and consideration of relevant existing environmental data and information.
- The general knowledge and extensive experience of the Environmental Consultants in the field of Environmental Impact Assessments for township establishment.
- Correspondence with Interested and Affected Parties, including directly affected landowners, general stakeholders and relevant authorities.

### 6.2 List of Impacts Associated with the Development

#### 6.2.1 *Expected Negative Impacts*

The main potential negative impacts associated with the project are the following:

##### 6.2.1.1 *Design & Planning Phase (critical issues that must be addressed during the design and planning phase):*

- Safety and Health Impact (dust, radio-activity and undermining)
- Impact on the wetland and the stream
- Impact on natural habitat (fauna and flora)
- Potential impact on groundwater
- Increased run-off resulting in erosion and a loss of soil

##### 6.2.1.2 *Construction Phase*

- Health & Safety Risk during construction
- Impact on the wetland and the stream
- Impact on natural habit (fauna & flora)
- Increased risk for groundwater pollution
- Increased risk for erosion resulting from construction activities
- Influx of labourers with associated crime, access control, risk for habitat destruction
- Impacts associated with construction activities such as noise and dust

##### 6.2.1.3 *During Operational Phase*

- Health & Safety risk during operation (dust, radio-activity and undermining)
- Continuous risk for disturbance to the wetland
- Continuous risk for groundwater pollution
- Increased risk for impact on surrounding environment (i.e. habitat destruction and veld fires)
- Increased run-off resulting in erosion

##### 6.2.1.4 *Cumulative Impact*

- Increased traffic

### 6.2.2 Expected Positive Impacts

The expected positive impacts of the proposed project on the environment are as follows:

- Residential opportunities of any significant scale are still lacking in Gauteng and the proposed development is ideally located to cater in the needs of the Ekurhuleni and Midvaal communities.
- If this area could enjoy local residential growth in addition to the proposed commercial development along the R59 corridor, such residential opportunities could well favour a scenario of employment and residential opportunities in close and functional proximity to each other. This can contribute to a decrease in dependence on regional traffic routes and therefore impact positively on the current traffic scenario.
- The proposed township will ensure sustainable livelihoods through the development of high quality and sustainable residential units as provision is made for two primary schools, one secondary school, a community facility and other supportive land uses.
- The use of existing resources and infrastructure such as roads, transportation and economic and social support will be maximised. It is evident that the developer will contribute towards the establishment (installation) of bulk engineering services in order to develop the Rietspruit township.
- Easily accessible land relatively close to work opportunities (as is the case with this property) is always under risk for settlement of squatters with associated negative social impact (i.e. increased crime and safety risk) and degradation of the environment in the absence of sufficient engineering services (water supply, sewage and waste disposal), i.e. collection of firewood, use of the watercourse for ablution activities, placement of snares, etc. Illegal dumping can no longer take place.
- The riverine area is at risk of deterioration because it is easily accessible by the public. By following the correct planning principles in cooperation with the Department of Water & Sanitation will ensure that measures are in place to restrict impact as far as reasonable and practical on the watercourse.
- A strong “indigenous only” approach will be followed with landscaping and as much as practical existing indigenous vegetation will be incorporated into the development.
- A green architectural approach is also proposed (in terms of water saving, electricity saving, restriction of light pollution, waste management, etc.).

### 6.3 Proposed Management of Impacts and Mitigation

Identified impacts and mitigation will be monitored through the application of the Environmental Management Programme (EMPr) to be included in the Environmental Impact Report.

The main objectives of the EMPr are to ensure that:

- Mitigation measures are identified and implemented to avoid or minimise the expected negative environmental impact and enhance the potential positive impact associated with the project.
- The developer, construction workers and the operational and maintenance staff are well acquainted with their responsibilities in terms of the environment.
- Communication channels to report on environment related issues are in place.

Specifications will be supplied for the following project development phases:

- Design & Planning Phase
- Construction Phase
- Operational Phase



## 7. PLAN OF STUDY FOR ENVIRONMENTAL IMPACT ASSESSMENT PHASE

### 7.1 Objective of the EIA Phase

According to Appendix 3 of the NEMA 2104 Regulations, the objective of the environmental impact assessment process is to, through a consultative process:

- (a) determine the policy and legislative context within which the activity is located and document how the proposed activity complies with and responds to the policy and legislative context;
- (b) describe the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location;
- (c) identify the location of the development footprint within the preferred site based on an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified development footprint alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects of the environment;
- (d) determine the
  - (i) nature, significance, consequence, extent, duration and probability of the impacts occurring to inform identified preferred alternatives; and
  - (ii) degree to which these impacts-
    - (aa) can be reversed;
    - (bb) may cause irreplaceable loss of resources, and
    - (cc) can be avoided, managed or mitigated;
- (e) identify the most ideal location for the activity within the preferred site based on the lowest level of environmental sensitivity identified during the assessment;
- (f) identify, assess, and rank the impacts the activity will impose on the preferred location through the life of the activity;
- (g) identify suitable measures to avoid, manage or mitigate identified impacts and
- (h) identify residual risks that need to be managed and monitored.

### 7.2 Plan of Study

#### 7.2.1 Content of Plan of Study

According to the NEMA 2014 Regulations, Appendix 2.2(i) a Plan of Study for undertaking the Environmental Impact Assessment process must include the following:

- i. A description of the alternatives to be considered and assessed within the preferred site, including the option of not proceeding with the activity;
- ii. A description of the aspects to be assessed as part of the environmental impact assessment process;
- iii. Aspects to be assessed by specialists;
- iv. A description of the proposed method of assessing the environmental aspects, including a description of the proposed method of assessing the environmental aspects including aspects to be assessed by specialists;
- v. A description of the proposed method of assessing duration and significance;
- vi. An indication of the stages at which the competent authority will be consulted;
- vii. Particulars of the public participation process that will be conducted during the environmental impact assessment process;
- viii. A description of the tasks that will be undertaken as part of the environmental impact assessment process;
- ix. Identify suitable measures to avoid, reverse, mitigate or manage identified impacts and to determine the extent of the residual risks that need to be managed and monitored.

### 7.2.2 Project Components and Alternatives

- The final proposed project components (different land uses and extent thereof) of the township must be confirmed.
- The township layout plan must be finalised to accommodate all environmental sensitivities associated with the site.
- All alternative land uses for the site must be considered.

### 7.2.3 Legal Requirements

Final confirmation of relevant authorisations, licences and permits required will be confirmed during the EIR Phase in terms of the following acts:

- National Environmental Management Act (NEMA), 1998 (Act Nr 107 of 1998)

It will again be confirmed whether any activities (provided in Paragraph 1.3) should be added and/or should be deleted from this list. If the list of relevant activities has to be amended, this will be communicated with the relevant stakeholders and be included in the Environmental Impact Report to be submitted to GDARD.

- National Heritage Resources Act, (NHRA), 1999 (Act 25 of 1999)

The authorisation process in terms of the NHRA forms part of the EIA process. If approval has not yet be obtained, actions must be taken to get approval from SAHRA and the Provincial Heritage Resources Agency-Gauteng (PHRA-G). Comments and/or approval from SAHRA and PHRA-G will be included in the final EIR.

- The National Water Act, (NWA), 1998 (Act Nr 36 of 1998)

The requirements in terms of the Water Use Licence Application must be confirmed with the Department of Human Settlement, Water and Sanitation (DWS). The DWS requires that water use authorisation be obtained for any development within 500m from the edge of a delineated buffer zone. It is expected that an application in terms of the following would apply:

- Development in close proximity to the watercourse:
  - Section 21(c): Impeding or diverting the flow of water in a watercourse
  - Section 21(i): Altering the bed, banks, course or characteristics of a watercourse
- The extent of other project components would also be confirmed to establish the extent of the application and additional specialist input required (i.e. technical input such as concept bridge(s) and services designs, etc.). This would be finalised during the EIA phase of the project.
- Proof that actions to obtain water use authorisation are being taken will be included in the Final EIR. This will include at least proof of submission on the E-WULA system and a copy of the minutes of the Pre-application Meeting with the DWS.

### 7.2.4 Specialist and Project Team Input during the EIA Phase

The project town planners must provide the following for inclusion and integration with the Environmental Impact Report:

- Positive comment and/or approval from the Mogale Local Municipality
- Either approval and/or Motivating Memorandums of the six townships.
- Communication with the municipality and other key stakeholders
- A site layout that corresponds with the Environmental Sensitivity Maps

The Consulting Engineering company must provide the following for inclusion and integration with the Environmental Impact Report:

- A Stormwater Management Plan
- A concept design and/or method statement for the crossing of the wetland – road and engineering services.
- All bulk engineering services must be confirmed, especially in terms of a WWTW, whether it must be planned onsite or on nearby land.

## 7.2.5 Impact Assessment

Impacts will be evaluated and assessed in terms of the following:

<b>Extent of Impact</b>	<b>Explanation of Extent</b>
Site	Impacts limited to construction site and direct surrounding area
Local	Impacts affecting environmental elements within the local area / district
Regional	Impacts affecting environmental elements within the province
National	Impacts affecting environmental elements on a national level
Global	Impacts affecting environmental elements on a global level
<b>Duration of Impact</b>	<b>Explanation of Duration</b>
Short term	0 - 5 years. The impact is reversible in less than 5 years.
Medium term	5 - 15 years. The impact is reversible in less than 15 years.
Long term	>15 years, but where the impacts will cease if the project is decommissioned
Permanent	The impact will continue indefinitely and is irreversible.
<b>Probability of Impact</b>	<b>Explanation of Probability</b>
Unlikely	The chance of the impact occurring is extremely low
Possible	The impact may occur
Probable	The impact will very likely occur
Definite	Impact will certainly occur
<b>Magnitude/Intensity of Impact</b>	<b>Explanation of Magnitude/Intensity</b>
Low	Where the impact affects the environment in such a way that natural, social and cultural functions and processes are not affected
Moderate	Where the affected environment is altered, but natural, social and cultural functions and processes continue albeit in a modified way
Severe	Where natural, social and cultural functions or processes are altered to the extent that it will temporarily or permanently cease
<b>Significance of Impact</b>	<b>Explanation of Significance</b>
None	There is no impact at all
Low	Impact is negligible or is of a low order and is likely to have little real effect
Moderate	Impact is real but not substantial
High	Impact is substantial
Very high	Impact is very high and can therefore influence the viability of the project

The main potential negative impacts associated with the project which need to be assessed are the following (this could be added to once the project components are finalised):

### 7.2.5.1 Design & Planning Phase (critical issues that must be addressed during the design and planning phase):

- Impact on the wetland
- Impact on terrestrial ecology (fauna and flora)
- Loss of agricultural land
- Risk for impact on groundwater
- Increased run-off resulting in erosion and a loss of soil

### 7.2.5.2 Construction Phase

- Health & Safety risk during construction
- Impact on the natural habit (wetland, fauna & flora)
- Increased risk for groundwater pollution
- Increased risk for erosion resulting from construction activities
- Influx of labourers with associated crime, access control, risk for habitat destruction
- Impacts associated with construction activities such as noise and dust
- Impact on heritage resources

### 7.2.5.3 Operational Phase

- Continuous risk for disturbance to the riverine area
- Continuous risk for groundwater pollution (associated with the sewage treatment plant, if relevant)
- Increased risk for impact on surrounding environment (i.e. habitat destruction and veld fires)
- Increased run-off resulting in erosion

### 7.2.5.4 Cumulative Impact

- Increased traffic
- Increased pressure on municipal infrastructure

### 7.2.6 Public Participation Programme: EIA Phase

- A second Public Participation Programme (PPP) will be undertaken as per the prescribed guidelines of DEA and according to the stipulations of the EIA Regulations (a PPP is compulsory for both the Scoping and EIA phases).
- The PPP for the EIA Phase will include the following:
  - Distribution of the Draft EIR for comment.
  - The Final EIR will be distributed for further public comment if
    - any significant changes to the Draft EIR was made due to information received which was not available during the compilation of the Draft EIR; and
    - comment received on the Draft EIR changed the outcome of the study (i.e. changes in the proposed layout plan).
  - The Final EIR will be submitted to I&AP's if required for their record keeping before submission thereof to GDARD.
  - The Final EIR will then be submitted to GDARD for final consideration of Environmental Authorisation.
- Focus group meetings will be held with key role players should the need arise.
- All comment, objections and concerns raised and submitted by the I&APs will be addressed during the PPP and all proceedings, recommendations and correspondence will be documented in the final EIR Report to be submitted to GDARD.
- The PPP will aim to obtain written comment from the following key stakeholders:
  - West Rand District Municipality
  - Mogale City Local Municipality
  - City of Johannesburg Metropolitan Municipality
  - The Department of Water and Sanitation (DWS)
  - SAHRA and/or PHRA-G
  - Adjacent Landowners

Proof of reasonable attempts to obtain comment from these key stakeholders will be provided in the EIR.

### 7.2.7 The Environmental Impact Report

According to the NEMA 2014 Regulations, Appendix 2.2, Paragraph 3, the Environmental Impact Report will contain the information described below.

An environmental impact assessment report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include the following:

- (a) Details of-
  - (i) the EAP who prepared the report; and
  - (ii) the expertise of the EAP, including a curriculum vitae;
- (b) The location of the activity, including:
  - (i) the 21 digit Surveyor General code of each cadastral land parcel;
  - (ii) where available, the physical address and farm name; and
  - (iii) where the required information in items (i) and (ii) is not available, the coordinates of the boundary of the property or properties;

- (c) A plan which locates the proposed activity or activities applied for as well as the associated structures and infrastructure at an appropriate scale, or, if it is- (i) a linear activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken; (ii) on land where the property has not been defined, the coordinates within which the activity is to be undertaken;
- (d) A description of the scope of the proposed activity, including- (i) all listed and specified activities triggered and being applied for; and (ii) a description of the associated structures and infrastructure related to the development;
- (e) A description of the policy and legislative context within which the development is located and an explanation of how the proposed development complies with and responds to the legislation and policy context;
- (f) A motivation for the need and desirability for the proposed development, including the need and desirability of the activity in the context of the preferred location;
- (g) A motivation for the preferred development footprint within the approved site;
- (h) A full description of the process followed to reach the proposed development footprint within the approved site, including:
  - (i) *details of the development footprint alternatives considered;*
  - (ii) *details of the public participation process undertaken in terms of regulation 41 of the Regulations, including copies of the supporting documents and inputs;*
  - (iii) *a summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them;*
  - (iv) *the environmental attributes associated with the development footprint alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects;*
  - (v) *the impacts and risks identified including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts-*
    - (aa) *can be reversed;*
    - (bb) *may cause irreplaceable loss of resources; and*
    - (cc) *can be avoided, managed or mitigated;*
  - (vi) *the methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks;*
  - (vii) *positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects;*
  - (viii) *the possible mitigation measures that could be applied and level of residual risk;*
  - (ix) *if no alternative development locations for the activity were investigated, the motivation for not considering such; and*
  - (x) *a concluding statement indicating the preferred alternative development location within the approved site;*
- (i) A full description of the process undertaken to identify, assess and rank the impacts the activity and associated structures and infrastructure will impose on the preferred location through the life of the activity, including-
  - (i) *a description of all environmental issues and risks that were identified during the environmental impact assessment process; and*
  - (ii) *an assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures;*
- (j) An assessment of each identified potentially significant impact and risk, including-
  - (i) *cumulative impacts;*
  - (ii) *the nature, significance and consequences of the impact and risk;*
  - (iii) *the extent and duration of the impact and risk;*
  - (iv) *the probability of the impact and risk occurring;*
  - (v) *the degree to which the impact and risk can be reversed;*
  - (vi) *the degree to which the impact and risk may cause irreplaceable loss of resources; and*
  - (vii) *the degree to which the impact and risk can be mitigated;*
- (k) Where applicable, a summary of the findings and recommendations of any specialist report complying with Appendix 6 to these Regulations and an indication as to how these findings and recommendations have been included in the final assessment report;
- (l) An environmental impact statement which contains
  - (i) *a summary of the key findings of the environmental impact assessment;*
  - (ii) *a map at an appropriate scale which superimposes the proposed activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers; and*
  - (iii) *a summary of the positive and negative impacts and risks of the proposed activity and identified alternatives;*

- (m) Based on the assessment, and where applicable, recommendations from specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMPr as well as for inclusion as conditions of authorisation;
- (n) The final proposed alternatives which respond to the impact management measures, avoidance, and mitigation measures identified through the assessment;
- (o) Any aspects which were conditional to the findings of the assessment either by the EAP or specialist which are to be included as conditions of authorisation
- (p) A description of any assumptions, uncertainties and gaps in knowledge which relate to the assessment and mitigation measures proposed;
- (q) A reasoned opinion as to whether the proposed activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation;
- (r) Where the proposed activity does not include operational aspects, the period for which the environmental authorisation is required and the date on which the activity will be concluded and the post construction monitoring requirements finalised;
- (s) An undertaking under oath or affirmation by the EAP in relation to:
  - (i) *the correctness of the information provided in the reports;*
  - (ii) *the inclusion of comments and inputs from stakeholders and I&APs;*
  - (iii) *the inclusion of inputs and recommendations from the specialist reports where relevant; and*
  - (iv) *any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested or affected parties;*
- (t) Where applicable, details of any financial provisions for the rehabilitation, closure, and ongoing post decommissioning management of negative environmental impacts;
- (u) An indication of any deviation from the approved scoping report, including the plan of study, including-
  - (i) *any deviation from the methodology used in determining the significance of potential environmental impacts and risks; and*
  - (ii) *a motivation for the deviation;*
- (v) Any specific information that may be required by the competent authority; and
- (w) Any other matters required in terms of section 24(4)(a) and (b) of the Act.

### 7.2.8 Environmental Management Programme

An Environmental Management Programme (EMPr) has to be compiled as part of the EIR phase. The main objectives of the EMPr are to identify actions and mitigation measures to minimise expected negative impact and enhance positive impact during all development phases (Design & Planning; Construction, and Post-construction/Operational Phase) in terms of community issues, construction site preparation, construction workers, habitat protection, safety, health, security, etc. Communication channels and contact details must also be provided.

According to the NEMA 2014 Regulations, Appendix 4, an EMPr must comply with section 24N of the Act and include:

- (a) Details of
  - (i) *the EAP who prepared the EMPr; and*
  - (ii) *the expertise of that EAP to prepare an EMPr, including a curriculum vitae;*
- (b) A detailed description of the aspects of the activity that are covered by the EMPr as identified by the project description;
- (c) A map at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that any areas that should be avoided, including buffers;
- (d) A description of the impact management objectives, including management statements, identifying the impacts and risks that need to be avoided, managed and mitigated as identified through the environmental impact assessment process for all phases of the development including-
  - (i) *planning and design;*
  - (ii) *pre-construction activities;*
  - (iii) *construction activities;*
  - (iv) *rehabilitation of the environment after construction and where applicable post closure; and (v) where relevant, operation activities;*
- (e) A description and identification of impact management outcomes required for the aspects contemplated in paragraph (d);
- (f) A description of proposed impact management actions, identifying the manner in which the impact management objectives and outcomes contemplated in paragraphs (d) and (e) will be achieved, and must, where applicable, include actions to
  - (i) *avoid, modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation;*
  - (ii) *comply with any prescribed environmental management standards or practices;*
  - (iii) *comply with any applicable provisions of the Act regarding closure, where applicable; and*
  - (iv) *comply with any provisions of the Act regarding financial provisions for rehabilitation, where applicable;*

- (g) The method of monitoring the implementation of the impact management actions contemplated in paragraph (f);
- (h) The frequency of monitoring the implementation of the impact management actions contemplated in paragraph (f);
- (i) An indication of the persons who will be responsible for the implementation of the impact management actions;
- (j) The time periods within which the impact management actions contemplated in paragraph (f) must be implemented;
- (k) The mechanism for monitoring compliance with the impact management actions contemplated in paragraph (f);
- (l) A program for reporting on compliance, taking into account the requirements as prescribed by the regulations;
- (m) An environmental awareness plan describing the manner in which-
  - (i) *the applicant intends to inform his or her employees of any environmental risk which may result from their work; and*
  - (ii) *risks must be dealt with in order to avoid pollution or the degradation of the environment; and*
- (n) Any specific information that may be required by the competent authority.

## 8. CONCLUSION

### 8.1 Recommendations by the EAP

The professional and objective opinion of the independent EAPs are as follows:

#### 8.1.1 *The key issues associated with this project are the following:*

##### 8.1.1.1 *Town Planning: Land Use Planning Objectives:*

- The proposed development promotes the goals of the National Development Plan (NDP) 2030 by providing housing opportunities closer to places of work.
- The proposed development is in line with the Mogale City Spatial Development Framework:
  - The development is situated within the urban development boundary.
  - It falls within a "Mixed Use Development Zone".
- According to the Gauteng Environmental Management Framework (EMF) the site falls within Zone 1: Urban Development Zone. The intention with Zone 1 is to streamline urban development activities in it and to promote infill development, densification and concentration of urban development within the urban development zones as defined in the Gauteng Spatial Development Framework (GSDF).
- The provision of a medium density development comprising simplexes, duplexes and walk ups (4 storeys) should not negatively impact the surrounding area since it is an extension of existing and planned land use in the macro area. It will not result in frog-leap development.
- The project will contribute to the upgrading of engineering services as the developer will construct a new reservoir and waste water treatment plant.

##### 8.1.1.2 *Engineering Services*

- Bulk and Link services for regional water supply, sewage disposal outfall sewers, wastewater treatment works, roads network and stormwater attenuation facilities are to be constructed. Currently a cross border agreement between Mogale City and Johannesburg Water is in place with Johannesburg Water supplying the Muldersdrift area with water from Cosmo City. This water supply is under pressure due to limited availability from Johannesburg Water and no additional supply will be made available for future developments. No sewage disposal network or wastewater treatment works are currently available.
- It is proposed that the developer construct a 10 ML Water Reservoir on behalf of Mogale City Local Municipality in the proximity of the Nooitgedacht Primary School.
- A site was identified outside the Lion Pride Extension area to construct a 7ML mechanical dewatering, wastewater treatment works. 3 Sewer pump stations will also have to be constructed as part of the required sewer network. This WWTW will be constructed in phases of 1ML as the development of the proposed townships progress. It will form part of a separate EA.
- Main access to the proposed development is from an approved and existing intersection with Malibongwe Drive.
- Eskom is the electrical supply authority for the proposed development. The proposed development falls within the feeder area of the Eskom owned Cosmo City Substation, and supply will be made available from there.

##### 8.1.1.3 *Specialists*

- The ecologist (fauna, flora and aquatics) for the project confirmed the following:
  - The development of the degraded areas with low ecological sensitivities on the study site should not have a negative impact on the environment provided that the mitigation measures as indicated in his report is incorporated into the management plan and adhered to.
  - The area of high conservation value is the delineated wetland and 32m buffer zone. No development may take place within the area without water use authorisation from the Department of Water & Sanitation.



- The aquatic specialist delineated the wetland area and provided a 32m buffer zone in which development should not take place. He also recommended that alien vegetation should be eradicated and/or controlled as per legal requirement.
- The heritage consultant for the project confirmed the following:
 

No heritage resources of significance had been identified within the study area. According to the SAHRA Paleontological Sensitivity Map, the study area is of insignificant paleontological significance. No adverse impact on heritage resources is expected by the project and it is recommended that the project can commence on condition that general mitigation measures provided are included in the Environmental Management Plan, inclusive of comment from South African Heritage Resources Agency (SAHRA).
- The agricultural impact specialist confirmed the following:
 

It was confirmed that no crop production took place on the site in the past five years; there is no evidence of livestock farming on the site and the grazing capacity of the entire site would allow for 4 head of cattle.

The Lion Pride Extension is considered a viable land use option for the area. It was recommended that the application be considered favourably, permitting that soil management measures are followed to prevent soil erosion and pollution. The project infrastructure should also remain within the development area boundaries indicated in the project layout.

#### 8.1.1.4 Township Layout

The concept township layout has been determined mainly by the following issues:

- Applicant requirement for a residential development
- Access from an approved and existing intersection with Malibongwe Drive
- The wetland and 32m buffer zone are excluded from the developable area. The 1:100 year floodline had also been determined. No development will be allowed in within these regulated areas- whichever is the largest, without Water Use Authorisation.

#### 8.1.1.5 Stakeholder Consultation

The first round of public participation was concluded (newspaper advertisement, onsite notices and notification to key stakeholders). No objection had yet been received. This Draft Scoping Report is now distributed for comment and all written communication received will be included and addressed in the Final Scoping Report that will be submitted to GDARD for approval.

#### 8.1.2 *The Environmental Impact Report must therefore ensure the following:*

- All the relevant information must be supplied by the project engineers to ensure that all potential negative impact on the environment is properly assessed and sufficient mitigation measures proposed.
- All the conditions and comments of the key commenting authorities must be integrated in the final layout plan and design of the township.
- It should effectively be illustrated (with specialist and key stakeholder support) that all expected negative impact could be mitigated to acceptable levels.
- Objections from stakeholders must be addressed in a reasonable and fair manner.
- Compliance with all legislative requirements of all relevant organs of state must be demonstrated.

#### 8.1.3 *The following considerations are also relevant in the decision-making process:*

- Residential opportunities of any significant scale are still lacking in Gauteng and the proposed development is ideally located to cater in the needs of the Mogale City and City of Johannesburg communities.
- If this area could enjoy local residential growth in addition to the proposed commercial development along the Lanseria corridor, such residential opportunities could well favour a scenario of employment and residential opportunities in close and functional proximity to each other. This can contribute to a decrease in dependence on regional traffic routes and therefore impact positively on the current traffic scenario.

- The proposed township will ensure sustainable livelihoods through the development of high quality and sustainable residential units as provision is made for two primary schools, one secondary school, a community facility and other supportive land uses.
- The use of existing resources and infrastructure such as roads, transportation and economic and social support will be maximised. It is evident that the developer will contribute towards the establishment (installation) of bulk engineering services in order to develop the Lion Pride Extension township.
- Easily accessible land relatively close to work opportunities (as is the case with this property) is always under risk for settlement of squatters with associated negative social impact (i.e. increased crime and safety risk) and degradation of the environment in the absence of sufficient engineering services (water supply, sewage and waste disposal), i.e. collection of firewood, use of the watercourse for ablution activities, placement of snares, etc. Illegal dumping can no longer take place.
- A strong “indigenous only” approach will be followed with landscaping and as much as practical existing indigenous vegetation will be incorporated into the development.
- A green architectural approach is also proposed (in terms of water saving, electricity saving, restriction of light pollution, waste management, etc.).
- The environmental specialists input obtained up to date is comprehensive in providing an assessment of the status quo of the study area; potentially sensitive areas and issues of concern to be considered during consideration of alternatives.
- Significant actions were taken to identify and notify all Interested & Affected Parties that include government departments, relevant authorities, general stakeholders and affected landowners of the project. A comprehensive Register of Interested & Affected Parties, attached in Appendix E(2), had been identified. During the first notification and advertising round, no objections had been received. Further consultation with key stakeholders during the distribution of the Draft Scoping Report is necessary but at this stage indications are that it is not an unwanted development in the macro area with appropriate mitigation measures in place.
- All relevant legal requirement in terms of the Scoping Phase as per the Environmental Impact Assessment Regulations published on 4 December 2014 as per the National Environmental Management Act, 1998 (Act No 107 of 1998) as amended is complied with.

#### **8.1.4 Conclusion by and Recommendation by the EAPs**

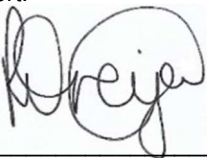
- The proposed Lion Pride Extension is planned in a legal, pro-active and structured manner taking all development components, environmental features, site potential and restrictions into account.
- All relevant legal requirement in terms of the Scoping Phase as per the Environmental Impact Assessment Regulations published on 4 December 2014 as per the National Environmental Management Act, 1998 (Act No 107 of 1998) as amended is complied with.
- The Plan of Study was compiled with sufficient consideration of potentially relevant legal requirement in terms of this type and scale of project, as well as due consideration of the key issues associated with this project (i.e. engineering infrastructure).

The EAPs recommend this Scoping Report together with the Plan of Study for the EIA Phase for approval by the Gauteng Department of Agriculture and Rural Development.

## 8.2 Affirmations by the EAP

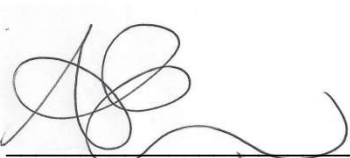
### 8.2.1 Undertaking regarding correctness of information

We, Ronel Dreyer and Annelize Erasmus, herewith undertake that the information provided in the foregoing report is correct, and that the comments and inputs from stakeholders and Interested and Affected parties were correctly recorded in the report.



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Ronel Dreyer



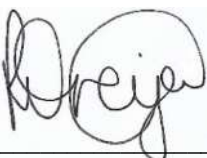
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Annelize Erasmus

Date: 15 September 2022

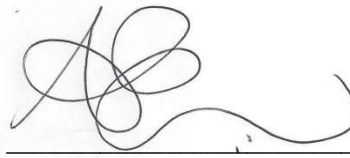
### 8.2.2 Undertaking regarding level of agreement

We, Ronel Dreyer and Annelize Erasmus, herewith undertake that the information provided in the foregoing report is correct, and that the level of agreement with Interested and Affected Parties and stakeholders was correctly recorded and reported herein.



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Ronel Dreyer



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Annelize Erasmus

Date: 15 September 2022