

# SMR

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## MOTIVATING MEMORANDUM

**IN SUPPORT OF THE APPLICATIONS FOR TOWNSHIP  
ESTABLISHMENT IN TERMS OF SECTION 51 OF THE  
MOGALE CITY LOCAL MUNICIPALITY SPATIAL PLANNING  
AND LAND USE MANAGEMENT BY-LAW, 2018**

*Mogale Extensions 54 - 59*

Part of the Remainder of Portion 23, part of Portion 162 and part of the  
Remainder of Portion 196  
of the farm Nootgedacht 534-JQ

*Mogale City Local Municipality*



Date: August 2022  
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# Memorandum

## 1. INTRODUCTION

Sonja Meissner-Roloff of SMR Town & Environmental Planning is appointed by Cosmopolitan Projects Pty Ltd to apply to the Mogale City Local Municipality for applications for township establishment 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 in terms of Section 51 of the Mogale City Local Municipality Spatial Planning and Land Use Management By-law, 2018.

The proposed townships will be known as Mogale Extensions 54 to 59 as confirmed by the Development Planning Department attached herewith as Annexure A. Mogale Extensions 54 to 59 (referred to as Lion Pride Extension) as will be described in this report.

## 2. GENERAL INFORMATION

### 2.1 The Properties, Extent and Ownership

The proposed townships will be situated on parts of Re/Portion 23; Portion 162 and Re/Portion 196 of the farm Nooitgedacht 534-JQ:

<b>Farm portion of the farm Nooitgedacht 534-JQ</b>	<b>Title Deed</b>	<b>Area</b>	<b>Area Included in townships</b>
Re/Portion 23	T26272/2021	28,2181 ha	3,2030 ha
Portion 162	T26272/2021	19,1226 ha	19,1017 ha
Re/Portion 196	T26272/2021	18,3954 ha	18,2630 ha
<b>Total area of proposed township</b>			<b>40,5677 ha</b>

The properties are registered in the name of Cosmopolitan Projects Johannesburg Pty Ltd (Registration number 2005/013577/07) vide Deed of Transfer T26272/2021.

### 2.2 Restrictive Title Conditions and Servitudes

The following conditions and servitudes are registered against Deed of Transfer T26272/2021:

#### 2.2.1 Against the Remaining Extent of Portion 23 and the Remaining Extent of Portion 196:

- A. *"Die eigaenaar van het eigendom hieronder gehoude sal gerechtigd zijn tot een volle halva dag uit elke veertien (14) dagen van het water komende van en vloeiende uit de gezamentlike dam gelegen in de spruit op gedeelte "G" van gedeelte van gezegde plaas NOOITGEDACHT, zoals gehoude onder Certifikaat van Verdelingtitel No 11392/1923, en tot het recht om gemelde water te leiden langs de reeds bestaande watervoor bekend als de oostelike watervoor over gezegd gedeelte "G" maar zijn gedeelte "H", met recht van vrije toegang voor hom en zil werkleden over gezegd gedeelte "G" om gezegde gezamentlike dam en de gezegde watervoor te helpen schoon maken en houden. De eigaenaar van dit gedeelte zal gerechtigd wezen zij beurt van water uit de gezegde oostelike watervoor te gebruiken vanaf 's morgens zes uur tot 's avonds zes uur van elke Dinsdag na de Maandag waarop de eigaenaar van gezegd gedeelte "G" gerechtig is zijn aandeel water door de gezegde oostelike watervoor te leiden.*

*Verder zal de eiegenaar van dit gedeelte gerechtigd zijn tot een straal water in de gezegde oostelike watervoor voor drinkwater en huishoudelike gebruik alleen.*

*Gedurende de dagen waarop het water niet gebruikt wordt voor de eiegenaar van dit gedeelt of van de verschillende andere gedeelten, zal hetzelfde moeten blijven berusten in de gezegde gesamentlike dam totdat de beurten van de gezegde eiegenaren weer een aanvang neem.*

- B. Onderhewig aan die volgende voorwaardes opgelê deur die Administrateur ingevolge Artikel 11 (3) en (6) van die Wet op Adverteer langs en Toebou van Paaie, 1940 (Wet 21 van 1940):*

*"Except with the written approval of the Administrator as Controlling Authority as defined in the Advertising on Roads and Ribbon Development Act, 1940 (Act 21 of 1940) –*

- (a) (i) the land shall be used solely for residential and agricultural purposes;*  
*(ii) the number of buildings on the land, or on any duly approved subdivision thereof, shall not exceed one residence together with such outbuildings as are ordinarily required to be used in connection therewith and such further buildings and structures as may be required for purposes of agriculture;*
- (b) No store or place of business or industry whatsoever may be opened or conducted on the land; and*
- (c) No building or any structure whatsoever may be erected within a distance of 95 metres from the centre line of any public road."*

#### 2.2.2 Against Portion 162:

- A. "Portion 22 (formerly Portion G) of Portion of the said farm (whereof the property hereby transferred forms a part) shall be subject to:-*

*"Een kwart dat uit elke veertien (14) dagen van het water komende van en vloeiende uit de gesamentlike dam gelegen in de spruit of dit gedeelte 2 en tot het recht om gemeld water te leiden langs de reede bestaande watervoor bekend als de westelike watervoor; met het verder recht tot een kwart dag uit elke veertien (14) dagen van het water komende van en vloeiende uit de gezegde gezamentlike dam, en gemeld water te leiden langs de reeds bestaande watervoor bekend als de oostelike watervoor. De eienaar van dit gedeelte 22 sal gerechtigd wezen zyn beurt van water te gebruiken uit de westelike watervoor vanaf 2 uur's middags tot zes uur's avonds van een Maandag in elke 14 dag en, en zyn beurt van water uit te oostelike watervoor te gebruiken vanaf 12 uur's middags tot zes uur's avonds van de Maandag volgende de Maandag waarop hy gerechtigd is zyn aandeel water door de gezegde westelike voor te leiden.*

*Gedurende de dagen waarop het water niet gebruikt wordt door te eiegenaar van dit gedeelte of van de verschillende andere gedeelten, zal hetzelfde moeten bly van berusten in de gezegde gezamentlike dam totdat de beurten van de gezegde eiegenaren weer aan aanvang nemen.*

- B. Portion 22 of Portion of the said farm (whereof the property hereby transferred forms a part, is subject to:-*

*Een servituut en faveure van de eigeenaar van het resterende gedeelte van gedeelte van gezegde Plaats, groot als zodanig 172,0944 hektaar en ten faveure van de eigenaren van gedeeltes "E" en "F" van gedeelte van gezegde plaats, zoals gehouden onder Certifikaten van Verdelingstitel Nos 11394/1923, 11390/1923 en 11391/1923 om hun aandelen water in de gezegde gezamentlike dam te leiden langs de gezegde westelike watervoor over dit gedeelte 22 naar hun respektiewe gedeelten met recht van vrye toegang voor hen en hun werkliden over dit gedeelte 22 om te gezegde westelike watervoor e gesamentlike dam te helpen schoon maken en houden' als mede een servituut ten faveure van de eigeenaar van gedeelte "H" van gedeelte van gezegde plaats zoals gehouden onder Certifikaat van Verdelingstitel No 11393/1923 op 3 Desember, 1923, uitgeekt, om sy aandeel water in de gezegde gesamentlike dam te leiden langs die gezegde oostelike watervoor over dit gedeelte 22 naar zyn gedeelte H" met recht van vrye toegang voor hem en zyn werkliden over dit gedeelte 22 om de gezegde oostelike watervoor en gezamentlike dam te helpen schoon maken en houden.*

*De eigeenaar van dit gedeelte 2 is verpligt te helpen de gezamentlike dam en oostelike en westelike watervoren schoon te maken en te houden.*

- C. *Onderworpe aan 'n reg-van-weg, 6,10 meter wyd vanaf die naaste publieke pad ten gunste van gedeelte 161 van voormelde plaas, getransporteer op die 20ste dag van June, 1950, kragtens Akte van Verdelingstransport No 11305/1950, langs sodanige roete as wat deur die partye onderling ooreengekom sal word."*

Chantel Bolton of Van Rensburg Inc prepared a Conveyancer's Certificate to indicate how each of the conditions outlined above and contained in the Title Deed will be dealt with during the township establishment process. A Servitude Certificate has further been issued by Mr Eamon Swart of SVR Land Surveyors.

The conditions will be dealt with in the following manner:

- Conditions 1 A, 2 A and 3 A to B will be excluded from the Conditions of title for the township, as the conditions are only applicable on farm land.
- Condition 1 B and 2 B – an application will be made to the Registrar of Deeds simultaneously with the opening of the township register to cancel this condition. The condition will therefore also be excluded from the Conditions of title for the township.
- Condition 3 C

The right of way servitude will be accommodated in the Layout Plan for Mogale X54 and can therefore be cancelled from the Title Deed. The 32m "Access Road" included in the township layout will be intersected by a 25m street included in Mogale X56, as indicated on the Combined Layout Plan, which will connect to the road provided along the western boundary of the approved Mogale X9 thereby providing access to the Remaining Portion of Portion 161 of the farm Nooitgedacht 534-JQ.

The Conveyancer Certificate and the Servitude Certificate are submitted along with this application.

### **2.3 Mortgage Bond**

No mortgage bond is registered against Deed of Transfer T26272/2021.

## **2.4 Mineral Rights**

The mineral rights vest with the State and the consent of the Department of Mineral Resources will be applied for in terms of Section 53 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002). The consent from the said Department will be submitted to Council upon receipt thereof.

## **2.5 Zoning**

The properties fall within the Scheme boundary of the Krugersdorp Town Planning Scheme of 1980 and are zoned "Agricultural" as confirmed by the Zoning Certificates (Annexure B) attached to this application.

## **2.6 Local Authority**

The properties fall within the area of jurisdiction of the Mogale City Local Municipality.

## **2.7 Township name**

The name of the townships will be Mogale Extensions 54 to 59.

# **3. PHYSICAL INFORMATION**

## **3.1 Locality**

The location of the proposed townships is indicated on the attached Locality Plan marked Annexure F. The Locality Plan indicates the proposed Lion Pride Extension (Mogale X54 to X59) as "the site".

- The site is situated adjacent to the N14 Freeway and south-west of the intersection thereof with Malibongwe Drive (P103-1);
- Malibongwe Drive (P103-1) is located adjacent east of the site;
- Hertford Junction shopping centre and the Total Garage is located  $\pm 1,61$  km north of the site;
- Lanseria International Airport is located  $\pm 4,5$  km to the north of the site;
- Cosmo Mall is situated  $\pm 3,21$  km south-east of the site;
- Cosmo City Shopping Centre is situated  $\pm 3,62$  km south of the site;
- Lion Pride, a residential development by Cosmopolitan Projects, is located  $\pm 1$  km south of the site, to the east of Malibongwe Drive;
- La Vue Guest Lodge and Function Venue is located south-west of the site; and
- The Lion Park Informal Settlement is adjacent east of the site (east of Malibongwe Drive).

## **3.2 Topography**

A 1:50 and 1:100 year floodline area runs through the centre of the development, confirming that the Lion Pride Extension (Mogale X54 to X59) will drain towards it.

The site slopes gently (approximately 2%) from the western boundary and the eastern boundary to the low lying areas of the floodline area.

The topography of the site is suitable for the proposed residential development.

### 3.3 Floodlines

The proposed townships are affected by a 1:50 and 1:100 year floodline as defined by the National Water Act of 1998 (Act 36 of 1998).

The 1:50 and 1:00 year floodlines are located in the centre of the Lion Pride Extension.

### 3.4 Existing Structures and Development

The parts of Re/23, Portion 162 and part of Re/Portion 196 of the farm Nooitgedacht 534-JQ where the townships are proposed, are vacant.

### 3.5 Surrounding Land Uses

Lion Pride Extension is surrounded by:

- Lion Park Informal Settlement to the east across Malibongwe Drive;
- Pride Lion 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 and
- La Vue Guest House south-west of the site.

Lion Pride Extension is surrounded by residential development to the east and south and by non-residential and agricultural uses to the south-west.

### 3.6 Geotechnical Suitability

Intraconsult has been appointed to attend to a Phase 1 Geotechnical Investigation for the proposed township Mogale Extension 59 (forming part of Lion Pride Extension) during October 2021 (Report number IR1737.1S Prelim). The following information is derived from the report:

*"The preliminary report presents and comments on the results and observations of near surface soil geotechnical investigations carried out on various portions of the farm Nooitgedacht 543-JQ: South of the N14 Freeway (Lion Pride Extension).*

*The site is located on Halfway House granite and related soil derivatives. The site is mantled by colluvium and alluvium in the flood plain of the stream that traverses the central site area from south to north.*

*The soil map presented in this report sub-divides the site into (preliminary) Site Class sub-areas in terms of the NHBRC Manual and the Code of Practice. A broad overview of the assumptions made and analytical processes adopted for these classifications is provided. The terrain slopes gently (approximately at 2%) from the western sector of the site (1437m AMSL) and the eastern sector of the site (1437m AMSL) to the low lying areas along the stream (1404m AMSL).*

*The presence of open-textured (potentially collapsible) and active (potentially swelling/shrinking) near surface soils is discussed in detail.*

*Although well-developed pedocretes mantle the residual granite (varying refusal depths) over some sections of the site, the thickness of the pedocretes are known to vary and to be*



*completely absent in some areas. Therefore, geotechnical inspection (at GFSH-2 Phase 2 Stage) will be a crucial design requirement in refining and finalising the individual Soil Site classifications for housing foundation design.*

*Investigations have confirmed that potentially problematic soils mantle the bedrock over large sections of the site area. The occupancy of these soils and their anticipated in-service behaviours has been analysed and broad preliminary zonation provided on the Soil Map, Drawing IR1737.1S with the zones defined below:*

<b>Sub-Area Designations shown on the Soil Map</b>	<b>Commentary</b>
<i>2(R3)[H/C-C1/S]</i>	<i>Anticipate sectors of potentially collapsible materials, also pockets of difficult excavation conditions in the 0.0 to 1.5m profile (and below).</i>
<i>2(R3)[H/C/S]</i>	<i>Anticipate potentially pockets of difficult excavation conditions in the 0.0 to 1.5m profile (and below).</i>
<i>2[H/C-C1/S]</i>	<i>Anticipate sectors of potentially collapsible materials.</i>
<i>2[H/C1-C2/S]</i>	<i>Anticipate sectors potentially thick layers of collapsible materials.</i>
<i>2[H-H1/C-C1/S]</i>	<i>Anticipate potentially medium active soils and potentially collapsible materials</i>
<i>3W</i>	<i>Area below flood line as determined by the Engineer. Encompasses water filled old excavations.</i>

*Possible foundation solutions for structures are further complicated by the possible presence of 'hard' and 'soft' materials immediately beneath individual building footprints as a consequence of local rock sub-outcrop. In such circumstances, differential settlement/movement is equal to total movement due to variable bedrock depth on the granite. The individual erf 'Sub-Area' designations will need to be confirmed during the GFSH-2, Phase 2 Implementation Stage Investigations, before foundation designs are finalised as required by the NHBRC."*

It is evident from the geotechnical report that a residential development can be supported on the site, but that certain precautionary measures / foundation proposals must be implemented.

### **3.7 Waste and Refuse Removal**

The Mogale City Local Municipality will be responsible for waste and refuse removal.

### **3.8 Environmental Authorization**

iSquare Information Systems CC has been appointed to obtain Environmental Authorization for the proposed development.

*"The Environmental Authorisation (EA) application will be submitted to the Gauteng Department of Agriculture and Rural Development (GDARD) 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. The following activities are relevant:*

*Listing Notice 2 of 2017*

*Activity 15: The clearance of an area of 20 hectares or more of indigenous vegetation.*

*Activity 27: The development of a road – (iv) catering for more than one lane of traffic in both directions.*

*Listing Notice 3 of 2017*

*Activity 4: The development of a road wider than 4 metres with a reserve less than 13,5 metres in (c) Gauteng on (iv) Sites identified as Critical Biodiversity Areas (CBAs) or Ecological Support Areas (ESAs) in the Gauteng Conservation Plan or in bioregional plans and (vii) Sites identified as high potential agricultural land in terms of Gauteng Agricultural Potential Atlas.*

*Activity 12: The clearance of an area of 300 square metres or more of vegetation in (c) Gauteng (ii) Within Critical Biodiversity Areas or Ecological Support Areas identified in the Gauteng Conservation Plan or bioregional plans.*

*In order to obtain the necessary environmental authorisation for the proposed project from the GDARD, the undertaking of a **Scoping** and **EIA Process** will be required. The following activities will form an essential part of the environmental authorisation project:*

- *Application to the Department in terms of the EIA Regulations (2014 as amended);*
- *Undertake independent, comprehensive and technically sound investigations of all environmental issues associated with the project;*
- *Coordination and management of specialists;*
- *Liaison with GDARD during the Scoping and Fill EIA process;*
- *Regular feedback to the client in terms of progress and any findings; and*
- *Undertake a public participation process (PPP) to identify issues and concerns of key stakeholders and interested and affected parties (I&APs). The PPP will accommodate the consultation requirements of the proponent in accordance with the new EIA regulations.*

*Following submission of the final Environmental Impact Assessment Report (EIR) GDARD will then reach a decision as to whether, and under what conditions, the project may proceed, based on environmental considerations.*

*The authorisation can be obtained within a period from 300-350 days as per timeframe in the 2014 EIA Regulations, as amended.”*

The Environmental Authorization will be submitted to Mogale City Local Municipality once received.

## **4. PROPOSED DEVELOPMENT**

### **4.1 Lanseria Smart City**

President Cyril Ramaphosa announced in his 2021 State of the Nation Address that the Lanseria Smart City, the first new city to be built in a democratic South Africa, is now a reality in the making. Plans for the Lanseria Smart City – first known as Cradle City – started in 2007 with the idea of creating South Africa’s first city built around an airport.

For many years the project was low-key, but it started to make headlines after it was mentioned in Ramaphosa’s State of the Nation Address and Premier David Makhura’s Gauteng State of the Province address. Further details about the project were made public, which included that Crosspoint, in cooperation with the Gauteng Department of Human Settlements, will implement the Lanseria Airport City Mega Project over a ten-year period. Crosspoint has

also partnered with the Public Investment Corporation (PIC) to develop a 90-hectare mixed-use commercial precinct – the Lanseria Business District – as part of the project.

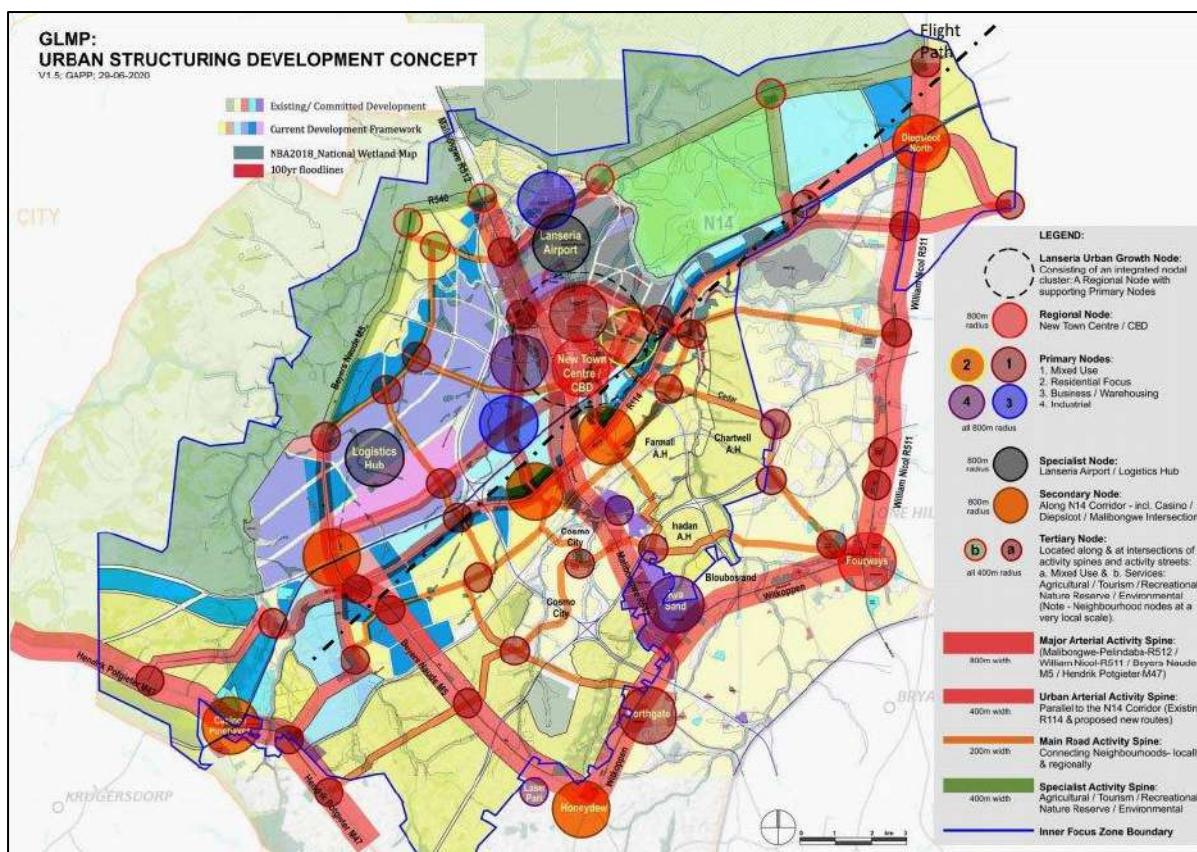
A draft Masterplan for the Greater Lanseria Growth Node was released in November 2020 for public comment. The plan highlighted that the new smart city is a joint initiative of the Presidency, the Office of the Gauteng Premier, the City of Tshwane, the City of Johannesburg, and Mogale City.

The aim is to create the first post-apartheid city in South Africa based on best practice in urban sustainability and the principles underpinning the smart city.



The city would be built surrounding Lanseria International Airport, north of Johannesburg, in a project which would take around 25 years to complete. Sitting in the centre of the development, the airport will be the main economic driver for the city's growth. Strong residential growth in the surrounding areas is expected which would be supported by improvements to existing roads in the area.

The map below shows how the new Lanseria Smart City will fit into the greater area surrounding the development.



From the outset, the plan is to build a smart city which is innovative, sustainable and green. It was designed to “interface with nature” to ensure minimal environmental impact. The Lanseria Smart City will feature rainwater harvesting and solar energy to limit its carbon footprint. The city aims to move urban sustainability beyond existing paradigms of planning, engineering, and urbanization to increasingly appropriate levels of sustainability and innovation.

There is a strong focus on limiting the need to commute using cars. Any commuting should, by default, be by non-motorised means like walking or cycling or, where necessary, by public transport. In planning terms, this means the new city needs to be walkable. People must be able to walk to work, shopping malls, or schools, within between 5 minutes (400m) and 10 minutes (800m).

To further increase the appeal of the city, there are plans to expand the Lanseria International Airport. The airport currently accommodates 3.5 million passengers per annum, with a vision to accommodate 18 to 20 million passengers in future. To support this expansion, the airport will have to accommodate business jets and Boeing 737s, which requires a longer runway. The Lanseria international Airport is exploring different options of expansion, which could include the extension of the existing runway from 3km to 4.5km or potentially adding an additional runway.

To accommodate the increased traffic to and from the Lanseria International Airport, existing roads will have to be upgraded and new roads will have to be built. Additional interchanges, subways, bridges, and service lanes are planned to enhance the current road system around the airport.



The Lanseria Business Gateway will be located on 130 hectares of prime real estate between Lanseria Airport and the upmarket Blair Atholl Golf Estate. It will be a 24-hour smart city zone that will offer retail, conference, and business facilities. It will also host the Lanseria luxury hotel.

To make the Lanseria Smart City safe for residents and workers, the streets, sidewalks, marketplaces, and parks will be well policed and well-lit at night. The public areas of the city are aimed at street-life and social interaction and the design of the buildings facing onto these areas will encourage this. Where it is possible, there is also the idea of making opportunities for small-scale market gardening available in an organised way so that urban agriculture can be included as part of the Smart City's economic activity.

The idea is that the Lanseria Smart City will have accommodation for many socio-economic and cultural groups living in and around a higher density, mixed-use city. As part of this accommodation, the Northern side of the Lanseria Smart City will include a sustainable residential area with river-frontage for high-end residential units.

## 4.2 Proposed Lanseria Development

A whole new residential development is planned by the Cosmopolitan / Central Developments Group which will complement the proposed Lanseria Smart City and the Lion Pride Development. This Lanseria development will be situated to the west of Malibongwe Drive (P103-1) and south of the Elandsdrift Road and in the area of jurisdiction of the Mogale City Local Municipality.

This development will extend in a southerly direction over the N14 Freeway as indicated on the attached Lanseria Development Plan (Annexure D). The entire development is situated west of Malibongwe Drive. The part of the development north of the N14 is referred to as **Lanseria North** and the part of the development south of the N14 is referred to as **Lion Pride Extension** (consisting of Mogale X54 to X59).

Provision will be made for the following categories of residential erven / units:

<b>LANSERIA DEVELOPMENT PLAN</b>			
<b>Provision of Residential Erven / Units</b>			
<b>Lanseria North</b>			
<b>Type</b>	<b>Density</b>	<b>Area (ha)</b>	<b>No of erven/units</b>
Low Density	18 units/ha (400m <sup>2</sup> +)	41,5876	748
Low Density	24 units/ha (225m <sup>2</sup> – 300m <sup>2</sup> )	109,7583	2 634
Medium Density	40 units/ha	53,1337	2 125
Charter (High Density)	120 units/ha	12,3422	1 481
High Density	120 units/ha	10,6172	1 274
<b>Sub-Total</b>		<b>227,4383</b>	<b>8 262</b>
<b>Lion Pride Extension</b>			
<b>Type</b>	<b>Density</b>	<b>Area (ha)</b>	<b>No of erven/units</b>
Medium Density	40 units/ha	20,2837	810
High Density	130 units/ha	8,8598	1 151
<b>Sub-Total</b>		<b>29,1435</b>	<b>1 961</b>
<b>Total</b>			<b>10 223</b>

It is evident from the Lanseria Development Plan that residential development will occur on ± 259 hectares of the ± 432 hectares, thus ± 60 % of the site. It is further evident on the Development Plan that the following further land uses will be accommodated/provided:

- Roads – Provincial and Municipal roads have been planned in addition and to connect with the existing Malibongwe Drive (eastern boundary), N14 Freeway (divides the site in an east-west direction).
- Educational facilities to cater for Primary Schools and Secondary Schools, both public and private;
- Commercial facilities along the N14 / Malibongwe intersection (north-west) and along Malibongwe Drive;
- A Shopping centre in the Lanseria development; and
- Open space as dictated by the Environmental Authorization applied for at GDARD which will accommodate floodlines; wetlands and associated buffers; environmental sensitive areas and corridors.

#### **4.3 Phase 1 – “Lion Pride Extension”**

Phase 1 of the development will be “Lion Pride Extension”. This includes 6x townships as indicated on the attached Combined Layout Plan (Annexure E), being:

<b>Lion Pride Extension</b>		
<b>Township</b>	<b>Residential Zoning &amp; Density</b>	<b>No of Units</b>
Mogale Extension 54	Residential 3 @ 40 units/ha	235
Mogale Extension 55	Residential 3 @ 40 units/ha	249
Mogale Extension 56	Residential 3 @ 40 units/ha	326
Mogale Extension 57	Residential 4 @ 130 units/ha	485
Mogale Extension 58	Residential 4 @ 130 units/ha	314
Mogale Extension 59	Residential 4 @ 130 units/ha	352
<b>Total number of units</b>		<b>1 961</b>

Lion Pride Extension will be situated south of the N14 Freeway and will gain access from Malibongwe Drive.

Lion Pride Extension comprises:

- 3x Medium Density townships (Mogale Extensions 54 to 56) with a density of 40 units per hectare;
- 3x High Density townships (Mogale Extensions 57 to 59) with a density of 130 units per hectare.

## 5. SITE EVALUATION

### 5.1 Sufficient access

The townships will gain sufficient access from Access Road A which intersects with Malibongwe Drive, as indicated on the Combined Layout Plan.

### 5.2 Developable portion

The following areas form part of the floodline area and are not developable:

Township	Erf no	Area
Zwartkoppies X54	2	2,2404
Zwartkoppies X55	2	1,4525
Zwartkoppies X56	3	3,9273
Zwartkoppies X57	2	0,1957
Zwartkoppies X58	-	-
Zwartkoppies X59	2	0,0184
<b>Total</b>		<b>7,8343</b>

It is thus evident that  $\pm 20\%$  of the area of the Lion Pride Extension is not developable.

### 5.3 Public Transport

As indicated in the TIA, further described in Paragraph 7.2, the following public transport facilities are currently available and facilities proposed for the development:

*"Malibongwe Drive (R512), which borders the subject site to the east, is known to be a popular public transport route. On-site observations also revealed that both the N14-Freeway and the R114 (P39-1), are popular public transport routes for buses and minibus-taxis. The above-mentioned roads are serving and connecting several townships in the area such as Cosmo City, Lion Park and even Diepsloot. Malibongwe Drive (R512) is also one of Joburg's SPTN (Strategic Public Transport Network) routes. To note is that there are currently several bus stops along this route, at its intersections with other major roads.*

*The classified traffic count undertaken at the Malibongwe Drive and Road R114 confirmed that approximately 12% and 9% of the total traffic through this intersection during the weekday AM and PM peak hours, respectively, were minibus taxis. These percentages are considerable, especially if one takes into account that Malibongwe Drive is a major arterial route that carries a high volume of through traffic. Similarly, the classified traffic count showed that approximately 3% and 5% of the total traffic through this intersection during the weekday AM and PM peak hours, respectively, were heavy vehicles, which consisted of a notable number of buses. These percentages confirm that a large portion of commuters in the study area make use of public transport services. Since these public transport services are located*

*in close proximity to the subject site, it can be concluded that the subject site is very well located with regards to public transport services such as buses and minibus taxis.*

*In terms of existing public transport facilities, a set of public transport laybys (bus laybys; Gautrans standard) are currently in place at the site access intersection (i.e., Malibongwe Drive and 'Road A'). However, no paved pedestrian walkways are currently provided at the intersection.*

*It is expected that the proposed development and other nearby developments (i.e., latent rights), as they develop over time, will further stimulate the demand for public transport services and it is expected that particularly minibus taxis would respond to this demand by providing more services. With regards to the public roads traversing the site, it is very likely that 'Road A' will become a popular public transport route in the future.*

*In order to make provision for the users of public transport, generated by the proposed development, the following are proposed:*

- *Pedestrian Walkways: With reference to Drawing No. 0583/CL/01, it is recommended that paved pedestrian walkways of at least 1.8m wide be constructed on either side of 'Road A' from its intersection with Malibongwe Drive (R512) and up to the proposed traffic circle intersection between 'Road A' and 'Road C'. After this traffic circle, it is recommended that the sidewalk continue on only one side of the road as indicated. This sidewalk should be implemented along at least one side of 'Road B' as well.*
- *Public Transport Laybys: Since many of the residents, employees (e.g., domestic workers, security personnel) are expected to make use of public transport services, it is suggested that a new set of public transport laybys be constructed at the intersection between 'Road A' and 'Road C' as per Drawing No. 0583/CL/01.*

*More details of the above would be submitted as part of the Site Development Plans and/or detail designs of the external roads. The final location of the proposed sidewalks and laybys can be discussed with the authorities at design stage of the external roads."*

#### **5.4 Overshadowing of neighbours**

Overshadowing of neighbours occurs to the southern side of buildings on higher density residential developments. It is important to ensure that the high density component of buildings to be constructed on the proposed "Residential 4" erf, be constructed in such a way that no overshadowing takes place.

Overshadowing will be addressed on the final Site Development Plan and will be in accordance with the Council's by-laws and the National Building Regulations.

#### **5.5 Parking provision and vehicular movement**

This is applicable to Erven 1 and 2 - "Residential 4" whereby provision will be made in the Site Development Plan for sufficient stacking distance at the security access / guard house. Vehicular movement will also be addressed as vehicles will be able to turn within the development.

Sufficient parking will be provided at a ratio of 1,33 parking spaces per unit.



## 5.6 Privacy to neighbours

The dwelling units will be developed in such a way that privacy of neighbouring units is maximized.

## 6. ENGINEERING SERVICES

### 6.1 Civil Engineering Services

Ruimsig Infrastructure Consultants CC have been tasked to prepare a "Bulk Services Outline Scheme Report" for Lion Pride Extension (Mogale X54 – X59) and the Proposed Lanseria Development. The following information has been derived from the report:

*"This outline scheme report addresses the provision of bulk water and sewer municipal services for the Lion Pride Extension (Mogale Extensions 54 to 59) as well as the land currently available for the Proposed Lanseria Developments, and furthermore the provision of roads and stormwater network for Lion Pride Extension (Mogale Extensions 54 to 59) only. The Lion Pride Extension (Mogale Extensions 54 to 59) development consists of approximately 40 Ha Agricultural zoned land and the proposed Lanseria development currently consists of approximately 383 Ha Agricultural zoned land. Application will be made for the establishment of various townships for approximately residential erven / units. **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.***

*The Proposed Developments are situated in the Muldersdrift area that falls within the Municipal Boundary of Mogale City Local Municipality. **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.***

***Please note that this report deals with all the land currently available for development and that more land could be added by the developer at a later stage to facilitate the feasibility for the provision of the required bulk infrastructure that will be installed by the developer.***

*The proposed township of Lion Pride Extension (Mogale Extensions 54 to 59) will have direct access to the existing Malibongwe Drive (R512) bordering the proposed development on the eastern side. (See layout of the traffic engineer, Dhubecon Consulting, Annexure E, Layout Drawings)*

#### **Phasing of development**

*Due to the large scale of the proposed development, implementation will take place in numerous phases, most likely in 1 extension at a time.*

#### **BULK SERVICES**

##### **Water reticulation**

*The water supply of the Muldersdrift area east of Beyers Naude Drive are 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 and therefore the following proposal for the supply of bulk water. **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.***

*(See Bulk Water Reticulation 1 of 2 and 2 of 2) 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 to Rand Water for a metered bulk water connection onto the Weltevreden Park – Cosmo City Reservoir feeder line. All these 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 motive behind the chosen site for the construction of the reservoir is to construct bulk infrastructure according to Mogale City's future water master plan. The ground elevation of the proposed reservoir site is 1471m MSL while the proposed development's elevation changes from 1431m MSL in the south to 1351m MSL in the north. This results in 40m to 120m water pressure due to the change in elevation and therefore no water pressure tower will be required. As can be seen in the flow calculations, 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.*

*Sewer reticulation*

*Currently no bulk sewer infrastructure is available in the proximity of the proposed development. It is proposed to construct an on-site, 7ML, mechanical dewatering, wastewater treatment works on the north western corner of the site. 3 Sewer pump stations will also have to be constructed as part of the required sewer network. (See Annexure E – Layout Drawings) This WwTW will be constructed in phases of 1ML as the development of the proposed townships progress. The WwTW and associated bulk outfall sewers, together with 3 sewer pump stations and rising mains 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.*

*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 of the various extensions 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.*

*Roads*

*The following existing and future roads are affected by the layout of the proposed townships:*

- *Existing Malibongwe Drive (R512 / P103-1 / K29)*
- *Existing N14 Freeway (P158-2)*
- *Road R114 (P39-1 / Future K52)*

*A Comprehensive Traffic Impact Assessment for the development of Lion Pride Extension (Mogale Extensions 54 to 59) townships was done by Dhubecon Consulting Engineers and will be submitted to Mogale City Local Municipality, Roads and Surface Drainage Section, for approval.*

*The proposed Lion Pride Extension (Mogale Extensions 54 to 59) townships will have access to the existing Malibongwe Drive Provincial Road via an existing access crossing. This existing access crossing will have to be upgraded as recommended in the Traffic Impact Assessment.*

## INTERNAL SERVICES

### Water reticulation

*The proposed internal reticulation will be located and planned in road reserves at 1.5m from stand boundaries, with house connections to the individual stands. The development will be serviced to provide the required minimum flow and head requirements as determined by the "Red Book". A water network analysis will be done with Technocad Watermate Ver 2023 to optimize the pipe sizes for the development. A minimum pipe size of 75mm dia will be specified.*

*The reticulation will consist of class 12 uPVC / PVC-O / HDPE pipes and fittings with each erf being provided with an HDPE type 4 class 16 pipe house connections with Plasson compression fittings.*

*The designed services will be in accordance with the requirements of the "Red Book" specifications and designs and constructed in accordance with the relevant SABS 1200 specifications. Valves and hydrants will be installed as required in terms of specifications of the "Red Book" standards and the system will provide for fire flow as per various category determined by the "Red Book". The water layout construction drawings will be submitted to Mogale City Local Municipality, Water and Sanitation Section, for approval.*

### Sewer reticulation

*The proposed internal reticulation will be located and planned in road reserves at 1.5m from stand boundaries, with house connections to the individual stands. The sewers will be designed to drain 85% of the depth of the stands and manhole spacing will not exceed 80m.*

*Minimum slope for 160 mm sewer pipes will be 1:140 with a minimum full flow velocity of 0.7m/sec. The capacity of a pipe at this slope is 13.1l/sec. The pipes to be used are Maincore Class 400 Heavy Duty uPVC.*

*The reticulation will be in accordance with the specifications of the "Red Book" and installation will be in accordance with the relevant SABS 1200 specifications. A preliminary assessment of the sewer design has been completed and no sewers exceed a depth of 3.0m.*

*The proposed development will be gravity reticulated through proposed stands to the lowest point of the development which is in the north western corner where it will connect to the proposed WwTW. The sewer pipes will range in size from 160mm to 200mm diameter.*

*Construction drawings for the planned development will be submitted to Mogale City Local Municipality, Water and Sanitation Section, for approval and stands will be serviced to provide the required minimum flow and pipe sizes as required by the "Red Book". A sewer flow network analysis will be done with Technocad Pipemate Ver 2023 to determine the pipe sizes for the development. A minimum pipe size of 160mm dia will be specified.*

*The Mogale City Local Municipality, Water and Sanitation Section's standard sewer drawings will be applicable for the construction phase as well as the relevant SABS 1200 specifications.*

### Stormwater management

*A complete Stormwater Management Plan will be submitted to Mogale City Local Municipality, Roads and Surface Drainage Section, after finalization of a Site Development Plan.*

### Roads

*The street geometric and vertical design will be done with Technocad Roadmate Ver 2023. The proposed internal roads will consist of prepared earthworks layers with a 125mm crusher run base course; 150mm sub-base; 150mm selected gravel layer and 150mm road bed and a 25mm asphalt*

surface all to the requirements of Mogale City. The kerbs will be pre-cast semi-mountable fig 8 kerbs.

*The vertical and horizontal alignment will be determined based on a design speed of 60 kph and providing comfortable vehicular access to the individual properties. There is no direct access from the bus route to individual properties. The road widths for various reserve widths will be as specified by Mogale City and up to 7,4m for higher order roads (Bus routes).*

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

It is evident from the report that bulk sewer and water services are not available, but will be constructed by the developer due to the magnitude of the Lanseria development. Copies of the report accompany the application and will be circulated to the relevant engineering departments.

## **6.2 Traffic Consideration**

Dhubecon Consulting Engineers was appointed to conduct a Traffic Impact Assessment of the proposed Mogale X54 to X59. The report was finalized in July 2022 and the following information has been derived:

*"Based on the content of this document, the following key conclusions and recommendations are relevant:*

1. *This Traffic Impact Assessment (TIA) forms part of the township application for the proposed new residential townships known as Mogale Ext. 54-59, which is to be situated on Part of the Remainder of Portion 23, a Part of Portion 162 and Part of the Remainder of Portion 196 of the Farm Nooitgedacht 534-JQ, approximately 4.8km south of the Lanseria International Airport. The site location is shown in attached Figure 1 and Figure 2 and falls under the jurisdiction of the Mogale City municipality. It is, however, to note that the boundary between Mogale City and the City of Johannesburg (CoJ) is situated in the vicinity of the site and that the subject site falls under the jurisdiction of Mogale City while most of the existing analysed key intersections instead 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 this TIA. The municipal boundary separating Mogale City and the CoJ is also indicated in Figure 2 for ease of reference.*
2. *The subject site, as a whole, is approximately 39.9ha in extent and comprises of six (6) proposed townships. With reference to the town planner's combined Township Layout Plan in Annexure A, the proposed townships will be residential developments that would comprise out of 'Residential 3' and 'Residential 4' units. Mogale Extensions 54-56 are earmarked for 'Residential 3' units with a development density of 40 units/ha while Extensions 57-59 are earmarked for high density 'Residential 4' units with a development density of 130 units/ ha. Based on the area of each township, the combined permissible extent of the site jointly calculates to 2,106 units (927 'Residential 3' units and 1,179 'Residential 4' units). The proposed townships will primarily cater for the lower-income households, similar to most new developments in the area.*
3. *LOCAL ROAD NETWORK: As part of this particular development, three (3) new public municipal roads, which is to fall under the jurisdiction of Mogale City, have been proposed to improve the overall accessibility of each township while also taking into consideration the accessibility of the neighbouring vacant properties. These roads have also been incorporated into the combined Township Layouts for the development in Annexure A and as a result its*

*proposed road reserves and splays have already been accounted for. For the purposes of this study, these roads have been referred to as 'Road A', 'Road B' and 'Road C', as per Figure 2 and also the conceptual key plan of the site (Drawing No. 0583/CL/01). See Section 2.3.2 for specific details on each of these future roads.*

4. *PROPOSED SITE ACCESS INTERSECTIONS: In light of the adjacent provincial Class 2 road, namely Malibongwe Drive (R512 / P103-1 / K29), 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) by the formalization of 'Road A'. The required upgrades for this intersection by the developer is discussed in Section 3.2 as well as Section 6.2 in further detail.*

*The intersection of 'Road A' and Malibongwe Drive (R512 / P103-1) is already present and the location of this intersection coincides with Gautrans planning of the K29 road. However, the western approach of this intersection, which is particularly relevant for this development, has only been constructed as a paved asphalt road up to a certain point (approximately a 60m section of road is present) after which the road continues as an unpaved gravel road. Therefore, to provide adequate accessibility to the townships, 'Road A' will be extended further as shown conceptually in Drawing No. 0583/CL/01 and also discussed in Section 2.3.2.*

5. *LOCAL TOWNSHIP ACCESS ARRANGEMENTS: Important to note is that all the proposed residential townships (i.e., Extensions 54-59) will have security-controlled accesses and therefore adequate stacking distance should be provided to ensure that inbound vehicles queuing at the security gates do not impact on other traffic along the adjacent roads. The latest and most relevant guideline, namely the THM 16 (Vol 2): South African Traffic Impact and Site Traffic Assessment Standards and Requirement Manual (Committee Draft 2.0, October 2019) was used to determine the required stacking distance requirements for each of the residential township accesses, which is summarised in Table 2 in Section 3.3. With regards to the recommended access configuration, it is proposed that each access have two inbound lanes and two outbound lanes as the access control as conceptually indicated in Drawing No. 0583/CL/01.*

*Furthermore, as per Annexure A, a total of six (6) residential townships are proposed. However, the developer intends to notarially tie Ext. 54 & 55 in order to provide a single security-controlled access for these two townships. Thus, the development would have five (5) security-controlled accesses in total.*

6. *To accommodate emergency and service vehicles, it is also necessary to ensure that at least one traffic lane (inbound or outbound) of each access has a width of at least 3.5m wide with a total free-space of 4.5m and a height clearance of 5.2m, or as per the requirements of the local authority. More details of the access arrangements will be provided as part of the submission of the final Site Development Plans (SDP's) for each township.*
7. *TRIP GENERATION: It is estimated that the proposed townships as a whole will generate approximately 919vph (total IN plus OUT) during both the weekday AM and PM peak hours, respectively.*
8. *ROAD & INTERSECTION UPGRADES: Based on the estimated additional traffic generations of the proposed development as a whole, its projected distribution onto the surrounding road network during the weekday AM and PM peak hours, the capacity analyses in Section 5 as well as on-site observations during the peaks, road and intersection upgrades will be required.*

*At the intersection of Malibongwe Drive (R512 / P103-1) and Road R114 (P39-1) upgrades have been identified in the approved TIA, issued in 2018 by Dhubecon Consulting Engineers*

*(Pty) Ltd, for the Cosmo City Ext. 33-49 townships. These upgrades are listed in Section 6.1 of the report and also conceptually shown in Drawing No. 0583/CL/03a*

*Furthermore, it would form part of the authorities' responsibility to reinstate the traffic signals, which have been vandalized/ stolen over the years, at the following key intersections:*

- *Malibongwe Drive (R512/ P103-1) / N14 (P158-2) Northern Terminal;*
- *Malibongwe Drive (R512/ P103-1) / N14 (P158-2) Southern Terminal; and*
- *Malibongwe Drive (R512/ P103-1) / Road R114 (P39-1).*

*As part of the subject Mogale Ext. 54 – 59 townships, upgrades at the following roads and intersections will be required (see Section 6.2 for further details):*

- *Malibongwe Drive (R512 / P103-1) / N14 (P158-2) Northern Terminal (Refer to Drawing No. 0583/CL/02);*
- *Malibongwe Drive (R512 / P103-1) / Road R114 (P39-1) (Refer to Drawing No. 0583/CL/03b);*
- *Malibongwe Drive (R512 / P103-1) / 'Road A' (Refer to Drawing No. 0583/CL/01); and*
- *The implementation of 'Road A', 'Road B' and 'Road C' with all of its relevant intersections as listed and described in Section 6.2.2 and conceptually shown in Drawing No. 0583/CL/01.*

9. *In the event of bulk engineering contributions payable with respect to roads and stormwater, it is recommended that at least part of the contribution be off-set against the proposed road and intersection upgrades, as outlined above, since these upgrades will also benefit other future developments and the relevant road authorities. It is acknowledged that the off-setting of costs against provincial roads could be a problem in terms of the legislation, but it is recommended that CoJ, Mogale City and Gautrans come to some agreement in this respect.*

10. *PROPOSED PHASING OF UPGRADES: The upgrading of the relevant roads and intersections as proposed in Section 6.2 and shown in the attached drawings are applicable to the proposed townships as a whole, which is also the most appropriate way to investigate the overall traffic impact and identify the necessary upgrades. However, due to the high costs of implementing the engineering services for the townships, it is more feasible for a developer to implement the development in phases, which is made possible with smaller townships. This is the main reason for the multiple townships. In giving consideration to the kick-off needed for certain road infrastructure and considering the anticipated traffic generation contribution of each township (or phase) as identified in Table 4 of this report, Table 5 in Section 6.3 proposes the partial implementation of the upgrades, linked to the various townships/ phases. The practical and construction implications of the upgrades had also been taken into account.*

*Furthermore, depending on the availability of other engineering services such as electricity, water and sewer, as well as market demand, it could be possible that some townships be implemented before others and consequently it may affect the proposed phasing of the road infrastructure implementation. More details of the road upgrades will follow later as part of the services agreement and detail designs to be submitted by the civil engineer.*

11. *PROPOSED NON-MOTORISED & PUBLIC TRANSPORT FACILITIES: It is expected that the proposed development and other nearby developments (i.e., latent rights), as they develop over time, will stimulate the demand for public transport services and it is expected that particularly minibus taxis would respond to this demand by providing more services. With regards to the public roads traversing the site, it is very likely that 'Road A' will become a popular public transport route in the future. Therefore, in order to make provision for the*

users of public transport, generated by the proposed development, the following facilities are proposed:

- *Pedestrian Walkways:* With reference to Drawing No. 0583/CL/01, it is recommended that paved pedestrian walkways of at least 1.8m wide be constructed on either side of 'Road A' from its intersection with Malibongwe Drive (R512) and up to the proposed traffic circle intersection between 'Road A' and 'Road C'. After this traffic circle, it is recommended that the sidewalk continue on only one side of the road as indicated. This sidewalk should be implemented along at least one side of 'Road B' as well.
- *Public Transport Laybys:* Since many of the residents, employees (e.g., domestic workers, security personnel) are expected to make use of public transport services, it is suggested that a new set of public transport laybys be constructed at the intersection between 'Road A' and 'Road C' as per Drawing No. 0583/CL/01.

More details of the above would be submitted as part of the Site Development Plans and/or detail designs of the external roads. The final location of the proposed sidewalks and laybys can be discussed with the authorities at design stage of the external roads.

From a traffic engineering perspective, the proposed residential townships known as Mogale Ext 54-59 is supported, provided that the proposed site accesses, external road/intersection upgrades and public transport facilities as proposed in this TIA are being implemented to the relevant design standards of the local and provincial authorities (where relevant)."

Copies of the Traffic Impact Assessment accompany the application and will be circulated to the relevant Departments.

### 6.3 Electrical Engineering Services

Eksteen le Roux Electrical Engineers will be responsible for the electricity supply to the proposed development (Mogale X54-X59).

1. *The proposed development of Mogale Ext. 54 – 59 is a low/high-density sectional title development.*
2. *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 therefore the electrical supply authority for the proposed development.*
3. *The electrical bulk supply requirement for the proposed development as a whole is 6303kVA, and is summarised below:*

Zoning	Land Use	Electrical Load Allocation (kVA)		Total		
				Stands / Living units	Area (ha)	Load (kVA)
Residential 3	Low Density residential	140 3.5	kVA / ha based on 40 units/ha kVA per living unit	810	20	2 835
Residential 4	High Density residential	390 3	kVA / ha based on 130 units/ha kVA per living unit	1 151	9	3 453
Private Open Space	Parks		N/A	5	8	0
Roads	Street lighting allowance					15
	Public roads			3	3	0
				<b>1 969</b>	<b>40</b>	<b>6 303</b>

4. *The proposed development falls within the feeder area of the Eskom owned Cosmo City Substation, and supply will be made available from there. Eskom to confirm the availability of the required electrical bulk supply from Cosmo City Substation on application to them.*

Copies of this letter from Eksteen le Roux Electrical Engineers accompany the application.

## **7. MOTIVATION**

### **7.1 Spatial Planning**

#### **7.1.1 National Development Plan, 2030**

According to the National Development Plan, 2030, the Commission proposes a national focus on spatial transformation across all geographical scales. Policies, plans and instruments are needed to reduce travel distances and costs, especially for poor households. By 2030 a larger proportion of the population should live closer to places of work, and the transport they use to commute should be safe, reliable and energy efficient. This requires:

- (a) Strong measures to prevent further development of housing in marginal places;*
- (b) Increased urban densities to support public transport and reduce urban sprawl;*
- (c) More reliable and affordable public transport and better coordination between various modes of transport;*
- (d) Incentives and programmes to shift jobs and investments towards the dense townships on the urban edge; and*
- (e) Focused partnerships with the private sector to bridge the housing gap market.*

The proposed Lanseria development will increase urban densities by providing ± 10 223 additional housing opportunities in close relation to Lanseria Airport and Kya Sand and within the Mogale urban edge. Supporting land uses such as educational, commercial and business facilities will also be provided in the long run. Lion Pride Extension is located adjacent to Malibongwe Drive, being a prominent road and on which public transport takes place. Malibongwe Drive connects at present Lion Pride Extension with Kya Sand, being a place of work and employment. In future when Lanseria Smart City has been developed, employment more employment opportunities will be provided to the north of the N14 Freeway. The proposed development therefore promotes the goals of the NDP, 2030 by providing housing opportunities closer to places of work.

#### **7.1.2 Gauteng Spatial Development Framework 2030**

The Gauteng Spatial Development Framework (2030) provides a common future spatial structure for the Gauteng Province and is clear on the fact the "growth must be structured and directed"; not merely accepted and accommodated.

*"The precepts of a sustainable city according to the Gauteng Spatial Development Framework, 2030 are:*

- The horizontal spatial extent of the urban system is kept tight within the existing urban system to prevent unbridled, ill-constructed and unsustainable horizontal urban sprawl;*
- The greater part of the province is kept rural for agricultural, recreational, bio-diversity and aquifer management purposes;*
- The intensity of urban development and the densities at which people are accommodated within the urban area are increased significantly through time as population increases;*



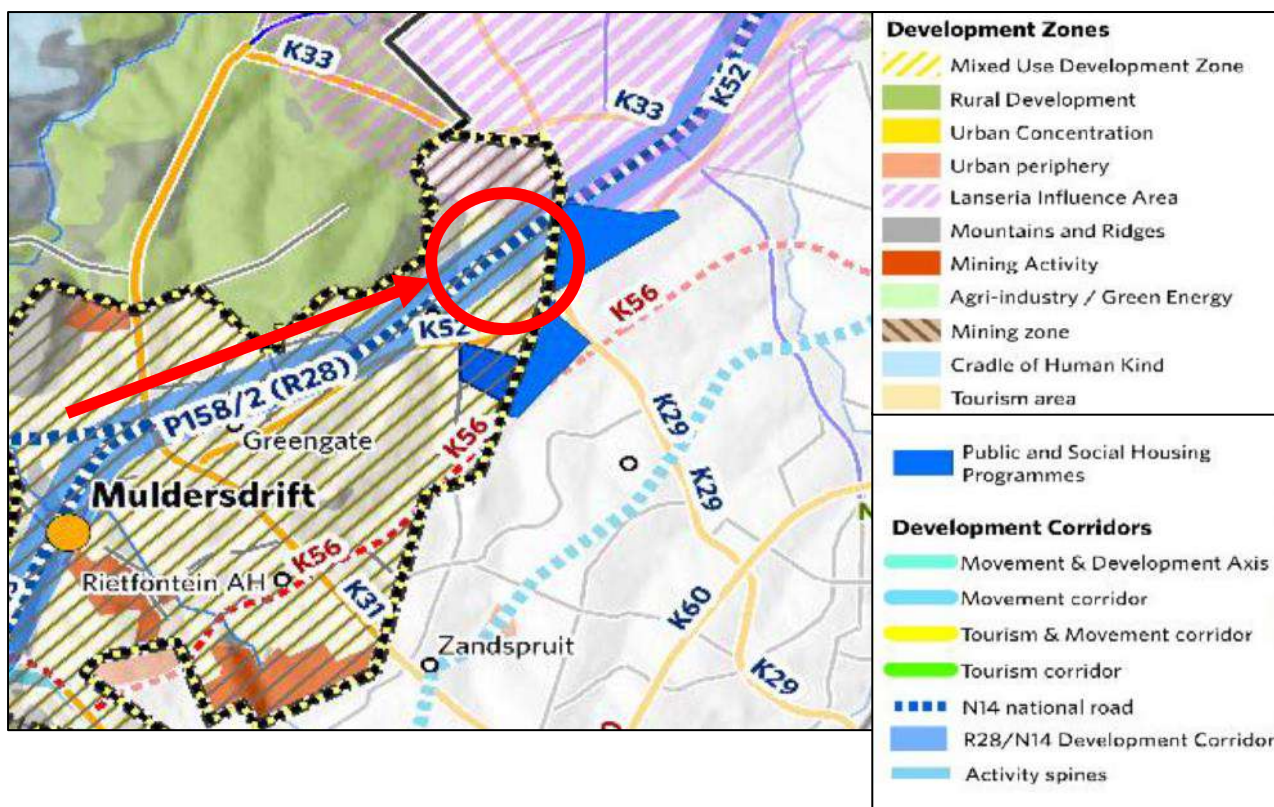
- *An integrated open space network is embedded in the urban system as one of the principal spatial ordering principles, both for reasons of bio-diversity, ecological sensitivities and the making of a liveable city for a densely populated area;*
- *Mass public transport is used as a fundamental shaper of the urban logic with the existing rail systems and now, more recently Gautrain and the BRT routes, forming the basis of the movement systems;*
- *Urban structuring elements (consolidation zones, urban corridors, urban activity nodes, activity spines) are defined to create a "skeleton" on which urban development forms over time;*
- *Strong relationships between movement, particularly public transport routes, and urban intensification are formed as a fundamental spatial logic;*
- *The shape and pattern of the urban systems existing and proposed road network is used to reinforce and shape the urban form;*
- *Within these areas noted for urban intensification, emphasis moves away from separation of land uses at defined maxima in terms of intensities or densities of development as a basis for development control versus inclusionary zoning and mixed-use development to minimum intensities or densities as a basis for urban management; and*
- *The push for higher intensities and densities notwithstanding, there is sensitivity to the qualities of the existing patterns of lower-density districts and suburbs and the value, lifestyle and heritage these represent. Nevertheless, within the constraints placed by environmental character and heritage, there is a general push towards increasing the densities within suburbia and broadening the profile and range of housing opportunities."*

The Lanseria development of ± 10 223 additional housing opportunities will utilise the land more efficiently and economically by providing in the high demand for housing within the urban edge and in close proximity to prominent roads, being Malibongwe Drive (P103-1) and the N14 Freeway. The first phase of development to be known Lion Pride Extension will provide ± 2 000 units in closer proximity to places of employment such as Kya Sand.

The development is situated within the urban edge and does not impact any agricultural or recreational land negatively. Public transport (mini bus taxis) is easily accessible due to the close proximity of Malibongwe Drive. Provision will further be made to strengthen public transportation along with the proposed township. The provision of a medium density development comprising simplexes, duplexes and walk ups (4 storeys) will not negatively impact the surrounding area. It will also be sensitive to the quality and value of lifestyles for the residents and the surrounding area and will furthermore contribute to the upgrading of engineering services as the developer will construct a new reservoir and waste water treatment plant.

### **7.1.3 Mogale City Spatial Development Framework 2022-2027**

The Mogale City Spatial Development Framework was recently approved and Lion Pride Extension falls within the zone "Mixed Use Development Zone" and the Urban Development Boundary for which the following is stated:



*“The areas adjacent east and south of the site is earmarked as “Public and Social Housing Programmes.*

*Increasing the average density of infill, redevelopment, and Greenfield projects within the confines of the designated MCLM urban boundary is crucial to improving the quality of life in MCLM. Higher density is important to protecting open space and supporting transportation options like public transport, walking, and biking. MCLM should focus much of its higher density where it can be served conveniently by bus or rail public transport, which will also reduce the need to drive and provide other environmental benefits.*

*In investing in mixed use development, MCLM should consider the following imperatives:*

- *Need to apply the concept in appropriate places where the market is supportive*
- *Need to ensure that development standards should be flexible to accommodate for the land between full scale implementation and the market catching up.*
- *Need to integrate residential, commercial, employment, and civic uses.*
- *Need to plan and build an interconnected network of streets.*
- *Need to create a network of public spaces.*
- *Need to minimize surface parking erfs.*
- *Need to ensure standards result in human-scaled buildings that fit in with the neighbourhood context, and*
- *Need to proactively address issues that arise with new, more intensive mixed-use buildings, such as massing and design, transitions and step-downs, and ground floor uses.*

*Successful mixed-use developments typically share six common elements. Each of these elements has specific zoning and/or design tools that may address some of the issues outlined above. Key success factor includes:*

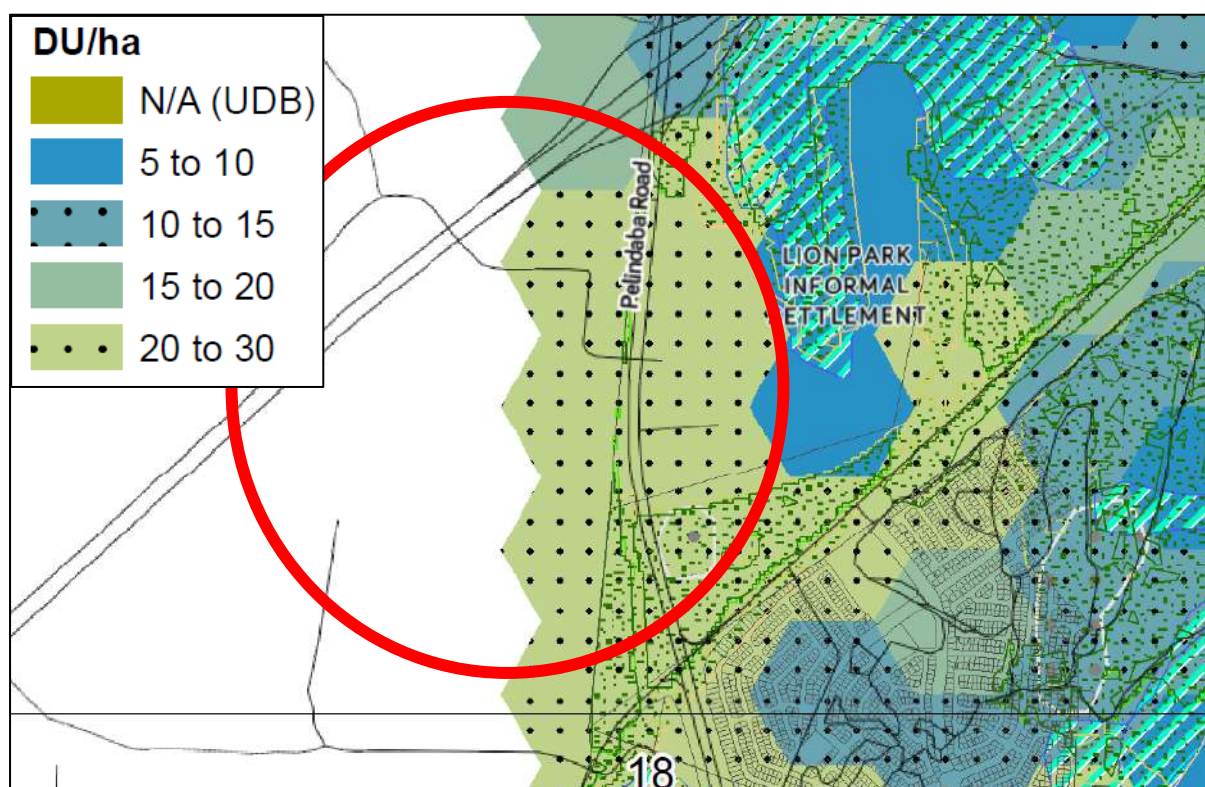
- **Creating Compact Development:** *Creating vibrant, walkable communities through mixed-use zones – a strong element of influencing the development of the wall-to-wall MCLM-LUS – includes compact development to take advantage of infill, redevelopment, and revitalization in activity nodes by providing incentives for infill and redevelopment in designated areas while discouraging Greenfield development. Compact development can be achieved by implementing urban renewal and infill projects such as in the CBD and along selected corridors, while traditional overlay zones could be employed to encourage development in designated areas such as in nodes in MCLM by providing incentives, such as fee waivers or reductions, development streamlining, and density bonuses.*
- **Entrenching Mixed Land Uses:** *Discourage inflexible, one-size-fits-all development standards, but encourage a mix of land uses by developing different types of compatible uses close together in appropriate locations to facilitate alternate modes of transportation, and shorten trips. In this regard, it is important to ensure that zoning regulations allow the integration of residential uses with commercial, employment, and civic uses in appropriate locations such as in the CBD, nodes and selected corridors. Look for opportunities to provide flexibility in building height, housing density, floor area, lot coverage, yard setback, landscaping, and other zoning provisions for mixed use developments.*
- **Ensuring Street Connectivity and Pedestrian Access and Safety:** *It is crucial for MCLM to seek to plan and build an interconnected network of streets that support all modes of transportation, and provide linkages to local retail, services, housing and amenities. In addition, MCLM should seek to promote pedestrian access and safety by planning and building on-site vehicle and pedestrian circulation systems that are safe, convenient, attractive, and comfortable for pedestrians and bicyclists.*
- **Creating Inclusive Public Spaces:** *Create and maintain a network of public spaces including sidewalks, plazas, parks, civic buildings, and places of assembly to allow for informal social interaction and gatherings. MCLM should thus require developments to integrate usable public space whenever possible, and encourage development patterns and projects that recognize and respond appropriately to existing or planned public spaces on or near the site, for example, parks, civic buildings and spaces, public transport stops, sidewalks, plazas, and similar spaces).*
- **Implementing Innovative Parking Approaches:** *In mixed-use zones, it is important to remember that parking areas should be efficiently designed and managed to minimize unnecessary surface parking. Surface parking can be reduced through implementing form-based zoning, incentives, and innovative site planning. Areas located near public transport should necessarily limit surface parking. MCLM should consider the following regulatory and parking management tools and strategies to limit the amount of land used for surface parking:*
  - o *Parking management plans*
  - o *Shared parking*
  - o *Additional on-street parking*
  - o *Reduced or waived minimum off-street parking standards*
  - o *Reduction in parking standards based on parking impact studies*
  - o *Maximum parking ratios*
  - o *Designated parking areas in lieu of fees for off-street parking*
  - o *Park-once strategies*
  - o *Structured parking, and*
  - o *Park and ride.*
- **Ensuring Human-Scaled Building Design:** *Building design standards should result in buildings that are human-scaled for pedestrian comfort, and compatibility between other land uses. The same design principles that apply to main streets and downtowns, with some adaptation, may apply to other commercial areas. MCLM-LUS regulations could support human-scale design by requiring building entrance placement close to the street, ground floor windows, articulated façades, appropriately scaled signs and lighting, as well as awnings and other weather protection.”*

The proposed development will provide both high density residential developments and various housing opportunities such as Simplexes, duplexes and walk-ups. The proposed township is furthermore strengthening the existing residential area created by the Lionpark Informal Settlement and Lion Pride development by Cosmopolitan Projects Pty Ltd. The Lanseria Development will provide further housing opportunities, along with supporting land uses such as educational facilities, businesses and commercial. It therefore complies with the principles of a mixed land use development.

The proposed township falls within the new Urban Development Boundary and is in line with the Mogale City Spatial Development Framework 2022-2027 as approved by the Mogale City Local Municipality.

### 8.1.5 City of Johannesburg Nodal Strategy Policy 2019/20

The following is an extract from the City of Johannesburg Nodal Strategy Policy of 2019/20:



Lion Pride Extension is situated along the boundary of the City of Johannesburg Metropolitan Municipality. The Nodal Strategy of the City of Johannesburg indicates that the areas adjacent east of Malibongwe Drive should be earmarked for residential developments with a density of 20 to 30 dwelling units per hectare.

The proposed development does not contradict the Strategic Development plans of Johannesburg adjacent to the site, as residential developments are proposed, along with non-residential uses such as "Educational" and "Business" within the larger Lanseria Development.

### 8.1.6 Spatial Planning and Land Use Management Act 2013,

The following principles apply to spatial planning, land development and land use management:

- (a) *"The principle of spatial justice, whereby -*
- (i) past spatial and other development imbalances must be redressed through improved access to and use of land;*
  - (ii) spatial development frameworks and policies at all spheres of government must address the inclusion of persons and areas that were previously excluded, with an emphasis on informal settlements, former homeland areas and areas characterized by wide spread poverty and deprivation;*
  - (iii) spatial planning mechanisms, including land use schemes, must incorporate provisions that enable redress in access to land by disadvantaged communities and persons;*
  - (iv) land use management systems must include all areas of a municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas, informal settlements and former homeland areas;*
  - (v) land development procedures must include provisions that accommodate access to secure tenure and the incremental upgrading of informal areas; and*
  - (vi) A Municipal Planning Tribunal considering an application before it, may not be impeded or restricted in the exercise of its discretion solely on the ground that the value of land or property is affected by the outcome of the application";*

The proposed development has taken into account the spatial development frameworks and policies at all spheres of government which was discussed above. The proposed land use will redress past spatial imbalances by providing affordable housing opportunities for the less privileged within the urban edge and in close proximity to employment opportunities. The proposed development is in line with the goals and strategies of the proposed SDF 2022-2027.

- (b) *"the principle of spatial sustainability, whereby spatial planning and land use management systems must –*
- (i) promote land development that is within the fiscal, institutional and administrative means of the Republic;*
  - (ii) ensure that special consideration is given to the protection of prime and unique agricultural land;*
  - (iii) uphold consistency of land use measures in accordance with environmental management instruments;*
  - (iv) promote and stimulate the effective and equitable functioning of land markets;*
  - (v) consider all current and future costs to all parties for the provision of infrastructure and social services in land developments;*
  - (vi) promote land development in locations that are sustainable and limit urban sprawl; and*
  - (vii) result in communities that are viable"*

The principles of spatial sustainability were taken into account by the proposed applications for township establishment. The proposed development does not affect prime agricultural land negatively and promotes development in locations that are sustainable and that limits urban sprawl through deification. Mogale City recognizes the need for residential development as an amendment to the urban development boundary is proposed.

- (c) *"the principle of efficiency, whereby –*

- (i) *land development optimise the use of existing resources and infrastructure;*
- (ii) *decision-making procedures are designed to minimise negative financial, social, economic or environmental impacts; and*
- (iii) *development application procedures are efficient and streamlined and timeframes are adhered to by all parties”;*

The proposed development will utilise and optimise existing infrastructures and resources in the area.

- (d) *“the principle of spatial resilience, whereby flexibility in spatial plans, policies and land use management systems are accommodated to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks”;*  
*and*

The proposed development will ensure sustainable livelihoods by the development of high quality residential opportunities.

- (e) *“the principle of good administration, whereby –*
  - (i) *all spheres of government ensure an integrated approach to land use and land development that is guided by the spatial planning and land use management systems as embodied in this Act;*
  - (ii) *all government departments must provide their sector inputs and comply with any other prescribed requirements during the preparation or amendment of spatial development frameworks;*
  - (iii) *the requirements of any law relating to land development and land use are met timeously;*
  - (iv) *the preparation and amendment of spatial plans, policies, land use schemes as well as procedures for development applications, include transparent processes of public participation that afford all parties the opportunity to provide inputs on matters affecting them; and*
  - (v) *policies, legislation and procedures must be clearly set in order to inform and empower members of the public”.*

The proposed township establishment applications will be circulated to all internal municipal departments and the relevant external provincial departments for their input and to set out their requirements that needs to be adhered to. All law-relating requirements will be adhered to timeously. The proposed township establishment applications will also be made public knowledge by advertising the applications in the Gauteng Provincial Gazette and a local newspaper for any party that wishes to contribute or object. Notice boards will also be erected on the property to inform the public of the proposed development and registered post will be forwarded to adjoining land owners. Therefore, public participation will be possible and available to all members of the community.

The principles of spatial justice, spatial sustainability, efficiency, spatial resilience and good administration are also promoted through the development of residential opportunities in close proximity to job opportunities and by utilising the vacant land more economically. The development adheres to spatial development frameworks and policies at all spheres of government as discussed above. Special consideration was given to the protection of environmental sensitive land and the proposed development does not affect any of this land negatively. The proposed development minimises negative financial, social, economic or environmental impacts by the development of vacant land which is in close proximity to job opportunities, public transport, schools, shops etc.

The proposed development is therefore in line with the principles of the Spatial Planning and Land Use Management Act.

## **8.2 Need**

### **8.2.1 Housing need**

It is a well-known fact that basic housing remains one of the fundamental challenges along the road to the general enhancement of quality of life in South Africa. The primary focus at this need lies undoubtedly with the population segment that has difficulty in accessing housing opportunities by means of market mechanisms. It is, however, also accepted that the creation of housing opportunities at any level of affordability contributes positively towards the total housing stock, hence also the availability of housing opportunities to vertically mobile populations and thus as a result also to the availability of opportunities at lower levels of affordability. In other words: the establishment of market driven housing indirectly facilitates the availability of subsidized housing opportunities.

Both Cosmo City and Lion Pride are sought after residential addresses and the proposed Lion Pride Extension (and later on Lanseria development) will provide much needed housing in an established area. Lion Pride Extension will furthermore provide sectional title units in the form of simplexes, duplexes, walk-ups and flats which will complement the housing options in Lion Pride and Cosmo City.

Since the basic need for housing in general is undisputed, the provision of supplementary housing options as advocated by this application will contribute to the establishment of residential stock in the market.

### **8.2.2 Local Housing Need**

The local housing need can only be regarded in context with the demand for housing in the Lion Pride / Cosmo City environment. Provision has been made in Lion Pride Extension for Medium and High Density Developments. Our client is of the opinion that a medium to high density residential development providing simplexes, duplexes and walk up units will add to and complement the existing and proposed residential housing options in the area.

Once the Lanseria Smart City development kicks off, housing will be more in demand as employment opportunities will be available to the north and south of Lion Pride Extension. The proposed Lanseria development will also provide employment opportunities as provision will be made for commercial, business and educational facilities. It is foreseen that the Lanseria development will follow after Lion Pride Extension has been completed.

### **8.2.3 Comprehensive approach**

As raw or undeveloped land is often subdivided into small portions in areas surrounding urban settlement, its development for residential purposes is often forced to happen piece-meal and on an add-on basis. Pieces of land less than 5 hectare in extent are developed as additions and extensions to existing settlement patterns. Authorities must then make sense of this phenomenon by trying to maintain meaningful spatial format and provide for supportive uses (or force investors to provide land for same). At best this results in a reactionary approach with less than ideal land-use interaction and movement planning and even conflicting land-use priorities.

The Lanseria property, inclusive of the Lion Pride Extension development, however, provides the unique opportunity for comprehensive land-use planning on a scale that allows for the establishment and management of a residential settlement of true neighbourhood quality. The design approach as contemplated in this report is in fact a direct response to the need posed by the subject property in this regard.

The nature of the subject property thus requires that a residential area inclusive of its supportive uses be planned from the outset as indicated on the Lanseria Development Plan. The different land uses had been allocated once the Roads Masterplan for the area was finalized as the roads dictate to a great extent the land uses to be provided. It is evident that the north-south proposed Road will play an important role to link to two residential areas across the N14 Freeway. Accordingly, the proposal at hand provides for various residential densities, open space, educational and a business component to establish a sustainable residential development from the start.

#### **8.2.4 Supporting Land Uses**

The Lanseria Development Plan indicates the location of educational, commercial and business facilities together with the various residential densities.

#### **8.2.5 Reversing Spatial Inequities**

The addition of ± 10 223 residential erven/units within the urban edge complies with the principle of providing erven in close proximity to employment centres and public transport routes thereby reversing spatial inequities.

#### **8.2.6 Compact Urban Structure**

Vacant land within the urban edge will be developed if engineering services are available to ensure a compact urban structure.

#### **8.2.7 Promote Public Transport**

The proposed Lion Pride Extension (Mogale Extensions 54 to 59) is situated directly west of Malibongwe Drive (P103-1) and at the intersection with the N14 Freeway. Public transport is available in on both these prominent roads and therefore in close proximity to the proposed townships. The proposed development will further make provisions to promote and enhance access to public transport in the area.

### **8.3 Desirability**

The proposed application is considered desirable based on the following considerations:

- The proposed development is not in conflict with surrounding land uses or development proposals on surrounding land.
- The proposed lay-out is sensitive to and recognizes the existing features of the site.
- The proposed development is not in conflict with any characteristic of cultural or historical significance.
- The proposed rights are in line with the draft Mogale City Spatial Development Framework of 2022-2027.
- The proposed development falls within the urban development boundary.



- In view of the size of the property, its locality and its potential, the property can best be described as under-utilized.
- The development as a whole will be of high quality both in terms of design, finish and function.
- The nature of the use proposed reflects the strategic planning goals of the local authority for this area.

## **9. CONCLUSION**

We trust that the applications for township establishment Mogale Extension 54 to 59 will receive your favourable consideration.



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**SMR TOWN & ENVIRONMENTAL PLANNING**

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