



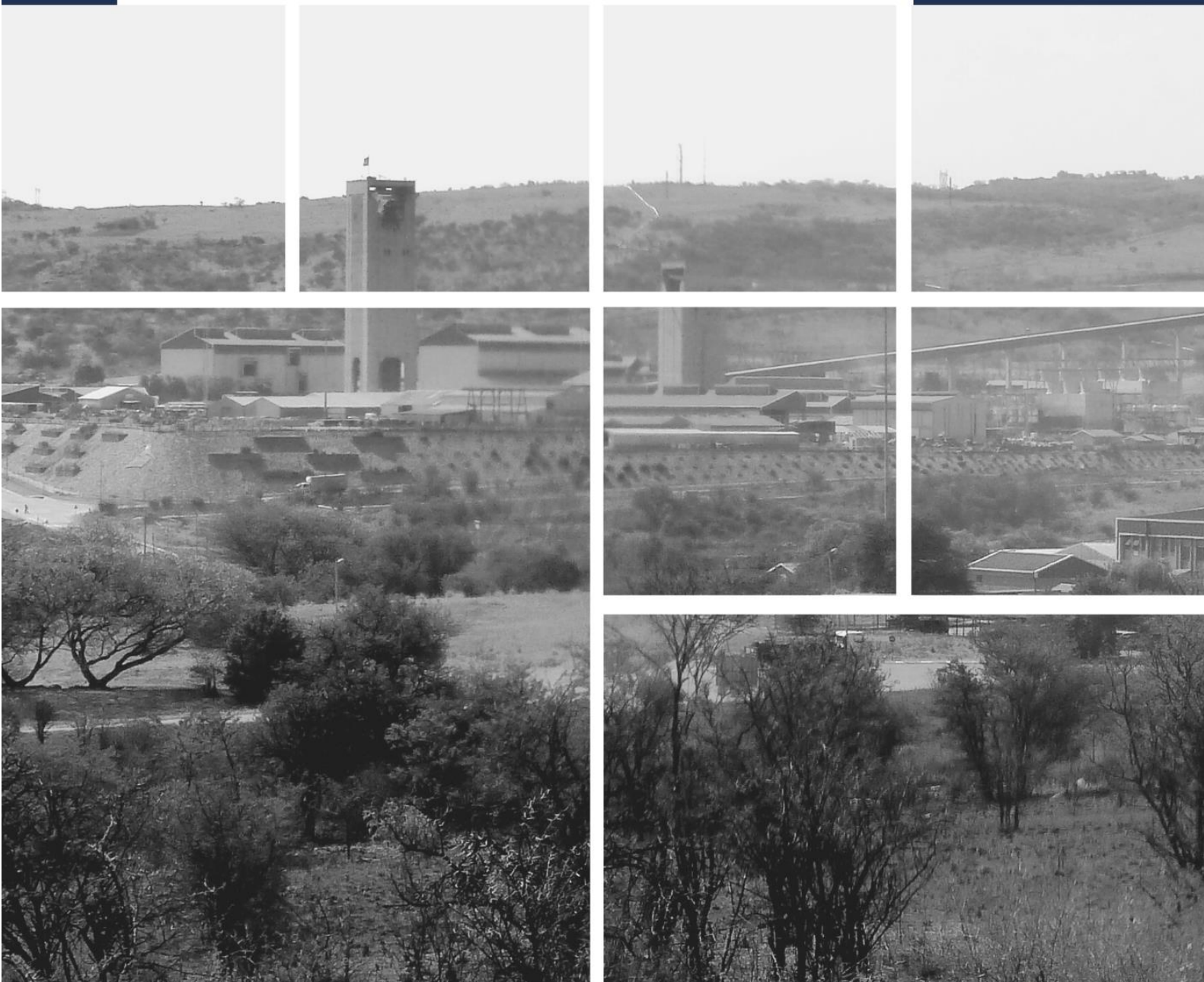
Merafong City

# Spatial Development Framework

IDP Executive Summary

Prepared by: BC Gildenhuys & Associates

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agriculture, land reform  
& rural development

Department:  
Agriculture, Land Reform and Rural Development  
REPUBLIC OF SOUTH AFRICA

# Merafong City Local Municipality Spatial Development Framework

## IDP Executive Summary

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Prepared for:



### agriculture, land reform & rural development

Department:  
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REPUBLIC OF SOUTH AFRICA

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524 CNR Stanza Bopape and Steve Biko  
Suncardia Building 6TH floor  
Arcadia  
Pretoria  
0083

**Contact person:** Samuel Osei  
**T:** +27 12 337 3712  
**E:** samuel.osei@dalrrd.gov.za

### Merafong City Local Municipality

3 Halite Street  
Carltonville  
2499

**Contact person:** Christiaan De Jager  
**T:** +27 18 788 9039  
**E:** cdejager@merafong.gov.za



By:



### BC Gildenhuys & Associates (Pty) Ltd

Suite 18, Menlyn Central Towers  
141 Corobay Avenue  
Menlyn  
Pretoria  
0181

**Contact Person:** Stephan Gildenhuys  
**T:** +27 83 560 7114  
**E:** [stephan@bcga.co.za](mailto:stephan@bcga.co.za)  
**W:** [www.bcga.co.za](http://www.bcga.co.za)

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# 1. Background & Introduction

**A Spatial Development Framework (SDF) is regarded as an integral part of an Integrated Development Plan (IDP) as required by Section 26 of the Municipal Systems Act of 2000 (Act 32 of 2000).**

**This section provides an overview of an SDF, its purpose, objective and requirements. It also provides a summary of the project methodology and the structure of this report.**

## 1.1 Introduction

Regarding the Spatial Planning and Land Use Management Act (16 of 2013), hereafter referred to as the act, an SDF "...must include the provision of basic guidelines for a land-use management system for the municipality." However, an SDF is not a one-dimensional map or plan. It seeks to arrange development activities, land uses, and the built form - in such a manner that it can accommodate the ideas and desires of people - without compromising the natural environment and how services are delivered. If not done correctly, the system will be costly, inefficient, and even collapse. A delicate balance must always be maintained: too much emphasis on one element can harm the system; if development happens too quickly, infrastructure provision cannot keep up. In the final analysis, the objectives of an SDF must be realistic and achievable.

Many issues will need ongoing discussion and debate: integration with provincial development strategies, linking urban and rural development, functional integration of settlements often far apart, infrastructure provision, social justice, poverty, etc. All of these are complex, and all are connected. The key is optimising development and access to development opportunities for all people.

An SDF integrates various sector plans. The emphasis is on developing an interdisciplinary approach to bring different sectors' knowledge to bear on a shared objective. SDFs are not comprehensive development blueprints. They must, however, be proactive and clearly define the desirable directions and outcomes of future growth.

The central question that all urban and regional planners and development managers grapple with is how to ensure the development of sustainable cities, towns, and rural areas in a climate where the immediate needs of poverty and lack of basic services overshadow the development agenda. This is the fundamental role that the SDF should play in the municipal area, namely ensuring the development of a sustainable urban and rural environment while simultaneously creating an enabling environment for the implementation of the developmental agenda of the national government. The National Spatial Development Perspective states, *"the challenges and opportunities posed by and in urban settlements, whether they are declining or expanding, necessitates a targeted response by government to achieve better urban management. Managed urbanisation and improved urban management are crucial supporting components of government's drive for accelerated shared growth, not least because of the crucial role cities, towns and urbanising agglomerations play in fostering resilient and inclusive economic growth and the sustainable development of countries and regions"*.

## 1.2 The purpose of an SDF

The aims of the SDF are not necessarily exclusive to the SDF; some are also the aims of development planning and local government in general. The fundamental purpose the SDF process is intended to achieve is as follows:

- Represent the spatial development vision statement of the Municipality through integration and trade-off of all relevant sector policies and plans.
- Guide the Municipality in making any decisions or exercising any discretion relating to spatial planning and land use management systems and address historic spatial imbalances in development.
- Provide information to the public and private sectors about investment areas, identify long-term risks of particular spatial patterns of growth and development and provide mitigation measures.

- Provide direction for strategic developments and infrastructure investment, and take cognisance of any environmental management instrument.

### 1.3 Overall principles underlying the development of an SDF

#### SPLUMA principles

SPLUMA provides five guiding principles that must be used and observed in all spatial planning processes at all scales. These principles are the basis for the municipality's spatial planning, decision-making,, and implementation recommendations in the context of the SDF and include Spatial justice, spatial sustainability, efficiency, resilience, and good administration.



#### Principle 1: Spatial sustainability

Spatial planning and land use management systems must promote the principles of socio-economic and environmental sustainability by encouraging the protection of prime and unique agricultural land, promoting land development in locations that are sustainable and limit urban sprawl, considering all current and future costs to all parties involved in the provision of infrastructure and social services to ensure for the creation of viable communities.



#### Principle 2: Efficiency

Land development must optimise the use of existing resources and the accompanying infrastructure, while development application procedures and timeframes must be efficient and streamlined to promote growth and employment.



#### Principle 3: Spatial justice

Ensure redress in terms of access to the economic opportunities and locational benefits that the country and its cities, towns, and rural areas offer, including well-located, productive land; Include inclusion of previously excluded areas in the national space economy; and Pursue intergenerational justice in (1) the location and pattern of settlement development, and (2) the use of natural resources.



#### Principle 4: Resilience

Securing communities and livelihoods from spatial dimensions of socioeconomic and environmental shocks through mitigation and adaptability accommodated by flexibility in spatial plans, policies, and land use management systems.



#### Principle 5: Good administration

Government at all levels must integrate land use and development, with departments contributing sector-specific input and adhering to prescribed requirements when preparing or amending SDFs. This principle is central to the framework because effective implementation of spatial planning relies on strong coordination by the central government and suitable governance mechanisms, including meaningful consultations and coordination, across various planning spheres and domains.

## SPLUMA required content of an SDF

Section 21 of the SPLUMA sets out the contents of a municipal spatial development framework. These requirements guide the review and development of the Merafong LM SDF and stipulate that the SDF must address or include the following:

- 1) give effect to the development principles and applicable norms and standards set out in Chapter 2;
- 2) include a written and spatial representation of a five-year spatial development plan for the spatial form of the municipality;
- 3) include a longer term spatial development vision statement for the municipal area which indicates a desired spatial growth and development pattern for the next 10 to 20 years;
- 4) identify current and future significant structuring and restructuring elements of the spatial form of the municipality, including development corridors, activity spines and economic nodes where public and private investment will be prioritised and facilitated;
- 5) include population growth estimates for the next five years;
- 6) include estimates of the demand for housing units across different socio-economic categories and the planned location and density of future housing developments;
- 7) include estimates of economic activity and employment trends and locations in the municipal area for the next five years;
- 8) identify, quantify and provide location requirements of engineering infrastructure and services provision for existing and future development needs for the next five years;
- 9) identify the designated areas where a national or provincial inclusionary housing policy may be applicable;
- 10) include a strategic assessment of the environmental pressures and opportunities within the municipal area, including the spatial location of environmental sensitivities, high potential agricultural land and coastal access strips, where applicable;
- 11) identify the designation of areas in the municipality where incremental upgrading approaches to development and regulation will be applicable;
- 12) identify the designation of areas in which—
  - a) more detailed local plans must be developed; and
  - b) shortened land use development procedures may be applicable and land use schemes may be so amended;
- 13) provide the spatial expression of the coordination, alignment and integration of sectoral policies of all municipal departments;
- 14) determine a capital expenditure framework for the municipality's development programmes, depicted spatially;
- 15) determine the purpose, desired impact and structure of the land use management scheme to apply in that municipal area; and
- 16) include an implementation plan comprising of—
  - a) sectoral requirements, including budgets and resources for implementation;
  - b) necessary amendments to a land use scheme;
  - c) specification of institutional arrangements necessary for implementation;
  - d) specification of implementation targets, including dates and monitoring
  - e) indicators; and
  - f) specification, where necessary, of any arrangements for partnerships in the implementation process.



## 1.4 The SDF within the context of municipal planning

All human activities have a spatial dimension. On the one hand, human action affects space; on the other hand, All human activities have a spatial dimension, impacting and being influenced by space. This dynamic interplay is central to a Sustainable Spatial Development Framework (SDF) and is crucial in municipal settings. Developing and implementing a sustainable SDF is pivotal, demanding integration with core municipal functions. Figure 1 illustrates this integration.

SDF Focus: The municipal area necessitates a dual approach, emphasizing municipal-wide trends and tendencies to:

- Enhance spatial functionality.
- Align with district and provincial SDFs.
- Establish settlement typologies for detailed planning.

Integration Key Points: Spatial development planning is interconnected with core Council processes, guided by the Integrated Development Plan (IDP). This aligns with the constitutional mandates of service access and local economic development, driven by the Infrastructure Investment Plan (IIP) and Local Economic Development Plan (LED).

The Medium Revenue and Expenditure Framework (MTREF) aligns monetary objectives with spatial goals in the SDF. This connection links to project prioritization and implementation processes, influenced by sector plans, IIP, and SDF within the IDP context.

All these activities respond to the municipality's development footprint, seeking to impact and modify it when necessary. This approach ensures seamless integration between the SDF and the Council's other plans and functions.

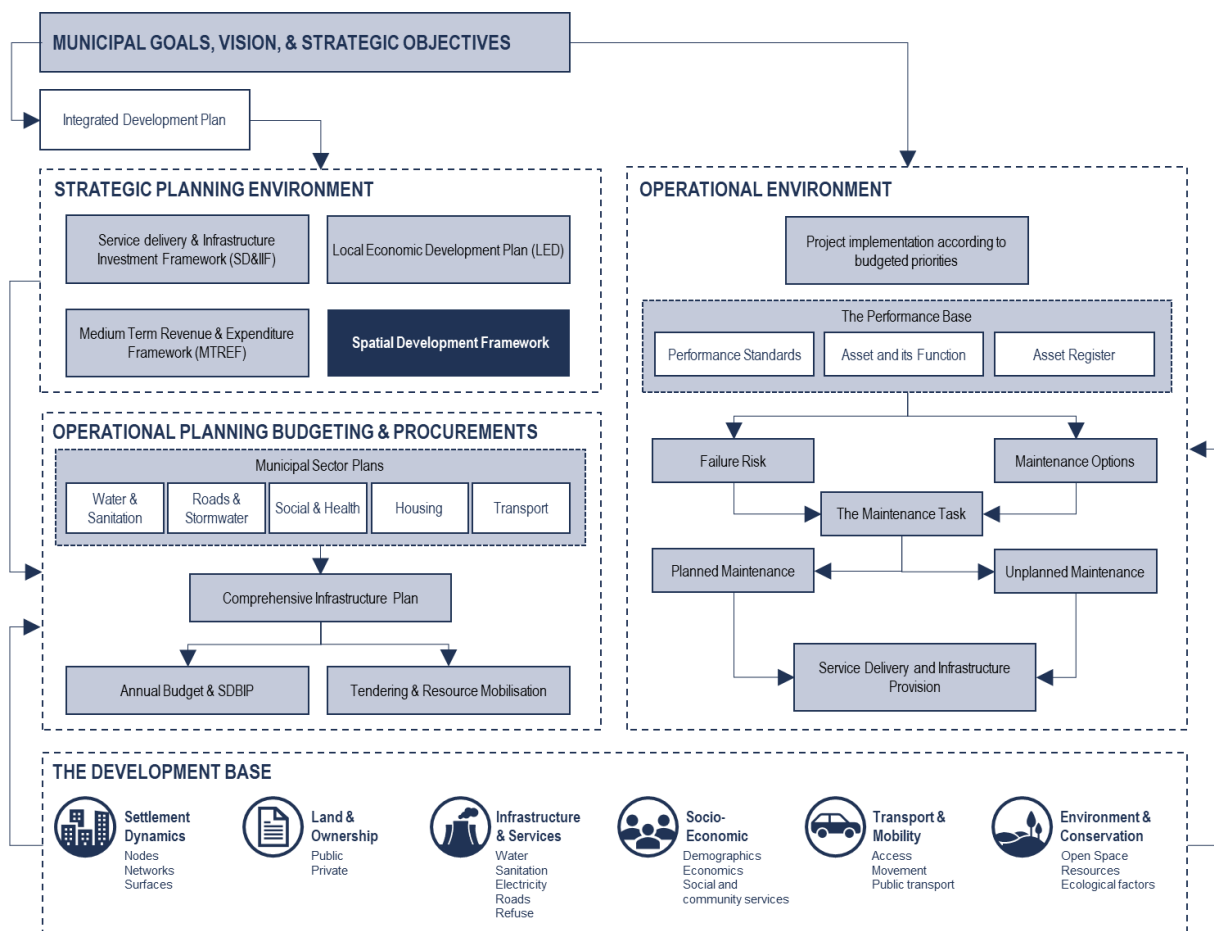


Figure 1: SDF focus and integration with the municipal service delivery environment



## 1.5 Study objectives

The key objective of the project is to appoint a service provider to prepare the Spatial Development Framework for the Merafong City Local Municipality (MLM) within ten (10) months that should: -

- Provide a clear and comprehensive Spatial Development Framework for the Merafong City LM;
- Inform, improve, and guide cross-sectoral policy or project implementation and integration;
- Provide a strategic spatial development vision for the municipality in line with the broad development objectives of National and Provincial policies;
- Indicate in as much detail as possible to members of the public and others with an interest in the municipality and the desired spatial form for the municipality;
- Indicate planning, environment, infrastructure, and institutional issues that gave rise to the proposals contained in the final document and provide all stakeholders with an opportunity to participate during the process of formulating the SDF;
- To provide a spatial reflection of the needs and priorities established in the integrated development plan and identify specific issues that are unique to the municipalities;
- To address rural development issues such as the integration with urban areas, the provision of social and economic amenities, the provision of infrastructure, and involvement during the public participation process;
- To provide long-term strategic mechanisms for identifying areas for economic opportunities, particularly for industrial, commercial, and agricultural sectors.
  - Identify infrastructure needs and service constraints and bring tangible solutions to address these constraints.
  - Accommodate the growing housing needs considering the need to develop various housing typologies and programmes (e.g. "Gap Housing", social housing, FLISP, etc.)
  - Protection of the natural environment, e.g. Conservation Corridors, Green Wedges, hydrological resources, biodiversity areas, etc.
- Be data and systems supportive by containing spatial and financial modeling that can link seamlessly into project prioritization and budgeting through the Capital Expenditure Framework (CEF). Through integrated modelling, clear linkages are required to facilitate the interaction between Spatial Planning, Infrastructure Planning and Financial Planning.

## 1.6 Project approach and methodology

All human activities have a spatial dimension. On the one hand, human activities impact space; on the other hand, space helps shape and direct human action. This dynamic relationship is addressed in an SDF. The figure below highlights the approach and methodology proposed by the team. Developing and implementing a sustainable SDF is a pivotal activity in any municipality. However, integrating spatial planning and delivery with other core activities in the municipality is critical. We believe the approach conforms to the requirements and outcomes of the terms of reference and is proven for successful implementation.

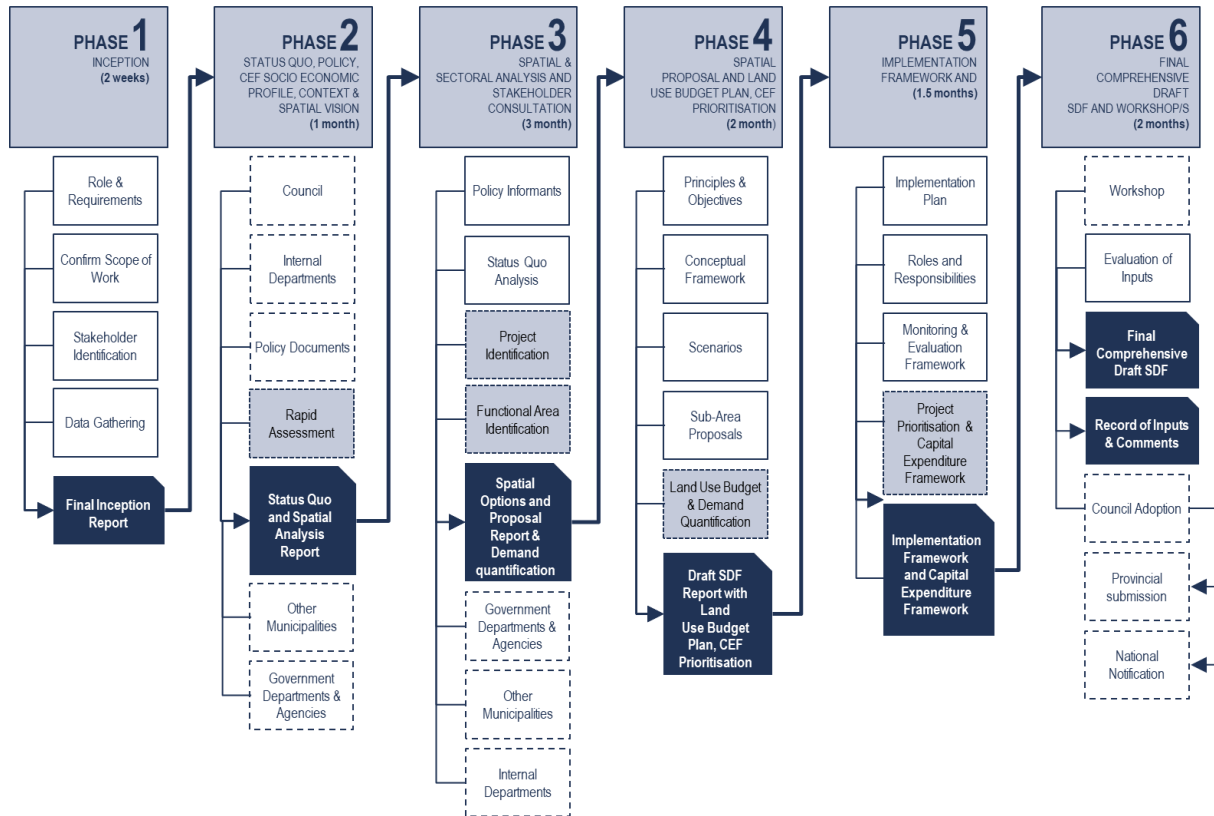
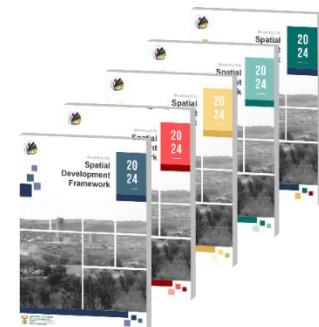


Figure 2: Project approach and methodology

## 1.7 Project deliverable

The Merafong City LM SDF comprises six (6) main deliverables. These include:

- **Phase 1:** Inception Report and Stakeholder Plan
- **Phase 2:** Issues and Vision Report,
- **Phase 3:** Spatial Analysis Report,
- **Phase 4:** Spatial Proposals Report (This report),
- **Phase 5:** Implementation Framework and CEF report, and
- **Phase 6:** Final comprehensive Spatial Development Framework





### ***Phase 1: An Inception report and stakeholder plan***

The inception report and stakeholder plan seek to develop a detailed project management plan. It includes the structures in terms of project governance, reporting, financial management, establishing the logistical parameters, lines of communication for the duration of the project, and a detailed work plan. An inclusive stakeholder engagement and communication plan is also be presented.



### ***Phase 2: Issues and Vision Report***

The issues and vision report (this report) provides context on the background and purpose of the SDF process and report structure. It also includes a section on the SDF's policy context and vision directives. The document summarises key policy directives from the relevant strategic policy and legislative frameworks constituting national, provincial, and local planning agendas.



### ***Phase 3: Spatial Analysis Report***

The spatial analysis report offers a strategic spatial analysis that unpacks the biophysical, socio-economic, and built environment aspects related to the study area. It also identifies and synthesises critical challenges regarding what needs to be redressed, addressed, and mitigated and key opportunities arising.



### ***Phase 4: Spatial Proposals Report (This report)***

The spatial proposals report outlines a final spatial concept for the future development of the SDF area (based on refining the vision). It also provides SDF strategies in a spatialised conceptual manner followed by a consolidated composite SDF translated into a prioritised settlement or site-specific proposals.



### ***Phase 5: Implementation Framework and CEF Report***

The implementation framework report sets out high-level Implementation elements. It provides required institutional arrangements, policies, and guidelines that will support the adoption of the SDF proposals while aligning the capital investment and budgeting process moving forward.



### ***Phase 6: Final comprehensive Spatial Development Framework***

The Final comprehensive Spatial Development Framework combines all the pertinent information from the previous phases. It describes the SDF's background and provides the municipality's relevant context. It synthesises the most relevant findings from the spatial analysis in terms of environmental and biophysical considerations, factors relating to the built environment, and critical socio-economic considerations. It also outlines essential spatial proposals and concludes with the implementation framework and CEF.

## 2. Municipal overview

**The Merafong City Local Municipality's physical location, regional context, and importance in the Gauteng Province cannot be overstated. With a well-connected infrastructure network, diverse population, and a mix of economic activities, it presents opportunities for growth and development while posing challenges that require careful planning and management.**

**This section provides an overview of the context of the municipality and outlines some of the major challenges of future development in the area.**

### 2.1 Regional context

Merafong City Local Municipality is situated in the western part of Gauteng Province, South Africa. It covers an area of approximately 1,011 square kilometres. The municipality is strategically located adjacent to the North West Province, enhancing its economic and social connectivity with neighbouring regions. It is bounded by Randfontein and Westonaria municipalities to the east and north, while its western and southern boundaries adjoin various municipalities within the North West Province.

The Municipality plays a pivotal role in the greater Gauteng Province and the broader South African context. It forms part of the West Rand District Municipality, contributing to this region's economic, industrial, and cultural landscape. Gauteng Province, as a whole, is the economic powerhouse of South Africa, with Johannesburg and Pretoria at its heart. Merafong City's proximity to these urban centres facilitates economic interactions and opportunities, while its location on the border of the North West Province fosters interprovincial trade and collaboration.

### 2.2 Local context

The municipality boasts a well-developed road network, with several key arteries serving local and regional transportation needs. The R28 and R501 highways connect Merafong City to nearby urban centres and provide access to national routes. The N12 and N14 highways also pass through the vicinity, further enhancing connectivity and accessibility.

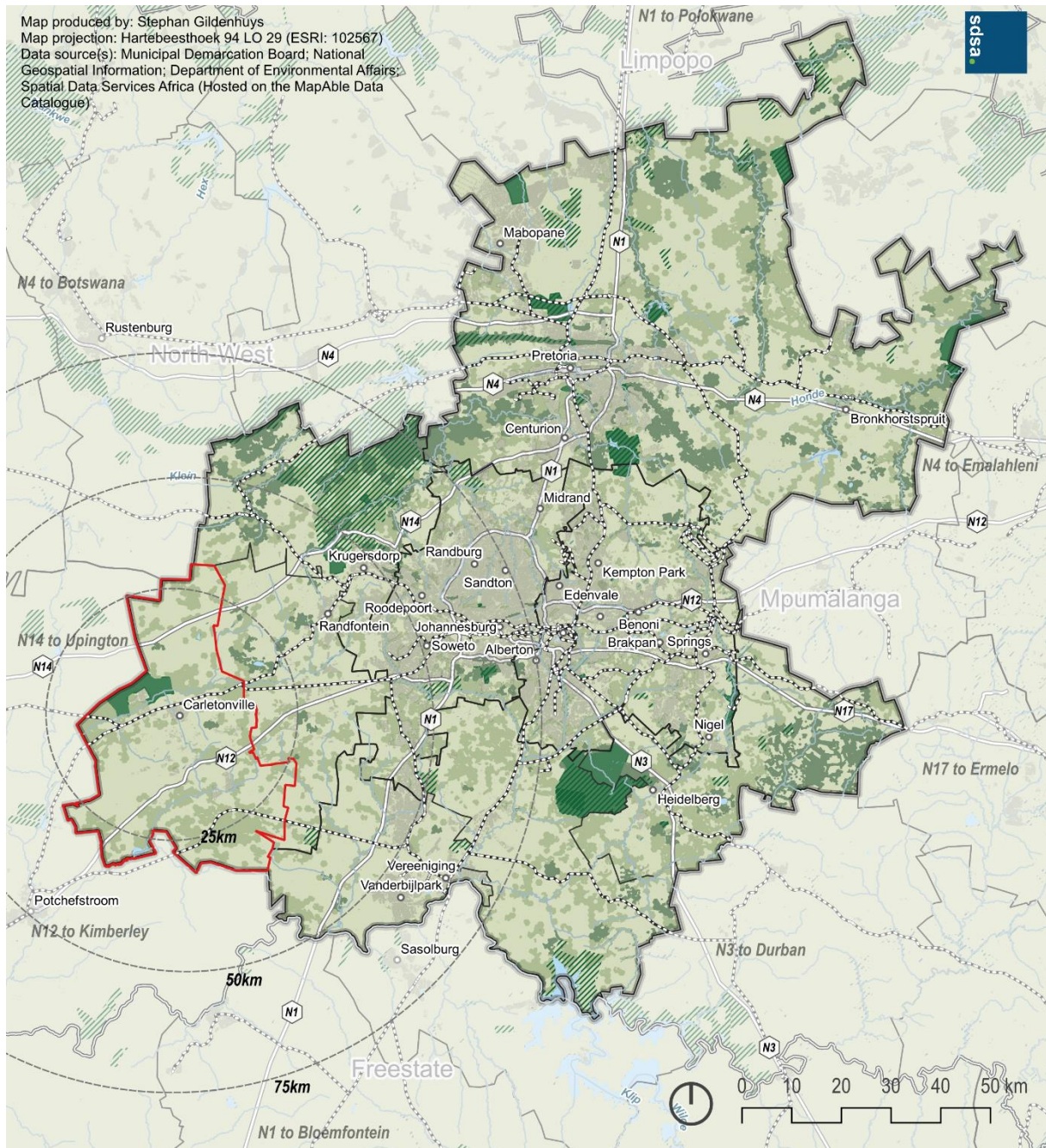
A mix of urban and rural settlements also characterises Merafong City. Notable urban areas include Carletonville, Fochville, and Khutsong, each with unique infrastructure and community needs. A network of roads and public transportation services interconnect these settlements.

The municipality encompasses a range of natural and environmental features, including significant agricultural land, mining areas, and water bodies such as the Wonderfontein Spruit and Klip River. Preserving and sustainably managing these resources is essential for the municipality's long-term growth and environmental sustainability.

Merafong City is a diverse municipality with a population of various ethnic groups and cultures. Understanding the demographic composition is vital for planning and service delivery. The municipality's demographic profile reveals a mix of urban and rural residents with varying socio-economic needs.

The local economy is predominantly driven by mining and agriculture. Gold mining, in particular, has been a historical pillar of the municipality's economy. Agriculture is also significant, with fertile land supporting the production of maize, sunflowers, and livestock. Additionally, there is potential for growth in the manufacturing, tourism, and services sectors due to the municipality's strategic location and access to major transportation routes.

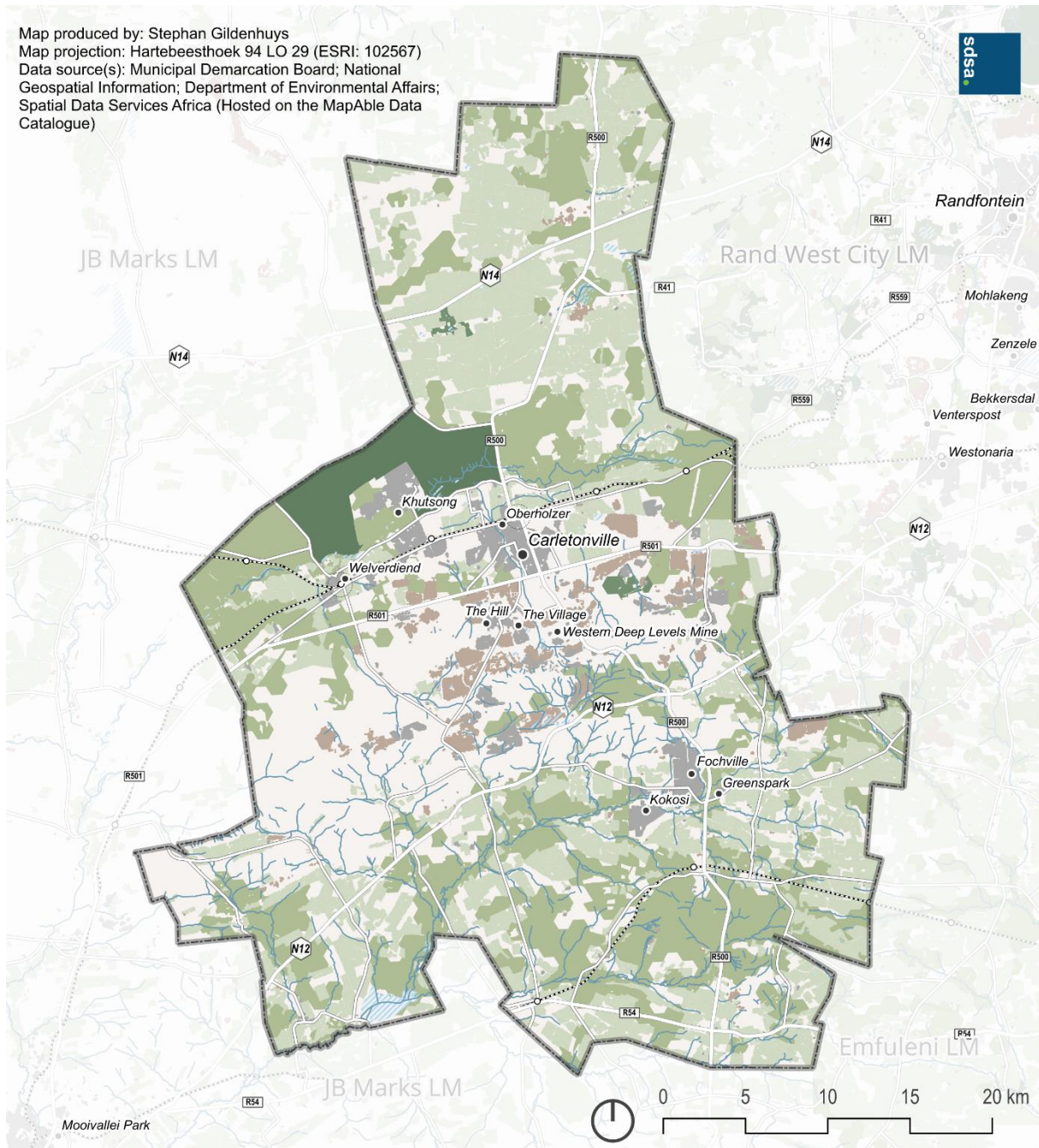




Map 1: The municipality in its regional context



Map produced by: Stephan Gildenhuys  
Map projection: Hartebeesthoek 94 LO 29 (ESRI: 102567)  
Data source(s): Municipal Demarcation Board; National  
Geospatial Information; Department of Environmental Affairs;  
Spatial Data Services Africa (Hosted on the Mapable Data  
Catalogue)



### LEGEND

#### Towns & Cities

- Towns & Cities

#### Transport Features

- Railway Station
- Railway Line
- Major Road

#### Boundaries

- Local Municipalities
- Merafong City LM Boundary

#### Man Made Features

- Mining Areas
- Developed Land
- Cultivated Land

#### Natural Features

- River
- Wetlands
- Water Bodies
- Important Area
- Irreplaceable Area
- Conservation Area

Map 2: Local context

## 2.3 Administrative context

South Africa undergoes a reassessment of its municipal boundaries before each municipal election. Changes in municipal boundaries affect all planning levels and long-term development strategies. Table 1 shows the municipality(s) which previously formed part of the current municipality.

**Table 1: Demarcation history**

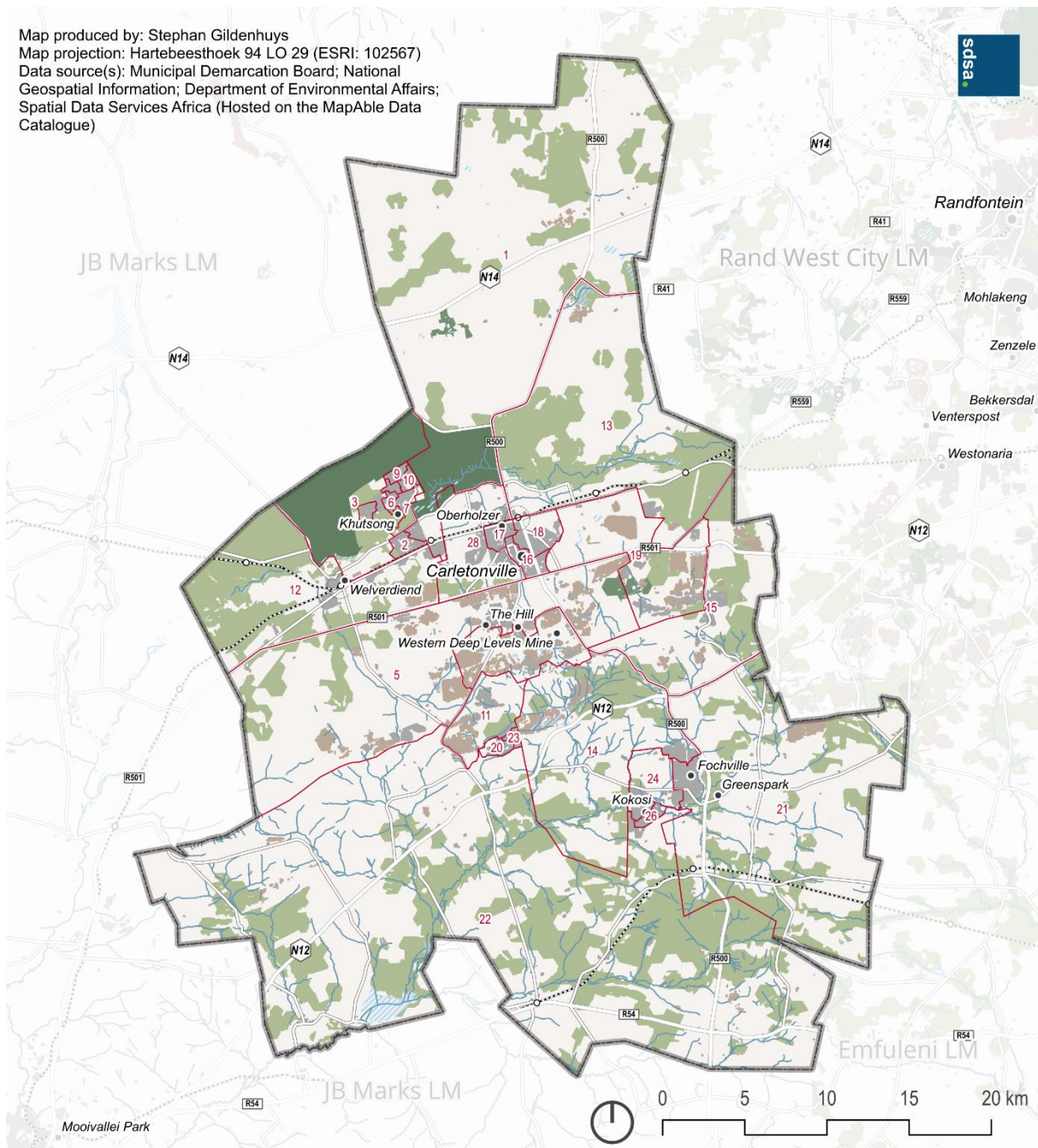
	2016	2011	2006	2001	1996
District municipality(s) / Metropolitan area(s) affected	West Rand	West Rand	West Rand DC	West Rand DM	Unknown
Local municipality(s) affected:	Merafong City	Merafong City	Carletonville	Merafong City	Carletonville TLC Fochville TLC Gatsrand TRC Klerksdorp Remaining TRC Rustenburg Region TRC Vaal River TRC Wedela TLC Westonaria TLC
Number of wards	28	28	26	28	No data

Source: Municipal Demarcation Board

The data shows that the municipality had few demarcation disruptions over its history. Therefore, fewer demarcation changes should contribute to stability in the municipal area and allow growth and development without the institutional and service delivery disruptions that typically accompany municipal boundary changes. Currently, the Merafong City LM consists of 28 wards. Map 3, on the following page, shows these wards within the Merafong City LM context.



Map produced by: Stephan Gildenhuys  
Map projection: Hartebeesthoek 94 LO 29 (ESRI: 102567)  
Data source(s): Municipal Demarcation Board; National Geospatial Information; Department of Environmental Affairs; Spatial Data Services Africa (Hosted on the Mapable Data Catalogue)



### LEGEND

#### Towns & Cities

- Towns & Cities

#### Transport Features

- Railway Station
- Railway Line
- Major Road

#### Boundaries

- Wards 2020
- Local Municipalities
- Merafong City LM Boundary

#### Man Made Features

- Developed Land
- Mining

#### Natural Features

- River
- ▨ Wetlands
- Water Bodies
- Important Area
- Irreplaceable Area
- Conservation Area

Map 3: Merafong City ward allocation

## 2.4 Historical context

The section provides an overview of the history of key towns and settlements in the municipal area.

### Carletonville



**Figure 3: Carletonville sinkhole 1964**

Nestled within the area are several privately owned gold-mining township villages and contractor labour quarters established on mining grounds owned by various mining houses. These villages are situated south of the R501 provincial road, which serves as the southern boundary of Carletonville. Despite changes in ownership and company mergers with altered names, the mine villages to the south have retained their identities as Blyvooruitzicht (the oldest), Western Deep, and Elandsrand. To the west and southwest lie Doornfontein and Deelkraal, while to the east stands East Village at East Driefontein.

Carletonville serves as the primary shopping centre for the mine village townships, as mines are only allowed to have tuck shops offering basic necessities. These shops are typically located at mine recreation centres or privately owned farm boundaries near contractor labour quarters.

Carletonville, a town with a rich mining history, owes its development to various mining companies that began their operations in 1937. It bears the name of Guy Carleton Jones, a dedicated mining director from Consolidated Gold Fields. However, it wasn't until 1959 that Carletonville was officially incorporated.

In 1967, the town achieved a significant milestone when its population reached 2,000 inhabitants, primarily consisting of the white population during the apartheid era. This demographic shift led to Carletonville gaining official recognition and becoming a celebrated provincial town.

### Fochville



**Figure 4: The Danie Theron monument**

Fochville, situated in South Africa's Gauteng province, boasts a multifaceted history as a town with strong ties to both farming and mining. It forms an essential part of the Merafong City Local Municipality, alongside neighbouring communities such as Kokosi, Carletonville, and Khutsong.

The region surrounding Fochville holds remnants of a bygone era, with Sotho and Tswana ruins providing glimpses into ancient civilizations. Notably, the Tlokwe Ruins on the hills surrounding Fochville bear witness to the presence of Sotho-Tswana settlements that thrived until the 1820s.

The town also has its share of historical significance, with the area 5 kilometres north of Fochville marking the site where Danie Theron, a hero of the Boer War, met his fate.

Fochville itself was formally established in 1920 as a centre for agriculture. Its name pays homage to Marshal Ferdinand Foch, the distinguished commander-in-chief of the Allied forces during World War I.

## Past patterns of development

**Before 1910**



Before 1910, there were no proclaimed towns in the municipal area. However, to the east of the municipality, various towns were proclaimed in the larger Johannesburg area due to the discovery of gold. Other proclaimed towns also included Vereeniging due to the discovery of coal.



### 1910-1948: The Institutionalisation of Apartheid

During this period, segregation was formalised through various acts and policies. The first phase of these pre-apartheid colonial segregation policies was the Native Urban Areas Act of 1923. Under this Act, municipalities were required to establish separate locations (townships for black residents) based on race and to preclude Blacks from purchasing land outside designated areas. The last stages of the period saw pronounced industrialisation and the popularisation of the automobile. These technological innovations also contributed to spatial growth during this time. General plans for Carletonville, Welverdiend, Fochville and Blybank were approved during this period.

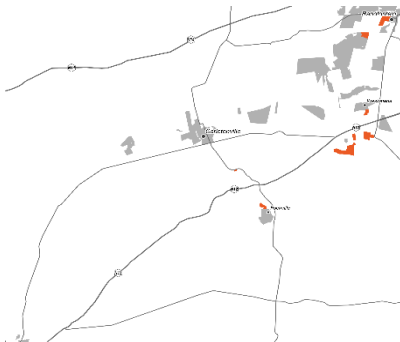


### 1950 – 1964: The Group Areas Act

In 1948, the National Party came to power on the strength of an apartheid manifesto. This was the height of apartheid, and the government used planning as a tool to implement the party's vision. Nowhere is this more evident than in the Group Areas Act of 1950.

In the 1950s, many scattered residential settlements started consolidating as new settlements were established between existing ones. During this time, new black townships were designated and promoted. These settlements were established on the urban periphery.

This period also saw the development of a more complex road network. Increasing transport infrastructure and efficiency accelerated the region's physical expansion and directed growth patterns. During this period, Carletonville expanded to include the Oberholzer area.



### 1965 – 1974: The final phase of apartheid

During this period, 860,400 people were affected by relocations within urban areas under the Group Areas Act of 1950. The legacy of these forced removals is still evident today. The removals between 1960 and 1983 go a long way to explaining the persistence of ethnic segregation in contemporary South African towns and cities.

The period saw extensive commercial development taking place. This manifested spatially along significant roads. In the Merafong City LM, little development took place except for the expansion of Fochville to the north.

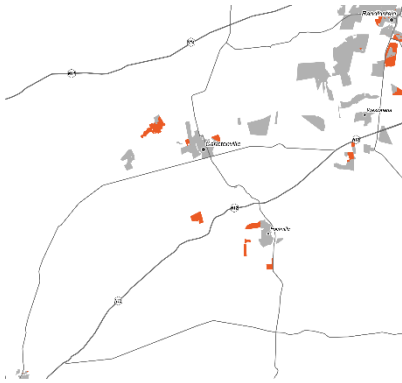
### 1975 – 1984: The establishment of the Black Local Authorities





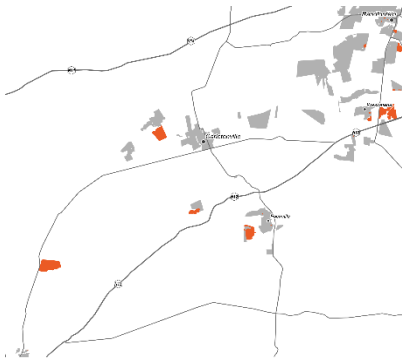
This was a period of revolt and reform in South Africa. Some major changes took place during this period. A planning policy shift occurred, but change also occurred regarding the issues planners addressed. In the wake of the township revolt, the newly elected prime minister, P.W. Botha (1978), embarked on centralising power to accomplish reform. A significant part of this had to do with urban policy and planning.

1983 saw a step toward incorporating Africans politically at the local level. This was in the form of “fully fledged and autonomous ‘black local authorities’ (BLAs). In terms of urban planning functions, this was done by passing the Black Communities Development Act, but Development Boards retained most planning functions at the provincial level.



#### 1985 – 1994: Period of transformation

Throughout the 1980s, the country struggled with a real annual economic growth rate of about 1%. But, as the 90s started, South Africa was launched into a period of change and transition. President F.W. de Klerk quickly removed various discriminatory measures, many directly involving town planning. He abolished the “Racially Based Land Measures Act, No 208 of 1991, repealed the Black Land Act of 1913 and 1936; the Group Areas Act; and Black Communities Development Act of 1984, successor to the Natives Urban Areas Act of 1923”. The repeal of the Group Areas Act in 1991 (and other discriminatory legislation in South Africa’s political dispensation in 1994) triggered a significant rural-to-urban migration by segments of the Black population that had been forcibly kept out of towns and cities. This period saw the establishment of the Khutsong township.



#### 1995 – 1999: The prospect of urban reconstruction

It was in 1995 that the first significant piece of post-apartheid planning legislation, the DFA, was passed. The Reconstruction and Development Programme (RDP) was also developed and was seen as the primary vehicle for reconstruction after the ravages of apartheid.

The critical policies developed during this time also included the 1994 Housing White Paper, the 2004 Comprehensive Policy on Sustainable Human Settlement (Breaking New Ground [BNG]), and the 2003 National Spatial Development Perspective (NSDP). During this time, Khutsong South and Kokosi were proclaimed.



#### Post-2000 and beyond

After 2000, much of the approach of the previous era persisted. The urban development experienced between 2001 and 2009 was a result of the proliferation of informal settlements (promoted by multiple factors, such as the deepening of poverty and inequality, and indirectly fed by weakening control of cross-border illegal immigration), government RDP housing projects, office parks, industrial parks, residential estates (gated communities) and associated shopping complexes. This period was characterised by strong economic growth and population increase. Many general plans were approved during this period in the Merafong LM, especially along the N12 between Carletonville and Welverdiend.

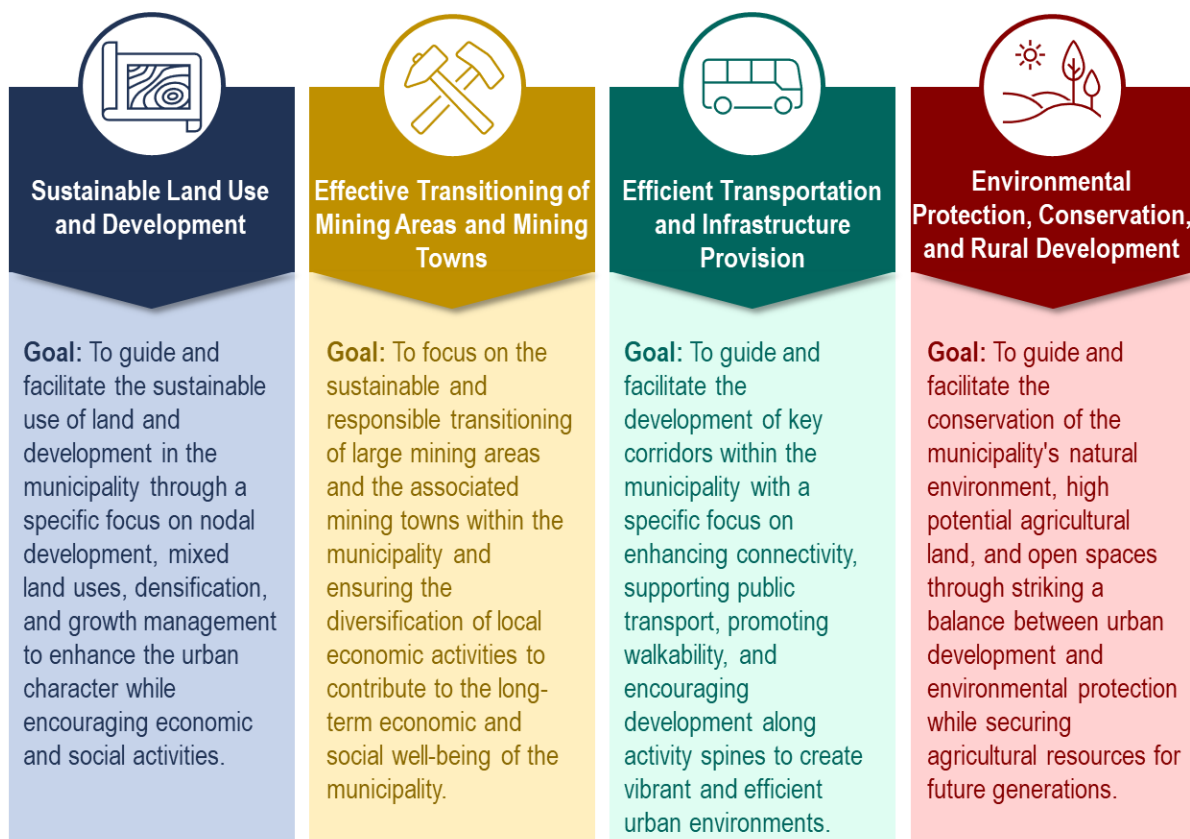
# 3. Objectives, Spatial Concept and Strategies

A series of fundamental, layered concepts contribute to the overall framework for development of The Merafong City Local Municipality. Their composition and interaction represent the physical manifestation of the development objectives and principles, and inform the concepts and policies of each framework element.

This section presents the policy directives, objectives and development strategies. Drawing inspiration from these directives, specific development goals and objectives are established. Based on this, the section culminates in creating a spatial concept with associated development strategies to translate these objectives into tangible outcomes.

## 3.1 Development objectives

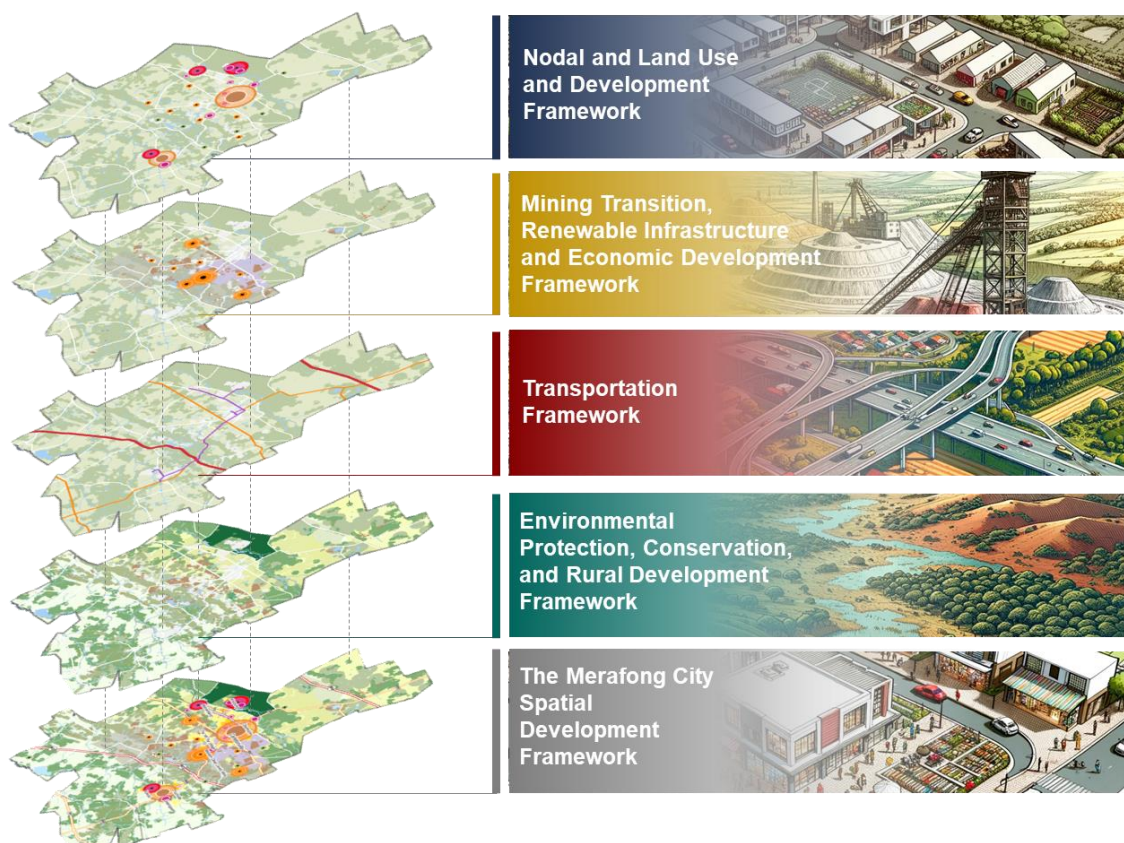
To achieve the vision set out in the IDP, four key objectives and an associated goal have been identified. These include: Sustainable Land Use and Development, Effective Management of Mining Areas and Mining Towns within the Municipality, Efficient Transportation and Infrastructure Provision and Environmental Protection, Conservation, and Rural Development.



### 3.2 The Merafong City SDF Concept

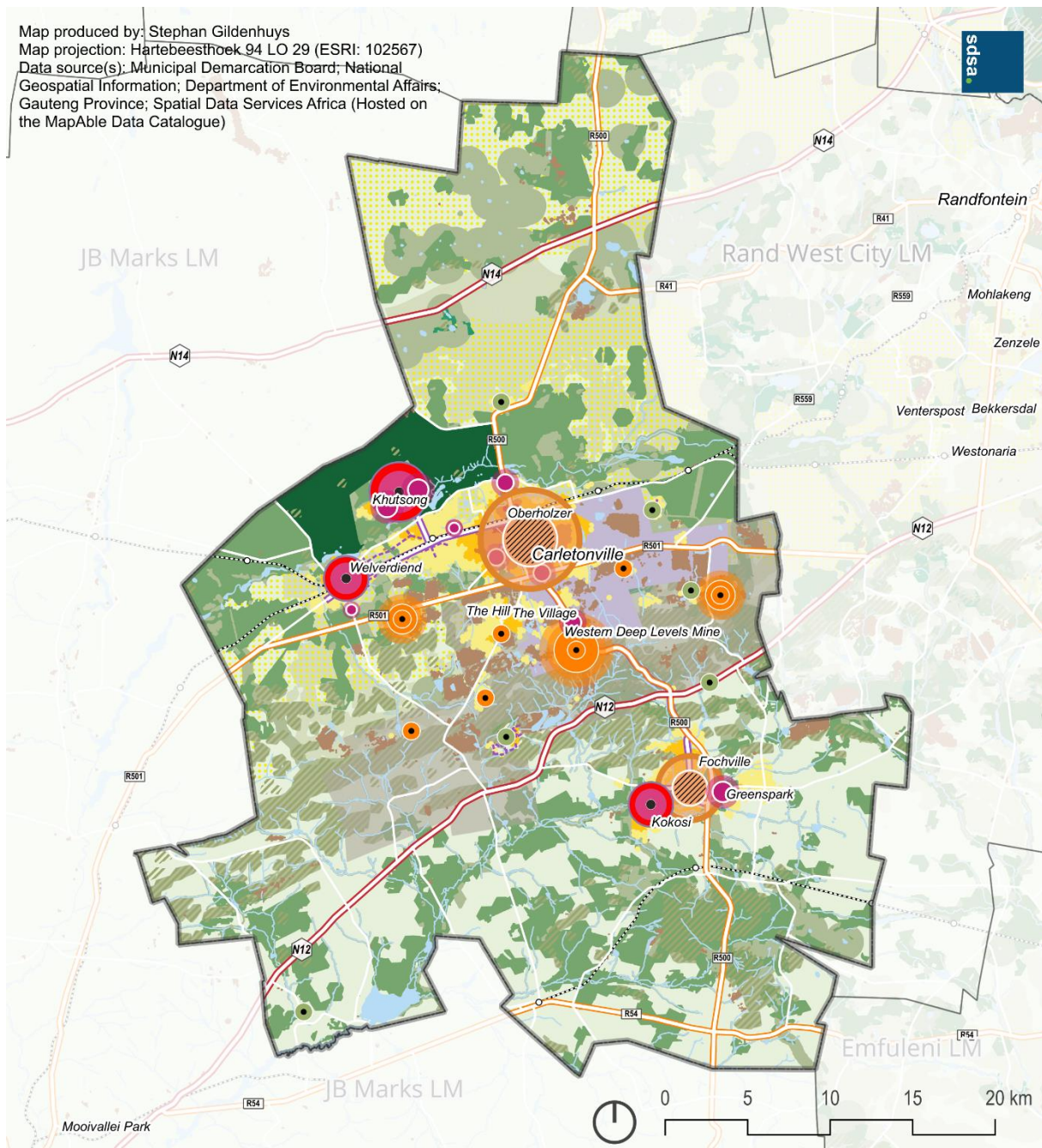
The spatial development concept provides strategic guidance for the spatial structuring of the municipal area. Having determined the goals and objectives for spatial development in the Merafong City LM, the following layer elements completes the spatial development framework development concept with specific policies and strategies to achieve the intended outcomes:

- **Nodal and Land use Framework:** The nodal and land use framework sets out nodal typologies and guidelines to support development. It provides a hierarchy of nodes, including primary nodes, secondary Nodes and potential new nodes. Mining nodes and rural nodes are also presented. These typologies will focus on and support local development while enhancing the municipality's regional competitiveness.
- **The Mining Transition, Renewable Infrastructure And Economic Development Framework:** This concept sets out to provide a hierarchy of mining towns to develop a focused approach to delivering resources to those towns with the potential for future growth and development to create resilient, diversified, and sustainable communities that can thrive beyond the lifespan of mining activities. It also focuses on the transition of the economy away from the mining sector to a more diversified and sustainable economy for the municipality.
- **Transport Framework:** The transport and corridor concept provides strategies and concepts for improving the efficiency of moving people and goods in the municipality and the larger region. This is achieved by providing a hierarchy of different corridors each with its own role and function. It focusses on both the concept of corridors and public transport elements.
- **Environmental Protection, Conservation and Rural Development Framework:** The overall concept relies on the area's existing open space to expand its natural resources. The concept attempts to guide and facilitate conserving the municipality's natural environment, high-potential agricultural land, and open spaces by striking a balance between urban development and environmental protection while securing agrarian resources for future generations.
- **The Merafong City Spatial Development Framework:** The consolidated Merafong City SDF concept attempts to give effect to the current situation on the ground by being sensitive to the issues identified while trying to reach aspiration development goals. The concept directly responds to the development principles while giving effect to the SPLUMA principles. This is achieved in the context of the identified goals that provide strategic direction and an appropriate structure to address spatial development in the municipality.





Map produced by: Stephan Gildenhuys  
Map projection: Hartebeesthoek 94 LO 29 (ESRI: 102567)  
Data source(s): Municipal Demarcation Board; National Geospatial Information; Department of Environmental Affairs; Gauteng Province; Spatial Data Services Africa (Hosted on the MapAbile Data Catalogue)



#### LEGEND

<b>Group</b> <ul style="list-style-type: none"> <li>Towns &amp; Cities</li> <li>Railway Station</li> <li>Railway Line</li> <li>Major Road</li> <li>Local Municipalities</li> <li>Merafong Boundary</li> <li>Open Space</li> </ul>	<b>Corridor Framework</b> <ul style="list-style-type: none"> <li>Class 1 Regional Corridor</li> <li>Class 2 Intra Regional Connectors</li> <li>Activity Spine</li> <li>Activity Street</li> </ul> <b>Mining &amp; Economic Framework</b> <ul style="list-style-type: none"> <li>Circular Economy Zone</li> <li>Mining Areas</li> <li>Mining Belt</li> </ul>	<b>Land Use &amp; Growth Management Framework</b> <ul style="list-style-type: none"> <li>Peri-Urban</li> <li>General Urban</li> <li>Urban Centre</li> <li>Urban Core</li> </ul> <b>Environment, Conservation &amp; Rural Development Framework</b> <ul style="list-style-type: none"> <li>Rivers</li> <li>Wetlands</li> </ul>	<ul style="list-style-type: none"> <li>Dolomite</li> <li>High Potential Agricultural Land</li> <li>Ecological Support Area</li> <li>Important Area</li> <li>Irreplaceable Area</li> <li>Protected Area</li> <li>Ridges</li> </ul>	<b>Nodal Framework</b> <ul style="list-style-type: none"> <li>Primary Node</li> <li>Secondary Node</li> <li>Tertiary Node</li> <li>Mining Node</li> <li>Rural Node</li> </ul>
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**Map 4: The consolidated Merafong City Municipal Spatial Development Concept**



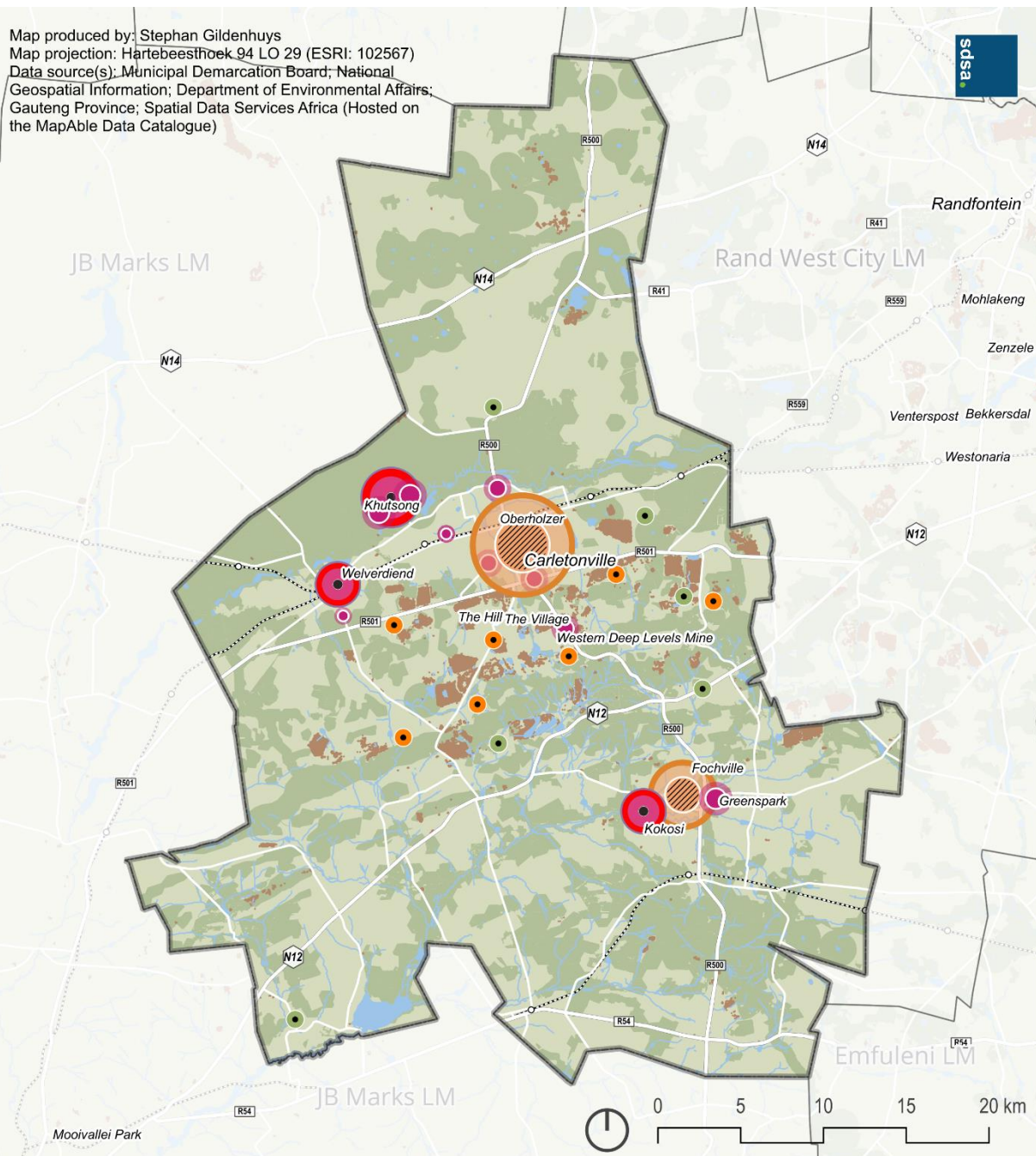
## Nodal and Land Use Development Framework

The land use framework is designed to offer a straightforward set of codes and guidelines that are in harmony with existing laws yet flexible enough to adapt to evolving economic conditions and new growth patterns.

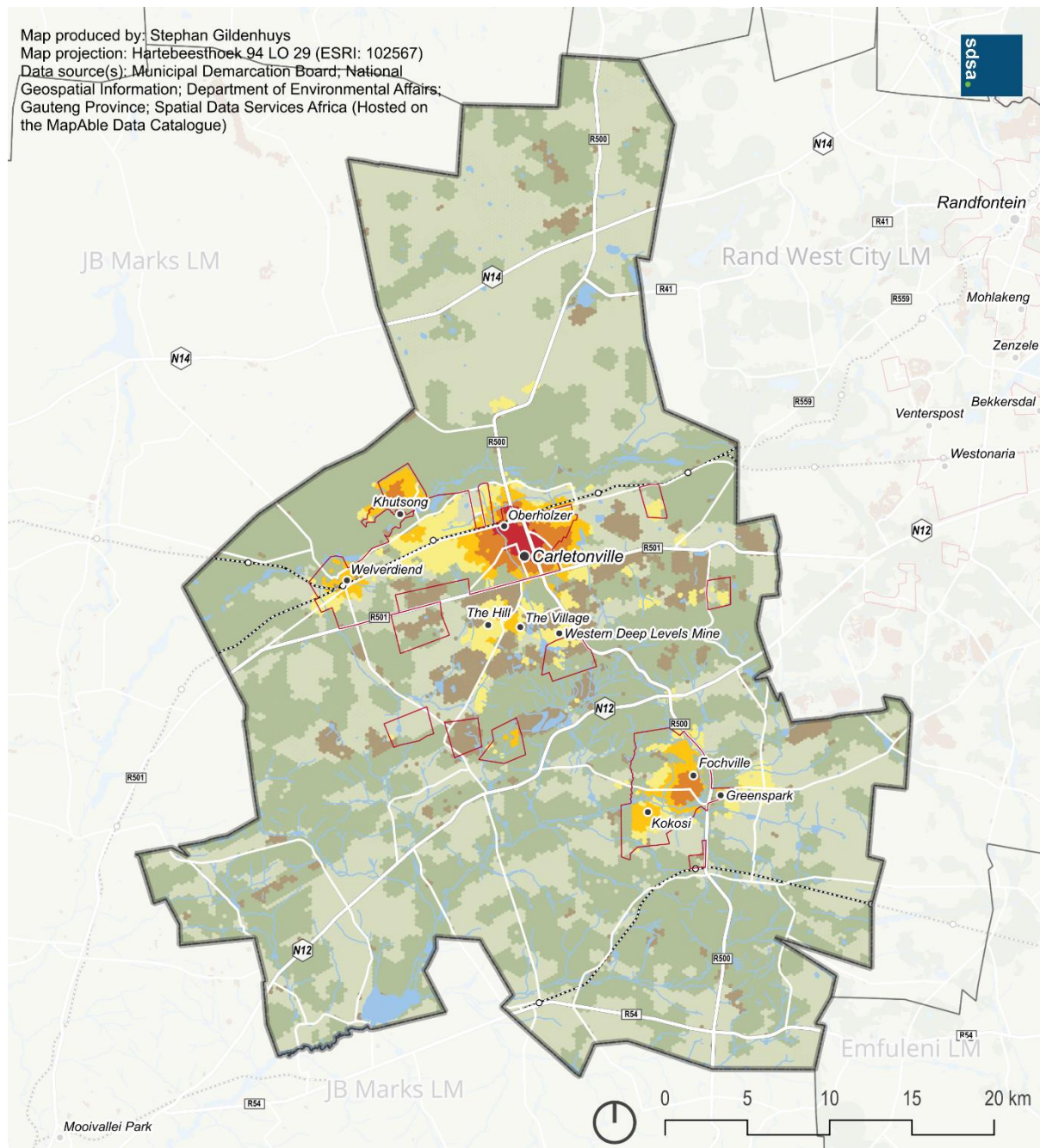
**Goal: To guide and facilitate the sustainable use of land and development in the municipality by focusing on nodal development, mixed land uses, densification, and growth management to enhance the urban character while encouraging economic and social activities.**

The principles of Nodal Hierarchy, Land Use, Growth Management, and Housing and Human Settlements focus on sustainable and equitable urban development in line with the SPLUMA guidelines. Nodal Hierarchy aims for balanced development by identifying and improving key municipal areas, ensuring equitable resource distribution and sustainable urban growth. Land Use planning strives to create sustainable, livable neighbourhoods with efficient resource use, adapted to local contexts and avoiding environmentally sensitive areas. Growth Management controls urban expansion, advocating for efficient and sustainable land use and equitable access to urban amenities. Lastly, the Housing and Human Settlements principle targets creating diverse, stable communities, promoting equitable housing access, sustainable development, good governance, and public participation in decision-making, addressing historical inequalities and fostering spatial justice.

Policies	Strategies
<b>1</b> <b>Establish an effective nodal hierarchy</b>	<ol style="list-style-type: none"> <li>1. Identify and prioritise key nodes within the municipality that have the potential for development and regeneration.</li> <li>2. Establish new nodes, especially in township areas, to foster economic diversity and access to opportunities.</li> <li>3. Encourage public and private investment in these nodes to enhance their vitality and attractiveness.</li> <li>4. Encourage higher-density development within nodal areas, focusing on compact, well-designed buildings.</li> <li>5. Focus efforts on infrastructure maintenance and renewal to support the regeneration of old nodes and to accommodate higher densities.</li> </ol>
<b>2</b> <b>Promote sustainable land use planning</b>	<ol style="list-style-type: none"> <li>1. Advocate land use planning and employ zoning tools that enhance neighbourhood liveability by improving walkability and increasing access to amenities, goods, and services.</li> <li>2. Rationalise land-use patterns to promote economic efficiency and sustainability.</li> <li>3. Ensure contextually appropriate development within established neighbourhoods by maintaining density and land use standards that reflect each neighbourhood's character.</li> <li>4. Avoid development in areas with underlying dolomite to avoid damage to buildings, infrastructure and the possible loss of life.</li> </ol>
<b>3</b> <b>Direct future growth through Growth Management</b>	<ol style="list-style-type: none"> <li>1. Establish growth boundaries or urban edges to manage and direct development within the municipality.</li> <li>2. Encourage infill development to activate commercial sites and promote the highest and best use of land.</li> <li>3. Promote mixed-use development at key activity nodes, integrating commercial and residential land uses at higher densities.</li> </ol>
<b>4</b> <b>Create diverse, stable, and sustainable human settlements</b>	<ol style="list-style-type: none"> <li>1. Preserve neighbourhood integrity and enhance the community's image by building economic and social stability.</li> <li>2. Steer new housing developments and resources for housing rehabilitation toward sites likely to stabilize marginal and declining neighbourhoods.</li> <li>3. Expand the range of housing choices available to existing and prospective residents while increasing home ownership.</li> </ol>



Map 5: Nodal Framework



Map 6: Land use and growth management framework



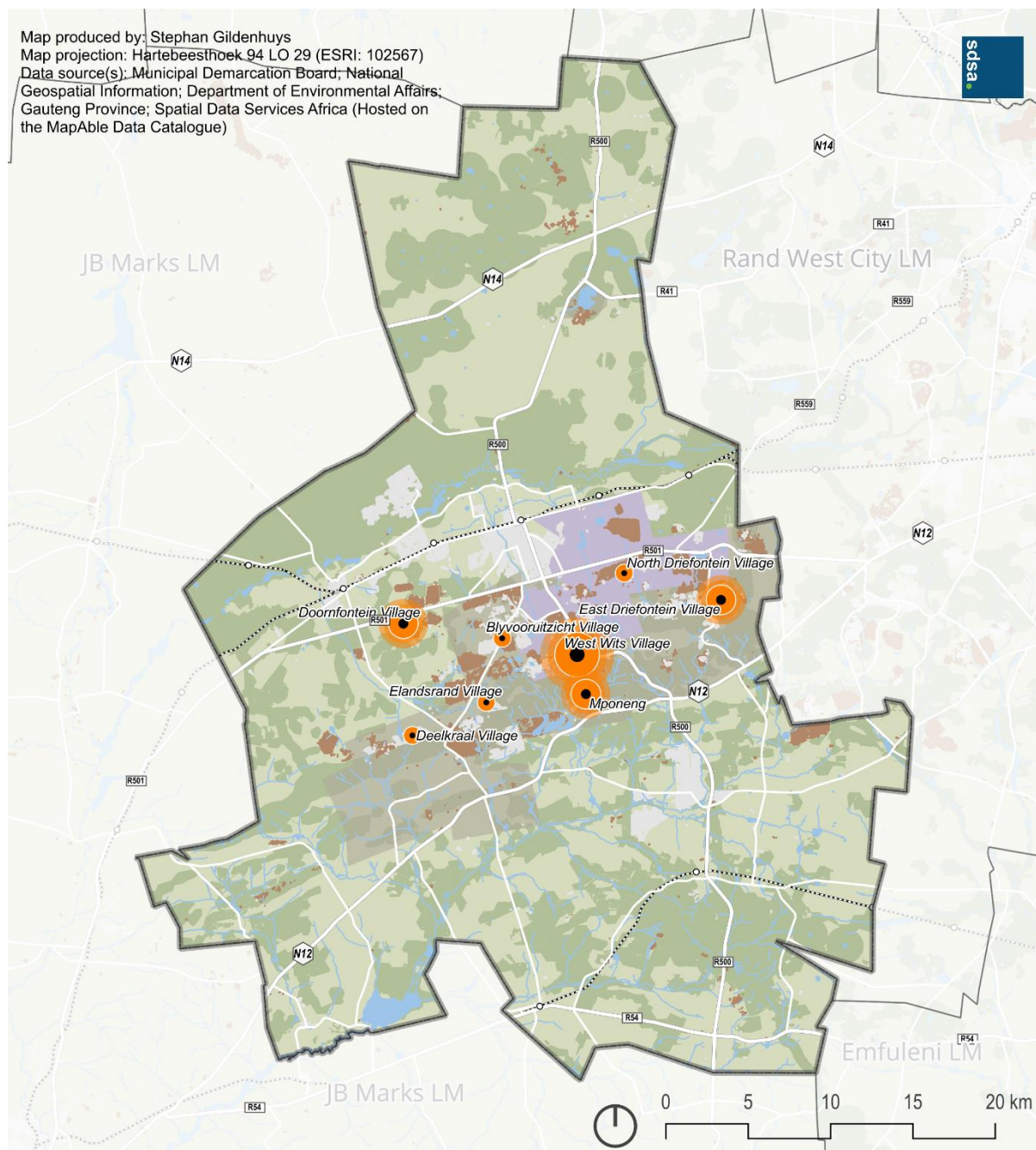
## Mining Transition, Renewable Infrastructure and Economic Development Framework

The mining transition and economic development framework set out to provide a hierarchy of mining towns to develop a focused approach in delivering resources to those towns with the potential for future growth and development to create resilient, diversified, and sustainable communities that can thrive beyond the lifespan of mining activities. It also focuses on the transition of the economy away from the mining sector to a more diversified and sustainable economy for the municipality.

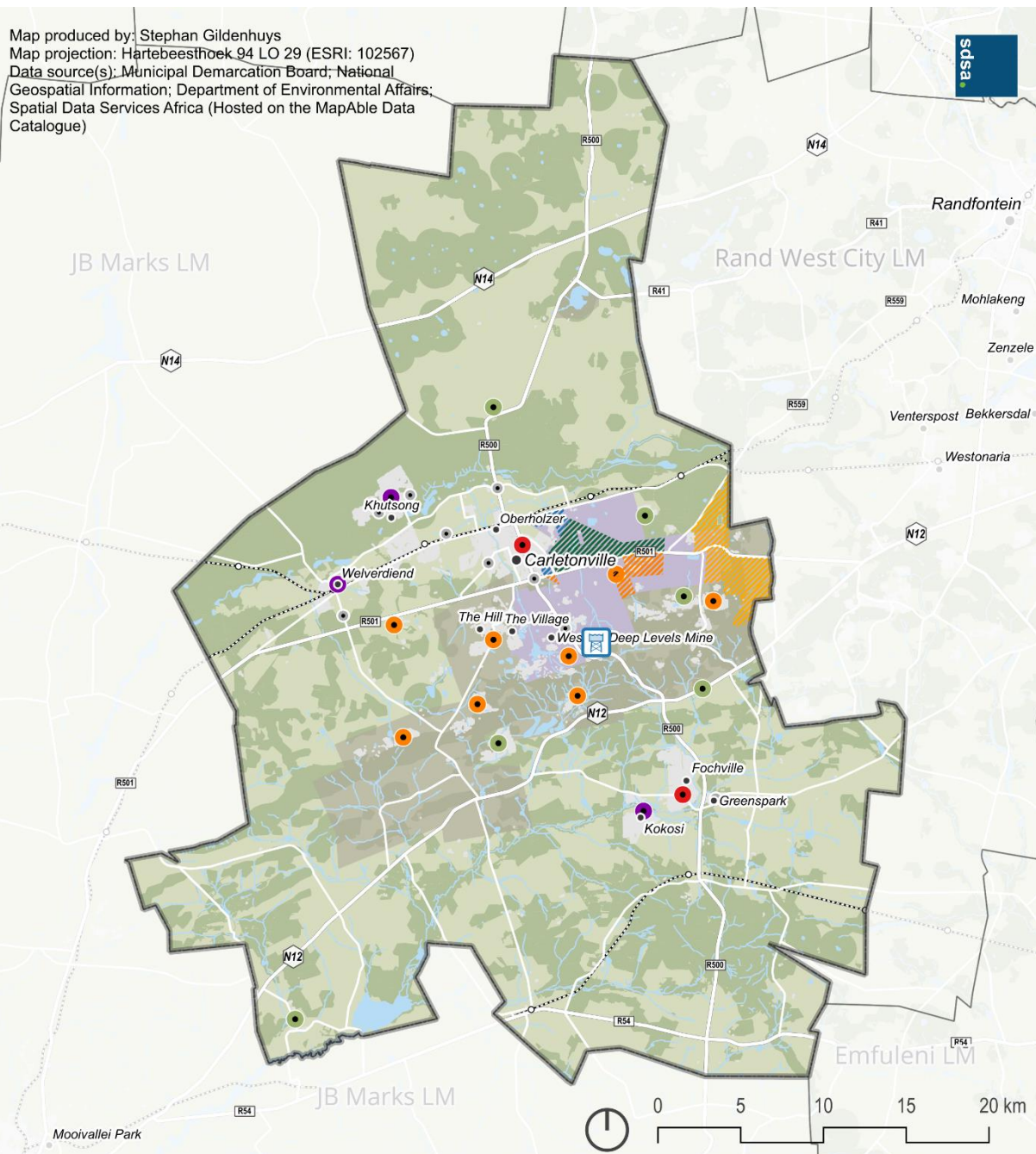
**Goal: To focus on the sustainable and responsible management and transition of large mining areas and the associated mining towns within the municipality, ensuring that as mining activities decrease over time, new economic sectors contribute to the community's long-term economic and social well-being.**

The effective transitioning of mining areas and towns principle underscores a conscientious and proactive strategy for managing mining activities and their adjacent urban regions. Its goal is to harmonize the economic gains from mining with the reduction of environmental impacts and the enduring prosperity of local communities. This requires meticulous planning, broadening the scope of local economic activities, and a commitment to sustainable development approaches. By taking into account the full lifecycle of mining operations and placing emphasis on the requirements of mining towns, this principle aims to foster communities that are robust, varied, and sustainable, capable of flourishing even after mining activities have ceased.

Policies	Strategies
<b>1</b> Efficient transitioning of Mining Areas and Towns	1. Focus development of mining areas on viable and sustainable settlements.
	2. Promote economic diversification in suitable mining towns to reduce dependency on the mining sector and create sustainable employment opportunities in other industries.
	3. Develop land use plans that consider the eventual closure and transformation of mining areas once extraction is completed.
	4. Prioritise mining settlements to focus efforts and resources on mining towns that have the potential for rehabilitation, formalisation and adaptive re-use.
<b>2</b> Sustainable Economic Transition	1. Promote the establishment of new sustainable economic sectors in the Municipality.
	2. Allow for new green technologies to support the economic transition.
	3. Focus on the renewal of existing infrastructure to support future growth and development.
<b>3</b> Provide efficient and cost-effective Infrastructure and services	4. Leverage the available capacity of the Driefontein Reservoir for additional water storage capacity to enable future economic development.
	1. Implementation of a needs-based approach to infrastructure planning and service delivery, prioritising areas with the highest levels of need.
	2. Encouraging public-private partnerships to expand access to basic services, particularly in underserved areas.
	3. Building capacity within the municipality to plan, implement, and manage infrastructure projects in an effective and sustainable manner.



Map 7: Mining and economic development framework



## LEGEND

## Towns &amp; Cities

- Town & Cities

## Transport Features

- Railway Station
- Railway Line
- Major Road

## Boundaries

- Local Municipalities
- ▭ Merafong City LM Boundary

## Natural Features

- River
- Wetlands
- Water Bodies
- Conservation Areas

## Infrastructure

- Driefontein Reservoir

## Economic Transformation Zones

- Mining\_belt
- Circular Economy Zone
- Proposed Solar Plant
- Mining and Industrial Zone (SEZ)
- Agriculture and Agri-Processing Zone (SEZ)
- Municipal Land Available for the SEZ

## Nodal Hierarchy

- Mining Node
- Primary Node
- Rural Node
- Secondary Node
- Tertiary Node

Map 8: Infrastructure and economic transition framework



## Transportation Framework

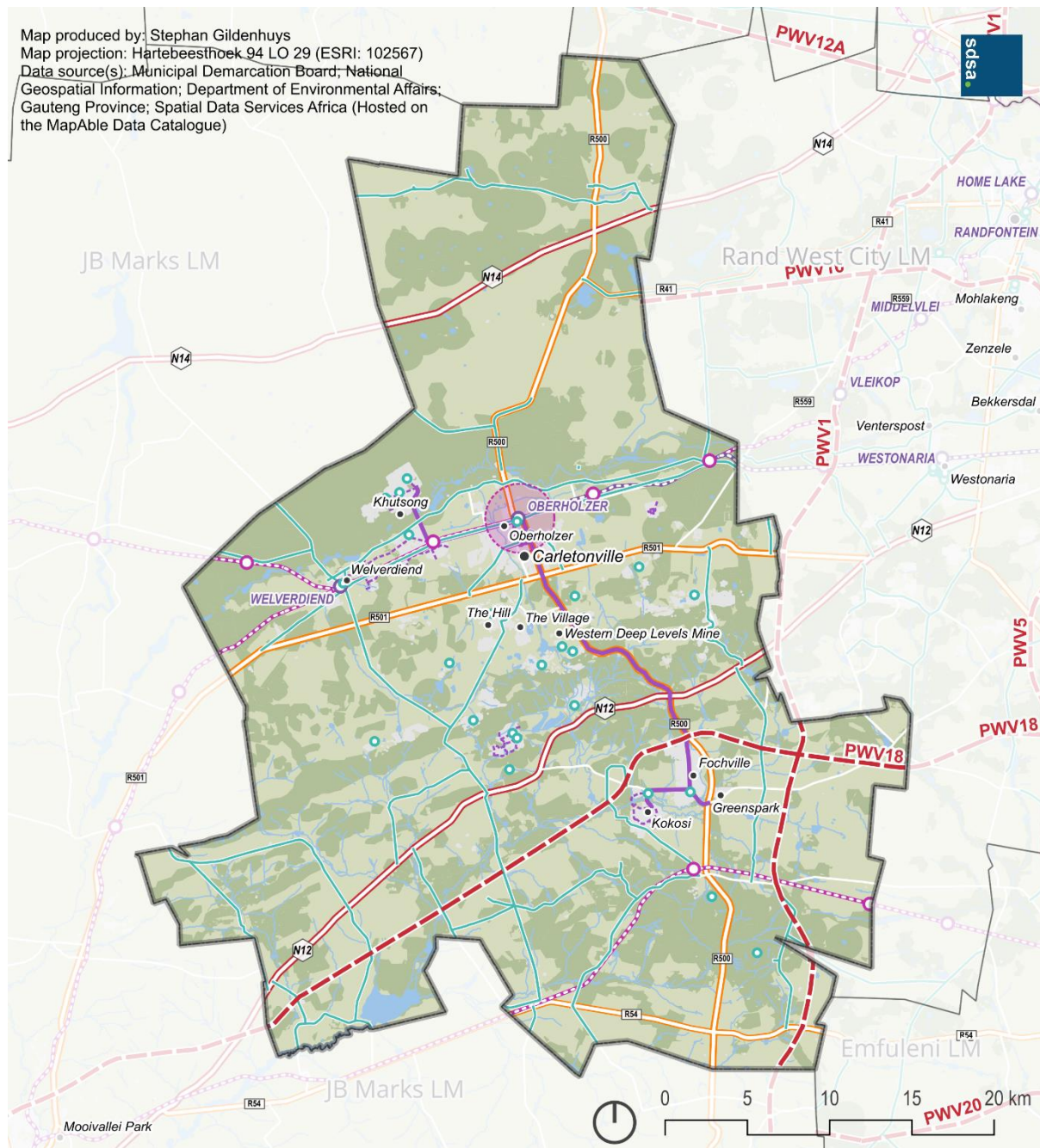
The transport and corridor framework provides strategies and concepts for improving the efficiency of moving people and goods in the municipality and the larger region. The framework identifies strategic corridors and public transport elements and guides to support development.

**Goal: To guide and facilitate the development of key corridors within the municipality with a specific focus on enhancing connectivity, supporting public transport, promoting walkability, and encouraging development along activity spines to create vibrant and efficient urban environments.**

The principles of establishing a hierarchy of transport corridors, ensuring effective public transport, and providing efficient and cost-effective infrastructure and services are geared towards creating an efficient, equitable, and sustainable urban environment in line with SPLUMA guidelines. This focuses on developing a well-connected transportation network by identifying and prioritizing key corridors, promoting equal access and sustainable transit planning. Secondly, to enhance public transportation and pedestrian infrastructure to foster lively, walkable communities with integrated land uses, reducing dependency on private vehicles. Lastly, it prioritises high-need areas, encouraging the enhancement of municipal capacity for infrastructure management, aligning with the objectives of economic efficiency, sustainability, and good governance.

Policies	Strategies
<b>1</b> Establish a hierarchy of transport corridors	<div>1. Identify and prioritise key transportation corridors that serve as critical links within the municipality, connecting residential, commercial, and recreational areas.</div> <div>2. Establish a clear and efficient road hierarchy that supports the movement of people and goods.</div>
<b>2</b> Ensure effective public transport	<div>1. Identify and designate specific areas along the corridors as "activity spines" where mixed-use, commercial, and residential development is encouraged.</div> <div>2. Develop pedestrian-friendly infrastructure, such as sidewalks, crosswalks, and greenways, along activity spines to encourage walking and cycling.</div> <div>3. Prioritise and expand public transportation networks, focusing on developing key movement corridors and community corridors connecting activity nodes.</div> <div>4. Engage with PRASA to facilitate and prioritise the rehabilitation of commuter railway lines and stations.</div>





Map 9: Corridor and public transport framework

## Environmental Protection, Conservation, and Rural Development Framework

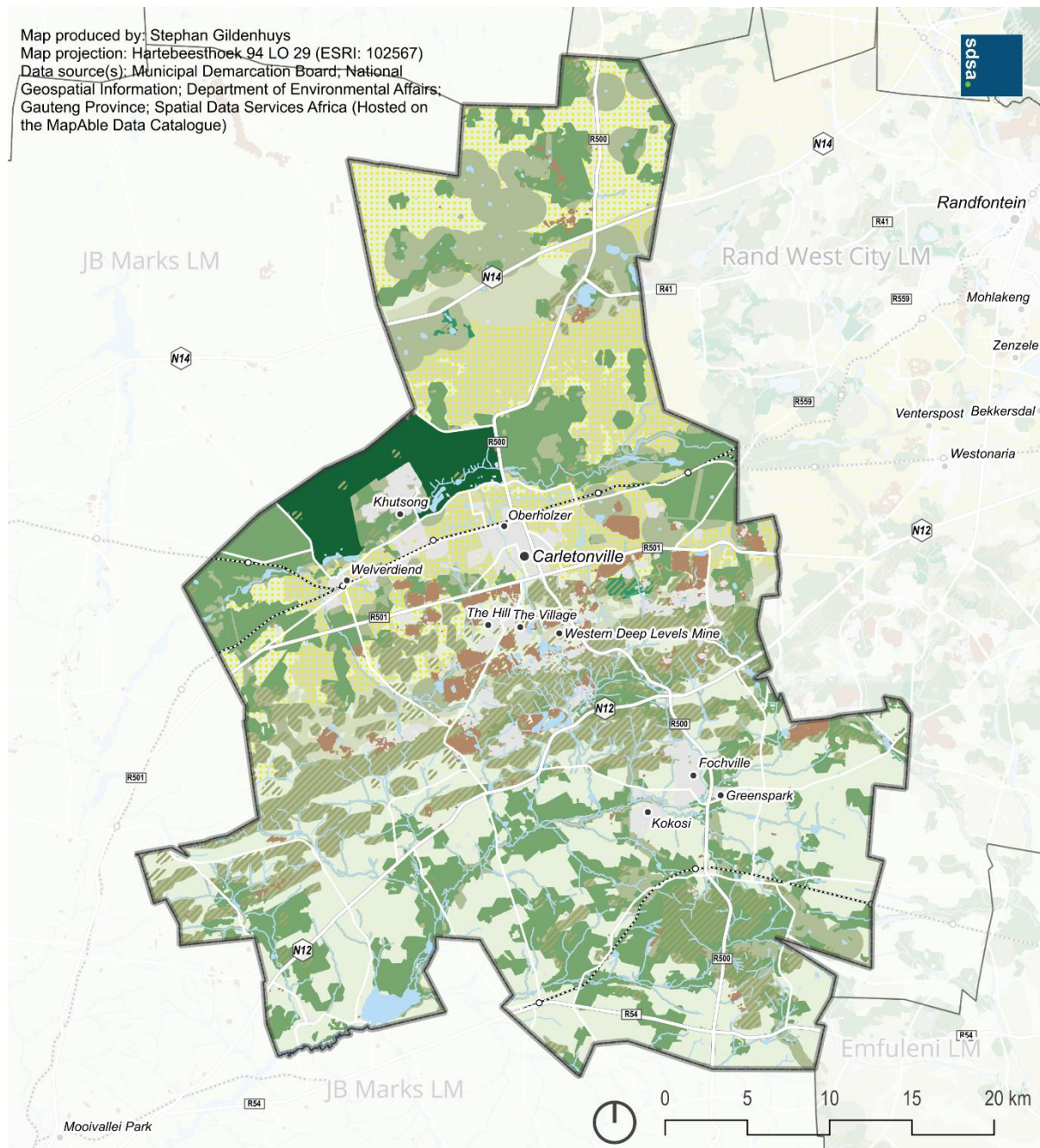
The overall concept relies on the area's existing open space to expand its natural resources. Hydrological corridors comprising floodways and flood plains become publicly accessible green linkages, working in conjunction with pedestrian-friendly streetscapes to connect public parks and other green resources.

**Goal: To guide and facilitate the conservation of the municipality's natural environment, high-potential agricultural land, and open spaces by striking a balance between urban development and environmental protection while securing agrarian resources for future generations.**

Protecting the natural environment, public open space, and rural development within a municipality align with SPLUMA's sustainable land use and management guidelines. The first principle concentrates on conserving environmentally sensitive areas such as wetlands and wildlife habitats, balancing urban growth with the preservation of natural ecosystems. The second principle emphasizes the importance of maintaining and enhancing green public spaces, ensuring equal access to recreational areas, and integrating these spaces within the urban landscape, thereby balancing urban development with the preservation of natural environments. The final principle focuses on supporting and developing rural areas, highlighting the conservation of agricultural lands, fostering connections between rural and urban regions, and investing in rural infrastructure. This approach promotes a balanced development between urban and rural areas, ensuring sustainable agricultural practices and economic growth in rural sectors.

Policies		Strategies
<b>1</b>	<b>Protect Conservation and Biodiversity Assets</b>	1. Identify and protect ecologically sensitive areas, such as wetlands, riparian zones, and wildlife habitats, through appropriate development and conservation regulations.
		2. Proactively identify areas of potential conflict between development proposals and critical and sensitive environmental areas.
<b>2</b>	<b>Enhance Public Space</b>	1. Identify and preserve public spaces, greenbelts, and recreational areas for the community's health and well-being.
		2. Expand the public space network to incorporate and protect natural resource areas and provide additional active and passive recreational areas.
		3. Establish continuous greenbelts along major drainage channels to mitigate flooding and extend recreational activities.
<b>3</b>	<b>Support Rural Development</b>	1. Identify and designate high-potential agricultural land, considering water resources and local agricultural needs.
		2. Facilitate the development of market linkages between rural producers and urban consumers to increase economic opportunities and improve food security.
		3. Invest in infrastructure, such as roads and telecommunications, to support economic development and increase access to markets and services.





Map 10: Environment and conservation framework



# BCGA

BC GILDENHUYS & ASSOCIATES

Document prepared by:

**BC Gildenhuys & Associates**

Suite 18, Menlyn Central Towers

141 Corobay Avenue

Menlyn

Pretoria

0181

**Contact Person:** Stephan Gildenhuys

**T:** +27 83 560 7114

**E:** [stephan@bcga.co.za](mailto:stephan@bcga.co.za)

**W:** [www.bcga.co.za](http://www.bcga.co.za)

