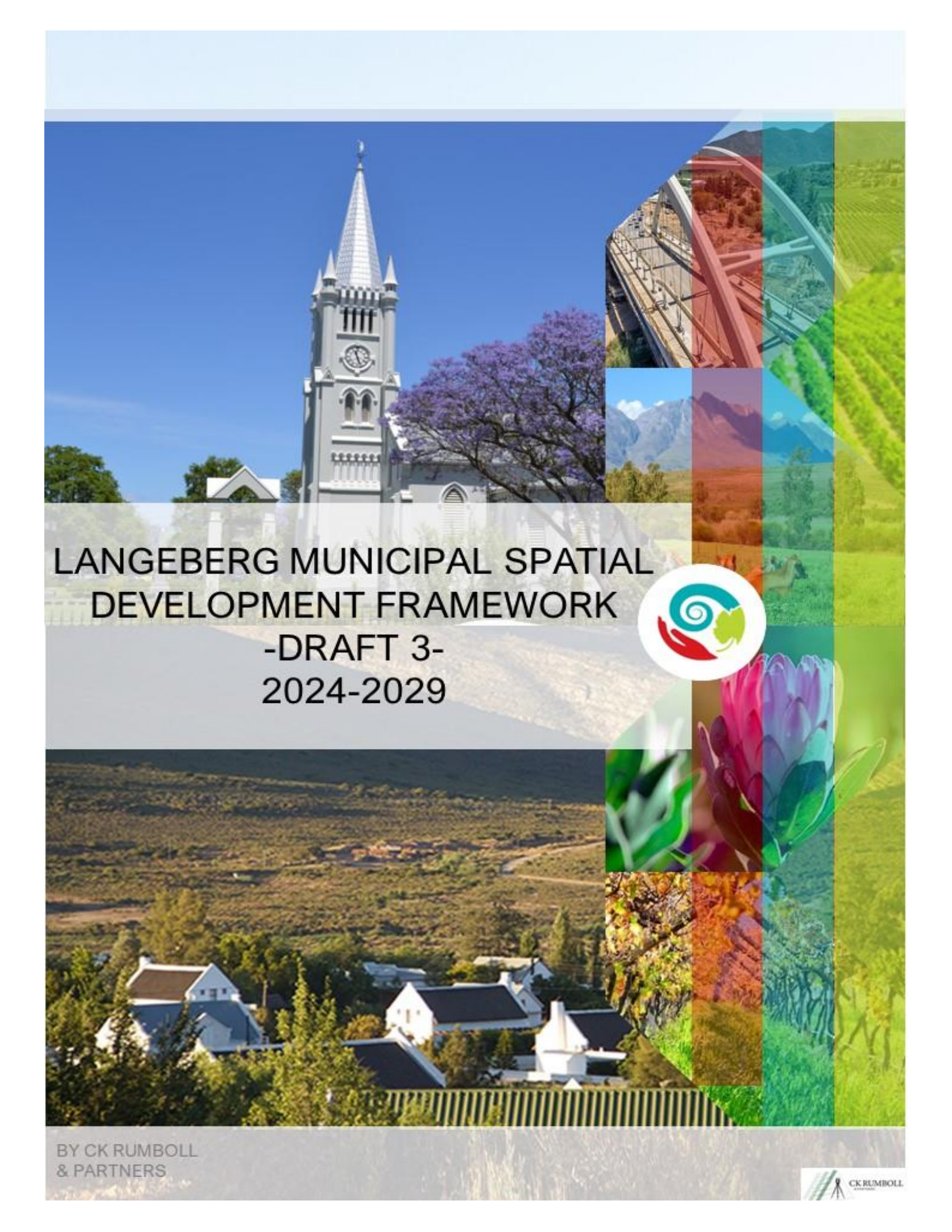


The cover features a collage of images. The top left shows a tall, grey stone church tower with a clock face and a pointed roof, set against a clear blue sky. Below this, a semi-transparent grey box contains the title text. To the right of the text is a circular logo with a stylized spiral in blue, green, and red. The background of the cover is a mix of images: a bridge with a red arch, a mountain range, a field of purple flowers, a close-up of a pink flower, and a view of white houses with dark roofs nestled in a green valley.

LANGEBERG MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK -DRAFT 3- 2024-2029

BY CK RUMBOLL
& PARTNERS

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CHAPTER 1: MSDF Purpose, Principles and Legislative Context

This chapter states the purpose of the Spatial Development Framework, details the principles required to achieve the desired spatial form and outlines the project plan to implement the MSDF.

1.1 Purpose

The purpose of the Langeberg Municipal Spatial Development Framework (MSDF) is to guide growth and development in the Langeberg municipal area in a sustainable manner. Hence, future growth, development and land use planning will embrace the spatial vision and principles to protect and develop integrated, sustainable settlements and liveable environments, and promote economic and social prosperity.

The MSDF in use was approved in 2015 and requires review and updating. This rewritten version of the Langeberg MSDF is for the 2024 – 2029 period.¹

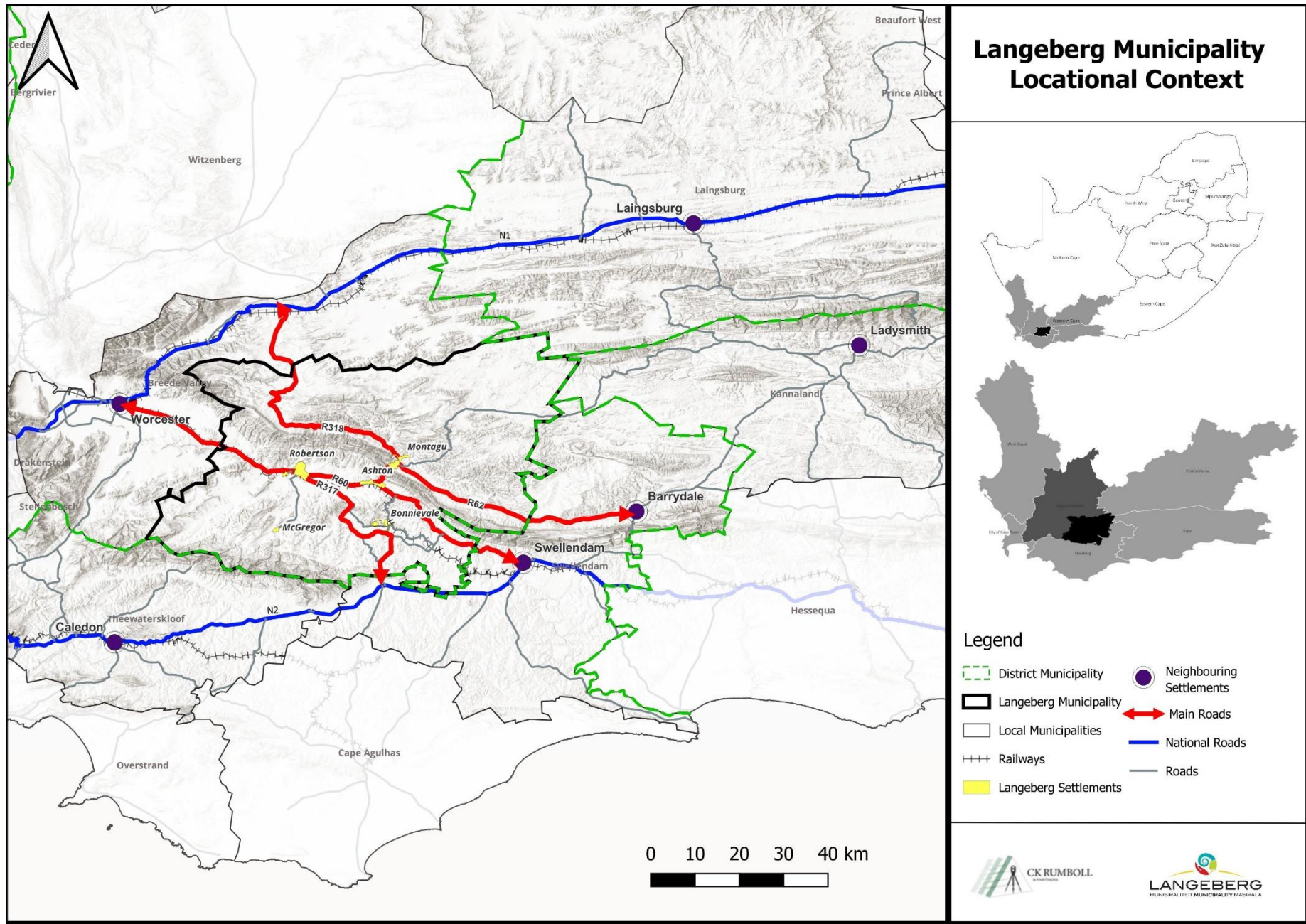
1.2 Spatial Context

The Langeberg Municipality (WCO26) is located within the Western Cape Province and forms part of the Cape Winelands District Municipality together with the Drakenstein, Breede Valley, Stellenbosch and Witzenberg Municipalities (IDP, 2023).

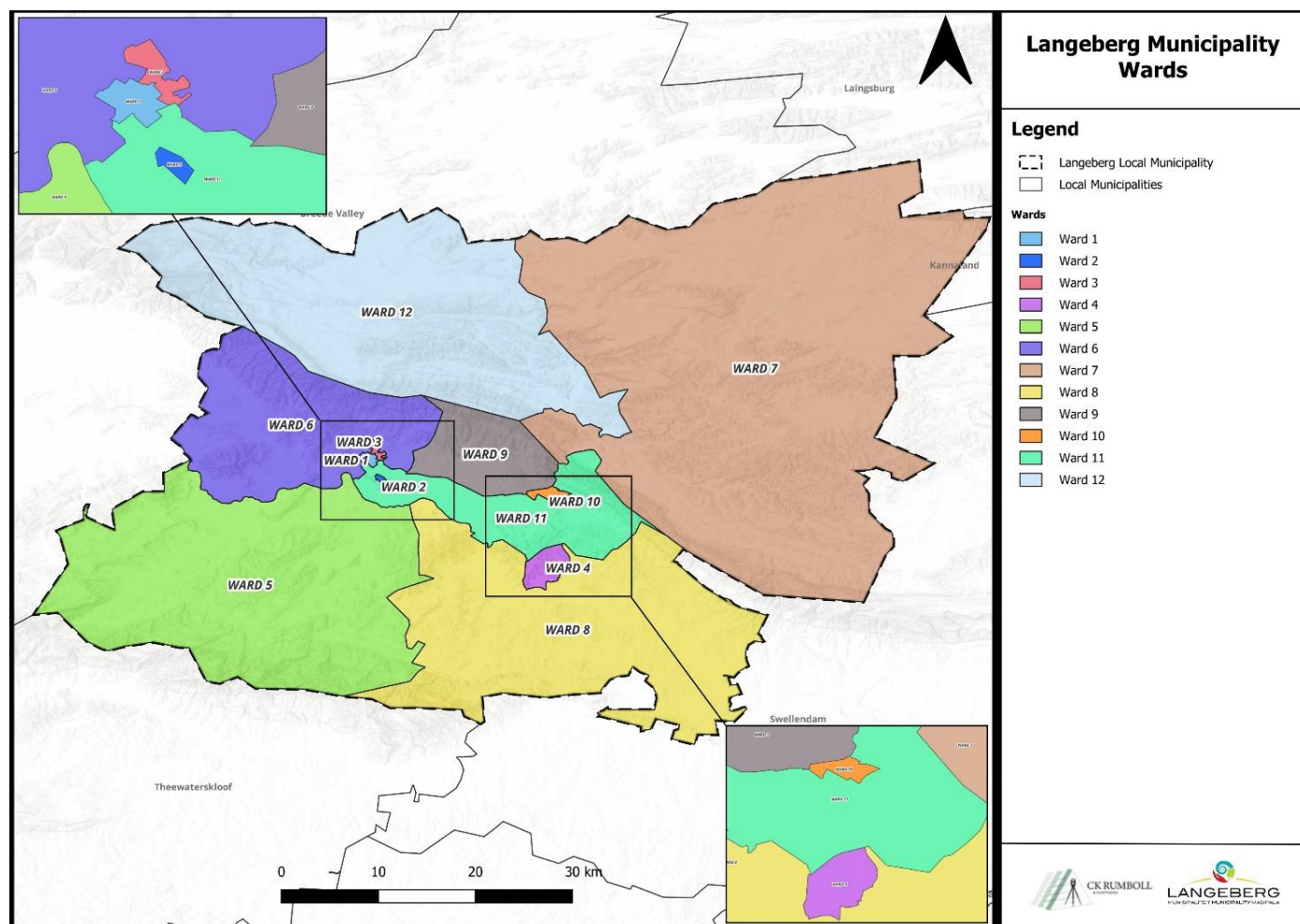
The total area of the Langeberg Municipality is approximately four thousand five hundred square kilometres (4 518 km²) which represents 21% of the Cape Winelands region. The Langeberg municipal area stretches from the Riviersonderend Mountains in the south across the Langeberg to the Hex River Mountains and Anysberg (part of the Swartberge) in the north.

¹Scope of Work: SPLUMA Section 12 and SMA Section 24 (1) and 26 (e)

Map 1: Locational Context Map



The municipality is divided into twelve (12) wards which include the five settlements and surrounding rural areas. The five settlements are: Robertson, Montagu, Ashton, Bonnievale, and McGregor as per the table below (IDP, 2023).



Ward Number	Settlement
Ward 1, 3 (urban only), 6 & 11	Robertson, Silwerstrand & Rural Areas
Ward 2 (urban only)	Nkqubela, Robertson
Ward 4 & 8	Bonnievale & Rural Areas
Ward 5	McGregor & Rural Areas
Ward 7, 11	Montagu & Rural Areas
Ward 9 & 10	Ashton, Zolani and Rural Areas
Ward 12	Montagu (Ashbury) & Rural (Keisie & Koo Valley)

1.3 Structure of the MSDF Document

The MSDF provides the municipality with the necessary tools for the effective management of future development to ensure that development is balanced, sustainable and creates socio-economic opportunities. The document comprises the following chapters:

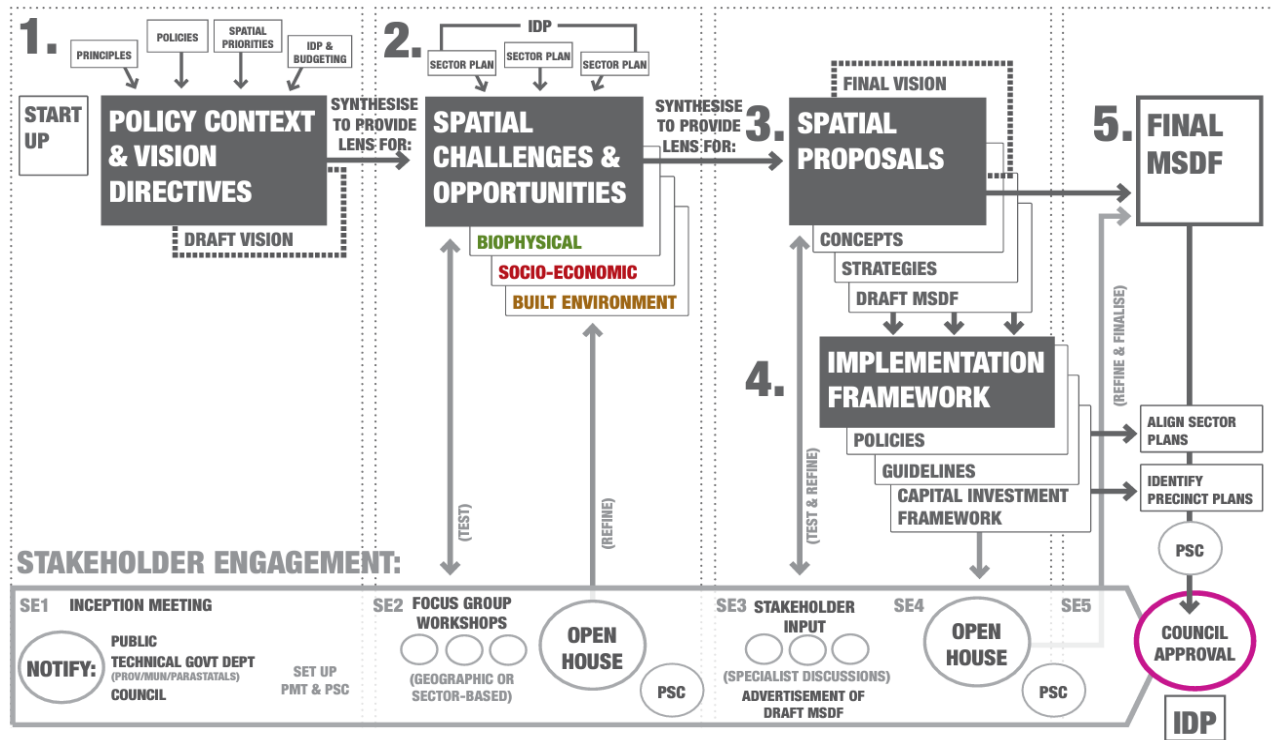
Chapter 1:	MSDF Purpose, Principles and Legislative Context
Chapter 2:	Spatial and Sectoral Plan Analysis and MSDF Review
Chapter 3:	Land Demand, Supply and Settlement Development Guidelines
Chapter 4:	Issues, Vision and Goals
Chapter 5:	Settlement Proposals
Chapter 6:	Rural and Regional Proposals
Chapter 7:	Capital Expenditure Framework
Chapter 8:	Implementation Plan

1.4 Langeberg MSDF Status, Process and IDP, National & Provincial Policy Alignment

The diagram presented below provides a general overview of the steps involved in the preparation of an MSDF (Municipal Spatial Development Framework). This process can be broadly divided into five phases. The initial two phase primarily focus on getting structures in place to support the development of the MSDF and an analysis of the policy context to derive directives for the subsequent phases. The compilation of the status quo and analysis of the sector plans and neighbouring MSDFs generate more directives and identify gaps. The desired spatial form of the municipal area is conceptualised from the directives generated and gaps identified in these two phases. These two phases are followed by compiling spatial proposals and the first draft of the MSDF. Once the first draft MSDF is ready, the public and government departments are afforded opportunity to comment. These comments are considered and the first draft MSDF is amended. The spatial and related proposals are costed and a capital expenditure framework is developed to prioritise proposals. The prioritised proposals are converted to an implementation framework. The MSDF, capital budget and implementation framework is being presented to Council for adoption. Once Council approve the MSDF as a sector plan of the IDP the project is closed.

Langeberg Municipality had a project committee guiding the compilation of the MSDF, as required by the Land Use Planning Act (LUPA). A representative of DEADP was part of the PSC. The process is documented below.

Figure 1: The MSDF Process (from DRDLR's PLUMA Guidelines, 2014)



Phase	Overview	Important Dates
1. Policy Context & Vision Directives	Project Initiation.	August 2022.
2. Spatial Challenges and Opportunities & Council Status Quo presentation	Compilation of comprehensive assessment, including the review of government plans and policies, an analysis of challenges and opportunities related to four key themes (biophysical, socio-economic, built environment, and institutional). Comments from citizens and department and interest groups regarding community and municipal issues.	October 2022.
3. Spatial Proposals & Public Participation	Creating a spatial concept for the future development and management of the MSDF area, derived from the vision that addresses key challenges and opportunities. Compilation of settlement and rural proposals. Comments from citizens and department and interest groups regarding community and municipal issues.	End February / Early March 2023. PPP March – May 2023. PPP February 2024
4. Implementation Framework	Amendment of Draft MSDF. Compilation of what the capital requirements are and what funds are available. Compilation of implementation framework and Council presentation.	Revised Draft MSDF: Status Quo, August 2023. Proposals: November 2023, June 2024.
5. Final MSDF	Final presentation to Council.	Mid December 2023, October 2024.

The Langeberg MSDF, 2024 -2029, will be adopted as a core component of the 5th generation Langeberg IDP, 2023 – 2027 (MSA Section 26(e)). The rewrite of the current MSDF, 2015 focuses on proposals that will be included as projects planned for the next five (5) years and for the next twenty (20) years and the alignment of these proposals with the Capital Expenditure Framework of Langeberg Municipality (MSA, 2000).

In accordance with Section 3(1) of the Langeberg Municipality: Land Use Planning By-Law, 2015, the Langeberg MSDF was prepared as part of the municipal IDP in accordance with the provisions of the Municipal Systems Act (MSA) (Act 32 of 2000). Sections 3 - 10 of the Langeberg Municipality: Land Use Planning By-Law guides the content of and procedure to follow to compile or amend an MSDF. The approval or adoption of this MSDF will be undertaken in accordance with Section 10 of the Langeberg Municipality: Land Use Planning By-Law.

According to Section 21 of SPLUMA (Act 16 of 2013) and Section 10 (2) of LUPA (Act 3 of 2014), Municipal Spatial Development Frameworks have to be aligned with different national, provincial and local legislation, policies² and strategies that provide a spatial planning agenda. The alignment between these strategies is illustrated in the table below (MSA, 2000):

²National Policy Context: SPLUMA Section 12(5) and Section 7e(ii) & Municipal Policy Context SPLUMA Chp4, Section 12.1©, Sec 20(2) and Sec 7(e)(ii)

National			Provincial		Local	
Political Mandate	NDP 2030	IUDF 2016	WCPSDP 2014	Langeberg MSDF (proposed)	IDP	
Political Theme & SPLUMA & LUPA Principles: Jobs & Opportunities, Spatial Justice						
- Infrastructure-led growth. - EPWP expansion. - LED one stop shops, prioritise job creation, partner local business. - Implement taxi & bus services. - Provide a range of housing topologies. - Ownership transferred. - Connect communities to internet.	- Economy & Employment (No. 1). - Infrastructure (No. 2). - Inclusive rural economy (No. 4). - Local vs. SA (No. 5).	Integrated urban planning and management (No. 1). Integrated transport and mobility (No. 2). Inclusive economic development (No. 6).	Housing: Integrated human settlements and improved living conditions of all households. Safeguard inland and coastal water resources and manage the sustainable use of water (R2). Safeguard Western Cape's agricultural and mineral resources, and manage sustainable use (R3). Diversify and strengthen the rural economy (E2). Revitalise and strengthen urban space economies as the engine of growth (E3). Improve inter and intra-regional accessibility (S2).	<i>Grow economic prosperity</i> (Obj 1) [Economic Environment].	Local Economic Development: Create an enabling environment for economic growth and decent employment. Effective stakeholder engagements to promote civic education.	
Political Theme & SPLUMA & LUPA Principles: Responsive Local Government – Efficiency & Good Administration						
- Graduate recruitment appointments. - Access drug addiction treatment.	Building capable state (No. 11).	Efficient land governance and management (No. 5). Empowered active communities (No. 7). Effective urban governance (No. 8). Sustainable finance (No. 9).	Protect biodiversity and ecosystem services (R1). Recycle and recover waste, deliver clean sources of energy, shift from private to public transport and adapt to and mitigate against climate change (R4). Safeguard cultural and scenic assets (R5).	<i>Protect and grow place identity and cultural integrity</i> (Obj 4) [Built Environment]. <i>Protect ecological and agricultural integrity</i> (Obj 5) [Biophysical or Natural Environment].	An efficient, effective, responsive and accountable administration. Effective stakeholder engagements to promote civic education.	
Political Theme & SPLUMA & LUPA Principles: Better Service Delivery – Efficiency & Spatial Sustainability						
- Maintain roads (potholes). - Access to electricity, water & sanitation. - Regular maintenance of infrastructure.	- Improve education, training & innovation (No. 7). - Health care for all (No. 8).	Integrated transport and mobility (No. 2). Integrated urban infrastructure (No. 4). Inclusive economic development (No. 6).	Use regional infrastructure investment to leverage economic growth (E1).	<i>Sustain material, physical and social well-being</i> (Obj 3) [Social Environment]. <i>Grow economic prosperity</i> (Obj 1) [Economic Environment].	Basic Service Delivery: Maintain infrastructure to provide basic services to all citizens. Sound Financial Management: Adherence to all laws and regulations applicable to LG.	

Political Theme & SPLUMA & LUPA Principles: Stop Corruption – Good Administration					
• Effective systems: complaints processing. • Staff appointed: add value. • Exclude councillors from recruitment. • Open tender adjudication. • Open council meetings.	• Fighting corruption (No. 12).	Efficient land governance and management (No. 5). Empowered active communities (No. 7). Effective urban governance (No. 8). Sustainable finance (No. 9).	Protect, manage and enhance sense of place, cultural and scenic landscapes (S1).	<i>Protect and grow place identity and cultural integrity</i> (Obj 4) [Built Environment].	An efficient, effective, responsive and accountable administration. Sound Financial Management: Adherence to all laws and regulations applicable to LG.
Political Theme & SPLUMA & LUPA Principles: Meaningful redress – Spatial Justice					
• Inclusive amenities & spaces. • Reliable public transport. • True B-BBEE. • Urban planning integrates communities & levels of income.	• Environmental resilience (No. 3). • Transform settlements (No. 6). • Nation Building (No. 13).	Integrated urban planning and management (No. 1). Integrated transport and mobility (No. 2). Integrated sustainable human settlements (No. 3).	Promote compact, mixed-use and integrated settlements (S3). Balance and coordinate the delivery of facilities and social services (S4). Promote sustainable, integrated and inclusive housing in formal and informal markets (S5).	<i>Proximate, convenient and equal access</i> (Obj 2) [Economic Environment].	Housing: Effective approach to integrated human settlements and improved living conditions of all households. Provision for well-located schools and communication facilities.
Political Theme & SPLUMA & LUPA Principles: Making Communities safer – Spatial Resilience					
• Prevention units: gangs & drugs. • Law enforcement service: traffic & crime.	• Social protection (No. 9). • Safer Communities (No. 10).	Empowered active communities (No. 7). Effective urban governance (No. 8).	Promote compact, mixed-use and integrated settlements (S3). Balance and coordinate the delivery of facilities and social services (S4).	<i>Sustain material, physical and social well-being</i> (Obj 3) [Social Environment].	An efficient, effective, responsive and accountable administration. To facilitate social cohesion, safe and healthy communities (SO6).

(IUDF, 2016) (PSDF, 2014)

1.5 Legislative Directives

Several national acts, policies and frameworks provide spatial directives that enable Municipalities to guide development and to focus capital expenditure³. The following are of particular relevance:

International policy:

The United Nations' Sustainable Development Goals (SDG), 2016 include all three dimensions of

sustainable development – social, economic and environmental. The SDGs should benefit all – eradicating poverty and reducing inequalities.



- SDG 1: Create sustainable employment opportunities.
- SDG 2: Protect agricultural land and food security.
- SDG 3: Provide for social amenities and recreation.
- SDG 4: Provide inclusive and equitable quality education and promote lifelong learning opportunities for all.
- SDG 5: Achieve gender equality and empowerment of women and girls.
- SDG 6: Promote efficient and effective water and sanitation infrastructure.
- SDG 7: Provide for clean energy.
- SDG 8: Promote, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.
- SDG 10: Promote equal opportunity for all people.
- SDG 11: Promote cities, communities and human settlements that are inclusive, safe, resilient and sustainable.
- SDG 12: Ensure sustainable consumption and production patterns.
- SDG 13: Take urgent action to combat climate change and its impacts.
- SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
- SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt land and nature reserve degradation and biodiversity loss.
- SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and built effective, accountable and inclusive institutions at all levels.
- SDG 17: Strengthen the means of implementation and revitalise all partnerships for sustainable development.

³ National Policy Context: SPLUMA Section 12(5) and Section 7e(ii)

The New Urban Agenda (NUA), 2016 aims for city sustainability and responds to the growth of cities and their spatial, social, cultural and economic inequalities. The NUA Implementation Framework promotes effective planning and design dependent on the principles of connectedness, inclusivity and resilience.

The Habitat III Issue Papers, No 10 – Urban-Rural Linkages, 2016 emphasise the interdependence between urban and rural areas. Urban centres rely on rural regions for various essentials like food, water, and resources, while rural areas depend on urban areas for services, jobs, and markets. **Small to medium towns play a crucial role as they connect rural and urban populations, boosting economic prospects and providing essential services.** Instead of competing for limited resources, the focus should be on sustainable investments that promote a balanced development approach, fostering a shared vision and future.

The NUA acknowledges the International Guidelines on Urban and Territorial Planning (IG-UTP), 2015 and has one goal: to foster sustainable and climate change resilient urban development, through improved policies and implementation processes of more compact, integrated and connected cities and territories:

- Make cities, communities and human settlements inclusive, safe, resilient and sustainable (SDG 11).
- Promote connectedness, inclusivity and resilience to promote compact urban footprints (SDG 11), agricultural and natural protection areas (SDG 2 & 15), preventing unwanted urban sprawl, and strengthening urban-rural linkages.
- Improving policies, plans, designs and implementation processes leading to more compact, socially inclusive, better integrated and connected cities and territories that foster sustainable urban development and are resilient to climate change (SDG 11).

The International Framework for the Evaluation of Sustainable Land Management (FESLM) (1993) focuses on sustainable agriculture and integration of natural resources socio-economic principles. FESLM spatial directives are:

- Drives for sustainable agriculture by combining technology, policies and activities to integrate natural resources with socio-economic principles.

National Laws and Policies:

The Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983) (CARA) provides control over the utilisation of the natural agricultural resources of RSA to promote the conservation of the soil, the water sources and the vegetation. CARA spatial directives are:

- The conservation of natural agricultural resources by the maintenance of the production potential of land and promoting conservation of the soil, water sources and the vegetation (SDG 15).

The National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA) calls for development to be socially, environmentally and economically sustainable as the environment is held in public trust for the people. The Act provides for a framework for integrating good environmental management into all development activities. Several Specific Environmental Management Acts (SEMAs) follow from NEMA for example NEM: Air Quality Act (No 39 of 2004). NEMA spatial directives are:

- The beneficial use of environmental resources must serve the public interest and the environment must be protected (SDG 15).

The Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) (SPLUMA) has re-affirmed the role of municipalities as the authorities of first instance and the Act allows for the creation of Provincial Legislation and Municipal By-laws. SPLUMA spatial directives are:

- Provision of a three-sphere system of integrated planning at the national, provincial and municipal level (SDG 17).

The 2012 National Development Plan (NDP) envisaged, by 2030, a united South Africa, unleashing the energies of its citizens, growing an inclusive economy, building capabilities, and enhancing the capability of the state and leaders working together to solve complex problems. NDP spatial directives are:

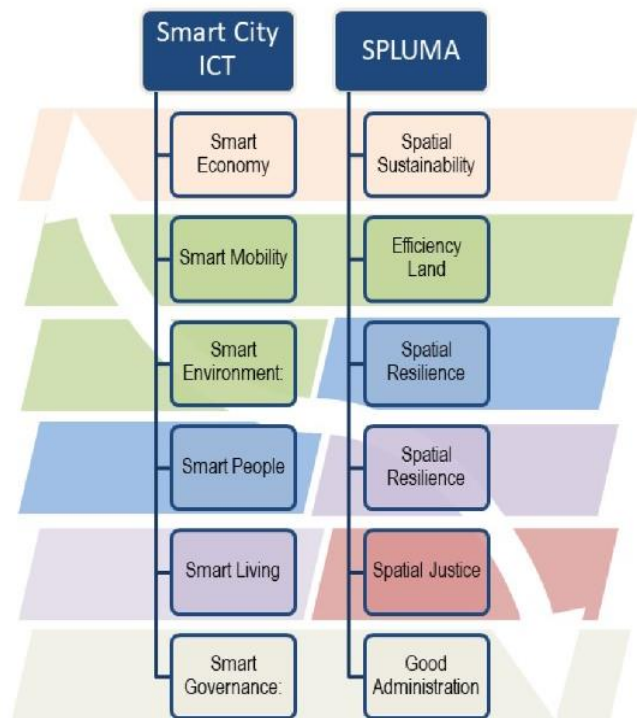
- To eliminate income poverty and reduce inequality (SDG 1 & 10).
- Setting of spatial priorities of Urban and Rural Transformation, Improving Infrastructure, Building Environmental Sustainability and Resilience (SDG 11).

The 2016 Integrated Urban Development Framework (IUDF) sets four strategic goals promoting Spatial integration, Inclusion and access to social and economic services, opportunities and choices, Inclusive, sustainable economic growth and development and Governance which provides a roadmap for spatial transformation. Quality infrastructure should drive socio-economic progress by granting access to urban markets, healthcare, education, and jobs. It's essential for road and rail networks to connect rural farmers to food processing industries. National and provincial authorities, collaborating with local governments, ought to invest in robust transport systems and ensure that Strategic Infrastructure Projects (SIPs) align with other key transportation investments. IUDF spatial directives are:

- Steers urban growth towards a sustainable model of compact, connected and coordinated towns and cities.
- Creating liveable, inclusive and resilient towns and cities (SDG 11).
- Promoting access to ICT infrastructure (such as fast broadband and mobile coverage) in both urban and rural areas which is also critical in improving rural-urban linkages.

The Smart City Initiatives promote Smart Economy boosting economic development establishing and enhancing hubs, incubators and development precincts; Smart Mobility enhancing reliability, convenience and efficiency of traditional transport using big data, machine learning and sensors; Smart Environment retrofitting buildings for energy and water efficiency and generation and use of smart meters to monitor usage; Smart People using ICT-based technologies to communicate with city authorities; Smart Living improving settlement liveability and ease of access to public Wi-Fi, surveillance to reduce crime, improving walkability, and providing leisure and fitness facilities in public open spaces and Smart Governance using technology to support decision making and deliver improved services to the public.

Figure 2: SMART City Information and Communication Technology (ICT) outcomes vs SPLUMA principles



Smart Cities Initiative spatial directives are:

- Promotes Smart Economy boosting economic development (SDG 8).
- Smart Mobility enhancing reliability, convenience and efficiency of traditional transport.
- Smart Environment retrofitting buildings for energy and water efficiency and generation (SDG 6 & 7).
- Smart People using ICT-based technologies to communicate with city authorities.
- Smart Living improving settlement liveability (SDG 11).
- Smart Governance using technology to support decision-making and deliver improved services to the public.

The National Strategy for Sustainable Development and Action Plan 2011 – 2014 (NSSD 1) defined sustainability in a South African context:

- A sustainable society implies ecological sustainability and recognises that maintaining healthy ecosystems and natural resources are preconditions for human well-being (SDG 11).
- Sustainable development is achieved by selecting and implementing a development option, which allows for appropriate and justifiable social and economic goals to be achieved (SDG 11).

The [National Spatial Development Framework, 2018 \(NSDF\)](#) recognises the need for enhanced 'regional development anchors' in rural areas. NSDF 2018 spatial directives are:

- Recognises the need to develop and strengthen regional-rural ‘regional development anchors’ in rural areas to:
 - (1) connect urban to rural areas in mutually beneficial ways.
 - (2) act as catalysts for regional-rural development and promote a ‘polycentric rural service-delivery network, such service-delivery networks need to provide quality public services, and ensure far greater levels of rural-to-rural interaction and local economic development.
 - (3) determine ‘rural edges’ in rural areas to ensure the protection of (a) the unique, intrinsic qualities of our rural areas, (b) their cultural, customary and historical value, and (c) the often highly sensitive ecosystems they harbour, pursuing intra-rural trade and greater resilience of rural areas through diversification avoiding ‘single economic sector’ places.

The Small Town Regeneration (STR) Programme aims to look for ways to strengthen small town economies; provide better quality of life; and build and leverage local assets. It recognises that regional connectivity and economic value chains are key drivers of large-scale economic development. This understanding offers opportunities for cross boundary municipal collaboration, cooperative spatial governance, and joint planning to foster a shared economy. STR Programme spatial directives are:

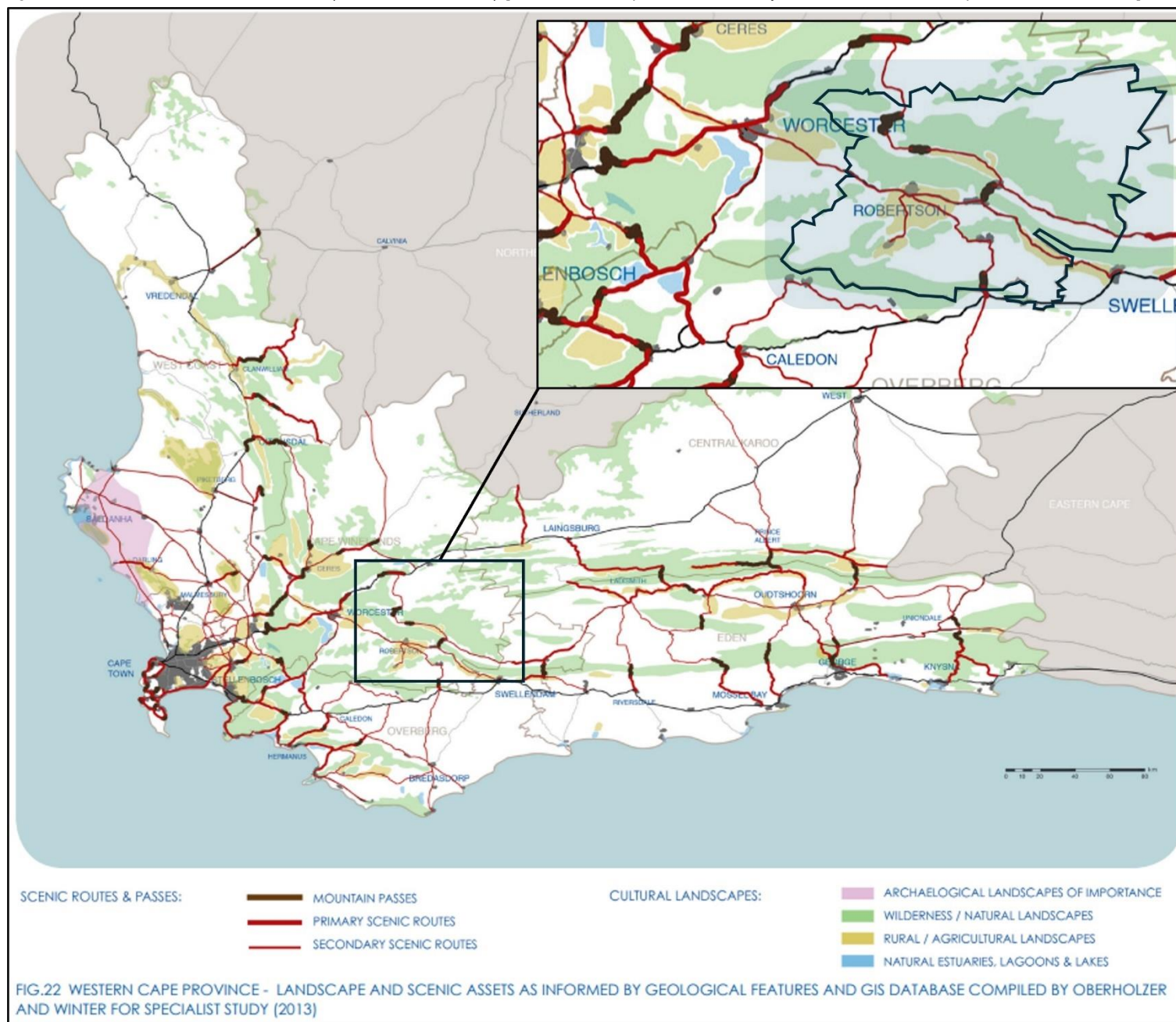
- Regeneration, restoration and fulfilling the economic potential of underperforming small towns (SDG 8).

Provincial Laws and Policies:

The Western Cape Provincial Spatial Development Framework (PSDF) builds on the complementary national and provincial development agendas of the NDP and OneCape 2040 to promote three spatial themes: resources, space economy and settlement embedded in spatial governance. The PSDF serves to guide the location and form of public investment in the natural and built environment so that the returns on these investments are consistent with the development objectives of the Western Cape Government.

A number of scenic landscapes of high significance are under threat and require strategies to ensure their long-term protection as demarcated in the Cultural and Scenic assets map.

Figure 3: WCG Cultural and Scenic Assets (WCG: DEADP, 2019) [Cultural landscapes as identified by Oberholze and Winter Specialist Studies, 2013]



Land use planning principles set out in SPLUMA and the Western Cape Land Use Planning Act, 2014 (Act 3 of 2014) (LUPA) apply to all organs of state responsible for the implementation of legislation regulating the utilisation and development of land, and guide spatial development frameworks, zoning schemes or any policy concerning land use planning, any steps to ensure sustainable development and the consideration of applications that impact on the utilisation and development of land.

The Provincial Strategic Plan (PSP) sets out the Western Cape Government's vision and strategic priorities. The WCG remains committed to building an "Open Opportunity Society for All" in the Province. The PSP follows a "whole-of-society" approach in which citizens, civil society and business actively partner with the state – encapsulated in the WCG's "Better Together" slogan. The PSP commits South Africa to ending poverty by 2030 and the longer-term OneCape 2040 vision of "a highly skilled, innovation-driven, resource-efficient, connected, high-opportunity society for all". The PSP underpins the six core values of the WCG: Caring, Competence, Accountability, Integrity, Innovation and Responsiveness.

The Provincial Biodiversity Strategy and Action Plan (PBSAP) aligns with the National and Provincial Medium Term Strategic Framework 2014 - 2019 and the National Biodiversity Strategy and Action Plan (NBSAP) 2015 - 2025. It integrates South Africa's obligations under the Convention on Biological Diversity into the provincial context. PBSAP spatial directives are:

- Prioritises and co-ordinates the collective efforts of stakeholders to ensure that biodiversity and ecological infrastructure is optimally conserved, sustainably utilised and that benefits are equitably shared (SDG 17).

The SmartAgri Plan, the Western Cape Climate Change Response Framework and Implementation Plan for the Agricultural Sector (2016) builds on the Western Cape Climate Change Response Strategy (2023) and its Implementation Framework, specifically the focus area of "Food Security". It also aligns closely with the WCG. SmartAgri Plan spatial directives are:

- Protect agricultural land and food security (SDG 2).

The Western Cape Land Use Planning Guidelines for Rural Areas - March 2019, envisage to create a balance between development and conservation in rural areas of the Western Cape. This vision aims to protect natural resources and biodiversity as well as preserve the unique rural character and heritage, support agricultural viability and rural livelihoods, and promote environmentally responsible land use practices throughout the Western Cape Province. Assist municipalities to plan and manage their rural areas more effectively, and to inform the principles of their zoning schemes and spatial development frameworks.

The objectives of the Rural Areas Guideline provide directives:

- Promote sustainable development in appropriate rural locations and ensure the inclusive growth of the rural economy.
- Safeguard priority biodiversity areas and the functionality of the Province's life supporting ecological infrastructure and ecosystem services (i.e. environmental goods and services).
- Maintain the integrity, authenticity and accessibility of the Western Cape's significant farming, ecological, coastal, cultural and scenic rural landscapes, and natural resources.
- Provide clarity to all role players and partners (public and private) on the type of development that is appropriate beyond the current built-up areas, suitable locations where it could take place, and the desirable form and scale of such development.
- Be viewed as a gender mainstreaming tool which will move Saldanha along towards the achievement of equality, particularly the youth and gender equality imperatives in rural land use planning.

In addition to the NEMA, SPLUMA and LUPA principles, as well as the strategic objectives of the Smart Agri Plan in response to climate change and food security, the following principles underpin the Rural Areas Guideline:

- Good quality and carefully sited development should be encouraged and located as far as possible in existing settlements;
- Accessibility should be a key consideration in all land development decisions;
- New building development should be strictly controlled with respect to scale, dimension, height, colour, roof profile, etc;
- Land development must avoid negative impact on river systems and should therefore not be permitted below the 1:100 flood line or within 100m of a river bank, whichever distance is greater. Where the flood line has not been determined or is out of date, a flood line study is required;
- Land development proposals must avoid negative impacts on coastal resources and be responsive towards coastal risk zones. Therefore, new settlement or resort development along the coastline should be avoided;
- Consider historical land use to guide future land use, especially with regard to future contribution of land to national food security;
- All development in rural areas should be in keeping and in scale with its location, and sensitive to the character of the rural landscape and local distinctiveness;
- Only activities that are appropriate in a rural context, generate positive socio-economic returns, and do not compromise the environment or ability of the municipality to deliver on its mandate is supported;

- Consider in all decision-making, the relevance of how many and which women and men will benefit from the development and in what respect. Also consider whether the development will have any negative or harmful effects on women or men – and particularly, those less advantaged;
- The cumulative effect of all ancillary and non-agricultural land uses should not detract from the rural character of the landscape and the primary agricultural activities;
- Rural activities must have a focus on sustainability and be in harmony with the surrounding agricultural landscape;
- Agricultural resources should be protected for increased agricultural production;
- Gender-transformative aspects must be considered as part of the planning, development, policy making, decision making, budgeting and consultation processes, including, but not limited to the plea of rural women and safety of rural communities.

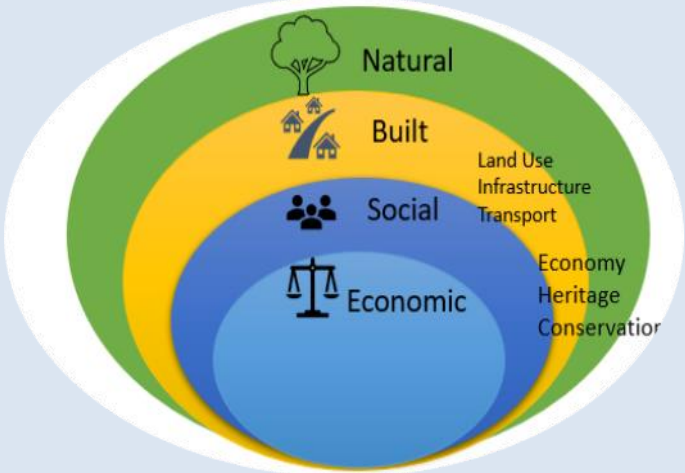
The cultural and Scenic Assets map is a result of the **implications**

- A specialist study was undertaken in 2013 on The Significance of Heritage and Scenic Resources. The study reaffirmed that the Western Cape's cultural and scenic landscapes and specifically noted that Saldanha Bay has Archaeological landscapes of importance.

1.6 Development Values and Performance Qualities

Planning shifted from separate development and modernism (functionalism) to human and nature-centred settlement making. Such settlements are scaled for pedestrians (neither pedestrians nor vehicles dominate); are compact (with high building densities); are integrated; have composite parts which reinforce each other; have a strong spatial feel with well-defined public spaces and have complex spatial structures offering choices in terms of intensity of interaction, privacy of living conditions, lifestyles, housing options and movement systems (physical, social and economic integration).

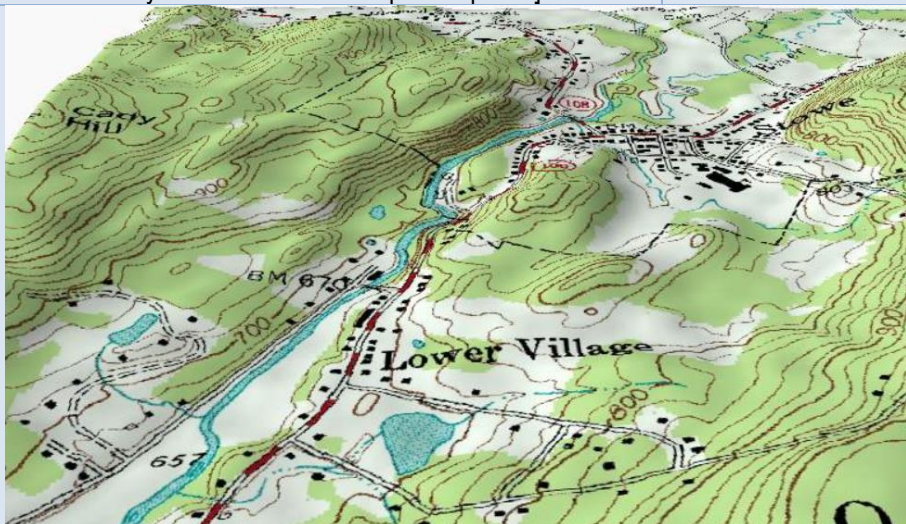
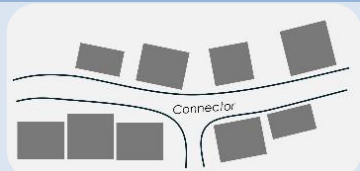
Well-performing settlements and regions have the qualities of Liveable Environments and Sustainable Settlements. These performance qualities are defined and described below and reference is made to the SPLUMA principle each quality represents:

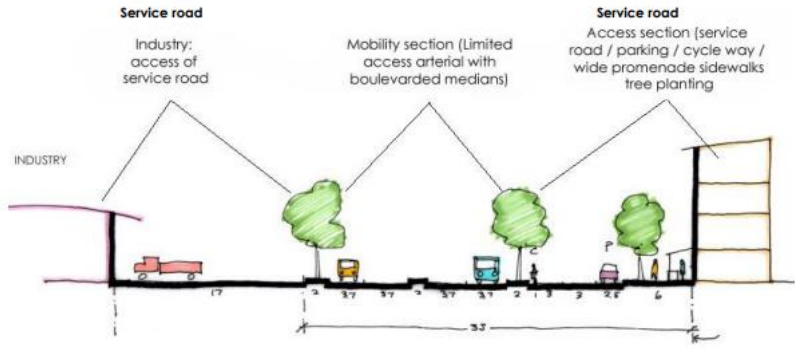
Definition SPLUMA	Features and qualities
Liveable Environments: <i>A liveable settlement satisfies more than the basic needs of a community as the individual as well as the community's needs for social facilities and health facilities are met. Quality of life is key. (Van Kamp et al, 2003). (Social Justice).</i>	<i>Liveable environments are recognised by the present relationship between people and their settlements and feature economic growth, accessibility and place identity. (Resilience).</i>
Sustainable Settlements: - Are well-managed, compact entities in which economic growth and social development are in balance with the carrying capacity of the natural systems on which they depend for their existence and result in sustainable development, wealth creation, poverty alleviation and equity (Department of Local Government and Housing, 2005). (Sustainability). - Improve the liveability of settlements by reducing the impact on the environment through reduced use of resources and the generation of less waste. (Efficiency).	<i>Present the future relationship between settlement and environment and feature Ecological integrity (Planet), Social justice (People) and Economical effectiveness (Prosperity).</i> 

1.6.1 Spatial Elements of Settlements and Regions

Settlements are structured spaces that facilitate the interplay between a) formally planned development (assigned land uses and corresponding engineering services) and spontaneous development (settlement plans that accommodate uncertainty and change) as well as b) public environments, shared by all inhabitants, vs. private realms of individual households.

The spatial elements of regions are topography (form), cultivation and landscape and man-made elements, which include road networks and settlements, as described below (CSIR, 2000):

Space: built and natural		
At settlement level		At regional level
• Consist of spaces in relation to the whole (settlement and its environment) and to each other within a settlement and are not spaces in isolation. • A continuum or hierarchy of public spaces and movement systems, which attract and give order to activities, events and elements in accordance with their need for publicness or privacy. • Structured and diverse, spaces characterised on continuum of public to private. [Public spaces are places where people meet, comprised of urban “rooms” and connectivity “seams”. Streets are public spaces].		• Delineated and merged landscapes, which are characterised by conservation, cultivation and nature. • Mountains and Fynbos ecosystems, Rivers and Freshwater ecosystems, Wetlands, Formal and Informal Conservation areas, Arable land.
		
Community facilities/ Institutions/ Amenities		
At settlement level	and	At regional level
• Most valued by society, which have the potential to foster social cohesion, such as institutions of learning, worship, exchange and markets, serve as structuring elements in settlements. • Including public open space, demands safety and quality. • Give unique character to places and often attract informal activities. • Provision guided by population thresholds and access (Department of Human Settlements, 2019). • Location and clustering in relation to one another and to other structuring elements is critical to ensure efficient use of public land and resources (central places, easily accessible i.t.o movement patterns, announced by public space). • Location often determines private or public use.		
		

Connection including networks and systems	
At settlement level	
	A movement system is: A network of spaces that people move through and allows for the public life of a community. Refers to e.g. roads and streets, pedestrian and bicycle routes, and public transport systems, such as passenger rail.
At regional level	
Movement and/or circulation networks are: • Linear systems connecting settlements. • Specific routes along which people, goods and services are channelled. • Movement infrastructure such as main routes, highways, ports, and railway lines and stations between and within settlements.	
Utility services (engineering services)	
Settlement	
• Essential for settlement function and public health, including water provision, sewerage removal, stormwater disposal, solid waste removal and electricity supply. • Should be provided as efficiently and cost-effectively as possible, while appropriately considering human and nature centred approaches to settlement making. • Should follow settlement structure, not lead it.	
Regional	
• Bulk services are essential to functioning of regions (area) e.g. solar farms.	

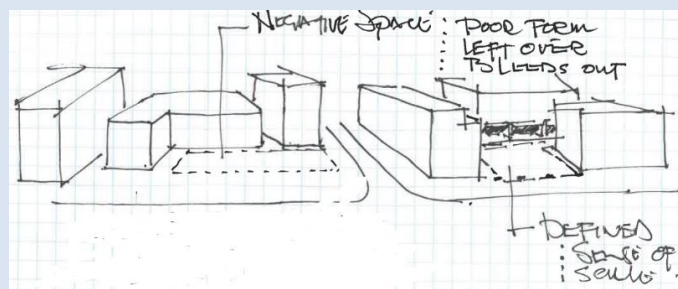
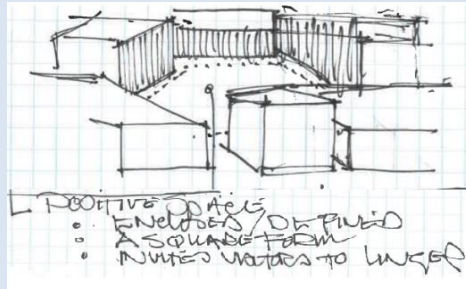
1.6.2 Structural Tools: Measures and SPLUMA Principles

Settlements demonstrating desirable spatial qualities are scaled for pedestrians (neither pedestrians nor vehicles dominate); are compact (with high building densities); are integrated and composite parts reinforce each other; have a strong spatial feel with well-defined public spaces and have complex spatial structures offering choices i.t.o. intensity of interaction, privacy of living conditions, lifestyles, housing options and movement systems.

The application of four spatial measures is central to the use of space to create positive settlements: definition, scale, flexibility and intensity. Each spatial measure consists of two opposite measures or structural tools as per the table below:

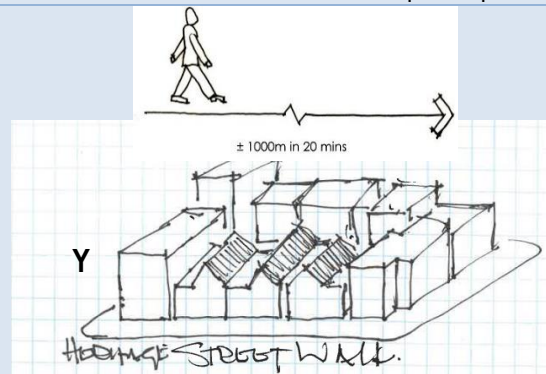
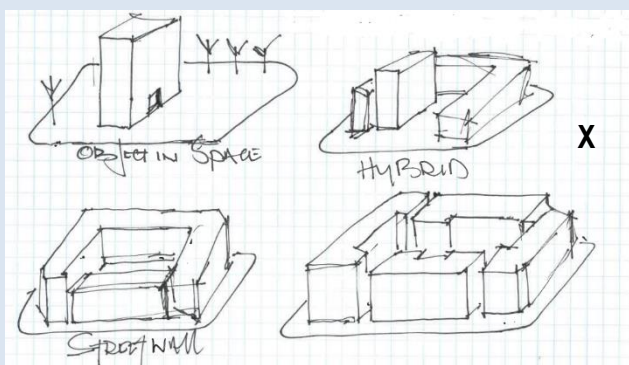
Spatial Measures

Definition: In positive environments, public open spaces are defined by buildings and other space-defining elements, such as walls and landscaping. The elements create a feeling of enclosure rather than free-standing elements with no relation to one another.



Structural Tools: Continuity and Discontinuity (Containment).

Scale: the relationship between size, distance and height. "Human Scale" is a norm for all development planning.



Structural Tools: Externalisation and Localisation.

Flexibility: the creation of spatial structures that accommodate unexpected change over a period of time.

Structural Tools: Same and Different (Homogeneity and Heterogeneity).

Intensity: Refers to the creation of:

- High-level support for economic and social goods and services.
- The conditions for sustainable public transport systems.
- Effective infrastructure use, improved land use, contributing to compact urban areas, reduced transportation and energy use as well as the reduction of pollution.



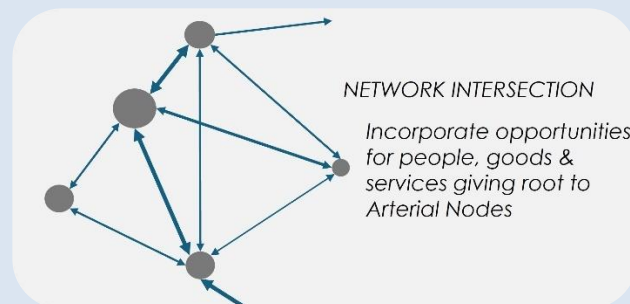
Structural Tools: Density and Sparsity (Openness).

Considerations:

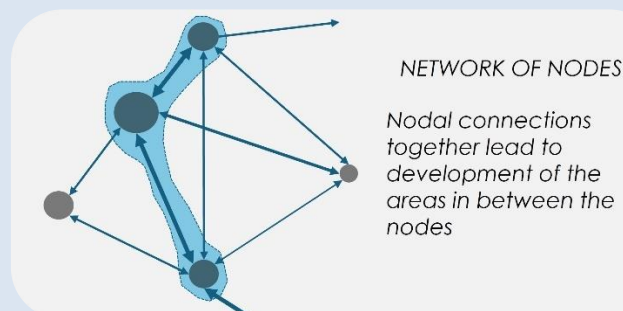
- Sensitively intensify development opportunities in apparently developed but often underdeveloped well located urban areas paying attention to urban quality;
- Sensitive infill and redevelopment along main routes in well located precincts;
- Sensitivity towards existing heritage buildings; and
- Enhancing the street experience through landscaping and building design quality in new developments.

The application of structural tools creates man-made spatial elements such as:

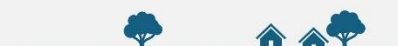
- **Centres/ Parks/ Precincts** (e.g. Administrative, Educational, Legal and Services).
- **Nodes** (e.g. Collective & Specialised Economies, Services, Manufacturing, Tourist Attractions): Highly accessible, high-intensity land use activity located along or at the start and end points of existing, emerging or national corridors: include areas of residence, industrial activity or trade that are either generators of transport demand and/or supporters of transport functions.

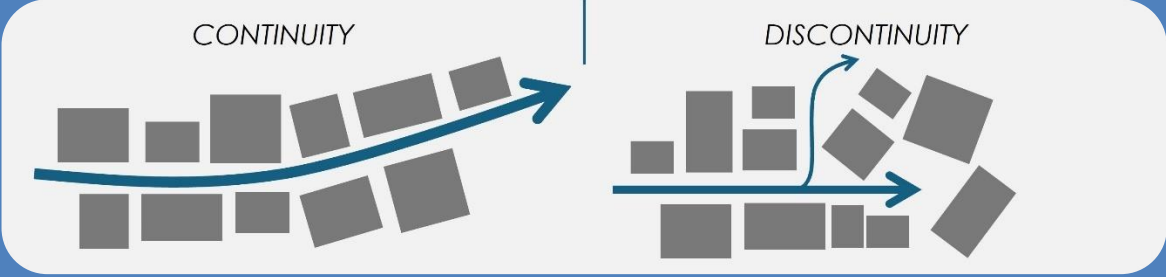


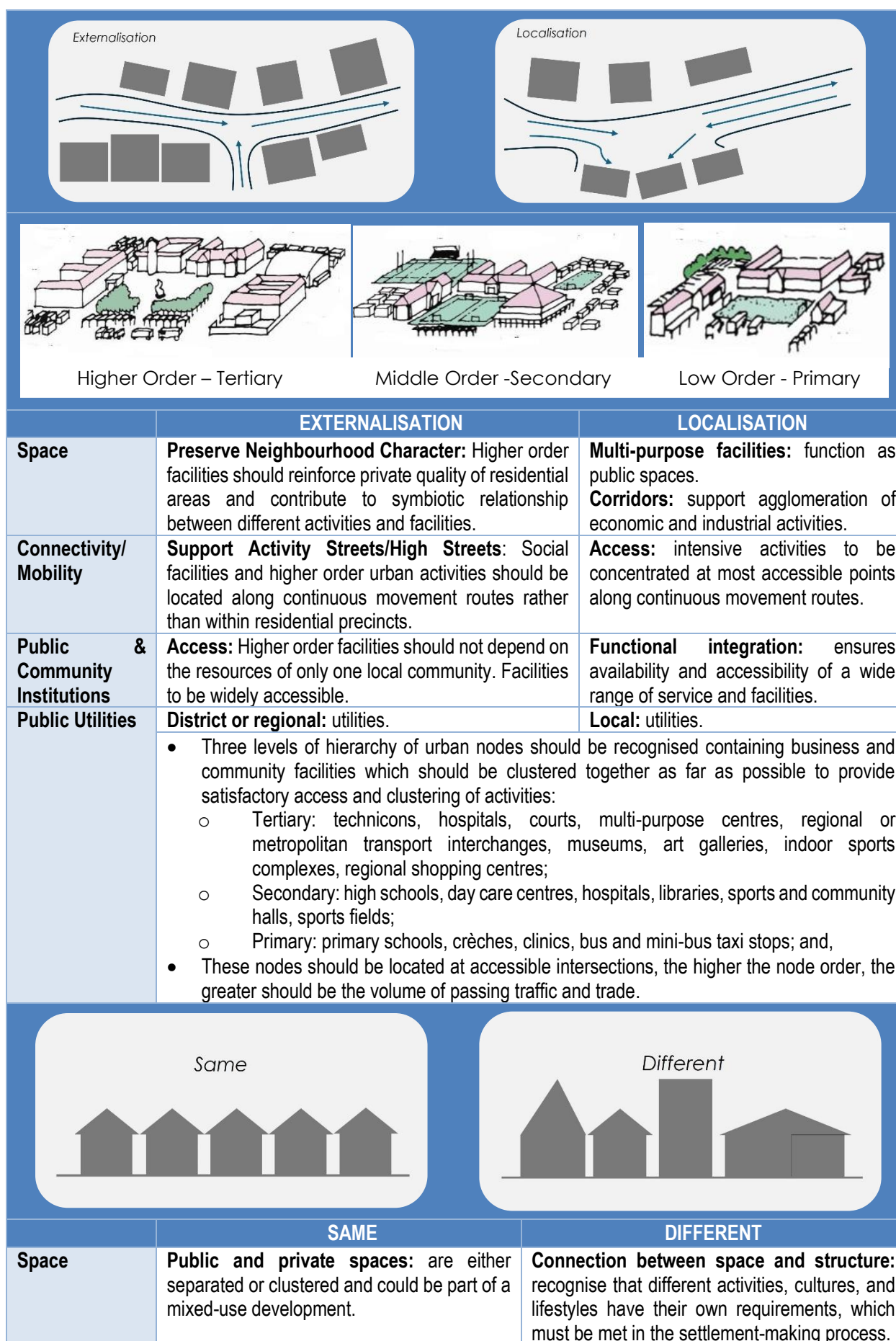
- **Hubs** (Economic specialisation: Jewellery, Petro-Chemical, Logistic). Highly accessible.
- **Axis or Streets** (Transport & mobility spines).
- **Corridors**: include, but not limited to scenic, tourism, freight, transport, industrial development zones (IDZ), intensive agriculture or rural including agri-industry and related and supporting services and conservation.
- **Zones/ Precincts** (Tourism, Commercial (special economic zones), Agricultural and Irrigation, Alternative Energy, Industrial (IDZs and SIDZs).

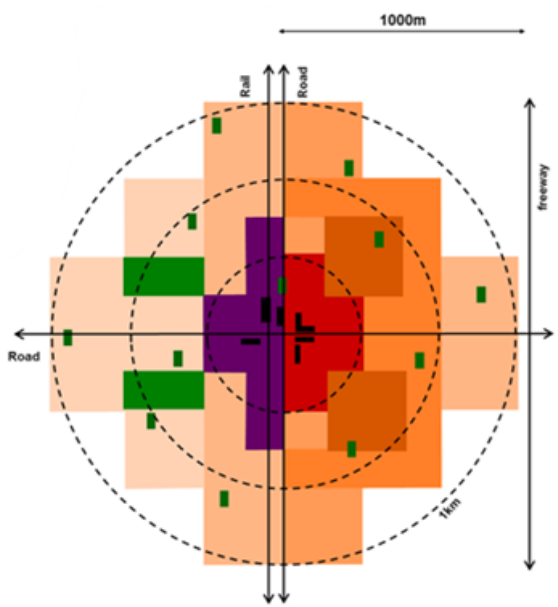


The table below provides a description of the structural tools applied to the spatial elements and its resultant man-made elements and or qualities:

DENSITY  Urban SPARSITY  Rural	
	DENSITY (REINFORCEMENT) SPARSITY (OPENNESS)
Space	Economic agglomeration: Integration of different developments (new and old). Densification: Reduction of erf size, alternative housing types (housing typologies), infill, redesign, mixed-use development. Natural open space network: a key component of a sustainable urban landscape. Movement networks: part of a system of public places. Protection and enhancement of heritage and natural resources: through either Heritage Overlay Zones or Conservation (biophysical) Overlay Zones and categories.
Connectivity/ Mobility	Single corridor movement network: Different forms of transport are brought together (pedestrian, bicycle, train, taxi, bus and vehicles). Single mode transport networks or roads: population thresholds are too low to justify other modes.

	Activity Axis: The core of activity corridor/ tertiary network or street (local network). Activity nodes: Different forms of transport connect.	
Public & Community Institutions	Clustered, multipurpose facilities and nodes where different social services and programmes are offered. A system of public spaces and hierarchy of facilities that order activities and resources.	Single facility e.g. school.
Public Utilities	Infrastructure cluster where different utilities are managed e.g. water & sewerage.	Single Infrastructure yard e.g. sewerage works or solar farm.
		
	CONTINUITY	DISCONTINUITY (CONTAINMENT)
Space	Enclosure: Create a sense of enclosure and definition. Buildings, either through the building itself, its walls, or planting, should contribute to defining the public space it abuts.	Natural habitats: Ecological systems, complex, continuous, allow migration of species, productive/ conservation/ preservation space. Integrate natural and rural areas into urban landscape.
Connectivity/ Mobility	Ordering structure of movement networks: <i>Settlement level:</i> network energy released through stopping, exit (not through movement); retain rather than integrate space. <i>Inter-settlement level:</i> Routes that do not allow stopping (i.e. freeways) serve as integrators of space.	Special Places: Along higher-order routes, create special places, such as public open space (squares) and parks. Privacy: On lower-order routes create thresholds that encourage qualities of semi-private and private space, discouraging through-traffic.
Public & Community Institutions	Integration: Integrate new parcels of development with existing development to encourage agglomeration. Absorb settlement output: in green spaces i.e. evaporation ponds and stormwater retention systems.	Access and Scale: Use public space to interrupt built form, to ensure convenient access or create dimensions of scale. Clustering: Multifunctional centres and mobile services.
Public Utilities	Above Ground: Infrastructure.	Underground: Infrastructure.



Connectivity/ Mobility	Non-motorised vs motorised: designate hierarchies, especially in the road network, to adequately accommodate different types of users. e.g. highway vs residential street.	Non-motorised vs motorised corridors: intensification of development; mixed-uses; pedestrian and cycling friendly; high quality streetscaping.
Public & Community Institutions	Minimise Institutional Complexity: Centralise decisions at institutional level, not at site level.	Mixed-use: commercial, social, service, trade and residential areas of different densities and types.
Public Utilities	Minimise Institutional Complexity: Centralise decision making involving local directives and needs.	Various utility types: solar farm, electrical transformers, etc.
Different income groups and/or densities and/or uses  Human Settlement projects should not be targeted at a single income group exclusively, e.g. BNG or site and service (S+S), but should always include at least a GAP housing and top structure BNG component even if only comprising 10% or 20% of the units. Where possible market housing should be included in projects as well. Arrangement of housing for various income groups should be according to the principle of the socio-economic gradient with higher end of market closest to main routes and giving serious consideration to the design of the interface between them.		

(CSIR, 2000)

1.7 Structural Tools: Bioregional Spatial Planning Categories

The Bioregional Spatial Planning Categories (SPCs), consistent with the principles of bioregional planning and UNESCO's MaB (Man and the Biosphere) Programme have their origins in the Bioregional Planning Framework for the Western Cape. Bioregions can occur across municipal boundaries to provide meaningful geographical areas with common interests. SPCs serve to organise space and provide structure and the implementation of these categories guide development to the most appropriate areas and support conservation and integration of natural areas, e.g. nature reserves and biospheres (WCBA, 2021).

The conservation and biodiversity categories, their definition and management objective, as well as the Bioregional Spatial Planning Categories (SPCs) in brackets, follow in the table below.

BSP Category	Protected Areas	CBA 1	CBA 2	ESA 1	ESA 2	ONA	NNR
SPC							
Core 1							
Core 2							
Buffer 1							
Buffer 2							
Intensive Agriculture							
Settlement							
Industry & Existing Mining							

*(CBA – Critical Biodiversity Areas, ESA – Ecological Support Areas, ONA – Other Natural Areas, NNR – No Natural Remaining) (WCBSP, 2017)

Table 1: CBA & ESA Map Categories, recommended corresponding Spatial Planning Category

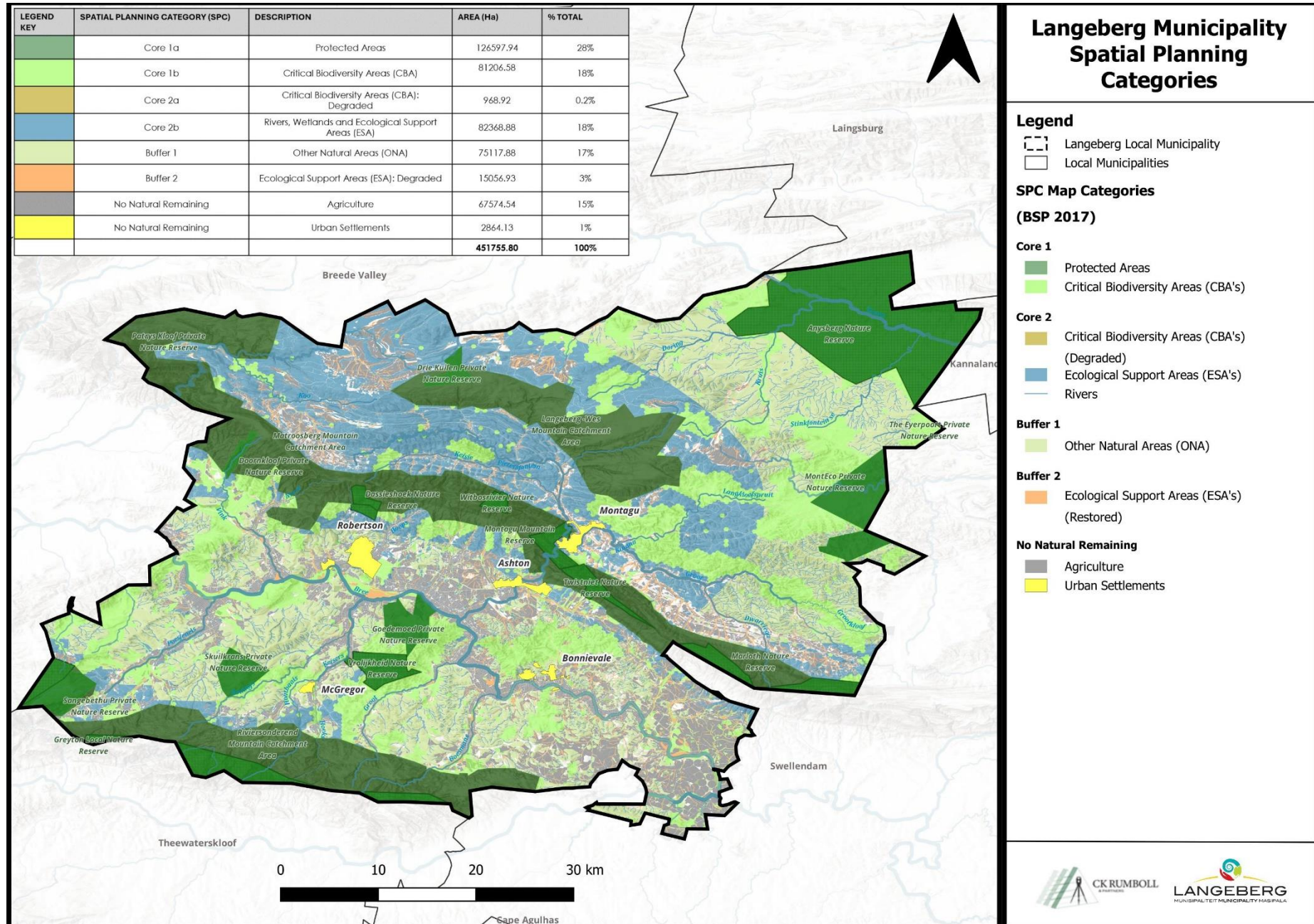
Map Category (SPCs)	DEFINITION	DESIRED MANAGEMENT OBJECTIVE	SUB-CATEGORY	ALLOWABLE LAND USE
Protected Area (Core 1)	Areas that are proclaimed as protected under national or provincial legislation.	Must be kept in a natural state, with a management plan focused on maintaining or improving the state of biodiversity. A benchmark for biodiversity.	n/a	No go area, only non-consumptive activities are permitted, e.g. passive recreation and tourism (hiking trails, bird watching), religious ceremonies, research and environmental education & associated buildings. No agriculture.
Critical Biodiversity Area 1 – CBA 1 (Core 1)	Areas in a natural condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.	Maintain in a natural or near-natural state, with no further loss of habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive land uses are appropriate.	CBA: River	
			CBA: Estuary	
			CBA: Wetland	
			CBA: Forest	
			CBA: Terrestrial	
Critical Biodiversity Area 2 – CBA 2 (Core 2)	Areas in a degraded or secondary condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.	Maintain in a functional, natural or near-natural state, with no further loss of natural habitat. These areas should be rehabilitated.	CBA: Degraded	Biodiversity compatible and low impact conservation land uses as per Core 1 areas, but allowing for a limited increase in the scale of development in less sensitive areas.
Ecological Support Area 1 – ESA 1 (Core 2)	Areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of PAs or CBAs, and are often vital for delivering ecosystem services.	Maintain in a functional, near-natural state. Some habitat loss is acceptable, provided the underlying biodiversity objectives and ecological functioning are not compromised.	ESA: Foredune	
			ESA: Forest	
			ESA: Climate Adaptation Corridor	
			ESA: Coastal Resource Protection	
			ESA: Endangered Ecosystem	
			ESA: River	
			ESA: Estuary	
			ESA: Wetland	
			ESA: Watercourse Protection	
			ESA: Water Source Protection	
			ESA: Water Recharge Protection	
Ecological Support Area 2 – ESA 2 (Buffer 2)	Areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of PAs or CBAs, and are often vital for delivering ecosystem services.	Restore and manage to minimise impact on ecological infrastructure, especially soil and water related services.	ESA: Restore from NN	Activities and uses directly related to primary agricultural enterprise, including a homestead, agricultural buildings and worker accommodation, (additional dwelling units limited to 5 units). Additional land uses include small scale holiday accommodation (farm stay, B&B, guesthouse, boutique hotel); restaurant, lifestyle retail, venue facility; farm stall & farm store; home occupation; local product processing (e.g. cheese making), and tourist and recreational facilities (e.g. hiking trail, mountain biking, 4 x 4 routes).

ONA: Natural to Near-Natural (Buffer 1 & 2)	Areas that have not been identified as a priority in the current systematic biodiversity plan, but retain most of their natural character and perform a range of biodiversity and ecological infrastructure functions. Although they have not been prioritised for biodiversity, they are still an important part of the natural ecosystem.	Minimise habitat and species loss and ensure ecosystem functionality through strategic landscape planning. Offers flexibility in permissible land uses, but some authorisation may still be required for high-impact land uses.	ONA: Natural to Near-Natural	Biodiversity compatible uses as informed by transformation thresholds, including low density rural residential development, resort and holiday accommodation, tourist and recreation facilities, additional dwelling units, renewable energy projects. Extensive agriculture: game and livestock farming.
			ONA: Degraded	
No Natural Remaining (Intensive Agriculture Settlements, Industry, Mining)	Areas that have been modified by human activity to the extent that they are no longer natural, and do not contribute to biodiversity targets. These areas may still provide limited biodiversity and ecological infrastructure functions, even if they are never prioritised for conservation action.	Manage in a biodiversity-sensitive manner, aiming to maximise ecological functionality. Offers the most flexibility regarding potential land uses, but some authorisation may still be required for high-impact land uses.	No Natural Remaining	Activities and uses directly related to the primary agricultural enterprise. Farm buildings and associated infrastructure (e.g. homestead barns, farm worker accommodation, etc.). 5 additional dwelling units. Ancillary rural activities of appropriate scale, which do not detract from farming production but diversify farm income, and add value to locally produced products. Agricultural activities of an excessive scale (regional product processing) and non-agricultural activities not suited for location in the Intensive Agricultural and Buffer 1 and Buffer 2 areas to be located within settlements or their "fringe areas".

SPC categories were used to generate an SPC map for Langeberg municipal area to be used as basis for environmental factors to be considered when development is contemplated. Sustainable development is generally defined as development that satisfies the needs of the current generation without jeopardising the ability of future generations to provide for their needs. The National Environmental Act, Act 107 of 1998, defines sustainable development as integration of social, economic and environmental factors through planning, implementation and decision-making to ensure that development can support future generations.

The Langeberg SPC map follows. Please note that an A0 hard copy and a GIS soft copy of this map is available from Langeberg Municipality.

Map 2: Langeberg Spatial Planning Categories

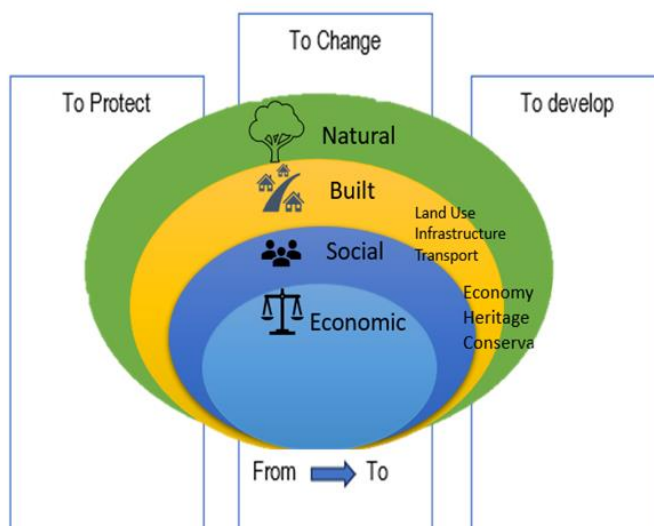


CHAPTER 2: Spatial and Sectoral Plan Analysis and MSDF Review

The spatial analysis of three environments, that is biophysical, socio-economic and built environment, and the sector plans will provide broad directives within and across borders from Langeberg Municipality. These and the directives derived from the applicable legislation governing these environments and related sector plans form the basis for the proposals to be made at settlement and rural area level. Directives generated from the legal and Status Quo analysis, can broadly be categorised into three proposal types:

- to protect;
- to change; and
- to develop resources in the three environments.

The proposals and directives in the chapters to follow, are presented accordingly.



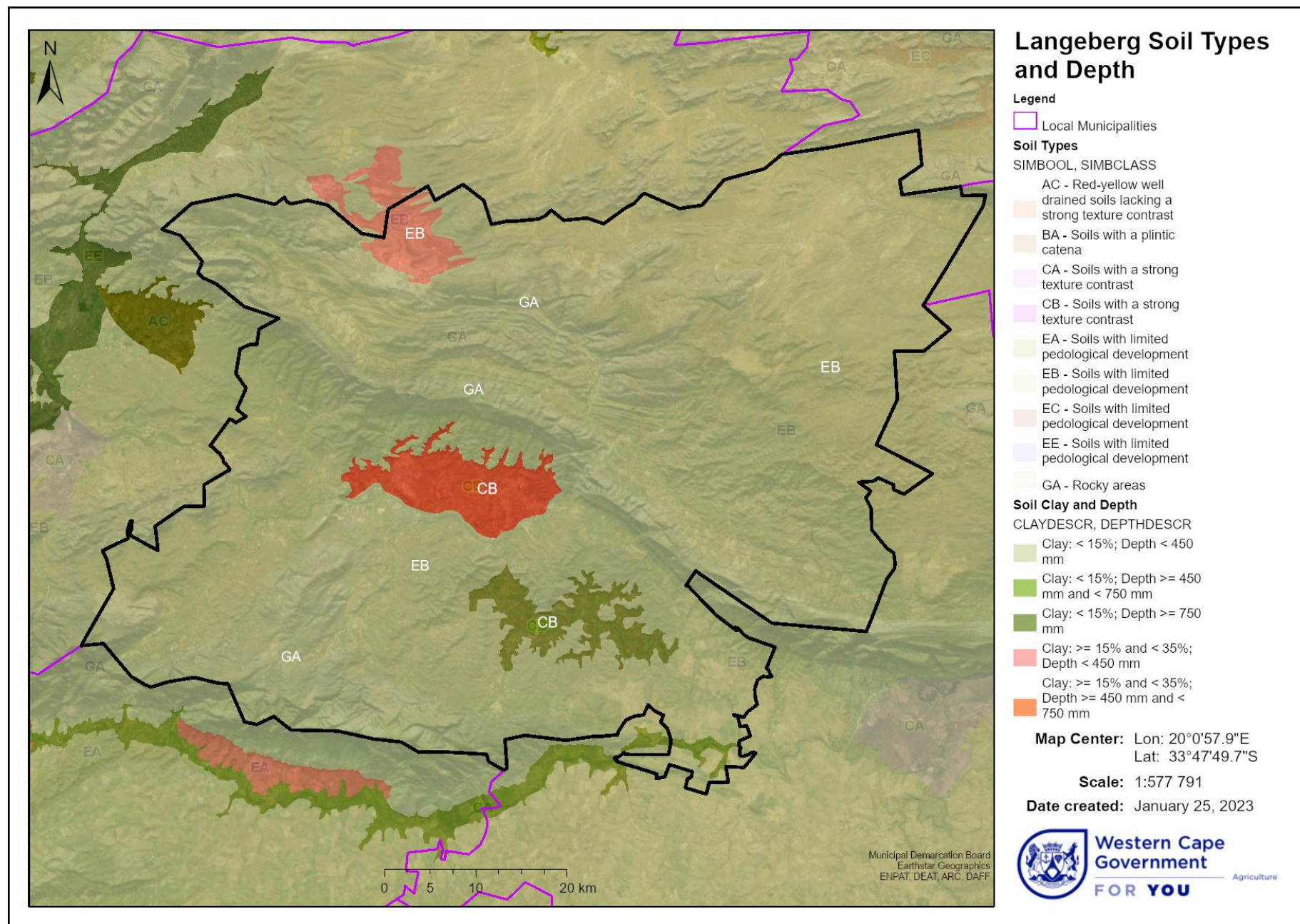
2.1 Spatial Analysis of Status Quo

The spatial analysis considers three environments: biophysical, socio-economic and built. From the analysis general directives arise that inform the settlement and rural proposals:

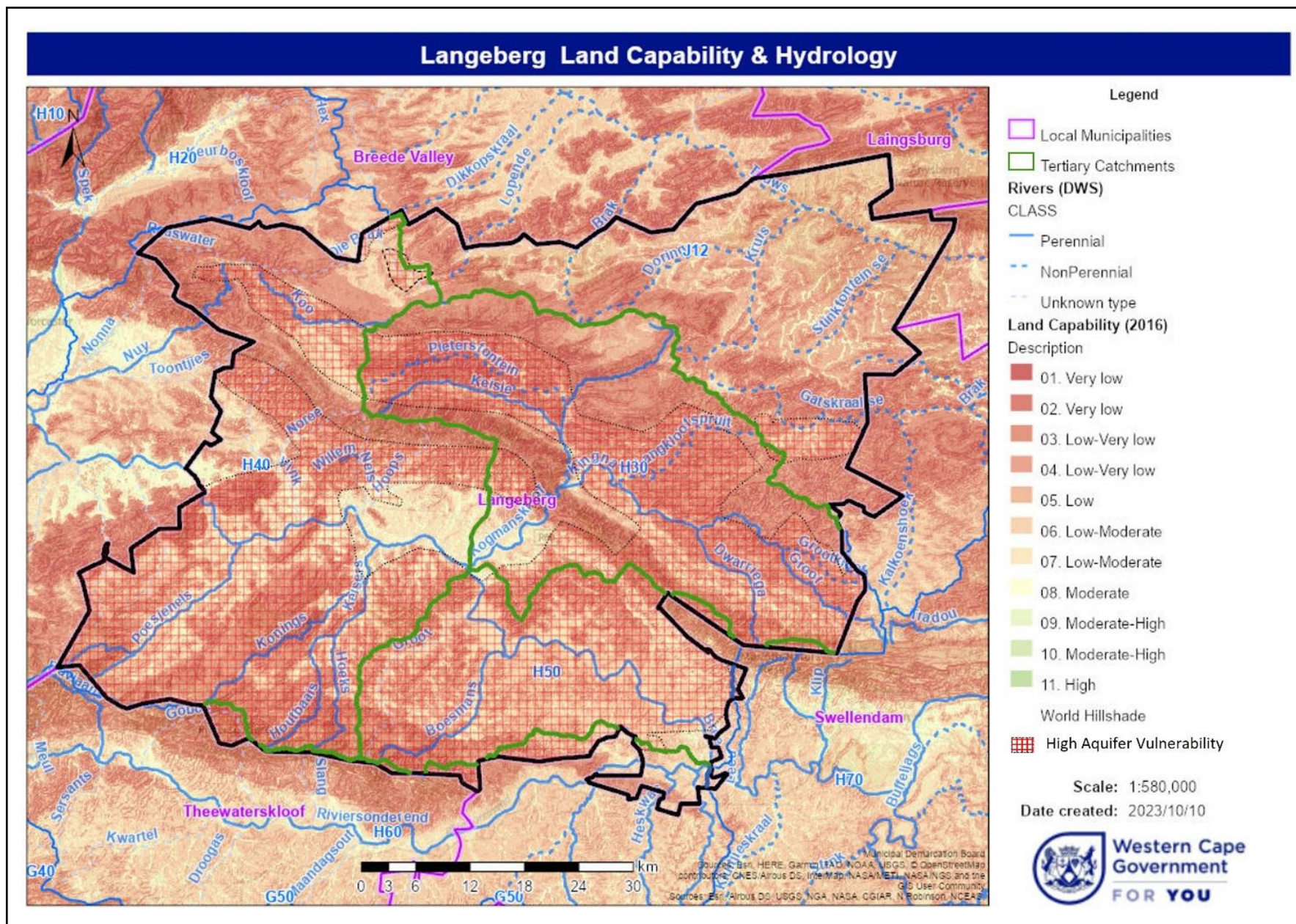
2.1.1 Biophysical Spatial Analysis

Geology & Soils:	<u>Soils suitable:</u> Soil clay percentage overall in the Langeberg municipal area is less than 15%. Around and between Robertson and Ashton and around Bonnievale and in Northern Koo Valley are soils with strong texture contrasts and 15% and 35% clay, ideal for cultivating stone fruit and vineyards. <u>Soil depth:</u> Soils surrounding Robertson, Montagu, McGregor, Ashton and Bonnievale are between 450 and 750 mm deep. Between Bonnievale and McGregor in the vicinity of the Vrolijkheid Nature Reserve, soils are deeper than 750 mm.
Directives	Protect areas with high land capability in the following valleys: Keisie; Koo, Wabooms or Brakrivier; Breede River; between McGregor and Riviersonderend Mountains. Control erosion in areas highly susceptible to erosion (rural areas and settlements): Require mitigation along Vink, Keisie, and Touws Rivers regardless development be(ing) contemplated or not.
Directives from 2015 MSDF	➤ High clay content requires detailed geo-technical studies; ➤ Soils with greater soil depths (located between McGregor and Bonnievale) generally underlined by shale formations should be protected.

Map 3: Langeberg Soil Types and Depth

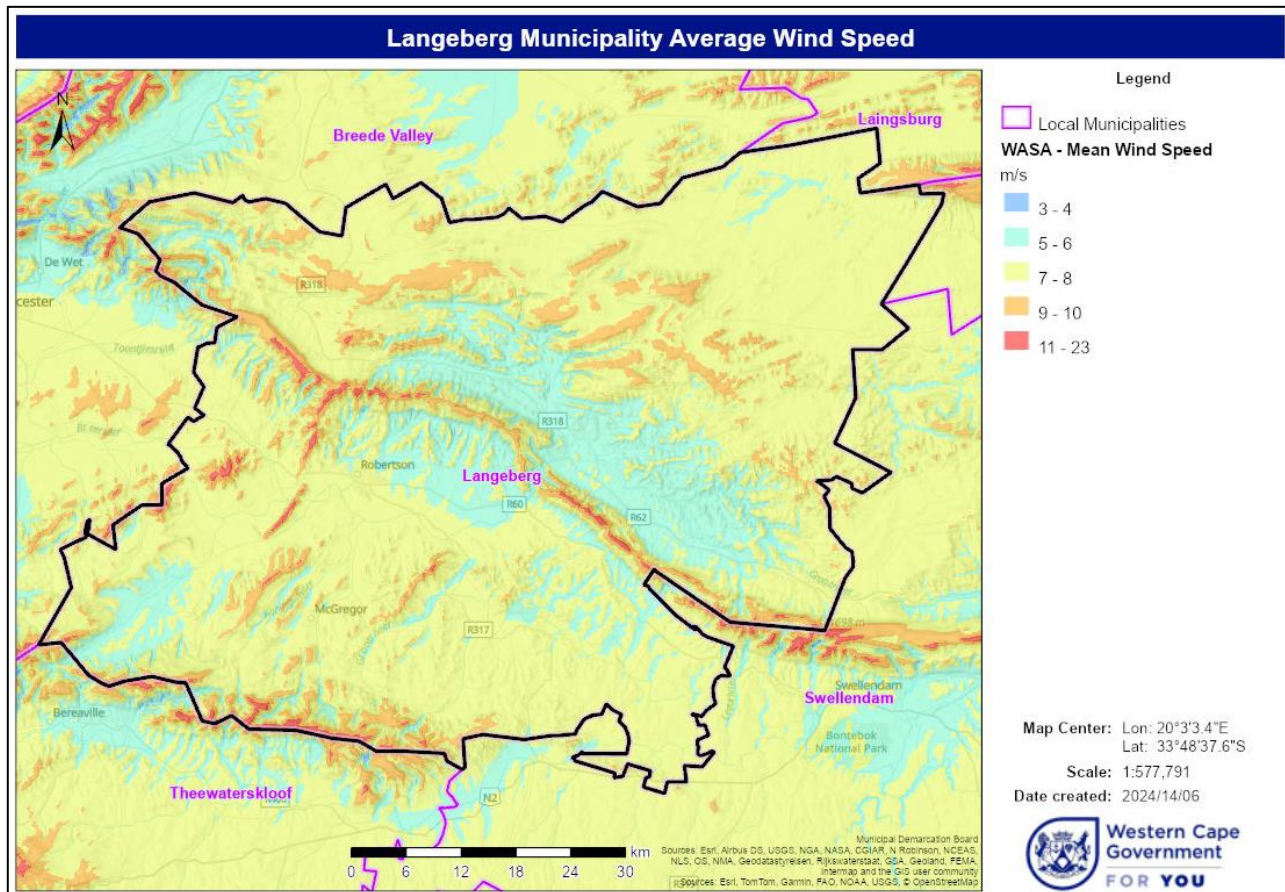


Map 4: Langeberg Land Capability and Hydrology

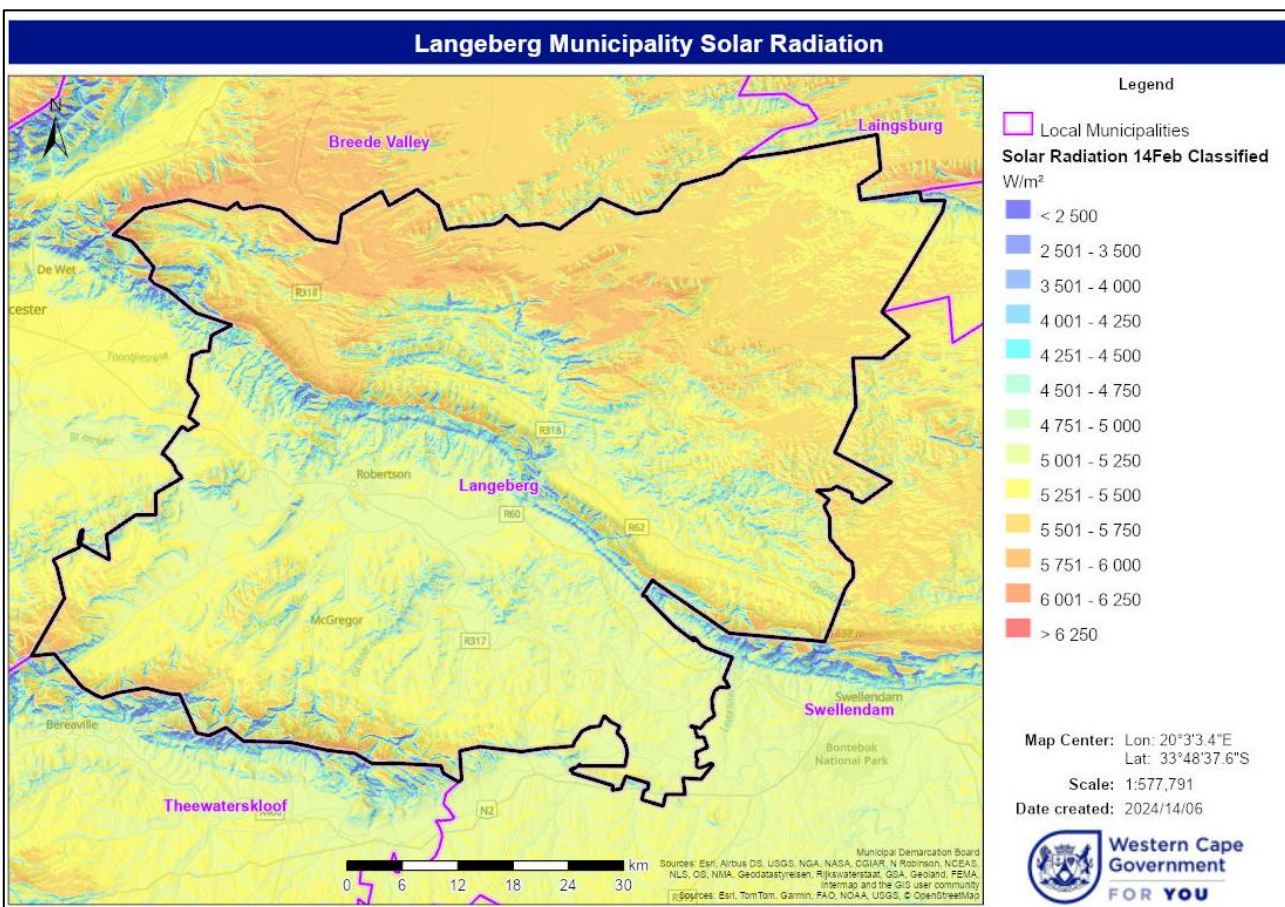


Climate:	Rainfall	Summers are hot and dry, while Winters are wetter and relatively cold with typical annual rainfall. <u>Rainfall</u> ranges between 400 mm to more than 1000 mm per annum, with the highest rainfall experienced along the Langeberg and Riviersonderend Mountains. Hence stone fruit orchards and vineyards are irrigated.
	Wind	During summer, the predominant <u>wind</u> direction is southeast and during winter, west-northwest. The northern part of the Langeberg municipal area has a mean annual wind speed of 8 - 9 m/s and alternative wind facilities can be considered.
	Sun	<u>Temperatures:</u> Horizontal Global Irradiance above the Langeberg municipal area is 1 901 – 2 000 kWh/m ² /annum and on the western and northern border 2 001 – 2 100 kWh/m ² /annum where solar facilities can be considered. The average temperature fluctuates between 17°C and 8°C.
Directives		Control and maintain water quality in catchment areas. Require mitigation regardless development be(ing) contemplated or not. Provide guidelines for the development of alternative energy facilities. Balance food security and energy generation. Promote alternative energy options: Wind, Irradiance and Hydrology. Implement and where required develop River Management and Maintenance Programmes.
Directives from 2015 MSDF		➤ (High average summer and very cold winter temperatures) required building design to consider insulation, orientation, materials and environmental sensitivity; ➤ Place renewable energy projects (solar & wind) in western, central, and north-eastern area. Design and placement of wind and solar energy facilities to adhere to the amended zoning scheme regulations (Langeberg Integrated Zoning Scheme, 2018); ➤ Consider dominant wind direction (Southeast to West-Northwest) in building and settlement design; ➤ Building orientations, architecture and materials used must be sensitive to aspects (i.e. north facing, south facing, etc.) in order to reduce unnecessary energy consumption; ➤ Implement rainwater harvesting; ➤ Educate residents on water saving measures and waste reduction; ➤ Protect landscapes providing resilience to climate change; ○ Kloofs, providing connectivity and temperature and moisture refuges; ○ South facing slopes, providing refuge habitats; ○ Topographically diverse areas, containing important altitude and climatic gradients ensuring a range of micro-climates; ○ Riverine corridors, providing connectivity in extensive arid environments. ➤ Expected impact of climate change on water resources, implement the following measures: ○ Artificial groundwater recharge and strict groundwater management systems; ○ Desalination of groundwater; ○ Local water resource management and monitoring; ○ Grey water recycling; ○ Tariff structures to reduce water consumption; ○ Provide WWTW capacity for major industrial development. ➤ Provide for buffer around landfill sites to protect water areas/ resources.

Map 5: Langeberg Wind Speed



Map 6: Langeberg Solar Radiation



Climate Change

Climate Change Projections from the 2024 Climate Change Advisory compiled by the Department of Environmental Affairs and Development Planning are:

- General projections indicate that by 2050, drought risk in the Langeberg Municipality will increase from 2 possible drought years per decade to 6 years per decade. Temperatures will also continue to rise, resulting in 18 more hot days (temperatures above 30 degrees Celsius) per year by 2050 in the Langeberg municipal area.
- Rainfall patterns will change, and combined with the higher temperatures will increase concerns over water security and the risk of wildfires, along with concerns over flooding in winter.

Langeberg aims to develop a climate change response framework in 2024/25 which should facilitate the integration of concerns such as human well-being and water security into the strategic and operational plans of the Municipality.

A detailed climate change outlook for mid-century (2050) follows:

Climate parameter ³	Change from present conditions (projections for 2050 ⁴)	Seasonal	Implications
Decrease in total annual precipitation ⁵	-22 to -45 mm	Possible increased rainfall in summer and winter, but bigger decreases in spring and autumn	Substantial risk to agricultural practices, as seasonal patterns change or intensify. (Historic annual rainfall is 401-500mm)
Change in number of days per year with >10mm of rain	1 to 2 days fewer per year	Possible small increase in rainfall events in winter, but decreases in spring and autumn	Corresponds to the trend in overall rainfall decrease
Change in maximum amount of rain in a 5-day period	+2 to -11 mm	Drying in the Hex River Valley. In other regions drying in spring and autumn, increased intensity in winter	Concerns about flood risk in winter, and water security in Hex River Valley
Additional number of dry years per decade	5 years / decade (3 years more than at present)	~	Water security, ecosystem stress, fire risk, agriculture impacts
Increase in average annual temperature	1.19°C	Autumn: 1.1 - 1.2°C Winter: 1.3 - 1.4°C Spring: 1.3 - 1.4°C Summer: 0.9 - 1.4°C	Increased biomass drying (fire risk) Water security concerns due to evaporation
Decrease in number of days per year with temperatures below 0°C	-1.5 to -5 days	Change mostly in winter	By 2050, the region averages zero frost days
Additional days per year with temperatures above 30°C	18 days	Autumn and Spring: 5 days each Summer: 10 days	Fire risk, heat stress, ecosystem stress

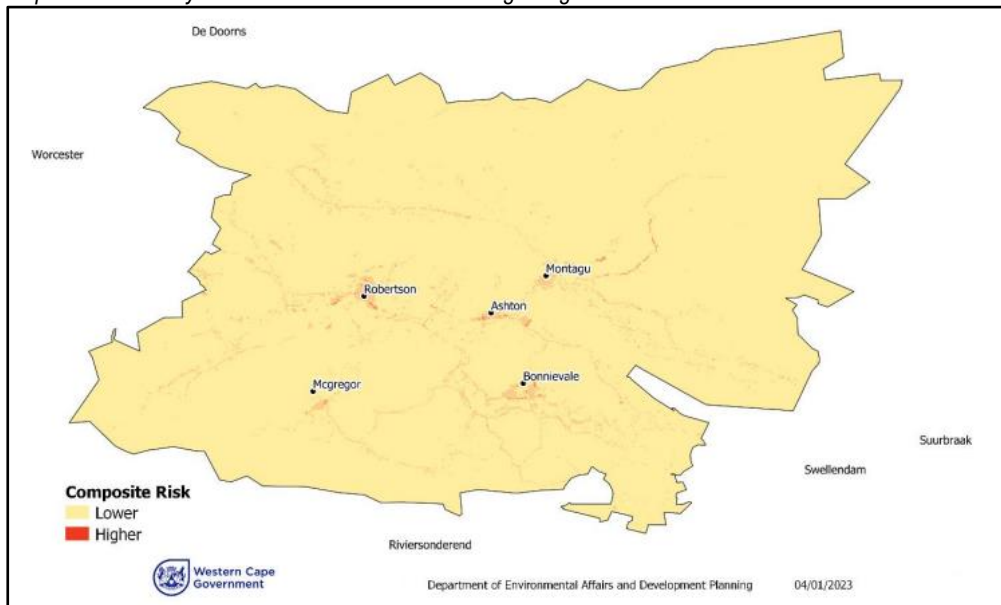
The Langeberg Disaster Management Plan, 2023/2024 reflects the following top ten hazards and their impact on climate change.

Top 10 Hazards	Impact of climate change
Human diseases	Increase in water-borne diseases, changing range of disease vectors
Domestic Water Pollution	Deteriorating water quality from water sources
Crime	Increased protests
Riverine flooding	Dryer conditions could make ground impervious to sudden, intense rainfall events Increased rainfall intensity in certain seasons increases flooding risk
Alcohol abuse	N/A
Veld/Mountain fires	Increased frequency of fire-risk days Increased flammability of biomass fuel
Drug abuse	N/A
Domestic solid waste pollution	Faster rate of decomposition
Traffic Accidents	Increased rate of road surface damage due to higher temperatures
Dam Failure	As related to flood risk Sedimentation due to dry conditions

Vulnerability and Risk:

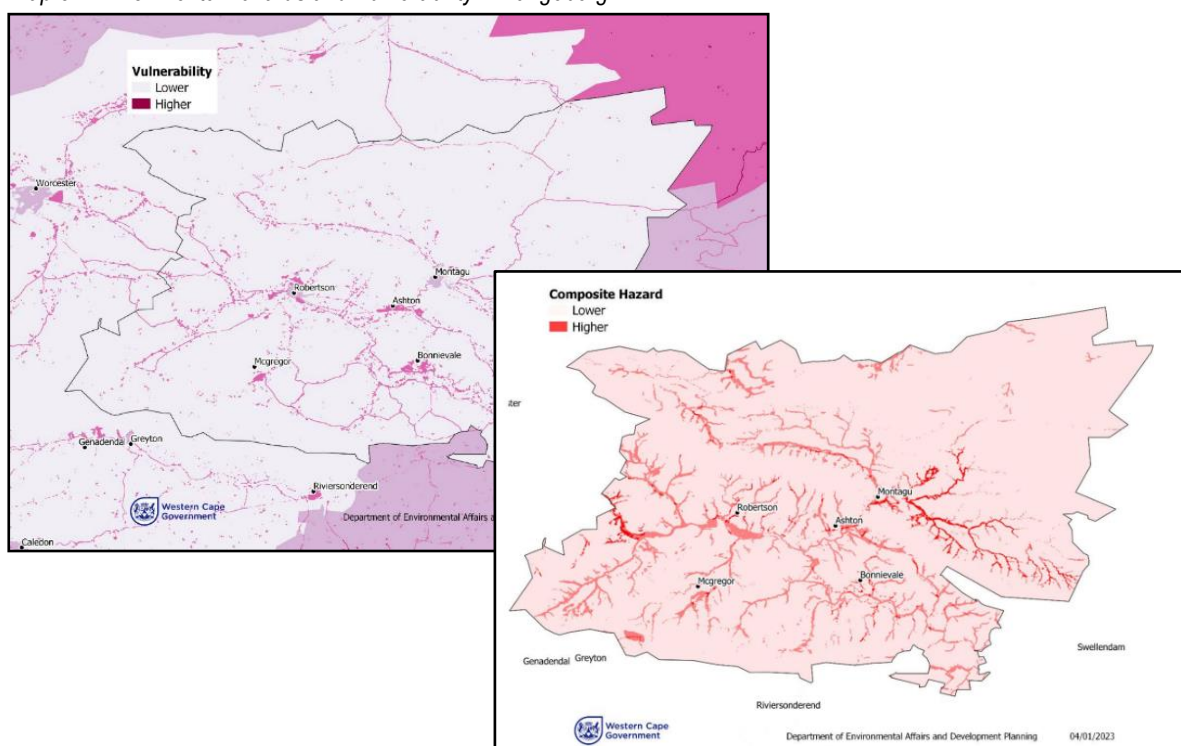
Environmental Risk & Vulnerability Map Project, Langeberg, by Department of Environmental Affairs and Development Planning, evaluated Langeberg to be at a low environmental risk. It is not a climate change risk assessment, but inform climate change planning. The environmental risks mapping illustrates the impacts that different people, systems and resources will experience, and their ability to withstand or adjust to the pressures of environmental hazards. A map combining combining socio-economic and governance indicators (DEA&DP, 2023) follows:

Map 7: Vulnerability to environmental threats in Langeberg



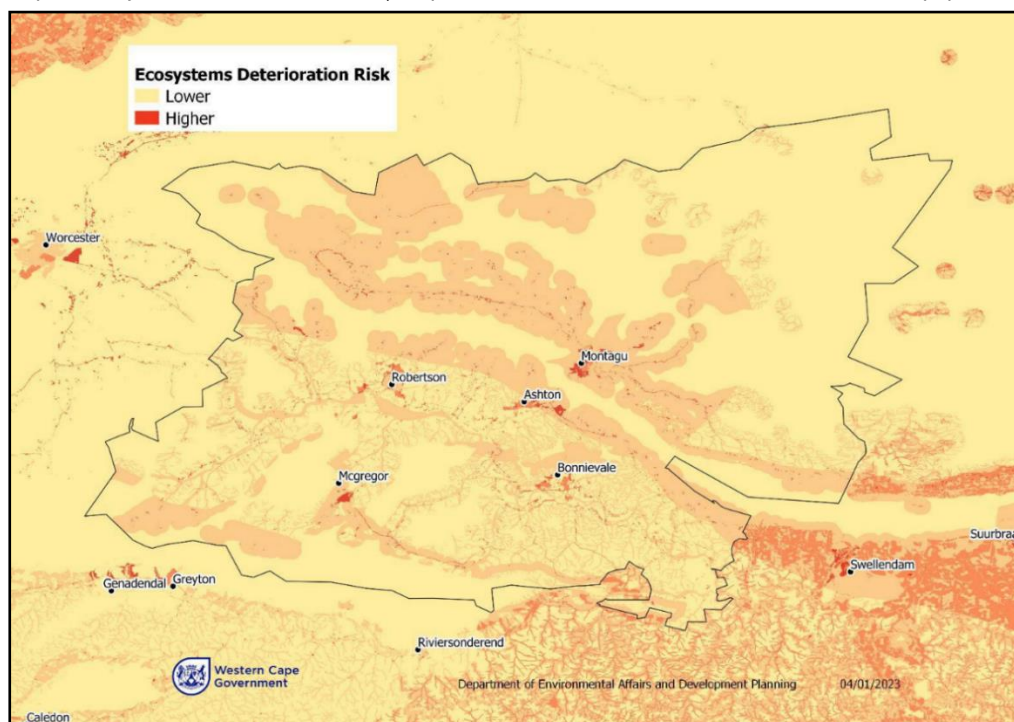
'Risk' is interpreted as the outcome of an interplay between 'hazard' and 'vulnerability'. Vulnerability to environmental threats is depicted as an averaged index derived from two main categories of vulnerability, Socio-Economic factors and Governance, and optional additional factors used as sensitivity moderators. Environmental threats or hazards include ecosystems deterioration, coastal erosion and flooding, terrestrial flooding, water security, air quality and health, solid waste management, and wildfires. These seven themes will be individually reported and illustrated by maps generated by the Environmental Risk & Vulnerability Map Project – Langeberg (DEA&DP, 2023).

Map 8: Environmental hazards and Vulnerability in Langeberg



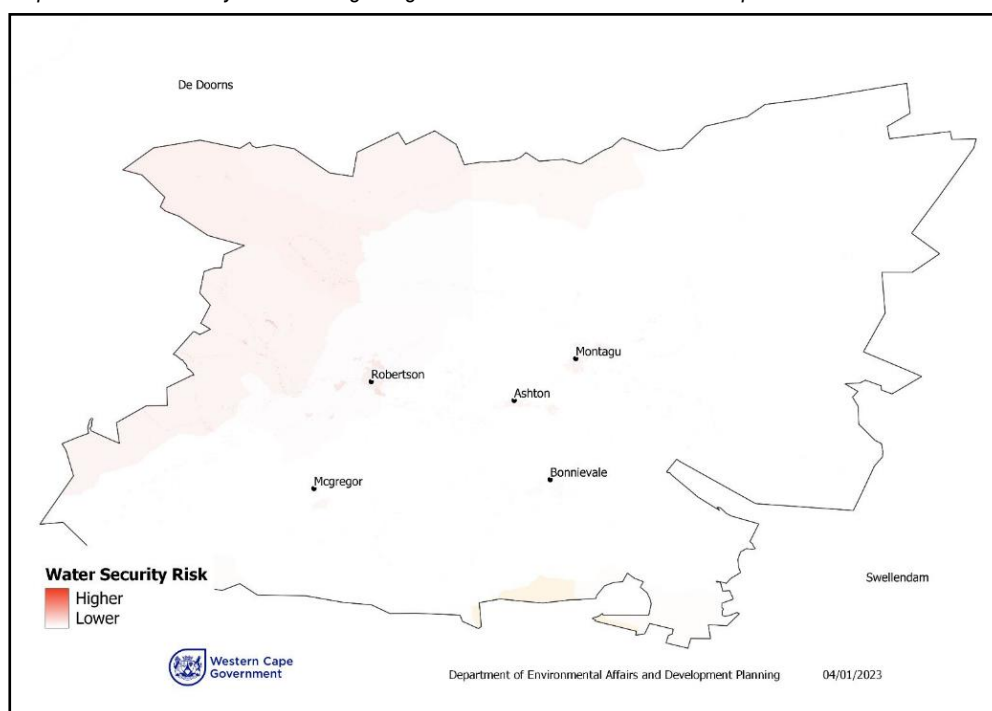
Ecosystem deterioration assessed as low, assesses the likely loss of ecosystems and impact on communities closest to it as a source of ecological infrastructure and solutions to natural threats related to vegetation and health.

Map 9: Ecosystems Deterioration Risk (compromised natural features coincide with vulnerable populations)



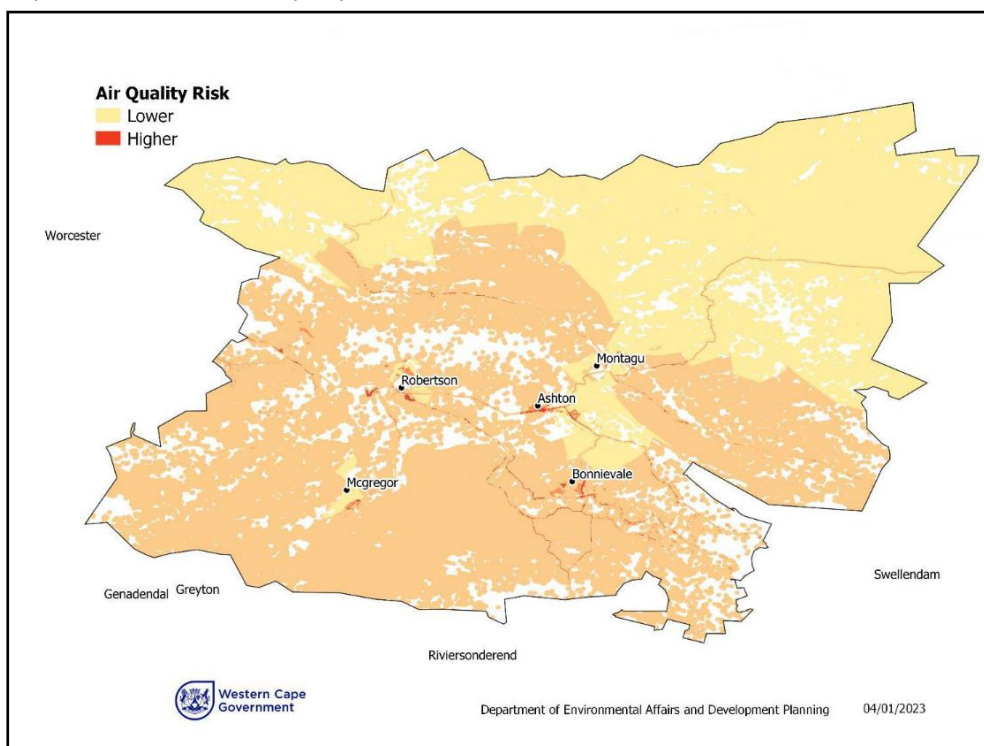
Water security, informed by available water resources and the management (catchment area and storage) thereof, was assessed as low with a slightly higher risk on the western and northwestern side of the municipal area. (Risk and Vulnerability Mapping, 2023) In the long term water security is projected to decrease substantially and alternative water sources than the Breede River should be investigated (Western Cape Integrated Drought Water Response Plan, 2022).

Map 10: Water Security Risk in Langeberg and alternative water sources requirement.



Air quality, measured as exposure to atmospheric pollutants and health (air pollution hazards, potential emissions and exposure of communities thereto or health) rated as lower with poor socio-economic areas and poor indoor air quality due to the use of domestic fuels being the main contributor to the score.

Map 11: Relative index of air quality related risk



Solid Waste management was scored as a low risk. The vulnerability assessment considers accumulation of waste (removal services) and environmental pollution from formal waste sites combined with the likelihood of being affected. According to Langeberg Municipal Solid Waste Management, the waste disposal site at Zolani has a closure permit but is still in use and the informal residential area adjacent to the site and Zolani West, is under risk particularly in times of heavy rain.

Wildfire risk (likelihood and impact on communities) is rated as medium and particularly so around settlements.

Terrestrial flooding was assessed as a low risk. Although all settlements experience flood damage, Montagu, Ashton and McGregor are more flood prone than the remaining settlements and flooded in 1981, 2003, 2008, 2023 and 2024.

Topography: The Langeberg Mountains, with an average height of 1 000 to 1 500 m above sea level, run through the middle of the municipal area and create a typical classic landscape: clearly defined mountains and hills and imaginable spaces such as valleys and basins (Norberg-Schulz's (1980)). Langeberg Mountains are mirrored in the south by Riviersonderend Mountains, and in the northeast lies the Anysberg.

Directives

Protect landscape character (landscape heritage).

Protect and maintain Ecological infrastructure: Mountains and mountain ranges: Lange, Riviersonderend, Wabooms and Anysberg.

Reduce potential negative impact of built development along scenic corridors.

Directives from 2015 MSDF

- Divert settlement opportunities to more level areas (slopes of less than 1:4);
- Future subsidised settlement development should preferably be located on north facing slopes;
- Reduce potential negative impact of urban development along the scenic corridors;
- Ensure land use changes maintain integrity, authenticity and accessibility of significant cultural landscapes (WCPSDF, 2014);
- Integrate development within the urban area to combat urban sprawl and negative visual impact.

Hydrology:	The Langeberg municipal area falls in two WMAs: North of the Waboom Mountains is the Gouritz and south thereof is the Breede. The Breede River is ±337 km long with a catchment area of approximately 12.984 km². The source of the Breede River is the Skurweberg Mountains in Witzenberg. The Breed River runs through the Breed Valley municipal area via Brandvlei Dam. It enters Langeberg municipal area near Elandia and exits near Stormsvlei flowing to the Indian Ocean at Witsand in Hessequa municipal area. Northwest of the Langeberg Mountains are the Koo and Keisie Rivers and the Dwariega and Kingna to the northeast. The Cogmanskloof River links the north of the region to the south. SANBI: NFEPA (2007), classes the Breede River as Moderately Modified. Seriously Modified tributaries include the Vink, Keisie and Touws Rivers. Southwards several rivers feed into the Breede River such as the Boesmans, Groot, Hoeks Korings, Houtbaais and Poesjenels River. Other rivers include: Raaswater, Brak, Lopende, Doring, Kruis, Stinkfontein, Pieterfontein, Gatskraal, Noree, Willem Nels, Hoops, Keisers, Groot, Boesmans, Langkloofspruit and Grootkloof. Main inland water bodies/ dams: Keerom Dam (north-west), Pietersfontein Dam (north) and Potjieskloof Dam (east). Municipal dams for bulk water storage: Ashton, McGregor, Montagu, Robertson <u>Water for Livestock:</u> Water for livestock is obtained from boreholes, springs, rivers or dams. <u>Water for Irrigation:</u> Water for irrigation is obtained from the rivers (mainly Breede) or dams. Irrigation channels pass along Ashton and Bonnievale. Historic “leivore” are integral in settlements in Langeberg Municipality: Robertson, Montagu, McGregor.
Directives	Protect and maintain Ecological Infrastructure: Water Management Areas (Government Water Control Area) and Rivers within WMA: Breede, Koo, Keisie, Dwariega, Kingna, Cogmanskloof, Vink, Keisie, and Touws Rivers. Control areas that are susceptible to alien invasion and erosion. For Breede, Koo, Keisie, Vink and Touws Rivers: - Enhance river corridors (rural and urban) ecologically and socially; - Facilitate impact of irrigation on salinity of rivers (water quality); - Preserve fresh water sources and water quality (ground and surface water). Protect historic “leivore”/ leiwater irrigation channels: McGregor, Montagu and Robertson. Investigate alternative water resources (boreholes, ground water, water harvesting) to alleviate water shortages that may arise. Prepare and/or implement River Management and Maintenance Plans.
Directives from 2015 MSDF	➤ Protect the river systems and their immediate surrounding environment; ➤ Proper management of catchments and stream banks is required; ➤ Regulate water demand especially for agricultural purposes; ➤ Develop more effective water management strategies; ➤ Improved technologies to be explored; ➤ The protection of ecological water reserves should be a priority; ➤ Monitoring biodiversity closely and eradicating alien vegetation should be undertaken; and ➤ Evaluating livelihoods based on threatened resources.

The map displays the Breede Valley region, highlighting four specific water management areas: H40 (red outline), H30 (purple outline), H50 (orange outline), and H60 (black outline). The region is characterized by a complex network of rivers and streams, including the Orange River, Breede River, and various tributaries like the Riet, Koo, and Kooi. The map also shows the locations of several towns and villages, such as Witzberg, Bok, and Laingsburg. The boundaries of the Free State and Northern Cape provinces are indicated. A scale bar at the bottom shows distances up to 30 km.

Legend

- Langeberg Local Municipality
- Local Municipalities
- Tertiary Catchments

River Ecological Status

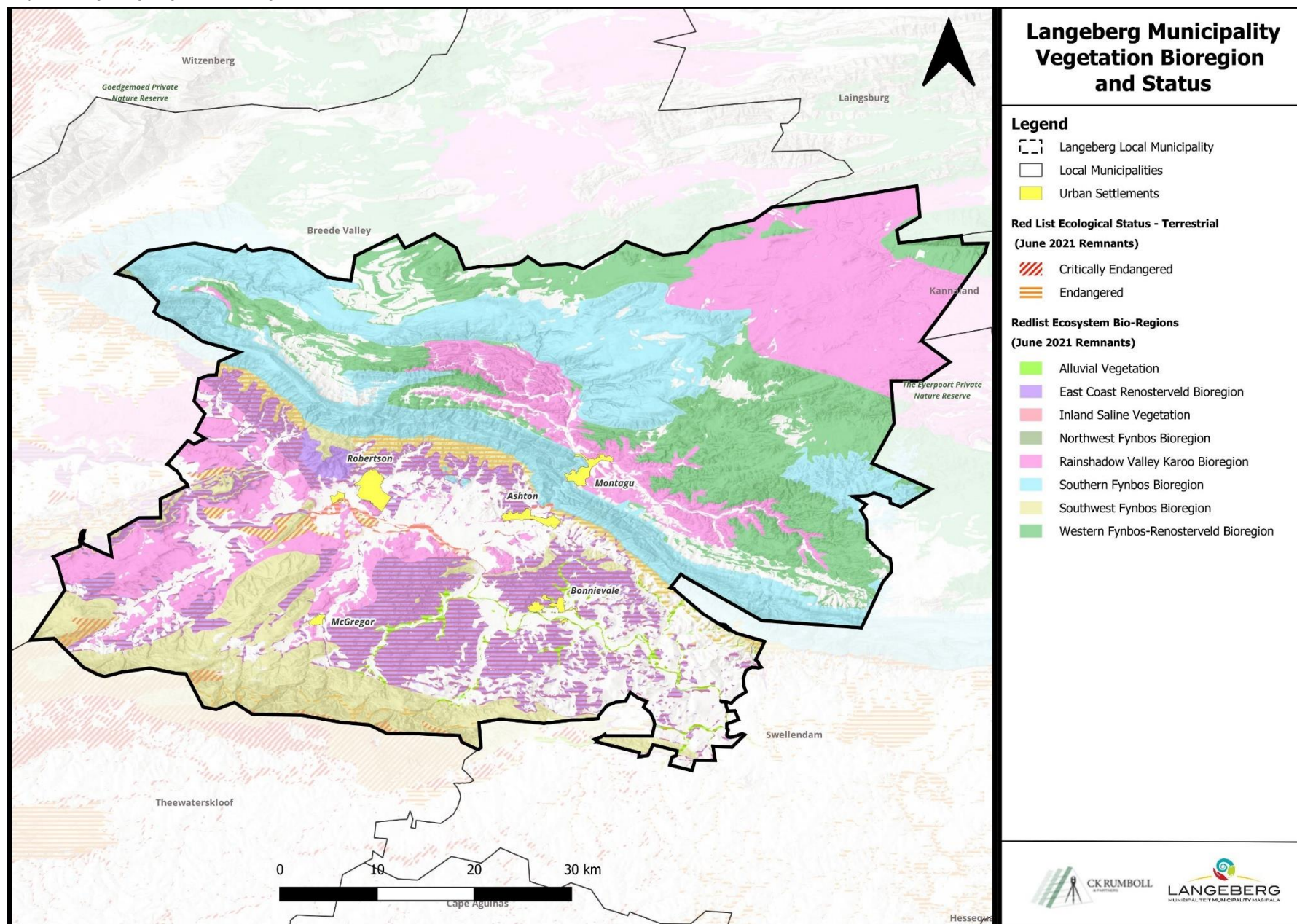
- Class C: Moderately Modified
- Class D: Largely Modified

Soil Erodability
K-Factor

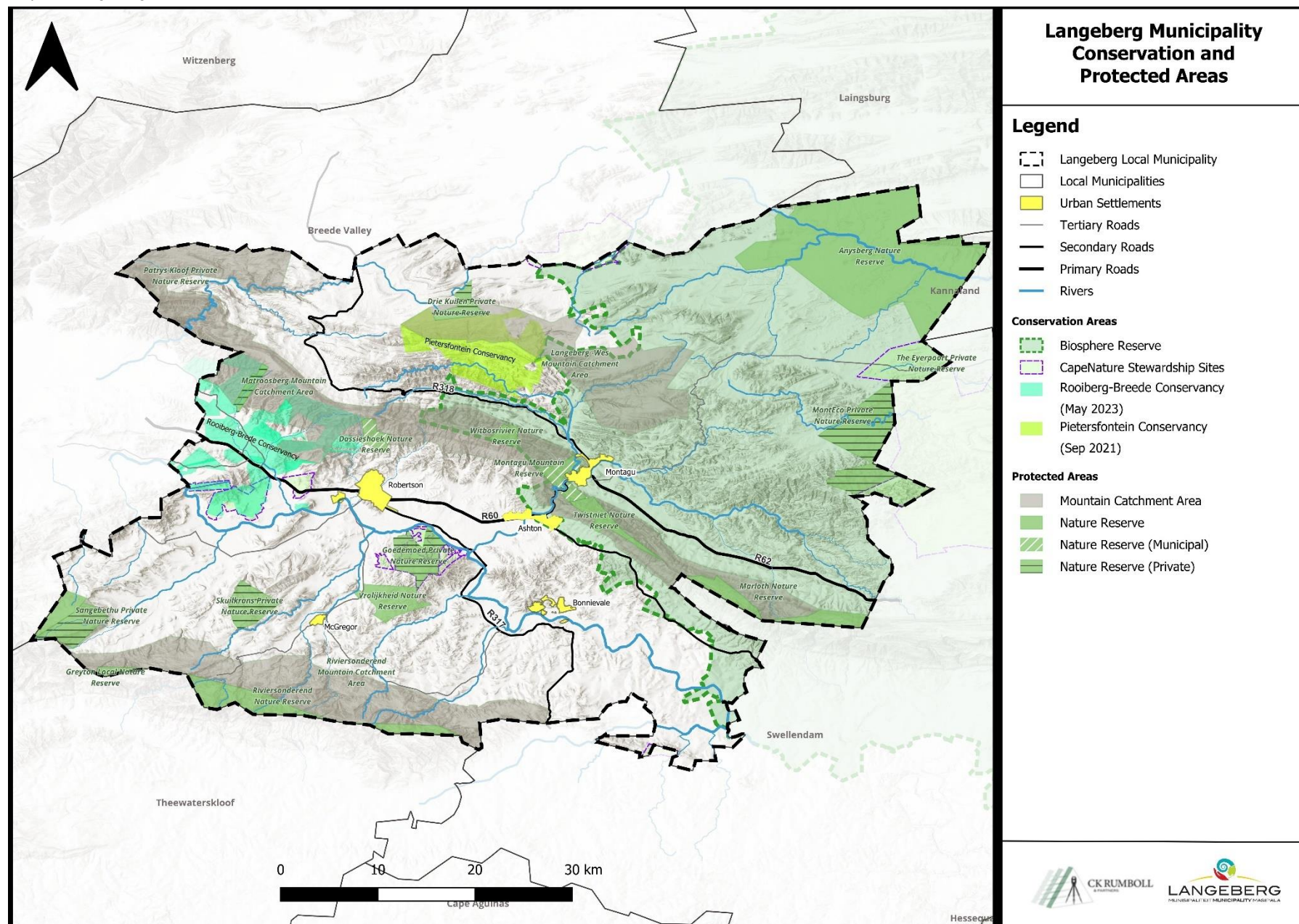
	High
	Moderate
	Waterbody

Biodiversity:	Langeberg Municipality is endowed with a comprehensive system of CBA corridors of which a large extent is already formally or informally conserved and of which several are mostly continuous throughout the municipality. Protected areas and threatened ecosystems include provincial nature reserve: Anysberg; private nature reserves: MontEco, Drie Kuilen, Skuilkrans and Sangebethu; and Cape Nature nature reserves: Dassieshoek, Viljoendrift, Van Loveren, Vrolijkheid, Centenary and Marloth. Mountain ranges are Riviersonderend, Langeberg West and East, Waboom and Anysberg. The different biomes that are present in the Langeberg municipal area are the Azonal Vegetation (3.11%), Fynbos Biome (74.03%), and the Succulent Karoo Biome (22.86%) and the map illustrates their location. Azonal vegetation is located south of Robertson, between Robertson and Ashton and around Bonnievale. McGregor, Robertson and Montagu are characterised by the surrounding Succulent Karoo Biome. A large section of Succulent Karoo Biome can also be found in the northeast of the region. The majority of the municipal region is covered with Fynbos Biome. The southern region is home to 48 endemic ericas and 17 endemic restios whilst the Mesic Mountain Fynbos is home to Afromontane Forest patches. <u>Fauna:</u> Terrestrial invertebrates include the Cape honey bee, 38 butterfly species, and 966 spider species. (Dippenaar-Schoeman et al. 2015). Freshwater macro-invertebrates include endemic dragonflies (in Riviersonderend Complex). Amphibians include Landdrooskop mountain toadlets and Rose's Mountain toadlets (in Riviersonderend Complex). Indigenous fish include Breede River redbellied fish, Cape kurper, Berg-Breede whitefish, longfin eel, and Cape galaxias. Reptiles including the Cape Mountain Lizard and the Cape Crag Lizard out of 40 reptile taxa. (Riviersonderend Complex). Avifauna hosts 217 bird species (land and/or water-dependent) of which 17 are threatened species including the Cape rock-jumper, Protea seed-eater and Agulhas long-billed lark. Mammals host over 35 mammal species, of which the leopard, grey rhebok and African clawless otter, spectacled dormouse and African striped weasel are of conservation concern.
Directives	Confirm SPCs and support and strengthen the biodiversity and conservation status of the area. Expand and maintain protected and threatened ecosystem areas, not limited to, but particularly around mountains. Promote conservation corridors to enhance natural resources and formal and proposed areas. Promote a system of corridors to counter climate change. Facilitate competing uses within biophysical environments e.g. renewable energy, agriculture, mining and conservation. No urban development in CBAs or Protected Areas.
Directives from 2015 MSDF	➤ Urban development is not compatible with conserving Fynbos or any other fire-prone vegetation type. Cluster houses within a fire-free zone and provide an appropriate fire belt. Firebreaks must be clear within the development footprint, not in adjacent veld; ➤ Development in close proximity or within endangered vegetation types must be avoided; ➤ Strategies and management guidelines to be developed to protect Critical Biodiversity Areas, particularly in the southeast of the Langeberg municipal area, which receive no formal protection; ➤ Minimised footprints and maximise the retention of indigenous habitats, species and ecological processes; ➤ Search and rescue when development may result in irreversible loss of rare or threatened plant populations; ➤ Biodiversity offsets should be investigated where equal-sized or larger areas of the same vegetation type are secured for conservation funded by development proposed within natural to near natural habitats; ➤ Appropriate management of Critical Biodiversity Areas is a high priority; ➤ Manage agricultural activities to not negatively impact on Critical biodiversity Areas; ➤ Consider endangered and critical vegetation types carefully in spatial planning, land use decision making and environmental management; ➤ Critically Endangered and Endangered vegetation in valleys of Breede River and its tributaries to be protected to maintain water quality and quantity; ➤ Include specific guidance on biodiversity management; ➤ No urban development in CBAs or the Protected Areas.

Map 13: Langeberg Vegetation Bioregions

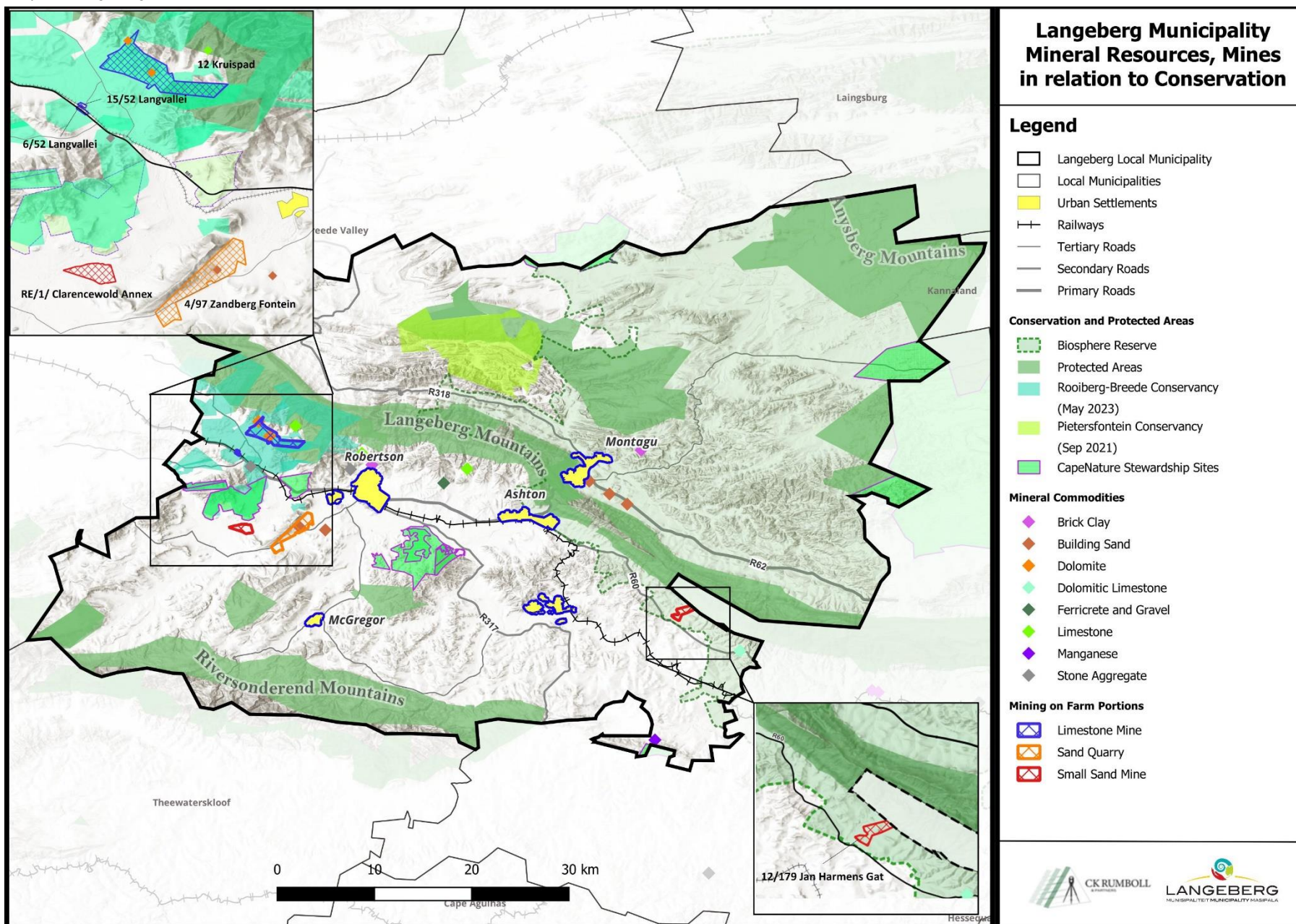


Map 14: Langeberg Conservation and Protected Areas

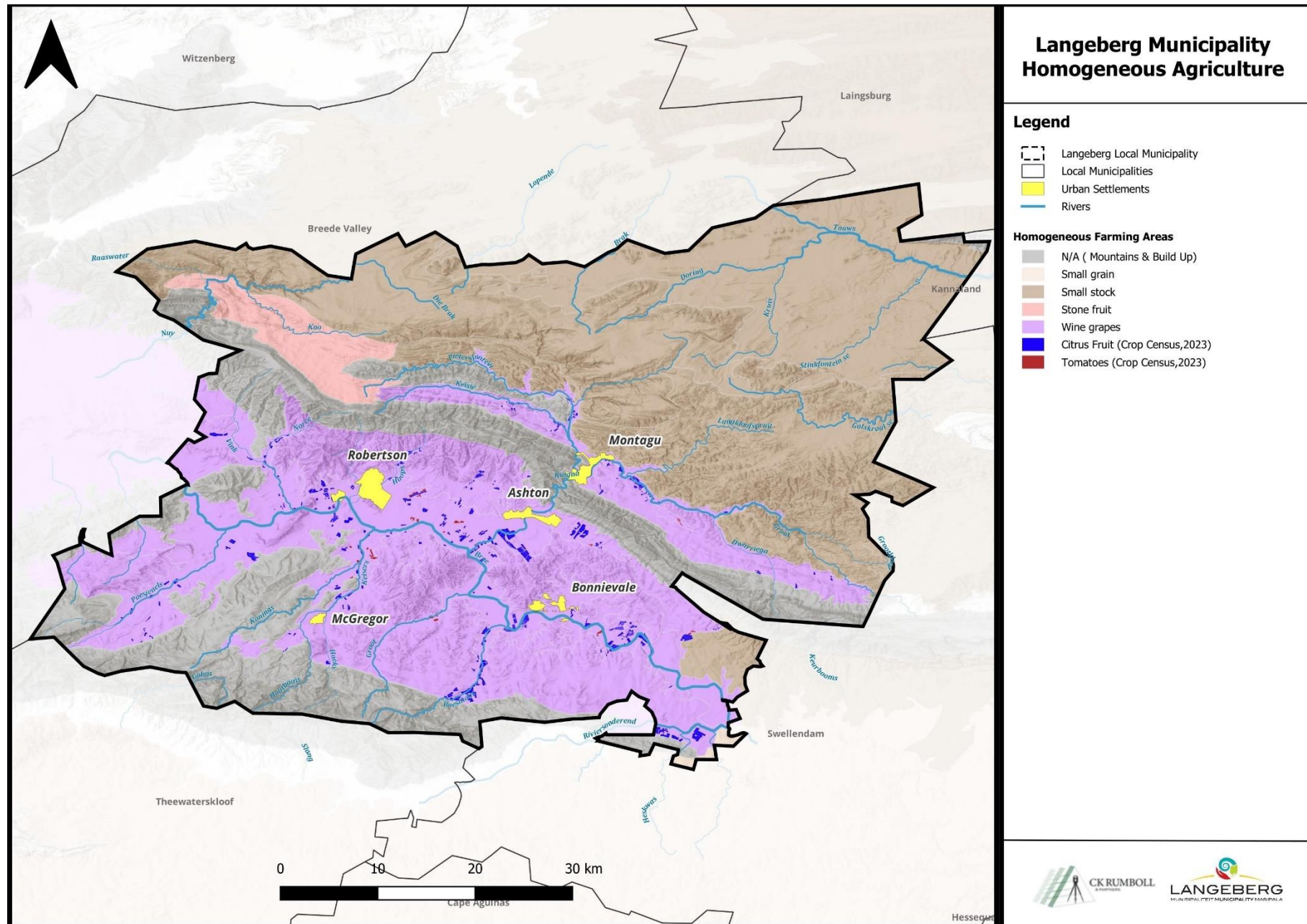


Mining:	Langeberg Municipality is home to two active mines, one being the Langvlei Strati form (Cape Lime) mine, located in the west, on Portions 15 and 16 of farm Lange Vallei no. 52 and on farm Kruspad no. 12, Robertson Division, where lime and Gypsum are mined. The other being a sand mine on Portion 4 of Farm Zandbergfontein no 97, Robertson Division. There are a number of borrow pits adjoining the various district roads, which are used for road maintenance purposes. All the mines are in the rural subregion: Breede River (See Chapter 6 for rural regions).
Directives	Support sustainable mining and manage potential cumulative impacts on the landscape (sensitive environments: visual, agricultural resources, natural, cultural): Mitigate between sand mining and conservation whilst capitalising on long-term mines (30 years) (Langvlei Strati (Cape Lime) form Mine).
Directives from 2015 MSDF	➤ Ensure mine rehabilitation and topsoil stockpiled, and post mining platforms comply with land use.
Agriculture:	<u>% Arable land cultivated:</u> Approximately 6% (26 610 ha) of the Langeberg municipal area is being cultivated. Agricultural cultivation is mostly intensive, comprising irrigated vineyards, orchards and pastures. Crop cultivation according to subregion: Keisie: vineyards (dry climate, naturally limed soils, high slopes and on fertile alluvial soil along riverbanks) and olives; Anyenberg: honey bush tea and conservation; Wabooms Valley or Brakrivier Valley: wheat and proteas; Breede River: large scale fruit, wine, tomatoes, pumpkin variants, vegetables, melons and citrus; McGregor and north of Riviersonderend Mountains: extensive vineyards. Koo Valley: apples, pears, apricots and peaches. Dairy farming has been reduced drastically and milk is imported from the Overberg District. <u>Agri-processing</u> and agriculture are Langeberg Municipality's major economic activities and employer. Substantial volumes of cultivated produce are dried or canned. In 2019 Agriculture, Forestry & Fishing contributed 10.9% to Langeberg Municipality's GVA along with 25.9% to employment. Agriculture is one of the five biggest contributors to Langeberg Municipality's economy, yet agriculture's contribution is slowly decreasing as are the number of commercial farming entities. <u>Small scale</u> farming or subsistence farming is limited.
Directives	Secure cultivated arable land required for food security. (26 610 ha arable land). Protect both extensive and intensive agricultural cultivation (irrigation or dryland) and different types of cultivation (orchards, vegetables, full-field, etc) (as part of the rural landscape). Mitigate agricultural practice trends and resultant impacts e.g. netting involving multi-disciplinary groups to maximize agricultural yields whilst protecting the rural landscape. Promote Mitigation programmes such as SmartAgri.
Directives from 2015 MSDF	➤ Agricultural expansion constrained by availability of irrigation water and suitable land; ➤ Labour productivity strategy to counter increasing labour costs; ➤ Promote new farming methods (less hazardous, environmentally friendly) as demand for intensified production will impact on soil fertility; ➤ Increased food demand and exports will impact on high quality produce. Small scale farming should be encouraged to instil self-sufficiency.
Agritourism:	The agricultural landscape together with the magnificent scenery and agricultural activities, especially wine making, forms the basis of its vibrant tourism industry. To support and build the industry, a Langeberg tourism development strategy is being developed. Western Cape receives the highest income from agritourism in the country (WC Department of Agriculture, 2018). Agritourism serves as an economic diversification strategy and a vehicle to promote rural development including preserving local culture, maintaining biodiversity and other environmental assets and growing the wine industry.
Directives	Promote Agritourism to enhance agriculture and conservation (economic diversification).

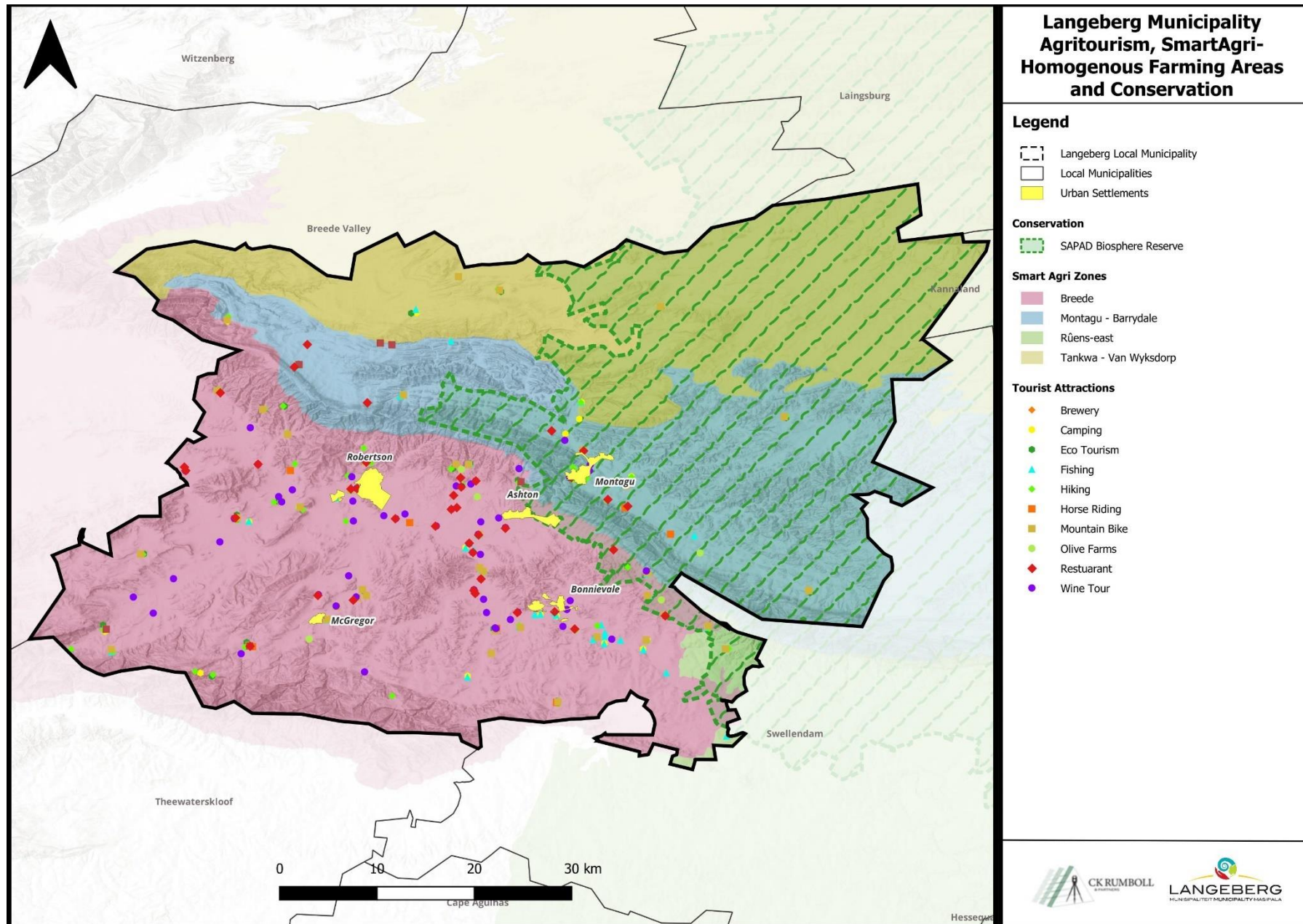
Map 15: Langeberg Mineral Resources, Mines and Conservation



Map 16: Langeberg Homogeneous Agriculture



Map 17: Langeberg Agritourism, SmartAgri Homogeneous Farming Areas and Conservation



2.1.2 Socio-Economic Spatial Analysis

Demography

According to the MYPE, 2022 population growth trends for the next 5 years and next 20 years:

Group (%)	Age	2022	2023	2027	2028	2032	2033	2037	2042
Children (%)	0-14	28,5	28,4	28,3	28,3	28,2	28,2	28,0	28,0
Youth (%)	15-24	13,3	13,3	13,2	13,2	13,4	11,4	10,8	10,8
Working age (%)	25-59	48,4	48,8	49,6	49,7	49,8	49,9	50,5	50,5
Aged (%)	60+	9,8	9,7	10,0	10,0	10,4	10,5	10,7	10,7
All	Total	121 704	123 698	131 879	133 862	140 562	142 264	151 736	164 028
Households		32 230	32 758	34 925	35 450	37 224	37 675	40 183	43 438
Household size		3,9	3,9	3,8	3,7	3,7	3,8	3,8	3,8
Annual Growth Rate		1.6 % (2022-2026)			1,5%		1.4%		1,6%

In 20 years, it is predicted that there will be 164 028 ($\pm$ 42 000 more than in 2022) people in Langeberg Municipality, 43 438 households of 4 (3,8) persons per household.

Household size decreases from 3.9 in 2023 to 3.7 in 2028. The number of households increases by 2 695 and the number of people by 10 175 from 2022 to 2027.

The annual population growth rate average decreases from 1.6% in 2022 to 1,4% projected in 2037.

Migration according to the 2016 Community Survey is that 92% of the population is born in the Western Cape, 4% originates from the Eastern Cape, 1% from Gauteng and 2.1% from the Southern African Development Community. In 2022, nearly sixteen per cent (15,6% and 367 835 persons) out of 2,36million people in 2022 settled in the Western Cape, with 83,7% of these immigrants being from the SADC countries.

In 2023, half (48,8%) of the Langeberg Municipality's population is 25 to 59 years of age, a cohort that represents the working age. Sixty two percent (62,1%) is 15 – 59 years of age representing the labour force. In 2023 the male to female ratio is nearly equal: 51 females: 49 males.

Langeberg Municipality's population comprises of a third of population being children (scholars), nearly an eighth (13%) being youth (students), slightly less than half being of working age and leaving a tenth of the people being the elderly. Whilst the Municipality's population increases, as a percentage of the total population the following cohorts increase over the long run: working age population (>1%), youth (<1%), the aged (<1%) whilst the cohort children decrease marginally (<1%) after 2025. The dependency ratio stays nearly constant at 54%, with fewer (1%) younger people being dependent from 2023 to 2037.

In 2022, 35% of household heads were female and it is projected that females being heads of households will increase to 39% (MYPE, 2022). Over a hundred (101) heads of households were younger than 18 years, compared to the Cape Winelands and Western Cape where 454 and 4 877 heads of households were younger than 18 years. Of the child headed households, 66,3% have females as their head. Just more than ninety percent (92%) of children 14 years and younger have both biological parents (StatsSA, 2016).

The majority (70%) of the population in Langeberg Municipality is Coloured, followed by Black Africans (17%) which had the largest influx in numbers since 2011.

Table: Race Distribution, Langeberg Municipality. [*838 people unclassified]

	Black African		Coloured		Indian/Asian		White		Total
	N	%	N	%	N	%	N	%	+ other
2016	18 429	17,5	74 319	70,5	147	0,1	12 588	11,9	105 483
2011	15 882	16,3	68 708	70,3	312	0,3	11 983	12,3	97 726*

* Includes 841 (0,9%) other race population.

Directives

The Langeberg Municipality's population increased by $\pm$ 42 000 people and 11 208 households during the 20-year cycle to 164 028 people and 43 438 households of 4 (3,8) persons per household.

A strategy and plan to deal with informal settlements to be prepared for migration to Langeberg settlements are required.

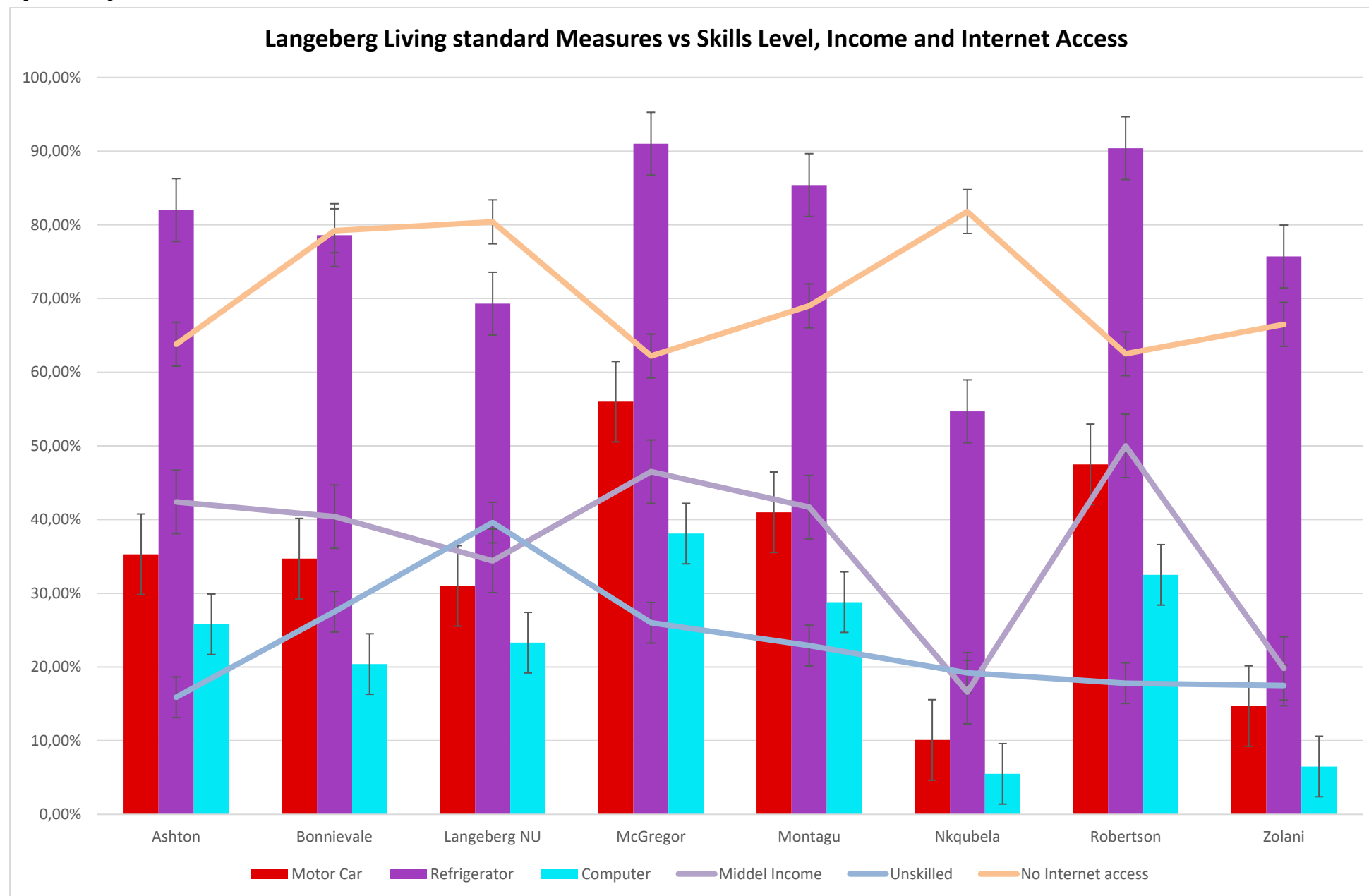
The child population decreased marginally (<1%). Youth decreased substantially by 2.5%. Working age people increased by 2.1% and the aged by 0.9%. The decreasing youth growth rate resulted in an aging working population.

	In 2023, the majority (65.2%) of the Langeberg Municipality's population was between 15 and 64 years of age, a cohort that represents the labour force. At the same time a third are children aged 0 – 14 years (28.4%) with a small (6.4%) elderly population. Provide for social amenities and economic spaces required by growth trends in child, working and elderly populations (for example more schools, skills centres and amenities): - Nearly a third, 28%, of the Langeberg Municipality's population is younger than 15 years, representing pre-school and school going age whilst there is an undersupply of Grade R classes in all settlements: Though 52 crèches against the norm is an oversupply, the low skills levels with a fifth (20%) of the population being unskilled and 44% being semi-skilled escalate the need for Grade R classes. - Robertson and Montagu require a secondary school. Plan and design living spaces (settlement and rural) driven by proximity and demanded (required) by family trends (such as child headed households (younger than 18 years)), children 14 years and younger that lost both biological parents and female heads of households) and provide for such living space at earmarked (e.g. social housing) sites. Provision of amenities at settlement and regional level should be driven by proximity. Accommodate family trends in social housing precincts in Robertson.												
Urban Rural Population & Settlement Classification	Settlements in Langeberg Municipality classified according to their populations: - Robertson as small town and regional service centre (population between 25 000 – 60 000); - Montagu, Ashton (& Zolani) and Bonnievale as villages (population between 5 000 – 25 000); - McGregor as remote village (population ≤5 000) (Stats SA, 2016). <table><tr><td>Town</td><td>Robertson</td><td>Montagu</td><td>Ashton</td><td>Bonnievale</td><td>McGregor</td></tr><tr><td>Population, 2023</td><td>35 081</td><td>19 209</td><td>16 867</td><td>11 508</td><td>3 956</td></tr></table> In the next 20 years Robertson (including Nkqubela) (46 519) will stay a small town (25 000 – 60 000) whilst still serving as regional service centre. However, Robertson as small town and isolated regional service centre and with a population of 38 081 in 2023 may change to a medium town (60 000 – 100 000) and a regional service centre when adding the entire rural growth (12 686 people) in the municipal area during the MSDF cycle to the Robertson population. Nearly a third (29.98%) of the population resides in rural areas.	Town	Robertson	Montagu	Ashton	Bonnievale	McGregor	Population, 2023	35 081	19 209	16 867	11 508	3 956
Town	Robertson	Montagu	Ashton	Bonnievale	McGregor								
Population, 2023	35 081	19 209	16 867	11 508	3 956								
Directives	All settlements in the Langeberg municipal area, despite the population growth, will keep the same settlement classification in the 20-year framework: Robertson as small town (25 000 – 60 000), McGregor as remote village (≤5 000) and all remaining villages as villages (5 000 – 25 000). Capitalise on settlement classification according to population and future population resulting not directly in hierarchy changes, but aspiring thereto e.g. Robertson. Promote infrastructure development in settlements particularly to invite public and private investment and to strengthen value chains.												
Health	In 2020, Langeberg municipal area had the following <u>Health Facilities</u>: - 13 public primary healthcare clinics (PHC) of which 7 PHCs were fixed and 6 PHCs were mobile. - 2 district hospitals (Robertson 50 beds & Montagu 30 beds). - 13 primary health care clinics (7 permanent (fixed) and 6 mobile clinic services) supporting the outlying areas (an extension of the 'fixed' clinics) and 8 ART clinics/treatment sites and 13 TB treatment clinics (IDP 2022-2023). The seven PHC clinics are in Ashton (Cogmanskloof and Zolani), Montagu (community day centre) and Robertson (Strooidak/ Bergsig and Nkqubela) and satellite clinics in Bonnievale (Happy Valley) and McGregor. - 1 dental clinic in Robertson. Provision of Health and Emergency services e.g. clinics and mobile services comply with the CSIR norms. In 2020, the nearly three thousand three hundred (3 279) registered patients receiving antiretroviral treatment (ART) reflects an increase (250 patients) since 2019. A similar trend was noted in the Cape Winelands District. Female Health in Langeberg Municipality is slightly declining as the maternal mortality rate (MMR) recorded zero deaths per 100 000 live births in 2019, worsening to 123.3 whilst the rate in the Cape Winelands District improved (SEP, 2021). The delivery rate of women under 19 years of age in Langeberg Municipality and the Cape Winelands District was recorded at 15.2 and 13.6 percent respectively in 2020. The termination of pregnancy rate decreased marginally from 0.5 and 0.4 and 0.8 to 0.7 between 2019 and 2020 for Langeberg Municipality and Cape Winelands District respectively.												

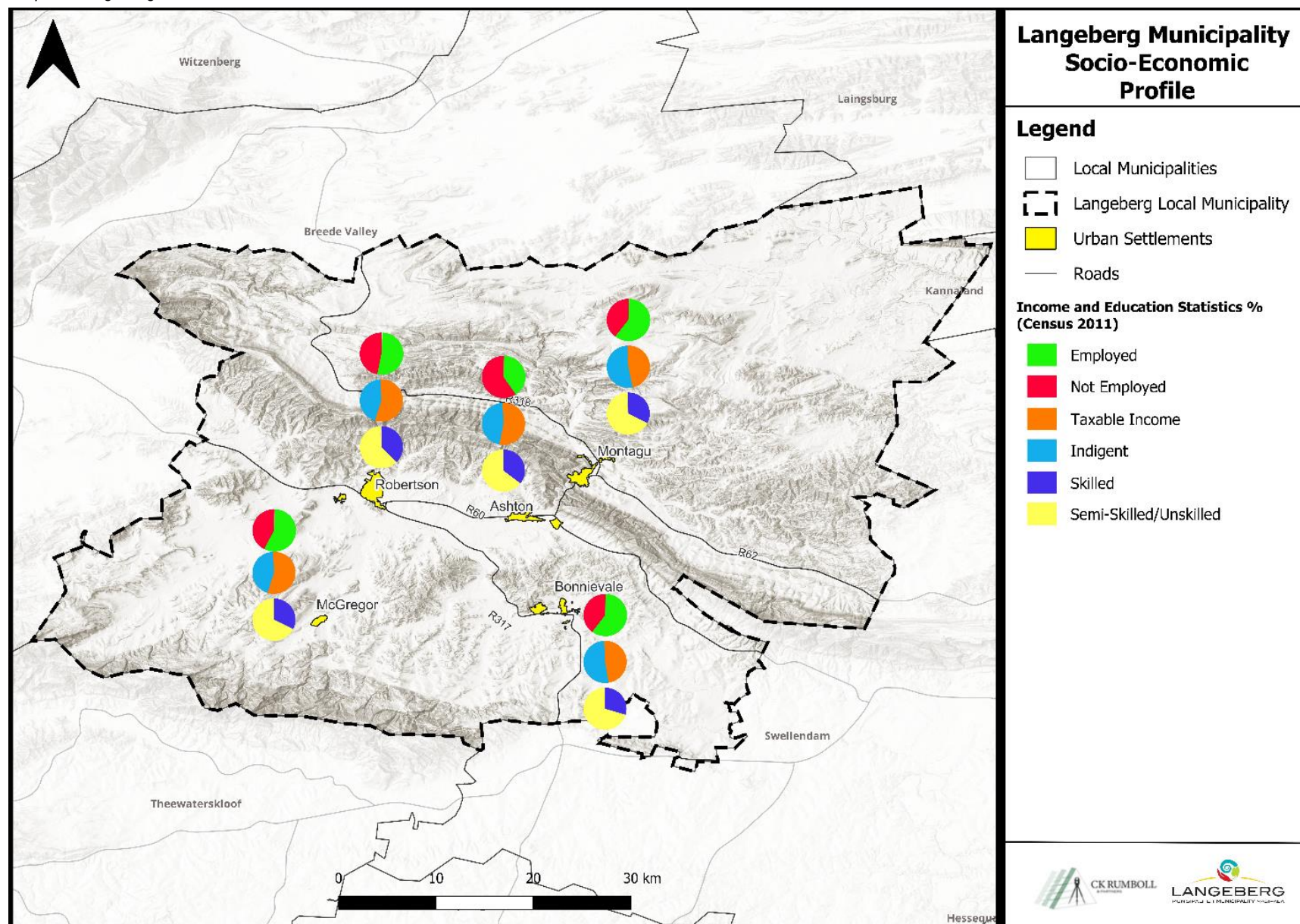
	By 2020, Child Health overall improved in Langeberg Municipality since 2019 as the: - Immunization rate increased by 5% from 59.8% to 64.4%, yet the immunization rate remains low. - Malnutrition rate for children under five years (per 100 000) decreased from 2.0 to 1.0. - Neonatal mortality rate (per 1000 live births) improved from 15.6 in 2019 to 2.1 in 2020. - Low birth weight indicator improved from 18.8% to 12.1%.
Directives	Provide Health and Emergency services i.e. clinics and satellite in settlements and remote villages to comply with the <u>CSIR norms for mobile clinics: 1 multifunctional mobile per 5 000 persons or 1 250 dwellings.</u> Lobby provision for different health trends such as HIV/ AIDs, female health, child health and mental health, driven by proximity of existing facilities and agglomeration of future facilities. Demand for healthcare as a result of climate change likely to increase due to water quality, stress because of changes in domestic patterns and heat exhaustion. Use existing facilities but extend operational time and add daily shifts. Spatially provide for amenities or programmes to assist with maternal mortality, women under 20 years of age delivering and child health (though improving). Provide structured neighbourhood spaces (per 0.5 ha persons 1 000 people/ 250 households) to promote youth development and family programmes. Encourage and provide spatially for food gardens and small-scale farming and related programmes.
Directives from 2015 MSDF	➤ Place new health facilities where economic growth potential is highest and most people (aligned with NSDP principles).
Safety	Provision of Emergency services i.e. fire stations and police stations in all settlements in Langeberg Municipality comply with the norms: There is a police station in every settlement: Ashton, Bonnievale, McGregor, Montagu and Robertson and a fire station in Ashton and Robertson. There are also other emergency services offered at a district level such as veld, chemical and mountain fires; bureau of missing persons; mountain rescue; poisons help-line; snake catcher; gender-based violence command centre. Within Langeberg Municipality, Robertson/Nkqubela is a hotspot. Langeberg Municipality does not form part of the Regional Socio-Economic Programme (RSEP) and Violence Prevention through Urban Upgrading (VPUU) Programme. RSEP focuses on urban, social and spatial upgrading and safe and sustainable neighbourhoods (preventing crime and violence) in previously disadvantaged urban areas in the Western Cape. An urban upgrading programme was developed by a national initiative to achieve the same goals. (Langeberg Neighbourhood Development Partnership Grant Investment Plan for Robertson/Nkqubela, 2020).
Directives	Provide spatially for safety and disaster infrastructure gaps informed by demarcated target reach according to fire and police station norms and any other emergency and safety services and identified gaps. Provide community safety programmes at hotspots and within their spheres of influence. Promote urban upgrade programmes.
Directives from 2015 MSDF	➤ Address crime levels in Robertson given its economic role: create public open spaces with good surveillance.
Education	Nearly a third, 28%, of the Langeberg Municipality's population is younger than 15 years, representing pre-school and school-going age. There are: • 40 primary schools. • 9 secondary schools. • 10 combined schools. • no tertiary institution. • 17 schools equipped with libraries. • 52 pre-primary and playschools. • 59 schools of which 45 (76%) are no fee schools. Early childhood development services include home visits, playgrounds, toy libraries and centres. There are a total of 52 ECD centres.

	In 2010, 2 256 children aged 0 – 6 years in the Langeberg Municipality attended an educational institution (registered ECD preschools accommodate 6 children and more). Facilities having 6 children and less register as playschools and are excluded. On average 44 children were enrolled per facility projecting the same number (20%) of children enrolled in 2023 out of a likely 11 116 children between 0 – 4 years.							
	Settlement	Ashton	Bonnievale	McGregor	Montagu	Robertson	Rural	Total
	No. of children, 2010	413	350	78	510	905	-	2 256
	ECD services, 2023	8	6	2	8	27	1	52
	Ninety percent (90%) of children between 5-17 years of age <u>attended school</u> in 2016. 10% of children in this cohort do not attend school which is higher than the provincial rate of 7% of children not attending school. Twelve percent (12% or 637) of children between ages 15 and 17 are in the labour force.							
	The matric pass rate was 73.8% in 2020.							
	The percentage of the population aged 20 years and older (as per StatsSA 2016), and their educational status:							
		No or incomplete primary school (& not applicable)		Completed primary or incomplete secondary schooling and are semi-skilled		Complete secondary schooling or a tertiary qualification		
	Percentage, 2016	20% (& 6%)		44%		30.3%		
	Number, 2023	18 460		31 483		21 680		
	Skills level	Unskilled		Semi-skilled		Skilled		
	Jobs/ Employment 2020	14 241		11 692		5 256		
Directives	Nearly a third, 28%, of the Langeberg Municipality’s population is younger than 15 years, representing pre-school and school going age. Provide educational and social learning spaces indoors and outdoors to address learning and learner trends: enrolment, retention, matric pass rate. Spatially provide for all educational facilities in settlements and remote villages according to CSIR norms and in particular: 1 primary school or grade R per 1 000 learners (1.9 ha/ 1 000 or less; 0.9 ha sports field included), 1 secondary school per 2 500 learners and crèches are variable (0.02 ha / 100 children). Provide for after school education and training and further education and training facilities. Drive for increases in: • ECD enrolment by 10% (from 20%); • Learner enrolment by 2%; • Average learner retention increases by 10% in the municipal area and in the long-term a drop-out rate of less than 2%; • Matric pass rate by at least 7%; • Matching the skills of the population aged 20 years and older with workplace demands: ○ No or incomplete primary school education vs low skilled jobs (77% employment in 2020); ○ Primary or incomplete secondary schooling and semi-skilled vs semi-skilled jobs (37% employment in 2020); ○ Complete secondary schooling or a tertiary qualification vs skilled jobs (24% employment in 2020). Specifically, skills development for matriculants. Provide spatially for outdoor training and education. Provide spatially for access to google scholar. Provide spatially for tertiary education facilities. Provide for farm schools and sport facilities in rural areas.							
Directives from 2015 MSDF	➤ Address no schooling; ➤ Provide for a new high school and primary school in both Montagu and Ashton and a high school in Robertson.							

Figure 4: Living standard Measures vs Skills level, Income and Internet Access



Map 18: Langeberg Socio-Economic Profile



Economy

In 2019, Langeberg's economy was valued at R7.2 billion (current prices) and included the following sector contributors:

Sector	Broad Sector	Contribution	Percentage
Wholesale and retail trade, catering, accommodation	Tertiary	R1.4 billion	19.9%
Manufacturing	Secondary	R1.3 billion	18.2%
Finance, insurance, real estate & business	Tertiary	R1.2 million	17.3%
Agriculture, Fishing & Forestry	Primary	R0.8 billion	10.9%
Transport, storage & communication	Tertiary	R0.8 billion	10.8%

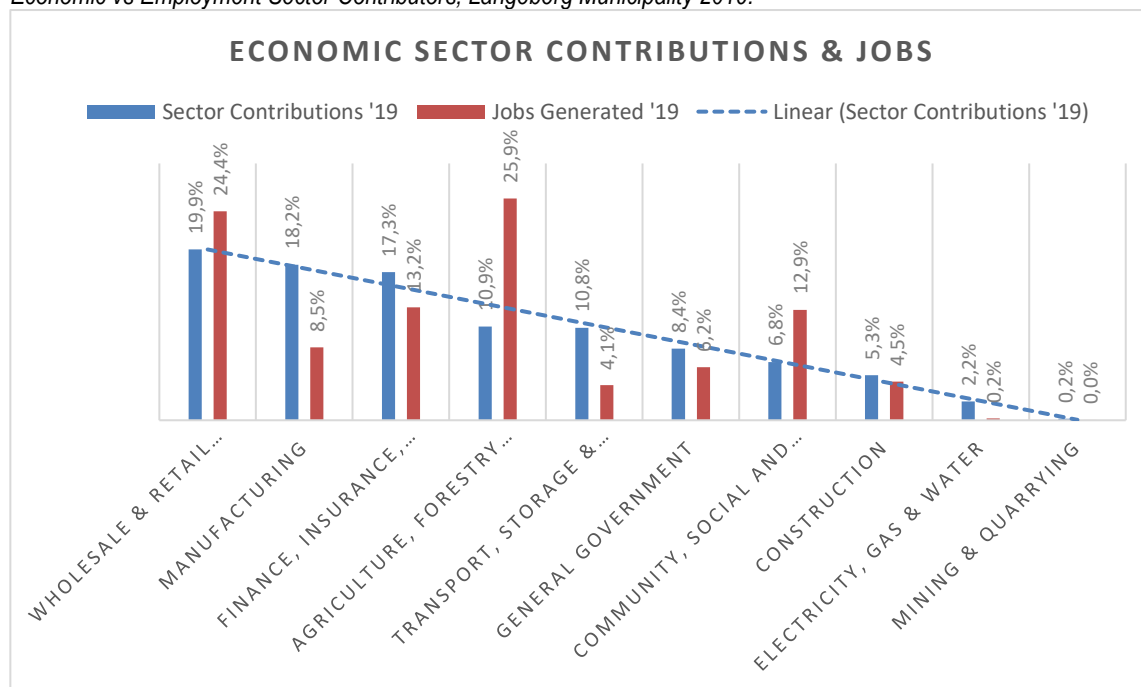
The Langeberg economy is diversified as evidenced by a Tress index of 47.7. For the period 2015 – 2019, the economy of Langeberg Municipality realised an average annual growth rate of 1.2% which can be attributed to the 3.1% annual growth rate in the tertiary sector. Growth in the tertiary sector was driven by the following contributions: finance sector 4.9%, transport 3.2% and trade 2.5%. A decline in economic growth was anticipated due to Covid 19 and currently because of worldwide volatility.

Agri-Industrial and industrial development (manufacturing) is driven by local export agriculture. Hence, access to infrastructure (Ports and Airports) and compliance-with-ease spaces and facilities within Langeberg Municipality resulted in intensification of agriculture and agri-industry. Though manufacturing has high economic value, it is energy and water dependent. Currently Langeberg Municipality has access to reliable water sources but need to fast track reliable alternative energy generation. In future alternative water sources have to be investigated to decrease reliance on the Breede River and alternative energy generation has to replace use of conventional energy.

Sectors that are high contributors and highly competitive are Manufacturing, Wholesale and Retail and Finance, Insurance and Real Estate, whilst sectors that are high contributors but less competitive are Agriculture, Fishing and Forestry and Transport, Storage and Communication.

Sectors in the Langeberg Municipality that are both highest contributors to the economy and to employment are: Wholesale, retail, catering and accommodation, Manufacturing, Finance, insurance, real estate and business services and Agriculture. The high contributing sectors to both the economy and employment in Western Cape which are similar to Langeberg Municipality are Finance, insurance, real estate and business services, Wholesale, retail, catering and accommodation and Manufacturing.

Economic vs Employment Sector Contributors, Langeberg Municipality 2019:



Economic vs Employment Sector Contributors, Western Cape 2019:

Rank	1	2	3	4	5
Employment	Finance, Real Estate	Community & Social/ Gen Gov	Wholesale & Retail	Manufacturing	Agriculture
Economy	Finance, Real Estate	Manufacturing	Wholesale & Retail	General Gov	Transport

Economic Sector Employment contributors in 2019, and in order of highest job contributors respectively:

Sector	Broad Sector	Jobs	Percentage
Agriculture, forestry and fishing	Primary	13 856	25.9%
Wholesale and retail trade, catering and accommodation	Tertiary	13 057	24.4%
Finance, insurance, real estate and business services	Tertiary	7 056	13.2%
Community, social & personal services	Tertiary	6 908	12.9%
Manufacturing	Secondary	4 557	8.5%

Eighty five percent (85%) of employment opportunities are generated by five sectors out of ten (10) sectors. Two out of the five sectors, Wholesale and retail, catering and accommodation and Finance insurance, real estate and business services, add high value to products and services. Manufacturing also adds value but is a smaller contributor to employment.

A total of 53 489 workers of which 32 739 (63.8%) are in the formal sector and 20 750 (38.8%) are in the informal sector is estimated to be employed in 2019. In 2020, 31 189 formal and 19 379 informal jobs made up the total of 50 568 jobs reflecting the retraction in employment in both the formal and informal sector during the Covid pandemic. Three quarters (74%) of the workforce (20 – 64) were employed in 2020. The top complaints reported to Law Enforcement Officers are about informal traders selling goods on the street without a permit, which is against the law.

In 2020 most of the formally employed were low-skilled (44.7%) and semi-skilled (37.4%) whilst the demand for semi-skilled has increased slightly.

Unemployment rates in 2020 were 7.3% (incl. people looking for work and not finding employment, excluding people that want to work but do not actively seek employment) in the Langeberg Municipality: 10.8% in the Cape Winelands and 18.9% in the Western Cape. (SEP, 2021).

Cape Winelands District	Full Time Employee Trends 2018-2022					Firm Trends 2018-2022				
	Jobs 2022	% FTE in Municipality	% FTE in District	Absolute FTE 2018-2022	Relative % Net WC 2018-2022	Firms 2022	% Firms in Municipality	% Firms in District	Absolute 2018-2022	Relative % Net WC 2018-2022
Langeberg Municipality	22 665	100%	9.0	3 962	4.8	1 036	100	9.3	133	2.2
Robertson	11 255	49.7	4.5	2 622	3.2	520	50.2	4.7	44	0.7
Montagu	4 524	20.0	1.8	588	0.7	240	23.2	2.2	38	0.6
Ashton	3 652	16.1	1.4	131	0.2	90	8.7	0.8	20	0.3
Bonnievale	2 848	12.6	1.1	511	0.6	151	14.6	1.4	27	0.5
McGregor	386	1.7	0.2	110	0.1	35	3.4	0.3	4	0.1

(Western Cape Economic Dashboard, 2023)

Robertson having 11.3 thousand FTE and 520 firms in 2022, added 2.6 thousand net FTE and 44 firms between 2018 and 2022. The agriculture, forestry and fishing sector made up 57% of the town's formal workforce in 2022. This sector had the largest job growth, specifically amongst a range of crop and animal production sub sectors like growing of grapes, post-harvest crop and mixed farming activities which grew by just over 2 thousand jobs (in Robertson) between 2018 and 2022.

Directives

Enhance Economic Sector Employment Contributors:

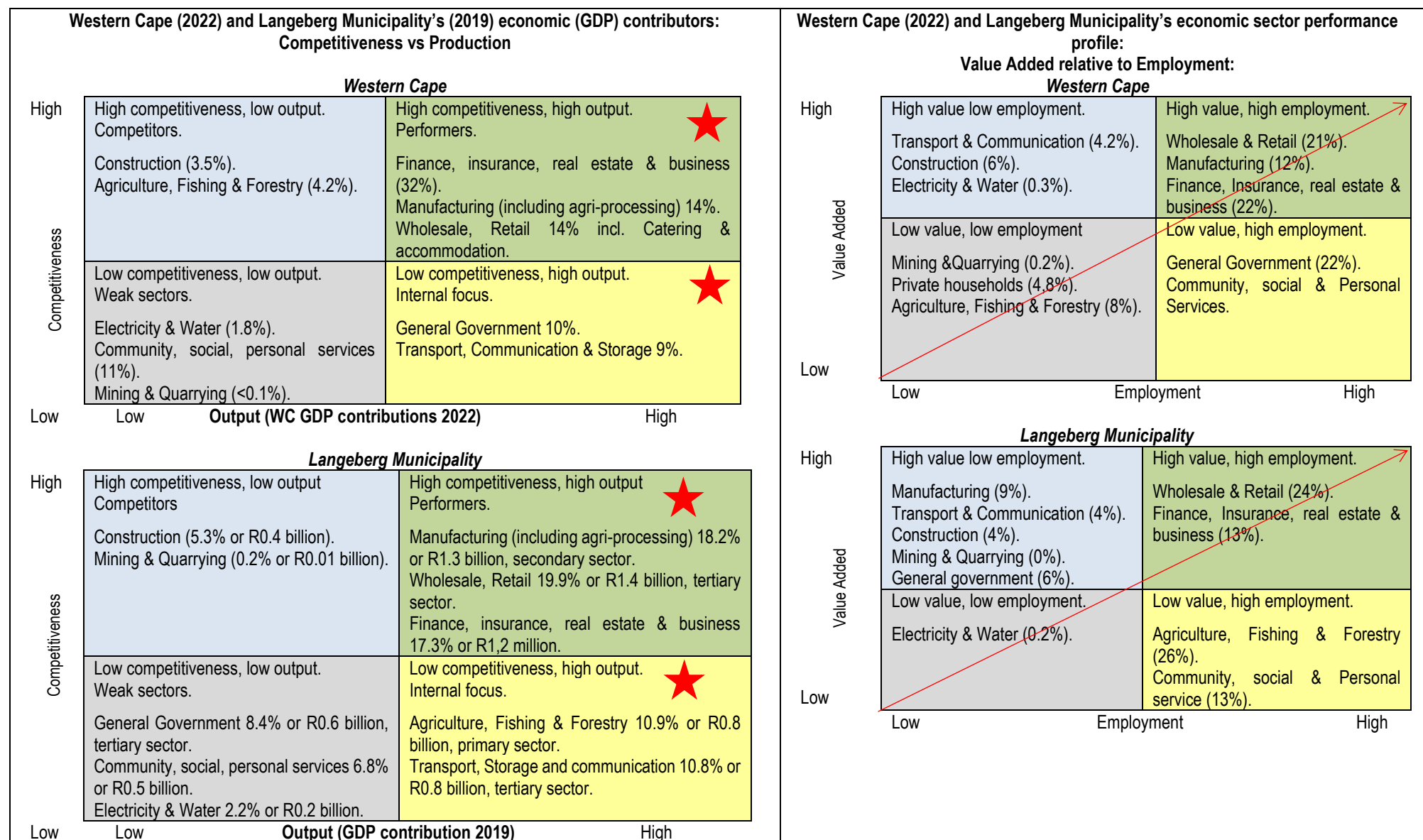
- Spatially provide for formal and informal industry and business particularly in Robertson, Ashton and Bonnievale;
- Promote business agglomeration and establish catalytic environments where road infrastructure allows, either at settlement level or at intersections;
- Prepare focus area plans to facilitate and mitigate contrasting uses and in particular Conservation and Settlement Making (Robertson, Ashton, Montagu), Mining (Overall) and Agriculture (Overall), within the biophysical environment as well as Agricultural Uses and value chain activities and transport and freight needs.

Promote the agricultural and conservation sector defining the character of Langeberg Municipality, as wine, fruit and nature reserve destination of the Western Cape.

	Economic Sectors that are high contributors in the Western Cape but could intensify or lack in Langeberg Municipality area should be spatially encouraged to establish in Langeberg Municipality: - Specific economic sectors: Transport, Storage, Communication and Energy (renewable), to be specifically promoted within settlement and rural spaces to absorb social and employment trends; - On-site training and skills centres promoting specific economic sectors. Provide for agglomeration of existing well-performing sectors to strengthen these sectors e.g. Agricultural value chain. As three quarters (74%) of the working age population (20 – 64) work, provide for the balance that are economically non-active to become economically active and promote home occupation and small business. Provide for social support where required by the economically active population with no income but in employment at home (caring). Provide overall for income generation spaces to decrease the unemployment rate in the Langeberg Municipality. Lower the entry barriers to legal informal trading. Enhance access to compliance-with-ease spaces and facilities within Langeberg Municipality and fast track land use applications.
Directives from 2015 MSDF	➤ Support and grow Manufacturing, Agriculture and Wholesale and retail trade incl. tourism contributing the most to GVA and add high value (excl. agriculture) and employment opportunities; ➤ Harness construction; ➤ Electricity and water and community services would offer little in terms of output and competitiveness; ➤ Increase labour force participation rate (LFPR), prioritised in Robertson north, Nkqubela, Zolani, Ashbury (Montagu) and Happy Valley (Bonnievale); ➤ Skills training provided to the lower income communities; ➤ Support LED identified projects; ➤ Promote tourism attractions along the R62 and R60 routes and get passing through tourist to spend time; ➤ Promote tourism activities along the Breede River.
Tourism	Tourism spending expressed as a % of Gross Domestic Product (GDP) is gradually increasing from 5,3% (2020), 5,8% (2021, R0,958 billion) to 6,5% (2022) (SEP, 2023). Most of Tourism contribution is included in the Wholesale, Retail trade, Accommodation and Catering sector's 17,2% contribution to the (GDP) of Langeberg. To support and build the industry, a Langeberg tourism development strategy is being developed. Domestic tourism remains the largest contributor in value terms to the South African tourism economy. Foreign tourism preferences in 2021 included 52,5% of surveyed tourists visited Natural Attractions; 50%, Beaches; 29%, Wildlife; and 34%, Adventure experiences. The Robertson wine route, the Marloth nature reserve including the river course above the waterfall and the waterfall hiking trail, Montague, Grootvadersbosch and adjacent Boosmansbos nature reserves, Arangiskop and Tradouws pass are the major tourist attractions. Tourism has a high employment intensity and can absorb relatively low-skilled workers. In 2019, a breakdown of the total tourism jobs (that is, those jobs created by foreign and domestic visitor consumption in tourism-characteristic industries and value chain) per industry, was: • Road passenger transport industry, 31%; • Food and beverage industries, 19%; • Retail trade industries, 20%; • Accommodation industry, 15% and • Agencies (travel), cultural industry and sport and recreation, 9%. At a local level more jobs would have been in the food and beverage, retail trade and accommodation industries and far less in the road passenger transport industry. Black African South Africans held 76% of total jobs across the tourism industries in 2019 and women comprised 40% of all tourism industry jobs. Most tourism enterprises are small, medium and micro-enterprises (SMMES) constituting about 90% of all tourism businesses in the country.

Directives	Ecosystems are the basis for life and economic production and Agriculture underpin the economic sectors that are well performing such as Finance, Trade (tourism) and Manufacturing. The conflicting economies are recognised as an opportunity if it can link to environmentally sound economic development potential through climate-smart economic growth. This kind of growth is understood to protect and/or restore natural ecosystems while supporting sustainable production. Invest in climate-smart skills, linked to agri-processing industries and nature conservation for example the agri-factory workers, could be re-skilled for a more diversified agri- or energy and conservation economy.
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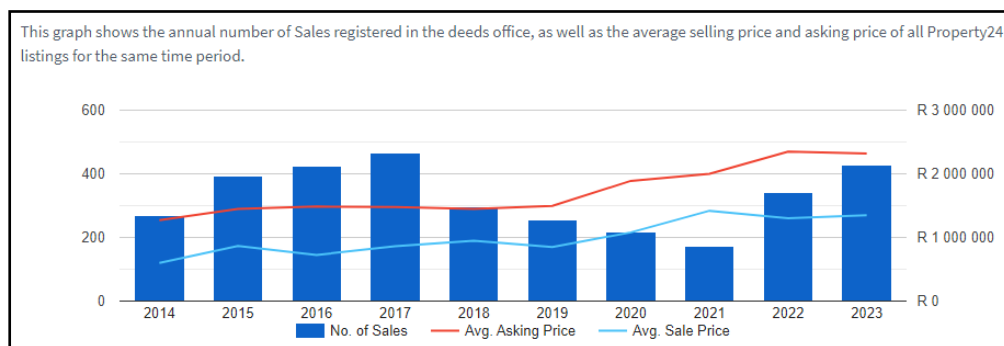
(SEP, 2021) (Western Cape Economic Dashboard, 2023)



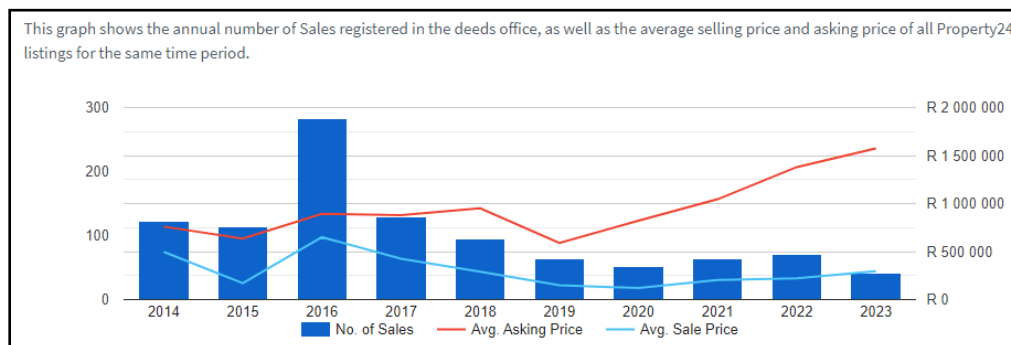
Property Market patterns, growth pressures & Land Reform	The demand for urban properties increased due to the popularity of the unique and tranquil lifestyle in combination with the relatively affordable prices. The property market trends for the period 2014 to 2023 for each settlement follow. In Montagu sales are declining, in Ashton, Bonnievale and McGregor sales keep a fairly steady trend whilst in Robertson sales are increasing.
Directives	Promote the supply of GAP and affordable housing. Promote the supply of high-income housing in Robertson, Montagu and Bonnievale. Ensure transfer of ownership of subsidised housing and serviced sites.
Directives from 2015 MSDF	➤ The SDF should provide policy to ensure that land reform projects do not result in settlement in inappropriate places (p143).

Annual Sale and Listing Trends (Property24, 2023)

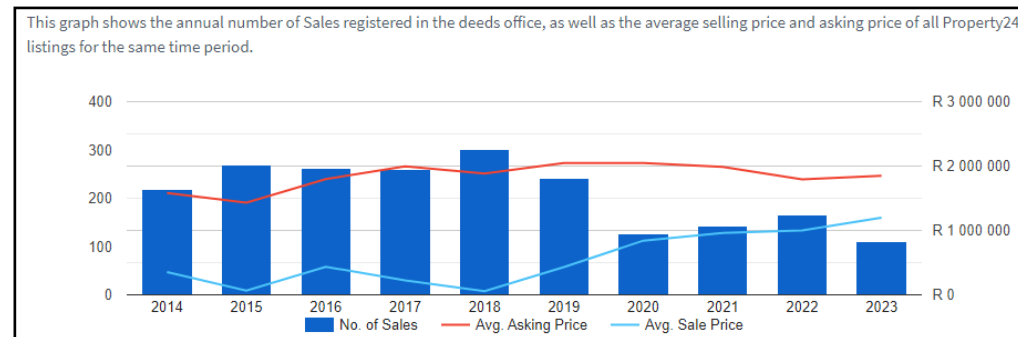
Robertson



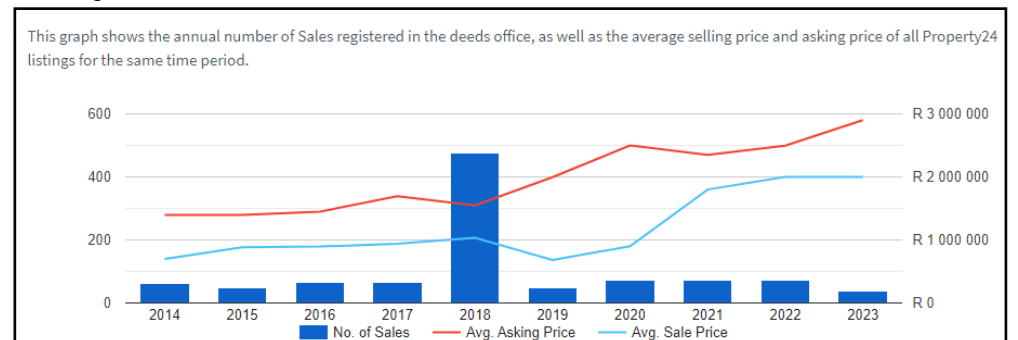
Ashton



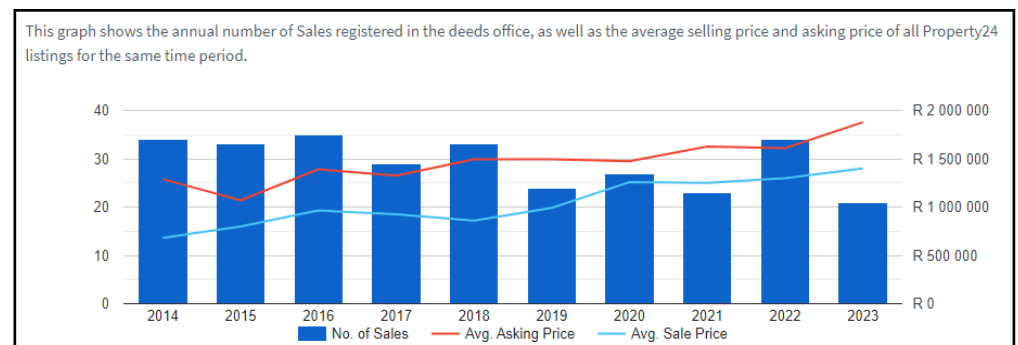
Montagu



McGregor



Bonnievale



2.1.3 Built Environment Spatial Analysis

Built Environment: Engineering Services, Human Settlement Development and Heritage	
Hierarchy and Role of Settlements	Robertson is the main urban and agricultural service centre being located within one of the largest wine producing regions in SA. Montagu is situated north of the Cogmanskloof Pass and has dried fruit, muskadel and hot springs as signature. Ashton is located between Montagu and Robertson and home to the canning factories of which only Ashton Canning (Tiger Brands) is in operation but scheduled to remodel its operation. Bonnievale is known for its wines, manufacturing of peach and apricot products and for processing milk and making cheese. The GPS (2018) confirmed the growth potential of the Langeberg municipal area as Medium in relation to the WC. Composite Growth potential of Ashton, Bonnievale, McGregor, Montagu and Robertson is Medium.
Directives	Focus areas emerge from the hierarchy and role and connectivity of settlements. <u>Breede River Plain: Robertson, Ashton and Bonnievale Cluster (Agri-Industry):</u> R60 and R317 (and road over Drew) connect Robertson, Ashton and Bonnievale. Enhance residential, rural and agri-processing roles across this area on the Breede River Plain. <u>Robertson, McGregor and Montagu Cluster (Tourism):</u> Drive role as tourism destinations whilst operational agri-service is protected. Introduce land uses and multi-purpose facilities. Ashton has a locational advantage as it connects to all directions and all settlements within the Langeberg municipal area and the Transport, storage and communication sector should be enhanced and related hubs should be promoted. Support hubs that enhance agri-services and processing in Ashton, Bonnievale, Robertson and Montagu and capitalise on the locational advantage of Robertson and Ashton. From a Growth Potential perspective, all settlements have a medium growth potential. Hence spatially provide for economic development and related residential. McGregor and Montagu have high innovation potential and spatial provision should be made for training, skills development and innovation.
Roads & Transportation modes	Mini-bus taxi (MBT) is the dominant public transport mode providing both commuter and long-distance services with limited supportive infrastructure. Bus services do exist for transporting learners (a contract service provided by Western Cape Department of Education) and for long distance travellers (TransLux and City to City providing a commercial service daily) with no public bus stop facility. Rail infrastructure exists for freight and restricted passenger movement only. There are three train stations at Robertson, Ashton and Bonnievale and three sidings: Vink, Merwesport and Drew. Robertson has a regional light aircraft airport located on the eastern outskirts of settlement. National Household Travel Survey (NHTS) highlighted that over 58.9% of all work trips are made on foot in the Langeberg municipal area. According to the Local Integrated Transport Plan, 2016, the road network involves some 238 km of road as well as 17 km of 80-20 Provincially subsidized road. A Road Asset Management Plan (2019) is in place to rejuvenate old road surfaces, which is a high priority, followed by patching and resurfacing and construction and fixing of pavements to prevent excessive deformation or potholes.
Directives	<u>Road Network and connectivity:</u> Capitalise on opportunities connectors create: R60 and R62 intersections and links inland to high-speed roads (N1 and N2). Public Transport modes, service frequency and routes limit mobility as most people travel on foot. Provide for non-motorised transport: well-maintained routes, shelter and transport of purchased goods. Enhance transport facilities used by private providers such as taxi ranks and bus stops. Link distant settlement precincts with Non-Motorised Transport (NMT) routes. Liaise with Transnet to extend operating rail for passengers between settlements, between municipal area and Worcester and keep intact and enhance tourism rail.

Airfields: Enhance regional light aircraft airfield adjacent to Robertson and capitalize economic opportunity.

Public Transport infrastructure:

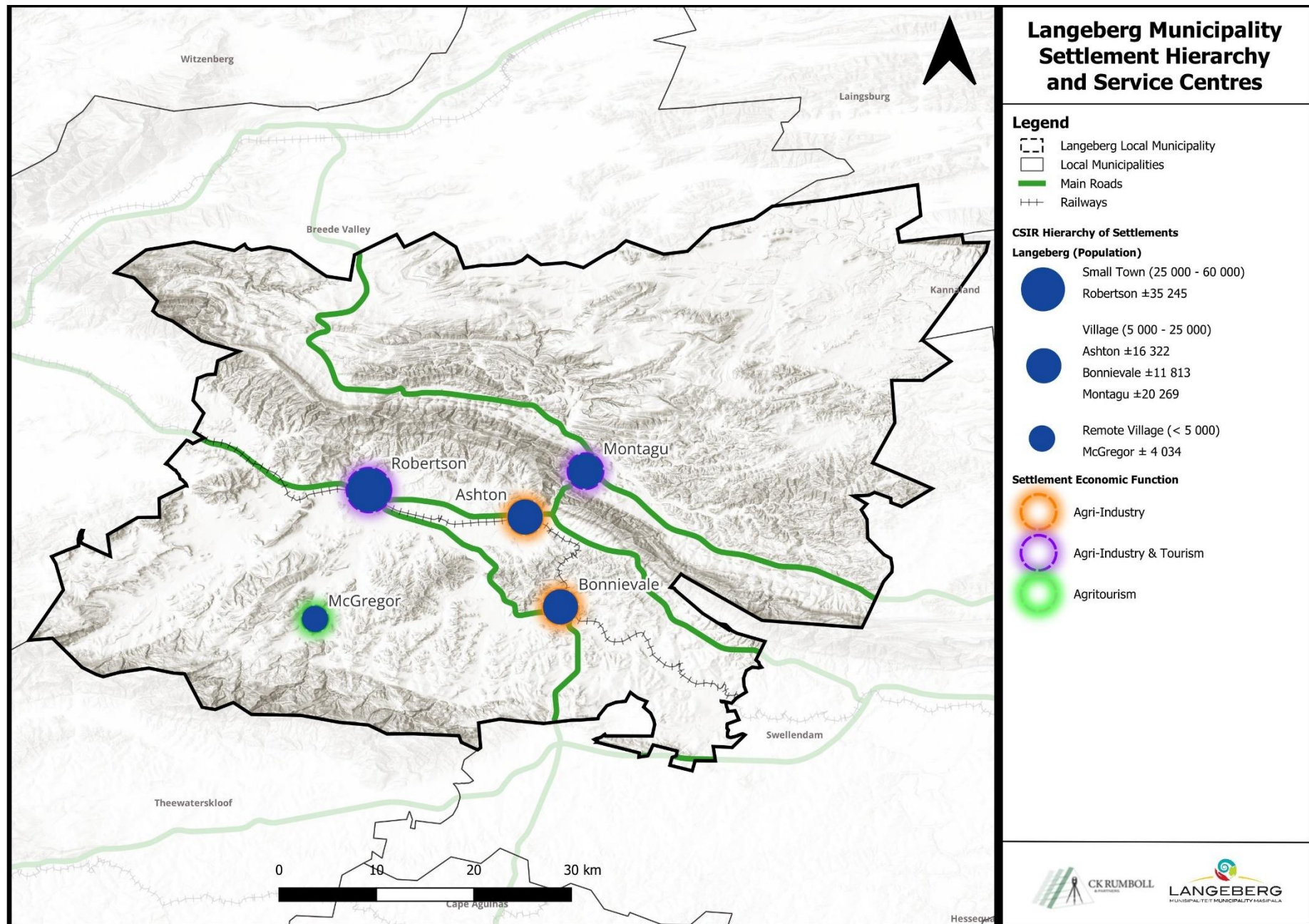
Ensure dedicated parking for taxis in central business areas on Saturday mornings and end of the month when there is the highest demand for these services: Upgrade or build taxi ranks in Robertson, Ashton, Montagu and Bonnievale.

Upgrade commercial bus service stops in the Langeberg municipal area to make routes more accessible to commuters within the municipal area.

Routes and more frequent trips outside municipal area are required. Ashton should serve as the transport hub for the region. Establish regional and district transport nodes at Ashton.

The current capacity of the road transport network and the proposed networks as per the Local Integrated Transport Plan (2016) Langeberg, accommodates the current trips and capacities should be assessed to accommodate growth and densification.

Map 19: Langeberg Settlement Hierarchy and Service Centres



Stormwater	No Stormwater Management Plan is available for Ashton and McGregor. <u>Bonnievale</u>: The stormwater system consists of various surface channels (some lined and others as earth drains) and is in some cases combined with the minor irrigation channel network. The major irrigation channel is a prominent structure that can divert/cut-off stormwater from the natural drainage route. The minor irrigation channel is used by the local authority as a stormwater system where no minor stormwater system exists. The CBD stormwater system was not designed as a gravity system. And the largest part of the drainage system is linked to the very shallow minor irrigation channels. There is a dedicated stormwater system in some parts of Happy Valley consisting of underground pipes and catchpits in Milners Street. The remainder of Happy Valley is not serviced by a stormwater system and stormwater is drained in the roads and through erven. There are side drains next to most of the roads in Mountain View. Both stormwater and irrigation systems are not maintained adequately. Problems experienced with stormwater drainage are due to inadequate road alignment design and a lack of maintenance of the stormwater system. <u>Montagu</u>: Runoff from a small part of Badshoogte (Montagu North) and Montagu West deposits into the Keisie and remainder of Montagu drains into Kingna River. Montagu (incorporating Ashbury) is served by 20 drainage systems. Drainage systems within developed areas comprise limited underground stormwater pipes and channels and are predominated by overland flow through developed areas complemented by “leiwaterroute” and surfaced or gravel (unsurfaced) roadways. <u>Robertson</u>: All stormwater runoff is routed aboveground via the internal streets and preferential drainage paths. There are numerous lined and unlined channels as well as culverts beneath existing streets that cross the channels.																																																														
Directives	Road and Stormwater <u>Infrastructure upgrades are required</u> in all settlements, but gravel road surfaces should be maintained as to not change the rural character of McGregor. Reuse of stormwater for irrigation of parks.																																																														
Waste	According to the draft Integrated Waste Management Plan (IWMP, 2021), ±27 000 tons of waste was generated in 2020 made up of 24 059 tons of municipal waste, 1 871 tons of organic waste and 1 136 tons of construction. The settlements generated the following tonnage: <table><tr><td>Town</td><td>Ashton</td><td>Bonnievale</td><td>McGregor</td><td>Montagu</td><td>Robertson</td><td>Total</td></tr><tr><td>Tonnage</td><td>4 518</td><td>3 053</td><td>1 012</td><td>4 721</td><td>9 778</td><td>23 082</td></tr></table> The waste generated included 61% recyclables, 24% or more non-recyclables and on average 15% and more organic waste (WCS, 2016). Future waste generation rates were applied & the volume of waste until 2027 is: <table><tr><th colspan="6">Future estimated waste generation rates (tons)</th></tr><tr><th>Year</th><th>Population</th><th>Total Waste Generation</th><th>Low Income: 57%</th><th>Middle Income: 38%</th><th>High Income: 5%</th></tr><tr><td>2025</td><td>132 268</td><td>32 865</td><td>18 733</td><td>12 489</td><td>1 643</td></tr><tr><td>2027</td><td>137 611</td><td>34 193</td><td>19 490</td><td>12 993</td><td>1 710</td></tr></table> Waste sites and waste transfer sites: <table><tr><th>Town</th><th>Ashton</th><th>Bonnievale</th><th>McGregor</th><th>Montagu</th><th>Robertson</th></tr><tr><td>Site Type</td><td>- Waste Disposal Facility and Transfer Station. - Material Recovery Facility.</td><td>- Waste Disposal Facility. - Drop-off Facility.</td><td>- Waste Disposal Facility. - Drop-off Facility.</td><td>- Waste Disposal Facility. - Transfer Station.</td><td>- Transfer Station. - Compost Facility.</td></tr><tr><td>Environment ally Authorised & Licensed</td><td>Yes 16/2/7/H300/D41/Z1/P33 2/A1 ** 19/2/5/2/B1/2/WL0152/1 8 #</td><td>Yes 16/7/H500.D79.Z1.P 304 ** 19/2/5/4/B1/4/WL012 8/18 #</td><td>Yes 9/2/5/1/B2/10/WL008 2/13 **</td><td>Yes B33/2/800/45/2/P16 9 **</td><td>No</td></tr><tr><td>Additional Remarks</td><td>Is a licensed landfill site with an operation permit.</td><td>Is a licensed landfill site with an operation permit.</td><td>Closed but rehabilitation required.</td><td>Operational, but closure and rehabilitation required.</td><td>Closed and rehabilitat ed. Non-recyclable general waste transporte</td></tr></table>	Town	Ashton	Bonnievale	McGregor	Montagu	Robertson	Total	Tonnage	4 518	3 053	1 012	4 721	9 778	23 082	Future estimated waste generation rates (tons)						Year	Population	Total Waste Generation	Low Income: 57%	Middle Income: 38%	High Income: 5%	2025	132 268	32 865	18 733	12 489	1 643	2027	137 611	34 193	19 490	12 993	1 710	Town	Ashton	Bonnievale	McGregor	Montagu	Robertson	Site Type	- Waste Disposal Facility and Transfer Station. - Material Recovery Facility.	- Waste Disposal Facility. - Drop-off Facility.	- Waste Disposal Facility. - Drop-off Facility.	- Waste Disposal Facility. - Transfer Station.	- Transfer Station. - Compost Facility.	Environment ally Authorised & Licensed	Yes 16/2/7/H300/D41/Z1/P33 2/A1 ** 19/2/5/2/B1/2/WL0152/1 8 #	Yes 16/7/H500.D79.Z1.P 304 ** 19/2/5/4/B1/4/WL012 8/18 #	Yes 9/2/5/1/B2/10/WL008 2/13 **	Yes B33/2/800/45/2/P16 9 **	No	Additional Remarks	Is a licensed landfill site with an operation permit.	Is a licensed landfill site with an operation permit.	Closed but rehabilitation required.	Operational, but closure and rehabilitation required.	Closed and rehabilitat ed. Non-recyclable general waste transporte
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** Section 4.6 of Langeberg IWMP, 2021. [Waste Management Licence]. # Compliance Audit Report under Annexure B. - Ashton: Waste Disposal Facility (WDF) should have been closed and rehabilitated as per license (ref: 19/2/5/2/B1/2/WL0152/18) after allowable airspace was used. A total of 20,953.3m³ of waste was placed at the WDF between 2022 and 2023. - Bonnievale: Waste diversion activities at the WDF enhanced the site to have unlimited airspace and undefined lifespan. - McGregor: Application was made to DEADP to postpone the WDF decommissioning date. - Montagu: The WDF had a nett airspace remaining of 3,075.91 m³ in 2023. - Robertson: The WDF has been rehabilitated and no longer receives waste for disposal.																																																																																
Directives	<u>For households and businesses:</u> Provide recycling igloo spaces/ waste separation and collection spaces in settlements. <u>Bulk:</u> Provide for recycle space at the landfill sites and at the transfer stations. Encourage providing garden waste to private composting plants and building rubble to infill projects. Provide spatially for agri-processing and industrial waste on site, close to site and establish waste re-use plants. Promote organic waste facilities near all settlements. Promote recycling igloos in all settlements and waste separation at sources of origin.																																																																															
Directives from 2015 MSDF	➤ Implementation of the IWMP with detailed action plans and key performance indicators: ○ Preparing an Integrated Waste Management by-law; ○ Audit all waste management facilities as required per respective waste permit; ○ A minimum of a 500 m buffer around solid waste sites where no residential development should be located.																																																																															
Sewerage	The sewerage volumes in 2012 are tabulated below: <table><tr><th>Sewerage: (Present Water Demand, 2012) Potential, assuming all stands occupied</th><th>Water use (kℓ/d)</th><th>NRW est. (kℓ/d)</th><th>AADD (kℓ/d)</th></tr><tr><td>Ashton</td><td>5 534</td><td>1 062</td><td>6 596</td></tr><tr><td>Bonnievale</td><td>3 848</td><td>962</td><td>4 810</td></tr><tr><td>McGregor</td><td>891</td><td>157</td><td>1 048</td></tr><tr><td>Montagu</td><td>5 171</td><td>575</td><td>5 746</td></tr><tr><td>Robertson</td><td>7 015</td><td>1 238</td><td>8 252</td></tr></table> Master plan implementation costs are estimated at R54.1 million (2012) or unit cost of R4 606 R/kℓ/d. The implementation will increase the total sewer system capacity of the towns within Langeberg Municipality from its present Peak Daily Dry Weather Flow (PDDWF) of ± 10 664 kℓ/d to the future PDDWF of ± 21 766 kℓ/d (SWP, 2012). Existing WWTWs should be progressively improved to comply with the effluent quality requirements set out in their licenses and achieve the minimum potable (drinking) water, contact, phosphate, nitrate and e-coli standards. The Langeberg Municipality WWTWs capacities and distribution infrastructure: <table><tr><th rowspan="3">Sewer Drainage Systems</th><th colspan="2">WWTWs Capacity</th><th colspan="2">Sewer Drainage Network</th><th rowspan="3">Number of Sewer PS</th></tr><tr><th>Hydraulic Capacity</th><th>Organic Capacity</th><th>Rising</th><th>Gravity</th></tr><tr><th>Mℓ/d</th><th>kg COD/d</th><th>Km</th><th>km</th></tr><tr><td>Robertson</td><td>4.300</td><td>5 148</td><td>3.300</td><td>80.400</td><td>3</td></tr><tr><td>McGregor</td><td>0.300</td><td>187</td><td>0.00</td><td>18.900</td><td>0</td></tr><tr><td>Bonnievale</td><td>1.800</td><td>1 566</td><td>6.100</td><td>37.600</td><td>9</td></tr><tr><td>Ashton</td><td>2.450</td><td>2 720</td><td>3.200</td><td>41.300</td><td>4</td></tr><tr><td>Montagu</td><td>3.500</td><td>2 695</td><td>4.500</td><td>69.400</td><td>4</td></tr><tr><td colspan="3">Total Langeberg</td><td>17.100</td><td>247.600</td><td>20</td></tr></table> A summary of current hydraulic design capacities and current flows at each of the WWTWs, as well as the final effluent quality compliance percentages for the 2020/2021 financial year:						Sewerage: (Present Water Demand, 2012) Potential, assuming all stands occupied	Water use (kℓ/d)	NRW est. (kℓ/d)	AADD (kℓ/d)	Ashton	5 534	1 062	6 596	Bonnievale	3 848	962	4 810	McGregor	891	157	1 048	Montagu	5 171	575	5 746	Robertson	7 015	1 238	8 252	Sewer Drainage Systems	WWTWs Capacity		Sewer Drainage Network		Number of Sewer PS	Hydraulic Capacity	Organic Capacity	Rising	Gravity	Mℓ/d	kg COD/d	Km	km	Robertson	4.300	5 148	3.300	80.400	3	McGregor	0.300	187	0.00	18.900	0	Bonnievale	1.800	1 566	6.100	37.600	9	Ashton	2.450	2 720	3.200	41.300	4	Montagu	3.500	2 695	4.500	69.400	4	Total Langeberg			17.100	247.600	20
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	WWTW	Existing Hydraulic Capacity	Peak Month Average Daily Flow	Ave. Daily Flow (2020/2021)	Ave. Wet Weather Flow (Jul & Aug 2020, May & Aug 2021)	Ave. Daily Flow as a % of Design Capacity	Final Effluent Compliance for 2020/2021 against Authorisation		
	Robertson	4.300	6.293 (May '21)	5.152	5.461	119.8%	Microbiological: 10.0% Chemical: 65.6% Physical: 72.7% <i>General Limits</i>		
	McGregor	0.300	0.287 (Sep '20)	0.230 *	0.250	76.7%	Microbiological: 100.0% Chemical: 100.0% Physical: 100.0% <i>General Limits</i>		
	Bonnievale	1.800	1.036 (Jan '21)	0.887	0.826	49.3%	Microbiological: 45.5% Chemical: 88.6% Physical: 91.7% <i>General Limits</i>		
	Ashton	2.450	1.423 (Nov '20)	1.226	1.221	50.0%	Microbiological: 81.8% Chemical: 77.1% Physical: 91.7% <i>General Limits</i>		
	Montagu	3.500	2.474 (May '21)	2.275	2.295	65.0%	Microbiological: 90.9% Chemical: 77.1% Physical: 94.4% <i>General Limits</i>		
	Ashton's WWTW overflow needs attention. WWTWs in all settlements need upgrading.								
Directives	Provide for oxidation dam upgrades and upgrading of reticulation capacity with Robertson and Ashton (overflow) being priority. Re-use wastewater at municipal level.								
Directives from 2015 MSDF	➤ Promote Off-grid, small bore, dry and alternative technologies such as biogas (permanent occupation) or enviro-loos/biolytic filters/ventilated improved pit latrines (VIPL) (also suitable for periodic occupation); ➤ Implement master plan, increase total sewer system capacity across municipality from its present Peak Daily Dry Weather Flow (PDDWF) of ± 10 664 kℓ/d to the future PDDWF of ± 21 766 kℓ/d (SWP, 2012); ➤ (WWTWs) should be progressively improved and maintained so that the water quality of the rivers and waterbodies with which they are associated achieve minimum potable (drinking), contact, phosphate, nitrate and e-coli standards. Compliance with effluent quality requirements set out in licenses demanded; ➤ Alternative forms of sewage disposal and treatment for new developments should be promoted: wastewater to minimising pollution of surface and groundwater; ➤ All wetland ecosystems should be protected maintaining their ecological and stormwater purification function. Water abstraction from and effluent discharge into wetlands should be prohibited; ➤ Where urban development proposals will exceed infrastructure capacity, applications should be refused until the provision is made to deal with the additional loads.								
Electricity	According to the Langeberg Master Planning Investigation in 2017 Ashton, Bonnievale, Goudmyn, Le Chasseur, McGregor, Montagu & Noree medium voltage networks are all lightly loaded with the 5, 10 and 15- year growth forecasts easily absorbed by the existing network. The Robertson network requires immediate upgrade to continue to function as a reliable and stable medium voltage network given the volt-drop of 5%, which is higher than the recommended guideline of 3%. Bonnievale, McGregor and Ashton & Zolani need an upgraded distribution system.								
		Robertson	Nkqubela	Bonnievale	McGregor	Ashton	Zolani	Montagu	Ashbury
	E-Capacity	42.2 MVA		21.2 MVA	7.4 MVA	26.0 MVA		33.256 MVA	
	E-Demand 2012	32.1 MVA		8.9 MVA	2.5 MVA	10.7 MVA		8.265 MVA	
	E-Demand Estimated 2023	43.625 MVA & 28.839 MVA (Excl.)		11.546 MVA	3.454 MVA	11.275 MVA		11.042 MVA	
	E-Demand Estimated 2028	47.281 MVA (Incl.) 31.052 MVA (Excl.)		13.385 MVA	4.133 MVA	11.882 MVA		Of 12.764 MVA	
	E-Distribution	3x 15 MVA 66/11 kV transformer. Conductors within capacity.		1x 20 MVA 66/11 kV transformer. Conductors to be upgraded.	1x 10 MVA 66/ 11 kV Conductors have additional capacity.	2 x 20 MVA 66/11 kV & 5 MVA 66/11 kVA transformers. Distributors to be upgraded.		Conductors have additional capacity.	

Directives	<u>Households and businesses</u>: Encourage green building technology and power generation. <u>Bulk</u>: Establish Municipal and Private Renewable energy plants. Establish additional capacity in Robertson and upgrade the distribution system in Ashton and Bonnievale to make settlement expansion possible.
Directives from 2015 MSDF	➤ Require use of renewable energy sources, i.e. solar hot water cylinders and photo-voltaic systems in all new developments.

Water	Water Sources are listed below (Water Services Development Plan 2014/2015).		
	- Ashton: Breede River irrigation canal, the Cogmanskloof Irrigation Board (CBR), two small streams in the Langeberg Mountain Catchment Area (Robertson Canal). - Bonnievale: Breede River and Zanddrift Irrigation Canals. - McGregor: Houtbaais River which is treated at McGregor's water treatment plant. - Montagu: Kruiskloof, Keurkloof, Rietvlei and the CBR pipeline scheme and supplemented from aquifers in Badskloof (Montagu West). - Robertson: Langeberg Mountain Catchment Area north of Robertson and Breede River irrigation canal. (Brandvlei Irrigation Scheme (Breede River), Dassieshoek and Koos Kok Dams, Hoops River Irrigation Scheme).		
	Bulk water supply:		
	Settlement	Sources & Facilities	Volume
	Robertson	Robertson (Brandvlei) Irrigation Canal.	1.279 million m³/a Scheduled Abstraction (to WTW & "leiwaterr")
		Hoops River Irrigation Scheme	0.662 million m³/a, 21l/s. diversion capacity
		Langeberg Mountains: Dassieshoek, Koos Kok and Gumgroee Dams	1.324 million m³/a.
		Total	3.264750 million m³/a
		Leiwaterr	Yes
	McGregor	Houtbaais River Scheme – members of McGregor Water User Association (WUA)	1.31 million m³/a, 52% share of 2.52 million m³/a
		Two municipal boreholes	Poor water quality
		Total	1.31 million m³/a.
		Leiwaterr	Yes
	Bonnievale	Zanddrift Water User Association (WUA) irrigation canal abstracted from Breede River (Brandvlei Dam)	1.245 million m³/a, salinity levels, High
		Total	1.245 million m³/a
		Leiwaterr	No
	Ashton	Greater Brandvlei Dam & Robertson irrigation canal.	1.193 million m³/a.
		Cogmanskloof Irrigation Board.	0.270 million m³
		Municipality pump from Breede River scheme.	1.5 million m³ per year
		Total	2.962528 million m³/a
		Leiwaterr	None
	Montagu	Kruis River	124.000 Ml/a
		Rietvlei River	369.000 Ml/a
		Keurkloof	74.000 Ml/a
		Breede River: from Montagu pumpstation at Ashton	1.500 million m³/a
		Cogmanskloof Irrigation Scheme	525.000 Ml/a (75 Ha water at 7 000 m³ per Ha) 140.000 Ml/a (20 Ha winter water at 7 000 m³ per Ha)
		Total	1 232.000 Ml/a
		Leiwaterr	Yes
	Total	All settlements and irrigation	10 015 Ml/a
	Each settlement has an operational Water Treatment works and the operational process outlined is followed: Flow measurement, Coagulant dosing, Flocculation, Sedimentation, Filtration, Stabilisation, Disinfection and Sludge handling. At the McGregor WTW flocculation is not required whilst at the Montagu WTW aeration is required. The current capacities, current flows and required treatment capacities at each of the WTWs and the water quality failures for the distribution systems are summarised in the table below. All WTWs with the exception of Ashton are utilised over capacity.		

WTW	Existing Hydraulic Capacity	Peak Month Average Daily Flow	Ave. Daily Flow (Jul 2020 – Jun 2021)	Ave. Daily Flow as a percentage of Capacity	Required Treatment Capacity (1.5 x AADD10yr)	2020/2021 Water Quality Failures
	Mℓ/d	Mℓ/d	Mℓ/d	%	Mℓ/d	SANS0241:2015
Robertson	10.140	10.489 (Feb 21)	7.955	78.4%	14.545	Turbidity (Operational)
McGregor	0.600	1.117 (Feb 21)	0.738	123.0%	1.350	Turbidity (Operational & Aesthetic)
Bonnievale	5.000	5.620 (Jan 21) *	4.836 *	96.7%	9.211	Turbidity (Operational)
Ashton	11.910	9.299 (Feb 21)	5.662	47.5%	10.352	Turbidity (Operational), Combined Trihalomethane
Montagu	5.180	4.882 (Jan 21)	3.553	68.6%	6.497	Turbidity (Operational)
Total	32 630				41 9 55	

Bonnievale WTW Outflow needs attention.

The master plan implementation at a cost of R120.5 million will increase the Municipal system capacity from its present Annual Average Daily Demand (AADD) of 18 542 kℓ/d to the future AADD of 33 374 kℓ/d. This amounts to an implementation unit cost of R8 124 R/kℓ/d (WMP, 2012).

The water reticulation networks, pump stations and reservoirs are summarised in the table below for each of the water distribution systems.

Water Distribution System	Water Distribution Networks		Number of Water Pump Stations		Reservoirs		
	Bulk	Internal	Raw Water	Potable Water	Number of Reservoirs	Total Storage in Mℓ	Required Storage
	Km	Km	Number of PS	Number of PS			
Robertson	1.766	90.632	2	4	5	14.700	
McGregor	0.596	12.561	3	1	2	2.450	
Bonnievale	1.921	48.839	1	4	3	6.750	
Ashton	13.937	47.208	3	4	4	8.900	
Montagu	24.068	67.184	-	8	11	10.220	
Total Langeberg	42.288	266.424	9	21	25	43.020	

All settlements require additional (new) reservoirs and upgraded WTW.

Directives

Households: Formalise informal areas to have access to piped water within their dwellings or obtain water from communal points according to norms for the provision of water: 25 litres of water per person per day, with water not to be carried for distances longer than 200 m from the source to the home.

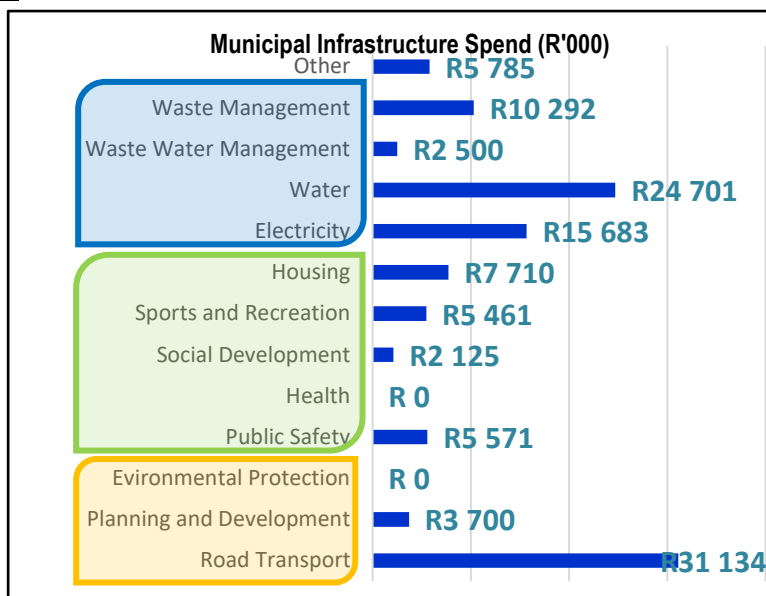
Bulk: Upgrade WTWs in all settlements.

Maintain reservoir sites in all settlements.

Directives from 2015 MSDF

- The Water Master Plan, 2012 implementation at a cost of R120.5 million will increase the Municipal system capacity from its present Annual Average Daily Demand (AADD) of 18 542 kℓ/d to the future AADD of 33 374 kℓ/d;
- A range of water demand management strategies needs to be developed for all sectors:
 - Rainwater harvesting, grey water recycling and similar technical enhancements encouraged for new developments;
 - Retrofitting water demand management technologies into existing buildings;
 - Educating consumers.
- Implementation water demand management techniques, minimising leaks by reducing water pressure and a stepped tariff system.

Municipal Expenditure and Investment	Of the total capital budget of R325.335 million, R208.7 million was received from the Western Cape Government Infrastructure Budget (WCG) and R116.635 million from Langeberg Municipality's own funds. <u>Spending on Social Infrastructure and Development:</u> In 2021/22 Langeberg Municipality received R6.771 million (3.2 per cent) from the (WCG) infrastructure budget towards social infrastructure: Education received R4.0 million, Human Settlements R2.0 million and Health R0.771 million. Langeberg Municipality complemented social infrastructure expenditure with R20.8 million (18.2 per cent) allocation from their capital budget. In addition to the Municipality's R2.1 million spending on social development, it also allocated R 7.7 million towards housing, R5.5 million towards sports and recreation, and R5.6 million towards public safety. <u>Spending on Economic Infrastructure:</u> Economic infrastructure promotes economic activity. Spending on economic enables infrastructure aids Economic growth and development and enabling higher Per Capita incomes. The WCG 2020/21 allocation included an allocation for road infrastructure from Transport and Public Works (Provincial Road transport infrastructure): R202 million (96.8 per cent). The Municipality contributed R34.8 million (30.4 per cent) towards road transport. <u>Spending on Trading Services:</u> The Municipality's infrastructure budget of R53.2 million (46.4 per cent) is allocated towards the provision of basic services (access to water, electricity, sanitation and refuse removal). The bulk of the spending on trading services have been allocated towards water (R24.7 million (46.4 per cent), Electricity (R15.6 million or 13.7 per cent) and waste management (R10.2 million or 9 per cent) and wastewater management (R2.5 million or 4.7 per cent).
Directives	Secure sufficient funds for maintenance for basic tradable services, economic infrastructure and social infrastructure. Enable economic activity based on access to water, electricity, sanitation and refuse removal. Secure funds for social infrastructure and amenities and particular sports facilities and neighbourhood open spaces. Secure funds for economic infrastructure and services. Pursue alternative revenue sources from resources such as renewable energy. Include provision of mental health services as a budget item. Recommend future spending should focus on early childhood development and youth hubs.



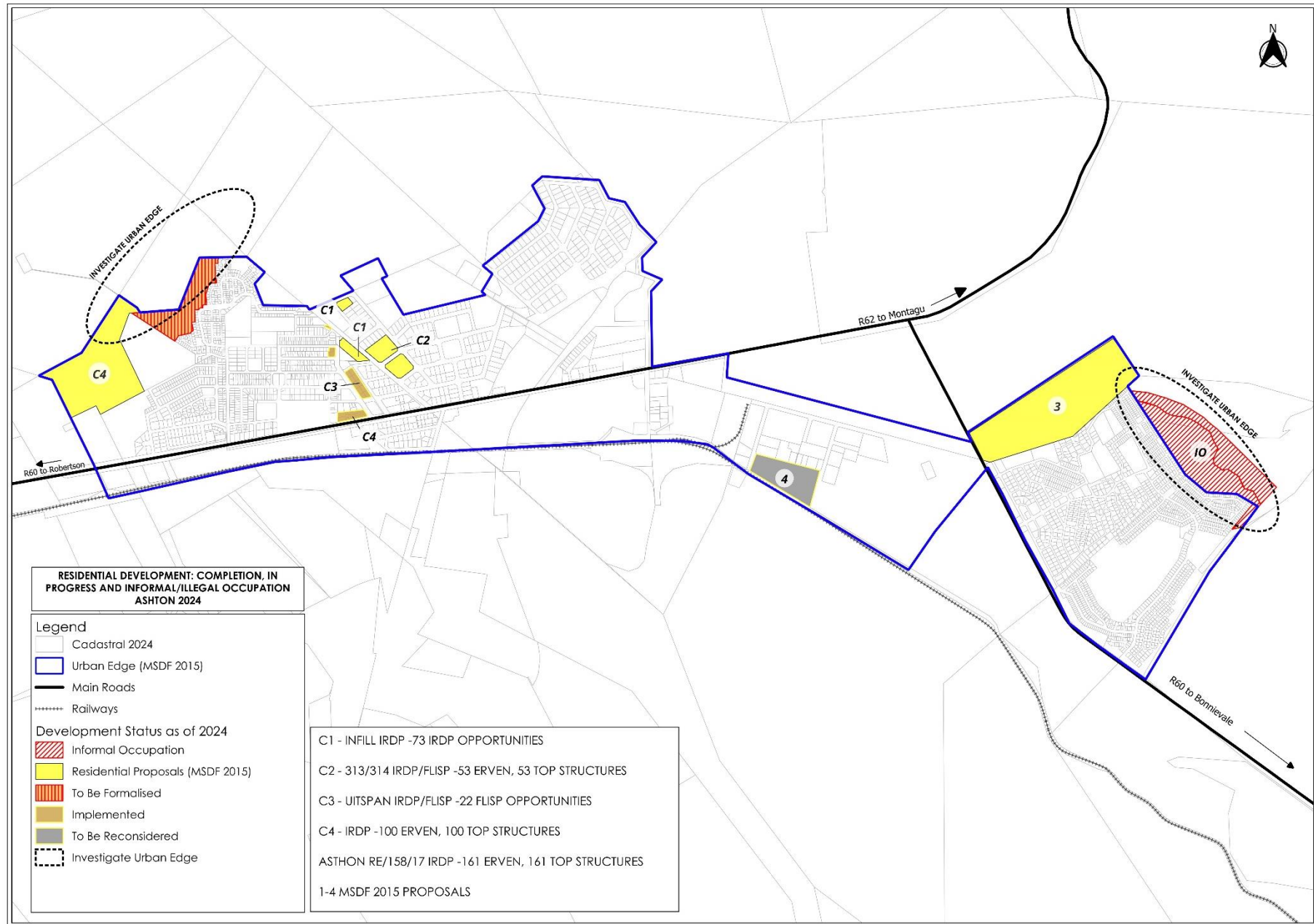
(Langeberg Municipality Water and Sewer Master Plan, 2012) (Langeberg Municipality Electrical Master Plan, 2017)

Langeberg Spatial Development Framework 2024-2029

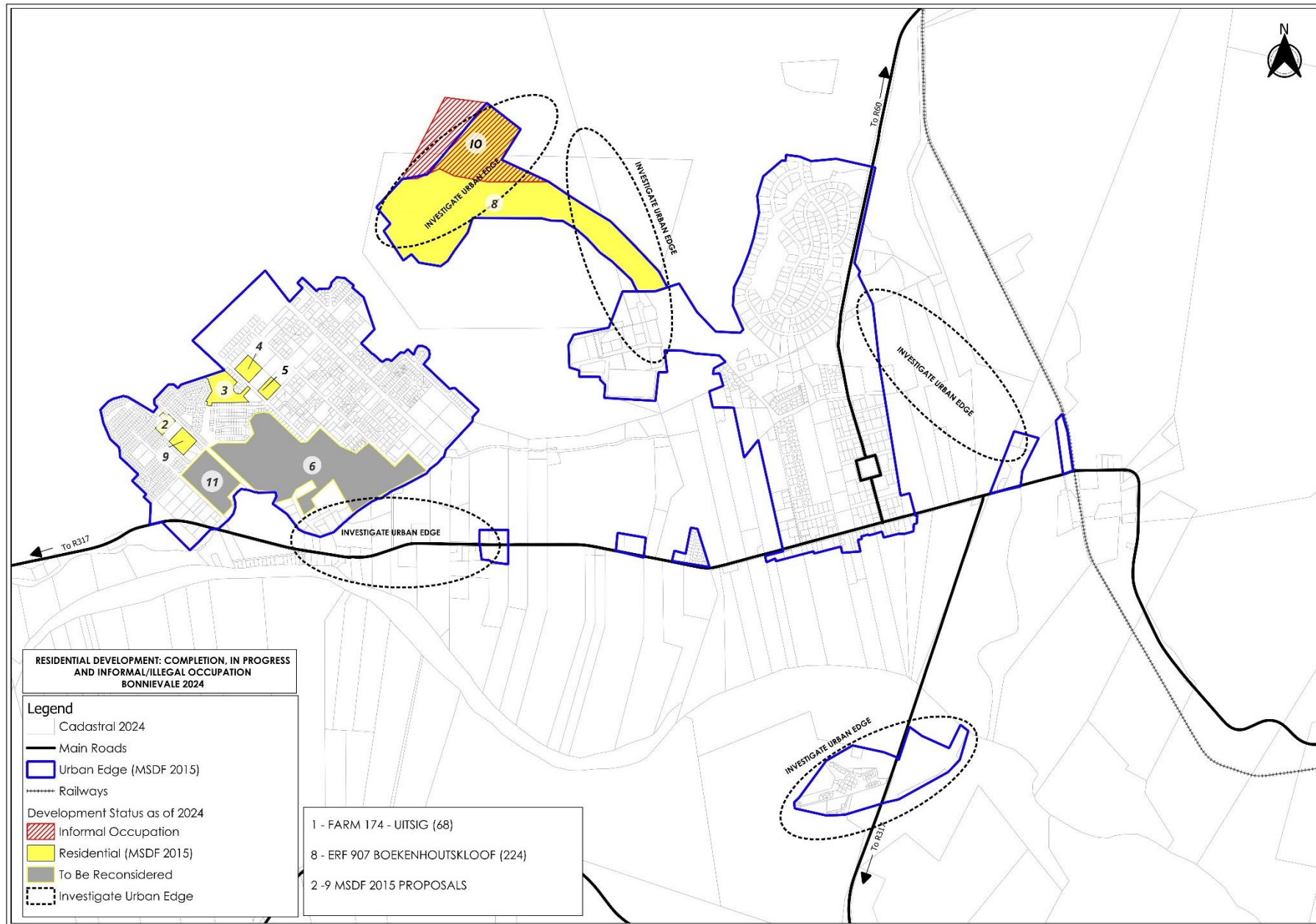


Human Settlement and Tenure	According to WCHS database, April 2023, the estimated housing backlog waiting list total is 9 493. The numbers per settlement, though more than the waiting list total, follows: - Robertson – 3 717 individuals and Nkqubela – 1 078 individuals; - Ashton – 2 599 individuals and Zolani – 1 302 individuals; - Bonnievale – 2 432 individuals; - Montagu – 1 168 individuals; - McGregor - 582 individuals. Informal areas in the Langeberg municipal area have almost doubled and in 2023 was estimated at 2 396: - Ashton: Cogmanskloof - 135 and Zolani – 377; - McGregor – 280; - Montagu: Mandela Square – 248; - Robertson: Nkanini & Kenana – 766 and Robertson North – 142; - Bonnievale: Boekenhoutskloof – 448 (Langeberg Express, March 2023). According to the LMHSP, 2014, 225 ha of land was required to provide for tenure opportunities: (See maps 21 to 25). <table><tr><th>Settlement</th><th>Robertson</th><th>Montagu</th><th>Ashton</th><th>Bonnievale</th><th>McGregor</th><th>Total</th></tr><tr><td>Land (ha)</td><td>86,35</td><td>17,5</td><td>48</td><td>53,8</td><td>19,2</td><td>224,85</td></tr></table> In Robertson on Erf 7973 (Muiskraalkop), 129 houses were completed and deeds transferred, and on erf 1466 (Kenana), 505 serviced sites were prepared and the deeds transfers are in process. In McGregor on Erf 360, 486 houses were completed and deeds transferred with 10 houses outstanding and 15 affordable (FLISP) sites available. In Nkqubela 172 top structures have been completed on Erf 435 a portion of Erf 136. Projects currently being implemented are: - Montagu, Mandela Square 173 ISSP & 148 serviced sites (UISP), RE/Ptn Erf 1 & 937; - Montagu Kingna River (adjoining Mandela Square) – ±500 IRDP, Rem/Erf 937 including sports facilities; - Bonnievale, Boekenhoutskloof 224 UISP, Erf 907 & RE/Farm 174 Swellendam RD; - Robertson Heights 189 services - 188 IRDP/UISP, Erven 2981 & 2445. Projects proposed to be implemented in the short to medium term are: - Robertson, Heyl's land 1 000 UISP & serviced sites, Portion of Erf 1206 (private acquisition); - Ashton, Zolani 1 000 UISP, for Nkandla, Riemvasmaak and back yarders, Portion Farm Goree, 197, Montagu Registration Division (private acquisition); - Montagu Krieketveld, 65 serviced sites and top structures (IRDP), Rem/Erf 728, Montagu Registration Division; - Bonnievale, Uitsig 58 IRDP, Portions 1, 2, 4 and 55 of 695 Swellendam Registration Division; - McGregor, 30 UISP, Erf 397, Robertson Division (Environmental Restriction). Other projects: Montagu, 14 IRDP houses, reconstruction of degraded historic houses and some relocations: Strydom Street Erven 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2394 & 2395.	Settlement	Robertson	Montagu	Ashton	Bonnievale	McGregor	Total	Land (ha)	86,35	17,5	48	53,8	19,2	224,85
Settlement	Robertson	Montagu	Ashton	Bonnievale	McGregor	Total									
Land (ha)	86,35	17,5	48	53,8	19,2	224,85									
Directives	Calculated land requirements (need), demand (waiting list) and provision (pipeline) are mapped as part of settlement proposals. Pipeline provision should indicate proximity to amenities, business and work. Enhance settlement spatially to implement pipeline. Promote different housing typologies in all settlements and create new sense of place for precincts with appropriate transition into historic precincts. Reconstruct degraded historic houses.														
Directives from 2015 MSDF	➤ Develop most suitable sites for housing; ➤ Provides subsidised housing according to the following settlement planning principles: ○ Locate activities (residential, transport, work, recreation, etc.) that at least 50% of it in walking distance; ○ Locate most frequented activities in the most central / accessible localities, e.g. industrial and commercial; ○ Use all well-located vacant land, i.e. within 1 to 2 km of urban centres; ○ Locate all future residential areas within walking distance of urban centres where space permits.														

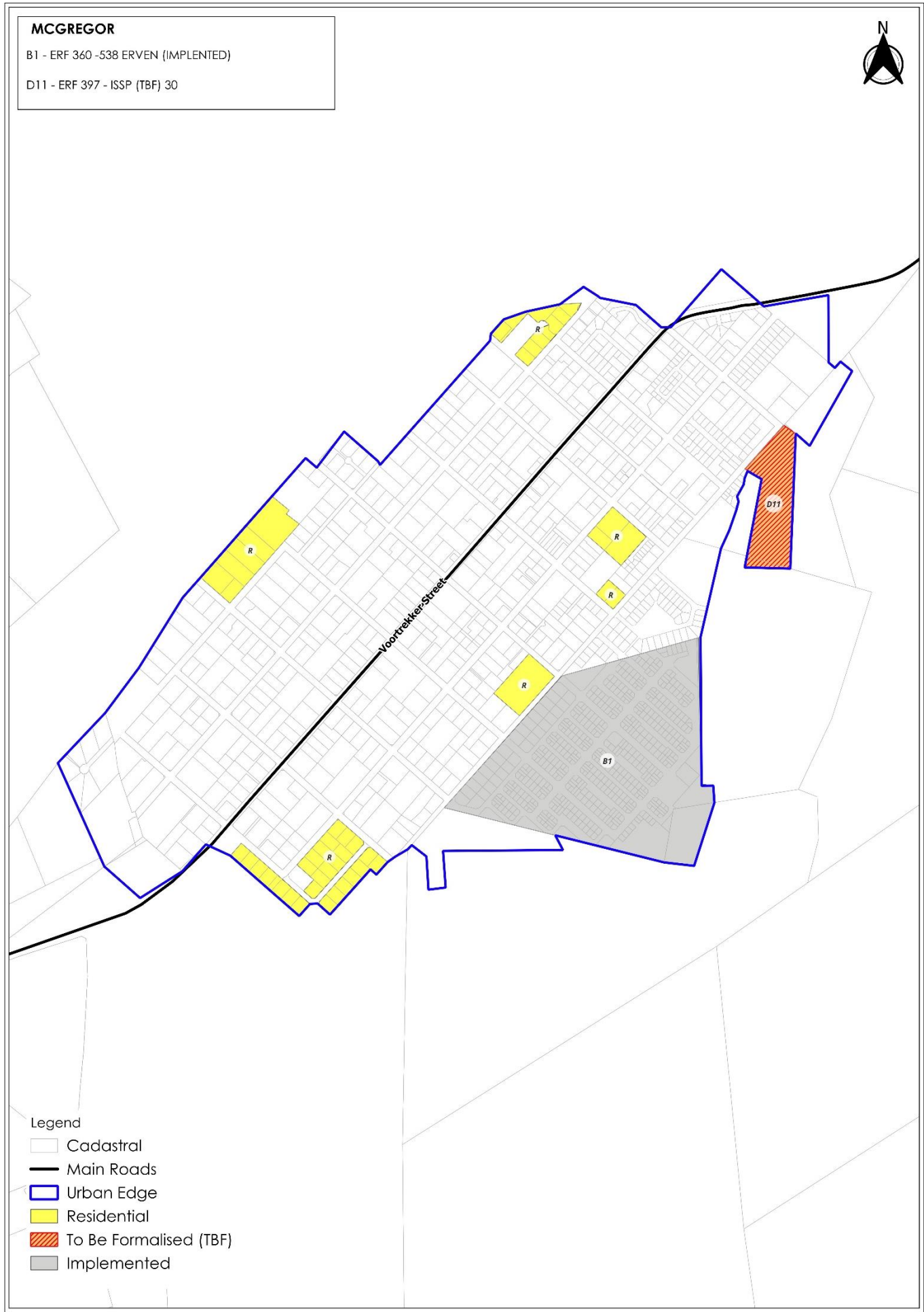
Map 21: Ashton Residential Sites and Schools, MSDF 2015 and Informal Sites, 2023



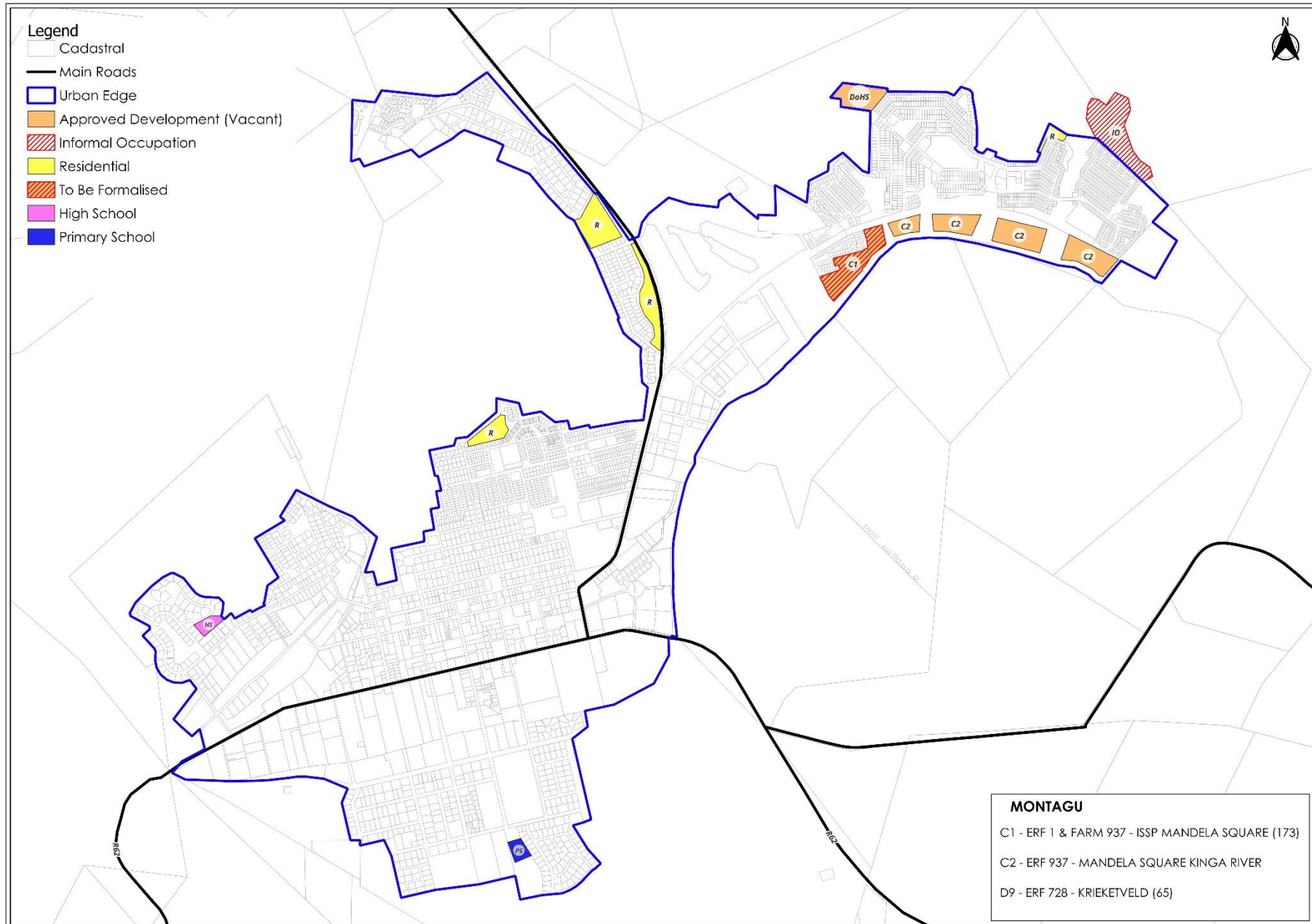
Map 22: Bonnievale Residential Sites and Schools, MSDF 2015 and Informal Sites, 2023



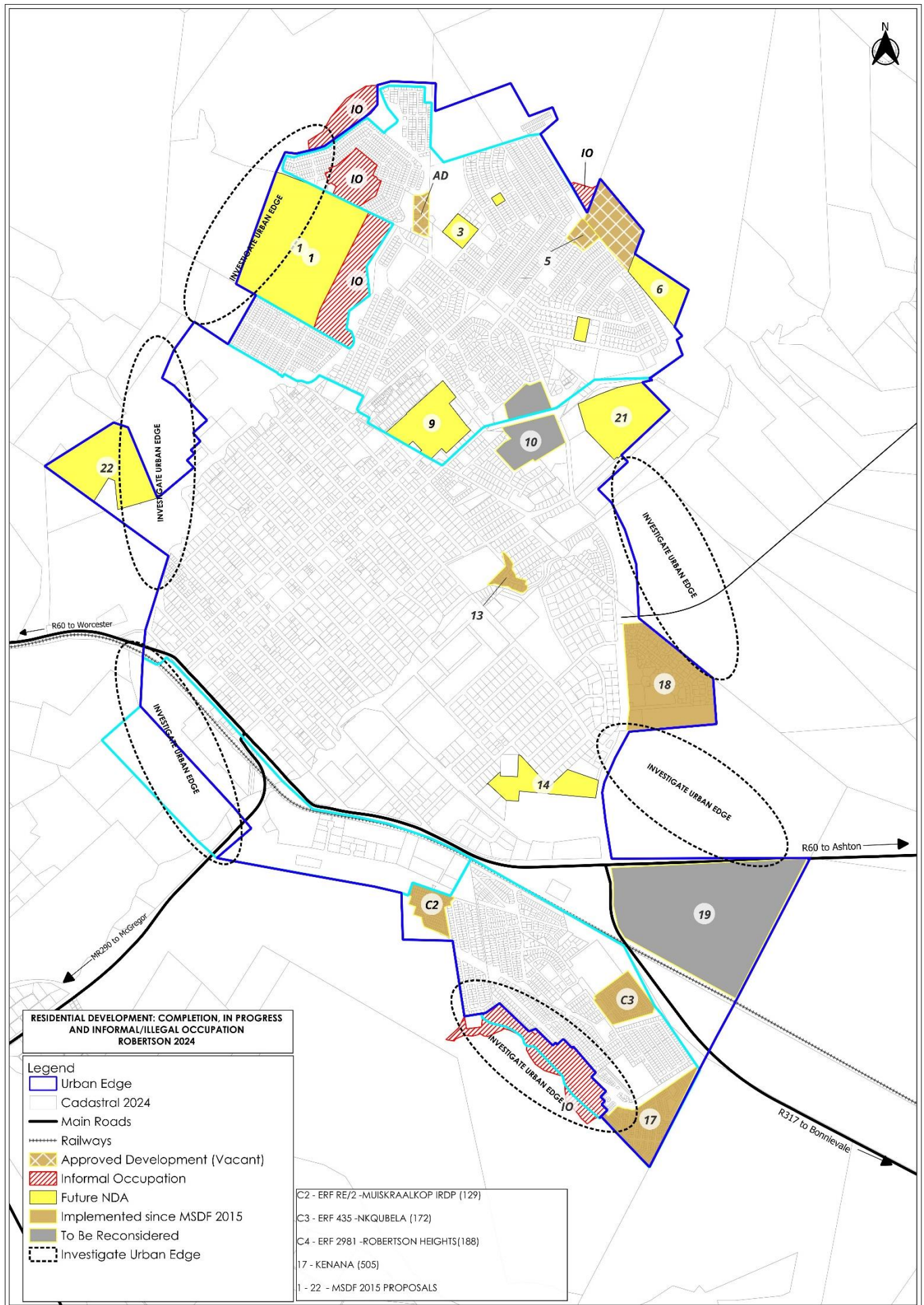
Map 23: McGregor Residential Sites and Schools, MSDF 2015 and Informal Sites, 2023



Map 24: Montagu Residential Sites and Schools, MSDF 2015 and Informal Sites, 2023



Map 25: Robertson Residential Sites and Schools, MSDF 2015 and Informal Sites, 2023



Amenities	Amenities: The matrix to follow provides a comprehensive overview of: a) The population figures (norm) per settlement required to provide an amenity (Column Norm, Description of norm and Column Amenity Type); b) The population per Langeberg settlement in 2023; c) The number of amenities that should be provided based on the settlement population (Column: [Settlement name] and Norm) compared to the norm; d) The number of amenities per Langeberg settlement (Column: [Settlement name] and number) or in cases where an amenity is regional, the settlement name where such an amenity can be accessed. In general, amenities comply with the norms set by the Council for Scientific and Industrial Research and DEADP. Robertson and Montagu both require secondary schools. Urban (outside) Gyms are required in Robertson, Montagu and Ashton as well as sports fields in Ashton. Educare facilities, after school care or learning laboratories and libraries should be provided for. Cemetery capacity is required in most settlements. Ashton cemetery was enlarged. Ongoing maintenance is required, and a fencing programme should be implemented.
Directives	Ensure provision of amenities in the Langeberg municipal area complies with the CSIR compulsory and discretionary norms. Extend cemeteries in all settlements with the exception of Ashton.
Directives from 2015 MSDF	➤ Ensure that additional space requirements are timeously addressed keep 500 m buffer in mind.

Table 2: Langeberg Amenities Matrix

	Amenity Type	Small Towns or Rural Population	Robertson '23		Farms '23	Village Population	Montagu '23		Ashton '23		Bonnievale '23		McGregor '23	
Life Balance	nC = No Criteria; 1 = present, 0 = Absent, Settlement Abbreviations: Rob, Mon, Ash, Bon, McG relate to the settlement where the service is delivered	25 000 - 60 000	35 081		37 077	5 000 -25 000	19 209		16 867		11 508		3 956	
			Norm	No.	No.		Norm	No.	Norm	No.	Norm	No.	Norm	No.
Health & Emergency Services	District Hospital (L1) (DH), Specialised (S)	1DH/300 000	0	1DH	Rob	Not Required	0	1DH	0	Rob, Mon	0	Rob, Mon	0	Rob
	Primary Health Clinic or Satellite (S) or Mobile (M)	1/24 000 - 70 000	1	1	Rob	1/5 000 - 7 000	1	1	1	1	1	1	1	1
	Fire Station, Municipal (M) or District (DM), Fire Bakkie (B)	1/60 000 - 100 000	1	1M	Rob	Fire bakkie (B) Variable	1	1B	1	1B	1	1B	1	1B
	Police Station	1/60 000 - 100 000	1	1	Rob	Variable	1	1	1	1	1	1	1	1
Education	Further Education and Training	Not Required/ Variable	0	0	Rob	Not Required/ Variable	0	0	0	0	0	0	0	0
	Secondary School	1/12 500	3	2	Rob	1/12 500	2	1	2	2	1	1	0	0
	Primary School	1/12 500	3	4	Rob	1/7 000	3	3	2	2	1	2	1	2
	ABET (A) /Skills Training (S)	Variable (V)	V	1	Rob	Variable	0	0	1	1	0	0	0	0
	Special Education	No Criteria	0	1	Bon	No Criteria	0	0	0	0	1	1	0	0
	Grade R Class at Primary School	1/1 000	35	1	Rob	1/1 000	19	2	17	2	12	2	4	1
	Crèche / Early Childhood Development	1/2 400 – 3000	14	27	Rob	1/2 400 - 3 000	8	0	7	8	5	6	22	2
	ECD Resource Hub & Care Centre	1/20 000	1	0	0	Not Required	0	0	0	0	0	0	0	0
Recreation Facilities	Local/Neighbourhood Park (includes play equipment for children)	1/3 000 - 15 000	5	5	Rob	1/1 000	1	1	3	3	1	1	1	1
	Urban Gym (outside gym)	No Criteria	0	0	Rob	Not Required	1	1	0	0	0	0	0	0
	Grassed Surface (2 football fields equivalent) with or without seats	1/15 000	3	3	Rob	1/15 000	2	2	1	0	1	0	0	0
	Athletics/Cricket Stadium (grassed field/ athletics track, stand 3000+ seats)	1/60 000	1	1	Rob	No Required	0	0	1	1	0	0	0	0
	Combi-court surface (x2; x4) / Level surface playing field	1/x2/15 000; 1/x4/60 000	1(x2)	1(x2)	Rob	1/x2: 15 000; 1/x1: 3000	0	0	0	0	0	0	0	0
	Multi-purpose Sport Hall	1/ 100 000	0	0	0	Not Required	0	0	0	0	0	0	0	0
	Community Pool (25m to 33m)	1/80 000	0	1	Rob	1/10 000	0	0	0	0	0	0	0	0
Cultural	Library, Local (L), Mobile (M), Special categories i.e. disabled (MS)	1/20 000 - 70 000	2	2L	Rob	1/5 000 - 20 000	1L	1L	1L	1L	0	0	0	0
	Museum – medium(M) / small (S)	Variable	1	1	Rob	Variable	3S	3S	0	0	1	1	0	0
	Performing Arts Centre	1/50 000	0	0	0	Not Required	0	0	0	0	0	1	0	0

	Amenity Type	Small Towns or Rural Population	Robertson '23		Farms '23	Village Population	Montagu '23		Ashton '23		Bonnievale '23		McGregor '23	
Government & Municipal Services	nC = No Criteria; 1 = present, 0 = Absent, Settlement Abbreviations: Rob, Mon, Ash, Bon, McG relate to the settlement where the service is delivered	25 000 - 60 000	35 081		37 077	5 000 -25 000	19 209		16 867		11 508		3 956	
			Norm	No.	No.		Norm	No.	Norm	No.	Norm	No.	Norm	No.
Civic	Home Affairs (Medium or Small Office)	1/40 000	1	Rob	Rob	Variable	0	Rob	0	Rob	0	Rob	0	Rob
	Thusong Centre	1/ Mun	1	Rob	Rob	1/ Mun	0	Rob	0	Rob	0	Rob	0	Rob
	Labour Office	Variable	0	0	0	Variable	0	0	0	0	1	0	0	0
	Magistrate's Court	Variable	1	1	0	Variable	1	1	0	0	1	1	0	0
	Municipal Offices	1/ Mun	1	1	Rob	1/ Mun	1	1	1	1	1	1	1	1
	Prison & Place of Safety	No Criteria	1	1	Rob	No Criteria	0	0	0	0	0	0	0	0
	Solid Waste Disposal site (LF), Transfer site (WT), Recycling depot (RD), recycling igloos (RI)	No Criteria	LF, RI	LF, RI	Rob	No Criteria	V	LF	V	LF	V	LF, RI	V	LF, RI
Social Services	Community Hall - Large (L), Medium/ small fringe (M or S)	1/10 000 - 15 000	3	2	Rob	1/10 000 - 15 000	1	1	1	1	1	0	0	0
	Children's Home (CH) / Child Protection (CP)	Variable	V	0	Rob	Variable	Rob	Rob	Rob	Rob	Rob	Rob	Rob	Rob
	Home for Aged (HA), Retirement Village (RV)	Variable	V	1HA, 1RV	Rob	Variable	1	1	Rob	Rob	2	2HA	Rob	Rob
	ICT Access Point	10 000+	0	0	0	10 000+	0	0	0	0	0	0	0	0
	Post-boxes and drop off, Post office agency (A)	1/10 000 - 20 000	1	1	Rob	1/10 000 - 20 000	1	1	0	0	1	1	1	1
	SASSA Office	1/ 40 000	0	0	Rog	1/ 40 000	Rob	Rob	Rob	Rob	Rob	Rob	Rob	Rob
	Social Grant Pay Point	Variable	1	1	Rob	Variable	Rob	Rob	Rob	Rob	Rob	Rob	Rob	Rob
	Cemetery - (Medium = M; Small = S)	8,8ha/ 50 000	M	M	Rob	0,88ha/ 5 000; 4,4ha/ 25 000	S	1	S	1	S	1	S	1

Heritage

This section needs to be read together with Annexure 4, the Langeberg Heritage Inventory.

The settlements in the Langeberg municipal area were founded between 1853 and 1861, and a summary of the built heritage resources, mainly in McGregor, Montagu and Robertson, is tabulated below:

Founded	Declared	Settlement	Grade 2	Grade 3A	Grade 3B	Grade 3C	Total
1853	1857	Robertson	6	5	36	156	203
1853	1857	Ashton					
1853	1857	Bonnievale					
1856	1895	Montagu	22		22	30	74
1861	1892	McGregor	13	2	10	12	37
		Rural	4	5	24		33

From the 347 built heritage resources, 45 (13%) are of regional significance (Provincial Heritage Site (PHS)) and 33 (10%) are in rural areas (4 PHS and 29 local).

Robertson and McGregor have grid layouts whilst Montagu has a Voortrekker Rydorp layout with water erven.

There are two scenic routes:

Cogmanskloof Pass which as historic mountain pass extends across a river valley and runs through a poort (Cogmanskloof) in the Langeberg Mountain range that links Ashton and Montagu. The pass follows the path of the Kingna and Keisie Rivers and is susceptible to flooding. It was constructed in 1877. Its heritage significance includes rock art and palaeontological resources, the English Fort (PHS) and high scenic values of the narrow river valley and is surrounded by the Cape Fold Mountains (Heritage Western Cape, n.d.).

R317, road between Robertson to Bonnievale hugs the Breede River, and takes in some of the most fertile wine and fruit farms in the region. The road itself is famously lined with red Canna Lillies and trees, and in certain seasons provides a bouquet of colour.

More potential scenic routes based on their outstanding landscapes are:

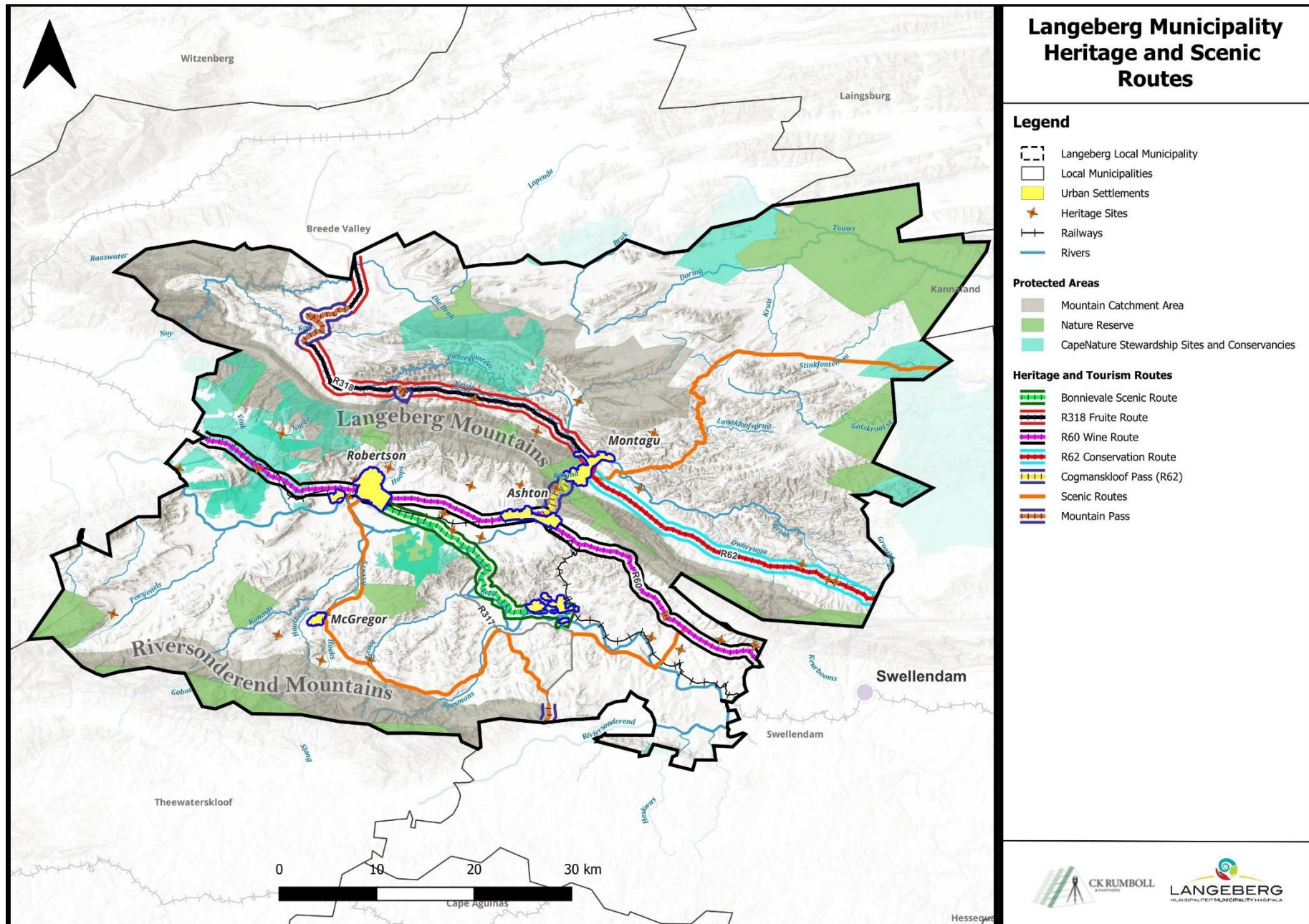
- R60 traverse areas with a concentration of historic farmsteads and is a historic route;
- R62 Some scenic qualities. Has developed as a major tourism route;
- R318 traverse areas with a concentration of historic farmsteads. Its transition from winelands to Karoo is considered to have unique scenic qualities relating to its role as threshold into the Karoo.

The following landscapes are of high heritage value:

	McGregor valley	Montagu and surrounds	Bonnievale
Scenic Landscape	Spectacular: setting against mountain backdrop.	Spectacular: the setting against mountain and Cogmanskloof pass backdrop.	Vineyards and agricultural cultivation.
Historical buildings and provincial heritage site	Very high concentration.	Very high concentration.	
Civilization	Evidence of long human occupation, well preserved, stretching 1.8 million years.	Concentration of conservation worthy farms.	Early 20th century speculative small holding enterprise.
Agriculture and Nature	SAHRA WC consideration for application as Grade 1 cultural landscape.	Gateway viewshed of cultivated fields at Ashton and base of the Cogmanskloof Pass.	Early irrigation scheme contemporary to the Clanwilliam Bullshoek irrigation scheme. Continuity of characteristic small holdings along irrigation canals.

Directives	Promote the preservation of worthy buildings and trees and concentration of buildings in settlements such as Robertson, Montagu and McGregor. Promote Heritage Zones to protect buildings and to relax parking requirements and to promote pedestrian traffic. Heritage zones can develop as destinations. Preserve the following Cape Winelands Heritage Themes: 1. Pre-colonial archaeology and early inhabitants of the area. 2. Early colonial history and settlements; agriculture in well-watered fertile valleys and foothills late C17th early C18th. 3. Cultivation and agricultural production; historic land claiming, history of farming and associated secondary industries. 4. Slavery and labour; Farmyard and agricultural production to mid C19th; sites of slavery including 1808 Slave Revolt. 5. Religion; C19th Church towns. 6. Routes and Transport; mountain passes e.g. Cogmanskloof; early cattle and wagon routes, outspans; railway development in C19th, associated stations and development. 7. Military History; SA Anglo-Boer War action, WW2 installations. 8. Regional Architecture; Cape Dutch, Georgian, Victorian, Cape Revival, Art Deco on farms and in settlements: architecture, barns and veranda houses of the early C19th. 9. Outstanding Scenic Beauty and landscapes. Promote heritage through recreation and tourism: destination places, themes and routes; wildflowers, olives, wine and places of cultural and/ or scientific interest.
Directives from 2015 MSDF	➤ Montagu, McGregor and Robertson are considered worthy of urban conservation area/ heritage area overlays. (see Todeschini and Japha, 1990 and 1993, as well as Robinson, 1997). Robertson includes some of the oldest fabric in the region, has a high density of modest Cape Georgian and Victorian domestic buildings, and much of its civic and religious architecture is of high architectural and historic significance.

Map 26: Langeberg Heritage and Scenic Routes



The LSDF 2015 includes a spatial plan for each of the five towns: Ashton, Bonnievale, McGregor, Montagu, and Robertson these plans require updating in terms of the envisaged future development opportunities per town, and a revised urban edge to accommodate compact future growth.

Progress made since 2015, in alignment with the 2015 LSDF:

Bioregional Planning: The SPC's based on bioregional planning has proved to be a sound basis for the LSDF, and the assessment of land use applications. The cross-reference to the WC Rural Development Guidelines, 2019 has also worked well and ensures a level of consistency for development authorisations across municipal boundaries.

Urban Edges: the defined urban edges have proved to be reliable and well-informed by levels of development and have ensured that the development of each of the five towns has remained as compact as possible, which facilitates sustainability in terms of the Municipality's primary mandate of efficient service delivery.

New Development Areas (NDAs) – Residential: The 2015 LSDF identified a number of NDAs to accommodate urban growth, with the focus on land for subsidized residential development.

The following NDAs have been fully developed since they were proposed in the 2015 LSDF:

- McGregor Erf 360 – White City: 486 residential RDP erven and top structures.
- Robertson: Nkqubela, Muiskraalkop 129 RDP houses.
- Robertson: Nkqubela, Kenana 505 residential RDP erven.
- Robertson: Nkqubela, Sports field site 172 RDP houses.

In terms of higher income residential development, identified NDAs have been well developed, including Ext 9 Robertson, which includes the new Carewell hospital, Silwerstrand golf course estate, which is nearly fully developed, and Piet se Pad residential development in Montagu – also nearly fully built-up.

Development of the following NDAs is currently in progress: upgrading of Mandela Square in Montagu (173 erven); Boekenhoutskloof in Bonnievale (224 erven); and Robertson Heights (188 erven).

The result of the above continuous development is that there is now limited vacant land for further residential development looking towards 2035, and the LSDF 2024/25 needs to make provision for future development of new residential areas for all income groups. The demand for GAP housing is also increasing and underprovided for.

Significant new development other than residential development, which has already taken place in line with the 2015 LSDF, includes the new shopping centre in Robertson known as the Urban Quarter, the Jakes Gerwel school in Bonnievale – public-private partnership; ECDs in Nkqubela; library in Ashbury, Recycling Facility in Ashton's industrial area, expansion of the cemetery in Ashton, and a new fire station in Robertson.

Threat to progress with Plan-led Development:

Uncontrolled Informal Settlement:

There is increasing uncontrolled informal settlement growth in each of the five towns, particularly in the following areas: above Nkqubela in Robertson; between Moreson and Droeheuwel in Robertson; Riemvasmaak adjoining the western side of Ashton; above Zolani adjoining the Municipal landfill site; adjoining Ashbury in Montagu; and in various areas in Bonnievale adjoining Happy Valley, Mountain View and Boekenhoutskloof.

These settlements threaten the ability to implement planned projects. In addition this uncontrolled growth threatens the ability to provide sufficient and adequate community facilities, particularly health and education; as well as the sustainability of our towns in terms of service delivery.

Whilst housing is a provincial competency, in practice, uncontrolled informal housing areas become a daily municipal engineering services problem, which can only be assisted in the following ways at District, Provincial and National levels:

- ✓ Need for Assistance with Monitoring, Reporting and Action: and identification of responsibility for such monitoring – provincial / district / municipal; with a plan of action to prevent uncontrolled growth.
- ✓ Border Control and Constitutional Mandates: A key driving force of informal settlement growth is the inadequate national border control and lack of documentation of those entering South Africa. Although this is a national responsibility, it is municipalities that must deal with the practical consequences as all illegal residents occupy space in one or other municipality. This substantially undermines Municipalities' ability to deliver on their mandate of basic service delivery. In the absence of national control, a local system of documenting new residents to informal settlements must be implemented to track the need for services. Provincial assistance is necessary to ensure a standardised system across the province.
- ✓ Currently the Informal Settlement Support programme focuses on upgrading informal settlements as opposed to controlling growth. There is a need for a parallel provincial programme to address the growth of informal settlements.

The reality is that without an appropriate response to the current rapid informal settlement growth, the LSDF and related plans will be jeopardised and there will be ongoing crisis management rather than progressive implementation of plans.

Lack of building of new Schools on Identified Sites:

There has been a notable absence of the building of new schools, despite the identified immediate need in 2015 for four new Secondary, five new Primary schools and one FET college. Existing schools which were identified as overcrowded in 2015 are now well above double their capacity. This is a serious threat to the education, skills levels, and social stability within the Langeberg Municipal area.

Projects Not Implemented:

Many of the projects included in the Implementation Chapter of the 2015 LSDF have not materialized due to: lack of funding; lack of coordinated working relationships between the municipality and relevant departments with regard to functions which are not a municipal mandate; lack of commitment from the mandated authorities; municipal land not being made available for identified private development; and incomplete negotiations with landowners relating to the need for land for housing projects.

Projects not implemented include: the preparation of river maintenance management plans; tourism plans; commonage plans; scenic tourism routes policy; new Ashton – Zolani High Street link road; Ashton industrial layout plan; proposed FET colleges and schools, and the provision of additional business and industrial erven to accommodate the economic demand.

As shown on the 2015 SDF plan for Robertson, a large area for an industrial / business park was identified immediately south of the Robertson airfield (marked “19. Bullida Gronde”). This area has not yet been developed and remains one of the primary development proposals.

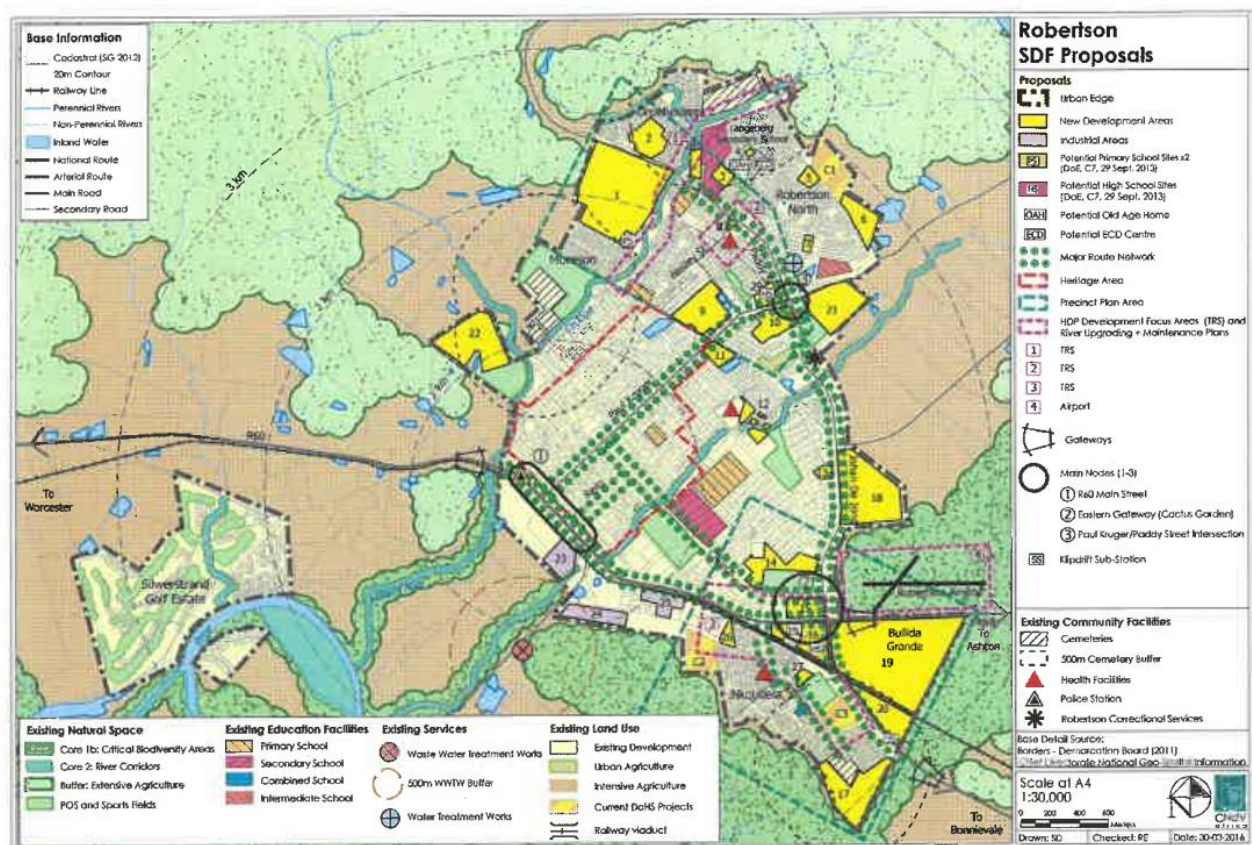


Figure 8. Robertson Spatial Development Framework 2015

What needs attention for the next planning cycle to ensure the implementation of the LMSDF?

To promote the implementation of the LMSDF the new 2024/25 LSDF must be mainstreamed into the municipality's broader planning and performance management systems. The Implementation Projects identified in the rewritten SDF must be carried through to the IDP and budget; and/or directed to the relevant external Departments (e.g., Education) via a Municipal Implementation Committee. The Implementation

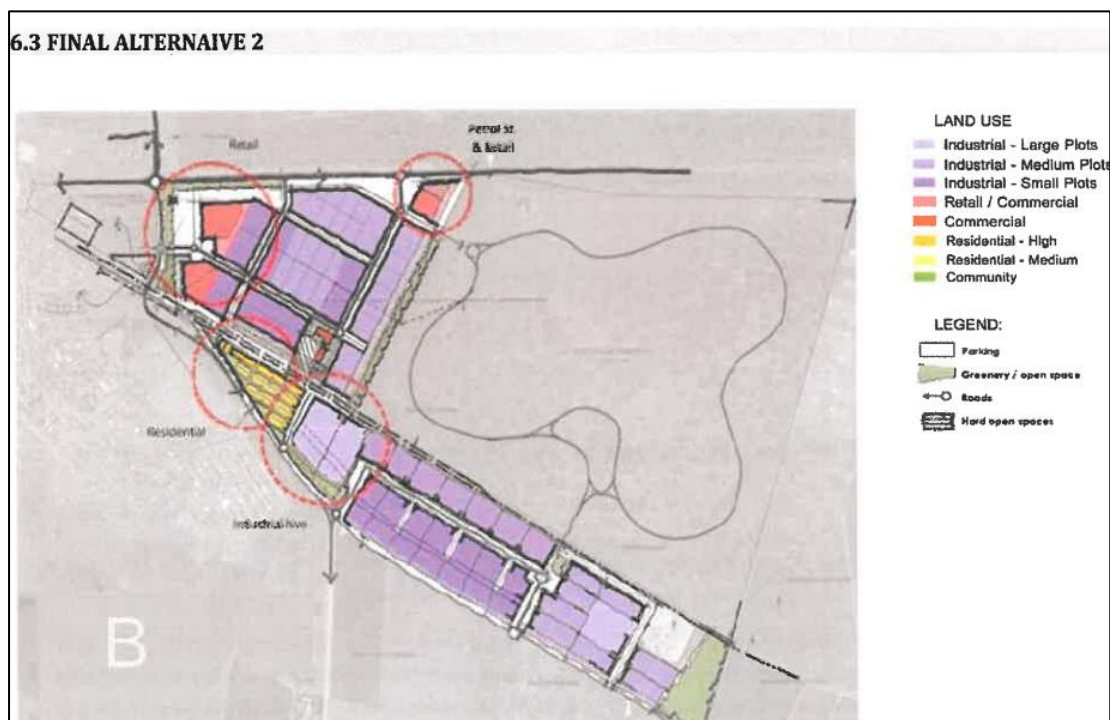
Committee must ensure that development and budget-spending is plan-led; and must also identify where the LSDF is not being implemented and how this can be improved or where critical shifts are required in projects. The CEF must reinforce existing and proposed Sector Plans, Budgets and Asset Management Plans and not compete with other existing financial management plans.

What are the Key Proposals in the LSDF 2024/25?

The overall conceptual vision for the Langeberg Municipal Area highlights the significance of the natural resource base, particularly the Breede River and the Langeberg and Riviersonderend Mountain Catchment Areas which feed this river system. Key projects to be addressed must include the following:

Light Industry and Business:

The Robertson Industrial and Business Park (Bullida Gronde), south of the Robertson airfield, and immediately east of Nkqubela:



Arising out of the 2015 SDF, the above precinct plan has been prepared and the development of this area is one of the primary development projects for the 2024/25 SDF. Landscaping proposals will be key in developing a sought-after high quality industrial and business park. The area is large and proposed to be developed in phases, with grouping of similar types of uses in terms of the potential impacts of uses and their demand for services. There is also potential for the development of a truck stop in this area.

The desirability of this project is reinforced by the data in the WC Economic dashboard which highlights the success of the Robertson area in terms of job creation and supports the need for additional industrial and agri-industrial erven to be made available in Robertson – refer to the extract below.

Extract from the WC Economic Dashboard:

Town	Municipality	Total FTE 2022	2018-2022 FTE Growth	FTE Growth 2018-2022 Rank	FTE Growth as % Total WC 2018-2022	Firms 2022	% Firms In WC	Absolute 2018-2022	Relative % Net WC 2018-2022
Cape Town	City of Cape Town Metropolitan Municipality	1366815	29419	1	35.8	63922	69.1	2793	46.3
Stellenbosch	Stellenbosch Local Municipality	67664	12819	2	15.6	3130	3.4	349	5.8
Wellington	Drakenstein Local Municipality	17316	2841	3	3.5	880	1.0	77	1.3
Citrusdal	Cederberg Local Municipality	10034	2826	4	3.4	247	0.3	68	1.1
Robertson	Langeberg Local Municipality	11255	2622	5	3.2	520	0.6	44	0.7
Worcester	Breede Valley Local Municipality	24523	2084	6	2.5	1334	1.4	127	2.1
Ceres	Witzenberg Local Municipality	18697	1969	7	2.4	414	0.4	34	0.6
Hermanus	Overstrand Local Municipality	13384	1921	8	2.3	1120	1.2	145	2.4
George	George Local Municipality	40763	1830	9	2.2	3180	3.4	367	6.1
Malmesbury	Swartland Local Municipality	16529	1540	10	1.9	741	0.8	47	0.8

Robertson town, in Langeberg, with 11.3 thousand FTE (Full time employment) and 520 firms in 2022, added 2.6 thousand net FTE and 44 firms between 2018 and 2022. The agriculture, forestry and fishing sector made up 57% of the town's formal workforce in 2022. This sector had the largest job growth, specifically amongst a range of crop and animal production sub sectors like growing of grapes, post-harvest crop and mixed farming activities which grew by just over 2 thousand jobs between 2018 and 2022.

Schools and Training Colleges:

School sites are large land uses and difficult to locate with good accessibility to the community if lost to other uses e.g., housing. Existing vacant planned school sites need to be protected from being allocated to alternative uses. There is also an identified need for technical schools in Robertson, Ashton and Montagu, and a school and / or training facility to accommodate children disabled by Fetal Alcohol Syndrome.

School sites must be identified in all towns, with potential sites for technical schools / Schools of Skill in Ashton, Montagu, and Robertson. Active engagement between the Municipality and Department of Education is of paramount importance.

Implementation of Housing Projects in terms of the Approved Housing Pipeline:

Three large areas for housing and related community facilities, are identified in the draft 2024/25 SDF: Farmland adjoining Zolani's northern boundary; the Kingna Housing project in Montagu, between Ashbury and the Kingna river; and farmland between Droeheuwel and Moreson in Robertson.

These proposals originated in the 2015 SDF and are prioritized as urgent in the SDF rewrite. The lack of development of these areas relates to factors such as negotiations with landowners (Robertson and Ashton/Zolani), funding, and recent land invasions.

The evaluation of the 2015 SDF highlights major priorities for the next SDF cycle: land for housing, economic development, industry and schools. Development proposals and projects currently under consideration, include the following:

- Alternative energy generation strategies and projects (private and public-private partnerships).
- Interdicts to prevent expansion of illegal informal settlement, and standard operating procedures to respond to illegal squatting and land invasion.
- Truck stop/s in Robertson and / or Ashton, and farm labourer pick-up points in Robertson.
- Additional landfill space for all towns – land identification for a new cell in Ashton as a minimum requirement. Ongoing implementation of recycling and material recovery through the recently constructed Ashton Material Recovery Facility, located in the Ashton Industrial Area.
- Facilitate the preparation of river maintenance management plans, to respond to increased flood damage, in liaison with BOCMA and local Water User Associations. In particular for the following rivers through / adjoining the towns: Kingna and Keisie (Montagu); Cogmanskloof from Montagu through the kloof and through Ashton up to the Breede River; Hoops, Drooge and Willem Nels (Robertson); and Keisers including the Hoeks and Houtbaai (McGregor) and Boekenhoutskloof (Bonnievale).
- Upgrading of sewer and water works to prevent water pollution and deliver a sustainable, safe water supply in all towns.
- Update heritage inventories and prepare scenic tourism routes plans / policies.
- Update Policies: Boundary Walls & Fences Policy, Signage Policy.
- Identify land for urban agriculture and community gardening: Urban agriculture: food production is essential to balance the lack of jobs, as migration to our towns continues to increase, and formal job creation will not keep pace.
- Liaise with Department of Infrastructure to ensure rural roads management plan for upgrading of District roads.
- Assessment of potential for private development at Robertson airfield: opportunities for fly-in tourists / tour operators; links with proposed new Winelands Airport; car-hire, courier services etc.
- Revitalization of the Robertson Train Station and other Transnet-owned property.
- The Implementation plan should identify the following as a project: Preparation of an Asset Management Plan based on an audit of municipal infrastructure.

2.2.2 Sector Plan, CWSDF and WCSDF Spatial Analysis and Directives

Sector plans provide spatial and development directives inclusive of:

- Enabling policy;
- Accelerating the economy;
- Growing tourism (longer stays, average spend increase, number of visitors);
- Focusing on capital investment supportive of the tourism industry;
- Creating job and business opportunities as tourism sector strengthens and grows;
- Rural communities to socially benefit from tourism sector economy;
- Enhancing conservation;
- Integrate Disaster Risk Management into the strategic, operational planning and project implementation of all line functions and role players within Langeberg Municipality.

District MSDFs, and relevant to Langeberg, the CWSDF including the municipal areas of Breede Valley, Drakenstein, Stellenbosch, Witzenberg and Langeberg, set objectives to achieve:

- Institutional preparedness;
- Human well-being;
- Economic imperative; and
- Environmental integrity.

The table to follow illustrates alignment of sector plans according to directives listed above and the Cape Winelands SDF and the Western Cape PSDF. Sector plans and strategies included are:

- a) Local Economic Development Plan;
- b) Tourism Strategy;
- c) Risk Management Plan; and
- d) Human Settlement Plan.

Four sector plans or strategies, Local Economic Development Plan, Tourism Strategy and Risk Management Plan, and Human Settlement Plan, 2014, provide spatial and development directives:

	Local Economic Development Plan	Tourism Strategy	CWSDF	WC PSDF, 2014
Policy & Enabling Environment	Create a nurturing economic environment: - Emerging tourism businesses, - Local economic development, - Job creation, - Tax base enhancement.	Create an enabling environment (institutional framework in municipality) to grow tourism and equitable business development (previously disadvantaged). <u>Objective 3:</u> Coordinate marketing.	Robertson as a First Order town and Montagu as a Second Order town. McGregor, Ashton and Bonnievale are identified as third order towns.	Promote compact, Mixed use and integrated settlements. Improve inter and intraregional accessibility.
Economy	Accelerate economic growth through: - Business Retention, Expansion, fostering new businesses, job creation.	A sector-based strategy growing tourism: <u>Objective 1:</u> Route and destination development (foster current attractions). (Introduce new and unique tourism product offerings catering for market preferences).	Urban densities are to be increased to 25 du/ha before allowing expansion to urban edges. Land development incentives are given as a possible means of encouraging densification in desired locations.	Promote R60 and R62 as a continuous combined road/rail transport corridor and the R62 as a continuous tourism corridor.
Tourism	- Grow the tourism sector and agri-processing as investment attractions. - Grow and capacitate existing businesses and new ventures, different sectors. - Enhance tourism's electronic footprint. - Go green and stay green. - Ease travelling access to and within the region.	<u>Proposed Vision:</u> Grow LLM as a sought after, all year round, unified tourism destination with an increasing contribution to the local economy: <u>Broad Objective:</u> To grow the number of visitors to the LLM, particularly from identified target markets. Provide coordinated approach to tourism development: and facilitate cooperation: <u>Objective 14:</u> To regularly monitor tourism sector performance and trends.	Coordinate the effective use of resources (financial, human & natural). Urban densification should take cognisance of ecological and heritage concerns.	- Promote tourism development along the R62. - Promote the extension of the conservation status of existing reserves into a series of continuous biodiversity corridors: Waboom; Langeberg, Breede River and Riviersonderend Mountains. - Protect intensive agriculture areas to ensure food security.
Investment, Capital Expenditure:	Cape Winelands to coordinate investment: Develop LLM as an investment and tourism destination and provide services and innovative travel infrastructure.	Ensure tourism infrastructure & human resources are in place to grow tourism. <u>Objective 8:</u> Spatially spread tourism in Langeberg Municipality through infrastructure provision. <u>Objective 9:</u> Facilitate more transport options.	Accommodate disadvantaged communities (strategically located) through infill development. Well located land along corridors and close to employment opportunities are considered ideal locations.	Use regional infrastructure investment to leverage economic growth. Diversify and strengthen the rural economy. Revitalise and strengthen Urban Space-economies.

	Local Economic Development Plan	Tourism Strategy	CWSDF	WC SDF, 2014
Rural Development	- Protect natural resources. - Implement water efficient farming practices. - Provide for new technology and knowledge industry applications to enhance agriculture & tourism.	Focus on unique selling points of all areas. <u>Objective 6:</u> Collaborate with areas outside Langeberg Municipality and include rural areas. (Enable the entry of new, previously excluded areas and enterprises into the market).	- Promote sustainable resource use and responsible rural development. - Strengthen rural support programmes for commercial and small-scale farming and develop the potential of the agricultural value chain.	Improved effectiveness in the governance of urban and rural areas.
Social Development/ Human Resources	Establish a better life for all (Sector Plan): Improve levels of education, offer skills training to improve service delivery.	Support tourism sector to contribute to employment and socio-economic development: - Transform the tourism industry. - Enable Human Resource Development and placement. - Involve all stakeholders.	Use heritage resources, such as the adaptive use of historic buildings, to enhance the character of an area, stimulate urban regeneration, encourage investment and create tourism opportunities, while ensuring that interventions in these heritage contexts are consistent with local building and landscape.	- To improve quality of education and levels of innovation capacity. - Balance sustainable service delivery and equitable access to education and health services.

Langeberg Disaster Management Plan (2022/23) – Climate Change

The Disaster Management Plan (DMP) is an information guide to relevant role players and should advise them on how to lead in the case of a disaster, to prevent or mitigate any negative effects due to an incident.

Submit DMP to relevant Governmental structures, such as the Disaster Management Control Centres of CWDM, WC and National.

Increase municipal capacity to prevent and deal with disaster:

Integrate Disaster Risk Management into the strategic, operational planning and project implementation of all line functions and role players within Langeberg Municipality;

Prepare for integrated, fast and efficient response to emergencies and disasters by all role-players.

Langeberg Human Settlement Plan, 2014

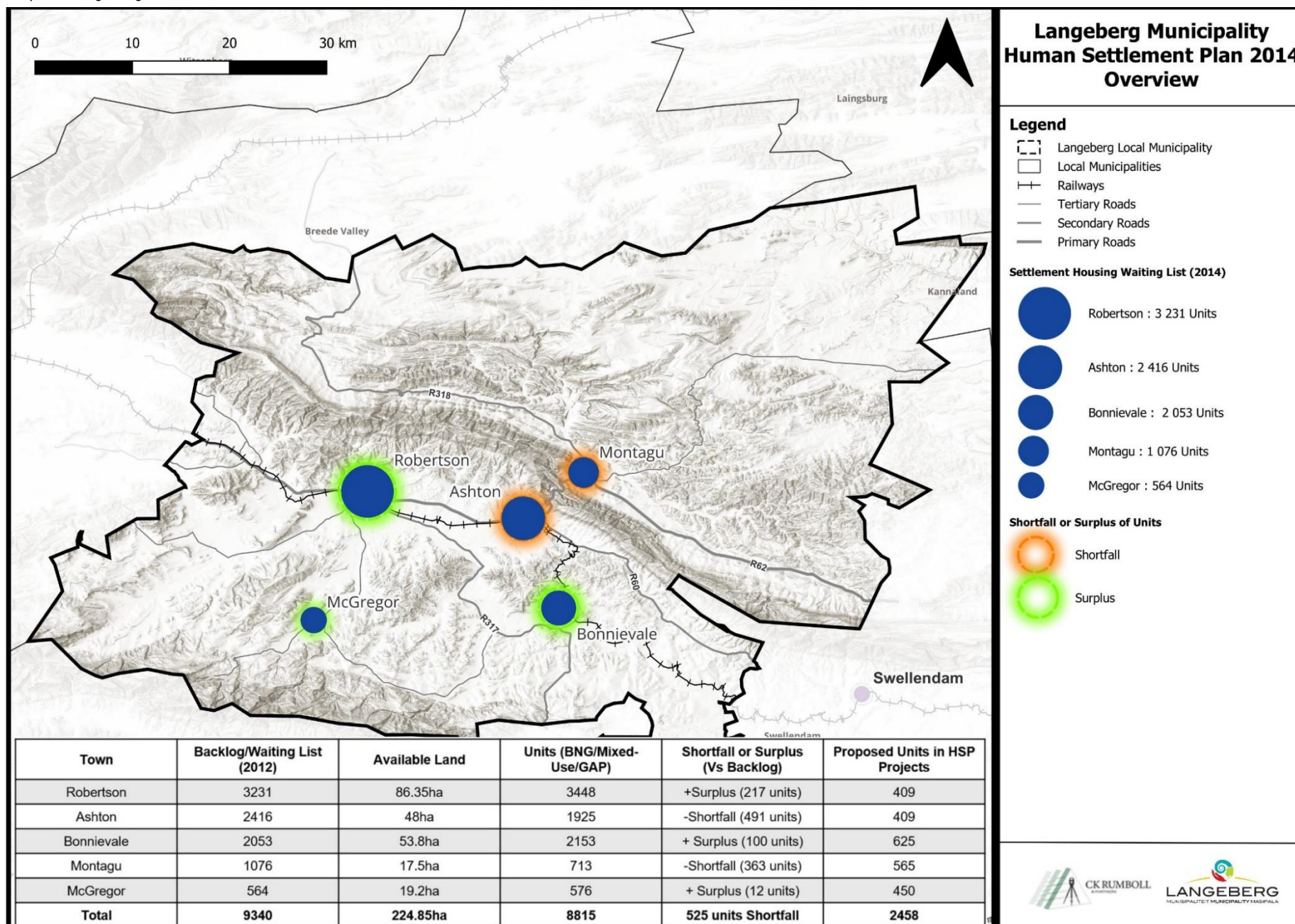
Based on the hierarchical role and function of the various towns, Robertson and Ashton were identified as settlements for further growth in terms of housing, social and economic investment. As for the remaining settlements, growth should be limited. The focus for housing development should be on Robertson and Ashton.

Minimum plot sizes of 120 m² (at 40 units per ha) for BNG units, 120 to 195 m² for GAP units and 500 m² for high income is proposed (LMHSP, p 27).

The table below provides a summary of the state of housing provision within the Langeberg Municipality. The waiting list included in the LMHSP, 2014 is dated 2012. A *shortfall* indicates that the land yield fewer units than the number of beneficiaries on the waiting list and a *surplus* indicates the land yield additional units compared to the beneficiaries on the waiting list need.

Town	Backlog / Waiting List, 2012	Available land	Units (BNG/ Mix-Used/ GAP)	Shortfall (-) or Surplus (+) of units vs backlog	Proposed Units per LMHSP projects
Robertson	3231	86.35 ha	3448	217 units Surplus	409
Ashton	2416	48 ha	1925	491 units Shortfall	409
Bonnievale	2053	53.8 ha	2153	100 units Surplus	625
Montagu	1076	17.5 ha	713	363 units Shortfall	565
McGregor	564	19.2 ha	576	12 units Surplus	450
Total	9340	224.85 ha	8815	525 units Shortfall	2458

Map 27: Langeberg Human Settlement Plan 2014 Overview

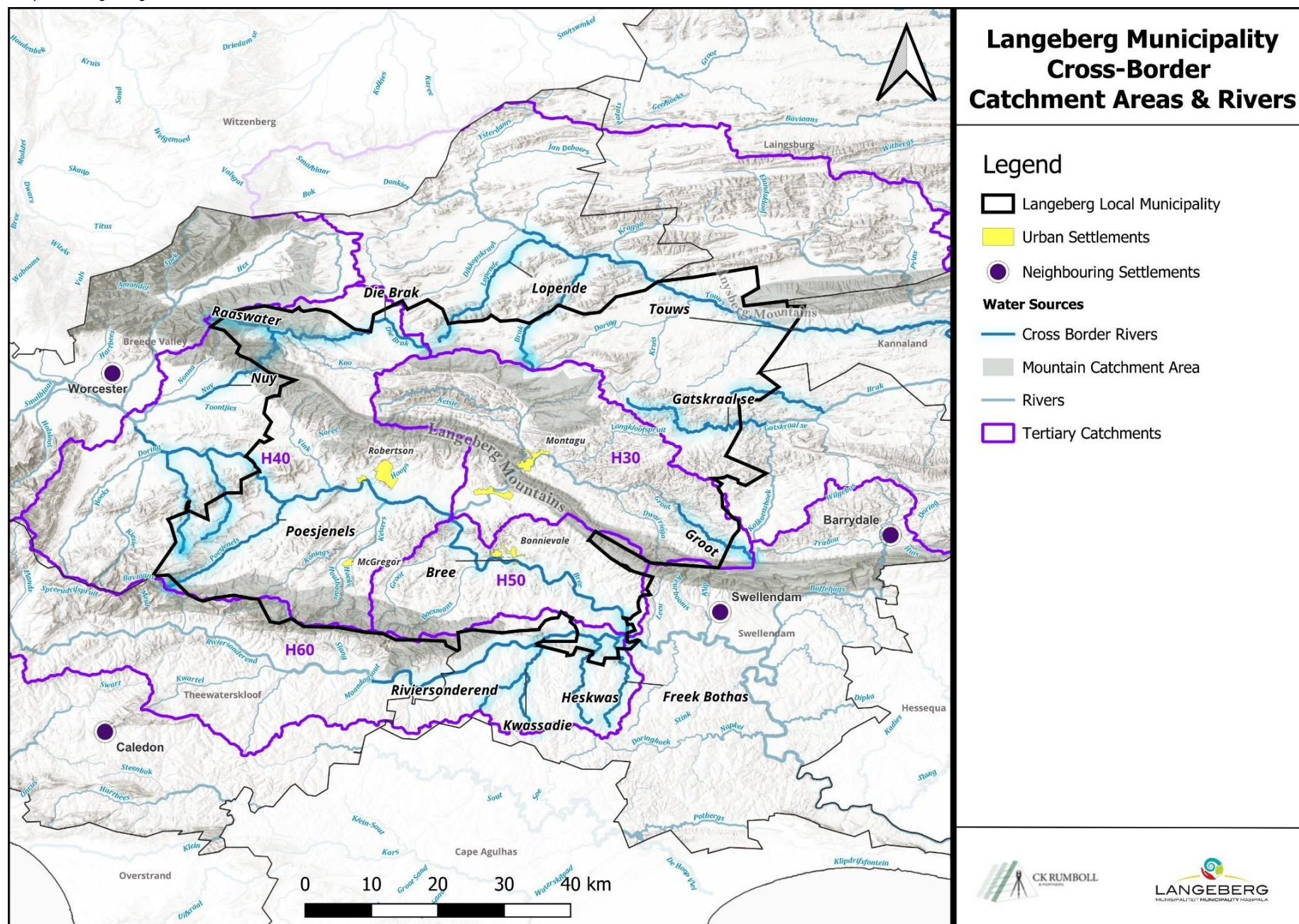


2.3 Spatial Analysis and Neighbouring Municipal Resources

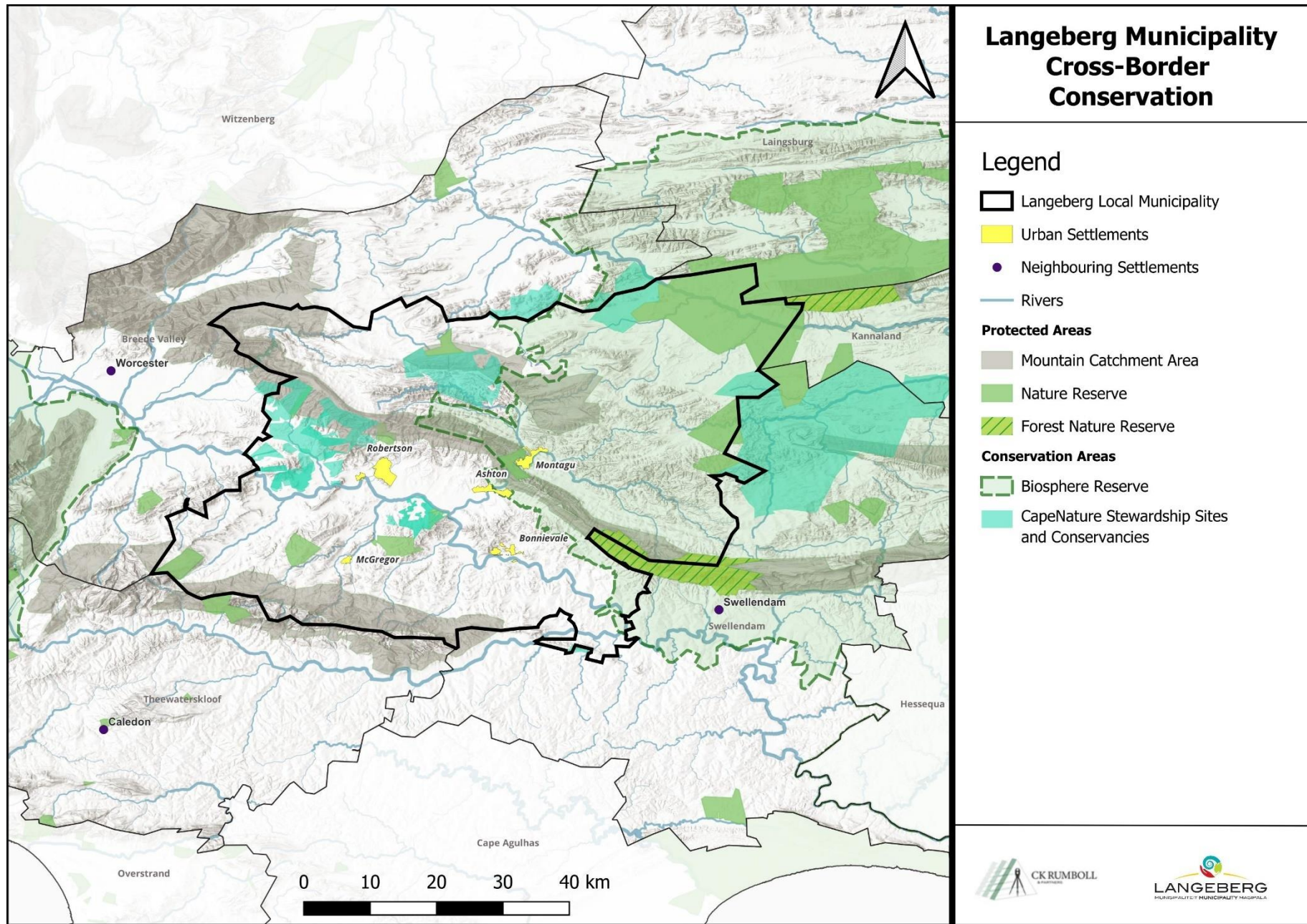
Five local municipalities abut Langeberg Municipality, namely the Breede Valley, Theewaterskloof, Swellendam, Kannaland, and Laingsburg Local Municipalities.

Municipality Shared boundary	Breede Valley Western boundary along Riviersonderend Mountains	Theewaterskloof Small section on southern boundary along Riviersonderend Mountains	Swellendam Eastern boundary of Langeberg Municipality abuts Swellendam Municipality	Kannaland Small section of north-eastern boundary	Laingsburg Small section of north- eastern boundary
Mountain Ranges: a) Conservation corridors extends along the boundaries. b) protect lower slopes and minimise visual and ecological intrusion. Key: <i>Mountains and Mountain Ranges</i> - named according to Trigonometric Beacons are indicated (in brackets) - in brackets [...] occur outside but close to Langeberg Municipal Boundary.	Langeberg Mountain including: North: Zoutkuil and Leeuwbosch. Northwest: Kanetvlei, Waterkloof, (Ben Heatly), Keeromsberg, Rabiesberg, Naudesberg. West: Langkloofsberg, Bosjesveld, Gannasberg.	South: Genadendal, [Galgeberg], Schilpadkop, Zondereinde, Dasberg	South: Wagenboom, [Stormsvlei], [Naauwkloof], Turks. Southeast: Bakoven, Beton Paal, Leeuwvriessberg, Goedgeloof. East: [Akkerboom], Vlakterand, [Windvogel], Kalkoenshoek, Ratelfontein, [Zoovoorby].	Northeast: Anysberg. Klein Karoo valley, formed by Swartberge and Langeberg Mountains, traversed by the Groot and Gamka Rivers.	Northeast: Anysberg West.
Rivers: Enhance biodiversity conservation and wilderness tourism opportunities. Provide for local recreation need. Develop regional legislation for recreational use of <u>Breede</u> River in conjunction with SA Maritime Safety Authority (SAMSA) and National Small Vessel Safety Regulations.	North: Kragga (Touws), Brak, Lopende Rivers. Northwest: Raaswater, Nuy Rivers. West: <u>Breede</u> River; Catchment Management areas: a) Skurweberg Mountains (Ceres) and b) Langeberg West and Riviersonderend.	South: Poesjenels, Gobos, Slang Rivers.	South: Riviersonderend, Kwassadie, Heskwas, Freek Bothas Rivers. East: <u>Breede</u>, Grootrivier, Gatskraalse Rivers.	Northeast: Touws River.	None

Map 28: Langeberg Cross Border Catchment Areas and Rivers

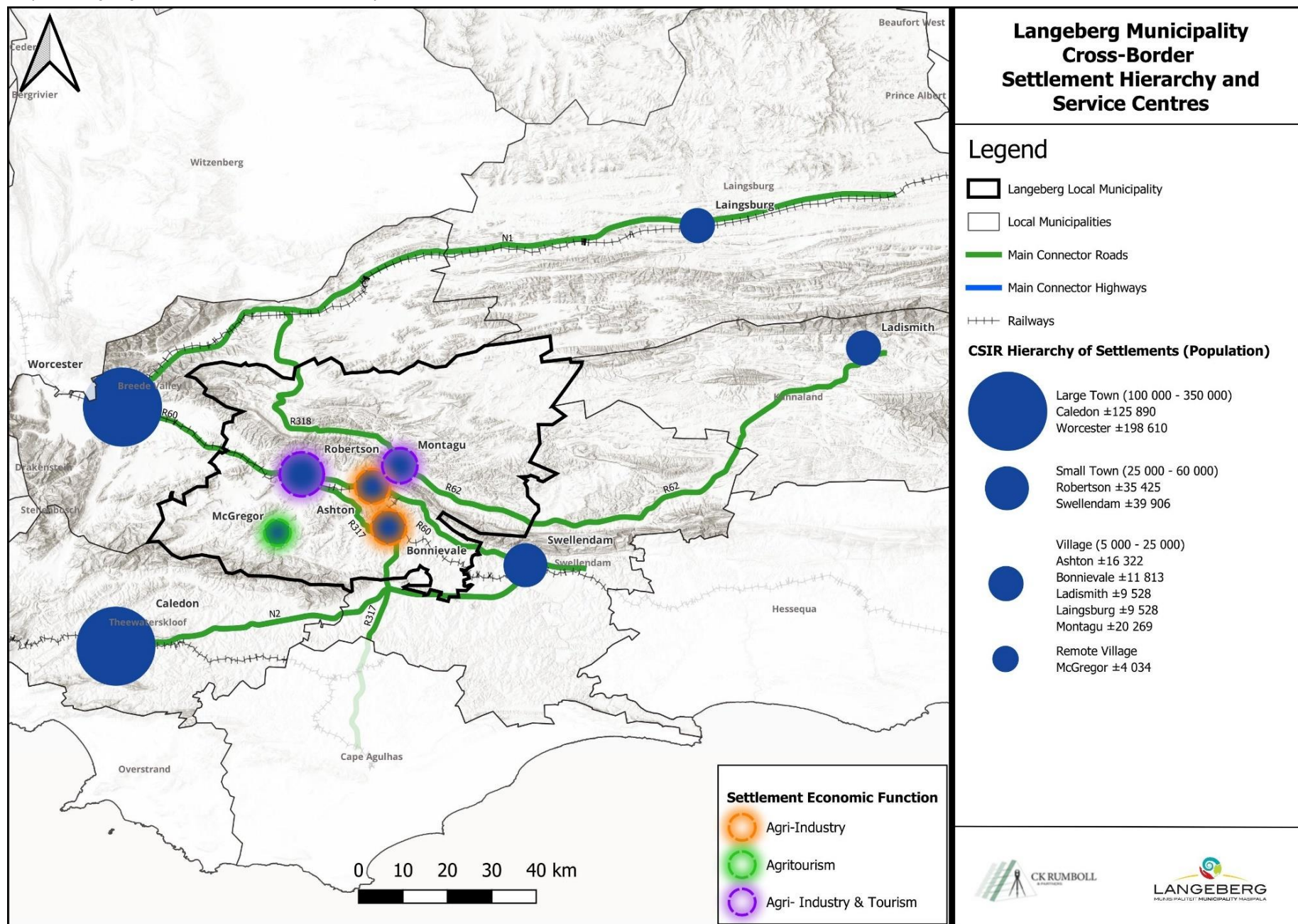


Map 29: Langeberg Cross Border Conservation



<i>Cross Border Analysis Continued</i>	Breede Valley	Theewaterskloof	Swellendam	Kannaland	Laingsburg
Conservation & Proclaimed conservation areas: Maintain conservation status of mutual Nature Reserves. Promote extension of reserves into a continuous biodiversity corridor through stewardship conservancies on private farms. Protect indigenous and listed alien woodlots and mature trees.	North: Gouritz Cluster Biosphere Reserve, Gecko Rock Private Nature Reserve, Urban Retreat, Lettaskraal. Northwest: Matroosberg Mountain Catchment Area, Patrys Kloof Private Nature Reserve. West: Langeberg West Mountain Catchment Area, Zoetigheid, Riviersonderend Nature Reserve, Riviersonderend Mountain Catchment Area. Langeberg Conservation Breede River.	South: Riviersonderend Mountain Catchment Area, Riviersonderend Nature Reserve, Sangebethu Private Nature Reserve, Greyton Local Nature Reserve.	South: Riviersonderend Mountain Catchment Area, Hessakwaskloof. Southeast: Gouritz Cluster Biosphere Reserve, Marloth Nature Reserve, Langeberg West Mountain Catchment Area. East: Gouritz Cluster Biosphere Reserve, Sanbona, MontEco Private Nature Reserve and Anysberg Nature Reserve are mutual conservation area. Eyerpoort Nature Reserve borders Langeberg.	Northeast: Gouritz Cluster Biosphere Reserve, Anysberg Nature Reserve.	Gouritz Cluster Biosphere Reserve including Anysberg Nature Reserves. Anysberg Nature Reserve, Lettaskraal.
Transport Network: Direct development in rural areas to urban settlements with opportunity to grow economy e.g. tourism in Greyton, Genadedal and McGregor in Riviersonderend Mountain conservation area. (RSMCA). Promote tourism routes e.g. R62.	N1 (Cape Town to Gauteng) links to Breede Valley transport corridor (rail line & R62/N15), and Langeberg Municipality to Swellendam Municipality, R318, R60.		R317, R60, R62.	R62 as main Klein Karoo route and connects Montagu and Uniondale, 400 km apart.	R318, indirect connection
Agriculture: Protect river systems and catchments. Protect conservation of natural vegetation.	Intensive agriculture around Worcester, Rawsonville & Doorns similar to around McGregor, Bonnievale & Robertson & between Robertson & Ashton. North: Small Stock Farming. West: Viticulture (Wine Grape) Farming.		Southeast: Viticulture Farming, Small Stock Farming, Small Grain Farming and Stone Fruit Farming. East: Small Stock Farming.	Northeast: Small Stock Farming.	Northeast: Small Stock Farming.
Settlement status:	Worcester is a regional service centre (>100 000) with a population of $\pm 127\ 000$.	Caledon is a village (between 5 000 and 25 000) with a population of 13 000+.	Swellendam is a village (between 5 000 and 25 000) with a population of $\pm 17\ 000$.	Ladismith is a village (between 5 000 and 25 000) with a population of $\pm 9\ 000$.	Laingsburg is a village (between 5 000 and 25 000) with a population of $\pm 6\ 000$.

Map 30: Langeberg Cross Border Settlement Hierarchy and Service Centres



CHAPTER 3: Land Demand, Supply and Settlement Development Guidelines

To allow for effective and sustainable planning of settlements, SPLUMA requires that the future demand and need for housing and related social and infrastructure services be considered and addressed as part of the SDF. For each settlement the **need (required) and demand for land** within the short term (5 years) and long term (15-20 years) timeframes was considered in the spatial proposals.

The need for tenure equals the population and household projections as 5-year intervals over the 20-year period. The demand for housing equals the municipal waiting list with the pipeline providing the list of priorities.

3.1 Household Growth Projections

The projected need was established using the Midyear Population Estimates, 2022 (MYPE 22) and projecting the household (hh) growth in Langeberg Municipal area. The MYPE 22 population projections in the table below served as a basis:

Table 3: Langeberg Household Growth per 5-year cycle (MYPE 2022)⁴

Settlement	2022 HH	2027 HH	Additional HH	2032 HH	Additional HH	2037 HH	Additional HH	2042 Pop	Additional HH	20 Year Additional HH
Ashton	2 548	2 761	213	2 943	182	3 177	234	3 435	258	887
Zolani	1 846	2 001	155	2 132	131	2 302	170	2 488	186	642
Bonnievale	2 999	3 249	250	3 463	214	3 739	276	4 041	302	1 042
McGregor	1 031	1 117	86	1 190	73	1 285	95	1 389	104	358
Montagu	5 005	5 424	418	5 781	356	6 240	459	6 746	506	1 741
Robertson	7 232	7 837	605	8 353	516	9 017	664	9 747	730	2 515
Nkqubela	1 908	2 068	160	2 204	136	2 379	175	2 572	193	664
Total Urban	22 569	24 457	1887	26 066	1 609	28 139	2 073	30 418	2 279	7 849
Langeberg Non-Urban	9 661	10 468	808	11 157	689	12 044	887	13 020	976	3 359
Total	32 230	34 925	2 695	37 223	2 298	40 183	2 960	43 438	3 255	11 208

The projections reveal that in the 20-year period, the population will increase by 11 208 people (one third) and the households in the Langeberg municipal area, are going to increase by nearly a third (9 097) of its population compared to the nearly 32 000 households in 2023 as per the table to follow.

The projected household growth and income, split into subsidised and taxable, was used to calculate the additional land to be provided for in 5-year cycles. Households that are fully subsidised are those that earn R3 800 and less per month. Households that are partially subsidised can pay municipal tax and are referred to as taxable. Erven of 150m² in extent for subsidised and GAP units and 450m² in extent for high income were used as the norm to calculate the netto (net) land requirements. The land requirements for the waiting list used a minimum plot sizes of 120 m² (at 40 units per ha) for BNG units, 120 to 195 m² for GAP units and 500 m² for high income is proposed (Human Settlement Plan, 2014, p 27).

⁴ Calculated with a total average of a 4-person household

The below table indicates the 5-year household projections per category Subsidised (Sub) or Taxable (Tax) and netto land requirements to provide tenure for these households, excluding the total land required for amenities. Settlement proposals, following in Chapter 5, have to provide for the projected land demand.

Table 4: 5-year household projections per taxable category and netto residential land requirements

Year	2023		2027				2032				2037				2042				Additional 20-Year Total			
Additional Households & Land (ha)	Wait List		Households		Net Land (ha)		Households		Net Land (ha)		Households		Net Land (ha)		Households		Net Land (ha)		Households		Total Net Land (ha) / settlement excl. Waiting list	
Settlement	Pop	Ha	Sub	Tax	Sub	Tax	Sub	Tax	Sub	Tax	Sub	Tax	Sub	Tax	Sub	Tax	Sub	Tax	Sub	Tax	Sub	Tax
Ashton	2 599	61	112	101	2	5	95	87	1	4	122	111	2	5	134	122	3	2	463	420	7	19
Zolani	1 302	31	123	32	2	1	105	27	2	1	134	35	2	2	147	38	2	2	508	132	8	6
Bonnievale	2 432	57	139	111	2	5	119	95	2	4	152	121	2	5	167	134	3	6	577	461	9	21
McGregor	17	0.4	41	45	1	2	35	39	1	2	45	49	1	2	49	54	1	2	170	187	3	8
Montagu	1 168	27	221	198	3	9	188	169	3	8	241	216	4	10	265	237	4	11	914	819	14	37
Robertson	3 083	72	259	345	4	16	221	294	3	13	283	376	4	17	311	414	5	19	1 075	1 429	16	64
Nkqubela	915	21	133	27	2	1	113	23	2	1	145	30	2	1	159	33	2	1	550	113	8	5
Total Urban	11 516	270	1 027	859	16	39	876	733	14	33	1 121	938	17	42	1 233	1 031	20	43	4 256	3 562	65	160
Langeberg NU			489	317	7	14	418	271	6	12	534	346	8	16	588	381	9	17	2 029	1 316	30	59
Total	9 493*	270	1 516	1 177	23	53	1 294	1 004	20	45	1 655	1 284	25	58	1 820	1 412	29	60	62 85	4 877	95	219

*As per Western Cape Human Settlement Database April 2023: 8 428 persons on the waiting list qualified as indigent and 1 065 as taxable.

Key: Sub - households that are fully subsidised earning R3 800 and less per month; Tax – households that are partially subsidised and can pay municipal tax.

Out of the total population, the urban rural split is 53:47, with slightly less than half of the population living in rural areas.

3.2 Tenure and Land Demand

The demand was established using the municipal waiting lists or backlog. The biggest demand is for subsidised housing. There is an existing total backlog of 9 493 opportunities (WCHS database, 2023), with Robertson and Ashton representing most (3 998 and 3 901 respectively, 2014 HSP minus those assisted) of those opportunities. The demand originating from informal settlements (some of which may be included in the waiting list) is estimated at 2 396 with Robertson and Ashton representing 908 and 512 respectively and McGregor, Montagu (Mandela Square) and Bonnievale (Boekenhoutskloof) representing 280, 248 and 448.

Table 5: Langeberg housing waiting list 2023 and land requirements

Settlement	Ashton	Bonnievale	McGregor	Montagu	Robertson	Total
Land (gross ha) HSP, 2014	48	53.8	19.2	17.8	86.33	225.13
2014 waiting list (minus assisted, 2023)	3 901 2 599 (Ashton) 1 302 (Zolani)	2 432	17	1 168	3 998 3 083 (Robertson) 915 (Nkqubela)	11 516
Land Required (net ha) per 2014 waiting list – assisted by 2023	82.3	52	0.4	27.3	93.55	269
Informal Settlement Households	512	448	280	248	908	2 396
Informal Settlement area (2023)	9.2	8.1	5.0	4.5	16.3	43.1
Total net hectare land required	91.5	38.6	5.4	31.8	109.85	312.1

The demand for affordable, GAP and social housing is the highest in Robertson, Montagu and Ashton with 1 059 opportunities for GAP on the waiting list (April 2023). There is a demand for weekend and medium (6 on waiting list) and higher income housing and housing for retirees in Montagu and McGregor which are popular destinations for weekends.

Provision should be made for female headed households which gradually increased from an average of 388 households per annum: 32% (8 705) in 2016 to 35% (or 11 424) in 2023.

Less than half (49.4% or 16 547) of households in the Langeberg municipal area owned their dwellings, whilst a fifth (19% or 6 224) rented from private owners and 14% (or 4 586) rented from other entities including the municipality. In addition, the percentage (88%) of formal dwellings decreased as more serviced, informal structures are becoming the trend with 9.3% households living in informal dwellings. (StatsSA, 2016)

According to the HSP 2014, 225ha of land was required to provide for housing opportunities to deal with the waiting list. An additional 43ha is required to formalise the recent informal areas. In 2023 269ha of land is required according to the waiting list.

3.3 Bulk Infrastructure Capacity

The availability of bulk infrastructure and services contribute to the economy, investors' confidence and future development of settlements in the Langeberg municipal area.

There is a need to upgrade water distribution overall, treatment capacity in Bonnievale and McGregor and storage capacity in Robertson.

Improved sewerage capacity is required across the Municipality with Robertson and Ashton being the priority.

Increased electrical capacity is needed in Robertson and Nkqubela. Bonnievale needs increased transformer capacity and for conductors to be upgraded, whilst in Ashton and Zolani distributors have to be upgraded.

Table 6: Langeberg Infrastructure Status Quo

Service Aspects	Robertson	Nkqubela	Bonnievale	McGregor	Ashton	Zolani	Montagu	Ashbury
E-Capacity EMP2017 (EMP/A 2022)	42.2 MVA (2017) 54.9 MVA (2022)		21.2 MVA (2017) 23.045 MVA (2022)	7.4 MVA (2017) 9.822 MVA (2022)	26.0 MVA (2017) 26.730 MVA (2022)		33.256 MVA (2017) 28.266 MVA (2022)	
E-Demand 2012	32.1 MVA		8.9 MVA	2.5 MVA	10.7 MVA		8.265 MVA	
E-Demand Estimated 2023 (WMP, 2012)	43.625 MVA & 28.839 MVA (Excl.)		11.546 MVA	3.454 MVA	11.275 MVA		11.042 MVA	
E-Demand Estimated 2028 (WMP, 2012)	47.281 MVA (Incl.) 31.052 MVA (Excl.)		13.385 MVA	4.133 MVA	11.882 MVA		Of 12.764 MVA	
E-Distribution (EMP/A 2022)	3x 15 MVA 66/11 kV transformer. Conductors within capacity.		1x 20 MVA 66/11 kV transformer. Conductors to be upgraded.	1x 10 MVA 66/ 11kV Conductors have additional capacity.	2 x 20 MVA 66/11 kV & 5 MVA 66/11 kVA transformers. Distributors to be upgraded.		1x 20 MVA 66/11 kV transformer. 1x 5MVA 66/11 kV Transformer on standby. Conductors have additional capacity.	
W-storage			2 960 kℓ	10 700 kℓ	6 700 kℓ	3 475 kℓ	11 700 kℓ	
W-storage WMP, 2012	11.70Mℓ (5 reservoirs)		3.475Mℓ (3 reservoirs)	2.960Mℓ (2 reservoirs)	8.900 Mℓ (4 Reservoirs)		10.70Mℓ (11 reservoirs)	
Additional W-storage Capacity	3,0 Mℓ (Add to Res 3), 2,5 Mℓ (Add to Res 4), 5,0 Mℓ (new Res 5).			Additional W-storage Capacity	3,0 Mℓ (Add to Res 3), 2,5 Mℓ (Add to Res 4), 5,0 Mℓ (new Res 5).			
W-volume required			4,0 Mℓ New Res					
W-purification Capacity WMP, 2012	10.140 Mℓ/d		5.000 Mℓ/d	0.600 Mℓ/d	11.910 Mℓ/d		5.180 Mℓ/d	
W-purification capacity required	14.545 Mℓ/d (78.4% AeDF/Mℓ/d cap%)		9.211 Mℓ/d (123% AeDF/Mℓ/d cap%)	1.350 Mℓ/d (96.7% AeDF/Mℓ/d cap%)	10.352 Mℓ/d (47.5% AeDF/Mℓ/d cap%)		6.497 Mℓ/d (68.6% AeDF/Mℓ/d cap%)	
W-distribution WMP, 2012	Insufficient capacity for future water demands.		Insufficient capacity for future demand.	Insufficient capacity for future demands.	Insufficient capacity for future water demands.		Insufficient capacity for future demands.	
W-main feeder WMP, 2012	Upgrade one of two 250 mm Ø (Res 1 to Town Centre). Upgrade 75 mm Ø (Res 1 to Nkqubela booster pump).		Utilise 200 mm Ø as additional supply. New 315 mm Ø (Old Res to New Res).	No Upgrades required.	Upgrade 200 mm Ø to a 315 mm Ø main. (WTP to Langeberg factory).		Upgrade 200 mm Ø (WTP – Ash Reservoir). New 160 mm Ø (main to Badshoogte Res).	
S-capacity Actual SMP, 2012'	4.300 Mℓ/d		1.800 Mℓ/d	0.300 Mℓ/d	2.450 Mℓ/d		3.500 Mℓ/d	
S-capacity AADD potential SMP, 2012	8 252 kℓ/d		4 810 kℓ/d	1 048 kℓ/d	6 596 kℓ/d		5 746 kℓ/d	
S- distribution	Inadequate		Adequate	Adequate	Inadequate		Adequate	

(GLS Consulting (Pty) Ltd, 2012) (WorleyParsons RSA (Pty) Ltd, 2017)

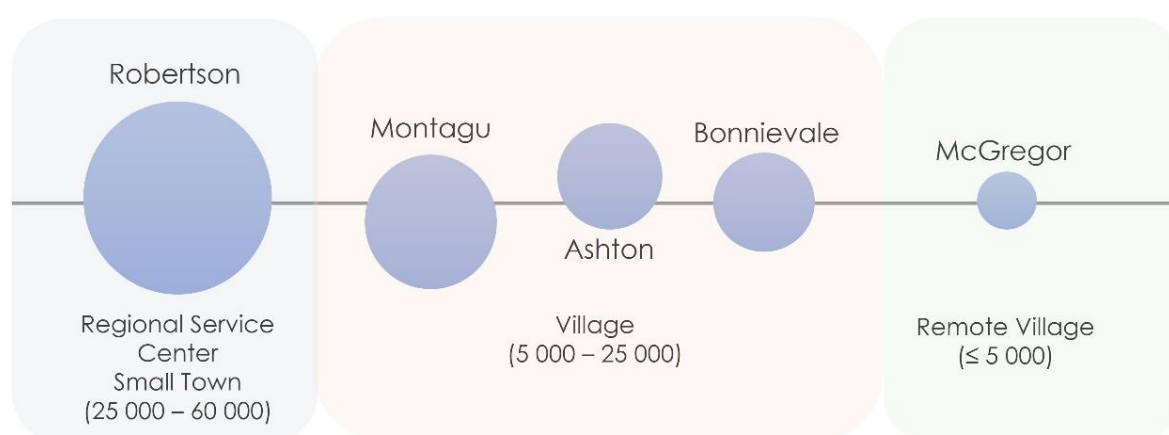
	Goudmyn	Le Chasseur	Noree
E-Capacity	18.382 MVA	9.226 MVA	11.081 MVA
E-Demand	8.8 MVA	3.8 MVA	5.278 MVA
	10.272 MVA	4.632 MVA	6.855 MVA
	11.843 MVA	5.115 MVA	7.813 MVA
E-Distribution	2x 10 MVA 66/11 kV transformers; Conductors within Capacity.	2x 5 MVA transformers; Conductors have additional capacity.	1x 10 MVA 66/11 kV transformer. Conductors have additional capacity.

Though the civil bulk services Master Plans are being updated, the available information was considered in determining bulk service capacity required for housing provision. The following threats, strengths and weaknesses related to infrastructure were identified.

Strengths Infrastructure/ Roads (R60, R62, R315).	Weaknesses - Infrastructure upgrades delay future development. - Housing backlog (12 879 in 2014). - Low levels of education, income & dependency on Municipal support. - Low levels of employment of semi and skilled persons. - Reliance on Breede River, existing high volumes of abstraction likely to increase.
Opportunities - Catalytic projects enabling the provision of infrastructure in Robertson. - Investigate alternative sources of water to supplement existing supply and for future expansion.	Threats - Expensive potable water. - Loadshedding.

3.4 Settlement Function

The classifications of settlements in Langeberg municipal area according to their populations range from Robertson being a regional service centre, Montagu, Ashton and Bonnievale being villages and McGregor being a remote village.



The Western Cape Growth Potential Study (2018) determined the settlement and socio-economic status of settlements in the Western Cape outside of the Cape Town metropolitan area along with their growth potential and investment directives. The study identifies the growth potential of the Langeberg municipal area as Medium in relation to the Western Cape. Composite growth potential of Ashton, Bonnievale, McGregor, Montagu and Robertson are Medium and are the scores of the 2014 study.

Index	Ashton '14	Bonnievale '14	McGregor '14	Montagu '14	Robertson'14	Langeberg'18
Human Capital	Low	High	Medium	High	Medium	Low
Economic	Medium	Medium	Medium	Medium	High	Medium
Physical	Medium	Medium	High	High	Medium	Low
Infrastructure	Medium	Medium	Medium	Medium	Medium	Low
Institutional	Medium	Medium	High	High	High	High
Composite Growth Potential	Medium	Medium	Medium	Medium	Medium	Medium

The Study considered five indices which among others include:

- **Human Capital Index:** level of education, income and employment;
- **Economic Index:** average per capita income, change in economic diversity, Gross Value Added and number of businesses per person;
- **Physical Index:** rainfall, presence of groundwater, grazing capacity and growth in area cultivated;
- **Infrastructure Index:** access to municipal services and transport;
- **Institutional Index:** the innovative potential of a settlement (Western Cape Province, 2014).

In the 2018 WC Growth Potential Study, a decrease in indexes Infrastructure and Institutional were caused by decreased access to sanitation in the house (Infrastructure) and more people per amenity and social services, more crime and slow infrastructure backlog reduction (Institutional), Physical and Natural rated the same despite the increased projected short-term shortfall of peak summer GAADD considering internal reticulation storage (mcm/a) of water.

Though indexes Human Capital rated the same, per capita income increased, whilst unemployment did too and matric pass rated stayed unchanged. Index Economic stayed unchanged with an ample increase in medium term annual percentage GVA growth. (Western Cape Province, 2018)

Though the composite growth potential is Medium, the socio-economic needs are high in Robertson, medium in Ashton, Bonnievale & Montagu and very low in McGregor.

Socio-economic needs include Household services, Education level, Housing need & Economic characteristics						
Growth Potential		Very Low	Low	Medium	High	Very high
	Very low					
	Low					
	Medium	McGregor		Ashton, Bonnievale, Montagu	Robertson	
	High					
	Very High					

As the majority of the population in the Langeberg municipal area is between 15 and 64 years of age (labour force) and having the highest proportion of children aged 0 – 14 years (29.4%) in 2016 in the district, Smart City outcomes should be promoted in Robertson, Ashton, Bonnievale and Montagu.

3.5 Land Required

The economic basis of settlements, and hence settlement status, was used to generate overall development proposals (opportunity generation). With the requirements for residential development already calculated, the requirements for Industrial and Business zoned land and for amenities are tabulated below:

Table 7: Land requirement for business and industrial uses according to household growth

Land (ha) requirement according to household growth																
	Waiting list 23	2027			2032			2037			2042			20 Year Total		
Main Town	Res	Total	Buss	Indus	Tot	Buss	Indus	Tot	Buss	Indus	Tot	Buss	Indus	Total	Buss	Indus
Ashton	60,82	6,24	0,44	2,18	5,32	0,37	1,86	6,81	0,48	2,4	7,49	0,52	2,62	84,6	5,9	29,6
Zolani	30,47	3,28	0,23	1,15	2,80	0,20	0,98	3,58	0,25	1,3	3,93	0,28	1,38	44,0	3,1	15,4
Bonnievale	56,91	7,10	0,50	2,48	6,06	0,42	2,12	7,74	0,54	2,7	8,52	0,60	2,98	86,3	6,0	30,2
McGregor	0,4	2,65	0,19	0,93	2,26	0,16	0,79	2,89	0,20	1,0	3,18	0,22	1,11	11,4	0,8	4,0
Montagu	27,33	12,20	0,85	4,27	10,41	0,73	3,64	13,31	0,93	4,7	14,64	1,02	5,12	77,9	5,5	27,3
Robertson	72,14	19,40	1,36	6,79	16,55	1,16	5,79	27,17	1,48	7,4	23,29	1,63	8,15	152,6	10,7	53,4
Nkqubela	21,41	3,22	0,23	1,13	2,74	0,19	0,96	3,51	0,25	1,2	3,86	0,27	1,35	34,7	2,4	12,2
Total Urban	269,5	54,07	3,56	17,80	46,14	3,23	16,15	59,01	4,13	20,7	64,90	4,54	22,72	491,5	34,4	172,0
Langeberg NU		21,63	1,51	7,57	18,45	1,29	6,46	23,60	1,65	8,3	25,96	1,82	9,09	89,64	6,3	31,4
Total, whole municipal area		75,70	5,07	25,37	64,59	4,52	22,61	82,61	5,78	28,9	90,86	6,36	31,80	581,1	40,7	203,43

Key: Res – Residential; Buss – Business; Indus – Industrial.

Table 8: Land requirement for amenities

Langeberg Population 2023		35 081	37 077	19 209	16 867	11 508	3 956
Life Balance	Amenity Type	Robertson	Farms	Montagu	Ashton	Bonnievale	McGregor
Education	Secondary School	2,6	7,8	2,6	0	0	0
	Primary School	0	8,4	0	0	2,8	0
	ABET (A) /Skills Training (S)	0	0	0,1	0	0,1	0,1
	Special Education	2,6	0	0	2,6	0	0
	Grade R Class at Primary School	2,72	2,96	1,36	1,2	0,8	0,24
	Crèche / Early Childhood Development	0	0,96	0	0	0	0
	ECD Resource Hub & Care Centre	0,1	0,1	0,1	0	0	0
Recreation Facilities	Local/Neighbourhood Park (includes play equipment for children)	0	1,5	0,5	0,5	0	0
	Urban Gym (outside gym)	0,7	0	0,7	0,7	0,35	0
	Grassed Surface (2 football fields equivalent) with or without sets	1	2	0	0	0	0
	Athletics/Cricket Stadium (grassed field/ athletics track, stand 3000+ seats)	0	0	1,4	0	0	0
	Combi-court surface (x2; x4) / Level surface playing field	2	2	2	1	1	0
Cultural	Library, Local (L), Mobile (M), Special categories i.e. disabled (MS)	0	0,2	0	0	0,1	0
Total		11,72	25,92	8,76	6	5,15	0,34

Nk = not known, Req = require, NR = not required

A total of 885ha land consisting of 583ha residential, 203ha industrial, 41ha business and 58ha community use zoned land is required.

3.6 Land Supplied

The land supplied is dealt with in Chapters 5, Settlement proposals, and 7, Capital Expenditure Framework. At a municipal and regional level, the following is recommended to improve the walkability and accessibility of settlements in the Langeberg Municipality to proximate social amenities:

- Integrate recreation facilities into the open space network within settlements and between settlements.
- Land use parameters for social amenities should be customised and include the relaxation of parking parameters where more than half of the users are walking to reach such an amenity.
- Land use parameters for businesses in historical core areas should be relaxed to encourage walking.
- Land use parameters for business, industry and service industry should include storage.

The directives below shall apply:

- Give sufficient protection to land requiring protection, inter alia, high value agricultural land currently under cultivation;
- Encourage contraction (a compact urban form) rather than expansion of urban settlements to promote non-motorised transport modes and spatial integration where appropriate;
- Provide sufficient land for development to satisfy the needs of the area for about the next 20 years, given the current growth rate and the availability of under or unutilised vacant land;
- Include municipal vacant land as part of the Land Supply. Hence, a vacant land audit should inform the Human Settlement Plan;
- Commission a housing market study to establish the different typologies and need in different income groups is recommended.

CHAPTER 4: Spatial Vision and Goals

This chapter provides an overview of the Langeberg Municipality's strategic objectives and its Strengths, Weaknesses, Opportunities and Threats from the Status Quo analysis. It spells out the Spatial Vision for Langeberg Municipality and sets Goals to achieve its desired spatial form.

4.1 Strategic Objectives of Langeberg Municipality

The Langeberg IDP's strategic objectives are listed below:

Table 9: Langeberg Strategic Objectives, 2022

Strategic Objectives	
SO1	Ensure efficient administration for good governance
SO2	Provide infrastructure for sustainable and affordable basic services
SO3	Promote a safe and secure environment
SO4	Promote and facilitate investment and local economic development
SO5	Provide sustainable financial management

(IDP, 2023).

The priorities for each ward are addressed as part of the *Development Proposals per Settlement* and *Development Proposals for Rural Areas*.

4.2 Strategic Goals

The strategic goals of the MSDF are informed by the IDP strategic objectives. These goals will be refined once the Langeberg MSDF vision is concluded.

IDP OBJECTIVES		STRATEGIC GOALS & SPATIAL STRATEGIES
SO2: PROVIDE INFRASTRUCTURE FOR SUSTAINABLE AND AFFORDABLE BASIC SERVICES Review infrastructure master plans; Research alternative sources of electricity to supply municipal wastewater treatment plants and water treatment plants; Upgrade Robertson wastewater treatment works; SO4: PROMOTE AND FACILITATE INVESTMENT AND LOCAL ECONOMIC DEVELOPMENT Review land policy and perform land audit; Provide support for Local Tourism Associations (LTA's); Develop an investment area management plan and conduct annual business survey to monitor local economic growth. SO5: PROVIDE SUSTAINABLE FINANCIAL MANAGEMENT	Goal	Goal 1: Grow (& unlock) economic prosperity
	SS1	Grow economy & stimulate sector diversification, including tourism, and product development.
	SS2	Strengthen mobility and economic links (investor confidence).
	SS3	Develop product and trade advantages (export value chain & agri-industry corridors) and competitive advantage.
	SS16	Promote tourism and WC tourism recovery plan.
SO2: PROVIDE INFRASTRUCTURE FOR SUSTAINABLE AND AFFORDABLE BASIC SERVICES Revise road asset maintenance plan.	Goal	Goal 2: Proximate, convenient and equal access.
	SS4	Protect economic vibrancy.
	SS5	Provide (change) sustainable infrastructure and services (smart growth).
	SS6	Provide zoned land for residential and industrial development and education.

SO2: PROVIDE INFRASTRUCTURE FOR SUSTAINABLE AND AFFORDABLE BASIC SERVICES Identify alternative municipal landfill sites; Implement title deeds restoration projects; Facilitate shelter options. SO4: PROMOTE AND FACILITATE INVESTMENT AND LOCAL ECONOMIC DEVELOPMENT Review land policy and perform land audit; Support the establishment of vegetable gardens; Review Langeberg Municipality cemetery policy. SO3: PROMOTE A SAFE AND SECURE ENVIRONMENT	Goal	Goal 3: Sustain material, physical and social well-being.
	SS7	Protect safety and security.
	SS8	Protect fundamental community resources (air, water & energy).
	SS9	Provide (change) social infrastructure and services (as per norm) to facilitate smart growth.
SO4: PROMOTE AND FACILITATE INVESTMENT AND LOCAL ECONOMIC DEVELOPMENT Review land policy and perform land audit.	SS10	Manage risk & disaster (man-made and natural).
	Goal	Goal 4: Protect and grow place identity (sense of place) and cultural integrity [Built Environment].
	SS11	Protect heritage resources, scenic resources & place identity.
	SS12	Grow cultural potential.
SO4: PROMOTE AND FACILITATE INVESTMENT AND LOCAL ECONOMIC DEVELOPMENT Review land policy and perform land audit. SO1: ENSURE EFFICIENT ADMINISTRATION FOR GOOD GOVERNANCE.	SS1	Grow economy (landscape & conservation, tourism & new markets and economic sectors) & stimulate sector diversification.
	Goal	Goals 1 : Protect ecological infrastructure integrity and agricultural integrity [Natural and Economic Environment].
	SS13	Protect food & water security & adhere to Spatial Planning Categories.
	SS14	Grow conservation potential and formalise conservation of CBAs and apply river management (RMMPs).
	SS15	Protect and preserve sensitive habitats and enhance Ecosystem services.

4.3 Strengths, Weaknesses, Opportunities and Threats

The following table provides a SWOT analysis of the biophysical, social & economic and built environments (as per the Status Quo report). The relevant municipal departments and ward councillors participated in the SWOT analysis.

Table 10: SWOT Analysis

Strengths	Weaknesses
Settlements: - Growth towns/ Service centres (Robertson - regional, Ashton and Bonnievale – Food-processing). - Tourism nodes (McGregor and Montagu) with strong historic identity. - Strong settlement character: Bonnievale has scattered nodes amongst vineyards including agri-processing facilities; Montagu has a variety of open spaces (vineyards, conservation areas and tree cluster or lanes), McGregor has farmyards incorporated within the settlement. Robertson and Ashton have agri-processing facilities. Urban Edges: - Protecting high value agricultural land, encourage spatial integration. Water Sources/ Courses: - Breede River, Koo, Dwariega, Kingna and Keisie combining into Cogmanskloof, Keisers (McGregor) and several other small rivers. Soil Potential and Cultivation: - Fertile and suitable soil for agricultural cultivation in valleys north of Langeberg Mountains and across plain between Lange and Riviersonderend Mountains. Land Cover: - Mountains & Hills: Langeberg, Riviersonderend, Waboom, Koega and Anysberg Mountain ranges.	Maintenance of Infrastructure: - Maintain & secure upgrading and provision of new infrastructure for future development including state subsidised housing. - Road maintenance in many urban settlements (McGregor, Ashton as priority reduces potential priority to other infrastructure priorities). Zoned land and Shelter: - Require 225 ha over the next 5 years (projection for 25 years till 2030) (HSP, 2014). Robertson lacks land for housing. - Housing backlog estimated as 9 340 households (2018). - Fully subsidised housing provided on settlement periphery. - Some housing provided is of low quality. - Densities too low; medium density not provided for. - Lack of strategic land for settlement (housing) development. Mobility: - Lack of integration between movement networks and modes of transport. Unemployment and low skills level: Low levels of income/ Poverty: 67% or 16 784 households earned less than R38 200 per annum (Per capita of R39 000 in 2018, SEP 2020). At R58

Diversity in agriculture:

- Fresh produce (grapes, pine and stone fruit, tomatoes and vegetables) and agri-processing: fruit, dried fruit, wine, cheese.

Infrastructure:

- Roads (R60, R62, R317 & R318) and high regional connectivity and movement systems.

Economy:

- Agriculture (13 998 or 25.9%) is the highest contributor to employment, followed by Wholesale & Retail, Catering & Accommodation (12 981 or 24%) Finance, Insurance, Real Estate & Business Services (7 202 or 13.3%), General Government & Community – Social Services (6 896 or 12.8 %) and Manufacturing (4 650 or 8.6%).

	1	2	3	4	5
Empl	Agri	Ret Acc	Fin Est	Gov	Manu
Eco	Ret Acc	Manu	Fin Est	Agric	Trans

- Wholesale & Retail, Catering & Accommodation (19.4%) followed by Manufacturing (17.7%) are the highest contributors to GDP followed by Finance, Insurance, Real Estate & Business Services (17%). The fourth and fifth biggest contributors are Agriculture (12.8%) and Transport (10.6%).
- Intensive Agriculture takes place on the Breede River plain around and between Robertson and Ashton, around Bonnievale and north of the Langeberg Mountains in the Keisie and Koo Valley.

431, Langeberg Municipality's per capita GDP is below Cape Winelands District (R72 778) and Western Cape (R84 967) in 2020 (SEP, 2021).

- Gini Coefficient (income inequality) increased from 0.56 in 2014 to 0.61 in 2020.
- Dependency ratio: 54% or 2 (number of working age population (aged 15 to 64) to 1 dependent (aged 0 - 14 and over 65)).
- Medium Human Development Index (Langeberg Municipality): increased by 0.72 in 2020, lower than Western Cape: 0.63 in 2018 (life expectancy at birth, adult literacy levels, gross educational enrolment and GDP). Dependency on subsidies.

School dropouts:

- Schools are overcrowded and there are two few schools according to provision standards.
- 2020, 18 659 learners enrolled in school, whilst the retention rate was 58.3% (SEP 2021). Early childhood development for children becomes imperative.
- Literacy rate (successful completion of a minimum of seven years of formal education for those 14 years of age and older) in the Langeberg Municipality is 54.3%. (Illiteracy rate is 45.7%, SEP 2021).

Ecological infrastructure:

- Reliance on Breede River, existing high volumes of abstraction likely to increase.

Opportunities

Built heritage assets.

Access value chains:

- Access to Cape Town: R60 provides easy access to N1 and in turn to ports (air and sea).
- Agriculture.

Access to information driving future economic development:

- Access to information should be promoted.

Governance and regulation (SPLUMA):

- SPLUMA provided Langeberg Municipality with delegated powers to govern and regulate development to enable economic growth and establish Langeberg Municipality as a place to invest. Caution against regulations that raise the entry level for SMMEs and informal trading.

Human Resources:

- Largely young population.

World economy:

- Langeberg Municipality is home to export industries and businesses (to South Africa & world). Hence provide for sufficient industrial and commercially zoned land in and agri-industrial land between Robertson and Ashton.
- Consider alternative to road transport (existing railways), to reduce carbon footprint.
- Integrate agri-industries and tourism.

Biodiversity and Natural Resources:

- Gouritz Cluster Biosphere, Riviersonderend Mountain Catchment Area, Langeberg Wes Mountain Catchment Area (including Dassieshoek, Montagu Mountain and Twisniet Nature Reserve) and Anysberg Nature Reserve, Matroosberg Mountain Catchment area, Nature Reserves: Vrolijkheid, Goedemoed, Skuilkrans and Mont Eco links to conservation areas outside the municipal area to promote greater environmental sustainability for the region.
- Tourist potential.
- Water resources: Breede River and Management Catchment Areas (MCAs).

Ecological infrastructure:

- Investigate alternative sources of water to supplement existing supply and for future expansion.

Threats

Economic Globalisation:

- Mechanisation and technology require less but skilled labour.
- Cultivation requirements conflict with natural character of the region (netting).

Climate change:

- Causes changes to precipitation, seasons, micro-climates and habitat stability, can lead to direct agricultural and natural vulnerabilities and indirect economic consequences.

Urbanisation:

- Population increased to 123 698 people in 2023 of which $\pm 70\%$ is urbanised (30% or 37 077 people live in rural areas in 2014) (MYPE, 2022).
- A high percentage of these households are dependent on state subsidised housing.
- Illegal land occupation leads to settlement disfunction and a loss in market confidence. (Increased stress on civil, electrical and financial capacity).
- Poses a challenge to create compact liveable urban environments.

Insufficient electricity provision:

- Robertson has insufficient electrical capacity; funding (own contribution) not forthcoming.
- Loadshedding hampers agri-industry in Ashton, Robertson, Bonnievale and Montagu.

Poverty & Unemployment:

- Lack of public transport decreases economic mobility (to reach work and to conduct business).
- Crime.
- Increasing non-compliance with by-laws and regulations.

4.4 Conceptual Proposal

4.4.1 Rural Structuring Elements

Deriving from the SWOT analysis of the Langeberg Municipal area, are the R60 and R62 as the main East-West connector and the R317 and R318 as the North-South connector and all are vibrant and growing tourism corridors. Ashton has developed as a settlement node where all these connector roads link and present a variety of economic opportunities within the conservation worthy agricultural and natural landscape, whilst settlements along these connectors present similar opportunities. Ashton, Bonnievale and Robertson are the main agri-industrial hubs whilst Montagu and McGregor are the tourism hubs.

The Langeberg municipal area has strong intensively cultivated agricultural corridors running from the north North West to the South-East along:

- The R60 from; and
- The R318 (Koo and Keisie) and R62.

In contrast with, but in support of the agricultural cultivation, are significant stretches of natural conservation worthy veld being home to threatened biomes.

Within settlements, the transitions in the built, socio-economic and biophysical environments envisaged follow.

4.4.2 Settlement Transitions

From	To
Built Environment	
Fragmented communities destroy the unique character and quality of life in settlements and rural settlements as it causes: ▪ Unsympathetic architecture and structure. ▪ Wide roads and excessive black tar surfaces. ▪ Conflict between pedestrians and motorcars. ▪ Commercial ribbon development and an overload of billboards. ▪ Security gates, telephone poles, masts and satellite dishes. ▪ Loss of continuous open spaces. ▪ Limited landscaping (could be intensified by solar installations when trees are removed). ▪ Absence of Non-Motorised Transport (NMT) and inadequate pavement provision.	Rejuvenated and growing settlements to be liveable and diverse and enable the population to be economically mobile. ▪ Promote complementing architecture and prohibit removal of trees of 20 years+. ▪ Soften main roads in settlements and calm traffic. ▪ Promote pedestrian and cycling pathways (NMT). ▪ Develop a code for where and how to display billboards, guard natural gateways and prohibit signage and advertisements along nature and water side of developments. ▪ Promote underground instead of above ground service reticulation including communication networks. ▪ Protect the agricultural landscape. ▪ Promote open spaces as part of OS networks. ▪ Encourage tree planting and require each land unit being created to plant two trees. ▪ Prepare for climate change. ▪ Allow for topography to inform development.
Settlement urban edges were delineated for 5-, 10- and 20-year horizons whilst low densities prevailed.	Intensify land uses within settlement edges in accordance with IZS.
Density norms were determined for each town. A densification rate was determined and infill development was encouraged in order for settlements to achieve their 50-year density parameters.	Promote rejuvenation of settlements whilst keeping precinct character and promote infill development, increased floor factor and potential subdivisions or re-development. Implement precinct plan(s).
Langeberg Municipality owns commonage in all settlements. A vacant land audit identified developable land within the urban areas.	Enhance economic mobility and sustainable settlements. NMT and adequate and well-maintained pavement provision.

Socio-Economic	
Although there are good primary and secondary schools, only half of the population is semi-skilled or skilled.	Ensure there are accessible opportunities for educational progression for example FET college. Promote crèches and preschools and provide for safe multi-disciplinary schools. As only half of the population lives in urban areas, make education accessible to those living in rural areas.
Whilst Robertson Hospital is accessible, Montagu Hospital is isolated. Quality health care is requested by the community.	Ensure supportive community health care is delivered across the municipal area. Provide accessible transport to health care within settlements.
Despite low skill levels, the workforce is stable.	Provide for skills training. Promote entrepreneurial spaces and skills. Lower the barrier to informal training and SMMEs.
Biophysical Environment	
Extensive and intensive agriculture removes most natural vegetation.	Protect agricultural land and include conservation
Landscapes determine the status of assets and include Agricultural landscape, Wilderness landscape, Waterways and connectors, Cultural-historical landscape, Connector routes and Corridors, social Foci and Community facilities and activities.	Enhance landscapes and utilise assets as tourist destinations.

4.5 Spatial Vision and Spatial Goals

The spatial vision emerging from the above SWOT analysis, the biophysical, socio-economic and built environment status quo and the conceptual proposal (See *Langeberg Vision map*) is:

“Langeberg is a prosperous region of economically well-connected, sustainable, liveable, inclusive and resilient settlements and rural areas, enabling residents to enjoy and responsibly utilise the region’s abundant resources.”

To attain this vision, the spatial goals are:

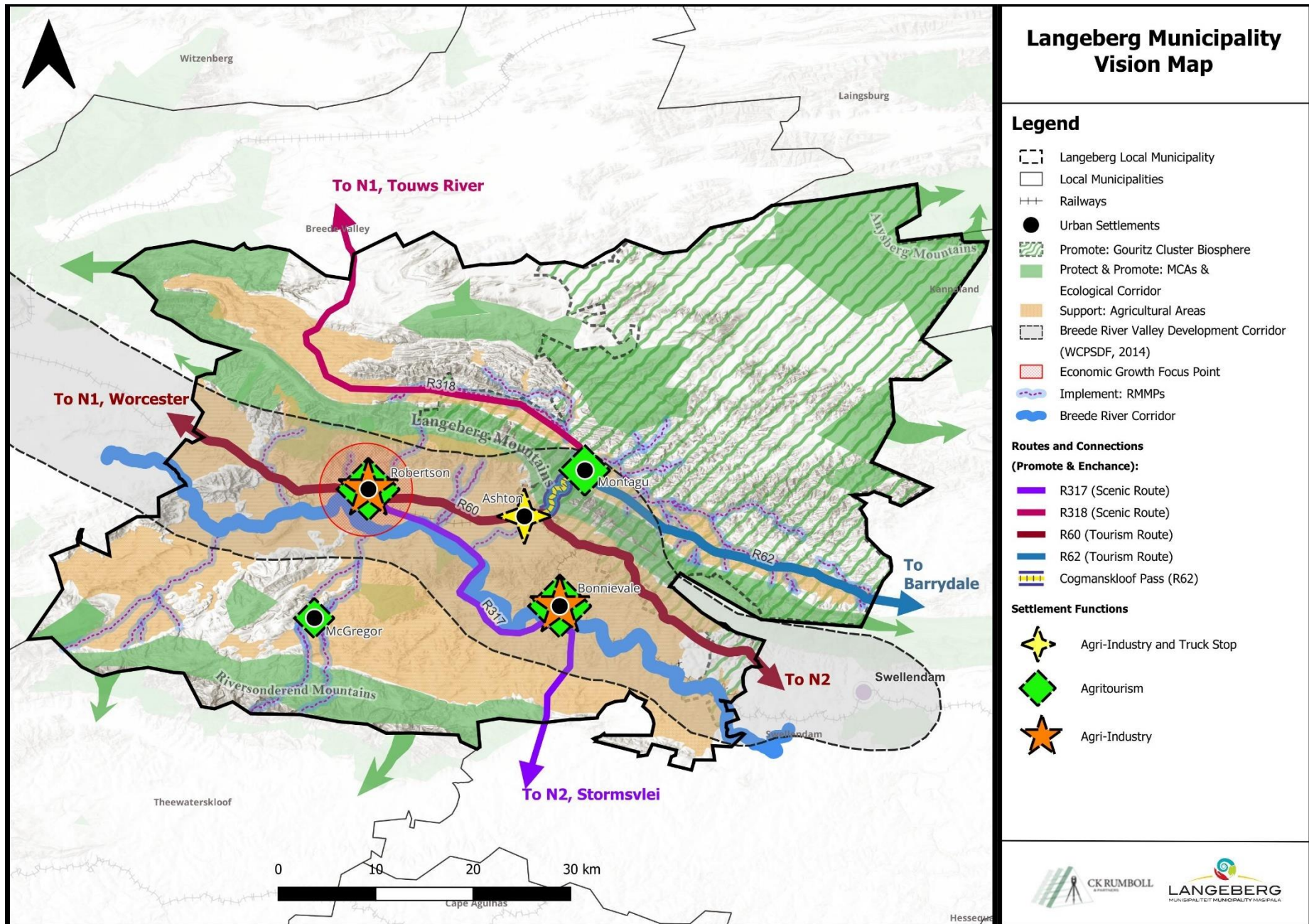
- Goal A: **To promote and protect ecological infrastructure integrity and the natural environment** through the conservation of the Gouritz Cluster Biosphere, Riviersonderend Mountain Catchment Area, Langeberg West Mountain Catchment Area (including Dassieshoek, Montagu Mountain Reserve and Twistniet Nature Reserve), Matroosberg Mountain Catchment Area and Provincial Nature Reserves (Anysberg Nature Reserve and Vrolijkheid Nature Reserve) and Private Nature Reserves including Goedemoed, Skuilkrans and Mont Eco Nature Reserve;
- Goal B: **To protect agricultural integrity** and enhance and intensify agriculture and agricultural value chain activities specifically in the Breede, Keisie and Koo Valleys;
- Goal C: **To strengthen the sense of place**, the heritage conservation, **cultural integrity** and role of settlements, rural areas and scenic routes in the Langeberg municipal area and promote orderly, compact and **walkable settlements** which enable the Municipality to deliver on its primary mandate of efficient service delivery and provide a supportive environment for private development;
- Goal D: **To facilitate and promote economic growth and prosperity** through the provision of **well-located industrial and business land** and the development of new schools and training facilities focused on skills development and the robust promotion of early childhood development activities;
- Goal E: To promote tourism and the post-covid WC tourism recovery plan **to grow economic prosperity**.

The MSDF Vision is in support of Langeberg IDP vision:

“To create a safe and healthy environment for delivering sustainable quality services” (IDP, 2023).

To prudently manage this vision in the spatial realm, five objectives will assist in achieving it:

Map 31: Langeberg Vision Map



CHAPTER 5: Settlement Proposals

A compact urban form supports spatial sustainability, one of the cross-cutting planning principles as advocated in SPLUMA and LUPA. Both the general directives and specific settlement proposal that follow in this chapter, enhance the five SPLUMA and LUPA principles to achieve a compact urban form.

5.1 General Settlement Proposals

General proposals for all Langeberg settlements arranged according to the spatial objectives to achieve the vision of both the MSDP and Langeberg Municipality, follow. All directives promote either protection, change or development.

No	Proposal	Category	Goal
All services			
G01	Plan, budget, allocate budgets, provide capacity, maintain and reduce losses and upgrade all services for medium and long-term demands (20 years) considering population growth, densification and income ranges (indigent).	Master Plans & budgets	1
G02	Complete an Asset Management Plan based on an audit of municipal infrastructure.	Maintenance	1
G03	Prepare and implement the following maintenance plan, being part of asset management plan. (All individual settlement proposals to be included in municipal wide plans).		
	- Roads and stormwater.		
	- Bulk water and reticulation infrastructure.		
	- Bulk sewer and distribution infrastructure.		
	- Bulk electrical and distribution infrastructure.		
	- Community facilities.		
	- Public Realm and soft open spaces (including River Maintenance Management Plans).		
G04	Prioritise upgrade of sewerage reticulation network to keep up with population growth.	Upgrades, Sewerage	1
G05	Secure appropriately located and adequate land for bulk infrastructure expansion:	Land requirements & site selection	1
	- Avoid conservation-worthy areas.		
G05	- Select land with a high visual absorption capacity to limit impact on the landscape.		
	Promote passive building design to minimise energy, solid waste and water demand and promote use of solar water heaters; PV panels; grey water recycling and waste separation at source.	Domestic Services, Building Design	1
Amenities /Community Facilities			
G07	Promote & support provision of adequate primary health & education facilities: preschools, crèches, secondary/tertiary schools, libraries, museums, sports, clinics and overall health facilities within walking distance.	Provision guidelines	3
	- Align provision of social infrastructure to provision norms.		
	- Determine accessible locations for amenities for areas lacking social infrastructure and greenfield development areas.		
	- Promote multi-use whilst in operation and immediate re-purposing once decommissioned of social amenities and schools.		
G08	- Maintain all social infrastructure to create safe living environments.		
	Locate amenities according to the three-tier hierarchy to ensure that higher-order facilities will be enjoyed by the most people and shared by residents across the entire income gradient:	Location	3
	- Tertiary: Hospitals, courts, multi-purpose centres, regional or metropolitan transport interchanges, museums and indoor sports complexes.		
	- Secondary: High schools, day-care centres, hospitals, libraries, sports and community halls and sports fields.		
	- Primary: Primary schools, crèches, clinics, bus and mini-bus taxi stops.		
G09	Encourage the provision of communication infrastructure (ICT hubs).	ICT hubs	1
G10	Guide installation of ICT hubs by means high level public realm precinct plans including active and passive open spaces and activity nodes and streets.		
G11	Prioritise the provision of and protect and maintain existing sports grounds.	Sport Grounds	3

G12	Prioritise the provision of training centres, creches, schools and aftercare facilities to improve educational levels overall for, but not limited to:	Education & Training	3
	- Preschool children.		
	- Grade R.		
	- School children.		
	- Agri- and agri-industry workers where relevant course and life skills will be offered.		
G13	Support the establishment of crèches and other education facilities in residential areas.	Cemeteries, Expansion	3
G14	Plan for adequate expansion of cemeteries. Ensure cemetery capacity are monitored to address additional space requirements timeously.		
G15	Avoid the location of cemeteries:		
	- Within flood plains and determine or consider flood lines.		
	- On unsuitable soil and where the water tables is high.		
G16	Undertake relevant geotechnical and geohydrological assessments.		
G17	Support securing (fence and control) access to cemeteries and facilitate ongoing maintenance of all cemeteries.		3
G18	Strengthen and encourage community spaces and squares.	Public Realm & Open Spaces	3
	- Promote multi-functional recreational areas (e.g. children's play parks, day camping and picnic facilities).		
	- Promote urban-rural linkages and use "soft" land uses such as sports and recreation facilities linked to routes (e.g. hiking, mountain biking, bird watching, wildflower viewing, horse trails, fishing and water sports).		
G19	Develop a practice note for supporting Fetal Alcohol Syndrome persons.	Guidelines FAS	
G20	Develop a practice note on schools in settlements and in rural areas and make reference to Annexure B, LMSDF, 2015.	Guidelines, Schools	
G21	Develop practice note on placement and aesthetics of IT hubs in settlements and cell phone and communication masts in settlements and in rural areas.	Guidelines, communication infrastructure	
Bulk Electricity, Reticulation and Alternative Energy			
G22	Promote private-public partnership (PPP) alternative energy facilities.	Collaboration	1
G23	Preferably locate Electric Charging Stations at filling stations.	Transport, Charging Stations	1
G24	Upgrade/ replace obsolete electrical infrastructure.	Electrical, Infrastructure	1
G25	Support provision and manage adequate street lighting.	Safety, Street Lighting	1
G26	Promote a fair constant energy price to ensure access to all.	Energy, price	1
G27	Support and encourage installation and use of alternative energy sources e.g. solar and wind for domestic use and bulk generation.	Energy, Alternative Sources	1
Commercial & Industrial Development			
G28	Provide vulnerable and disadvantaged residents and local entrepreneurs access to integrated and viable tourism spaces to conduct business (arts and crafts, cultural and heritage, local guides and local food).	Access To Business	1
	- Permit markets at highly accessible movement network and urban structure locations such as modal interchanges and intersections and along activity streets.		
	- Promote the development of well-located vacant properties earmarked for business.		
	- Improve access to and ownership of commercial and industrial land.		
G29	Intensify and enhance Central Business Districts (CBDs) and promote mixed-uses.	Intensify & differentiate	
G30	Intensify development and renewal along main activity routes, activity streets and at nodes to promote business, small business and/or mixed-use (a combination of commercial, residential and low-impact service industries) and/or residential development and:	Intensify, Activity Streets	1
	- Promote development on both sides of activity streets.		
	- Use the within "walking distance" principle to regenerate, revitalise and restructure settlements.		
	- Orientate short sides of blocks to major streets to promote access (penetration).		
	- Locate most frequented activities (higher-order development) and mixed uses in the most central/accessible localities, e.g. industrial, commercial and educational.		
	- Support establishment of house shops along activity streets.		
	- Support home occupation and professional services in residential areas.		
	- Support residential infill to achieve social and functional integration.		
G31	Support agricultural service industry and agri-industry related development and diversification including the small and informal business sector.	Access to Work	1
G32	Ensure adequate bulk infrastructure capacity to support industrial and agri-industrial expansion.	Infrastructure Capacity	1
G33	Provide for clusters of zoned commercial and industrial land to drive economic growth.	Zoned land	1

Mobility			
G34	Provide for and improve walkability and mobility and:	Routes and Walking distance	2
	- Locate activities (residential, transport, work, recreation, etc.) within walking distance (1 000m/1km), (see spatial proposal maps illustrating a 1km radius from schools).		
	- Promote pedestrian streets, public transport, one-way streets, non-motorised transport.		
	- Connectivity between precincts and to and from areas adjacent to CBD and activity streets and corridors.		
	- Create appropriate road cross-section widths that can provide for vehicle traffic, parking, pedestrian movement, cycling and landscaping.		
	- Protect mobility function of routes and where applicable obtain DOI: Transport Infrastructure Branch approval and develop Arterial Management Plans.		
	- Secure appropriate maintenance and renewal budgets for mobility infrastructure and road networks.		
G35	- Locate buildings closer, rather than further, from streets to increase pedestrian activity, a sense of enclosure and surveillance.		
	Provide safe NMT routes throughout settlement, along activity streets and between precincts and amenities, improving connectivity in settlements.	NMT Routes	2
	- Ensure routes are circular and connect different precincts.	Links	
	- Develop and promote multi-mode and multi-use routes.	Modes	
	- Provide for cycle routes along activity corridors.		
	- Separate cycling lanes from pedestrian and vehicle lanes.	Regulation	
	- Implement traffic calming measures to create a more pedestrian-friendly environment.		
	- Protect cycling and pedestrian lanes from unauthorised use by motorised vehicles.	Safety	
	- Improve surveillance.	ITC Hubs, Mobility	
	- Provide supporting infrastructure (street furniture and ITC hubs) to improve mobility of residents and tourists.	Access (Disabled)	
	- Improve accessibility of NMT routes for the disabled.	Stormwater Infrastructure	
	- Maintain and upgrade road and stormwater infrastructure.	Movement Network	2
	- Expand local movement network, including sidewalks, NMT routes and internal roads.	Alternative Public Transport	
Encourage railway transport as alternative public transport system.	Rail Freight Transport		
Lobby use of railway services to enhance industrial precinct along railway line.			
Nature and Conservation			
G36	Designate and protect river and ecological corridors, including Breede River aquatic CBAs, by excluding urban development and ploughing 32m from river banks and wetlands. Rivers should ideally be left natural apart from access routes.	Ecological Corridors, Buffers	5
	- Update and/or determine floodlines of all named rivers within the urban edges.	Guidelines, Floodline	
	- Commission and implement river maintenance management plans across Langeberg and within settlements for those rivers such as Willem Nels, Hoops and Drooge Rivers (Robertson and surroundings), Keisie (from Avalon Springs to Cogmanskloof, Montagu), Cogmanskloof (from Montagu to Ashton and Ashton to Breede River) and Breede River (from Rooibrug to Kambati) and Boekenhoutskloof River that do not yet have approved plans.	Guidelines, Implement, River Plans	
	- River Maintenance Management Plans are in place for Baden River Montagu (DEADP, 2017), Keisie River (DEADP, 2014), Kingna River Montagu (WCDA, 2018), Dwarriga, Groot and Kingna Montagu East (Dol [DTPW], 2015) and Keisers River (2018).		
G37	Preserve cultivated, agricultural and natural areas within the settlements for example McGregor, Montagu and Roberson and:	Natural Areas, Agriculture	5
- Protect and consolidate urban agricultural areas as important ecological and heritage resources;			
	- Offer incentives to property owners such as similar to agriculture or discounted property rates and taxes.		
G38	Protect natural areas and Critical Biodiversity Areas within and immediately around settlements officially and announce allowable uses.	Natural Areas, Conservation	5
G39	Secure offsets for affected CBAs at proposed developments.	Natural Areas, Conservation Targets	5
G40	Link natural open spaces within settlement to agricultural and natural surroundings.	Natural Areas, Links	5
G41	Promote DWAF catchment management plans for the whole of Langeberg.	River maintenance management	5

Residential			
G42	Arrange housing according to the socio-economic gradient principle, with higher end of the market closest to the main thoroughfare and the lower end of the market closest to the CBD.	Access, Location	1
G43	Speed up conveyancing to give residents freehold tenure, i.e. title deeds, immediately after informal areas are serviced so that private temporary shelter upgrading can commence at once.	Access, Ownership	1
G44	Support densification through subdivision and infill development.	Densification	1
G45	Promote mixed uses as a key component for achieving improved levels of settlement liveability.	Intensification	1
G46	Promote intensification of land uses and amenities (corridors, nodes and linkages) between settlement precincts and less formal areas.	Intensify, Linking	1
G47	Provide for the entire spectrum of residential development to enhance cross-subsidisation.	Residential Spectrum	1
	Promote the inclusion of GAP housing schemes as part of subsidised projects so as to cross-subsidise the provision of services.		
	Encourage provision of a multiple range of affordable entry level housing, catering for various markets.		
	Promote Integration Zones in settlements.		
	Provide for farmworker housing and joint ventures with farming enterprises.		
G48	In liaison with Western Cape Provincial Administration, develop a practice note or by-law and standard operational procedures to deal with unlawful occupation of land.	Guidelines, migration	
Safety and Risk Management			
G49	Promote the implementation of the Department of Water and Sanitation's River Maintenance Management Programme and plans.	Collaboration	1
G50	Mitigate potential impacts of climate change (as per municipal Climate Change Strategy & Framework).	Mitigate Impacts	1
G51	Promote effective management of air quality and prevent air pollution.	Mitigate Impacts, Air	1
G52	Prioritise upgrading of informal residential areas to site and serviced stands, to address pollution and reduced water quality (CAPEX and Implementation Plan).	Mitigate Impacts, Sewerage	1
G53	Require implementation of all mitigation and management actions to protect natural resources according to standards, permit requirements and environmental management plans and in particular to sewerage management:	Mitigate Impacts, Standards	1
	- Prohibit effluent discharge into wetlands and/ or waterways.		
	- Encourage replacement of septic tanks.		
	- Adhere to the 300m sewerage work buffer.		
	- Protect and maintain existing waterborne sewerage system.		
	- Provide sewerage treatment plant capacity and reticulation for future demand driven by population growth.		
G54	Promote security of and maintenance of existing police stations.	Security	1
Sense of place, Heritage, Gateways and Tourism			
G55	Commission (and budget for) the updating of the rural and settlement heritage inventory (Abrahamse, 2013) including landscapes.	Guideline, Rural and Urban Heritage	4
	Prepare heritage overlay zones for introduction into the LIZS.	Guidelines, Overlay Zones	
G56	Control alterations and demolitions of buildings older than 100 years and promote sensitive development around heritage buildings.	Alterations, Demolitions	4
G57	Repurpose heritage buildings as amenities promoting sport (skate board parks), arts and culture and education.	Protect and Repurpose	4
G58	Protect the traditional grid layout pattern (urban structure).	Lay Out	4
G59	Consider and protect historic settlement character, historical context and unique sense of place (e.g. spaciousness) whilst supporting sensitive densification by means of infill development and willingness of owners to subdivide.	Densification	4
G60	Upgrade the public realm and plant trees and tree lanes, improve sidewalks, provide street furniture, pave and raise intersections and provide facilities for NMT traffic (MSDF, 2015) at, but not limited to, settlement centres (CBDs) and heritage destinations.	Public Realm	4
G61	Develop a tree management policy (removing, replacement and planting) to protect mature trees in the Langeberg municipal area. (Trees older than 20 years). Include individual settlement proposals and an implementation plan and budget.	Guideline, Tree Management	5
G62	Promote the improvement of the visual character of higher density residential developments, and in particular subsidised housing developments, through the planting of trees along streets & developing functional, enclosed (where required), open space areas.	Sense of place, Trees	1
G63	Design interactive development interfaces along open space networks and waterways. (Developments face open space networks. No rear building side oriented to open space or waterways).	Interface between Open Space & Development	5

G64	Ensure that signage, and colours used on commercial buildings or sites align with the rural agricultural character. Mandate sensitive signage placement along the roadside, on buildings, and in sensitive core areas.	Signage	4
G65	Develop guidelines for commercial facades, sensitive advertising signs and information signs to align and enhance local agri-industrial character and historical settings. Avoid advertisements, signage, inscriptions, neon and flashing lighting along river corridors within the settlement footprint. Such guidelines should be aligned with the <i>Policy for the Design and Control of Signs</i> (n.d.).	Guidelines, Advertisements	4
G66	Maintain historic core areas and precincts and support development or rejuvenation of precincts with a fresh or new sense of place with appropriate transition buffers between the old and new.	Heritage Assets, Renewal & New development	4
G67	Promoted heritage trails informed by appropriate and sensitive information boards.	Heritage Assets, Trails	4
G68	Promote all heritage assets as tourism attractions in order to protect their significance.	Protect Heritage Assets, Attractions	4
G69	Promote and protect landscape features of settlement surroundings as part of settlement character and as tourist attractions and:	Gateways	2
	- Sensitive landscape or keep gateways natural and plant lanes or clusters of trees to announce settlements.		
	- Keep signs announcing settlements and development at gateways to be aesthetically and heritage sensitive.		
	- Protect broader agricultural landscapes and natural features.		
G70	Adhere to no development along slopes steeper than 1:4 (25%).	Slopes	1
G71	Commission (and budget for) the delineation of scenic routes and scenic route overlays in accordance with the Heritage and Scenic Resources: Inventory and Policy Framework.	Guidelines, Scenic Routes	4
G72	Encourage collaboration between tourism, heritage and aesthetic bodies operating in the Langeberg.	Collaboration	3
G73	Support tourism development that will increase visitor numbers, increase average spend per visitor, extend visitor stays and expand product offering.	Tourism, Variety and Convenience	4
	- Support the establishment of accommodation facilities for tourists in rural and urban areas.		
	- Support Agritourism-based development.		
	- Focus investment on the provision of social facilities & services to support and strengthen tourism.		
	- Promote skills development in agritourism.		
Small Scale Agriculture			
G74	Relax development regulations to promote the agricultural economy.	Guidelines, Relaxation	1
G75	Investigate how agritourism and agriculture can operate harmoniously.	Guidelines, Use Conflicts	1
G76	Promote small-scale agriculture at identified sites in each settlement including municipal commonage.	Small Scale Agriculture	1
G77	Promote community gardens across all income groups and facilities to promote food security.	Food Gardens	1
G78	Protect and consolidate urban agriculture as a heritage resource including incentives to property owners such as agricultural rates and taxes for example in Robertson and water erven along Longstreet, Montagu.		
Waste			
G79	Ensure collaboration between River Maintenance Management and Integrated Waste Management to prevent pollution.	Collaboration	1
G80	Allocate resources to ensure compliance with waste license and permit conditions and audit report findings.	Compliance	1
G81	Promote waste management and reduction strategies:	Waste Reduction	1
	- Promote waste to energy generation projects.		
	- Promote recycle initiatives and provide for recycling facilities of recyclable material and organic waste.		
	- Support implementation of waste awareness programmes and campaigns directed at school going children, youth and families.		
	- Integrate existing waste entrepreneurs into the municipal waste diversion system to avoid potential conflicts and acts of vandalism.		
Water			
G82	Develop a range of water demand management strategies for all sectors.	Water Demand Strategies	1
	- Encourage retrofitting of water demand management technologies in existing buildings and offer an incentive program.	Building Design, Retrofitting Technology	
	- Encourage reduced household water use whilst managing increased future water demand driven by population growth.	Water Demand	

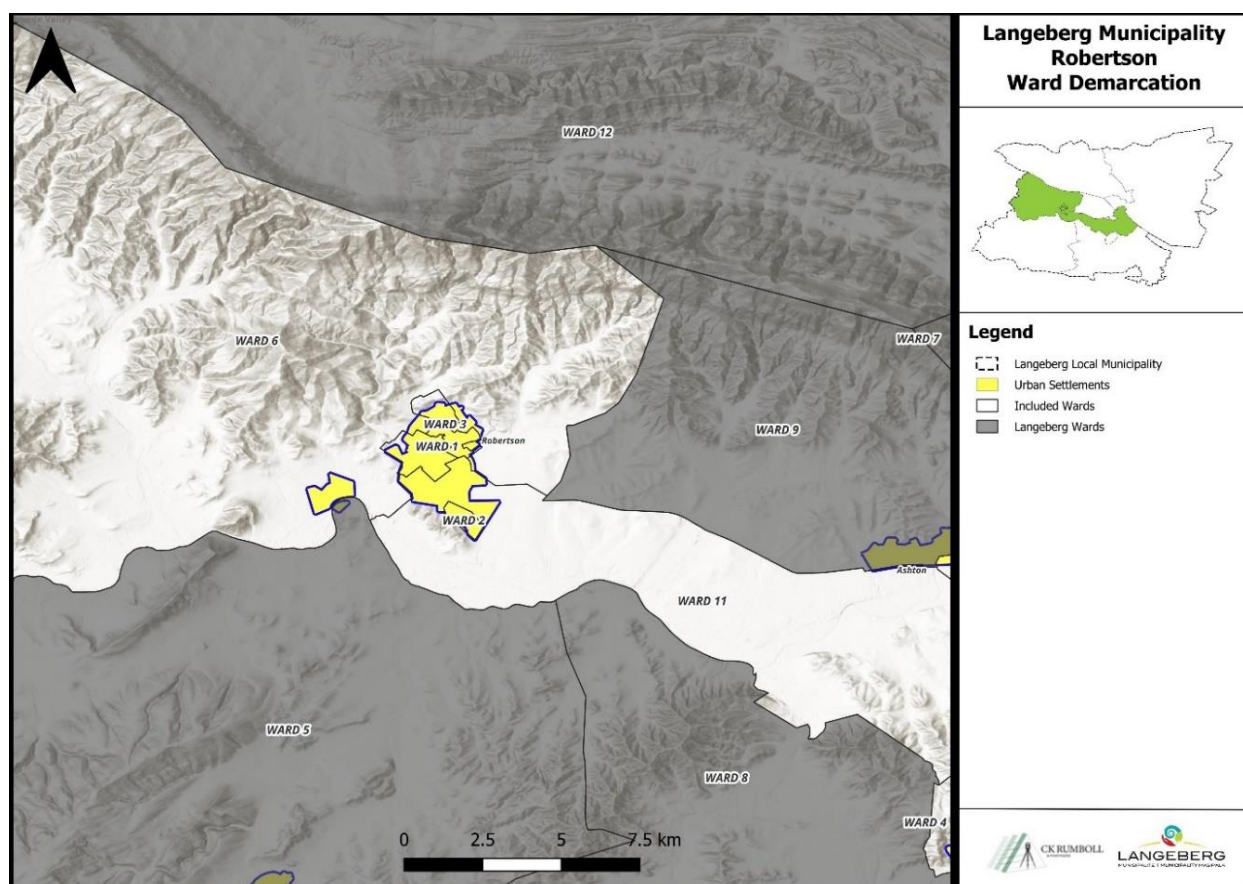
G83	Comply with minimum potable (drinking) water phosphate, nitrate and e-coli standards and with effluent quality requirements set out in water use license.	Compliance	1
G84	Maintain and secure water treatment plants.	Infrastructure Maintenance	1
G85	Upgrade Water Treatment Plant.	Infrastructure Upgrades	1
G86	Manage adequate land for future expansion of water storage capacity.	Land requirements	1
G87	Investigate and secure alternative water resources.	Water Sources, Alternative	1
	- Encourage rainwater harvesting and greywater recycling.		
	- Re-use stormwater.		
G88	Secure water reallocations where agricultural land with high suitability is impacted by proposed developments.	Water Sources, Reallocation	1
G89	Protect Breede River irrigation scheme and infrastructure for agricultural cultivation.	Water, Irrigation Scheme	1
G90	Develop a municipal wide open space network and management plan.	Public & Private Open Space	
G91	Compile a municipal wide NMT route master plan.	NMT Routes, Links	
G92	Prepare and implement a road maintenance plan.	Infrastructure, Maintenance, Roads	
G93	Plan and budget to update the capital expenditure framework, and particular a) the Ranked 3-year Capital Expenditure Budget Items and b) the maintenance budget annually and aligned with the municipal budgets.	Capital Expenditure Framework, Annual Update	

5.2 Development Proposals and Urban Edge Expansions

Settlement proposals include proposed urban expansions where required. Proposals follow implementation timeframes. 5-year urban edge proposals represent expansions likely to take place in the current MSDF cycle, 20-year proposals represent long term development and Future Urban Edge Expansion represents speculative development. Exclusion of unrecognized invaded land, have been done on account of topography and access to services.

5.3 Ward 1, 3, 6 and 11 Robertson

As the main urban centre, Robertson has the largest population in Langeberg Municipality. It serves as an agricultural service centre. It is located within one of the largest wine producing regions in South Africa.



5.3.1 Robertson Status Quo

Robertson has strengths and weaknesses set out according to the settlement's biophysical, socio-economic and built environments.

	Strengths	Weaknesses
Biophysical	- Two waterways, Droë joining Willem Nels, joined by and Hoops Rivers, provide natural corridors within the settlement. - Urban agriculture (Urban Vineyards) represents important heritage and sense of place elements. "Leivore" supporting gardens and small scale agriculture. - Surrounding topography and landscape contributing strongly to settlement character.	- Pollution of waterways stays a challenge. - Interruption of biodiversity corridor from north east to south west by airport precinct and Nkqubela. - Surrounding topography and biodiversity limits future development.
Socio-economic	- Agri-industry and tourism & recreation, both with considerable growth potential, are core to local economy. - Good social infrastructure such as churches, schools, libraries, a clinic, police station and sporting facilities. - Established central business and commercial area.	- Economy largely dependent on agriculture. - Unmet demand for land for settlement development across all income groups. - Unmet demand for industrial and commercial development. - Poverty and employability. - Xenophobia.

Built Environment	• Strong sense of place in historic parts of Robertson as grid layout, rectangular street blocks and long streets accommodating "leivore" transporting water from the Willem Nels River to the street blocks. • Heritage resources as documented in the Heritage Survey (2013). • Good access and connection via R60 and R317. • Built heritage resources are a core element of Robertson as tourist destination. • Voortrekker Road's (R60) interface displays Robertson's sense of place. • Basic sense of place of recent precincts such as Droëheuwel and Môreson (Robertson North) and Nkqubela having mainly curvilinear street grid and are located on the northern and southern hills.	• Lack of integration between Robertson and Nkqubela and between Droëheuwel and Môreson incur significant cost in terms of rendering services, the distances that residents have to commute and the difficulty of creating economic opportunities and employment creation in such marginal locations. • Heritage resources not graded. • Cumbersome main access routes to recent precincts: Robertson North via Paul Kruger or along Wesley Street; Nkqubela: over two level crossings of the railway line and along the R317 at the traffic circle after crossing the R60.
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5.3.2 Robertson Spatial Proposals

The table below details various spatial proposals for Robertson, each identified by a unique code corresponding to specific proposals illustrated on the settlement proposal map. The "Goal" column indicates the relevant SDF goals (in section 4.2 of Chapter 4) associated with each proposal.

Development proposals:

Code	Category	Proposal	SDF Goal	Precinct
R01	Informal Residential	Promote subsidised and UISP residential development.	1	A
R02	Approved Development	Support implementation of approved development.	1	A
R03	Residential	Promote infill development.	1	A
R04	Business Node	Promote neighbourhood business node in Droëheuwel.	1	A
R05	Mixed-Use Development	Promote subsidised and UISP residential development on Erf 1206.	1	A
R06	Community Facility	Promote a school in Môreson. Regularly meet with WCED to ensure building of school is part of development on Erf 1206.	3	A
R07	Approved Development	Promote infill development.	1	B
R08	Residential	Promote GAP and FLISP residential development.	1	A
R09	Residential	Promote GAP and FLISP residential development.	1	A
R10	Cemetery	Expand White Street Cemetery.	3	B
R11	Business Node	Promote a neighbourhood business node.	1	B
R12	Industrial	Promote industrial development.	1	E
R13	Community Facility	Promote the development of an ECD facility on Erven 1789 and 1783.	3	A
R14	Residential	Promote GAP and FLISP residential development.	1	B
R15	Industrial	Promote light industrial development. Public opinion to inform the use of the site as a truck stop.	1	E
R16	Business Node	Promote a neighbourhood business node.	1	E
R17	Community Facility	Promote a school at Nkqubela. Regularly meet with WCED to ensure building of school.	3	E
R18	Central Business District	Intensify CBD in accordance with heritage character.	1	D
R19	Mixed-Use Development	Encourage use of showground as agricultural showcase, events, training and trading centre.	3	C
R20	Residential	Promote GAP and FLISP residential development.	1	B
R21	Community Facility	Establish a school in Droëheuwel. Regularly meet with WCED to ensure building of school.	3	A
R22	Approved Development	Support implementation of approved developments.	1	A
R23	Public Open Space	Protect and enhance public open space.	5	A
R24	Residential	Promote GAP and FLISP residential development.	1	C
R25	Industrial	Promote light industrial development and rejuvenate Transnet land and Station.	1	E

R26	Industrial	Promote light industrial development.	1	E
R27	Business Node	Promote a secondary business/ office park node at Bullida Gronde and keep a corridor of natural vegetation and extent or plant a new tree lane.	1	E
R28	Business Node	Promote a neighbourhood business node opposite Thusong centre.	1	A
R29	Business Node	Promote a neighbourhood business node adjoining Langeberg Secondary School.	1	A
R30	Industrial	Promote light industrial development. To proceed, decide on implementation options recommended in Bullida Gronde Feasibility Study, 2019.	1	E
R31	Agri-Industry	Promote agri-industrial development.	1	Out
R32	Industrial	Promote aero industrial development.	2	E
R33	Public Open Space	Protect and enhance public open space.	5	A
R34	Business Node	Demarcate and promote informal trading area and drop-off points	1	F
R35	Informal Settlement	Ensure subsidised and UISP residential development.	1	F
R36	Community Facility	Establish a school in Droëheuwel. Regularly meet with WCED to ensure building of school.	3	A
R37	Approved Development	Support implementation of approved developments.	1	A
R38	Business and Community	Promote integration of community uses and business.	1	C
R39	Road	Budget and build a link road between Droëheuwel and Môreson. Regularly meet with WCED to ensure building of school.	1	A
R40	Approved Development	Support implementation of approved developments.	1	G
R41	Approved Development	Support implementation of approved developments.	1	C
R42	Mixed-Use Development	Promote mixed-use development of which the bulk is industrial and business uses.	1	E
R43	Relocation	Ensure relocation of a portion of Lawaakamp informal settlement located above reservoir service line.	1	Out
R44	Business Node	Upgrade and maintain informal trading area and maintain canopies and informal trading kiosks for informal traders on Erf 873 Robertson, next to PnP parking area.	1	D
R45	Industrial	Screen industrial uses and plant trees and shrubs.	1	D
R46	Community Facility	Support a preschool construction at foster home.	3	C
R47	Business Node	Promote informal trading area at vacant Erf 306 (c/o Burwana and Hani Streets).	1	F
R48	Public Open Space	Protect and enhance public open space.	5	F
R49	Community Facility	Establish a preschool in Nkqubela.	3	F
R50	Public Open Space	Protect and enhance public open space.	5	F
R51	Public Open Space	Protect and enhance public open space and execute RMMPs.	5	F

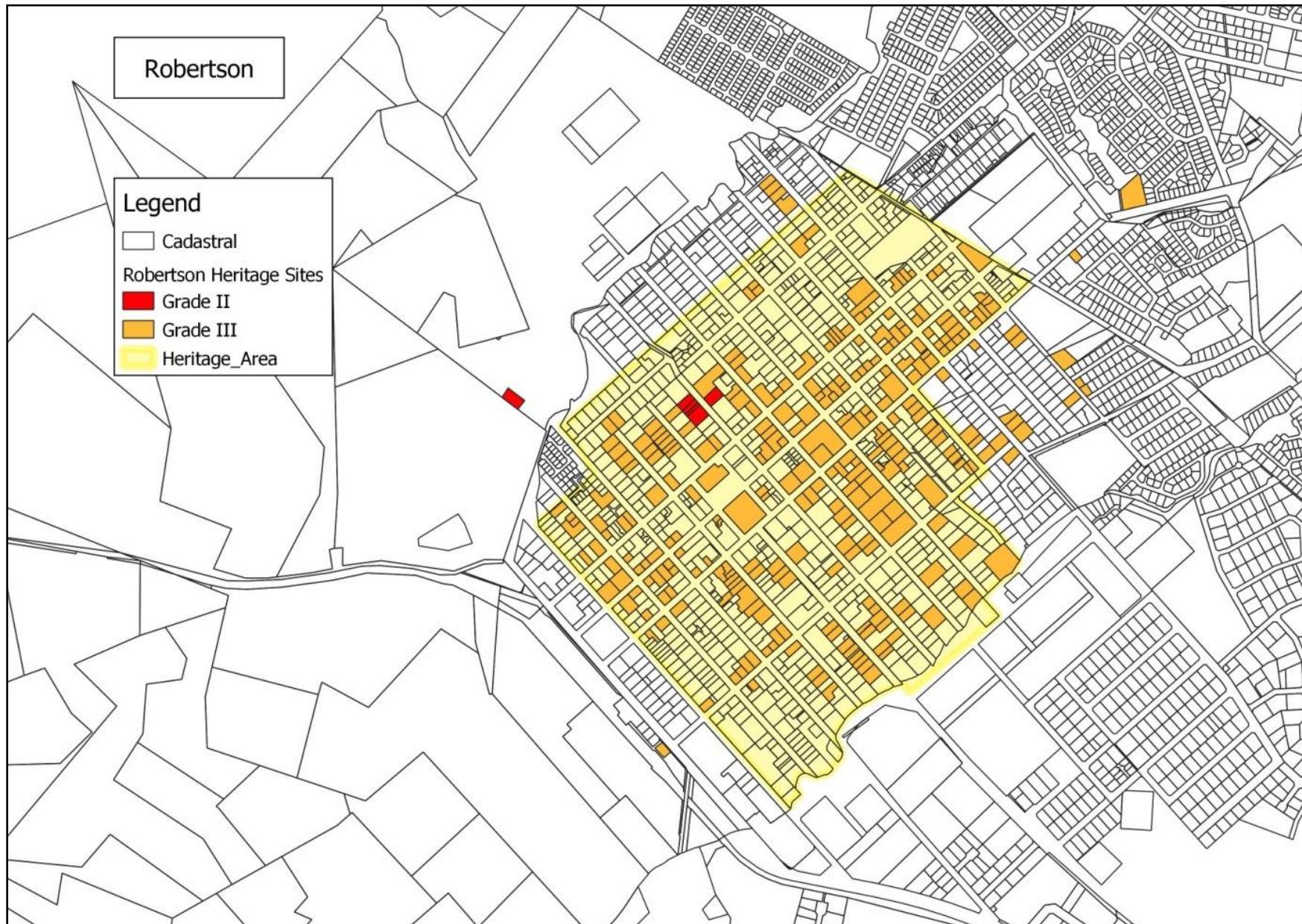
The table below contains proposals that are not illustrated on the settlement proposal map.

Code	Category	Proposal	Goal
R52	Activity Streets and Corridors	Commission a precinct plan for Church Street, the CBD and Main Street that at least addresses, but is not limited to, the street interface, mixed and contrasting uses, and future allowable uses. - Upgrade Church Street as direct link from Johan de Jong Avenue to the historic retail core, (MSDF, 2015), including the Church and Paul Kruger Streets intersection as historic settlement centre point and destination.	2
R53	Activity Streets and Corridors	Develop multi-purpose node around roundabout consisting of four precincts: - North west: business & residential; - North east: airstrip, light industrial and conservation; - South west: education and residential; - South east: industrial, agi-industrial and business and conservation to utilise vacant land optimally and to integrate precincts.	2
R54	Activity Streets and Corridors	Enhance Paddy Street and Johan de Jong Avenue as important north south link between Robertson North (Môreson and Droëheuwel) and Nkqubela: - Upgrade Johan de Jong Avenue as one of the major boulevarded mixed-use activity routes linking all settlement precincts (Môreson, Droëheuwel, Robertson and Nkqubela); - Introduce speed calming in Johan de Jong Avenue; - Develop accessible, safe and adequately lit, surfaced and shaded NMT routes along Johan de Jong Avenue, R60 (main street) and R317 (along Nkqubela).	2

R55	Activity Streets and Corridors	Promote the following streets as activity streets: - North-West to South-East (backward slanted): Voortrekker, Church, Van Zyl, Paddy, Burwana and August, Johan de Jong, Keerom; - North- East to South-West (Forward slanted): Paul Kruger, Reitz, Pieter.	1
R56	Air	Commission a feasibility study for the development of airport precinct and its surroundings. (1.5km to support agriculture, tourism and recreation and conservation) including possibility of private ownership/investment.	2
R57	Bulk Electricity and Reticulation	Prioritise the provision of bulk electricity and provide 47.281 MVA and 31.052 MVA substations.	1
R58	Bulk Electricity and Reticulation	Establish a solar facility at or near Bullida Gronde to feed into Klipdrift substation (east of R31).	1
R59	Commercial	Commission an optimal location for informal trading study.	1
R60	Commercial	Upgrade informal trading area and provide canopies and informal trading kiosks for informal traders on Erf 873 next to PnP parking area.	1
R61	Gateways	Enhance and announce town entrances and gateways: (R60 east & west, R317 and Langverwagten Road).	2
R62	Gateways	Keep eastern entrance natural and: - Enhance traffic circle on R60 as eastern gateway of Robertson, a tourism destination, and maintain a natural gateway from roundabout eastwards to the end of runway; - Plant trees along Bullida Gronde development footprint to buffer industrial development and to retain the natural vegetation between R60 and industrial development.	2
R63	Heritage	Establish a heritage precinct of provincial or national significance according to the heritage overlay zone as Robertson has a large and intact resource of historic buildings (on a scale of settlements like Stellenbosch and Graaff Reinet). (MSDF, 2015): - Preserve heritage character in Central Business District (CBD) area being included in heritage overlay zone; - Proclaim centre of settlement as a heritage precinct and launch a campaign to encourage building owners and tenants to improve buildings. (This should be supported by the municipality upgrading the public realm; trees, sidewalks, street furniture, paving of intersections and facilities for NMT traffic). (MSDF, 2015); - Protect and establish the street block of Robertson's church and nearby buildings as a CBD focus point.	4
R64	Community facility	Provide for and expand education facilities and particularly crèches and adult education/skills development centres.	3
R65	Community facility	Provide for places of worship (buildings and open spaces) on Bullida Gronde.	3
R66	Community facility	Provide a dedicated facility to house a FAS programme and research and to advance educational levels.	3
R67	Nature and Conservation	Prepare river maintenance management plan. Maintain rivers as per River Maintenance and Management Plans: Hoops, Welm Nels and Drooge River.	5
R68	Nature and Conservation	Protect the settlement's two main water sources: Langeberg Mountain Catchment Area north of Robertson and Breede River irrigation canal. Promote river corridors throughout settlement and: Two NDP Focus Areas along the upper reaches of the Droë River in Robertson North whilst celebrating Willem Nels and Hoops Rivers.	5
R69	NMT routes	- Promote NMT routes; - Streetlights.	4
R70	Rail	Establish private rail services on public Transnet line.	2
R71	Residential	Promote exercising split zoning (business and residential) of corner properties in Robertson's historic core.	1
R72	Residential	Align subdivisions and CBD renewals with surrounding densities and character (including placement and street setbacks) of the built environment.	1
R73	Residential	Utilise opportunities for infill development on residential properties in Zone A and B.	2
R74	Road	Upgrade intersection of R317 and railway line (as per BGFS, 2020).	2
R75	Road	Upgrade section of R317 from roundabout to Constitution Road, along Nkqubela.	2
R76	Road	Provide for pedestrian crossing over R317 (as per BGFS, 2020).	2
R77	Road	Develop pick up and drop off points in Nkqubela: - At traffic circle on R317 direction Bonnievale; - Along Burwana Road at triangle between R60 and railway line (opposite school site).	2

R78	Road	Protect and maintain R60 (east-west direction), linking to N1 via Worcester and N2 via Swellendam.	2
R79	Road	Protect R317 link to Bonnievale.	2
R80	Road	Protect Langverwagten Road link to McGregor.	2
R81	Road	Develop a new road linking Droëheuwel and Môreson in Zone A.	2
R82	Road	Public opinion to inform the use of the site as a truck stop.	2
R83	Sewerage	Upgrade Nkqubela sewerage reticulation system to accommodate increased volumes including from backyard dwellers.	1
R84	Social Infrastructure	Support the expansion and upgrading of sports grounds in Zone B (Môreson) and F (Nkqubela).	3
R85	Social Infrastructure	Formalise recreational area under Breede River bridge, McGregor direction.	3
R86	Social Infrastructure	Develop a taxi rank/bus stop: - In CBD across private parking spaces in collaboration with private sector; - In Nkqubela and Droëheuwel.	2
R87	Tourism	Maintain and promote Voortrekker Street interface as a tourist attraction.	4
R88	Tourism	Lobby for prolonged Blue Train layover and local tourism train trips at Robertson.	4
R89	Waste	Upgrade transfer station.	1
R90	Waste	Upgrade composting facility.	1
R91	Water	Upgrade existing reservoir capacity and provide for 8 252 kℓ/d AADD capacity once all allocated erven are occupied.	1
R92	Water	Protect “leiwater” system and infrastructure for gardening and urban agriculture.	1
R93			

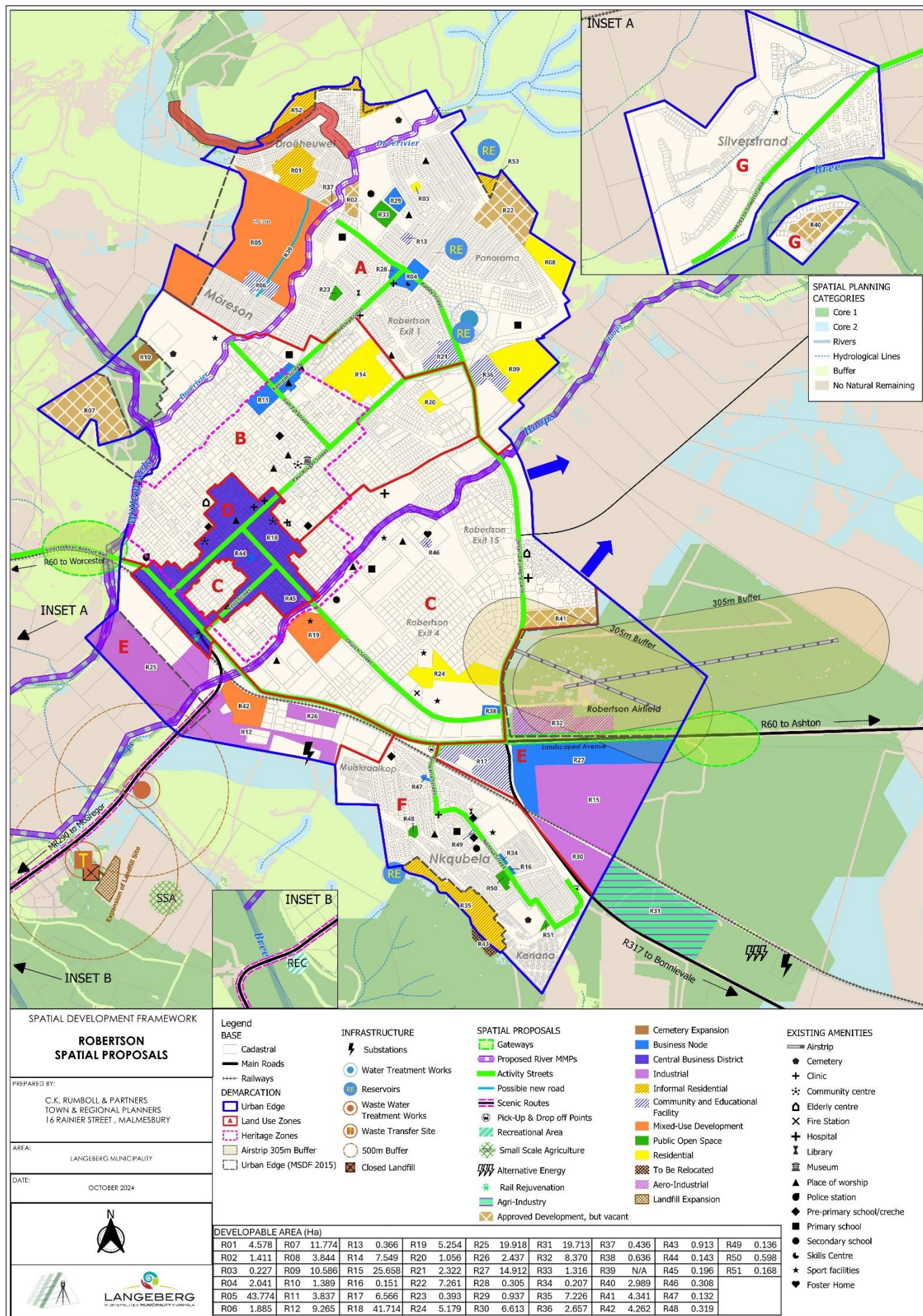
Map 32: Robertson Heritage Overlay Zones



LAND USE PRECINCT PROPOSALS FOR ROBERTSON

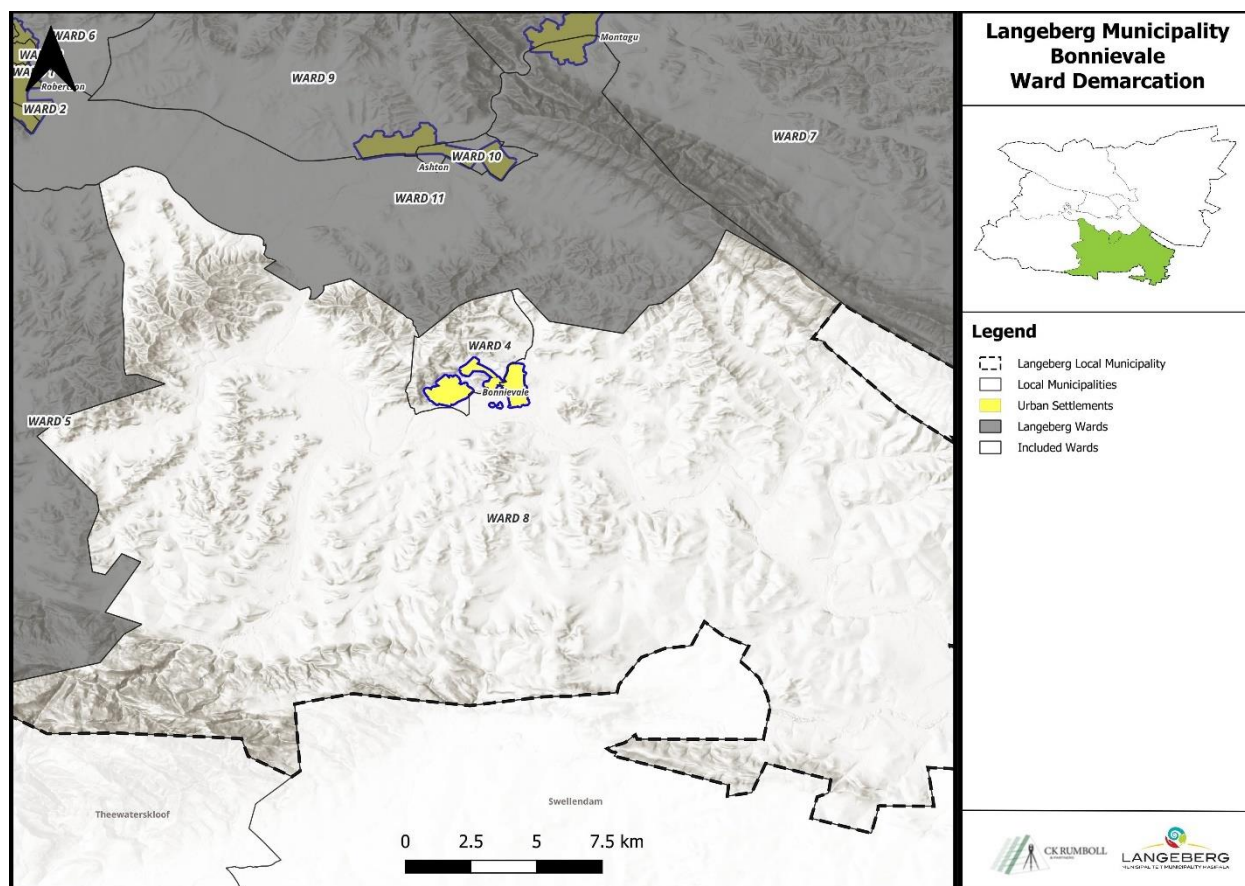
Robertson has been divided into seven (7) precincts (areas with common characteristics) and the table below outlines potentially suitable land uses (and descriptions of these use at the end of this chapter) for every precinct.

ROBERTSON LAND USE PRECINCT		Low Density Residential Uses	Medium Density Residential Uses	High Density & Informal Residential	Secondary Educational Uses	Place of instruction	Professional Use	Business Uses	Secondary Business Uses	Place of worship	Institution	Guest houses/self-catering	Authority	Sport/Recreational Facilities	Industries & Service Trade
A	Precinct A, Robertson North (Droëheuwel, Môreson and Panorama) has a high-density residential character which includes housing development, a secondary business node and several places of instruction. Allow for infill residential development opportunities.			X	X	X	X	X 3	X 1,3	X	X	X	X	X	
B	Precinct B has a medium to high density residential character with opportunities for infill development and intensification. This node also includes the White Street cemetery with limited expansion potential as well as a secondary business node.		X 1, 3	X	X	X	X	X 3	X 1,3	X	X	X	X	X	
C	Precinct C, Robertson Extensions, has a low to medium density residential character with opportunities for infill development and intensification. A mixed-use development industrial and a fire station satellite office support residential use.	X	X	X 1,3	X	X	X		X 1,3	X	X	X	X	X	
D	Precinct D is the central business district where mostly commercial and compatible uses are encouraged to enhance the node.	X	X	X	X	X	X	X	X	X	X	X	X	X	X 2
E	Precinct E is the Robertson's industrial area with light industrial expansion proposed. Agri industry encouraged.			X 1,3	X	X	X	X 4	X 3	X	X		X	X	X
F	Precinct F is Nkqubela which has a high-density residential character and include a cemetery.			X	X	X	X	X 3	X 1,3	X	X	X	X	X	
G	Precinct G is Silverstrand Golf Course development and has a low-density character.	X	X	X	X		X					X	X	X	
(1) Along activity streets (2) Only Service trades (3) At identified nodes (4) At identified main nodes		Business Uses e.g. Shop, supermarket and service station. Place of instruction e.g. Schools, Universities, Colleges. Professional Uses e.g. Doctors, dentists, architects. Secondary Business Uses allows for neighbourhood business e.g. Café, house shops, small shop & offices and home occupation. House taverns only to be allowed along activity streets in residential areas. Secondary Educational Uses e.g. Crèches/day care.													



5.4 Wards 4 & 8: Bonnievale

Bonnievale is located along the Breede River approximately 30 km south east of Robertson. It is an agritourism destination as making wine, making cheese and cultivating peaches and apricots provide for a beautiful landscape with great food.



5.4.1 Bonnievale Status Quo

Bonnievale has strengths and weaknesses set out according to the settlement's biophysical, socio-economic and built environments.

	Strengths	Weaknesses
Biophysical	- Fertile agricultural land along Breede River where intensive agricultural cultivation occurs. - Breede River and Boekenhoutskloof provide structuring elements. - Two waterways, Boekenhoutskloof and Kanaal River, provide natural corridors within the settlement. - Natural surroundings including mountains and agricultural fields (vineyards) on the river plain. - Breede River and its irrigation canal on the seams of the settlement.	- Natural vegetation under threat from agricultural activities and settlement development. - Underutilisation of waterways within the settlement.
Socio-economic	- Agricultural surroundings, an established tourism destination, supported by Bonnievale as service centre. - Agri-industrial hub for dairy and wine, is core to local economy. - Good road and rail connection with surrounding settlements. - Established commercial centre. - Educational hub (Jakes Gerwel school of skills).	- Limited social amenities are provided. - Public realm lack of trees, greenery and pedestrian-oriented public space in commercial core to attract locals and tourists. - Alcoholism and substance abuse.

Built Environment	• Vacant properties in Happy Valley are suitable for small scale infill schemes and GAP housing. • Role as residential and retirement settlement. • Significant established agri-industry infrastructure in settlement nodes. • Irrigation infrastructure, the canal, to support agricultural cultivation. • Planned private solar facility to supply municipality with electricity.	• Several physically separated settlement nodes constituting Bonnievale. • Ongoing growth of Boekenhoutskloof informal settlement precinct to be formalised. • Insufficient subsidised housing stock. • Proximity to amenities. • Insufficient rental housing.
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5.4.2 Bonnievale Spatial Proposals

The table below details various spatial proposals for Bonnievale, each identified by a unique code corresponding to specific proposals illustrated on the settlement proposal map. The "Goal" column indicates the relevant SDF goals (in section 4.2 of Chapter 4) associated with each proposal.

Development proposals:

Code	Category	Proposal	Goal	Zone
B01	Residential	Promote GAP residential development.	1	A
B02	Residential	Promote GAP residential development.	1	A
B03	Cemetery	Expand the cemetery.	1	E
B04	Residential	Promote GAP residential development.	1	A
B05	Residential	Promote GAP residential development.	1	A
B06	Informal Residential	Promote subsidised and UISP residential development. Secure offsets for affected CBAs.	1	D
B07	Institution Facility	Promote development of a school and social amenities (crèches & primary health facility).	1	D
B08	Community Facility	Secure education facilities (crèche). Secure offsets for affected CBAs.	3	D
B09	Rural Residential	Promote rural residential development.	1	I
B10	Residential	Promote GAP residential development.	1	A
B11	Business Node	Promote affordable & integrated commercial development.	1	B
B12	Residential	Promote GAP residential development.	1	C
B13	Residential	Promote GAP residential development.	1	C
B14	Business Node	Promote affordable & integrated commercial development.	1	C
B15	Mixed Use	Promote mixed-use development (high density residential development and community facilities). Secure offsets for affected CBAs.	1	D
B16	Industrial	Promote light industrial development. Secure offsets for affected CBAs.	1	E
B17	Mixed-Use Development	Promote mixed use development including residential opportunities.	1	G
B18	Central Business District	Enhance intensification of Central Business District.	1	H
B19	Agri-Industry	Promote Agri-industrial development.	1	J
B20	Agri-Industry	Promote Agri-industrial development.	1	J
B21	Mixed-Use Development	Promote a trading and market area where activity corridors Madeliefie and Barlinka Streets meet, promote mixed use including residential development and an education facility.	1	B
B22	Mixed-Use Development	Promote mixed use development.	1	L
B23	Residential	Expand lower density residential development.	1	F
B24	Residential	Promote infill residential development and delineate historical cemetery.	1	out
B25	Rural Residential	Promote rural residential development.	1	I
B26	Rural Residential	Promote rural residential development. Secure offsets for affected CBAs.	1	Out
B27	Agri-Industry	Promote Agri-industrial development.	1	Out
B28	Business Node	Promote secondary business node.	1	A
B29	Community Facility	Promote development of a community facility.	3	A
B30	Business Node	Promote secondary business node.	1	C

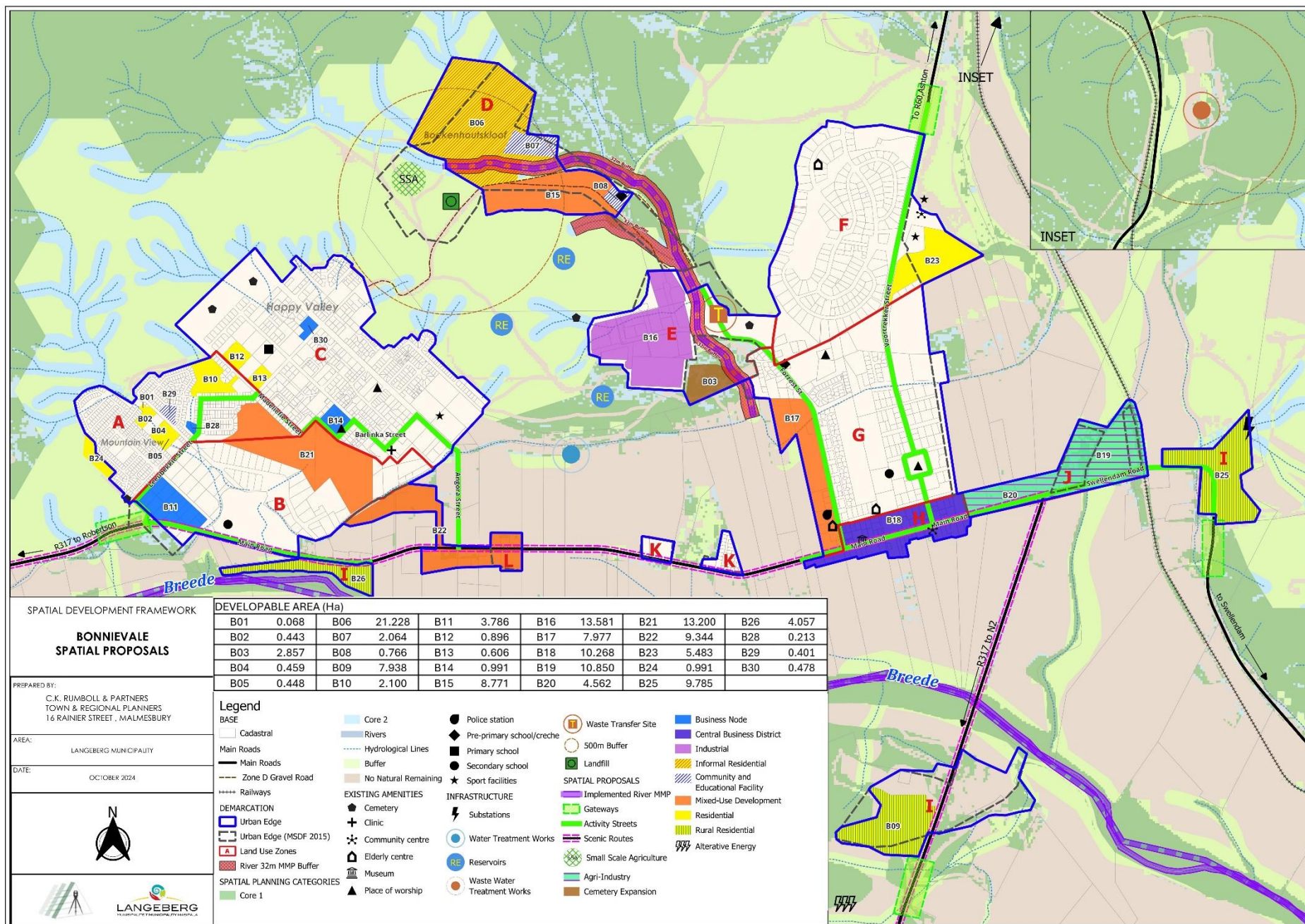
The table below contains proposals that are not illustrated on the settlement proposal map.

Code	Category	Proposal	Goal
B31	Activity Streets and Corridors	Promote the following streets as activity streets in Happy Valley (Bonnievale West): - Main Road connecting to Leeubekkie; - Keurboom connecting with Madeliefie; - Barlinka Street connecting with New Cross; - New Cross connecting with Sultana; - Sultana connecting with Milner; - Milner connecting with Angora; - Angora connects to main road (R317).	2
B32	Activity Streets and Corridors	Promote Forest Street (located in Bonnievale North) as activity street.	2
B33	Activity Streets and Corridors	Promote the following streets as activity streets in Bonnievale Central: - Mainstreet along CBD; - Along Voortrekker.	2
B34	Activity Streets and Corridors	Encourage commercial activities along roads parallel to and along Main and Church Streets.	2
B35	Bulk Electricity and Reticulation	Provide land for and develop a 21.2 MVA substation to supply sufficient capacity by 2028.	1
B36	Community Facility	Promote Bonnievale as an educational destination being home to the Jakes Gerwel school of skills, Hennie Coetzee crèche and a FAS centre.	3
B37	Gateways	Enhance all gateways and plant trees or vineyards specifically towards Skilpadhoogte pass.	2
B38	Heritage	Protect and enhance sense of place of the entire Main Road (along the R317) from B11 (west) to B25.	4
B39	Heritage	Beautify the street section from Waterkant to Main Street (North South) and along the street blocks from around Myrtle and Church Street according to a commissioned street and landscape plan.	4
B40	Heritage	Protect urban vineyards and traditional grid pattern representing the unique agricultural settlement character.	4
B41	Heritage	Improve information about and linkages between heritage assets such as Happy Valley historic cemetery, Myrtle Rigg Memorial Church, Bonnievale's irrigation scheme, Bonnievale's littlest museum and Dutch Reform Church.	4
B42	Heritage	Ensure that signage, and colours used on commercial buildings or sites align with the rural agricultural character. Mandate sensitive signage and placement along the roadside and on buildings bordering natural or agricultural areas.	4
B43	Nature and Conservation	Develop a river maintenance management plan for Boekenhoutskloof River (indicated on map).	5
B44	Public & Private Open Space	Create a continuous tree lane along Main Street interlinked with the settlement, the street network and surrounding agricultural landscape (SDF 2015).	5
B45	Public & Private Open Space	Promote multi-functional recreational areas (e.g. children's play parks, day camping and picnic facilities) close to and along the river (Possibly Erf 890).	5
B46	Public & Private Open Space	Upgrade existing POS and sports fields (SDF 2015).	5
B47	Residential	Provide for a farmworker retirement village including a home for the aged.	3
B48	Road	Upgrade road linking Happy Valley, Bonnievale North and Boekenhoutskloof.	1
B49	Tourism	Improve visual character of higher density residential, and in particular subsidised housing developments, though planting of trees along streets & developing functional open space areas.	4
B50	Tourism	Celebrate the strengths of the settlements and its surroundings such as: - Proximity to the Langeberg and Riviersonderend Mountains; - Being part of the Cape Wine Route; - Locally made produce e.g. cheese and wine; - Private game reserves; - Extensive hiking trails.	4
B51	Waste	Maintain licensed domestic waste landfill site and drop-off facility with estimated capacity until 2065.	1
B52	Water and Reticulation	Upgrade water reservoir to provide for an additional 5.5 Mℓ.	1
B53	Water and Reticulation	Protect two extraction points from water source (Main extraction point for WTP is the canal. Extraction directly from the river is only done as a supplementary source and in emergency conditions).	1

LAND USE PRECINCT PROPOSALS FOR BONNIEVALE

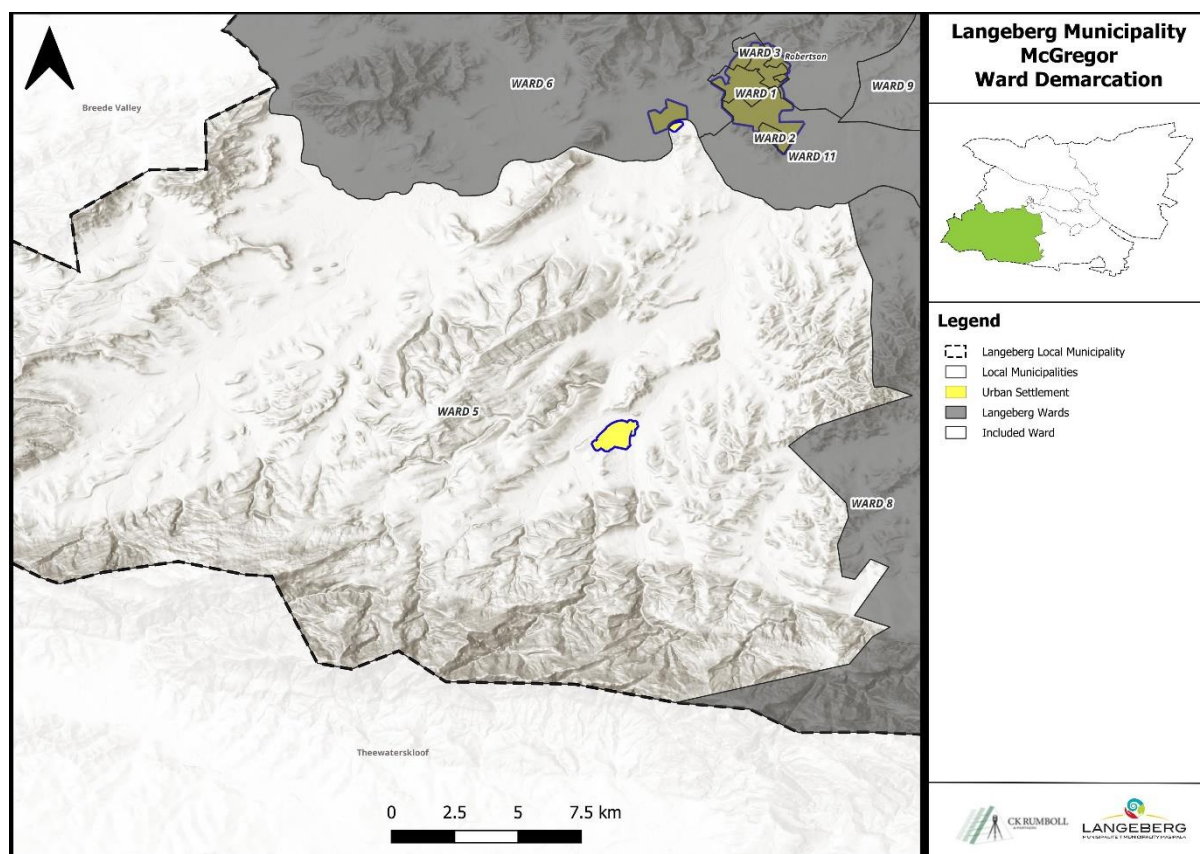
Bonnievale has been divided into twelve (12) precincts (areas with common characteristics) and the table below outlines potentially suitable land uses (and descriptions of these uses at the end of this chapter) per precinct.

BONNIEVALE LAND USE PRECINCT		Low Density Residential Uses	Medium Density Residential Uses	High Density & Informal Residential Uses	Secondary Educational Uses	Place of instruction	Professional Use	Business Uses	Secondary Business Uses	Place of worship	Institution	Guest houses/self-catering	Authority	Sport/Recreational Facilities	Industries & Service Trade
A	Precinct A is home Mandela Park and surroundings, a high-density housing development with the same character. This zone allows for opportunities for infill residential development and intensification of use along the south-eastern boundary of the precinct.		X	X	X	X	X		X 1,3	X	X	X	X	X	
B	Precinct B has a low-density residential character and include a neighbourhood business node. There are opportunities for infill development to achieve a medium density character Development on the southern boundary should be sensitive to the agricultural interface including boundary treatment.	X	X		X	X	X	X 3	X 1,3	X	X	X	X	X	
C	Precinct C, Happy Valley and Mountain View, is a residential precinct with mixed densities and include a neighbourhood business node and cemetery. Opportunities include intensification of use and expansion of cemetery space.	X	X	X	X	X	X	X 3	X 1,3	X	X	X	X	X	
D	Precinct D, Boekenhoutskloof, is an informal precinct and require formalisation as a high to medium density development and limited intensification. Opportunities for institutional facilities.	X	X	X	X	X	X		X 3	X	X	X	X	X	
E	Precinct E is home to industrial uses and a cemetery. There are opportunities for industrial and cemetery expansion.					X	X	X	X	X	X		X	X	X
F	Precinct F has a low-density residential character with opportunities for infill development.	X			X		X		X 1			X	X	X	
G	Precinct G has a mixed density residential character with opportunity for intensification.	X	X	X	X	X	X		X 1	X	X	X	X	X	
H	Precinct H is home to the central business district where mostly commercial and compatible uses are supported. Intensification is encouraged.	X	X	X	X	X	X	X	X	X	X	X	X	X	X 2
I	Precinct I, the Lactalis factory and surroundings, consists of residential and industrial uses with proposed infill development opportunities. Intensification is encouraged.		X		X										X
J	Precinct J is an Agri Industry node.														X 4
K	Precinct K has a medium density residential character and expansion should be prohibited.		X		X				X 1			X	X		X 2
L	Precinct L is a mixed-use business development node and expansion should be prohibited.	X	X	X	X	X	X	X	X	X	X	X	X	X	X
(1) Along activity street (2) Only Service trades (3) At identified nodes (4) Only Agri-industries		Business Uses e.g. Shop, supermarket and service station. Place of instruction e.g. Schools, Universities, Colleges. Professional Uses e.g. Doctors, dentists, architects. Secondary Business Uses allows for neighbourhood business e.g. Café, house shops, small shop & offices and home occupation. House taverns only to be allowed along activity streets in residential areas. Secondary Educational Uses e.g. Crèches/day care.													



5.5 Ward 5: McGregor

McGregor, located on the Riviersonderend Mountain plain, is a well-known tourist attraction as a result of its unique rural sense of place and over 60 well-preserved heritage homesteads in the village and surrounding agricultural area. Those which have been declared national monuments and provincial heritage resources are indicated on Map 33: McGregor Heritage Overlay Zone.



5.5.1 McGregor Status Quo

McGregor has strengths and weaknesses set out according to the settlement's biophysical, socio-economic and built environments.

	Strengths	Weaknesses
Biophysical	- Two waterways, Houtbaais and Hoeks Rivers, provide natural corridors around McGregor. - Surrounding vineyards along Hoeks River (fertile agricultural land) are important heritage and sense of place elements. "Leivore" supporting gardens and small-scale agriculture.	- Pollution of Houtbaais River is a challenge given historic settlement activities and small scale farming on river plain. - Periodic flooding of town and surrounding farms: Hoeks, Houtbaais and Keisers rivers.
Socio-economic	- Built heritage resources, grid layout and spacious placement of buildings, are core elements of McGregor's sense of place and being a heritage destination. - Voortrekker Road interface as tourism destination. - A rural and recreation destination. - Tourism & recreation are core to the local economy derived from agriculture as primary economic base.	- No high school in McGregor. - Limited social amenities. - Lack of youth and skills training centre with a broad reach (Breede centre youth offerings is limited). - Available facilities vandalised. - Limited land for small scale agriculture.

Built Environment	• Different precincts in McGregor remain fairly integrated. • Retained spaciousness and connectivity to the surrounding agricultural space is part of rural character. • Gravel road network of main streets helps to keep sense of place and integrate the various components of the village.	• Residents not adhering to boundary wall treatment. • Weak, unifying public spaces.
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5.5.2 McGregor Spatial Proposals

The table below details various spatial proposals for McGregor, each identified by a unique code corresponding to specific proposals illustrated on the settlement proposal map. The "Goal" column indicates the relevant SDF goals (in section 4.2 of Chapter 4) associated with each proposal.

Development proposals:

Code	Category	Proposal	Goal	Zones
Mc01	Central Business District	Sensitively maintain vibrancy in commercial precinct along Voortrekker Street. Allow mixed-uses.	1	A
Mc02	Business Node	Sensitively maintain vibrancy in secondary business node.	1	C
Mc03	Informal Residential	Promote subsidised and UISP residential development.	1	C
Mc04	Small Business	Promote a market place to celebrate McGregor as a unified and integrated community.	1	B
Mc05	Residential	Promote infill residential development.	1	B
Mc06	Business Node	Promote secondary business node and early childhood development facility. ECD alternative Erf 1432.	1	C
Mc07	Community Facility	Development of as an institutional or community facility e.g. school of skills.	1	C
Mc08	Residential	Promote subsidised residential development.	1	C
Mc09	Cemetery	Expand cemetery subject to specialist studies.	1	Out
Mc10	Cemetery	Expand cemetery subject to specialist studies.	1	Out

The table below contains proposals that are not illustrated on the settlement proposal map.

Code	Category	Proposal	Goal
Mc11	Agriculture	Protect urban agriculture in street block centres as key component of village character (MSDF 2015). Incentivise cultivated plots and portions of plots.	1
Mc12	Agriculture	Secure a budget for a commonage plan.	1
Mc13	Agriculture	Monitor small-scale piggeries at village entrance against over-capacity.	1
Mc14	Agriculture	Promote small-scale agriculture on commonage (Rooilande and Gladdelande).	1
Mc15	Gateways	Keep southern gateway rural, natural and unannounced.	3
Mc16	Heritage	Include delineated Heritage Overlay Zone for McGregor in Integrated Zoning Scheme.	4
Mc17	Heritage	Commission a landscaping and tree planting management plan for the village.	4
Mc18	Heritage	Promote tree planting on edge between the historic village and White City and the planting of cypress trees on the perimeter of double storey dwelling street blocks in White City.	4
Mc19	Heritage	Promote evolving social history of village within an intensive cultivated agricultural area, being home to farm workers, artists and artisans.	4
Mc20	Industrial	Limit industrial uses to light industrial uses.	1
Mc21	Nature and Conservation	Protect the Houtbaais and Hoeks Rivers and maintain relevant setback lines to limit potential impact on waterways.	5
Mc22	Nature and Conservation	Protect all wetland ecosystems and ecological infrastructure (stormwater purification) including CBAs along Houtbaais and Hoeks Rivers.	5
Mc23	Nature and Conservation	Implement approved Keisers River Maintenance Management Plan, which includes Houtbaais and Hoeks rivers.	5
Mc24	Nature and Conservation	Protect McGregor unique rural character, heritage (church town) and aesthetic value and celebrate proximity to Riviersonderend Mountains.	5
Mc25	Nature and Conservation	Protect all-natural vegetation surrounding the village as part of the Krans Nature Reserve.	5

Mc26	Public & Private Open Space	Promote multi-use public open spaces as recreational kick-about in White City (MSDF, 2015).	5
Mc27	Public & Private Open Space	Protect matured tree lanes and develop a tree management (removing, replacement and planting) schedule.	5
Mc28	Public & Private Open Space	Establish an open space network linking the agricultural and natural surroundings to the open spaces within the settlement.	5
Mc29	Public & Private Open Space	Develop hiking trails and mountain bike routes in the surrounding natural areas and along activity corridors such as Voortrekker Street, Bree Street and Church Street.	5
Mc30	Residential	Ensure boundary walls are treated according to revised and specific boundary wall directives. Issue building plan approval once directives have been adhered to.	1
Mc31	Residential	Develop a general building parameters and boundary treatment information brochure to be circulated together with the existing policy to potential buyers and new owners.	1
Mc32	Residential	Require restrictive title deed conditions as per building parameters and boundary treatment information brochure. - Guidelines for buildings 60 year and older buildings; - Guidelines for buildings 60 years and younger; - Protection and design around mature and old trees as landmarks.	4
Mc33	Residential	Protect compact, yet sparse village character with a limited CBD along Voortrekker Street and community institutions (primary school, proposed high school and youth and community centre) located on the eastern periphery of village.	1
Mc34	Residential	Protect rural residential character whilst promoting dwellings also being used as accommodation enhancing agri- & ecotourism.	1
Mc35	Residential	Strategically densify establishing medium-density housing types (group and townhouses and second dwellings) creating the impression of one large manor house and an outbuilding per plot.	1
Mc36	Residential	Support compact form of McGregor with medium and higher intensity development along higher order roads and activity streets.	1
Mc37	Residential	Protect and maintain village character of lower density residential development with strong rural character. 	1
Mc38	Residential	Accommodate growth and develop a subdivision policy (including an erf size limit) to protect sensitive viewsheds between houses and keeping the feeling of spaciousness and ruralness intact.	1
Mc39	Electricity	Protect existing Municipal substation with capacity of 7.4 MVA.	1
Mc40	Residential	Provide for a farmworker retirement village including a home for the aged.	3
Mc41	Road	Maintain gravel streets to keep rural character whilst improving the mobility of locals and tourists.	2
Mc42	Road	Promote public transport related infrastructure to connect McGregor and Robertson.	2

Mc43	Sewerage	Protect and maintain existing waterborne sewerage system with an actual capacity of 483 kℓ/d.	1
Mc44	Sewerage	Provide for required full-occupation AADD capacity of 1048 kℓ/d.	1
Mc45	Social Infrastructure	Promote skills development in agritourism and viticulture at Mouton's House or at proposed high school.	3
Mc46	Social Infrastructure	Support reasonable multi-purpose use of school sport grounds by the entire community.	3
Mc47	Social Infrastructure	Secure a satellite library.	3
Mc48	Social Infrastructure	Support a high school (despite not meeting the threshold) on land immediately east of primary school.	3
Mc49	Tourism	Heritage Overlay Zone to uphold proposals in “desktop heritage survey for the Langeberg Municipality SDF (August 2013)”.	4
Mc50	Tourism	Promote the establishment of high-quality tourist accommodation and allow residences to be used as holiday accommodation and short-term stays.	4
Mc51	Tourism	Sensitively upgrade the public realm in Voortrekker Road.	4
Mc52	Tourism	Promote McGregor as tourism destination and boutique town and promote the following resources: a) Krans Nature Reserve; b) Voortrekker Street as commercial and social space; c) Church square (Mc11) as community market; d) Walking trails in the immediate surrounding towards Krans Reserve.	4
Mc53	Tourism	Protect cultivation and natural area along Langverwagten Road, (connecting Robertson to McGregor) as main activity route serving surrounding farms.	4
Mc54	Tourism	Support security of occupancy to rear pigs at an appropriate location. Announce such a location with a sign and information board, and if necessary some natural screening.	4
Mc55	Water	Protect “leiwat” system and infrastructure for gardening and urban agriculture.	1
Mc56	Water	Develop 2 Mℓ reservoir next to existing reservoirs.	1
Mc57	Water	Protect Houtbaais River as main water source for McGregor.	1
Mc58	Water	Protect existing reservoir capacity of 10 700 kℓ.	1

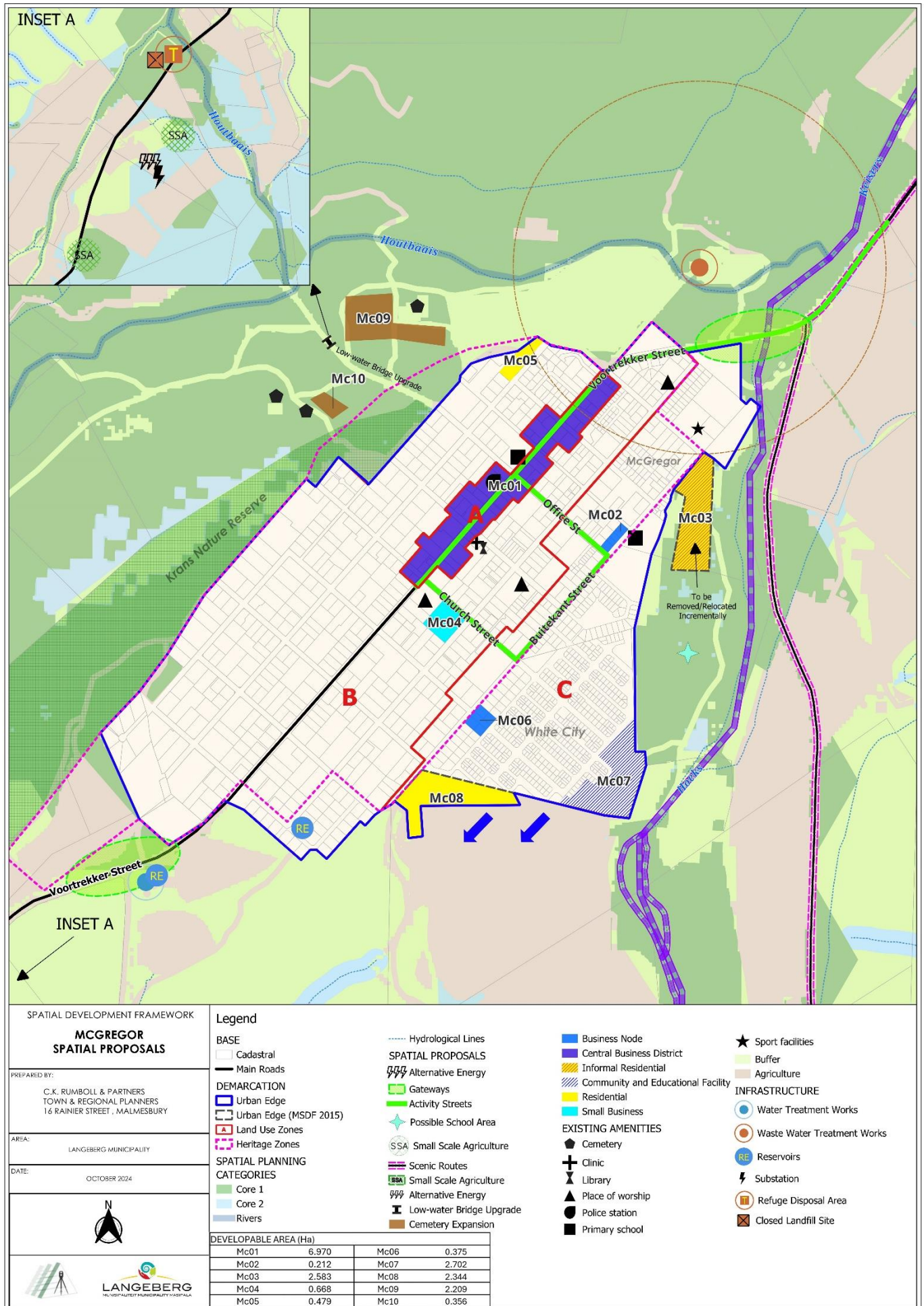
Map 33: McGregor Heritage Overlay Zone



LAND USE PRECINCT PROPOSALS FOR MCGREGOR

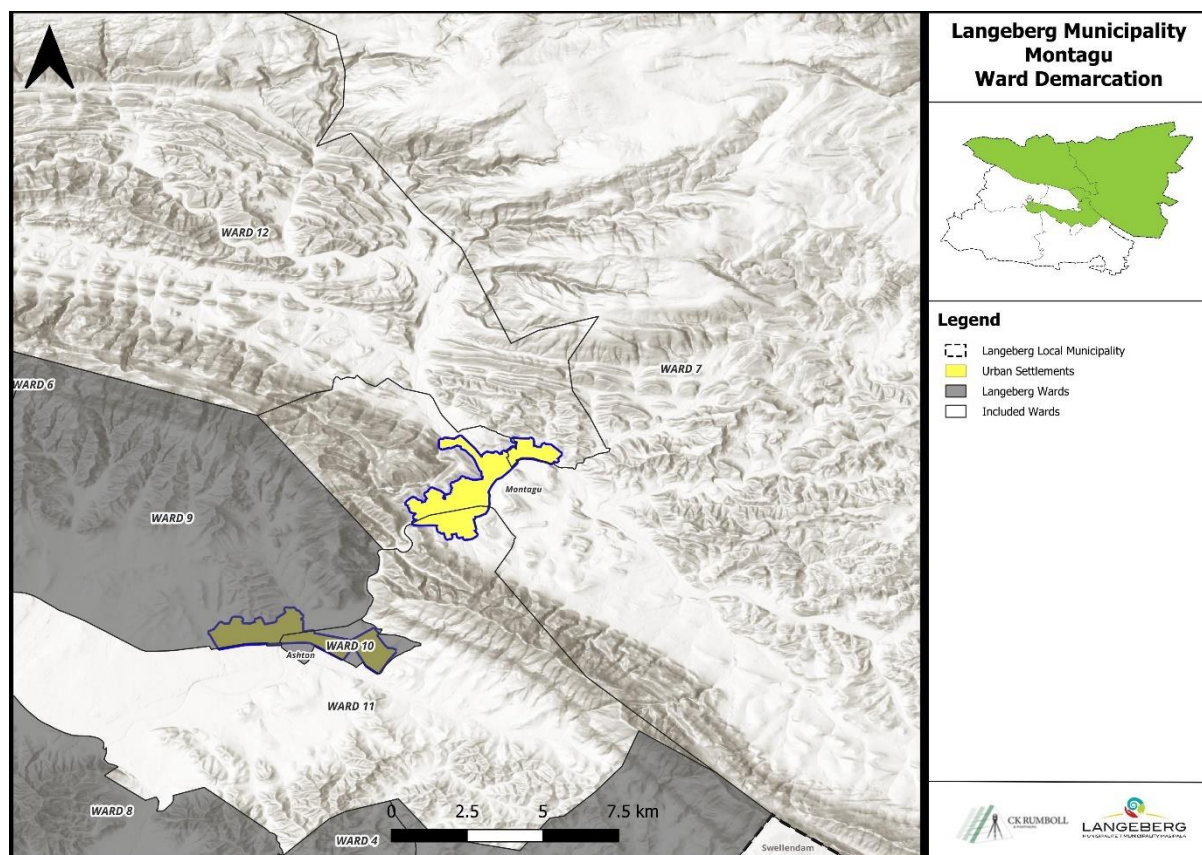
McGregor has been divided into three (3) precincts (areas with common characteristics) and the table below outlines potentially suitable land uses (and descriptions of these use at the end of this chapter) for every precinct.

MCGREGOR LAND USE PRECINCT		Low Density Residential Uses	Medium Density Residential Uses	High Density & Informal Residential Uses	Secondary Educational Uses	Place of instruction	Professional Use	Business Uses	Secondary Business Uses	Place of worship	Institution	Guest houses/self -catering	Authority	Sport/Recreational Facilities	Industries & Service Trade
A	Precinct A is the town's central business district where mostly commercial and other compatible uses are supported to enhance the node. Mixed-use development is promoted. Keep to grid layout.		X	X	X	X	X	X	X	X	X	X	X	X	
B	Precinct B, the historic village, has a low to medium density residential character with opportunities for infill development. This node also includes a secondary business node. Keep to grid layout.	X	X		X	X	X	X 2	X 1,2	X	X	X	X	X	
C	Precinct C, White City, has a high-density residential character. Allow supporting social and neighbourhood orientated commercial services. Keep to grid layout.			X	X	X	X		X 1,2	X	X	X	X	X	
(1) Along activity streets (2) At identified nodes		Business Uses e.g. Shop, supermarket and service station. Place of instruction e.g. Schools, Universities, Colleges. Professional Uses e.g. Doctors, dentists, architects. Secondary Business Uses allows for neighbourhood business e.g. Café, house shops, small shop & offices and home occupation. House taverns only to be considered along activity streets in residential areas. Secondary Educational Uses e.g. Crèches/day care.													



5.6 Wards 7, 11 and 12: Montagu

Montagu is situated at the north of the Langeberg municipal area, at the entrance to the Cogmankloof Pass. It serves as the main centre for wine, fruit, dried fruit production and tourism. It is well known for its muscadel and hot springs.



5.6.1 Montagu Status Quo

Montagu has strengths and weaknesses set out according to the settlement's biophysical, socio-economic and built environments.

	Strengths	Weaknesses
Biophysical	- Two waterways, Keisie and Kingna Rivers, provide natural corridors in and around Montagu. - Water erven and agricultural fields along the river where small scale agriculture occurs. - Keisie, Kingna and Cogmanskloof river banks as ecological river corridors and positive natural and open spaces with walking and cycling trails. "Leivore" supporting gardens and small scale agriculture. - Natural hot water springs attract tourists. - Hiking Trails.	- Urban agricultural areas in and on the outskirts as ecological and heritage resource are under threat. - Fertile agricultural land could be lost to urban development. - Topography is major informant of extension and infill layouts. - River maintenance management plan not in place for Cogmanskloof and Keisie rivers (from Avala Springs to Cogmanskloof). - No adopted PAMP for MNR (Municipal Nature Reserve).

Socio-economic	• Agri-industry and tourism & recreation, both with considerable growth potential, are core to local economy. • Good road connection with surrounding settlements. • Established historic commercial central area. • Offers high quality, unusual and authentic cultural tourism opportunities. • Good social infrastructure such as churches, schools, libraries, a clinic, police station and sporting facilities.	• Uneven distribution of social amenities across different precincts. • Public realm lack trees and pedestrian-oriented public spaces in commercial core to attract locals and tourists. • Lack of retirement facilities for farm workers. • High property taxes of water erven cause huge expense to maintain these erven, being the essence of the rural character of Montagu.
Built Environment	• Historically grid layout, rectangular street blocks with long streets and "leivore" aligned therewith. • Urban agriculture, along the Keisie and Kingna rivers with water erven along the Kingna River. • Businesses and facilities located in historic centre and accessible via associated movement corridors. • Golf course attracts local residents and tourists.	• Subsidised and BNG housing developments should be sensitive toward the settlement character. • Slow implementation or lapsing of approved developments. • Slow implementation of housing projects e.g. Kingna development below Ashbury.

5.6.2 Montagu Spatial Proposals

The table below details various spatial proposals for Montagu, each identified by a unique code corresponding to specific proposals illustrated on the settlement proposal map. The "Goal" column indicates the relevant SDF goals (in section 4.2 of Chapter 4) associated with each proposal.

Development proposals:

Code	Category	Proposal	Goal	Zone
M01	Cemetery	Expand northeast cemetery.	3	A
M02	Residential	Promote subsidised residential development as per housing pipeline.	1	A
M03	Residential	Promote subsidised residential development as per housing pipeline.	1	A
M04	Residential	Promote subsidised residential development as per housing pipeline.	1	A
M05	Residential	Promote subsidised residential development as per housing pipeline.	1	A
M06	Residential	Promote subsidised residential development on former Ashbury cricket field (long term, 5 years +).	1	A
M07	Business Node	Intensify neighbourhood business node.	1	A
M09	Residential	Promote infill development.	1	B
M10	Community Facility	Promote a high school adjoining Montagu Industrial area.	3	C
M11	Informal Residential	Promote UISP and subsidised residential development.	1	A
M12	Residential	Promote infill development.	1	A
M13	Residential	Promote infill development.	1	B
M14	Approved Development	Promote rural residential development that accommodate water erven character and promote orchards and lucerne fields.	1	C, H
M15	Business Node	Intensify neighbourhood business node.	1	D
M16	Residential	Promote infill development.	1	D
M17	Central Business District	Intensify CBD in accordance with heritage character.	1	F
M18	Industrial	Promote agricultural service industry, agri-industry and industry related development.	1	C
M19	Mixed-Use Development	Promote mixed uses and establishment of a tourist destination.	4	C
M20	Rural Residential	Promote agri-worker residential and retirement development.	1	Out
M21	Approved Development	Support implementation of approved layout and ensure medium-density residential development is accommodated.	1	I
M22	Community Facility	Promote a multi-purpose community facility.	3	A
M23	Residential	Promote UISP residential development subject to location of services.	1	A

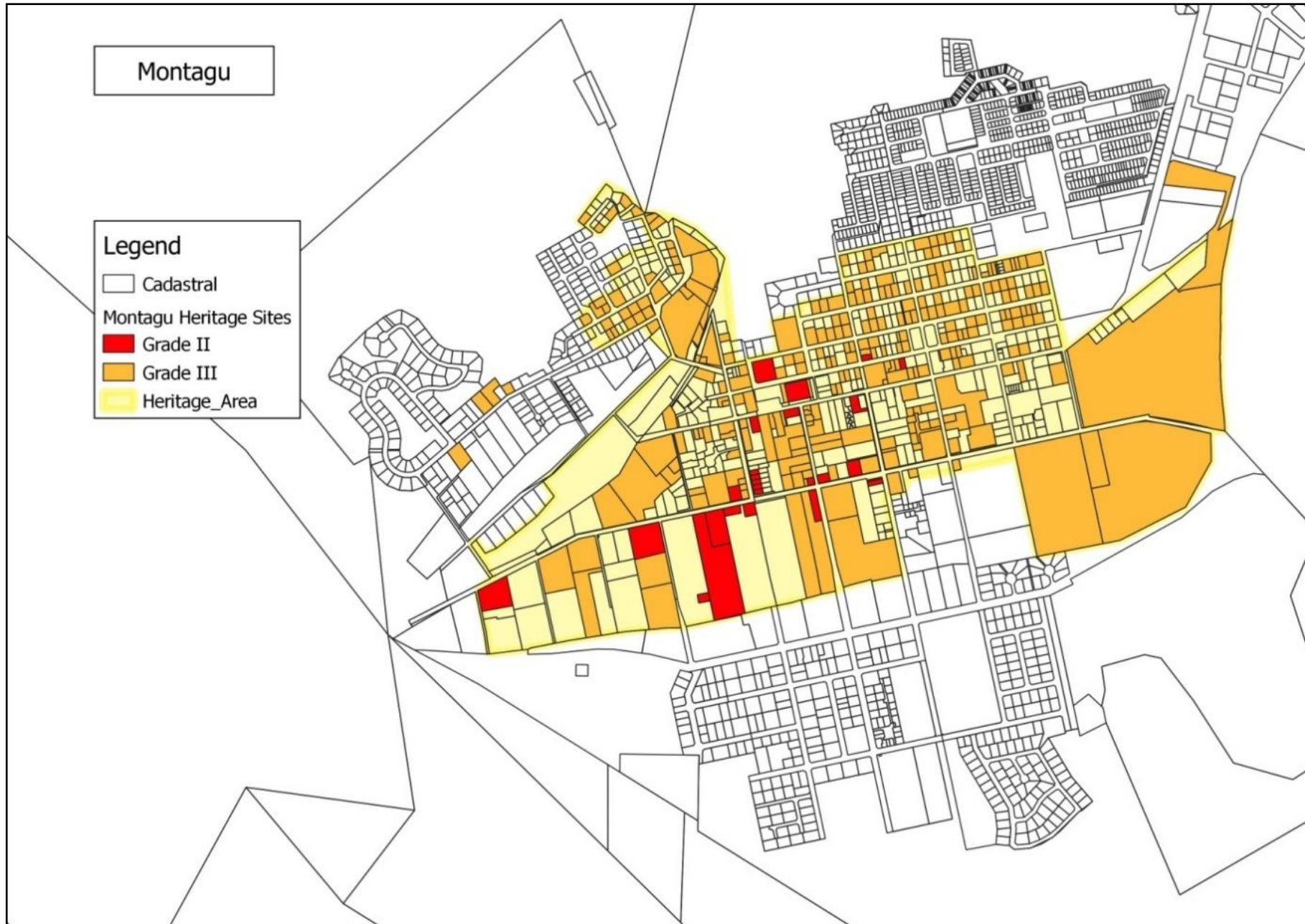
M24	Informal Residential	Ensure relocation of residential structures.	1	A
M25	Residential	Promote UISP residential development subject to the location of services.	1	A
M26	Residential/SSA	Promote residential development or establish SSA.	1	A
M27	Residential	Promote residential development.	1	A
M28	Informal Residential	Ensure relocation of residential structures.	1	Out

The table below contains proposals that are not illustrated on the settlement proposal map.

Code	Category	Proposal	Goal
M29	Activity Streets and Corridors	Promote the following streets as activity streets being part of CBD: - Direction East west: Long Street (R62), Bath, Buitekant and Wilhelm Thys Streets. - Direction North South: Barry, Church, Kohler, Eyssen, Mark and Cross Streets.	2
M30	Activity Streets and Corridors	Plant tree lanes to soften road interface along R318 and provide street furniture and NMT routes.	2
M31	Bulk Electricity and Reticulation	Maintain adequate bulk electrical capacity of 12.764 MVA required by 2028.	1
M32	Commercial	Enhance commercial and retail development of Montagu Transnet properties (Erf numbers) including the bus depo in Kohler Street (opposite Huis van Velden). Langeberg Municipality to engage with Transnet to repurpose train station and other Transnet properties or alienate these properties for redeveloped.	1
M33	Heritage	Design and renovation of all buildings in the conservation area, not only those older than 60 years, has to conform to conservation guidelines.	4
M34	Heritage	Promote Bath, du Toit, Church and Kohler streets (the CBD) and Long Street as the main heritage streets.	4
M35	Heritage	Enhance tourism along Long Street and: - Secure tax rebates for properties along Long Street and particularly water erven; - Reduce parking requirements and redirect parking for trucks; - Reduce speed and introduce speed calming (between the two Van Riebeeck Street intersections; - Reduce conflicts between freight and heritage role of Long Street; - Promote walkability; - Direct Aesthetics and Heritage Committees to collaborate on the above, though not limited to, living heritage matters.	4
M36	Heritage	Protect Badskloof (also known as Lovers Walk) as a heritage trail.	4
M37	Heritage	Protect and promote Cogmanskloof as provincial heritage site of natural, built (forts), archaeological and scenic heritage resources.	4
M38	Heritage	Promote Cogmanskloof as scenic route.	4
M39	Main Roads	Maintain R62 through Montagu, linking settlement to Ashton and Barrydale.	2
M40	Main Roads	Maintain and sensitively landscape North-western gateway, where R62 connects to R318 and R318 ultimately connects to N1.	2
M41	Main Roads	Protect Western gateway including Cogmanskloof tunnel as national monument.	2
M42	Main Roads	Formalise taxi parking spaces and upgrade by providing ablution.	2
M43	Nature and Conservation	Facilitate the compilation of a protected area management plan including Dassieskloof and Montagu Nature Garden.	5
M44	Nature and Conservation	Protect and promote: Montagu Mountain ReservePAMP, Anysberg Nature Reserve Complex PAMP, Riviersonderend Complex PAMS.	5
M45	Nature and Conservation	Implement a comprehensive tree management plan including pruning, removal, replacement, and planting schedules for all designated streets with tree-lined lanes and "leiwater" canals.	5
M46	Nature and Conservation	Protect mature trees as heritage resources: - Declared heritage tree in Montagu west on a corner; - 4 oak trees in historic precinct.	5
M47	Nature and Conservation	Develop Keisie River and Cogmanskloof River Maintenance Management Plan.	5
M48	Nature and Conservation	Implement Kingna River Maintenance Management Plan.	5
M49	Nature and Conservation	Maintain and enhance linkages between settlement and nature trails.	5
M50	Nature Reserve	Expand Montagu Nature Garden southwards as shown on the plan.	5
M51	Pedestrian and Cycle Routes	Promote a safe and adequately lit multi-use pedestrian/cycle route between CBD and Ashbury, along Long, Bath and Muskadel Streets and R318 link).	2

M52	Nature and Conservation	Support the inclusion of land parcels to be included in the Langeberg Complex PAMP.	5
M53	Pedestrian and Cycle Routes	Maintain and enhance linkages between settlement and cycling routes beyond the urban footprint, such as Ashbury Koop Route (14 km), Jeep Track via Joubert's Pass (37 km), Ouberg Route (52 km), Bobejaans Bult Route (38 km), Baden Route & Pietersfontein Dam Loop (43 km) and Talana Route (41 km).	2
M54	Pedestrian and Cycle Routes	Enhance multi-use trails and NMT routes as part of open space corridors, natural habitat links and recreational corridors.	2
M55	Public & Private Open Space	Enhance open space network and corridors within and beyond settlement footprint.	5
M56	Public & Private Open Space	Encourage maintenance of riverbank landscape and provision of NMT routes as part of the open spaces network of Cogmanskloof, Kingna and Keisie river corridors (MSDF, 2015).	5
M57	Public & Private Open Space	Link sport grounds and golf course as public and private open spaces into open space network.	5
M58	Residential	Support sensitive infill development along street fronts of water erven and along activity streets interfaces.	1
M59	Residential	Keep pastures, orchards and vineyards intact in zone H and C (M14).	1
M60	Residential	Provide for a farmworker retirement village including a home for the aged.	3
M61	Road	Upgrade street network including Church, Kohler, Eysssen, Lang, Bath, and Van Riebeek and Muskadel Streets as an interlinked system with similar paving, street furniture and tree planting programme (MSDF, 2015).	2
M62	Road	Plant trees along Church Street from Van Riebeek Street intersection to the hospital.	2
M63	Road	Maintain and upgrade existing parking area across magistrate court as a pick up and drop off point and parking area for trucks transporting agri-workers (or in Bath and Long Street).	2
M64	Social Infrastructure	Make provision for a recreational field in Ashbury (replacing former cricket field) above M04.	3
M65	Social Infrastructure	Provide for a centralised taxi/bus stop with an all-weather shelter and related infrastructure in CBD either at Erf 416 or at historic open space at Cross and Bath Streets' intersection.	3
M66	Social Infrastructure	Investigate options for place of safety for those who live on the street.	3
M67	Tourism	Promote commercial development in Long Street as supportive to tourism (restaurants, gift shops and art galleries) and in Bath Street as supportive to domestic and business use (consumables and appliances).	4
M68	Tourism	Encourage information boards along NMT routes and hiking trails (promoting heritage and education).	4
M69	Tourism	Develop a tourism strategy for Montagu to identify focus areas.	4
M70	Water and Reticulation	Protect "leiwat" system and infrastructure for gardening and urban agriculture.	1
M71	Water and Reticulation	Protect settlement's water resources from: Kruiskloof, Keurkloof, Rietvlei and the CBR pipeline scheme.	1
M72	Water and Reticulation	Protect aquifers in Badskloof, Montagu West, serving as water source supplement.	1
M73	Scenic Routes	Take action to obtain scenic route status for the R62 and Cogmanskloof Pass.	4

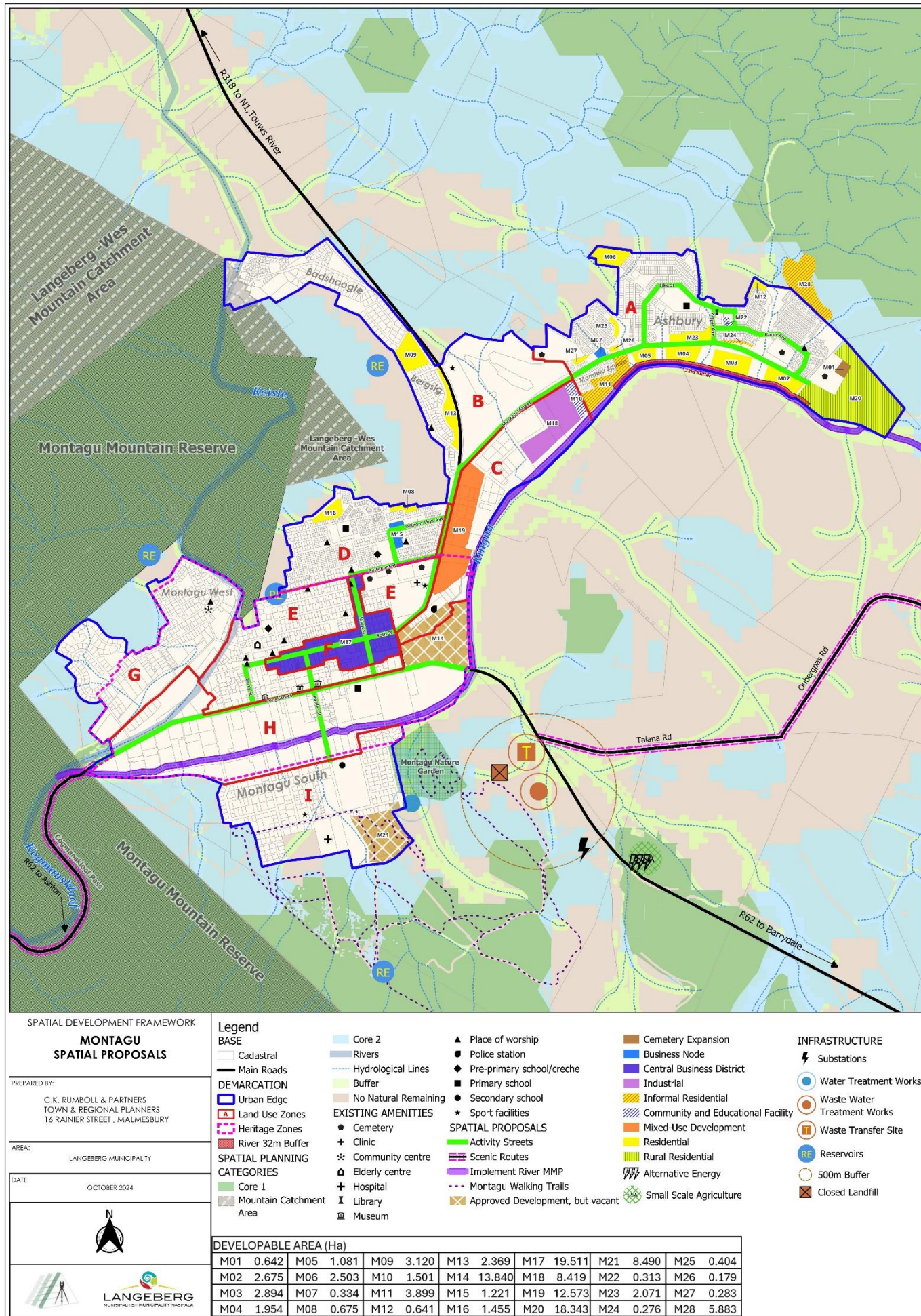
Map 34: Montagu Heritage Overlay Zones



LAND USE PRECINCT PROPOSALS FOR MONTAGU

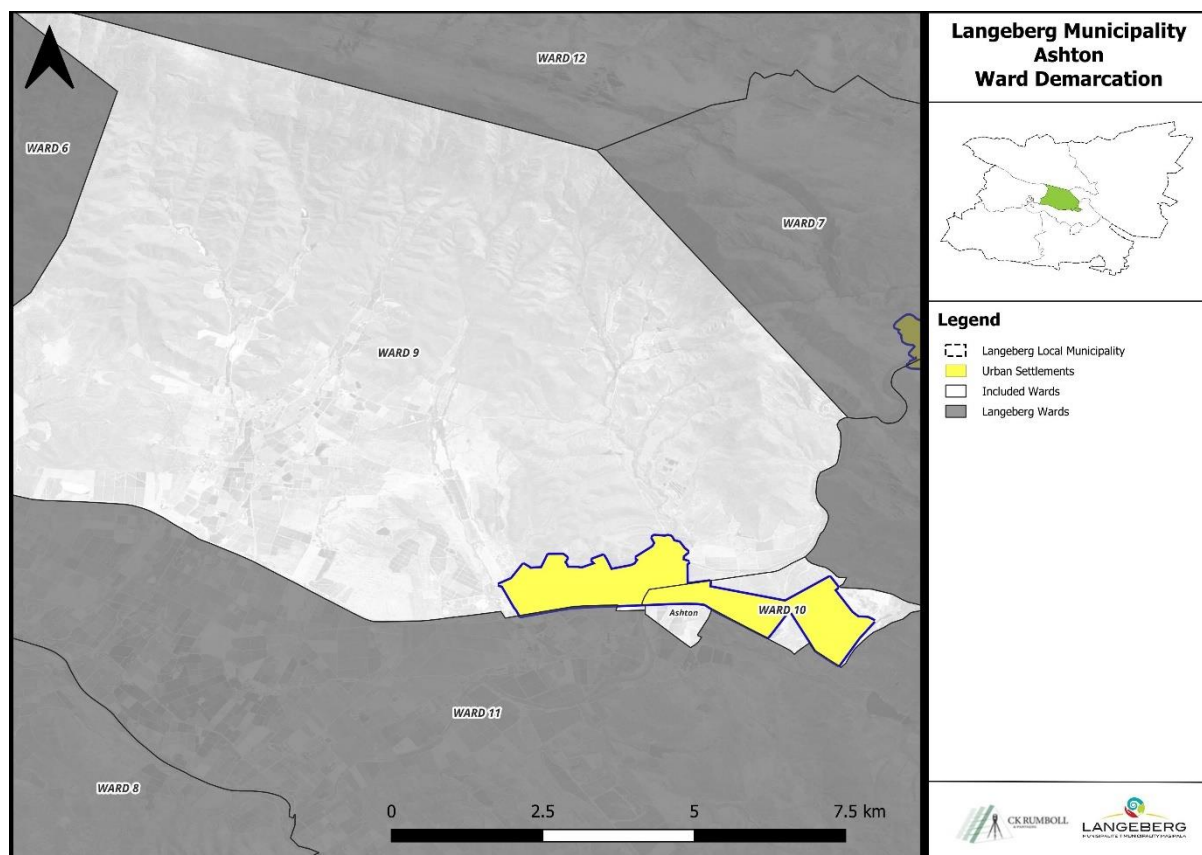
Montagu has been divided into nine (9) precincts (areas with common characteristics) and the table below outlines potentially suitable land uses (and descriptions of these use at the end of this chapter) for every precinct.

MONTAGU LAND USE PRECINCT		Low Density Residential Uses	Medium Density Residential Uses	High Density & Informal Residential Uses	Secondary Educational Uses	Place of instruction	Professional Use	Business Uses	Secondary Business Uses	Place of worship	Institution	Guest houses/self-catering	Authority	Sport/Recreational Facilities	Industries & Service Trade
A	Precinct A, Ashbury, has a high-density residential character and includes a neighbourhood business area and a place of instruction. Informal housing within precinct proposed. Precinct requires formalisation and creates opportunity for infill residential development. Both cemeteries can expand.			X	X	X	X	X ₃	X _{1,3}	X		X	X	X	
B	Precinct B, Badshoogte and Bergsig, had a medium density residential character with opportunities for infill development and a place of instruction. The Golf Course adds to precinct B as gate way to the rural areas north of Montagu. Thus, the interface along the access road has to be sensitively treated and soften by tree lanes.	X	X		X	X	X			X	X	X	X	X	
C	Precinct C has a mixed-use character with opportunities for industrial, destination (tourism) and business development including dual residential opportunities. Infill, river edge and activity street interface residential development should contribute to precinct C's character. Precinct C is the gate way to the Keisie and Koo and sensitive landscaping should be encouraged.	X	X	X _{1,3}	X	X	X	X ₃	X _{1,3}	X	X	X	X	X	X
D	Precinct D has a high-density residential character and include a place of instruction, open spaces, neighbourhood business node and public spaces.		X	X	X	X	X	X ₃	X ₁	X	X	X	X	X	
E	Precinct E has a medium residential characteristic. Open spaces include historic and operational cemeteries and a sports field.	X	X		X	X	X		X ₁	X	X	X	X	X	
F	Precinct F is the central business district where mostly commercial and other compatible uses are supported to enhance the node. Mixed-uses are supported, but should be sensitive to the character of Montagu.	X	X	X	X	X	X	X	X	X	X	X	X	X	X ₂
G	Precinct G has a medium to low residential character with opportunities for infill development.	X	X		X	X	X			X	X	X	X	X	
H	Precinct H can be identified as a low-density residential area consisting of "water erven" and development must be harmonised with the rural character around Montagu and be limited. The Agricultural character must be preserved. The eastern section of precinct H is the gateway to the R62 and sensitive low residential development is allowable whilst urban agriculture in the street block should be maintained.	X	X ₄		X	X	X		X ₁	X	X	X	X	X	
I	Precinct I can be identified as a low-density residential area which includes a hospital, place of instruction and an approved proposed housing development.	X	X		X	X	X			X	X	X	X	X	
(1) Along activity street (2) Only Service trades (3) At identified Nodes (4) Existing uses		Business Uses e.g. Shop, supermarket and service station. Place of instruction e.g. Schools, Universities, Colleges. Professional Uses e.g. Doctors, dentists, architects. Secondary Business Uses allows for neighbourhood business e.g. Café, house shops, small shop & offices and home occupation. House taverns only to be allowed along activity streets in residential areas. Secondary Educational Uses e.g. Crèches/day care.													



5.7 Ward 9: Ashton

Ashton is located at the heart of the Langeberg municipal area between Montagu and Robertson and Bonnievale. Ashton is known for its canning factories of which only Ashton Canning (Tiger Brands) is in operation but scheduled to relocate out of the Langeberg municipal area in the near future.



5.7.1 Ashton Status Quo

Ashton has strengths and weaknesses set out according to the settlement's biophysical, socio-economic and built environments.

	Strengths	Weaknesses
Biophysical	- Two waterways, Cogmanskloof and Sarahs's rivers, provide natural corridors within Ashton and Zolani. - Fertile agricultural land along river where intensive agriculture is practiced within Ashton. - A significant agricultural hinterland and agri-industrial resource base. - Located in scenic surroundings and gateways. - Blue gum tree lane along a section of main road.	Pollution stays a challenge, especially during heavy rains.
Socio-economic	- Agriculture is primary economic base and agri-industry the secondary base. - R60 and R62 intersect and link with entire region. - Land earmarked for industrial development is available. - Good social infrastructure such as churches, schools, libraries, a clinic, police station and sporting facilities. - Administrative hub of municipality.	- Transport and freight opportunities are underutilised. - Lack of trees and pedestrian-oriented public space in Zolani and Cogmanskloof.

Built Environment	• Businesses located along movement corridors. • Vineyards abutting the R60/R62 create a strong agricultural, natural and heritage gateway. • Bridge over Cogmanskloof, a new heritage resource and a tourism attraction.	• Informal settlement on steep slopes. • Informal settlements beyond urban edge. • Expanded and spread out settlement: most eastern extensions in Zolani and most western extensions in Cogmanskloof are over 7km apart. • Limited integration between Ashton and Zolani. • Slow implementation of new housing projects north of Zolani and west of Cogmanskloof.
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5.7.2 Ashton Spatial Proposals

The table below details various spatial proposals for Ashton, each identified by a unique code corresponding to specific proposals illustrated on the settlement proposal map. The "Goal" column indicates the relevant SDF goals (in section 4.2 of Chapter 4) associated with each proposal.

Development proposals:

Code	Category	Proposal	Goal	Zone
A01	Residential	Promote subsidised residential development.	1	A
A02	Infill Development	Support infill development.	1	A
A03	Agri-Industry	Promote agri-industry development.	1	A
A04	Business Node	Support intensification and extension of neighbourhood business node.	1	A
A05	Community Facility	Promote a skills school.	1	E
A06	Industrial	Promote industrial development. Public opinion to inform the use of the site as a truck stop.	1	D
A07	Residential	Promote GAP and FLISP residential development.	1	F
A08	Industrial	Support agricultural service industry uses in industrial precinct.	1	D
A09	Residential	Promote GAP and FLISP residential development.	1	B
A10	Residential	Promote (medium to high) residential development.	1	A
A11	Residential	Promote GAP and FLISP residential development.	1	B
A12	Residential	Promote subsidised residential development.	1	B
A13	Residential	Promote subsidised residential development.	1	B
A14	Residential	Promote GAP and FLISP residential development.	1	B
A15	Central Business District	Support intensification of CBD.	1	C
A16	Cemetery	Expand existing cemetery.	3	D
A17	Business Node	Support intensification of secondary business node.	1	E
A18	Business Node	Support intensification of secondary business node.	1	E
A19	Informal Residential	Upgrading of informal development located below the reservoir service line. Ensure 32m buffer is kept from the water course. Secure offsets for CBAs impacted on by proposed development.	1	F
A20	Informal Residential	Ensure relocation of informal settlement area located above reservoir service line.	1	Out
A21	Community Facility	Promote development of a new primary school in Zolani.	3	F
A22	Business Node	Support intensification of neighbourhood business node.	1	F
A23	Mixed-Use Development	Promote mixed-use development of which the bulk is service industry and business uses. Protect and promote vineyards along the pedestrian link between Zolani and the central business district.	3	G
A24	Community Facility	Promote development of a community and educational facility.	3	F
A25	Informal Residential	Upgrading of informal development located below the reservoir service line. Ensure 32m buffer is kept from the water course. Secure offsets for CBAs impacted on by proposed development.	1	A
A26	Business Node	Support intensification of neighbourhood business node.	1	F
A27	Informal Residential	Promote Upgrading of Informal Settlement development. Secure offsets for CBAs impacted on by proposed development.	1	F

A28	Informal Residential	Promote Upgrading of Informal Settlement development. Secure offsets for CBAs impacted on by proposed development.	1	F
A29	Agri-Industry	Promote agri-industry development.	1	E
A30	Community Facility	Promote development of an institutional facility.	3	F
A31	Community Facility	Promote development of an institutional facility.	3	F
A32	Small Business	Promote informal trading and establish a marketplace on the open space, corner of Dudumashe Avenue and Tshoto Street.	1	F
A33	Public Open Space	Promote establishment of a secure and fenced-off play park locally known as "karpad" at Mantlana street entrance to Zolani.	3	F
A34	Small Business	Promote the development a unifying community square at the rear of the church in Hoog, Skool, Fullard and De Villiers streets.	1	B

The table below contains proposals that are not illustrated on the settlement proposal map.

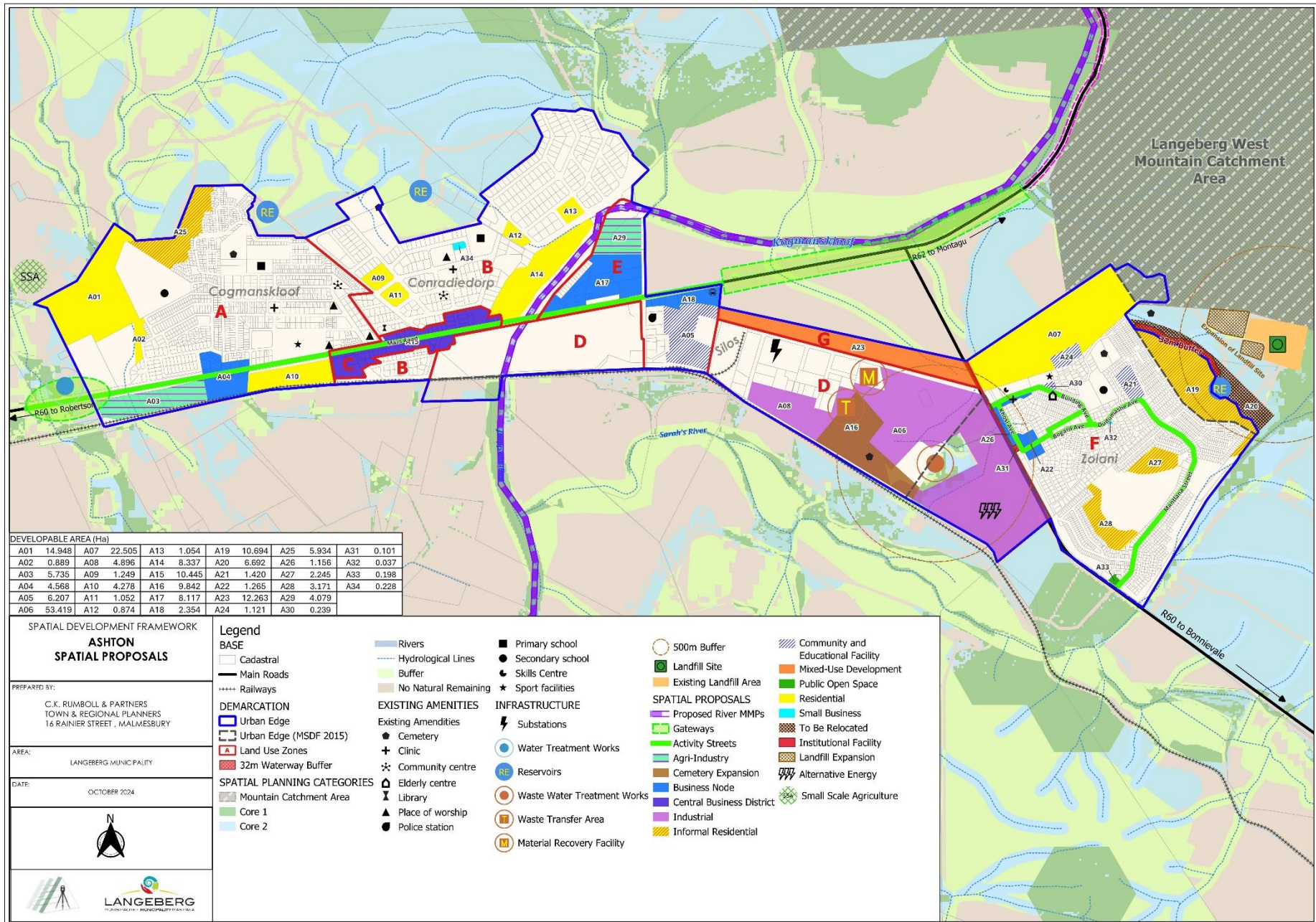
Code	Category	Proposal	Goal
A35	Activity Streets and Corridors	Promote the following streets as activity streets: Building Avenue, Kalase Avenue, Bogard Avenue and Khosi Avenues and Mantlana Streets on R60 at different points.	2
A36	Commercial	Secure yet mitigate visual exposure of informal business hub between Mantlana and Building Avenue to passing traffic taking into account the need for signage, advertising, businesses to be visible (SDF 2015).	4
A37	Commercial	Enhance integration of central Ashton (CBD) with Zolani and Conradiedorp.	2
A38	Electricity	Secure land to build a 26.0 MVA substation with 11.882 MVA by 2028.	1
A39	Electricity	Secure land for installing a 2x 20 MVA 66/11 kV and 5 MVA 66/11 kV transformers.	1
A40	Heritage	Promote Arch Bridge as attraction to affirm historic route through Cogmanskloof Pass and along R62.	4
A41	Heritage	Preserve existing heritage resources e.g. Train station.	4
A42	Heritage	Protect remnants of Art Deco buildings and character along Main Street: Commission the development of urban design and architectural guidelines.	4
A43	Industrial	Develop a precinct plan for Silos Industrial area.	1
A44	Nature and Conservation	Identify conservation worthy areas within urban areas in Zolani, Ashton and Conradiedorp and link to conservation areas seaming and beyond the settlement.	4
A45	Nature and Conservation	Limited and appropriate use along critical biodiversity features/areas such as Cogmanskloof River.	5
A46	Nature and Conservation	Prepare a Cogmanskloof River Maintenance Management Plan.	5
A47	Nature and Conservation	Adhere to development line along Cogmanskloof River.	5
A48	Pedestrian and NMT Routes	Develop and maintain safe multipurpose NMT routes within Ashton and along R60 between Ashton West and Central and Zolani.	2
A49	Pedestrian and NMT Routes	Provide for a pedestrian crossing on R60 at Zolani (consider raising road surface) or develop an underpass/street crossing between Zolani and the industrial area.	2
A50	Residential	Increase density to 18 units per hectare.	1
A51	Roads	Extend a high-quality landscaped and treed boulevard along the R60 at Zolani (SDF 2015).	2
A52	Roads	Protect the mobility of R60 (connector to Robertson, Montagu) and R62 (connector to Swellendam).	2
A53	Sense of place	Plant trees to improve the visual attractiveness of Zolani and Conradiedorp as a higher density neighbourhoods.	4
A54	Sense of Place	Protect and promote the vineyards lining the pedestrian link between Zolani and the CBD. As well as the land between the rail line and R60 (SDF 2015).	4
A55	Sense of Place	Maintain high-quality landscaped and treed boulevard along the frontages of the CBD and: - Protect and extend tree lane (eucalyptus and other along Main Street); - Ensure adequate lighting street lighting.	4
A56	Stormwater	Improve stormwater system in particularly identified flood-prone areas (Rivers NGI resource layer), north east of Cogmanskloof, middle of Conradiedorp and north east & middle of Zolani.	1
A57	Tourism and Agri-tourism	Develop an agritourism support, logistics, transport and tourism strategy for Ashton as connector (R60, R62, N1 and N2).	4
A58	Tourism and Agri-tourism	Commission architectural guidelines to promote an improvement in the town's appearance and presentation to travellers, visitors and residents.	4
A59	Tourism and Agri-tourism	Support and improve tourism infrastructure e.g. local tourism information office, signage and standard of tourism facilities.	4

A60	Waste	Expand existing landfill site as shown on map.	1
A61	Waste	Protect and maintain licensed waste disposal facility for domestic, business and non-hazardous building waste.	1
A62	Waste	Protect and maintain transfer station for green and recyclable waste.	1
A63	Waste	Protect and maintain operational material recovery facility, licensed for builder, garden and recyclable waste (IWMP, 2012).	1
A64	Waste	Keep waste facility intact.	1
A65	Wastewater	Progressively improve existing WWTWs to accommodate 6 596 kℓ/d AADD requirement once all allocated erven are occupied.	1
A66	Water and reticulation	Upgrade water works and water distribution network to prohibit flooding.	1
A67	Water and reticulation	Downsize Cogmanskloof to Conradiedorp pump station.	1
A68	Water and reticulation	Add a 3rd pump set for standby at Ashton WTP to Langeberg factory pump station.	1
A69	Water and reticulation	Install new Conradiedorp booster pump station.	1
A70	Water and reticulation	Protect four water sources, i.e. the Breede River irrigation canal and abstracted water, the Cogmanskloof Irrigation Scheme, two small streams in the Langeberg Mountain Catchment Area.	1

LAND USE PRECINCT PROPOSALS FOR ASHTON

Ashton has been divided into seven (7) precincts (areas with common characteristics) and the table below outlines potentially suitable land uses (and descriptions of these use at the end of this chapter) for every precinct.

ASHTON LAND USE PRECINCTS		Low Density Residential Uses	Medium Density Residential Uses	High Density & Informal Residential Uses	Secondary Educational Uses	Place of instruction	Professional Use	Business Uses	Secondary Business Uses	Place of worship	Institution	Guest houses/self -catering	Authority	Sport/Recreational Facilities	Industries & Service Trade
A	Precinct A has a high-density residential character which includes housing development and a secondary business node. Allow for opportunities for infill residential development and agricultural industries.		X	X	X	X	X		X 1,3		X	X	X	X	
B	Precinct B has a low-density residential character with opportunities for infill development.	X	X		X	X	X		X 1,3	X	X	X	X	X	
C	Precinct C is the town's central business district where mostly commercial and other compatible functions are supported to enhance the node. Mixed-use development is promoted.		X	X	X	X	X	X	X	X	X	X	X	X	X 2
D	Precinct D consist of the Ashton industrial area with industrial expansion proposed. This zone also includes the proposed cemetery expansion.					X	X	X	X	X	X		X		X
E	Precinct E is a secondary business node which supports commercial uses as well as high density residential uses.		X	X	X	X	X	X	X	X	X	X	X		X 2
F	Precinct F has a high-density residential character. Allow supporting social and neighbourhood orientated commercial services.		X	X	X	X	X	X 1	X 1,3	X	X	X	X	X	
G	Precinct G is a scenic interface entrance to the Cogmanskloof.							X	X	X	X		X	X	
(1) At identified nodes (2) Only Service trades (3) Along activity streets		Business Uses e.g. Shop, supermarket and service station. Place of instruction e.g. Schools, Universities, Colleges. Professional Uses e.g. Doctors, dentists, architects. Secondary Business Uses allows for neighbourhood business e.g. Café, house shops, small shop & offices and home occupation. House taverns only to be allowed along activity streets in residential areas. Secondary Educational Uses e.g. Crèches/day care.													



Description of proposed land uses in the identified Development Zones of Langeberg towns	
Proposed land uses	Description
Low density Residential Uses	Residential densities of up to 15 units per hectare can be accommodated within the Single Residential Zone I*.
Medium density Residential Uses	Residential densities of between 20 to 50 units per hectare can be accommodated within the Single Residential Zone II, General Residential Zones I and II*.
High density Residential Uses	Residential densities of above 50 units per hectare can be accommodated within General Residential Zone III* (along activity streets and within business nodes).
Secondary Educational Uses	Allow for educational use such as Crèches, Aftercare facilities and Daycare Centres.
Place of Instruction	Allow for places of instruction (crèches, schools, colleges, universities, research institutions, libraries, museums, art galleries, hostels, etc.)
Professional Use	Means use which is normally and reasonably associated with professionals such as doctors, dentists, attorneys, architects, engineers and town planners, where services rendered, are separate from trading are one of the distinguishing factors.
Business Uses	Business use that include business premises, restaurants, service trade as included under Business Zone I (at nodes), Business Zone II (along activity streets and at nodes), Business Zone III* (along activity streets and at nodes) and Business Zones IV and V.
Secondary Business Uses	Allow for low intensity commercial and mixed-use to provide for the needs of the local neighbourhood in terms of consumer goods and personal services (including house shop, home occupation, small offices, house taverns, cafes, but not limited to these uses). House taverns only to be allowed along activity streets in residential areas. These types of use should be limited and must be able to integrate with surrounding residential areas without negatively impacting these areas. As allowed for under Business Zones II and III.
Place of Worship	Places of worship under Community Zone II and as consent uses under Business Zones I, II, V and Industrial Zone I*.
Institution	Allow for Institution use (social, health and welfare facilities) with specific reference to hospital, clinic, home for the aged, indigent or handicapped that are allowed for under the Community Zone III* as well as consent under Business Zone IV and Community Zones I and II*.
Guest Houses	For the provision of guest accommodation as allowed for as a consent use under Agricultural Zones I & II, Single Residential Zone I, and guest lodges under General Residential Zone IV*.
Authority	Land use that are related to national and provincial government departments and municipalities. The locality and alignment of authority use should consider existing and planned future uses in the surrounding area. Use as allowed under Utility Zone.
Sport/Recreational Facilities	Allow for sport facilities and other related recreational and tourism facilities like show grounds, picnic and camping areas.
Industrial/Service Trade and Industries	Allow for development of industries, service industries and service trade related use, with the different types of industries considering the context and locality in the urban areas. Certain commercial use including shops, restaurants, places of assembly, adult entertainment as well as funeral parlours and places of worship that are allowed for in these zones in accordance with the zoning scheme.

* The proposed zoning is according to the Langeberg Integrated Zoning Scheme Regulations of 2018, or as may be amended in future. The proposed land uses only provide an indication of the potentially suitable land uses that can be allowed within the precincts. All land use applications must be in accordance with the LLUP by-law, 2015 and the zoning scheme applicable at the time.

CHAPTER 6: Rural & Regional – Cross Border Proposals & Environmental Management and Climate Change Mitigation Framework

Being part of the Cape Winelands region, Langeberg Municipality is home to five bioregions that can be distinguished according to the natural environment and economic landscape. The bioregions are:



Anysberg Mountain Area – the northern Karoo plains much of it within the Anysberg Nature Reserve (CapeNature).



Koo Valley – high lying valley well-known for fruit, fruit processing and tourism.



Keisie Valley – high lying scenic valley with intensive agriculture and start of the R62 tourism route beginning in Montagu.



Breede River Valley – intensely farmed, mainly vineyards and tomatoes. Wine farms offer tourism attractions such as festivals, accommodation, restaurants, wine tasting. One of the most popular wine routes. Contains main settlements, Robertson, Ashton, Bonnievale.



Riviersonderend Mountain Valleys – high lying series of three valleys – also intensive agriculture, mainly vineyards and tourism, but at a reduced level compared to the activities in the Breede River Valley. McGregor is the main settlement, albeit the smallest in the municipality (CNdV Africa, 2013).

The table to follow provides an overview of the five regions:

All proposals should be read and implemented within the framework of the Western Cape Land Use Planning: Rural Guidelines, 2019.

Map 35: Langeberg Bioregions

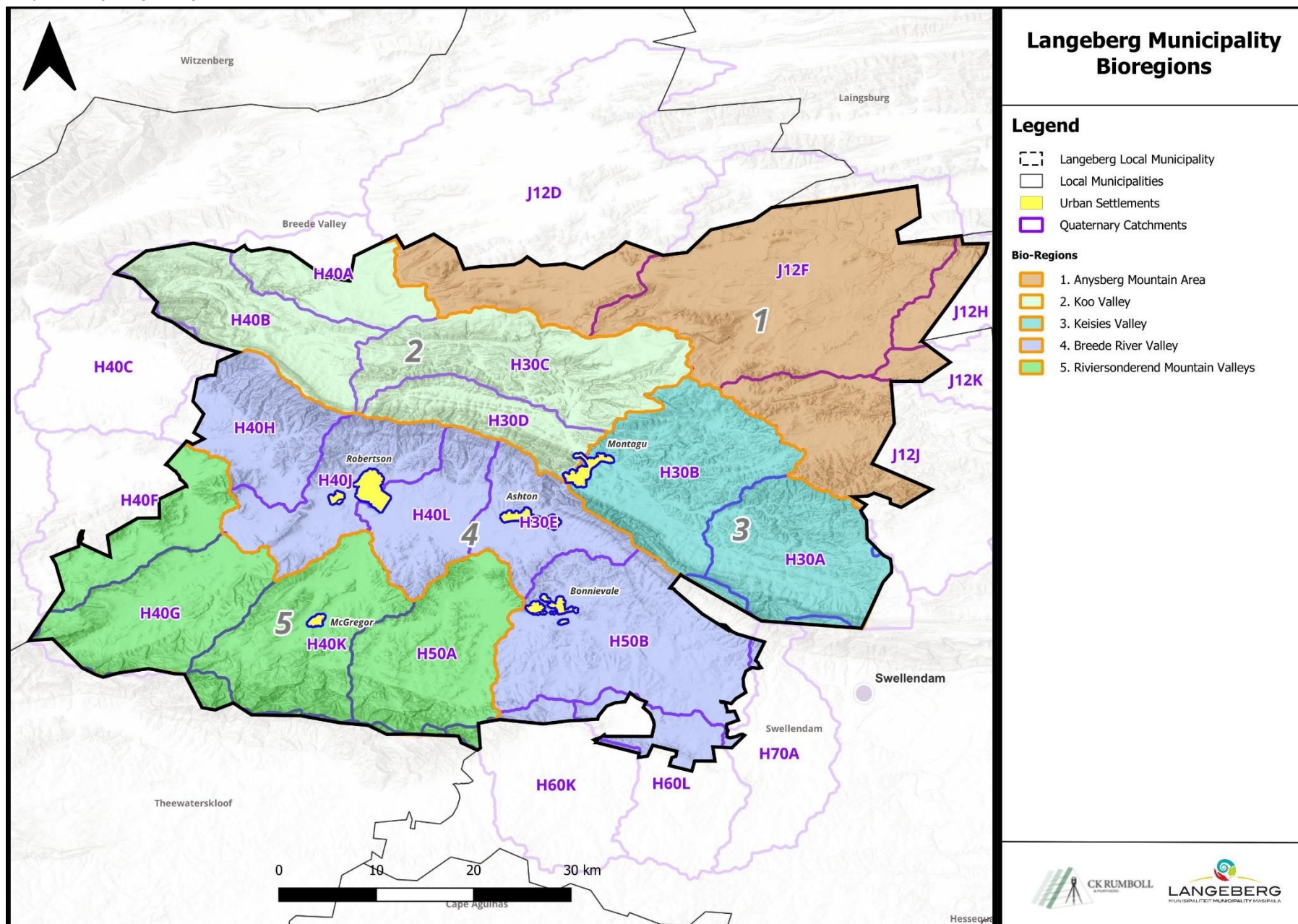


Table 11: Characteristics of Langeberg's five bioregions

	ANYNSBERG	KOO	KEISIE	BREEDE VALLEY	RIVIERSONDEREND MOUNTAIN VALLEYS
Altitude (m)	500 – 1 000	750 – 1 250	250 – 1 000	100 – 500	250 – 1 250
Agriculture (Primary Economy)	Stock and game farming with some dry land cultivation in river valleys.	Mainly stone fruit orchards.	Some wine, table grapes and fruit orchards.	Rich mixed farming area including wine, table grapes, dairy and fruit.	Mainly wine, table grapes and oranges.
Mining (Primary Economy)	None	None	Building sand and brick clay	Building sand, Dolomite, Limestone, Stone Aggregate, Brick Clay, Ferrecrete & Gravel, Dolomitic Limestone, Mineral pigment: Agricultural lime and gypsum mine in the west.	Building sand
Biodiversity	Succulent Karoo.	Succulent karoo in the deeper river valleys to the east. Shale renosterveld, shale and granite fynbos on mountain slopes.	Succulent karoo in the deeper river valleys – shale fynbos and granite fynbos on mountain slopes, shale renosterveld.	Complex mosaic of alluvial vegetation, succulent karoo to the west and shale renosterveld to the east.	Granite fynbos on high mountain slopes with succulent karoo to the west and shale renosterveld to the east.
Secondary Economy			Agri-processing.	Agri-processing in Ashton & Bonnievale.	Wineries.
Tertiary Economy	Few holiday farms.	Few holiday farms and well-developed tourist attractions.	Montagu historic tourist and desirable residential town, well-developed network of holiday farms and farmstalls along R62 tourism route. Montagu is often considered as the western starting point of this route.	Well-developed mix of agricultural and wilderness tourism, Robertson financial, retail and agricultural service centre with historic heritage potential.	Well-developed holiday farms and tourist attractions focused around McGregor.
Renewable energy potential	Relatively low wind speed. Medium to high levels of solar radiation.	Relatively low wind speed. Medium to high levels of solar radiation.	Relatively low wind speed. Medium to low levels of solar radiation.	Relatively low wind speed. Medium to low levels of solar radiation – small solar plant proposed near Bonnievale.	High wind speeds along Riviersonderend mountains. Medium to low levels of solar radiation– small solar plant proposed near McGregor.
Hydrology	Touws River – significantly modified.	Koo – moderately modified.	Keisie – significantly modified.	Breede – moderately modified, Vink, Riviersonderend significantly modified.	Poesjenels, Houtbaais Rivers in poor state.
Landscape character	Cosmic.	Classical.	Classical.	Romantic.	Classical.

6.1 Regional and Rural, Environmental Management and Climate Change Proposals

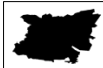
The rural development proposals for the Langeberg Municipality are centred around natural resources, including Water, Soil (Land), Minerals, Vegetation (Ecosystems including Fauna), Air (Wind), Sun, and one man-made resource, Connectors. These proposals and directives are categorised into three main areas: Opportunities (to develop), Disasters (to protect and adapt to), and Risks (to mitigate and change). These proposals are tabulated within a matrix to address three key aspects: land use (LU), environmental management (EM), and climate change (CC).

Land Use	Environmental Management	Climate Change
		

Furthermore, the rural development initiatives in Langeberg align with national and provincial projects, alongside investments by state-owned entities.

6.1.1 Water/ Hydrology

Opportunities			
Water catchment areas, water courses, highly and averagely productive underground water sources			
Adhere to the following buffers where no development (permanent structures) is allowed, unless authorised by an environmental impact and/or water use assessment to limit risks and to reduce and prevent pollution and degradation of water resources:			
• 32m wide buffer area along rivers and riverbanks (NEMA, 1998); • The outer edge of the 1:100 year floodline and/or delineated riparian habitat, whichever is the greatest distance, measured from the middle of the water course of a river, natural channel, lake or dam; • In the absence of a determined 1:100 year floodline or riparian area, the area within 100m from the edge of a watercourse where the edge of the watercourse is the first identifiable annual bank fill flood bench; • A 500m radius from the delineated boundary (extent) of any wetland or pan., or within the 1:50 year flood line. (NWA, 1998); • Vleiland buffer up to 75m from wetland outer edge (refer to Floodplains and Rivers Corridor Management Policy, City of Cape Town, 2009); • Low-lying areas where the area is exposed to floods not only caused by rivers, but by groundwater or stormwater collection (prohibit development including Cemeteries, Industrial Areas, Fuel Storage Facilities and Intensive Agricultural Uses).			
Promote and delineate natural open space networks and restore, rehabilitate, maintain and enhance various river corridors in accordance with RMMP:			
• Ecological: preserve aquatic and associated ecosystems and their biological diversity along the following rivers: ○ Kingna; ○ Keisie; ○ Keisers (McGregor). • Ecotourism: ○ Provide for social amenities (soft fields and courts) connecting rivers and tributaries within settlements to the rural surroundings for example: ▪ Kingna River (Montagu); ▪ Keisie and Koo Rivers (Keisie and Koo valleys); ▪ Breede River (Bonnievale); ▪ Klaas Voogds River (Klaas Voogds). • Conservation: ○ Restore existing and historical connections between wetlands, drainage ports and rivers/streams and groundwater (and directed by groundwater connections); ○ Of moderately and largely modified rivers and tributaries across Langeberg Municipality.			

• Protect and manage all water resources ecological infrastructure e.g. the Breede River: ○ Mitigate reliance on the Breede River as only source in the light of exceptionally high volumes of abstraction and likely increase for citrus cultivation; and ○ Investigate alternative sources of water to supplement existing sources and for future expansion of settlements. • Implement River Maintenance Management Plans for Willem-Nels, Hoops and Drooge (Robertson and surroundings), the Kingna (Montagu) and the Keisers Rivers (McGregor) and prepare River Maintenance and Management Plans for: ○ Montagu: Keisie from Springs to Cogmanskloof; ○ Cogmans River from Ashton to Breede River; ○ Breede River from Rooibrug to Kambati; ○ Boekenhoutskloof River. • Develop a by-law for recreational use of Breede River in conjunction with surrounding municipalities the SA Maritime Safety Authority (SAMSA) and National Small Vessel Safety Regulations.		
Tourism, sport and recreation		
Promote and strengthen natural, rural and cultural environments and develop guidelines and location specific water resources zone (WRZ) plans to promote, manage and guide land use related to tourism, sport and recreation along rivers, dams, and other water resources addressing:		 
• Infrastructure in and around water resources (to comply with operational requirements and to mitigate and manage socio-economic impacts) guided by Guidelines for Resort Developments along the Breede and other rivers; • The provision of day facilities and picnic areas alongside resorts including camping, caravan parks, spas (hot springs) and reserves; • The use of public amenities for activities and events in accordance with the relevant Municipal By-Law. Prepare a By-Law for the recreational use of the Breede River. • Whilst considering the Provincial Biodiversity Strategy and Action Plan (PBSAP).		
Waste Management		  
• Promote municipal integrated waste management strategy and make provision for the costs. • Promote ongoing use and maintenance of the Material Recovery Facility (MRF) in Ashton. • Provide appropriately located land for and maintain waste facilities: ○ Promote the rehabilitation of closed waste disposal sites in McGregor, Montagu and Robertson to ensure compliance with closure license requirements. Continue waste delivery to the Ashton and Bonnievale landfill sites, emphasising avoidance and reduction, as well as treatment and disposal measures. ○ Investigate and provide for dropoff locations for waste: ▪ In rural areas along major routes and at large farming operations; ▪ And provide for establishing a site in Ashton and include budget in CEF (Severely limited available landfill airspace: Ashton landfill permitted for closure and rehabilitation in 1998, yet still in operation). ○ Provide for and promote recycling of domestic waste, composting of garden waste and re-use of building rubble separately in all settlements: ○ Specifically in Montagu, McGregor, Robertson, Ashton and Bonnievale where composting facilities can be established on under-utilised municipal land; ○ Establish igloos sites for specific types of domestic waste, composting facilities for garden waste, and building rubble facilities to facilitate the reuse of building materials. Additionally, implement waste recovery programmes to extract usable products from waste streams. ○ Implement waste to energy programmes. • Support and empower small waste related businesses and consider integration of waste pickers in waste management system (particularly reclamation of recyclable material). ○ Enable access to waste, including by-law regulations, once a municipal waste recovery facility is implemented.		
Research and Education:		 
• Promote river health projects in both Gouritz and Breede rivers catchment areas, as managed by the Department of Water and Sanitation.		
Develop and facilitate awareness, education, training, capacity building, research and information gathering and a sense of custodianship in the district:		
• Promote active waste education and awareness strategies. Implement programmes within the Langeberg community and its schools to emphasise the value of water resources in light of climate change and water scarcity.		

Disasters

Water catchment areas, water courses, highly and average productive underground water sources.

Pollution and Risk Control:



- Improve pollution control, management and monitoring of effluent generating infrastructure and facilities to prevent pollution.
 - Divert infrastructure and development that may have significant impact on water sources include intensive agricultural activities, waste management (transfer & recycle) sites, fuel storage facilities and industrial areas.
 - Consider developments that may have little or no significant impact including residential development and standard agricultural activities.

Alternative Water Resources:



- Support the use of alternative water resources (boreholes and ground water, water harvesting, desalination) and the reuse of appropriately treated water (stormwater, waste and grey water) to alleviate water shortages that may arise during droughts.
 - Secure operational and maintenance costs of alternative water provision.
- Provide for establishing alternative water resources e.g. water harvesting and collection of precipitation along Langeberg and Riviersonderend Mountains.

Floods, Erosion and Droughts



Support monitoring and management aspects to guarantee water quality:

- River monitoring must take place according to the guidelines of the Department of Water and Sanitation's River Health Programme for all developments e.g. agri-industry. The health of rivers in the Langeberg municipal area is tabulated below:

River Status	Largely natural, few modifications	Moderately Modified	Critically/ Extremely modified
North	Raaswater, Brak, Doring, Kruis, Stinkfontein Se, Langkloofspruit.	Dwariega, Kingna, Koo, Die Brak, Lopende, Gatskraalse, Pietersfontein.	Keisie, Touws.
South	Konings, Hoeks, Bosmans.	Cogmanskloof, Breede, Groot, Houtbaais, Willem Nels, Noree, Hoops.	Vink, Poesjenels, Keisers.

- Borehole monitoring must take place in all developments that could lead to possible groundwater pollution, e.g. waste landfills, intensive farming practices;
- Stormwater management and treatment must prevent pollution:
 - In rural areas, for example, intensive farming practices such as cattle housing above underground water sources. Improve stormwater treatment in urban and rural agri and industrial zones, service stations, and fuel distribution areas.
- Water quality monitoring is required for all water and stormwater treatment systems;
- Management, monitoring and evaluation and rehabilitation must be regulated by an area specific Environmental Management Plan.

Risks

Water catchment areas, water courses, highly and average productive underground water sources

Support effective and fair management of state dam basins (Poortjiekloof and Keerom), water resources and catchment areas based on social, economic and environmental impact consideration: to secure water volumes and quality including guarding against erosion and mitigating drought and flooding impacts.



- Protect and promote maintenance of and reduced risk within water catchment areas inclusive of wetlands and highly and average productive underground water sources:
 - Mountain catchment areas: Matroosberg, Langeberg West, Riviersonderend;
 - Effectively remove and control invasive alien plants with the exception of heritage trees (trees older than 20 years);
 - Delineate underground water resources and aquifers to guard against overexploitation.
- Promote cooperative Management of Protected Areas (National Environmental Management: Protected Areas Act);
 - And avoid development of infrastructure and waste sites (including cemeteries) and caution development of residential, commercial and industrial developments, intensive agriculture and fuel storage.

Water quality:

- Ensure developments in all phases uphold water quality standards and thresholds;
- Ensure supply levels of all water sources, especially surface water resources, and re-evaluate water sources especially where demand is close to the safe 1:20 year yields;
- Require efficient water use in all development proposals;
- Consider all applicable guidelines, policies and legislation pertaining to freshwater impacts where relevant to proposed developments;
- Promote small sewerage treatment package plants and alternative technologies on farms and in rural settlements.

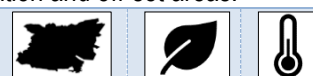
Environmental justice and impact assessment requirements:



Promote environmental justice by ensuring that adverse environmental impacts are not unfairly distributed, especially among vulnerable and disadvantaged individuals. Implement all Environmental Approvals according to approved Environmental Management Plans, which outline directives for management and monitoring:

- All proposed settlement and infrastructure developments must have Environmental Approval or confirmation of applicability of the Environmental Management Act before proceeding and include developments:
 - Covering an area of 50 m² and more and within 32 m from the banks of a water source;
 - Impacting on terrestrial, and heritage environments, conservation worthy natural vegetation and off-set areas.

Cemeteries, sanitation, waste and water storage.



Cemetery expansion:

- Promote local and regional cemeteries;
- Promote memorial parks that include a combination of uses such as passive entertainment and passive recreation activities.

Sanitation in rural villages:

Maintain sanitation in rural villages and in rural areas according to prescribed standards:

- Monitor water quality of all water treatment systems;
- Renew bulk infrastructure where required.

Waste site:

Promote a municipal waste facility as priority, despite using a regional landfill facility.

- Prohibit waste disposal sites on Highly Productive Underground Water Sources (HPUWS), which encompass highly productive interrelated and broken underground water sources, as well as average productive sources;
- Prioritise compliance with environmental authorisations for operating Langeberg Municipal waste management facilities.

Risk

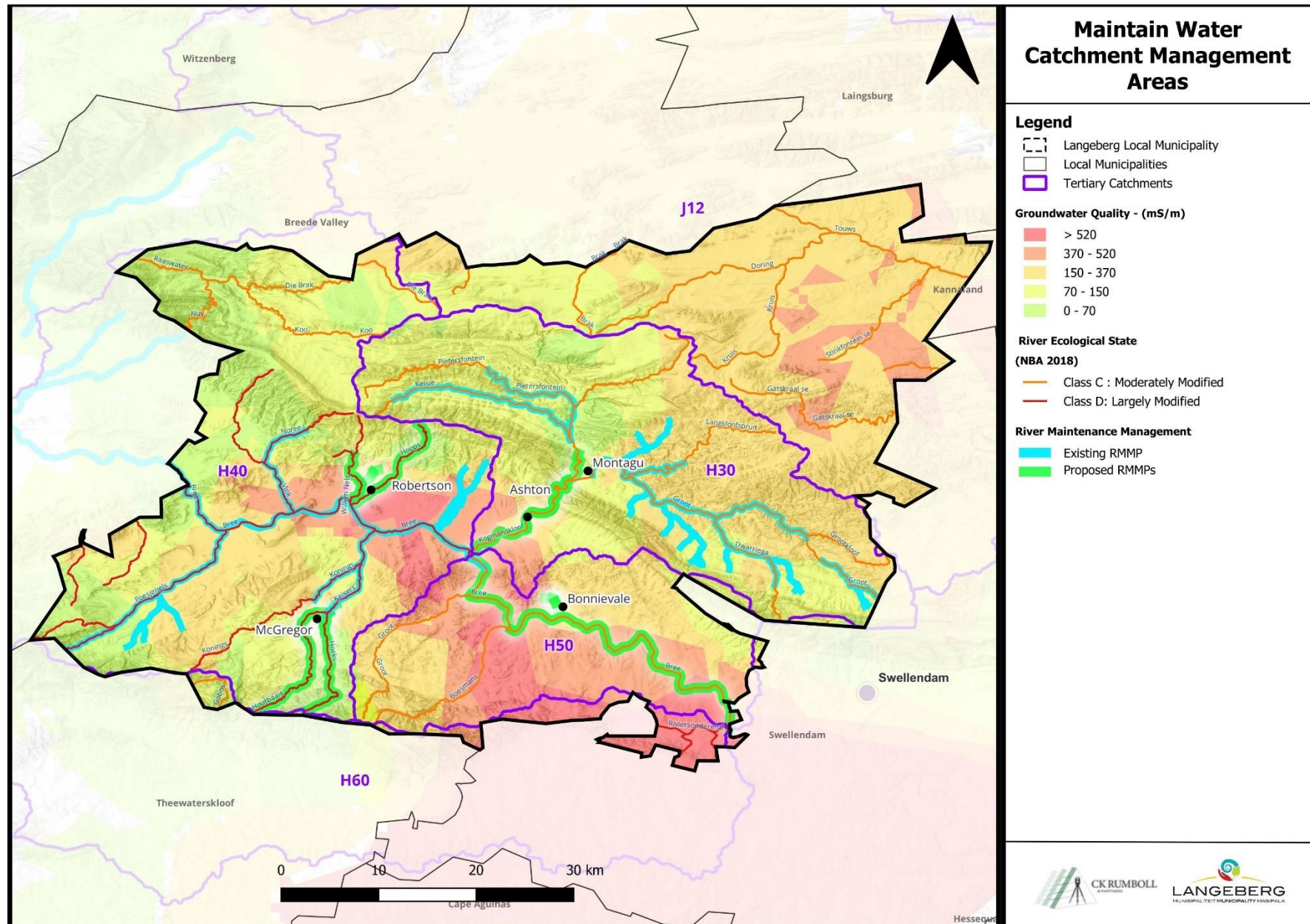
Water catchment areas, water courses, highly and average productive underground water sources

Water as resource:

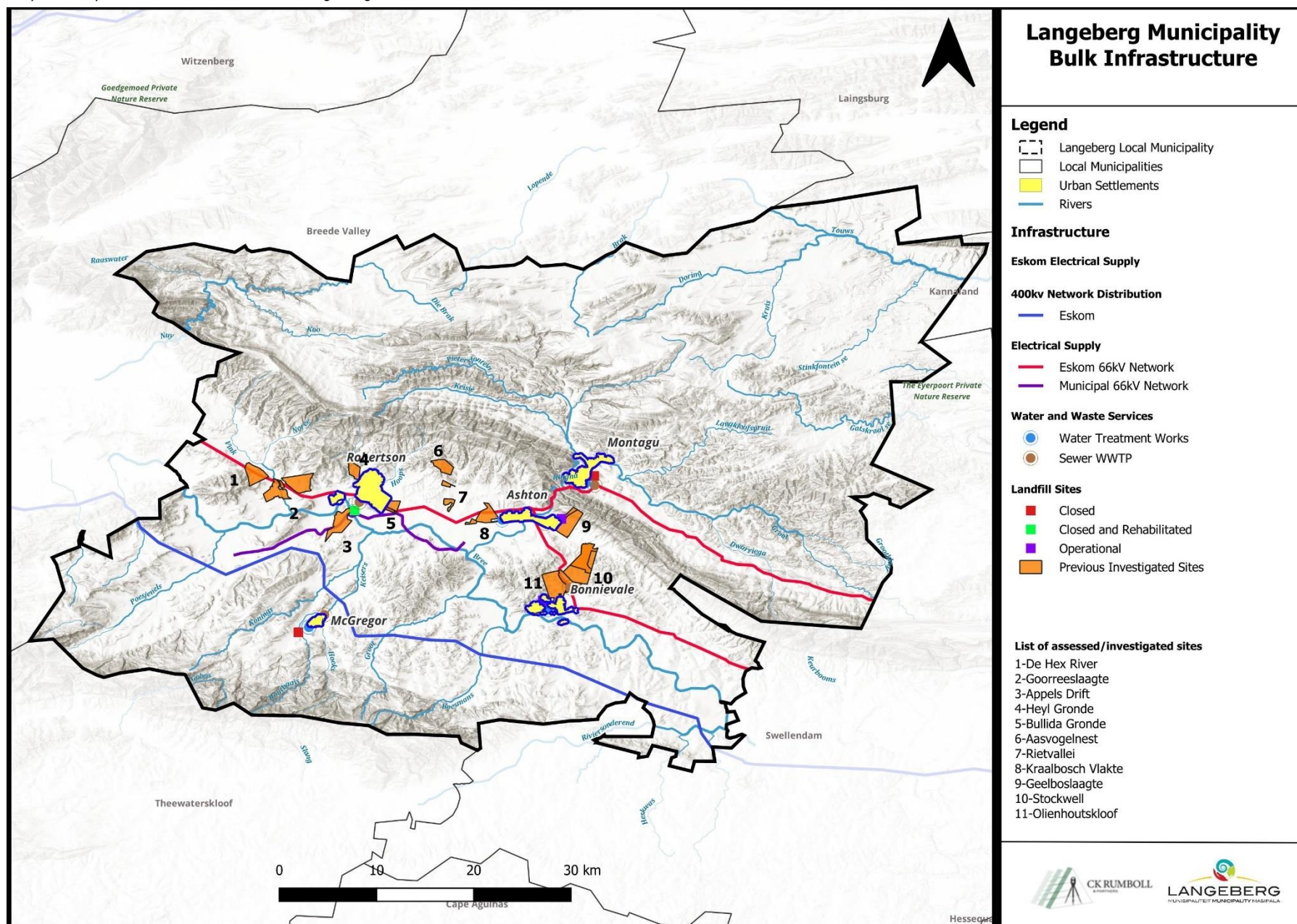


- Potable Water Storage: Add at least 10% additional supply capacity (headroom) when considering the maximum 24-hour demand in the highest (peak) demand month of the year;
- Subject proposed developments to proper investigation of the impact on water sources and long-term sustainability;
- Vigorously implement Water Demand Management measures, especially in terms of the following:
 - Increased water efficiency;
 - Frequent monitoring of water supply systems;
 - Conduct regular and adequate system maintenance and repairs.
- Diversify water resources, e.g. surface water and groundwater use and wastewater re-use;
- Plan for, provide and maintain adequate water resources, water storage capacity and networks for settlements and rural areas and expand bulk infrastructure where required.

Map 36: Proposal: Maintain Langeberg Water Catchment Management Areas



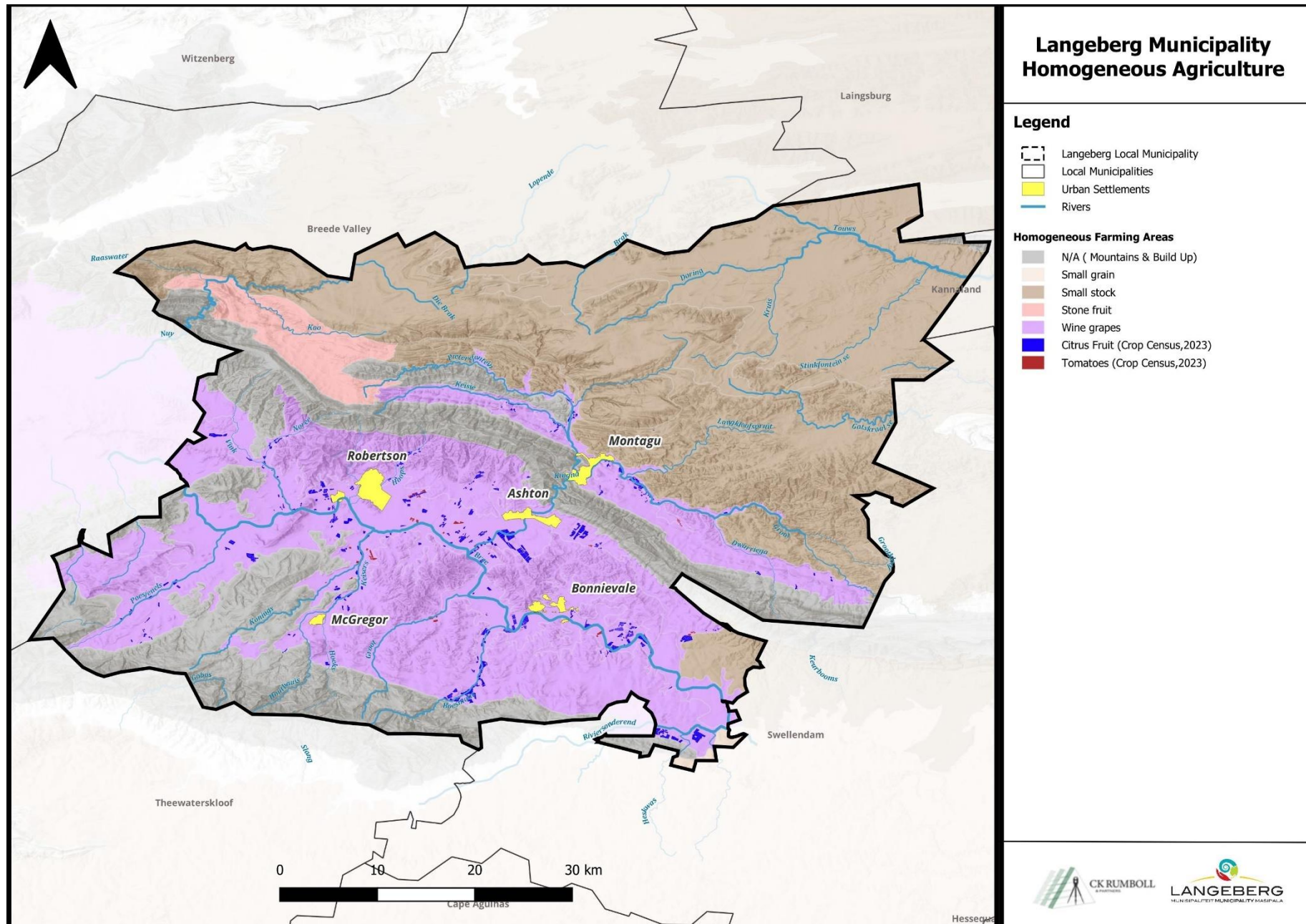
Map 37: Proposal: Plan for and Maintain Langeberg Water and Waste Infrastructure



6.1.2 Land/ Soil

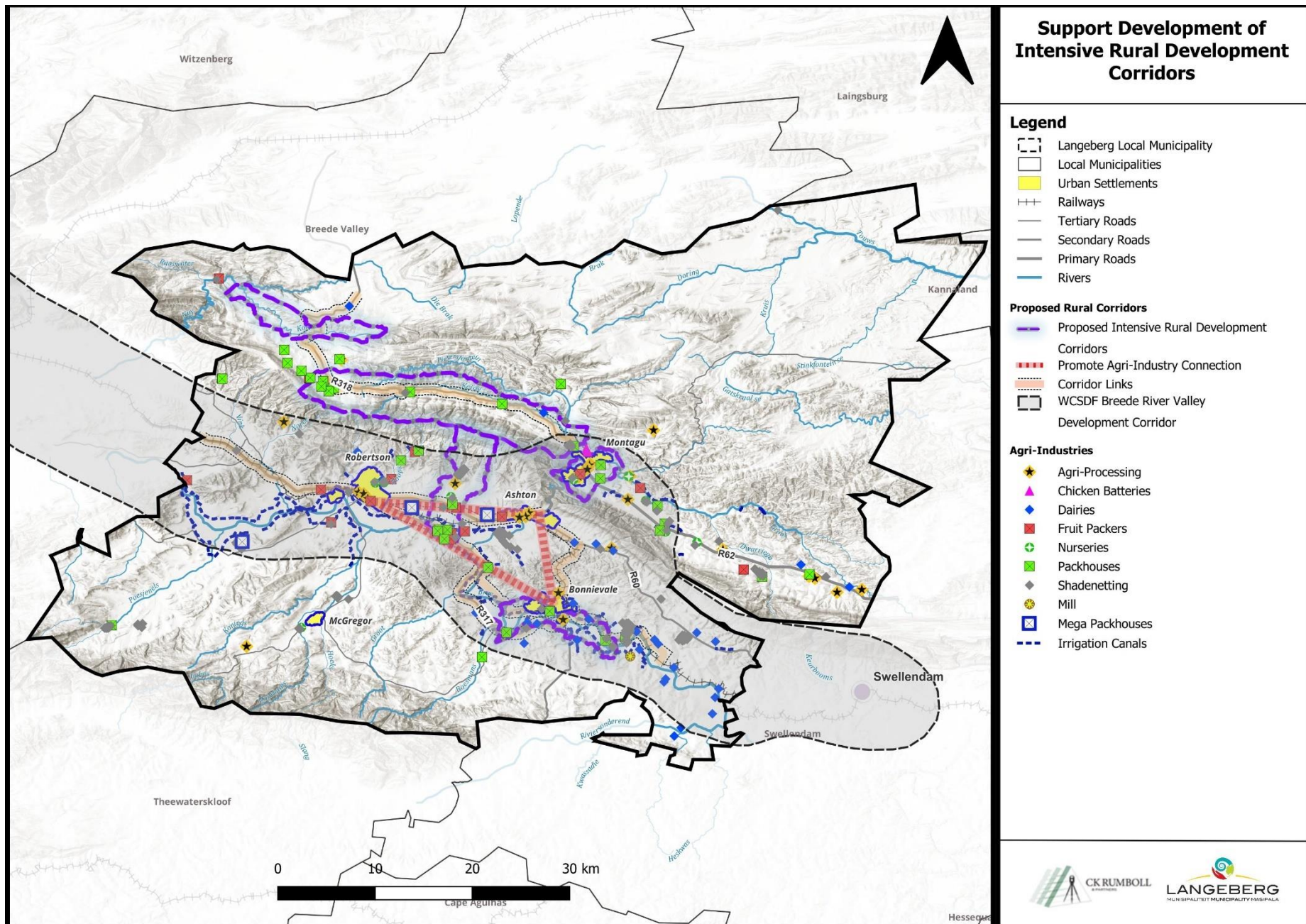
Opportunities			
Soil Suitability and Agriculture (Food Security)			
Conserve and preserve high potential agricultural land:			
- Protect and preserve agricultural resources (soil, water and ecology) in the Langeberg municipal area, including: - High-potential unique agricultural land, food production and agricultural landscapes; - Other areas of significant agricultural value; - Extensive agricultural production; - Smallholdings; - Protect water sources and quality: Intensively irrigated areas along the Breede, Keisie and Koo rivers. - And: - Ensure no cultivation of virgin land takes place without the written consent of the Minister of Agriculture; - Ensure no land with a slope of more than 20% will be cultivated without written consent of the Minister of Agriculture; - Ensure cultivated land is effectively protected against water and wind erosion; - Avoid use of vegetation in a marsh or a water sponge or in a floodplain; - Prohibit any development that will contradict or may have a significant impact on the cultivation of land with high and significant (medium) agricultural potential (e.g. settlement development and mining), whilst allowing for development that will have limited or no significant impact on agricultural areas. (See also Rural Guidelines); - Delineate and protect intensive and extensive agricultural productive land, after consideration of social, economic and environmental impacts, to support effective and fair management of: - State dam basins; - Water resources; - Catchment areas. - Maintain firebreaks around farms to mitigate the risk of wildfires.			
- Protect agricultural cultivation across municipal borders to maintain homogeneous agricultural areas and to promote food security. This includes: - Anysberg – conservation and small livestock; - Koo Valley – fruit cultivation; - Keisie Valley – fruit and wine cultivation, intensive and mixed-use agriculture including small stock; - Breede River Valley – mainly vineyards and tomatoes; - Riviersonderend Mountain Valley – intensive agriculture, mainly vineyards.			
- Protect underground water as limited resource. Encourage dry land cultivation. - Support cultivation and conservation e.g. Biodiversity and Wine Initiative. - Promote implementation of approved Protected Area Management Plans (PAMP) addressing the cumulative impact of ecological degradation and biodiversity loss: - Langeberg Nature Reserve Complex PAMP; - Anysberg Nature Reserve Complex PAMP; - Riviersonderend Complex PAMP; - Need for new PAMPS.			
- Protect sensitive natural and agricultural environments as agriculture is the biggest GDP and employment contributor and an important economic, environmental and cultural resource from inappropriate and opportunistic development to enhance food security: - Delineation intensive and extensive agricultural land.			

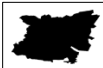
Map 38: Langeberg Municipality Homogeneous Agriculture

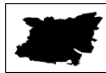


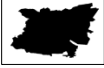
- Effectively manage erosion, both water and wind, through conservation agriculture methods, including: - Planting perennial legumes; - Implementing contour line management.			
- Maintain the SmartAgri plan initiated by the Western Cape Government, prioritising sustainable practices encompassing: - Conservation agriculture; - Ecological infrastructure restoration; - Integrated catchment management; - Energy efficiency; - Climate-resilient agri-processing; - Knowledge systems for climate-smart agricultural extension. - Support ongoing research into the impact of climate change on current crop production and sustainable cultivation methods (Western Cape Agricultural Sector Climate Change Framework and Implementation Plan).			
- Promote long term sustainability of agriculture and agricultural development: - Support compliance with environmental and water legislation; - Apply standard environmental management principles; - Provide for management and monitoring of implementation of Environmental Approvals regulated by an approved Environmental Management Plan.			
Agri-industry and food security			
- Promote the following settlement as a regional agricultural service centre: - Robertson; - Promote the following settlements as local agricultural service centres: - Ashton; - Montagu; - Bonnievale; - McGregor.			
- Support development of an Intensive Rural Development Corridor (Production and agri-industry) along prominent transport links and at intersections: - Along the R60 from Rooiberg west of Robertson to Ashton; - Along the R317 from the R60 circle to Bonnievale; - Along main road Bonnievale and road connecting main road and R317 (pass Lactalis); - Including agricultural industries and big box agricultural buildings (to scale within agricultural context); - Including tourist facilities and farm stalls; - Including the heritage areas in the rural areas.			
Promote Agri-industrial infrastructure in settlements and delineate areas outside settlements to locate such infrastructure with the necessary sensitivity regarding visual impact and water quality along all rivers and specifically along the Breede, Keisie, Koo, Kingna, Groot, Dwarriega, Poesjenels, Keisers, Konings and Boesmans Rivers.			
- Strengthen agricultural value chain and support the development related to agricultural produce and services along transport networks and tourism routes: - Distribution facilities (e.g. pack sheds and cool storage); - Agri-related production facilities (e.g. biofuel); - Tourism development (protect the food value chain); - Agricultural and related industries, including agri-processing (potato, wineries, citrus, grape, and fruit processing); - Composting; - Alternative energy generation; - Ancillary services such as repair services.			

Map 39: Langeberg Intensive Rural Development Corridors

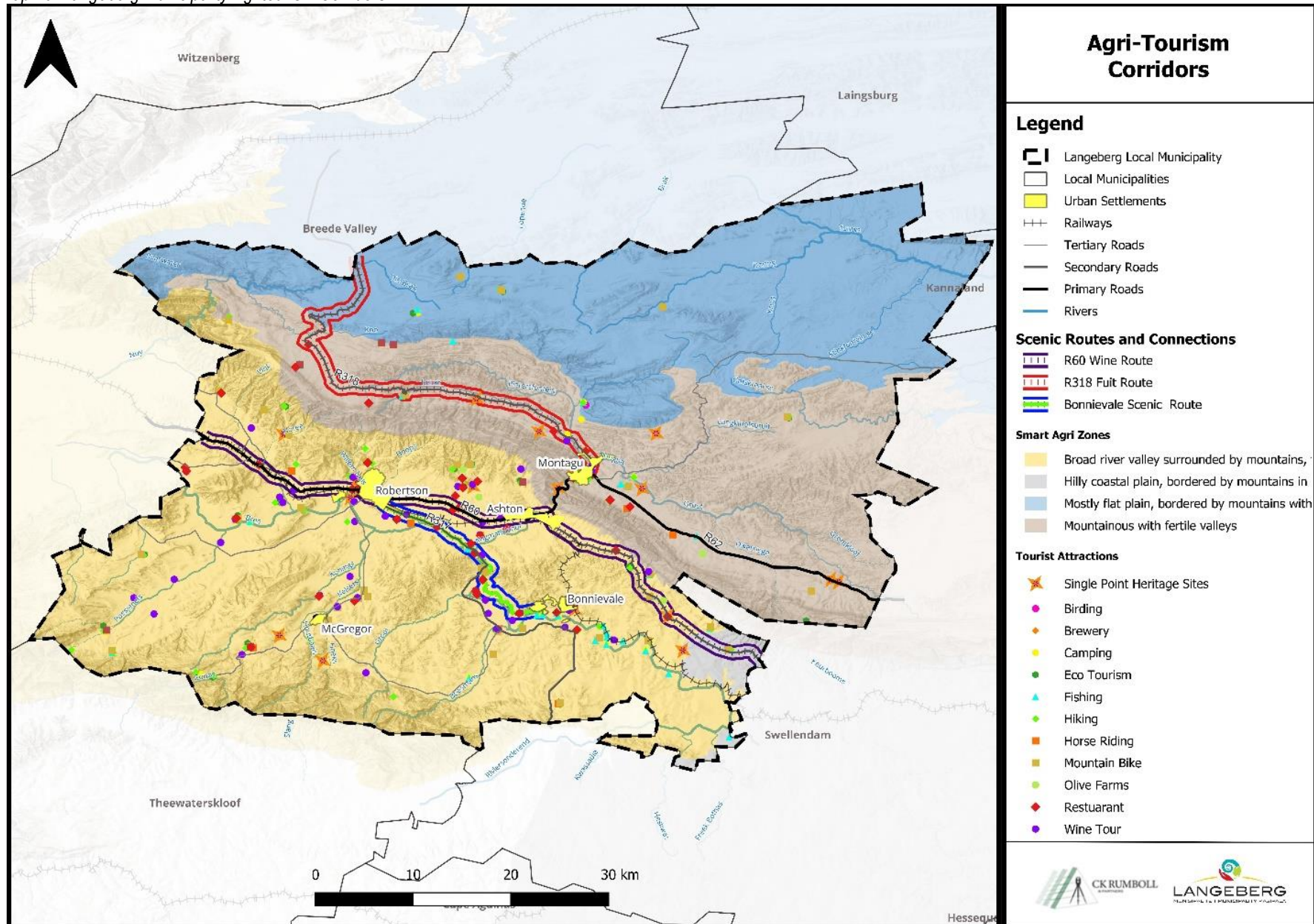


- Encourage labour intensive processing and manufacturing (for small scale agriculture); - Support the initiation of commercial activities involving agricultural/farm workers, such as farm stalls and local markets; - Promote a Langeberg brand /branded identity for produce from the Langeberg municipal area; - Enhance opportunities to establish new markets at local, regional, provincial and national level; - Promote the cultivation and marketing of agricultural produce (e.g. dried fruit) and their by-products (biofuel, agricultural service industries); - Stimulate the growth and diversification of the agricultural sector by combining cultivation with conservation to create new products and markets, such as alternative energy, tourism and by-products.			
Land reform and food security			
Protect and promote food security cross spectrum (households to global).			
Promote innovative land reform models with access to land and water and allow for various size farm units and rural living smallholdings.			
Facilitate tenure opportunities for new and emerging farmers, both small-scale and commercial, on municipal and state land as part of Land Reform Implementation.			
Prepare Robertson and its surrounding area as a potential future Agricultural Farmer Production Support Unit (FPSU) for the proposed Worcester/Swellendam Agri Hub under the Cape Winelands District Rural Development Plan).			
- Identify areas including municipal land, with potential for community gardens and small-scale agriculture in: - Bonnievale; - Montagu; - Ashton; - Robertson; - McGregor;			
- Promote the revitalisation of the rural economy to address poverty and improve access to local economy; - Provide agricultural workers the opportunity to fully or partially (e.g. farm stalls and local markets) participate in the rural economy within settlements and rural area: - Encourage food gardens, community gardens and small-scale agriculture; - Encourage the preference for locally produced agricultural products; - Promote the production of niche products on farms (value adding) and investigate the production of new agricultural related and complimentary products e.g. from fruit processing.			
- Re-orientate existing agricultural model to allow for the creation of agricultural units of various sizes (smallholdings, intensive and extensive agricultural farms, larger residential units) to accommodate: - Intensive cultivation; - Alternative farming methods.			
To support innovative approaches to food production and encourage diversification.			
- Identify locations to establish skills development facilities for agricultural workers to receive training in agriculture, tourism, niche product manufacturing (e.g. biofuel), and business operations and management. - Promote a small-scale agricultural forum for informal and small-scale farming areas to deliberate development issues and establish development parameters; - Strengthen associations to promote community participation in local development issues and to determine land use/ zoning guidelines.			
Landscapes, Historical areas, Scenic routes, Public structured open spaces & networks			
Netting, tunnels and agricultural industry and public utilities:			
- Ensure adverse effects of the placement of: - Polytunnels; - Agricultural shade netting; - Agricultural industries exceeding 2000 m², are mitigated with measures such as repositioning or screening after careful consideration of potential visual, cultural, and heritage impacts. - Require decommissioning of polytunnels and agricultural shade netting;			

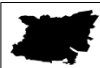
- Encourage repurposing rather than demolition of agri-industrial buildings, ensuring that conversions address concerns about activity intensity and adverse impacts on the surrounding character and cultural amenities. - Develop a netting practice note.			
Subject proposed large scale facilities (tourism and big-box) to an environmental assessment and ensure environmental approval is obtained before development takes place. (And manage and monitor as per EMPr).			
Specify guidelines for fences, allowing wire or steel palisade structures up to 2.1 meters in height, with limitations on masonry walls and brick piers to preserve visual aesthetics.			
Public Utilities: - Promote communication corridors and zones: - Improve communication networks; - Promote access to information & technology; - Including access to internet prioritising rural areas. - Advocate for the establishment and careful placement of communication network facilities, data centres, and telecommunication towers in rural areas and on agricultural land, considering environmental and community sensitivities; - Provide for adequate bulk infrastructure and the location thereof. - Develop a practice note on schools in settlements and in rural areas and make reference to Annexure B, LMSDF, 2015.			
Preserve the agricultural character of Cogmanskloof Pass along the Kingna River and poort linking Ashton (pass upgraded in last 5 years).			
Tourism: Support Langeberg cultivation routes (wine, stone fruit and grain/ lucerne and pastures) and the development of related infrastructure, facilities and accommodation.			
Provide for and capitalise on recreation and sports events as commercial opportunities on land, water and air e.g. Langeberg Meander Trail Run and Breede River river rafting.			
- Support proposed and current and cross border tourism routes and destinations: - Tourism routes: - Wine route: Robertson to Bonnievale (R317); Robertson to McGregor (Langverwagten Road), R60, R60 to Riverside and Goree, Robertson to Middelbosjesveld, Robertson to Montagu [R62]). - Proposed tourism route: - Stone fruit route: Keisie Valley along R318; - Klein Karoo/ agricultural landscape: (1) Montagu along R62 toward Barrydale; (2) From Brakkefontein Game Farm along Ouberg pass; - Klein Karoo: past Drie Kuilen & Rooikrans private nature reserves; - Promote Blue Train rail route, and Robertson train trips. - Proposed tourism regions: - Horses: Around Ashton and Bonnievale, Wine, Dried fruit. - Cross border tourism routes: - Winelands Wine Route including Robertson, Ashton, Montagu, Bonnievale & McGregor; - The Winelands scenic routes: R60, R317 from Bonnievale and Robertson. - Manage Cogmanskloof pass natural environment as per River Maintenance and Managment Plan.			
Promote resorts (camping, caravan parks, hot springs and game reserves) and support infrastructure development and spaces for festivals, events and celebrations. Provide for tourism infrastructure (roads and existing services), whilst complying with environmental impact assessment considerations.			
Encourage film industry uses (business tourism).			
Promote events/ festivals and support Robertson Wine Valley's Hands-on Harvest, kykNET and Robertson Wine Valley's Wacky Wine Weekend; Robertson Slow Lifestyle Festival; and Robertson Wine on the River to build awareness of conservation and cultivation.			

• Implement restrictions on: ○ Advertisements; ○ Signage; ○ Lighting. • Along river frontages within the settlement footprint, with exceptions for nameboards (number plate size) on waterfront buildings.			
• Develop practice note on placement and aesthetics of IT hubs and cell phone and communication masts.			
• Protect natural landscapes and establish development lines around mountains and koppies. Ensure preservation of marshes, water sponges, and floodplains.			
• Encourage tourism-related activities on farms and along waterways such as: ○ Farm stays; ○ Leisure accommodation and resort development; ○ Agri-processing; ○ Tastings; ○ Restaurants; ○ Farm stalls; ○ Wineries and private nature reserves.			

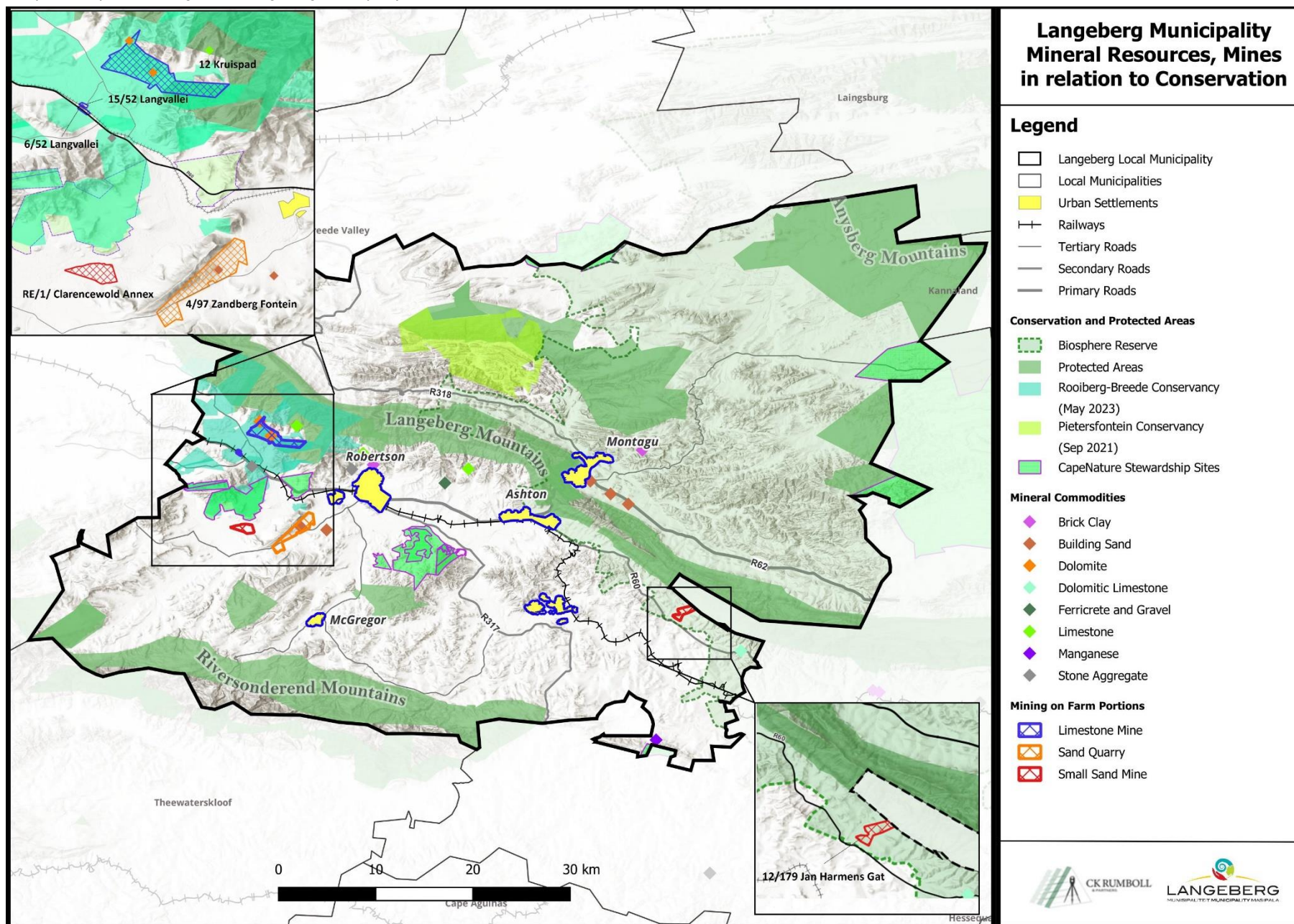
Map 40: Langeberg Municipality Agritourism Corridors



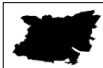
6.1.3 Mineral Resources

Opportunities			
Minerals			
Support land use changes for mining viable volumes of natural resources aligning with sustainability and environmental norms. Ensure mitigation of impacts, effective rehabilitation and utilisation of alternative transportation methods.			
Encourage the development of mining-related industries, mineral beneficiation (e.g. Langvlei) and support services at long lifespan mines to maximise economic benefits and create labour intensive employment opportunities.	-do-	-do-	-do-
Risks			
Dust, Colouration, Visual Impact and Water Quality			
Ensure EMPRs limit ecological (dust, water quality) and aesthetic damage (visual intrusion and coloration): - Pursue and ensure continuous rehabilitation and/ or repurposing of exploration activities or mines during and after operations as per EMPR; - Monitor adherence to EMPR and application of mitigation measures; - Develop land use directives in the absence of an EMPR to rehabilitate or repurpose ceased mines.			
Align mining activities, as illustrated in Map 41, with spatial planning, land use and environmental norms and parameters: - Limit mining to proven viable operations in Bioregion IV, Breede River Valley (Identify all mineral and geological sources suitable for mining and determine its financial viability [i.e. quality and quantity of resources] versus environmental degrading [impact on aesthetic value, tourism, boutique wine industry and intensive agricultural land uses] and ability to mitigate during operations and to rehabilitate). - Assess cost-benefit ratios locally, nationally, and internationally to inform decision-making and develop guidelines for sensitive areas; - Mandate adherence to sustainable environmental standards to minimise economic, environmental and social impacts; - Prevent high visual impact, short & long term and cumulative impacts on scenic landscapes and conservation-worthy resources; - Develop guidelines and detailed Area Plans to avoid sensitive landscapes and to prohibit mining working against tourism; - Require rehabilitation and repurposing; - Mitigate existing impacts e.g. use alternative transport of mined resources. - Ensure mines provide for adequate storage of overburden to limit and mitigate potential impact of mine dumps (heaps) on rural landscape; - Avoid contamination of water sources (in a water scarce municipal area contamination would have a long-term impact on the landscape character); - Caution and mitigate dust generation leading to landscape discoloration; - Prohibit mining that conflicts with conservation of resources of international importance.			
Caution mining activities which are not viable (all types, but sand mining specifically) and/or are conflicting with and counterproductive to the character and value of the landscape of Bioregion IV: Breede River Valley.			

Map 41: Proposed Mining Zone, Langeberg Municipality

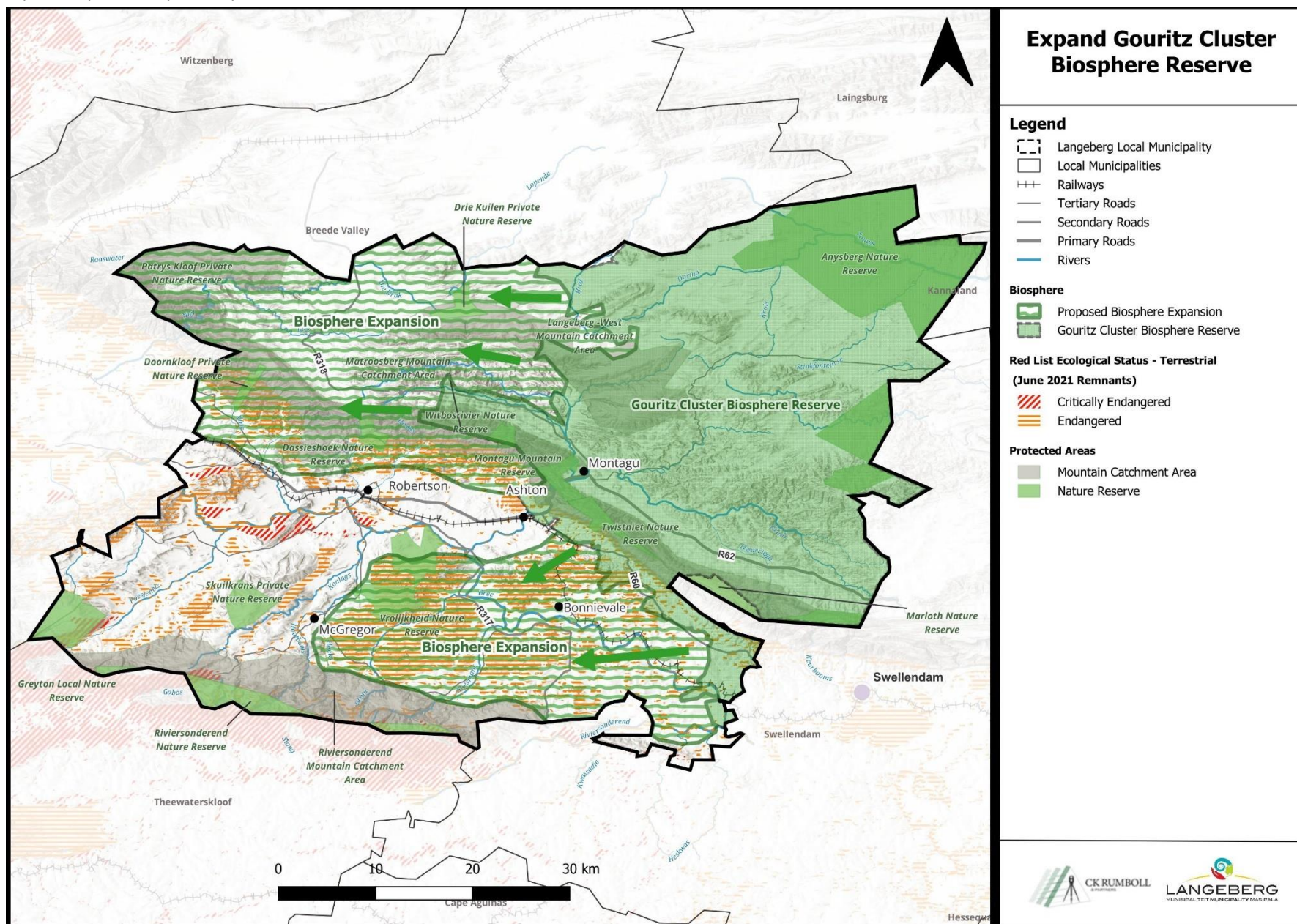


6.1.4 Vegetation, Fauna, Ecosystems

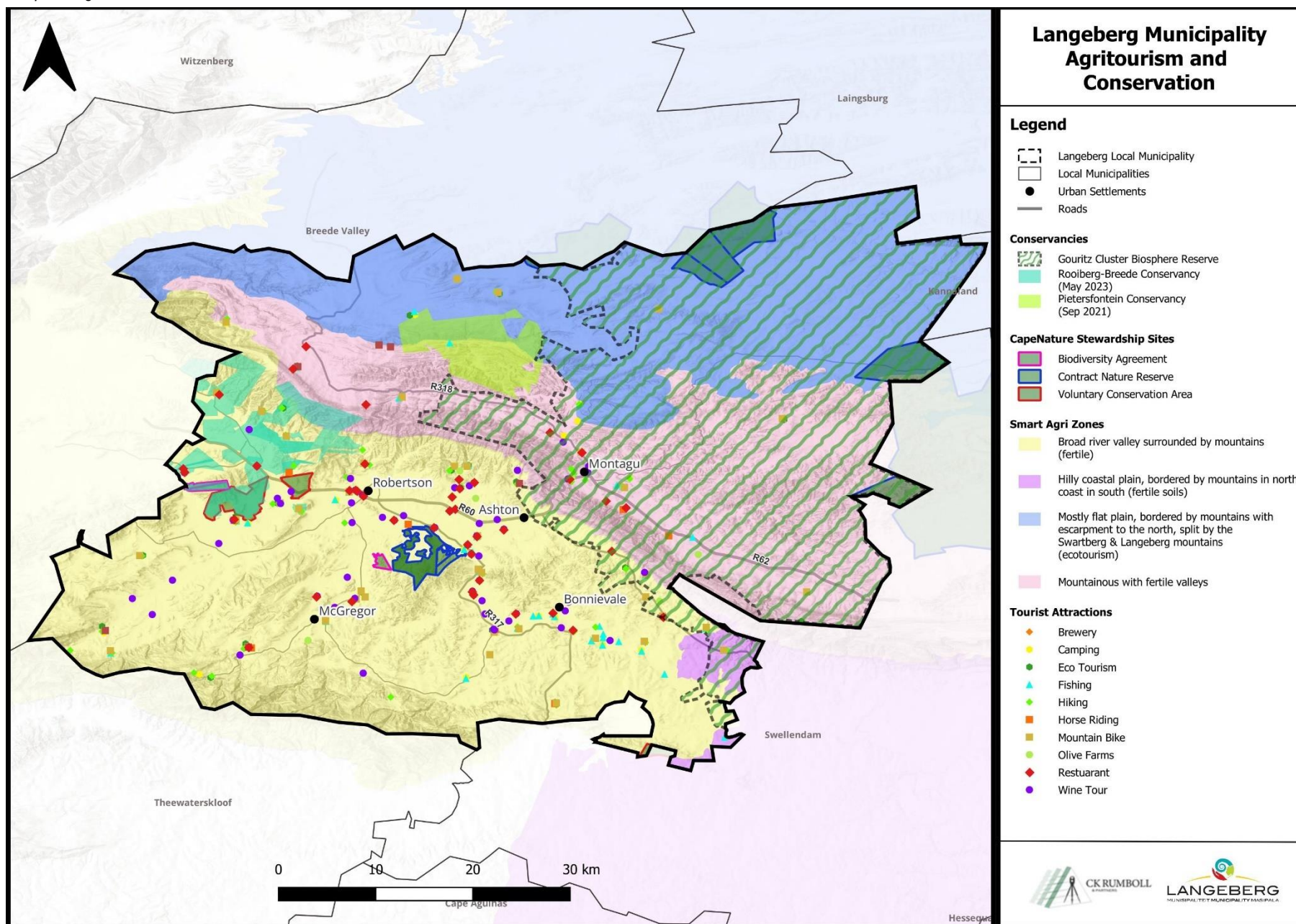
Opportunities			
Natural environment and Ecosystems			
- Protect natural assets, ecosystems and resources. - Preserve the critical natural capital within Langeberg, as it provides for continuous income from ecosystem advantages such as biological diversity, mineral resources and clean air and water (including biodiversity, topography, soils and water resources, geology, hydrology), and: - Promote its natural heritage value and use serving the public interest; - Pursue threatened fauna and flora species targets; - Preserve mature eucalyptus trees, whether as single mature trees or clusters, and woodlots; - Promote the establishment of wildflower reserves and nature reserves; - Target the inclusion of remnants of natural vegetation, in front of setback lines, behind development lines and within buffers along the lower reaches of mountains to restore ecological services. Where such remnants occur outside these lines and buffers, extend the conservation area; - Manage conservation areas in accordance with national norms and standards to ensure their long-term viability; - Limit internal fences to create natural corridors and areas.			
Promote the establishment of cross border initiatives (important conservation corridors) such as the Langeberg and the Riviersonderend Mountains and Gouritz Cluster Biosphere (including linking the natural environment to the larger network of reserves and conservation areas in the Langeberg Municipal area).			
Opportunities			
Spatial Planning categories			
- Promote application of spatial planning categories, to protect ecosystems and facilitate objective decision making in development applications: - Core Areas: Nature reserves; - Buffer Areas along mountain ranges and Biospheres; - Intensive Agricultural areas: Breede River, Riviersonderend, Keisie and Koo Valleys.			
Opportunities			
Impact on Landscapes			
Develop guidelines for: - Open space networks and riverfront interfaces, and addressing elements like use of colours, landscaping, lighting and architectural form; - Scenic and heritage (landscape heritage) route management.			
Opportunities			
Conservation Agriculture			
- Identify and delineate areas prone to erosion, both by wind and water, and implement measures to enhance rehabilitation and prevent erosion, employing protective preparation methods and planting perennial crops to stabilise the soil and mitigate erosion risks. - Promote and protect cross border activities including conservation agriculture towards the north and northeast, viticulture to the west (Breede Valley Municipality) and stone fruit to the west, and collaborate with neighbouring municipalities. - Enhance food security and protect sensitive natural environment and agricultural resources from inappropriate and opportunistic development. - Protect and conserve the agricultural landscape and retain and conserve the rural character through development guidelines.			

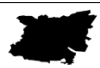
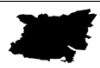
Also see Rural Guidelines, Western Cape, 2023

Map 42: Proposed Biosphere Expansion



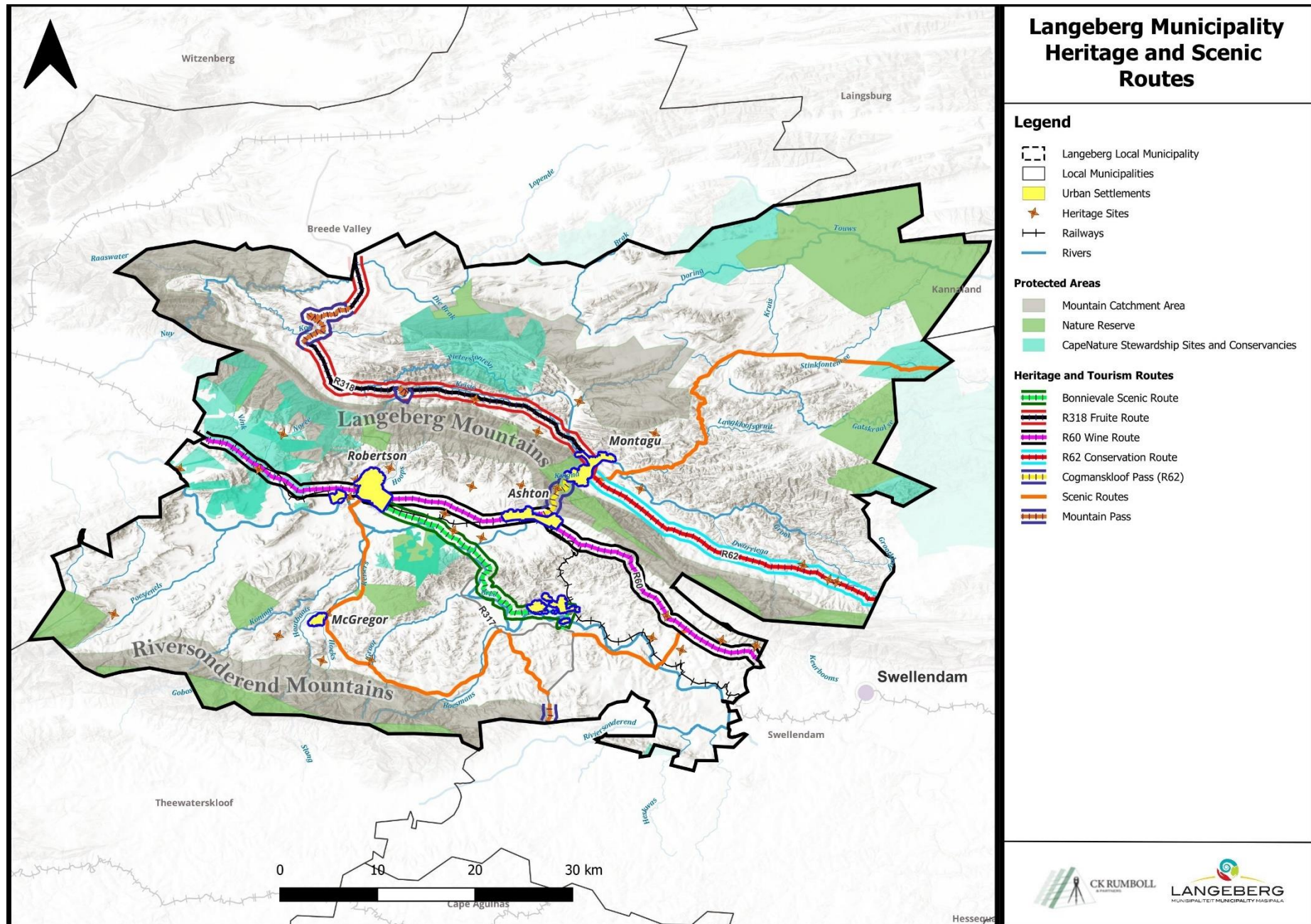
Map 43: Agritourism and Conservation



Opportunities			
Heritage and Tourism and Sense of Place			
Heritage Management:			
- Support the integration of heritage management and planning functions as per National Heritage Resources Act, Act 25 of 1999 (NHRA): - Update the heritage inventory and include urban and rural, inclusive of heritage resources (buildings and structures, archaeology), landscapes and prominent natural features, in areas of jurisdiction (Sections 30 (5) and 31) and heritage overlay zones (special heritage areas). These to be submitted to the relevant provincial heritage authority for formalisation; - Protect the cultural resources creating Langeberg's sense of place, and forming the basis of tourism; - Grade heritage resources to ensure the effective management and preservation thereof. (Grading has to be overseen by the Provincial Heritage Authority). A future consideration is to establish a heritage entity for Robertson and that this entity together with those of Montagu and McGregor will manage the graded heritage resources in their respective settlements and jointly manage the heritage resources in the rural areas.			
Scenic and Heritage Routes:			
- Promote scenic and heritage routes: - Explore alternative and more effective utilisation of conservation areas and heritage resources to create opportunities for alternate income generation on farms, such as hosting festivals.			
Establish conservation routes along the R62 (Montagu to Robertson) and establish Conservation & Heritage areas: Langeberg Riviersonderend and Hex River Mountains.			
Gateways and Signage:			
Develop understated, unique and where possible natural gateways to settlements. Avoid gateways and gateway precincts becoming advertising spaces.			
			
Promote improved roadside signage and understated entrance gates in sensitive landscapes.			
Preserve cultural and heritage resources with information boards. Utilise heritage sites for recreation and tourism. Develop tourism infrastructure sensitive to natural and historical landscapes.			
Celebrating heritage resources:			
Promote conservation of natural, cultivated and domestic landscapes, and heritage resources within the municipal area, safeguarding features like heritage elements, old farmsteads, and mature trees. Also, highlight socio-economic resources like biomes, wildflowers, historical & cultural heritage, and agricultural areas such as Montagu and Robertson.			
Map heritage landscapes, zones in settlements, significant farmyards and any other heritage resources in rural areas to guide appropriate development.			
			
Formally give notice of local heritage areas in settlements and rural areas.			
Support the restoration of historic spatial patterns and the effective and efficient use of existing infrastructure.			
Manage, rehabilitate and preserve cultural and historical landscapes, graves, monuments, etc. described by the National Heritage Resources Act.			
Improve and rehabilitate: Restore buildings and sites that have heritage value.			
Integrate ecological processes and community needs to ensure sustainable resource use in mountainous and riverine areas, guided by bioregional planning principles.			
- Grow Langeberg municipal area as part of the bigger Winelands and Conservation (ecotourism) drive: Birdlife, biomes, lush agricultural landscape, horses, wine production, cooking and cultivation. - Promote tourism and recreation activities and destinations. - Promote recreation such as hiking, mountain biking, fishing, bird watching, horse riding, 4 x 4 trails and clay pigeon shooting.			

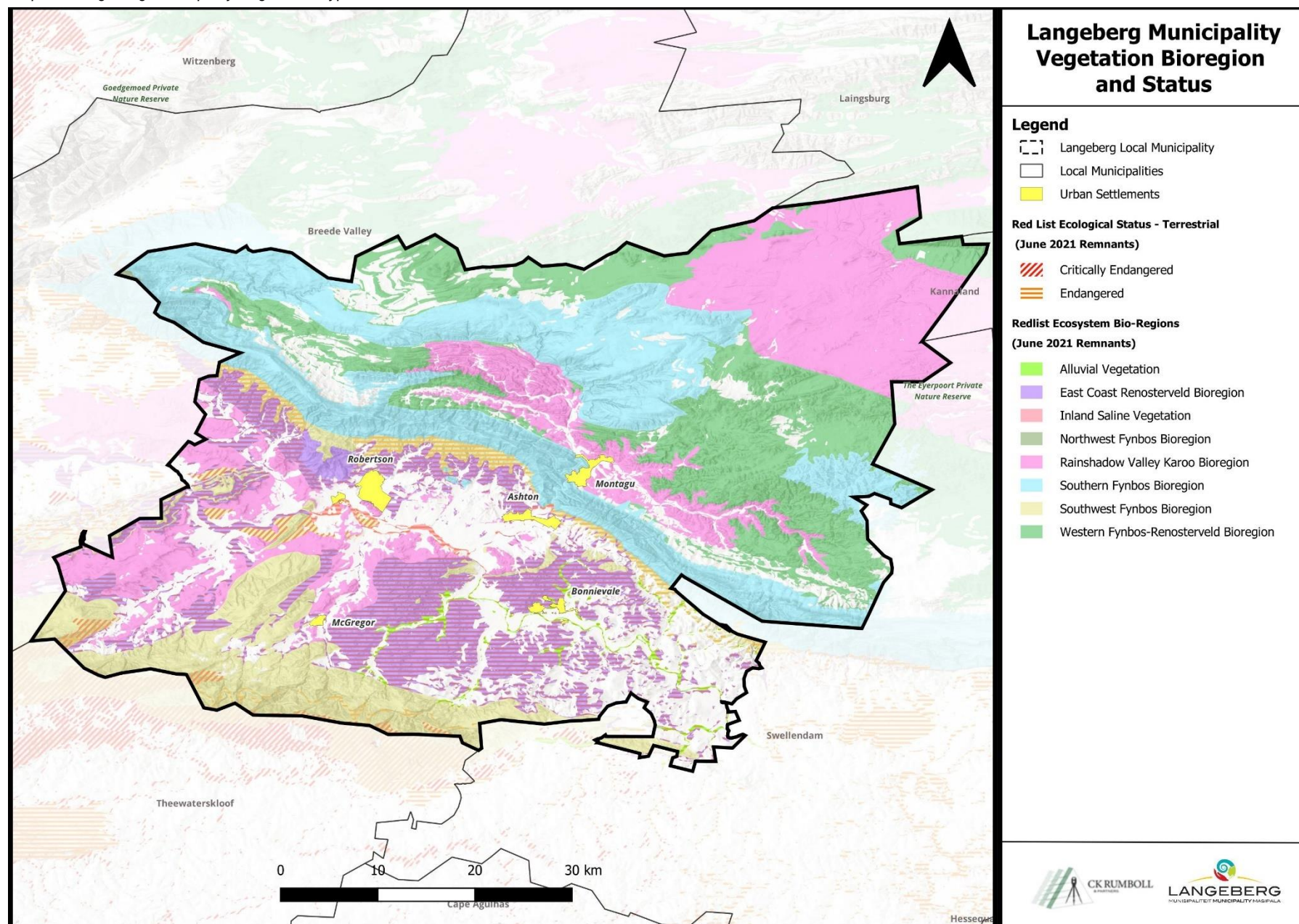
• Ensure that the amenity capacity of the biophysical environment is not exceeded.			
• Implement Economic incentives (for conservation) to stimulate growth (tax rebates).			
• Attract more retirees and working people (for whom remote working is an option due to improved technology and connectivity) who want to live in a more tranquil rural environment to settle in Langeberg municipal area (improved rates and taxes).			
Creating heritage: • Protect heritage resources, yet create areas with a fresh or new sense of place through urban design and rejuvenation.			
• Promote the planting of trees by all households and protect mature trees (20 years and older).			
• Promote evolving heritage sites as tourism destinations, including cultural and landscape routes, to celebrate and preserve local history and traditions.			

Map 44: Langeberg Municipality Heritage and Scenic Routes



Risks			
Natural environment and Ecosystems			
- Control invasive alien species (heightened fuel loads increase risk and intensity of vegetation fires): - Prohibit planting of listed invasive alien plant species; - Prioritise control efforts along ecological pathways like river valleys and remnant indigenous vegetation to prevent the spread of existing invasive alien plants beyond property boundaries; - and maintain firebreaks around property and infrastructure; - Prevent erosion when biomass is removed and firebreaks prepared; - Implement Preventive Early Detection and Rapid Response (EDRR) measures, such as regular surveys, prevention of seed production, identification of new species and prohibiting re-sprouting; - Apply systematic (mechanical, chemical and biological or natural enemy) control.			
Refer to Map 45 for an illustration of Langeberg Municipality Vegetation Types.			
Promote the establishment and formalisation of ecological corridors and conservancies to facilitate connectivity between different habitat areas, allowing for the movement of wildlife and to protect natural habitat areas.			
- Establish conservation buffers and or corridors inter alia to mitigate climate change and enhance proper ecosystem functioning: - Along mountains to ensure effective conservation and management of natural vegetation remnants; - Along agricultural landscapes; - As Open Space Networks in urban areas linking to rural areas to protect natural habitat areas; - As designated biodiversity priority areas.			
Preserve vital corridors and remnants of lowland habitat to boost agricultural productivity. This includes promoting CapeNature Stewardship Programmes and fostering partnerships with stakeholders.			
Expand Gouritz Cluster Biosphere Reserve (GBR) over entire northern area of Langeberg area.			
Promote the Langeberg and the Riversonderend Mountains and Gouritz Cluster Biosphere as important conservation corridors across municipal boundaries (including linking the natural environment to the larger network of reserves and conservation areas in Langeberg Municipal area)			
Establish buffer zones in urban, rural and agricultural areas as part of Open Space and Conservation Networks. These areas will support climate change corridors, with examples like the Gouritz Cluster Biosphere Reserve including the Anysberg Reserve bordering Kannaland municipality serving as climate change corridor.			
Promote management and conservation of catchment areas, clearing of alien vegetation, and wetland & river management.			
Minimise waste and mitigate environmental damage in the food production chain.			
- Ensure that all development activities, including mining, cultivation or business activities, are subject to and comply with: - Regulations set forth in the National Environmental Management Act and where required, guided by an environmental impact study and environmental management plan; <u>Risk and disaster management plans.</u>			

Map 45: Langeberg Municipality Vegetation Types



Risks			
Impact on Landscapes			
Limit the impact of development and urban growth on significant landscape features:			
• Delineate development lines for settlements along mountains and along flood plains: Robertson, Ashton, Montagu, Bonnievale and McGregor.			
• Ensure no land with a slope of more than 20% will be cultivated without written consent of the Minister of Agriculture.			
• Limit development: ○ That will lead to the clearing of more than 300m² of natural vegetation, where natural vegetation covers more than 75% of the area; ○ Of proposed large scale tourism facilities.			
Limit the impact of development and urban growth on significant landscape features. Prohibit in accordance with the WCBSP land use guidelines the following development that should not occur:			
• In <u>settlements</u>: Demolition of historical buildings. Any negative impacts on buildings or sites that have cultural or historical value; • <u>Landscapes</u>: Uncontrolled, unsightly development; • <u>Historical areas</u>: Uncontrolled, unsightly development; • <u>Scenic routes</u>: Uncontrolled, unsightly development e.g. wind farms; • <u>Structured open space & networks</u>: Commercial, industrial or residential developments; • <u>Conservation areas</u>: <u>Critical Biodiversity Areas</u> any development not focused on ecotourism; • <u>Critical Biodiversity Areas 2 (Rehabitable & irreplaceable areas) and Critical Ecological Support Areas and Other Ecological Support Areas</u>: developments that are not closely focused on ecotourism: Limited development after an Environmental Impact Assessment has determined the guidelines, could be considered; • <u>Other natural vegetation areas</u>: uncontrolled and non-compliant development: Residential, commercial and industrial developments could be considered.			
Issue development and no-development instructions according to the SPCs.			
Encourage development that has no significant impact:			
• In <u>settlements</u>: Restoration of buildings for offices, guest houses, etc.; • <u>Landscapes</u>: Limited, low-density development that is not visually apparent and adds value to the environment; • <u>Historical areas</u>: Limited, light density development that is not visually apparent and adds value to the environment; • <u>Scenic routes</u>: Limited, light density development that is not visually intrusive; • <u>Structured open space & networks</u>: Limited development.			
Risks			
Heritage and Tourism and Sense of Place			
Sense of Place and Landscapes:			
• Preserve and promote the character of the Langeberg municipal area, inclusive of the unique agricultural (wine, fruit: processed and byproducts), heritage and natural environment and landscape.			
• Develop design and development parameters to protect settlement patterns and rural landscapes: ○ Conserve historical town centres often determined by the location of drinking water or a church and grid layout pattern; ○ Protect unique character of settlement and within settlements: ▪ Protect critical biodiversity areas, ecological corridors and ecosystems; ▪ Protect unique natural and manmade landscape features and structures; ▪ Protect scenic routes and vistas; ▪ Protect heritage features and landscapes and create future heritage landscapes; ○ Retain and preserves conservation areas designated as biodiversity priority areas as indicated in the Spatial Development Framework; ○ All monitoring and management aspects must be set out by a biodiversity environmental management plan, to be drawn up for priority areas.			

- Promote guidelines for rural areas:
 - Maintain existing nodes and a meaningful settlement hierarchy in the Western Cape. Promote smart growth by curbing urban sprawl and prioritising infill and densification of existing urban areas.
 - Prevent urban development encroachment into agricultural areas, scenic landscapes and biodiversity priority areas;
 - Provide housing opportunities and agri-villages or agri-precincts for rural dwellers in existing settlements (in partnership with agri workers and farmers) or ensure security of tenure for agricultural workers or ensure their enrolment on the waiting lists in Bonnievale, Montagu and McGregor.



6.1.5 Air, Wind and Sun

Opportunities

Air & wind and sun

Promote alternative energy generation facilities (wind, solar and hydrogen) in viable zones only:



- Promote solar energy overall for Langeberg (Map 47);
- Provide for solar facilities to cater for future urban expansion. Generate alternative energy: Robertson, McGregor, Bonnievale, Ashton and Montagu;
 - Within close proximity to substations and other electrical infrastructure in all wards.
- Wind Energy (Refer to Map 46): Consider avoidance of slopes and between McGregor and below Bonnievale.

Risk

- Implement measures to protect surface and groundwater by:
 - Designing roads;
 - Treating runoff from roads;
 - Disturbing surfaces to reduce sedimentation and prevent erosion.
- Prohibit erosion potential and soil type influences resulting from road construction and re-vegetation efforts.



- Conduct a comprehensive vegetation assessment if the proposed development site is not in an agriculturally disturbed area. The assessment should evaluate the location and condition of:
 - Extent of disturbed or alien vegetation;
 - Extent of any natural vegetation;
 - Indigenous and endemic species;
 - Rare and threatened species.



- Consider the following for terrain suitability:
 - Slopes by gradient classes;
 - Rocky areas;
 - Soil type and permeability;
 - Natural watercourses and areas with high water tables, rainfall data;
 - Vegetation.



The natural landscape contributes significantly to the cultural integrity and future heritage of the environment of Langeberg as conservation and ecotourism destination.

Consider placement on slopes given impact on:



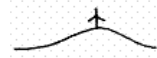
- Wind Potential – slopes, up to a certain gradient, orientated towards prevailing wind directions, tend to augment average wind speed;
- Solar radiation – slopes influence placement and various technologies require different placement direction;
- Visibility – wind and solar farms on slopes have increased visibility;
- Road layout and design – slopes to be considered in road layout to reduce erosion potential, of road runoff, rockfall and landslide potential;
- Tower foundation/ pedestal design – need to consider falls across the platforms;
- Soil stabilisation – steep road verges and cuts require re-vegetation to reduce erosion from runoff.



sensitive



dominating



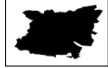
sculptural



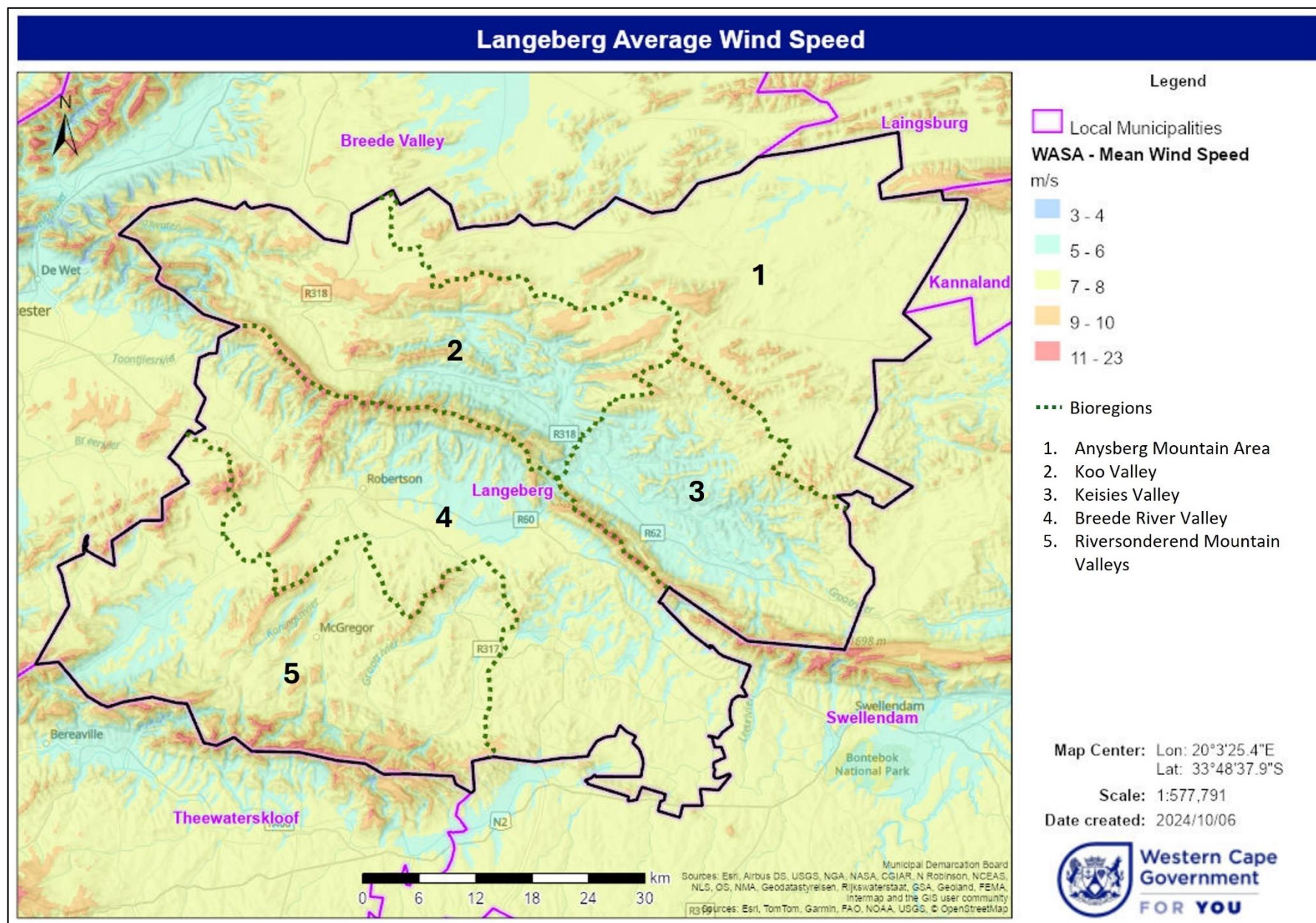
utilitarian

Location options for wind turbines

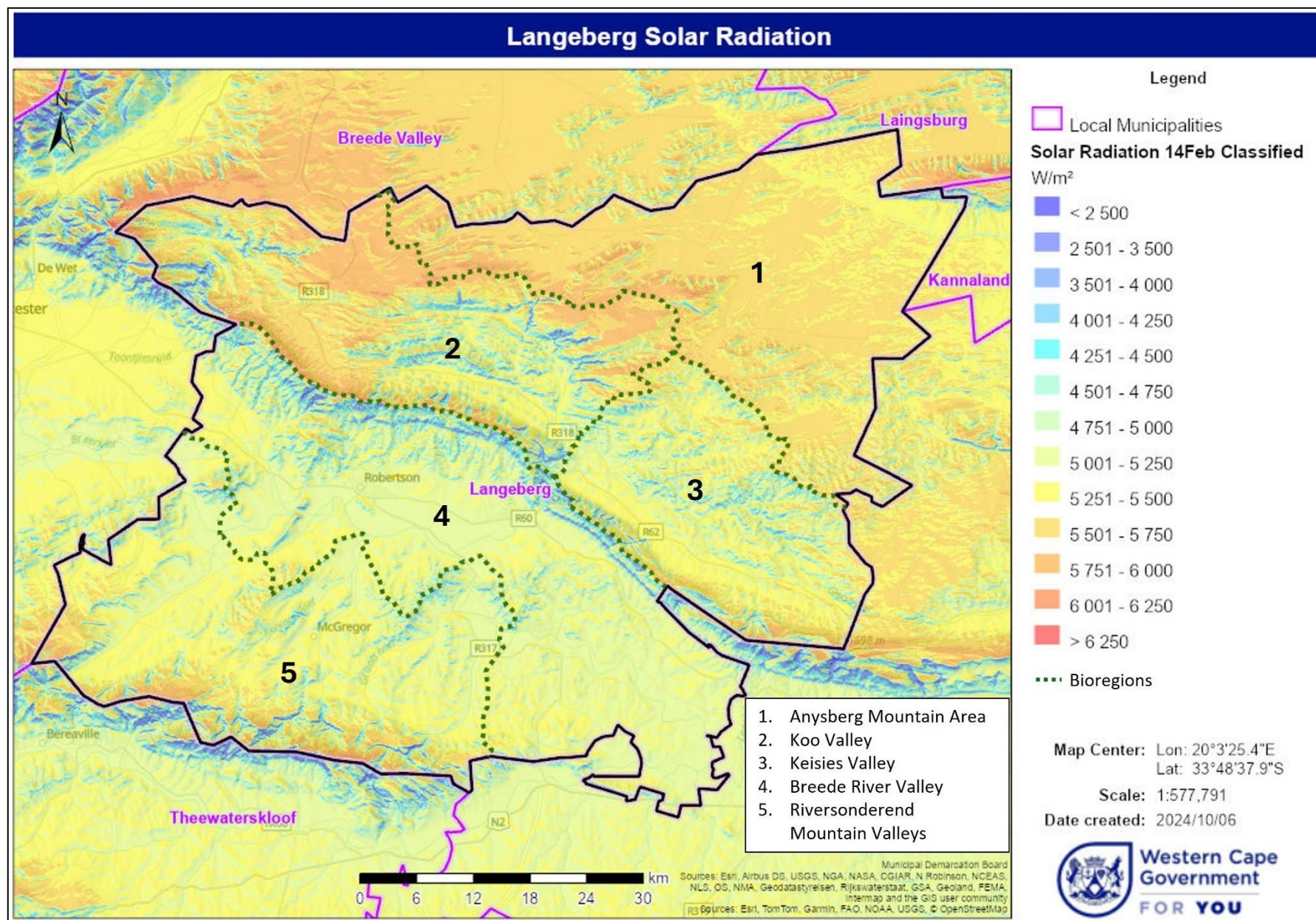
Air Quality			
Manage and monitor air quality: - Enhance enforcement and management of air quality compliance. Increase awareness regarding air quality management. Upgrade existing air quality management tools. - Invest in adequate human and financial resources to ensure effective implementation and management of air quality; - Integrate Climate Change and Air Quality Management.			
Pollution Sources: Where information is available or where emission factors can be applied to quantify emissions, an emissions inventory for air pollution sources has been compiled. (See SANS 1929: 2005 - Ambient Air Quality - Limits for common pollutants and National Environmental Management: Air Quality Act 39 of 2004). Potential air pollution sources in Langeberg: - Industrial operations - mainly emissions from small boiler sources and larger industry such as canning factories and lime mining (Particulate and gaseous emissions). - Agricultural activities - although not quantified, agricultural activities are considered to be a contributor to ambient particulate concentrations. - Agriculture is a dominant land use within Langeberg. - Mining Activities – Mining activities to a limited extent. Pollution sources are mainly surface activities like: - Waste loading and unloading; - Resource loading and unloading; - Exposed screening plants; - Waste dumps; - Stock yards; - Exposed pit surfaces; - Transport roads and haul roads. - Biomass burning (veld fires) - also not quantified, owing to the irregular and seasonal nature of this source. - Vehicle and generator tailpipe emissions - from petrol and diesel vehicles along major roads and generators (to generate energy during loadshedding) but this is not considered to be a significant air pollution source (Particulate and gaseous emissions). - Waste treatment and disposal – information regarding disposal facilities (landfills and incinerators) has been collected partially. - Domestic fuel burning including wood and paraffin. - Dust from paved and unpaved roads. - Other fugitive dust sources such as wind erosion of exposed areas.			
<u>Manage (avoid, mitigate or reduce) air pollution:</u> Ensure that air pollution is avoided, or where it cannot be altogether avoided, mitigated or minimised in accordance with the Langeberg Air Quality by-law, 2020 or any other related laws. - Develop an Air Quality Management Plan (AQMP) and implement measures to mitigate potential air pollution sources in the Langeberg municipal area. - All monitoring and management aspects as set out in Langeberg Air Quality by-law, 2020, to be drawn up for priority areas: - Agriculture and mining; - Utilities (sewerage, waste); - Industrial areas (areas of production within settlements) (All industries using coal to operate boilers and having stacks (Ashton and Bonnievale)); - Serving as informant of future development in close proximity and guided by an environmental impact study. - All proposed activities where emissions exceed intensities as per listed activities in section 21 and 23 of the Air Quality Act, including: - Smoke caused by burning; - Generated dust;			

○ Odours and spraying (e.g. Conduct passive H₂S monitoring of wineries (Robertson) and canning factories (Ashton, Wildepaardehoek) must be subjected to an environmental impact assessment and environmental approval must be obtained before the activities may take place; ○ Monitor implementation of mitigation measures to prevent increased air pollution episodes that contribute to climate change. Measures to address climate change include: ▪ Increasing the number of monitoring stations in the Western Cape; ▪ Effective dissemination of air quality information; ▪ Introducing cleaner fuel programmes for households and transport.			
• Langeberg Municipality to refine priority pollutants list according to its by-laws, establish more stringent local air quality standards, set local emission standards, monitor ambient air quality, and prepare an annual report on the implementation of the AQMP.			
Prevention and reduction measures:			
• Prepare for wildfires in mountain areas and delineating firebreak buffers around towns such as Montagu.			
• Promote the incorporation of trees and plants that enhance air quality in all development projects. Advocate for mitigation measures to address dust, discoloration, and visual impacts associated with mining activities.			
• Adopt climate change mitigations to reduce GHG emissions. This is done to build a sustainable low carbon economy including but not limited to: a reduction in need for transport fuels, compact settlement planning, a reduction in energy use and a switch to renewable energy.			

Map 46: Proposed Wind Zone, Langeberg Municipality

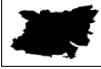


Map 47: Proposed Solar and Hydrogen Zones, Langeberg Municipality

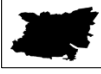
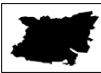


6.1.6 Connectors

See Annexure 2 for directives of the Department of Infrastructure (DOI) Transport Infrastructure Branch.

Opportunities			
Mobility, Transport Networks & Economic Links:			
<u>Roads as connectors:</u>			
- Functionally (easy access): integrate rural and urban areas as connector roads within Langeberg municipal area to link with: - Western Cape; - Northern Cape; - Namibia; - The Karoo; - And provide important freight and scenic routes, across the region. - Support the enhancement of the following freight routes: - R60 as gateway to N1 and Cape Town in the south and provide for opportunities in Robertson and Ashton for freight and distribution related industries; - R62 as link between the Winelands and Klein Karoo (Oudtshoorn) and N12 and provide for tourism infrastructure and activities; - R317 as link between the Winelands and Struisbaai on the Coast and provide for tourism infrastructure and activities; - Strengthen link between R62 & R318 connecting Breede River and Groot Karoo. - Promote maintenance of road network to support economic activities (commercial, industrial and agricultural); - Rail freight has experienced a significant decline, while road freight has seen a sharp increase.			
<u>Transport nodes:</u>			
- Promote and support the establishment of transport and transport service nodes along key provincial and national roads and at intersections, such as the: - R60 and the R317 in Robertson and; - R60 and R62 in Ashton. - Adhere to SANRAL and Department of Transport and Public Works' criteria such as distance between nodes and visibility where applicable; - Develop new transport infrastructure (farm stalls or convenience shops) sensitively within the agricultural and conservation landscape to support economic activity and seamlessly integrate and harmonise into the environment; - Ensure visibility of node development to safeguard intersection nodes; - Enhance mobility between rural and urban areas; - Focus node development on: - Tourism and mobility; - Agricultural and fishing support services; - Reliable public transport services (a mobility hub) along the R60 between Robertson and Ashton, Ashton and Montagu (R62) as well as between Robertson and Bonnievale (R317) to increase the mobility of the local community.; - Freight distribution; - Enhancing service stations. - Should an Arterial Management Plan be required for the development of nodes, it is subject to approval by the DTPW Roads Branch, to preserve the mobility function of routes (refer to Annexure 2 for details); - Provide access along Proclaimed Provincial and National Roads in accordance with the WCG DTPW Access Management Guidelines (2020) and SANRAL policies.			
- Develop an area plan and guidelines for clustered agricultural development along scenic routes and rural corridor/ triangle around and between: - R60 rural corridor around and between Robertson and Ashton including agricultural industries and big box agricultural buildings. - Include agricultural industries and big box agricultural buildings.			

Rail: • Encourage the use of rail as an alternative mode of transport, particularly for freight (agriculture and mining); • Introduce passenger rail services for commuters and tourists in Winelands District (Bellville to Oudtshoorn). (inter municipal route). • Support the implementation of special train trips: ○ Between Robertson & Ashton (tourism and employment elsewhere or access to education). (Railway line to Gauteng); ○ From Cape Town to Robertson and Ashton and Bonnievale during winter season.			
Mobility: • Promote improved mobility in rural areas: ○ Provide for upgrading of pedestrian routes and adequate lighting; ○ Where freight routes intersect with settlements, locate pedestrian and NMT routes away from freight route; ○ Along freight routes outside settlement, locate pedestrian and NMT routes at a safe distance or away from freight route; ○ Identify and provide for safe/all-weather bus/taxi stops along main transport network to serve the rural community.			
Public Transport, motorised: • Investigate the feasibility and reliability of a public transport service along: ○ R60 between Robertson and Ashton; ○ R62 between Ashton and Montagu; ○ Between Robertson and Bonnievale (R317) to increase the mobility of the local community.			
Transport Nodes: Safeguard the formalisation of the intersection of: • R60 and the R317 in Robertson; and • R60 and R62 in Ashton. Promote the development of the intersections as nodes aligned with the requirements of DOI Transport Infrastructure Branch.			
Public transport, rail: • Introduce or enhance passenger rail services (public-private partnership) for both commuters and tourists: ○ Worcester, Robertson and Ashton to support increased economic links & mobility of people.			
Air: Support private airstrips and helicopter landing pads which are used in cases of emergency.			
Social amenities			
• Provide social amenities in accordance with CSIR standards to enhance the well-being of residents.			
Access to education: • Promote access for agri-workers and rural dwellers to education and development programmes.			
• Provide for and support development of early childhood education facilities on farms and rural areas particularly where intensive cultivation take place. ○ Breede Valley; ○ Koo and Keisie Valleys; ○ Riviersonderend Valley.			
• Establish a skills training facility and short-term accommodation in Ashton, Robertson and Bonnievale.			

Repurposing of railway infrastructure and stations: - Promote the renewal, upgrading, and redevelopment of existing station buildings at: - Robertson, Ashton and Bonnievale and three sidings: Vink, Merwespont and Drew - Additionally, improve siding infrastructure including grain silos and water storage facilities;			
Mobile social services: - Provide for mobile social service in rural areas and prevent deterioration in the Human Development Index, including: - Mobile clinics; - Early childhood education facilities; - Mobile libraries; - Firefighting; - Ambulance service; - Busses and taxis; - Law enforcement. - Develop a practice note or by-laws for supporting Fetal Alcohol Syndrome persons, - In liaison with Western Cape Provincial Administration, develop a practice note or by-law and standard operational procedures to deal with unlawful occupation of land.			
Rural public open spaces: - Promote the identification and formalisation of public open spaces along specific water courses in rural areas; - Enhance public areas or spaces through promoting urban design and landscaping.			
Strategic rural sites: Identify strategic rural sites to provide for consolidated, centralised social and sport infrastructure in highly accessible nodes i.e. sport complexes combined with community facilities.			

6.1.7 Nature Reserves & Conservancy

6.1.7.1 General Directives

Conservation of biodiversity and wilderness character	• Prioritise sustainability in farming and wine production, aiming to maintain ecological balance and conserve natural resources; • Promote intervention farming practices and environmental education initiatives which contribute to the preservation of natural habitats and biodiversity.
Co-management and effective governance	• Secure financing; • Ensure adequate resources and capacity; • Collaborate with local communities and conservation organisations, such as the WWF and Cape Nature, to achieve shared conservation goals; • Encourage private sector involvement which is crucial in biodiversity conservation, as evidenced by the successful reintroduction of rare species; • Showcase, through the establishment of genetic diverse populations, effective co-management between reserves and conservation authorities.
Research and monitoring	• Promote scientific research; • Maintain ecosystem health and functioning; • Remove invasive alien vegetation; • Increased records of scarce species; • Vegetation studies have been conducted to understand and classify the vegetation units within the complex, informing conservation targets and management actions; • Ongoing monitoring of wildlife populations demonstrates a commitment to research and conservation; • The presence of healthy populations of reintroduced species indicates successful conservation practices and long-term monitoring strategies.
Public awareness	• Make visitors aware to use established paths; • Work to increase public awareness about the significance of conserving biodiversity and wilderness character through various educational initiatives; • Promote reserves through guided drives and fostering appreciation for biodiversity and wilderness; • Encourage educational programmes and awareness initiatives to inform the public about the importance of conservation and sustainable practices; • Through collaborative efforts with local communities and tourism agencies, promote awareness of the reserves' ecological significance; • Celebrate events like World Wildlife Day and Earth Hour to raise awareness of environmental issues and the importance of sustainable practices.
Economic benefits and ecotourism	• Conserve unique environments within the Riviersonderend Complex to contribute to sustainable wine production and to minimise the loss of threatened natural habitats; • Derive economic benefits from nature-based tourism opportunities, incorporate sound natural resource management practices throughout agricultural and winemaking operations; • Provide opportunities for ecotourism and outdoor recreation, contributing to the local economy through tourism-related activities and services; • Through sustainable farming practices and conservation efforts, contribute to the preservation of natural ecosystems, support ecotourism and recreational activities like hiking and birdwatching; • Promote guided drives and overnight stays which contribute to the local economy while promoting conservation efforts; • Attract visitors from both local and international markets to reserves offering a unique Big 5 safari experience; • Encourage accommodation options which cater to various preferences, from luxury lodges to camping experiences, supporting a range of tourism interests.
Development that should not occur	• Farming; • Any urban type of development; • Exploitation of important species (Fauna and Flora);

	• Preservation of biodiversity and wilderness character is essential across all reserves, with careful consideration given to any development that may harm these aspects; • Mining.
Directives	• Encourages the removal of invasive alien woody plant species and effective fire management; • Advocate for the management of large game species in accordance with policies to maintain ecological balance and prevent encroachment; • Ensure any development plans prioritise conservation and sustainable land management, avoiding activities that could degrade natural habitats or disrupt or impact ecosystems; • Prioritise sustainable farming practices, minimal intervention winemaking, and waste management strategies to minimise ecological footprint and maintain ecosystem health; • Encourage continued collaboration with local communities and conservation organisations to ensure that development efforts align with conservation objectives and benefit present and future generations; • Carefully plans expansion of infrastructure to avoid disrupting wildlife habitats and pristine wilderness areas; • Emphasise sustainable tourism practices to prevent overexploitation of natural resources and ensure the long-term viability of the reserves; • Sensitively promote alternative energy amidst conservation.

6.1.7.2 Nature Reserves & Conservancy (North of R62 & R318)

Anysberg, Driekuilen, Mont Eco, Pietersfontein, Sanbona, Machaseh, Bloutoring, Kruisrivier & Gecko Rock.

Management Priority	Priority Focus Area
Anysberg, Driekuilen, Mont Eco, Pietersfontein, Sanbona, Machaseh, Bloutoring, Kruisrivier, Gecko Rock.	• These sites boast diverse wildlife including Cape Mountain Zebras, various antelope species, and rare sightings of Cape Mountain Leopards.
Conservation of biodiversity and wilderness character	• Conservation measures to minimise human impact, ensuring the preservation of flora and fauna; • Reintroduce endangered species such as the riverine rabbit and black rhino, contributing to biodiversity conservation.
Co-management and effective governance	• Private sector involvement is crucial in biodiversity conservation, as evidenced by the successful reintroduction of rare species like black rhinos and riverine rabbits; • The establishment of genetic diverse populations, such as the Cape Mountain Zebras, showcase effective co-management between reserves and conservation authorities.

6.1.7.3 Nature Reserves & Conservancy corridor (South of R62 & R318, North of Breede River)

Zoetigheid, Riverscape, Graham Beck, Doornkloof, Witbosrivier, Twistniet, Marloth & Montagu Mountain Reserve.

Management Priority	Priority Focus Area
Zoetigheid, Riverscape, Graham Beck, Doornkloof, Witbosrivier, Twistniet, Marloth & Montagu Mountain Reserve	- Unique Cape Floral Kingdom biodiversity, including critically endangered species like the Cape Leopard and Riverine Rabbit; - The corridor comprises multiple nature reserves spanning from east to west, each offering unique landscapes and biodiversity.
Conservation of biodiversity and wilderness character	- The Rooiberg Breede River Conservancy, protects unique Cape Floral Kingdom biodiversity, including critically endangered species like the Cape Leopard and Riverine Rabbit; - Endangered Breede Redfin Minnow occur in upper stretches of the Vink and Noree streams; - Brown Hyena and Honey Badger.
Co-management and effective governance	- Graham Beck's Conservation Champion status and involvement in initiatives like the Rooiberg Breede River Conservancy highlight effective co-management and governance structures; - The Beck Family Development Trust supports philanthropic projects and conservation awareness, promoting sustainable resource utilisation and habitat conservation.
Research and monitoring	- Graham Beck conducts ongoing research and monitoring of conservation projects, aiming to reduce environmental impact and enhance biodiversity; - Innovative initiatives like the Neutron Moisture Probe readings and river management plans demonstrate a commitment to adaptive management and conservation research; - Continued restoration programmes and monitoring efforts track progress and ensure the long-term success of conservation projects.

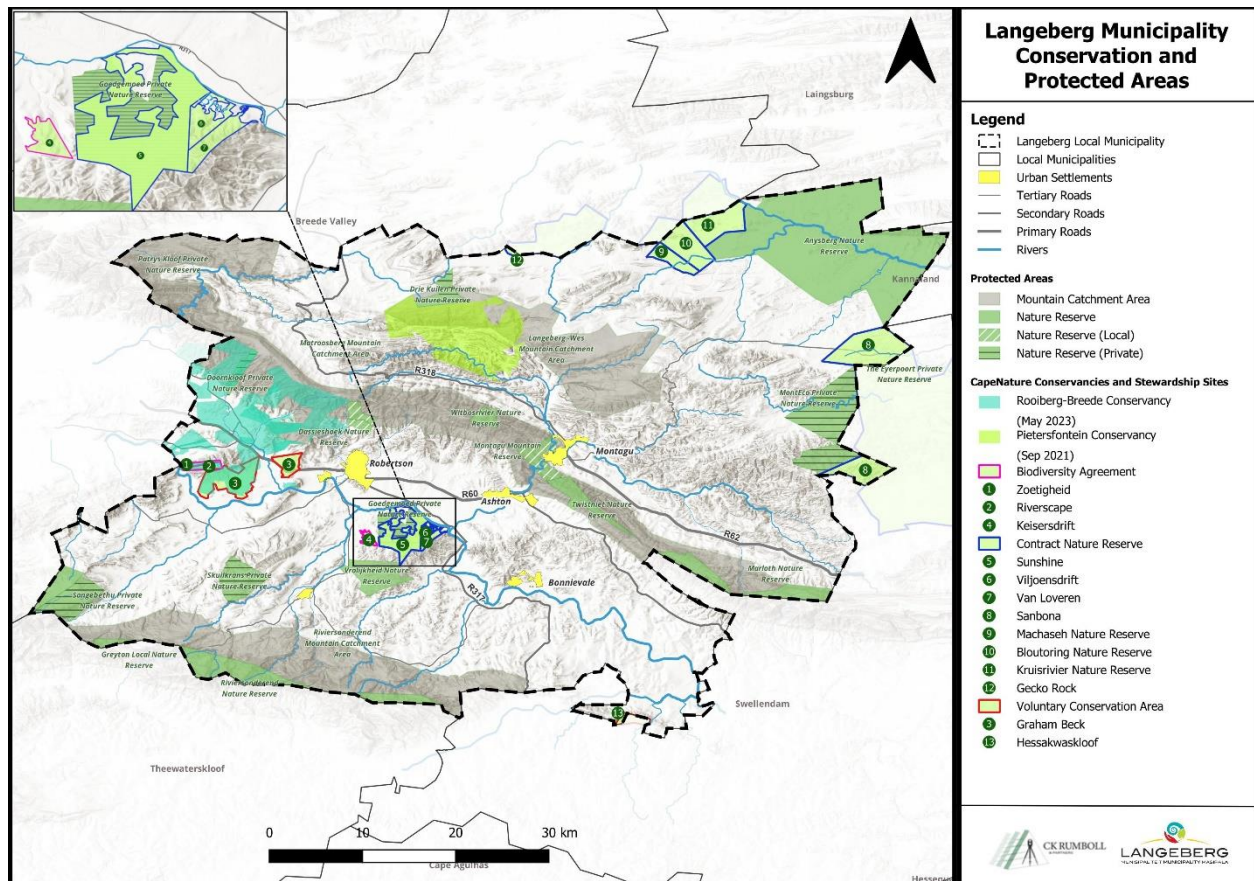
6.1.7.4 Nature Reserves & Conservancy (South of Breede River)

Sangebethu, Skuilkrans, Riviersonderend, Vrolijkheid, Keisersdrift, Sunshine, Viljoensdrift, Van Loveren & Hessakwaskloof.

Management Priority	Priority Focus Area
Sangebethu, Skuilkrans, Riviersonderend, Vrolijkheid, Keisersdrift, Sunshine, Viljoensdrift, Van Loveren & Hessakwaskloof.	- Include healthy catchments, ecosystem services and human well-being benefits; - Vegetation units comprise various biomes, including Fynbos, Forest, Succulent Karoo and Azonal Vegetation Biome.
Conservation of biodiversity and wilderness character	- Protect ecosystem services, biodiversity, connectivity and diverse cultural heritage; - Conservation targets include Fynbos Mosaic, Succulent Karoo, Freshwater Ecosystems, Landscape Connectivity and Diverse Cultural Heritage; - The area falls within the Core Cape Subregion, one of the world's smallest but richest floral kingdoms, with high plant biodiversity and a range of ecosystems.
Research and monitoring	Increased records of nocturnal species such as Aardvark, African Wild Cat and Honey Badger.
Economic benefits and ecotourism	The conservation of unique environments within the Riviersonderend Complex contributes to sustainable wine production and minimises the loss of threatened natural habitats;

	The reserves offer a unique Big 5 safari experience, attracting visitors from both local and international markets.
Public awareness	CapeNature promotes access to environmental education, advocacy and natural & cultural heritage within the Riversonderend Complex.
Economic benefits and ecotourism	Conservation initiatives like the Rooiberg Breede River Conservancy attract visitors interested in experiencing and learning about biodiversity conservation.

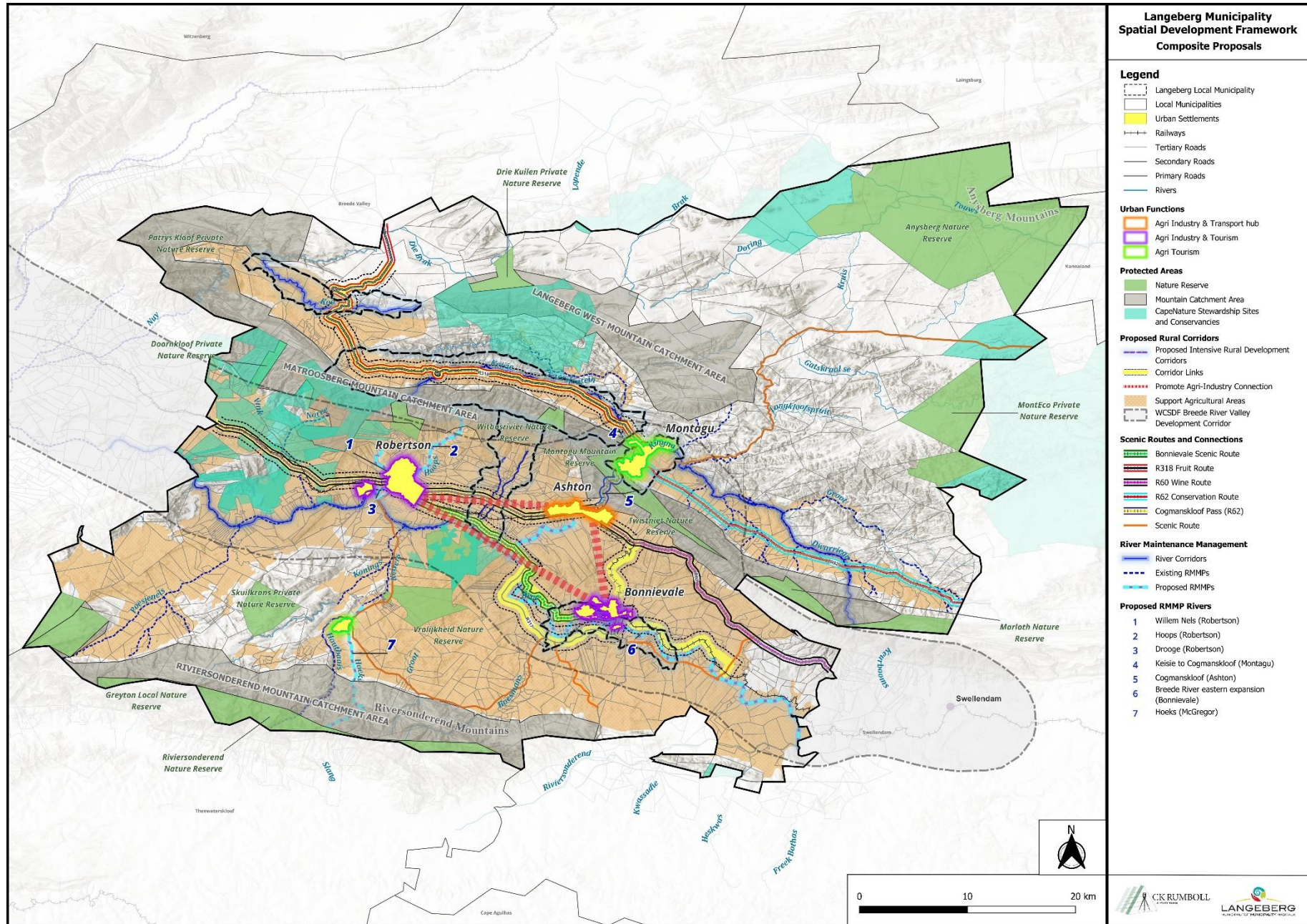
Map 48: Conservation and Protected Areas



6.2 Composite Proposals

The Langeberg Municipality SDF Composite Plan (Map 49) illustrates all the rural development proposals. The composite plan also illustrates the well-connected location of the Langeberg settlements and the opportunities for spatial integration of the rural development proposals.

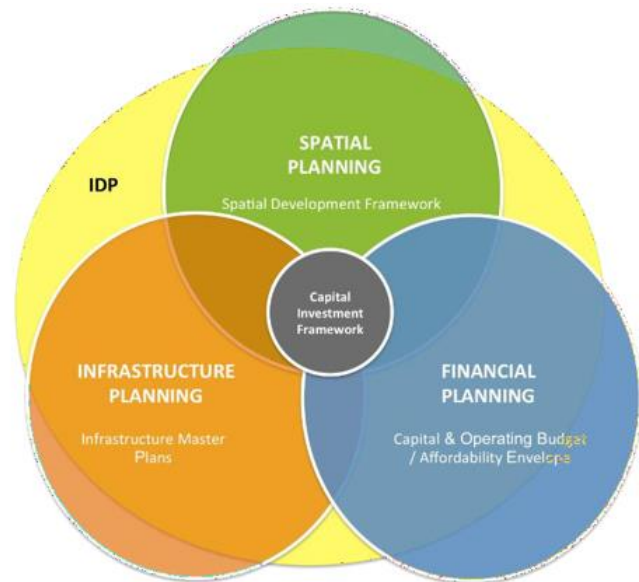
Map 49: Langeberg Municipality SDF Composite Plan



CHAPTER 7: Capital Expenditure Framework

Both the Municipal Systems Act, 2000 (Act 32 of 2000) and the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) require that a municipal spatial development framework “determine a capital expenditure framework for the municipality’s development programmes, depicted spatially”.

The framework effectively links the municipality’s spatial development strategies with the municipality’s budget and grants of relevant government sectors, grounded in the existing and future infrastructure backlogs and demands, as well as the affordability envelope as defined by the Long-Term Financial Plan, as illustrated in the adjacent figure.



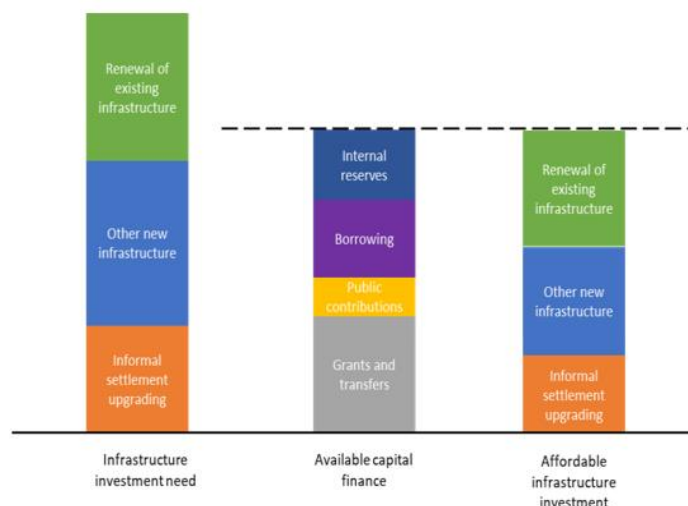
The framework brings together spatial planning, infrastructure planning and financial planning. The framework assists to guide investment to spatial priorities and categories and thus enhance financial sustainability.

Infrastructure investment includes:

- a) Renewal of existing infrastructure;
- b) New infrastructure;
- c) Informal settlement upgrading.

Available finance and capital include:

- d) Internal resources;
- e) Borrowing;
- f) Public contribution;
- g) Grants and transfers.

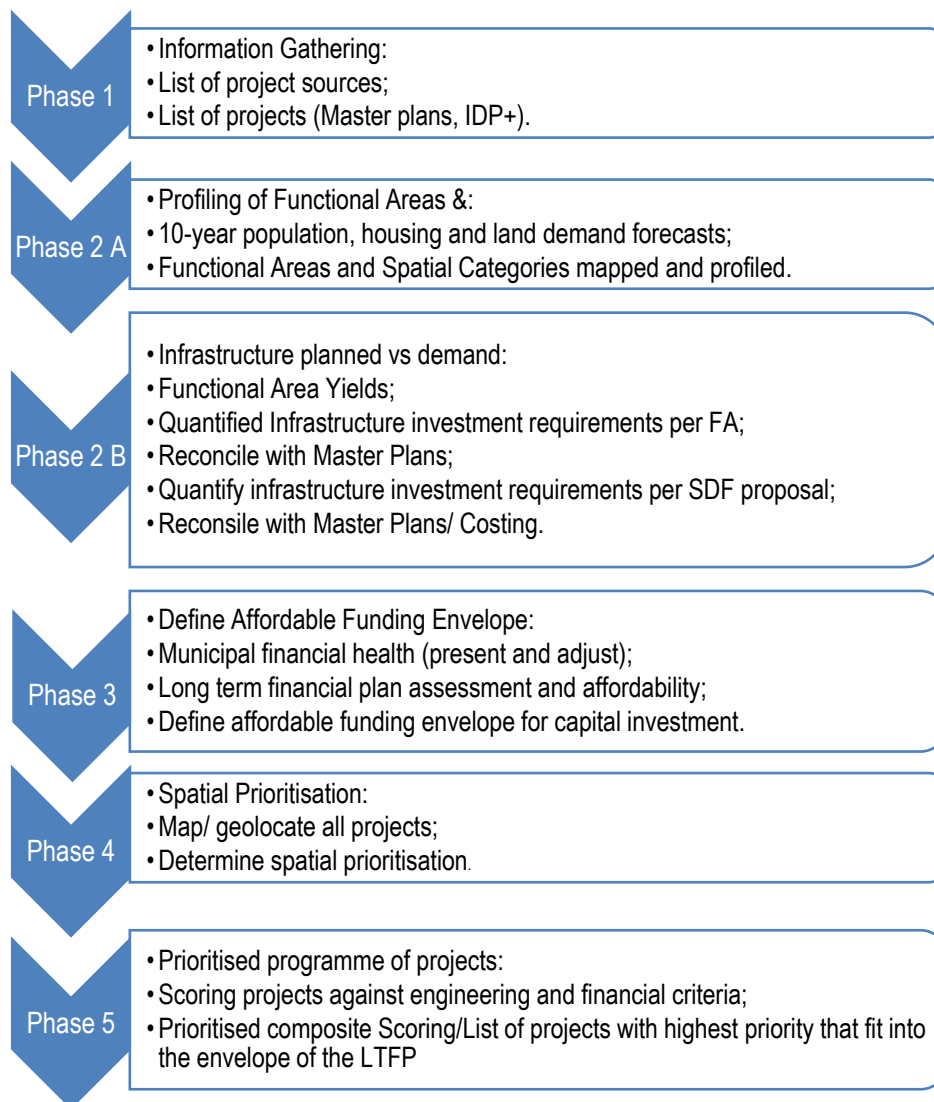


Aligning the infrastructure investment with available finance ensures prioritisation and guided investment.

In summary, a MSDF must articulate what kind of development should take place and where it should take place; the infrastructure master plans will ground these proposals in a quantification of the infrastructure implications, whilst the long-term financial plan must define the financial parameters within which the infrastructure, assets and built environment must be developed and managed. With the information at hand and with an overview of Langeberg Municipality’s financial health, spending and revenue as well as a 10-

Year Capital Expenditure, development projects are prioritised. The 10-Year Capital Expenditure demand is around R2 824 million whilst the appropriate capital funding and thus affordability is R1 198 million.

Langeberg Capital Expenditure Framework includes different milestones listed below:



7.1 Infrastructure Determination

Phases 1, 2a and 2b are interdependent and determine the infrastructure demand and capital investment needs that the implementation of the MSDF will generate over a 10-year period.

7.1.1 Phase 1: A Consolidated Portfolio of Capital Investment Needs

Information was gathered in Phase 1 and all infrastructure investment projects identified as needed (new renewal and maintenance) for a 10-year period were combined into a single table.

Note:

- A complete list of the documents used appears on the cover pages of the List of projects: DEADP template. Developed in 2023, it includes:
The Langeberg MTREF Capital Budget for 2023/24, 2024/25 and 2025/26;
Langeberg ten year Capital Budget estimation;
The MSDP (2015);
Service Master Plans.
- Though Civil Engineering Services Master Plans, 2012 are outdated, the infrastructure identified as needed in these plans is still needed. The Electrical Engineering Services Master Plan, 2022 and Integrated Waste Management Plan, 2019 are more recent.
- The database represents capital investments for the following service types:
Water;
Wastewater management;
Energy / electricity;
Waste management.
Roads;
Social and economic infrastructure;
Human settlements;
Information technology;
Other, such as furniture, equipment and tools/machinery.

This consolidated database of capital investment needs forms the basis upon which the CEF was developed, and the projects contained herein forms the basis upon which the prioritised portfolio of capital investments will be developed.

The output of phase 1 is a consolidated table of infrastructure investments (new, upgrade or maintenance) per infrastructure type, per functional area, for the entire municipality. Figure 4 below provides an extract of the consolidated table of infrastructure investments.

Figure 5: A Consolidated Database of Capital Investment Needs for Langeberg Municipality

Project ID	Project Name	Project Source	Municipal Department	MSCOA Function (asset class)	Municipal, Provincial or National	Funding Source	Project, type New, Upgrade, Rehabilitation, Maintenance, Equipment or Plant?	Basic Service? (Yes / No)	Linked to informal settlement upgrading? (Yes / No)	Total Project Value	Town or Area	Functional Area (as per CEF map from MSDP)
1	ERP System	A1	Financial Services	Finance and Administration	Municipal	CRR	Equipment	No	No	6 000 000,00	Municipal wide	All
2	Forklift	A1	Financial Services	Finance and Administration	Municipal	CRR	Equipment	No	No	400 000,00	Municipal wide	All
3	Equipment	A1	Strategy & Social Development	Community and Social Services	Municipal	CRR	Equipment	No	No	500 000,00	Municipal wide	All
4	General ICT Needs	A1	Strategy & Social Development	Community and Social Services	Municipal	CRR	Equipment	No	No	2 200 000,00	Municipal wide	All
5	Upgrade ICT Infrastructure	A1	Strategy & Social Development	Community and Social Services	Municipal	CRR	Upgrade	No	No	4 500 000,00	Municipal wide	All
6	Machinery and Equipment Generators	A1	Strategy & Social Development	Community and Social Services	Municipal	CRR	Equipment	No	No	4 000 000,00	Municipal wide	All
7	Upgrading of Robertson Informal trading area - CRR	A1	Strategy & Social Development	Community and Social Services	Municipal	CRR	Upgrade	No	No	2 500 000,00	Robertson	Robertson
8	VTS roll up doors	A1	Corporate Services	Corporate Services	Municipal	CRR	Maintenance	No	No	50 000,00	Municipal wide	All
9	Alterations / Upgrading Municipal Offices	A1	Corporate Services	Corporate Services	Municipal	CRR	Upgrade	No	No	750 000,00	Municipal wide	All
10	Office Furniture Equipment	A1	Corporate Services	Corporate Services	Municipal	CRR	Equipment	No	No	440 000,00	Municipal wide	All
11	Equipment	A1	Engineering Services	Water Management	Municipal	CRR	Equipment	No	No	180 000,00	Municipal wide	All
12	New WTW McGregor - MIG	A1	Engineering Services	Water Management	Provincial	MIG	New	Yes	No	10 680 080,00	McGregor	McGregor
13	New WTW McGregor - CRR	A1	Engineering Services	Water Management	Municipal	CRR	New	Yes	No	5 400 000,00	McGregor	McGregor
14	Montagu caskinor	A1	Engineering Services	Water Management	Municipal	CRR	Upgrade	Yes	No	150 000,00	Montagu	Montagu
15	Generators for WTW and pumps	A1	Engineering Services	Water Management	Municipal	CRR	Equipment	No	No	8 957 000,00	Municipal wide	All
16	Water Pipe Replacement	A1	Engineering Services	Water Management	Municipal	CRR	Upgrade	Yes	No	2 000 000,00	Municipal wide	All
17	New pump and pumps at Breede River pump station (Ashton)	A1	Engineering Services	Water Management	Municipal	CRR	New	Yes	No	3 400 000,00	Ashton	Ashton
18	Equipment	A1	Engineering Services	Waste Water Management	Municipal	CRR	Equipment	No	No	120 000,00	Municipal wide	All
19	60m sewer line LeRoux Street Robertson	A1	Engineering Services	Waste Water Management	Municipal	CRR	Maintenance	Yes	No	-	Robertson	Robertson
20	Upgr Robertson WWTW - MIG	A1	Engineering Services	Waste Water Management	Provincial	MIG	Upgrade	Yes	No	34 274 024,00	Robertson	Robertson
21	Upgr Robertson WWTW - CRR	A1	Engineering Services	Waste Water Management	Municipal	CRR	Upgrade	Yes	No	9 356 521,00	Robertson	Robertson
22	Construction and alterations to the sewer networks in Hospital Street, Robertson	A1	Engineering Services	Waste Water Management	Municipal	CRR	New	Yes	No	250 000,00	Robertson	Robertson
23	Provision of sewer network in Louisianna, Bonnievale	A1	Engineering Services	Waste Water Management	Municipal	CRR	New	Yes	No	11 000 000,00	Bonnievale	Bonnievale
24	Generators WWTW and sewer pump stations	A1	Engineering Services	Waste Water Management	Municipal	CRR	Equipment	No	No	18 916 000,00	Municipal wide	All
25	Material Recovery Facility	A1	Engineering Services	Waste Management	Municipal	CRR	New	Yes	No	2 500 000,00	Municipal wide	All

Figure 6: A Summary of Capital Investment Needs for Langeberg Municipality

Vote Description	2022/23 Medium Term Revenue & Expenditure Framework		
	Budget Year 2022/23	Budget Year +1 2023/24	Budget Year +2 2024/25
R'000 000			
Community and public safety	13 791	9 753	161
Community and social services	1 590	500	
Sport and recreation	4 783	3 810	
Public safety	7 183	5 443	161
Housing	236		
Health			
Economic and environmental services	45 069	23 966	23 043
Planning and development	2 221		
Road transport	42 848	23 966	23 043
Environmental protection			
Trading services	57 857	44 647	47 472
Energy sources	17 062	8 259	9 176
Water management		7 583	11 440
Wastewater management	21 979	28 205	14 471
Waste management	18 816	600	12 384
Other			
Total Capital Expenditure - Functional	126 294	89 136	75 847

The list of projects serves as the engineering and infrastructure informants.

The municipality has to improve infrastructure maintenance and strongly improve upgrades which impacts on its financial sustainability. The municipality also plans for expansion of its service network. Hence the municipality has to ensure policies are in place that seek to focus on utilising its current infrastructure asset network more cost-effectively and caution costly outward urban expansion of this network.

The following factors are worth noting from an infrastructure backlog and planning perspective:

- Bulk Water: Ashton, Bonnievale, McGregor, Montagu and Robertson are running at capacity. No settlements have additional capacity. There is an overall need to find additional bulk water sources, which is an expensive exercise;
- Water Network Infrastructure: Ashton, Montagu and Robertson require an upgrade of network infrastructure, Bonnievale and Montagu require new water network infrastructure and McGregor has sufficient network capacity. The water networks are generally old and reactive maintenance is required on a regular basis. An updated multi-year infrastructure maintenance programme budget is needed to systematically address this infrastructure maintenance backlog;
- Wastewater Treatment Works (WWTW) are at capacity in Robertson and Ashton and require regular maintenance to keep this infrastructure working well and to prevent ecological disasters (such as spills) that could severely undermine river health as well as agricultural and economic productivity which are dependent on clean river systems. Bonnievale and Montagu require WWTW upgrades. Ashton and Robertson require new Waste Treatment facilities.
- The Sewer Network is running at capacity with not much room for accommodating expansion. It is generally old and reactive maintenance is being done, however insufficiently funded;

- Bulk Electricity: Robertson does not have sufficient capacity and requires immediate upgrade. Ashton, Bonnievale, McGregor and Montagu have sufficient capacity.
- The Electricity Network is also running at capacity with not much room for accommodating expansion. The networks generally are old and reactive maintenance is being done, however insufficiently funded. Robertson, Bonnievale and Ashton require network and transformer upgrades.

The following are key questions that will need to be addressed in medium term budgets following the updates of the relevant engineering masterplans, which are largely outdated, as well as Financial Strategy which should detail:

- a) Where is sewer / water / roads and storm water infrastructure failing / under pressure?
- b) How much will it cost to address failing infrastructure and infrastructure needing maintenance?
- c) How much money is available to address failing infrastructure and infrastructure needing maintenance?
- d) What is the planned new infrastructure on the books?
- e) Is the municipality meeting the minimum requirement of 8% of spending on repairs and maintenance as a percentage of property plant and equipment? Langeberg LM has to increase its repairs and maintenance spending on property plant and equipment from the FY2021 to the end of the planning period (2025) at a rate of 2.9%.
- f) Repairs and maintenance as a percentage of property, plant and equipment is assumed to gradually increase to 8% by the end of the planning period, from the FY2021 rate of 2.9%.
- g) Expenditure on repairs and maintenance as a percentage of property plant and equipment (4.9%) remained below the NT benchmark of 8% during the review period. Effort should be made to increase Repairs and Maintenance to 8% as a percentage of property plant and equipment.
- h) What new connection needs does the municipality need to action?
- i) What are affordable development options vs. unaffordable development options?
- j) What is deemed to be revenue generating infrastructure vs. non-revenue generating infrastructure?
- k) What is the strategy to transition areas / neighborhoods from 'indigent' neighborhoods to 'service paying' neighborhoods over time? Inherent to this question is what is the municipality's strategy to achieve municipal financial sustainability over time?

The above questions will inform a more spatially-specific Capital Expenditure Framework for Langeberg.

Priority spending and efforts should be placed on infrastructure maintenance and upgrading rather than on infrastructure network expansion. Maintenance of existing infrastructure and existing assets is first and foremost the priority of the municipality.

Optimising the use of existing infrastructure systems must be prioritised as well. This means actively increasing densities within the existing footprint of the municipality, specifically in the middle and upper income areas, to moderately increased densities.

7.1.2 Phase 2a: Functional Area and Spatial Category for Investment Planning Profiling and Yield Determinations in Preparation for Infrastructure Demand Quantification

Functional Areas are areas of similar characteristics, service levels and have similar service requirements, such as low density established suburbs, industrial areas, high density informal areas or central business districts. These areas usually correspond to an area sharing the same engineering and utility service requirements and levels of service (or have similar upgrading needs).

Langeberg Municipality was divided into 21 Functional Areas (FA's) that have similar or common characteristics from a development, level of service and/or service demand perspective. For each FA (Functional Area) infrastructure investments (new, upgrade or maintenance) per infrastructure type for the entire municipality were listed.

Each functional area was profiled as projected population and household growth were set out. Potential yields (including gross lettable areas) were then determined for each functional area, based on the spatial budget and proposals from the MSDF which identifies sites for densification, infill, or new urban growth. This exercise considers the MSDF proposals section, as well as whether an investment (spatial) category falls within the functional area, which may provide specific objectives that need to be attained. To phase development, sites were categorised in short, medium and longer-term developments. The priority (short term) sites stay priority across the duration (planning, budgeting, obtaining rights and implementation) of the development.

The results of phase 2a establish an understanding of what projected growth will occur in each functional area over the 10-year period, including potential land yields, potential gross lettable areas, and identification of sites to accommodate development, as well as an indication of priority / phasing for these sites.

The results of phase 2a will, in phase 2b, assist to determine the infrastructure need and service demand per functional area, as well as help to determine bulk infrastructure demand per service type over a 10-year period.

The section following sets out the functional areas and development and investment priorities:

- a) Functional areas were delineated to correspond to Enumerator Areas and with services reticulation. Current and future population and household projections were based on enumerator area data and proportioning the information where required, according to the number of residential opportunities per functional area.

	Ashton		Bonnievale		Montagu
A	Cogmanskloof	A	Bonnievale	A	Ashbury
B	Ashton	B	Happy Valley & Mountain View	B	Montagu Industrial
C	Ashton Industrial/ Silos	C	Boekenhoutskloof	C	Bergsig
D	Zolani	D	Malherbe Street South (Lactalis)	D	Montagu North
		E	Bonnievale Station	E	Montagu
	McGregor		Robertson		
A	White City	A	Robertson Industrial		
B	McGregor	B	Nkqubela		
		C	Robertson		
		D	Droëheuwel & Môreson		
		E	Silverstrand		

Maps of the functional areas for Langeberg settlements are included:

Figure 7: Functional Areas for the town of Robertson

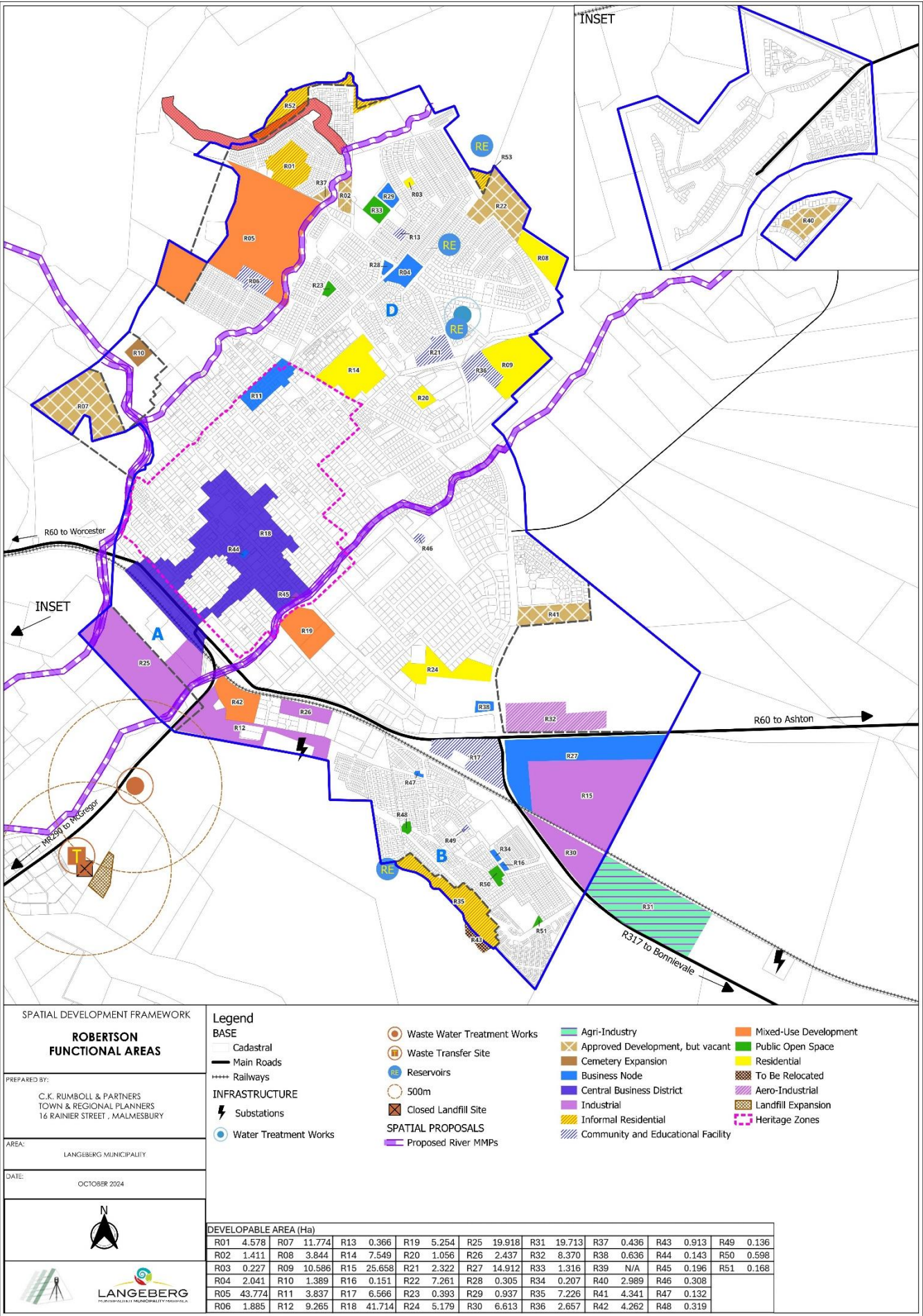


Figure 8: Functional Areas for the town of Montagu

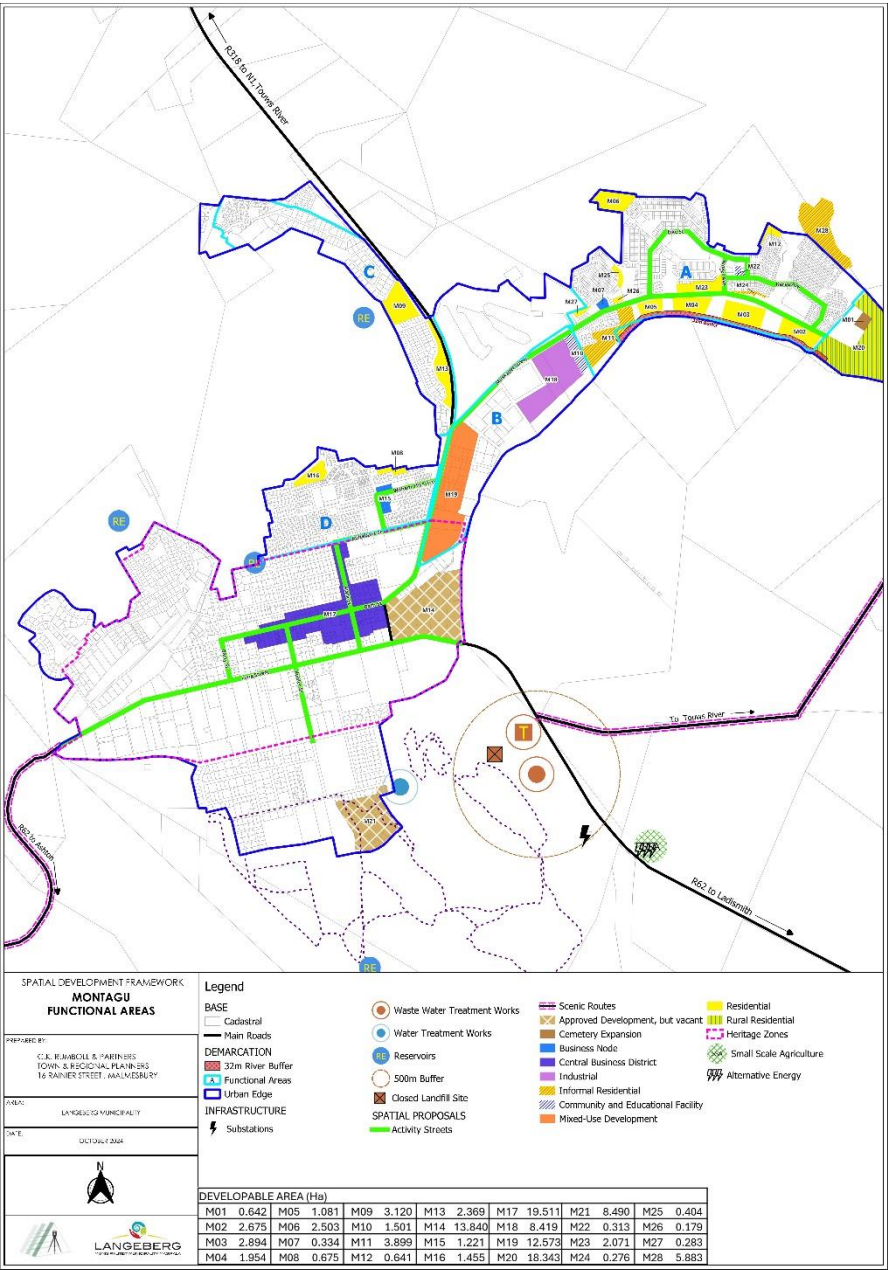


Figure 9: Functional Areas for the town of McGregor

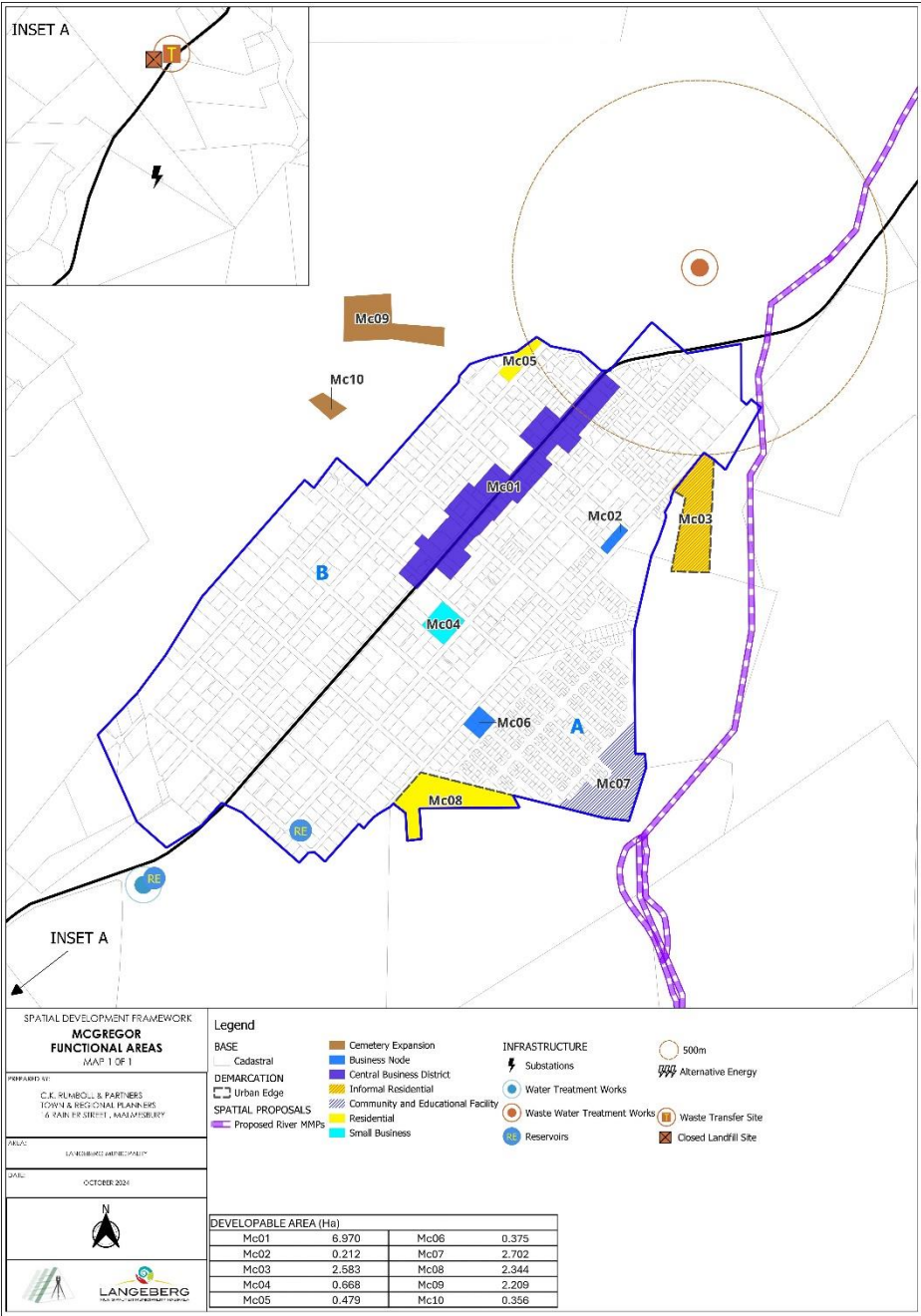


Figure 10: Functional Areas for the town of Ashton

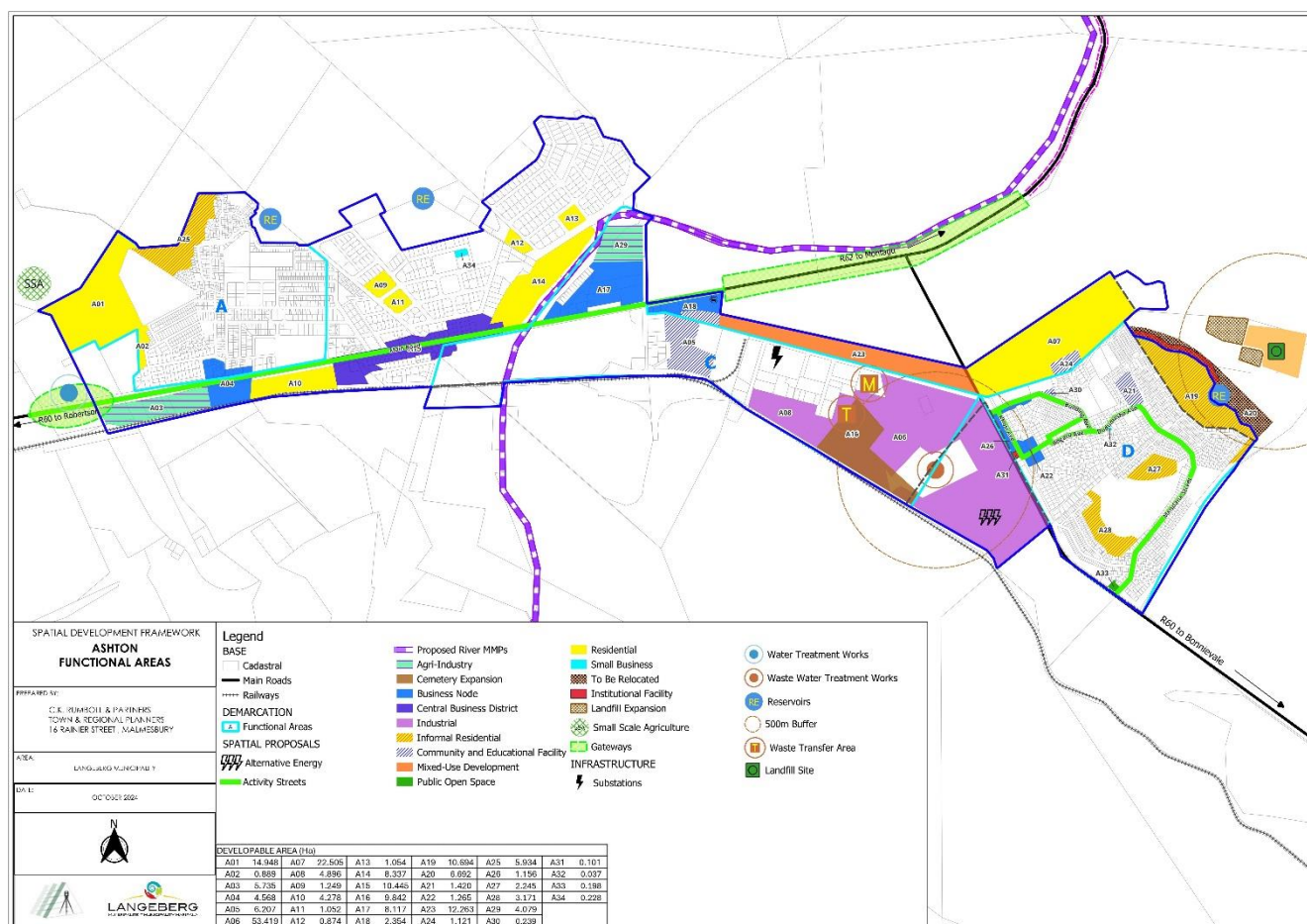
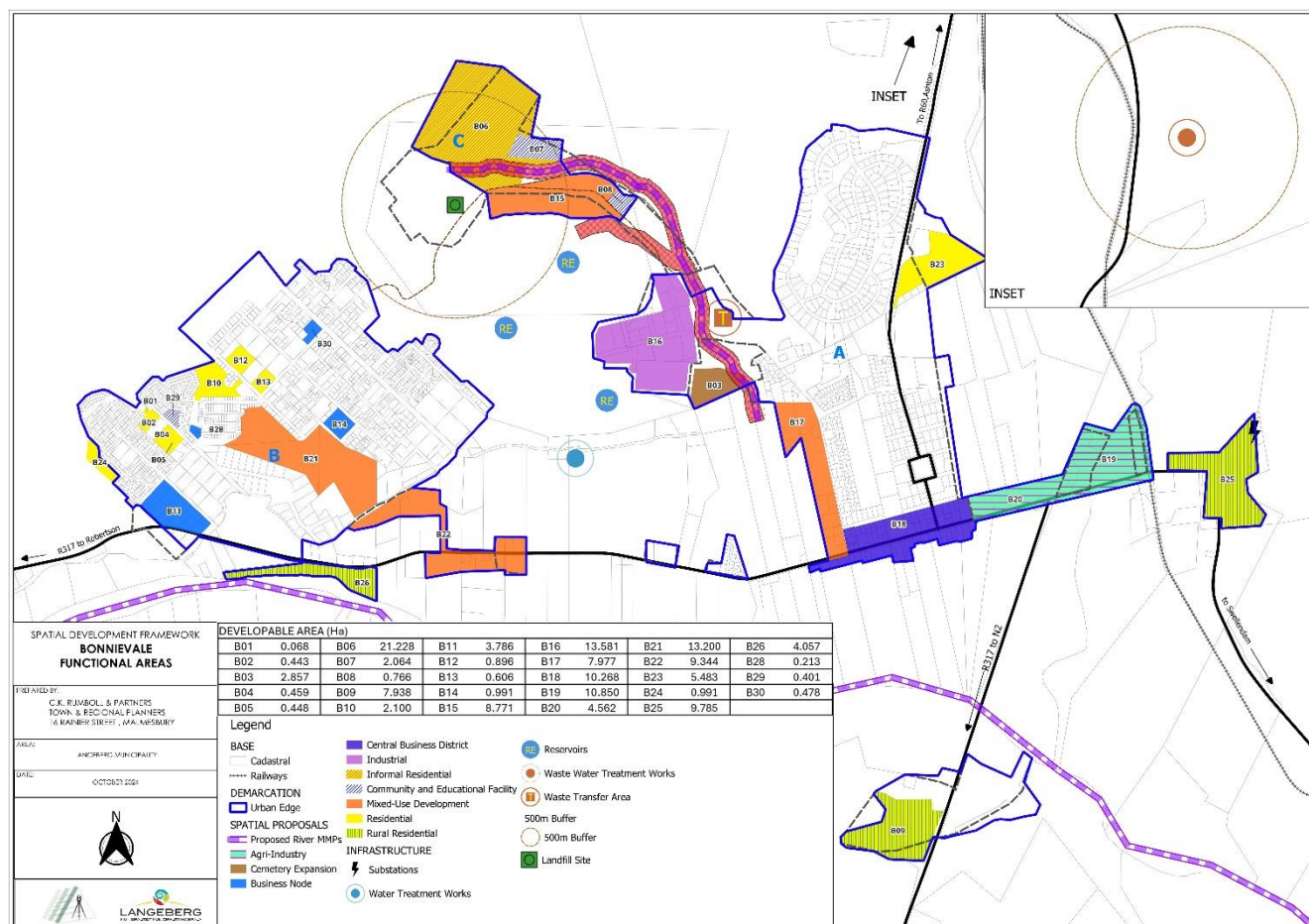


Figure 11: Functional Areas for the town of Bonnievale



All development sites were labelled with the first or first few letters of the settlement name. Sites were prioritised and priority sites (if any) for the purposes of phasing future growth were set out per functional area. Priority sites and the related land parcels will be prioritised in terms of all (planning, budgeting and implementation) phases.

- b) Investment (or spatial) categories identified for guiding investment planning within Langeberg, are set out below, as well as shown in Map 50.

Priority Investment Areas at the municipal wide scale refer to towns in Langeberg that are:

- An investment priority within the regional context;
- Generally occupying a high-order in terms of the services, facilities and employment opportunities that are on offer;
- Generally, with the largest population size and greatest social need;
- Having economic growth potential within the region.

Generally, investments made in these settlements will have the greatest multiplier effect and impact on the greatest number of people.

Priority investment areas at municipal scale include:

- Robertson industrial area, subsidised and single residential areas, CBD;
- Ashton industrial area, transport and freight hub facilitating R60 and 62 connections, subsidised residential areas.

Priority Investment Areas at settlement scale are:

- Principal transport activity corridors;
- CBD,
- Secondary nodes and priority public transport-oriented development nodes connected by the corridors;
- Restructuring zone which seeks to reinforce the centre.

These areas must be the focus for getting the basics right as well as adding value through new investment to facilitate social inclusion, attract economic activity and private sector & household investment.

- There is scope for residential, commercial, and industrial growth within this zone.

These areas and the priority nodes specifically should be the focus of any municipal investment incentives including expedited land use development procedures and/or relaxation of development controls e.g. parking requirements. This should be done in a way that creates a public realm and streetscape that must keep intact and enhance the integrity of the Langeberg and Cape Winelands identity and attractiveness.

The Langeberg Municipality is dedicated to maintaining, strengthening and intensifying CBDs of Langeberg's settlements as their primary economic activity centres. Incentives for private investment in the upgrading and redevelopment of the CBD's buildings will be supported and promoted. Key spatial actions related to the CBD are to:

- Continue to resist the trend of "dispersed" business development in the CBD, specifically the spread of business development into surrounding residential areas;
- Retain office activities in the CBD;
- Support residential densification along key CBD routes;
- Implement public space upgrades to ensure a vibrant, integrated, and safe pedestrian environment;
- Promote high quality urban design with the aim of reducing crime and improve the overall appeal of the CBD and confidence for private sector investment.

Settlements with several priority nodes, were advanced as priority areas at settlement scale.

Priority Investment Areas at the settlement scale are:

- Montagu mixed-use area as tourism destination (industrial area around Cape Dry), main street with water erven and tourism activities, warm baths, Montagu Nature Garden and conservation areas, subsidised and single residential development, CBD, and Long & Bath Streets;
- Bonnievale agri-industrial areas, subsidised residential development, CBD, Bonnievale Railway Station area and Malherbe Street south (Lactalis).

Upgrading areas at the municipal-wide scale: These are the settlements that still:

- Have considerable populations, services and some job opportunities, but that are not seen as primary service centres at municipal scale and beyond;
- They are generally major rural settlements that play a role in the economy of the region, but also with pressing social needs;
- Further significant expansion of these areas not advised.

Langeberg has Robertson and Ashton as upgrading areas at municipal scale.

Upgrading areas at the settlement scale:

- These are areas primarily focused on informal settlement and marginalised rural settlements and areas that require upgrading and improvement to bring them to an acceptable standard of performance as residential settlements.

Langeberg has Robertson, Bonnievale and Montagu as upgrading areas at settlement scale.

Consolidation areas at the settlement and municipal-wide scale form the balance of the settlement footprint. In these areas the focus is to ensure the provision and maintenance of services so that the areas may perform well within their current functions with no further expansion or growth of these areas, as far as possible.

Consolidation areas:

McGregor is a consolidation area.

Any growth in these settlements will be dependent on private sector investment.

Long term (speculative) development area (10 – 20 years), applicable only at the settlement scale, is an area identified as the desired location for long term growth first with the understanding that residential, commercial, and business opportunities in Priority Development Areas are taken up, before allowing development in Long Term or Speculative Development Areas. Speculative development may occur only in 10 to 20 years' time (i.e. after 2030).

Robertson has areas to develop in the long term (10 - 20-years and beyond).

Densification encouragement areas are generally well-established residential areas that are extremely low density (with erf sizes ranging from between 500 to 2000m² - translating to a netto dwelling unit density of between 5 to 20 dwelling units per hectare) that could accommodate densification in the form of subdivisions to accommodate one or two additional houses, as well as accommodating 'granny flats'. The intention here is to double the density of the neighbourhood over the long term and to allow the infrastructure systems to be utilised more effectively. This densification should not drastically alter the nature or feel of these neighbourhoods.

It should be noted that the current zoning scheme bylaw already provides for second dwellings as a consent use.

Densification encouragement areas include all the single residential areas and activity streets in Ashton, Bonnievale, Montagu and Robertson.

A summary of all development areas per settlement follows:

Priority Area	Robertson	Ashton	Bonnievale	Montagu	McGregor
Priority investment areas & types	Municipal	Municipal	Settlement	Settlement	
	Subsidised Residential, Education. CBD				CBD, Education
	Private Res	Private Res			
	Industrial	Industrial, Agri-Industrial	Agri-Industrial	Mix-Use, Industrial	
Upgrading area	Upgrading	Upgrading	Upgrading	Upgrading	Upgrading
Consolidation areas					Settlement
Long term development areas (10 – 20 years)	Industrial				
		Agri-Residential	Rural Residential		
			Agri-Industrial.		
Densification areas	Residential areas, Activity Streets			Activity Streets	
Intensification areas	CBD, Mixed-Use, Activity Streets				Village Centre

The section following sets out the various projections and potential yields.

- a) Population and household projections follow as per the tables below. Population and households were projected per functional area for intervals of 5 years: 2022, 2027 and 2032.

Table 12: Population projections for each Functional Area in Langeberg Municipality (settlements only)

Functional Areas	Population 2022	Population 2027	Population 2032	Population Growth 2022 – 2027	Population Growth 2022 – 2032
Ashton (A)	6 473	7 015	7 476	541	1 003
Ashton (B)	3 022	3 275	3 491	253	468
Ashton (C)	127	138	147	11	20
Zolani (D)	6 972	7 554	8 052	583	1 080
Bonnievale (A)	2 621	2 840	3 027	219	406
Bonnievale (B)	8 702	9 429	10 050	728	1 348
Bonnievale (C)	0	0	0	0	0
McGregor (A)	1 854	2 009	2 141	155	287
McGregor (B)	2 038	2 208	2 354	170	316
Montagu (A)	8 483	9 192	9 797	709	1 314
Montagu (B)	0	0	0	0	0
Montagu (D)	4 265	4 622	4 926	357	661
Montagu (E)	6 152	6 666	7 105	514	953
Robertson (A)	6	6	7	0	1
Robertson (C)	10 486	11 363	12 111	877	1 625
Robertson (D)	16 818	18 224	19 424	1 406	2 606
Nkqubela (B)	7 206	7 808	8 322	602	1 117
Grand Total	85 224	92 350	98 430	7 125	13 205

Table 13: Household projections for each Functional Area in Langeberg Municipality (settlements only)

Functional Areas	Households 2022	Households 2027	Households 2032	New Households Formed 2022 – 2027	New Households Formed 2022 – 2032
Ashton (A)	1 541	1 670	1 780	129	239
Ashton (B)	720	780	831	60	111
Ashton (C)	30	33	35	3	5
Zolani (D)	2 050	2 222	2 368	171	318
Bonnievale (A)	690	747	797	58	107
Bonnievale (B)	2 290	2 481	2 645	191	355
Bonnievale (C)	0	0	0	0	0
McGregor (A)	530	574	612	44	82
McGregor (B)	582	631	672	49	90
Montagu (A)	2 424	2 626	2 799	203	376
Montagu (B)	0	0	0	0	0
Montagu (D)	1 219	1 320	1 407	102	189
Montagu (E)	1 758	1 905	2 030	147	272
Robertson (A)	2	2	2	0	0
Robertson (C)	2 913	3 156	3 364	244	451
Robertson (D)	4 672	5 062	5 395	391	724
Nkqubela (B)	2 324	2 519	2 685	194	360
Grand Total	23 744	25 729	27 423	1 985	3 679

As can be seen from the above tables:

The population of Langeberg is growing, with the total population increasing from 85 224 people in 2022 to 92 350 in 2027 and to 98 430 in 2032 (a total increase of 13 205 people by 2035 in settlements and 42 132 people in Langeberg).

The number of households in Langeberg settlements will grow from 22 569 in 2022 to 24 457 in 2027 and 26 066 in 2032 based on a household size of 3.8 persons per household. The increase of 3 497 settlement households exclude the increase of 1 496 rural households for the same period. The total increase of Langeberg households over the period 2022 to 2032 is 4 993 households.

The nearly five thousand (4 993) household do not account for the existing housing backlog and only reflects the population growth expected over this period in Langeberg settlements.

The highest household growth is expected in functional area Robertson B (Nkqubela) and D (Droëheuwel & Môreson), Montagu A (Ashbury & Mandela Square) and D (Montagu North) and Ashton A (Cogmanskloof) and D (Zolani), and Bonnievale B (Happy Valley and Mountain View) and C (Boekenhoutskloof), McGregor A (White City). This “growth pressure” does not necessarily mean that the actual households will be accommodated within these areas in the future, as new development opportunities in line with the MSDF proposals, may accommodate some of this growth. The growth in the rural areas, representing 30% of households, will also be accommodated within development opportunities, in line with the MSDF.

- b) The total housing demand (Including backlog) per functional area is set out in the table below for the municipality, considering the housing backlog per functional area, up until 2042.

Table 14: Total Housing Demand projections for each Functional Area in Langeberg Municipality

Functional Areas	2022 to 2042 additional HH	April 2022 Housing Waiting List	Total Housing Demand 2022 to 2042 + Waiting List	Units Potentially Yielded in 2024 - 2029 SDF	Surplus or Under Supply (SDF Yield minus 2042 total housing demand)
Ashton (A)	380	861	1 241	527	-714
Ashton (B)	178	0	178	236	59
Ashton (C)	7	0	7	0	-7
Zolani (D)	506	592	1 098	946	-152
Bonnievale (A)	170	0	170	96	-74
Bonnievale (B)	565	0	565	137	-428
Bonnievale (C)	0	1 581	1 581	520	-1 061
Bonnievale (D)	0	0	0	0	0
Bonnievale (E)	0	0	0	270	270
McGregor (A)	131	537	668	121	-547
McGregor (B)	144	0	144	3	-140
Montagu (A)	598	1 146	1 744	927	-817
Montagu (B)	0	0	0	0	0
Montagu (C)	0	0	0	96	96
Montagu (D)	301	0	301	37	-263
Montagu (E)	434	0	434	0	-434
Robertson (A)	0	0	0	0	0
Robertson (C)	719	0	719	1 558	839
Robertson (D)	1 153	2 754	3 907	248	-3 659
Robertson (E)	0	0	0	0	0
Robertson (F)	0	0	0	0	0
Nkqubela (B)	574	1 739	2 313	177	-2 136
Grand Total	5 859	9 210	15 069	5 900	-9 169

As can be seen from the above table, Robertson (6 939) and Ashton (2 524) account for 63% (9 463 households) of the total housing demand between 2022 and 2042, primarily because of its significant housing backlog.

- c) Priority sites for future development were identified in the Langeberg MSDF (2020). Priority sites can accommodate future growth, urban development, infill and densification. The tables below set out each of these sites, which functional area each site falls in, the total area, proposed use, density, and the number of residential units and/or GLA that the site can accommodate. In addition, thereto, the maps below delineate the functional area and illustrate and label the sites identified that can accommodate future growth pressures.
- d) Once an understanding of the existing and projected population and households was reached per functional area, various scenarios were tested to determine (1) how many households could potentially be accommodated per functional area and (2) reconcile this with the spatial budget and the sites that have been identified for potential urban expansion in the settlements of Langeberg. The yield calculations are shown in detail in the tables below;

- e) In order to determine the approximate Gross Lettable Area (GLA) and number of units possible in each functional area, a number of assumptions were made. These assumptions are:
- i. 30% of developable area deducted for open space and parking;
 - ii. Maximum floor area is between 1 and 2 storeys, depending in which zone the unit will fall;
 - iii. Average gross dwelling unit density ranges from 42 dwelling units per hectare, with exceptions of 5 and 10 units per hectare.
- f) High Priority sites can accommodate up to 5 900 residential units, as well as significant industrial (1 159 732m²) and commercial / retail (970 046m²) development gross lettable area.

Table 15: A summary of High Priority Sites identified from the MSDF that can accommodate future urban growth, and the projected yield and/or GLA per site.

Timeframes	Sum of Developable Area (m2)	Sum of GLA in m2 (=built foot x storeys)	Sum of Retail / commercial (m2)	Sum of Industrial (m2)	Sum of Residential (m2)	Sum of Residential units yielded
0	137 290	96 103	8 092	0	0	0
< 5	3 832 320	2 682 624	799 092	449 792	578 767	1 855
5 - 10	2 702 590	1 891 813	104 384	336 007	1 148 042	3 499
0 - 10	1 087 280	761 096	58 478	373 933	128 401	321
> 10	186 070	130 249	0	0	130 249	225
Grand Total	7 945 550	5 561 885	970 046	1 159 732	1 985 459	5 900

- g) In summary, as per the 'high density' scenario, the following is pertinent to note:
- a. A total of 795 hectares of land is potentially available for urban expansion as indicated in the individual Settlement proposal maps in Chapter 5;
 - b. Up to 5 900 new residential units can be accommodated within the proposed expansion areas;
 - c. 9 181 new residential units have been under supplied as a total of 15 069 dwelling units are required according to the projected population growth and waiting list.

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Table 16: All sites identified from the MSDF that can accommodate future urban growth, and the projected yield and/or GLA per site.

Functional Area Name	New Dev Site ID on SDF Map	Main Place Name	Sub Place Name	Does Site Fall in SDF Development Node, Densification corridor or Priority Investment Area?	Area (Ha)	Proposed Use	Proposed Density	Developable Area (m2)	Built Footprint 70% coverage (m2)	Storeys	GLA in m2 (=built foot x storeys)	Retail / commercial (m2)	Industrial (m2)	Residential (m2)	Residential units yielded
Ashton (A)	A01	Ashton	Cogmanskloof	Yes	14,95	Residential	35	149 480	104 636	1	104 636	0	0	104 636	366
Ashton (A)	A02	Ashton	Cogmanskloof	Yes	0,89	Residential	25	8 890	6 223	1	6 223	0	0	6 223	16
Ashton (B)	A03	Ashton	Cogmanskloof	Yes	5,74	Agri-Industry	7	57 350	40 145	1	40 145	0	0	0	0
Ashton (A)	A04	Ashton	Cogmanskloof	Yes	4,57	Business Node	10	45 680	31 976	1	31 976	31 976	0	0	0
Ashton (C)	A05	Ashton	Silos	Yes	6,21	Community Facility	10	62 070	43 449	1	43 449	0	0	0	0
Ashton (C)	A06	Ashton	Silos	Yes	53,42	Industrial	7	534 190	373 933	1	373 933	0	373 933	0	0
Zolani (D)	A07	Ashton/ Zolani	Zolani	Yes	22,50	Residential	35	225 040	157 528	1	157 528	0	0	157 528	551
Ashton (C)	A08	Ashton	Silos	Yes	4,90	Industrial (Truck Stop)	7	48 960	34 272	1	34 272	0	34 272	0	0
Ashton (B)	A09	Ashton	Conradiedorp	Yes	1,25	Residential	25	12 490	8 743	1	8 743	0	0	8 743	22
Ashton (B)	A10	Ashton	Cogmanskloof	No	4,28	Residential	25	42 780	29 946	1	29 946	0	0	29 946	75
Ashton (B)	A11	Ashton	Conradiedorp	Yes	1,05	Residential	25	10 520	7 364	1	7 364	0	0	7 364	18
Ashton (B)	A12	Ashton	Conradiedorp	Yes	0,87	Residential	25	8 740	6 118	1	6 118	0	0	6 118	15
Ashton (B)	A13	Ashton	Conradiedorp	Yes	1,05	Residential	25	10 540	7 378	1	7 378	0	0	7 378	18
Ashton (B)	A14	Ashton	Conradiedorp	No	8,34	Residential	15	83 370	58 359	1	58 359	0	0	58 359	88
Ashton (B)	A15	Ashton	CBD	Yes	10,45	Central Business District	10	104 450	73 115	1	73 115	73 115	0	0	0
Ashton (C)	A16	Ashton	Silos	Yes	9,84	Cemetery	NA	98 420	68 894	1	68 894	0	0	0	0
Ashton (C)	A17	Ashton	Ashton	Yes	8,12	Business Node	10	81 170	56 819	1	56 819	56 819	0	0	0
Ashton (C)	A18	Ashton	Ashton	Yes	2,35	Business Node	10	23 540	16 478	1	16 478	16 478	0	0	0
Zolani (D)	A19	Ashton/ Zolani	Zolani	Yes	10,69	Informal Residential	35	106 940	74 858	1	74 858	0	0	74 858	262
Zolani (D)	A20	Ashton/ Zolani	Zolani	Yes	6,69	To Be Relocated	NA	66 920	46 844	1	46 844	0	0	0	0
Zolani (D)	A21	Ashton/ Zolani	Zolani	Yes	1,42	Community Facility	10	14 200	9 940	1	9 940	0	0	0	0
Zolani (D)	A22	Ashton/ Zolani	Zolani	Yes	1,27	Business Node	10	12 650	8 855	1	8 855	8 855	0	0	0
Ashton (C)	A23	Ashton	Silos	Yes	12,26	Mixed-Use Development	10	122 630	85 841	1	85 841	0	0	0	0
Zolani (D)	A24	Ashton/ Zolani	Zolani	Yes	1,12	Community Facility	10	11 210	7 847	1	7 847	0	0	0	0
Ashton (A)	A25	Ashton	Cogmanskloof	Yes	5,93	Informal Residential	35	59 340	41 538	1	41 538	0	0	41 538	145

Zolani (D)	A26	Ashton/ Zolani	Zolani	Yes	1,16	Business Node	10	11 560	8 092	1	8 092	8 092	0	0	0
Zolani (D)	A27	Ashton/ Zolani	Zolani	Yes	2,25	Informal Residential	35	22 450	15 715	1	15 715	0	0	15 715	55
Zolani (D)	A28	Ashton/ Zolani	Zolani	Yes	3,17	Informal Residential	35	31 710	22 197	1	22 197	0	0	22 197	78
Ashton (C)	A29	Ashton	Ashton	No	4,08	Agri-Industry	7	40 790	28 553	1	28 553	0	0	0	0
Zolani (D)	A30	Ashton/ Zolani	Zolani	Yes	0,24	Community Facility	10	2 390	1 673	1	1 673	0	0	0	0
Zolani (D)	A31	Ashton/ Zolani	Zolani	Yes	0,10	Community Facility	10	1 010	707	1	707	0	0	0	0
Zolani (D)	A32	Ashton/ Zolani	Zolani	Yes	0,04	Small Business	10	370	259	1	259	259	0	0	0
Zolani (D)	A33	Ashton/ Zolani	Zolani	Yes	0,20	Public Open Space	NA	1 980	1 386	1	1 386	0	0	0	0
Ashton (B)	A34	Ashton	Conradiedorp	Yes	0,23	Small Business	10	2 280	1 596	1	1 596	1 596	0	0	0
Bonnievale (B)	B01	Bonnievale	Mandela Park	Yes	0,07	Residential	35	680	476	1	476	0	0	476	2
Bonnievale (B)	B02	Bonnievale	Mandela Park	Yes	0,44	Residential	35	4 430	3 101	1	3 101	0	0	3 101	11
Bonnievale (A)	B03	Bonnievale	Bonnievale	Yes	2,86	Cemetery	NA	28 570	19 999	1	19 999	0	0	0	0
Bonnievale (B)	B04	Bonnievale	Mandela Park	Yes	0,46	Residential	35	4 590	3 213	1	3 213	0	0	3 213	11
Bonnievale (B)	B05	Bonnievale	Mandela Park	Yes	0,45	Residential	35	4 480	3 136	1	3 136	0	0	3 136	11
Bonnievale (C)	B06	Bonnievale	Boekenhoutskloof	Yes	21,23	Informal Residential	35	212 280	148 596	1	148 596	0	0	148 596	520
Bonnievale (C)	B07	Bonnievale	Boekenhoutskloof	Yes	2,06	Community Facility	10	20 640	14 448	1	14 448	0	0	0	0
Bonnievale (C)	B08	Bonnievale	Boekenhoutskloof	Yes	0,77	Community Facility	10	7 700	5 390	1	5 390	0	0	0	0
Bonnievale (E)	B09	Bonnievale	Lactalis	No	7,94	Rural Residential	25	79 380	55 566	1	55 566	0	0	55 566	139
Bonnievale (B)	B10	Bonnievale	Mandela Park	Yes	2,10	Residential	35	21 000	14 700	1	14 700	0	0	14 700	51
Bonnievale (B)	B11	Bonnievale	Mountain View	Yes	3,79	Business Node	10	37 860	26 502	1	26 502	26 502	0	0	0
Bonnievale (B)	B12	Bonnievale	Mountain View	Yes	0,90	Residential	25	8 960	6 272	1	6 272	0	0	6 272	16
Bonnievale (B)	B13	Bonnievale	Mountain View	Yes	0,61	Residential	25	6 060	4 242	1	4 242	0	0	4 242	11
Bonnievale (B)	B14	Bonnievale	Mountain View	Yes	0,99	Business Node	10	9 910	6 937	1	6 937	6 937	0	0	0
Bonnievale (C)	B15	Bonnievale	Boekenhoutskloof	No	8,77	Mixed-Use Development	10	87 710	61 397	1	61 397	0	0	0	0
Bonnievale (C)	B16	Bonnievale	Bonnievale	Yes	13,58	Industrial	7	135 810	95 067	1	95 067	0	95 067	0	0
Bonnievale (A)	B17	Bonnievale	Bonnievale	Yes	7,98	Mixed-Use Development	20	79 770	55 839	1	55 839	0	0	0	0
Bonnievale (A)	B18	Bonnievale	CBD	Yes	10,27	Central Business District	10	102 680	71 876	1	71 876	71 876	0	0	0
Bonnievale (D)	B19	Bonnievale	Bonnievale	Yes	10,85	Agri-Industry	7	108 500	75 950	1	75 950	0	0	0	0
Bonnievale (D)	B20	Bonnievale	Bonnievale	Yes	4,56	Agri-Industry	7	45 620	31 934	1	31 934	0	0	0	0
Bonnievale (B)	B21	Bonnievale	Mountain View	No	13,20	Mixed-Use Development	10	132 000	92 400	1	92 400	0	0	0	0

Bonnievale (B)	B22	Bonnievale	Bonnievale	No	9,34	Mixed-Use Development	10	93 440	65 408	1	65 408	0	0	0	0
Bonnievale (A)	B23	Bonnievale	Golf Course	No	5,48	Residential	25	54 830	38 381	1	38 381	0	0	38 381	96
Bonnievale (B)	B24	Bonnievale	Mandela Park	Yes	0,99	Residential	35	9 900	6 930	1	6 930	0	0	6 930	24
Bonnievale (E)	B25	Bonnievale	Railway Station	No	9,79	Rural Residential	15	97 850	68 495	1	68 495	0	0	68 495	103
Bonnievale (E)	B26	Bonnievale	Bonnievale	No	4,06	Rural Residential	10	40 570	28 399	1	28 399	0	0	28 399	28
Bonnievale (D)	B27	Bonnievale	Bonnievale	No	3,62	Agri-Industry	7	36 170	25 319	1	25 319	0	0	0	0
Bonnievale (B)	B28	Bonnievale	Mandela Park	Yes	0,21	Business Node	10	2 130	1 491	1	1 491	1 491	0	0	0
Bonnievale (B)	B29	Bonnievale	Mandela Park	Yes	0,40	Community Facility	10	4 010	2 807	1	2 807	0	0	0	0
Bonnievale (B)	B30	Bonnievale	Happy Valley	Yes	0,48	Business Node	10	4 780	3 346	1	3 346	3 346	0	0	0
McGregor (B)	Mc01	McGregor	McGregor	No	6,97	Central Business District	10	69 700	48 790	1	48 790	48 790	0	0	0
McGregor (B)	Mc02	McGregor	McGregor	No	0,21	Business Node	10	2 120	1 484	1	1 484	1 484	0	0	0
McGregor (A)	Mc03	McGregor	McGregor	Yes	2,58	Informal Residential	35	25 830	18 081	1	18 081	0	0	18 081	63
McGregor (B)	Mc04	McGregor	McGregor	Yes	0,67	Small Business	10	6 680	4 676	1	4 676	4 676	0	0	0
McGregor (B)	Mc05	McGregor	McGregor	No	0,48	Residential	10	4 790	3 353	1	3 353	0	0	3 353	3
McGregor (A)	Mc06	McGregor	White City	Yes	0,38	Business Node	10	3 750	2 625	1	2 625	2 625	0	0	0
McGregor (A)	Mc07	McGregor	White City	Yes	2,70	Community Facility	10	27 020	18 914	1	18 914	0	0	0	0
McGregor (A)	Mc08	McGregor	White City	No	2,34	Residential	35	23 440	16 408	1	16 408	0	0	16 408	57
McGregor (B)	Mc09	McGregor	McGregor	No	2,21	Cemetery	NA	22 070	15 449	1	15 449	0	0	0	0
McGregor (B)	Mc10	McGregor	McGregor	No	0,36	Cemetery	NA	3 560	2 492	1	2 492	0	0	0	0
Montagu (A)	M01	Montagu	Ashbury	Yes	0,64	Cemetery	NA	6 420	4 494	1	4 494	0	0	0	0
Montagu (A)	M02	Montagu	Ashbury	Yes	2,68	Residential	35	26 750	18 725	1	18 725	0	0	18 725	66
Montagu (A)	M03	Montagu	Ashbury	Yes	2,89	Residential	35	28 940	20 258	1	20 258	0	0	20 258	71
Montagu (A)	M04	Montagu	Ashbury	Yes	1,95	Residential	35	19 540	13 678	1	13 678	0	0	13 678	48
Montagu (A)	M05	Montagu	Ashbury	Yes	1,08	Residential	35	10 810	7 567	1	7 567	0	0	7 567	26
Montagu (A)	M06	Montagu	Ashbury	Yes	2,50	Residential	35	25 030	17 521	1	17 521	0	0	17 521	61
Montagu (A)	M07	Montagu	Ashbury	Yes	0,33	Business Node	10	3 340	2 338	1	2 338	2 338	0	0	0
Montagu (D)	M08	Montagu	Montagu	Yes	0,68	Residential	25	6 750	4 725	1	4 725	0	0	4 725	12
Montagu (C)	M09	Montagu	Bergsig	Yes	3,12	Residential	25	31 200	21 840	1	21 840	0	0	21 840	55
Montagu (B)	M10	Montagu	Montagu Industrial	Yes	1,50	Community Facility	10	15 010	10 507	1	10 507	0	0	0	0
Montagu (A)	M11	Montagu	Mandela Square	Yes	3,90	Informal Residential	35	38 990	27 293	1	27 293	0	0	27 293	96
Montagu (A)	M12	Montagu	Ashbury	Yes	0,64	Residential	35	6 410	4 487	1	4 487	0	0	4 487	16
Montagu (C)	M13	Montagu	Bergsig	Yes	2,37	Residential	25	23 690	16 583	1	16 583	0	0	16 583	41

Montagu (B)	M14	Montagu	Montagu	No	13,84	Approved Development, but vacant	10	138 400	96 880	1	96 880	0	0	0	0
Montagu (D)	M15	Montagu	Montagu	No	1,22	Business Node	10	12 210	8 547	1	8 547	8 547	0	0	0
Montagu (D)	M16	Montagu	Montagu	Yes	1,46	Residential	25	14 550	10 185	1	10 185	0	0	10 185	25
Montagu (E)	M17	Montagu	CBD	Yes	19,51	Central Business District	10	195 110	136 577	1	136 577	136 577	0	0	0
Montagu (B)	M18	Montagu	Montagu Industrial	Yes	8,42	Industrial	7	84 190	58 933	1	58 933	0	58 933	0	0
Montagu (B)	M19	Montagu	Montagu Industrial	Yes	12,57	Mixed-Use Development	7	125 730	88 011	1	88 011	0	0	0	0
Montagu (A)	M20	Montagu	Kliprug	Yes	18,34	Rural Residential	25	183 430	128 401	1	128 401	0	0	128 401	321
Montagu (E)	M21	Montagu	Montagu South	Yes	8,49	Approved Development, but vacant	25	84 900	59 430	1	59 430	0	0	0	0
Montagu (A)	M22	Montagu	Ashbury	Yes	0,31	Community Facility	10	3 130	2 191	1	2 191	0	0	0	0
Montagu (A)	M23	Montagu	Ashbury	Yes	2,07	Residential	35	20 710	14 497	1	14 497	0	0	14 497	51
Montagu (A)	M24	Montagu	Ashbury	Yes	0,28	Informal Residential	35	2 760	1 932	1	1 932	0	0	1 932	7
Montagu (A)	M25	Montagu	Ashbury	Yes	0,40	Residential	35	4 040	2 828	1	2 828	0	0	2 828	10
Montagu (A)	M26	Montagu	Ashbury	Yes	0,18	Residential	35	1 790	1 253	1	1 253	0	0	1 253	4
Montagu (A)	M27	Montagu	Ashbury	Yes	0,28	Residential	35	2 830	1 981	1	1 981	0	0	1 981	7
Montagu (A)	M28	Montagu	Ashbury	Yes	5,88	Informal Residential	35	58 830	41 181	1	41 181	0	0	41 181	144
Robertson (D)	R01	Robertson	Droëheuwel	Yes	4,58	Informal Residential	35	45 780	32 046	1	32 046	0	0	32 046	112
Robertson (D)	R02	Robertson	Dorpsig	Yes	1,41	Approved Development, but vacant	25	14 110	9 877	1	9 877	0	0	0	0
Robertson (D)	R03	Robertson	Dorpsig	Yes	0,23	Residential	25	2 270	1 589	1	1 589	0	0	1 589	4
Robertson (D)	R04	Robertson	Dorpsig / Ext 1	Yes	2,04	Business Node	10	20 410	14 287	1	14 287	14 287	0	0	0
Robertson (C)	R05	Robertson	Heyl	Yes	43,77	Mixed-Use Development/ Residential	35	437 740	306 418	1	306 418	0	0	306 418	1072
Robertson (C)	R06	Robertson	Môreson	Yes	1,89	Community Facility	10	18 850	13 195	1	13 195	0	0	0	0
Robertson (C)	R07	Robertson	Robertson	No	11,77	Approved Development, but vacant	15	117 740	82 418	1	82 418	0	0	82 418	124
Robertson (C)	R08	Robertson	Panorama	Yes	3,84	Residential	25	38 440	26 908	1	26 908	0	0	26 908	67
Robertson (C)	R09	Robertson	Ou Plaas	Yes	10,59	Residential	25	105 890	74 123	1	74 123	0	0	74 123	185
Robertson (C)	R10	Robertson	Robertson	Yes	1,39	Cemetery	NA	13 890	9 723	1	9 723	0	0	0	0
Robertson (C)	R11	Robertson	Robertson	No	3,84	Business Node	10	38 370	26 859	1	26 859	26 859	0	0	0
Robertson (A)	R12	Robertson	Robertson Industrial	Yes	9,27	Industrial	7	92 650	64 855	1	64 855	0	64 855	0	0

Robertson (C)	R13	Robertson	Dorpsig	Yes	0,37	Community Facility	10	3 660	2 562	1	2 562	2 562	0	0	0
Robertson (D)	R14	Robertson	Robertson	Yes	7,55	Residential	25	75 490	52 843	1	52 843	0	0	52 843	132
Robertson (E)	R15	Robertson	Bullida Gronde	Yes	25,66	Industrial	7	256 580	179 606	1	179 606	0	179 606	0	0
Robertson (C)	R16	Robertson	Nkqubela	Yes	0,15	Business Node	10	1 510	1 057	1	1 057	1 057	0	0	0
Robertson (C)	R17	Robertson	Nkqubela	Yes	6,57	Community Facility	10	65 660	45 962	1	45 962	0	0	0	0
Robertson (C)	R18	Robertson	CBD	Yes	41,71	Central Business District	10	417 140	291 998	1	291 998	291 998	0	0	0
Robertson (C)	R19	Robertson	Show Grounds	No	5,25	Mixed-Use Development	1	52 540	36 778	1	36 778	0	0	0	0
Robertson (C)	R20	Robertson	Robertson	Yes	1,06	Residential	25	10 560	7 392	1	7 392	0	0	7 392	18
Robertson (D)	R21	Robertson	Ext 1	Yes	2,32	Community Facility	10	23 220	16 254	1	16 254	0	0	0	0
Robertson (D)	R22	Robertson	Panorama	Yes	7,26	Approved Development, but vacant	25	72 610	50 827	1	50 827	0	0	0	0
Robertson (D)	R23	Robertson	Sonskyn	Yes	0,39	Public Open Space	NA	3 930	2 751	1	2 751	0	0	0	0
Robertson (C)	R24	Robertson	Ext 4	Yes	5,18	Residential	25	51 790	36 253	1	36 253	0	0	36 253	91
Robertson (A)	R25	Robertson	Robertson Industrial	Yes	19,92	Industrial	7	199 180	139 426	1	139 426	0	139 426	0	0
Robertson (A)	R26	Robertson	Robertson Industrial	Yes	2,44	Industrial	7	24 370	17 059	1	17 059	0	17 059	0	0
Robertson (E)	R27	Robertson	Bullida Gronde	Yes	14,91	Business Node	10	149 120	104 384	1	104 384	104 384	0	0	0
Robertson (D)	R28	Robertson	Dagbreek	Yes	0,31	Business Node	10	3 050	2 135	1	2 135	2 135	0	0	0
Robertson (D)	R29	Robertson	Dorpsig	Yes	0,94	Business Node	10	9 370	6 559	1	6 559	6 559	0	0	0
Robertson (E)	R30	Robertson	Bullida Gronde	Yes	6,61	Industrial	7	66 130	46 291	1	46 291	0	0	0	0
Robertson (E)	R31	Robertson	Bullida Gronde	Yes	19,71	Agri-Industry	7	197 130	137 991	1	137 991	0	137 991	0	0
Robertson (E)	R32	Robertson	Airfield	Yes	8,37	Aero-Industrial	7	83 700	58 590	1	58 590	0	58 590	0	0
Robertson (D)	R33	Robertson	Dorpsig	Yes	1,32	Public Open Space	NA	13 160	9 212	1	9 212	0	0	0	0
Robertson (C)	R34	Robertson	Nkqubela	Yes	0,21	Business Node	10	2 070	1 449	1	1 449	1 449	0	0	0
Nkqubela (B)	R35	Robertson/Nkqubela	Nkqubela	Yes	7,23	Informal Residential	35	72 260	50 582	1	50 582	0	0	50 582	177
Robertson (C)	R36	Robertson	Ou Plaas	Yes	2,66	Community Facility	10	26 570	18 599	1	18 599	0	0	0	0
Robertson (D)	R37	Robertson	Droëheuwel	Yes	0,44	Approved Development, but vacant	25	4 360	3 052	1	3 052	0	0	0	0
Robertson (C)	R38	Robertson	Ext 4	Yes	0,64	Business Node	10	6 360	4 452	1	4 452	4 452	0	0	0
Robertson (C)	R39	Robertson	Heyl	Yes		Transport	NA	0	0	1	0	0	0	0	0

Robertson (F)	R40	Robertson	Silverstrand	No	2,99	Approved Development, but vacant	15	29 890	20 923	1	20 923	0	0	0	0
Robertson (E)	R41	Robertson	Ext 15	Yes	4,34	Approved Development, but vacant	25	43 410	30 387	1	30 387	0	0	0	0
Robertson (A)	R42	Robertson	Robertson Industrial	Yes	4,26	Mixed-Use Development	15	42 620	29 834	1	29 834	0	0	0	0
Nkqubela (B)	R43	Robertson/Nkqubela	Nkqubela	Yes	0,91	To Be Relocated	NA	9 130	6 391	1	6 391	0	0	0	0
Robertson (C)	R44	Robertson	CBD	Yes	0,14	Business Node	10	1 430	1 001	1	1 001	1 001	0	0	0
Robertson (C)	R45	Robertson	CBD	Yes	0,20	Industrial	7	1 960	1 372	1	1 372	0	0	0	0
Robertson (C)	R46	Robertson	Robertson	Yes	0,31	Community Facility	10	3 080	2 156	1	2 156	0	0	0	0
Nkqubela (B)	R47	Robertson/Nkqubela	Nkqubela	Yes	0,13	Business Node	10	1 320	924	1	924	924	0	0	0
Nkqubela (B)	R48	Robertson/Nkqubela	Nkqubela	Yes	0,32	Public Open Space	NA	3 190	2 233	1	2 233	0	0	0	0
Nkqubela (B)	R49	Robertson/Nkqubela	Nkqubela	Yes	0,14	Community Facility	10	1 360	952	1	952	0	0	0	0
Nkqubela (B)	R50	Robertson/Nkqubela	Nkqubela	Yes	0,60	Public Open Space	NA	5 980	4 186	1	4 186	0	0	0	0
Nkqubela (B)	R51	Robertson/Nkqubela	Nkqubela	Yes	0,17	Public Open Space	NA	1 650	1 155	1	1 155	0	0	0	0

Of the above sites, the following sites in Robertson and Ashton at municipal level and Bonnievale and Montagu at settlement level have been identified as being high priority sites for future development:

Table 17: Details of the High Priority Sites identified from the MSDF that can accommodate future urban growth, and the projected yield and/or GLA per site.

Functional Area Name	New Dev Site ID on SDF Map	Main Place Name	Sub Place Name	Does Site Fall in SDF Development Node, Densification corridor or Priority Investment Area?	Area (Ha)	Proposed Use	Proposed Density	Developable Area (m2)	Built Footprint 70% coverage (m2)	Storeys	GLA in m2 (=built foot x storeys)	Retail / commercial (m2)	Industrial (m2)	Residential (m2)	Residential units yielded	Development Priority
Zolani (D)	A26	Ashton/ Zolani	Zolani	Yes	1,16	Business Node	10	11 560	8 092	1	8 092	8 092	0	0	0	0
Montagu (B)	M19	Montagu	Montagu Industrial	Yes	12,57	Mixed-Use Development	7	125 730	88 011	1	88 011	0	0	0	0	0
Ashton (A)	A02	Ashton	Cogmanskloof	Yes	0,89	Residential	25	8 890	6 223	1	6 223	0	0	6 223	16	< 5
Ashton (C)	A08	Ashton	Silos	Yes	4,90	Industrial (Truck Stop)	7	48 960	34 272	1	34 272	0	34 272	0	0	< 5
Ashton (B)	A09	Ashton	Conradiedorp	Yes	1,25	Residential	25	12 490	8 743	1	8 743	0	0	8 743	22	< 5
Ashton (B)	A11	Ashton	Conradiedorp	Yes	1,05	Residential	25	10 520	7 364	1	7 364	0	0	7 364	18	< 5
Ashton (B)	A12	Ashton	Conradiedorp	Yes	0,87	Residential	25	8 740	6 118	1	6 118	0	0	6 118	15	< 5
Ashton (B)	A13	Ashton	Conradiedorp	Yes	1,05	Residential	25	10 540	7 378	1	7 378	0	0	7 378	18	< 5
Ashton (B)	A15	Ashton	CBD	Yes	10,45	Central Business District	10	104 450	73 115	1	73 115	73 115	0	0	0	< 5
Ashton (C)	A16	Ashton	Silos	Yes	9,84	Cemetery	NA	98 420	68 894	1	68 894	0	0	0	0	< 5
Ashton (C)	A17	Ashton	Ashton	Yes	8,12	Business Node	10	81 170	56 819	1	56 819	56 819	0	0	0	< 5
Ashton (C)	A18	Ashton	Ashton	Yes	2,35	Business Node	10	23 540	16 478	1	16 478	16 478	0	0	0	< 5
Zolani (D)	A20	Ashton/ Zolani	Zolani	Yes	6,69	To Be Relocated	NA	66 920	46 844	1	46 844	0	0	0	0	< 5
Zolani (D)	A21	Ashton/ Zolani	Zolani	Yes	1,42	Community Facility	10	14 200	9 940	1	9 940	0	0	0	0	< 5
Zolani (D)	A22	Ashton/ Zolani	Zolani	Yes	1,27	Business Node	10	12 650	8 855	1	8 855	8 855	0	0	0	< 5
Ashton (A)	A25	Ashton	Cogmanskloof	Yes	5,93	Informal Residential	35	59 340	41 538	1	41 538	0	0	41 538	145	< 5
Ashton (C)	A29	Ashton	Ashton	No	4,08	Agri-Industry	7	40 790	28 553	1	28 553	0	0	0	0	< 5
Zolani (D)	A30	Ashton/ Zolani	Zolani	Yes	0,24	Community Facility	10	2 390	1 673	1	1 673	0	0	0	0	< 5
Zolani (D)	A31	Ashton/ Zolani	Zolani	Yes	0,10	Community Facility	10	1 010	707	1	707	0	0	0	0	< 5
Zolani (D)	A32	Ashton/ Zolani	Zolani	Yes	0,04	Small Business	10	370	259	1	259	259	0	0	0	< 5
Zolani (D)	A33	Ashton/ Zolani	Zolani	Yes	0,20	Public Open Space	NA	1 980	1 386	1	1 386	0	0	0	0	< 5
Ashton (B)	A34	Ashton	Conradiedorp	Yes	0,23	Small Business	10	2 280	1 596	1	1 596	1 596	0	0	0	< 5
Bonnievale (B)	B01	Bonnievale	Mandela Park	Yes	0,07	Residential	35	680	476	1	476	0	0	476	2	< 5
Bonnievale (B)	B02	Bonnievale	Mandela Park	Yes	0,44	Residential	35	4 430	3 101	1	3 101	0	0	3 101	11	< 5
Bonnievale (A)	B03	Bonnievale	Bonnievale	Yes	2,86	Cemetery	NA	28 570	19 999	1	19 999	0	0	0	0	< 5
Bonnievale (B)	B04	Bonnievale	Mandela Park	Yes	0,46	Residential	35	4 590	3 213	1	3 213	0	0	3 213	11	< 5
Bonnievale (B)	B05	Bonnievale	Mandela Park	Yes	0,45	Residential	35	4 480	3 136	1	3 136	0	0	3 136	11	< 5

Functional Area Name	New Dev Site ID on SDF Map	Main Place Name	Sub Place Name	Does Site Fall in SDF Development Node, Density corridor or Priority Investment Area?	Area (Ha)	Proposed Use	Proposed Density	Developable Area (m2)	Built Footprint 70% coverage (m2)	Storeys	GLA in m2 (=built foot x storeys)	Retail / commercial (m2)	Industrial (m2)	Residential (m2)	Residential units yielded	Development Priority
Bonnievale (C)	B06	Bonnievale	Boekenhoutskloof	Yes	21.23	Informal Residential	35	212 280	148 596	1	148 596	0	0	148 596	520	< 5
Bonnievale (C)	B07	Bonnievale	Boekenhoutskloof	Yes	2.06	Community Facility	10	20 640	14 448	1	14 448	0	0	0	0	< 5
Bonnievale (C)	B08	Bonnievale	Boekenhoutskloof	Yes	0.77	Community Facility	10	7 700	5 390	1	5 390	0	0	0	0	< 5
Bonnievale (E)	B09	Bonnievale	Lactalis	No	7.94	Rural Residential	25	79 380	55 566	1	55 566	0	0	55 566	139	< 5
Bonnievale (B)	B10	Bonnievale	Mandela Park	Yes	2.10	Residential	35	21 000	14 700	1	14 700	0	0	14 700	51	< 5
Bonnievale (B)	B12	Bonnievale	Mountain View	Yes	0.90	Residential	25	8 960	6 272	1	6 272	0	0	6 272	16	< 5
Bonnievale (B)	B13	Bonnievale	Mountain View	Yes	0.61	Residential	25	6 060	4 242	1	4 242	0	0	4 242	11	< 5
Bonnievale (B)	B14	Bonnievale	Mountain View	Yes	0.99	Business Node	10	9 910	6 937	1	6 937	6 937	0	0	0	< 5
Bonnievale (C)	B15	Bonnievale	Boekenhoutskloof	No	8.77	Mixed-Use Development	10	87 710	61 397	1	61 397	0	0	0	0	< 5
Bonnievale (C)	B16	Bonnievale	Bonnievale	Yes	13.58	Industrial	7	135 810	95 067	1	95 067	0	95 067	0	0	< 5
Bonnievale (A)	B17	Bonnievale	Bonnievale	Yes	7.98	Mixed-Use Development	20	79 770	55 839	1	55 839	0	0	0	0	< 5
Bonnievale (A)	B18	Bonnievale	CBD	Yes	10.27	Central Business District	10	102 680	71 876	1	71 876	71 876	0	0	0	< 5
Bonnievale (B)	B22	Bonnievale	Bonnievale	No	9.34	Mixed-Use Development	10	93 440	65 408	1	65 408	0	0	0	0	< 5
Bonnievale (B)	B24	Bonnievale	Mandela Park	Yes	0.99	Residential	35	9 900	6 930	1	6 930	0	0	6 930	24	< 5
Bonnievale (D)	B27	Bonnievale	Bonnievale	No	3.62	Agri-Industry	7	36 170	25 319	1	25 319	0	0	0	0	< 5
Bonnievale (B)	B28	Bonnievale	Mandela Park	Yes	0.21	Business Node	10	2 130	1 491	1	1 491	1 491	0	0	0	< 5
Bonnievale (B)	B29	Bonnievale	Mandela Park	Yes	0.40	Community Facility	10	4 010	2 807	1	2 807	0	0	0	0	< 5
Bonnievale (B)	B30	Bonnievale	Happy Valley	Yes	0.48	Business Node	10	4 780	3 346	1	3 346	3 346	0	0	0	< 5
McGregor (B)	Mc01	McGregor	McGregor	No	6.97	Central Business District	10	69 700	48 790	1	48 790	48 790	0	0	0	< 5
McGregor (B)	Mc02	McGregor	McGregor	No	0.21	Business Node	10	2 120	1 484	1	1 484	1 484	0	0	0	< 5
McGregor (A)	Mc03	McGregor	McGregor	Yes	2.58	Informal Residential	35	25 830	18 081	1	18 081	0	0	18 081	63	< 5
McGregor (B)	Mc04	McGregor	McGregor	Yes	0.67	Small Business	10	6 680	4 676	1	4 676	4 676	0	0	0	< 5
McGregor (B)	Mc05	McGregor	McGregor	No	0.48	Residential	10	4 790	3 353	1	3 353	0	0	3 353	3	< 5
McGregor (A)	Mc06	McGregor	White City	Yes	0.38	Business Node	10	3 750	2 625	1	2 625	2 625	0	0	0	< 5
McGregor (A)	Mc07	McGregor	White City	Yes	2.70	Community Facility	10	27 020	18 914	1	18 914	0	0	0	0	< 5

Functional Area Name	New Dev Site ID on SDF Map	Main Place Name	Sub Place Name	Does Site Fall in SDF Development Node, Intensification corridor or Priority Investment Area?	Area (Ha)	Proposed Use	Proposed Density	Developable Area (m2)	Built Footprint 70% coverage (m2)	Storeys	GLA in m2 (=built foot x storeys)	Retail / commercial (m2)	Industrial (m2)	Residential (m2)	Residential units yielded	Development Priority
McGregor (B)	Mc09	McGregor	McGregor	No	2.21	Cemetery	NA	22 070	15 449	1	15 449	0	0	0	0	< 5
McGregor (B)	Mc10	McGregor	McGregor	No	0.36	Cemetery	NA	3 560	2 492	1	2 492	0	0	0	0	< 5
Montagu (A)	M01	Montagu	Ashbury	Yes	0.64	Cemetery	NA	6 420	4 494	1	4 494	0	0	0	0	< 5
Montagu (A)	M07	Montagu	Ashbury	Yes	0.33	Business Node	10	3 340	2 338	1	2 338	2 338	0	0	0	< 5
Montagu (D)	M08	Montagu	Montagu	Yes	0.68	Residential	25	6 750	4 725	1	4 725	0	0	4 725	12	< 5
Montagu (B)	M10	Montagu	Montagu Industrial	Yes	1.50	Community Facility	10	15 010	10 507	1	10 507	0	0	0	0	< 5
Montagu (A)	M11	Montagu	Mandela Square	Yes	3.90	Informal Residential	35	38 990	27 293	1	27 293	0	0	27 293	96	< 5
Montagu (B)	M14	Montagu	Montagu	No	13.84	Approved Development, but vacant	10	138 400	96 880	1	96 880	0	0	0	0	< 5
Montagu (D)	M15	Montagu	Montagu	No	1.22	Business Node	10	12 210	8 547	1	8 547	8 547	0	0	0	< 5
Montagu (D)	M16	Montagu	Montagu	Yes	1.46	Residential	25	14 550	10 185	1	10 185	0	0	10 185	25	< 5
Montagu (E)	M17	Montagu	CBD	Yes	19.51	Central Business District	10	195 110	136 577	1	136 577	136 577	0	0	0	< 5
Montagu (B)	M18	Montagu	Montagu Industrial	Yes	8.42	Industrial	7	84 190	58 933	1	58 933	0	58 933	0	0	< 5
Montagu (E)	M21	Montagu	Montagu South	Yes	8.49	Approved Development, but vacant	25	84 900	59 430	1	59 430	0	0	0	0	< 5
Montagu (A)	M22	Montagu	Ashbury	Yes	0.31	Community Facility	10	3 130	2 191	1	2 191	0	0	0	0	< 5
Montagu (A)	M23	Montagu	Ashbury	Yes	2.07	Residential	35	20 710	14 497	1	14 497	0	0	14 497	51	< 5
Montagu (A)	M24	Montagu	Ashbury	Yes	0.28	Informal Residential	35	2 760	1 932	1	1 932	0	0	1 932	7	< 5
Montagu (A)	M25	Montagu	Ashbury	Yes	0.40	Residential	35	4 040	2 828	1	2 828	0	0	2 828	10	< 5
Montagu (A)	M26	Montagu	Ashbury	Yes	0.18	Residential	35	1 790	1 253	1	1 253	0	0	1 253	4	< 5
Montagu (A)	M27	Montagu	Ashbury	Yes	0.28	Residential	35	2 830	1 981	1	1 981	0	0	1 981	7	< 5
Montagu (A)	M28	Montagu	Ashbury	Yes	5.88	Informal Residential	35	58 830	41 181	1	41 181	0	0	41 181	144	< 5
Robertson (D)	R01	Robertson	Droëheuvel	Yes	4.58	Informal Residential	35	45 780	32 046	1	32 046	0	0	32 046	112	< 5
Robertson (D)	R02	Robertson	Dorpsig	Yes	1.41	Approved Development, but vacant	25	14 110	9 877	1	9 877	0	0	0	0	< 5
Robertson (D)	R03	Robertson	Dorpsig	Yes	0.23	Residential	25	2 270	1 589	1	1 589	0	0	1 589	4	< 5

Functional Area Name	New Dev Site ID on SDF Map	Main Place Name	Sub Place Name	Does Site Fall in SDF Development Node, Densification corridor or Priority Investment Area?	Area (Ha)	Proposed Use	Proposed Density	Developable Area (m2)	Built Footprint 70% coverage (m2)	Storeys	GLA in m2 (=built foot x storeys)	Retail / commercial (m2)	Industrial (m2)	Residential (m2)	Residential units yielded	Development Priority
Robertson (D)	R04	Robertson	Dorpsig / Ext 1	Yes	2,04	Business Node	10	20 410	14 287	1	14 287	14 287	0	0	0	< 5
Robertson (C)	R10	Robertson	Robertson	Yes	1,39	Cemetery	NA	13 890	9 723	1	9 723	0	0	0	0	< 5
Robertson (C)	R11	Robertson	Robertson	No	3,84	Business Node	10	38 370	26 859	1	26 859	26 859	0	0	0	< 5
Robertson (A)	R12	Robertson	Robertson Industrial	Yes	9,27	Industrial	7	92 650	64 855	1	64 855	0	64 855	0	0	< 5
Robertson (C)	R13	Robertson	Dorpsig	Yes	0,37	Community Facility	10	3 660	2 562	1	2 562	2 562	0	0	0	< 5
Robertson (E)	R15	Robertson	Bulida Grande	Yes	25,66	Industrial	7	256 580	179 606	1	179 606	0	179 606	0	0	< 5
Robertson (C)	R16	Robertson	Nkqubela	Yes	0,15	Business Node	10	1 510	1 057	1	1 057	1 057	0	0	0	< 5
Robertson (C)	R17	Robertson	Nkqubela	Yes	6,57	Community Facility	10	65 660	45 962	1	45 962	0	0	0	0	< 5
Robertson (C)	R18	Robertson	CBD	Yes	41,71	Central Business District	10	417 140	291 998	1	291 998	291 998	0	0	0	< 5
Robertson (C)	R20	Robertson	Robertson (C)	Yes	1,06	Residential	25	10 560	7 392	1	7 392	0	0	7 392	18	< 5
Robertson (D)	R21	Robertson	Ext 1	Yes	2,32	Community Facility	10	23 220	16 254	1	16 254	0	0	0	0	< 5
Robertson (D)	R22	Robertson	Panorama	Yes	7,26	Approved Development, but vacant	25	72 610	50 827	1	50 827	0	0	0	0	< 5
Robertson (D)	R23	Robertson	Sonskyn	Yes	0,39	Public Open Space	NA	3 930	2 751	1	2 751	0	0	0	0	< 5
Robertson (C)	R24	Robertson	Ext 4	Yes	5,18	Residential	25	51 790	36 253	1	36 253	0	0	36 253	91	< 5
Robertson (A)	R26	Robertson	Robertson Industrial	Yes	2,44	Industrial	7	24 370	17 059	1	17 059	0	17 059	0	0	< 5
Robertson (D)	R28	Robertson	Dagbreek	Yes	0,31	Business Node	10	3 050	2 135	1	2 135	2 135	0	0	0	< 5
Robertson (D)	R29	Robertson	Dorpsig	Yes	0,94	Business Node	10	9 370	6 559	1	6 559	6 559	0	0	0	< 5
Robertson (D)	R33	Robertson	Dorpsig	Yes	1,32	Public Open Space	NA	13 160	9 212	1	9 212	0	0	0	0	< 5
Robertson (C)	R34	Robertson	Nkqubela	Yes	0,21	Business Node	10	2 070	1 449	1	1 449	1 449	0	0	0	< 5
Nkqubela (B)	R35	Robertson/ Nkqubela	Nkqubela	Yes	7,23	Informal Residential	35	72 260	50 582	1	50 582	0	0	50 582	177	< 5
Robertson (C)	R36	Robertson	Ou Plaas	Yes	2,66	Community Facility	10	26 570	18 599	1	18 599	0	0	0	0	< 5
Robertson (D)	R37	Robertson	Droëheuwel	Yes	0,44	Approved Development, but vacant	25	4 360	3 052	1	3 052	0	0	0	0	< 5
Robertson (C)	R38	Robertson	Ext 4	Yes	0,64	Business Node	10	6 360	4 452	1	4 452	4 452	0	0	0	< 5

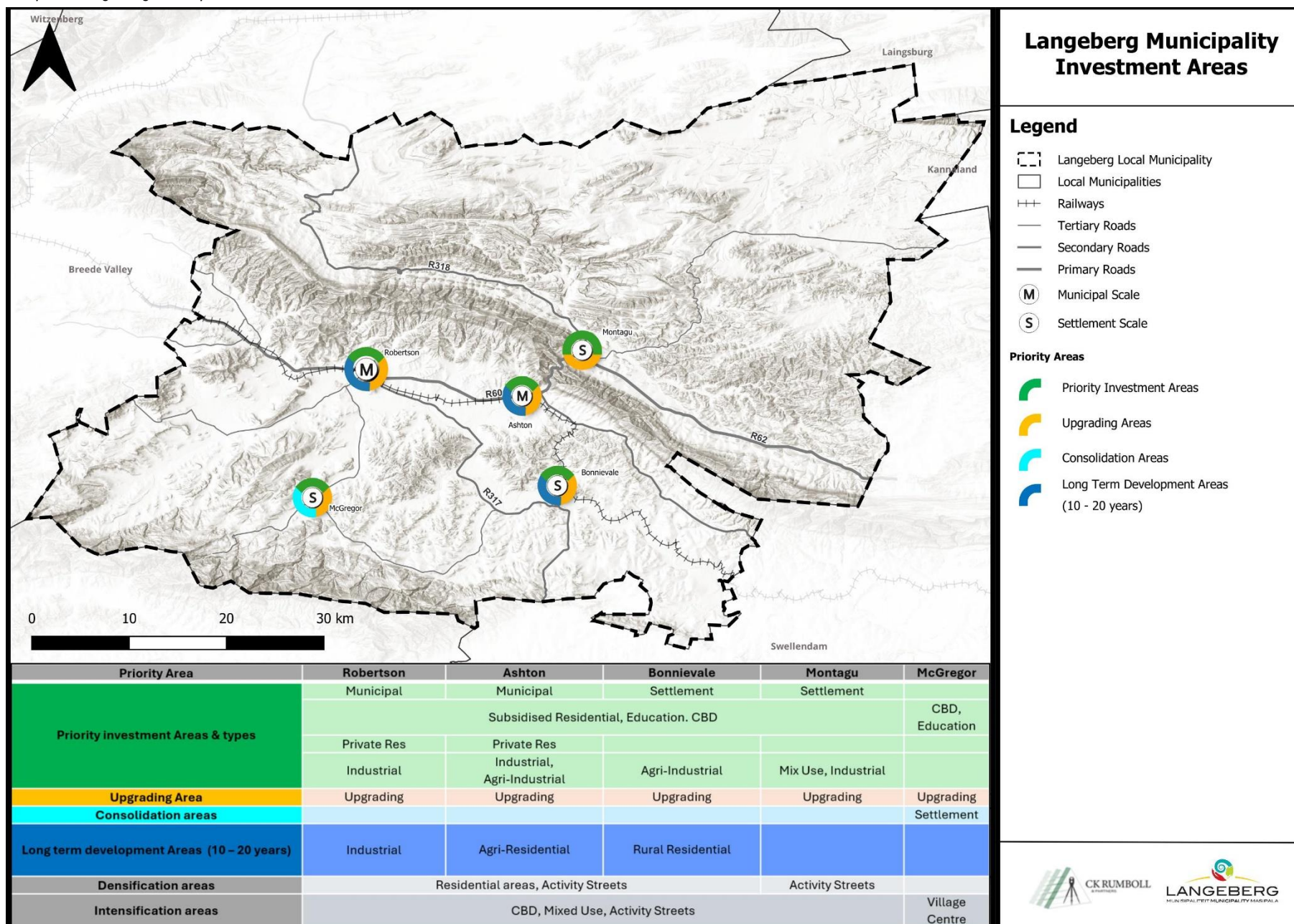
Functional Area Name	New Dev Site ID on SDF Map	Main Place Name	Sub Place Name	Does Site Fall in SDF Development Node, Densification corridor or Priority Investment Area?	Area (Ha)	Proposed Use	Proposed Density	Developable Area (m2)	Built Footprint 70% coverage (m2)	Storeys	GLA in m2 (=built foot x storeys)	Retail / commercial (m2)	Industrial (m2)	Residential (m2)	Residential units yielded	Development Priority
Robertson (F)	R40	Robertson	Silverstrand	No	2,99	Approved Development, but vacant	15	29 890	20 923	1	20 923	0	0	0	0	< 5
Robertson (E)	R41	Robertson	Ext 15	Yes	4,34	Approved Development, but vacant	25	43 410	30 387	1	30 387	0	0	0	0	< 5
Nkqubela (B)	R43	Robertson/ Nkqubela	Nkqubela	Yes	0,91	To Be Relocated	NA	9 130	6 391	1	6 391	0	0	0	0	< 5
Robertson (C)	R44	Robertson	CBD	Yes	0,14	Business Node	10	1 430	1 001	1	1 001	1 001	0	0	0	< 5
Robertson (C)	R45	Robertson	CBD	Yes	0,20	Industrial	7	1 960	1 372	1	1 372	0	0	0	0	< 5
Robertson (C)	R46	Robertson	Robertson	Yes	0,31	Community Facility	10	3 080	2 156	1	2 156	0	0	0	0	< 5
Nkqubela (B)	R47	Robertson/ Nkqubela	Nkqubela	Yes	0,13	Business Node	10	1 320	924	1	924	924	0	0	0	< 5
Nkqubela (B)	R48	Robertson/ Nkqubela	Nkqubela	Yes	0,32	Public Open Space	NA	3 190	2 233	1	2 233	0	0	0	0	< 5
Nkqubela (B)	R49	Robertson/ Nkqubela	Nkqubela	Yes	0,14	Community Facility	10	1 360	952	1	952	0	0	0	0	< 5
Nkqubela (B)	R50	Robertson/ Nkqubela	Nkqubela	Yes	0,60	Public Open Space	NA	5 980	4 186	1	4 186	0	0	0	0	< 5
Nkqubela (B)	R51	Robertson/ Nkqubela	Nkqubela	Yes	0,17	Public Open Space	NA	1 650	1 155	1	1 155	0	0	0	0	< 5

The table below reflects a summary of the total developable land in each functional area.

Table 18: Summary of the total developable areas in each of the Functional Areas – including the number of residential units that can be yielded per functional area

Settlement Areas	Sum of Developable Area (m2)	Sum of GLA in m2 (=built foot x storeys)	Sum of Retail / commercial (m2)	Sum of Industrial (m2)	Sum of Residential (m2)	Sum of Residential units yielded
Ashton (A)	263 390	184 373	31 976	0	152 397	527
Ashton (B)	332 520	232 764	74 711	0	117 908	236
Ashton (C)	1 011 770	708 239	73 297	408 205	0	0
Bonnievale (A)	265 850	186 095	71 876	0	38 381	96
Bonnievale (B)	344 230	240 961	38 276	0	42 070	137
Bonnievale (C)	464 140	324 898	0	95 067	148 596	520
Bonnievale (D)	190 290	133 203	0	0	0	0
Bonnievale (E)	217 800	152 460	0	0	152 460	270
McGregor (A)	80 040	56 028	2 625	0	34 489	121
McGregor (B)	108 920	76 244	54 950	0	3 353	3
Montagu (A)	443 750	310 625	2 338	0	301 602	927
Montagu (B)	363 330	254 331	0	58 933	0	0
Montagu (C)	54 890	38 423	0	0	38 423	96
Montagu (D)	33 510	23 457	8 547	0	14 910	37
Montagu (E)	280 010	196 007	136 577	0	0	0
Nkqubela (B)	94 890	66 423	924	0	50 582	177
Robertson (A)	358 820	251 174	0	221 340	0	0
Robertson (C)	1 415 250	990 675	329 378	0	533 512	1 558
Robertson (D)	287 760	201 432	22 981	0	86 478	248
Robertson (E)	796 070	557 249	104 384	376 187	0	0
Robertson (F)	29 890	20 923	0	0	0	0
Zolani (D)	508 430	355 901	17 206	0	270 298	946
Grand Total	7 945 550	5 561 885	970 046	1 159 732	1 985 459	5 900

Map 50: Langeberg Municipal Investment Areas.



7.1.3 Phase 2b: Undertake Infrastructure Demand Quantification and Identify Infrastructure Investment Requirements

Based on the residential yields and/or GLA determined from phase 2a for each site, phase 2b translates this into infrastructure demand and infrastructure service implications. The infrastructure determined from this phase is then included in the consolidated database of capital investments created during phase 1 of the CEF process.

Table 19: The engineering infrastructure and capital investment implications of the yields derived per residential site.

New Dev Site ID on SDF Map	Water Infrastructure Installation Costs (excl VAT)	Sanitation Infrastructure Installation Costs (excl VAT)	Roads Infrastructure Installation Costs (excl VAT)	Stormwater Infrastructure Installation Costs (excl VAT)	Solid Waste Infrastructure Installation Costs (excl VAT)	Electricity Infrastructure Installation Costs (excl VAT)	Total Infrastructure Installation Cost (excl VAT)
A01	R6 226 941	R10 505 925	R4 656 197	R1 049 970	R1 440 559	R1 370 784	R25 250 376
A02	R264 524	R446 298	R197 798	R44 603	R61 196	R58 232	R1 072 651
A03	R0	R0	R0	R0	R0	R0	R0
A04	R0	R0	R0	R0	R0	R0	R0
A05	R0	R0	R0	R0	R0	R0	R0
A06	R0	R0	R0	R0	R0	R0	R0
A07	R9 374 570	R15 816 520	R7 009 838	R1 580 715	R2 168 741	R2 063 696	R38 014 079
A08	R0	R0	R0	R0	R0	R0	R0
A09	R743 286	R1 045 044	R277 896	R62 665	R85 977	R163 625	R2 378 494
A10	R2 545 859	R3 579 420	R951 834	R214 638	R294 483	R560 439	R8 146 674
A11	R626 050	R880 213	R234 065	R52 781	R72 416	R137 817	R2 003 343
A12	R520 122	R731 279	R194 461	R43 851	R60 163	R114 498	R1 664 374
A13	R627 241	R881 886	R234 510	R52 882	R72 554	R138 079	R2 007 152
A14	R2 976 834	R4 185 362	R1 112 964	R250 973	R344 335	R655 313	R9 525 781
A15	R0	R0	R0	R0	R0	R0	R0
A16	R0	R0	R0	R0	R0	R0	R0
A17	R0	R0	R0	R0	R0	R0	R0
A18	R0	R0	R0	R0	R0	R0	R0
A19	R4 454 837	R7 516 080	R3 331 106	R751 163	R1 030 595	R980 677	R18 064 458
A20	R0	R0	R0	R0	R0	R0	R0
A21	R0	R0	R0	R0	R0	R0	R0
A22	R0	R0	R0	R0	R0	R0	R0
A23	R0	R0	R0	R0	R0	R0	R0
A24	R0	R0	R0	R0	R0	R0	R0
A25	R2 471 947	R4 170 602	R1 848 399	R416 813	R571 868	R544 169	R10 023 798
A26	R0	R0	R0	R0	R0	R0	R0
A27	R935 208	R1 577 857	R699 302	R157 692	R216 354	R205 874	R3 792 286
A28	R1 320 955	R2 228 679	R987 744	R222 736	R305 594	R290 792	R5 356 499
A29	R0	R0	R0	R0	R0	R0	R0
A30	R0	R0	R0	R0	R0	R0	R0
A31	R0	R0	R0	R0	R0	R0	R0
A32	R0	R0	R0	R0	R0	R0	R0
A33	R0	R0	R0	R0	R0	R0	R0
A34	R0	R0	R0	R0	R0	R0	R0
B01	R28 327	R47 793	R21 182	R4 776	R6 553	R6 236	R114 867
B02	R184 542	R311 354	R137 991	R31 117	R42 693	R40 625	R748 322
B03	R0	R0	R0	R0	R0	R0	R0
B04	R191 207	R322 600	R142 975	R32 241	R44 234	R42 092	R775 349
B05	R186 625	R314 869	R139 549	R31 468	R43 174	R41 083	R756 768
B06	R8 843 022	R14 919 707	R6 612 373	R1 491 087	R2 045 771	R1 946 682	R35 858 642
B07	R0	R0	R0	R0	R0	R0	R0
B08	R0	R0	R0	R0	R0	R0	R0

B09	R4 723 943	R6 641 758	R1 766 165	R398 269	R546 425	R1 039 918	R15 116 479
B10	R874 804	R1 475 946	R654 135	R147 507	R202 380	R192 577	R3 547 350
B11	R0	R0	R0	R0	R0	R0	R0
B12	R266 607	R449 812	R199 356	R44 955	R61 678	R58 690	R1 081 097
B13	R180 317	R304 226	R134 832	R30 405	R41 715	R39 695	R731 188
B14	R0	R0	R0	R0	R0	R0	R0
B15	R0	R0	R0	R0	R0	R0	R0
B16	R0	R0	R0	R0	R0	R0	R0
B17	R0	R0	R0	R0	R0	R0	R0
B18	R0	R0	R0	R0	R0	R0	R0
B19	R0	R0	R0	R0	R0	R0	R0
B20	R0	R0	R0	R0	R0	R0	R0
B21	R0	R0	R0	R0	R0	R0	R0
B22	R0	R0	R0	R0	R0	R0	R0
B23	R3 262 961	R4 587 649	R1 219 940	R275 096	R377 431	R718 300	R10 441 377
B24	R412 408	R695 803	R308 378	R69 539	R95 408	R90 786	R1 672 322
B25	R3 493 861	R4 912 290	R1 306 268	R294 563	R404 140	R769 130	R11 180 253
B26	R965 736	R1 357 804	R361 065	R81 420	R111 708	R212 595	R3 090 328
B27	R0	R0	R0	R0	R0	R0	R0
B28	R0	R0	R0	R0	R0	R0	R0
B29	R0	R0	R0	R0	R0	R0	R0
B30	R0	R0	R0	R0	R0	R0	R0
Mc01	R0	R0	R0	R0	R0	R0	R0
Mc02	R0	R0	R0	R0	R0	R0	R0
Mc03	R1 076 009	R1 815 414	R804 586	R181 434	R248 927	R236 870	R4 363 241
Mc04	R0	R0	R0	R0	R0	R0	R0
Mc05	R114 022	R160 313	R42 630	R9 613	R13 189	R25 101	R364 867
Mc06	R0	R0	R0	R0	R0	R0	R0
Mc07	R0	R0	R0	R0	R0	R0	R0
Mc08	R976 448	R1 647 437	R730 140	R164 646	R225 894	R214 953	R3 959 518
Mc09	R0	R0	R0	R0	R0	R0	R0
Mc10	R0	R0	R0	R0	R0	R0	R0
M01	R0	R0	R0	R0	R0	R0	R0
M02	R1 114 334	R1 880 074	R833 244	R187 896	R257 793	R245 307	R4 518 648
M03	R1 205 564	R2 033 994	R901 461	R203 279	R278 899	R265 390	R4 888 586
M04	R813 985	R1 373 333	R608 657	R137 252	R188 310	R179 189	R3 300 725
M05	R450 316	R759 761	R336 724	R75 931	R104 177	R99 131	R1 826 041
M06	R1 042 683	R1 759 187	R779 667	R175 814	R241 217	R229 534	R4 228 103
M07	R0	R0	R0	R0	R0	R0	R0
M08	R401 696	R564 775	R150 184	R33 866	R46 465	R88 428	R1 285 415
M09	R1 856 728	R2 610 517	R694 184	R156 538	R214 770	R408 736	R5 941 473
M10	R0	R0	R0	R0	R0	R0	R0
M11	R1 624 220	R2 740 340	R1 214 511	R273 872	R375 752	R357 552	R6 586 247
M12	R267 024	R450 515	R199 667	R45 025	R61 774	R58 782	R1 082 786
M13	R1 409 804	R1 982 152	R527 091	R118 859	R163 074	R310 351	R4 511 330
M14	R0	R0	R0	R0	R0	R0	R0
M15	R0	R0	R0	R0	R0	R0	R0
M16	R865 878	R1 217 405	R323 730	R73 001	R100 157	R190 612	R2 770 783
M17	R0	R0	R0	R0	R0	R0	R0
M18	R0	R0	R0	R0	R0	R0	R0
M19	R0	R0	R0	R0	R0	R0	R0
M20	R5 458 006	R9 208 599	R4 081 226	R920 314	R1 262 671	R1 201 512	R22 132 328
M21	R0	R0	R0	R0	R0	R0	R0
M22	R0	R0	R0	R0	R0	R0	R0
M23	R862 724	R1 455 564	R645 102	R145 470	R199 585	R189 918	R3 498 363
M24	R114 974	R193 981	R85 972	R19 387	R26 598	R25 310	R466 223
M25	R168 296	R283 944	R125 843	R28 378	R38 934	R37 048	R682 443
M26	R74 567	R125 807	R55 757	R12 573	R17 250	R16 415	R302 369

M27	R117 890	R198 901	R88 153	R19 878	R27 273	R25 952	R478 048
M28	R2 450 702	R4 134 758	R1 832 513	R413 231	R566 953	R539 492	R9 937 648
R01	R1 907 073	R3 217 563	R1 426 015	R321 566	R441 188	R419 819	R7 733 223
R02	R0	R0	R0	R0	R0	R0	R0
R03	R67 544	R113 959	R50 506	R11 389	R15 626	R14 869	R273 894
R04	R0	R0	R0	R0	R0	R0	R0
R05	R36 470 177	R51 276 243	R13 635 295	R3 074 751	R4 218 559	R8 028 458	R116 703 483
R06	R0	R0	R0	R0	R0	R0	R0
R07	R4 204 060	R5 910 813	R1 571 794	R354 439	R486 290	R925 472	R13 452 866
R08	R2 287 584	R3 216 291	R855 271	R192 863	R264 608	R503 583	R7 320 200
R09	R6 301 567	R8 859 860	R2 356 000	R531 277	R728 911	R1 387 212	R20 164 827
R10	R0	R0	R0	R0	R0	R0	R0
R11	R0	R0	R0	R0	R0	R0	R0
R12	R0	R0	R0	R0	R0	R0	R0
R13	R0	R0	R0	R0	R0	R0	R0
R14	R2 246 224	R3 789 768	R1 679 615	R378 752	R519 648	R494 478	R9 108 485
R15	R0	R0	R0	R0	R0	R0	R0
R16	R0	R0	R0	R0	R0	R0	R0
R17	R0	R0	R0	R0	R0	R0	R0
R18	R0	R0	R0	R0	R0	R0	R0
R19	R0	R0	R0	R0	R0	R0	R0
R20	R628 431	R883 560	R234 955	R52 982	R72 692	R138 341	R2 010 960
R21	R0	R0	R0	R0	R0	R0	R0
R22	R0	R0	R0	R0	R0	R0	R0
R23	R0	R0	R0	R0	R0	R0	R0
R24	R3 082 049	R4 333 291	R1 152 302	R259 843	R356 505	R678 475	R9 862 465
R25	R0	R0	R0	R0	R0	R0	R0
R26	R0	R0	R0	R0	R0	R0	R0
R27	R0	R0	R0	R0	R0	R0	R0
R28	R0	R0	R0	R0	R0	R0	R0
R29	R0	R0	R0	R0	R0	R0	R0
R30	R0	R0	R0	R0	R0	R0	R0
R31	R0	R0	R0	R0	R0	R0	R0
R32	R0	R0	R0	R0	R0	R0	R0
R33	R0	R0	R0	R0	R0	R0	R0
R34	R0	R0	R0	R0	R0	R0	R0
R35	R3 010 160	R5 078 660	R2 250 848	R507 565	R696 379	R662 649	R12 206 263
R36	R0	R0	R0	R0	R0	R0	R0
R37	R0	R0	R0	R0	R0	R0	R0
R38	R0	R0	R0	R0	R0	R0	R0
R39	R0	R0	R0	R0	R0	R0	R0
R40	R0	R0	R0	R0	R0	R0	R0
R41	R0	R0	R0	R0	R0	R0	R0
R42	R0	R0	R0	R0	R0	R0	R0
R43	R0	R0	R0	R0	R0	R0	R0
R44	R0	R0	R0	R0	R0	R0	R0
R45	R0	R0	R0	R0	R0	R0	R0
R46	R0	R0	R0	R0	R0	R0	R0
R47	R0	R0	R0	R0	R0	R0	R0
R48	R0	R0	R0	R0	R0	R0	R0
R49	R0	R0	R0	R0	R0	R0	R0
R50	R0	R0	R0	R0	R0	R0	R0
R51	R0	R0	R0	R0	R0	R0	R0

Table 20: The engineering service demand implications of the yields derived per residential site.

New Dev Site ID on SDF Map	Water Service Demand (kl/day)	Sanitation Service Demand (kl/day2)	Roads Service Demand (Trips/peak hour)	Stormwater Service Demand ©	Solid Waste Service Demand (kg/day)	Electricity Service Demand (kVA/day)
A01	146	132	1 465		4 094	916
A02	6	6	62		174	39
A03						
A04						
A05						
A06						
A07	221	198	2 205		16 246	1 378
A08						
A09	17	13	87		644	70
A10	60	45	299		2 206	240
A11	15	11	74		542	59
A12	12	9	61		451	49
A13	15	11	74		544	59
A14	70	53	350		2 579	280
A15						
A16						
A17						
A18						
A19	105	94	1 048		7 720	419
A20						
A21						
A22						
A23						
A24						
A25	58	52	582		2 142	233
A26						
A27	22	20	220		1 621	88
A28	31	28	311		2 289	124
A29						
A30						
A31						
A32						
A33						
A34						
B01	1	1	7		25	4
B02	4	4	43		160	27
B03						
B04	4	4	45		166	28
B05	4	4	44		162	27
B06	208	187	2 080		7 662	832
B07						
B08						
B09	111	83	556		3 106	445
B10	21	19	206		758	129
B11						
B12	6	6	63		231	39
B13	4	4	42		156	27
B14						
B15						
B16						
B17						
B18						

B19						
B20						
B21						
B22						
B23	77	58	384		2 145	307
B24	10	9	97		357	61
B25	82	62	411		2 297	329
B26	23	17	114		635	91
B27						
B28						
B29						
B30						
Mc01						
Mc02						
Mc03	25	23	253		932	101
Mc04						
Mc05	3	2	13		99	11
Mc06						
Mc07						
Mc08	23	21	230		846	144
Mc09						
Mc10						
M01						
M02	26	24	262		966	105
M03	28	26	284		1 045	113
M04	19	17	191		705	77
M05	11	10	106		390	42
M06	25	22	245		903	153
M07						
M08	9	7	47		264	38
M09	44	33	218		1 221	175
M10						
M11	38	34	382		1 407	153
M12	6	6	63		231	39
M13	33	25	166		927	133
M14						
M15						
M16	20	15	102		569	81
M17						
M18						
M19						
M20	128	116	1 284		4 729	514
M21						
M22						
M23	20	18	203		748	127
M24	3	2	27		100	11
M25	4	4	40		146	25
M26	2	2	18		65	11
M27	3	2	28		102	17
M28	58	52	577		2 124	231
R01	45	40	449		1 652	179
R02						
R03	2	1	16		59	10
R04						
R05	858	643	4 290		31 601	3 432
R06						
R07	99	74	495		3 643	396
R08	54	40	269		1 982	215

R09	148	111	741		5 460	593
R10						
R11						
R12						
R13						
R14	53	48	528		1 946	330
R15						
R16						
R17						
R18						
R19						
R20	15	11	74		545	59
R21						
R22						
R23						
R24	73	54	363		2 671	290
R25						
R26						
R27						
R28						
R29						
R30						
R31						
R32						
R33						
R34						
R35	71	64	708		2 608	283
R36						
R37						
R38						
R39						
R40						
R41						
R42						
R43						
R44						
R45						
R46						
R47						
R48						
R49						
R50						
R51						
Total	3 279	2 675	23 600	0	129 800	14 386

Table 21: Summary of the engineering service demand implications of the yields derived per site, per functional area.

Settlement Areas	Sum of Water Service Demand (kl/day)	Sum of Sanitation Service Demand (kl/day2)	Sum of Solid Waste Service Demand (kg/day)	Sum of Roads Service Demand (Trips/peak hour)	Sum of Electricity Service Demand (kVA/day)
Ashton (A)	211	190	6 410	2 109	1 187
Ashton (B)	189	142	6 966	946	757
Ashton (C)	0	0	0	0	0
Bonnievale (A)	77	58	2 145	384	307
Bonnievale (B)	55	49	2 014	547	342
Bonnievale (C)	208	187	7 662	2 080	832
Bonnievale (D)	0	0	0	0	0
Bonnievale (E)	216	162	6 038	1 080	864
McGregor (A)	48	43	1 778	483	245
McGregor (B)	3	2	99	13	11
Montagu (A)	371	334	13 661	3 709	1 618
Montagu (B)	0	0	0	0	0
Montagu (C)	77	58	2 148	384	307
Montagu (D)	30	22	833	149	119
Montagu (E)	0	0	0	0	0
Nkqubela (B)	71	64	2 608	708	283
Robertson (A)	0	0	0	0	0
Robertson (C)	1 246	935	45 902	6 231	4 985
Robertson (D)	99	89	3 657	993	520
Robertson (E)	0	0	0	0	0
Robertson (F)	0	0	0	0	0
Zolani (D)	378	341	27 876	3 784	2 010
Grand Total	3 279	2 675	129 800	23 600	14 386

7.1.4 Phase 3: Define 10-year Affordability Envelop for Capital Infrastructure Investment and Maintenance

The long-term financial plan (LTFP) indicates that the total 10-year Capex demand for Langeberg is R2. 824 billion whilst the 10-year affordability is R1.198 billion (43% of the demand).

Affordable Future Capital Investment:

The total capital expenditure demand was determined during the preparation of the LTFP in 2016 and is expected to have changed since then. However, it is used for purposes of determining affordability, the focus of the Capital Expenditure Framework.

Table 22: Capital Expenditure: Demand vs Affordability

Total 10-year CAPEX Demand (Adjusted)	R 2 824 million
Total 10-year CAPEX Affordability:	R 1 198 million.

The 10-year funding mix for affordable capital demand includes 62.4% from new loans, 4.5% from own cash and 32.3% from grants and 0.8% from other sources such as development contributions.

Table 23: Capital Funding Mix

Source	Rm	%
Public & Developers' Contributions	10	0.8%
Capital Grants	387	32.3%
Financing	748	62.4%
Cash Reserves and Funds	53	4.5%
Cash Shortfall	-	
Capital Expenditure	1 198	100%

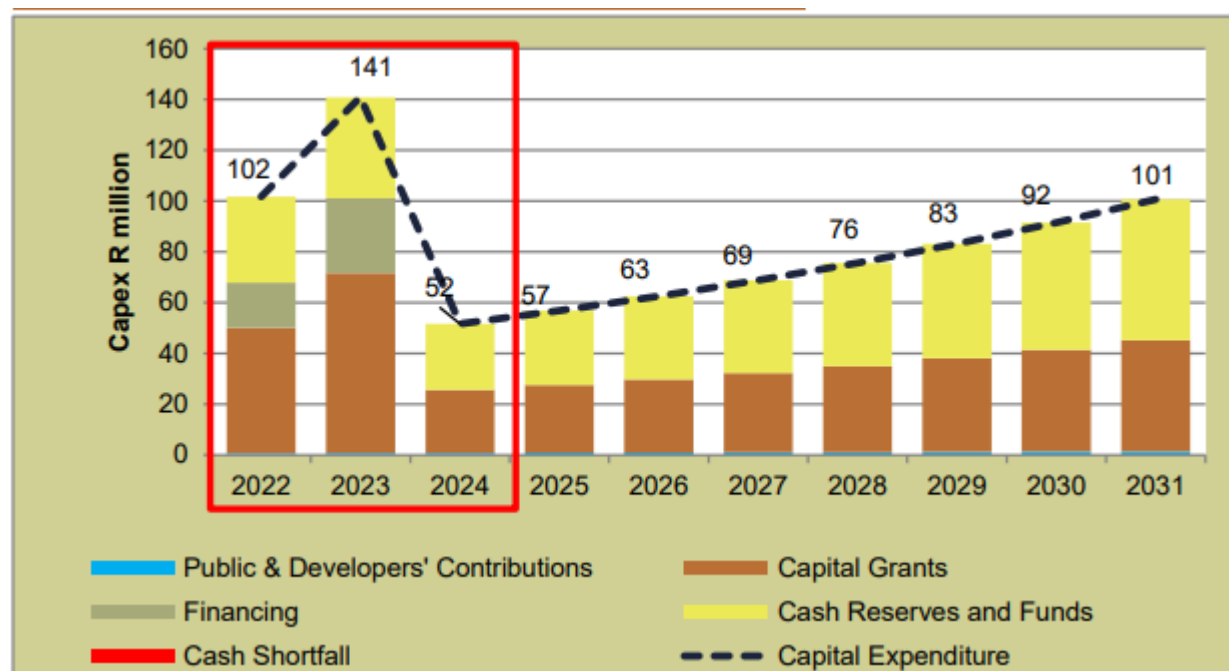
The increase in borrowings as the main funding source (62.4%) compares to the historical funding mix (past 8 years) where cash reserves and capital grant funds were extensively utilised to fund capital expenditure. Pertinent to the decision to take up borrowings to create an optimal funding mix, is that grant funding in future is expected to decline in real terms.

The gearing ratio remains below the maximum benchmark of 30%, however the debt service to total expense ratio will exceed the maximum benchmark of 7% for the planning period.

Repairs and maintenance as a percentage of property, plant and equipment was gradually increased from 2.9% (FY2021) to reach 8% by the end of the planning period.

Therefore, Langeberg LM has to improve its profitability by managing its expenditure (the optimal model assumed a R 20 million decrease) for each year of the MTREF period and consider tariff increases that result in higher surplus margins, whilst maintaining a collection rate above at or above 96%.

Figure 12: Current MTREF: Capital Funding Mix



The current funding mix will contribute to a significant decline in the cash balance over the long term. Therefore, the current MTREF capital funding mix appears sub-optimal and the following adjustments are recommended:

1. MTREF expected collection rate of 96% assumed to remain constant for the remainder of the planning period.
2. Adjust the MTREF capital funding mix by eliminating funding from cash resources from FY2023 onwards by taking up borrowings instead.
3. Reduce operating expenditure by R20 million per year (approximately 2% of MTREF operating expenditure) permanently from FY2022 onwards.
4. Repairs and maintenance as a percentage of property, plant and equipment assumed to gradually increase to 8% by the end of the planning period, from the FY2021 rate of 2.9%.

The annual borrowings proposed under this scenario consists of 10-year amortising loans at a fixed interest rate equal to 6% over CPI in any given year. Even at these levels of borrowings, the debt indicators of Langeberg LM remain at or below the maximum recommended norms. Adjusting the funding mix, while preserving cash resources, yields a positive/improved financial outcome. With these adjustments to the funding mix over the MTREF period, Langeberg is forecast to generate operating surpluses from FY2029.

The Estimated 10 Year Funding of Capital Expenditure average R1 198 million. The LTFP recommend that Langeberg Municipality do not advance its capital to fund upgrades and new infrastructure required. The municipality will have to seriously consider to decrease the use of its cash reserves to 4,2% of the Estimated 10 Year Funding of Capital Expenditure its envisaged investment. Note that the MTREF capital expenditure (2022 – 2024) averaged R99 million per annum (R296 million in total) is less than the affordable 10-Year Capital Expenditure demand calculation of R120 million per annum, which indicates under-budgeting.

7.1.5 Langeberg Financial Performance, Income and Spending

The information that follows is derived from the Langeberg Long Term Financial Plan (Update 2021).

7.1.5.1 Long Term Financial Plan

Langeberg's long-term financial plan, 2016 – 2025 was updated in 2021 and provides the following overview:

- Langeberg LM's economy reveals an average economic growth rate over the past 5 years of 0.04% p.a.;
- A GVA per capita of R 49 541;
- An economy that is fairly diversified as indicated by a Tress Index of 47.66 driven by five main economic sectors, comprising approximately 87.9% of economic output;
- The total Gross Value Added (GVA) was R5.443 billion in 2020 (constant prices) and is on a declining trend resulting from COVID-19 and associated lockdowns.
- A shrinking economy along with a population growth of 1.28% resulted in a reduction in GVA per capita. The pressure on households to settle their municipal bill (household ability to pay risk) will increase;
- GVA per capita is expected to improve steadily over the long-term planning period;
- Growth in GVA will result in an increase in the municipality's revenue base, which will improve profitability and ultimately accelerate investment in capital expenditure;
- Langeberg LM is forecast to generate cash from operations due to the high collection rate assumed over the planning period;
- The high percentage of indigent households reliant on support (16.6%); an official unemployment rate of 6.8% and a human development index of 0.73 resulted in a "Medium" household ability to pay risk component of MRRI;
- The regional economy and the household ability to pay for services delivered by the municipality, rates Langeberg LM as "Medium to High" risk on the MRRI indicator scale i.e. there is a medium to high risk that the municipality will not be able to generate the forecast cash revenue expected in future. (The Municipal Revenue Risk Indicator ("MRRI") measures the risk of a municipality to generate its own revenues).

7.1.5.2 Financial Health Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	
Unspent Conditional Grants	3.3	10.5	8.9	3.8	13.7	7.4	6.6	28.8	Cash balance: Cash in bank and not being in overdraft
Short Term Provisions	14.3	16.5	21.2	20.1	29.2	34.7	43.1	49.4	
Funds, Reserves & Trust Funds (Cash Backed)	35.8	29.4	35.2	31.4	56.4	62.9	62.9	62.9	
Total	53.4	56.5	65.4	55.2	99.3	105.1	112.6	141.2	
Unencumbered Cash	61.2	82.6	103.1	115.1	149.1	154.7	201.0	283.1	The length of time, and ideally 3 months, a municipality could manage to pay for the day-to-day expenses.
Cash Coverage Ratio (excl Working Capital)	1.1	1.5	1.6	2.1	1.5	1.5	1.8	2.0	
Working Capital Provision (1 Month's Opex)	33.0	38.4	42.9	45.3	49.5	50.5	53.1	60.4	
Cash Coverage Ratio (incl Working Capital)	0.7	0.9	1.0	1.1	1.0	1.0	1.2	1.4	
Minimum Liquidity Required	86.4	94.9	108.3	100.5	148.8	155.5	165.8	201.6	
Cash Surplus/(Shortfall)	(25.2)	(12.2)	(5.3)	14.6	0.3	(0.8)	35.2	81.5	

Cash Balance

Cash and cash equivalents increased by R82.1 million (41%) from R201.0 million as at FYE2020 to R283.1 million as at FYE2021. This can be attributed to: 1) the improvement in the collection rate over the period (94% to 104%); 2) the municipality not having utilised its own cash resources to fund capital expenditure; and 3) the additional capital grant funds invested at year end on short term investments due to the underspending on capital expenditure. This resulted in an improvement in Langeberg LM's cash position whereby the cash balance (and cash in the bank and not being in overdraft) net the statutory liquidity requirements of R201.6 million, was a cash surplus of R81.5 million; a significant improvement since FYE2019's cash deficit of R0.8 million.

Cash Coverage

Cash coverage measures the length of time in months a municipality could manage to pay for the day-to-day expenses using just its cash reserves. Ideally a municipality should have three months of cash cover and Langeberg has two months of cash cover (excluding working capital) and 1.4 months of cash cover (including working capital).

Spending of Operating Budget

How much more a municipality spends on it's operating budget than planned has to be controlled to avoid cash shortages. Overspending by up to 5 percent is usually condoned, while overspending in excess of 15% is a sign of high risk.

Langeberg LM is forecast to generate accounting and operating deficits for most of the planning period. However, notwithstanding these deficits, it is forecast that the municipality will generate cash from operations from FY2023 onwards.

Table 24: Analysis of Surplus

	2014	2015	2016	2017	2018	2019	2020	2021
Total Accounting Surplus	31.0	12.8	52.9	77.3	10.0	99.1	79.1	34.0
Total Operating Surplus (excl Capital Grants)	5.5	(10.0)	6.6	52.8	(14.1)	42.7	47.1	5.1
Cash Generated by Operations (excl Capital Grants)	26.2	46.1	46.3	41.0	45.0	45.0	50.4	82.9

Spending of Capital Budget

Capital spending includes spending on infrastructure projects. Underspending on a capital budget can lead to an under-delivery of basic services. The underspending of the capital budget implementation of 52% underscores the urgent upgrade of civil and electrical services required. Persistent underspending may be due to under resourced municipalities which cannot manage large projects on time.

Municipalities should aim to spend at least 95 percent of their capital budgets. Failure to spend even 85 percent is a clear warning sign.

As capital expenditure over the last two years decreased when compared to FY2019 it was recommended that the municipality taking up borrowings to fund its capital expenditure instead of utilising its own cash resources. The FY2021 capital expenditure of R56.8 million was funded primarily through capital grants of which a significant portion (R28,8 million conditional grants) was unspent at year end.

Fruitless and wasteful expenditure

Fruitless & wasteful expenditure is that which is made in vain and could have been avoided had reasonable care been exercised. Such expenditure includes unauthorised and irregular expenditure. No figures were available on this item.

Current Ratio

The current ration compares the value of a municipality's short-term assets (cash, bank deposits, etc) to its short-term liabilities (creditors, loans due and so on). The higher the ratio, the better. The current ration is 1.5 to 2 (the municipality's assets are more than 1,5 to 2 times its current debts). A lower ratio will mean the municipality will struggle to keep up it's debt payments.

The combined effect of the movements in Current Assets and Current Liabilities resulted in a current ratio of 2.09:1 as at FYE2021 (See table below), which is aligned with the norm of 1.5 to 2. Hence a healthy liquidity ratio (excluding debtors greater than 30 days) of 2.02:1 is reflected.

Table 25: Liquidity Ratios

	Ratios	2014	2015	2016	2017	2018	2019	2020	2021
Current Assets: Current Liabilities	Current Ratio	1.76	1.49	1.55	2.04	1.73	1.86	2.22	2.09
Current Assets (less Debtors > 30 Days): Current Liabilities	Liquidity Ratio	1.76	1.49	1.54	2.03	1.71	1.84	2.04	2.02

Liquidity Ratio

The ability to meet current liabilities (monies owed immediately such as rent and salaries) as they become due as well as long term liabilities (such as loans) as they become current.

Current Liabilities peaked at R174.6 million in FYE2021 following an increase of R29.6 million (20%) from R145.0 million in FYE2020. This increase is mainly driven by the unspent conditional grant of R22.2 million received as a “late allocation of grant from Department of Water Services”.

Notwithstanding being the main contributor to the current liabilities balance, creditors remained relatively stable at R77.2 million for FYE2021, compared to the R77.5 million as at FYE2020. This marginal difference is evidenced in the creditors’ payment period⁵ of 29 days as at FYE2021, which is less than the NT recommended benchmark of 30 days.

The increased levels of cash also provide for a liquidity buffer to absorb unexpected cash outflows (financial shocks) in the short to medium-term. The healthy liquidity position is further supported by a current ratio (excluding debtors greater than 30 days) of 2.02:1, which indicates the high level of liquidity in current assets.

Current Debtors Collection Rate

Not all rates and services charges are collected within a financial year. The Current Debtors Collection Rate looks at the percentage of new revenue that a municipality collects.

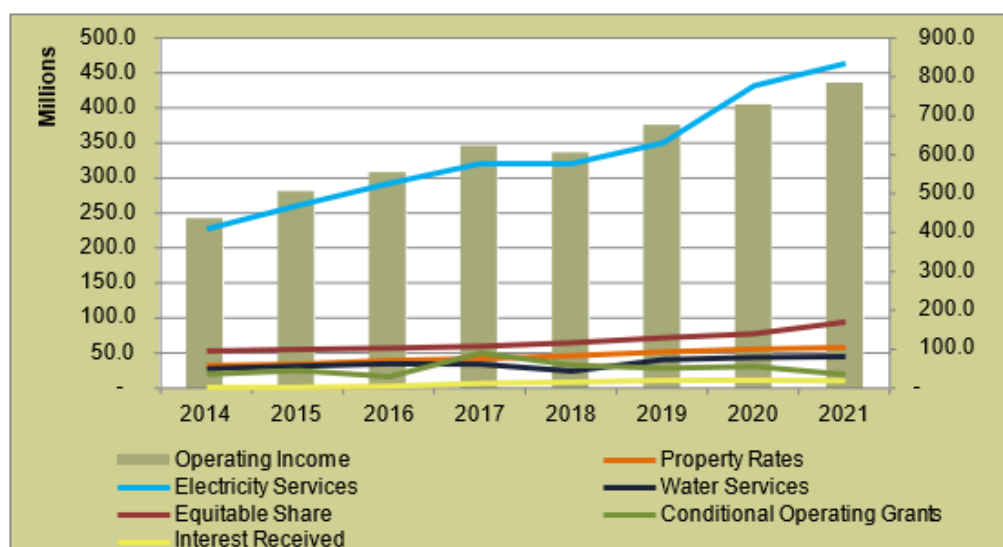
The collection rate deteriorated to 94% in FY2020 due to the financial impact of COVID-19. However, this rate improved to 104% in FY2021, exceeding the municipality’s expectations as envisioned in the FY2021 budget. A collection rate of 96% was assumed in the MTREF budget for FY2022. The collection rate has to be maintained at these high levels for Langeberg LM to maintain a healthy liquidity position.

7.1.5.3 Municipal Income

Municipalities are expected to generate its own income instead of being dependent on transfers and grants from government. Langeberg LM generated a total operating surplus of R5.1 million (excluding capital grants), being an 89% decrease from R47.1 million realised in FY2020.

⁵ The creditors payment period is determined by taking into consideration the “trade and other payables from exchange transactions” disclosed in the AFS which includes trade payables, payments received in advance, other payables, retentions and deposits.

Figure 13: Contribution Per Income Source



Excluding Capital Grants, the three main revenue sources remain Electricity Services, Property Rates and Water Services, with a combined contribution of 73% to Operating Revenue in FY2021. Almost 59% is sourced from Electricity Services alone. The annual increase in these main revenue items was also above CPI, with revenue from Electricity Services having the highest increase (7%).

The increase in Electricity Services (7%) for FY2021 is marginally higher than the budgeted average tariff increase of 6.3% for the same year, which indicates a marginal increase in electricity consumption.

The annual increase in Water Services income (2%) in FY2021 was lower than the average tariff increases of 8%, indicating a decrease in the water consumption for the year.

Equitable Share contributed 12% to Operating Income in FY2021. This contribution has remained relatively constant since FY2018. Equitable Share increased by 12% (R17.3 million) in FY2021, the majority of which was utilised for funding COVID-19 expenditure of R11.45 million as disclosed in the pre-audit annual financial statements (AFS) for FY2021 "Note 63: COVID-19 Expenditure".

7.1.5.4 Municipal Expenditure

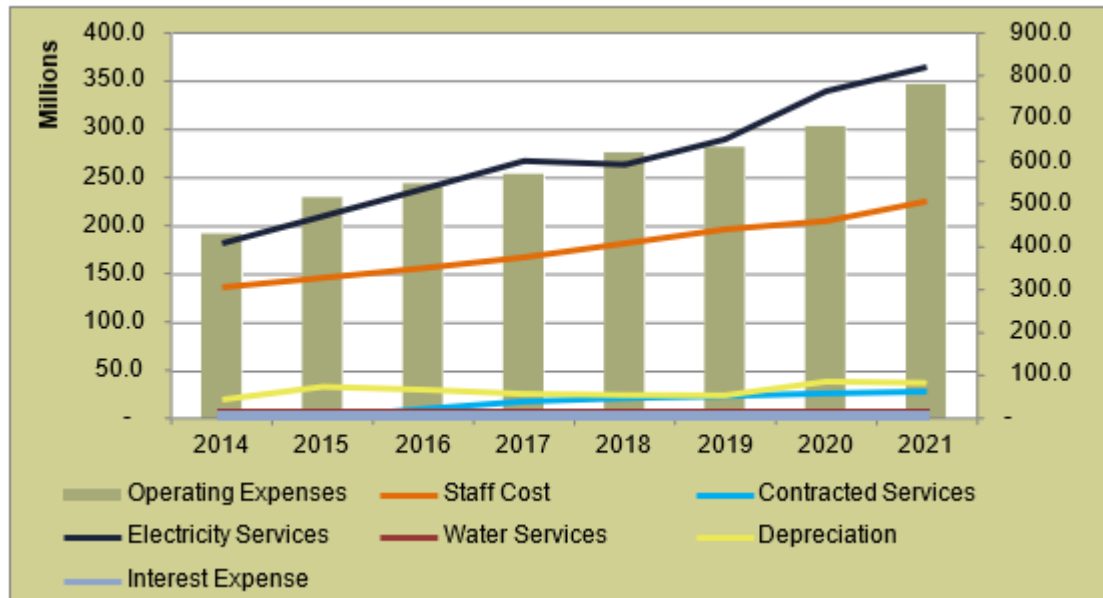
Employee costs are typically the largest portion of operating expenditure and should vary between 25% - 40%. In the case of Langeberg, electricity bulk purchases remained the largest operating expenditure item, with a contribution of 44% for FY2021. This expenditure item increased by 7% from FY2020, equivalent to the increase in Electricity Services revenue, resulting in the gross electricity surplus margin remaining at 21%.

Staff Costs increased by 10% from FY2020 to R226.5 million. Its contribution of 27% to Operating Expenditure remains within the NT norm range of 25% to 40%. Positive to note is that the Staff Costs contribution to Operating Expenditure has remained constant since FY2017.

Contracted Services increased by 7% from FY2020 to FY2021 but its contribution to Operating Expenditure remained at 3% (NT norm range: 3% - 5%). Like Staff Costs, this contribution has remained constant since FY2017. Staff Costs and Contracted Services contribute a combined 30% to Operating Expenditure.

Electricity distribution losses increased from 4.19% in FY2020 to 5.00%. Over the same period, water distribution losses decreased from 14.81% to 13.36%. Both remained below their respective maximum norm limits of 10% and 30%.

Figure 14: Contribution Per Expenditure Item



7.1.5.5 A Synthesis: Financial Health, Municipal Income and Spending

Overall, Langeberg's financial position is improving with an improved cash balance and cash coverage. Capital budget underspending remains a challenge.

The current liquidity ratio is satisfactory and current debtor's collection rate is excellent.

Langeberg is mainly dependent on grants as the percentage of income is low.

Staff expenditure is below the allowable range of total expenditure.

Langeberg will be prudent to preserve and maintain its high liquidity levels to provide a buffer against any potential future financial shocks.

7.1.6. Medium-term Capital Expenditure Budget

The 3-year Capital Expenditure Budget, approved by Council, per settlement, is tabulated below:

Table 26: Langeberg 2023/24 – 2025/26 Capital Expenditure Budget

	Water	Sewerage	Roads & Storm Water	Electrical Engineering	Solid Waste	Civil Engineering Services	Social Development and Amenities	Community sports fields & swimming pool	Cemeteries	Other Services
Ashton	3 400 000			2 800 000					500 000	12 384 457
Bonnievale		11 000 000	25 769 983	217 391		500 000		1 600 000		
McGregor	16 080 080			6 700 000	1 300 000					
Montagu	150 000			1 950 000				120 000		
Nkqubela			37 864 348	6 956 522						
Robertson		43 880 545		23 079 109	4 000 000		17 608 912	2 750 000		
Zolani								1 500 000		
All Settlements	11 137 000	19 036 000	13 430 000	21 960 000	7 900 000	120 000	13 184 027	2 130 000	475 000	10 195 000

7.1.7 Overview and Comparison of All Budgets

A high-level comparison between the Master Plan budget, LMTREF and 3-year Capital Expenditure Budget concluded the following:

- The Master Plan budget provided for some replacement costs, yet mainly for additional infrastructure anticipated for future growth based on the extent of proposed development and totals R 213,5 million;
- The LMTREF provided for future growth by using a baseline budget (2019) and projected growth and it provided for maintenance and replacement. The LMTREF is a full-scale governance plan as required for local municipalities to perform their main purpose: provision of services and totals R 2,8 billion and R282 million per annum and R120 million affordability. (R2 824 000 000 demand vs R1 198 000 000 affordable);
- The 3-year Capital Expenditure Budget includes both maintenance and replacement and infrastructure for growth and totals R317 million or R106 million per annum. (The 3-year Capital Expenditure Budget concludes one financial year before (2026/27) the LMTREF (2027/28)). The annual expenditure is below the annual affordable estimate.

Comparing Capital Expenditure Budget (2023 - 2027) with Master Plan Costing:

A comparison between the Master Plan Costing and the 2023 – 2027 approved Capital Expenditure budget reflects that for the provision of bulk water there is alignment between the plan and the budget whilst bulk electricity and sewer is under budgeted. This may well be the case for water as the Master Plans are dated.

7.2 Affordability

Table 27: Capital Expenditure: Demand vs Affordability

Total 10-year CAPEX Demand (Adjusted)	R2 824 million
Total 10-year CAPEX Affordability:	R1 198 million.

7.2.1 Funding

Langeberg Municipality's adopted MTREF Budget FY2022 to FY2024, has a capital budget amounting to R296 million funded as follows:

Table 28: 3-Year MTREF Funding Mix R'm

R'000	Total	FY2022	FY2023	FY2024
Public & Developers Contributions	4	1	1	2
Capital Grants	145	49	71	25
Financing	47	18	29	0
Cash Reserves and Funds	100	34	40	26
Total	296	102	141	52

It was recommended that the MTREF capital budget funding mix be adjusted and the levels of borrowing increased whilst liquidity is preserved:

Table 29: 3-Year MTREF Funding Mix R'm - Base Case

R'000	Total	FY2022	FY2023	FY2024
Public & Developers Contributions	4	1	1	1
Capital Grants	145	49	71	25
Financing	113	18	69	26
Cash Reserves and Funds	34	34	0	0
Total	296	102	141	52

At the levels of borrowing proposed, the municipality's debt profile remains affordable while liquidity is being preserved. The cash balance remains above the minimum liquidity requirements (1 month's operating expenditure) for the entire planning period.

A collection rate of 96% for the planning period, equivalent to the rate assumed in the MTREF budget for FY2022 should be maintained to maintain a healthy liquidity position. Though Langeberg LM is forecast to generate accounting and operating deficits for most of the planning period, the municipality will generate cash from operations from FY2023 onwards.

A 10-year Capital Funding Mix:

The capital funding mix for the 10-year planning period are as follows:

Table 30: Capital Funding Mix

Source	Rm	%
Public & Developers' Contributions	10	0.8%
Capital Grants	387	32.3%
Financing	748	62.4%
Cash Reserves and Funds	53	4.5%
Cash Shortfall	-	
Capital Expenditure	1 198	100%

The funding mix indicates an increase in borrowings as the main funding source (62.4%) compared to the historical funding mix (past 8 years) where cash reserves and capital grant funds were extensively utilised to fund capital expenditure. To take up borrowings to create an optimal funding mix, keeping in mind that grant funding in future is expected to decline in real terms.

The gearing ratio remains below the maximum benchmark of 30%, however the debt service to total expense ratio will exceed the maximum benchmark of 7% for the planning period.

The repairs and maintenance as a percentage of property, plant and equipment and property plant and equipment was gradually increased from 2.9% (FY2021) to reach 8% by the end of the planning period.

Therefore, Langeberg Municipality has to improve its profitability by managing its expenditure (the optimal model assumed a R 20 million decrease) for each year of the MTREF period and consider tariff increases that result in higher surplus margins, whilst maintaining a collection rate at or above 96%.

The 10-year CAPEX affordability envelop provides the “ceiling” within which capital investments must be planned and budgeted for and will assist in prioritising and sequencing capital expenditure for Langeberg Municipality over the 10-year period.

Langeberg used its cash reserves and capital grants as the main funding source. The over utilisation of cash resources is not sustainable over the longer term as it results in the depletion of cash resources and declining liquidity levels. As a result, Langeberg may consider revising its CAPEX funding mix by taking up borrowings and decreasing operational expenditure to create an optimal funding mix. However, borrowing may not be the policy of the municipality. It is important to note that due to the prevailing national fiscus constraints, grant funding in future will decline in real terms. It is therefore imperative that the municipality improve its profitability by managing its expenditure and carefully consider increases in future tariffs that result in higher surplus margins, whilst maintaining a collection rate above 96%. Increasing tariffs should be considered carefully.

7.2.2 Phase 4: Define a Prioritisation Tool to Assist in Project Prioritisation

The total infrastructure demands have been established in phase 1 and phase 2 within Langeberg Municipality, and phase 3 has assisted in determining the capital affordability envelop. Phase 4 will apply a tool that will assist the municipality to prioritise its capital investments to ensure capital demand stays within what is affordable. The infrastructure projects prioritisation tool and criteria, is based on spatial, financial, and engineering prioritisation criteria. The purpose of this phase is to agree on an infrastructure projects prioritisation criteria and through a multi-criteria analysis, score each project against the prescribed set of municipal priorities. The end objective will be to ensure that projects that most align with MSDF proposals, spatial transformation objectives, engineering, and financial priorities, are given the highest scores. This will help to identify and prioritise projects that are strategy-aligned.

Figure 15: The prioritisation tool that will be used to prioritise capital investments

PRIORITISATION TOOL FOR INFRASTRUCTURE INVESTMENT				
		Project A	Project B	Project C
SPATIAL STRATEGY PRIORITISATION CRITERIA	Criteria 1: Project Falls within a Municipal Scale: Priority Investment Area as per the MSDf? (Y = 1, N = 0)	1	1	0
	Criteria 2: Project Falls within a Settlement Scale Priority Investment Area as per the MSDf? (Y = 1, N = 0)	1	0	0
	Criteria 3: Project Falls within a settlement scale Priority Investment Area, Upgrade Area, Densification Encouragement Area or Informal Settlement Upgrading Area as per the MSDf? (Y = 1, N = 0)	1	0	0
	Criteria 4: Project directly related to enabling the implementation of a MSDf Spatial Policy or Strategy, such as Spatial Transformation? (Y = 1, N = 0)	1	0	1
ENGINEERING PRIORITISATION CRITERIA	Criteria 5: Is this addressing a backlog ? (Y = 1, N = 0)	1	0	1
	Criteria 6: Is this project giving effect to services required in terms of a statutory or legal requirement ? (Y = 1, N = 0)	0	1	1
	Criteria 7: Will this project unlock new investments, attract new economic activities or generate new rates income for the municipality? (Y = 1, N = 0)	0	1	1
	Criteria 8: Is the project implementation ready ? (Y = 1, N = 0)	1	1	1
	Criteria 9: Is this infrastructure a net Asset (YES) or net Liability (NO) for the municipality? (Y = 1, N = 0)	1	0	1
FINANCIAL PRIORITISATION CRITERIA	Criteria 10: Will this infrastructure be revenue generating ? (Y = 1, N = 0)	0	0	0
	Criteria 11: Will this infrastructure be affordable to the municipality from a capital investment perspective ? (Y = 1, N = 0)	0	0	0
	Criteria 12: – Is the project an asset maintenance / renewal / replacement project ? (Y = 1, N = 0)	0	1	0
	Criteria 13: Will this infrastructure be affordable to the municipality from an operational / maintenance perspective ? (Y = 1, N = 0)	1	0	0
COMPOSITE SCORE PER PROJECT		8	5	6
COMPOSITE PERCENTAGE PER PROJECT		62	38	46

7.2.3 Phase 5: Scoring of projects and arriving at a prioritised capital expenditure programme

In this phase, the following was done:

- A 10-year capital project portfolio (the list of required capital infrastructure expenditure projects), per functional area, as derived from phase 1 and phase 2b was set out;
- Using the prioritisation tool all infrastructure projects were scored (and scored indirectly in collaboration with the engineering, finance and town planning municipal officials);
- The prioritised list of infrastructure projects, together with the defined funding envelop from phase 3, was used to fit the prioritised infrastructure projects within the 10-year funding envelop. Projects were identified which do fall within and which do not fall within the affordability envelop, considering interdependencies between infrastructure investments needed. The proposed programme still has to be tailored within the defined expenditure envelope defined by the MTFP (from phase 3);
- With the information available, a spatially referenced capital project portfolio which is prioritised, was compiled;
- Funding strategies were identified.

Figure 16: The scored capital project list

The following Table scores all of the Capital Projects according to the 13 prioritisation criteria agreed to within the municipality, through Phase 4. It provides a composite score for each project. The composite score will range between 0% (for projects that dont meet any criteria) to 100% (for projects that meet all criteria).													SPATIAL STRATEGY PRIORITISATION CRITERIA				ENGINEERING PRIORITISATION CRITERIA					FINANCIAL PRIORITISATION CRITERIA				FINAL SCORE		
Project ID	Project Name	Project Source	Municipal Department	MSCOA Function (asset class)	Municipal, Provincial or National	Funding Source	Project type: New, Upgrade, Rehabilitation, Maintenance, Equipment or Plan?	Basic Service? (Yes / No)	Linked to informal settlement upgrading? (Yes / No)	Total Project Value	Town or Area	Function al Area (as per CEF map from MSDF)	Criteria 1: Project Falls within a Municipal Scale Priority Investment Area or per the MSDF? (Y - 1, N - 0)	Criteria 2: Project Falls within a Settlement Scale Priority Investment Area or per the MSDF? (Y - 1, N - 0)	Criteria 3: Project Falls within a settlement scale Priority Investment Area, Upgrade Area, Disinvestment Area or Informal Settlement Upgrading Area or per the MSDF? (Y - 1, N - 0)	Criteria 4: Project directly related to enabling the implementation of a MSDF Spatial Policy or Strategy, such as Spatial Transformation? (Y - 1, N - 0)	Criteria 5: Is this addressing a backlog? (Y - 1, N - 0)	Criteria 6: Is this project giving effect to service required in terms of a statutory or legal requirement? (Y - 1, N - 0)	Criteria 7: Will this project unlock new investment, attract new economic activities or generate new rate income for the municipality? (Y - 1, N - 0)	Criteria 8: Is the project implementable? (Y - 1, N - 0)	Criteria 9: Is this infrastructure a net Asset (YES) or a Liability (NO) for the municipality? (Y - 1, N - 0)	Criteria 10: Will this infrastructure generate revenue for the municipality? (Y - 1, N - 0)	Criteria 11: Will this infrastructure be affordable to the municipality from a capital investment perspective? (Y - 1, N - 0)	Criteria 12: Is the project an asset replacement project? (Y - 1, N - 0)	Criteria 13: Will this infrastructure be affordable to the municipality from an operational / maintenance perspective? (Y - 1, N - 0)	COMPOSITE SCORE	COMPOSITE PERCENTAGE	
1	ERP System	A1	Financial Services	Finance and Administration	Municipal	CRR	Equipment	No	No	6 000 000,00	Municipal wide	All	1	0	0	0	0	1	1	1	1	0	1	0	1	7	54%	
2	Forklift	A1	Financial Services	Finance and Administration	Municipal	CRR	Equipment	No	No	400 000,00	Municipal wide	All	1	0	0	0	0	0	0	1	1	0	1	0	1	5	38%	
3	Equipment	A1	Strategy & Social Development	Community and Social Services	Municipal	CRR	Equipment	No	No	500 000,00	Municipal wide	All	1	0	0	0	0	0	0	1	1	0	1	0	1	5	38%	
4	General ICT Needs	A1	Strategy & Social Development	Community and Social Services	Municipal	CRR	Equipment	No	No	2 200 000,00	Municipal wide	All	1	0	0	1	0	0	1	1	1	1	0	1	0	1	7	54%
5	Upgrade ICT Infrastructure infrastructure and Equipment	A1	Strategy & Social Development	Community and Social Services	Municipal	CRR	Upgrade	No	No	4 500 000,00	Municipal wide	All	1	0	0	1	0	0	1	1	1	1	0	1	0	1	7	54%
6	Upgrading of Robertson Informal trading area - CRR	A1	Strategy & Social Development	Community and Social Services	Municipal	CRR	Equipment	No	No	4 000 000,00	Municipal wide	All	1	0	0	0	0	1	1	1	1	0	1	0	1	7	54%	
7	VTS roll up doors	A1	Corporate Services	Corporate Services	Municipal	CRR	Maintenance	No	No	50 000,00	Municipal wide	All	1	0	0	0	0	0	0	1	1	0	1	0	1	5	38%	
8	Alterations / Upgrading Municipal Offices	A1	Corporate Services	Corporate Services	Municipal	CRR	Upgrade	No	No	750 000,00	Municipal wide	All	1	0	0	0	0	0	0	1	1	0	1	0	1	5	38%	
9	Office Furniture Equipment	A1	Corporate Services	Corporate Services	Municipal	CRR	Equipment	No	No	440 000,00	Municipal wide	All	1	0	0	0	0	0	0	1	1	0	1	0	1	5	38%	
10	Equipment	A1	Engineering Services	Water Management	Municipal	CRR	Equipment	No	No	180 000,00	Municipal wide	All	1	0	0	1	1	1	1	1	1	0	1	0	1	9	69%	
12	New WTW McGregor - MIG	A1	Engineering Services	Water Management	Provincial	MIG	New	Yes	No	10 680 080,00	McGregor	McGregor	0	0	0	1	1	1	1	1	1	1	1	1	1	10	77%	

7.3 Implementation Requirements

To implement the SDF proposals, Langeberg Municipality requires partnerships with the private and government sector. A municipal committee was established to monitor the alignment between budgets, proposal, priorities and expenditure.

a) Institutional Structure:

The municipal Business Continuity Committee (BCC) will be the guardian of the LSDF and CEF. Representatives from municipal Finance, Civil and Electrical Services and Community Development (both Spatial and IDP) serve on the committee.

The provincial practice note for MSDF Implementation Performance Review sets out the ideal reporting structure which relies on the on-going monitoring of SDF-led development by an Implementation Committee. Such committee has not existed to date and such Committee must be established or this additional function must be added to an existing (budget) committee (BCC). This will ensure coordination between the departments responsible for Town Planning, IDP, Housing, Finance and Engineering to achieve integration between the SDF, Master Plans, CEF and MTREF.

b) Private Sector Participation:

Investors prefer to develop across the municipal area. Such development will contribute capital resources that should secure the development of infrastructure in these settlements. Representatives from existing developments (including industry) should be co-opted when necessary.

c) Review and Monitoring of the SDF:

The BCC should review and monitor the implementation of the SDF aligned with the IDP review (annually).

d) Amendment of SDF:

SDF amendments within the 5-year cycle are unlikely. Exceptions are derived from the annual IDP review resulting in:

- Changes in the aims and objectives of the IDP;
- Changes in IDP that require sector plan changes;
- Budget realignments (as Expenditure is not aligned);
- Circumstances out of control of the Municipality.

If no such exceptions demand an amendment, the SDF should be rewritten or readopted as a IDP sector plan at the end of the 5-year cycle.

Annexures

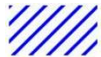
Annexure 1: Proposal Maps Key

	Existing Use		Proposed Use		Use Type
F Facility	A single entity, complex or limited area accommodating a single or several activities.	N Node	Several entities accommodating several activities, highly accessible.		
S, P Street / track / pathway	A continuous linear space enhancing mobility. When described, e.g. Activity Street, intensification of uses adjacent to the space is promoted.	C Corridor	An extended continuous linear space enhancing use intensification.		
	Existing Infrastructure		Proposed Infrastructure.		
PARAMETERS					
Map icon	Element	Description			
	Urban Edge	Means a line which may or may not follow cadastral boundaries, demarcating the outer limit of urban development according to interrelated policies, which serves to determine, manage, direct and control urban development.			
	Approved Development	Means an area within the urban edge where land use rights were granted in accordance with LUMS and civil and electrical services capacities were allocated. A colour notation refers to a specific use as per spatial proposals.			
	Rivers	A river or water course, perennial or non-perennial, is a ribbon-like body of water within a natural channel that flows to the sea, a lake or another river. Rivers vary in width, depth and length. A drainage line means a channel down which surface water naturally concentrates and flows, conveying water only during, or immediately after periods of heavy rainfall. Drainage lines are limited in length.			
	Sterilisation Radius	Refers to a 300m buffer around wastewater treatment works and a 500m buffer zone around landfills and cemeteries, prohibiting the development of residential or other habitable structures within the buffer zone. The buffer for cemeteries is under reconsideration.			
	Heritage Area	Declared Indicates an area recognized for its historical, cultural, or architectural significance, often protected by law or policy to preserve its unique characteristics for future generations.			

RESIDENTIAL		
Proposed	Element	Description
	Residential	Indicates an area earmarked for residential use, where permanent dwelling units form neighbourhoods with various densities. Residential use areas include amenities and secondary business nodes according to industry norms.
	Rural Residential	Means an area where larger erven are located or can be created for agricultural use with or without some guidelines to establish a particular character and to direct residential development and related and supportive land uses.
	Infill Development	Infill development means an existing layout is cancelled and replaced with a layout with higher densities or vacant or underutilised land within an urban area.
	Informal Residential	A residential area that was constructed without formal planning or adherence to building regulations, usually without basic services and infrastructure.
	To be relocated	Indicates an area which require relocation.
BUSINESS/COMMERCIAL		
Proposed	Element	Description
	Central Business District	Designated core area or primary business node of a settlement which concentrated commercial activity. Compatible non-business uses for example residential and services (storage) can be accommodated within the CBD.
	Business Node	Business Nodes indicates an area with a higher concentration of business AND commercial activities but is not necessarily primarily zoned as such.
	Small Business	Indicates smaller businesses in a residential area such as house shops or informal trading areas.
INDUSTRIAL		
Proposed	Element	Description
	Industrial	Represent factory uses where an article or part of such article is made, manufactured, produced, built, assembled, compiled, printed, ornamented, processed, treated, adapted, repaired, renovated, rebuilt, altered, painted (including spray painting), polished, finished, cleaned, dyed, washed, broken up, disassembled, sorted, packed, chilled, frozen or stored in cold storage or where a service or part of is rendered such as storage of perishables and non-perishables.
	Agri-Industry	Industries involved in the production, processing, and distribution of agricultural products, including farming, food processing, and related activities.

COMBINED USE		
Proposed	Element	Description
	Mixed Uses	Mixed-use development incorporates two or more land uses which are compatible either in the same area or precinct or building such as commercial and residential.
AGRICULTURE		
Proposed	Element	Description
	Intensive Agriculture	Intensive agriculture is a farming approach that maximizes crop and livestock yields through the extensive use of fertilizers, pesticides, advanced machinery, and irrigation systems. It often involves monoculture practices and high-density animal farming, aiming for high productivity and economic returns.
	Non-Intensive Agriculture	Non-intensive agriculture is a farming method characterized by lower input use and labor per unit area compared to intensive farming. It often relies on traditional practices, such as crop rotation, organic fertilizers, and minimal use of chemical pesticides.
	Fallow Farmlands	Agricultural land that is intentionally left unplanted for one or more growing seasons to allow the soil to recover its fertility and improve crop yield in future seasons.
	Small Scale Agriculture	Indicates area farming practices carried out on relatively small plots of land, typically managed by individuals, families, or small communities, focusing on diverse and sustainable production methods to meet local needs and often emphasizing manual labor and low-tech approaches.

AMENITIES/FACILITIES			
Proposed	Existing	Element	Description
		Public Open Space	Means municipal land, with or without access control, landscaped or kept natural and used primarily as a site for outdoor sport, play, rest or recreation, or as a park, garden, or conservation area with limited activities and likely access control or natural veld within a settlement being a conduit for services.
		Sports Facility	An in or outdoor facility designed for athletic activities and events, such as stadiums, arenas, fields, gymnasiums, or swimming pools.
		Nature Reserve (*Local)	An area where the preservation of the fauna, flora, soil, water, mineral and fossil deposits and, in general, of the natural environment is of particular importance. *Local means Local Authority, instead of provincial or national.
		Critical Biodiversity Area: Aquatic	Indicates aquatic (water) areas which must be safeguarded in their natural or near-natural state because they are critical for conserving biodiversity and maintaining ecosystem functioning, but have not been officially declared as a reserve.
		Critical Biodiversity Area: Terrestrial	Indicates terrestrial (land) areas which must be safeguarded in their natural or near-natural state because they are critical for conserving biodiversity and maintaining ecosystem functioning, but have not been officially declared as a reserve.
		Cemetery	Means a place where the dead are buried and may include buildings that are necessary for the religious, administrative and clerical uses associated therewith, but does not include a crematorium.

		Community Facility	A facility either public or private and operated for public purposes e.g. a court, school, church, clinic.
		Police Station	Indicates a building where police officers are stationed and operate from, providing law enforcement services to a community, including crime prevention, investigation, and maintaining public order.
		Fire Station	A building where firefighting equipment is stored and where firefighters work, train, and respond to fire emergencies and other crises.
		Elderly Centre	A community facility that services, activities, and support for senior citizens, often including social, recreational and health programs.
		Place of Worship	A building or space where individuals or groups come together to practice their religious beliefs, such as churches, mosques, synagogues, temples, and other sacred sites.
		Community Centre	A community facility, public or private, that accommodates a range of services and activities for a local community, such as health, education and training, social services, domestic affairs, administration, sports, events and a gathering space.
		Primary School	An educational institution for young children, typically covering the first stages of formal education (usually grades 1 through 7).
		Secondary School	An educational institution for adolescents, typically covering grades 8 through 12, providing education in a wide range of subjects.
		Pre-Primary School / Crèche	An educational facility for very young children, typically from infancy to the age of five, focusing on early childhood development, care, and foundational learning through play-based activities.
		Skill Centre / Academy / College	Refers to, but is not limited to, further education and training colleges, skills academies, skills centres, youth centres with a strong training focus.
		Library	Public library.
		Museum	An institution dedicated to collecting, preserving, interpreting, and displaying objects of historical, cultural, artistic, or scientific significance for public education and enjoyment.
		Medical Facility/ Clinic	A facility or clinic, where a range of medical and related services can be practiced or an accessible location, where a cluster of practices provides medical and related services and include a clinic, hospital, dentist and prosthetics.
		Hospital	A medical facility providing comprehensive health care services, including emergency care, surgery, inpatient treatment, and outpatient services, staffed by medical professionals such as doctors, nurses, and specialists.

CORRIDORS AND BUFFERS		
Proposed	Element	Description
	Activity Streets	Streets or roads that have a higher level of vehicular, non-motorised and pedestrian traffic due to adjacent land uses, such as residential, recreation, education or entertainment activities.
	River Maintenance Plan	Indicates a portion of a river which requires a strategic framework designed to manage and preserve the health and functionality of a river system, encompassing activities such as regular monitoring, sediment management, bank stabilization, pollution control, habitat restoration, and flood risk mitigation to ensure the long-term ecological balance and water quality of the river.
	Mountain Catchment Area	Indicates a mountainous terrain where precipitation collects and drains into a common outlet, such as a river, lake, or reservoir, playing a crucial role in water supply, flood control, and maintaining ecological balance downstream.
	Hydrological Lines	Depicts the flow path of water within a hydrological system, such as rivers, streams, or drainage channels, indicating the direction and connectivity of water movement across the landscape.
	Buffer	Indicates a designated area of land maintained around a natural feature, such as a river or wetland, to protect it from the impacts of adjacent land use and to preserve its ecological integrity.
	No Natural Remaining	Indicates an area where natural vegetation or original ecological features in a given area have been completely removed or altered, leaving no remnants of the original natural state.
	River 32m MMP Buffer	Indicates a protective zone extending 32 meters from the river's edge, known as the Minimum Management Practice (MMP) buffer, aimed at safeguarding the river's health by controlling activities within this zone to minimize erosion, pollution, and habitat disturbance.

ROADS/ROUTES			
Proposed	Existing	Element	Description
		Railway line	A physical link or line of movement that connects different railway stations or tracks with each other to facilitate the movement of trains.
		Main Roads	Principal roads that form the primary routes for traffic flow within and between urban and rural areas and are designed to handle high volumes of vehicles.
		Scenic Routes	Designated roads or pathways that offer travelers aesthetically pleasing and picturesque views of natural landscapes, cultural landmarks, and other visually appealing features, often highlighting the unique beauty and character of a region.
INFRASTRUCTURE			

Proposed	Existing	Element	Description
		Reservoir	A large artificial or natural lake or structure created to store water that can be used for irrigation, drinking, or other purposes.
		Alternative Energy	Indicates alternative energy infrastructure to either produce, store, and distribute energy from renewable sources, such as solar panels, wind turbines, hydroelectric plants, energy storage systems, and the grid connections necessary for their integration into the
		Substation	Indicates an electrical power system where voltage levels are transformed and controlled.
		Wastewater Treatment Facility	Indicates a facility for the treatment of sewerage.
		Water Treatment Works	Indicates a facility for the treatment of water.

Annexure 2: Comments from the Department of Infrastructure (DOI) Transport Infrastructure Branch

DOI Transport Infrastructure Branch approval required for land use change and developments adjacent to the Proclaimed Provincial Road Network.

Open Space Systems: Proposals for occasional activities at modal interchanges and intersections, accommodating a variety of users in and uses along major vehicular and public transport routes, appropriate road cross sections widths (provide for vehicle traffic, parking, pedestrian movement, cycling and landscaping) and open space systems.

Opportunities to promote Agri-industries and Processing, Land Reform and Agritourism including development of tourism and recreational routes and destinations, activities or establishment of farm stalls and accommodation facilities.

Development of Tourism routes and destinations to be undertaken in collaboration with and to the approval of the Regional Tourism Liaison Committee (RTLCL) and DOI Transport Infrastructure Branch.

Tourism and Agritourism: Provision of farm stall accesses and tourism view or interest points to be provided subject to DOI Transport Infrastructure Branch approval where access is obtained from the Proclaimed Provincial Road network.

Tourism and Agritourism: Settlements and Rural Settlements and Sense of Place

Landscape/Develop:

- Promote improved roadside signage and buildings in sensitive landscapes;
- Develop understated, unique gateways/entry point features to settlements;
- Develop support infrastructure and spaces for festivals, events and celebrations;
- Promote scenic and heritage routes and the development of special management guidelines.

All proposals adjacent to or within the road reserve or the Proclaimed Provincial Road Network are subject to DOI Transport Infrastructure Branch approval.

All measures along the Proclaimed Provincial Road Network are subject to DOI Transport Infrastructure Branch approval.

DOI Transport Infrastructure Branch, Subdirector Road Use Management decision (approval) is required and it will need to be consulted about any impact (direct or indirect) on or adjacent to the Proclaimed Provincial Road Network assets including:

- a) Corridor development including but not limited to scenic, tourism, freight, etc. Consider applicable Arterial Management Plans where these exist or where warranted. Arterial Management Plans are to be developed or approved by the DOI Transport Infrastructure Branch;
- b) Activity Streets;

- c) Node Development/ Access Provision;
- d) Identification of scenic routes and/or rural areas and any Scenic Drive (or similar) Policy to promote the Cultural Landscape and sense of place;
- e) Outdoor Advertising (adjacent to, and within the road reserve of the Proclaimed Provincial Road Network) and development of related Policy are subject to DOI Transport Infrastructure Branch approval;
- f) Traffic Calming as the Proclaimed Provincial Road Network serves a vital mobility function, providing connections between provincial towns and settlements and for the movement of citizens and goods, and in so doing, supports economic activity in the Western Cape;
- g) Public Transport proposed projects and new links;
- h) Renewal Energy Generation: Wind and Solar Farm Sites;
- i) Location of bulk utilities sites to provide key bulk infrastructure needs;
- j) Land use changes;
- k) Any intensification including sensitive infill or redevelopment of major arterial axes (develop both sides of activity streets and corridors to concentrate activities);
- l) Expansion of biospheres and nature reserves where there are roads and infrastructure present;
- m) Project Implementation: Implementation timing and funding of DOI led projects is to be determined by DOI Transport Infrastructure Branch in accordance with the relevant Provincial Budget, commonly referred to as Vote 10. This includes maintenance, upgrade and new construction works as applicable;
- n) Road Authority Boundaries/Urban Edge: Amendment to the urban edge has an impact on road authority boundaries. Any amendments made to formal, agreed upon, urban edge boundaries need to be made in consultation with the relevant Road Authority/authorities;
- o) Proposals for occasional activities at modal interchanges and intersections, accommodating a variety of users in and uses along major vehicular and public transport routes, appropriate road cross sections widths (provide for vehicle traffic, parking, pedestrian movement, cycling and landscaping) and open space systems;
- p) Development of intersections as nodes;
- q) Opportunities to promote Agri-industries and Processing, Land Reform and Agritourism including development of tourism and recreational routes and destinations, activities or establishment of farm stalls and accommodation facilities. Development of Tourism routes and destinations to be undertaken in collaboration with and to the approval of the Regional Tourism Liaison Committee (RTLCLC);
- r) Tourism and Agritourism: Provision of farm stall accesses and tourism view or interest points where access is obtained from the Proclaimed Provincial Road network;
- s) Tourism and Agritourism: Settlements and Rural Settlements and Sense of Place;
- t) Landscape: improved roadside signage and building placement in sensitive landscapes, understated, unique gateways/entry point features to settlements, support infrastructure and spaces

for festivals, events and celebrations and scenic and heritage routes and the development of special management guidelines.

Roads Master Plans: The Municipality is responsible for the development of a Municipal Roads Master Plan. The DOI Transport Infrastructure Branch is to be consulted where proposals impact (directly or indirectly) the Proclaimed Provincial Road Network.

Provision of access to and from the Proclaimed Provincial Road Network is to be assessed and provided in accordance with the WCG DTPW (now DOI) Access Management Guidelines (2020). Property Developments need to be undertaken with due consideration not only of the provision of direct access and egress, but also the impact on the surrounding road network.

Provision of farm stall accesses and tourism view or interest points where access is obtained from the Proclaimed Provincial Road network.

Annexure 3: McGregor Leiwater

McGregor currently has sufficient water from existing sources, but preventing future shortages requires improved management of bulk water supply and reduced losses in infrastructure. Projected water demand until 2030, including an emerging farmer project, can be met with existing sources.

Recommendations for long-term water supply security include:

- Priority maintenance of the Houtbaais canal (estimated cost: R800,000).
- Investigative drilling and potential upgrading of the Houtbaais diversion weir in collaboration with the McGregor Irrigation Board (drilling cost: R170,000).
- Scientific evaluation of existing boreholes by an accredited contractor.
- Installation of suitable pump equipment and replacement of the pipeline (estimated costs: R200,000 for pump equipment and R800,000 for pipeline replacement) if borehole tests are positive.
- Implementation of Water Conservation and Demand Management measures through appropriate by-laws.
- Appointment of a specialist dam design engineer to explore raising Vaaldam for additional storage capacity.
- Investigation of the unused borehole on the northern Klipberg commonage for an emerging farmer project, subject to proper evaluation.
- Decision-making on an emerging farmer project at Rooilande, exploring the possibility of a dam filled by gravity from the Houtbaais canal.
- Contracting a geo-hydrologist to identify promising borehole sites near the water treatment works, followed by exploratory drilling and testing.

(Medium and Long-Term Investigation of Bulk Water Supply to McGregor, December 2010, Louis Bruwer)

Annexure 4: Langeberg Municipality: Heritage Survey

Annexure 5: Western Cape Circular C27 of 2022: Unlawful Occupation of Land

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