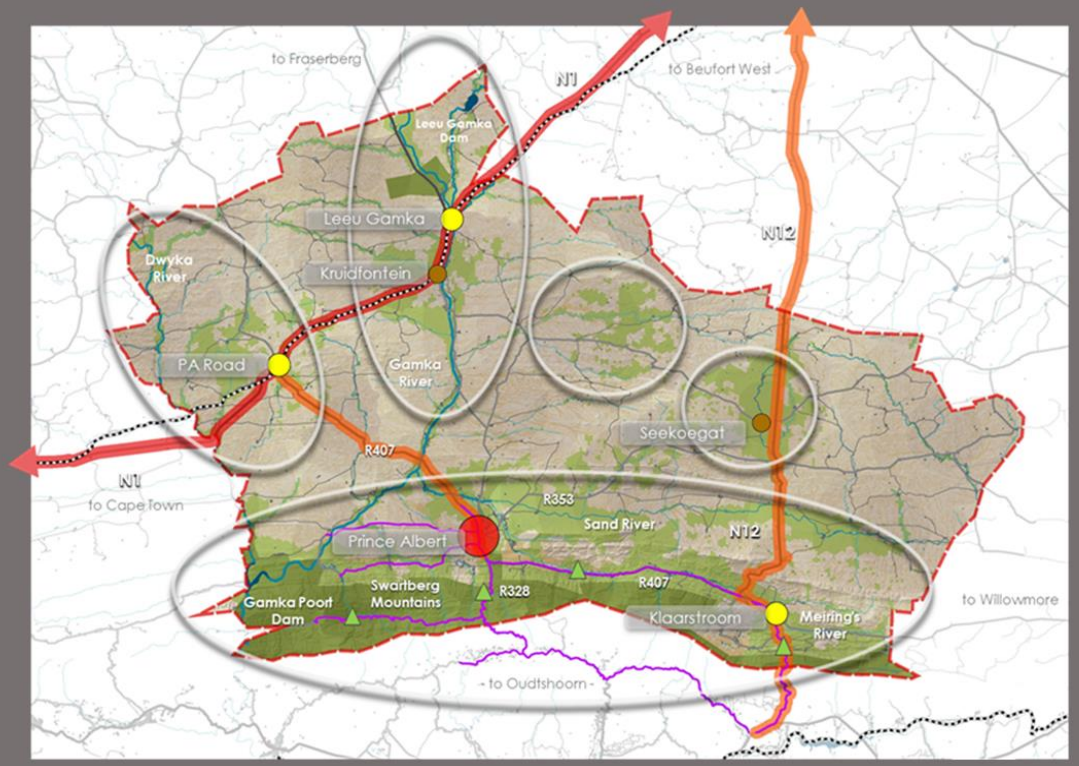
PRINCE ALBERT MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK

MAY 2021 FINAL DRAFT MSDF



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EXECUTIVE SUMMARY:

Now and in the future, Prince Albert municipality will be facing a constrained fiscal environment with severe climate change inhibiting development challenges. The largely grant dependent municipality is still implementing ongoing drought restrictions on top of the COVID-19 pandemic and lockdown, which not only affected the tourism industry but negatively impacted the municipality's revenue stream. If these economic pressures intensify, lower income households will find it more difficult to afford basic services and the implications will be that municipality will struggle to financially cater for their needs. The Municipality will therefore have to balance their relief programmes with improved debt collection.

The municipality is finding it hard to maintain its existing infrastructure network, without considering expansion of this network. The replacement costs of the network are becoming increasingly higher and the municipality is therefore focusing investment on maintenance and upgrading of the ageing road, water, and stormwater network assets. As the Oukloof, Gamkapoort and Leeu Gamka Dams are largely empty, the Municipality is also trying to secure additional ground water from boreholes. Highly problematic is that National government has revoked the drought disaster, with the implications being less funding for drought relief.

Working within a constrained water and fiscal environment is not easy and trade-offs will need to be made. A system of project recording and prioritization in relation to budget is unfortunately missing in many municipalities and many of the sector plans are particularly weak in articulating their projects and providing life cycle costs. This SDF has therefore included a Capital Expenditure Framework (CEF) to assist the municipality with integrating their spatial strategy and infrastructure master plans and to determine a prioritized portfolio of capital projects that fit within a 12-year affordable capital envelope from 2020 to 2031. Critically, however, is that, based on this MSDF and CEF, the municipality needs to update its outdated water and sanitation master plans to ensure alignment with the projects prioritized in this CEF.

This SDF, inclusive of the CEF, will be adopted before a new IDP cycle in 2022, presenting an opportune time for the MSDF's strategy to provide a basis from which the 'to be' updated water and sanitation master plans can be aligned and the correct projects prioritised over the next decade. A crucial need for the Municipality is to link the water and sanitation master plans to an accurate and well recorded zoning and land use model. This work is about to be undertaken by the Western Cape Department of Local Government under the Integrated Drought and Water Resilience strategy project. It is therefore envisaged that the CEF's calculated bulk infrastructure implications of future growth will be crosschecked with ceiling bulk capacity and will inform the future sequencing of projects in the CEF. The Municipality are also developing a new zoning scheme in 2021 to replace the outdated Scheme 8 regulations and this scheme must be informed by this SDF and directly linked to the water and sanitation land use model.

It is important to realize that Prince Albert Municipality's future challenges are multi-faceted and there needs to be a focus on regional collaboration not only with the surrounding local municipalities (Laingsburg, Beaufort West and Oudtshoorn and the Garden Route District Municipality) but together as part of the broader Central Karoo District. Similarly, these municipalities need to participate with Prince Albert Municipality.

Prince Albert Municipality is facing severe human resource capacity constraints and have to spend large portion of their budget on consultancy fees which could otherwise go to operation and capital expenditure costs. The municipality must therefore, as part of a district-based approach for the Central Karoo, seek continual partnership-driven solutions, specifically a shared service solution for firefighting, roads management (yellow fleet), planning (tribunals, zoning scheme and land use applications), supply chain and technical services (engineering and project management) within the district. This would ensure shared financial viability of administrative and logistical burdens associated with servicing a sparse region. The Municipality should also use this model to gain access to climate change related international funding, where future proof projects could be packaged with the district and considered for bonded finance in domestic and international markets. The model can also be used to coordinate access to the Western Cape Environmental Infrastructure Investment Framework (WC EIIF) which links opportunities for environmental restoration to collaboratively funded investment strategies.

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LIST OF ACRONYMS

CBA – Critical Biodiversity Area
CBD – Central Business District
CEF – Capital Expenditure Framework
CKDM – Central Karoo District Municipality
DEA&DP - Department of Environmental Affairs and Development Planning
DRDLR - Department of Rural Development and Land Reform
DM - District Municipality
ECD – Early Childhood Development
FET – Further Education and Training
GDP - Gross Domestic Product
GPS - Growth Potential Study
HSP – Human Settlement Plan
IDP - Integrated Development Plan
ISC – Intergovernmental Steering Committee
IUDF – Integrated Urban Development Framework
LTFP – Long Term Financial Plan
LUPA - Land Use Planning Act, 2014 (Act… of 2014)
MSA – Municipal Systems Act, 200 (Act 32 of 2000)
MSDF - Municipal Spatial Development Framework
MTREF – Medium Term Revenue and Expenditure Framework
NDP - National Development Plan
NEMA - National Environmental Management Act
NHRA - National Heritage Resources Act
NMT - Non-Motorised Transport
NPC – National Planning Commission
PAM – Prince Albert Municipality
PACF - Prince Albert Cultural Foundation
PSDF – Western Cape Provincial Spatial Development Framework, 2014
SDF - Spatial Development Framework
PAM – Prince Albert Municipality
SPLUMA - Spatial Planning and Land Use Management Act, 2013 (Act. of 2013)
WC - Western Cape
WCG - Western Cape Government
WTW – Water Treatment Works
WWTW – Waste Water Treatment Works

CHAPTER 1: INTRODUCTION & BACKGROUND

1.1 PURPOSE OF THE REPORT

The purpose of this report is to present a newly compiled Municipal Spatial Development Framework (MSDF) for Prince Albert Municipality, which will in part build upon the 2014 Prince Albert MSDF proposals. This compilation process seeks to:

- Establish the existing level of development of the Prince Albert Municipality;
- Review and update the key issues and opportunities in the Municipality as they relate to its future spatial development;
- Review and update the spatial vision of the Municipality, to bring it in line with the Prince Albert Municipality IDP, as well as with the Central Karoo MSDF (2020);
- Progressively bring the MSDF into alignment with the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) (SPLUMA), the Western Cape Land Use Planning Act, 2014 (Act 3 of 2015) (LUPA) and the relevant Municipal Land Use Planning By-law for Prince Albert; and
- Review and update the Spatial Development Framework proposals.

The Prince Albert MSDF will, amongst other things, focus on:

- Clearly defining the relationship, hierarchy, linkages and corridors between and within the settlements;
- Identifying growth nodes, priority investment areas, consolidation areas, and upgrade areas within the Municipality;
- Identifying protected areas, threatened ecosystems, critical biodiversity areas, valuable agricultural land, water catchment areas and natural resources of the Municipality, based on the latest available information;
- Setting out general urban planning and design principles to be applied in all settlements located within the municipality, including guidelines for farms or small holdings in and around the Prince Albert town centre.
- Identifying spatial transformation opportunities and urban expansion opportunities for growth.

The MSDF is guided by various National, Provincial, and Local planning legislation and policies, as well as municipal sector plans. The MSDF will guide local-level land development and planning decisions by outlining future development opportunities and constraints. It should be noted that whilst the MSDF does guide land development and land use management decision making, it does not in and of itself give or take away land use rights.

1.2 PROBLEM STATEMENT

The Prince Albert Municipality seeks to create a newly compiled MSDF to coincide with the 5-year term of the new Integrated Development Plan (IDP). Some of the key areas of focus were:

- Updated Critical Biodiversity Area information and Biodiversity Spatial Plans;
- New population growth figures, economic data and service level data;
- An evolved policy position on shale gas extraction in the Karoo;
- The amalgamation of spatial data sets from the Central Karoo MSDF, Prince Albert MSDF 2014 and Disaster Risk Assessment 2019; and the
- Development of a Capital Expenditure Framework (CEF) and Capital Investment Framework (CIF) as required by SPLUMA.

1.3 PROCESS AND DOCUMENT STRUCTURE

1.3.1 MSDF Process

The procedure to compile a Spatial Development Framework is set out in the Municipal Systems Act, 2000 (Act 32 of 2000), SPLUMA and LUPA. This process is shown in Figure 1.1. In short, the process entails the following:

1) The municipality decides whether to establish an Intergovernmental Steering Committee (ISC);
2) Members of Council to be given reasonable notice of the intention to compile the MSDF;
3) The proposal to compile the MSDF must be published in the media in at least 2 official languages;

4) The municipality must inform the provincial minster in writing of their intent to compile the MSDF;
5) Municipality must establish a project committee;
6) If an ISC is established, then provincial and other departments must be invited to sit on it and provide input on the MSDF amendment;
7) Once available, the draft MSDF must be made available for public comment for a period of 60 days.
8) The Project Committee must consider all comments received and compile a final MSDF for council adoption;
9) MSDF is presented to Council for approval;
10) Once adopted, a notice of adoption must be placed in Provincial Gazette within 14 days;
11) The must be MSDF submitted to the provincial minister within 10 days of Council approval.

During 2016, the municipal Council informed the Minister of Local Government: Environmental Affairs and Development Planning of their intention to amend the 2014 Prince Albert MSDF. However, this evolved to be the compilation of a new MSDF given that the previous one was completed in 2014. Since then, DEA&DP has also sought to clarify the difference between compiling amending and reviewing MSDFs. It is noted that the municipality opted not to establish an ISC to oversee the MSDF compilation process.

Due to human resource capacity and budget constraints, the municipality sought technical assistance from DEA&DP to undertake the MSDF compilation process using their inhouse capacity. The terms of reference were subsequently developed and a Project Committee (PC) was established. The PC was tasked with managing and compiling the Prince Albert MSDF. In summary, the Prince Albert MSDF is being compiled for the following reasons:

1) The current state of the municipality has changed since 2014 and the MSDF must be updated to reflect these changes, particularly the socio-economic and environmental conditions; and
2) New laws governing planning were passed during 2013, 2014 and 2015 (SPLUMA, LUPA and the Municipal Land Use Planning By-law). The amended Prince Albert MSDF will seek to progressively align with the stated planning legislation

1.3.2 Document Structure

The structure of this MSDF is broadly in alignment with the DRDLR Guidelines for SDF's and follows the document structure shown in Figure 1.2. There is a separate report for the Status quo analysis which sets out a comprehensive assessment of key environmental, social, economic, infrastructure and built environment assets in the municipality, concluding with a synthesis, identifying key development issues and opportunities and their spatial implication. This report contains the following Chapters:

1) **Chapter 2** provides an **overview** of the key legislative, policy, strategy and planning context.

2) **Chapter 3** sets out a spatial vision and spatial concept for Prince Albert Municipality, which will be the overarching framework that guides all subsequent policy interventions. It then goes on to set out the spatial development strategies, and spatial policies to guide land use planning, management, regulation and investment decisions throughout the municipal area, organised around four spatial strategies that support the spatial development vision. Within each of the strategies there is a stated objective, and an indication of how the municipality intends to measure the successful implementation of it., including identifying the impacts of the MSDF on sector planning.

3) **Chapter 4** sets out Capital Expenditure Framework (CEF), which aligns the spatial proposals of the MSDF with the infrastructure plans and municipal budget and in so doing provides as an implementation framework for the municipality between 2020 and 2031.

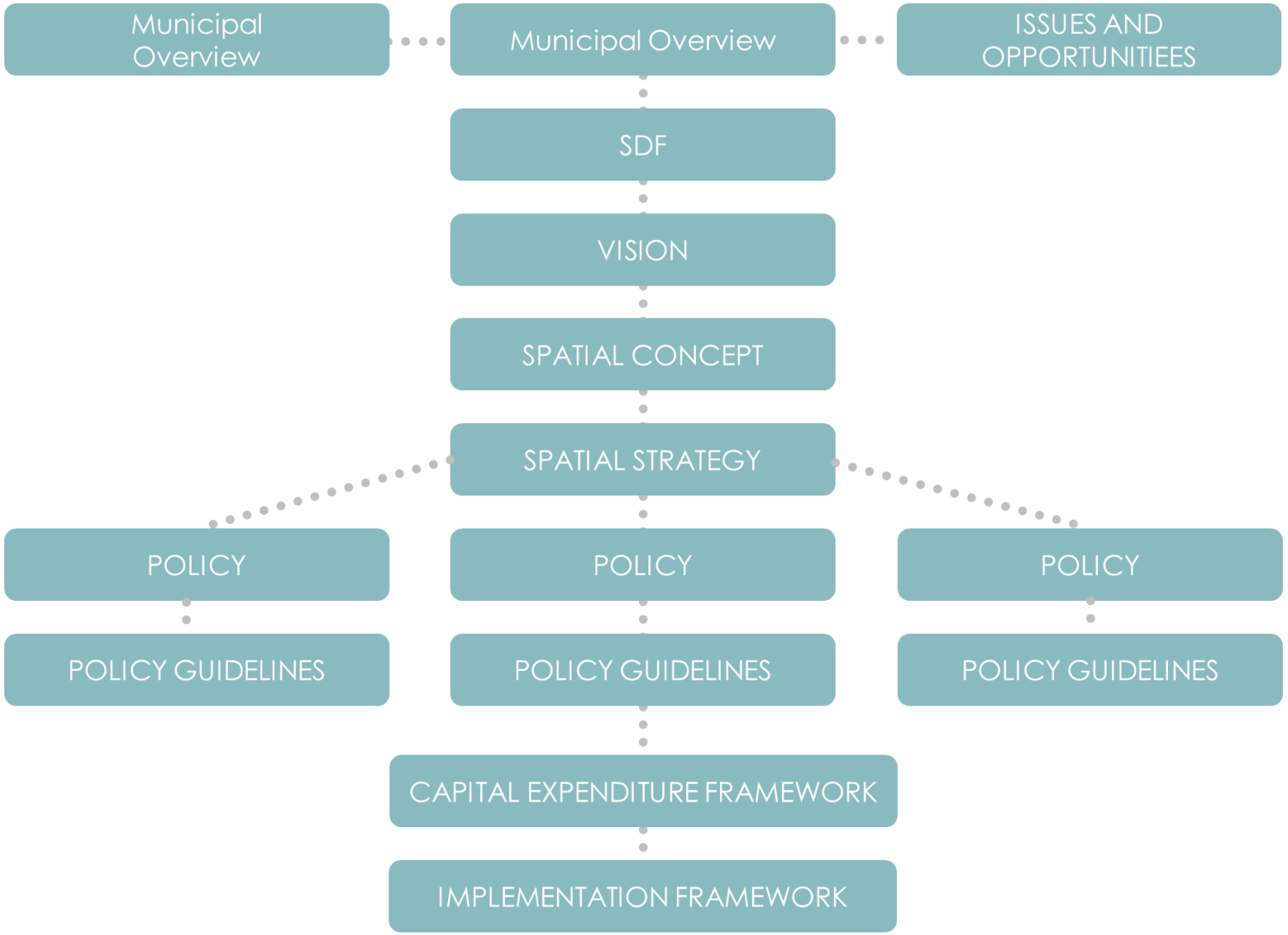


Figure 1.1: Overall Structure of this MSDF

1.4 LOCATION, ISSUES AND OPPORTUNITIES

The Prince Albert Municipality (WC052) is one of three Category B municipalities in the Central Karoo District Municipality of the Western Cape Province. It lies on the southern edge of the Great Karoo, a semi-desert region. The municipalities within the Central Karoo District are Beaufort West Municipality, Laingsburg Municipality and Prince Albert Municipality (See Figure 1.2).

The Prince Albert Municipal area covers a total area of 8 153 km² and is home to Prince Albert Town, Leeu Gamka, Klaarstroom and Prince Albert Road. The N1 (National road) cuts through the Municipality along which Leeu Gamka and Prince Albert Road are located. Despite these town's locations, they are not the primary towns of the municipality, which is in fact the town of Prince Albert, located some 45km south east of the N1 along the R407 at the foot of the Swartberg Mountains along the Dorps River. The N12 runs on a north-south axis through Klaarstroom and connects Oudtshoorn and George in the south to Beaufort West in the north, essentially linking the N1 and the N2. See Figure 1.3 for locality of Prince Albert municipality and its towns.

The next section broadly and graphically shows the issues and opportunities emanating from the separate MSDF status Quo analysis.

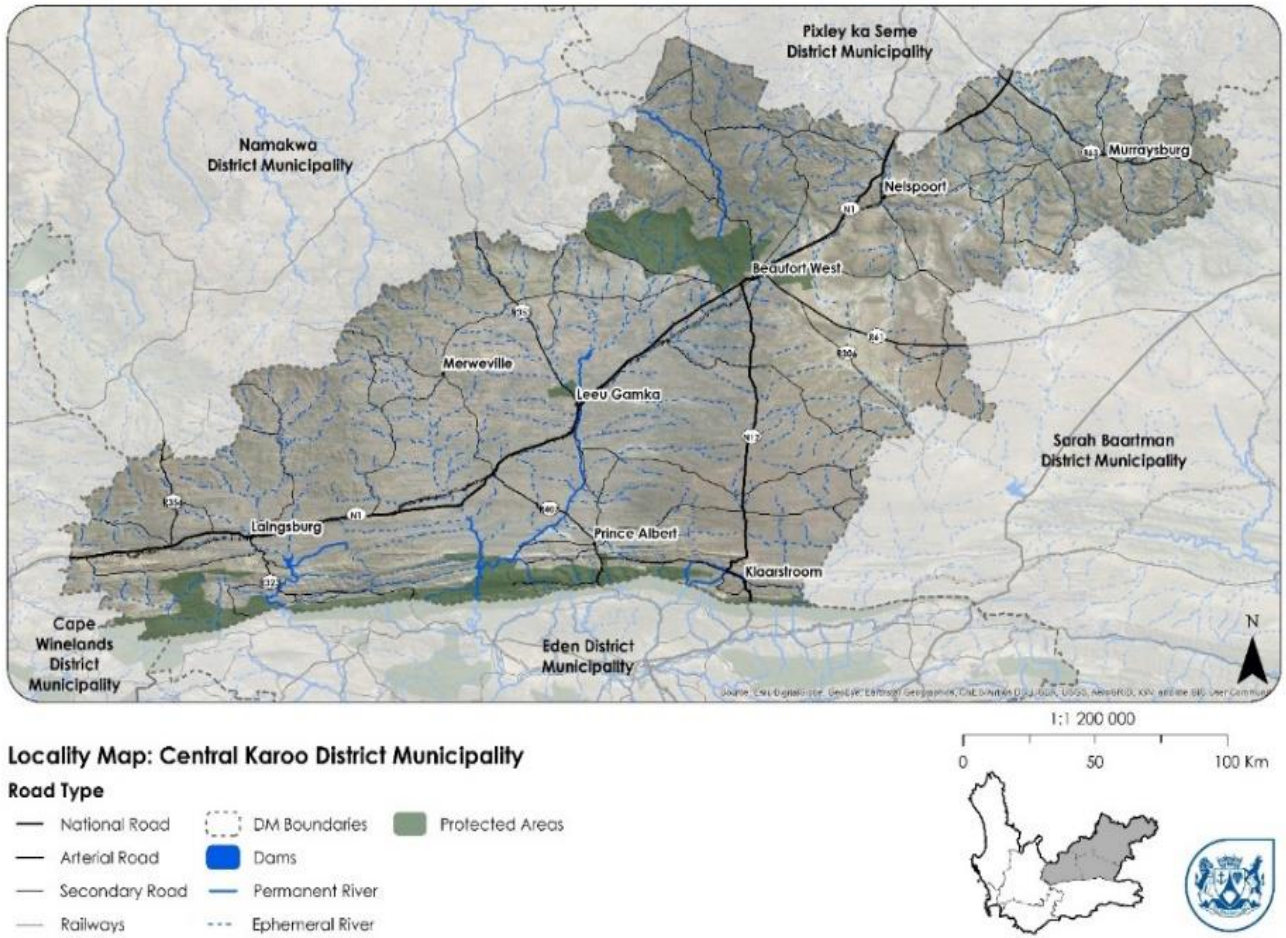


Figure 1.2: Central Karoo District Municipality

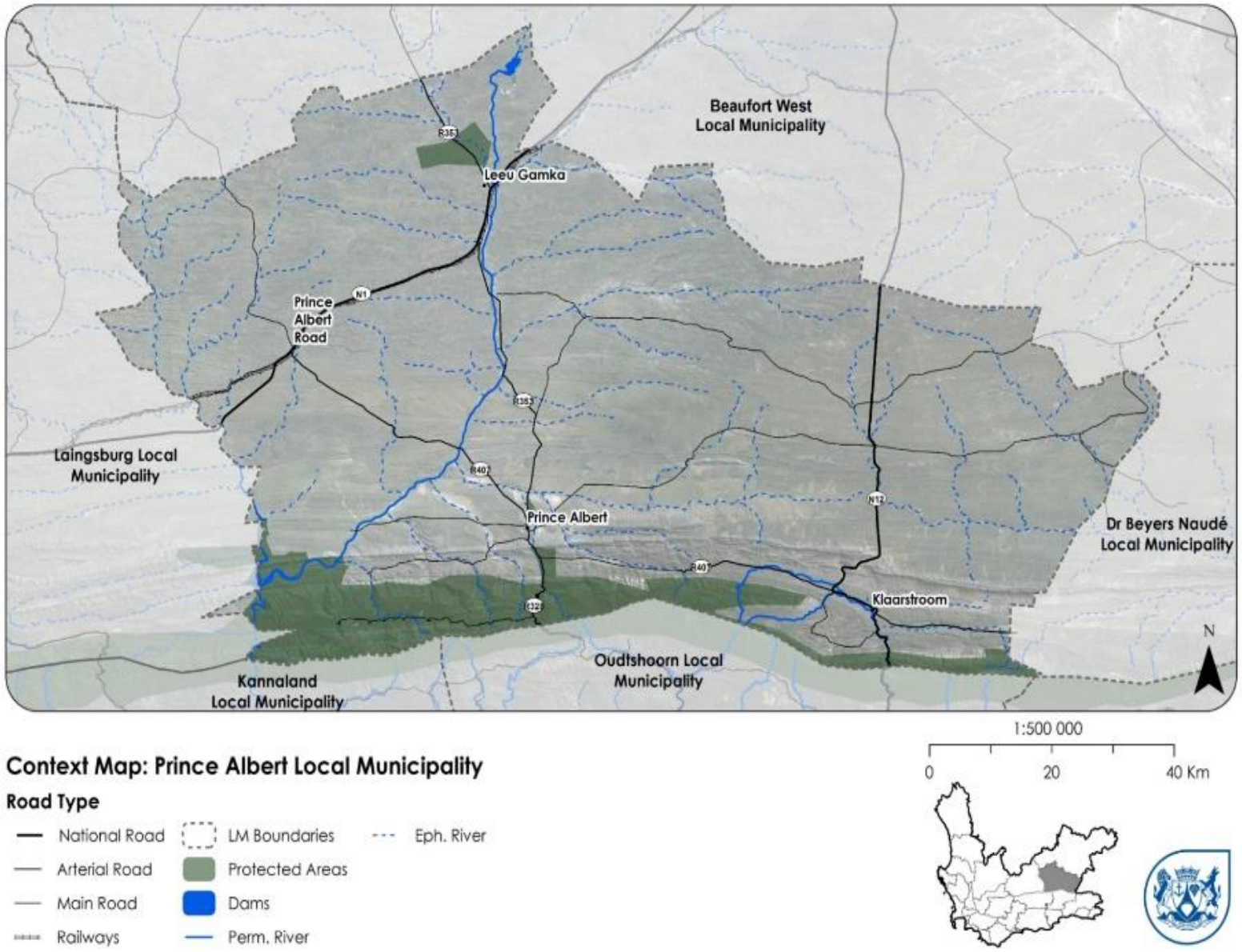


Figure 1.3: Context Map of Prince Albert Municipality

1.4.1 Main Issues from the SDF Status Quo Analysis

The following diagrams shows the main issues emanating from the SDF Status Quo. The sizes of the squares are only conceptual.

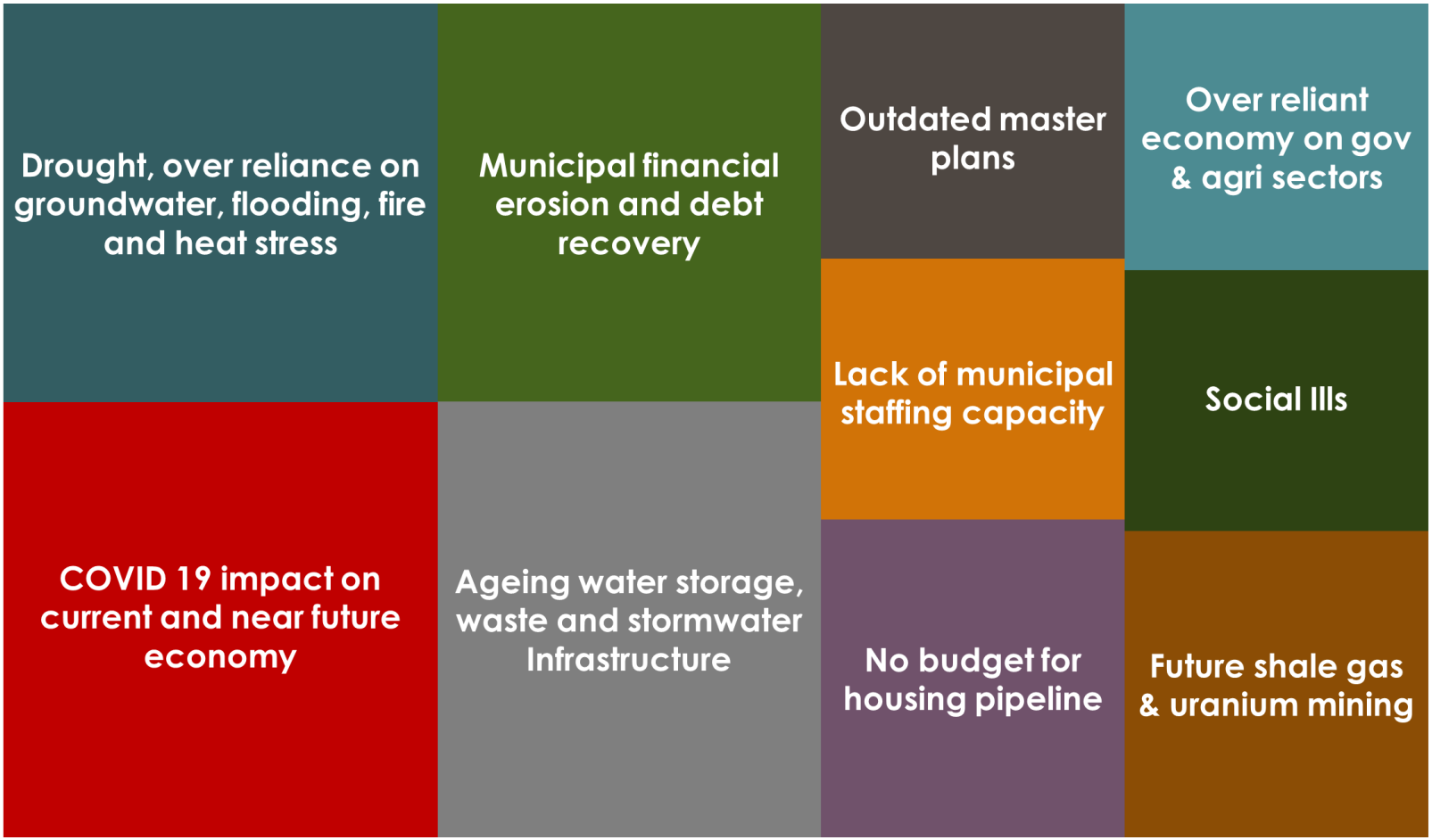


Figure 1.4: Main Issues from the SDF Status Quo Analysis

1.4.2 Main Opportunities from the SDF Status Quo Analysis

The diagram below shows the main opportunities and focus areas emanating from the SDF Status Quo. The sizes of the squares are only conceptual.

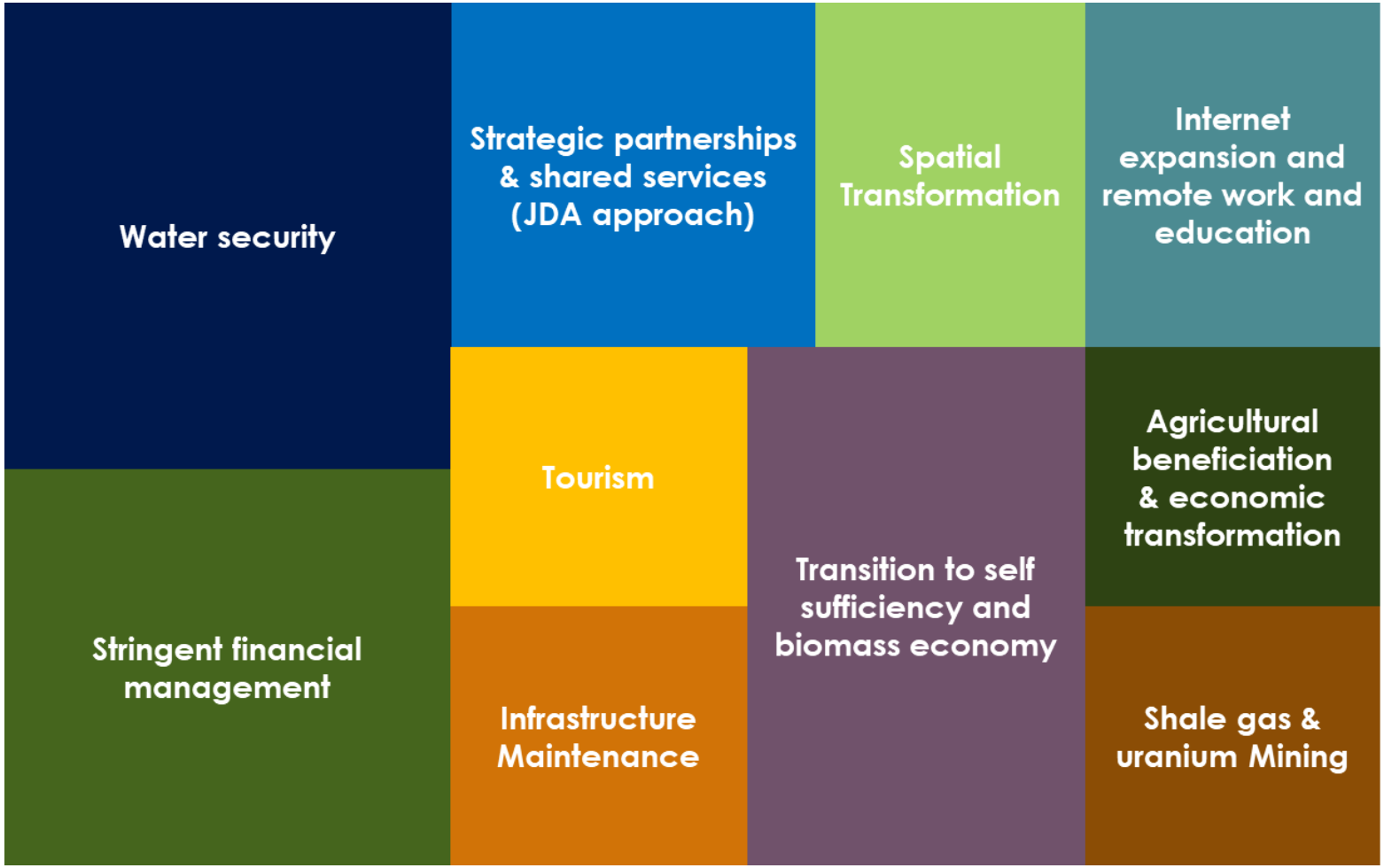


Figure 1.5: Main Opportunities from the SDF Status Quo Analysis

CHAPTER 2: POLICY AND LEGISLATIVE CONTEXT

2.1 RELEVANT NATIONAL AND PROVINCIAL POLICY AND LEGISLATION

The purpose of this chapter is to briefly provide a summary of the policy and legislative landscape that has a bearing on the Prince Albert MSDF. The following sections describe relevant national and provincial policy and legislation with which the Prince Albert MSDF must align. The MSDF should progressively seek to comply with the prescribed process and content requirements.

2.1.1 The Draft National Spatial Development Framework (NSDF) 2050

The foundation for the NSDF consists of five frames. These emanate from the National Development Plan 2030 priorities, the National Spatial Development Vision and Logic, as well as development issues identified through the analysis process. The five frames forming the foundation for the NSDF are listed below:

Frame One: Urban Regions, Clusters and Development Corridors as the engines of national transformation and economic growth: To focus and sustain national economic growth, drive inclusive economic development and derive maximum transformative benefit from urbanisation and urban living. What this means for Prince Albert Municipality is that it should be seen in the context of its nearest regional anchors, those being Oudtshoorn in the South and Beaufort West in the North.

Frame Two: Productive Rural Regions and Regional Development Anchors as the foundation of national transformation: To ensure national food security, rural transformation and rural enterprise development and quality of life in rural South Africa through a set of strong urban-rural development anchors in functional regional-rural economies. What this means for Prince Albert Municipality is that it should be seen in the context of rural region.

Frame Three: National Ecological Infrastructure System as enabler for a shared and sustainable resource foundation: To protect and enable sustainable and just access to water and other national resources for quality livelihoods of current and future generations. For Prince Albert Municipality, this means overcoming drought and becoming more resilient.

Frame Four: National Connectivity and Economic Infrastructure Networks as enablers for a shared, sustainable and inclusive economy: To develop, expand and maintain a transport, trade and communication network in support of national, regional and local economic development; and

Frame Five: National Social Service and Settlement Infrastructure Network in support of national well-being: To ensure effective access to the benefits of high-quality basic, social and economic services in a well-located system of vibrant rural service towns, acting as urban-rural anchors and rural-rural connectors.

As shown in Figure 2.1, Prince Albert Municipality falls within an Arid-Agri innovation region. Key economic linkages are the N1 National Road and the National Rail route between Cape Town and Gauteng as well as the N12 which connects Prince Albert and Klaarstroom settlements to regional development anchors Oudsthoorn and Beufort West.

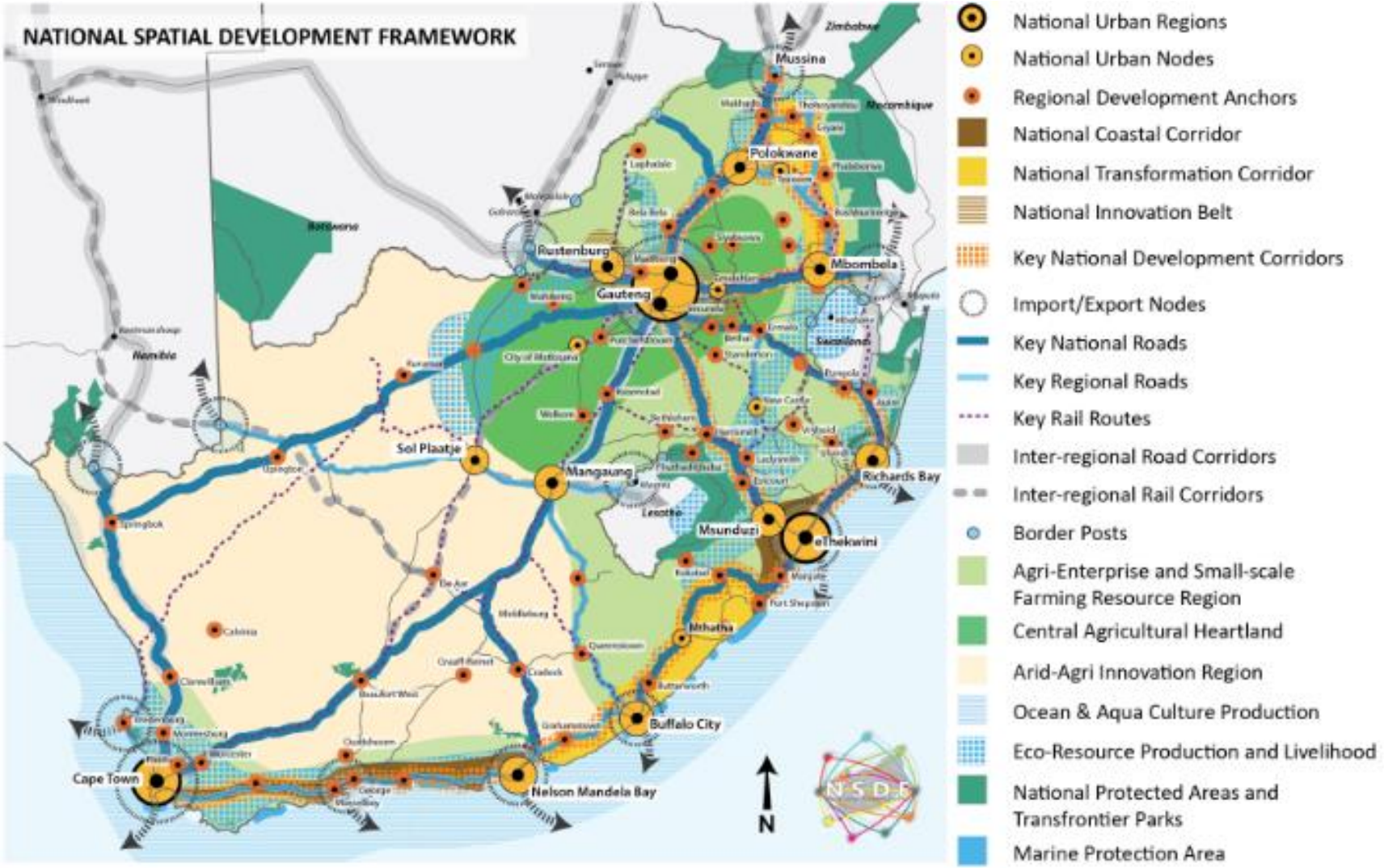


Figure 2.1: Draft NSDF 2050 (Source: NSDF 2019).

2.1.2 The Integrated Urban Development Framework (IUDF)

The IUDF's core objective is spatial transformation, drawing its mandate from the NDP and the realisation that urbanisation is an increasing challenge and indeed opportunity in South Africa. The IUDF essentially proposes a growth model for all urban areas in South African that promotes compaction, connectedness and coordinated growth in respect of land, transport, housing and job creation. The end goal is to create efficient urban spaces by reducing the travel costs and improving public transport, aligning land use and transport planning, increasing densities and promoting mixed land uses so that people and live and work in the same places and spaces.

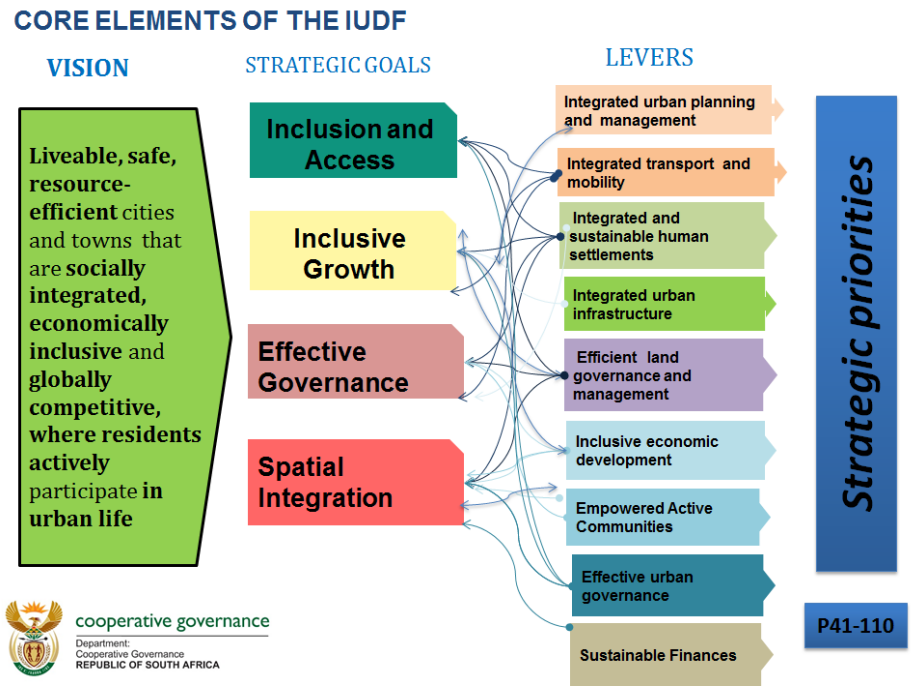


Figure 2.2: The Vision, Strategic Goals and Levers in the Integrated Urban Development Framework (COGTA, 2016)

2.1.3 The Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013)

SPLUMA sets out the process to develop an MSDF, as well as the minimum content requirements of an MSDF. Some of the notable outcomes that an MSDF must achieve are:

- Set out and be informed of a longer-term spatial vision;
- Guide all planning of all spheres of government;
- Identify risks associated with developments;
- Identify and quantify engineering infrastructure needed for future growth;
- Provide the spatial expression of the coordination, alignment and integration of all sector plans.

SPLUMA also includes a set of 5 development principles which must guide the preparation, adoption and implementation of any SDF, policy and/or by-law concerning spatial planning and the development or use of land. These principles are set out below:

Spatial Justice refers to the need to redress the past apartheid spatial development imbalances and aim for equity in the provision of access to opportunities, facilities, services and land. In the broadest sense, it seeks to promote the integration of communities and the creation of settlements that allow the poorest of the poor to access opportunities.

Spatial Sustainability refers to a sustainable form of development. A part of this means promoting less resource consumptive development typologies that promote compaction, pedestrianisation and mixed-use urban environments which allow for the development of a functional public transport system and space economy. A spatially sustainable settlement will be one which has an equitable land market, while ensuring the protection of valuable agricultural land, environmentally sensitive and biodiversity rich areas, as well as scenic and cultural landscapes and ultimately limited urban sprawl.

Efficiency the principle of spatial resilience refers to 'flexibility in spatial plans, policies and land use management systems are accommodated to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks.

Good administration in the context of land use planning refers to the promotion of integrated, consultative planning practices in which all spheres of government and other role-players ensure a joint planning approach is pursued. Furthermore, it is critical that decisions made in terms of land use planning seek to minimise the negative financial, social, economic and environmental impacts of a development. Additionally, 'good administration' in the context of land use planning refers to a system which is efficient, well run and where the timeframe requirements are adhered to.

Key message: spatial planning is a normative (value driven) process that must be underpinned by five principles that seek to jointly guide all actors in delivery of infrastructure and services in space.

2.1.4 Municipal Systems Act, 2000 (ACT 32 OF 2000)

Section 24 of the MSA notes that planning undertaken by a municipality must be aligned with, and complement, the development plans and strategies of other affected municipalities and organs of state. This is to give effect to the principles of co-operative governance contained in Section 41 of the Constitution. Its further notes that municipalities must participate in national and provincial development programmes as required in section 153(b) of the Constitution, and it requires municipal planning to reflect this as well.

Key message: Planning must be joint, integrated and aligned and give expression to the development plans and programmes of all spheres of government within the municipal space.

2.1.5 The Local Government: Municipal Planning and Performance Management Regulations, 2001 (LG: MP&PM REGULATIONS)

Chapter 2 of the LG:MP&PM regulations, published in terms of the Municipal Systems Act, 2000 (Act 32 of 2000), provides some detail as to what MSDFs should seek to achieve. In brief, it is articulated that an MSDF must set out the desired spatial form of the municipality, contain strategies and policies of how these will be met, and set out basic guidelines for the land use management system, amongst other things. It should be noted that SPLUMA provides greater detail to these requirements.

2.1.6 Implications for Prince Albert Municipality

National legislation and policy make it very clear that MSDFs should seek to redress past imbalances and be transformational, whilst facilitating private sector development and confidence. It is indeed a balancing act, however at the heart of the matter is the imperative to create more resilient, integrated and dense urban settlements that provide higher quality urban environments than are currently present and to provide healthy, happy and inspiring environments in which people, the economy and the natural environment can flourish.

2.2 PROVINCIAL AND DISTRICT POLICY AND LEGISLATION

2.2.1 The Western Cape Provincial Spatial Development Framework (PSDF) (2014)

As shown in Figure 2.3, the logic underpinning the PSDF's spatial strategy is to:

- Capitalise and build on the Western Cape's comparative strengths (e.g. gateway status, knowledge economy, lifestyle offering) and leverage the sustainable use of its unique spatial assets;
- Consolidate existing and emerging regional economic nodes as they offer the best prospects to generate jobs and stimulate innovation;
- Connect urban and rural markets and consumers, fragmented settlements and critical biodiversity areas (for example, freight logistics, public transport, broadband and priority climate change ecological corridors); and
- Cluster economic infrastructure and facilities along public transport routes (to maximise the coverage of these public investments and respond to unique regional identities within the Western Cape.

The PSDF includes four spatial themes, namely: Resources, Space Economy, Settlement and Spatial Governance. The first three themes, which have a spatial component, resulted in the development of 13 spatial policies. The fourth theme, spatial governance, explored the governance structure required in order to implement the PSDF. The key spatial policies in respect of Prince Albert Municipality are:

- **POLICY R1:** Protect Biodiversity and Ecosystem Services.

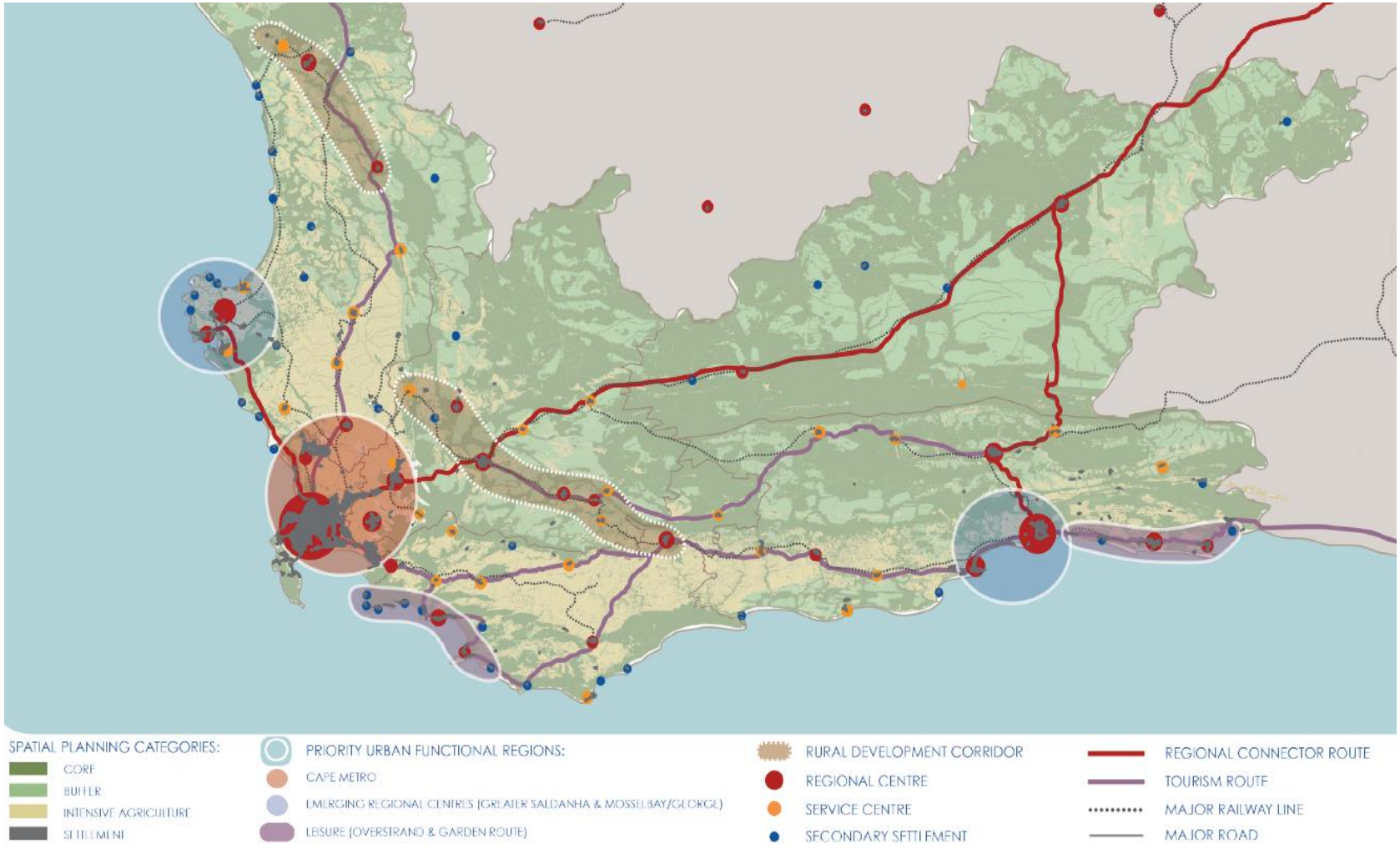


Figure 2.3: 2014 Provincial Spatial Development Framework

- **POLICY R2:** Safeguard Inland and Coastal Water Resources, and Manage the Sustainable Use of Water;
- **POLICY R3:** Safeguard the Western Cape's agricultural and mineral resources, and manage their sustainable and productive use;
- **POLICY R4:** Recycle and recover waste, deliver clean sources of energy to urban households, shift from private to public transport, and adapt to and mitigate against climate change;
- **POLICY R5:** Protect and manage provincial landscape and scenic assets;
- **POLICY E1:** Use regional infrastructure investment to leverage economic growth;
- **POLICY E2:** Diversify and Strengthen the Rural Economy;
- **POLICY E3:** Revitalise and strengthen urban space-economies as the engine of growth;
- **POLICY S1**: Protect, manage and enhance the provincial sense of place, heritage and cultural landscapes;
- **POLICY S2:** Improve provincial, inter- and intra-regional accessibility;
- **POLICY S3:** Ensure compact, balanced and strategically aligned activities and land uses;
- **POLICY S4:** Ensure balanced and coordinated delivery of facilities and social services;
- **POLICY S5:** Ensure sustainable, integrated and inclusive housing planning and implementation.

The PSDF composite map (see Figure 2.2) graphically portrays the Western Cape's spatial agenda. In line with the provincial spatial policies, the map shows what land use activities are suitable in different landscapes and highlights where efforts should be focused to grow the provincial economy.

2.2.2 The Western Cape Land Use Planning ACT, 2014 (ACT NO. 3 OF 2014) (LUPA)

LUPA echoes much of what SPLUMA seeks to achieve from a spatial planning perspective, adding some detail in terms of the process that may be used to develop an MSDF, the content requirements of MSDFs, and setting out the functions of municipalities and provincial government. In brief, LUPA allows municipalities to follow two different processes in developing MSDFs – one with an Intergovernmental Steering Committee and one without. The Prince Albert Municipality has decided not to establish an intergovernmental Steering Committee and as such, will allow for a 60-day public participation period in which all stakeholders will be invited to comment on the draft document.

2.2.3 Living Cape: A Human Settlements Framework

The Living Cape Framework outlines how human settlement planning, delivery and administration can be improved in the Province and can add value to this MSDF. The Framework proposes three important shifts namely moving from Housing to Sustainable Human Settlements; Low value production to reaping the urban dividend and most importantly for the State to change its role from provider to enabler.

2.2.4 Central Karoo District Spatial Development Framework (CKDMSDF) 2020

The CKDM SDF identifies the Groot Swartberg Nature Reserve as a Core Area (SPC Category A). Consequently, the area, which forms the northern extent of the study area, is delineated as a statutory conservation area. Alignment requirements include:

- Ensure that the conservation of the biodiversity of the area;
- Provide for eco-tourism opportunities;
- Provide planned and controlled outdoor recreation opportunities.

Several policies and guidelines were adopted as part of the CKDM, which the Prince Albert MSDF will align itself to. Focus includes the exploration of Shale Gas Extraction as per the 2017 CSIR Strategic Environmental Assessment in Figure 4.2 on the following page. As per Prince Albert's IDP, there is inadequate information to support or oppose full or large-scale production of shale gas. DEA&DP does, however, acknowledge that the need for information necessitates the commencement of exploration.

2.2.5 Prince Albert MSDF 2014

The Prince Albert MSDF was last revised during 2014 and adopted as a core component of the then IDP. As previously indicated, this MSDF is a new compilation. The new MSDF will be adopted shortly before a new IDP cycle in 2022, therefore presenting an opportune time for the MSDF's spatial strategy to align with the 'new IDP', that is the 2022 next 5-year IDP that is currently serving for adoption.

2.2.6 Prince Albert Municipality IDP

The 2017-2022 IDP for Prince Albert clearly sets out the vision for the 5-year period, which is to create an area characterised by a high quality of living and service delivery. The development Strategy in terms of the IUDF is to ensure the sustainable development of Prince Albert, where all sectoral plans are aligned for the betterment and benefit of the municipal area. It further seeks to create an enabling environment for the inhabitants of Prince Albert where job opportunities are created, and livelihoods are improved.

The municipality has also identified seven Strategic Objectives (SO), namely:

SO 1 - To promote sustainable integrated development through social and spatial integration that eradicates the apartheid legacy;

SO 2 - To stimulate, strengthen and improve the economy for sustainable growth;

SO 3 - To improve the general standards of living;

SO 4 - To provide quality, affordable and sustainable services on an equitable basis;

SO 5 - To maintain financial viability & sustainability through prudent expenditure, and sound financial systems;

SO 6 - To commit to improvement in human skills development and effective service delivery;

SO 7- To enhance participatory democracy.

The above are critical informants to the MSDF review for the municipality, as they assist in framing the spatial vision and priority action areas.

2.2.7 Prince Albert Land Use Planning By-law, 2015

The By-law sets out the process for the compilation, adoption, amendment or review of the MSDF, amongst other things. The Municipality are also developing a new zoning scheme in 2021 to replace the outdated Scheme 8 regulations,

2.2.8 Implications for the Prince Albert Municipality

Similarly, with relevant National and Provincial policies and legislation, the revised, updated and amended MSDF for Prince Albert will be aligned with these policies. The MSDF spatial proposals will be informed by all relevant National, Provincial and Local planning policies.

As required in terms of the Municipal Systems Act, 2000 (Act 32 of 2000), the MSDF will be adopted as a core component of the Municipal 5th generation IDP. This document will seek to progressively comply, as far as possible, with the prescribed requirements as contained in the applicable planning legislation.

2.3 ADJACENT MUNICIPAL & REGIONAL INFORMANTS

2.3.1 Garden Route District SDF 2019

A review of the Garden Route District SDF has been undertaken to align the Garden Route District SDF and IDP and to ensure compliance of the MSDF with SPLUMA, LUPA and the Western Cape PSDF. Looking at the broad structuring elements of the Garden Route SDF, of notable importance is the Swartberg Pass and N12 corridor linking through Klaarstroom. These, together with Prince Albert Town and Swartberg Circle Route can also be packaged as an addition to tourism activities in the Garden Route.

2.3.2 Adjacent MSDF informants include:

A composite of all the surrounding local MSDFs is shown in Figure 2.4. The 2014 Prince Albert MSDF is not in conflict with the spatial development proposals of the adjacent municipalities; however, it does show also illustrate the following:

- The need for continuity in the 'green network' of ecological corridors is important at the landscape scale;
- Mountain passes and scenic routes contribute to the competitive advantage of the region;
- Riverine corridors contribute to ecological and biodiversity connectivity to core critical biodiversity areas;
- The critical importance of the N1 highway to connect the region to the rest of South Africa and other regional connector roads, such as the N12 connecting the region to the Southern Cape; and

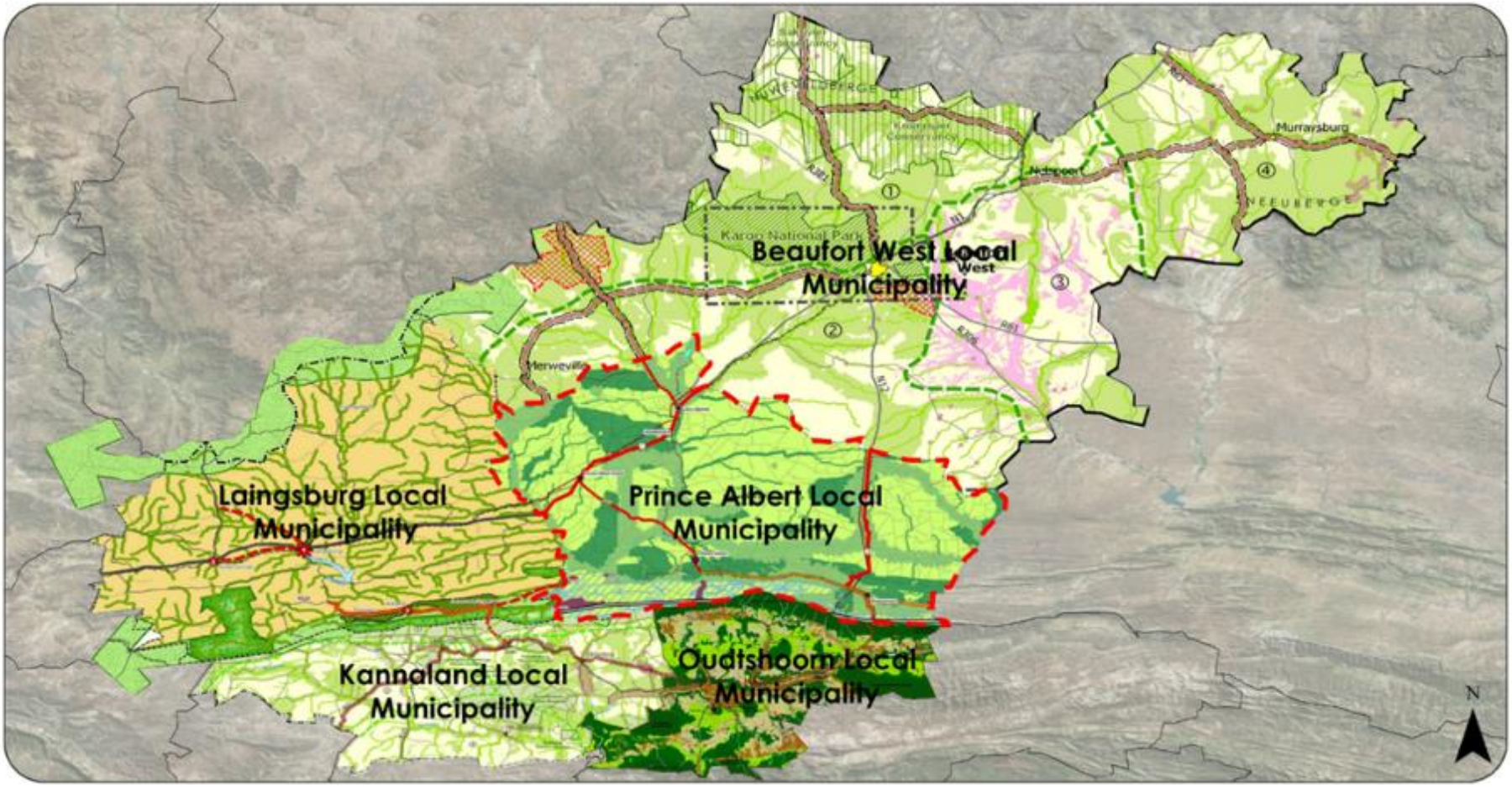


Figure 2.4: Prince Albert 2014 MSDF Alignment with Surrounding Municipalities

CHAPTER 3: PRINCE ALBERT SPATIAL DEVELOPMENT FRAMEWORK

3.1 SPATIAL DEVELOPMENT VISION STATEMENT

The vision to guide the 2020 Prince Albert MSDF is to:

"Develop Prince Albert as a place of resilience and environmental quality with a unique and distinctive sense of place - where people choose to live, work and visit, an exemplar in the achievement of sustainable growth"

This vision links to the 2020 Central Karoo District MSDF vision, which is:

"Working together in Sustainable Spatial Development and Growth towards a Resilient Central Karoo"

The municipal-wide spatial concept used to realise the above vision is shown in Figure 3.1. There are 5 socio-ecological systems of resilience shown in the shape of a 'Caracal Paw'. Resilience refers to the capability of individuals, social groups, or sub social-ecological systems not only to live with changes, disturbances, adversities or disasters (such as drought), but to adapt, innovate and transform into new, more desirable configurations.

The palm and heart of the Caracal Paw is Prince Albert Historic Town, together with the Swartberg Mountain Range, Swartberg Circle (R328 and R407), various mountain passes, dams, Klaarstroom Historic Town and the N12 national and provincial route. Together these provide the highest social, economic and political offerings, as well as road accessibility, upstream water source and storage and ecological connectivity for the region.

The first toe (Prince Albert Road) is ecologically connected via the Dwyka River and infrastructurally through the N1 & R407. This toe is connected to the second toe (Leeu Gamka Town and Kruidfontein) via the N1 national route, which in turn feeds Prince Albert through the R 407. The third toe is a range of guest farms and farm clusters along the Waterval river. The last toe includes Seekoegat and connects to the 'palm' via the N12 which feeds directly to the towns of Oudsthoorn, George and the broader Garden Route region. Enhancing the resilience of these socio-ecological systems is key to this MSDF.

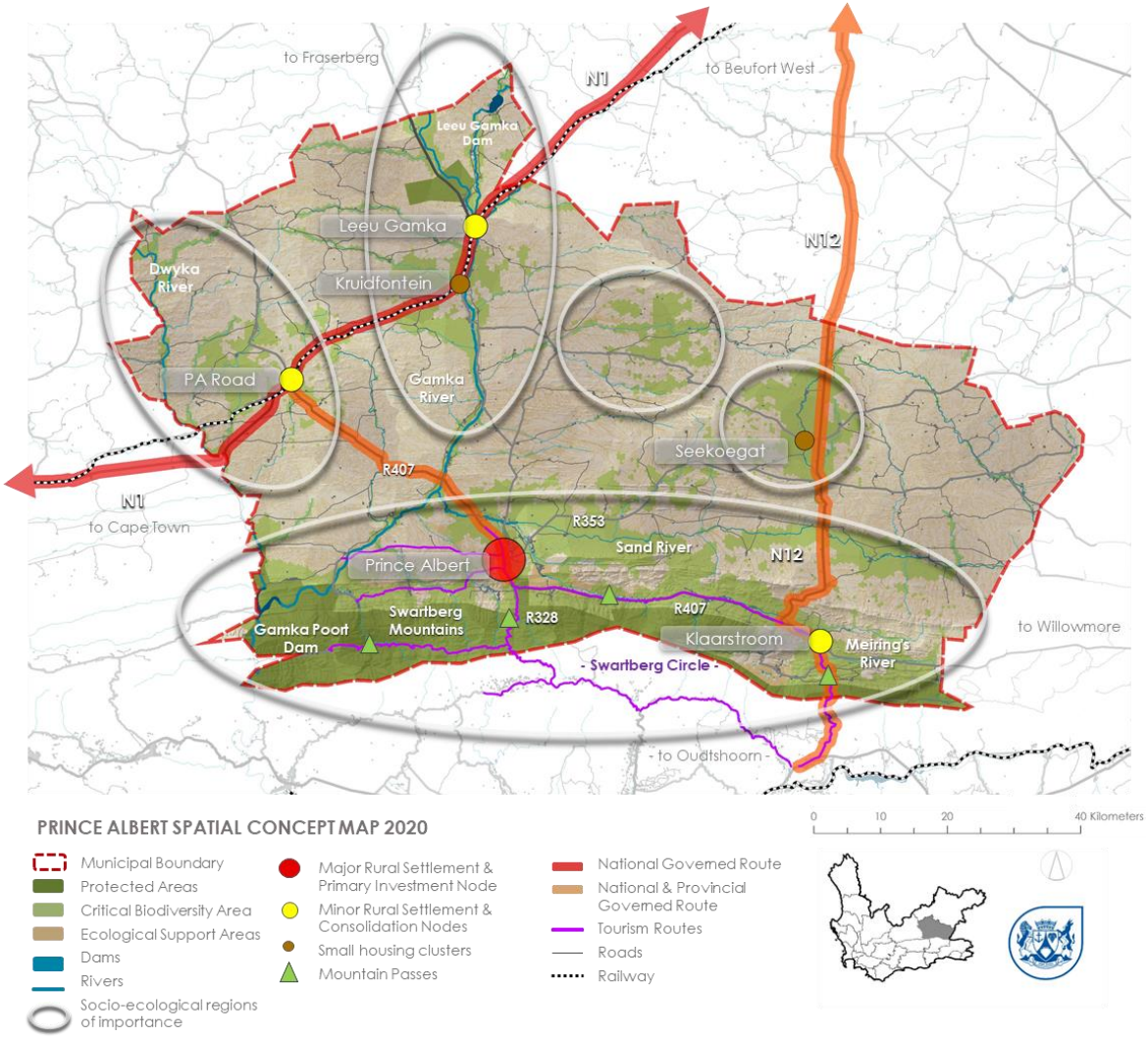


Figure 3.1: Prince Albert Spatial Concept

3.2 SPATIAL DEVELOPMENT STRATEGIES

To achieve the vision statement and spatial concept, four Spatial Strategies (A, B, C and D) for Prince Albert Municipality are listed and explained below.

3.2.1 Strategy A: A region that protects the environment, enhances resilience and capitalises on and honours the Karoo charm in support of a vibrant people and economy

The competitive advantage of the economy of Prince Albert Municipality is dependent on its natural resource base. This underpins the history, character, scenic and heritage appeal of the region, as well as the vitality of the tourism industry and limited yet important agricultural, agri-processing, manufacturing and downstream trade and construction economy. The functioning of this economy is directly linked to the availability of water and the health of the ecological systems. Hence the protection and enhancement of the environment is one of the main strategies of this MSDF. Through municipal policy and programmes, the municipality must therefore protect its natural assets, build its resilience and honour and enhance its tourism economy. The **primary resources to protect, maintain and enhance** are listed below and shown in Figure 3.2.

Natural and agricultural resource base: Swartberg Mountains, Prince Albert Historic Town Farms, critically biodiversity and ecological support areas along the river corridors of the Gamka, Dwyka, Dorps, Sand, Koekemoers and Meirings rivers and their tributaries, as well as irrigated agricultural production areas associated with these rivers.

Settlements with different economic roles and heritage potential: The towns of Prince Albert, Leeu Gamka, Klaarstroom and Prince Albert Road as well as smaller housing clusters like Seekoiegat and Kruidfontein.

Unique landscapes, lifestyle, and tourism offerings: Prince Albert Town, Church Street, historic town farms, lay water system, monuments and heritage zones, Klaarstroom Town and scenic routes (R407, R353, R328, N12 and Swartberg, Gamkakloof and Meiringspoort passes).

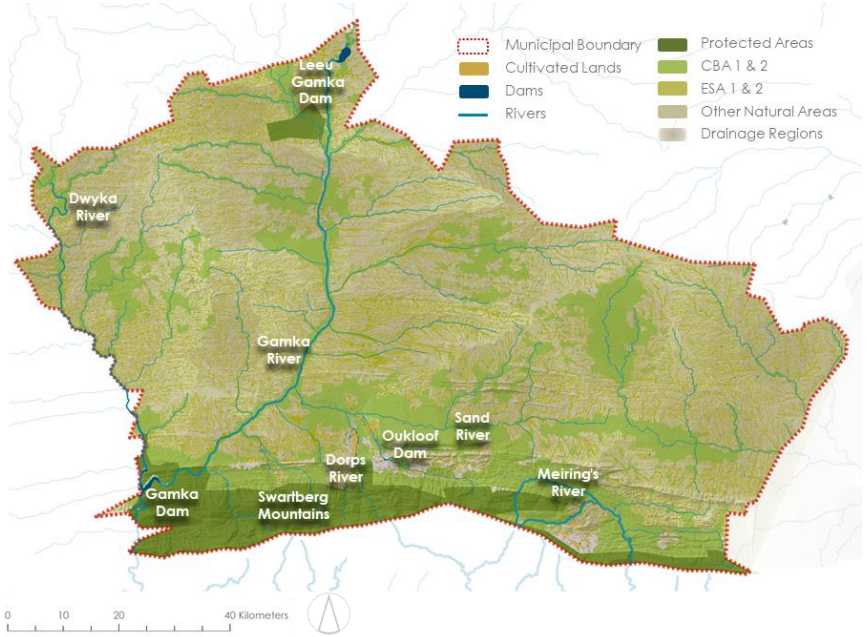


Figure 3.2: Map of Natural Resources for Protection

Figure 3.3: Images of Swartberg Pass and Mountains and Prince Albert Town and Gamkakloof Dam (Source: Princealbert.org.za).

Prince Albert Historic Town Farms: It is worth conceptualising each of the Caracal Paw socio-ecological systems of resilience through the regenerative "Agropolis" model shown in Figure 3.4. Without the road system (which brings people, tourists and transported goods to and from the market), the settlements in Prince Albert are logically linked to the river catchments and the farming system. The first ring can be conceptualised as Prince Albert Town, connected to the Dorps River and lei water system (a flowing stream that supplies the town along street viaducts).

The second ring is the Prince Albert historic town farms. This ring is made up of rich heritage buildings, sub-tropical fruit orchards and vegetable plots and milk production. These provide a unique tourism and farm-to-market-style economy and ensure long-term food security (See Figure 3.5). These are located closest to the town since vegetables, fruit and dairy products must get to market quickly.

A further assessment of the town farms and agricultural land must be conducted to determine which farms could potentially be subdivided and sensitively developed to accommodate additional dwelling units without undermining the character and feel of the town.

The third ring is typically for timber and firewood production, which are heavy to transport but essential for urban living. The fourth zone consists of extensive fields for producing grain which can be stored longer and can be transported more easily than dairy products. As a result, it can be located further from the town. The aim is to be aware of this logical system and to preserve its shape and functioning through the policies and programmes supported in this MSDF.

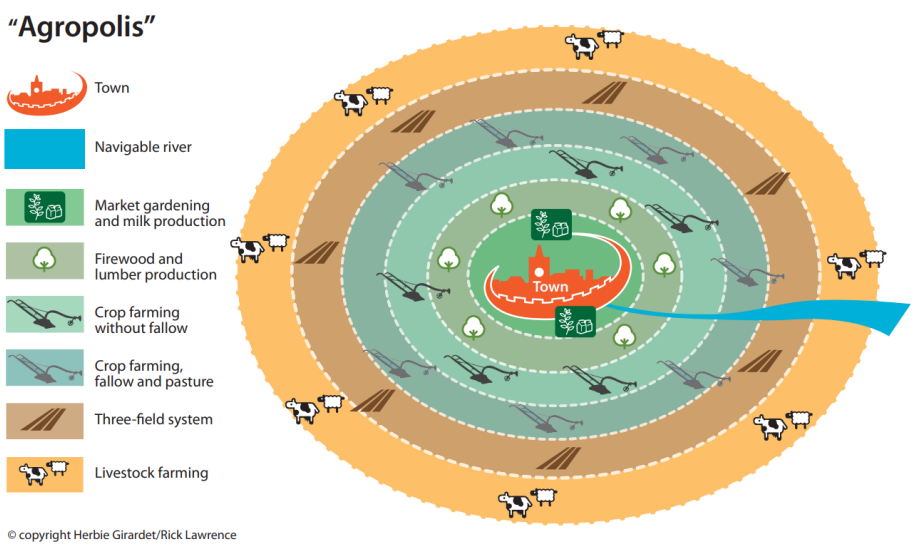


Figure 3.4: The Agropolis Concept (Source; https://www.worldfuturecouncil.org/wp-content/uploads/2016/01/WFC_2010_Regenerative_Cities.pdf)

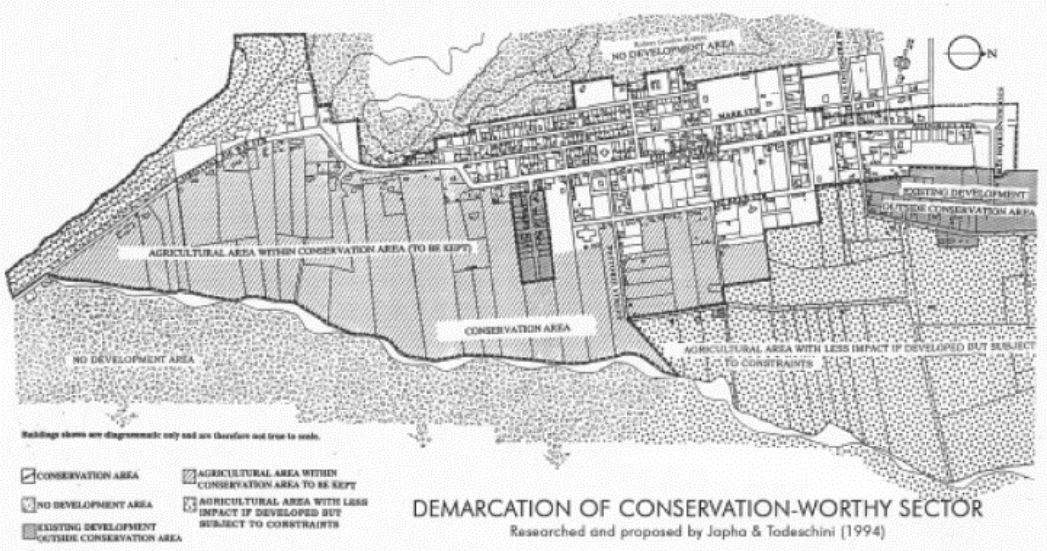


Figure 3.5: Historic Town Farms in Prince Albert (Source: Prince Albert Heritage Inventory (2009-2011)

3.2.2 Strategy B: Improve regional and rural accessibility and mobility for people and goods in support of a resilient economy

How easily citizens of and visitors to Prince Albert can access the opportunities, services and amenities it offers is a critical precondition for growth of the economy and development of its communities. However, small towns and remote settlements are difficult and expensive to service with public transport, and the absence of public transport systems serving rural communities and outlying settlements fundamentally constrains socio-economic development. Nonetheless, The MSDF promotes an effective and efficient accessibility network that supports a productive interaction between urban and rural settlements as well as within them. Examples of how this plays out conceptually can be seen in Figure 3.6.

What this means for Prince Albert is that, at the municipal scale, the **regional road and rail network** must support the effective and efficient movement of freight and people in Prince Albert Municipality. This requires ensuring that a clear primary and secondary regional route hierarchy is set out, which means defining the role of the route and how the land uses alongside it are managed to ensure efficient mobility. This network must support the ability of rural dwellers and workers, and those living in smaller rural settlements to be able to access services and amenities both within and outside Prince Albert Municipality within a reasonable time.

As part of both encouraging business, as well as encouraging tourism activities and money spent within towns of the region, Prince Albert Municipality needs to continue to ensure that its towns are conducive to use by both local and tourist passengers (on foot and in car) as well as attractive for businesses to invest in the area. Given the sparsely populated nature of the municipality, school learner transport and mobile services need to be provided.

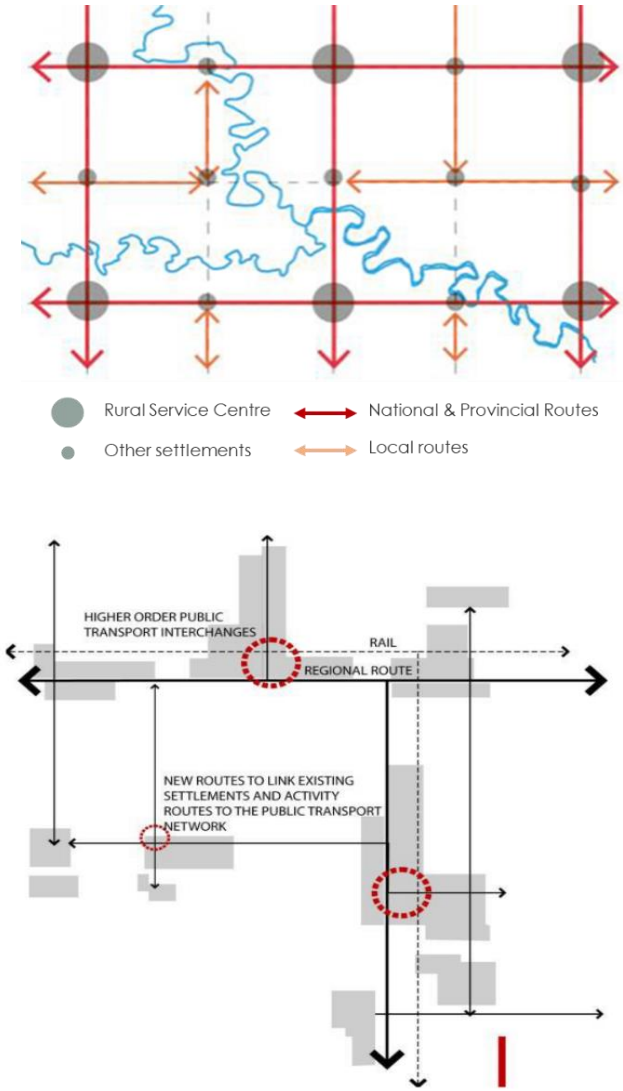


Figure 3.6: Diagrams illustrating how regional accessibility can be conceptualised in Prince Albert

3.2.3 Strategy C: Sustainably allocate government resources, infrastructure and facilities in a manner that uplifts and skills people and focusses on maximising impact on the most possible people, while providing a basic level of service for all

For these reasons, the National Spatial Development Framework (NSDF) (2019), as well as the CSIR, provide the national spatial social service provisioning model. This assists in the effective, affordable and equitable development of social service delivery, as seen in Figure 3.7. In terms of the wheel, **Prince Albert Town** is classified **as a 'Rural Service Centre'** (yellow) while **Leeu Gamka, Klaarstroom** and **Prince Albert Road** are considered **other settlements** (brown). In this MSDF, a further distinction will be made with Prince Albert Town being a **major rural settlement** while the so-called other towns will be called **minor rural settlements.** This is shown in the Spatial Concept in Figure 3.1.

The overarching aim is to achieve balance within settlements so that they function optimally within finite resource constraints. It is also to prevent situations where low growth settlements such as Leeu Gamka, Klaarstroom and Prince Albert Road expand to accommodate low-income persons without the requisite employment growth.

Through establishing a **clear settlement hierarchy**, strategy C aims to ensure that:

1. Opportunities are created for residents to prosper in inclusive and just settlements by preventing outward sprawl, disconnected and low-density development;
2. Municipal financial sustainability becomes a central concern in municipal and government infrastructure investment, growth management and expansion; and
3. Limited resources are used efficiently to protect long term financial sustainability of households, businesses and government.

The development approach of the municipality should be that infrastructure development and investment is directed where growth is matched to capacity, resources, and opportunity. Specifically, this means:

- Focus government investment, facilities, services and housing opportunities in Prince Albert Town and to a lesser extent Leeu Gamka and Klaarstroom, therefore preventing the creation of new low-income housing developments. in low growth, job deficient settlements that have little prospect of creating employment.
- Recognise population dynamics in infrastructure investment (more diverse housing products and opportunities in the centralised locations like Prince Albert Town).

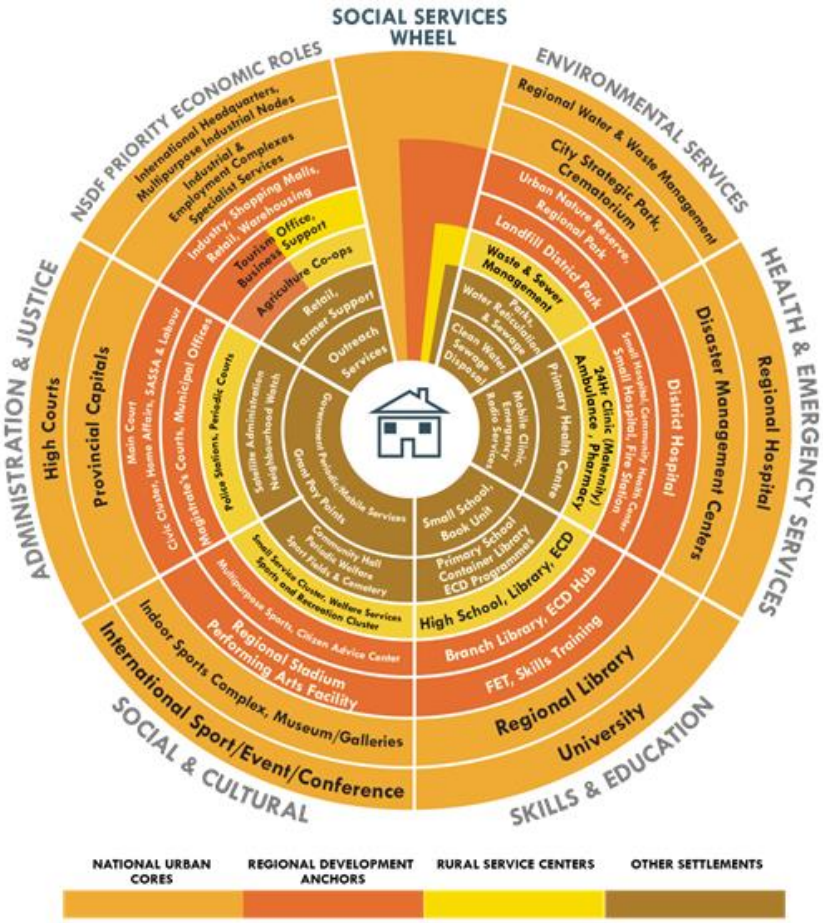


Figure 3.7: NSDF 2019 Social Services Wheel (Source: DALRRD NSDF 2019)

3.2.4 Strategy D: Partnership-driven governance and administration towards improved financial and non-financial sustainability and resilience

Strategy D underpins all the other strategies, because an integrated partnership and governance-based approach is required for better coordination, alignment, and impactful planning, budgeting and delivery. The application of an integrated governance approach directly ties in with this SPLUMA principle, which also requires municipalities to pursue good administration practices to enhance and strengthen the spatial planning and land use management systems of the municipality.

Prince Albert, as part of the Central Karoo, must seek partnership-driven solutions, realising that the challenges are multi-faceted and cannot be addressed only by the local sphere of government. It is therefore required that a range of partnerships be explored to **find a shared service solution** within the Central Karoo that ensures shared financial viability along with the administrative and logistical burdens associated with servicing a sparse region. Focus areas of potential partnership between all spheres of government and civil society pertaining to Prince Albert Municipality include:

- Water;
- Gas;
- Energy (specifically renewable energy);
- Rural mobility; and
- Tourism.

The viability of projects and increasing cost of fossil fuels must be considered now and, in the future, when higher temperatures are a reality. Economic security can only be achieved through climate resilient activities and sectors.

Figure 3.8 illustrates how the four spatial strategies align with Prince Albert Municipality's current IDP Strategic Objectives (SOs). The IDP SOs are already somewhat linked to the MSDF strategies because the MSDF is a key component of the IDP. Therefore, the strategic objectives of the IDP should evolve over time to better incorporate the logic of the spatial strategies and policies outlined in this MSDF.

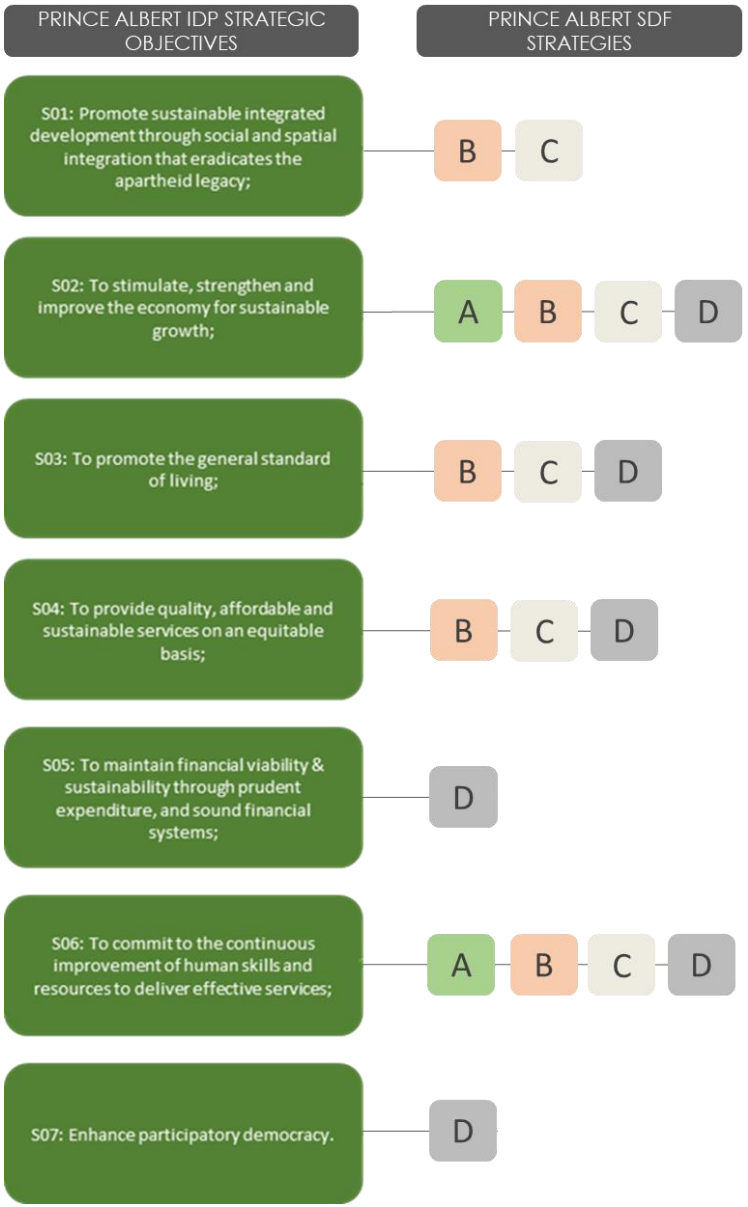
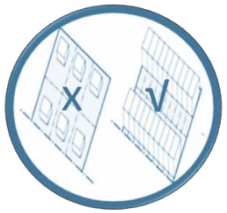


Figure 3.8: Prince Albert Municipality and CKDM MSDF Strategies linked to the Prince Albert Municipality IDP 19/20 Strategic Outcomes

3.3 SETTLEMENT SPECIFIC URBAN DESIGN PRINCIPLES

3.3.1 Spatial efficiency and resilience



Land must be used efficiently to ensure municipal financial sustainability. Low density development typologies are costly for the municipality to service and create inequitable settlements that are costly to live in. Creating settlements that are resilient to change and flexible in times of stress can address this, as can developing water-resilient settlements that focus on diversification of water sources.

3.3.2 Inclusivity

An inclusive town values the needs of all people equally. It is a town where people feel comfortable being citizens and have equal access to economic opportunities, quality public amenities and spaces, housing and basic services. Spatial integration is a key ingredient in the pursuit of an inclusive town.

3.3.3 Walkability

Walkable towns promote a public environment with a people focus rather than a car focus and can lead to addressing many social and economic problems through improved social interaction, enhanced physical fitness and diminishing crime.

3.3.4 Flexible and Mixed Use

Positive urban environments allow for a mix of land uses and reflect flexibility in their spatial structures. Flexibility refers to the creation of a spatial structure that can accommodate unexpected demands made upon them over time.

3.3.5 Economically Vibrant

Towns with vibrant economies are ones that promote inclusive economic activity (from small to large; formal and informal). By creating the conditions for a vibrant economy – which provides for increased economic security and financial sustainability – it is possible to contribute to positive individual and social outcomes.

3.3.6 Identity and Sense of Place

When citizens form a strong relationship with a place, that place becomes a part of who they are — their identity. High quality public spaces can greatly enhance the dignity and pride of citizens, which in turn strengthens their identity and attachment to a place.

3.3.7 Safety and security

Combatting crime and reducing insecurity is essential if positive development and growth is to occur. Where there is fear, there is no hope. Safety and security are vital for development, investment and access to services and amenities.

3.3.8 Spatial Transformation

Spatial transformation refers to addressing the apartheid legacy through settlement restructuring. The reconstruction framework developed by the WCG Regional Socio-Economic Programme (RSEP) is a practical toolkit for addressing apartheid spatial inefficiencies and spatial divides (where lower income residents live and where jobs and services are usually located). The toolkit, shown on the following page, is applied to Prince Albert Town. Once applied, the toolkit provides guidelines to connect fragmented towns by finding and upgrading integration zones, primary pedestrian movement routes and township satellite nodes.

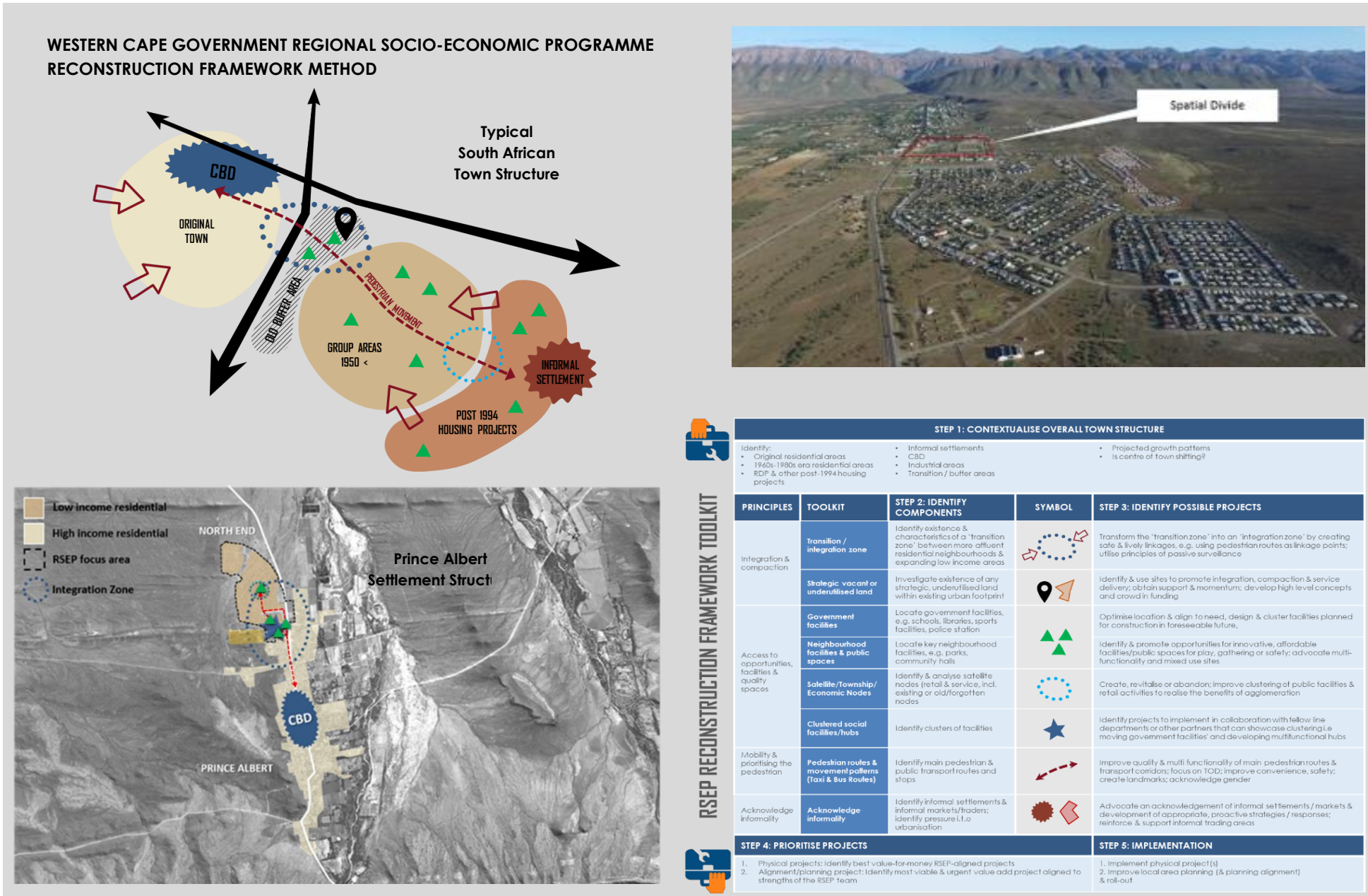


Figure 3.9: Application of the Reconstruction Framework Toolkit to the Town of Prince Albert Municipality (See https://www.westerncape.gov.za/rsep/)

SPATIAL TRANSFORMATION THROUGH OPTIMISED FACILITY LOCATION AND FACILITY CLUSTERING

Figure 3.10 shows the 2011 Census Car Ownership patterns in Prince Albert Town. Those who own a car are shown in **green** dots while those who don't are shown in **red** dots. The dots also provide a good representation of the number of people living in North End versus South End. The map confirms the RSEP pedestrian survey findings that movement on foot by North End residents is the common mode of transport.

Figure 3.11 shows an example of the mean distances travelled between North End residents and South End residents to the Prince Albert Municipality council and finance offices as well as a range of other education and business services located nearby in Church Street. By re-locating or developing new facilities in the integration zone (See Figure 3.9 where new council chamber and finance offices will be strategically clustered alongside the Thusong Centre), the distance for North End residents travelling on foot is roughly 1.5 km less one way and 3 km less in one round trip. Optimised spatial strategies like these indirectly save time and cost for marginalised residents as well as reduce exposure to potential crime incidents or accidents on foot.

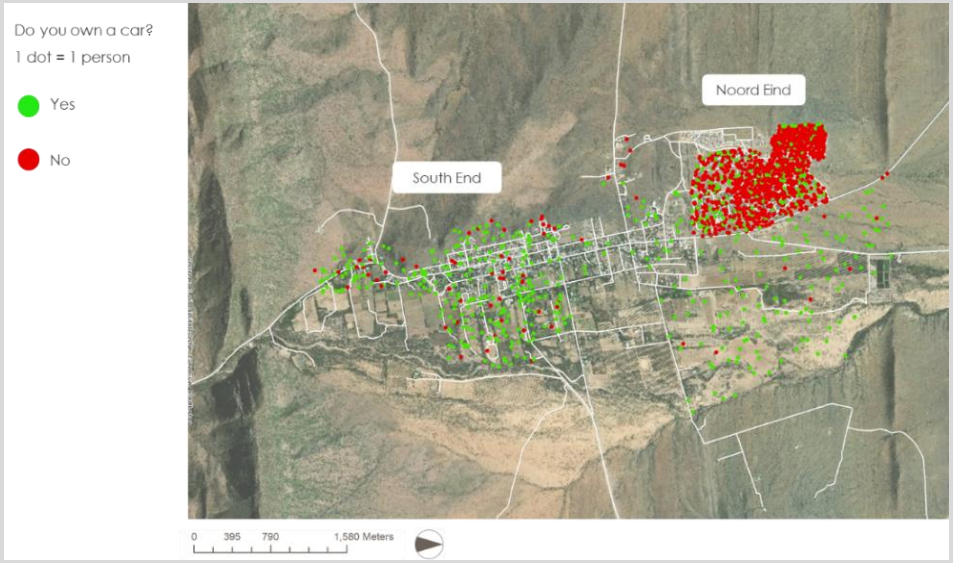


Figure 3.10: 2011 Census Car Ownership Patter in Prince Albert Town

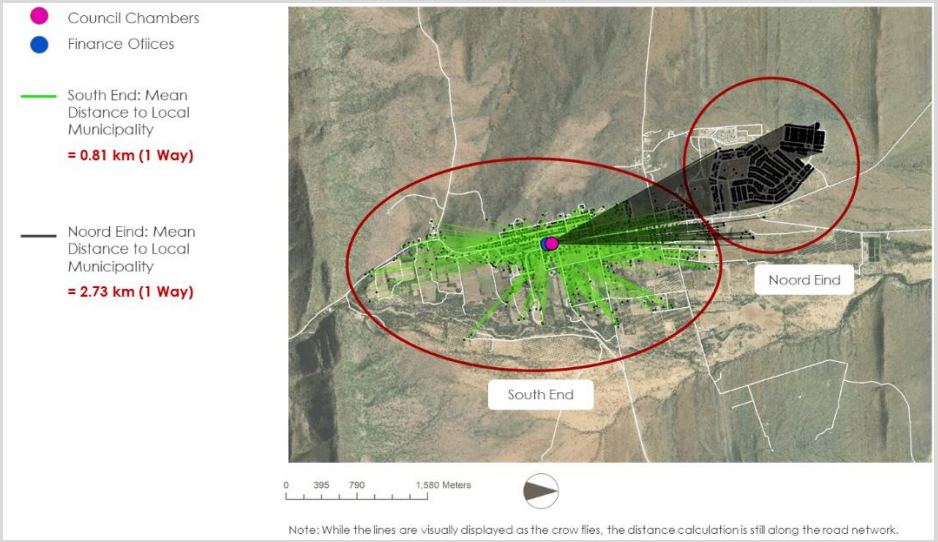


Figure 3.11: Location of Council and Finance offices and distance from North and South End

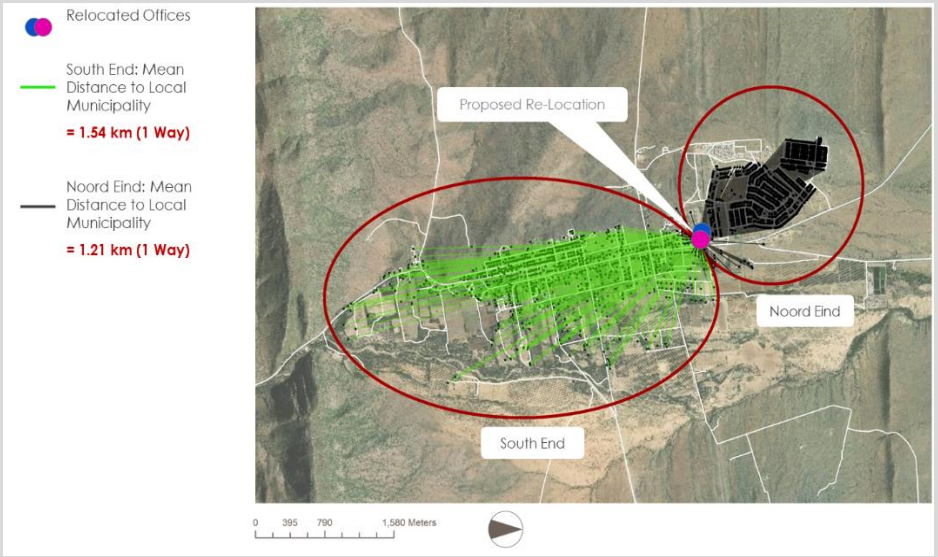


Figure 3.12: New Location of Council and Finance offices and new distance from North and South End

3.4 FUTURE POPULATION, HOUSING AND LAND DEMAND

As shown in Table 3.1, several documents use different population and household estimates and projections. This makes it problematic to find consensus and adequately forecast growth and land requirements, as well as determine future infrastructure investment. What many documents do have in common is that there is a slowing growth rate, averaging **2.2%** (2001-2011) and **1.73%** (2011-2016) and more recently **1.1%** in the Prince Albert IDP, **0.67%** in the 2019 Municipal Economic Review and Outlook (MERO) Report and **0.8**% in the 2020 MERO Report.

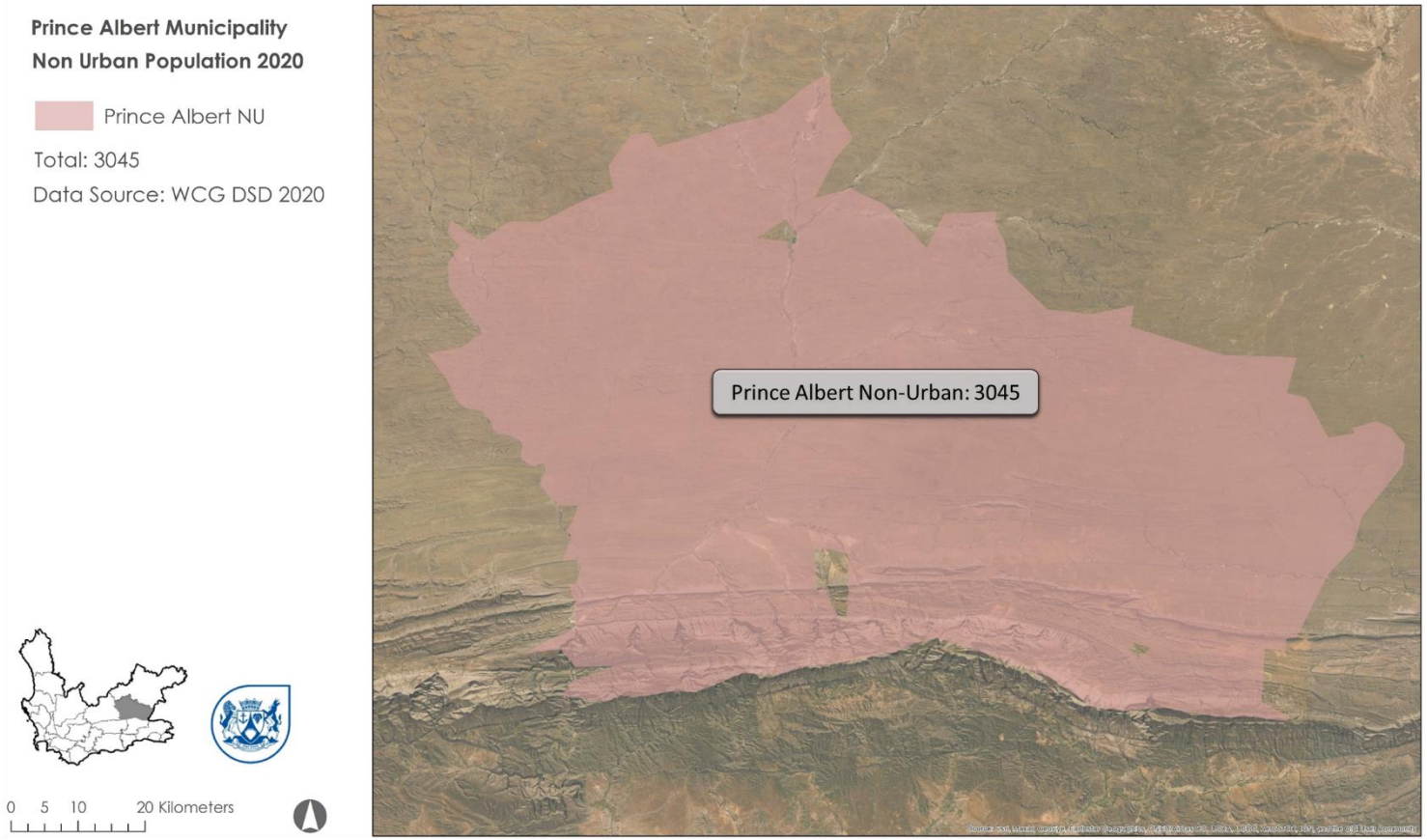
The Western Cape Socio-Economic Profile for Local Government (SEP-LG) Prince Albert Municipality (SEP-LG 2020) data is based on the Stats SA Mid-Year Population Estimate (MYPE) 2019, and MERO 2020 is based on the MYPE 2020. The Western Cape Provincial Population Unit (PPU) also developed an adaptable methodology that caters for provincial population estimates that stretch over a longer forecast period than provided by StatsSA. These estimates are available on a lower geographical level than what the national statistics organisation provides.

The Sub Place (SP) and Enumerator Area (EA) spatial data from the Provincial Population Unit appears to provide the **most acceptable median 2020 base population** of the various documents. Because it is the **most disaggregated data set** amongst all sector reports and master plans, it will be a useful baseline for developing the Capital Expenditure Framework in Chapter 4 of this MSDF. This data puts the total 2020 Municipal population at **14 371,** broken up as **11 326 urban and 3 045 rural.** Assuming a municipal-wide average household size of **3.8**, the total number of houses in 2020 would be **3781,** which is notably somewhat lower than what has previously been reported in other documents.

The SPs and EAs are mapped per town (labelled with 2020 population estimates) on the following page in Figures 3.13 - 3.16. Thereafter, Table 3.2 shows the 10-year (2020-2030) population and household projections for what are considered in this MSDF as low (**0.67%**), medium (**1.1%**) and high (**1.73%**) growth scenarios. The third-last column in Table 3.2 shows the 2020 housing waiting list per town. This is considered the 'backlog', which is added to the 'natural growth' to determine the total housing demand and future potential land requirements. The total municipal waiting list is **1 201** units which will require an HSDG allocation of roughly **R229 million** and **R118.5 million** worth of social infrastructure (normally around 50% of the housing infrastructure and top structures, but this requires detailed assessment).

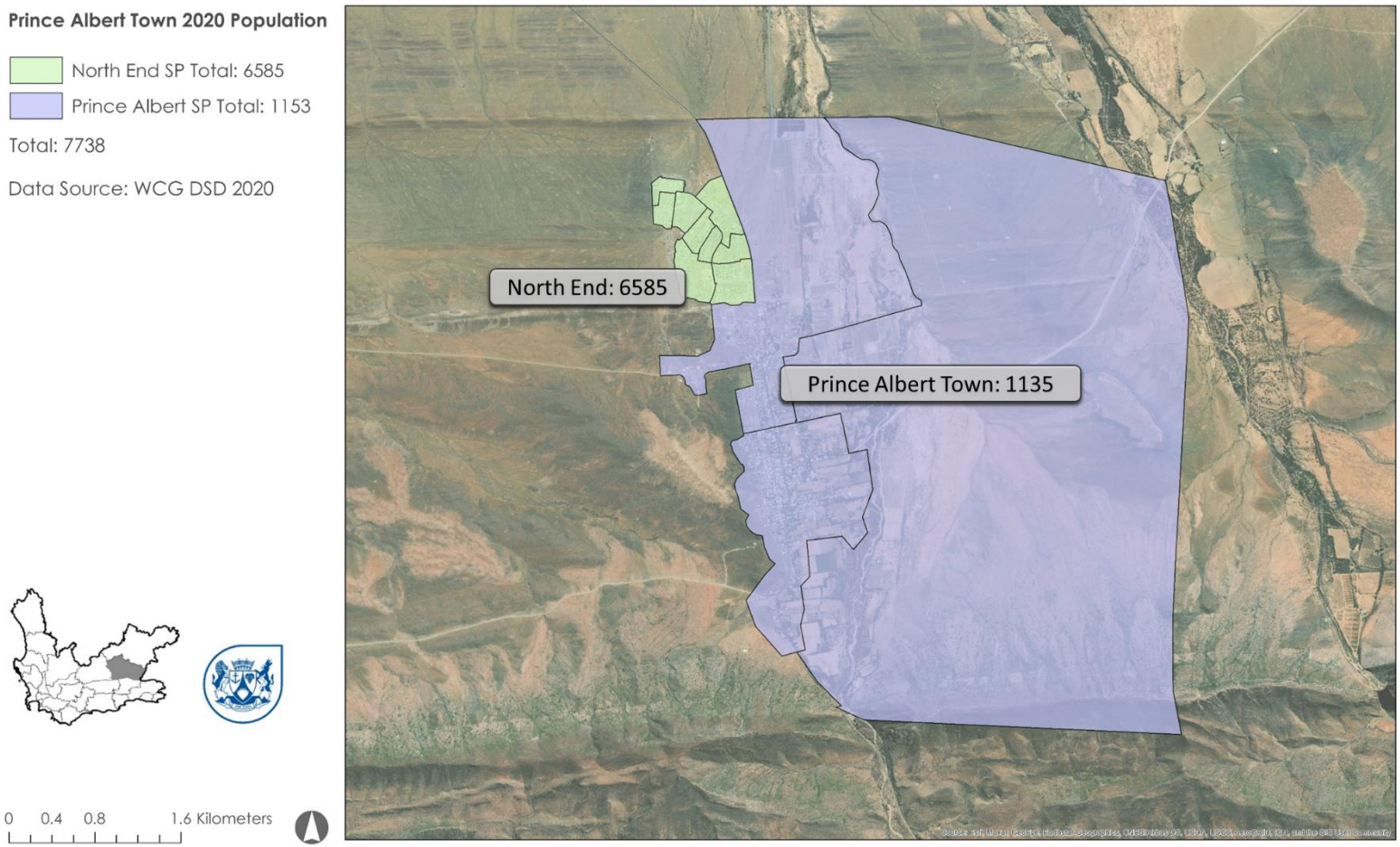
Table 3.1 Population, household and growth estimates from various documents

Document	Growth Rate	Population Size	Number of Households	Household Size
Prince Albert IDP 2019/20 uses the DSD's 2018	1.1%	14 607 (year 2020)	4183 (year 2016)	3.5
Sub Place (SP) and Enumerator Area (EA) spatial data from WCG: DSD, 2020	1.1%	14 371 (2020)	3781 (year 2020)	3.8
2019 (MERO): WCG Treasury	0.67% (2019)	14 510 (year 2020) 14 597 (year 2021) 14 694 (year 2022) 14 799 (year 2023) 14 911 (year 2024)	3780 (year 2020) 3821 (year 2021) 3873 (year 2022) 3924 (year 2023) 3976 (year 2024)	3.8
2020 (MERO) WCG Treasury	0.8% (2019-2023)	14 164 (2020) 14 253 (2021) 14 368 (2022) 14 551 (2023)		3.8
Central Karoo District SDF 2020 DEA&DP Spatial Planning	1.73% (2020-2030)	15 295 (2020)	4634 (year 2020)	3.3
Prince Albert 2014 MSDF	2.2% projection used	15 978 (2020)	4792 (year 2020)	3.33
The 2010 Central Karoo District Municipality Bulk Infrastructure Master Plan	1%	11 364 (urban only, year 2020)	2584 (urban only, year 2020)	4.3



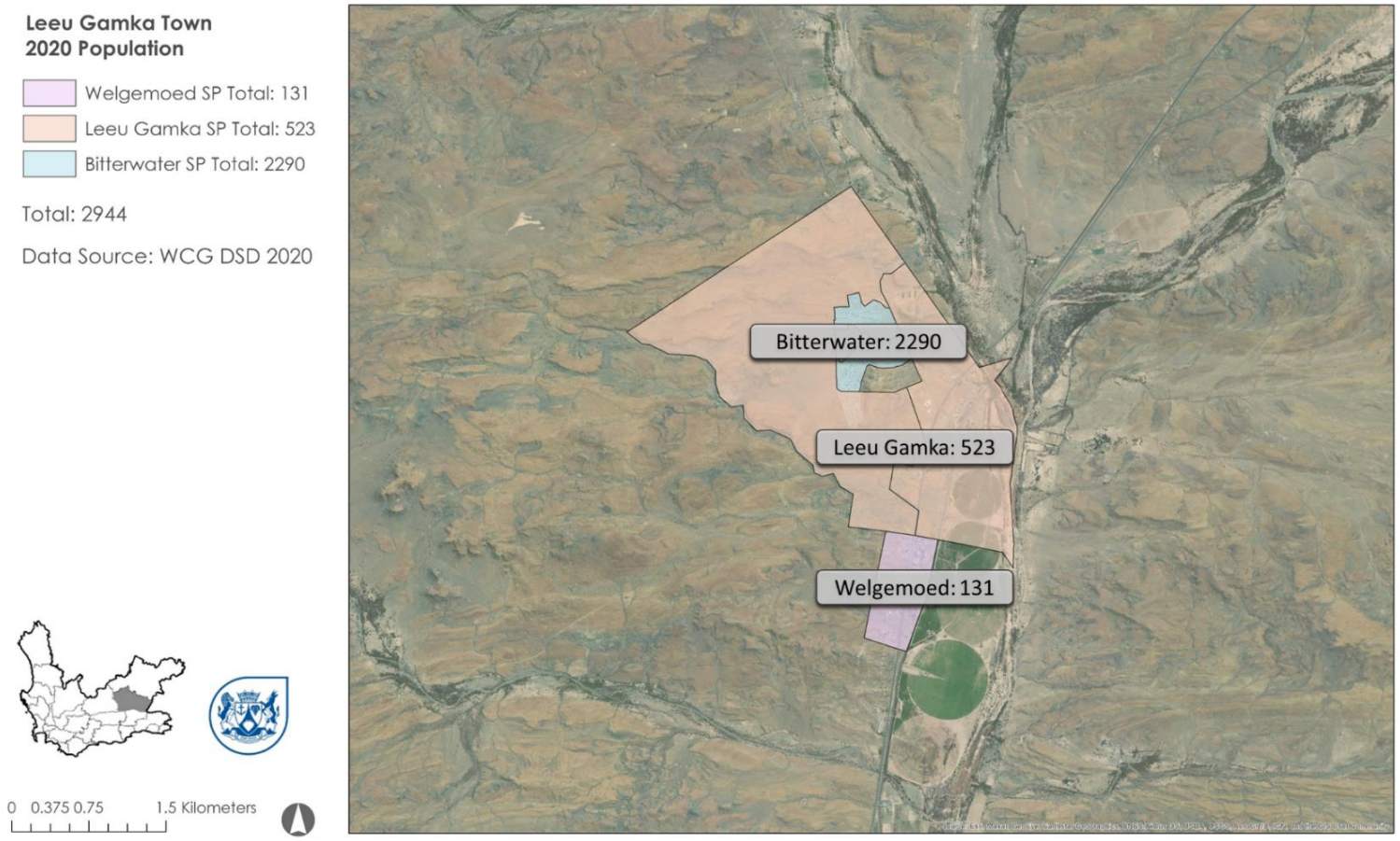
Area	Growth Rate %	Rank	Base Population 2020	Base No. of Households 2020 (Household size 3.8)	Projected Population 2025	No. of Households 2025	Projected Population 2030	No. of Households 2030	Additional People 2020-2030	Additional Households 2020- 2030	Land Required @ 25duha	2020 Housing Waiting List	2020-2030 Total Housing Demand	Land Required (ha)
Non-urban	0.67	Low	3045	801	3149	829	3256	857	211	56	2.22	4	60	2
	1.1	Med			3217	847	3399	894	354	93	3.73		97	4
	1.73	High			3320	874	3620	953	575	151	6.05		155	6

Figure 3.13: Map of Prince Albert Municipality Non-Urban Sub Place (Data sourced from WCG: DSD, 2020 and projected until 2030)



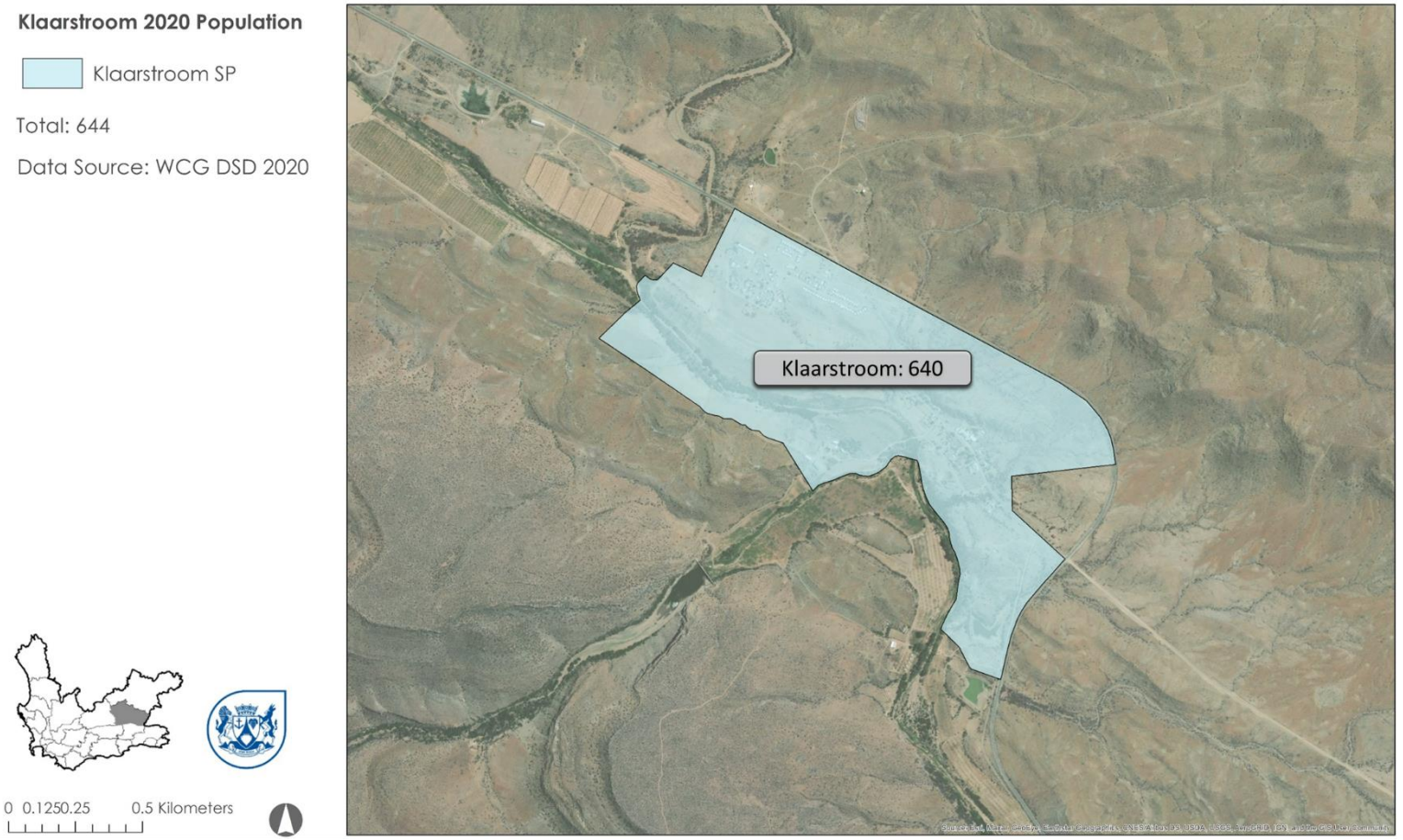
Area	Growth Rate %	Rank	Base Population 2020	Base No. of Households 2020 (Household size 3.8)	Projected Population 2025	No. of Households 2025	Projected Population 2030	No. of Households 2030	Additional People 2020-2030	Additional Households 2020-2030	Land Required @ 25duha	2020 Housing Waiting List	2020-2030 Total Housing Demand	Land Required (ha)
Prince Albert Town SP	0.67	Low	1153	303	1192	314	1233	324	80	21	0.84	718	859	34
	1.1	Med			1218	321	1287	339	134	35	1.41			
	1.73	High			1257	331	1371	361	218	57	2.29		955	38
North End SP	0.67	Low	6595	1736	6820	1795	7052	1856	457	120	4.81			
	1.1	Med			6968	1834	7362	1937	767	202	8.07		1103	44
	1.73	High			7191	1892	7841	2063	1246	328	13.11			

Figure 3.14: Map of Prince Albert Town Projected 2020 Sub-Place (Data sourced from WCG: DSD, 2020 and projected until 2030)



Area	Growth Rate %	Growth Scenario Rank	Base Population 2020	Base No. of Households 2020 (Household size 3.44)	Projected Population 2025	Projected No. of Households 2025	Projected Population 2030	Projected No. of Households 2030	Additional People 2020-2030	Additional Households 2020-2030	Land Required @ 25du/ha	2020 Housing Waiting List	2020-2030 Total Housing Demand	Land Required (ha) @ 25 du/ha
Bittewater SP	0.67	Low	2290	603	2368	623	2449	644	159	42	1.67	335	389	16
	1.1	Med			2419	637	2556	673	266	70	2.80			
	1.73	High			2497	657	2723	716	433	114	4.55		425	17
Welgemoed & Leeu Gamka SP	0.67	Low	654	172	676	178	699	184	45	12	0.48			
	1.1	Med			691	182	730	192	76	20	0.80		481	19
	1.73	High			713	188	778	205	124	33	1.30			

Figure 3.15: Map of Leeu Gamka Projected 2020 Sub-Place (Data sourced from WCG: DSD, 2020 and projected until 2030)



Area	Growth Rate %	Growth Scenario Rank	Base Population 2020	Base No. of Households 2020 (Household size 3.44)	Projected Population 2025	Projected No. of Households 2025	Projected Population 2030	Projected No. of Households 2030	Additional People 2020-2030	Additional Households 2020-2030	Land Required @ 25du/ha	2020 Housing Waiting List	2020-2030 Total Housing Demand	Land Required (ha) @ 25 du/ha
Klaarstroom	0.67	Low	644	169	666	175	689	181	45	12	0.47	144	156	6
	1.1	Med			680	179	719	189	75	20	0.79		164	7
	1.73	High			702	185	766	201	122	32	1.28		176	7

Figure 3.16: Map of Klaarstroom Projected 2020 Sub-Place and Enumerator Population (Data sourced from WCG: DSD, 2020 and projected until 2030)

Table 3.2: Projected 10 year (2020-2030) Population and Household Growth and Land Requirement Scenarios for each Sub Place and Town – reconciled with 2020 Housing Waiting List

Area	Growth Rate %	Rank	Base Population 2020	Base No. of Households 2020 (Household size 3.8)	Projected Population 2025	No. of Households 2025	Projected Population 2030	No. of Households 2030	Additional People 2020-2030	Additional Households 2020-2030	Land Required @ 25duha	2020 Housing Waiting List	2020-2030 Total Housing Demand	Land Required (ha)
Prince Albert Town SP	0.67	Low	1153	303	1192	314	1233	324	80	21	0.84	718	859	34
	1.1	Med			1218	321	1287	339	134	35	1.41			
	1.73	High			1257	331	1371	361	218	57	2.29		955	38
North End SP	0.67	Low	6595	1736	6820	1795	7052	1856	457	120	4.81			
	1.1	Med			6968	1834	7362	1937	767	202	8.07		1103	44
	1.73	High			7191	1892	7841	2063	1246	328	13.11			
Bittewater SP	0.67	Low	2290	603	2368	623	2449	644	159	42	1.67	335	389	16
	1.1	Med			2419	637	2556	673	266	70	2.80			
	1.73	High			2497	657	2723	716	433	114	4.55		425	17
Welgemoed & Leeu Gamka SP	0.67	Low	654	172	676	178	699	184	45	12	0.48			
	1.1	Med			691	182	730	192	76	20	0.80		481	19
	1.73	High			713	188	778	205	124	33	1.30			
Klaarstroom	0.67	Low	644	169	666	175	689	181	45	12	0.47	144	156	6
	1.1	Med			680	179	719	189	75	20	0.79		164	7
	1.73	High			702	185	766	201	122	32	1.28		176	7
Non-urban	0.67	Low	3045	801	3149	829	3256	857	211	56	2.22	4	60	2
	1.1	Med			3217	847	3399	894	354	93	3.73		97	4
	1.73	High			3320	874	3620	953	575	151	6.05		155	6
Total Municipal Area	0.67	Low	14381	3784	14871	3913	15378	4047	997	262	10.49	1201	1463	59
	1.1	Med			15194	3998	16053	4225	1672	440	17.60		1641	66
	1.73	High			15680	4126	17097	4499	2716	715	28.59		1916	77

Note: The Sub Place (SP) and Enumerator Area (EA) spatial population data from WCG: DSD Provincial Population Unit 2020 is used as a baseline. Three scenarios are projected from each baseline. The average household size is 3.8 and the land required is based on 25 dwelling units per hectare. The 'estimated' Total Housing Demand was calculated by taking the number of additional households 2020-2030 per scenario and adding this to the 2020 housing waiting list (backlog).

The following population findings can be summarised from Table 3.2:

1. By **2030** the **total population for Prince Albert** municipal area is projected to be **15 378** (low growth), **16 053** (medium growth) and **17 097** (high growth) people. The municipality will grow by between **997** (low), **1 672** (medium) and **2 716** (high) additional people by 2030. At an average household size of **3.8**, this would imply between roughly **261 and 715** additional households.

2. When reconciled with the 2020 housing waiting list (**1 201** applicants for the entire municipality), the 2020-2030 total housing demand for the total municipal area is between **1 463** and **1 916** houses, which will require between **59 and 77** hectares of additional land for housing.

3. By **2030,** the **total population of Prince Albert Town** is projected to be between **8 285** (low growth), **8 649** (medium growth) and **9 212** people (high growth). The 2020 population of **1 153** people will naturally grow by between **80** (low growth), **134** (medium growth) and **218** (high growth) additional people between 2020 and 2030. North End, with a 2020 population of **6 595** people, will naturally grow by between **457** (low growth), **767** (medium growth) and **1 246** additional people (high growth) between 2020 and 2030. At an average household size of **3.8**, this would imply between roughly **21 and 50** additional households in the main town and **120-328** additional houses in North End.

4. When reconciling with the 2020 housing waiting list (**718** applicants for Prince Albert town), the 2020-2030 total housing demand for Prince Albert Town is between **859** and **1103** houses which will require between **34 and 44** hectares of additional land for housing.

5. By **2030,** the **total population of Leeu Gamka/Welgemoed/Bitterwater** is projected to be between **3 148** (low growth), **3 286** (medium growth) and **3 501** people (high growth). Leeu Gamka/Welgemoed areas will naturally grow by between **45** (low growth), **76** (medium growth) and **124** (high growth) additional people between 2020 and 2030. Bitterwater will naturally grow by between **159** (low growth), **266** (medium growth) and **433** (high growth) additional people between 2020 and 2030. At an average household size of 3.8, this would imply between roughly **12-33** additional households in Leeu Gamka/Welgemoed and between **42** and **114** additional houses in Bitterwater.

6. When reconciling with the 2020 housing waiting list (**335** applicants for this area), the 2020-2030 total housing demand for this area is between **389** to **481** houses which will require between **16** and **19** hectares of additional land for housing.

7. By **2030,** the **total population of Klaarstroom** is projected to be between **689** (low growth), **719** (medium growth) and **766** (high growth) people. Klaarstroom will naturally grow by between **45** (low growth), **75** (medium growth) and **122** additional people (high growth) between 2020 and 2030. At an average household size of 3.8, this would imply between roughly **12 and 32** additional households.

8. When reconciling with the 2020 housing waiting list (144 applicants for this area), the 2020-2030 total housing demand for Klaarstroom is between **156 and 176** houses, which will require between **6 and 7** hectares of additional land for housing.

It should be recognised that these population, household and land projections are based on several assumptions, such as:

- The population growth rate scenarios continuing in a linear manner;
- the 2020 housing waiting list remaining its current size and not being cleaned up to remove or add applicants;
- that all households average 3.8 people per household; and
- that the average gross dwelling unit density will be 25 dwelling units per hectare in all areas.

For future clarity purposes, it is worth cross checking the above population scenario numbers on the recent and continual work done on population dynamics by the CSIR, who are using the CSIR Settlement Growth Model available online at https://riskprofiles.greenbook.co.za/. A short example on the following page is shown for the findings of Prince Albert Municipality. The model predicts a total municipal population of **16 194** people by 2030 and assigns growth pressures to each settlement. The findings are extremely close to those in Figure 3.17 although not as further disaggregated.

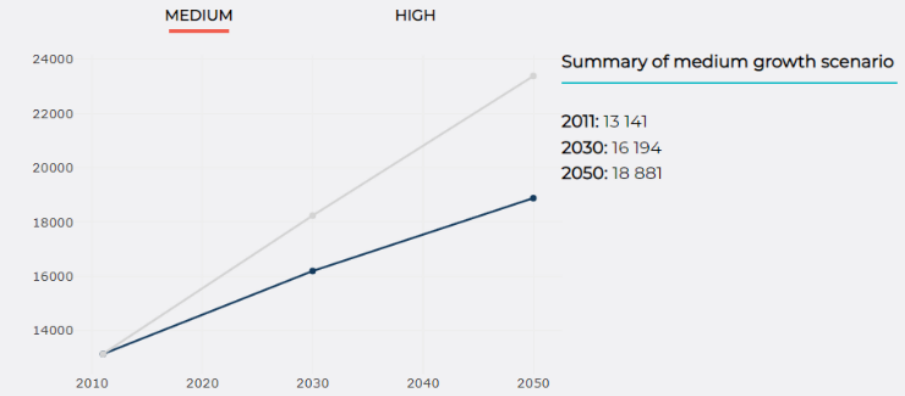
CSIR SETTLEMENT GROWTH MODEL

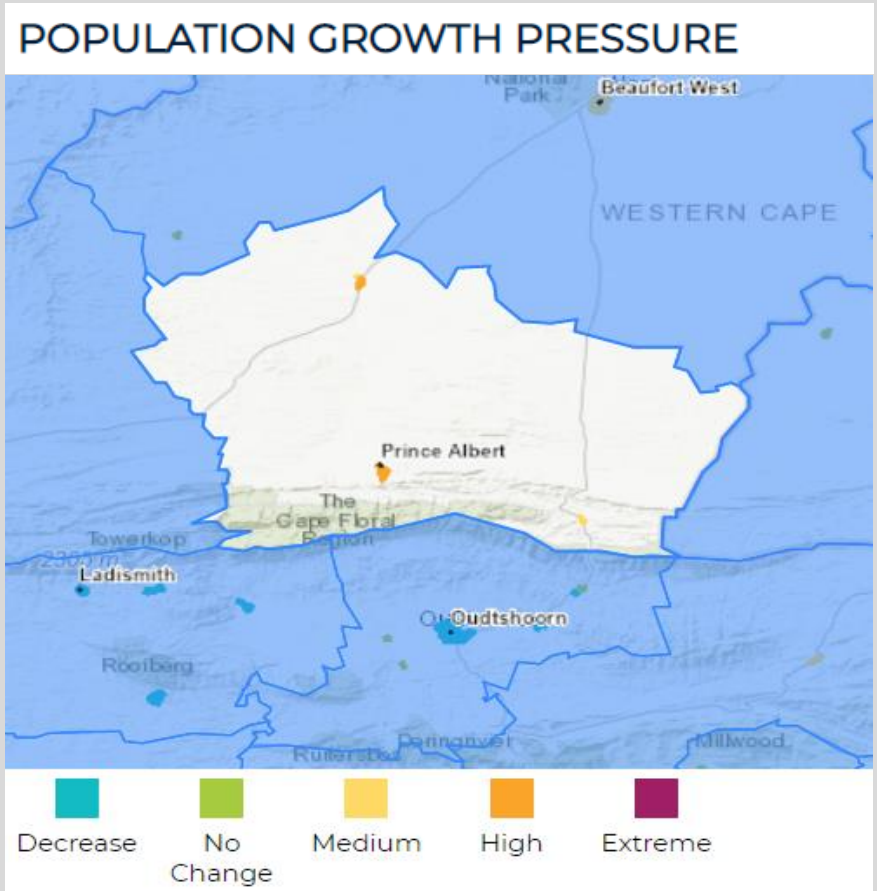
The core modelling components of the settlement growth model are the demographic model and the population potential gravity model. The demographic model produces the long-term projected population values at the national, provincial and municipal scales using the Spectrum and Cohort-Component models.

The spatially coarse demographic projections were fed into the population potential gravity model, a gravity model that uses a population potential surface to downscale the national population projections, resulting in 1x1 km resolution projected population grids for 2030 and 2050. The gravity potential model assumes Tobler's first law of geography: everything is related to everything else, but near things are more related than distant things.

Using the innovative settlement footprint data layer created by the CSIR, which delineates built-up areas, settlement-scale population projections were aggregated up from the 1 x 1km grids of South African projected population for a 2030 and 2050 medium and high growth scenario. These two population growth scenarios (medium and high) are differentiated based on their in- and out-migration assumptions.

Prince Albert Municipality CSIR Population Projections





Town	Pressure	2011	2030	2050
Klaarstroom	Medium	590	699	795
Prince Albert	High	7,055	9,567	11,777
Leeu Gamka	High	573	770	943
Bitterwater	Medium	2,201	2,437	2,645

Figure 3.17: CSIR 2020 population profile for Prince Albert Municipality (Source: https://riskprofiles.greenbook.co.za/)

3.5 FUTURE FACILITY DEMAND

Much of the population and housing growth is likely to take place in the towns of Prince Albert (particularly North End) and Leeu Gamka (particularly Bitterwater). Applying the total municipal population size and housing demand figures to the CSIR social facility demand calculator, the facilities listed below will be required for each growth scenario and will need to be located mainly in the town of Prince Albert. The thresholds, land requirements and approximated costs for these facilities are shown in Table 3.3.

Low Growth Scenario (0.67%):

+ 2 new ECD facilities
+ 1 Primary School
+ 1 Community Sports field
+ 2.5 New open spaces / parks
+ 1 New cemetery

Medium Growth (1.1%) Scenario:

+ 2.5 ECD facilities

+ 2 Primary Schools
+ 1 Community Sports field
+ 3 New open spaces / parks
+ 1 New cemetery

High Growth (1.73%) Scenario:

+ 3 ECD facilities
+ 1 Secondary School
+ 2 Primary Schools
+ 1.5 Community Sports field
+ 3.5 New open spaces / parks
+ 1.5 Cemeteries

Any variance in these assumptions will change the future growth and development scenarios, which are tied to and related to the future availability of water in the region, the growth or decline of the agricultural sector, migration and any major regional development initiatives (such as shale gas development) that may occur.

Table 3.3: CSIR Social Facility Thresholds, Land Requirements and Costs

Facility Type	Threshold Population		Threshold Households (No. of Households - assuming 3.54 ppl/hh)		Land Required	Approx. Cost per facility
	Lower limit	Upper limit	Lower limit	Upper limit	(ha)	
Early Childhood Development Centres	2400	3600	674	1011	0.1	R 2,000,000.00
Primary Schools	3000	4000	843	1124	2.8	R 60,000,000.00
Secondary Schools	6000	10000	1685	2809	2.6	R 60,000,000.00
Community Sports Field	5000	60000	1404	16854	2	R 8,000,000.00
Local Library	10000	70000	2809	19663	0.2	R 8,000,000.00
Community Health Care Centre	20000	120000	5618	33708	0.75	R 70,000,000.00
District Hospital	300000	900000	84270	252809	9	R 300,000,000.00
Children's Homes	42000	60000	11798	16854	2	R 10,000,000.00
Homes for the Aged	65000	65000	18258	18258		R 10,000,000.00
Community Halls / Centres	10000	25000	2809	7022	0.5	R 6,000,000.00
Municipal Offices	50000	50000	14045	14045		R 15,000,000.00
Firestations	60000	60000	16854	16854	1.2	R 60,000,000.00
Public Open Space (Community Parks)	2000	10000	562	2809	0.9ha/1000 people	R 5,000,000.00
Cemetries	5000	100000	1404	28090	10	R 20,000,000.00
Police Stations	25000	60000	7022	16854	0.1	R 50,000,000.00

3.6 SUMMARY OF MUNICIPAL WIDE SPATIAL POLICIES

The purpose of this section is to give expression to the spatial strategies by framing a set of spatial policies that must be used to inform land use planning, infrastructure development and rural and urban development decision making within Prince Albert Municipality. The policies listed below link to Prince Albert Municipality's IDP Strategic Objectives. The next section will provide further detail on each of the policies.

STRATEGY A: A REGION THAT PROTECTS THE ENVIRONMENT, ENHANCES RESILIENCE AND CAPITALISES ON AND HONOURS THE KAROO CHARM IN SUPPORT OF A VIBRANT PEOPLE AND GROWING THE ECONOMY

POLICY A1: PROTECT CRITICAL BIODIVERSITY AREAS, ENVIRONMENTAL SUPPORT AREAS & NATURAL ENVIRONMENT TOWARDS A RESILIENT MUNICIPALITY

POLICY A2: ENVIRONMENTAL OFFSETTING & BIODIVERSITY STEWARDSHIP

POLICY A3: PROMOTE AND DEVELOP A WATER RESILIENT MUNICIPALITY

POLICY A4: CLIMATE CHANGE ADAPTATION AND DISASTER MITIGATION

POLICY A5: TOURISM ENHANCEMENT & PROTECTION OF SCENIC ASSETS

POLICY A6: PROMOTE RESILIENT, SUSTAINABLE AGRICULTURE & AGRI-PROCESSING

POLICY A7: SHALE GAS DEVELOPMENT (SGD)

POLICY A8: LAND REFORM SUPPORT

STRATEGY B: IMPROVE REGIONAL AND RURAL ACCESSIBILITY AND MOBILITY FOR PEOPLE AND GOODS IN SUPPORT OF A RESILIENT ECONOMY

POLICY B1: IMPROVE INTER SETTLEMENT CONNECTIVITY

POLICY B2: RURAL MOBILITY & SCHOOL LEARNER TRANSPORT

POLICY B3: TOWN IMPROVEMENT PLANS FOCUSSED ON NON-MOTORISED TRANSPORT, SAFETY AND GREEN NETWORKS

STRATEGY C: ALLOCATE GOVERNMENT RESOURCES, INFRASTRUCTURE AND FACILITIES IN A MANNER THAT UPLIFTS AND SKILLS PEOPLE AND FOCUSSES ON MAXIMISING IMPACT ON THE MOST POSSIBLE PEOPLE, WHILE PROVIDING A BASIC LEVEL OF SERVICE FOR ALL

POLICY C1: ESTABLISHING A CLEAR SETTLEMENT HIERARCHY

POLICY C2: URBAN EDGE POLICY

POLICY C:3 FACILITY CLUSTERING & DESIGN PROTOCOL LINKED TO A CLEAR NODAL HEIRARCHY

STRATEGY D: PARTNERSHIP-DRIVEN GOVERNANCE AND ADMINISTRATION TOWARDS IMPROVED FINANCIAL AND NON-FINANCIAL SUSTAINABILITY AND RESILIENCE

POLICY D1: SHARED SERVICE CENTRE FOR THE CENTRAL KAROO

POLICY D2: INTEGRATED PLANNING, BUDGETING AND IMPLEMENTATION

3.7 STRATEGY A: A REGION THAT PROTECTS THE ENVIRONMENT, ENHANCES RESILIENCE AND CAPITALISES ON AND HONOURS THE KAROO CHARM IN SUPPORT OF A VIBRANT PEOPLE AND GROWING THE ECONOMY

Biodiversity Spatial Plan maps are shown in Figures 3.18 to Figure 3.22. Prince Albert should seek to become a resilient municipality that can adapt to and mitigate against the negative effects of climate change, increasing temperatures, reduced rainfall and the host of downstream impacts on the economy and society at large.

3.7.1 Policy A1: Protect Critical Biodiversity Areas, Environmental Support Areas & Natural Environment Towards a Resilient Municipality

Designated **Spatial Planning categories (SPCs)** must be considered in terms of land use management. This, in part, should ensure that Critical Biodiversity Areas (CBAs) and protected areas are conserved and, where applicable, restored. Land use change should always favour rehabilitation of indigenous species in degraded areas that have the potential to connect protected areas, CBAs and Ecological Support Areas (ESAs).

Policy A1 Guidelines:

I. Manage land use management in the rural areas of Prince Albert Municipality through the application of **Spatial Planning Categories (SPCs)** as set out in the Western Cape Rural Land Use Planning Guidelines and the Western Cape Biodiversity Spatial Plan (2017), and ensure that all investment in Prince Albert Municipality seeks to underpin the principles of spatial sustainability and spatial resilience. Greater detail on each SPC layer can be found in the Western Cape Rural Land Use Guidelines.

II. Protect and conserve important terrestrial, and aquatic habitats (rivers and wetlands) as identified in the Biodiversity Spatial Plan maps in Figure 3.18 at the municipal scale and Figure 3.19 - 3.22 at the town scale.

III. Regarding **interpreting the Guideline,** the table in the maps shows how to convert the Protected Areas, Critical Biodiversity Areas, Ecological Support Areas and Other Natural Areas to the various Spatial Planning Categories set out in the Western Cape Biodiversity Spatial Planning Map.

IV. The following mechanisms may be implemented when considering ways of formally protecting endangered and irreplaceable biodiversity. These mechanisms include:

- **Private Land**: involving Stewardship Contract Nature Reserves, Biodiversity Agreements, or Protected Environments;
- **Municipal Land:** Nature Reserve or Municipal Biodiversity Agreement (e.g. City of Cape Town);
- **Forest Nature Reserves** through the Natural Forest Act and Wilderness Areas into Wilderness Act;
- **Title deed restrictions** where land has been designated under the Stewardship Programme or declared a Nature Reserve or Protected Environment;
- **Contractual National Parks**: the zoning of private properties to Open Space III could be used as a mechanism for conservation in terms of the 2016 DEA&DP Standard Draft Zoning Scheme By-Law. Financial and non-financial incentives have the potential to be linked to the conservation on private land with title deed restrictions.

V. In line with the Western Cape DEA&DP guidelines for rural land use development, new investment in rural areas should not:
- Have significant impact on biodiversity;
- alienate unique or high value agricultural land;
- compromise existing farming activities;
- compromise the current and future use of mineral resources;
- be inconsistent with cultural and scenic landscapes within which it is situated;
- involve extensions to the municipality's reticulation networks;
- impose real costs or risks to the municipality delivering on their mandate; and
- infringe on the authenticity of the rural landscape and heritage assets.

The following land uses are permitted in the Central Karoo District, as per the following Spatial Planning Categories (SPCs). They are mapped in Figure 3.18:

- **Core 1 Areas**: **Critical Biodiversity Areas** (CBA) and protected areas. These include habitats classified as highly irreplaceable, critically endangered, or endangered terrestrial (land), aquatic (rivers, wetlands, and estuaries) and marine habitats. For example, areas such as Swartberg mountains and the protected area North West of Leeu Gamka. It also includes essential biological corridors, as it is vital to sustain their process and pattern functionality. These areas must be regarded as "no-go" for development and must be kept in a natural state, with a management plan focused on maintaining or improving the

state of biodiversity. There should be no further loss of natural habitat and degraded areas should be rehabilitated. In Prince Albert Municipality, CBAs are also typically found in conjunction with where the towns and settlements are located. Because of this, they are denoted as so called "socio ecological regions of importance" in the spatial concept map in Figure 3.1.

- **Core 2 Areas**: These consist of two areas, namely **Critical Biodiversity Area 2 (Degraded) and Ecological Support Area 1.** These areas are in a degraded or secondary condition and are required to meet biodiversity targets for species, ecosystems, or ecological processes and infrastructure. These areas should be maintained or rehabilitated into a natural or near-natural state with no further loss of natural habitat.

- **Buffer 1 Areas**: These areas may be degraded but still **play an important role in supporting the functioning of Core Areas** (either Protected Areas or CBAs), and are essential for delivering ecosystem services. In Prince Albert they are typically found in the remote landscapes of the municipality. These areas should be restored and/or managed to minimise impact on ecological infrastructure functioning, especially soil and water-related services. Two components of the rural landscape make up Buffer 1 areas:

    - **Ecological Support Area 2:** Here the goal is to restore and/or manage to minimize impact on ecological infrastructure functioning, especially soil and water-related services.

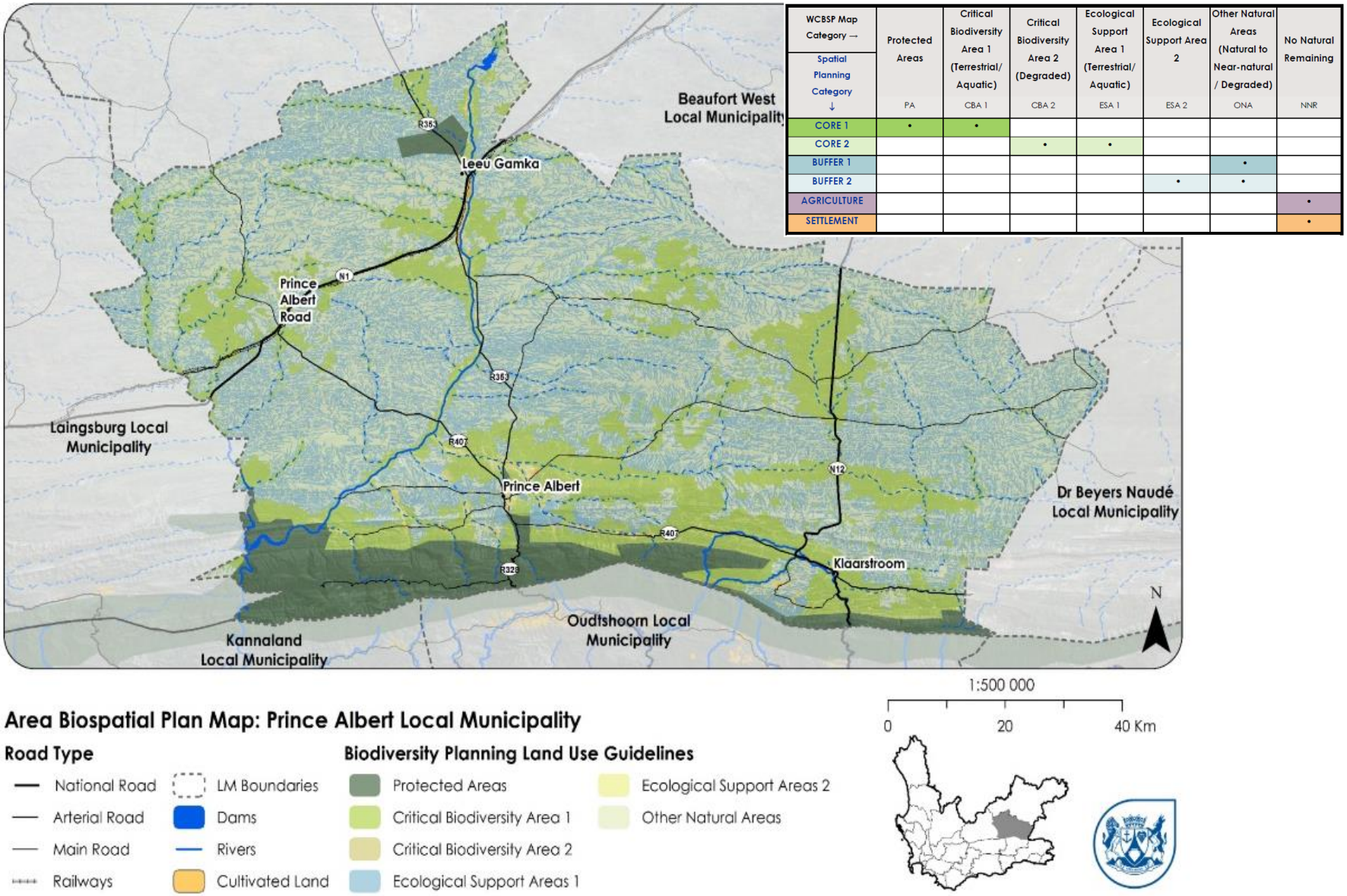
    - **Other Natural Areas:** in these areas the goal is to minimise habitat and species loss and to ensure ecosystem functionality through strategic landscape planning. This designation offers flexibility in permissible land-uses, but some authorisation may still be required for high impact land-uses.

- **Buffer 2 Areas**: This category includes areas designated as **Other Natural Areas**, located in an extensive and/or intensive agriculture matrix (i.e. grazing and livestock production) as the dominant land use. The Buffer 2 SPC requires that habitat and species loss is minimized, and that ecosystem functionality is preserved through strategic landscape planning. Buffer 2 areas offer flexibility in permissible land-uses, but some authorisation may still be required for high-impact land-uses.

- **Agriculture Areas**: These consist of areas with an existing or potential intensive agriculture footprint (namely homogeneous farming areas made up of cultivated land and production support areas). This designation includes areas in which significant or complete loss of natural habitat and ecological functioning has taken place due to farming activities. Existing and potential agricultural landscapes should be consolidated and protected; sustainable agricultural development, land and agrarian reform, and food security should be facilitated, and ecosystems must be stabilised and managed to restore their ecological functionality.

- **Settlement Areas:** This category includes all existing settlements, large and smaller towns, villages and hamlets. Settlements are delineated by municipalities in terms of an urban edge or by DEA&DP in terms of the 2014 NEMA Listing Notices as urban areas. The purpose is to develop and manage settlements in a sustainable manner. Wherever possible, existing settlements should be used to accommodate non-agricultural activities and facilities.

PAM should also follow the findings of the Swartberg Protected Area Management Plans completed in 2020. The Swartberg Complex Plan lists threats and includes prevention measures. Furthermore, report shows the 'Zone of Influence' which outlines areas where certain activities could have the greatest impact on the reserve targets. The Area Management Plans can be found at: https://www.capenature.co.za/wp-content/uploads/2020/05/Swartberg%20PAMP_board%20approved.pdf



WCBSP Map Category → / Spatial Planning Category ↓	Protected Areas (PA)	Critical Biodiversity Area 1 (Terrestrial/ Aquatic) (CBA 1)	Critical Biodiversity Area 2 (Degraded) (CBA 2)	Ecological Support Area 1 (Terrestrial/ Aquatic) (ESA 1)	Ecological Support Area 2 (ESA 2)	Other Natural Areas (Natural to Near-natural / Degraded) (ONA)	No Natural Remaining (NNR)
CORE 1	•	•					
CORE 2			•	•			
BUFFER 1						•	
BUFFER 2					•	•	
AGRICULTURE							•
SETTLEMENT							•

Figure 3.18: Area Biospatial Plan Map for the Prince Albert Municipal Area (Data source: SANBI, 2017)

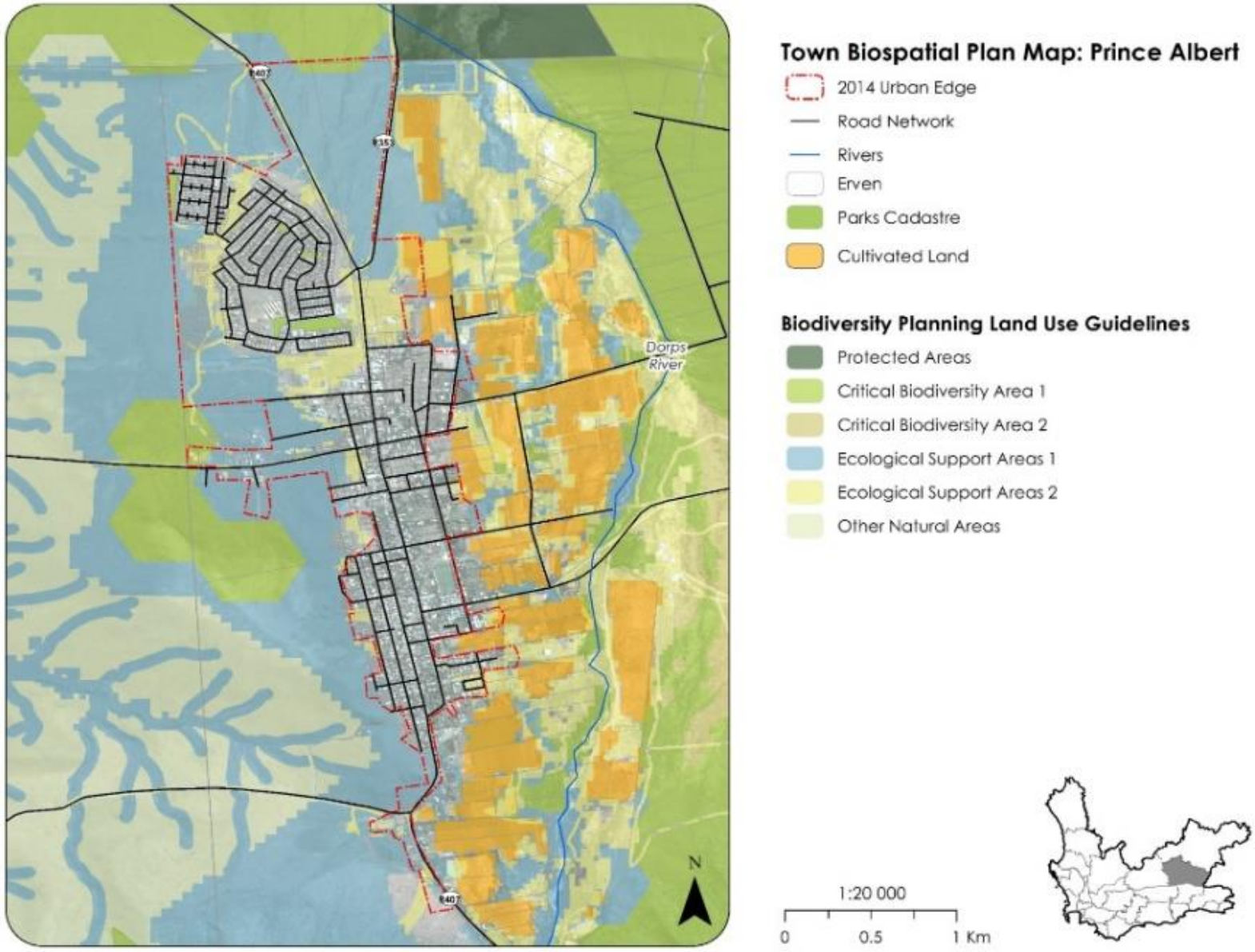


Figure 3.19: Area Biospatial Plan Map for the Prince Albert Town (Data source: SANBI, 2017)

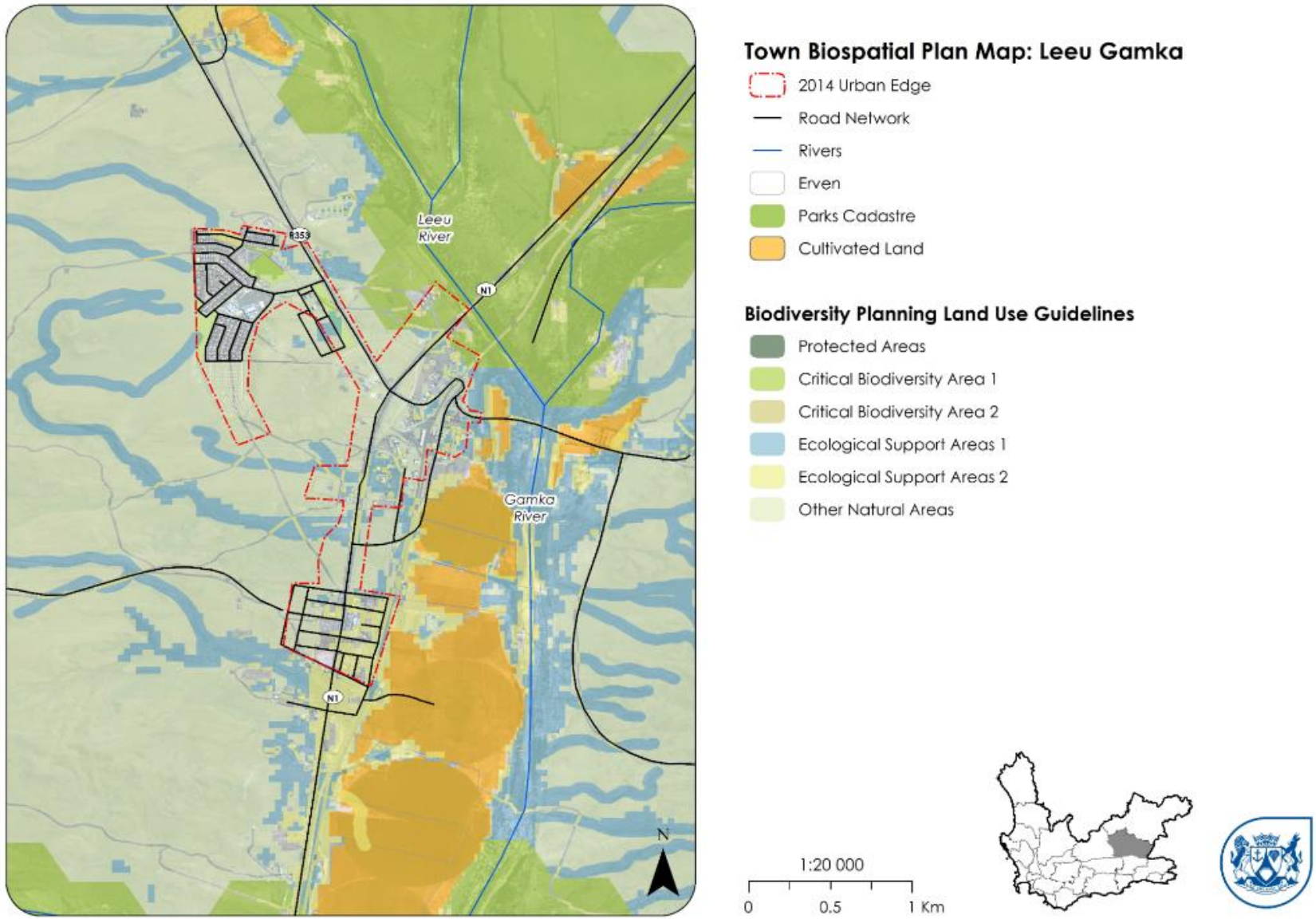
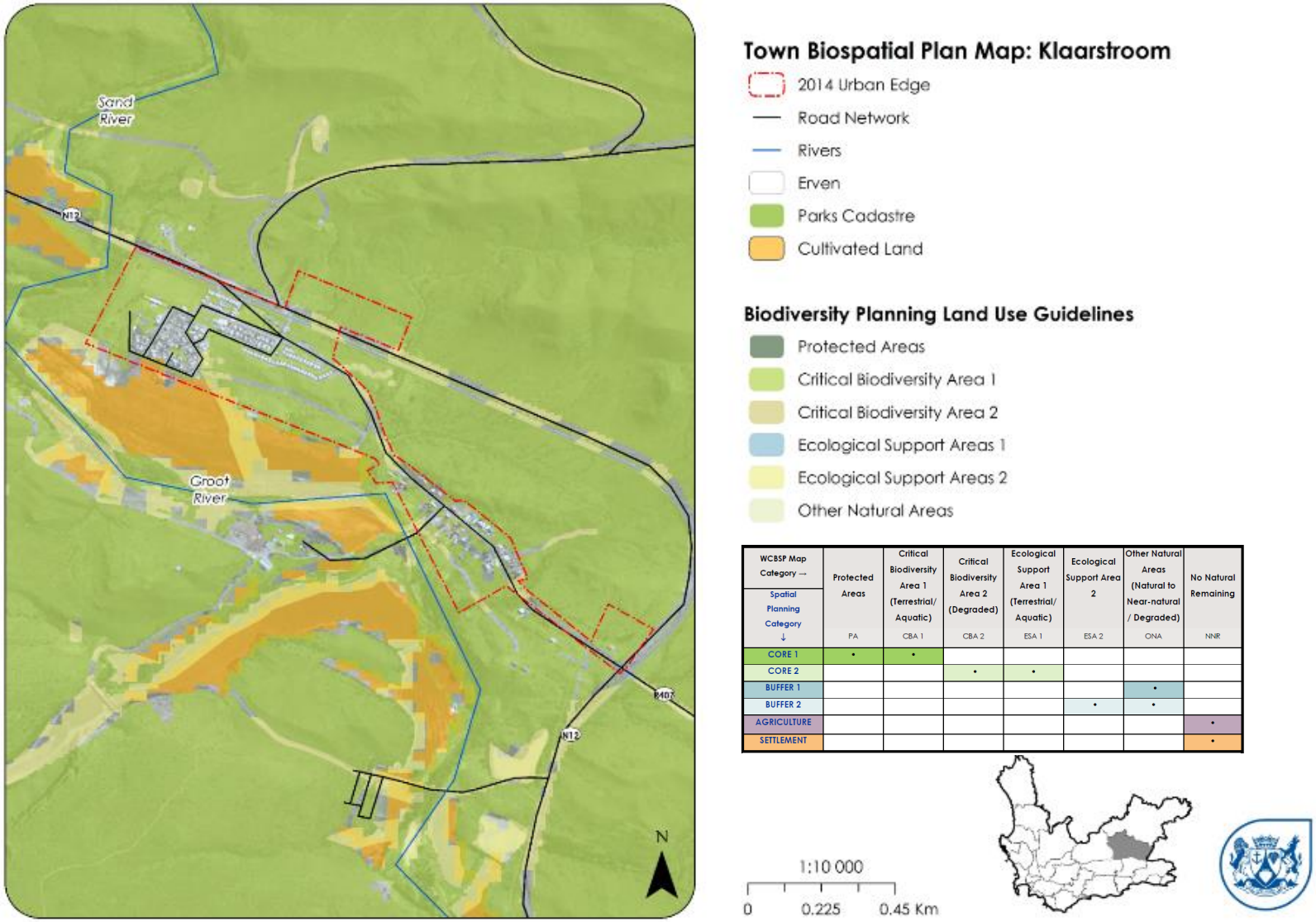


Figure 3.20: Area Biospatial Plan Map for the Prince Albert Town (Data source: SANBI, 2017)



WCBSP Map Category → / Spatial Planning Category ↓	Protected Areas (PA)	Critical Biodiversity Area 1 (Terrestrial/ Aquatic) (CBA 1)	Critical Biodiversity Area 2 (Degraded) (CBA 2)	Ecological Support Area 1 (Terrestrial/ Aquatic) (ESA 1)	Ecological Support Area 2 (ESA 2)	Other Natural Areas (Natural to Near-natural / Degraded) (ONA)	No Natural Remaining (NNR)
CORE 1	•	•					
CORE 2			•	•			
BUFFER 1						•	
BUFFER 2					•	•	
AGRICULTURE							•
SETTLEMENT							•

Figure 3.21: Area Biospatial Plan Map for Klaarstroom (Data source: SANBI, 2017)

WCBSP Map Category → / Spatial Planning Category ↓	Protected Areas PA	Critical Biodiversity Area 1 (Terrestrial/ Aquatic) CBA 1	Critical Biodiversity Area 2 (Degraded) CBA 2	Ecological Support Area 1 (Terrestrial/ Aquatic) ESA 1	Ecological Support Area 2 ESA 2	Other Natural Areas (Natural to Near-natural / Degraded) ONA	No Natural Remaining NNR
CORE 1	•	•					
CORE 2			•	•			
BUFFER 1						•	
BUFFER 2					•	•	
AGRICULTURE							•
SETTLEMENT							•

Figure 3.22: Area Biospatial Plan Map for Prince Albert Road (Data source: SANBI, 2017)

3.7.2 Policy A2: Environmental Offsetting & Biodiversity Stewardship

Environmental offsetting aims to slow and progressively reverse ecological deficit by counterbalancing human-induced negative effects on the environment that remain after every effort has been made to avoid, minimise and then rehabilitate these impacts by making positive intervention elsewhere. This approach recognises the interdependence between biodiversity, ecosystems and the benefits they provide for people through use and cultural values. It takes a landscape scale, rather than a site-specific view, to enable consideration of cumulative impacts.

Policy A2 Guidelines:

I. The 2017: Draft National Biodiversity Offset Policy aims to ensure that significant residual impacts of developments are remedied. The Western Cape Conservation Stewardship sites can be downloaded from http://bgis.sanbi.org/. The Offset Policy should be taken into consideration with every development application that still has significant residual impact after the Mitigation Sequence has been followed in the Environmental Impact Assessment process. Table 3.4 provides a set of basic offset ratios to be considered when designing an offset intervention.

II. The chosen offset intervention must go through public participation during the EIA process.

III. It is worth noting that the offsets could be ringfenced and linked to town-scale tree planting and water and waste management initiatives that demonstrate equal offset reduction measures.

IV. Draft an Offset Register to monitor compliance with the environmental offset and to monitor the progress and impact of the offset interventions.

Table 3.4: 2017: Draft National Biodiversity Offset Policy Offset Ratio's

Area impacted by remaining impact	Basic offset ratio (offset area : remaining impact area)
Critical Biodiversity Area: Irreplaceable (CBA1)	30 : 1
Critical Biodiversity Area: Important or Optimal (CBA2)	10 : 1
Ecological Support Area (ESA)	5 : 1
Other Natural Area	2 : 1

MSDFs often identify land in terms of the WCBSP data set that needs to be protected but is in fact privately owned land, which many landowners may become worried about. Therefore, information on **incentives or concessions around property rates or tax benefits** is useful.

Section 37D of the Tax Income Act allows for a 4% straight line deduction on the value of the land declared. This means that a landowner who declares their **land under Stewardship** as a Nature Reserve or National Park may deduct 4% of the value of that declared land value from their taxable income each year for 25 years.

The tax incentive governed by section 37D can only accrue to the title deed holder of the land. The land must be declared as a Nature Reserve or National Park in terms of section 20 or 23 of NEMPAA with the endorsement reflected on the title deed of the land for a minimum period of 99 years.

If the landowner maintains a right of use of the land, then the deduction is apportioned accordingly. The deduction becomes effective in the year the land is declared and in each subsequent year of assessment. It is important to remember that these straight-line deductions only apply to land declared on or after 1 March 2015.

Should the Stewardship agreement be terminated, the landowner will be liable for certain tax penalties. The landowners' responsibilities in terms of the Stewardship agreement are defined by NEMPAA. The section applies to taxpayers in profit making or loss positions and has benefits for both scenarios.

3.7.3 Policy A3: Promote and Develop a Water Resilient Municipality

Without water, life in Prince Albert Municipality is unsustainable. If the status quo remains, the region will continue to experience economic shocks related to water unavailability. Water sensitive design, water availability or water constraints must be considered as part of all land use management changes, infrastructure expansion or any other process that impacts on water use or availability in the municipality. The aim should be to make the towns progressively less dependent on rainfall, so that reserves can last through dry periods.

Policy A3 Guidelines:

At the municipal scale, the following adaptation policy measures apply:

i. Follow groundwater management recommendations in the Groundwater Management and Artificial Recharge Feasibility Study, monitor ground water resources and implement effective water reduction techniques when sources are low. See the Groundwater Monitoring Network Strategy for the Karoo: https://cbosss.com/igscbss-to-design-gw-monitoring-network-for-karoo/. It is noted that a hydrogeologist is currently work on this and information should become available soon.

ii. **Protect and rehabilitate the Dorps River** system, particularly, by evaluating the carrying capacity of the Dorps river and reconciling this with future growth needs.

iii. **Protect and rehabilitate high-yield groundwater recharge** areas in the Swartberg Mountain areas around the Gamka Poort Dam, Oukloof Dam and Klaarstroom Towns (See Figure 3.23).

iv. Adhering to the National Department of Water and Sanitation's water **resource quality objectives**. In September 2020, in terms of section 13(1) of the National Water Act, 1998 (Act No. 36 of 1998), the National DWS determined water resource classes, prioritisation units, river nodes and corresponding resource quality objectives for the catchment. The sub catchment of Breede-Gouritz Water Management Area in which Prince Albert municipality is located is classified as a **Class II**: moderate protection (further info to be found in the gazette pertaining to Class II). As shown in Figure 3.24, the Gamka Buffels groundwater resource prioritisation unit is located just south of Leeu Gamka. The important listed river nodes are **gv 1**,**2** and **3** (located near Kruidfontein and Leeu Gamka); and **gv 17** (located west of Prince Albert Town. The ecological category and the Resource Quality Objectives (RQOs) (water quantity and quality, habitat and biota) for each groundwater resource unit and river node can be found in the relevant gazette.

v. Reduce the loss of water through evaporation reduction as a primary objective. This includes covering reservoirs and dams, conversion of canals to water pipelines, recycling of grey water for reuse, etc

vi. Ensure that the integrity of valuable rainwater catchment areas, groundwater recharge areas and riverine systems are kept **clear of invasive plant species** or any use that will degrade either the quality or quantity of water available for use.

vii. Develop **agricultural water demand management programmes**, focusing on ground water appropriate agricultural areas, particularly the historic town farms along the Dorps, the farms along the Gamka River and the farms along the Meirings River.

At the settlement scale, the following following adaptation policy measures apply:

i. Regulate borehole use to ensure sustainable use of groundwater systems.
ii. Develop water and sanitation infrastructure that utilises water re-cycling and reuse.
iii. Promote household and farm-scale rainwater capturing for non-potable uses.
iv. Ensure rainwater tanks are included in new developments of households on erven larger than 120m^2.
v. Promote compact urban development to minimise infrastructure expansion that increases the risks of water loss from expansive water reticulation systems.
vi. Invest in a maintenance programme that seeks to minimise leaks from municipal water infrastructure.
vii. Implement water demand management programmes in Government facilities (such as municipal offices, education, health and public works).

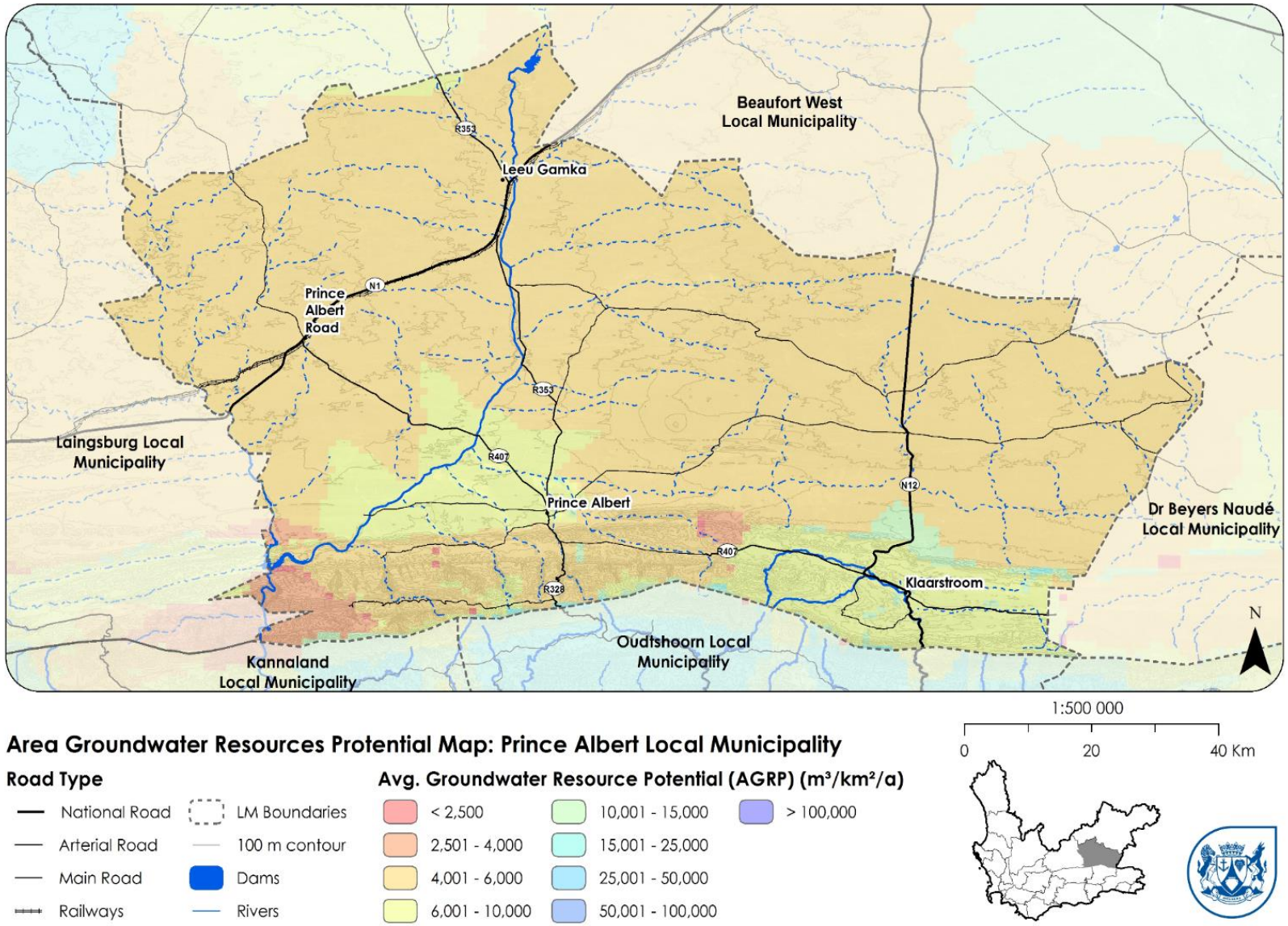


Figure 3.23: Area Groundwater Resources Map for Prince Albert (Data Source: Water Resources of South Africa Study, 2012)

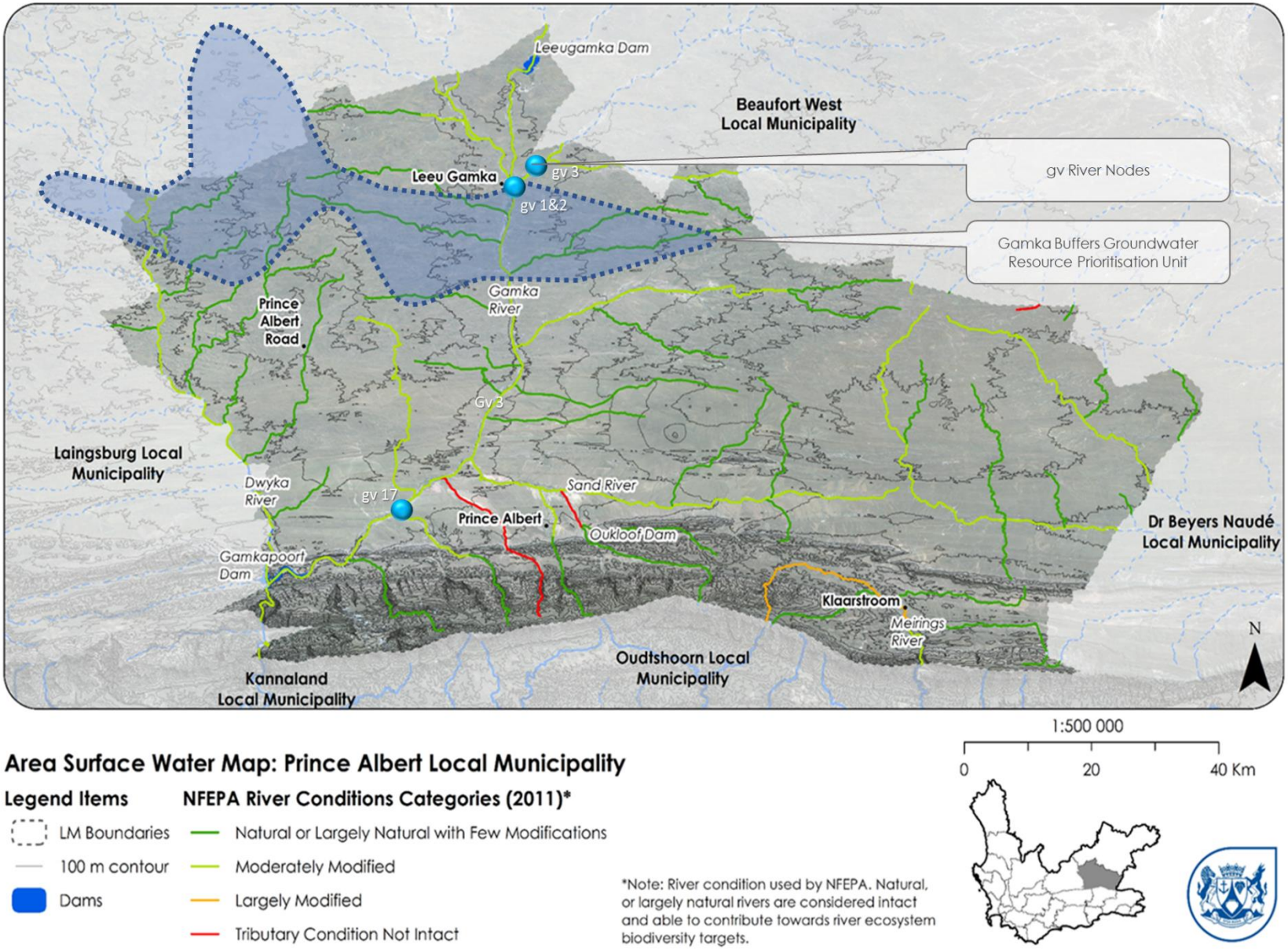


Figure 3.24: River Conditions Map for Prince Albert and DWS Groundwater Resource Prioritization Unit and gv River nodes (Data Source: CSIR NFEPA Rivers, 2011 & DWS 2020)

3.7.4 Policy A4: Climate Change Adaptation and Disaster Mitigation

This section, in addition to policies A1, 2 and A3, provides adaptation and mitigation guidance on combatting the effects of climate change. According to the Prince Albert Municipality 2019 Disaster Register, drought, fire, flooding and disruption to water supply are the most severe climate change related impacts for the municipality. Figure 3.25 shows the municipality's flood hazard, heat stress, dam level status and ground water depletion risk from the CSIR green book tool.

Policy A4 Guidelines for Adaptation and Mitigation:

i. In terms of **disaster risk**, where feasible and through broader partnership, respond to the infrastructure and risk guidelines put forth by the **2019/20 Prince Albert Municipality Community Based Disaster Risk Assessment and Risk Register**. An adapted summary of the risk maps for Prince Albert Town, Leeu Gamka and Klaarstroom are shown in Figures 3.26 to 3.28. The projects put forth by the Risk Assessment are further included in the Chapter 4 CEF of this MSDF.

ii. Link to the WCG and CSIR investment framework to assist with informing decisions on where and how to invest in the Western Cape's ecological infrastructure. The document, still in draft format, is called the Western Cape Environmental Infrastructure Investment Framework (WC EIIF) (See video link: https://youtu.be/ivR7zKs1Jqk). The study analyses risks & vulnerabilities per catchment such as water supply (surface & ground water), fire, flooding, and erosion and rangeland degradation. It then links these to opportunities for restoration through investment strategies that focus on collaboratively funded interventions such as alien invasive species strategy, fuel load reduction via Management Unit Control Plans (MUCPs), general ecosystem rehabilitation, conservation agriculture, integrated fire management and improved awareness, monitoring and evaluation

iii. Alien vegetation clearing has the highest and most immediate positive spin off for reducing fire and groundwater depletion risk. It can also be linked to a biomass economy. There are also opportunities for carbon sequestration using spekboom. See: https://www.greencape.co.za/assets/Uploads/BioValSA-Lignocellulosic-Biomass-Opp.pdf

iv. Guidelines for the monitoring, control, and eradication of alien invasive species can also be found in Section 76 of the National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004) ('NEMBA') and Ecosystem Guidelines for Environments in the Western Cape (2016) See: http://biodiversityadvisor.sanbi.org/wpcontent/uploads/2012/04/Ecosystem_Guidelines_Ed2.pdf.

v. Eradication programmes should focus on the urban periphery, in river catchment areas and Fire Management Areas. These programmes should also prioritise high veld fire risk areas and asset protection zones (interfaces between settlements and agricultural/natural environment – must ensure adequate fire breaks are considered and implemented).

vi. Public landowners must allocate enough resources to ensure the management of their land to remove and prevent alien vegetation infestation.

vii. The CKDM's Disaster Risk Management Department must be given an opportunity to provide input into land use applications in interface areas where there is fire and flooding risk. A protocol between the CKDM and Prince Albert Municipality must be developed to facilitate this.

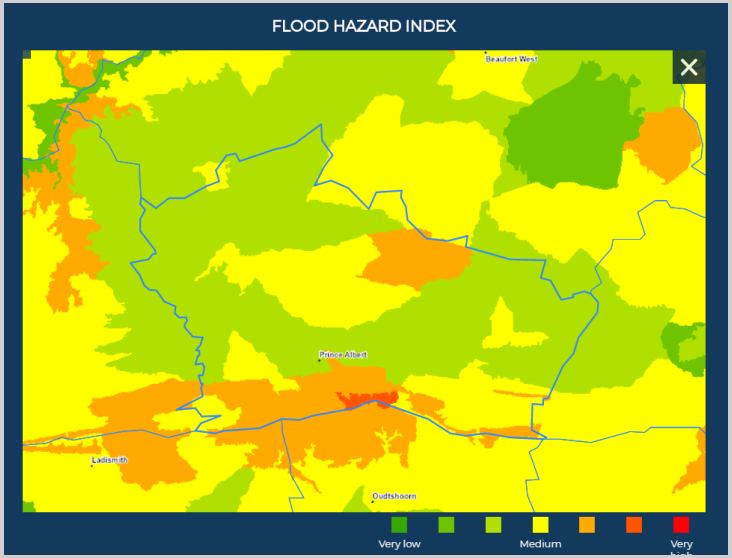
viii. Prevent future flood risks by ensuring development is set back from the 1:100-year flood zones adjacent to all river systems.

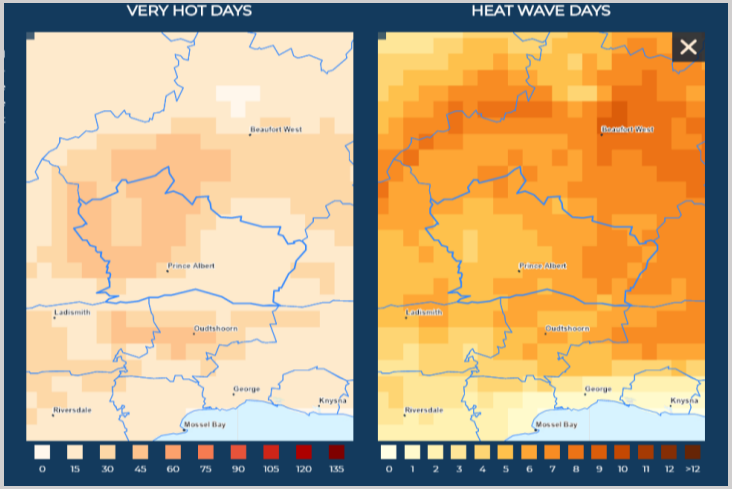
ix. Preserve river riparian zones and wetlands with at least a 32m buffer from agriculture and any other development.

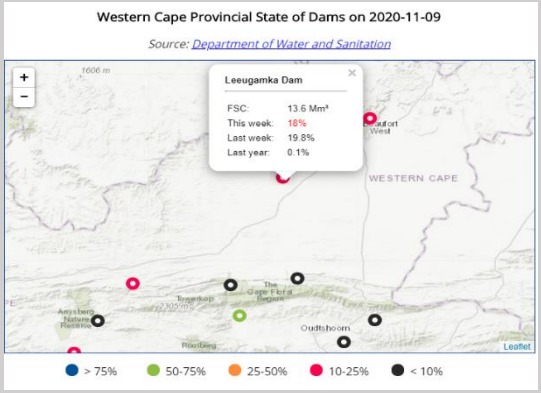
x. Ensure that storm water systems in urban areas can accommodate flooding conditions effectively, particularly in North End and Bitterwater. Where development is permitted, it must be associated with sustainable urban drainage design.

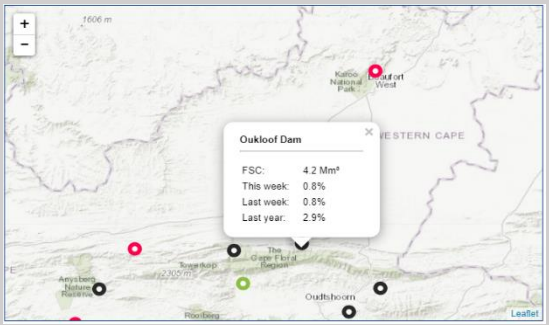
xi. Promote renewable energy generation and use. All new buildings must be designed such that they can be migrated off fossil fuels without cost to the owner/occupier - e.g. electrical connection (can be switched to renewables), solar geyser, no reliance on coal/paraffin etc. An often-overlooked aspect is the possible future penalties that will apply to fossil fuels (e.g. carbon tax). This will reduce the appeal of shale gas in favour of renewables such as solar and wind.

MUNICIPAL WIDE CLIMATE CHANGE IMPACTS IN PRINCE ALBERT MUNICIPALITY









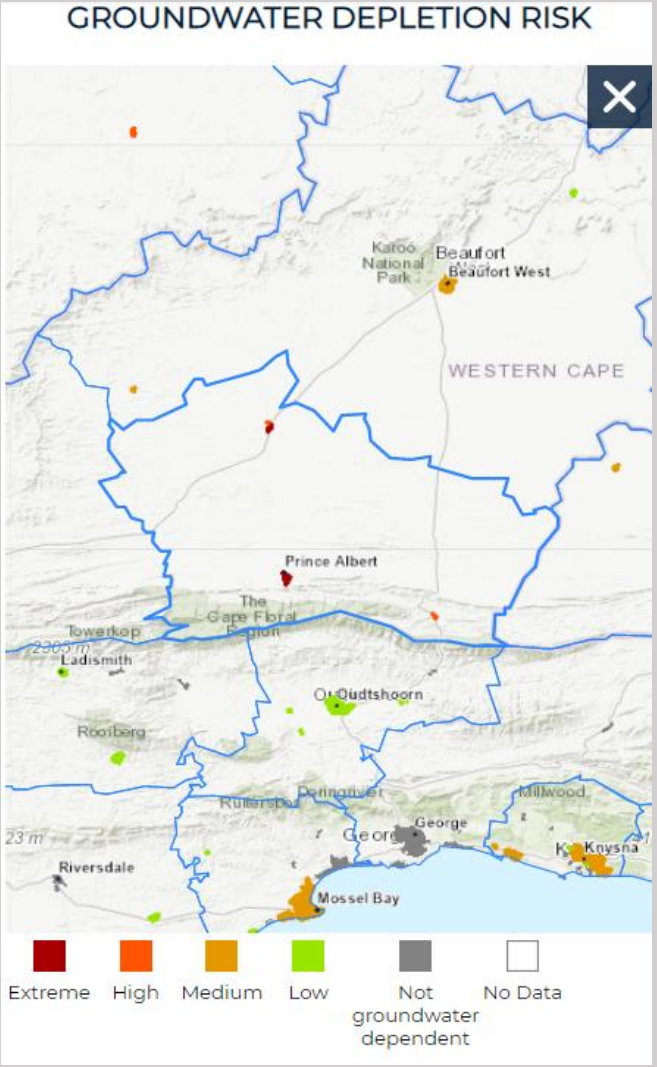


Figure 3.25: CSIR 2020 Risk profile and Dam Levels for Prince Albert Municipality (source: https://riskprofiles.greenbook.co.za/ + www.elsenburg.com/agri-tools/western-cape-dam-levels).

2019 COMMUNITY BASED RISK ASSESSMENT FOR PRINCE ALBERT TOWN

Flooding & Storm Water: There is ponding in Botterblom and Dahlia Streets. Supercritical flow storm water problems in Buitekant, Kronkel Weg & Church Streets. Water generally runs down from the West. WWTW is in a Flood and Fire Zone.

Electricity: Supply disruption during storms with strong winds. Aging infrastructure is problematic.

Sewerage: Blockage is an annual occurrence in Prince Albert North-End.

Population: Highest growth pressure is North End.

Transportation: Services for the elderly and disabled are needed.

Education: The high cost of traveling to educational facilities outside the boundaries of the municipality makes further education unaffordable and encourages early drop-out in schools.

Fire: Risk comes from the Swartberg Mountain and Pass. The last veld fire almost damaged the reservoir. Only have a limited amount of fire trucks.

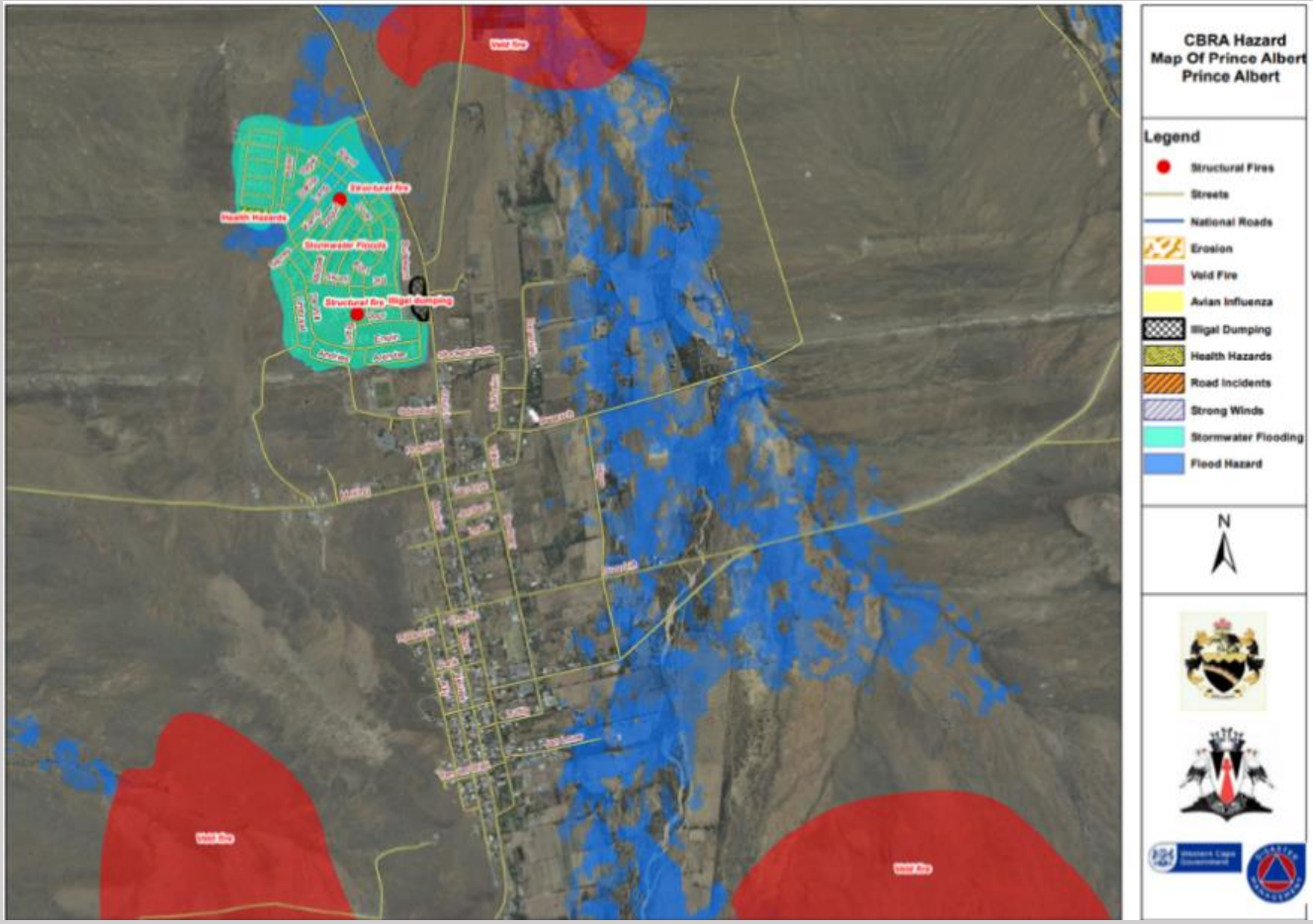


Figure 3.26: Community Based Risk Assessment Profile for Prince Albert Town (Source: Prince Albert Disaster Risk Assessment 2019)

2019 COMUNITY BASED RISK ASSESSMENT FOR LEEU GAMKA

Flooding & Storm Water: The main storm water problems are the culverts in Aster Street, Botteblom Street Gnaap and Aalwyn Street, Pepperboom Street, Gousblom Street, Springbok Street, the ambulance station area and Leeu-Gamka Primary.

Wind: The settlement lies mainly in an open plain, exposing most of the town to strong winds, along with the local Primary School.

Electricity: Supply disruption during storms with strong winds.

Population: Highest growth pressure is Bitterwater.

Transportation: No school learner transport routes.

Education: Secondary school is needed. Children must be transported to Beaufort-West at huge cost to both government and parents.

Fire: Risk along Koekemoers and Gamka River (high fuel loads generated by alien invasive species Fluitjiesriet). A lack of Fire Services. The landfill site is also considered a fire risk.

Road Accidents: Pedestrian accidents at Leeu Gamka along the N1. These are caused when residents cross the N1 to draw cash at the Shell Garage ATM. Contributing factors include a lack of street lighting and a lack of truck stops close by.

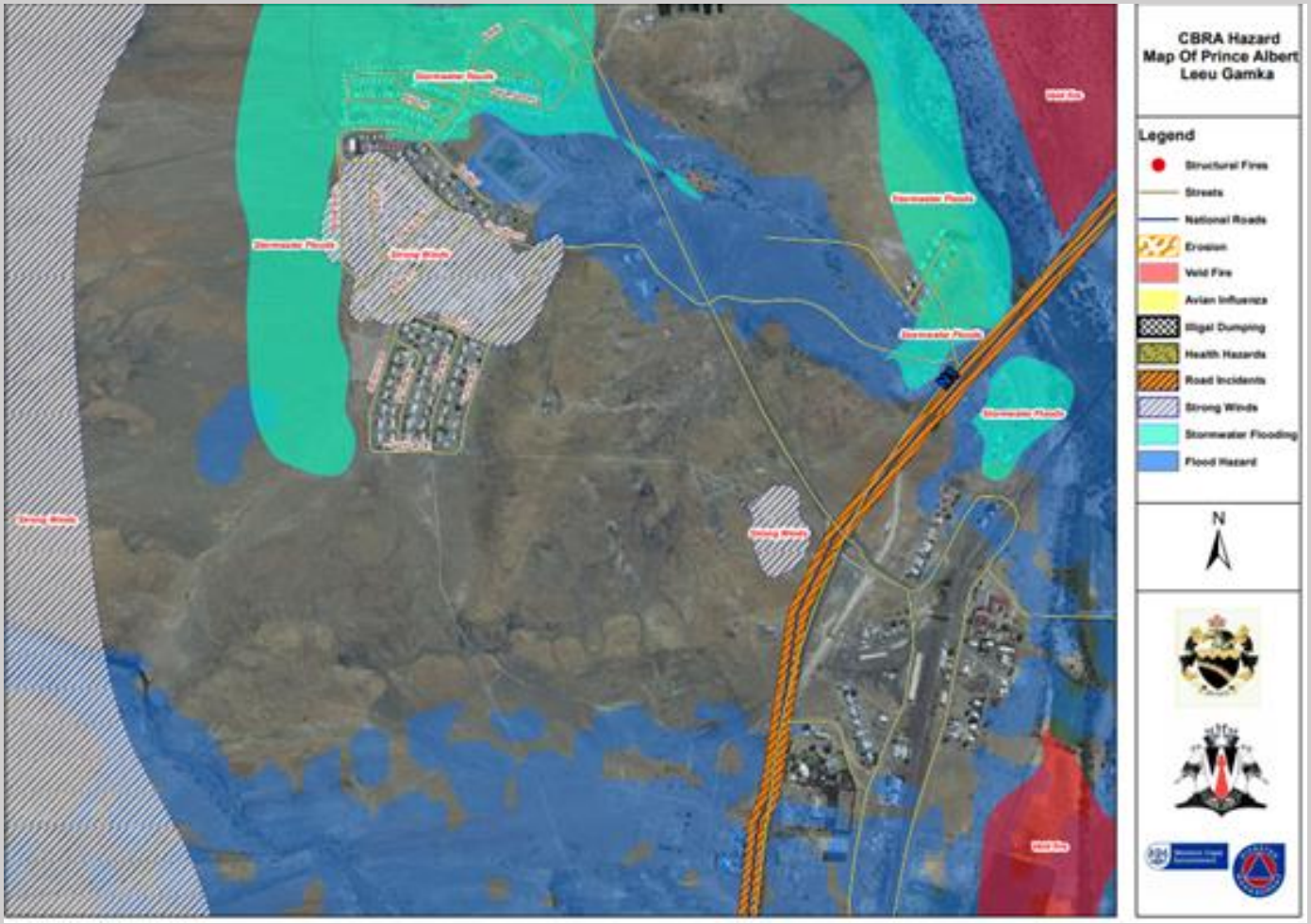


Figure 3.27: Community Based Risk Assessment Profile for Leeu Gamka (source: Prince Albert Disaster Risk Assessment 2019)

2019 COMMUNITY BASED RISK ASSESSMENT FOR KLAARSTROOM

Flooding & Storm Water: The main storm water problems are around stormwater flowing from Aalwyn Street into properties on the other side of the street (Bloekom Street). There is ponding at the cemetery, and informal structures and a low-lying bridge are located in flooding areas. Poor maintenance of existing stormwater infrastructure.

Wind: Has caused structural damage in the past between Skool and Bloekom Roads.

Electricity: Supply disruption during storms with strong winds.

Fire: Areas that were damaged in the past include Witrivier (a farm in Klaarstroom).

Road Accidents: Pedestrians and Kudu accidents along the N12.

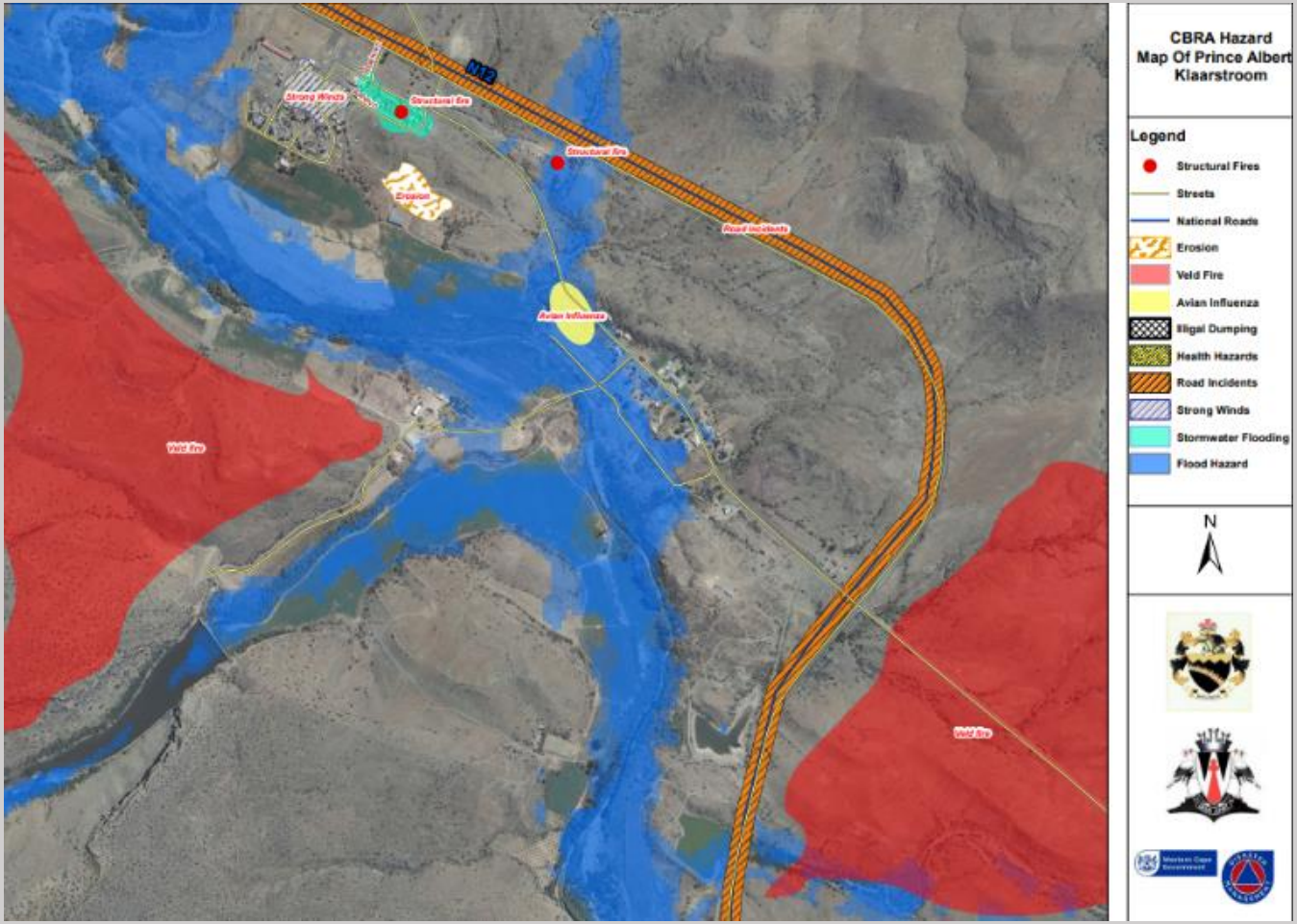


Figure 3.28: Community Based Risk Assessment Profile for Klaarstroom (source: Prince Albert Disaster Risk Assessment 2019)

3.7.5 Policy A5: Tourism Enhancement & Protection of Scenic Assets

Prince Albert Municipality's tourism industry has notably taken a knock from the COVID-19 containment measures in 2020. It was estimated that the wholesale and retail trade, catering and accommodation sector will most likely have contracted by 18.2 per cent in 2020 (MERO, 2020). In 2019, this sector was the largest contributor to the local economy, both in terms of GDPR and employment. Tourism is an important source of income in this sector, and the travel restrictions imposed have had a negative impact. Nonetheless, going forward, tourism must still assist in achieving future growth and development.

As shown in Figure 3.29, Prince Albert Municipality has the most heritage and scenic resources in the Central Karoo District. The main cultural heritage and scenic resources, as identified in the PSDF and endorsed in this MSDF, include:

- Scenic routes and passes as well as landscapes: The Swartberg, Meiringspoort, Gamkakloof and other mountain passes.

- Historic settlements, main streets and heritage assets which include Prince Albert Town, Church Street, Historic Town Farms, proclaimed monuments and heritage zones.

The landscape character of the passes and settlements must be safeguarded and compromising development on ridge lines or in important view corridors must not be allowed.

Policy A5 Guidelines:

i. The PSDF Heritage and Scenic Resources Specialist Study (2013) provides guidance in terms of the spatial form and character of settlements. These guidelines are adopted in this MSDF and should be referred to in land use management decision making.

ii. Rejuvenate and invest in the historic settlement cores of Prince Albert and Klaarstroom Towns to make these appealing to tourists, businesses and attract investment into the town centres. Leverage these assets to create employment opportunities by attracting tourists.

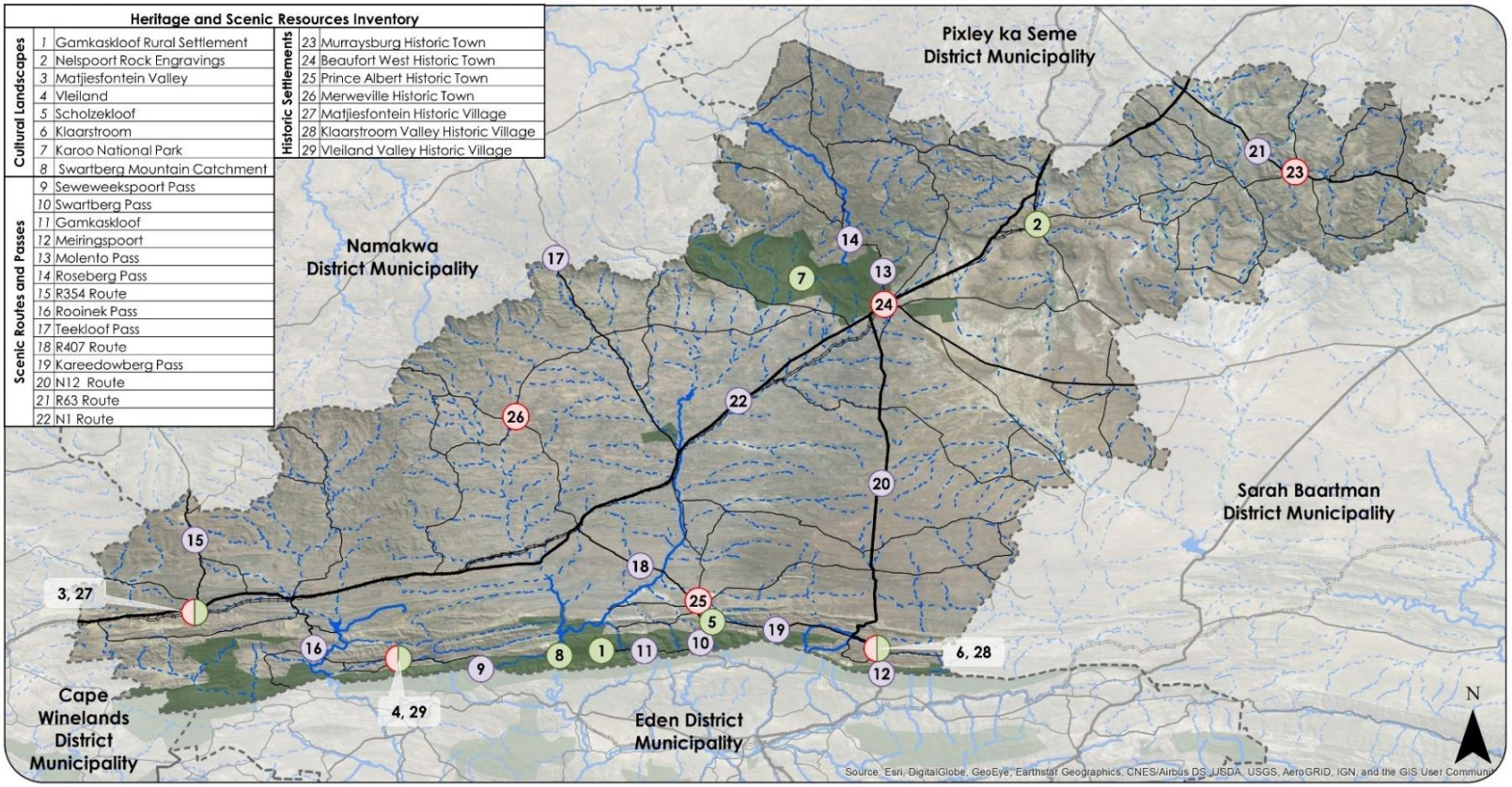
iii. Develop a heritage overlay zone to guide land use decision making (See Figure 3.30 and Figure 3.31). The Prince Albert Heritage Inventory, available from the Prince Albert Cultural Foundation (PACF), denotes the key heritage resources that must continue to be protected. These not only include the proclaimed monuments but also the graveyards, water furrow system and the historic town farms and Gabled buildings (c1840-1860). The PACF has divided Prince Albert into different heritage significant sectors and includes a matrix linking the current zoning scheme with recommendations for various land uses in each heritage significant sector.

iv. The development of a settlement (consolidation or growth) should take the existing (and sometimes historic) structure and spatial form into consideration and strengthen its character. This spatial form must be compact and respond to the topography of the landscape.

v. Promote vernacular Karoo-style building typologies in all development – low income housing development could be adapted to have Karoo-style features. Prince Albert Town, together with the Karoo region, has unique vernacular building and housing typologies that must be honoured and enhanced in future growth and development in order to make these places more appealing and desirable for tourism and to enhance their sense of place. These typologies should be replicated in government subsidy housing initiatives, as well as in gap and normal market housing development. Figure 3.32 shows some of the different housing typologies.

vi. When delivering any agri-processing, renewable energy or any infrastructure in rural areas, ensure that key view sheds and vistas are not undermined and that, where appropriate, set-backs and screenings (in the form of tree planting) are provided from roads.

vii. Continue to develop and implement a destination and tourism branding and marketing strategy to promote the tourism sector, i.e. through https://princealbert.org.za/.



Heritage and Scenic Resources Map: Central Karoo District Municipality

Road Type

- National Road
- Arterial Road
- Secondary Road
- Railways
- DM Boundaries
- Dams
- Permanent River
- Ephemeral River
- Protected Areas
- Cultural Landscapes
- Scenic Routes and Passes
- Historic Settlements

1:1 200 000

0 50 100 Km

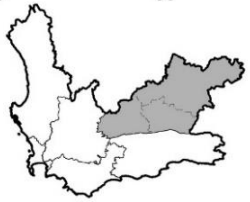


Figure 3.29: Heritage & Scenic Resources Map for the Central Karoo

PRINCE ALBERT TOWN HERITAGE OVERLAY ZONES AND PROCLAIMED MONUMENTS

A: Church Street and all erven east and west with very significant buildings and street frontages: Linear character with diversity of land uses: Agriculture, Residential, Business and Institutional

B: Very significant heritage farmhouses and out-buildings on prime farmlands along De Beer and Pastories Street

C: Very significant serial groupings of Victorian and Edwardian dwellings in Nuwe Street

D: Very significant serial groupings of Victorian and Edwardian dwellings in Mark Street

E: Very significant town centre heritage farm buildings and farmlands bounded by Church, De Beer, Leeb & Deurdrif Streets

F: Various significant heritage buildings along Meiring & M. Prinsloo Street Cottages on smallholdings along Van Dyk and Jordaan Streets

G: Various heritage buildings on extensive prime farmlands bounded by Dorps River in the east

H: Very significant heritage farmhouses on prime farmland with heritage cottages on the periphery of Bo-Dorp.

I: Very significant heritage farmhouses on prime farmland and cottages on smallholdings

J: Robert Gordon Koppie – A botanically natural backdrop to the town, which needs proper legal protection

K: Undeveloped erven with some heritage buildings

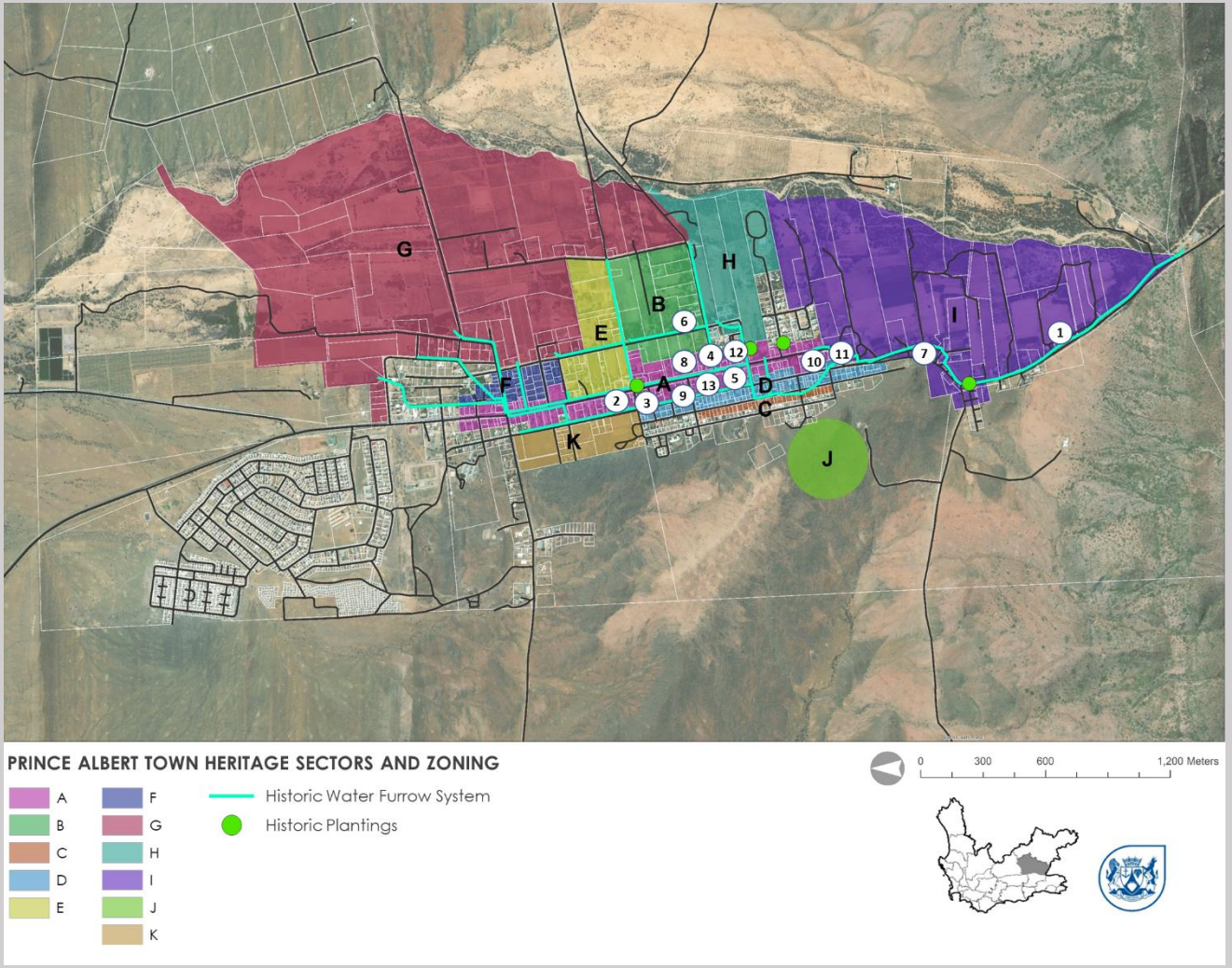


Figure 3.30: Prince Albert Heritage Sectors and Zoning overlaid with Proclaimed Monuments (Numbers correlate with Figure 31 on the following page)

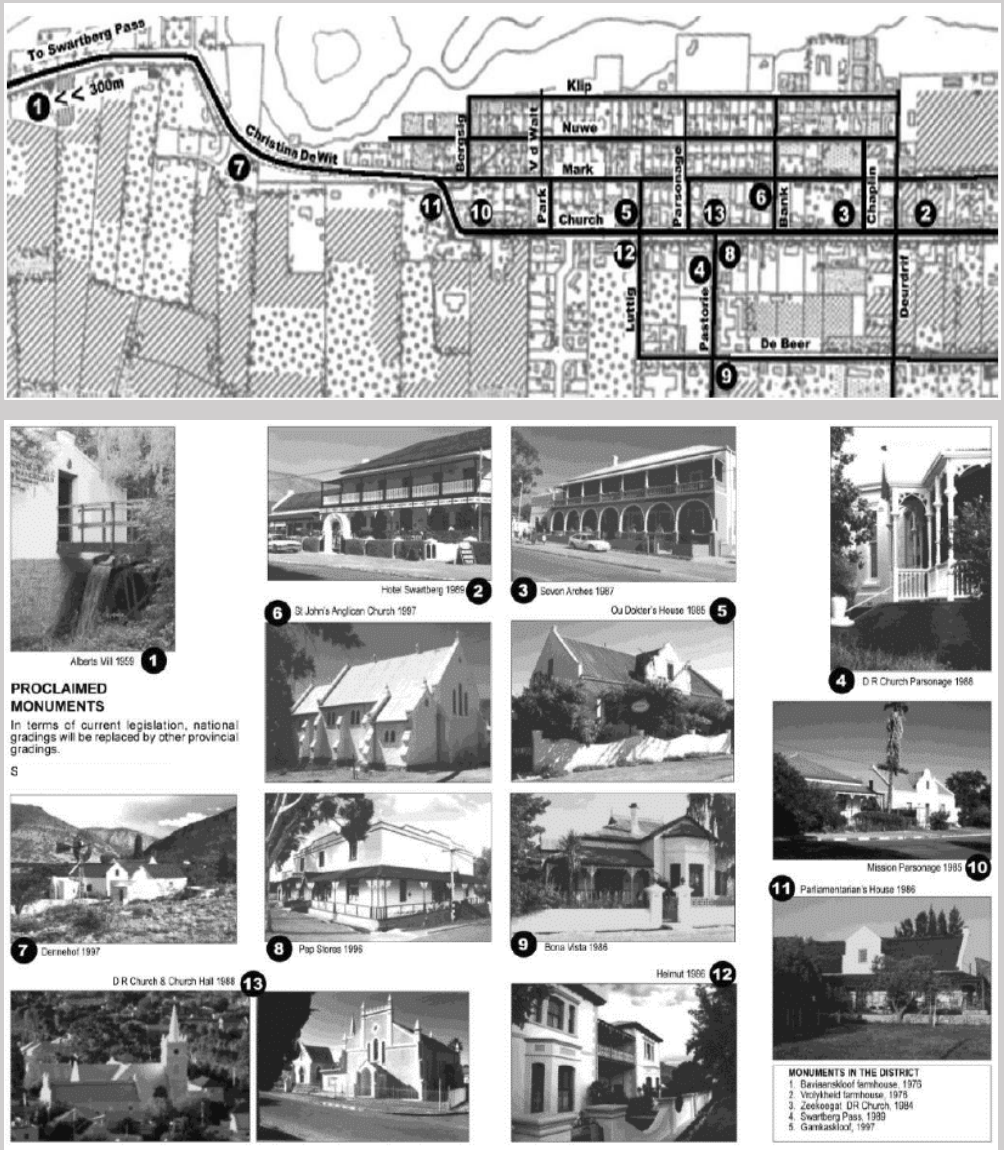


Figure 3.31: Proclaimed Monuments in Prince Albert (source: Prince Albert Heritage Inventory (2009-2011)

Figure 3.32: Examples of Karoo Style Housing Typologies (source: www.karoospace.co.za)

3.7.6 Policy A6: Promote Resilient, Sustainable Agriculture & Agri-processing

Agriculture contributes 46.4% to overall employment in Prince Albert Municipality (MERO, 2020) and provides opportunities to maintain and enhance both job and food security. It is also the basis for Prince Albert's tourism activities and is therefore a priority for both the municipality and the district.

Figure 3.33 shows the agricultural activities map for the Central Karoo District Municipality which includes Prince Albert Municipality. Figures 3.33 to 3.35 show the town agricultural maps for Prince Albert, Leeu Gamka and Klaarstroom. The use of agricultural land and the integrity of agricultural operations must be protected and enhanced. The conversion of irrigated, arable land is not supported in terms of this MSDF and the Subdivision of Agricultural Land, Act (Act 70 of 1970), section 3 (f), which states that "no area of jurisdiction, local area, development area, peri-urban area or other area … of the definition of 'agricultural land' in section 1, shall be established on or enlarged so as to include, any land which is agricultural". This underscores the need to protect agricultural land as stipulated in the Draft Preservation and Development of Agricultural Land Bill (2016).

It is in the national interest to preserve, and promote sustainable use and development of agricultural land to produce food, fuel, and fibre for the primary purpose to sustain life further recognising that high value agricultural land is a scarce and non-renewable resources; and recognising that it is in the interest of everyone to have agricultural land protected, for the benefit of present and future generations. The sustainable development of agricultural land requires the integration of social, economic and environmental considerations in both forward planning and ongoing agricultural land management to ensure that development of agricultural land.

Policy A6 Guidelines:

I. Encourage water-resilient farming practices that enable more efficient and productive use of water.

II. Encourage the use of drought-resistant crops and crop hybrids that tolerate drought conditions and use less water.

III. Actively and aggressively promote value-add to all locally produced agricultural products in the region.

IV. Ensure that farmers in the region are granted the necessary rights and building plans on their farms to promote agri-processing and job creation, but in a way that doesn't undermine Karoo charm and character (i.e. new developments must be designed well and must fit in with the landscape).

V. Provide the necessary farmer support for drought relief, water use efficiencies and agricultural expansion in the region, with a specific focus on emerging farmers.

VI. Implement catalytic economic development projects such as SMART gardening, Agri Parks and Dry Fruit Facilities and plantation. Land near Prince Albert air strip and behind the EE Centre is suitable for this purpose.

VII. Producers of long-term crops, such as orchards and vineyards, as well as game and ostrich producers, are excluded from government drought assistance, while they are in dire need of it. Thanks to financial contributions and feed donations to the Agri Western Cape Drought Relief Fund, Agri Western Cape can offer support to livestock farmers, but there is no assistance for producers who have had to de-root hundreds of hectares of vineyards and orchards.

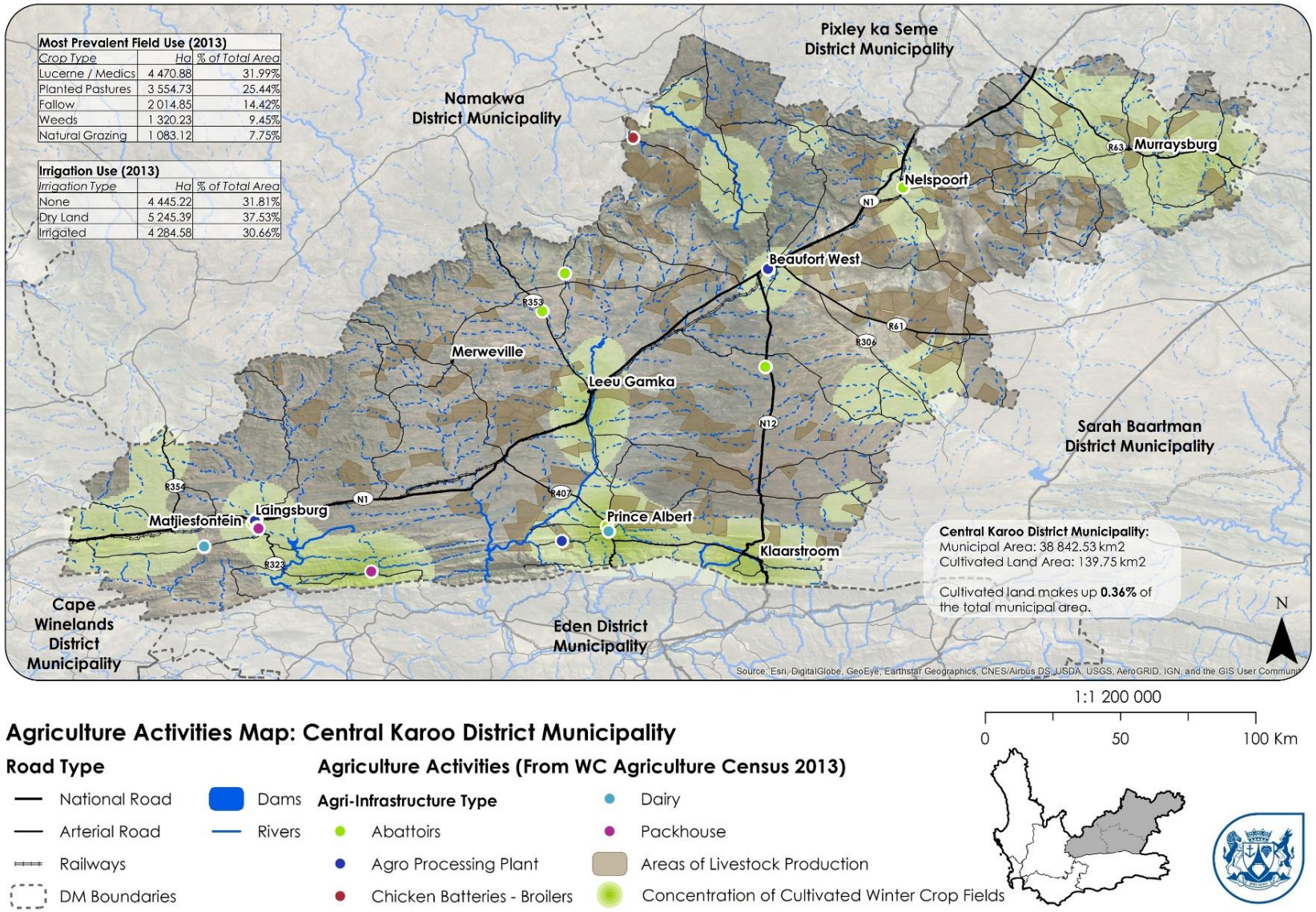


Figure 3.33: Agricultural Activities Map for the Central Karoo District Municipality

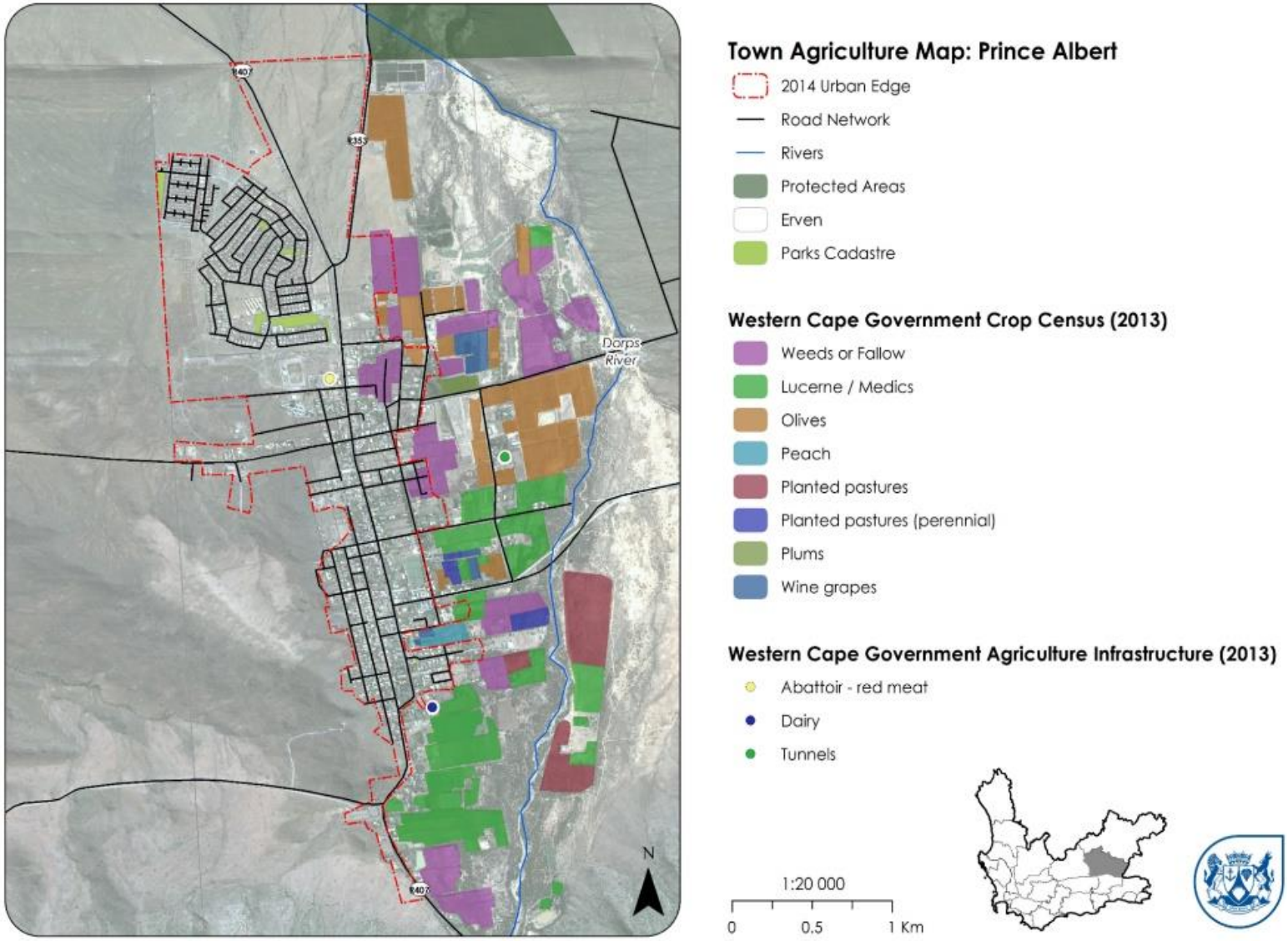


Figure 3.34: Agricultural Activities Map for Prince Albert Town

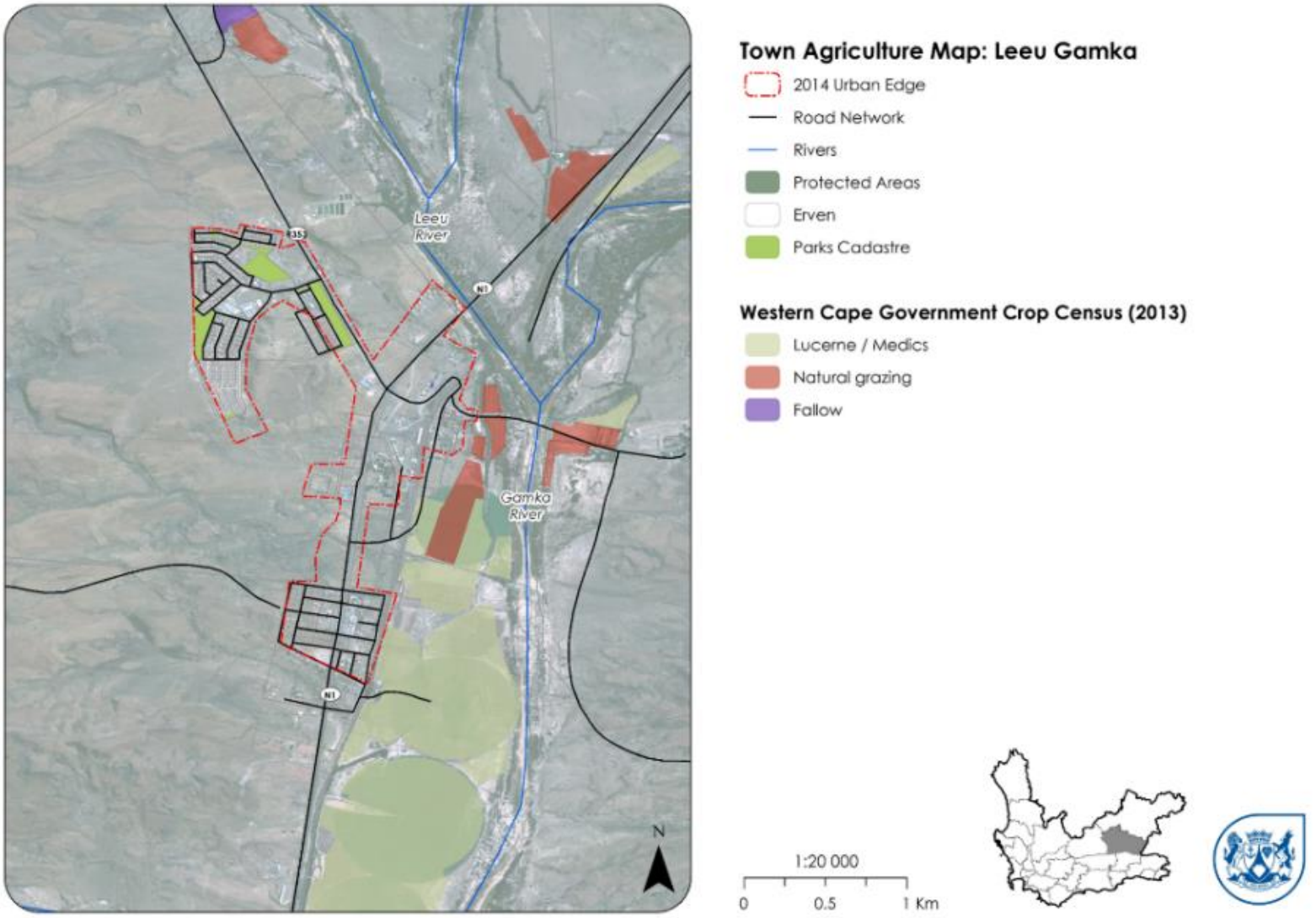


Figure 3.35: Agricultural Activities Map for Leeu Gamka

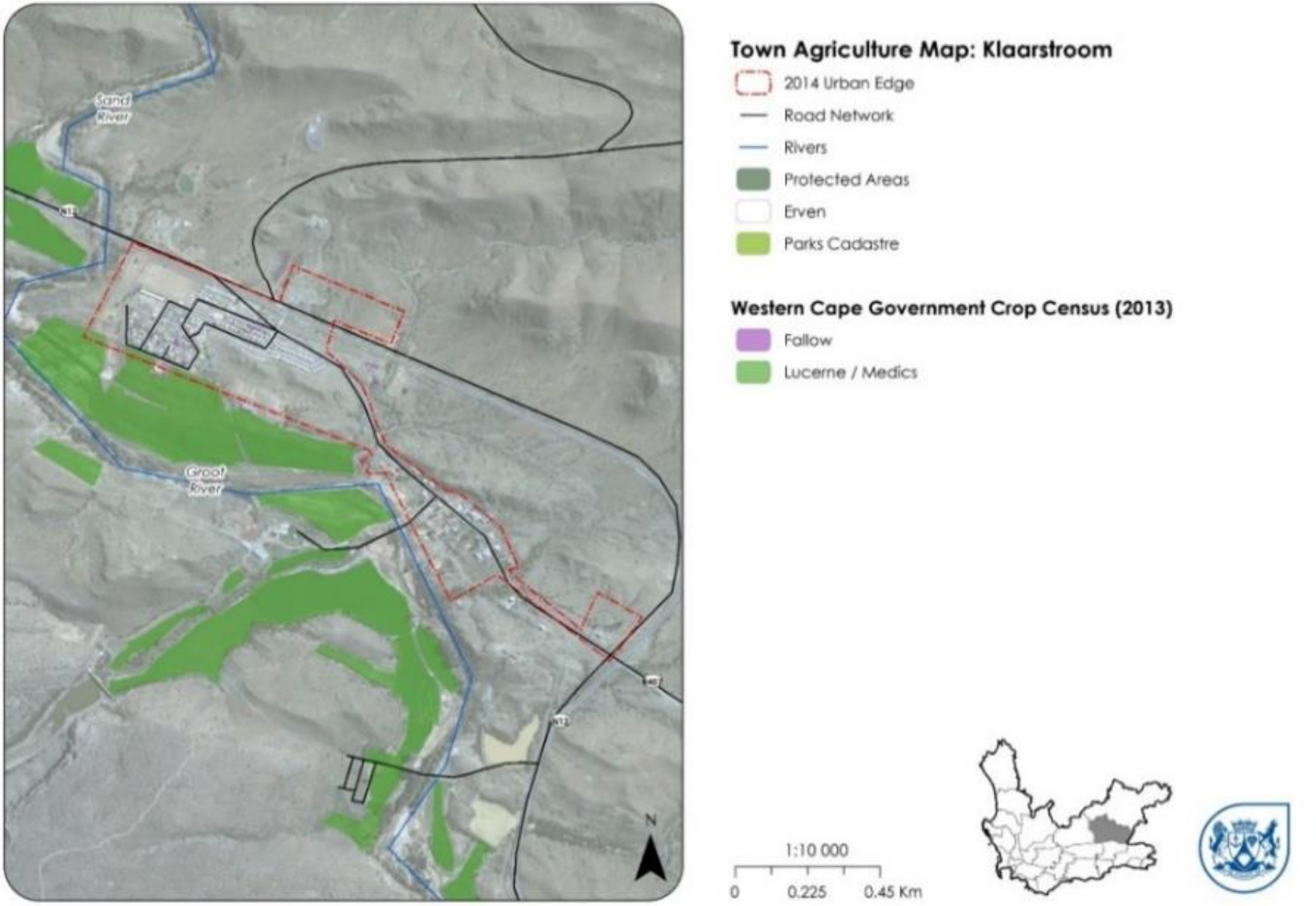


Figure 3.36: Agricultural Activities Map for Leeu Gamka

3.7.7 Policy A7: Shale Gas Development (SGD)

Figure 3.37 shows the Biodiversity Land Use Map for CKDM. This includes Exclusion Areas for Phase 1: Exploration of SGD. To date, SGD is still only a theoretical proposal within the Karoo Basin. Most notably, there is limited evidence that shale gas reserves can be viably recovered within the Karoo Basin, and estimates of shale gas reserves vary widely. The extent and viability of the gas reserves in the Karoo Basin, as well as the characteristics of the subsurface environment, is largely unknown. Satisfactory levels of certainty can only be ascertained by means of exploration or drilling into the target shale deposits. If hydrocarbons are encountered, a limited amount of hydraulic fracturing can then be undertaken.

Policy A7 Guidelines:

i. Natural gas represents an opportunity for economic development in the Western Cape (and South Africa as a whole).

ii. With South Africa focusing on its climate change commitments, natural gas should only be regarded as a transition fuel on the way to reliance on renewable energy. The use of natural gas must occur in support of renewable energy, not at the cost thereof, or as an alternative thereto.

iii. All impacts of this activity, on ground water resources specifically, **must** be adequately mitigated if it is to proceed in the Karoo basin.

iv. Critical Biodiversity Areas, Environmental Support Areas, Protected Areas and areas with valuable aquifers **must** be protected from shale gas extraction or any other kind of environmentally compromising activity.

v. Local communities potentially exposed to negative air quality because of shale gas extraction and related activities must be protected by an adequate buffer.

vi. Agricultural, tourism, visual and heritage areas that are deemed sensitive to shale gas extraction must be avoided as per the CSIR's Shale Gas Strategic Environmental Assessment (2017).

vii. Information gathering and evidence-based policy development remain key priorities for providing relevant information upon which decisions can be taken.

viii. When considering Karoo shale gas as a possible source of natural gas, the following factors must be considered: the anticipated shale gas drilling costs in South Africa may be significantly higher than those of the United States due to the lack of infrastructure; the gas reserves are remote (i.e. far away from the markets); there is a lack of drilling technology and expertise; the institutional context (i.e. regulatory framework, human resources and knowledge capacity) is inadequate; markets are undeveloped; and there are significant socio-ecological implications, inclusive of latent environmental impacts.

ix. There is inadequate information to support or oppose full or large-scale production of shale gas. The WCG does, however, acknowledge that the need for information necessitates the commencement of exploration.

x. The WCG supports shale gas exploration conducted in a phased manner to support evidence-based decision making. A prerequisite, however, is an improved state of readiness of both government and non-governmental stakeholders prior to the commencement of exploration activities. This includes the improvement of the regulatory and broader institutional framework based on the findings of the SEA process. Significant progress has been made in this regard through, for example, establishing a regulatory framework for hydraulic fracturing, although it is acknowledged that a lot must still be done to review and enhance this institutional framework.

xi. **Support for the commencement of exploration activities does not constitute support for the production phase of shale gas development**. The need for information is still a primary aim of the exploration phase in understanding the extent of the shale gas resource as well as the receiving environment. Once this information has been considered, an informed (and evidence-based) decision to move into the production phase for SGD can be taken. This is inclusive of the open and transparent consideration of information generated through the exploration phase.

xii. Should shale gas prove to be a viable environmentally sustainable source of natural gas, the WCG will consider both the potential risks and opportunities related to shale gas development, including how these may affect the Karoo environment. The WCG is in the process of evaluating its readiness to respond to SGD demands if exploration goes ahead within the Karoo Basin of South Africa.

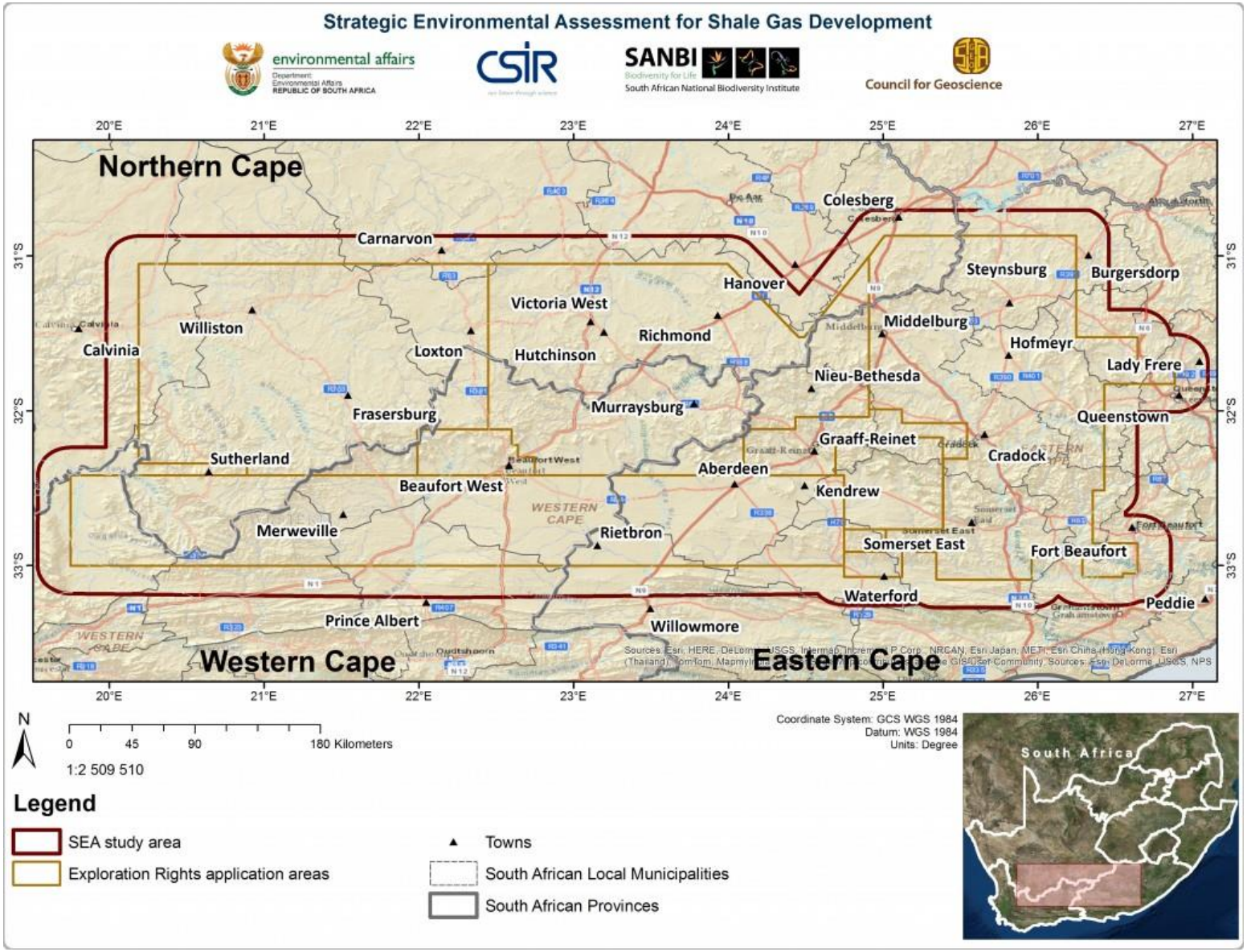


Figure 3.37: Strategic Environmental Assessment for Shale Gas Development

xiii. From an air quality perspective, an emission inventory of all point and mobile sources (including vehicles) should be compiled. This emission inventory would establish a baseline to inform future developments in the Prince Albert Region, especially when dealing with airshed planning. A spatial expression of the airshed within the Prince Albert area, will determine the impact of existing and planned emissions. With the establishment of more industries/ developments, the cumulative impact of those may significantly affect air quality as well as other environmental and health impacts;

3.7.8 Policy A8: Land Reform Support

Figure 3.38 shows the Farmer Production Support Unit (FPSU) Catchments for the Central Karoo. Figure 3.39 shows the Land Reform Projects for Prince Albert Municipality. The following list sets out five criteria that must be used to identify Strategically Located Land (SLL) for land reform in Prince Albert Municipality. These criteria should be used to inform the acquisition of farms in rural areas for land reform purposes.

Policy A8: Guidelines

i. The farm should fall within the FPSU catchment area, which indicates its proximity to the nearest town, potential markets and accessibility to the District road network. The FPSU catchment area is defined as being within 60 km of an FPSU.

ii. The priority FPSU catchment area covers the majority of Prince Albert Municipality.

iii. The farm must not fall within a Spatial Planning Category (SPC) or Biodiversity Spatial Plan area that indicates it as sensitive or having significant constraints (i.e. in a core or buffer SPC). Ideally, an Agricultural SPC is the most suitable land for acquisition purposes. This may not be a consideration if the farm is intended to be used for tourism (non-farming) purposes due to its natural beauty or if the intent is to sustainably harvest biodiversity (such as fynbos).

iv. The farm should not contain significant land with steep slopes (i.e. slopes above 12%).

v. Land ownership: state owned land should be first considered for land reform purposes, before privately-owned land is acquired for land reform purposes.

vi. The farm must have access or have the potential to access enough water to sustain its operations.

vii. A toolkit for integrating land reform and rural development into Spatial and Land Use Planning can be found at https://www.westerncape.gov.za/eadp/files/atoms/files/Toolkit_Integrating%20LRRD%20into%20Spatial%20%26%20LUP_0.pdf.

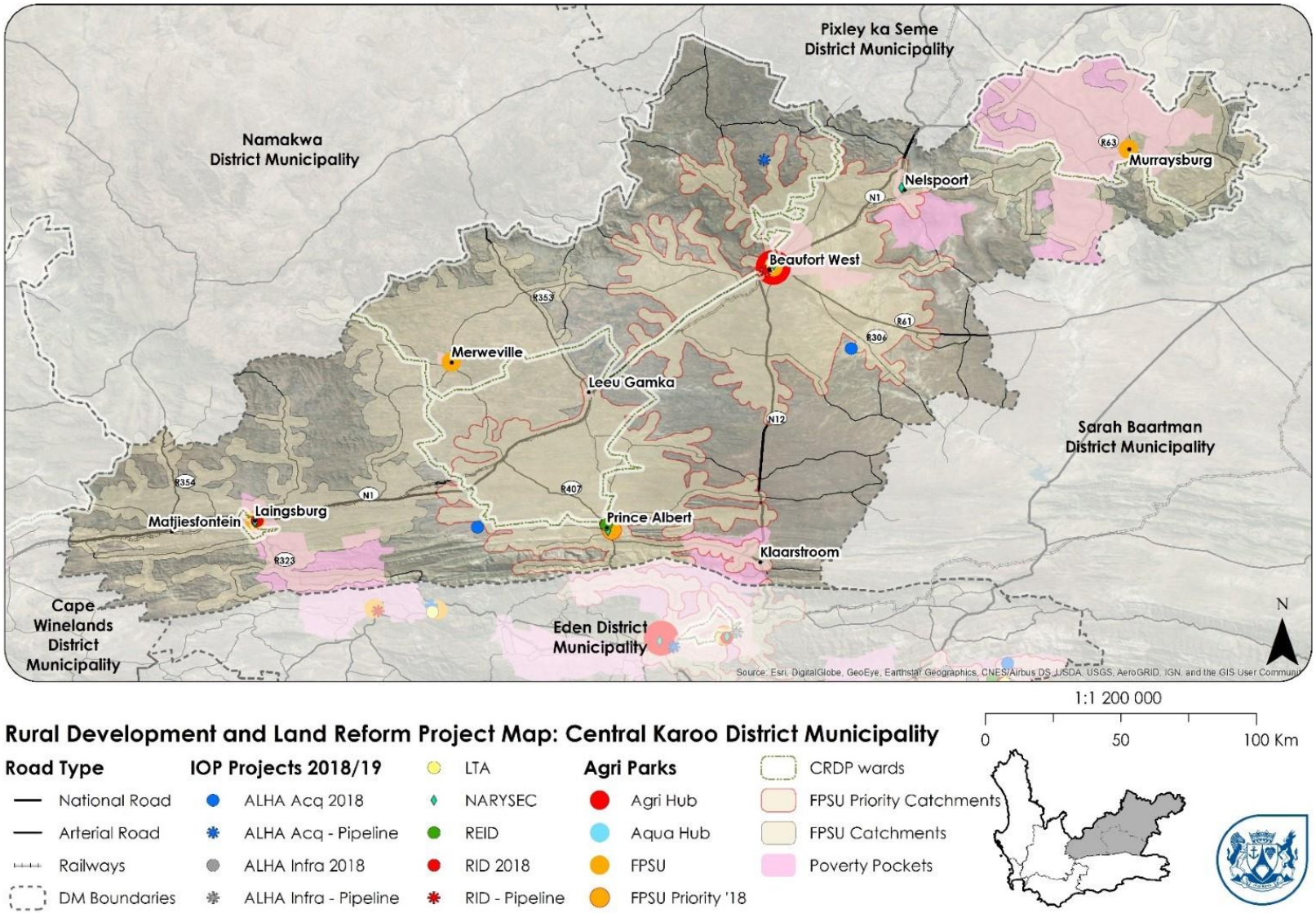


Figure 3.38: Rural Development and Land Reform Map for Central Karoo

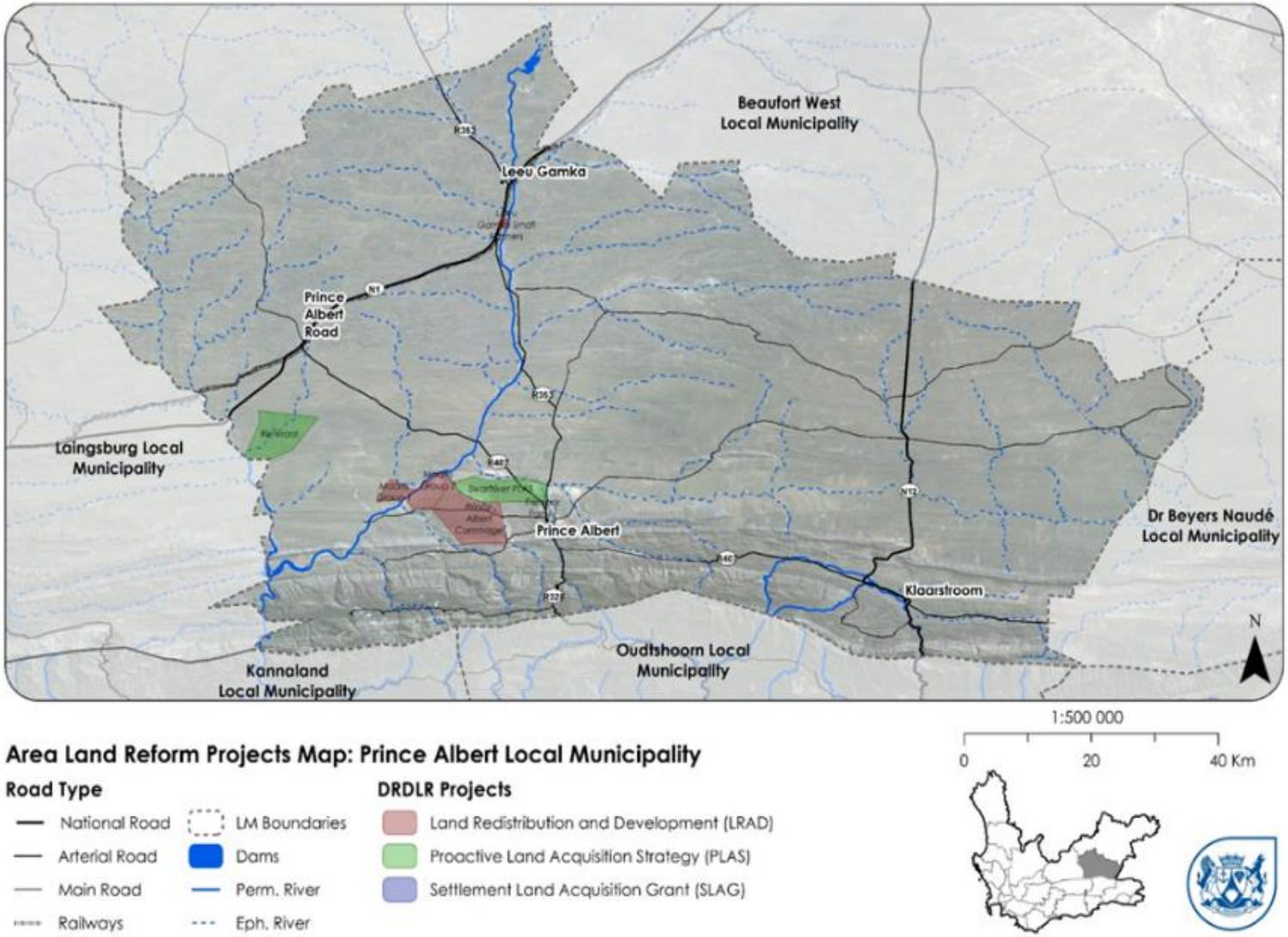


Figure 3.39: Area Land Reform Projects in Prince Albert Municipality

3.7.9 Composite Strategy A Map: "A region that Protects the Environment, Enhances Resilience and Capitalizes on and Honours the Karoo Charm in Support of a Vibrant People and Growing the Economy"

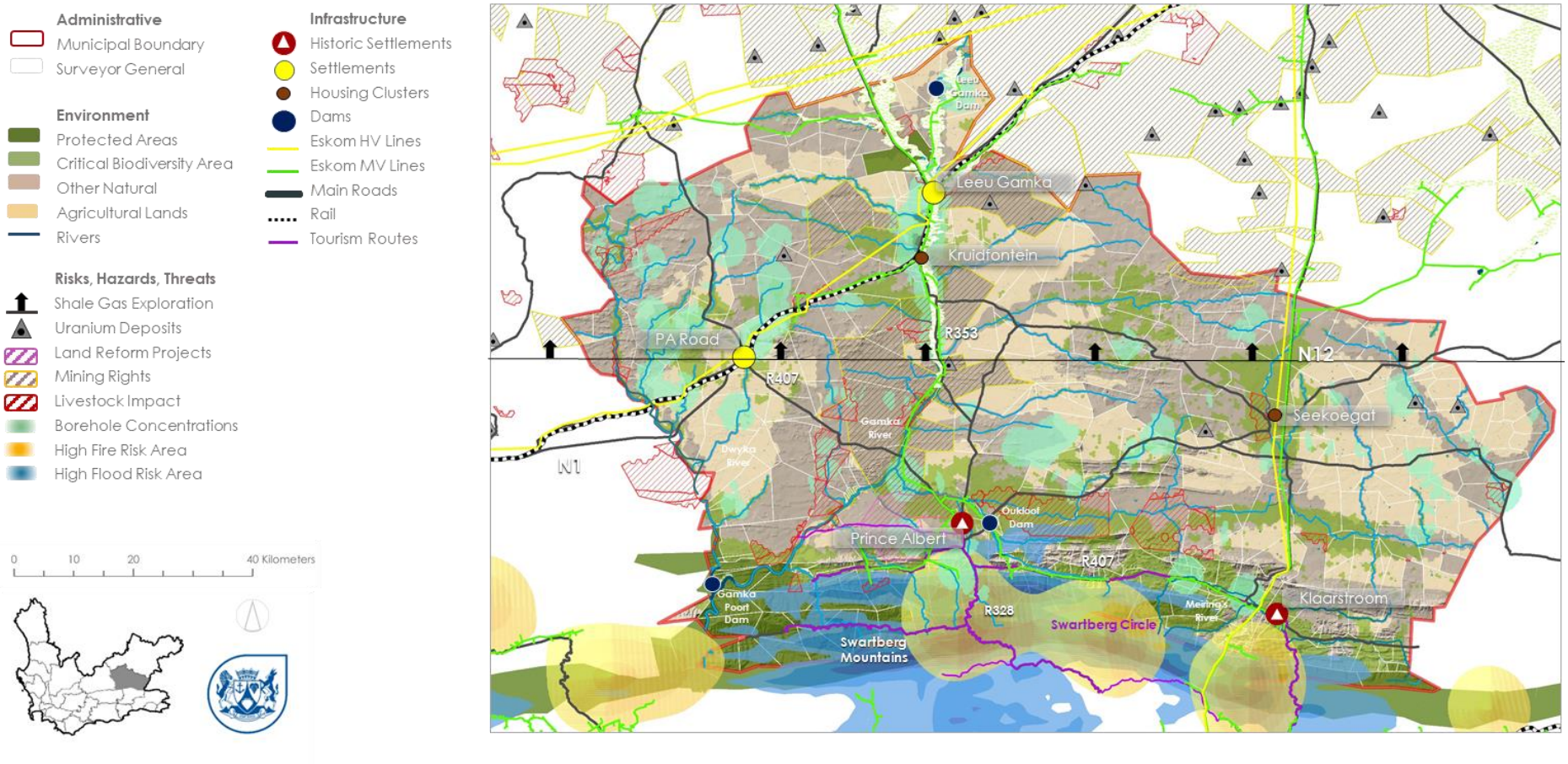


Figure 3.40: Composite Strategy A Map

3.8 STRATEGY B: IMPROVE REGIONAL AND RURAL ACCESSIBILITY AND MOBILITY FOR PEOPLE AND GOODS IN SUPPORT OF A RESILIENT ECONOMY

3.8.1 Policy B1: Improve Inter Settlement Connectivity

The municipality's transport system must be appropriate and affordable for both the inhabitants of the region and the people passing through. Given that only 15% of the municipal road network is tarred and given the limited budget, it is important to prioritise maintenance and upgrading of roads where necessary. Figure 3.41 shows the Regional and Rural Accessibility Map for Prince Albert Municipality. The following route hierarchy must be maintained and enhance:

N1: The N1 is a National road governed through SANRAL. It functions as a district connector between Beaufort West and Cape Town, running for 63 km through Prince Albert Municipality. It also consists of the underutilised national rail asset, which a draft Rail White Paper has recently been compiled with a new rail policy for the country, primarily to resuscitate rail freight. If it succeeds, it can have a massive positive economic influence on the Central Karoo District Municipality.

N12 (TR034): The N12 runs for 67 km through Prince Albert Municipality. It is considered both a National and Trunk road and is therefore governed by SANRAL and the WCG DTPW. It connects Klaarstroom to Beaufort West North and Oudtshoorn in the South. The ITP indicates that the road condition is very poor to fair.

R407 (TR03401): The R407 connects Prince Albert Town to the N1 and Klaarstroom through the Kredouw Pass. The ITP indicates that the surface conditions vary from poor to fair and good in certain places.

Gravel routes:

- R353: Leeu Gamka to Prince Albert Town
- R328: Swartberg Pass to Oudtshoorn (16km) – this is a key tourism route that has been degraded. It requires restoration and monitoring after heavy rainfall.
- Seekoegat Road: West of Prince Albert Town
- Magrieta Prinsloo: East of Prince Albert Town
- Weltevrede Road: East of Prince Albert Town

3.8.2 Policy B2: Rural Mobility & School Learner Transport

Figure 3.42 shows the map of Schools and School Leaner Routes in in Prince Albert Municipality. Since Prince Albert is generally a rural municipality, learner transportation services are provided to outlying areas which are more than 5 km from the nearest school and where no public transportation is available. Areas around Leeu-Gamka and several other areas do not have learner transportation services.

Policy B2 Guidelines:

I. Invest in rural pedestrian safety and scholar transport safety through partnership with the Western Cape Department of Education and the CKDM.

II. Develop a strategy aimed at offering cost-effective transportation services for rural communities.

III. Lobby the Western Cape Department of Education to add additional school learner routes for school children from Leeu Gamka and other areas of need.

IV. The roll-out of the rural mobility and accessibility strategies must be mindful that vulnerable groups (women, children and disabled) are disproportionately more dependent on the availability of public transport.

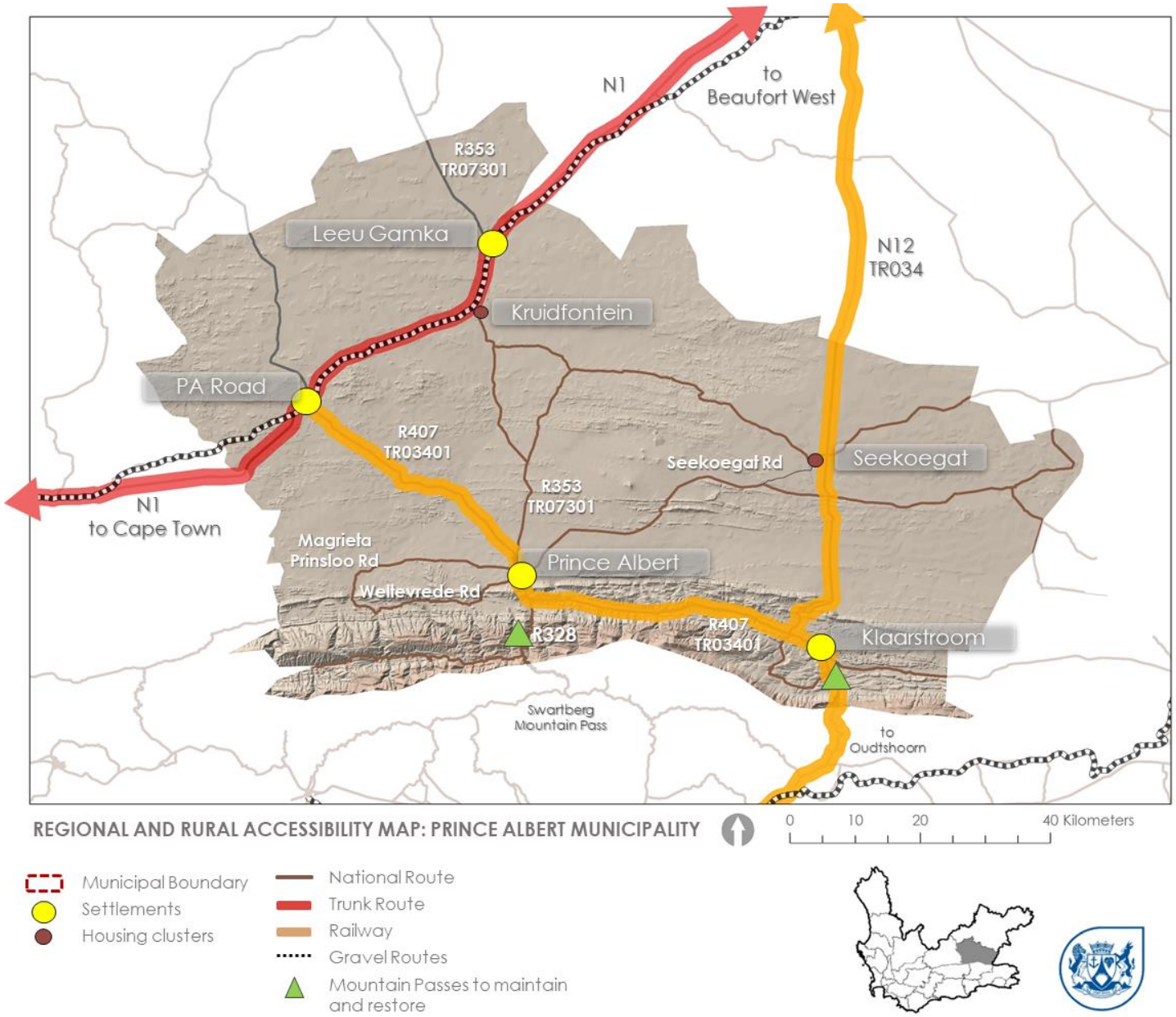


Figure 3.41: Regional and Rural Accessibility Map for Prince Albert Municipality

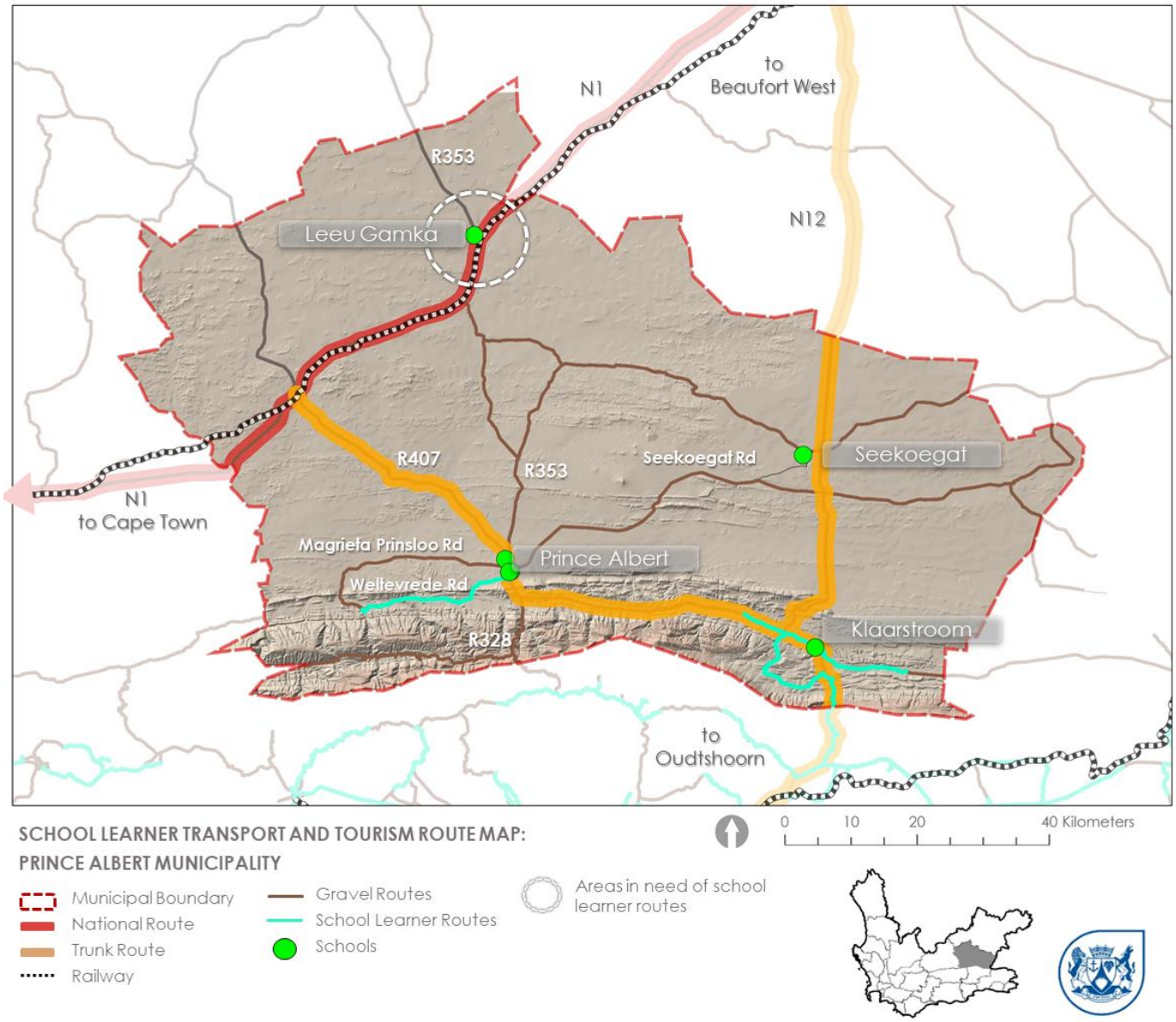


Figure 3.42: Map of Schools and School Leaner Routes in Prince Albert Municipality

3.8.3 Policy B3: Town Improvement Plans Focussed on Non-Motorised Transport, Safety and Green Networks

Prince Albert Municipality needs to ensure that its towns are conducive to both local and tourist passengers (on foot and in car) as well as attractive for businesses to invest in the area. This should be specifically pursued in Prince Albert Town and Klaarstroom because of their heritage appeal and accommodation offerings. Walkable towns promote a public environment with a human focus rather than a car focus. They can lead to many social and economic problems being addressed through improved social interaction, increased spending and diminished crime. With an added green network, walkable towns can also provide shade and keep temperatures lower (See Figure 4.43). This strategy can be achieved, in part through the beautification measures described below:

Policy B3 Guidelines:

i. All towns should continue to carry out basic beautification measures (Figure 3.43) at their entrances and main streets, including cleaning and sanitation services and tree-planting (of drought-tolerant species). These measures aim to create proud, distinct, clean and attractive spaces through litter, grime, graffiti and weed removal; landscaping and planting; colour differentiated bicycle lanes; paving and sidewalk regeneration; street furniture installations; lighting improvements; improved safety, security and law enforcement; promoting infrastructure maintenance; as well as putting systems and teams in place for people to report damaged infrastructure and the municipality to respond to this.

ii. Adjacent landowners in Church Street, Prince Albert Town should continue to be encouraged to beautify their frontage zones (See Figure 3.44). This should be accompanied by a pedestrian zone, furnishing zone, bicycle lanes and a tree greening network.

iii. Prince Albert Town should continue to focus on and lobby for funding for implementation of phases 3 and 4 of the 2008 ITP Non-Motorised Transport Plan as well as the CKDM ITP 2020-24 and this SDF's proposed additional sidewalks shown in Figure 3.45 and Figure 3.46. This should be accompanied with lighting to enhance safety between destinations. Further urban design input is needed that investigates low-cost, high-impact measures to increase the appeal of the network.

Figure 3.43: Examples of beautification, green networks and safety kiosks

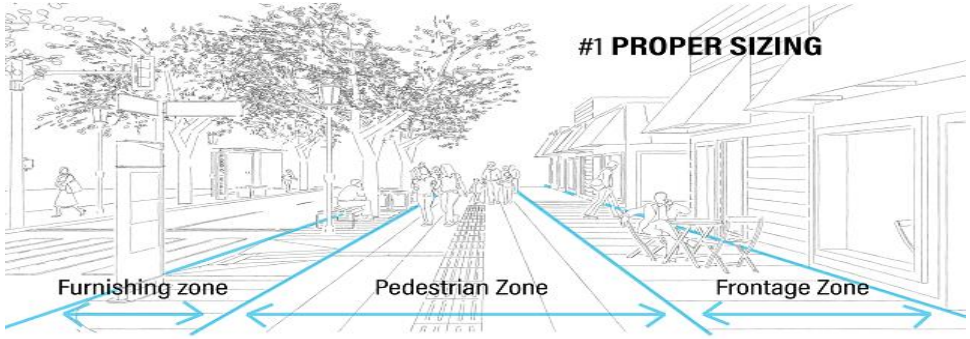
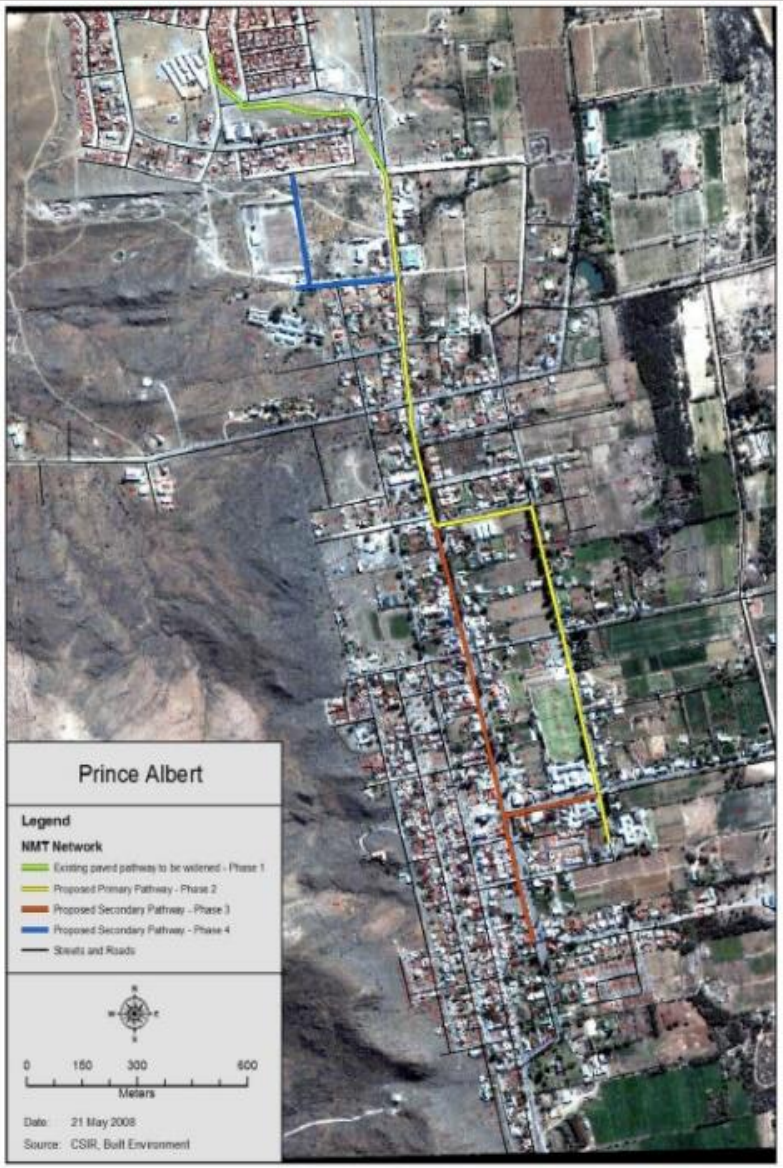


Figure 3.44: Examples of street beautification, bicycle lane and green networks

PRINCE ALBERT TOWN 2008 NMT NETWORK



POSSIBLE CHURCH STREET BEAUTIFICATION

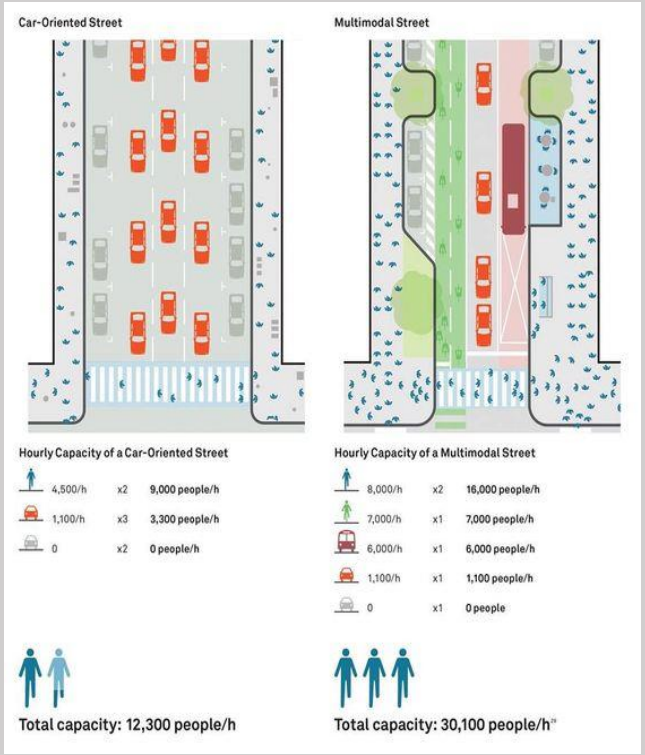


Figure 3.45: Prince Albert 2008 NMT network in relation to beautification measures (Sources: https://za.pinterest.com/pin/308004062014257899/)

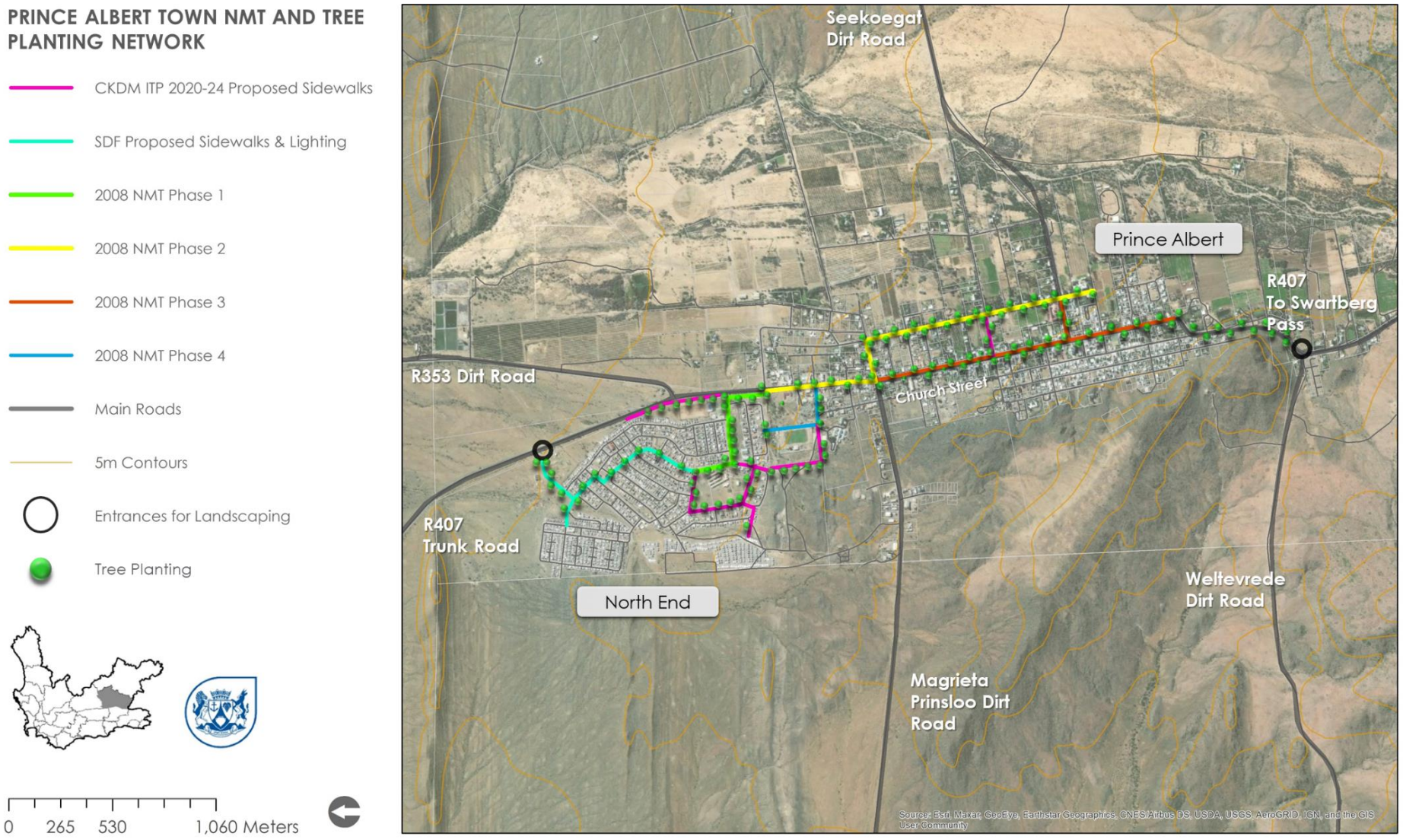


Figure 3.46: Prince Albert Town 2021 Non-Motorized Transport (NMT) Plan and Tree Planting Network

3.8.4 Composite Strategy B Map: Improved Regional and Rural Accessibility and Mobility for People and Goods in Support of a Resilient Economy

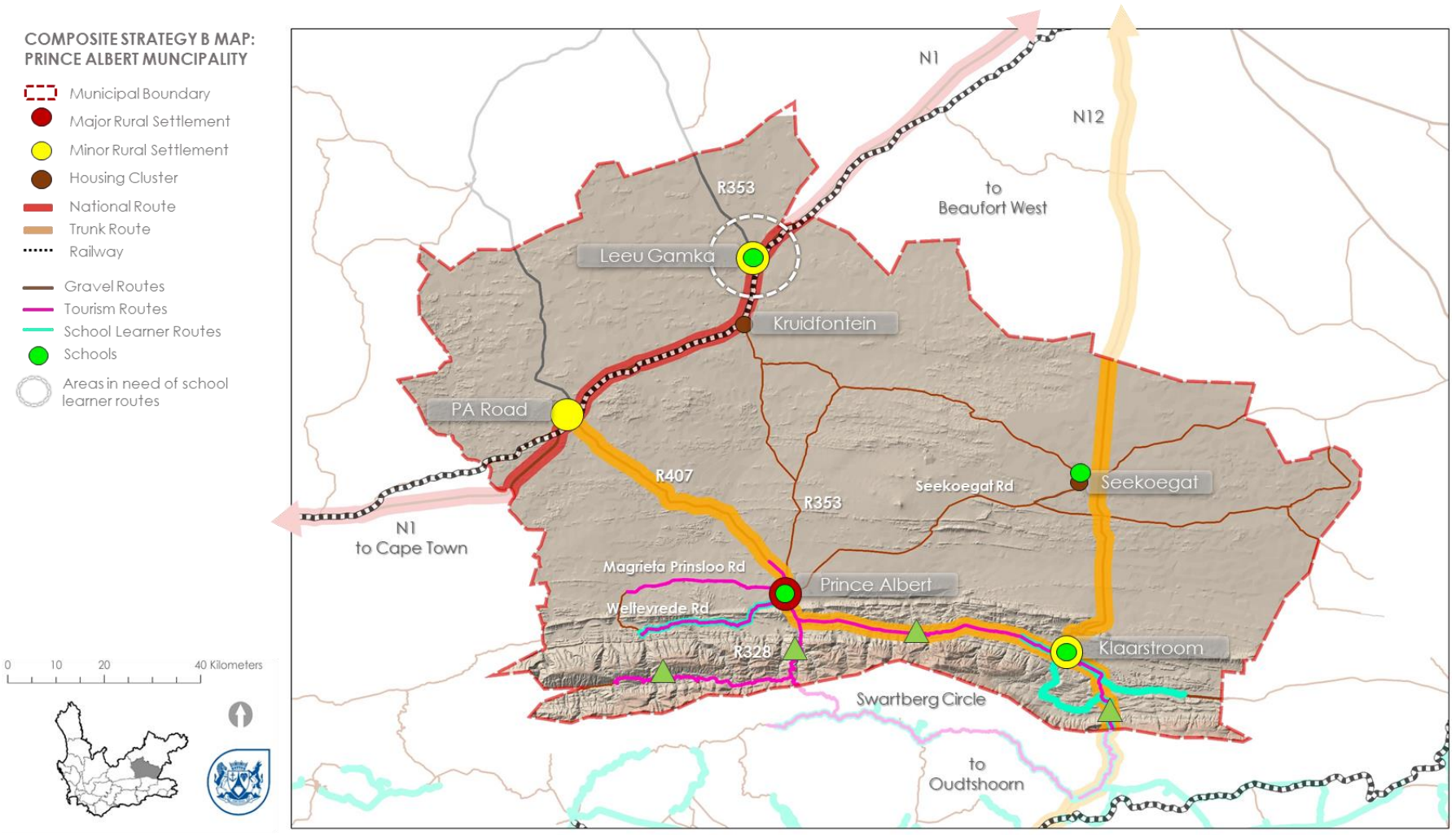


Figure 3.47: Composite Strategy B Map for Improved Regional & Rural Accessibility and Mobility for People & Goods in Support of a Resilient Economy

3.9 STRATEGY C: ALLOCATE GOVERNMENT RESOURCES, INFRASTRUCTURE AND FACILITIES IN A MANNER THAT UPLIFTS AND SKILLS PEOPLE AND FOCUSSES ON MAXIMISING IMPACT ON THE MOST POSSIBLE PEOPLE, WHILE PROVIDING A BASIC LEVEL OF SERVICE FOR ALL

3.9.1 Policy C1: Establishing a Clear Settlement Hierarchy

Prince Albert Municipality consists of 4 distinctive settlements, each fulfilling their own role in the district and municipal economy. These **roles are summarised in Table 3.5**. and **illustrated in Figure 3.48** on the page thereafter. They can also be read in conjunction with the Social Services Wheel in Figure 3.7.

The primary administrative centre remains Prince Albert Town. Given the limited nature of government resources, there needs to be a strong focus on locating a range of services in Prince Albert Town, with more rudimentary and lower order services in Leeu Gamka and Klaarstroom. Mobile service solutions are needed in the sparsest, smallest settlements and hamlets (Prince Albert Road, Seekoegat and Kruidfontein) where demand and funds are both insufficient for a permanent service.

3.9.2 Policy C2: Facility Clustering & Design Protocol Linked to a Clear Nodal Hierarchy

Table 3.5 also summarises the **'nodal hierarchy' at the town scale**. The focus within these nodes is to cluster social facilities, diversify the mix of land uses and increase densities. Figures 3.49 and 3.50 show the proposed 'nodal hierarchy' for Prince Albert and Leeu Gamka Towns. Klaarstroom' s local historic street is included in Table 3.5.

Policy C2 Guidelines:

I. The municipality must promote and encourage mixed land uses and higher densities within each of the proposed nodes.

II. Co-locating facilities and services in accessible nodal locations has the added benefit of reduced commuting distance and exposure to accidents and crime. Examples of facility clustering and increasing densities for passive surveillance of the street are shown in Figures 3.51 and 3.52.

III. The primary nodal location in which investment should follow is the Prince Albert Town integration precinct which aims to spatially connect North End with the town of Prince Albert and promote spatial transformation. The precinct currently consists of the Thusong Centre, hospital and regional sports facility and will accommodate new council offices. Further information on the Integration Precinct will be described later in this document.

3.9.3 Policy C3: Urban Edge and Densification Policy

The purpose of setting an urban edge is to ensure that development is contained, and that urban areas do not encroach into agricultural and biodiversity land. Urban edges also ensure that low density development does not occur, which is costly for the municipality to service. This type of development creates inequitable settlements that are costly to live in and travel from. Land for housing must therefore be used efficiently and by doing this, municipal financial sustainability can be secured.

Policy C3 Guidelines:

I. Urban edge boundaries for Prince Albert Town, Leeu Gamka, Klaarstroom and Prince Albert Road have been delineated in this MSDF. These boundaries adhere to National and provincial government targets of increasing the density of urban areas to an average gross dwelling unit density of 25 dwelling units / hectare.

II. To counter apartheid spatial patterns the aim is to follow a vacant infill strategy within the urban edges and to enhance densification within existing developed areas. This should take place specifically along Church Street, within the Prince Albert Integration Precinct and around the Prince Albert Primary School, where dwelling densities can be as high as 50 du/ha.

Table 3.5: Settlement Hierarchy for Price Albert Municipality

SETTLEMENT CLASSIFICATION	**SETTLEMENT**	**FUNCTION/ROLE**	
Major rural settlement	Prince Albert Town	Prince Albert Town functions as a specialised inland service centre with tourism, medical, educational, commercial, and administrative services as well as servicing surrounding rural areas. The spatial strategy is that, out of all the settlements in the municipality, most of the infrastructure investments should be focused in support of this town and will have the greatest multiplier effect and impact the greatest number of people.	
Minor rural settlement	Leeu Gamka and Klaarstroom	These are currently largely non-rates generating settlements where basic infrastructure renewal and maintenance are the priorities, along with appropriate infill, and densification as well as investing in developments that promote economic development and job creation. The spatial strategy is to meet the local convenience needs with basic social facilities and basic levels of service for surrounding rural communities.	
Hamlet / Housing Cluster	Kruidfontein and Seekoegat	Small residential cluster without commercial or business use.	
SETTLEMENT	**NODE**	**FUNCTION**	
Prince Albert Town	Church Street	Activity Spine	Historic tourism street/corridor with educational, commercial, religious and administrative services.
	Church / Pastorie Street Node	Historic Town Centre and Facility Cluster	Historic church, business, post office and other social facilities.
	Integration Precinct	Social facility Cluster	A precinct that connects North End to Church Street via a broader cluster of government and social facilities, along with housing.
Leeu Gamka	Bitterwater Node	Lower Order Neighbourhood node	Leeu Gamka Primary School, Gousblom, Aaalwyn and Granaatbos Street.
	Leeu Gamka Node	Lower Order Neighbourhood node	Local Railway Stop, Postal Services, ATMS.
	Welgemoed Node	Lower Order Neighbourhood node	Shell Ultra City and BNBs.
Klaarstroom	Klaarstroom Historic Main Street	Local historic street	History, tourism and scenic drive.

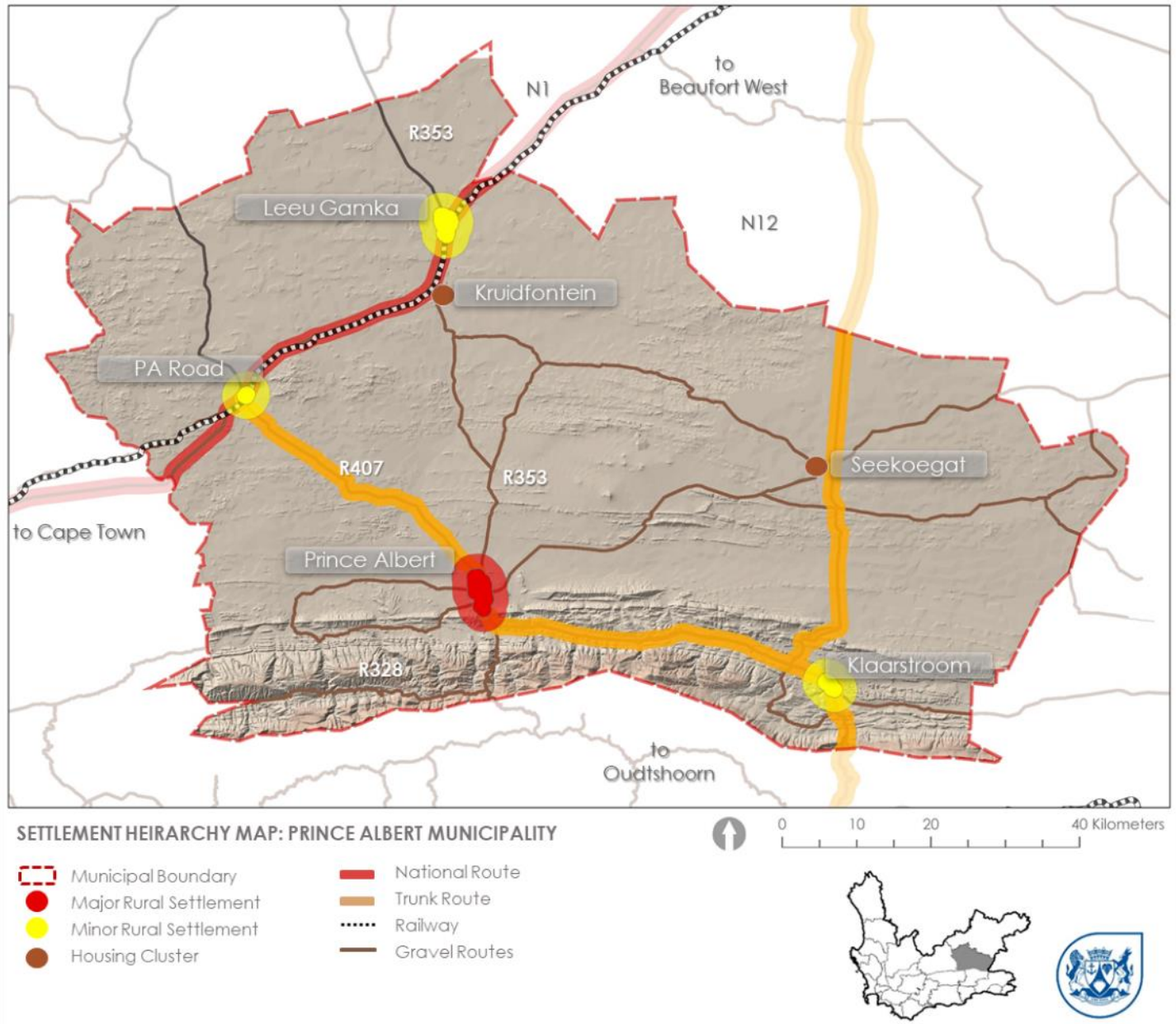


Figure 3.48: Settlement Hierarchy for Price Albert Municipality

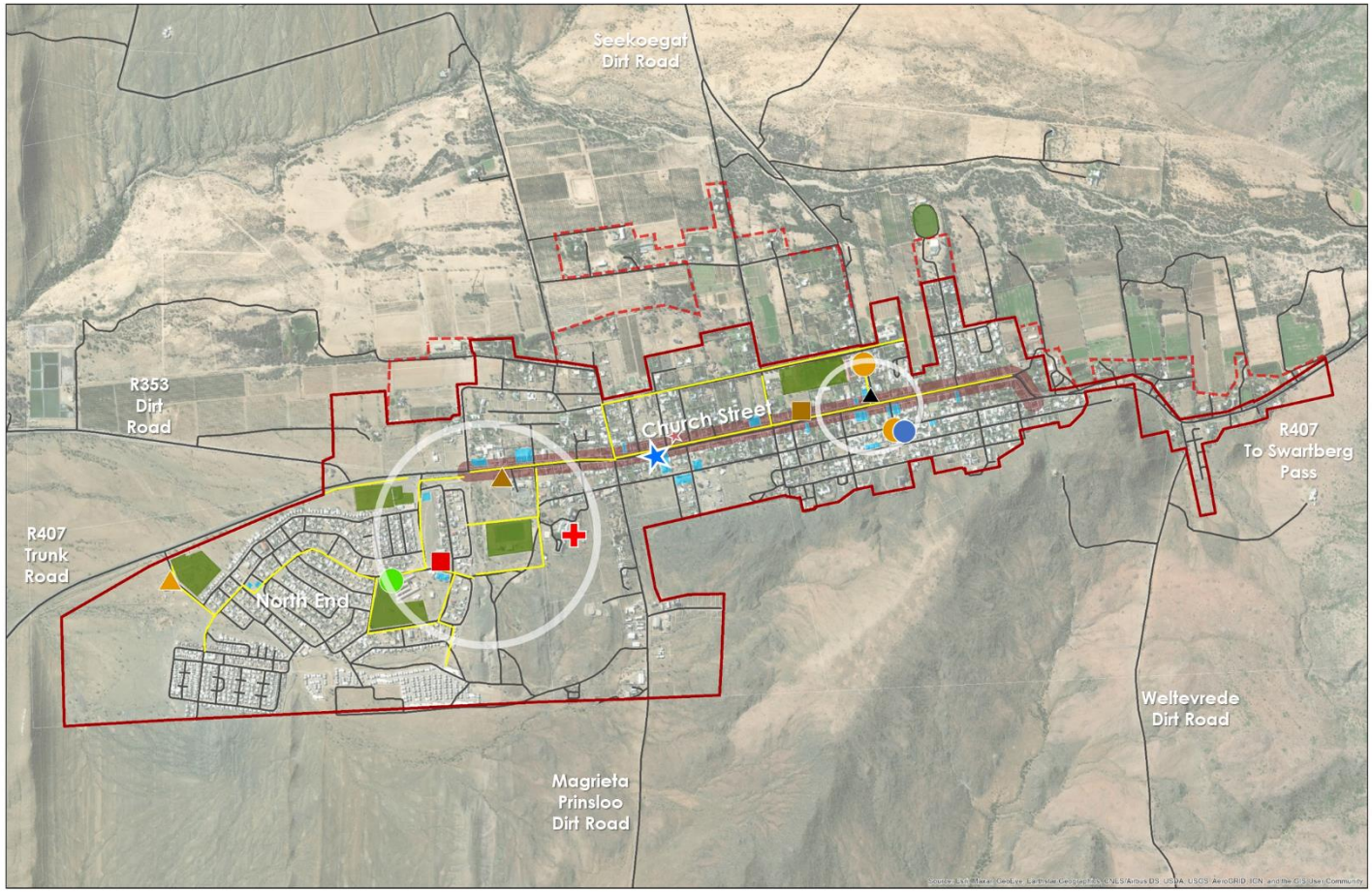


Figure 3.49: Prince Albert Town Nodes for Clustering and Mixed-use Intensification

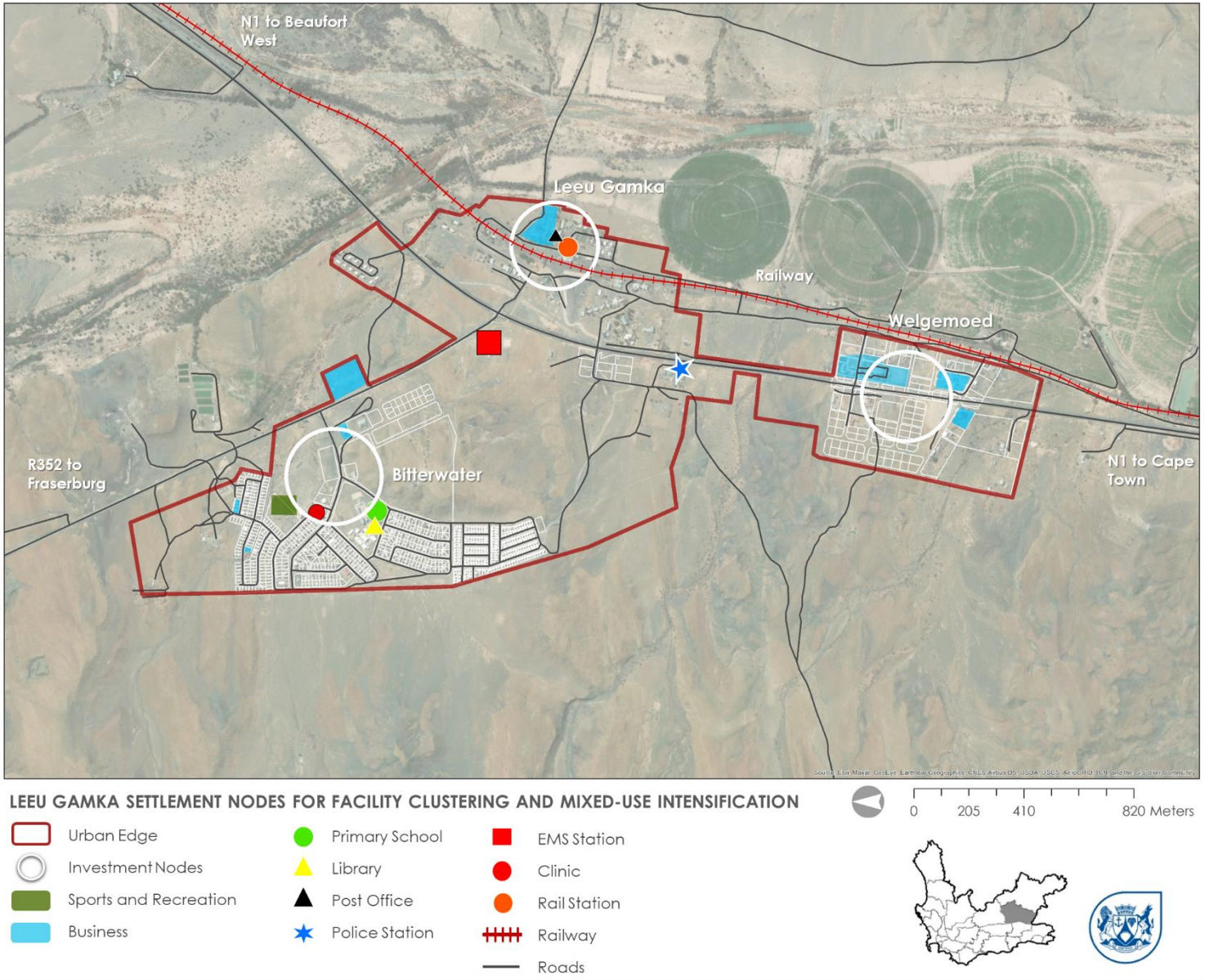


Figure 3.50: Leeu Gamka Settlement Nodes for Clustering and Mixed-use Intensification

EXAMLPE OF FACILITY CLUSTERING & DESIGN AT NODES

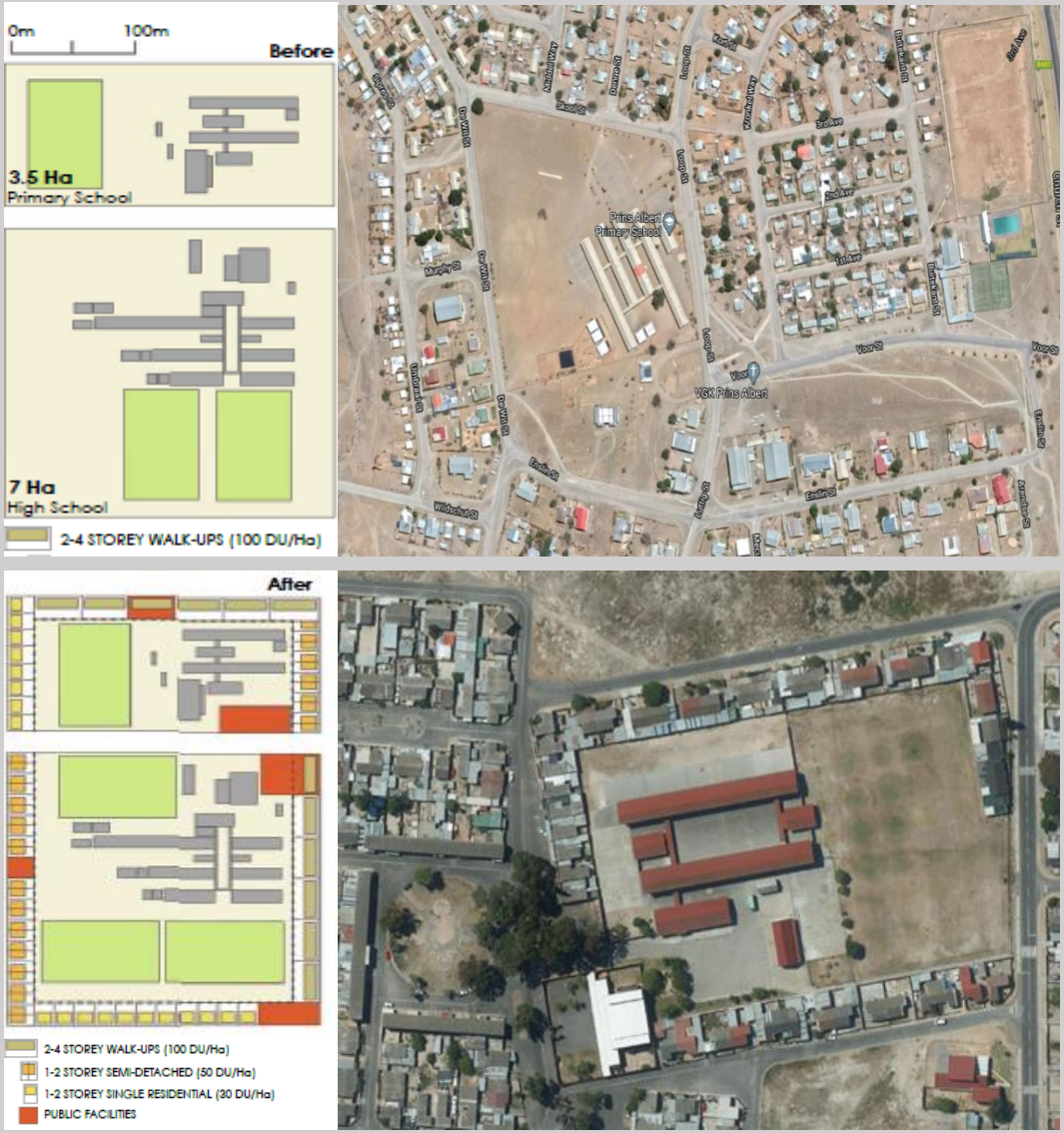
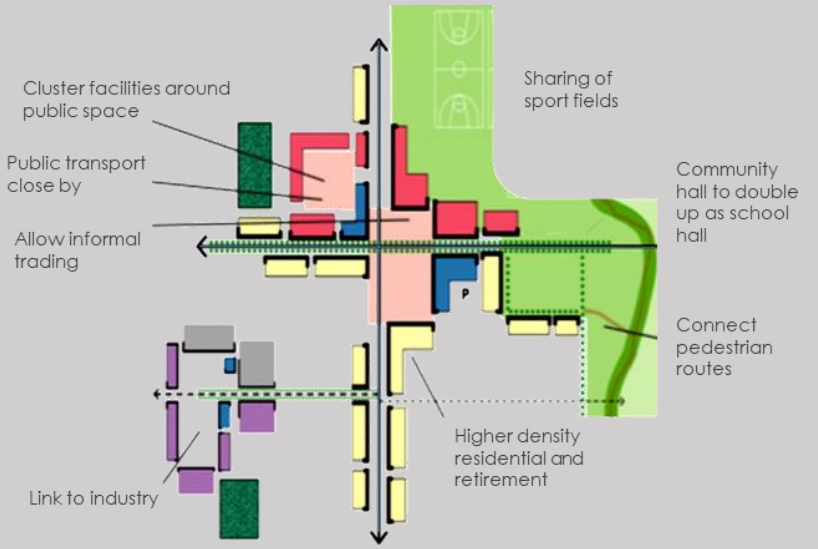


Figure 3.51: How Prince Albert Primary could be 'wrapped' with different housing typologies to provide passive surveillance, optimize land use and include other public facilities (Living Cape Framework, 2015)



CENTRAL FACILITIES AT CORE NODES/IN CBD		LOCAL/ NEIGHBOURHOOD FACILITIES
FACILITIES TO BE SITUATED WITHIN A CORE ZONE NOT FURTHER THAN 1 KM FROM EACH OTHER	FACILITIES SITUATED NEAR TO CORE ZONE	LOCAL PROVISION AT NEIGHBOURHOOD NODES
Home Affairs Offices	Community Halls	Community Halls
SASSA Offices	Primary Health Clinics	Social grant pay points
Labour Offices	Sports complexes	Children's Homes
Municipal Offices	Libraries	Homes for the Aged
Magistrate's Courts	Police Stations	Sports fields
National Youth Development Centres	Post Offices	Parks
		Schools

(Irrespective of thresholds, some measure of the above social services (i.e. a periodic mobile service at minimum) needs to be provided in all towns where there is no alternative supply that can be reached by residents within 40 km or in the case of the Northern Cape – 100 km)

Figure 3.52: Example of Social Facility Clustering from CSIR to be applied to Prince Albert Integration Precinct (CSIR, 2015)

3.9.4 Policy C4: Human Settlement Focus Areas

Over the last 25 years, the settlement growth of Prince Albert Municipality has been largely driven by the housing pipeline in North End and Bitterwater, and to a much lesser extent the private sector in Prince Albert Main Town. Based on the population projections and housing numbers presented, Prince Albert Town must be the priority investment area for human settlements, infrastructure, and services.

Table 3.6 shows the sites that are demarcated in this MSDF for priority government housing in Prince Albert Municipality, specifically Prince Albert Town. These correlate with Figure 3.52 on the following page. Figures 3.53 to 3.55 show how vacant land can possibly accommodate population growth projections for the towns of Prince Albert, Leeu Gamka and Klaarstroom.

The 2019-2024 HSDG 5-year delivery plan no longer shows budget for the housing pipeline in Prince Albert Municipality, but the pipeline is still supported by the Department of Human Settlements. It is important to note that Sites 3, 4 and 5 have been allocated for the GAP housing market, a segment of citizens who earn between R3 500 to R15 000 per month (regarded as a GAP market) and do not fall within the lower bracket to receive free government subsidized housing. Any entry level stock/house average from R400 000 upward means that for an individual to qualify for a mortgage loan, they must be earning at least R14 000 per month or more. A gap typically exits in the housing market for those earning between R3 500 to R13 000, meaning that the availability of stock (properties between R180 000 to R370 000), for this sub-segment of the housing market remains a challenge. A draft Policy Framework for Inclusionary Housing has been developed by DEA&DP and once complete can be used to will help municipalities in the Western Cape to facilitate the inclusion of more affordable housing units.

It is noted that there were 147 RDP units due in the housing pipeline for Leeu Gamka. These units were outside of the 2014 MSDF urban edge. This location is assumed to be due to existing available bulk infrastructure, however it is crucial that Prince Albert Municipality actively desist from providing any more government subsidy housing in settlements other than Prince Albert Town, unless economic opportunities warrant otherwise, because this entrenches a cycle of poverty and creates poverty pockets and poverty traps in the municipality.

Table 3.6: Settlement Hierarchy for Price Albert Municipality

PRIORITY HOUSING SITES IN PRINCE ALBERT TOWN	DESCRIPTION
Site 1	Falls upon Erf 99 and Erf 743. The Site is 15 ha in size and can yield between 350 and 524 residential units at 50 du/ha and 1 storey.
Site 2	This site can yield 250 residential units at 50 du/ha and a portion should be leftover to develop a possible school that doubles up on use of the regional sports facility.
Site 3	This site was originally part of the unfunded housing pipeline for GAP housing. The pipeline proposed a total of 69 units.
Site 4	This site is situated on privately owned land and within the heritage overlay zone. The site can accommodate 265 units at 50 du/ha. The aim is to replicate the vernacular Karoo-style building typologies within a gap market housing development.
Site 5	This site is situated on privately owned land and within the heritage overlay zone. The site can accommodate 176 units at 50 du/ha

STRATEGY C: PRINCE ALBERT TOWN

Main Activity Street: Church Street

Proposed nodes:

1. Integration Precinct
2. Pastorie and Church Streets

Priority housing sites:

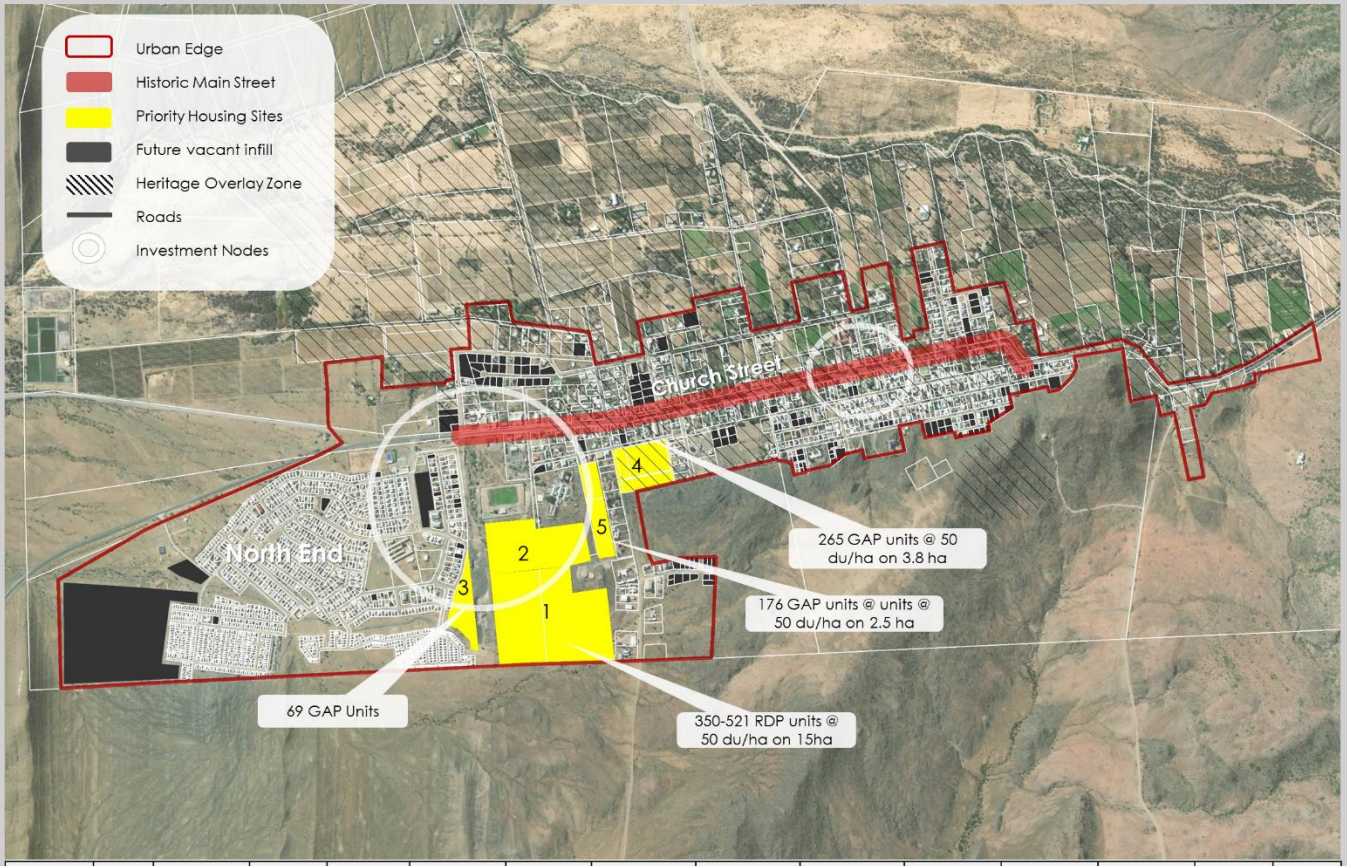
Priority sites 1, 3, 4 and 5 can yield approximately 1042 residential units at 50 du/ha. Priority Site 2 can include a school and 262 residential units @ 25 du/ha. Further information on these sites can be found in the Chapter 4 Capital Expenditure Framework.

All future vacant infill totals 62 ha which can accommodate up to 1624 units at densities between **25-50** du/ha.

In the medium growth scenario, Prince Albert Historic Town will have **134** additional people and **35** additional households. This will require **1.4** hectares of land.

In the medium growth scenario, **North End** will have **767** additional people and **202** additional households. This will require **8** hectares of land.

The 2020 Housing waiting list is **718** applicants. If this is considered the backlog, the total housing demand from 2020-2030 would be 718 + 35 + 202 = **955 units.** This would require **38** ha of land. There is therefore more than enough land to accommodate the growth.



Area	Growth Rate %	Rank	Base Population 2020	Base No. of Households 2020 (Household size 3.8)	Projected Population 2025	No. of Households 2025	Projected Population 2030	No. of Households 2030	Additional People 2020-2030	Additional Households 2020-2030	Land Required @ 25duha	2020 Housing Waiting List	2020-2030 Total Housing Demand	Land Required (ha)
Prince Albert Town SP	0.67	Low	1153	303	1192	314	1233	324	80	21	0.84	718	859	34
	1.1	Med			1218	321	1287	339	134	35	1.41			
	1.73	High			1257	331	1371	361	218	57	2.29		955	38
North End SP	0.67	Low	6595	1736	6820	1795	7052	1856	457	120	4.81			
	1.1	Med			6968	1834	7362	1937	767	202	8.07		1103	44
	1.73	High			7191	1892	7841	2063	1246	328	13.11			

Figure 3.53: Prince Albert Town Land and Population Analysis 2020

STRATEGY C: LEEU GAMKA

Proposed nodes:

1. Welgemoed Neighbourhood Node
2. Bitterwater Neighbourhood Node
3. Leeu Gamka Railway Node

Planned Housing Sites:

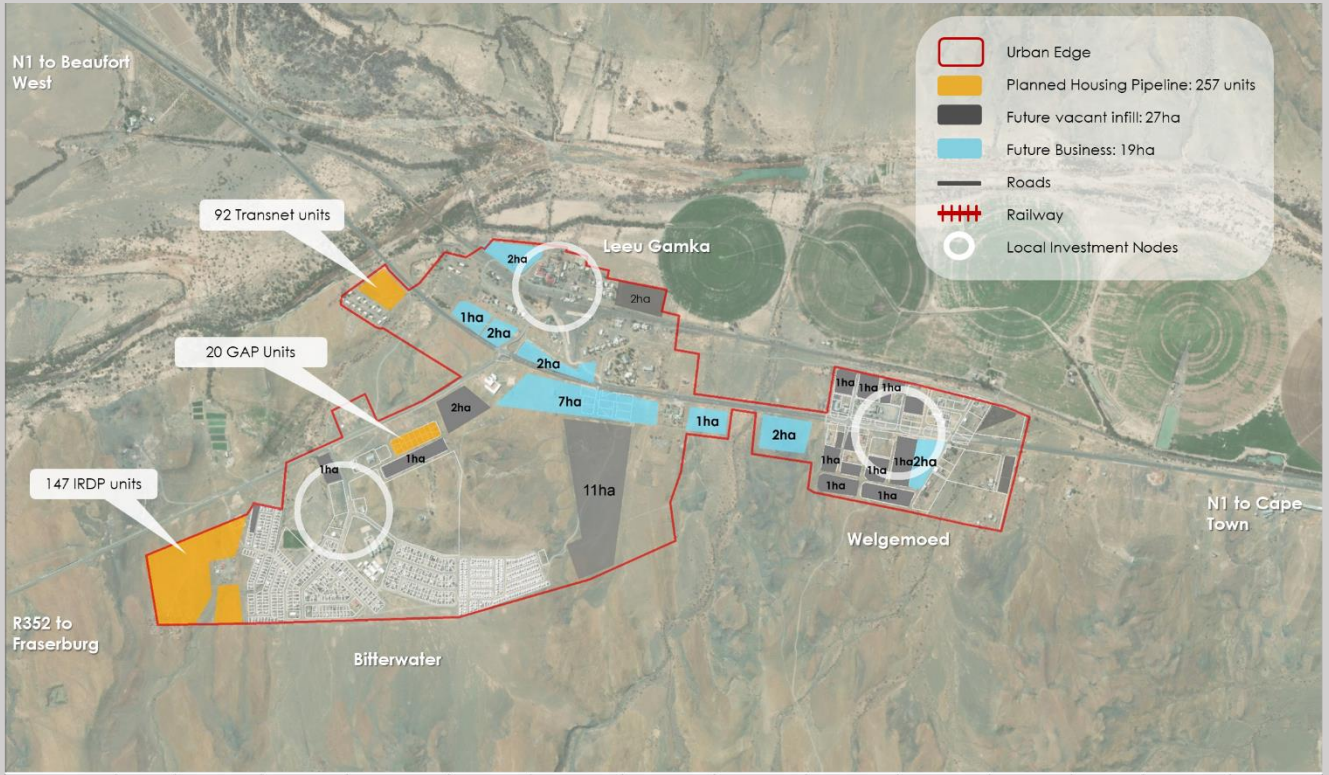
- 92 Transnet
- 20 GAP
- 147 IRDP

All future vacant infill (grey) totals 27 ha. This can accommodate **675** units at 25 du/ha. Housing in Leeu Gamka should be accompanied with business opportunity and a total of **18ha** of land has been designated for future business.

In the medium growth scenario, Welgemoed and Leeu Gamka will have **76** additional people and **20** additional households. This will require **0.8** hectares of land.

In the medium growth scenario, **Bitterwater** will have **266** additional people and **70** additional households. This will require **3.10** hectares of land.

The 2020 Housing waiting list is **335** applicants. If this is considered the backlog, the total housing demand between 2020 and 2030 would be 20 + 70 + 335 = **425** units. This would require **17** ha of land.



Area	Growth Rate %	Growth Scenario Rank	Base Population 2020	Base No. of Households 2020 (Household size 3.44)	Projected Population 2025	Projected No. of Households 2025	Projected Population 2030	Projected No. of Households 2030	Additional People 2020-2030	Additional Households 2020-2030	Land Required @ 25du/ha	2020 Housing Waiting List	2020-2030 Total Housing Demand	Land Required (ha) @ 25 du/ha
Bittewater SP	0.67	Low	2290	603	2368	623	2449	644	159	42	1.67	335	389	16
	1.1	Med			2419	637	2556	673	266	70	2.80			
	1.73	High			2497	657	2723	716	433	114	4.55		425	17
Welgemoed & Leeu Gamka SP	0.67	Low	654	172	676	178	699	184	45	12	0.48			
	1.1	Med			691	182	730	192	76	20	0.80			
	1.73	High			713	188	778	205	124	33	1.30		481	19

Figure 3.54: Leeu Gamka Town Land and Population Analysis 2020

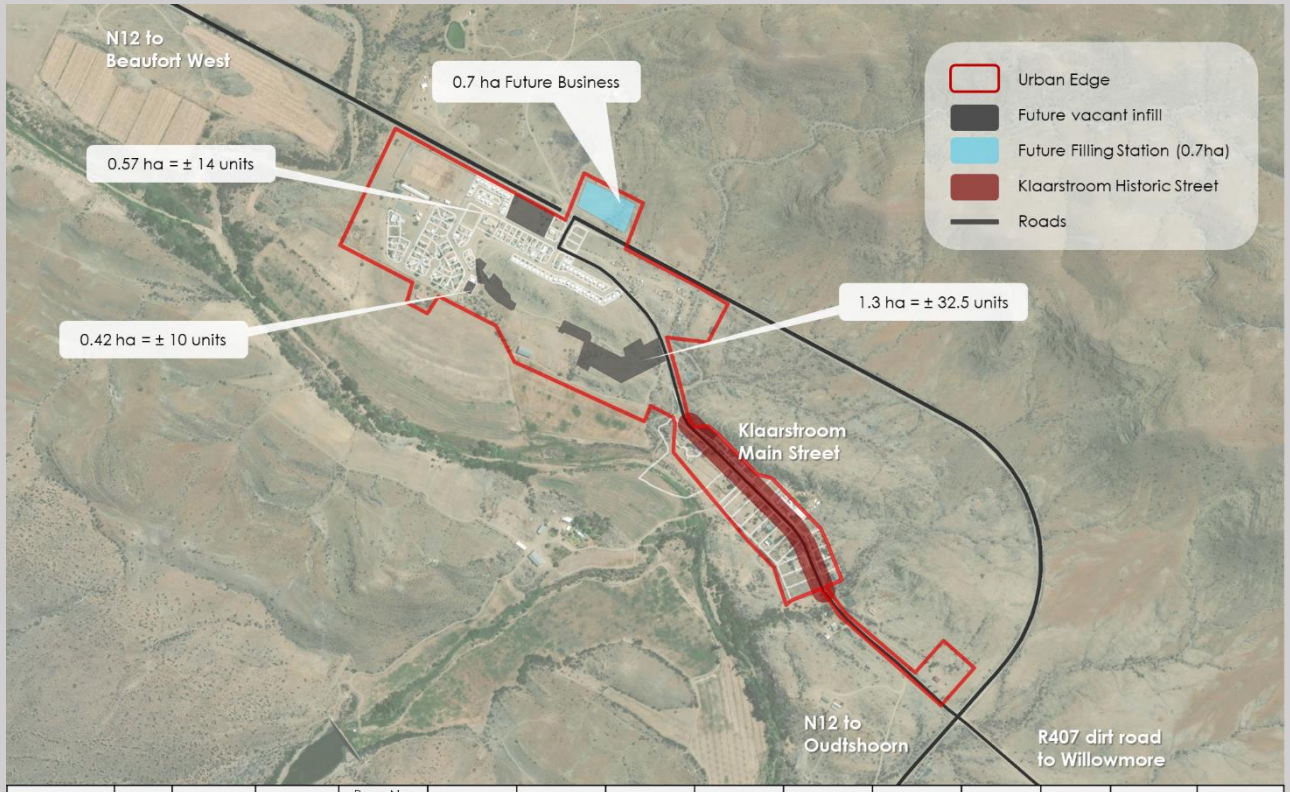
STRATEGY C: KLAARSTROOM

All future vacant infill (grey) totals 2.29 ha which can accommodate **56** units at 25 du/ha.

A total **0.7**ha of land has been designated for future business, namely a filling station.

In the medium growth scenario Klaarstroom will have **75** additional people and **20** additional households. This will require **0.79** hectares of land.

The 2020 Housing waiting list for Klaarstroom is **144** applicants. If this is considered the backlog, the total housing demand between 2020-2030 would be 20 + 144 = **164** units. This would require **7 ha** of land, which is not available in this settlement. Because of this, the housing waiting list for Klaarstroom must be scrutinised and cleaned and those on the waiting list possibly provided accommodation in Prince Albert Town where services and jobs are more available.



Area	Growth Rate %	Growth Scenario Rank	Base Population 2020	Base No. of Households 2020 (Household size 3.44)	Projected Population 2025	Projected No. of Households 2025	Projected Population 2030	Projected No. of Households 2030	Additional People 2020-2030	Additional Households 2020-2030	Land Required @ 25du/ha	2020 Housing Waiting List	2020-2030 Total Housing Demand	Land Required (ha) @ 25 du/ha
Klaarstroom	0.67	Low	644	169	666	175	689	181	45	12	0.47	144	156	6
	1.1	Med			680	179	719	189	75	20	0.79		164	7
	1.73	High			702	185	766	201	122	32	1.28		176	7

Figure 3.55: Klaarstroom Land and Population Analysis 2020

3.9.5 Policy C5: Asset Management & Infrastructure Maintenance Policy

Assets and infrastructure in Prince Albert Municipality, consistent with national and provincial trends, are under severe strain. This is due in part to historic underinvestment in maintenance, rehabilitation and renewal, diminishing budgets, ageing assets and infrastructure, and a focus on the creation of new infrastructure rather than on the maintenance of existing infrastructure.

Given this, the following policy guidelines set out the asset management and infrastructure maintenance policy that apply to water and sanitation assets, roads and sidewalks, solid waste, building, storm water, and community facility assets.

The core objective of this policy is for Prince Albert Municipality to focus on asset and infrastructure maintenance. It recognises that no further spatial development or growth, can be accommodated without a commensurate focus on maintaining the assets and infrastructure that underpin existing urban land use.

Policy C5 Guidelines:

Both the CKDM and Prince Albert Municipality **must** prepare and implement **Asset Management and Infrastructure Maintenance Plans** that are responsive to their mandates and responsibilities (or delegated responsibilities). These asset and infrastructure maintenance plans should:

I. Define desired **maintenance outcomes** per asset / infrastructure class;
II. identify **all assets** in the Municipality and who is responsible for their maintenance (i.e., **develop an asset register**).
III. Identify **critical assets** based on the risk and impact of asset or infrastructure failure.
IV. Determine the **maintenance options** available and select option that has the lowest life-cycle cost.
V. Be prepared for any new capital investment in infrastructure assets.

Greater detail is available on asset and infrastructure maintenance from various guidelines that have been developed. These include the MFMA Local Government Capital Asset Management Guideline (2008), the Guidelines for Infrastructure Asset Management in Local Government (2007) and the International Infrastructure Management Manual (2006).

3.9.6 Policy C6: A Responsively Skilled Population

According to the 2020 Municipal Economic Review and Outlook Report (MERO), Prince Albert Municipality's GDPR was valued at R 505 million in 2019 with a total employment base of 3890. A description of the sectors that contributed to the GDPR and employment in PAM is provided in Figure 3.56. In 2018, the general government sector contributed the largest GDPR share to the local economy (23.2%) and is also an important contributor to local employment (15.3%). Conversely, the agriculture, forestry and fishing sector were the biggest contributor to employment (34.9%) and the second biggest contributor to local GDPR in the same year. The high reliance of the economy on the government and agriculture sectors makes for a volatile economy, as the government sector is often influenced by fiscal constraints, which have an impact on municipal spending and the associated economic impact. Furthermore, agricultural production is vulnerable to various external factors. Therefore, economic diversification is needed to make PAM's settlements more resilient.

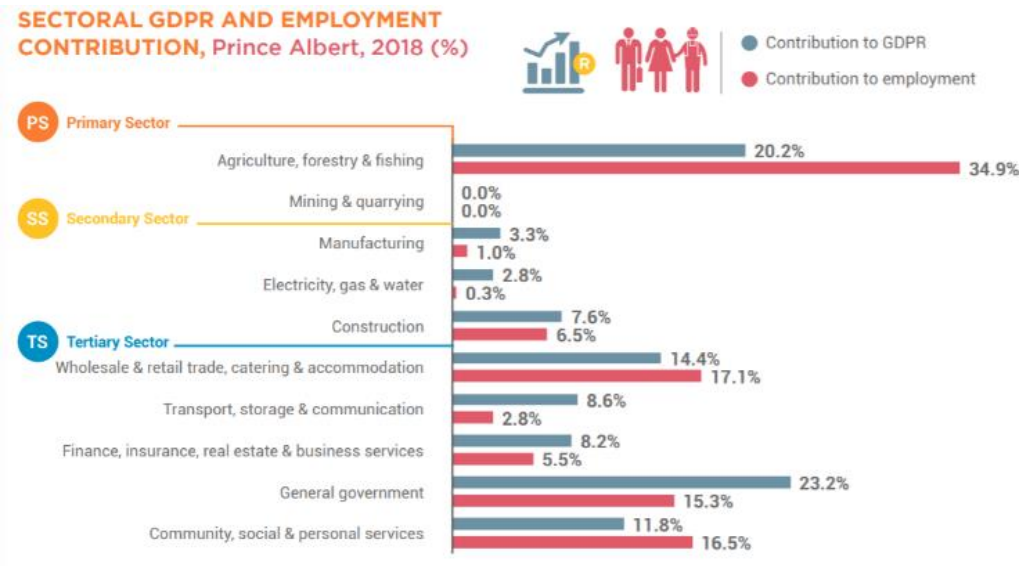


Figure 3.56: Sectoral GDPR and Employment 2018/19 (Source: MERO, 2020)

Prince Albert will primarily be generating job opportunities in agri-processing, tourism and energy in the future, with potential in oil and gas over the medium to long term. Prince Albert Municipality should seek to attract enough appropriately qualified technically and vocationally skilled people to meet the needs of prioritised economic growth areas. The WCG has also identified the following critical occupations for which there is, or will be, high demand but inadequate supply within **5 priority economic sectors**:

1. Oil and Gas;
2. agri-processing;
3. tourism;
4. energy; and
5. ICT (Broadband).

It is worth noting that the COVID-19 pandemic has accelerated existing trends in technology, telework and automation. This will have long lasting effects on how people live and work.

The mining and quarrying sector in the district can provide an opportunity to diversify economic activity and create new employment opportunities. The area north of the town of Prince Albert is a potential mining hotspot because it has a high density of uranium deposits

Policy C6 Guidelines:

I. Promote participation in the tertiary economy – specifically in retail, trade, catering and accommodation (i.e. the tourism sector), business and social services.

II. Focus skills enhancement programmes on sectors that have to do with climate change resilience.

III. Encourage people to enter and create employment opportunities in the **secondary (manufacturing) sector,** which is currently barely registering any performance in the region.

IV. Engage the Department of Education and other stakeholders who offer tertiary education and skills development regarding support for school-leavers who have not matriculated or seek vocational training.

V. Investigate underutilised facilities that can serve as locations for such training initiatives and define how the multi-functionality of spaces will be managed;

VI. Explore the potential for Internet expansion through Space X Star Link (Rethink the need for online learning).

VII. The roll-out of the Green Economy and broadband programmes have the potential to enhance the transformation agenda by lowering the barriers to entry for businesses which are run by women who are home-based and geographically distant from traditional business centres.

3.10 STRATEGY D: PARTNERSHIP-DRIVEN GOVERNANCE AND ADMINISTRATION TOWARDS IMPROVED FINANCIAL AND NON-FINANCIAL SUSTAINABILITY AND RESILIENCE

The Prince Albert Municipality cannot, by itself, address many of the social, economic and environmental issues and opportunities it faces. It requires cooperation and partnership not only with other spheres of government, but also partnerships with civic organisations, private sector businesses and the public at large to comprehensively address many of the challenges.

3.10.1 Policy D1: Shared Service Centre for the Central Karoo

Prince Albert Municipality, together with the rest of the Central Karoo, is a sparsely populated region that can greatly benefit from 'bringing together' the experience, capabilities and finances of the three local municipalities (Beaufort West, Laingsburg and Prince Albert) under a single umbrella through a shared service centre. This can perform a range of functions, not least of which is the planning function as defined in SPLUMA, LUPA and the local municipal planning bylaws. Such shared service centres could also include provincial regional offices and expertise as well, if this is required.

A Shared Service Centre Model for the Central Karoo was developed in 2012 but not implemented because of lack of capacity and adequate resources to implement the communication mandate. **This must be implemented as a matter of priority, particularly for the town planning function and planning tribunals as well as finance, engineering, and technical services.** A shared service centre is required to split time between the municipalities, as per the proposed model.

3.10.2 Policy D2: Integrated Planning, Budgeting and Implementation

The WCG, together with the municipalities of the Western Cape, has implemented an Integrated Work Plan with the intention that all of government seeks to plan, budget and implement in a more coordinated, integrated and sequenced manner. This is in line with the Joint District Approach being used nationally.

Various platforms and engagements take place throughout the year in which integrated planning, integrated budgeting and integrated implementation are reported on and should take place. The Central Karoo DM should use these forums to ensure the implementation of its Integrated Development Plan and Spatial Development Framework.

Various annual engagements are set out in the Integrated Work Plan (2018), as shown in Figure 3.57 on the following page. In short these are:

- Provincial Strategic Planning in July – ensuring provincial alignment at the strategic level;
- Provincial Top Management & Municipal Managers engagement in September – ensuring provincial and municipal planning engagement over strategic planning alignment;
- Integrated Municipal Engagements (IDP Indaba 1) in October / November – ensuring strategic and technical alignment between provincial government and municipal government;
- Provincial Government Medium Term Expenditure Committee (PGMTEC) 1 & 2 in November and January for provincial budget alignment; and
- Local Government Medium Term Expenditure Committee (LGMTEC) engagements in April / May to ensure municipal budget alignment.

The new district-based model will attempt to address the need for a capable and developmental state. The aim of a district-based approach is to focus on regional collaboration in the 44 districts and eight metros nationwide, which will attempt to ensure that municipalities are properly supported and adequately resourced. The delivery model will aim to break down the silos between the different spheres of government in a bid to improve service delivery in the 257 municipalities across the country.

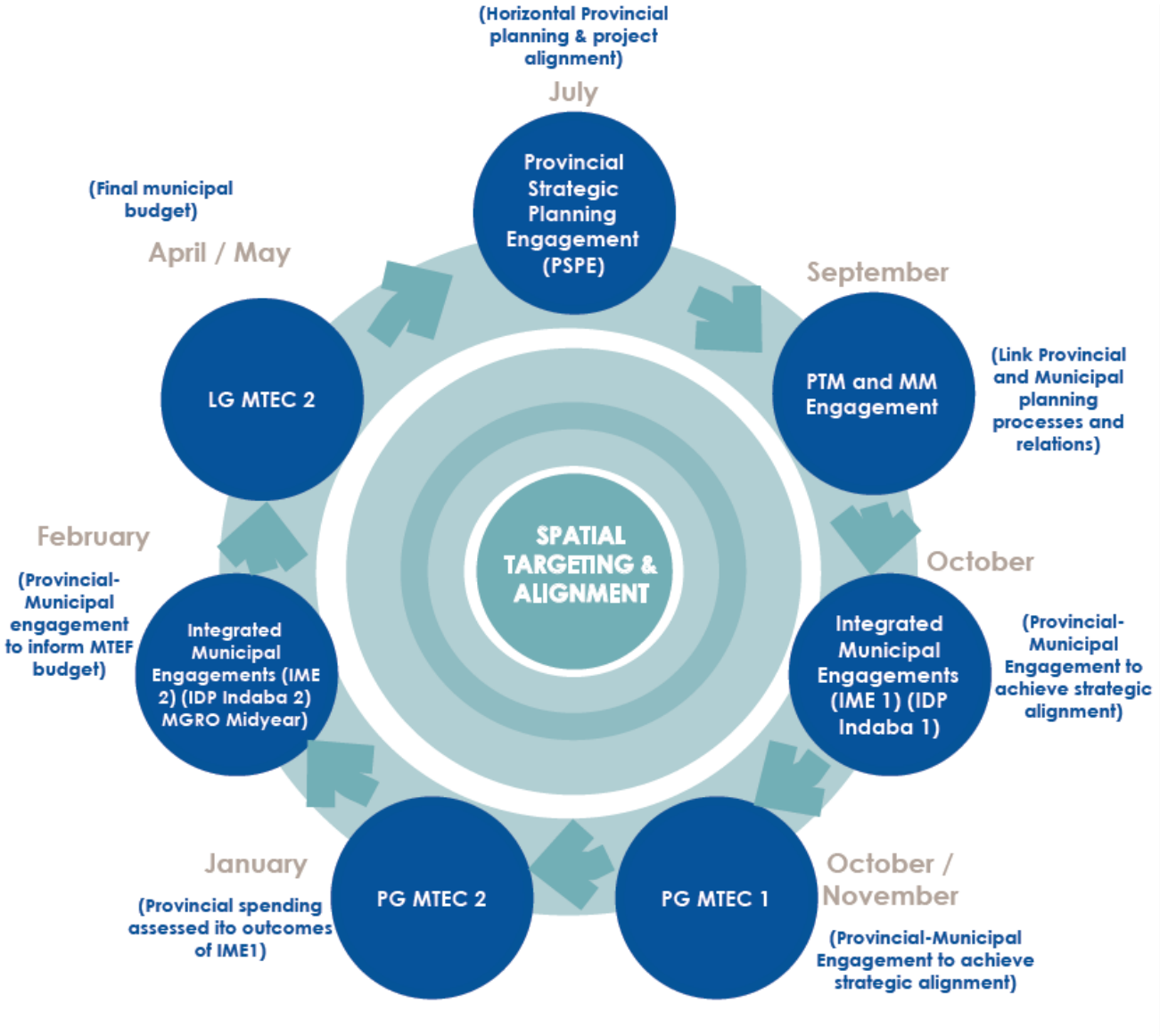


Figure 3.57: Diagram of various annual engagements as set out in the Integrated Work Plan (2018)

2.11 PRINCE ALBERT TOWN SPATIAL DEVELOPMENT FRAMEWORK 2020

Figure 3.58 shows the MSDF map for Prince Albert Town. The primary spatial strategy is to encourage the growth of North End towards Prince Albert South via the integration precinct and adjoining priority housing sites 1,3,4 and 5 as well as priority school site 2. The optimised use of land and social facility clustering will ensure spatial transformation as well as municipal financial sustainability in the form of reduced service impact costs associated with low density development. The following 7 important points can be made about the Prince Albert Town SDF Map:

1. There are updated 2017 Critical Biodiversity Areas based on the 2017 Biodiversity Spatial Plan;

2. There is a more contained urban edge to ensure that the priority housing sites are developed first. These sites form part of the larger integration precinct which aims to optimise the use of land and reduce walking distances for residents in North End.

3. An additional primary school will be triggered by the future facility demands of the town. Site 2 can therefore include a primary school or even secondary school (if needed) which doubles up on use of the sport field. This will require innovative design and partnership and the benefits cannot be understated for the settlement configuration of the town in the long term.

4. Figure 3.58 also shows the area where a further assessment is required to determine the impact of rezoning and additional dwelling units in the Historic Town Farms.

5. The heritage overlay zone must be adopted as part of the municipal zoning scheme bylaw and can guide land use management through the sensitive regard for all applications within this area;

6. To ensure pedestrian safety and ecological continuity there is a network of sidewalks, tree planting and lighting as well as safety kiosk at nodes. A designated bicycle lane is also proposed along Church Street for cyclists; and

7. The vacant infill land north of North End is last priority for a residential and other purposes. This land should only be taken up once the integration precinct has been successfully implemented to the furthest extent possible.

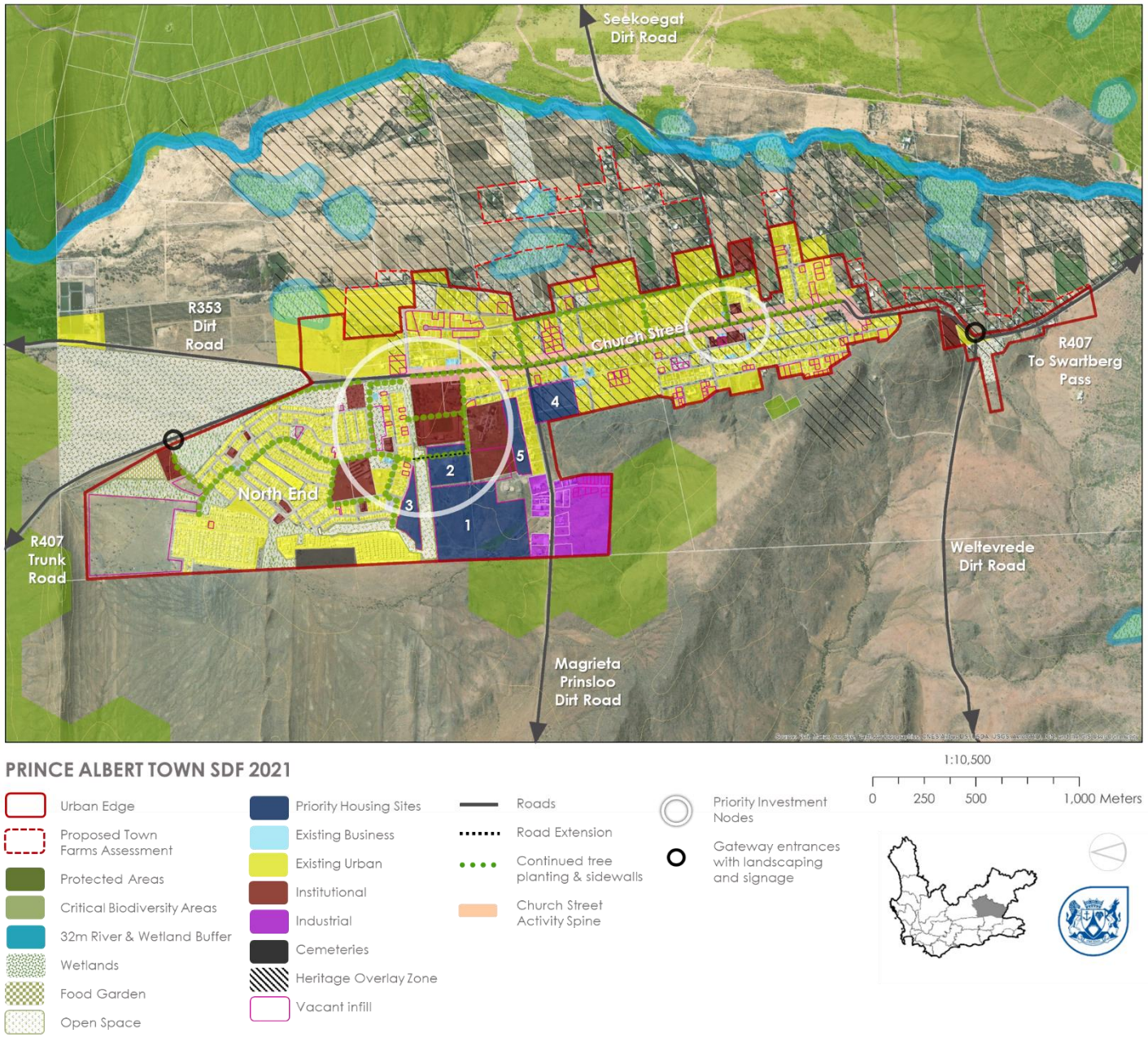


Figure 3.58: Prince Albert Town Spatial Development Framework

3.12 SPATIAL CATEGORIES TO GUIDE INVESTMENT IN PRINCE ALBERT TOWN

Figure 3.59 shows the '**spatial categories'** which should guide the municipality's investment priorities in Prince Albert Town. Spatial Categories for investment planning that have distinct investment needs and desired outcomes, in line with the spatial logic set out in this MSDF. These areas will have different infrastructure planning requirements and spatial planning intent, and hence will require different infrastructure investment approaches or strategies. The following types of spatial categories for investment planning have been identified in Prince Albert and are shown in Figure 3.58:

3.12.1 New Development Areas

- The Integration Precinct, particularly the adjoining housing pipeline (Priority housing sites 1,2 3,4 and 5 shown in yellow) are considered new development areas. The aim of these sites is to promote the spatial transformation of North End with the historic town and to accommodate the future housing demand projections. Priority sites 1 and 3 can be considered as part of North End while priority sites 4 and 5 can be considered as part of the historic main town. Priority Sites 1 and 3 should be considered for GAP housing to suit the needs of the potential GAP housing market. Priority Site 2 can be used for residential infill with the potential of school that doubles up on use of the sports field.

3.12.2 Upgrade Areas

- North End (shown in red in Figure 3.59) is an area to focus investment in infrastructure upgrading. This is because North End is the densest and most populated area of the municipality, with the highest need for infrastructure upgrades.

- North End is not a high rate generating area and a fine balance must be made between generating revenue and bringing the area up to an acceptable level of service. The spatial strategy in North End is to accommodates densities of up to 50 du/ha. Much of the older eastern portion of North End can be developed privately to include second dwelling units. Public space improvements, and improvements to road infrastructure and pedestrian networks are needed in this area.

3.12.3 Consolidation Areas

- Prince Albert Town Centre and Church Street are considered consolidation areas, meaning that infrastructure renewal and maintenance are the priorities and that infill and densification should only be allowed if it does not undermine the character and feel of the town. Therefore, in the case of Priority Housing Site 5, vernacular housing typologies and frontages will be required as part of the potential GAP housing development.

- The consolidation area includes a portion of the Historic Farms, where the town farms assessment should take place to determine the full-service related impact of rezoning and additional dwelling units.

3.12.4 Long Term Development Areas

- The land North of North End is considered last priority land. This land should only be taken up after the integration precinct has been successfully pursued; and

- The vacant land in the Industrial Development Area is considered long term development to accommodate future demand and contribute to economic growth and employment opportunities.

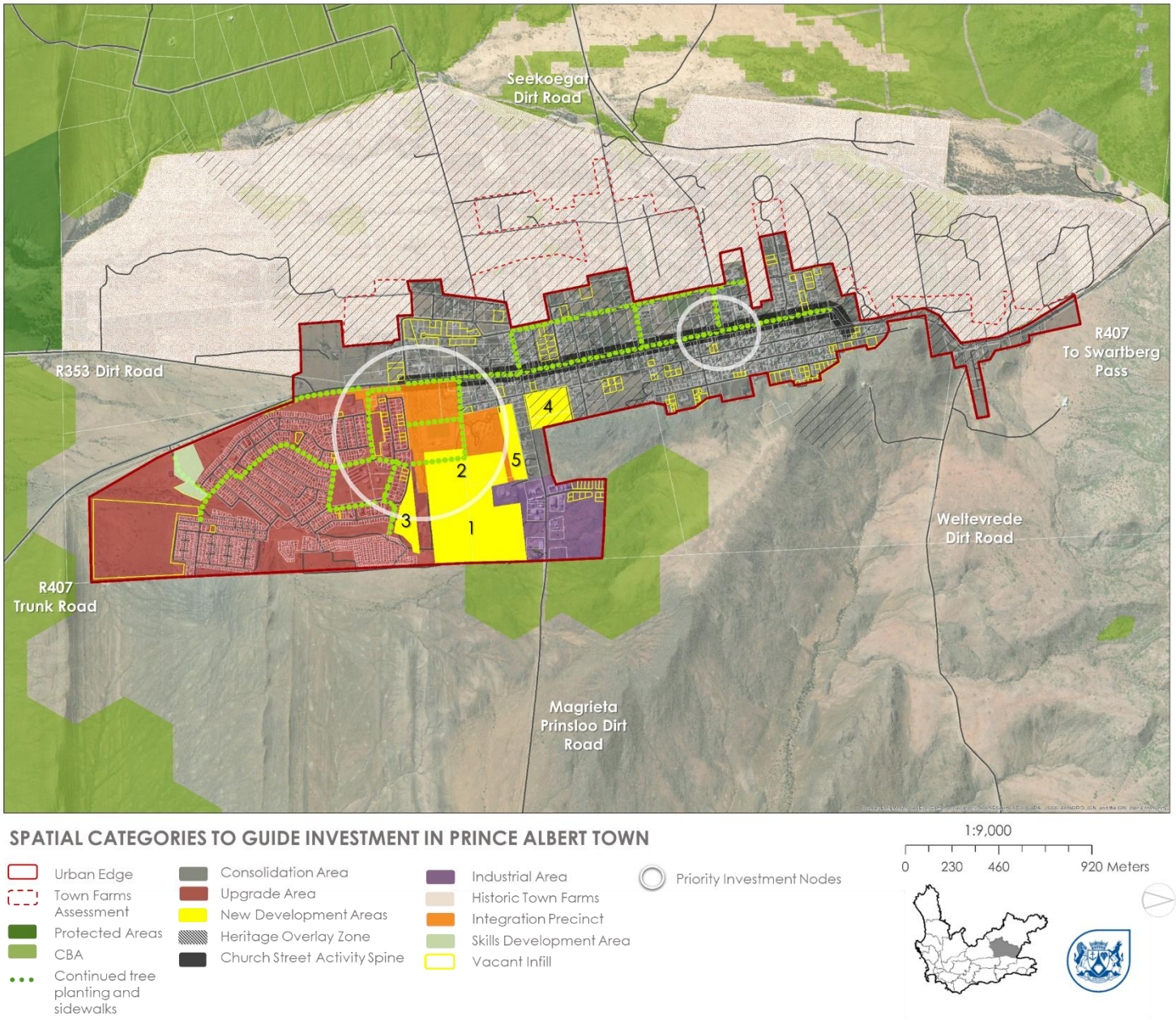


Figure 3.59: Prince Albert Town Areas Priority Areas for Investment Alignment

3.13 CATALYTIC PROJECT 1: INTEGRATION PRECINCT

The Integration Precinct aims to reconnect the historic town of Prince Albert with North End through a series of sequenced projects. A **precinct/local area plan** is needed to better package and enhance the design of the area. Figure 3.61 on the following page provides a conceptual layout for the precinct. The precinct currently consists of:

1. The extended Thusong Centre to house the new municipal offices. The previous offices were dilapidated, and this will provide the municipal officials with a better capability of delivery services while doubling up on optimised location to North End;
2. The sport and recreational sub-area which funding will continue to be obtained from DCAS;
3. The Prince Albert Hospital (29-bed facility) which caters for the medical needs of Prince Albert, Prince Albert Rural, Leeu Gamka, Klaarstroom and Merweville communities; and
4. Nearby retail related uses such as a BP Garage, SPAR; ATM, bottle store and public pool and learning area.

The following projects can and should be aligned to this precinct:

1. The development of priority housing sites 1,3,4 and 5 which, together with Site 2, can yield up to 1042 residential units at 50 du/ha. The sites can accommodate Prince Albert Town's 10-year total housing. Priority Site 2 can house a possible primary or secondary school for 400 learners which doubles up with the sport area. Further description is provided in the Chapter 4 CEF of this MSDF;
2. The extension of Luttig Street to the Provincial Hospital as the first bridge between North End and South End (See Figure 3.62 for example in Piketberg);
3. Enhanced safety, walkability and public spaces with an outdoor amphitheatre, lighted walkways, landscaping and streetscape improvements; and a
4. Zebra crossing to the filling station and SPAR.

3.14 CATALYTIC PROJECT 2: SKILLS DEVELOPMENT AREA

The Skills Development area is shown in Figure 3.60 and Figure 3.59 and consists of:

1. The Environmental Education Centre (computer training facilities, Wi-Fi access, community hall, "smart garden") is linked up with a semi-formal park.
2. Proposed ECD centre: Local Prince Albert residents, with international financial support (from the Netherlands), approached the municipality for an ideal location for a proposed ECD centre. A possible site has been identified south of and adjacent to the recreation park.
3. POP centre: slightly outside the proposed hub is an existing Path-Out-of-Poverty (POP) centre currently also being used as an ECD centre.
4. Proposed driving school North of the EE centre.

Further work can be done to establish a mini Library at the EE centre which can double up as space for adult education and training classes.

Figure 3.60: Skills Development Area North of North End

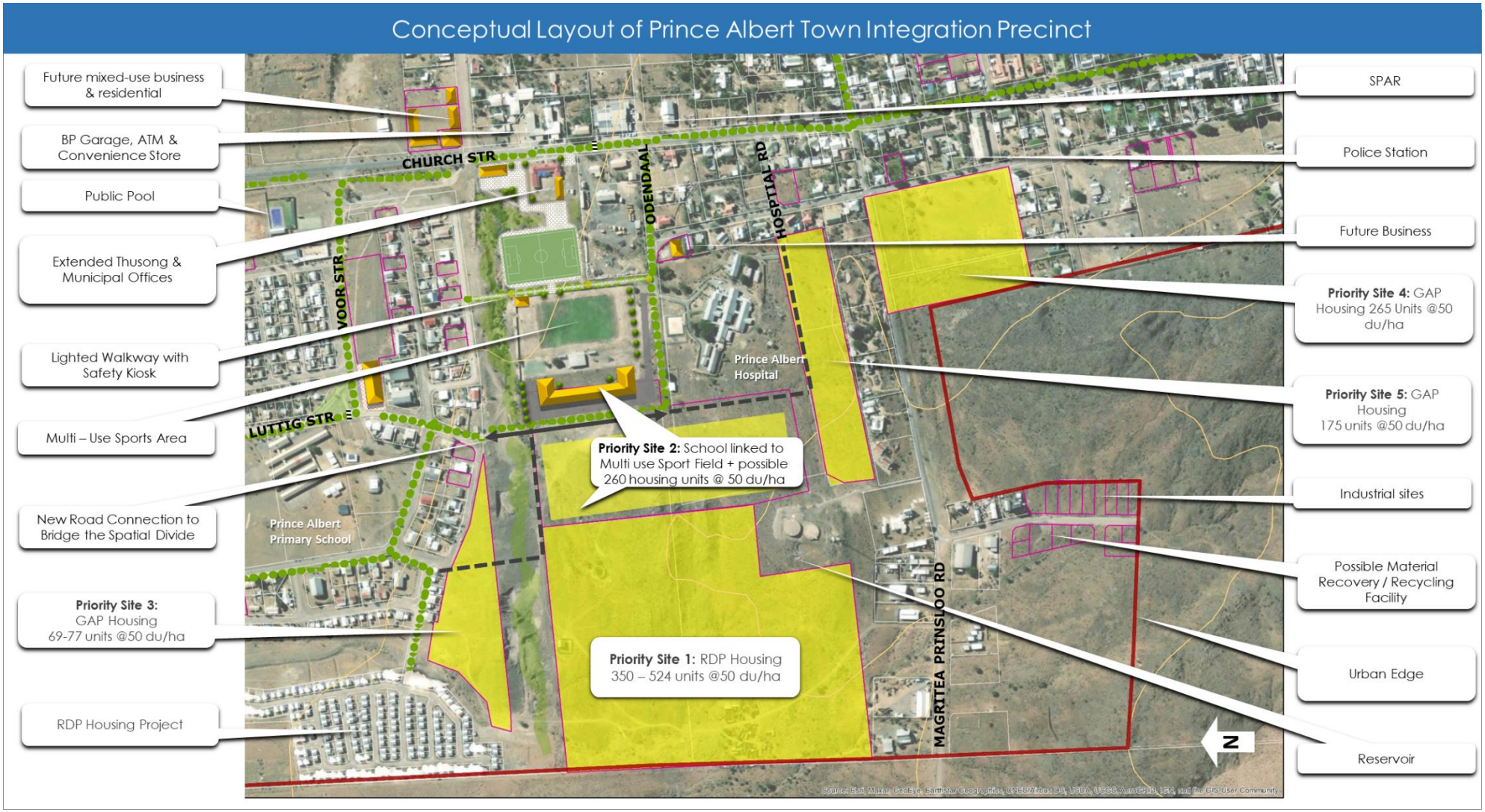


Figure 3.61: Spatial Transformation in Prince Albert Town via the Integration Precinct

Spatial Transformation in Piketberg, Bergrivier

In response to the WCG Regional Socio-Economic Programme's (RSEP) reconstruction toolkit findings, a local area plan was developed for the Piketberg 'integration zone', where a dilapidated old show grounds acted as a buffer between marginalised areas and the CBD. Eight projects were identified in the plan with 3 funded by DEA&DP RSEP, namely:

- The extension of Calendula Street across the showgrounds,
- An outdoor gym, and
- A 3-story active box to serve as a 'safety beacon' for passive surveillance in the integration zone;

The extension of Calendula Street resulted in the immediate integration of the marginalised working class community with the CBD. It marked the coming together of the two parts of Piketberg. A plaque was unveiled proclaiming "Een Piketberg" and the two communities now regularly hosted long table dinners to celebrate the social cohesion that Calendula Street brought about.

The road extension has been a catalyst for the development of a school in the integration zone. In collaboration with the WCED and the DTPW, the school site has been transferred from the municipality to the DTPW. Partnerships with DCAS were also formed to co-fund a modern library located within the identified 'integration zone'.

Figure 3.62: Spatial Transformation in Piketberg with the Regional Socio-Economic Programme's (RSEP) Reconstruction Framework Methodology

3.15 LEEU GAMKA SPATIAL DEVELOPMENT FRAMEWORK 2020

Figure 3.63 shows the SDF for Leeu Gamka. The spatial strategy is to limit growth in Leeu Gamka as far as possible unless economic opportunity warrants otherwise. If this job opportunities come about from solar farming, renewable energy and or shale gas and mining, growth should take place in the form of residential infill accompanied by commercial, retail, light industrial and transport-related development adjacent to the N1 highway. The following projects emanated from the 2014 SDF:

- Landscaping of town entrances;
- Tree planting and landscaping at the railway station; and
- Business and commercial (transport-related) activities to be promoted to the west of the N1.

Recent projects concluded:

- The new emergency medical services station in conjunction with the Western Cape Provincial Health Department to assist accidents on the N1;
- A permanent community health centre, doing away with the previously used mobile clinic; and
- The equipping of boreholes.

Projects the Municipality is currently investigating are:

- Waste to energy and solar farming;
- Drivers and Learning test Centre;
- Local Economic Development Projects;

The following points can be made about the SDF map:

1. Leeu Gamka (the urban edge boundary) is a consolidation zone, meaning that infrastructure renewal and maintenance are the priorities for this area, and limited expansion of the settlement should be allowed, specifically until there is enough jobs opportunities in the area and when an electricity credit collection agreement is concluded to enhance the rates base;

2. The 147-unit planned IRDP project in Bitterwater has been accommodated in the urban edge given its status in the project housing pipeline. Justification is given the availability of services;

3. Extensive residential development directly adjacent the N1 should be discouraged, as this will worsen existing traffic-related dangers i.e. Bitterwater residents crossing the busy N1 highway to get to the Shell garage.

4. Although the proposed investment nodes require more detailed site analysis, the aim is to cluster social facilities and increase densities in these locations and provide for a mix of uses such as residential, local business, education and recreation.

5. Leeu Gamka Primary could double up with a youth centre and creche which can simultaneously reduce the risk of children moving over the N1;

6. A total of 18ha of future commercial, retail, light industrial and transport-related business expansion areas adjacent to the N1 highway are proposed;

7. All sporting facilities require upgrading to include flood lighting, pavilions, shading, access control, fields and courts for netball and tennis; and

8. Continued paving of all streets including sidewalks & speed humps and potential traffic light on N1 to calm traffic; and

9. A paved walkway between Bitterwater and Welgemoed is needed.

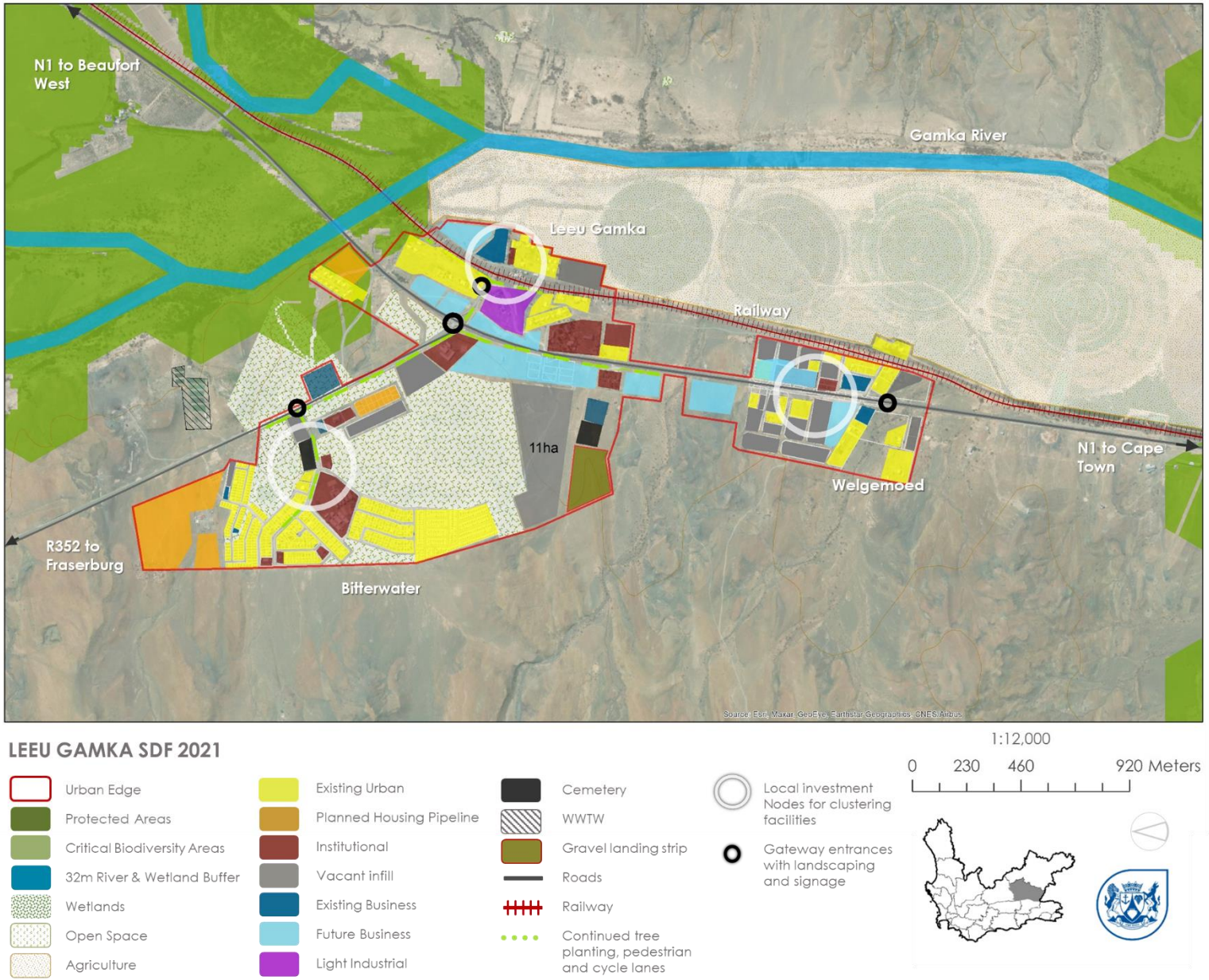


Figure 3.63: Leeu Gamka Spatial Development Framework

3.16 KLAARSTROOM SPATIAL DEVELOPMENT FRAMEWORK 2020

Figure 3.63 shows the SDF for Klaarstroom. The spatial strategy for Klaarstroom maintains that Klaarstroom is a 'minor rural settlement' based on agriculture and tourism. The urban edge boundary is considered a consolidation zone, meaning that infrastructure renewal and maintenance are the priorities for this area, and limited infill and densification should be allowed. The settlement should aim to meet local convenience needs with basic social facilities for surrounding rural communities. The settlement is an historic stop over for tourists travelling between the Karoo and Garden Route and should continue to provide accommodation offerings along the main street and cater for tourism activities. The following points can be made:

1. The density of the proposed infill sites is 25du/ha but can be up to 50 d/ha.

2. Although a 32m river and wetland buffer must continue to be maintained.

3. The area north of the N12, which is earmarked for business development, should accommodate a service station and transport related services.

4. Continue enhancing landscaping and signage at entrance points, which portrays the unique sense of place of Klaarstroom;

5. Promote and enhance the tourism route between Klaarstroom and Willowmore, as well as the route to Meirings Poort;

6. Any additional burial space required should occur south of the existing cemetery;

7. Settlement and mountain views must not be obstructed by any type of development;

8. Tree planting is proposed along the N12 to reduce the visual impact of the sports field wall and to reduce impact of strong winds;

9. Establishment of ablution facilities in main street is proposed;

10. Establishing a 40 km/hour speed limit on main road in Klaarstroom is proposed; and

11. Lighting and an enhanced east west pedestrian linkage is proposed.

12. The Klaarstroom Informal Settlement is shown. It is the biggest in the municipal area with 60 structures and 4-5 residents per structure. The Municipality is currently in the procurement phase of establishing additional ablution facilities at this premises. An agreement was reached with Eskom to supply electricity to the transit area before the end of June 2021

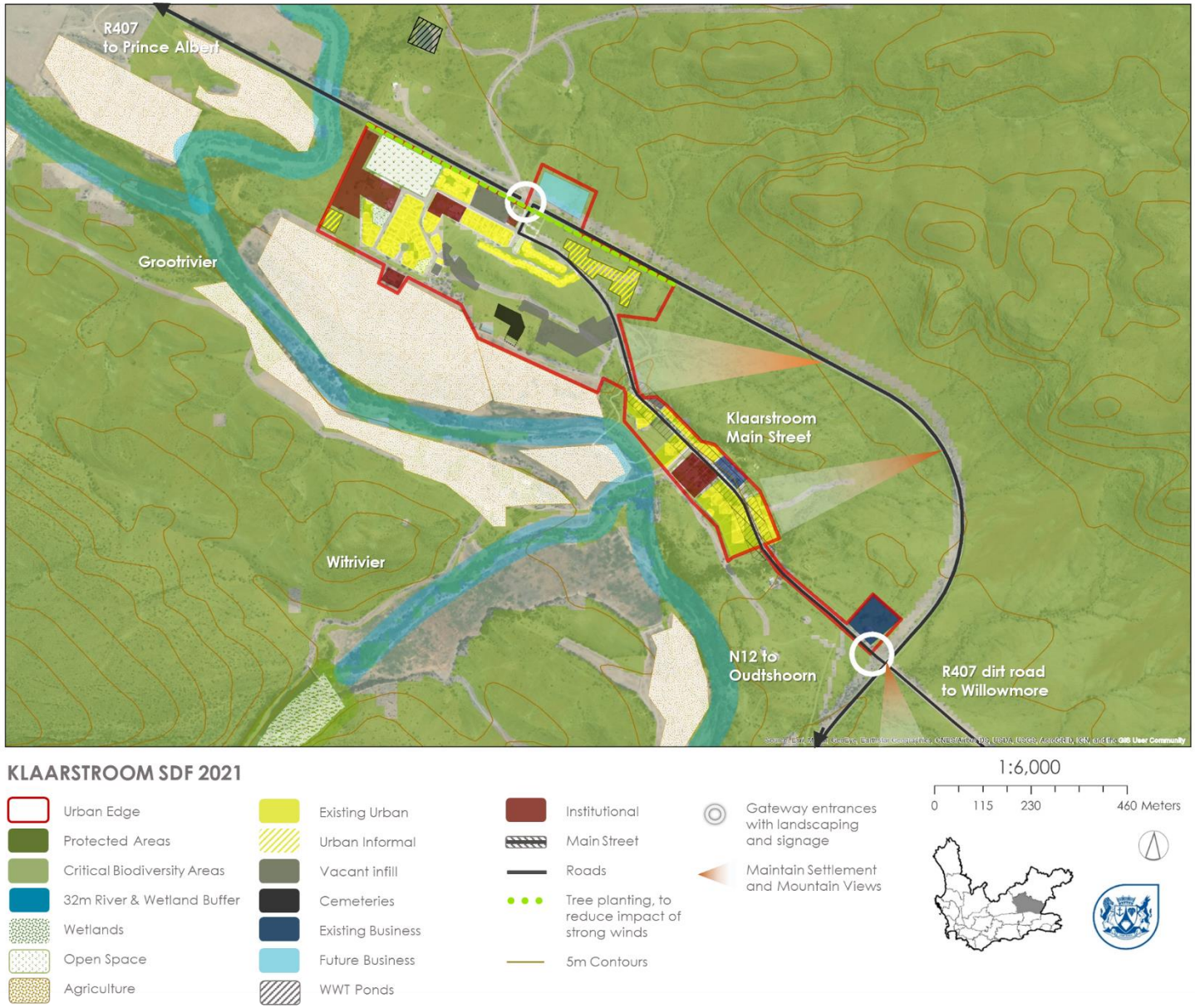


Figure 3.64: Klaarstroom Spatial Development Framework

3.17 PRINCE ALBERT ROAD SPATIAL DEVELOPMENT FRAMEWORK

Figure 3.65 shows the Prince Albert Road SDF. Although future residential development is not encouraged, 0.8ha of land is available if required. Transport-related commercial activities should be accommodated adjacent to the N1.

Projects emanating from the previous SDF include:

- Develop an Anglo Boer War Museum in the area earmarked for tourism development (to be developed).
- Continued landscaping and signage at both gateways on the N.
- Create a focal entrance point at the main entrance to the settlement. This should speak to a railway station thematic and include aesthetic architecture and landscaping.
- Capitalize on the economic opportunity of the national road that crosses it.

These projects should continue to be pursued in this SDF and possibly included in the CEF, pending their affordability.

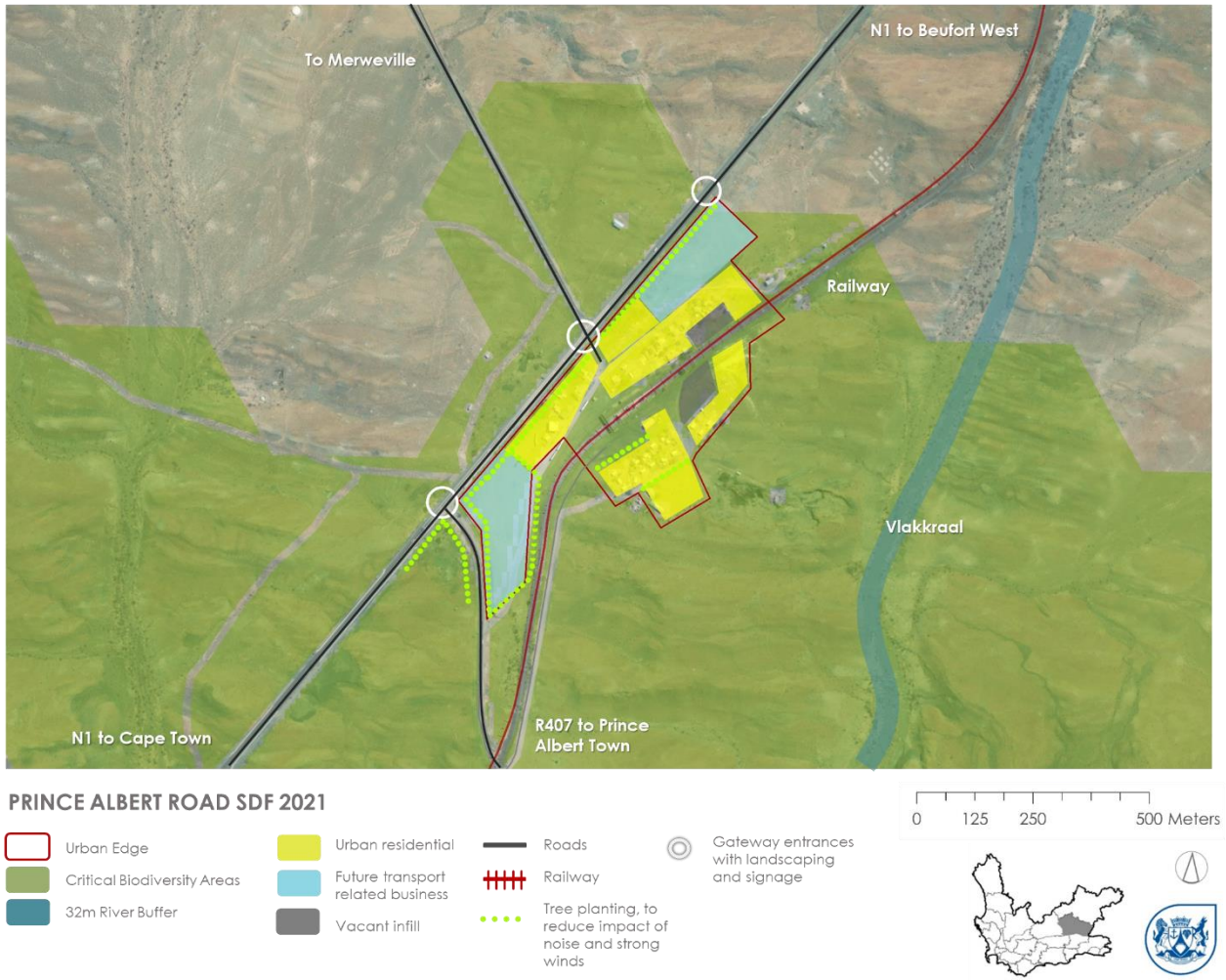


Figure 3.65: Prince Albert Road Spatial Development Framework

3.18 PRINCE ALBERT MUNICIPALITY COMPOSITE SPATIAL DEVELOPMENT FRAMEWORK

Figure 3.66 shows the composite Spatial Development Framework for Prince Albert Municipality. The spatial strategy has been articulated in each the four municipal wide spatial policies proposed in this MSDF and which have been linked to the IDP Strategic Objectives.

Prince Albert Municipality's economy is dependent on its natural resource base and the functioning of this economy is directly linked to the availability of water and the health of the ecological systems. Hence the protection and enhancement of the environment, specifically water security is one of the main strategies of this MSDF.

The urban strategy is to allocate government resources, infrastructure, and facilities according to the proposed 'settlement and nodal hierarchy' and 'regional road network'. This must be accompanied by a transition to green infrastructure, renewable energy and a biomass economy in a way that does not impact on municipal financial sustainability and enhances the tourism product that the region has to offer.

An integrated partnership and governance-based approach is required for better coordination, alignment, and impactful planning, budgeting and delivery. Prince Albert, as part of the Central Karoo, must seek partnership-driven solutions, realising that the challenges are multi-faceted and cannot be addressed only by the local sphere of government. It is therefore required that a range of partnerships be explored to find a shared service solution within the Central Karoo that ensures shared financial viability along with the administrative and logistical burdens associated with servicing a sparse region. Focus areas should include water; gas; energy (specifically renewable energy); rural mobility; and tourism.

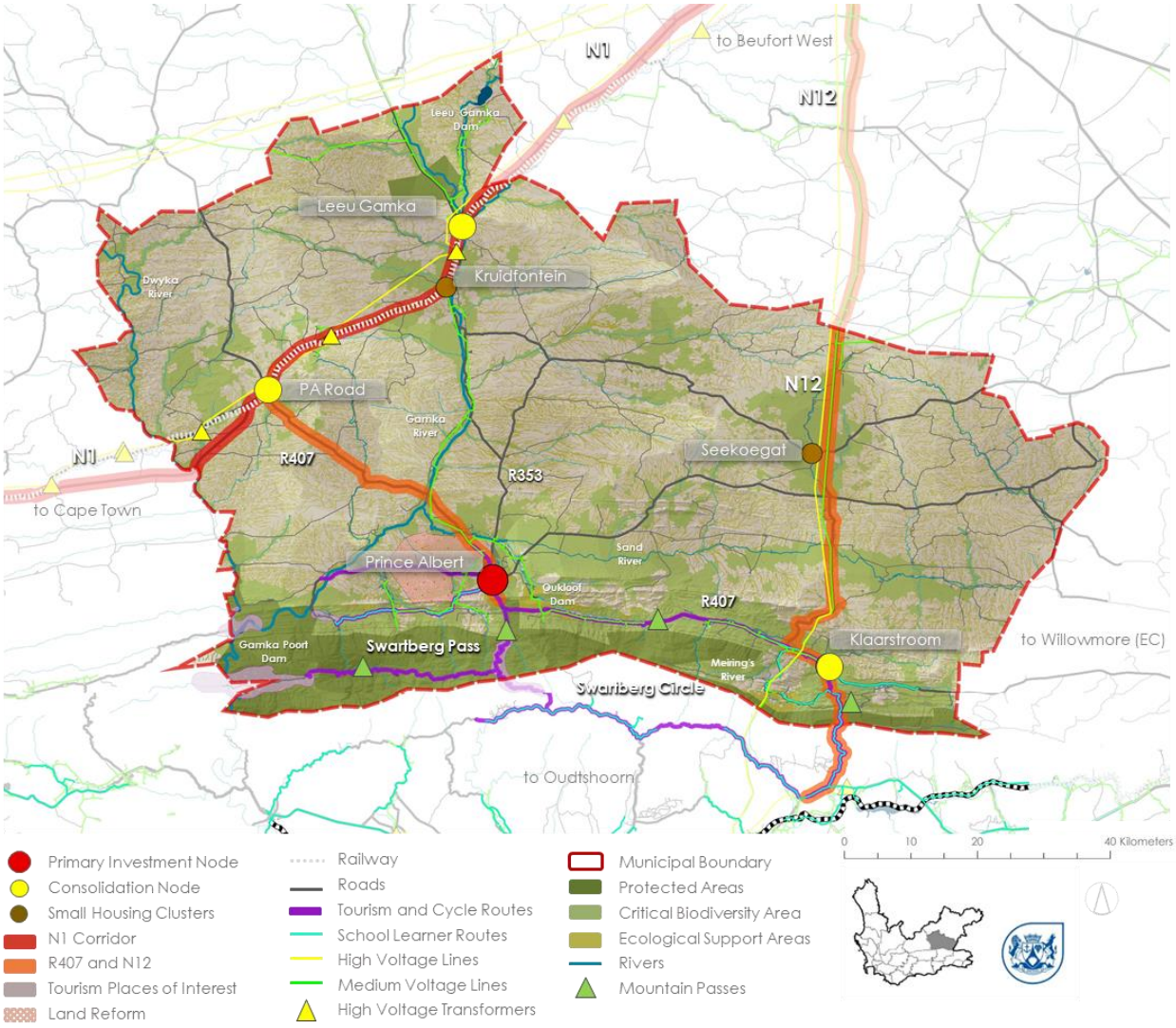


Figure 3.66: Prince Albert Municipality Spatial Development Framework 2020

3.19 PRINCE ALBERT MSDF SPECIFIC PROJECTS

Table 3.7 lists the municipal wide projects emanating out of the policies set out in Chapter 3 MSDF. Table 3.8 lists the district wide actions and projects. The projects that require capital funding will be included in a priority-setting exercise in the Chapter 4 CEF. The SDF Projects should be revisited on an annual basis as part of the IDP review process, especially to determine if new priorities emerge and if the priorities highlighted below remain priorities or have been implemented.

Table 3.7: Municipal Actions or Projects from the MSDF

PROJECT NUMBER	MUNICIPAL SPECIFIC ACTION or PROJECT	BUDGET	TIME FRAME	ROLE-PLAYERS
1	Local Area Plan for the Integration Precinct which should consist of the following projects: 1. The development of priority housing sites 1,3,4 and 5 which, together with Site 2, can yield up to 1042 residential units at 50 du/ha. The sites can accommodate Prince Albert Town's 10-year total housing demand of 955 units. 2. Priority Site 2 can house a possible primary or secondary school for 400 learners which doubles up on use of the sport area. Further description is provided in the Chapter 4 CEF of this MSDF; 2. The extension of Luttig Street to the Provincial Hospital as the first bridge between North End and South End; 3. Enhanced safety, walkability and public spaces with an outdoor amphitheatre, lighted walkways, landscaping and streetscape improvements; and 4. Zebra crossing to garage.	Budget to be determined in the CEF for projects in the Local area plan	2020 – 2030	Prince Albert Local Municipality Department of Human Settlements Department of Cultural Affairs and Sport Department of Education Central Karoo District Municipality Department Environmental Affairs and Development Planning Department of Local Government Business chambers and local civic interest groups Neighbourhood Development Grant
2	Prince Albert Town heritage overlay zone. The overlay zone must be adopted as part of the municipal zoning scheme bylaw and can guide land use management through the sensitive regard for all applications within this area;	Cost of employment (in relation to land use management decision making). To be adopted as part of the development of a municipal zoning scheme bylaw.	2020-2025	Prince Albert Local Municipality/ SAHRA
3	A network of sidewalks, tree planting and lighting as well as safety kiosks at nodes. A designated bicycle lane is also proposed along Church Street for cyclists.	Budget to be determined in the CEF.	2020 – 2030 and ongoing	CKDM Prince Albert Local Municipality

PROJECT NUMBER	MUNICIPAL SPECIFIC ACTION or PROJECT	BUDGET	TIME FRAME	ROLE-PLAYERS
4	Continued enhancement of existing facilities in the Skills Development Precinct: Current EE centre with additional area for Crèche and Mini Library.	Budget to be determined but will currently fall under operations and maintenance.	2020 – 2025 and ongoing	Prince Albert Local Municipality DCAS WCG
5	Conduct a town farms assessment. A further assessment of the town farms must be conducted to determine which farms could potentially be subdivided and sensitively developed to accommodate additional dwelling units without undermining the character and feel of the town, as well as agricultural land.	Cost of employment	2020 – 2025 and ongoing	Prince Albert Local Municipality/ SAHRA

Table 3.8: District Actions or Projects from the CKDM MSDF which are relevant to PAM

DISTRICT WIDE ACTION or PROJECT	BUDGET	TIME FRAME	ROLE-PLAYERS
Ensure that Spatial Planning Categories, based on the latest Western Cape Biodiversity Spatial Planning information, are applied in land use planning decision making within the Central Karoo as per Policy A1. This may require local SDFs to be amended to include new Critical Biodiversity Area data.	Cost of employment (in relation to land use management decision making).	Immediate and ongoing 2020 -2024	Central Karoo District municipality Beaufort West Local Municipality Laingsburg Local Municipality Prince Albert Local Municipality Support from Department of Agriculture, Land Reform and Rural Development and Department of Environmental Affairs and Development Planning
Ensure that all efforts towards building water resilience in the municipality, and responses to the persistent drought conditions, consider the proposals of Policy A2 around building water resilience.	Look beyond the public sector, that is, at business and the broader society to implement the suggested initiatives listed under Policy B4.	Immediate and ongoing	Central Karoo District Municipality Beaufort West Local Municipality Laingsburg Local Municipality Prince Albert Local Municipality Provincial Department of Transport and Public Works National Department of Water and Sanitation
Establish a Central Karoo Shared Service Centre for municipal planning and possibly a GIS function, and potentially other functions, within the Central Karoo.	R375 000 establishment cost. R1.5million annual running cost (based on the Business Plan for the implementation of Shared Services in the Central Karoo).	2020 – 2025	Central Karoo District municipality Beaufort West Local Municipality Laingsburg Local Municipality Prince Albert Local Municipality

Ensure application of Central Karoo and Prince Albert MSDF composite map, including the associated Spatial Planning Categories, in large scale infrastructure or development projects in the Karoo (such as land use approvals for shale gas extraction).	Cost of employment	Immediate and ongoing	Beaufort West Local Municipality Laingsburg Local Municipality Prince Albert Local Municipality
Ensure the District Municipality and all local municipalities develop and implement asset management and infrastructure maintenance policies and plans as per guideline C3 to ensure all infrastructure and assets are well maintained.	To be determined by functionaries, but to be done as part of engineering master plan development process.	2020-2025	Central Karoo District Municipality Beaufort West Local Municipality Laingsburg Local Municipality Prince Albert Local Municipality
For take-up in the Integrated Transport Plan: Gather Gender disaggregated data from surveys on traveller experiences while cycling, walking and moving around in the District, to give insight about the realities and needs of people navigating between towns. Data disaggregated by gender could analyse why men and women make trips to particular places at a particular time, which will provide a better understanding about functional relationships between settlements and larger towns and assist the municipality in addressing the transport needs of the people in a gender responsive manner.	As part of CITP process & budget	2020-2025	Department of Transport and Public Works Central Karoo District Municipality Beaufort West Local Municipality Laingsburg Local Municipality Prince Albert Local Municipality
Develop an urban design guideline for the Central Karoo that assists local municipalities in honouring, enhancing and building upon the unique architectural charm and tradition of the Karoo through its building plan and development management functions.	R1million	2020 - 2025	Department of Environmental Affairs and Development Planning Central Karoo District Municipality Beaufort West Local Municipality Laingsburg Local Municipality Prince Albert Local Municipality

CHAPTER 4: A CAPITAL EXPENDITURE FRAMEWORK FOR PRINCE ALBERT

4.1 INTRODUCTION AND BACKGROUND

This section presents the Capital Expenditure Framework (CEF) for Prince Albert Municipality (PAM) as is required by Section 21(n) of SPLUMA, which requires an MSDF to include a CEF for the municipality's development programmes, depicted spatially. Illustrated in Figure 4.1 below, the intention is to create a 10-year prioritised programme of capital infrastructure that links the spatial planning strategy, infrastructure plans, as well as the broader capital-based project needs of the municipality within the available capital budget.

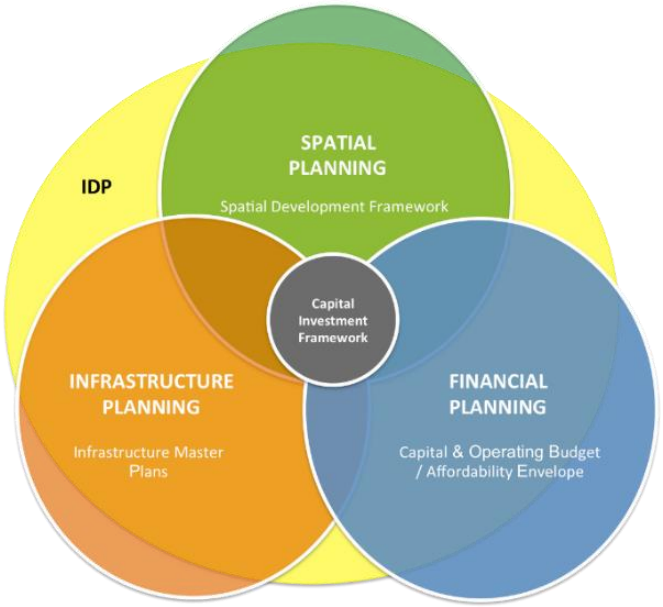


Figure 4.1: The Capital Expenditure Framework as the meeting point between Spatial Planning, Infrastructure Planning and Financial Planning (Knysna SDF, 2019)

The importance of including financial planning is to ensure that a consolidated and prioritized programme of project needs, is affordable and that strategies to address affordability constraints are identified and where possible addressed. This CEF therefore engages with PAM's financial parameters to determine a prioritised capital expenditure programme. Figure 4.2 below illustrates this concept that, invariably, the level of need for infrastructure investment within South African municipalities is usually greater than what can be afforded.

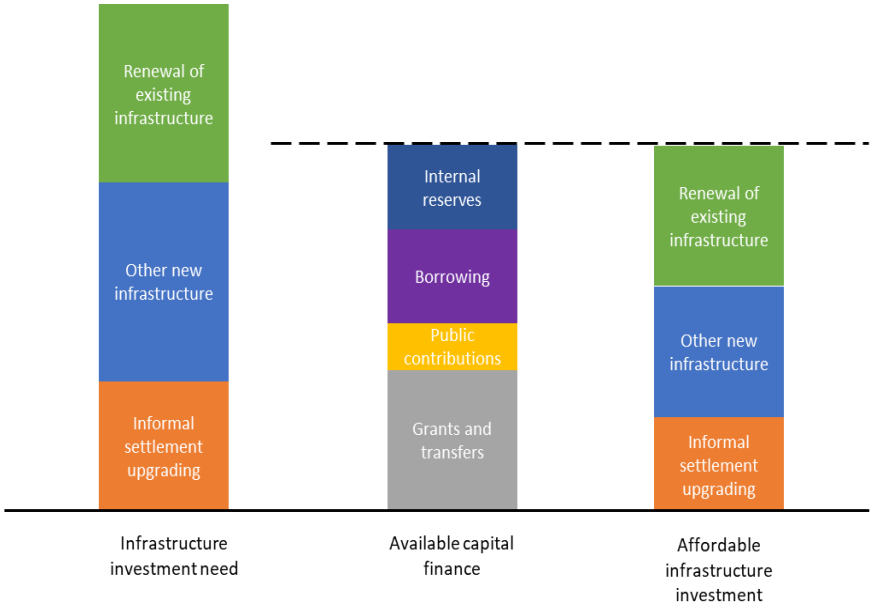


Figure 4.2: The Capital Expenditure Framework assists in determining what is affordable, within the 'affordability envelope' that is set out in the Long-Term Financial Plan (Knysna SDF, 2019)

4.2 GOVERNANCE AND INSTITUTIONAL CONSIDERATIONS

The ideal relationship between the MSDF, infrastructure master plans, IDP, and municipal budgets from a built environment perspective is shown in Figure 4.3. This CEF will be adopted before a new IDP cycle in 2022, therefore presenting an opportune time for the MSDF's spatial strategy to provide a basis from which the municipality's outdated infrastructure master plans can be spatially aligned, and the correct projects brought into the 5-year IDP planning and 3-year MTTREF intervals.

Ideally, the infrastructure and built environment programmes articulated in the 5-year IDP should align with the spatial objectives of the MSDF. However, a contributing factor to the lack of integration and spatial transformation is that strategic policy seldom leads the implementation agenda. Rather, implementation, and more specifically budget spending, tends to focus on the short-term which is further entrenched in the 5-year programme of the "term of office" political structure (contained in the IDP) and the 3-year budget cycles (contained in the MTREF). The CEF seeks to ensure a strategy-led approach to project identification, budgeting and implementation.

It's worth disclaiming that PAM's councillors and officials, pending the needs and risks that arise, will likely make annual changes to the CEF's prioritised capital portfolio of projects. Nonetheless, the goal of this CEF remains to put PAM in a better position to do 3-10-year project prioritisation, budgeting and to ensure that the most strategy-aligned projects are implemented. The CEF is therefore an iterative tool that will assist the municipality and other spheres of government in prioritizing needs (projects), based on municipal spatial strategy, and developing accountable and defendable budgets.

It is critical that the CEF is co-owned by all departments within the municipality. This is expected to be the case since the capital portfolio of projects emanate from the sector plans and needs of the municipality. PAM officials, and specifically the town planning, infrastructure services and finance office will therefore need to be trained to keep the capital project portfolio updated and scored in line with PAM's changing needs and priorities.

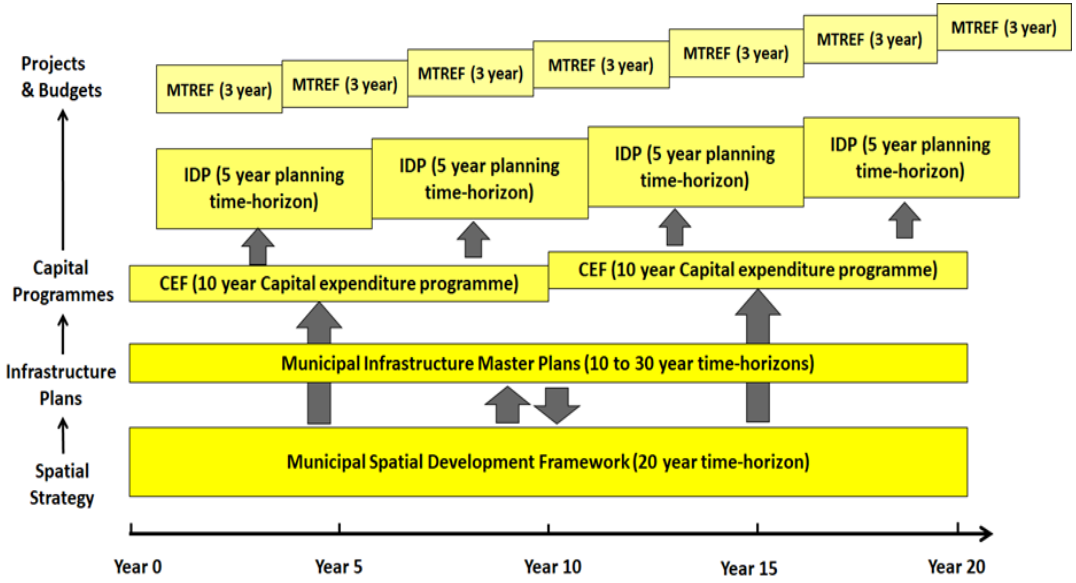


Figure 4.3: Articulating the ideal relationship between municipal planning tools from a built environment perspective

4.3 METHODOLOGY

An adapted version of COGTA's "Guide to Preparing a CEF" has been created for this CEF. This method is shown in Figure 4.4 on the following page and includes 3 main parts and 5 phases. A high-level overview of each part is provided below. Each 'Main Part' is accompanied by a separate database where information was recorded and then cross analysed.

4.3.1 Part A: Infrastructure Demand Determination

Part A is made up of Phases 1, 2a and 2b, which are inter-dependent, and whose purpose, are to determine the infrastructure demand that the MSDF will generate over a 10-year period.

Phase 1 involves reflecting on PAM's infrastructure status, risks, and economic informants; and then recording all of these infrastructure investment projects from various sources (the IDP, tabled budget documents, infrastructure master plans, municipal sector plans, MIG capital investment programme, and PAM 5-year capital plan 2020, and the MSDF itself) into a single consolidated infrastructure portfolio of projects.

The output of Phase 1 is a consolidated master source excel database of current and potential infrastructure and capital investments for the entire municipality, identifying new, upgrade, renewal, maintenance, as well as planning investments needed in the municipality. The master database consists of infrastructure projects (water, waste, roads, sanitation etc.) and planning projects (such as new engineering master plans) which have cost implications for the budget. These projects are, as far as possible, geo-located, to determine how they align to the spatial strategy in the MSDF.

Phase 2a develops a socio-economic and spatial profile of the local municipal area, highlighting the features that will impact on long-term growth within the municipality. The aim is to develop a socio-economic and spatial profile of each of the functional areas of the municipality, determine the population and household growth trends per functional area over a 10-year period, and to translate this into the anticipated yields and land required across land uses to meet this demand.

The aim of Phase 2b is to, based on the land yield demand (from phase 2a), determine what land needs to be acquired to accommodate the future growth, what infrastructure investments are required over a 10-year period,

and to determine the bulk infrastructure demand per service type over a 10-year period. The outputs of Phase 2b are based upon the Western Cape Government's Development Contributions (DC) calculator. The projects generated in phase 2b are then cross checked with projects in the consolidated database (from phase 1) that may already cater for the future need. The MSDF projects are then included within the broader project needs and wants.

4.3.2 Part B: Affordability and Funding Envelope

The aim of Part B (Phase 3 being the only phase in this part) is to ascertain the forecast of municipal revenue and expenses over a 10-year period and the forecast of the capital available for infrastructure investment for PAM (known as the 'affordability envelop'). It involves reflecting on PAM's long-term financial plan to determine the available capital budget which would be used to fund the projects. PAM's 2017 Long Term Financial Plan (LTFP) projects the Municipality's revenue and expenses between 2017 and 2026, but it does not provide a projected capital budget. The LTFP is also outdated and does not consider the 2020 economic recession caused by COVID-19 and the associated lock down measures. As a result of this, data from the audited Annual Financial Statements were used to project revenue and expenses using conservative growth assumptions. From this an affordability envelop (budget available for capital expenditure) was extracted. It must be noted that this part uses several assumptions. Changes in these assumptions can and will significantly alter the amount available for capital expenditure.

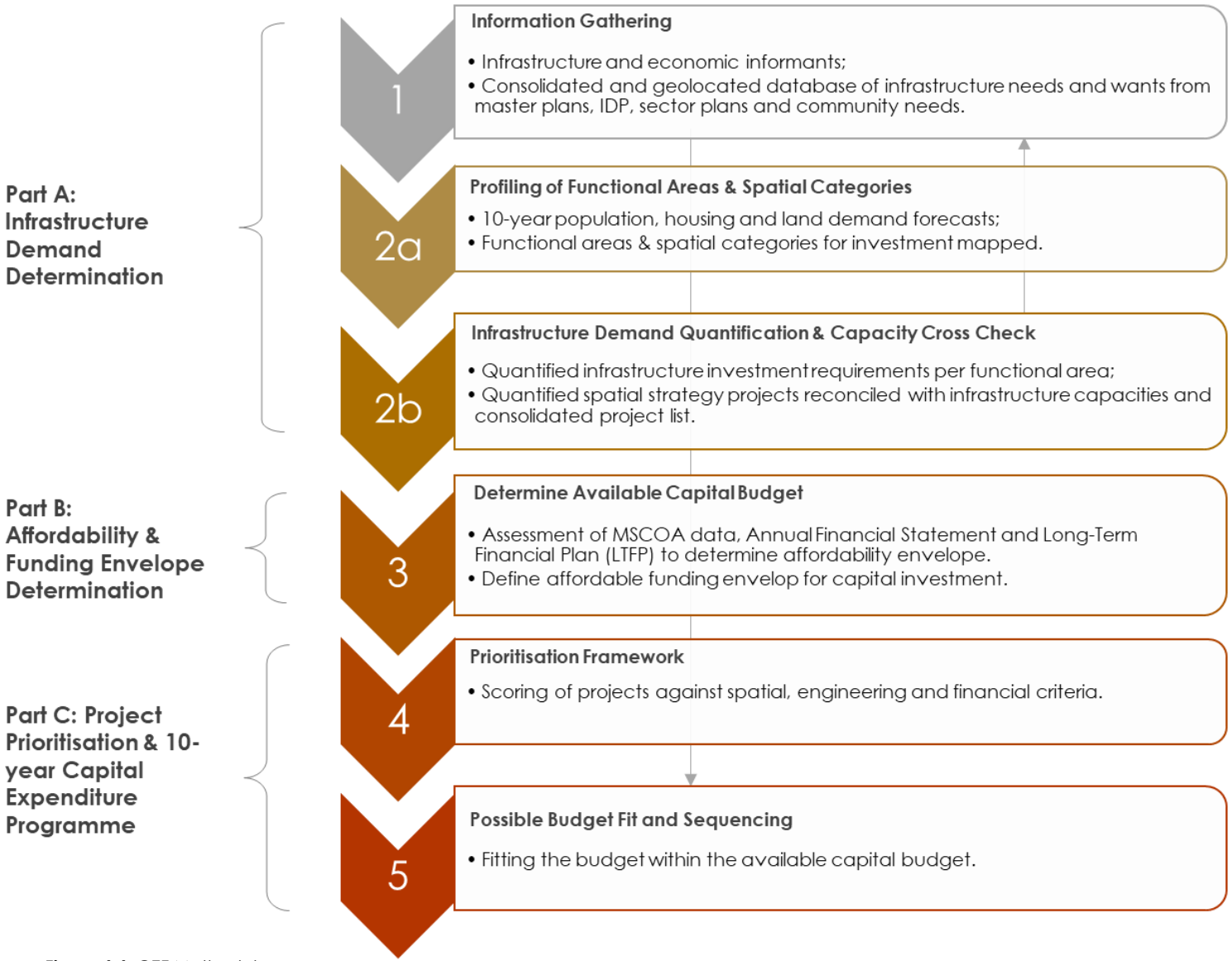


Figure 4.4: CEF Methodology

4.3.3 Part C: Project Prioritisation and 10-year Capital Expenditure Programme

The aim of Part C (made up of Phase 4 and Phase 5) is to apply a capital portfolio project prioritization tool, based on the spatial, financial, and engineering imperatives of the municipality, which will be used to score and rank the unfunded portfolio of infrastructure projects. When the tool is applied, a prioritized list of infrastructure projects is identified (based on scoring). Using the prioritized list of infrastructure projects, together with the defined funding envelop from phase 3, the prioritized infrastructure projects are fitted within the 10-year funding envelop. Here, one identifies which projects fall within the affordability envelop and which do not, considering interdependencies and sequencing considerations of infrastructure investments needed. These projects are then tailored or phased in the form of a proposed Capital Expenditure Programme within the defined capital expenditure envelope from phase 3.

It is worth noting that the criteria for the prioritisation tool were workshopped with the municipality and agreed upon, however they can be refined as and when required, to reflect municipal strategy, as they have a material and direct impact on which projects are prioritized.

Table 4.1: CEF Prioritisation Tool for Infrastructure Investment

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? (Y = 1, N = 0)	1	1	0
	Criteria 2: Project Falls within a Settlement Scale Priority Investment Area? (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? (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 or net Liability 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 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		**8**	**5**	**6**
COMPOSITE PERCENTAGE		**62**	**38**	**46**

4.4 PART A: INFRASTRUCTURE DEMAND DETERMINATION

4.4.1 Phase 1: Information Gathering & Infrastructure Status

An overview of the infrastructure informants for the towns of Prince Albert, Leeu Gamka, Klaarstroom and Prince Albert Road is shown in Figures 4.5 to 4.8 on the following pages. Spatial data from the 2014 Prince Albert SDF and newly created data from the MSDF was combined into a 3D Webmap to show the infrastructure informants for each of the towns. Information was also sourced from the:

- Department of Water and Sanitation's 2013 infrastructure spatial dataset;
- Risk information from the Prince Albert Community Based Risk Assessment and Risk Register 2019;
- Infrastructure related information from the Infrastructure and Growth Plan 2014; and the
- 2021/22 Draft Amended IDP.

In summary, PAM is struggling to maintain its existing infrastructure network, without considering expansion of this network. PAM is therefore prioritizing the maintenance of its road and water network assets and securing additional water source. Below is a summary of the main engineering and infrastructure asset issues across the municipality.

In terms of **water** and specifically ground water, over-abstraction from boreholes is a significant concern and risk, which together with the current drought, can lead to water disruptions or complete system failure ("day zero"). Water restrictions are currently being implemented and borehole abstraction rates are being dropped to ensure sustainable abstraction and use.

Numerous boreholes are not operating optimally due to a lack of funding and maintenance and there is a current lack of adequate **groundwater management**. The recommendations set out in the Groundwater Management and Artificial Recharge Feasibility Study (undated), must be implemented and PAM must also ensure that the surface water allocation, as per the agreement between the municipality and the Kweekvallei Irrigation Board, is implemented accordingly.

The municipality has proposed the building of a dam and an artificial groundwater recharge system in Prince Albert Town and Klaarstroom to boost water supply in the area. The need for more water storage capacity (i.e. reservoirs) is also a widely discussed need. According to a 2019 article by Future water UCT, there are difficulties with monitoring the flow of water into Prince Albert Town, resulting in uncertainty around supply volumes, infrastructure capacities, licensed and actual abstraction and water losses. To add to this challenge, the water and sanitation master plans are outdated and there is insufficient and unreliable data on bulk capacity as the existing condition of assets is not well recorded. Furthermore, the Lei-water/Furrow system does not extend to North End.

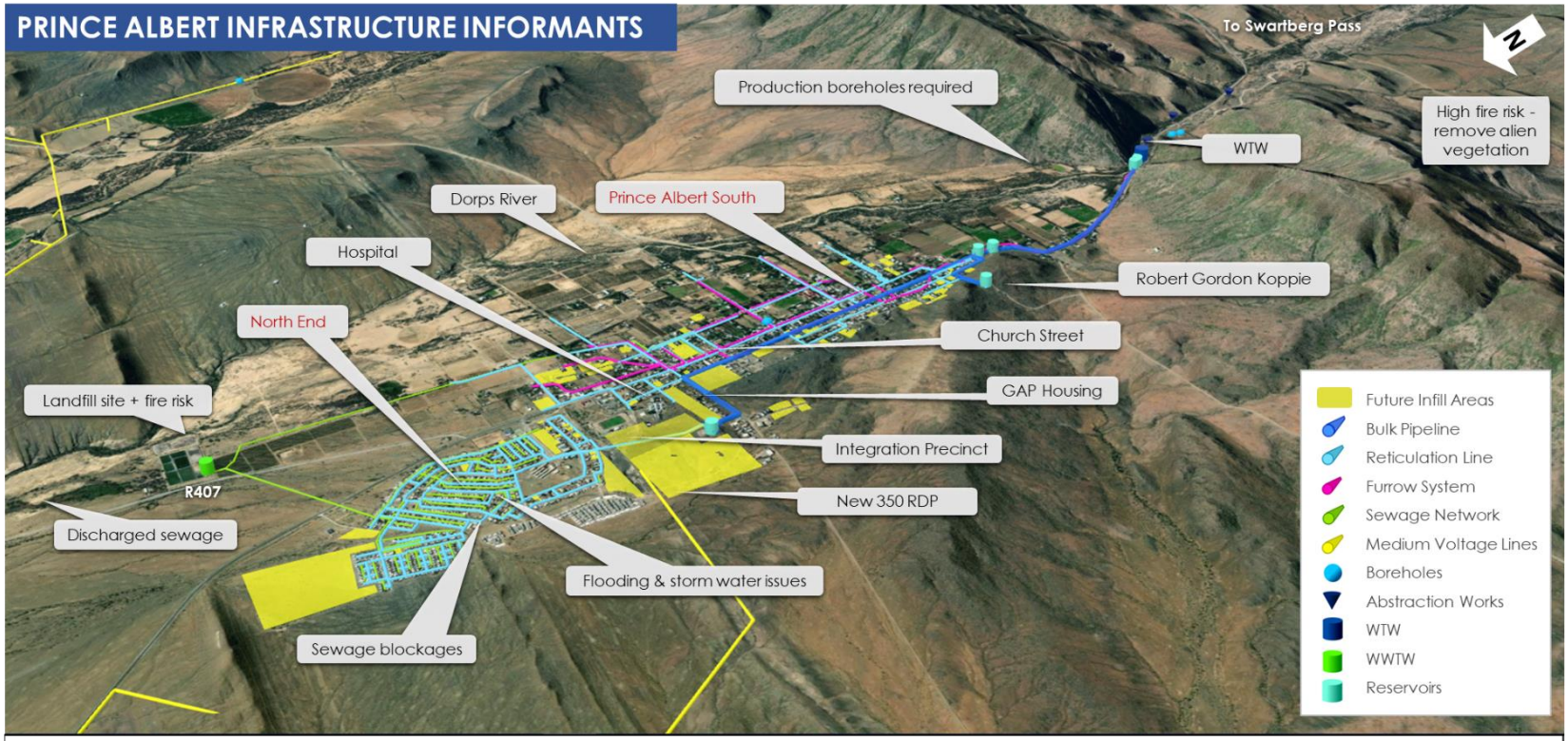
In terms of **wastewater**, 3 of the 4 towns in the Municipality have their own wastewater collection and treatment facility. Prince Albert, Klaarstroom and Leeu-Gamka have oxidation pond systems for WWTW whereas Prince Albert Road is served by a communal septic tank and soak-away.

Storm water is a problem in North End, Leeu Gamka and Klaarstroom and will become worse if climate induced factors worsen. The main problems are poor conditions, slopes, and gradients of channels; poor maintenance of existing storm water infrastructure which causes blockages of inlets and outlets. Specific needs include: Additional hydraulic capacity in Prince Albert South; additional detention ponds for future development; storm water flow diversion structures in North End; detention storage areas and formalising unlined channels in Klaarstroom;

In terms of **electricity**, the municipality needs to still secure electricity rate from Klaarstroom and Leeu Gamka who purchase directly from Eskom and numerous transformers need refurbishment with regards to oil leakage and heat stress.

In terms of **waste** management and landfill capacity there are licensing issues that need to be addressed in Prince Albert Town, Klaarstroom and Leeu Gamka. An organic waste diversion plan must be drafted to divert more organic waste from landfill and the municipality must implement targeted waste initiatives that will encourage waste separation and limit illegal dumping.

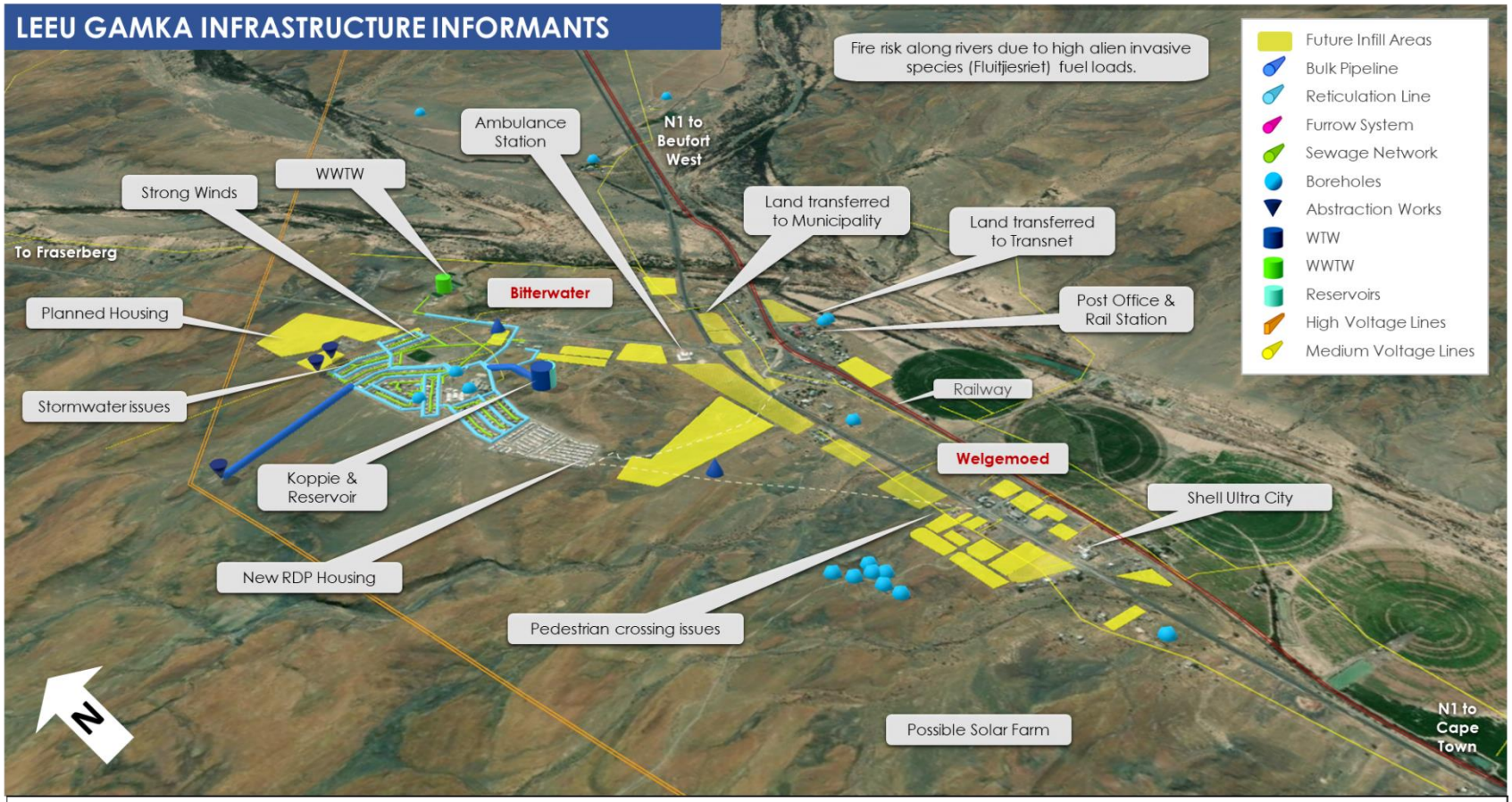
In terms of **roads**, only 15% of the municipal road network is tarred and given the limited budget, it is important to prioritize maintenance and upgrading of roads where necessary. As walking, cycling and even horse back is the primary mode of transport for most residents in the municipality, the need to develop and maintain a quality, connected and **safe pedestrian and non-motorised network** is critical.



Extracts from the DRAFT Amended Prince Albert IDP 2021/2022

1. To avoid Day zero, water use must be reduced in all areas and an investigation into the ground water availability must be undertaken. Artificial recharge possibilities must be investigated, improved water management must take place, a weir in the Swartberg Mountains must be build and in the long term a new well field must be developed. It is also necessary that the flood prone boreholes and supporting equipment must be moved out of the riverbed. To ensure effective management of water resources and emergency situations, a fully functional telemetric system will be needed.
2. The iron removal plant was upgraded in 2020 to improve water quality in Prince Albert.
3. The WWTW is being is upgrading to accommodate the planned 350 RDP housing units to be built soon. This upgrade is a multi-year project. Currently operating under general authorization. Funding to be sourced.
4. Load shedding leads to spillage of sewerage as the pumps currently have no back-up generators. The Municipality is in the process of purchasing generators.
5. Prince Albert South requires additional hydraulic capacity.
6. The current fleet experience continued break down in service due to overuse.
7. The storm water network in North End is currently and needs to be continue to being upgraded. The aim is to upgrade storm water flow diversion structures.

Figure 4.5: Prince Albert Infrastructure Informants (Note: Infrastructure Data is sourced from DWS but is outdated 2013- Only for conceptual purposes)



Extracts from the DRAFT Amended Prince Albert IDP 2021/2022

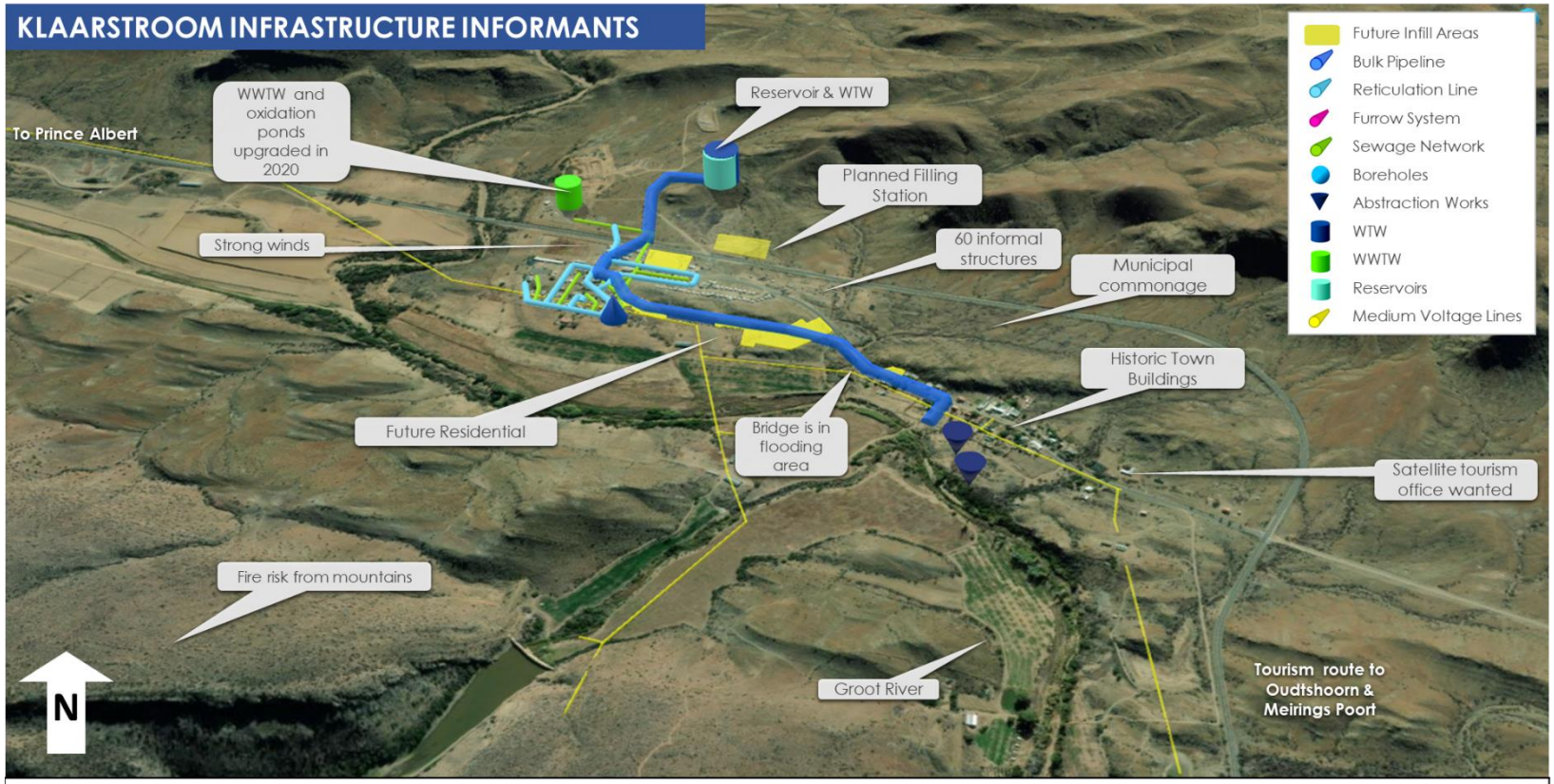
1. The WWTW is a pond system comprising of four primary ponds operating in parallel. The WWTW was originally constructed in 1985 with a design capacity of 140 kl/ day; however, it was recently upgraded to provide for the upcoming 251 houses and the Transnet area. Final effluent is used for irrigation into the adjacent field. The main of this project is still unfunded and needs to be upgraded to eradicate the bucket system.

2. Funding to relieve the residents of the Transnet areas from the bucket system is still needed and the Municipality is collaborating with the Department of Human Settlements to provide bulk infrastructure. The wastewater is screened at the pump station before being pumped to the WWTW. The night fall (buckets) are deposited in a manhole upstream of the central pumping station. The buckets are washed and stored at the central pumping station.

3. A public drop-off facility in Leeu Gamka is needed, specifically a 30m³ hook lift containers. This would not require a waste management license and would not trigger the norms and standards for waste storage facilities since it would have a designed capacity of less than 100m³. The cost to construct this is estimated at R2 513 000.

4. There is a need to building larger channels and divert storm water flow in Leeu Gamka.

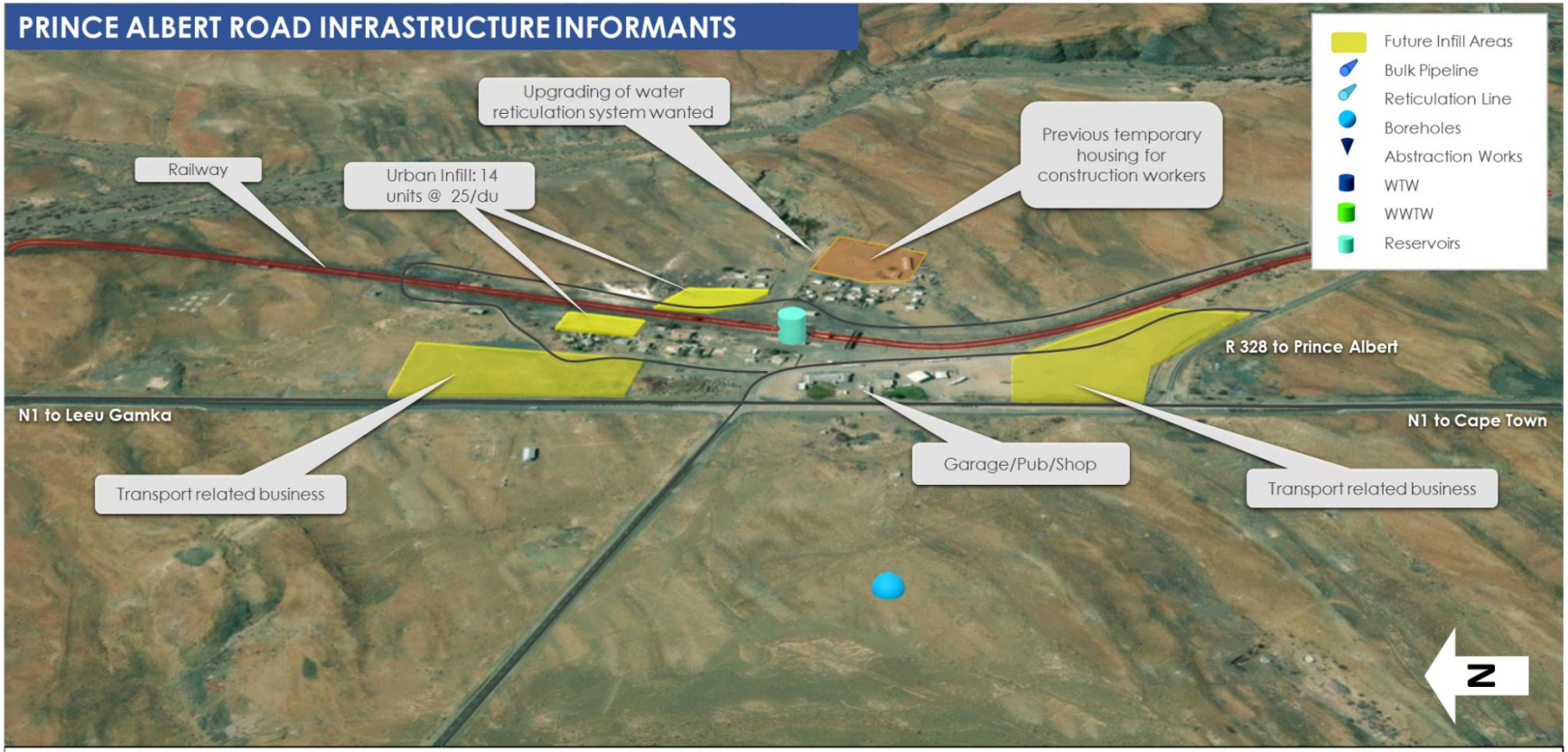
Figure 4.6: Leeu Gamka Infrastructure Informants (Note: Infrastructure Data is sourced from DWS but is outdated 2013- Only for conceptual purposes)



Extracts from the DRAFT Amended Prince Albert IDP 2021/2022

1. The WWTW in Klaarstroom was successfully upgraded in 2020 with oxidation ponds. The use of "natural systems" such as oxidation ponds and reedbed treatment systems are heavily promoted due to their simplicity of operation and low maintenance requirements.
2. Klaarstroom requires upgrading of existing channels to improve conveyance of water away from the town towards the natural stream. Most capital projects are for the future developments in the form of providing detention storage areas and formalising unlined channels.
3. Klaarstroom Informal Settlement is the biggest in the municipal area with 60 structures averaging 4-5 residents per structure. The upgrading of informal settlements programme (UISP) shows the only project is the relocation of existing toilets into homes.
4. A public waste drop-off is required at a cost of R2 513 000.
5. In Klaarstroom and Leeu-Gamka, electricity is directly supplied by ESKOM, which impacts heavily on revenue collection and the implementation of Prince Albert Municipality`s credit control and debt collection policy.
6. The first entrance to Klaarstroom – opposite the clinic should be reserved for business.

Figure 4.7: Klaarstroom Infrastructure Informants (Note: Infrastructure Data is sourced from DWS but is outdated 2013- Only for conceptual purposes)



Extracts from the DRAFT Amended Prince Albert IDP 2021/2022

1. In terms of wastewater, Prince Albert Road is served by a communal septic tank and soak-away.
2. Prince Albert Road entrance from the N1 lacks a sense of arrival and much can be done to enhance the first impression. The railway system and the national road which passes through Prince Albert Road causes noise pollution.
3. Although future residential development is not encouraged, a total of 0.8 hectares of land is earmarked for future residential development, if required.
4. The areas to the south of the N1 highway, which are earmarked for light business, should be reserved for transport related commercial and support activities.
5. The following wants came from the IDP mobile police station (especially during peak traffic hours), a daycare, cemetery and a new water network along with internal roads.

Figure 4.8: Prince Albert Road Infrastructure Informants (Note: Infrastructure Data is sourced from DWS but is outdated 2013- Only for conceptual purposes)

4.4.2 Phase 2a: Functional Area and Spatial Category for Investment Planning Profiling & Demand Quantification

The purpose of this section is to:

- Determine the population and household growth trends per functional area based on a ten-year horizon for the local municipal area; and to
- Determine the anticipated land required across land uses to meet this demand.

4.4.2.1 Phase 2a: Future Housing & Social Facility Demand Cost

Phase 2a is largely completed in Chapter 4 of the PAM MSDF, which projected the 2020 - 2030 population, housing and land demand requirements according to low (0.67%), medium (1.1%) and high (1.73%) growth rate scenarios. The data was sourced from the WCG's Provincial Population Unit and based on Sub Place level. The Graph in Figure 4.9 shows the housing growth scenarios between 2020 and 2030 in Prince Albert Municipality. Two demand scenarios were put forth from Chapter 4 of the MSDF – each based on the medium 1.1% growth rate. These scenarios are the:

1) Baseline Demand Scenario: Natural growth (1.1%) of all 'urban households' between 2020 – 2030, which will amount to 440 additional households over this 10-year period; and the

2) Ceiling Scenario: Natural growth (1.1%) of urban households in addition to the 2020 Housing Waiting list between 2020 – 2030, which will amount to 1544 additional households over this 10-year period.

PAM's housing delivery plan is also shown in Table 4.2 on the following page and although the pipeline is supported, there is currently no funding available. The housing waiting list for PAM, at July 2020, is 1201 applicants. The 2021 IDP recently put this at over 1300 applicants.

Regarding **social facility need**, Chapter 4 of the MSDF projected this for the above low, medium and high growth rates. In the medium growth (1.1%) scenario, PAM will need the following facilities between 2020 and 2030:

- + between 2 and 3 new ECD facilities.
- + 2 new Primary Schools (or expansion of existing).
- + 1 Community Sports field.
- + 3 New open spaces / parks.
- + 1 New cemetery.

These facilities are included in the consolidated portfolio of projects and should ideally be in the town of Prince Albert because much of the population and housing growth is projected to take place here (particularly North End). However, various documents also express the need for a secondary school in Leeu Gamka (particularly Bitterwater).

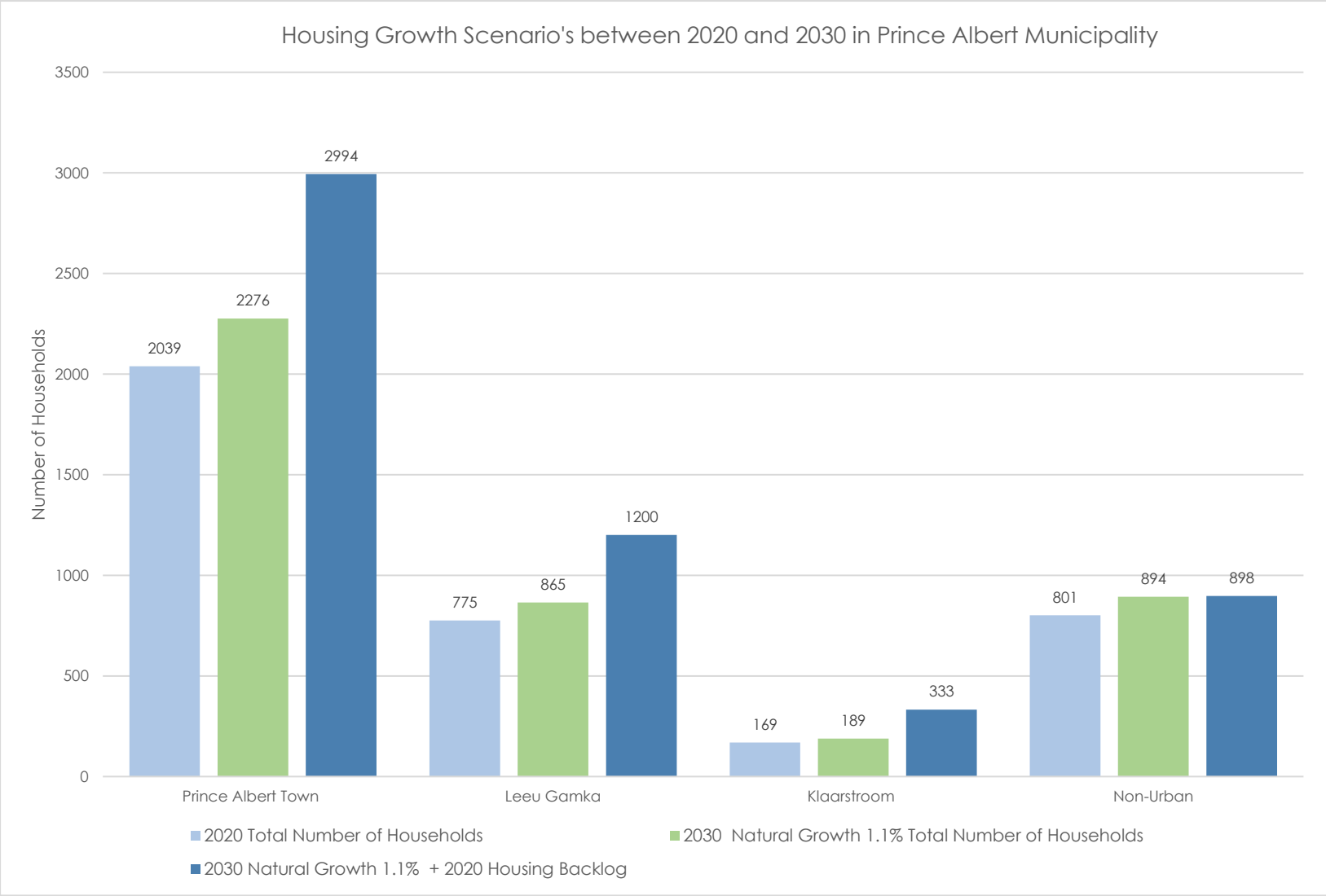


Figure 4.9: Housing Growth Scenario's between 2020 and 2030 in Prince Albert Municipality

Table 4.2: Prince Albert Municipality Housing Delivery Plan (Note Provincial DHS have indicated that this pipeline is still supported but no funding is currently available)

DELIVERY PLAN		2020/2021			2021/2022			2022/2023		
25 November 2019	PROGRAMME									
2019/20 - 2023/24 HSDG										
Average Site Cost (R'000)	60	SITES	HOUSES	FUNDING	SITES	HOUSES	FUNDING	SITES	HOUSES	FUNDING
Average Unit cost (R'000)	130	SERVICED	BUILT	R '000	SERVICED	BUILT	R '000	SERVICED	BUILT	R '000
Prince Albert		208	0	16 531	114	258	40 637	38	92	14 600
Prince Albert (451) (ph1 243)	IRDP									
Prince Albert (451) (ph2 208)	IRDP	208		12 480		208	27 040			
xxxx - Prince Albert Interim Basic Services (100) UISP	UISP			2 500						
xxxx - Prince Albert relocation of existing toilets into homes (402)	IRDP									
xxxx - Leeu Gamka relocation of existing toilets into homes (188)	IRDP									
xxxx - Klaarstroom relocation of existing toilets into homes (40)	IRDP									
xxxx - Klaarstroom (50 S & 50 T) UISP	UISP			1 500	50	50	9 500			
xxxx - Leeu Gamka Area 2 Gap (20) IRDP / FLISP	IRDP			30			60	20		1 200
xxxx - Klaarstroom Area 2 Gap (18) IRDP / FLISP	IRDP			21			51	18		1 080
xxxx - Leeu Gamka Bitterwater Farm 55 (127) IRDP	IRDP						146			360

4.4.2.2 Phase 2a: Functional Areas

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). The demarcation of Functional Areas takes the lead from the spatial articulation of the engineering or infrastructure master plans, which sets the drainage areas and parameters for existing or future infrastructure need. There are also instances where a Functional Area will correspond to enumeration area used in representing the latest census data. Spatial Categories for investment planning, on the other hand, are different spatial areas that will have distinct investment needs and desired outcomes, in line with the spatial logic set out in the MSDF proposals chapter. These areas will have different infrastructure planning requirements and spatial planning intent, and hence will require different infrastructure investment approaches or strategies.

The following types of spatial categories for investment planning have been identified in Prince Albert as shown in Figure 4.10, 4.11 and Table 4.3:

- Priority investment nodes and areas,
- Consolidation nodes and areas,
- Upgrading areas,
- new development areas, and
- long term development areas.

Functional Areas are used as a means of recording and determining the priority of projects based on where they are located, as well as helping to determine future infrastructure needs based on projected yields per functional area. In this CEF, Functional Areas are identified at both a municipal-wide scale (i.e. 1: 300,000) and at the settlement scale (1:15,000).

4.4.2.3 Functional Areas at the Municipal-wide Scale

As shown in Figure 4.10, the highest investment priority in the Municipality is Prince Albert Town, which is a primary investment node. Investments made in Prince Albert Town will have the greatest multiplier effect and impact on the greatest number of people. The town occupies a high order in terms of services, facilities and employment opportunities and has the largest population size and economic growth potential within the municipality.

Leeu Gamka, Klaarstroom and Prince Albert Road are consolidation nodes meaning infrastructure renewal and maintenance are the priorities, and limited expansion should be allowed because this places financial strain on the municipality to supply further services without commensurate economic development.

The primary routes for intergovernmental investment focus are the N1, N12, R407 and the R328 (particularly the Swartberg Circle Route and Swartberg Pass). Routes of importance include the N1, N12, gravel routes and the Swartberg Tourism Circle (R328 and R407) along with various mountain passes and dams.

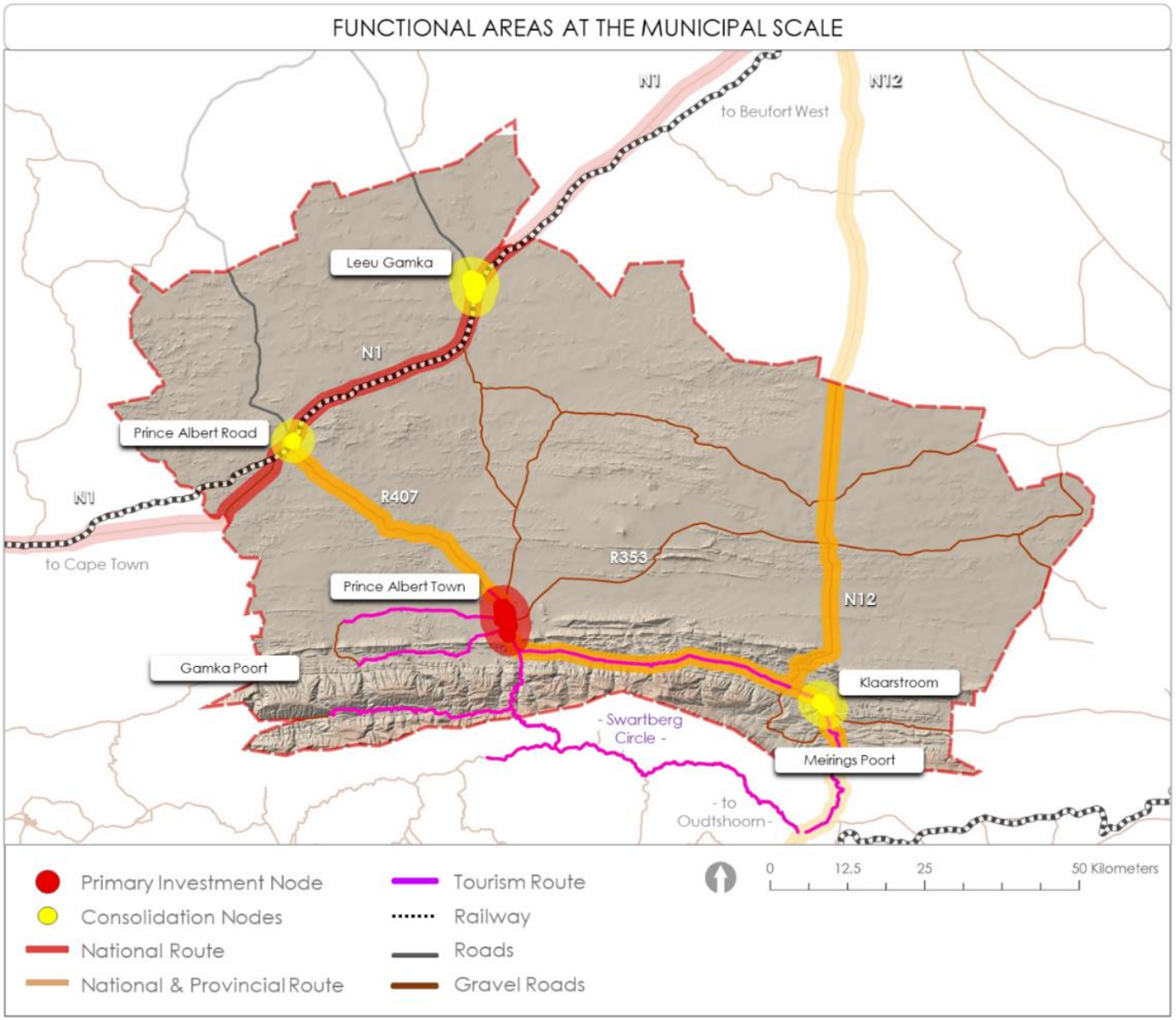


Figure 4.10: Municipal Wide Functional Areas as shown in the Prince Albert Spatial Concept

4.4.2.4 Functional Areas at the Settlement Scale

Figure 4.11 shows the Functional Areas at the town scale. These are suburbs with "similar characteristics (homogenic) from a developmental and service demand perspective'' (COGTA, 2018). There are 4 main functional areas:

Functional Area 1: Prince Albert Town, subdivided as:

- FA 1.1: North End
- FA 1.2 Industrial
- FA 1.3 Historic Main Street
- FA 1.4 Historic Town Farms
- FA 1.5 The Integration Precinct

Functional Area 2: Leeu Gamka

Functional Area 3: Klaarstroom

Functional Area 4: Prince Albert Road

Functional areas typically need to accommodate infrastructure service catchments i.e. water treatment works which provide additional capacity to the functional region as a whole or vice versa if the facility is constrained. However, the town scale functional areas used in this CEF are based largely on the urban edges (including historic town farms in Prince Albert). If a project falls outside of this edge it is still recorded within the consolidated project database whose projects emanate from the master and sector plans.

Table 4.3 on the following page provides detail on Prince Albert Municipality's Functional Areas as further defined by priority, size, yield, anticipated housing demand and function and spatial strategy

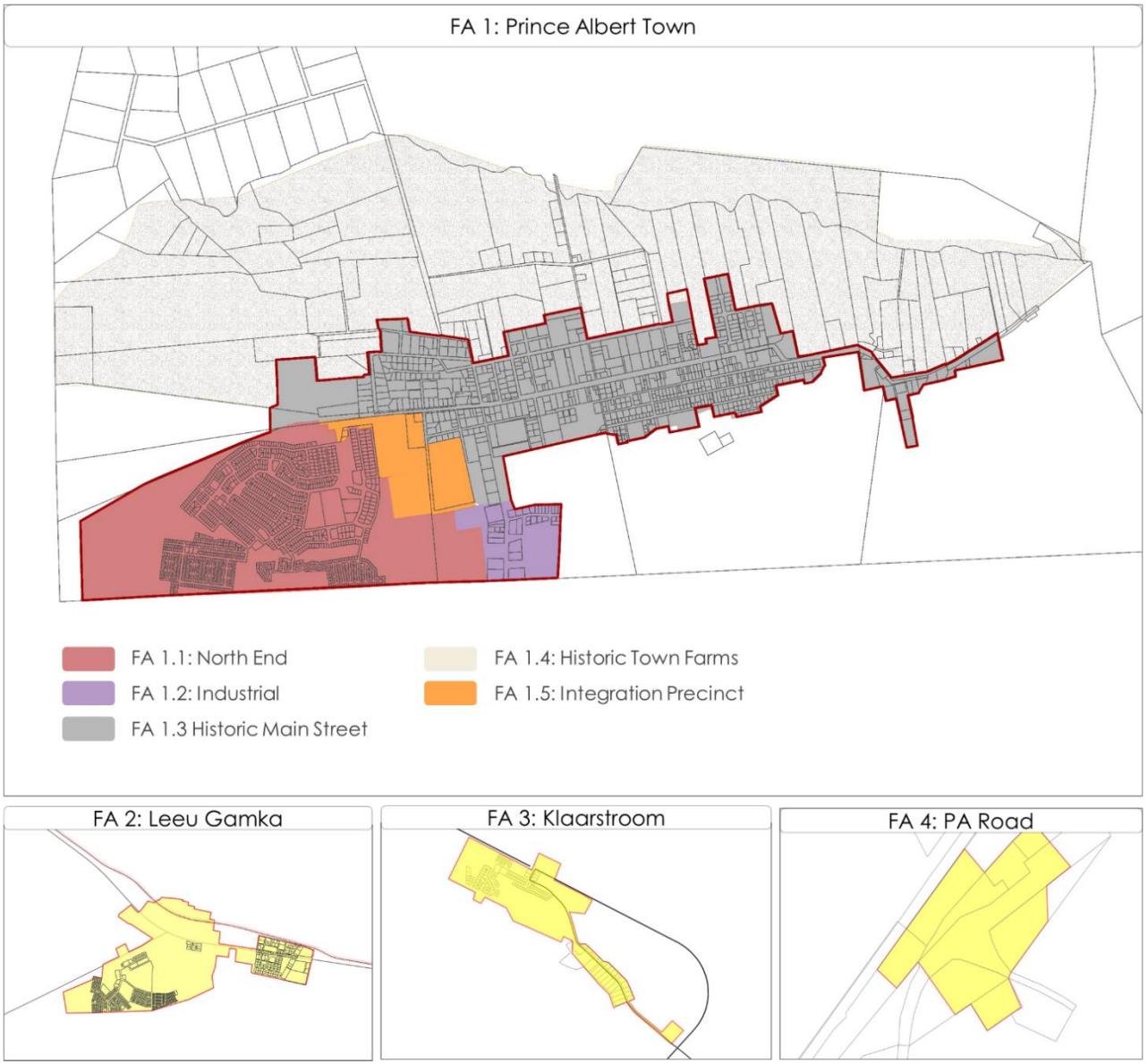


Figure 4.11: Town Scale Functional Areas

Table 4.3: Prince Albert Municipality's Functional Areas as defined by Priority, Size, Yield, Anticipated Housing Demand and Function and Spatial Strategy

FUNCTIONAL AREA (FA)	NAME	PRIORITY	SIZE	UNITS YIELDED ON VACANT LAND	ANTIIPATED HOUSING DEMAND 2020-2030	FUNCTION AND SPATIAL STRATEGY
1	Prince Albert Town	Priority Investment Node	774.9 ha	1624	955 residential units	Prince Albert Town functions as a specialised inland service centre with tourism, medical, educational, commercial, and administrative services as well as servicing surrounding rural areas. The spatial strategy is that, out of all the settlements in the municipality, most of the infrastructure investments should be focused in support of this town and will have the greatest multiplier effect and impact the greatest number of people.
1.1	North End	Upgrade Area inclusive of Sites 1, 2 and 3 as new development areas	140 ha	974		North End is the densest and most populated area of the municipality, with the highest need for infrastructure upgrades and where new infrastructure and additional bulk will be required because much of the housing pipeline will be accommodated here in the future. North End is not a high rate generating area and a fine balance must be made between generating revenue and bringing the area up to an acceptable level of service. The spatial strategy in North End is to accommodates densities of up to 50 du/ha. Much of the older eastern portion of North End can be developed privately to include second dwelling units. Public space improvements, and improvements to road infrastructure and pedestrian networks are needed in this area.
1.2	Integration Precinct	New Development Area to spatially integrated Prince Albert Town		0		The Integration Precinct aims to spatially connect North End with the town of Prince Albert and promote spatial transformation. A precinct plan must be drafted with the aim of better packaging, sequencing and mutually reinforcing the projects in this CEF. The precinct currently consists of the Thusong Centre, hospital and regional sports facility and will accommodate new council and finance offices. The spatial strategy is to adjoin the housing pipeline to the precinct, develop a primary or high school for 400 learners that doubles up on use of the regional sport field and to extend Luttig Street as the first bridge between North End and the Historic Main Street (See Piketberg example in Chapter 3, Figure 3.62). A precinct or local area plan must provide urban design guidelines to enhance the safety, walkability, and public spaces in this area i.e. outdoor

						amphitheatre, second sport field, lit walkways, landscaping, and streetscape improvements.
1.3	Industrial Area	Long Term Development Area		0		The industrial development area must accommodate future economic growth and employment opportunities in Prince Albert Town with the implications being the take up of the vacant land parcels.
1.4	Historic Main Street & Historic old town	Heritage Overlay and Consolidation Area		650		This area makes up the historic main town and includes Church Street as the main street/corridor with educational, commercial, retail, tourism, religious, and administrative services alongside. This area is where much of the municipality's rates and economy is generated. It includes heritage assets like Victorian and Karoo style housing typologies as well as historic buildings and monuments which fall under the heritage overlay zone proposed in this MSDF. The spatial strategy is to promote sensitive and appropriate infill of vacant land parcels and to enhance the subdivision of land in an architecturally and heritage appropriate manner.
1.5	Historic Town Farms	Consolidation Area		0 (Pending Town Farms Assessment		The Historic Town farms are included in the heritage overlay zone and are made up of rich heritage buildings and sub-tropical fruits orchards and vegetable plots which provide a unique tourism and farm to market style economy and ensure long-term food security of the town. A further assessment of the town farms must be conducted to determine which farms could potentially be subdivided and sensitively developed to accommodate additional dwelling units without undermining the character and feel of the town, as well as the integrity of the agricultural land asset.
2	Leeu Gamka	Consolidation Area	233	680	425	These are largely non-rates generating settlements where basic infrastructure renewal and maintenance are the priorities, along with appropriate infill, densification and job creation. In terms of facility servicing, the spatial strategy is to meet the local convenience needs with basic social facilities and basic levels of service for surrounding rural communities.
3	Klaarstroom	Consolidation Area	33	75	164	
4	Prince Albert Road	Consolidation Area	12.7	14	0	

4.4.3 Phase 2b: Land Yield and Infrastructure Demand Yield

The purpose of this phase is to, determine what land needs to be acquired to accommodate the future land demand shown in the MSDF; to determine the infrastructure investment requirements over a 10-year period; and to determine the bulk infrastructure demand per service type (water, sanitation, roads, storm water, solid waste and electricity over a 10-year period.

A comprehensive vacant land infill strategy was completed in Chapter 4 of the MSDF. The strategy shows how vacant land can adequately accommodate the ceiling demand projections of **1641 additional households** between 2020 and 2030. This growth is highly dependent on the availability of water and therefore this CEF has attempted to assist by creating a tool which enables the user to cross check future vacant sites with the possible service infrastructure implications and bulk demand. This information is provided in both the technical database and in **Figures 4.12 to 4.15** which show the cost implications for Prince Albert, Leeu Gamka, Klaarstroom, and Prince Albert Road for the provision of this infrastructure. In the 2021 MSDF, spatial data on vacant developable sites was taken from the 2014 SDF and a re-assessment done using 2020 aerial imagery to determine which sites are still vacant. Each vacant parcel of land was captured within a master source excel database and linked to a shapefile. Each vacant parcel was spatially joined to a functional area and assigned an appropriate land use and density between 25-50 du/ha, as indicated by the MSDF spatial strategy.

To determine the approximate Gross Lettable Area (GLA) and number of units possible within each parcel of land and functional area, the main assumption was that 30% of developable area would be deducted for open space and parking. The yields generated using these assumptions represent an optimal and best-case scenario for future development of the identified vacant developable land parcels identified. These yields are represented as the "100% Scenario" in the vacant parcels but not the entire functional areas, where densities can be further increased through secondary dwellings and maximising to 25 du/ha.

The output data on vacant and infill land yield was thereafter plugged into the WCG Development Charges (DC) calculator to determine the future infrastructure loadings and cost implications (for municipal utility services such as water, sanitation, roads, stormwater, solid waste, and electricity) per site and per functional area. The unit costs in the DC calculator are calculated for the year in which the model is set up, 2014 - 2020, and escalated using the Contract Price Adjustment Formula (CPAF) of 5.74% year on year. The cost of electricity service infrastructure did not provide outputs in the model and was therefore excluded. However, the unit loadings are provided and can be used by municipal project managers to source quotation.

A crucial need is to develop a water and sanitation land use model for Prince Albert, which is a piece of work currently being undertaken by the Western Cape Department of Local Government under the Integrated Drought and Water Resilience strategy project. The study seeks to, amongst other things, determine the infrastructure capacity and status for all of PAM's towns. It is therefore envisaged that the CEF's calculated bulk infrastructure implications of future growth (which includes unit loadings and cost implications per site and functional area) will be crosschecked with ceiling bulk capacity and will inform future sequencing of projects. It is also important to note that the Municipality are developing a new zoning scheme in 2021 to replace the outdated Scheme 8 regulations, which may impact the water land use model to be developed.

Figure 4.16 provides a breakdown of the development cost implications of all vacant land per functional area. It does not include Functional Area 1.4 Historic Town Farms as its not earmarked for future development currently. In summary:

- **127 hectares** of vacant land is available within all functional areas.

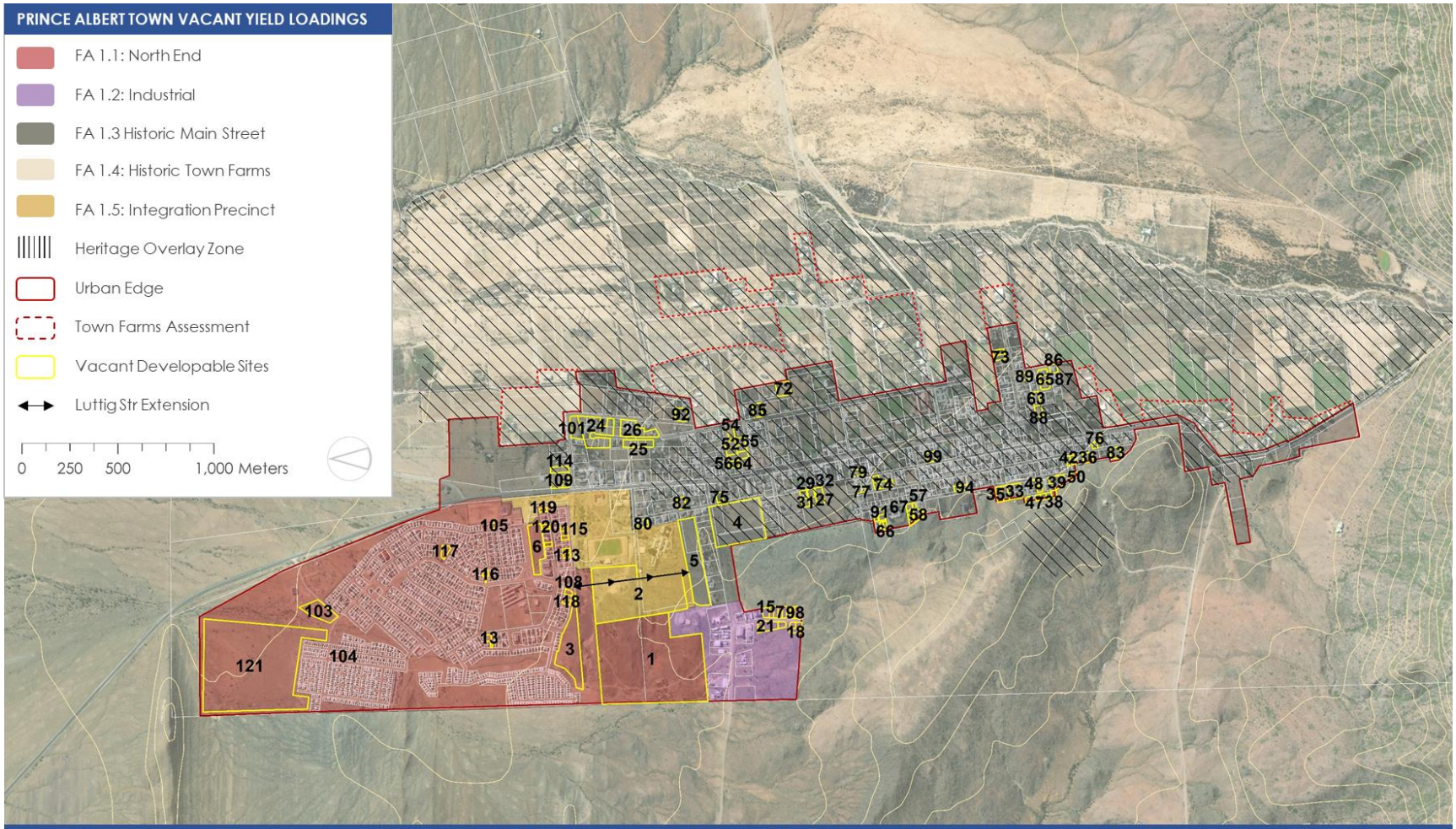
- At 70% GLA and tailored with densities ranging between 25-50 du/ha the vacant land can yield a total of **2303 residential** units (which is more than the 1641 needed by 2030, pending the availability of bulk water supply).

- The infrastructure implications costs to develop this land (excluding electricity) is calculated to be **R 106 million.** This can be broken down as follows:
    - North End: R 21 million
    - Industrial: R 1.8 million
    - Historic Main Street: R 14.1 million
    - Integration Precinct: R 2 million
    - Leeu Gamka: R 65 million
    - Klaarstroom R 3.5 million
    - Prince Albert Road R 10 million

The high costs for Leeu Gamka and Prince Albert Road are due to large tracts of vacant land that could be taken up. These are not priority development areas,

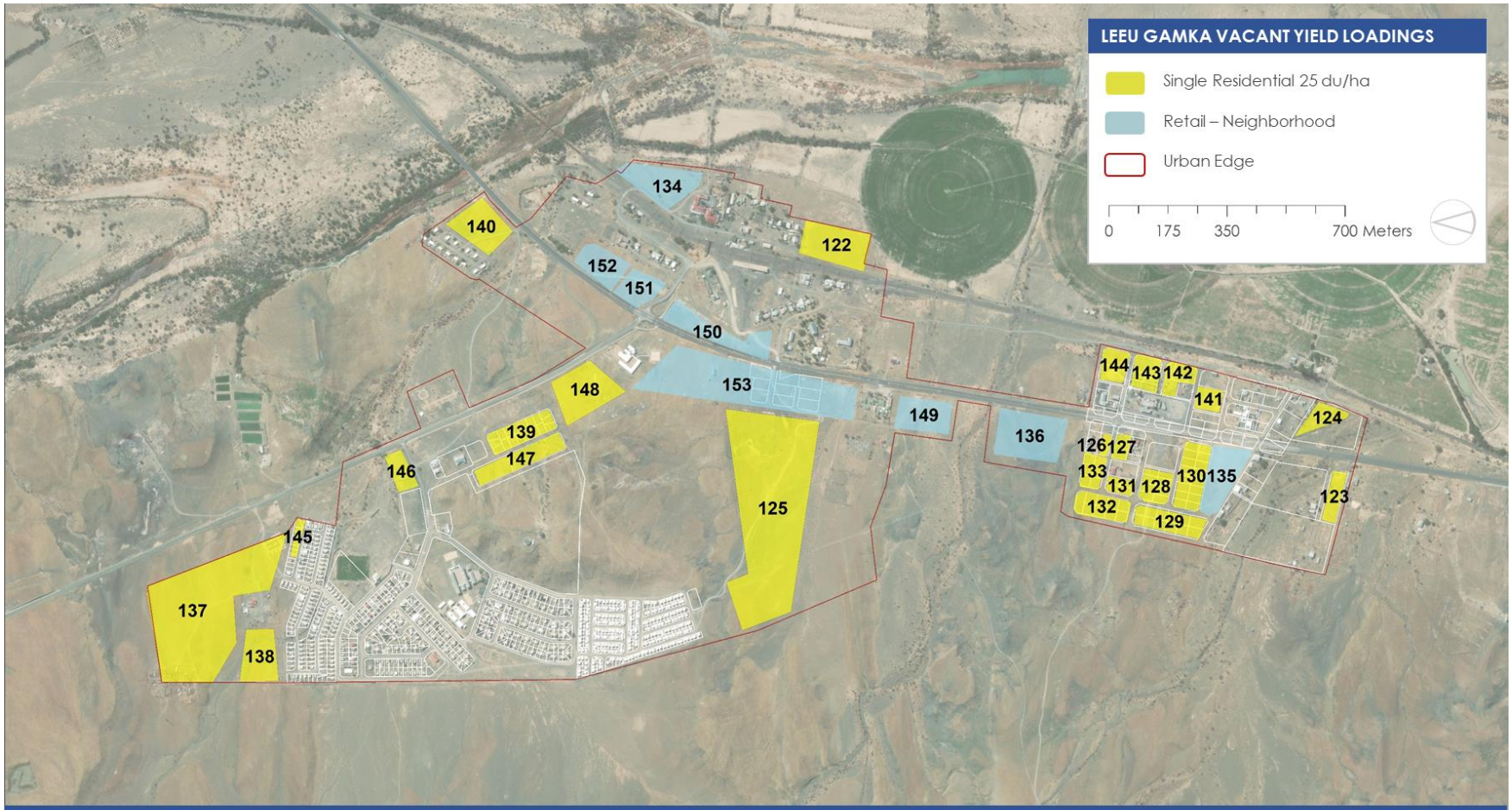
lack economic opportunities and should not be expanded unless economic opportunity warrants so.

It is important to note that even though this section has indicated the total "cost to develop" each town, it does not mean that the Municipality should develop all these parcels and therefore, the section to follow this will show which parcels of land are high priority to be translated into projects and included in the consolidated project database.



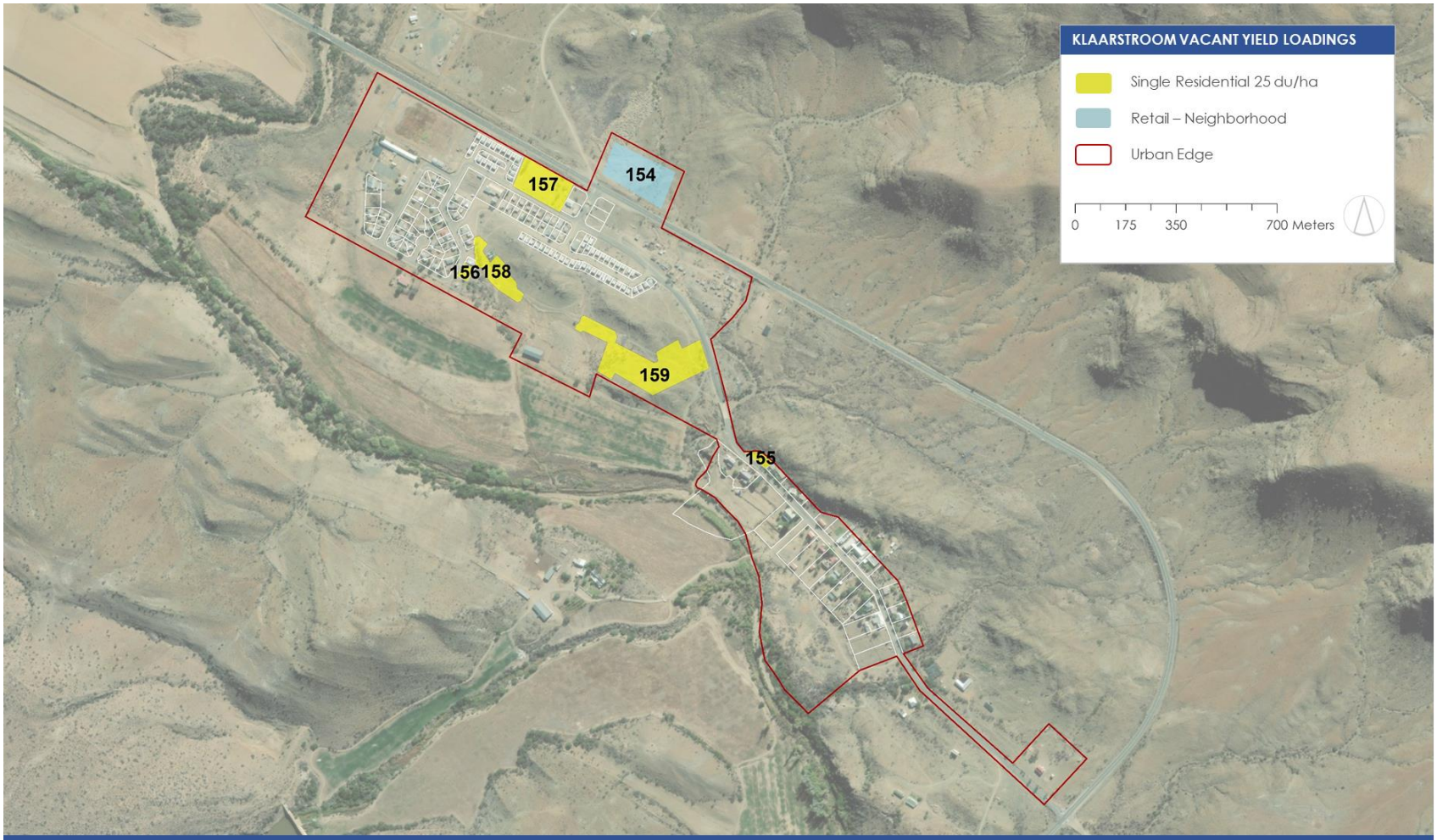
Functional Areas	Square Meters	70% GLA	Residential Units Yielded	Water kl/day	Sanitation kl/day	Roads R/trips/peak hour	Storm Water R/c/HA	Solid Waste Kg/day	Elec kVA/day
Primary Investment Town	620118	434082	1624	696	474	1770	10712	6539	5909
FA1.1 North End	354281	247996	974	378	264	860	809	3535	3114
Single Residential - High Density	171828	120279	601	210	147	300	510	2181	1622
Single Residential - Medium Density	182453	127717	373	167	117	559	298.4	1353	1492
FA1.2 Industrial	13537	9475	0	37.9	13	56	9001	284	568
Industrial - Dry	13537	9475	0	37	13	56	9001	284	568
FA1.3 Historic Main Street	177423	124197	650	248	173	534	542	2359	2026
Single Residential - High Density	63003	44102	441	154	108	220	374	1600	1190
Single Residential - Medium Density	114420	80095	209	94	65	313	167	758	836
FA1.5 Integration Precinct	74877	52414	0	32	22	320	360	360	200
Schools	74877	52414	0	32	22	320	360	360	200

Figure 4.12: Vacant Land Infill for Prince Albert Town showing potential yield and infrastructure implications (Site numbers link to Database 2: Costed Vacant Infill)



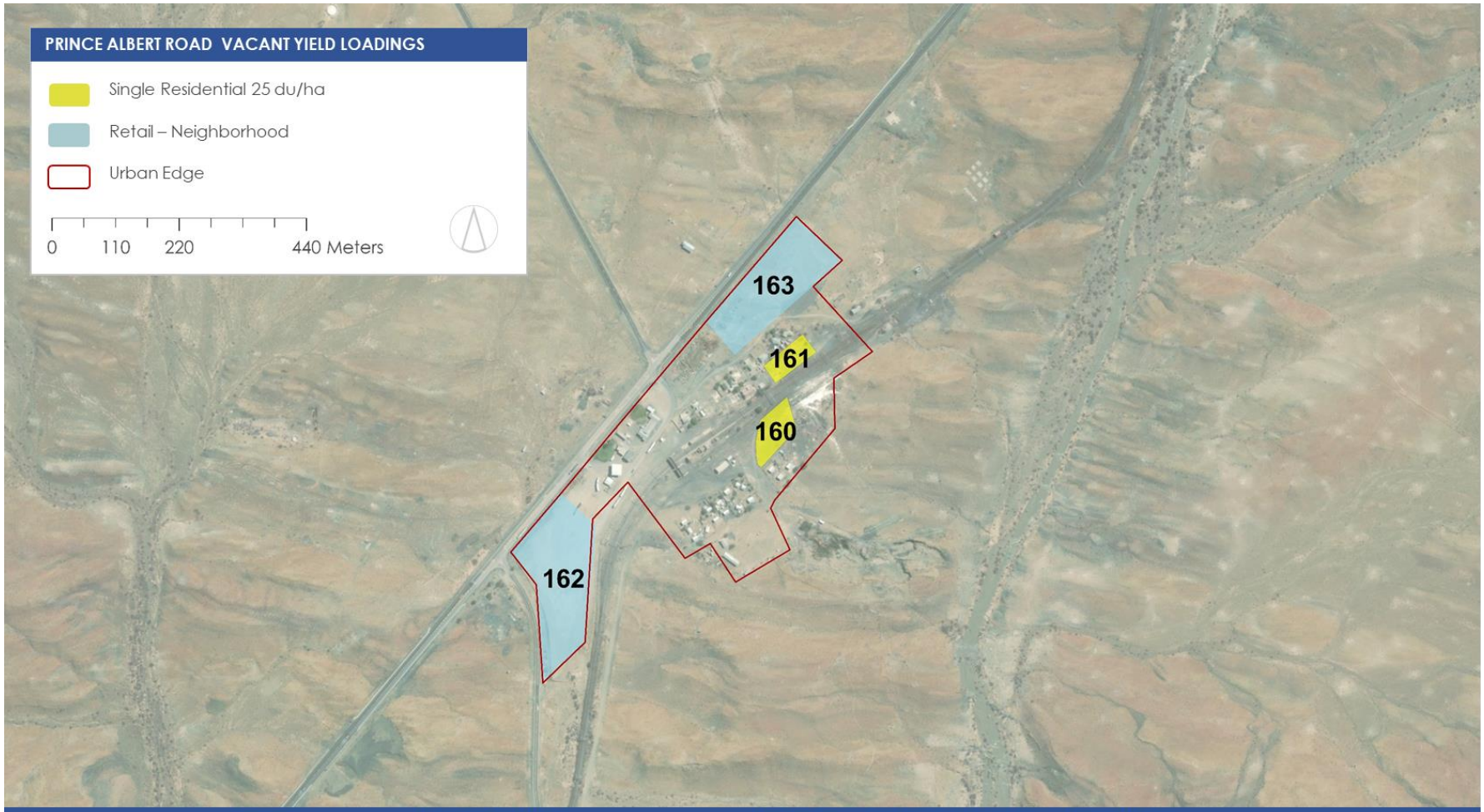
Functional Areas	Square Meters	70% GLA	Residential Units Yielded	Water kl/day	Sanitation kl/day	Roads R/trips/peak hour	Storm Water R/c/HA	Solid Waste Kg/day	Elec kVA/day
Consolidation Town									
FA2 Leeu Gamka	561265	392882	680	786	550	8229	108683	4871	12933
Retail - Neighbourhood	171652	120155	0	480	336	7209	108139	2403	10213
Single Residential - Medium Density	389613	272727	680	306	214	1020	544	2468	2720

Figure 4.13: Vacant Land Infill for Leeu Gamka showing potential yield and infrastructure implications (Site numbers link to Database 2: Costed Vacant Infill)



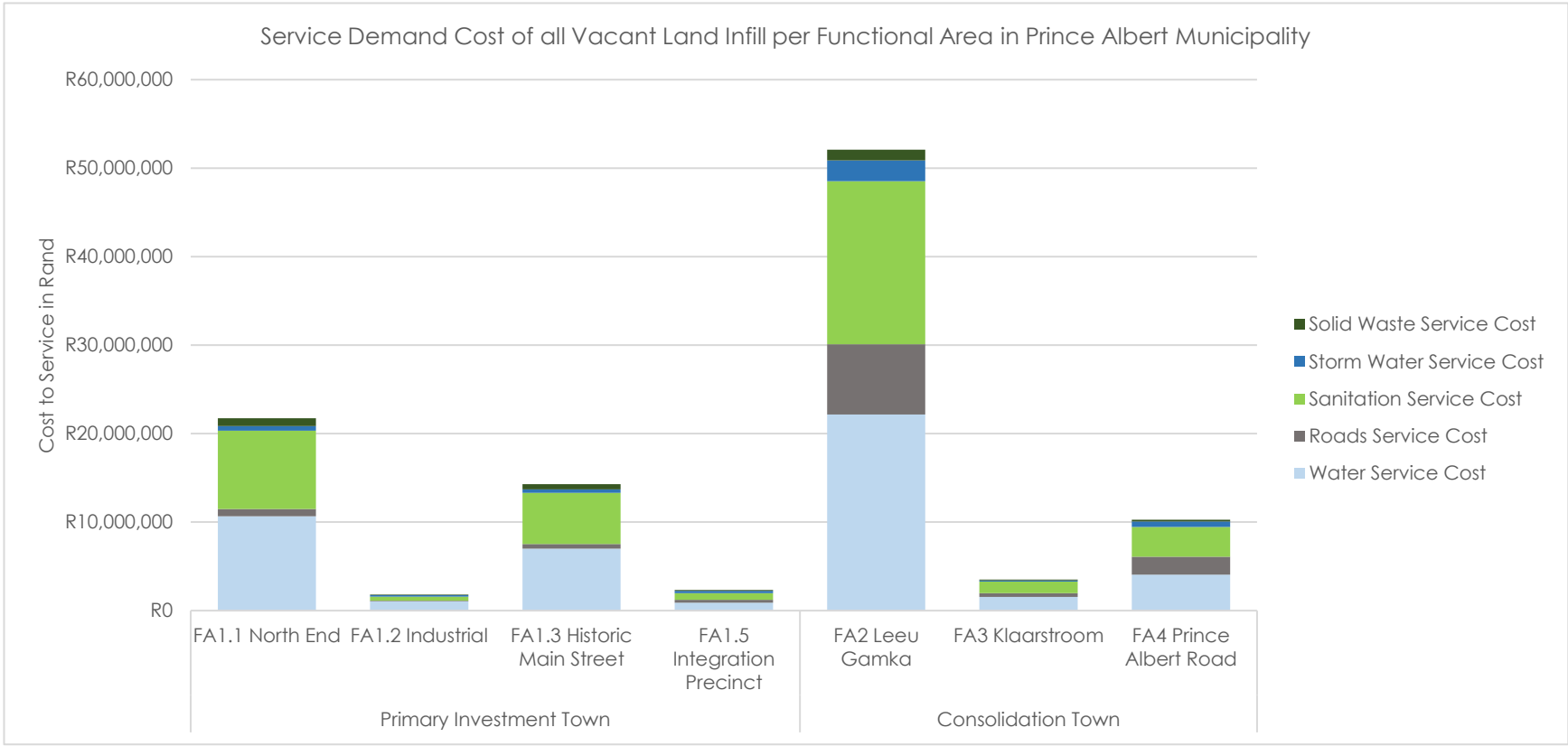
Functional Areas	Square Meters	70% GLA	Residential Units Yielded	Water kl/day	Sanitation kl/day	Roads R/trips/peak hour	Storm Water R/c/HA	Solid Waste Kg/day	Elec kVA/day
Consolidation Town									
FA3 Klaarstroom	31404	21982	75	55	38	439	4958	381	762
Retail - Neighbourhood	7776	5443	0	21	15	326	4898	108	462
Single Residential - Medium Density	23628	16539	75	33	23	112	60	272	300

Figure 4.14: Vacant Land Infill for Klaarstroom showing potential yield and infrastructure implications (Site numbers link to Database 2: Costed Vacant Infill)



Functional Areas	Square Meters	70% GLA	Residential Units Yielded	Water kl/day	Sanitation kl/day	Roads R/trips/peak hour	Storm Water R/c/HA	Solid Waste Kg/day	Elec kVA/day
Consolidation Town									
FA4 Prince Albert Road	57337	40137	14	144.364	101.0548	2091.96	31075.6	741.14	2989.86
Retail - Neighbourhood	49308	34516	0	138.064	96.6448	2070.96	31064.4	690.32	2933.86
Single Residential - Medium Density	8029	5621	14	6.3	4.41	21	11.2	50.82	56

Figure 4.15: Vacant Land Infill for Prince Albert Road showing potential yield and infrastructure implications (Site numbers link to Database 2: Costed Vacant Infill)



Functional Areas	SQM	Residential Units Yielded	70% GLA	Water Service Cost	Roads Service Cost	Sanitation Service Cost	Storm Water Service Cost	Solid Waste Service Cost
⊟Primary Investment Town	620118	1624	434082	R19,611,028	R1,714,833	R15,852,558	R1,367,001	R1,631,022
⊞FA1.1 North End	354281	974	247996	R10,648,803	R832,796	R8,848,701	R541,103	R881,839
⊞FA1.2 Industrial	13537	0	9475	R1,067,133	R55,052	R443,371	R174,611	R70,896
⊞FA1.3 Historic Main Street	177423	650	124197	R6,994,084	R517,108	R5,811,786	R371,948	R588,496
⊞FA1.5 Integration Precinct	74877	0	52414	R901,009	R309,878	R748,700	R279,339	R89,790
⊟Consolidation Town	650006	769	455001	R27,776,593	R10,419,962	R23,081,165	R3,093,730	R1,494,935
⊞FA2 Leeu Gamka	561265	680	392882	R22,148,496	R7,968,985	R18,404,456	R2,361,569	R1,215,029
⊞FA3 Klaarstroom	31404	75	21982	R1,563,307	R425,191	R1,299,042	R124,125	R95,055
⊞FA4 Prince Albert Road	57337	14	40137	R4,064,790	R2,025,786	R3,377,668	R608,036	R184,852
Grand Total	**1270124**	**2393**	**889083**	**R47,387,622**	**R12,134,795**	**R38,933,723**	**R4,460,731**	**R3,125,957**

Figure 4.16: Service costs of developing the vacant Infill strategy per Municipal and Town Scale Functional Area – Total Cost R 106 million in 2020 terms

4.4.4 Phase 2b: Spatial Strategy Projects for Prioritization

The previous section has shown the total cost of developing **all** vacant land in the municipality. This is not the desired 10-year pipeline of land parcels. What follows is the prioritisation of the sites most suitable for future development, based on the MSDF spatial strategy and proposals sets out in Chapter 4. The overarching spatial strategy of the MSDF is to bring about the spatial transformation of Prince Albert Town by connecting North End with the historic main street through the integration precinct. The strategy, shown in Figure 4.17 is to align the High **Priority Housing Sites 1,3,4 and 5** to the integration precinct and to develop a **primary or high school on High Priority Site 2** which is within the integration precinct and can double up as the regional sport field;

The above "spatial transformation strategy" (developing the high priority sites) is what will be translated into projects to be included in the consolidated project database and then prioritized within a 10-year capital budget. These sites are given a high priority because they fall within a priority investment settlement and priority investment node (within the settlement) and are well located to existing bulk services and social facilities. The planned housing delivery plan in Table 4.2 is largely catered for in the existing project database but the future priority sites are largely not.

Infrastructure projects for each of the priority sites have been captured within and crosschecked with the consolidated database. Sites 2, 3, 4 and 5 require new infrastructure investments while Site 1 and 2 are largely already catered for by the existing unfunded projects, with the same being said for the housing demand in Leeu Gamka and Klaarstroom, which are also largely catered for by the list if unfunded projects. It's worth noting that this strategy is not fixed, and the database has been set up so that if a different parcel of land is developed, the user can extract the service needs to be included in the project database for prioritisation.

High priority sites (1,3,4 and 5) scan yield up to **1042** residential units at 50 dwelling units / hectare (du/ha). **Site 2 was costed in the WCG DC calculator as a school but can, due to the design shown in the conceptual precinct plan, also accommodate 262 residential units bringing the total yield of the priority sites up to 1303 residential units @ 50 du/ha.** Sites 1,2 3, 4 and 5 can therefore accommodate more than Prince Albert Town's Housing demand of 955 units projected in this MSDF.

As shown in Figure 4.18, the infrastructure servicing costs of developing all priority sites will be **R 23.2 mil** (excl. top structures, electricity, land acquisition and the costing of Site 2 if it includes a residential component). Further technical description of each site is provided below and in the database:

- **Site 1**: Falls on Erf 99 and Erf 743, is 15 ha in size and can yield up to 524 units at 50 du/ha and 1 storey high. This may be less given topographical and industrial proximity constraints and that the infrastructure informants mention a possible 350 RDP units instead. If this is the case, then the surplus yield costs calculated (524 units minus 350 units = 170 units) can be brought over into the uncosted Site 2 residential component. Site 1 is largely owned by the municipality but a southern portion, near the industrial area, is privately owned with some informal structures on it and would need to be acquired by the municipality. Servicing Site 1 for 524 units would cost R 10.5 mil (excl electricity and top structures). When cross checking the project database, many projects are listed that already cater for Site 1 such as upgrading of the WWTW.

- **Site 2:** This site falls on a portion of Erf 743 and a portion of the site is owned by the hospital (Western Cape Government). The proposed use is a primary or secondary school for 400 pupils. The site has been chosen because most of the current and future school learners come from North End. Innovative design will be required, but it is possible that the school can double up on use of the existing sports field. Appropriately servicing the site specifically for a school with 400 learners would cost approximately R 2.3 mil (excl electricity). Road service costs for this site are ring fenced for the extension of Luttig Street as the first bridge between North End and the Historic Main Street.

- **Site 3:** Owned by PAM, is part of the unfunded housing pipeline for GAP housing. The pipeline proposed a total of 69 units as opposed to the 77 units outputted by this calculator.

- **Site 4:** Is situated on privately owned land and within the heritage overlay zone. It can accommodate 265 units at 50 du/ha, the aim here being to replicate the vernacular Karoo-style building typologies within a gap market housing development.

- **Site 5:** Is situated on privately owned land, within the heritage overlay zone, can accommodate 175 units at 50 du/ha and the aim being to replicate the vernacular Karoo-style building typologies within a gap market housing development.

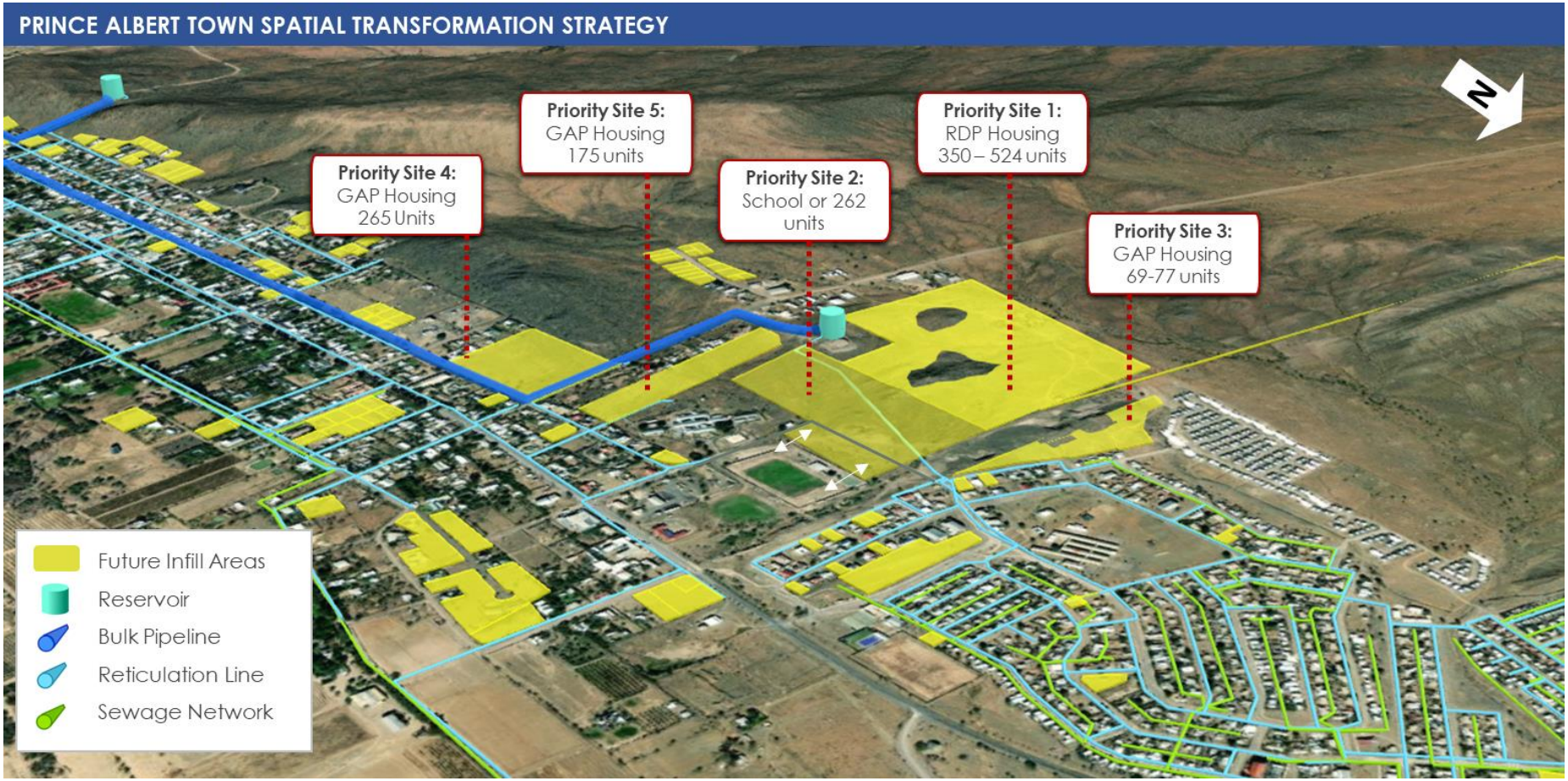


Figure 4.17: Prince Albert Town Priority Sites that promote Spatial Transformation

Priority Sites in Functional Areas	SQM	70% GLA	Residential Units Yielded	Water Service Charge	Sanitation Service Charge	Roads Service Charge	Storm Water Service Charge	Solid Waste Service Charge
FA1.1 North End	171828	120279	601	R5,922,728	R4,921,534	R290,994	R396,390	R544,133
1. High Priority	171828	120279	601	R5,922,728	R4,921,534	R290,994	R396,390	R544,133
1								
Single Residential - High Density	149775	104842	524	R5,163,909	R4,290,988	R253,712	R345,604	R474,419
3								
Single Residential - High Density	22053	15437	77	R758,819	R630,546	R37,282	R50,785	R69,714
FA1.3 Historic Main Street	63003	44102	441	R4,345,962	R3,611,309	R213,525	R290,862	R399,272
1. High Priority	63003	44102	441	R4,345,962	R3,611,309	R213,525	R290,862	R399,272
4								
Single Residential - High Density	37812	26468	265	R2,611,519	R2,170,061	R128,309	R174,781	R239,925
5								
Single Residential - High Density	25191	17634	176	R1,734,443	R1,441,248	R85,216	R116,081	R159,347
FA1.5 Integration Precinct	74877	52414	0	R901,009	R748,700	R309,878	R279,339	R89,790
1. High Priority	74877	52414	0	R901,009	R748,700	R309,878	R279,339	R89,790
2								
Schools	74877	52414	0	R901,009	R748,700	R309,878	R279,339	R89,790
Grand Total	**309708**	**216795**	**1042**	**R11,169,698**	**R9,281,543**	**R814,397**	**R966,591**	**R1,033,195**

Figure 4.18: Service costs of developing the High Priority Sites in Prince Albert Town – Total Cost R 23.2 mil

4.4.5 Part A Output 1: A Consolidated Project Database

As described in the methodology, the primary output of Part A is a consolidated master database of infrastructure investments or projects (which can be spatially depicted) for the entire municipality. These projects have been drawn from Phase 1, 2a and 2b. The full database, in excel format, forms part of this CEF. A total of 214 projects were recorded in the database at a total cost of R 586 mil, both funded (2019/20 to 2023) and unfunded.

Table 4.4 shows PAM's sector plans and status, many of which are outdated (highlighted in light blue). Two workshops were held with PAM project managers who assisted in providing their own 5-year capital plan, the total cost of which was **R 123.1 mil** over the **5-year period 2019-20224.** Numerous projects from the master plans, sector plans, and 2020/21 IDP were already included in the Five-year Capital plan. However, some projects in the IDP and sector plans were not included and therefore the database needed to be updated with all projects and cleaned of any duplications

Table 4.7 shows the recorded funded projects totaling R 94.35 mil. The funded projects in the database included projects that are funded by different spheres of government for the 2019/20 year as well as for the MTEF 2020/21 to 2023/23. A total of R 492 mil in unfunded projects was recorded and these projects can be found in Annexure A.

To create the project database, projects were drawn from the following sources:

- Draft MSDF 2021 Spatial Costing of Priority Sites 1 to 5;
- PAM 5-year Capital Plan 2021;
- The Central Karoo District Integrated Transport Plan 2020-2024;
- The 2020/21 IDP unfunded list of bulk and special infrastructure projects;
- Infrastructure Growth Plan 2014 Long Term Projects (IGP, 2014);
- Integrated Waste Management Plan (2015);
- Disaster Risk Management Plan (2019); and
- Projects in the Provincial MTEF (2020/21).

Table 4.4: Prince Albert Municipality Sector Plan and Status

Sector Plan		Status
1	CKDM Bulk Infrastructure Master Plan 2010	Needs updating
2	CKDM Bulk Integrated Transport Plan 2020-2024	Under Review
3	Water Master Plan (Draft) 2010	Needs updating
4	Sanitation Master Plan (Draft) 2010	Needs updating
5	Water Service Development Plan 2008	Urgently needs updating
6	Water Conservation and water demand management strategy	Needs updating
7	Pavement Management System 2010	Needs updating
8	Storm Water Master Plan Aurecon 2013	Need R 1.5m to be updated
9	Roads Master Plan 2009	Needs updating
10	Local Integrated Transport Plan	-
11	Integrated Waste Management Plan 2016	To be tabled with IDP
12	Electricity Master Plan 2016	-
13	Integrated Human Settlement Plan	Drafted
14	Integrated Infrastructure Maintenance Plan	To be developed
15	Asset management Plan	Adopted
16	Communication Strategy	Adopted
17	Performance Management Policy Framework	Adopted
18	Risk Management Strategy	Adopted
19	Long Term Financial Plan 2017-2027	Drafted to be tabled with IDP
21	Local Economic Development Strategy	Drafted to be tabled with IDP
21	Air Quality Master Plan	To be tabled with IDP
22	Disaster Management Plan 2019	To be tabled with IDP
23	Law enforcement strategy	To be developed
24	Employment Equity Plan	Adopted
25	Skills Development Plan	Adopted
26	Integrated HIV/Aids Plan	To be developed
27	Climate Change Response Strategy	In process of development with CKDM

The funded projects were derived from the MIG MTEF 2020 - 2023 plan totaling **R 23.61 mil** (see Table 4.5, tabled in the 2021/22 Draft Amended IDP). However, the information used in the CEF database was also sourced from PAM's 2020/21 IDP shown in Table 4.6, which was **R 28.3 mil** over the MTEF in total or **R 4.7 mil** more in comparison.

The funded projects included Provincial projects amounting to **R34.8 mil** (R33.6 mill for roads refurbishment and rehabilitation projects and R1.2 mil for health projects).

If **R 94.35 mil** is considered funded in the MTEF (based on Table 4.7), and **R 34.8 mil** of that is funded by Province, then **R 59.55** million is considered already committed by PAM's Capital Budget over the 2019/20-2023 financial years.

Table 4.5: MIG MTEF 2020 – 2023 Plan (PAM Draft Amended IDP 2021/22)

AREA	DESCRIPTION	2020/21 Allocation	2021/22 Allocation	FY 2021/22 CRR CO-FUNDING	2022/23 Allocation 7 956 000,00	FY2022/23 CRR CO-FUNDING
Leeu-Gamka	Upgrade Stormwater System	678 365			1 236 837,15	
Prince Albert: Noord End	Upgrade Stormwater System	409 688				
Klaarstroom	New Sidewalks	-	713 700,00		-	
Leeu-Gamka	New Sidewalks	1 324 771			-	
Prince Albert	New Sidewalks	1 567 653	1 550 800,00		1 214 715,00	
Leeu-Gamka: Bitterwater	Upgrade Sports Field: Ablution, Drainage & Turf	489 851				
Prince Albert: Noord End	New Sports Field: Ablution, Drainage & Turf	-	-		2 377 771	
Klaarstroom	Upgrade Waste Water Treatment Works: Oxidation Ponds	750 000	-		-	
Leeu-Gamka	Upgrading of Roads	961 179	2 540 100,00		2 728 876,81	
Klaarstroom	Upgrading of Roads	338 394	2 527 500,00	500 000,00	-	
Klaarstroom (Budget Maintenance; project 289681)	Upgrade Waste Water Treatment Works: Oxidation Ponds	552 948	-		-	
Prince Albert	PMU	377 150	385 900,00		397 800,00	
		7 450 000	7 718 000	500 000.00	7 956 000	-

Table 4.6: Prince Albert Detailed Capital Budget (PAM IDP 2020/21)

WC052 Prince Albert - Supporting Table SA36 Detailed capital budget				
R thousand		2020/21 Medium Term Revenue & Expenditure Framework		
Function	Project Description	Budget Year 2020/21	Budget Year +1 2021/22	Budget Year +2 2022/23
Parent municipality:				
List all capital projects grouped by Function				
Sports Grounds and Stadiums	Prince Albert Upgrade Sportfields	–	2 242	–
Sports Grounds and Stadiums	L/G Upgrade Sportfields	425,958	–	–
Sewerage	Klaarstroom Upgrade WWTW (MIG)	–	–	3 544
Electricity	Upgrade LV Reticulation/Opgradeer LS Reikulasie	–	1 739	–
Water Distribution	Refurbish iron removal plant	1 130	–	–
Corporate Services	Regional socia economic project / New municipal offices	3 913	870	–
Finance	PMU - New Laptops	17	20	27
Finance	CRR: IT Back - Up Sisteem in Admin Gebou	8	–	–
Roads	MIG - L/G Nuwe Sypaadjies	1 317	–	–
Roads	MIG - P/A Nuwe Sypaadjies	968	–	–
Roads	MIG - K/S Access road	1 092	991	1 266
Roads	MIG - L/G Access road	1 090	1 529	1 763
Water Distribution	MIG - L/G Storm Water	981	1 665	–
Water Distribution	MIG - P/A Upgrade Storm Water	356	–	–
Water Distribution	DLG: Manage Aquifer Recharge (Drought Relief)	522	–	–
Water Distribution	DLG: Supply and Install Stand-by Generators (Drought Relief)	450	–	–
Water Distribution	CRR: Refurbish Iron removal plant (Co-funding)	159	–	–
Water Distribution	CRR: Manage Aquifer Recharge (Co-funding)	127	–	–
Water Distribution	CRR: Supply and Install Stand-by Generators (Co-funding)	220	–	–
Parent Capital expenditure		12 778	9 056	6 600

Table 4.7: Consolidated Database of Recorded Funded Projects in PAM over the 2020 - 2023 MTEF including Provincial Projects

Funded Projects	Project Cost
Klaarstroom	**R18,092,284**
Road Transport	**R14,342,287**
Klaarstroom Access Roads Paving of Aalwyn and Booi Wilskut Str	R4,342,287
Klaarstroom to Beaufort N12	R10,000,000
Waste Water Management	**R3,749,997**
Klaarstroom Upgrade WWTW and additional oxidation ponds	R3,227,000
Klaarstroom Upgrade WWTW Co Funding	R522,997
Leeu Gamka	**R250,000**
Road Transport	**R250,000**
Side Walks Leeu Gamka	R250,000
Meirings Poort	**R25,000,000**
Road Transport	**R25,000,000**
Resealing of Meirings Poort	R25,000,000
Municipal Wide	**R12,541,324**
Community and social services	**R2,555,000**
Brushcutters	R265,000
Containers x 2	R90,000
Irrigation equipment for parks	R1,500,000
Truck 1.3 ton	R700,000
Electricity	**R5,100,000**
Upgrade of LV Network	R5,100,000
Finance and administration	**R1,214,000**
Insurance Replacements	R50,000
PMU	R1,164,000
Other	**R900,000**
Expanding of Cemetery	R900,000
Water	**R2,772,324**
Groundwater Management Interventions	R2,045,000
Managed Aquifer Recharge	R600,000
Managed Aquifer Recharge-CO FUNDING	R127,324
North End	**R3,072,125**
Road Transport	**R3,072,125**
Kerb and Sidewalks North End	R3,072,125
Prince Albert	**R31,395,341**
Community and social services	**R1,314,442**
Chainsaws	R214,442
Op Die Berg Public Toilets	R1,100,000
Corporate Services	**R7,000,000**
RSEP Projects New Council and Finance Offices	R5,500,000
Upgrade Council Chambers Co-Funding	R1,500,000
Electricity	**R738,000**
Supply and Install Stand-by Generators	R518,000
Supply and Install Stand-by Generators-CO FUNDING	R220,000
Executive and council	**R3,951,087**
Access Control - Furniture and Equipment	R205,000
IT Equipment	R2,950,000
Office Equipment	R446,087
Signage, Banners & Billboards	R350,000
Finance and administration	**R30,000**
Office Equipment	R30,000
Health	**R1,456,000**
Prince Albert Ambulance EMS Station	R1,220,000
Prince Albert Ambulance Station Health Technology and additions including wa:	R236,000
Road Transport	**R1,086,651**
Capex Test Centre	R740,151
Capex: Fire Arms	R346,500
Sport and recreation	**R12,860,623**
Prince Albert Sports Field Upgrade	R11,500,000
Prince Albert Sports Field Upgrade Co Funding	R1,360,623
Water	**R2,958,538**
Refurbish Iron Removal Plant CO-FUNDING	R158,538
Refurbishment Iron Removal Plant	R2,800,000
Prince Albert Road	**R4,000,000**
Road Transport	**R4,000,000**
Resealing of Prince Albert Road	R4,000,000
Grand Total	**R94,351,074**

Figure 4.19 provides a breakdown of PAM's funded and unfunded projects according 'Project Type' per settlement. The total **funded pipeline** can be summarised as **13% new, 51% renewal and 36% upgrades**. This affirms that all spheres of government are focused on PAM's existing infrastructure rather than new infrastructure over the MTEF period. The total **unfunded project** pipeline consists of **61% new, 7.9% renewal and 29.3%** upgrades, thus inferring the long term need for new infrastructure.

Table 4.8 on the following page shows the funded and unfunded projects according to MSCOA Function and Sub Function classifications. T**rading Service**s (particularly water, wastewater, and electricity) **make up 60% of the unfunded project needs**. This is followed by **community and public safety (22%)** and **economic and environmental services (18%)**. There is a noticeable gap in project data for health, environment, public safety and government and administration.

It should be noted that, in the absence of updated master plans, project identification over the long term unless the MSDF can properly cost its spatial strategy, and hence the need to keep master plans updated is critically important. Key questions to continue to be reflected on as the database is updated going forward are:

1. Are all projects from all sector plans and master plans being captured?

No, the master plans are outdated and need to be aligned with this CEF. In terms of Provincial projects, further investigation must be done to include the Provincial User Asset Management Plans (UAMP) projects, which will illustrate provincial investments over a 5-10-year time frame.

2. How do these projects relate to each other?

In terms of project sequencing and budgeting, municipal infrastructure projects often comprise of incremental upgrades to water supply, sanitation or electrical networks. It is therefore important that projects in the database are accordingly classified to sure these increments are captured and grouped.

3. What will be invested in infrastructure over short term?

The short term can be considered the 3-year MTEF (2019/20-2023) which is funded, and the medium term is the Municipality's 5-year capital plan. To extend this to 10 years, additional projects are added and then a longer-term determination should be made of what projects should be budgeted for within an available capital budget.

4. Which projects should be prioritized first and how will capital be spent, in which sector and over what time period?

In terms of capital budget, the only revenue or rates generating municipal projects are either the development of new rates contribution developments within the municipal area or investing in 'trading services' projects such as solid waste, water, wastewater treatment plants, and possible local electricity generation. Project financing via loans or municipal bonds can be considered for these investments, subject to feasibility and ultimately bankability of the projects.

4.4.8 PART A OUTPUT 2: A GEOLOCATED PROJECT DATABASE

Figure 4.20 on the following page shows PAM's funded and unfunded geolocated project database using ESRI Webmaps. It also shows the unfunded and funded projects according to town/area. The project database is easily uploaded into the ESRI Webmap online system because it has been geolocated as far as possible. In the Webmap, the viewer can click on each project and spatially view the various classifications for each town. The Webmap information is not public facing and in future, the database and Webmap can be owned and managed by the municipality using the same user-friendly software.

Figure 4.21 shows the geolocated project database in Prince Albert Town. Most projects are clustered in 3 areas namely the Prince Albert Town integration precinct, the water source areas in the southern area of the town and the waste and wastewater management areas in the northern lower gradient of the town.

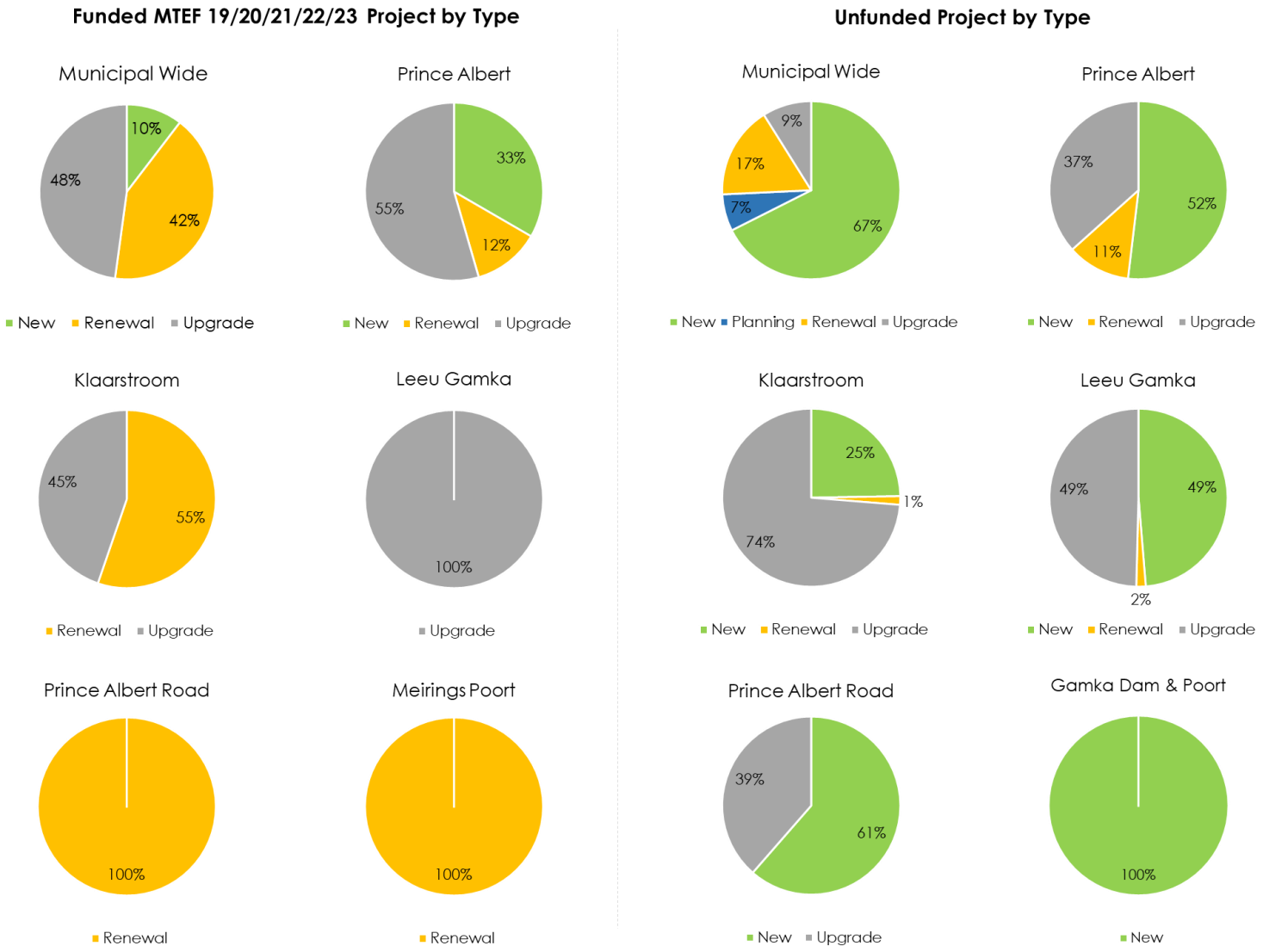
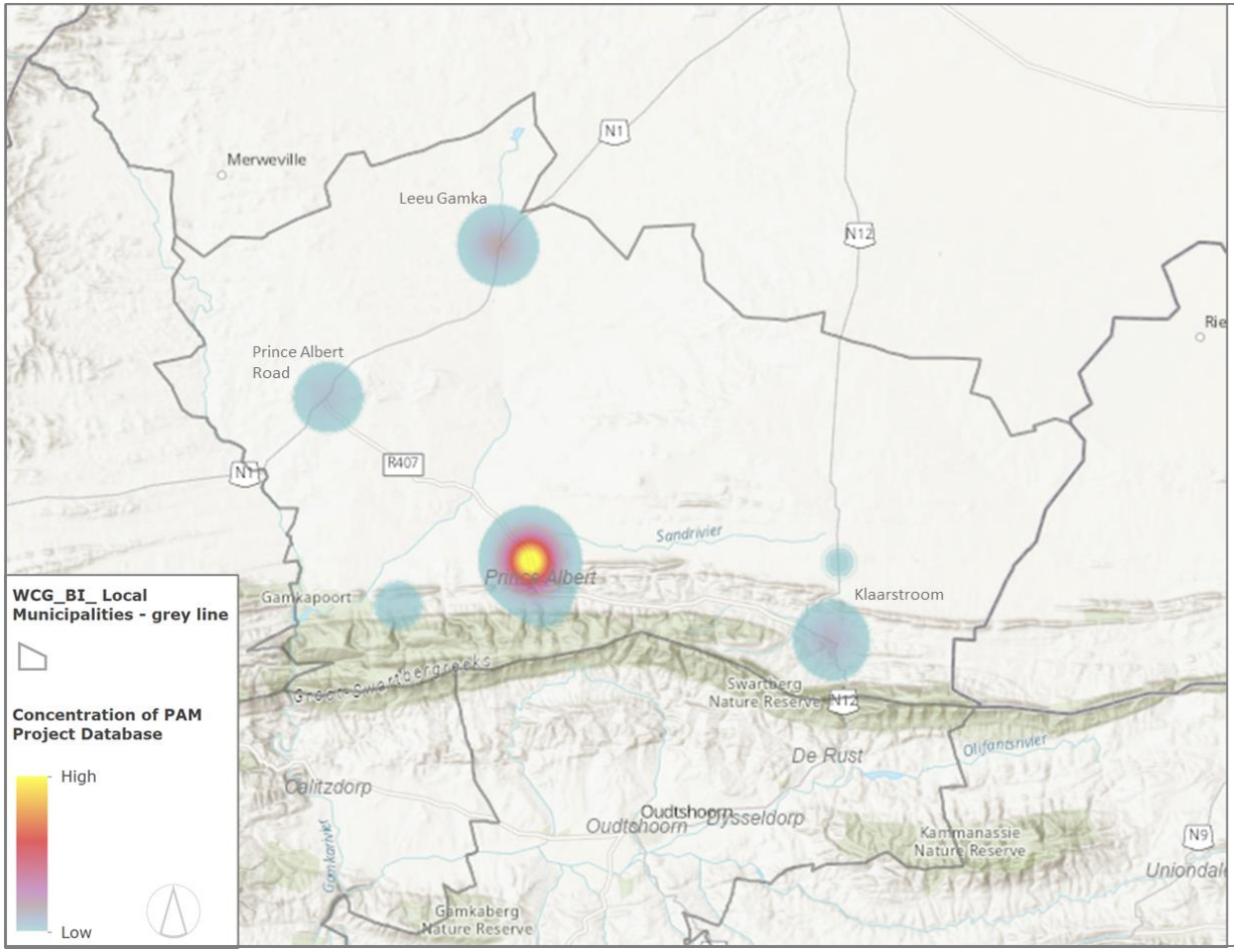


Figure 4.19: PAM Funded and Unfunded Projects by Project Type

Table 4.8: Pam Funded and Unfunded Projects per Function and Sub Function (Includes Provincial Funded Projects in the 2019/20/21 and 2022 period)

MSCOA Function and Sub Function	Funded	%	Unfunded	%
Community and public safety	**R18,186,065**	**19**	**R114,681,033**	**23**
Community and social services	R3,869,442	**4**	R44,020,000	**9**
Public safety	R0	**0**	R5,000,000	**1**
Health	R1,456,000	**2**	0	**0**
Sport and recreation	R12,860,623	**14**	R65,661,033	**311**
Economic and environmental servic	**R47,751,063**	**51**	**R93,163,436**	**19**
Environmental Protection	R0	**0**	R1,000,000	**0**
Road Transport	R47,751,063	**51**	R64,153,436	**13**
Planning and Development	R0	**0**	R28,010,000	**6**
Governance and administration	**R12,195,087**	**13**	**R3,381,782**	**1**
Corporate Services	R7,000,000	**7**	R0	**0**
Executive and council	R3,951,087	**4**	R3,381,782	**1**
Finance and administration	R1,244,000	**1**	R0	**0**
Trading Services	**R16,218,859**	**17**	**R280,598,687**	**57**
Electricity	R5,838,000	**6**	R32,700,000	**7**
Other	R900,000	**1**	R37,293,487	**8**
Waste Management	R0	**4**	R13,858,776	**3**
Waste Water Management	R3,749,997	**0**	R63,940,923	**13**
Water	R5,730,862	**6**	R132,805,500	**27**
Grand Total	**R94,351,074**		**R491,824,937**	



PRINCE ALBERT MUNICIPALITY GEOLOCATED PROJECT DATABASE

Funded Projects		
Town / Area	**Project Cost**	**%**
Klaarstroom	R18,092,284	19
Leeu Gamka	R250,000	0
Meirings Poort	R25,000,000	26
Municipal Wide	R12,541,324	13
North End	R3,072,125	3
Prince Albert	R31,395,341	33
Prince Albert Road	R4,000,000	4
Grand Total	**R94,351,074**	**100**

Unfunded Projects		
Town / Area	**Project Cost**	**%**
Municipal Wide	R71,738,819	15
Prince Albert	R256,495,361	52
North End	R21,000,000	4
Leeu Gamka	R46,405,653	9
Klaarstroom	R14,475,104	3
Gamka Dam	R5,000,000	1
Gamka Poort	R4,500,000	1
Prince Albert Road	R12,210,000	2
Treintjies	R60,000,000	12
Grand Total	**R491,824,937**	**100**

Figure 4.20: Concentration of Funded and Unfunded Project Database using ESRI Webmaps (The funded projects include provincial funded projects)

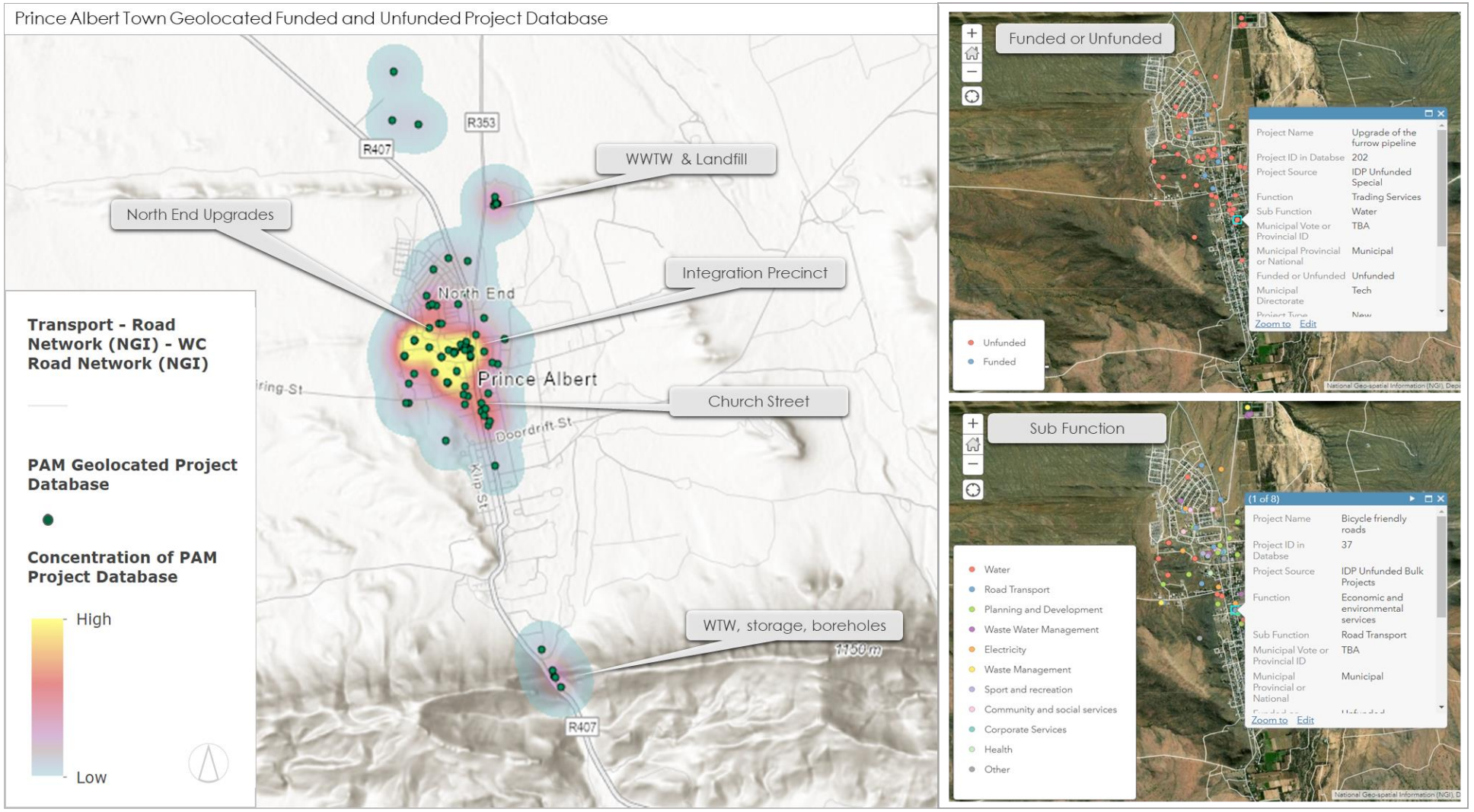


Figure 4.21: Concentration of Funded and Unfunded Project Projects in Prince Albert Town Using ESRI Webmaps

4.5 PART B: THE AFFRDOABILITY ENVELOPE

4.5.1 Phase 3: Projected Revenue and expenses

PAM's Long-Term Financial Plan (LTFP) was developed in 2017. The LTFP projected revenue and expenses between 2017 and 2026, however is now outdated due to the economic effects of the COVID-19 pandemic and associated recession in 2020. PAM is experiencing some of the lowest payment rates on record, meaning there's less money for operations than pre-2020. From a financial perspective stringent financial management is being implemented, such as monitoring financial targets, implementing expenditure reductions, monitoring debt levels, revenue improvement targets, debt collection targets, gearing ratio's, cost coverages and liquidity requirements.

For the purposes of this CEF, a reassessment of the 2017 LTFP was done by taking the audited Annual Financial Statements and the Budgeted Financial Performance (Table A4) of the 2020/21 – 2023/24 budget, and projected the municipality's revenue and expenses based on conservative growth assumptions (derived from the LTFP) from 2024/25 to 2030/31. This information is contained within a separate excel database named 'The CEF Affordability Envelope'. It is critical to note that these projections should not replace the full quantum or work that an updated LTFP would provide, and are underpinned by several assumptions (growth rates) that, if changed, significantly change the projected revenues and expenses of the municipality and hence change the available capital budget.

As shown in Figure 4.222, the projected expenses (capital and operational) stay in line with projected revenue. As shown in Figure 4.23, 42%.7 of revenue is derived from transfers. PAM does not have a strong revenue base and is highly dependent on transfers (equitable share and conditional grants), which is expected to decline in the future. It is therefore critical that capex is spent extremely wisely and strategically in addressing Prince Albert's development challenges. Figure 4.24 provides further information on PAM's finances.

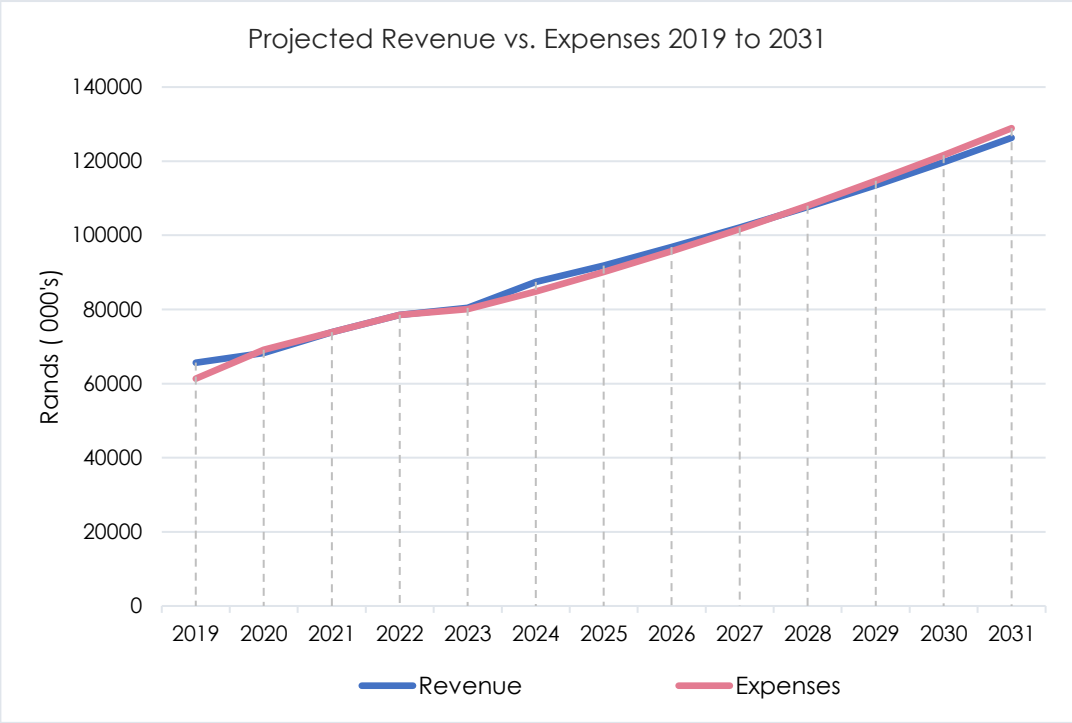


Figure 4.22: Projected Revenue vs. Expenditure Forecast 2018-2018

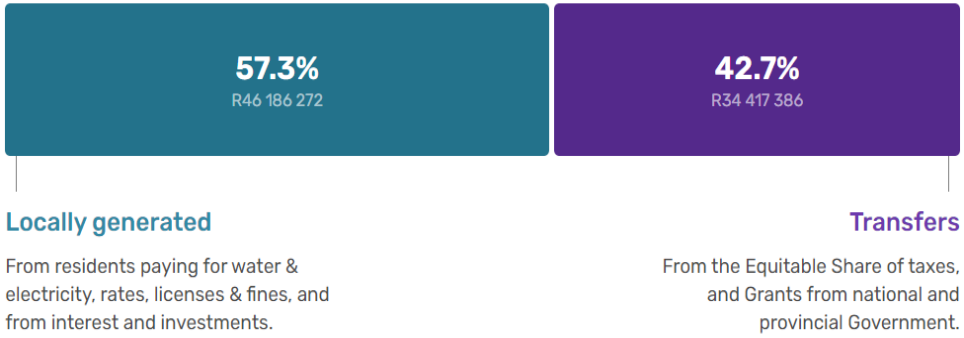
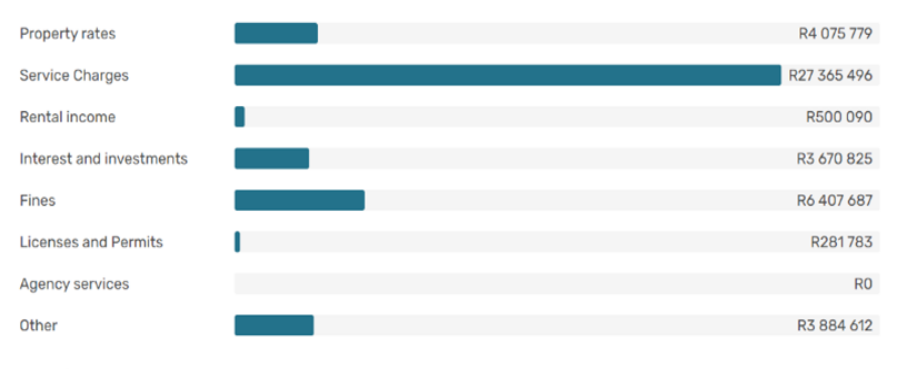


Figure 4.23: Where does PAM get its Money From (Source: Municipalmoney.gov.za)

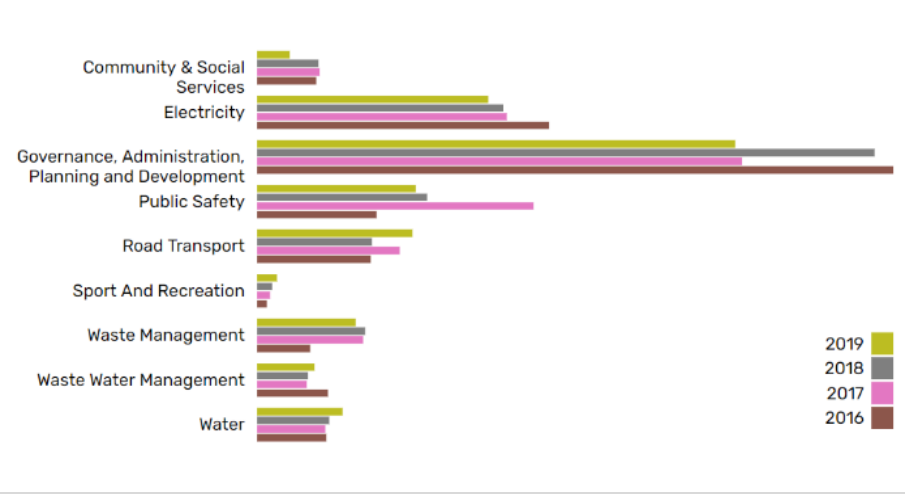
Municipal Money

What is PAM's local income sources 2018-2019?



What are the National conditional grants 2019-2020?

What is money spent on?



What is the planned and actual spending over time?

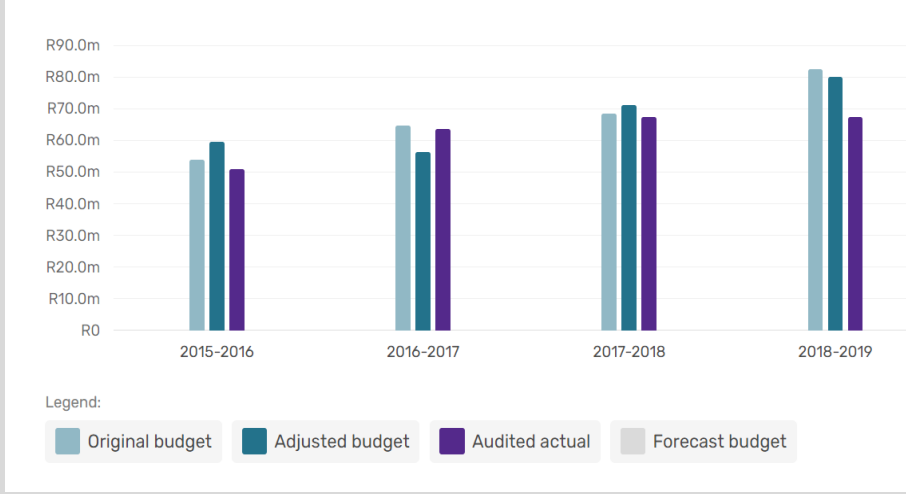


Figure 4.24: Information on PAM's finances form Municipal Money.gov (Source: https://municipalmoney.gov.za/profiles/municipality-WC052-prince-albert/)

4.5.2 Phase 3: Determining the Budget Available for Capital Expenditure

Figure 4.25 shows that the total cost of the funded and unfunded projects in PAM's project database is greater than what can be afforded. The graph shows, for 12 financial years 2019/2020 to 2030/2031, that the budget available for capital expenditure (grey line) is less than the amount needed for the funded and unfunded projects (orange line). The funded **(R94.35 million)** and unfunded **(R 492 million)** projects amounted to **R 586 mil** in comparison to the total available budget for capital expenditure of **R 303 mil**. All budget projections are shown in Table 4.9.

The total capital budget available for the unfunded projects **(R 492 million)** was calculated to be **R 209 million or 42.5%** of the unfunded need for the years 2024 to 2031 - this timeframe because the current MTEF is already prioritised and committed (See Figure 4.25). The budget was not explicitly set out in the 2017 LTFP and had to be calculated by determining what PAM historically spent on capital expenditure (both from grants and own) and applying a conservative growth estimate. PAM's 'accumulated surplus' is provided in the MSCOA budget tables for years 2020/21 – 2023/24 (See Annexure B). These figure were projected to grow at 5% per annum to 2031. PAM's 'accumulated surplus' is understood as PAM's own potential funding for capital projects because to finance the provision of infrastructure and other items of property, plant and equipment from internal sources, funds are transferred from the accumulated surplus / (deficit) to the Capital Replacement Reserve (CRR). To determine the final available capital budget, the accumulated surplus was then added to the MTEF MIG allocations over the 2020/21 – 2023/24 period (shown in Table 4.10) and projected at 5% per annum to 2031 (See Figure 4.25).

Due to austerity measures in 2020, budget cuts have been made to the MIG allocation, which is the main grant funding source used for infrastructure and this can be seen in the reduced capital budget is in Figure 4.25 between 2020 and 2021, which also impacts on the long-term capital projection.

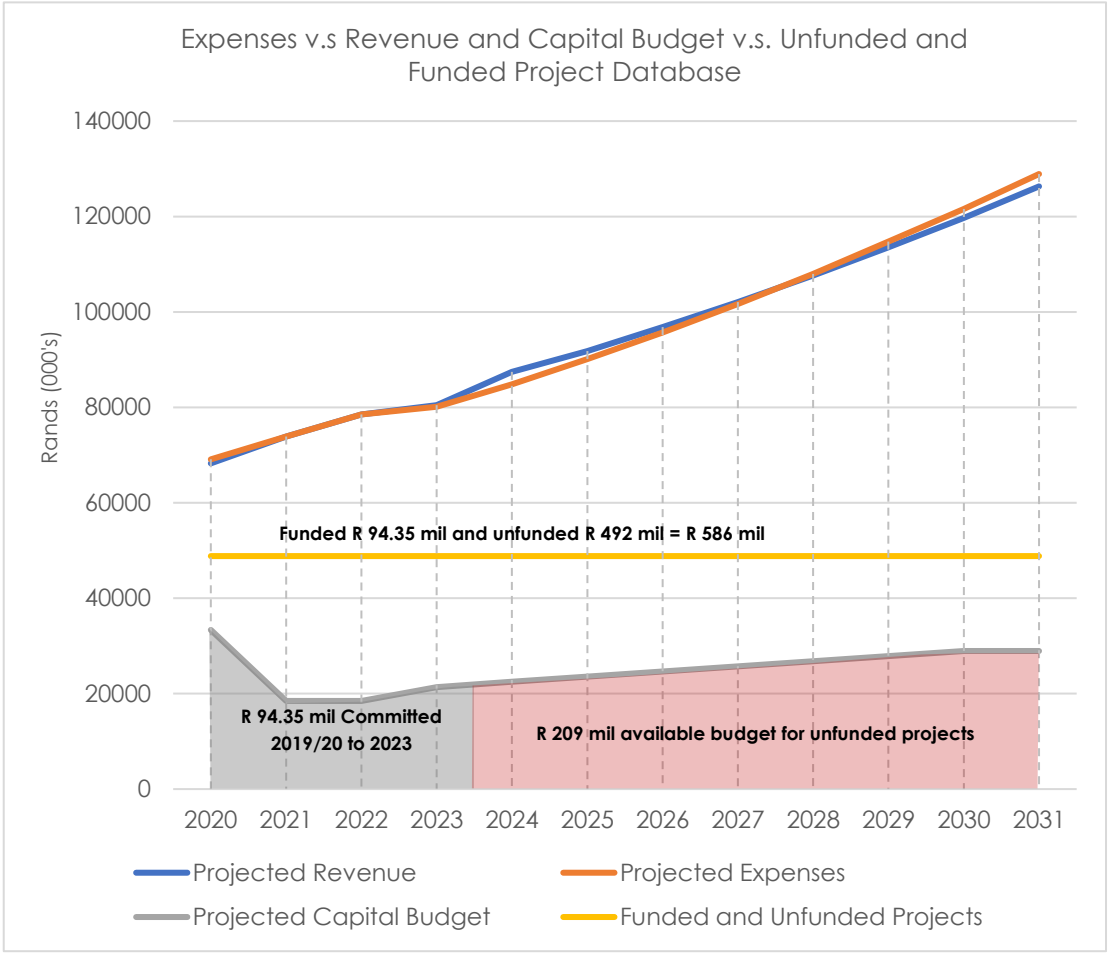


Figure 4.25: Graph of Projected Revenue vs. Expenses and Projected Capital Budget vs. Total Funded and Unfunded Project Cost (2019-2031) in (R'000)

Table 4.9: Table of Projected Revenue, Expenses, Capital Budget and Unfunded and Funded Project Costs (2019-2031) (Light Blue indicating financial data available from MSCOA and Annual Financial Statements and the darker border indicating Capital Budget Available for Unfunded Projects between 2024 and 2031)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Revenue	R68,264,000	R73,864,000	R78,523,000	R80,460,000	R87,468,000	R91,824,000	R96,810,000	R102,077,000	R107,643,000	R113,525,000	R119,741,000	R126,313,000
Expenses	R69,106,000	R73,861,000	R78,491,000	R80,126,000	R84,848,000	R90,142,000	R95,727,000	R101,670,000	R107,994,000	R114,725,000	R121,609,000	R128,905,000
Capital Budget available for capital expenditure	R33,359,000	R18,481,000	R18,471,000	R21,392,000	R22,514,000	R23,586,000	R24,658,000	R25,730,000	R26,803,000	R27,875,000	R28,947,000	R28,947,000
Funded and Unfunded Projects	R 48 833 333	R 48 833 333	R 48 833 333	R 48 833 333	R 48 833 333	R 48 833 333	R 48 833 333	R 48 833 333	R 48 833 333	R 48 833 333	R 48 833 333	R 48 833 333

Table 4.10: National and Provincial Distribution of Allocations to Prince Albert Municipality over MTEF period 2021/22/23 and 2024 (Source: OPMII, 2020)

Source	Department	Municipality	Transfer description	2021/22	2022/23	2023/24
National	Cooperative Governance	Prince Albert	Municipal Infrastructure Grant	7718	7956	8098
National	Mineral Resources and Energy	Prince Albert	Integrated National Electrification Programme (Municipal) Grant	0	3000	4000
National	National Treasury	Prince Albert	Equitable Share	24054	25533	25660
National	National Treasury	Prince Albert	Local Government Financial Management Grant	1650	1650	1700
National	Public works and Infrastructure	Prince Albert	Expanded Public Works Programme Integrated Grant for Municipalities	1243	0	0
WCG	Cultural Affairs and Sport	Prince Albert	Community library services grant	872	887	902
WCG	Cultural Affairs and Sport	Prince Albert	Development of Sport and Recreation Facilities	300	0	0
WCG	Cultural Affairs and Sport	Prince Albert	Library service: Replacement funding for most vulnerable B3 Municipalities	822	836	850
WCG	Environmental Affairs and Development Planning	Prince Albert	Regional Socio-Economic Projects (RSEP) Programme - Municipal Projects	1000	0	0
WCG	Local Government	Prince Albert	Community Development Workers (CDW) Operational Support Grant	57	57	57
WCG	Local Government	Prince Albert	Thusong Service Centres Grant	0	150	0
WCG	Provincial Treasury	Prince Albert	Western Cape Financial Management Capacity Building Grant	250	0	0
WCG	Transport and Public Works	Prince Albert	Financial assistance to Municipalities for maintenance and construction of transport infrastructure	50	50	50
Total				**38016**	**40119**	**41317**

4.6 PART C: PROJECT PRIORITISATION AND 12 -YEAR CAPITAL EXPENDITURE

Part C brings together Part A and B in the form of a prioritized portfolio of infrastructure projects within projected capital envelope from 2024 to 2031. To reiterate this timeframe is chosen because the current MTEF budget (Projects shown in Table 4.7) is already considered prioritised.

4.6.1 Phase 4: Applying a Prioritization Tool & Developing a Prioritised Portfolio of Infrastructure Projects

Phase 4 sets out the prioritization tool against which the 'unfunded' projects are assessed. This tool, shown in Table 4.1 and described in the methodology, consists of thirteen spatial, financial, and engineering criteria which are used to score the unfunded projects against to arrive at a prioritised portfolio of infrastructure projects. The criteria were workshopped with municipal officials but can be adjusted in future iterations based on changing priorities. Annexure A provides the full list of scored unfunded projects. The scores in the table do not mean that projects that scored low should not be considered for investment but rather to show how the unfunded projects from the database align to the spatial, engineering and financial criteria proposed in this CEF. Only the unfunded projects were scored because the funded projects are already budgeted for in the MTEF.

The prioritisation tool uses a simple binary scoring method and can easily be adjusted to make provision for assigning weighting to criteria. The weakness of the tool is that some criteria need to be subjectively determined in the absence of detailed feasibility studies, and that, despite the score a project receives, sequencing considerations may impact its final ranking in the Prioritised Portfolio of Capital Projects. As this is the first iteration of the PAM CEF, it is possible that some capital projects may not have been included in the consolidated project database, while others may be duplicated, although extensive effort went into scoring all sector and master plans for project identification, and a check for project duplication was done. However, this CEF methodology is iterative and the tools provided can be used to refine and improve the identification of strategy-aligned and affordable projects.

Multiple methods of prioritizing a limited capital budget exist and ideally, this should be done as a strategic prioritisation process by the municipality's strategic planners, urban planners, engineers, finance office, and municipal council once phase 1 to 3 of the CEF method are concluded. Critical, however, is that the project list is informed by reliable data on infrastructure demand and capacity. Attempts were made in this CEF to cross check housing growth figures with infrastructure capacities to determine an ideal sequencing of infrastructure projects listed in the database, however, most infrastructure master plans are outdated and there is insufficient and unreliable data on available bulk capacity for various services such as water, and waste water. For this reason, it was not possible to perfectly sequence projects and a further sequencing revision is needed once completed master plans have been developed, and phase 1 database completed. Notwithstanding this, the vacant infill strategy database provides a comprehensive understanding of unit loadings and cost implications per site which can be used to cross check with available bulk capacity (once determined). Therefore, only in the next iteration of this CEF, can an ideal sequencing of projects be achieved.

4.6.2 Phase 5: Budget Fit and Sequencing

The total capital budget to spend on unfunded projects (R 492 million) is R 209 million between 2024 and 2031. Therefore, PAM will only be able to afford **42.5%** of the unfunded need within this period. This does not mean that PAM's entire unfunded projects are completely unaffordable, rather that they simply cannot be afforded within the 2024 to 2031 timeframe and should therefore be prioritised into determine an optimal spatial, engineering and financial outcome for the municipality.

Figure 4.26 provides an example of how the unfunded projects can be proportionally fit by **42.5%** into the 7 year (2024-2031) available capital budget of **R 209 million**. A proportional fit is only conceptual and the bottom line for the municipality is to have uninterrupted service delivery, particularly 'trading services' or so called 'rates generating' projects like water, waste, electricity and sanitation that need to run in parallel.

To tackle this problem, the unfunded projects were therefore rescored from 1 to 5 in relation to their priority against other projects in their MSCOA Sub Functions i.e. 1 being the highest priority and 5 being the least priority in the sub function. Although this scoring was also subjective, it was still informed by the outcomes of the prioritization framework and the knowledge of the scorer who applied their mind in terms of the municipal focus on water resilience and infrastructure maintenance and repairs. The following were the outcomes when the unfunded projects were rescored within their sub function:

- Projects scoring 1 only: R230.8 mil
- Projects scoring 1 & 2: R 340 mil
- Projects scoring 1,2 & 3: R 400 mil
- Projects scoring 1,2,3 and 4: R 458 mil
- Projects scoring 1,2,3, 4 and 5: R 492 mil

Figure 4.27 provides an example of how the unfunded projects scoring 1 only, have a more representative weighting. The ideal capital fit for unfunded project was therefore **R 230.8** million and although the available capital budget is only **R 209 mil**, this means that a slight deficit from the total cost of some prioritized projects will need to be carried over into the outer years of 2031 onward.

Table 4.11 provides a breakdown (Function, sub function and Town/area) of the re-prioritised projects scoring 1 **(R230.8 mil)**, that fits closest to the available capital budget of **(R209 mil)** between 2024 and 2031.

Table 4.12 shows how this proposed and prioritized list of projects can be sequenced for each financial year in which the capital budget was projected. The sequencing included the high priority sites 1 to 5 which are highlighted in yellow in the table. To propose a possible sequencing, the following assumptions were made about each of the priority sites:

- By 2025, Site 1 (524 residential units) has been developed and the extension of Luttig Street has been completed to bridge the spatial divide.
- By 2028, Site 3 has been developed
- By 2029, Site 2 has been developed to have a School that doubles up on use of the Sport field.
- By 2030, GAP Housing Sited 4 and 5 have been developed.

It is important to note that Table 4.12 is only a proposed projects sequencing and there are several factors that can and will most likely this. This include, among others:

- Underspending and rollovers of projects;
- Fluctuations in the available capital funding
- The capital budget not being exactly what is forecasted here;
- Limits to the availability of water;
- Capital implications of disaster response; and
- Council decisions.

Table 4.11 has therefore been provided to allow the Municipality greater flexibility in determining their own sequencing of the prioritized R 241 mil projects.

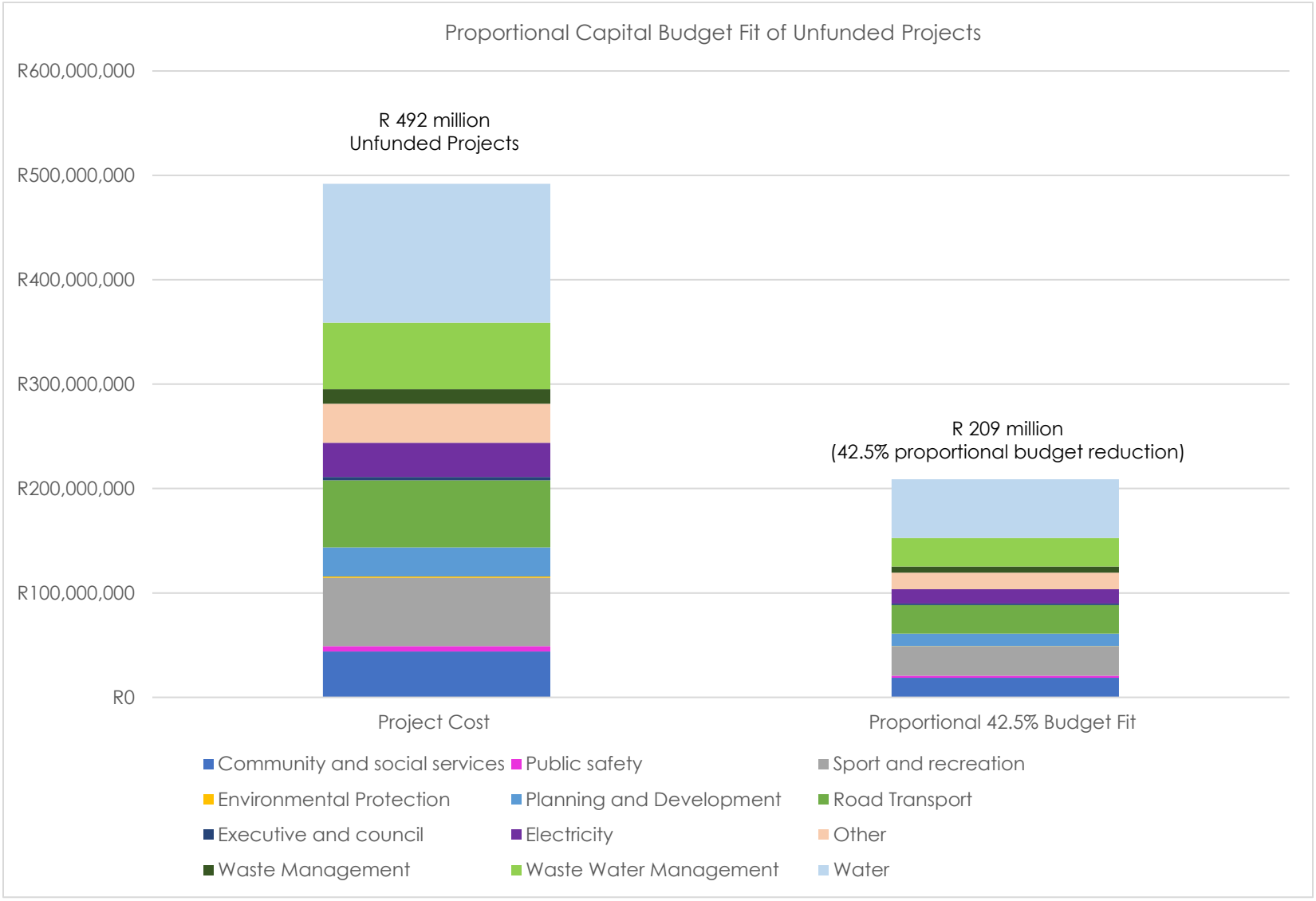


Figure 4.26: Graph of Proportional 42.5% Budget Fit Example for Unfunded Projects Across MSCOA Sub Functions 2014 to 2031

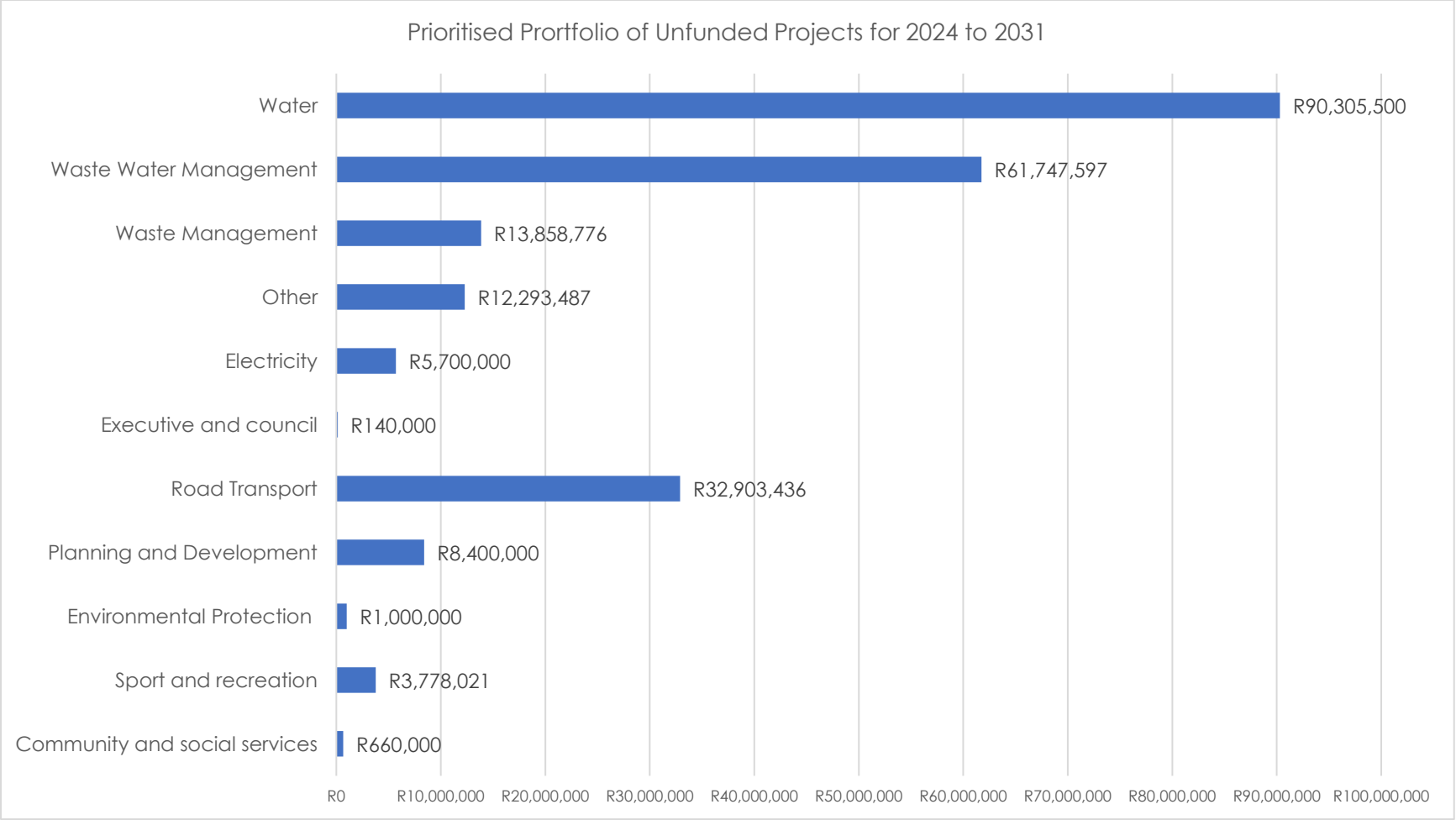


Figure 4.27: Graph of Prioritised (2024-2031) Unfunded Projects totaling R241 million

Table 4.11 Table of Unfunded Prioritized Projects that fit Closest to the Capital Budget

Unfunded Prioritized and Budget Fitted Projects per Function, Sub Function and Settlement/Area	Estimated Project Cost
Community and public safety	**R4,438,021**
Community and social services	**R660,000**
Municipal Wide	R660,000
Landscaping of parks	R600,000
Tables for Community Halls all 3 towns	R60,000
Sport and recreation	**R3,778,021**
Municipal Wide	R1,200,000
Sportsground development	R1,200,000
Prince Albert	R2,578,021
Prince Albert: Sports Field Upgrade	R2,578,021
Economic and environmental services	**R42,303,436**
Environmental Protection	**R1,000,000**
Municipal Wide	R1,000,000
Alien clearing populars prosopis satansbos cactuses	R1,000,000
Planning and Development	**R8,400,000**
Municipal Wide	R3,600,000
Develop a water resources zoning plan	DLG
Preliminary Investigation for Raw water storage dam	R3,000,000
Review and Update Water Master Plans Water and Sewage	R500,000
Train and equip volunteers to assist with area-based fire prevention and response teams.	R100,000
Prince Albert	R3,200,000
Integration Precinct - Land Acquisition for Southern Portion of Primary School Priority Site 2 to be transferred from DOH Health or DTPW	To be costed
Integration Precinct - Land Acquisition of Priority Housing Site 3 and 4 from private land holders	R1,000,000
Integration Precinct - Land Acquisition of Southern Portion of Priority Housing Site 1 from private land holder	R1,000,000
Tourism Centres Renovation of municipal buildings, equipping of centres, training of personnel, operation	R1,200,000
Klaarstroom	R1,600,000
Facilitate the establishment of infrastructure for new service station planned for the northern side of the N12	R1,600,000
Road Transport	**R32,903,436**
Municipal Wide	R17,420,000

Maintenance of roads	R3,000,000
Portable PA System (All in One)	R20,000
Public Transport	R14,000,000
Upgrade of Road Signage	R400,000
Prince Albert	R5,483,436
Integration Precinct - Priority Housing Site 1 Roads	R761,137
Integration Precinct - Priority Housing Site 3 Roads	R111,846
Integration Precinct - Priority Housing Site 4 Roads	R384,926
Integration Precinct - Priority Housing Site 5 Roads	R255,649
Non Motorised Transport Bicycle friendly lane along Church Street	R1,300,000
Tools & Equipment for Technical Services	R60,000
Vehicle Testing Centre	R2,300,000
Integration Precinct - Priority Site 2 Roads Luttig Street Extension	R309,878
North End	R10,000,000
Extension of sidewalks proposed in CKDM ITP	R10,000,000
Governance and administration	**R140,000**
Executive and council	**R140,000**
Municipal Wide	R60,000
Laptop x 2 for office of CLO's Klaarstroom and Leeu Gamka	R60,000
Prince Albert	R80,000
Office Furniture & Equipment	R80,000
Trading Services	**R183,905,360**
Electricity	**R5,700,000**
Prince Albert	To be costed
Integration Precinct - Priority Housing Site 1 Electricity	To be costed
Integration Precinct - Priority Housing Site 3 Electricity	To be costed
Integration Precinct - Priority Housing Site 4 Electricity	To be costed
Integration Precinct - Priority Housing Site 5 Electricity	To be costed
Integration Precinct - Priority Site 2 Electricity Infrastructure to accommodate primary school and housing	To be costed
North End	R3,700,000
Kiosk and upgrade of Transformers	R3,200,000

Street lighting in North End	R500,000
Leeu Gamka	R2,000,000
Community Lighting	R2,000,000
Other	**R12,293,487**
Municipal Wide	R11,151,305
New regional cemetery	R11,151,305
Prince Albert	R1,142,182
Tools & Equipment	R1,142,182
Waste Management	**R13,858,776**
Prince Albert	R9,058,776
Integration Precinct - Priority Housing Site 3 Waste	R69,714
Integration Precinct - Priority Housing Site 4 Waste	R239,925
Integration Precinct - Priority Housing Site 5 Waste	R159,347
Material Recovery Facility in Prince Albert	R4,500,000
Prince Albert Waste Disposal Facility Infrastructure for Licensing Requirements	R4,000,000
Integration Precinct - Priority Site 2 Waste Infrastructure to accommodate primary school and housing	R89,790
Klaarstroom	R4,800,000
Klaarstroom Upgrade Waste Disposal Facility with Transfer Station and Hazardous Disposal Facility	R2,500,000
Klaarstroom Waste Disposal Facility Infrastructure for Licensing Requirements	R2,300,000
Waste Water Management	**R61,747,597**
Municipal Wide	R200,000
High Pressure Jetting Pump to unblock sewer pipes	R200,000
Prince Albert	R48,502,791
Bulk Sanitation, effluent re-use, reservoir pump station, pipeline for irrigation, upgraded inflow to WWTW and reticulation pump stations	R10,000,000
Completion of effluent waste water pipeline to Sport fields	R4,000,000
Desktop Computers x 2	R60,000
Integration Precinct - Priority Housing Site 3 Sanitation	R809,431
Integration Precinct - Priority Housing Site 4 Sanitation	R2,785,705
Integration Precinct - Priority Housing Site 5 Sanitation	R1,850,128
New Front End Loader and Tipper Truck	R1,750,000
Prince Albert South End Sewer Upgrade Connecting of Septic Tanks to existing sewer reticulation network	R12,000,000

Upgrade of WWTW phase 3, air raisin, including intake	R2,500,000
Upgrade plant capacity to 1.5 Ml/d. Activated sludge technology in parallel with aerobic dams	R2,000,000
Upgrade sewage reticulation network PA North End	R10,000,000
Integration Precinct - Priority Site 2 Sanitation Infrastructure to accommodate primary school and housing	R747,527
Leeu Gamka	R7,944,806
Leeu Gamka Bulk Sanitation Package Plant Bucket Eradication and upgrade of septic tanks Bucket Eradication and upgrade of septic tanks	R4,500,000
Leeu Gamka Sidewalks registered with MIG 2012 must be implemented as clean-up of DPIP	R3,154,806
New Tractor- Leeu Gamka	R250,000
Replace sewage pumps at Leeu Gamka	R40,000
Klaarstroom	R3,000,000
Newton Park eradication of buckets with septic tanks	R3,000,000
Prince Albert Road	R2,100,000
Upgrade of WWTW Prince Albert Road	R2,100,000
Water	**R90,305,500**
Municipal Wide	R13,480,000
Artificial recharge of aquifer and implement artificial recharge of all boreholes	R5,000,000
Lower borehole pumps	R500,000
New 1 Tonner Bakkie (Technical Services)	R380,000
Telemetric system for WTW & WWTW	R3,200,000
Upgrade groundwater management plan	R400,000
Water Meter Replacement-Smart Meters	R4,000,000
Prince Albert	R37,506,829
Boreholes and mains + development of borehole field + reservoir	R1,000,000
Chlorine Gas Dosage Pumps	R150,000
Installation of prepaid water meters	R4,000,000
Integration Precinct - Priority Housing Site 1 Stormwater	R203,297
Integration Precinct - Priority Housing Site 3 Stormwater	R29,874
Integration Precinct - Priority Housing Site 3 Water	R872,959
Integration Precinct - Priority Housing Site 4 Stormwater	R102,812
Integration Precinct - Priority Housing Site 4 Water	R3,454,591
Integration Precinct - Priority Housing Site 5 Stormwater	R68,283

Integration Precinct - Priority Housing Site 5 Water	R1,995,334
New Production Boreholes along the foothills of the Swartberg and water mains	R5,000,000
Prince Albert New Storage Dam New 30 ML Storage Reservoir	R8,000,000
Prince Albert Stormwater Upgrade	R409,687
Upgrade of WTW, including and larger soda Ash plant, and filtering, including borehole	R6,000,000
Integration Precinct - Priority Site 2 Stormwater Infrastructure to accommodate primary school	R279,339
Integration Precinct - Priority Site 2 Water Infrastructure to accommodate primary school	R5,940,653
North End	R2,300,000
Stormwater Upgrade North End	R2,300,000
Leeu Gamka	R23,943,567
Bulk sanitation connection to previous Spoornet areas	R4,000,000
Bulk water connection, including mains and supply line to previous Spoornet area + Welgemoed + Newton Park	R6,000,000
Leeu Gamka Upgrade Internal Mains and supply lines in Bitterwater	R4,500,000
New Stormwater System in Bitterwater Leeu Gamka	R3,043,567
Replace AC pipes from boreholes to WTW with uPVC pipes installed underground	R500,000
Upgrade mains and water supply lines, upgrading of reticulation of asbestos pipeline	R3,500,000
Leeu Gamka Borehole Equipment	R2,400,000
Klaarstroom	R5,025,104
Klaarstroom Upgrade of WTW and lift pump station including telemetry and re-use of effluent	R4,075,104
New 200 kl Aqua dam Reservoir	R700,000
New Tractor- Klaarstroom	R250,000
Prince Albert Road	R8,050,000
Booster Pump Station PA	R2,500,000
Boreholes and mains, including pump station Prince Albert Road	R1,570,000
Prince Albert Road New Production Borehole and Mains	R2,000,000
Prince Albert Road New Storage Tank and WTW	R1,000,000
Reservoir, including upgrade of WTW Prince Albert Road	R980,000
Grand Total	**R230,786,817**

Table 4.12: Proposal for a Prioritized and Sequenced 7-year Capital Portfolio between 2024 to 2031 and Outer Years (High Priority Sites in Yellow)

Project Name	Town or Area	Est Project Cost	Year 2024	Year 2025	Year 2026	Year 2027	Year 2028	Year 2029	Year 2030	Year 2031	Shortfall to outer years
Material Recovery Facility in Prince Albert	Prince Albert	R4,500,000	R800,000	R1,200,000	R2,500,000						R0
New Production Boreholes along the foothills of the Swartberg and water mains	Prince Albert	R5,000,000	R2,421,420	R2,578,580							R0
Preliminary Investigation for Raw water storage dam	Municipal Wide	R3,000,000	R1,000,000	R2,000,000							R0
Review and Update Water Master Plans Water and Sewage	Municipal Wide	R500,000	R300,000	R200,000							R0
Alien clearing populars prosopis satansbos cactuses	Municipal Wide	R1,000,000	R60,000	R119,721	R60,000	R80,000	R179,202	R150,000	R114,663	R160,000	R76,414
Telemetric system for WTW & WWTW	Municipal Wide	R3,200,000	R1,500,000	R600,000					R550,000	R550,000	R0
Artificial recharge of aquifer and implement artificial recharge of all boreholes	Municipal Wide	R5,000,000	R1,700,000	R900,000	R1,000,000		R761,137				R638,863
Bulk Sanitation, effluent re-use, reservoir pump station, pipeline for irrigation, upgraded inflow to WWTW and reticulation pump stations	Prince Albert	R10,000,000	R2,300,000	R1,505,529	R2,933,334	R2,500,000					R761,137
High Pressure Jetting Pump to unblock sewer pipes	Municipal Wide	R200,000	R200,000								R0
New 200 kl Aqua dam Reservoir	Klaarstroom	R700,000			R700,000						R0
Prince Albert South End Sewer Upgrade Connecting of Septic Tanks to existing sewer reticulation network	Prince Albert	R12,000,000	R1,360,703	R2,000,000	R2,000,000	R4,639,297	R2,000,000				R0
Prince Albert Waste Disposal Facility Infrastructure for Licensing Requirements	Prince Albert	R4,000,000		R1,755,985	R2,244,015						R0
Stormwater Upgrade North End	North End	R2,300,000			R1,150,000	R1,150,000					R0
Upgrade of WTW, including and larger soda Ash plant, and filtering, including borehole	Prince Albert	R6,000,000			R1,000,000	R2,450,959	R2,549,041				R0
Upgrade of WWTW phase 3, air raisin, including intake	Prince Albert	R2,500,000			R1,250,000	R1,250,000					R0
Upgrade sewage reticulation network PA North End	Prince Albert	R10,000,000						R1,507,092	R3,000,000	R5,492,908	R0

Water Meter Replacement-Smart Meters	Municipal Wide	R4,000,000	R1,000,000	R1,000,000					R1,500,000	R500,000	R0
Prince Albert New Storage Dam New 30 ML Storage Reservoir	Prince Albert	R8,000,000					R4,000,000	R4,000,000			R0
Integration Precinct - Land Acquisition for Southern Portion of Primary School Priority Site 2 to be transferred from DOH Health or DTPW	Prince Albert	R0									R0
Integration Precinct - Land Acquisition of Priority Housing Site 3 and 4 from private land holders	Prince Albert	R1,000,000	R500,000	R500,000							R0
Integration Precinct - Land Acquisition of Southern Portion of Priority Housing Site 1 from private land holder	Prince Albert	R1,000,000	R1,000,000								R0
Upgrade groundwater management plan	Municipal Wide	R400,000	R200,000	R200,000							R0
New regional cemetery	Municipal Wide	R11,151,305					R2,787,826	R2,787,826	R2,787,826	R2,787,827	R0
Boreholes and mains + development of borehole field + reservoir	Prince Albert	R1,000,000	R755,994	R244,006							R0
Boreholes and mains, including pump station Prince Albert Road	Prince Albert Road	R1,570,000				R785,000	R785,000				R0
Chlorine Gas Dosage Pumps	Prince Albert	R150,000	R150,000								R0
Installation of prepaid water meters	Prince Albert	R4,000,000					R614,632	R1,000,000	R1,000,000	R385,367	R1,000,001
Integration Precinct - Priority Housing Site 1 Stormwater	Prince Albert	R203,297	R203,297								R0
Klaarstroom Upgrade Waste Disposal Facility with Transfer Station and Hazardous Disposal Facility	Klaarstroom	R2,500,000			R833,333	R831,416	R835,251				R0
Leeu Gamka Bulk Sanitation Package Plant Bucket Eradication and upgrade of septic tanks Bucket Eradication and upgrade of septic tanks	Leeu Gamka	R4,500,000			R1,125,000	R780,000	R1,125,000	R1,250,000			R220,000
Prince Albert Road New Production Borehole and Mains	Prince Albert Road	R2,000,000				R803,602	R1,196,398				R0
Prince Albert Stormwater Upgrade	Prince Albert	R409,687					R409,687				R0
Upgrade of WWTW Prince Albert Road	Prince Albert Road	R2,100,000								R1,775,000	R325,000

Upgrade plant capacity to 1.5 Ml/d. Activated sludge technology in parallel with aerobic dams	Prince Albert	R2,000,000				R1,000,000	R500,000	R500,000			R0
Integration Precinct - Priority Housing Site 1 Roads	Prince Albert	R761,137		R761,137							R0
Integration Precinct - Priority Housing Site 3 Roads	Prince Albert	R111,846					R111,846				R0
Integration Precinct - Priority Housing Site 4 Roads	Prince Albert	R384,926							R384,926		R0
Integration Precinct - Priority Housing Site 5 Roads	Prince Albert	R255,649							R255,649		R0
Bulk sanitation connection to previous Spoornet areas	Leeu Gamka	R4,000,000	R1,333,333	R2,666,667							R0
Integration Precinct - Priority Site 2 Roads Luttig Street Extension	Prince Albert	R309,878	R309,878								R0
Bulk water connection, including mains and supply line to previous Spoornet area + Welgemoed + Newton Park	Leeu Gamka	R6,000,000	R1,000,000	R2,000,000	R3,000,000						R0
Community Lighting	Leeu Gamka	R2,000,000	NARYSEC Funding								R2,000,000
Completion of effluent waste water pipeline to Sport fields	Prince Albert	R4,000,000						R1,000,000	R500,000	R1,000,000	R1,500,000
Integration Precinct - Priority Housing Site 1 Electricity	Prince Albert	R0		INEP							R0
Integration Precinct - Priority Housing Site 3 Electricity	Prince Albert	R0					INEP				R0
Integration Precinct - Priority Housing Site 3 Sanitation	Prince Albert	R809,431					R809,431				R0
Integration Precinct - Priority Housing Site 3 Stormwater	Prince Albert	R29,874					R29,874				R0
Integration Precinct - Priority Housing Site 3 Waste	Prince Albert	R69,714					R69,714				R0
Integration Precinct - Priority Housing Site 3 Water	Prince Albert	R872,959					R872,959				R0
Integration Precinct - Priority Housing Site 4 Electricity	Prince Albert	R0							INEP		R0
Integration Precinct - Priority Housing Site 4 Sanitation	Prince Albert	R2,785,705							R2,785,705		R0
Integration Precinct - Priority Housing Site 4 Stormwater	Prince Albert	R102,812							R102,812		R0
Integration Precinct - Priority Housing Site 4 Waste	Prince Albert	R239,925							R239,925		R0
Integration Precinct - Priority Housing Site 4 Water	Prince Albert	R3,454,591							R1,727,296	R1,727,295	R0
Maintenance of roads	Municipal Wide	R3,000,000	R400,000	R475,000		R375,000	R375,000	R375,000	R375,000	R375,000	R250,000
Integration Precinct - Priority Housing Site 5 Electricity	Prince Albert	R0							INEP		R0
Integration Precinct - Priority Housing Site 5 Sanitation	Prince Albert	R1,850,128							R1,850,128		R0

Integration Precinct - Priority Housing Site 5 Stormwater	Prince Albert	R68,283							R68,283		R0
Integration Precinct - Priority Housing Site 5 Waste	Prince Albert	R159,347							R159,347		R0
Integration Precinct - Priority Housing Site 5 Water	Prince Albert	R1,995,334							R997,667	R997,667	R0
Integration Precinct - Priority Site 2 Electricity Infrastructure to accommodate primary school and housing	Prince Albert	R0						INEP			R0
Integration Precinct - Priority Site 2 Sanitation Infrastructure to accommodate primary school and housing	Prince Albert	R747,527						R747,527			R0
Integration Precinct - Priority Site 2 Stormwater Infrastructure to accommodate primary school and housing	Prince Albert	R279,339						R279,339			R0
Integration Precinct - Priority Site 2 Waste Infrastructure to accommodate primary school and housing	Prince Albert	R89,790						R89,790			R0
Integration Precinct - Priority Site 2 Water Infrastructure to accommodate primary school and housing	Prince Albert	R5,940,653						R5,940,653			R0
Kiosk and upgrade of Transformers	North End	R3,200,000	INEP			INEP	INEP			INEP	R3,200,000
Leeu Gamka Borehole Equipment	Leeu Gamka	R2,400,000				R700,000	R480,000	R480,000	R480,000		R260,000
Leeu Gamka Upgrade Internal Mains and supply lines in Bitterwater	Leeu Gamka	R4,500,000						R2,250,000	R1,000,000		R1,250,000
Lower borehole pumps	Municipal Wide	R500,000		R250,000						R250,000	R0
Street lighting in North End	North End	R500,000					INEP	INEP			R500,000
Upgrade mains and water supply lines, upgrading of reticulation of asbestos pipeline	Leeu Gamka	R3,500,000				R750,000	R1,750,000				R1,000,000
Extension of sidewalks proposed in CKDM ITP	North End	R10,000,000							R2,500,000	R3,009,597	R4,490,403
Office Furniture & Equipment	Prince Albert	R80,000	R80,000								R0
New Tractor- Klaarstroom	Klaarstroom	R250,000					R250,000				R0
Replace sewage pumps at Leeu Gamka	Leeu Gamka	R40,000	R40,000								R0
Vehicle Testing Centre	Prince Albert	R2,300,000	R1,250,000	R1,050,000							R0

Non Motorised Transport Bicycle friendly lane along Church Street	Prince Albert	R1,300,000						R650,000	R650,000		R0
Tables for Community Halls all 3 towns	Municipal Wide	R60,000	R60,000								R0
New 1 Tonner Bakkie (Technical Services)	Municipal Wide	R380,000	R380,000								R0
Newton Park eradication of buckets with septic tanks	Klaarstroom	R3,000,000			R1,300,000	R1,500,000					R200,000
Facilitate the establishment of infrastructure for new service station planned for the northern side of the N12	Klaarstroom	R1,600,000			R926,276	R673,724					R0
Landscaping of parks	Municipal Wide	R600,000	R75,000	R75,000	R75,000	R75,000	R75,000	R75,000	R75,000	R75,000	R0
Portable PA System (All in One)	Municipal Wide	R20,000	R20,000								R0
Tools & Equipment for Technical Services	Prince Albert	R60,000		R60,000							R0
New Front End Loader and Tipper Truck	Prince Albert	R1,750,000						R1,750,000			R0
New Tractor- Leeu Gamka	Leeu Gamka	R250,000	R250,000								R0
Tools & Equipment	Prince Albert	R1,142,182	R142,773	R142,773	R142,773	R142,773	R142,773	R142,773	R142,772	R142,772	R0
Laptop x 2 for office of CLO's Klaarstroom and Leeu Gamka	Municipal Wide	R60,000	R60,000								R0
Train and equip volunteers to assist with area based fire prevention and response teams.	Municipal Wide	R100,000							R100,000		R0
Desktop Computers x 2	Prince Albert	R60,000	R60,000								R0
Develop a water resources zoning plan	Municipal Wide	R0									R0
Booster Pump Station PA	Prince Albert Road	R2,500,000								R2,500,000	R0
Klaarstroom Upgrade of WTW and liftpump station including telemetry and re-use of effluent	Klaarstroom	R4,075,104				R2,037,552	R2,037,552				R0
Klaarstroom Waste Disposal Facility Infrastructure for Licensing Requirements	Klaarstroom	R2,300,000			R1,150,000	R1,150,000					R0
Prince Albert Road New Storage Tank and WTW	Prince Albert Road	R1,000,000						R1,000,000			R0
New Stormwater System in Bitterwater Leeu Gamka	Leeu Gamka	R3,043,567							R500,000	R2,543,567	R0
Replace AC pipes from boreholes to WTW with uPVC pipes installed underground	Leeu Gamka	R500,000				R250,000	R250,000				R0

Reservoir, including upgrade of WTW Prince Albert Road	Prince Albert Road	R980,000								R980,000	R0
Upgrade of Road Signage	Municipal Wide	R400,000	R50,000	R50,000	R50,000	R50,000	R50,000	R50,000	R50,000	R50,000	R0
Prince Albert: Sports Field Upgrade	Prince Albert	R2,578,021				R1,289,011	R1,289,011				-R1
Tourism Centres Renovation of municipal buildings, equipping of centres, training of personnel, operation	Prince Albert	R1,200,000							R600,000	R600,000	R0
Public Transport	Municipal Wide	R14,000,000	R500,000	R200,000	R150,000	R200,000	R200,000		R2,000,000	R2,445,000	R8,305,000
Leeu Gamka Sidewalks registered with MIG 2012 must be implemented as clean up of DPIP	Leeu Gamka	R3,154,806	R1,051,602	R1,051,602	R801,602						R250,000
Sportsground development	Municipal Wide	R1,200,000							R600,000	R600,000	R0
PROJECTED YEARLY CAPITAL BUDGET			R22,514,000	R23,586,000	R24,658,000	R25,730,000	R26,803,000	R27,875,000	R28,947,000	R28,947,000	
TOTAL PRIORITIZED PROJECTS		**R230,786,817**									

4.7 FINDINGS AND RECOMMENDATIONS OF THE CEF

A system of project recording and prioritization in relation to budget is missing in many municipalities and the IDP has notably become a place where projects are recorded from all sector plans. However, many of the sector plans are particularly weak in articulating projects and providing life cycle costs, which is a weakness that needs to be addressed.

This CEF has assisted to translate the MSDF's spatial strategy into tangible projects and budget alongside projects from other sector plans. Critically, however, is that the municipality needs to update its outdated infrastructure master plans to ensure the most valuable CEF prioritised project list can be developed.

The CEF can become an iteratively used tool to assist the municipality and other spheres of government in prioritizing needs (projects) and developing accountable and defendable budgets. In terms of the format, this CEF consists of 3 excel databases that need to be kept up to date in order to produce a prioritized capital portfolio of affordable infrastructure investments. These are:

- **Database 1:** The Consolidated Capital Projects database;
- **Database 2:** The Consolidated Yield and Demand database which translates the yields from the prioritised sites into infrastructure implications, whose projects must be fed back into database 1; and
- **Database 3:** The Affordability Envelope database which calculates the annually changing capital budget of the municipality.

The first two databases are spatialized and can be mapped in ESRI Web Maps. The spatial, engineering and financial data can be updated over time, making the CEF databases dynamic and useful. The databases emanating from this CEF can be updated annually to assist in prioritisation, as well as monitoring and evaluating how well the municipality is performing in terms of implementing its MSDF (and achieving spatial transformation or meeting basic service delivery needs).

While this CEF has sought to provide a prioritized capital programme, inclusive of spatial strategy led projects, it is again worth noting that it is based on numerous assumptions, and the proposed programme must still be developed further as more reliable data on infrastructure demand and capacity, based on updated master plans, become available.

To make up the future projected project funding shortfall it is worthwhile reiterating the following 11 recommendations that came from the 2017 LTFP and are still highly relevant:

1. PAM should raise loans to meet the required expenditure on capital projects and replacing assets.

2. PAM needs to carefully accumulate cash reserves and determine alternative funds to replace assets when needed and formulate intensive comprehensive maintenance plans.

3. If no further grants can be obtained and/or MIG funds are not enough and/or the selling of assets are not possible, then loans to fund asset replacements must be considered.

4. Explore further avenues to obtain more grants funding, keeping in mind the additional maintenance expenditure that will still be the liability of the municipality even though the additional acquisition is financed from external sources.

5. The sale of investment property and/or other assets is necessary to generate cash for the period where cash shortage is evident. Weigh up the need for new assets against the need for replacing existing assets.

6. Repairs and maintenance are one of the major line items relating to asset management. It would be meaningful to increase future spending on repairs and maintenance.

7. Put strategies in place for reducing water and electricity distribution losses.

8. Apply more strict credit control measurements to increase the debtor recovery rate.

9. The condition of asset components should be accurately assessed.

10. Migrate asset registers to become decision tools for integrated asset management.

11. Assess quantum and timing of future revenues that an investment in infrastructure can generate before making that investment.

Further inputs and recommendations from the Prince Albert MSDF process included the following:

1. Although the LTFP recommends the use of loans to support capital projects and replacing assets it is advised that the municipality consider other financing tools prior to incurring additional long-term debt given the current constrained fiscal environment. The land-based financing tools developed by National Treasury and Cities Support Programme should be reviewed and considered.

2. Other than alien invasive clearing and potential solar, green energy, overall environmental protection projects were not well recorded.

3. There is a need to coordinate with the district regarding access to climate change related international funding. Projects could be packaged through the Joint District Model and considered for bonded finance. Unsolicited based projects are unknown and therefore not listed in the consolidated database. When these do arise, particularly those that look at reuse and smart energy should be brought into the Consolidated Project Database and scored.

4. Many of the non-bulk related projects in Leeu Gamka such as paving, lighting, creche's, school upgrade, swimming pool, youth centre etc. can be funded through the CRDP DRDLR NARYSEC programme. More information can be found at https://www.gov.za/about-government/government-programmes/national-rural-youth-service-corps-programme. The NARYSEC programme provides building programmes, soft and hard skills training and dispatches youth to rural areas to undertake various rural infrastructure and other development projects. It transforms youth from rural areas, from being job seekers to become job creators, breaking the vicious cycle of social grants dependency.

4.8 INPUT INTO SECTOR PLANS

Since PAM's water and sewer master plans are outdated, any updates to them should be led by this MSDF and the projects that they propose for capital funding, should be properly articulated and affordable within the available capital budget shown in this CEF. Table 4.13 provides input into PAM's infrastructure related sector plans.

Any update to the sector plans should a make use of the same future population, growth and land demand projections used in this this SDF as well as the unit loadings provide for each of the vacant land sites.

Table 4.13: Input into Sector Plans to ensure alignment with CEF

Long term Financial Plan 2017
Any changes to the LTFP will have implications for the available capital budget of this CEF and subsequently the projects that can be fitted within it. Therefore, if the LTFP is updated the CEF should be too. If not, a prioritized list of projects is still a valuable tool from which projects decisions can be made.
Prince Albert Water Master Plan 2008
The water master plan is outdated and needs to be updated as a matter of urgency. The municipality has requested assisted from DLG. It is important that the Water Master Plan makes direct reference to unit loading impacts of the vacant land infill strategy, particularly High Priority Sites 1 to 5 included in this CEF. It must also be linked to the municipality's new zoning scheme in 2021.
Sewer Master Plan 2008
The sewer master plan must be updated urgently. It must be aligned with the unit loading impacts of the CEF and should articulate the High Priority Sites 1 to 5 included in this CEF.
CKDM Comprehensive Bulk Infrastructure Plan 2010
CKDM appointed BKS(Pty) Ltd (BKS) for Phase 2 of the plan but status is unknown. It is highly important that sewer and master plans draw from this work. Furthermore, the shared service solution for the district must focus on administering and measuring the implementation of this plan.
CKDM Integrated Transport Plan (ITP) 2019-2024
The ITP is the responsibility of the CKDM. It was finalised in 2019 and the projects that it proposed to be funded by MIG have been included in this CEF. When prioritizing these projects, it was clear that was proposed is far too expensive for what can be afforded in relation projects that the municipality must also for MIG such as water and stormwater infrastructure. This MSDF does however amalgamate the 2008 NMT network phases and the additional proposed network in the latest ITP and the SDF (See Chapter 3 Figure 3.45).
Integrated Waste Management Plan (IWMP) 2016
The projects from this plan have been included in this CEF. Updates to the IWMP should clearly articulate waste to energy related projects that could be included in the CEF.
Electrical Master Plan 2016
The electrical master plan needs to be reviewed and directly aligned to the costed vacant infill strategy of this MSDF. In addition to catering for maintenance, and addressing backlogs, investment should be focused on the priority sites 1 to 5 in Prince Albert Town. The updated master plan should consider the potential for renewables in the form of roof top PV during the day to offset some of the demand needed for cooling during the summer periods. This should be accompanied with the migration of tariff schemes which allow for small scale generation without overall losses of revenue for the municipality.
Disaster Risk Management Plan 2019
A risk register has been successfully developed for the municipality. The capital-based projects from this plan are included in the CEF and the risk maps have also been included Chapter 3.

4.9 CONCLUSION

Working within a constrained water and fiscal environment is not easy and trade-offs will need to be made. A system of project recording and prioritization in relation to budget is unfortunately missing in many municipalities and many of the sector plans are particularly weak in articulating their projects and providing life cycle costs. This SDF has therefore included a Capital Expenditure Framework (CEF) to assist the municipality with integrating their spatial strategy and infrastructure master plans and to determine a prioritized portfolio of capital projects that fit within a 12-year affordable capital envelope from 2020 to 2031. Critically, however, is that, based on this MSDF and CEF, the municipality needs to update its outdated water and sanitation master plans to ensure alignment with the projects prioritized in this CEF.

This SDF, inclusive of the CEF, will be adopted before a new IDP cycle in 2022, presenting an opportune time for the MSDF's strategy to provide a basis from which the 'to be' updated water and sanitation master plans can be aligned and the correct projects prioritised over the next decade. A crucial need for the Municipality is to link the water and sanitation master plans to an accurate and well recorded zoning and land use model. This work is about to be undertaken by the Western Cape Department of Local Government under the Integrated Drought and Water Resilience strategy project. It is therefore envisaged that the CEF's calculated bulk infrastructure implications of future growth will be crosschecked with ceiling bulk capacity and will inform the future sequencing of projects in the CEF. The Municipality are also developing a new zoning scheme in 2021 to replace the outdated Scheme 8 regulations and this scheme must be informed by this SDF and directly linked to the water and sanitation land use model.

It is important to realize that Prince Albert Municipality's future challenges are multi-faceted and there needs to be a focus on regional collaboration not only with the surrounding local municipalities (Laingsburg, Beaufort West and Oudtshoorn and the Garden Route District Municipality) but together as part of the broader Central Karoo District. Similarly, these municipalities need to participate with Prince Albert Municipality.

Prince Albert Municipality is facing severe human resource capacity constraints and have to spend large portion of their budget on consultancy fees which could otherwise go to operation and capital expenditure costs. The municipality must therefore, as part of a district-based approach for the Central Karoo, seek continual partnership-driven solutions, specifically a shared service solution for firefighting, roads management (yellow fleet), planning (tribunals, zoning scheme and land use applications), supply chain and technical services (engineering and project management) within the district. This would ensure shared financial viability of administrative and logistical burdens associated with servicing a sparse region. The Municipality should also use this model to gain access to climate change related international funding, where future proof projects could be packaged with the district and considered for bonded finance in domestic and international markets. The model can also be used to coordinate access to the Western Cape Environmental Infrastructure Investment Framework (WC EIIF) which links opportunities for environmental restoration to collaboratively funded investment strategies.

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ANNEXURE A: SCORED AND PRIORITIZED UNFUNDED PROJECT DATABASE

Table A1: PAM Capital Unfunded Database (Note: More Information can be found in Database 1)

Project Name	Project Source	Possible Funding Source	Town or Area	Est Project Cost	Composite Percentage	Priority Ranking in MSCOA Category
Material Recovery Facility in Prince Albert	Five Year Capital Plan	MIG	Prince Albert	R4,500,000	100	1
New Production Boreholes along the foothills of the Swartberg and water mains	Five Year Capital Plan	MIG.WSIG	Prince Albert	R5,000,000	100	1
Preliminary Investigation for Raw water storage dam	IDP Unfunded MIG and CRR	WSIG.MISA	Municipal Wide	R3,000,000	100	1
Review and Update Water Master Plans Water and Sewage	IDP Unfunded MIG and CRR	TBA	Municipal Wide	R500,000	100	1
Alien clearing populars prosopis satansbos cactuses	IDP Unfunded Bulk Projects	TBA	Municipal Wide	R1,000,000	93	1
Telemetric system for WTW & WWTW	IDP Unfunded Bulk Projects	TBA	Municipal Wide	R3,200,000	93	1
Artificial recharge of aquifer and implement artificial recharge of all boreholes	IDP Unfunded MIG and CRR	DLG.CRR.WSIG	Municipal Wide	R5,000,000	93	1
Bulk Sanitation, effluent re-use, reservoir pump station, pipeline for irrigation, upgraded inflow to WWTW and reticulation pump stations	IDP Unfunded Bulk Projects	TBA	Prince Albert	R10,000,000	93	1
High Pressure Jetting Pump to unblock sewer pipes	Five Year Capital Plan	CRR	Municipal Wide	R200,000	93	1
New 200 kl Aqua dam Reservoir	IDP Unfunded MIG and CRR	MIG	Klaarstroom	R700,000	93	1
Prince Albert South End Sewer Upgrade Connecting of Septic Tanks to existing sewer reticulation network	Five Year Capital Plan	MIG.WSIG.CRR	Prince Albert	R12,000,000	93	1
Prince Albert Waste Disposal Facility Infrastructure for Licensing Requirements	IWMP 2016	MIG.CRR	Prince Albert	R4,000,000	93	1
Stormwater Upgrade North End	Five Year Capital Plan	CRR	North End	R2,300,000	93	1
Upgrade of WTW, including and larger soda Ash plant, and filtering, including borehole	IDP Unfunded Bulk Projects	TBA	Prince Albert	R6,000,000	93	1
Upgrade of WWTW phase 3, air raisin, including intake	IDP Unfunded Bulk Projects	TBA	Prince Albert	R2,500,000	93	1
Upgrade sewage reticulation network PA South End	IDP Unfunded MIG and CRR	WSIG.CRR	Prince Albert	R10,000,000	93	1
Water Meter Replacement-Smart Meters	Five Year Capital Plan	DLG.CRR	Municipal Wide	R4,000,000	93	1
Prince Albert New Storage Dam New 30 ML Storage Reservoir	Five Year Capital Plan	WSIG	Prince Albert	R8,000,000	93	1

Integration Precinct - Land Acquisition for Southern Portion of Primary School Priority Site 2 to be transferred from DOH Health or DTPW	SDF 2021	CRR	Prince Albert	R0	93	1
Integration Precinct - Land Acquisition of Priority Housing Site 3 and 4 from private land holders	SDF 2021	CRR	Prince Albert	R1,000,000	93	1
Integration Precinct - Land Acquisition of Southern Portion of Priority Housing Site 1 from private land holder	SDF 2021	CRR	Prince Albert	R1,000,000	93	1
Upgrade groundwater management plan	IDP Unfunded MIG and CRR	DLG.WSIG	Municipal Wide	R400,000	93	1
Local Area Plan for Integration Precinct	SDF 2021	MISA	Prince Albert	R0	93	1
New regional cemetery	Five Year Capital Plan	MIG	Municipal Wide	R11,151,305	93	1
Alien invasive clearance and management strategy	Disaster Risk Management Plan	CRR. DISTRICT.DOA	Municipal Wide	R0	86	1
Boreholes and mains + development of borehole field + reservoir	IDP Unfunded Bulk Projects	TBA	Prince Albert	R1,000,000	86	1
Boreholes and mains, including pump station Prince Albert Road	IDP Unfunded Bulk Projects	TBA	Prince Albert Road	R1,570,000	86	1
Chlorine Gas Dosage Pumps	Five Year Capital Plan	CRR	Prince Albert	R150,000	86	1
Installation of prepaid water meters	IDP Unfunded Bulk Projects	TBA	Prince Albert	R4,000,000	86	1
Integration Precinct - Priority Housing Site 1 Stormwater	SDF 2021	MIG.CRR	Prince Albert	R203,297	86	1
Klaarstroom Upgrade Waste Disposal Facility with Transfer Station and Hazardous Disposal Facility	Five Year Capital Plan	MIG	Klaarstroom	R2,500,000	86	1
Leeu Gamka Bulk Sanitation Package Plant Bucket Eradication and upgrade of septic tanks Bucket Eradication and upgrade of septic tanks	Five Year Capital Plan	MIG.WSIG	Leeu Gamka	R4,500,000	86	1
Prince Albert Road New Production Borehole and Mains	Five Year Capital Plan	MIG.WSIG	Prince Albert Road	R2,000,000	86	1
Prince Albert Stormwater Upgrade	Five Year Capital Plan	MIG	Prince Albert	R409,687	86	1
Upgrade of WWTW Prince Albert Road	IDP Unfunded Bulk Projects	MIG.WSIG	Prince Albert Road	R2,100,000	86	1
Upgrade plant capacity to 1.5 Ml/d. Activated sludge technology in parallel with aerobic dams	IGP Long Term Project	TBA	Prince Albert	R2,000,000	86	1
Water restriction devices	IDP Unfunded MIG and CRR	DLG.MIG	Municipal Wide	R1,500,000	86	1
Integration Precinct - Priority Housing Site 1 Roads	SDF 2021	MIG.CRR	Prince Albert	R761,137	79	1
Integration Precinct - Priority Housing Site 3 Roads	SDF 2021	MIG	Prince Albert	R111,846	79	1
Integration Precinct - Priority Housing Site 4 Roads	SDF 2021	MIG	Prince Albert	R384,926	79	1
Integration Precinct - Priority Housing Site 5 Roads	SDF 2021	MIG	Prince Albert	R255,649	79	1
Bulk sanitation connection to previous Spoornet areas	IDP Unfunded Bulk Projects	TBA	Leeu Gamka	R4,000,000	79	1

Integration Precinct - Priority Site 2 Roads Luttig Street and Secondary School	SDF 2021	MIG.CRR	Prince Albert	R309,878	79	1
Bulk water connection, including mains and supply line to previous Spoornet area + Welgemoed + Newton Park	IDP Unfunded Bulk Projects	TBA	Leeu Gamka	R6,000,000	79	1
Community Lighting	IDP Unfunded Bulk Projects	DRDLR NARYSEC	Leeu Gamka	R2,000,000	79	1
Completion of effluent waste water pipeline to Sport fields	IDP Unfunded Bulk Projects	TBA	Prince Albert	R4,000,000	79	1
Integration Precinct - Priority Housing Site 1 Electricity	SDF 2021	INEP	Prince Albert	R0	79	1
Integration Precinct - Priority Housing Site 3 Electricity	SDF 2021	INEP	Prince Albert	R0	79	1
Integration Precinct - Priority Housing Site 3 Sanitation	SDF 2021	MIG	Prince Albert	R809,431	79	1
Integration Precinct - Priority Housing Site 3 Stormwater	SDF 2021	MIG	Prince Albert	R29,874	79	1
Integration Precinct - Priority Housing Site 3 Waste	SDF 2021	MIG	Prince Albert	R69,714	79	1
Integration Precinct - Priority Housing Site 3 Water	SDF 2021	MIG.WSIG	Prince Albert	R872,959	79	1
Integration Precinct - Priority Housing Site 4 Electricity	SDF 2021	INEP	Prince Albert	R0	79	1
Integration Precinct - Priority Housing Site 4 Sanitation	SDF 2021	MIG	Prince Albert	R2,785,705	79	1
Integration Precinct - Priority Housing Site 4 Stormwater	SDF 2021	MIG	Prince Albert	R102,812	79	1
Integration Precinct - Priority Housing Site 4 Waste	SDF 2021	MIG	Prince Albert	R239,925	79	1
Integration Precinct - Priority Housing Site 4 Water	SDF 2021	MIG.WSIG	Prince Albert	R3,454,591	79	1
Maintenance of roads	CKDM ITP 2020-24	MIG	Municipal Wide	R3,000,000	79	1
Integration Precinct - Priority Housing Site 5 Electricity	SDF 2021	INEP	Prince Albert	R0	79	1
Integration Precinct - Priority Housing Site 5 Sanitation	SDF 2021	MIG	Prince Albert	R1,850,128	79	1
Integration Precinct - Priority Housing Site 5 Stormwater	SDF 2021	MIG	Prince Albert	R68,283	79	1
Integration Precinct - Priority Housing Site 5 Waste	SDF 2021	MIG	Prince Albert	R159,347	79	1
Integration Precinct - Priority Housing Site 5 Water	SDF 2021	DOH.MIG.WSIG	Prince Albert	R1,995,334	79	1
Integration Precinct - Priority Site 2 Electricity Infrastructure to accommodate primary school	SDF 2021	INEP	Prince Albert	R0	79	1
Integration Precinct - Priority Site 2 Sanitation Infrastructure to accommodate primary school	SDF 2021	MIG.CRR	Prince Albert	R747,527	79	1
Integration Precinct - Priority Site 2 Stormwater Infrastructure to accommodate primary school	SDF 2021	MIG.CRR	Prince Albert	R279,339	79	1
Integration Precinct - Priority Site 2 Waste Infrastructure to accommodate primary school	SDF 2021	MIG.CRR	Prince Albert	R89,790	79	1
Integration Precinct - Priority Site 2 Water Infrastructure to accommodate primary school	SDF 2021	DOH.MIG.WSIG	Prince Albert	R5,940,653	79	1
Kiosk and upgrade of Transformers	IDP Unfunded Bulk Projects	TBA	North End	R3,200,000	79	1
Leeu Gamka Borehole Equipment	Five Year Capital Plan	DLG.DROUGHT. RELIEF	Leeu Gamka	R2,400,000	79	1

Leeu Gamka Upgrade Internal Mains and supply lines in Bitterwater	Five Year Capital Plan	MIG.WSIG	Leeu Gamka	R4,500,000	79	1
Lower borehole pumps	IDP Unfunded MIG and CRR	DLG	Municipal Wide	R500,000	79	1
Street lighting in North End	SDF 2021	CRR	North End	R500,000	79	1
Upgrade mains and water supply lines, upgrading of reticulation of asbestos pipeline	IDP Unfunded Bulk Projects	TBA	Leeu Gamka	R3,500,000	79	1
Community Learning Centre at Thusong Centre	IDP Unfunded Special	TBA	Prince Albert	R5,200,000	71	1
Extension of sidewalks proposed in CKDM ITP	IDP Unfunded Bulk Projects	TBA	North End	R10,000,000	71	1
Office Furniture & Equipment	Five Year Capital Plan	CRR	Prince Albert	R80,000	71	1
New Tractor- Klaarstroom	Five Year Capital Plan	CRR	Klaarstroom	R250,000	71	1
Replace sewage pumps at Leeu Gamka	Five Year Capital Plan	CRR	Leeu Gamka	R40,000	71	1
Vehicle Testing Centre	IDP Unfunded Special	TBA	Prince Albert	R2,300,000	71	1
Non Motorised Transport Bicycle friendly lane along Church Street	IDP Unfunded Bulk Projects	TBA	Prince Albert	R1,300,000	57	1
Tables for Community Halls all 3 towns	Five Year Capital Plan	CRR	Municipal Wide	R60,000	57	1
New 1 Tonner Bakkie (Technical Services)	Five Year Capital Plan	CRR	Municipal Wide	R380,000	57	1
Newton Park eradication of buckets with septic tanks	IDP Unfunded Bulk Projects	TBA	Klaarstroom	R3,000,000	57	1
Facilitate the establishment of infrastructure for new service station planned for the northern side of the N12	SDF 2021	CRR.MIG	Klaarstroom	R1,600,000	50	1
Landscaping of parks	Five Year Capital Plan	CRR	Municipal Wide	R600,000	50	1
Portable PA System (All in One)	Five Year Capital Plan	CRR	Municipal Wide	R20,000	50	1
Tools & Equipment for Technical Services	Five Year Capital Plan	CRR	Prince Albert	R60,000	50	1
New Front End Loader and Tipper Truck	Five Year Capital Plan	CRR	Prince Albert	R1,750,000	50	1
New Tractor- Leeu Gamka	Five Year Capital Plan	CRR	Leeu Gamka	R250,000	50	1
Tools & Equipment	Five Year Capital Plan	CRR	Prince Albert	R1,142,182	50	1
Laptop x 2 for office of CLO's Klaarstroom and Leeu Gamka	Five Year Capital Plan	CRR	Municipal Wide	R60,000	43	1
Train and equip volunteers to assist with area-based fire prevention and response teams.	Disaster Risk Management Plan	FIRE.CAP.GRANT	Municipal Wide	R100,000	36	1
Desktop Computers x 2	Five Year Capital Plan	CRR	Prince Albert	R60,000	29	1

Develop a water resources zoning plan	Disaster Risk Management Plan	DALRRD.DLG	Municipal Wide	R0	93	1
Booster Pump Station PA	IDP Unfunded MIG and CRR	MIG.CRR	Prince Albert Road	R2,500,000	86	1
Klaarstroom Upgrade of WTW and lift pump station including telemetry and re-use of effluent	Five Year Capital Plan	MIG.WSIG	Klaarstroom	R4,075,104	86	1
Klaarstroom Waste Disposal Facility Infrastructure for Licensing Requirements	IWMP 2016	MIG.CRR	Klaarstroom	R2,300,000	86	1
Prince Albert Road New Storage Tank and WTW	Five Year Capital Plan	MIG	Prince Albert Road	R1,000,000	86	1
New Stormwater System in Bitterwater Leeu Gamka	Five Year Capital Plan	MIG	Leeu Gamka	R3,043,567	79	1
Replace AC pipes from boreholes to WTW with uPVC pipes installed underground	IGP Long Term Project	TBA	Leeu Gamka	R500,000	71	1
Reservoir, including upgrade of WTW Prince Albert Road	IDP Unfunded Bulk Projects	TBA	Prince Albert Road	R980,000	71	1
Upgrade of Road Signage	CKDM ITP 2020-24	CRR	Municipal Wide	R400,000	71	1
Prince Albert: Sports Field Upgrade	Five Year Capital Plan	MIG	Prince Albert	R2,578,021	64	1
Tourism Centres Renovation of municipal buildings, equipping of centres, training of personnel, operation	IDP Unfunded Special	TBA	Prince Albert	R1,200,000	57	1
Public Transport	CKDM ITP 2020-24	MIG	Municipal Wide	R14,000,000	50	1
Leeu Gamka Sidewalks registered with MIG 2012 must be implemented as clean-up of DPIP	Five Year Capital Plan	MIG	Leeu Gamka	R3,154,806	64	1
Sportsground development	Five Year Capital Plan	CRR	Municipal Wide	R1,200,000	64	1
Improve the entrance from the R407 (north & south) into Prince Albert to improve the first impression of the town	SDF 2021	CRR.MIG	Prince Albert	R200,000	50	1
Community Hall	IDP Unfunded Special	TBA	Prince Albert	R3,700,000	71	1
Resurface netball courts	Five Year Capital Plan	CRR	Municipal Wide	R800,000	64	1
Multi-purpose centre. ECD, offices for emerging farmers and SMME's	IDP Unfunded Bulk Projects	TBA	Prince Albert	R12,000,000	71	2
Upgrade of electricity meters and back office	IDP Unfunded Bulk Projects	TBA	Prince Albert	R2,000,000	71	2
Replacement of conventional lighting with renewable street lightning	IDP Unfunded Bulk Projects	TBA	Prince Albert	R25,000,000	93	2
Upgrade of the furrow pipeline	IDP Unfunded Special	TBA	Prince Albert	R36,000,000	79	2
Two New ECD facilities by 2030	SDF 2021	DTPW.CRR	Prince Albert	R400,000	71	2
Build additional off canal dam near source	IGP Long Term Project	TBA	Prince Albert	R5,000,000	64	2
Kliprug sport field change rooms	Five Year Capital Plan	CRR	Prince Albert	R600,000	57	2

Standardize fire hydrant couplings within the Municipality	Disaster Risk Management Plan	CRR. DISTRICT.DOA	Municipal Wide	R60,000	57	2
Facilitate the improvement of the main entrances of Prince Albert Road through landscaping and signage	SDF 2021	CRR	Prince Albert Road	R60,000	50	2
Establish a satellite fire station in Leeu-Gamka	Disaster Risk Management Plan	CRR. DISTRICT.DOA	Leeu Gamka	R2,000,000	43	2
Weigh bridge on N1 and N12	CKDM ITP 2020-24	TBA	Municipal Wide	R15,000,000	43	2
Camera equipment	Five Year Capital Plan	CRR	Municipal Wide	R40,000	36	2
Facilitate the improvement of the three main entrances of Klaarstroom through landscaping and signage	SDF 2021	CRR	Klaarstroom	R50,000	29	2
Integration Precinct - Zebra crossing to Spar	SDF 2021	CRR.MIG	Prince Albert	R50,000	50	3
Establish a secondary school in Leeu-Gamka	Disaster Risk Management Plan	CRR. DISTRICT.DOA	Leeu Gamka	R10,000,000	79	3
Integration Precinct - Priority Housing Site 1 Sanitation	SDF 2021	MIG.CRR	Prince Albert	R2,193,326	79	3
Swartberg Pass upgrade	IDP Unfunded Special	TBA	Prince Albert	R7,000,000	79	3
Business Hives	IDP Unfunded Special	DEDAT.DSBD	Prince Albert	R8,000,000	71	3
Development of SMME trading Hubs	IDP Unfunded Bulk Projects	TBA	North End	R5,000,000	71	3
Development of an Agri-Processing Facility in Prince Albert	LED Strategy	CRR. DISTRICT.DOA	Prince Albert	R0	64	3
Pavements and Terminus	IDP Unfunded Bulk Projects	TBA	Prince Albert	R9,000,000	50	3
Develop a Small-scale Farming Monitoring System	Disaster Risk Management Plan	CRR. DISTRICT.DOA	Municipal Wide	R100,000	43	3
Establishment of Agricultural College at Treintjies	MTBC 2021	CKDM.DOA	Treintjies	R10,000,000	43	3
Traffic Calming Study	CKDM ITP 2020-24	CRR	Municipal Wide	R100,000	43	3
Facilitate the development of the entrances of Leeu Gamka through landscaping and signage	SDF 2021	CRR	Leeu Gamka	R200,000	29	3
Fencing	Five Year Capital Plan	CRR	Municipal Wide	R3,201,782	29	3
Fencing for comanage	IDP Unfunded Special	TBA	Prince Albert	R5,000,000	29	3
Development of a Seeding Production Facility in Prince Albert	LED Strategy	CRR. DISTRICT.DOA	Prince Albert	R0	71	4
Expansion of the existing Onion Seed and Olive Production Facility in Prince Albert	LED Strategy	CRR. DISTRICT.DOA	Prince Albert	R0	71	4
Pomegranate project in Leeu-Gamka	LED Strategy	CRR. DISTRICT.DOA	Leeu Gamka	R0	71	4
Vegetable Enhancing Facilities in Prince Albert	LED Strategy	CRR. DISTRICT.DOA	Prince Albert	R0	71	4
Development of a Fruit Drying Facility with communal plantations	LED Strategy	CRR. DISTRICT.DOA	Prince Albert	R0	64	4

Development of a new Dry Fruit Facility or Project in Leeu-Gamka	LED Strategy	CRR. DISTRICT.DOA	Leeu Gamka	R0	64	4
Paving of Streets Study	CKDM ITP 2020-24	CRR	Municipal Wide	R200,000	64	4
Agri Tourism Hub Draft model and facilitate establishment	IDP Unfunded Special	TBA	Prince Albert	R1,500,000	57	4
Community Tourism Plan	IDP Unfunded Special	TBA	Prince Albert	R1,000,000	57	4
Integrated LED & Tourism Plan/ Strategy & Destination Marketing, SMME Tourism Development	IDP Unfunded Bulk Projects	TBA	Municipal Wide	R1,300,000	57	4
Treintjies river Green Resort for tourism, hiking, mountain biking and camping	IDP Unfunded Special	TBA	Treintjies	R50,000,000	43	4
Develop a Prince Albert Seismic Preparedness Plan	Disaster Risk Management Plan	CRR. DISTRICT.DOA	Prince Albert	R100,000	36	4
Develop a resting or eco park with overnight facilities	IDP Unfunded Special	TBA	Gamka Poort	R4,500,000	36	4
Construction of Gabions in Klaarstroom	MTBC 2021	CKDM.DOA	Klaarstroom	R0	36	4
Upgrading of airfield so produce for export are secured, including storage facilities and cooling facilities	IDP Unfunded Special	TBA	Prince Albert	R25,000,000	64	5
Pont over Dam. Develop eco-cultural adventure tourism in the rural areas & link up with other tourism route 66	IDP Unfunded Special	TBA	Gamka Dam	R5,000,000	43	5
Development of a railway/Anglo Boer War Museum	SDF 2021	CRR	Prince Albert Road	R2,000,000	36	5
Chalet Furniture	Five Year Capital Plan	CRR	Municipal Wide	R665,732	29	5
Leeu Gamka Sport field Fencing Boundary Wall	Five Year Capital Plan	MIG	Leeu Gamka	R317,280	29	5
TOTAL UNFUNDED PROJECTS				**R491,824,937**		

ANNEXURE B: WC052 PRINCE ALBERT MSCOA BUDGET TABLE

Table A2: Prince Albert Table A4 June 2020 pre-audit outcome (Source: Annual Financial Statement a June 2020)

WC052 Prince Albert - Table A4 Budgeted Financial Performance (revenue and expenditure)

Description	Ref	2017/18	2018/19	2019/20	Current Year 2020/21				2021/22 Medium Term Revenue & Expenditure Framework		
R thousand	1	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Pre-audit outcome	Budget Year 2021/22	Budget Year +1 2022/23	Budget Year +2 2023/24
Revenue By Source											
Property rates	2	–	–	3 743	4 478	4 578	4 578	4 578	4 673	4 953	5 251
Service charges - electricity revenue	2	–	–	14 851	16 260	16 253	16 253	16 253	21 349	22 630	23 988
Service charges - water revenue	2	–	–	4 354	4 233	5 270	5 270	5 270	6 114	6 481	6 870
Service charges - sanitation revenue	2	–	–	3 406	3 127	3 810	3 810	3 810	4 221	4 474	4 743
Service charges - refuse revenue	2	–	–	1 704	1 576	1 852	1 852	1 852	2 332	2 472	2 620
Rental of facilities and equipment		–	–	353	397	397	397	397	368	390	413
Interest earned - external investments		–	–	3 359	2 900	2 300	2 300	2 300	2 286	2 424	2 569
Interest earned - outstanding debtors		–	–	1 446	1 280	1 580	1 580	1 580	1 861	1 944	2 060
Dividends received		–	–	–	–	–	–	–	–	–	–
Fines, penalties and forfeits		–	–	3 936	3 332	2 775	2 775	2 775	2 191	2 380	2 186
Licences and permits		–	–	73	–	–	–	–	115	121	129
Agency services		–	–	218	200	110	110	110	110	117	124
Transfers and subsidies		–	–	30 420	31 104	34 542	34 542	34 542	32 424	31 566	35 976
Other revenue	2	–	–	401	467	397	397	397	479	508	539
Gains		–	–	–	–	–	–	–	–	–	–
Total Revenue (excluding capital transfers and contributions)		–	–	**68 264**	**69 353**	**73 864**	**73 864**	**73 864**	**78 522**	**80 460**	**87 469**
Expenditure By Type											
Employee related costs	2	–	–	22 928	22 709	26 128	26 128	26 128	27 868	28 488	30 206
Remuneration of councillors		–	–	3 127	3 370	3 370	3 370	3 370	3 355	3 556	3 770
Debt impairment	3	–	–	8 664	6 534	6 534	6 534	6 534	5 246	5 561	5 895
Depreciation & asset impairment	2	–	–	4 618	3 984	3 984	3 984	3 984	5 179	5 490	5 820
Finance charges		–	–	674	1 344	1 344	1 344	1 344	59	63	67
Bulk purchases - electricity	2	–	–	11 377	12 000	13 282	13 282	13 282	15 950	16 907	17 921
Inventory consumed	8	–	–	1 484	977	895	895	895	700	742	756
Contracted services		–	–	6 249	6 151	6 615	6 615	6 615	8 703	7 225	7 587
Transfers and subsidies		–	–	373	340	340	340	340	329	349	370
Other expenditure	4, 5	–	–	9 612	11 935	11 360	11 360	11 360	11 102	11 745	12 456
Losses		–	–	–	–	–	–	–	–	–	–
Total Expenditure		–	–	**69 106**	**69 345**	**73 854**	**73 854**	**73 854**	**78 490**	**80 126**	**84 846**
Surplus/(Deficit)		–	–	**(842)**	**8**	**10**	**10**	**10**	**32**	**334**	**2 622**
Transfers and subsidies - capital (monetary allocations) (National / Provincial and District)		–	–	12 369	14 104	22 048	22 048	22 048	10 731	10 181	10 672
allocations) (National / Provincial Departmental	6	–	–	–	–	–	–	–	–	–	–
Transfers and subsidies - capital (in-kind - all)		–	–	–	–	–	–	–	–	–	–
Surplus/(Deficit) after capital transfers & contributions		–	–	**11 527**	**14 112**	**22 059**	**22 059**	**22 059**	**10 763**	**10 515**	**13 294**
Taxation		–	–	–	–	–	–	–	–	–	–
Surplus/(Deficit) after taxation		–	–	**11 527**	**14 112**	**22 059**	**22 059**	**22 059**	**10 763**	**10 515**	**13 294**
Attributable to minorities		–	–	–	–	–	–	–	–	–	–
Surplus/(Deficit) attributable to municipality		–	–	**11 527**	**14 112**	**22 059**	**22 059**	**22 059**	**10 763**	**10 515**	**13 294**
Share of surplus/ (deficit) of associate	7	–	–	–	–	–	–	–	–	–	–
Surplus/(Deficit) for the year		–	–	**11 527**	**14 112**	**22 059**	**22 059**	**22 059**	**10 763**	**10 515**	**13 294**