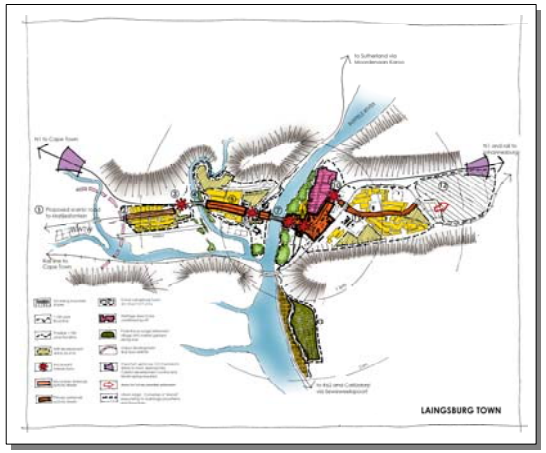

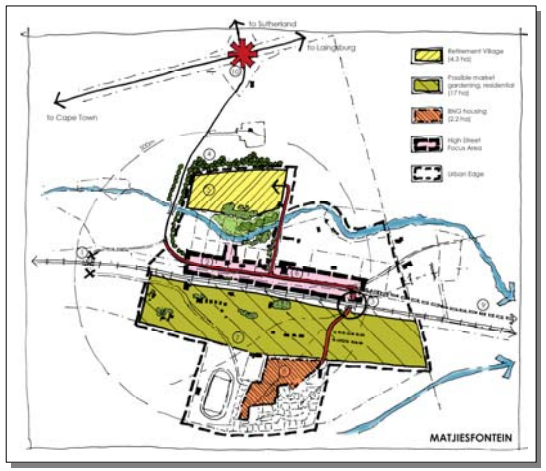

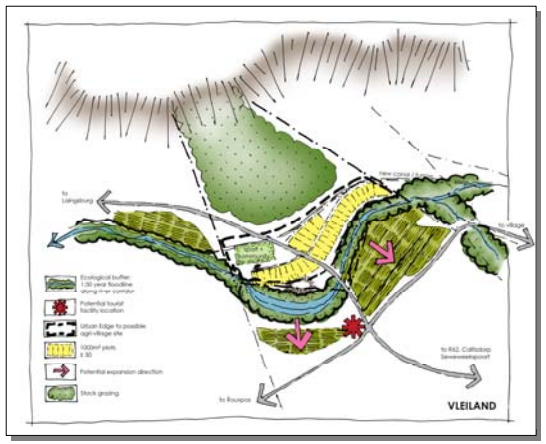

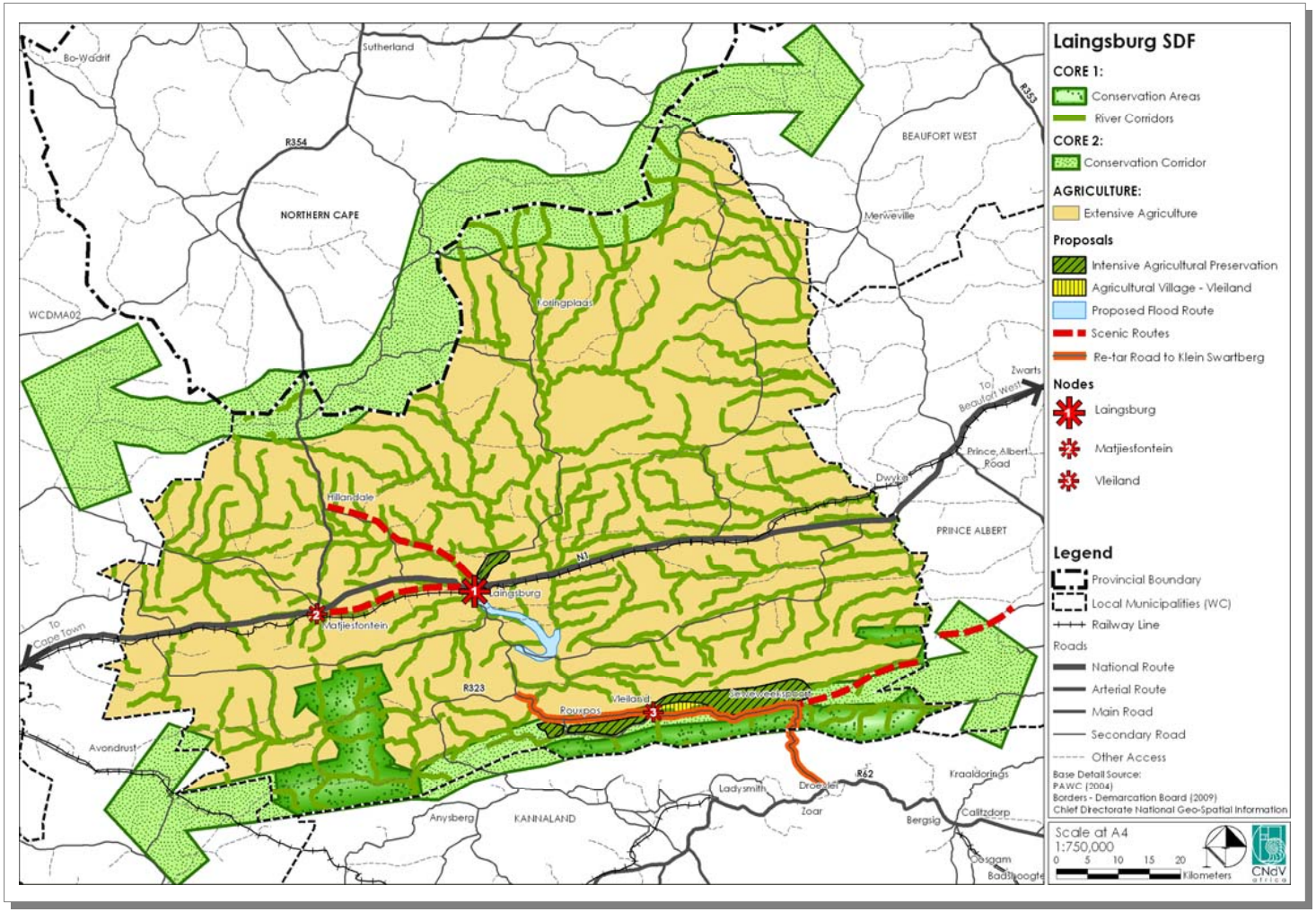

LAINGSBURG MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK

DRAFT FINAL REPORT

September 2012

rural development & land reform
Department:
Rural Development and Land Reform
REPUBLIC OF SOUTH AFRICA

LAINGSBURG MUNICIPAL
SPATIAL DEVELOPMENT FRAMEWORK

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prepared for

LAINGSBURG MUNICIPALITY

supported by

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September 2012

CONTENTS : VOLUME 1 : SPATIAL REPRESENTATION OF IDP AND DRAFT PHASE 1 AND 2 STATUS QUO REPORT

LIST OF FIGURES

LIST OF TABLES

LIST OF GRAPHS

LIST OF PHOTOS

ANNEXURES

GLOSSARY

CARA	Conservation of Agricultural Resources Act
CBAs	Critical Biodiversity Areas
CBD	Central Business District
DFA	Development Facilitation Act
DMA	District Management Area
DME	Department of Minerals and Energy
DTI	Department of Trade and Industry
GCB	General Waste, Communal Landfill and no significant leachate produced
GDP	Gross Domestic Product
GLA	Gross Leasable Area
GRP	Gross Regional Product, i.e. for district or local Municipality
GVA	Gross Value Added
I&AP	Interested and Affected Parties
IDP	Integrated Development Plan
IEMP	Integrated Environmental Management Plan
IT	Information and Technology
LUMS	Land Use Management Schemes
MEDS	Micro-Economic Development Strategy
MTAS	Municipal Turn Around Strategy
NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non Governmental Organisations
NSDP	National Spatial Development Perspective
OECD	Organisation for Economic Cooperation and Development
PGDS	Provincial Growth and Development Strategy
RIDS	Regional Industrial Development Strategy
SDF	Spatial Development Framework
SDP	Spatial Development Plan
SEA	Strategic Environmental Assessment
SIP	Strategic Infrastructure Plan
SMME	Small, Medium and Micro Enterprises
SoER	State of the Environment Report
SPC	Spatial Planning Category
SWOT	Strengths, Weaknesses, Opportunities and Threats
UNESCO-MAB	United Nations Educational, Scientific, and Cultural Organization - Man and the Biosphere (MAB)
UNESCO-CULTURAL LANDSCAPES	United Nations Educational, Scientific, and Cultural Organization - Cultural Landscapes
WWTW	Waste Water Treatment Works

1. INTRODUCTION

1.1 PURPOSE OF THIS REPORT

The purpose of this report is to provide relevant background information regarding the bio-physical, economic and social context of Laingsburg Municipality, see Figure 1.1.1, and the policy framework that must be taken into account in the SDF proposals for the Municipality.

1.2 STRUCTURE OF THIS REPORT

The report is structured in the following manner:

Section 1 describes the purpose and need for an SDF.

Section 2 describes how the SDF should take into account a number of national guidelines and concepts.

Section 3 describes the approach and overarching principles.

Section 4 describes the current situational analysis in the Laingsburg Municipality (WC051) under the following subsections:

- Natural Systems;
- Socio-economic systems; and
- Built Systems.

Section 5 provides a summary of the main findings of this report.

1.3 WHAT IS AN SDF AND WHY IS IT NEEDED?

The spatial management of growth in urban and rural environments and the subsequent impact on resources was previously directed through rather inflexible master plans which were underpinned by the principles of discrimination and separate development.

The new democratic government, post 1994, adopted a new system of spatial planning described in principle in the Development Facilitation Act and Municipal Systems Act. This new system had two components to it. The first was an indicative plan or Spatial Development Framework (SDF) that was intended to show desired patterns of land use, directions for future growth, indicate the alignment of Urban Edges, and depict other special development areas.

The impact of SDFs is limited to providing policy to guide and inform land development and management. They do not change or confer real rights on land.

These are controlled through the second component, the Land Use Management System (LUMS), the new term for town planning or zoning schemes. In many instances where they haven't been replaced or repealed these still take the place of LUMS. In contrast to SDF's LUMS have a binding effect on the development rights attributed to land and confer real rights on properties.

Because development in Municipalities is dynamic and responds to changing socio-economic and environmental circumstances, it is impossible to predict the exact requirements of development rights in every instance. Therefore, LUMS may be amended from time to time to take into account these changing circumstances. This is normally achieved through the processing of rezonings, subdivisions and removal of title deed restrictions applications. It is in these instances where SDF's play an important role in guiding appropriate future change and helping to guide motivations as to the need and desirability, or not, of proposed land use changes.

Because of their guiding and informing nature SDF's also have a number of other important roles in addition to guiding LUMS.

These include:

- Giving effect to the principles contained in the Development Facilitation Act Chapter 1, see Section 2.1.1 on page 12;
- Setting out objectives that reflect the desired spatial form including:

  Defining strategies and policies to achieve these objectives which must indicate, amongst others:
  - the desired pattern of land use;
  - how spatial reconstruction will be addressed; and,
  - providing strategic guidance in respect of the location and nature of development. (In this regard it should be noted that the SDF's should inform the investment decisions of the public ***and the private*** sectors.)

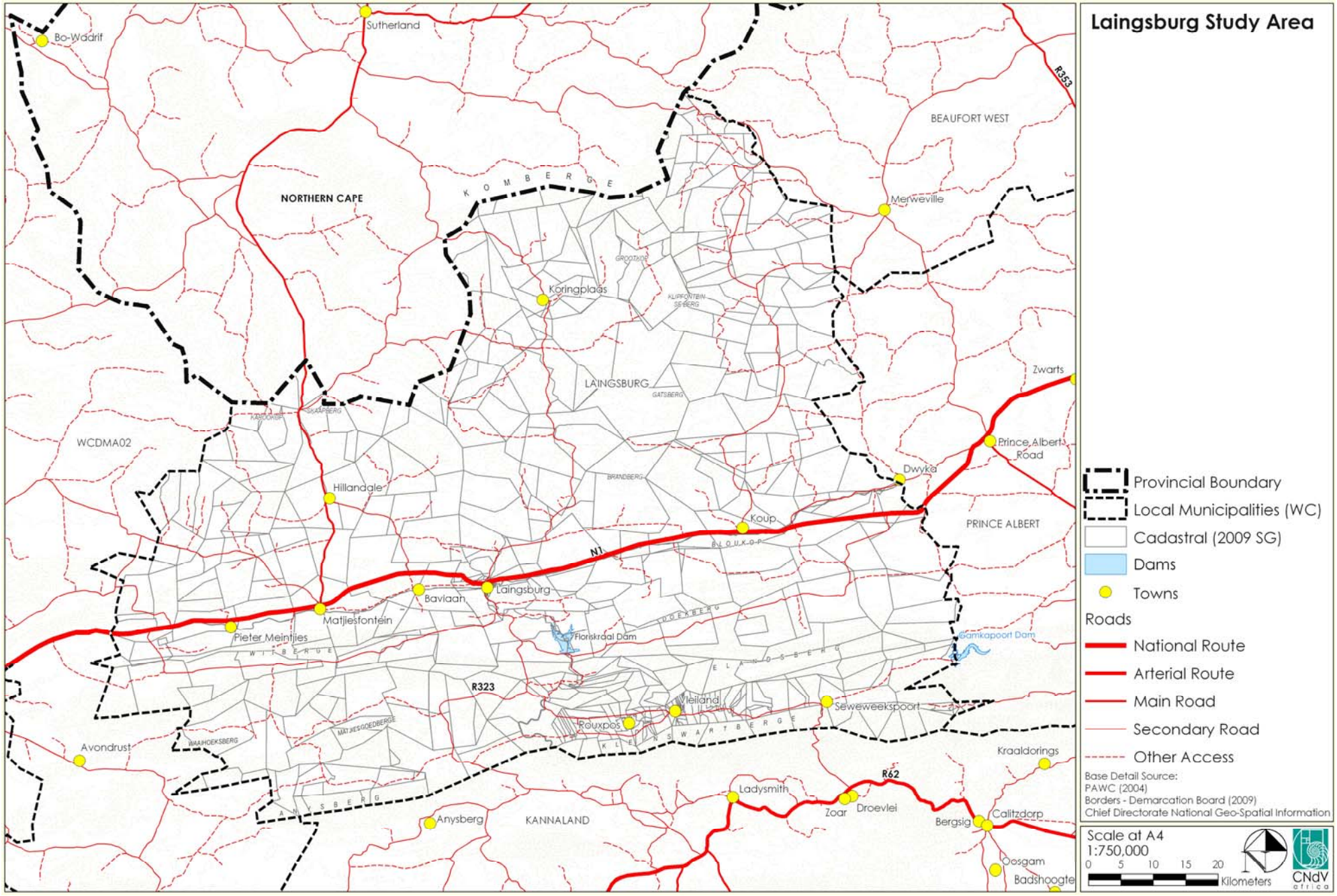


Figure 1.1.1a Study Area

- Set out a capital investment framework for development programs; (this will mainly inform public sector investment priorities);
- Include a Strategic Environmental Assessment (SEA) in the compilation of the SDF;
- Identify programs and projects for development of land;
- Be aligned with neighbouring Municipal SDF's; and,
- Provide a visual representation of the designed spatial form with the Municipality in the form of a map which must indicate the following:
  - public and private land development and infrastructure investment;
  - desired and undesired use of land;
  - may delineate the Urban Edge;
  - identify areas for strategic investment;
  - where policy intervention is needed; and,
  - indicate where authority spending is required.

1.4 LEGAL STATUS OF THE SDF

Within the limitations of a SDF as laid down by the Local Government Municipal Systems Act, 2000 (Act 32 of 2000) i.e. that it should be a guiding and informing document and does not confer real rights on land, it is intended that the SDF should be a binding document endorsed by the Municipal Council and approved by the Provincial Administration in terms of Section 4(6) of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985). These endorsements will assist with the processing of development applications, demonstrating compliance with different sectoral policies and motivating project funding and budgets.

1.5 RELATIONSHIP WITH OTHER PLANS

The SDF links the development objectives taken from the Integrated Development Plan (IDP) and the Budget of a particular municipality. Therefore, the SDF becomes the spatial presentation of the IDP objectives that guide projects funded through the budget of the local municipality. This link between the SDF, IDP and Budget is shown in Figure 1.5.1.

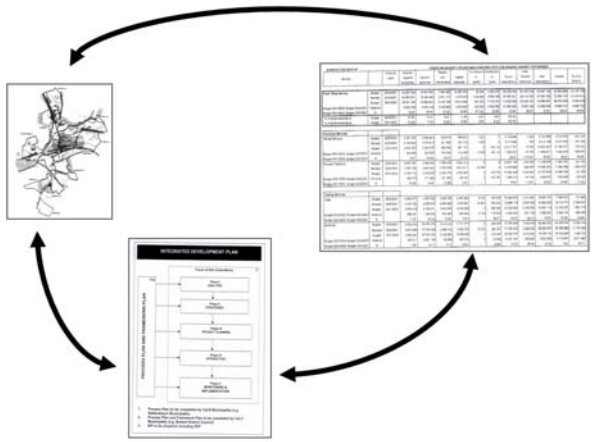


Figure 1.5.1 Link between SDF/IDP/Budget

The Laingsburg Municipal SDF is further linked to other spatial policies at different levels of detail depending on their level of jurisdiction. The National Spatial Development Perspective (NSDP) provides the broad national development goals, objectives and strategies. This informs the Western Cape Provincial SDF (WC-PSDF). The WC-PSDF in turn informs the District Municipal SDF. The Central Karoo District Municipal SDF then informs the preparation of the Laingsburg Municipal SDF. It should be noted that the hierarchy is not only top down but also bottom up, i.e. the lower level plans also inform the higher level plans through the updating process as a result of more local level detailed information. The lower the level of the plan the more detailed the plan becomes and vice versa. This is illustrated in Figure 1.5.2.

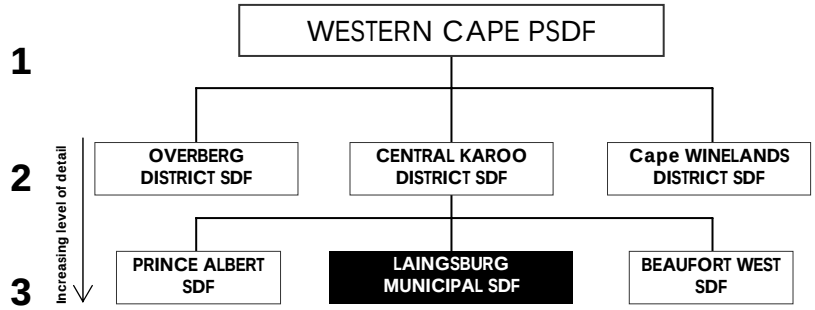


Figure 1.5.2 Layers of SDF and Level of Detail

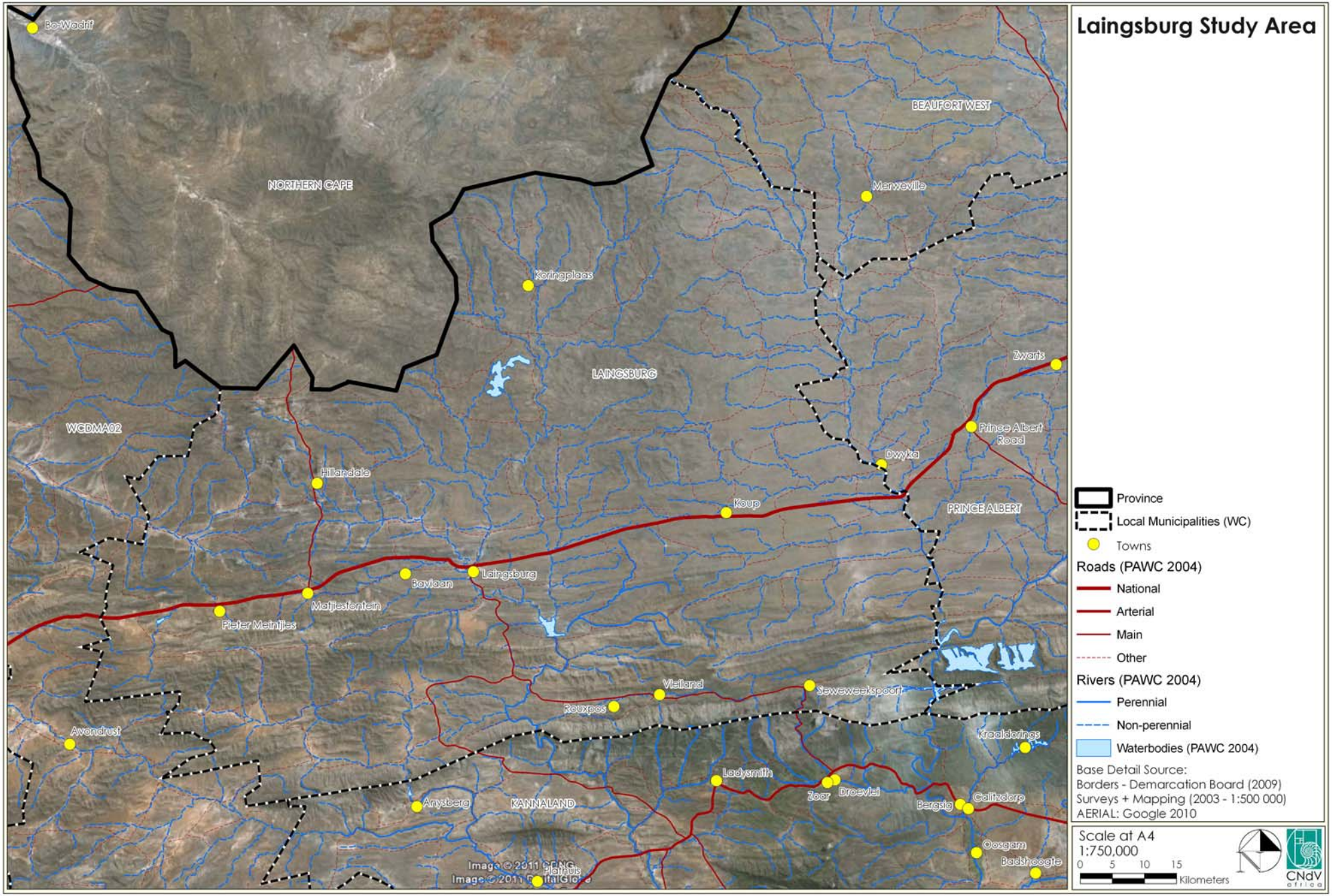


Figure 1.1.1b Aerial Photograph

The SDF should consider the impact of the natural environment (rivers, sensitive areas) as well as built environment aspects such as housing, infrastructure, etc. and socio-economic issues relating to economy, human development indicators, etc. Although prepared by the Department of Development the SDF must guide all of the Municipality's departments. Therefore, the SDF is informed by and in turn informs the plans and activities of the various line departments, see Figure 1.5.3.

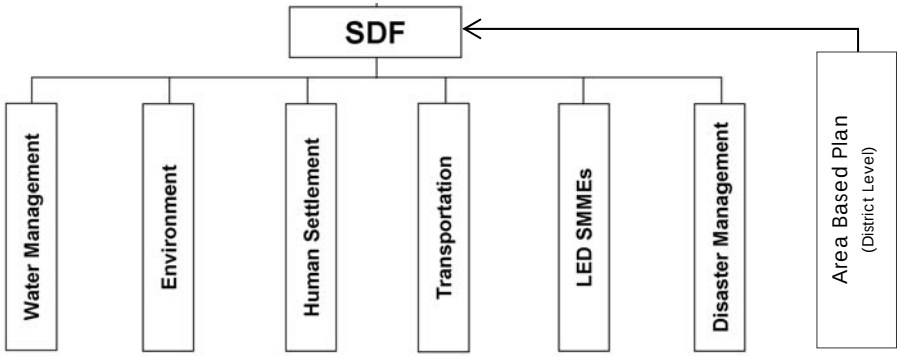


Figure 1.5.3 SDF relationship to sector plans

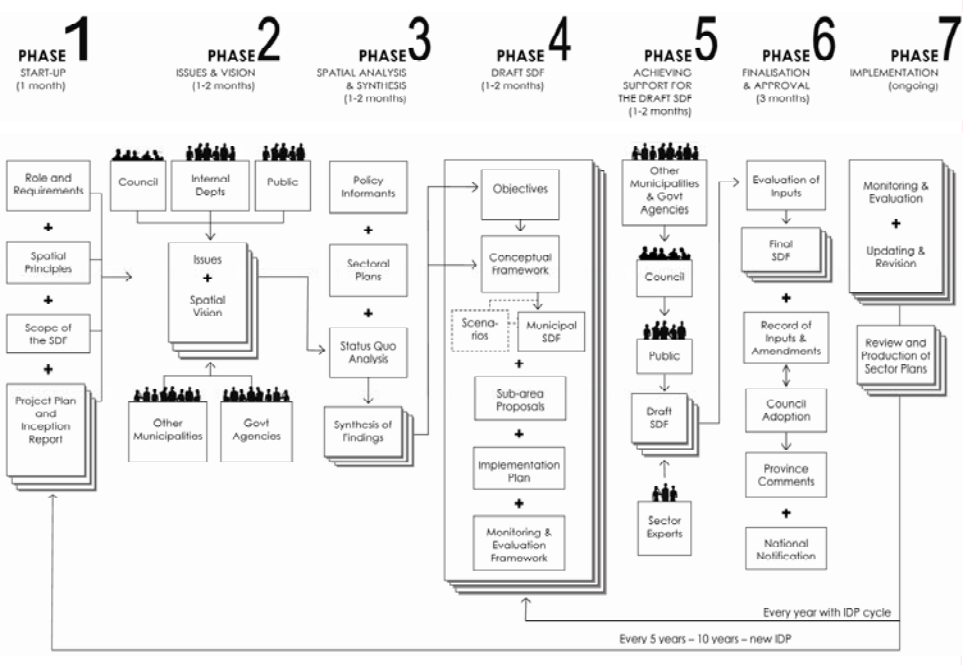


Figure 1.6.1 Phases in the process of completing an SDF (source: CNdV, 2010)

1.6 CONSULTANT'S BRIEF

The consultants brief is to prepare an SDF for the Laingsburg Municipality.

The following methodology is used in this project:

Product One : Spatial Representation of the IDP

Product Two : Analysis and Situational analysis Report

Product Three : Conceptual Framework (draft SDF)

Product Four : Implementation Strategies and Programmes

Product Five : Approval of SDF

The above mentioned products of the SDF will be produced in the phases shown below in Figure 1.6.1.

The following serves as specific foci:

CRITICAL MILESTONES AND DELIVERABLES

The following milestones are necessary phases of the project to ensure a credible and comprehensive SDF as required by the above policy and regulation:

- Spatial Interpretation of the IDP of the Municipality;
- Spatial Analysis of the Current Reality;
- Desired/Conceptual Spatial Goal and Development Pattern; and,
- Implementation Strategies and Programmes.

It is expected that each milestone should cover several deliverables. Following below is a list of deliverables for each of the four milestones.

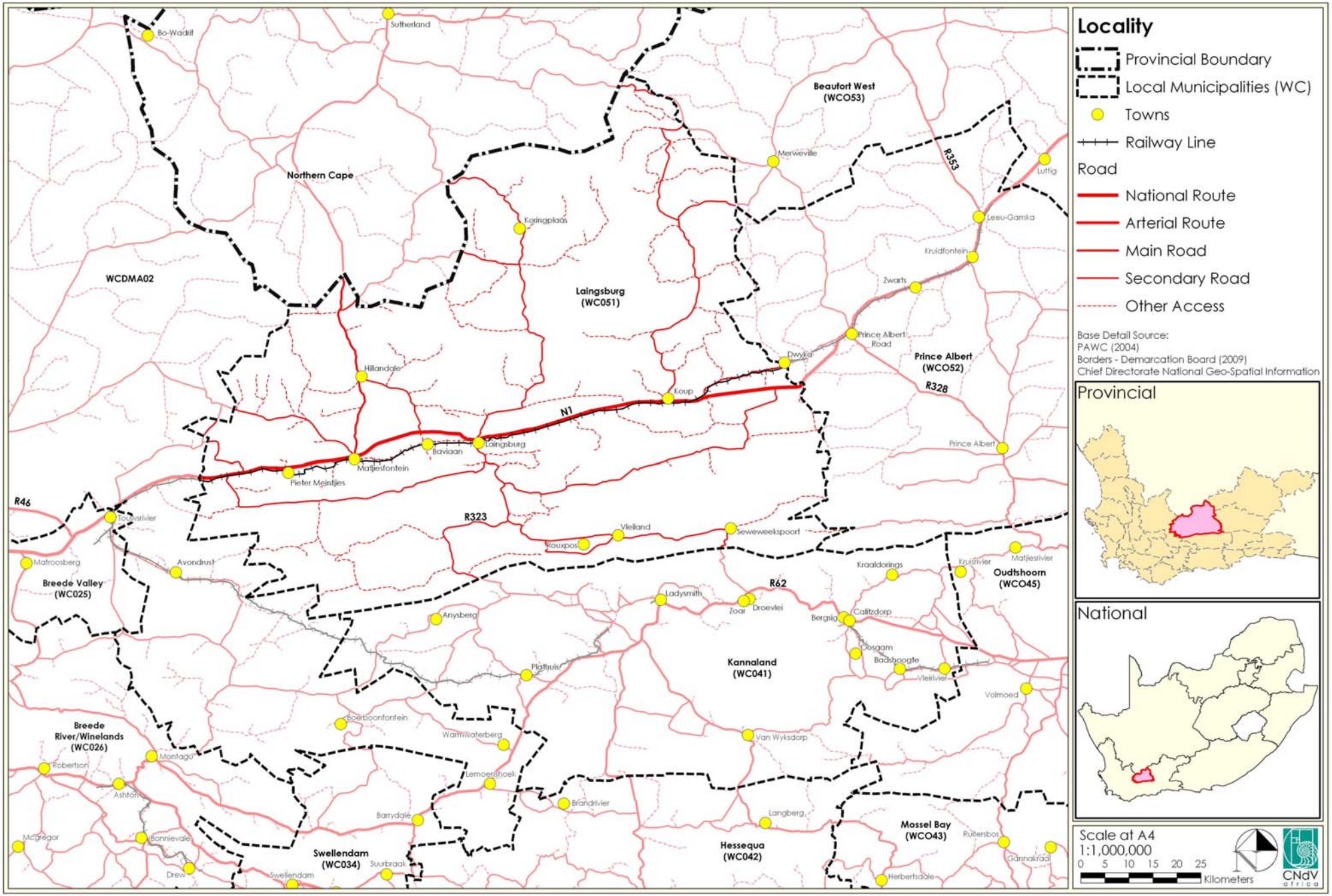


Figure 1.1.1c Laingsburg Locality Map

PRODUCT 1 SPATIAL PERSPECTIVE OF THE IDP OF THE MUNICIPALITY

Due to the fact that an SDF is a spatial representation of the IDP, understanding, but most importantly interpreting the IDP spatially is seen as the first phase of the process. The section should, *include the following*:

- Highlight the vision and mission of the IDP and its spatial implication;
- Confirm the interrelationship of the municipality's vision and that of the district from a spatial planning point of view;
- Identify main relevant principles and strategies as contained in the IDP and how they translate spatially;
- Delineate the municipal boundary, settlements, farms and wards; and,
- Map the area where the main pressing needs and the proposed multi-sector project(s) are located.

PRODUCT 2 SPATIAL ANALYSIS OF THE CURRENT REALITY

This section should check whether the "environment" is spatially conducive, able or geared for the delivery of the IDP and the relevant sector plans. It should not repeat the status-quo information as contained in the IDP. This phase must contain a **spatial analysis with maps**, and should indicate the following:

- Municipal-wide rural spatial issues (in relation to the needs identified) and existing projects proposals (including their locality);

The municipal investment and spending patterns. For example, are the municipality spending patterns:

- in the interest of the DFA;
- is spending biased towards the urban areas; or,
- is the focus on the needy rural settlements?
- Is there a Comprehensive Rural Development Programme (CRDP) in the municipality; and how do the proposals relate spatially and economically to the adjacent settlements and towns? and,
- Summarise existing policies, plans, resolutions and by-laws in the municipality pertaining to spatial planning. Are they supportive of what the municipality wants to achieve in particular with regard to rural development; or do they need to be revised?

Highlight spatial implication of applicable provincial and national plans, legislation, policies, strategies and directives;

- Settlement spatial patterns and dysfunctionalities:
    - Is there any sign of sprawl, integration or any other effects of apartheid?
    - Is the environment and its activities functioning efficiently as a system?
    - Can the proposals of the IDP be implemented?
- Identification and analysis of existing nodal points:
    - Are they viable and sustainable for promoting economic growth?
    - Should their development be enhanced, etc?
- Identification and analysis of strategic located vacant land and development potential land:
    - Note, only important vacant land should be described. Analysing every piece of land in the rural municipality should be avoided;
- Highlight major structuring elements, urbanisation trends and their spatial implication in the municipality;
- Identification of Strategic roads and transportation networks (district, provincial and municipal roads):
    - Are they systematically functional and supportive of each other?
    - Is there a need for new roads, and,
    - Identify which roads need to be upgraded and for what reason.
    - Where are the roads leading to and which ones will boost the economic growth of the municipality, etc;
- Location and trends of basic services and infrastructure:
    - Where does the municipality want the services and infrastructure to be placed?
    - Is it aligned with where the relevant sectors want to implement their projects? If not, what kind of engagements are necessary?
- Housing (human settlements):
    - Where are low income houses located?
    - Are they in viable locations from an economic and access point of view?
    - Is there supporting infrastructure?
- Environmental degradation, conservation and sensitive areas and the impact which specific development may have on the environment:
    - In which areas should no development be allowed at all?

    - In which areas could some development be allowed with strict management?
- Agriculture:
    - Which land has agricultural potential/
    - Which land is currently affected by land claims?
    - Does the respective municipality need the land for other purposes?
- Land reform:
    - Which are suitable areas for land reform purposes?
- Sports:
    - Where are the major sporting nodes or areas and whether they are supported by the relevant infrastructure?
- Spatial relationships between urban and rural areas:
    - What form does this take?
    - Is there a harmonious relationship between the two? What form does this take?
    - Infrastructure, poverty, welfare grants, markets, economic activities or cultural?
- Surrounding Municipalities:
    - Analyse trends and alignment of adjacent municipalities with those of the site;
- Overarching policy:
    - What are the main spatial implications of:
    - the District SDF;
    - Provincial SDF; and,
    - the Growth and Development Strategy;
- The relationship between the spatial issues and the vision of the municipality:
    - Is there a correlation or disjuncture? and,

This information should be summarised to determine the way forward in terms of how the municipality should be shaped from a spatial point of view.

PRODUCT 3 DESIRED/CONCEPTUAL SPATIAL GOALS AND DEVELOPMENT PATTERN

In this phase the conceptual proposals are developed. It is about how the spatial form of the municipality should be shaped. It links with the outcomes of the two phases mentioned above. The section should include and map the following:

- Relevant objectives and principles that will translate the space or the environment into the desired spatial form;
- The macro-conceptual framework showing the desired spatial form. The municipality should be portrayed as to how it will function sustainably as a system;
- A micro spatial plan of the focus/growth/nodal points in the municipality;
- Horizontal and vertical alignments of the conceptual diagram with other relevant plans such as PGDS, NSDP, District SDF and District IDP, etc.;
- Priority settlements for the implementation of the CRDP;
- Rural towns needing revitalisation;
- Strategic located land for agri-villages and agro-industries;
- Land to be acquired or reserved for land reform activities including land for proactive acquisition (PLAS) by the Department of Rural Development and Land Reform;
- Strategic areas requiring surveying;
- Point out strategic sites for Thusong Service Centres (also known as Multi Purpose Community Centres (MPCC's));
- Strategic development areas and priority areas for investment;
- Viable land for housing and other economic development and supporting infrastructure;
- Viable and functional nodal points, and identify potential nodes and how they should be developed.
- Identify nodes without development potential? Name or identify the nodes;
- Functional development corridors and how they should be developed to support the nodes;
- Urban edge and direction for growth for any of the different areas at micro framework level and for the municipality as a whole at macro level;
- Functional and integrating municipal/district roads and public passenger transportation network;
- Proposals for upgrading of or new roads; and,
- Proposed major bulk infrastructure for the whole municipality;
- Where appropriate include new bulk infrastructure and the relevant services;
- Environmental conservation and sensitive areas;

- Major sporting nodes as well as areas with tourism potential
- High agricultural potential and areas affected by claims which municipality needs the most for developmental purposes; and,
- Areas needing urgent policy intervention.

PRODUCT 4 IMPLEMENTATION STRATEGIES AND PROGRAMMES

This is the most important phase of the SDF to realise all the ideas as conceptualised in the previous phases. For implementation to succeed it is necessary to ensure the following from the start of the process:

- There is a strategic vision for the spatial structure of the municipality as a whole shared by councillors, all the municipal department's officials, the district in which the municipality is located, national the sector departments and the private sector;
- The development of the plan should be consultative from the beginning until to the end of the process; and,
- Strategies and processes should be in place to involve the relevant decision-makers and stakeholders.

Once this has been completed, the following deliverables should form part of the SDF:

- Relevant strategies and policies to implement the framework and determine the points of intervention by the municipality; and,
- Propose amendments to the relevant sector implementation plans to facilitate the implementation of the SDF. Sector plans must always be aligned to advance the interests of the SDF and hence the IDP, see Figure 1.6.2.

Note: Making recommendations for further studies needs to be conducted;

- Recommend for the revision of existing policies or strategies where necessary;
- Land ownership with updated cadastral information that could be utilised by the municipality as part of a land audit;
- Include or design relevant transportation, infrastructure and land use integration policy and plans;
- Include a land use management system guidelines or recommend for the formulation of land use schemes;

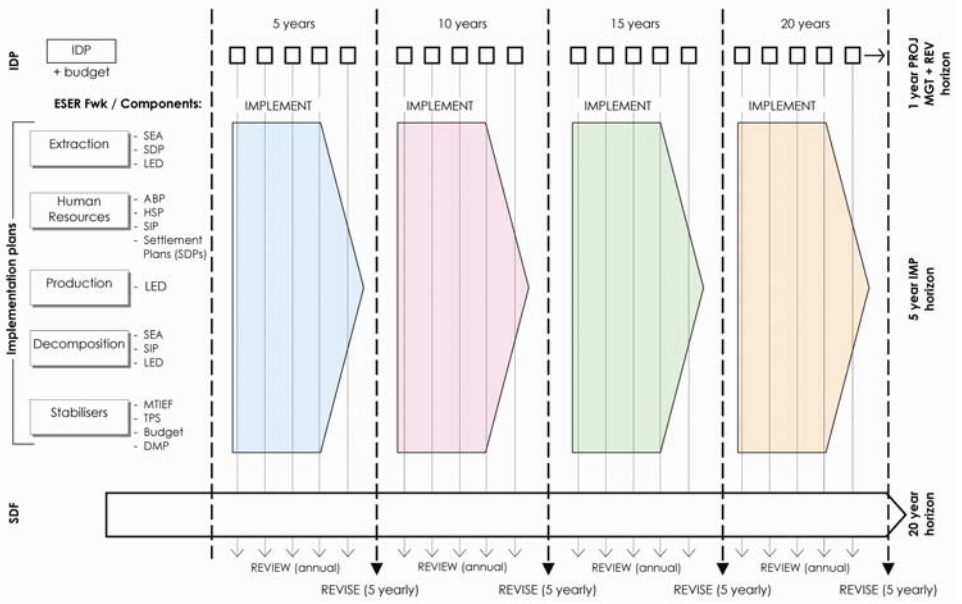


Figure 1.6.2 Proposed Relationship between IDPs, Implementation Plans, including HSPs and SDFs (source: CNdV 2010)

- Propose tools to facilitate urbanisation or migration onto the strategic development areas;
- Recommend strategies to facilitate the linkage between rural and urban areas;
- Proposals and strategies on how the municipality should be functionally integrated;
- Proposals on how to ensure the sustainability of land with high agricultural production potential; and,
- An Implementation Plan that summarised from the sector implementation plans:
    - Capital Expenditure Framework for the municipality's development programmes and budget process;
    - Prioritised list of developmental interventions and spatial location;
    - Cost and budget estimates;
    - Timing and phasing of development;
    - Sources of finance;
    - Implementation agent and their roles and responsibilities;

- Recommendations for the revision of existing policies or strategies, where necessary;
- Proposals on how the SDF can be used for the implementation of projects by Sector Departments; and,
- Institutional capacity recommendations.

Relationships with abutting Municipality in the Western Cape Province including Beaufort West, Prince Albert, Cape Winelands District Management Area (DMA) and Kannaland.

The following general deliverables are to be included:

i. Resumes of meetings;

ii. Powerpoint slide shows and hand-outs of presentations;

iii. Reports to be developed incrementally as project progresses;

iv. An atlas of situational analysis maps;

v. A set of proposals maps.

All of these products should be compatible with national, provincial and district GIS databases.

2. GOVERNANCE AND LEGISLATION - IMPLICATIONS

There are a number of Acts, policies and guidelines to be considered in the preparation of the SDF. The following section spells out some of the more important documents in this regard.

2.1 NATIONAL POLICY

2.1.1 DFA Principles

The Development Facilitation Act (DFA) provides an important set of overarching guidelines in the principles contained in Chapter 1 of the Act, see Figure 2.1.

- Promote efficient and integrated land development:
  - Integrate social, economic, institutional and physical aspects of land development;
  - Integrate land development in rural and urban areas;
  - Promote availability of residential and employment opportunities in close proximity to each other;
  - Optimise the use of existing resources;
  - Promote a diverse combination of land uses;
  - Discourage the phenomenon of urban sprawl and contribute to development of more compact towns and cities;
  - Contribute to the correction of historically distorted spatial patterns of settlement in the Republic; and,
  - Encourage environmentally sustainable land development.

Figure 2.1.1.1 DFA : Chapter 1 - Land Development Principles

Key themes contained in these principles include:

- Socio-economic integration;
- Rural and urban integration;
- The promotion of high levels of access that could minimise the need for the use of the private motor vehicle; and,
- Limiting urban sprawl so as to increase urban efficiencies relating to business thresholds and minimise the impact of urban growth on agricultural land, areas of scenic beauty and areas of high biodiversity potential.

Implications for Laingsburg Municipality
SDFs should indicate how they effectively contribute to achieving these principles.

2.1.2 NSDP Spatial Guidelines

The National Spatial Development Perspective (NSDP) is an effort by National Government to find the best way of allocating scarce resources in the various geographic regions in the country. The basic premise of the NSDP is that if there are not enough resources to satisfy all needs wherever they may occur then they should be allocated to where the benefits will be greatest.

The NSDP takes the form of a spatial narrative, a set of maps and a strategic response. Using these tools, the NSDP objectives are to:

- Provide a framework within in which to discuss future development;
- Act as a common reference point for national, provincial and local government for the analysis of development potentials;
- Identify areas of tensions/ priority in achieving positive spatial outcomes with government infrastructure;
- Provide governments response to the above mentioned for a given time period.

"The NSDP is unique in the sense that it proposes a mechanism that will link local, provincial and national planning in one integrated system of planning for development." (source: NSDP)

There are five major principles of the NSDP:

- Economic growth is most likely to continue where it has previously occurred and therefore economic potential will be highest in these localities (NSDP, pg 24);
- Economically active people will tend to move to localities where jobs or other livelihoods are available (NSDP, pg 24);
- Efforts to address past social inequalities should focus on people and not in places where it will be difficult to promote sustainable and economic growth (NSDP, pg 24);
- It is important that people are trained and skilled to participate effectively in the economy. Because of the tendency of people to move to areas of greatest opportunity especially when they have skills, programs in areas with low economic development potential should focus on enhancing people skills rather than the construction of fixed infrastructure. This will avoid the risk of such investment becoming redundant if people move away or there is not sufficient demand to justify high levels of expenditure;
- Future government spending on infrastructure and development should be in localities that would not become poverty traps (NSDP, pg 25);

Figure 2.1.2.1 illustrates the principles of the NSDP Spatial Guidelines.

Centres which have existing or potential economic growth should be the priority for economic investment, i.e. fixed infrastructure such as housing, underground services and roads. Centres with low economic potential should not be priorities for fixed infrastructure. However, social capital programs such as health, adult basic education and training, entrepreneurship development, and business and technical training should be directed to wherever people may require them. In this way, should the recipients decide to move to other centres, they will, in effect, be able to take this investment with them.

Facilities for the delivery of these programs in centres or areas of low economic potential should use and share existing facilities. In many of these locations there are under-utilised school buildings, clinics, etc. which could be refurbished and used as multi-purpose centres.

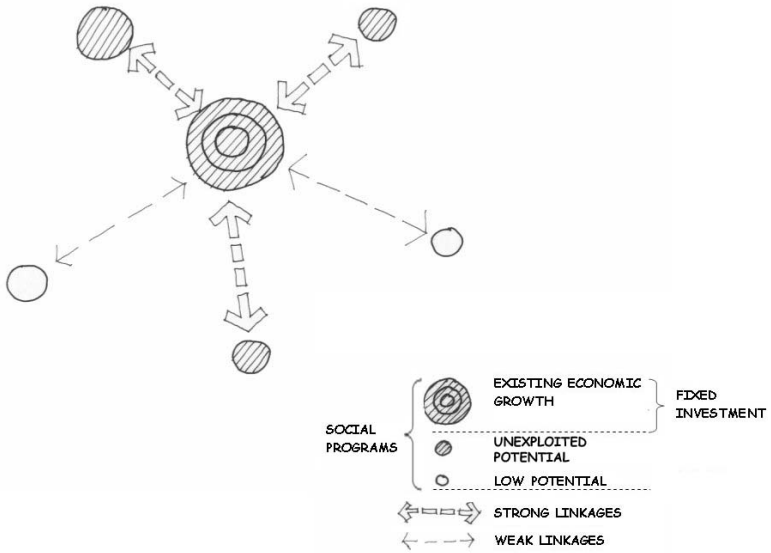


Figure 2.1.2.1 Principles of the NSDP Spatial Guidelines

The NSDP also recognises that development potential tends to be greatest along linear corridors or axes, see Figure 2.1.2.2. This is as a result of the relationship between urban nodes of opportunity and the transport and communication routes that connect them. In some instances a river whose banks also have enhanced economic opportunities could also give rise to linear development corridors as zones of investment priority.

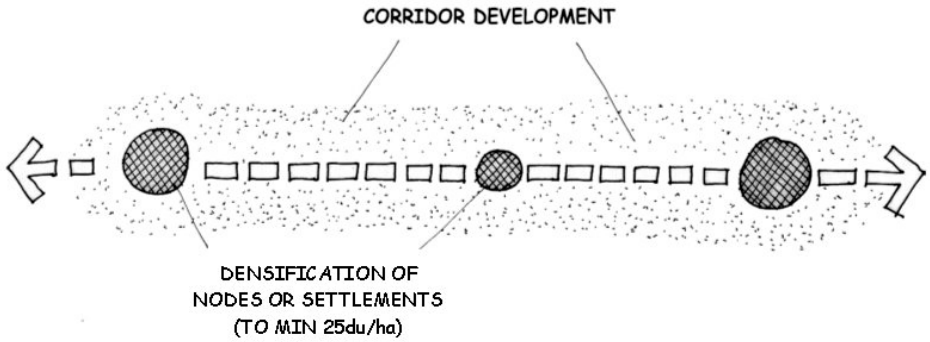


Figure 2.1.2.2 Development Potential along Linear Corridors

Difficult Choices and Decisions

The principle of allocating investment into areas of greater economic potential is considered controversial in situations where there is a concern that this might lead to socio-economic or spatial marginalisation of areas of less economic potential. While this is a valid concern, it needs to be clearly understood that in spatial terms resources are not equally distributed.

Figure 2.1.2.3 illustrates the difference between ideal relationships where all space is equal, people are distributed evenly across that space, and resources and opportunities are also equally distributed and reality which is that space is warped by topography, the unequal distribution of mineral resources, and the greater concentration of ecosystem services such as water, soil fertility, areas of biodiversity, in some areas than in others.

As a consequence of the warping of these patterns different parts of the landscape have greater opportunities than others. This, in turn, is reflected by the uneven development of infrastructure providing access to these areas of opportunity.

This leads to a similarly biased or uneven pattern of economic potential and population distribution.

It is important that the uneven pattern of these very powerful underlying forces is understood when resources are being allocated so as to minimise wastage and inefficiencies.

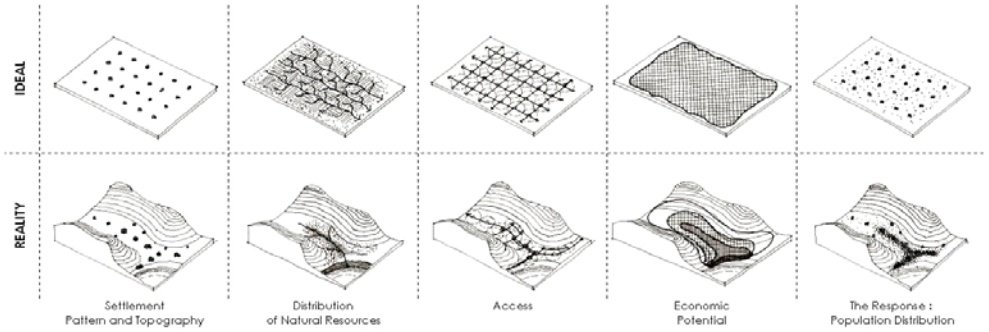


Figure 2.1.2.3 Differences between Ideal and Actual Patterns of Resources and Opportunities

In summary, the NSDP aims to direct where government invests its money. It targets areas that have high economic growth potential for the infrastructural (major physical) and social investment. Other areas that do not have high economic growth potential may receive only social capital investment i.e. investing in people, in educating, empowering, and uplifting the people.

It is argued that people who are located in areas of low or no economic growth potential will most likely move to areas of higher economic growth potential and in that way the investment in infrastructure in the low economic growth potential areas will be wasted. Therefore, it is considered more beneficial to invest in the people who can then take the skills with them. Alternatively the people may improve their current living conditions and standards in areas of low growth potential which may eventually result in their area improving its economic potential. By following this strategy government would have invested wisely and ensured the best return for public investment.

Implications for Laingsburg Municipality

- All settlements is deserving of human development programs.
- Fixed infrastructure to be strategically located so as to ensure compliance with above NSDP principle.
- Investigate what towns can be considered to have low economic growth potential and should only receive human development programs and what towns are considered to have high economic growth potential and could also receive fixed economic infrastructure investment in addition to human development programs.
- Investigate an appropriate response for the delivery of services to the settlements with low economic growth potential.
- Laingsburg town is clearly the main centre for investment.
- The nature of investment at Matjiesfontein will need to be considered very carefully to ensure that it is financially sustainable in particular.
- This will be even more applicable at Vleiland.
- It is likely that, as far as possible, zero emission and zero maintenance strategies with zero operating costs will need to be considered.

2.1.3 Department of Environmental Affairs and Tourism: South Africa's National Biodiversity Strategy and Action Plan

The Department of Environmental Affairs and Tourism prepared the National Biodiversity Strategy and Action Plan (NBSAP) "to develop a plan of action for the conservation and sustainable use of the country's biological diversity."

During the NBSAP preparation, the National Biodiversity Implementation Plan identified objectives, outcomes and activities required for the NBSAP to achieve its goals.

These objectives and targets include:

- ***Strategic Objective One****:* A policy and legislative framework that allows the integration of biodiversity management objectives into the economy.
  Targets:
  - o South Africa is to meet its international obligations with regards to biodiversity
  - o Biodiversity issues become integrated in the macro-economy, informing policy, planning, budgeting and decision making at all levels

- ***Strategic Objective Two****:* Ensure good governance in the biodiversity sector by enhancing institutional effectiveness and efficiency.
  Targets:
  - o Biodiversity concerns occupy a significant place on the national agenda
  - o Government, stakeholders and role-players work together (effectively and efficiently) to achieve biodiversity management objectives

- ***Strategic Objective Three****:* Integrated terrestrial and aquatic management to minimise the impacts of threatening processes on biodiversity, enhances ecosystem services and improve socio-economic security.
  Targets:
  - o By focusing on programmes aimed at poverty alleviation, effective control of priority invasive species is achieved
  - o Meet biodiversity objectives within all biodiversity priority areas
  - o Produce disaster prevention and management plans incorporating wise ecosystem management principles and practices
  - o Genetically modified organisms which threaten biodiversity, are not to be released into the environment
  - o Consider biodiversity in all aspects of resource use

- ***Strategic Objective Four****:* Enhance human well-being and development by enhancing the sustainable use of biological resources and equitable sharing of benefits.
  Targets:
  - o Economies based on the use of species and genetic resources are optimized and sustainably managed
  - o Priority fish stocks recover to sustainable levels
  - o No species status declines
  - o National products sector contribution to GDP grows by 50%
  - o With more effective and equitable resources, poverty is alleviated

- ***Strategic Objective Five****:* Maintain key ecological processes across the landscape and seascape.
  Targets:
  - o Comprehensive biodiversity monitoring systems inform planning
  - o Protected area network in marine environmental hence contribution to representation targets in priority areas
  - o No further loss of endangered ecosystems
  - o Establish protected environments and manage effectively

Implications for Laingsburg Municipality

- Need to have sensitive biodiversity areas mapped and clear and appropriate guidelines to guide their conservation.
- Unlike municipalities with large areas of arable land whose use for crop farming conflicts with the conservation of scarce biomes such as Renosterveld, virtually all of Laingsburg Municipality's agricultural activity, namely grazing, can be managed to promote biodiversity conservation if progressive grazing management systems are used.
- The extremely small area of arable land found in the river valleys must be farmed so that river bank cultivation is avoided.

2.1.4 Regional Industrial Development Strategy (RIDS)

The Department of Trade and Industries (DTI) Regional Industrial Development Strategy (RIDS) seeks to move South Africa's industrial development policy from the apartheid era's top-down localized approach to a bottom-up approach that treats regions as functional entities and builds on locally available skills and resources and relies on external investment. (The DTI, Draft Regional Industrial Development Strategy, June 2006, pg 16)

Therefore, it also seeks to strengthen world-class regions. These are high performance regions that contain companies or networks of companies which need to constantly upgrade so that they do not fall behind in global competition. (The DTI, ibid)

One strategy here is to concentrate a critical mass of firms in a chosen industry sector together with its upstream suppliers and service providers in a specific geographic location. Necessary support infrastructure includes transport, logistics, communications, education and training. Gauteng's Blue IQ is an example of such a regional economic development strategy.

RIDS identifies four levels that determine systematic competitiveness, see Figure 2.1.4.1.

National and regional industrial development policy is responsible for the Meta and Macro levels. It is at the Meso and Micro levels where district and local municipal policies can have the greatest effect.

Figure 2.1.4.2 overleaf, indicates that Laingsburg Municipality is considered to have static economic growth potential.

This poses significant challenges for the economic and employment well-being of the Municipality, particularly with regard to commonly held values regarding the need to improve the quality of life, particularly of the poorest residences. Coping with inflationary pressures, particularly with regard to electricity, water, food and wages is also a great challenge in these circumstance.

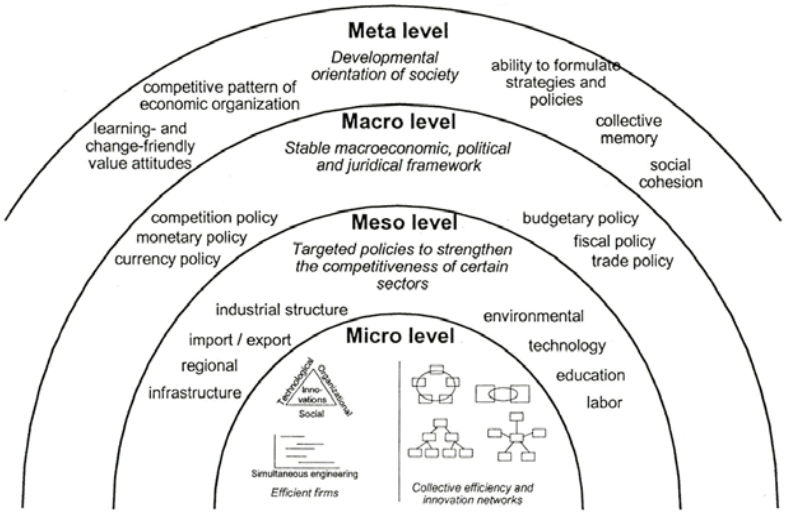


Figure 2.1.4.1 Determinants of Systemic Competitiveness
(source: Draft Regional Industrial Development Strategy, DTI, 2006, pg20)

Implications for Laingsburg Municipality

- Figure 2.1.4.3 illustrates Laingsburg Municipality as having very little gross valued added (GVA) in line with most rural Municipalities in the Karoo that do not have large urban concentrations.
- Laingsburg town is the only area showing some economic opportunity.

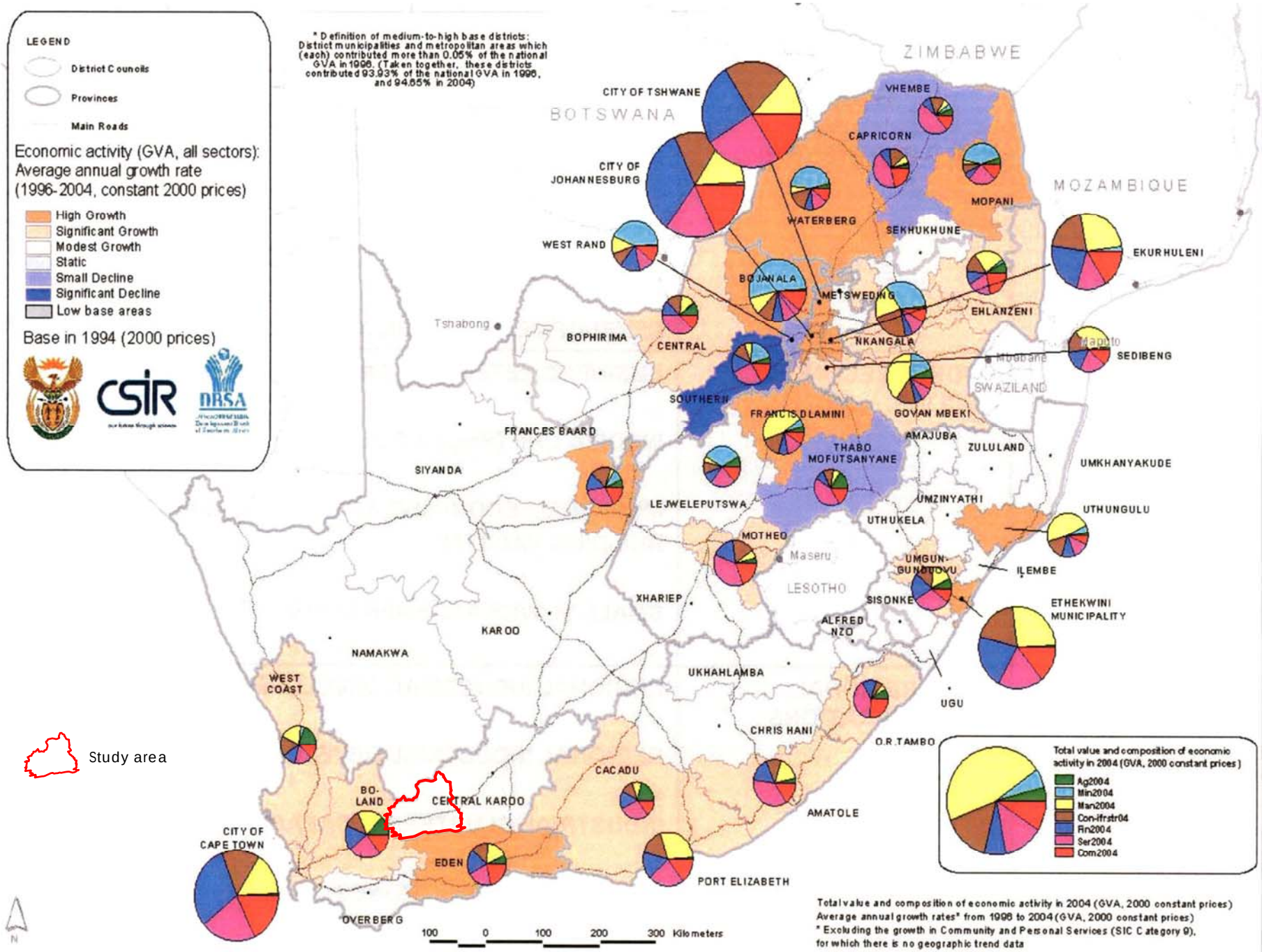


Figure 2.1.4.2 Medium to High Base Areas (source: CSIR, 2006)

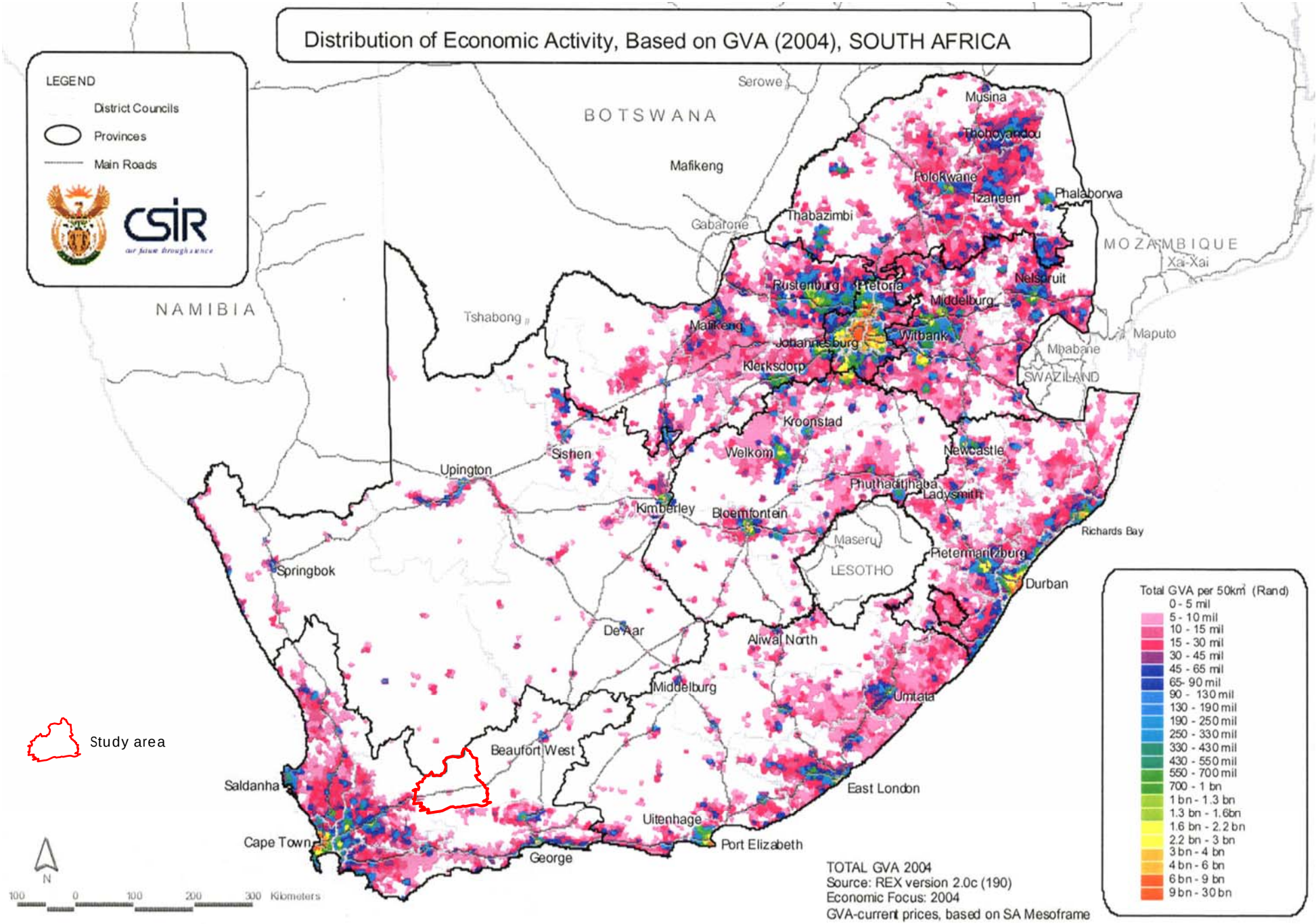


Figure 2.1.4.3 Distribution of Economic Activity, based on GVA (source: CSIR, 2006)

2.2 PROVINCIAL POLICY

2.2.1 Western Cape Provincial Spatial Development Framework (WC-PSDF) (November 2009)

The Western Cape Provincial Spatial Development Framework was adopted by the provincial cabinet in December 2005 and aims to give direction and guidance for the spatial development within the Western Cape.

This policy document formulates proposals that deal with the following areas of intervention: social economic development; urban restructuring and environmental sustainability.

The WCPSDF composite map indicates the broad spatial planning categories derived from the approach to bioregional planning. The five broad spatial categories provide policies for development and activities in the:

- Core areas;
- Buffer areas;
- Intensive agriculture areas;
- Urban development; and,
- The Urban Edge.

It is understood that the broad spatial planning categories will be refined at a detailed level by the district and local SDFs when those level SDFs are prepared.

The prioritisation of the provinces' urban settlements is indicated with respect to the relative levels of human need and economic potential so as to prioritise fixed investment and human need.

The study relating to the growth potential of towns outside of the City of Cape Town municipal jurisdiction has underpinned the proposals relating to the prioritisation of areas for fixed investment and those areas that would only receive human needs programs or social investment.

With regard to urban restructuring and integration proposals relating to the urban settlements, the WCPSDF proposes that urban edges be defined around current urban developed areas to contain the outward growth of areas and to increase the densities within those areas to an average of 25du/ha. Only resort types of development will therefore be permitted outside of those urban edges.

The WCPSDF is underpinned by the following objectives:

- Objective 1: Align the future settlement pattern of the province with the location of environmental resources for economic opportunities
- Objective 2: Deliver human development and basic need programs wherever they may be required
- Objective 3: Strategically invest scarce public sector resources where they will generate the highest socio-economic returns
- Objective 4: Support land reform
- Objective 5: Confirm and strengthen the sense of place of important cultural landscapes, artefacts and buildings
- Objective 6: Heal the apartheid structure of urban settlements
- Objective 7: Conveniently locate urban activities and promote public and non-motorised transport
- Objective 8: Protect biodiversity and agricultural resources
- Objective 9: Minimize the consumption of scarce environmental resources particularly water, fuel, burning materials, mineral resources, electricity and land.

The WC-PSDF aims to:

- "Be the spatial expression of the Provincial Growth and Development Strategy;
- Guide IDP's, SDF's and provincial and municipal SDP's;
- Help prioritise and align investment and infrastructure plans other provincial departments as well as national departments;
- Provide clear signals to the private sector about desired development directions;
- Increase predictability in the development environment;
- Redress the spatial legacy of apartheid."

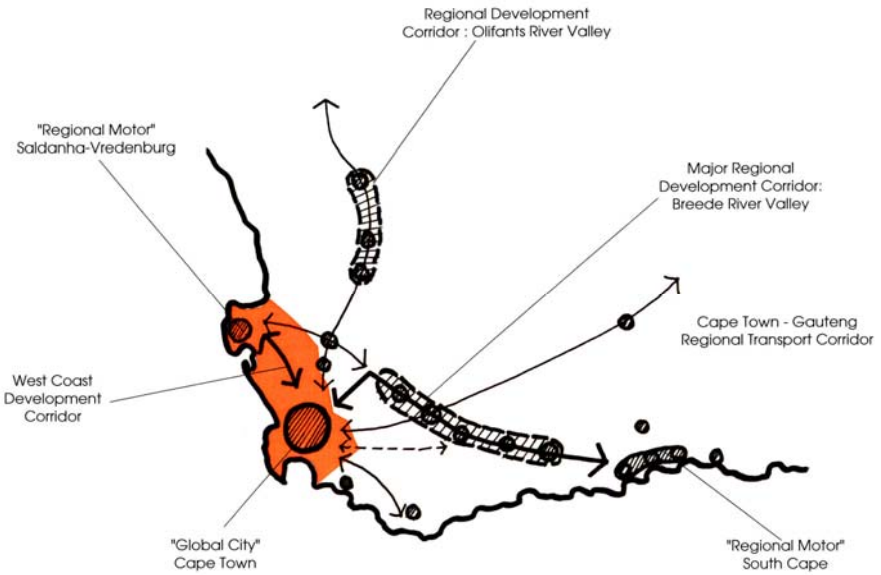


Figure 2.2.1.1 Patterns of Economic Activity (source: PSDF, 2006)

Figure 2.2.1.1 indicates the strategic direction of the WC-PSDF. No mention is made of the Central Karoo District, except the N1 Regional Corridor between Cape Town and Gauteng.

Strategies to address these issues, some of which are depicted on Figure 2.2.1.2.

The WCPSDF further identifies the N1 Freeway and the railway line as major transport corridors with major linkage opportunities. The N1 Freeway and the railway line bisects Laingsburg Municipality and town and is of vital importance to the sustainability of Laingsburg.

The strategies of the PSDF for Laingsburg / Central Karoo are:

- Reinforce development potential and urban efficiencies of settlements with economic growth potential like Beaufort West, Prince Albert and Laingsburg; and,
- Support work of SANBI and Department of Agriculture Soil Conservation Committees to achieve synergy with veld management programs that will improve both biodiversity conservation and stock carrying capacity.

The PSDF notes that both Matjiesfontein and Laingsburg have high need and low development potential.

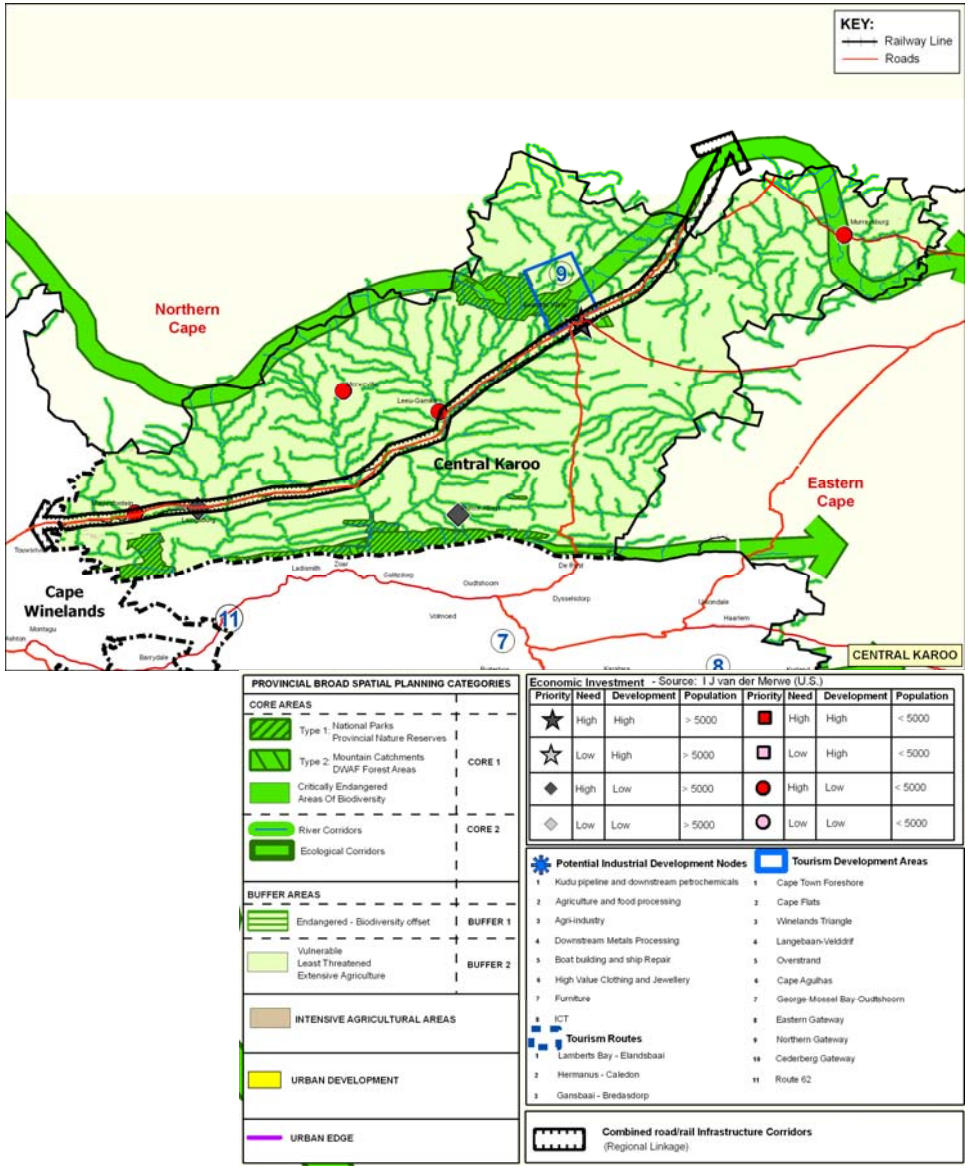


Figure 2.2.1.2 WCPSDF : Central Karoo (source: CNdV, 2006)

Implications for Laingsburg Municipality

- The river corridors should be promoted as Core Areas SPCs.
- Laingsburg town is identified as a settlement with high social need but low development potential. However, because its population is more than 5000 its overall economic investment priority is increased.
- Matjiesfontein, the only other significant settlement in the Municipality, is identified as having high social need and low development potential. Because its population is less than 5000 it will rate very low as an economic investment compared to the needs of other settlements elsewhere.
- Therefore, investment at Matjiesfontein will have to be particularly innovative and ensure that it doesn't create unsustainable burdens for the public sector.
- The Karookop, Skaapberge and Kromberge along the northern boundary should be encouraged to become conservancies reinforcing a biodiversity corridor that includes the Karoo National Park at Beaufort West.
- A similar initiative should be encouraged with farms in the south.

2.2.2 Strategic Infrastructure Plan (SIP), Provincial Government: Western Cape Department of Public Works and Transport, May 2006

The Strategic Infrastructure Plan has been formulated in line with the WC-PSDF and Micro-Economic Development Strategy to determine the requirements to improve growth and development for the Western Cape.

Each sector of the SIP describes the current situation, what the plan would like achieve by 2015 and methods of how to achieve this goal.

The six key aims that have been identified by the SIP are:

- Increasing economic growth;
- Improve well-being;
- Linking with WC-PSDF to attain sustainability;
- Fostering creativity;
- Building communities; and
- Expanding opportunities.

The eleven sectors that have been identified aim to achieve results in terms of sustainable development, economic viability and social equity in the province:

Sector	Current status / proposals for Laingsburg
Transport	Laingsburg is not mentioned.
Land and Property	Laingsburg is not mentioned.
Information & communication technology	Laingsburg is not mentioned.
Energy	Laingsburg is not mentioned.
Environment	Laingsburg is not mentioned.
Community services	Laingsburg is not mentioned.
Health	Laingsburg is not mentioned.
Justice and security	Laingsburg is not mentioned.
Risk Reduction & Emergency Management	Laingsburg is not mentioned.
Tourism and Recreation	Laingsburg is not mentioned.
Education and skills	Laingsburg is not mentioned.

Table 2.2.2.1 Strategic Infrastructure Plan (SIP), Provincial Government: Western Cape Department of Public Works and Transport, May 2006 (source: SIP, 2006)

2.2.3 Provincial Urban Edge Guideline

The following is extracted from the Provincial Urban Edge Guideline dated December 2005. (ref: DEADP, 2005)

An Urban Edge is a demarcated line to contain, manage, direct and control the outer limits of development around an urban area. The intention of an Urban Edge is to establish limits beyond which urban development should not occur and to promote urban and environmental efficiency, effectiveness and economy in the interest of all, see Figure 2.10.

The function of an Urban Edge is three-fold, namely:

- It is a means of restructuring the urban areas and integrating the currently segregated social groups and urban uses;
- It is a growth management tool, used to limit sprawl and the outward growth of urban areas, in favour of densification and infill development, to ensure the more efficient use of resources and land within the urban area; and
- It is a conservation tool, used to exclude certain elements of the environment from the urban area, in order to protect or preserve it, or to discourage its development in the short and medium term, while the long term implications are uncertain.

Urban development includes all development of land where the primary use of the land is for the erection of structures. Residential estates on farms and golf estates would for this purpose, if located outside the Urban Edge, be defined as urban uses, albeit that the "primary use" is "agriculture" or "private open space" and the "secondary use" is residential.

Agricultural uses, open space uses, conservation areas, transport zonings (excluding public transport interchanges, ranks and stations that consist mainly of buildings) and many similar use zonings refer to the use of the land rather than buildings erected on the land in order for the use to occur. These are non-urban uses.

Smallholdings used for bona fide agricultural purposes would or should typically be excluded from the urban area by delineation of an Urban Edge.

Golf courses, polo fields and other sporting facilities with low intensity structural development are seen as rural in nature, whereas a golf estate, i.e. a golf course with housing, is an urban use, unless it is a resort. Agricultural estates, i.e. farms with a large residential component for owners or shareholders (as opposed to bona fide labourer's residences) or for unrelated freehold or sectional title ownership are seen as urban if the density exceeds one unit per ten hectare.

The following issues, criteria and factors are regarded as informants when considering Urban Edges for the urban areas:

- Services infrastructure (barrier effect);
- Services infrastructure (capacity and reach);
- Vacant under-utilised land in urban area;
- Availability of developable land in urban area;
- Higher order roads, access routes and transport infrastructure;
- Cadastral boundaries of adjoining land units;
- Growth requirements over predetermined period;
- Land use applications for new development;
- Visual impact;
- Cultural! heritage resource areas;
- Ownership of land and existing land use rights;
- Informal settlements;
- Urban agriculture and small scale farming;
- Bio-regional spatial planning categories (core and buffer); and
- Density policy for residential development in rural towns.

Given the criteria, issues and facilities for determining Urban Edges, Urban Edges should be determined to:

- Exclude prominent landforms and environmental character areas from the urban area;
- Exclude valuable soils for agricultural purposes;
- Exclude valuable soils for mining purposes;
- Exclude surface and ground water resources that could be used to produce potable water;
- Exclude surface and ground water features;
- Exclude ecological resources and establish suitable; ecological corridors to link resource areas;
- Exclude all statutorily declared, proclaimed and protected natural areas;

- Exclude high intensity use and high potential agricultural resources and activity areas;
- Exclude scenic routes and routes of tourism significance;
- Exclude cultural and heritage resource areas and sites;
- Exclude areas that have visual sensitivity, skylines, mountainsides, ridgelines and hilltops; and
- Exclude the WC-PSDF defined core areas.

Implications for Laingsburg Municipality

In the case of Laingsburg Municipality the following informants, amongst others will play a critical role in the determination of the Urban Edge:

- Agricultural land: currently farmed land, high potential agricultural lands, agri-processing (e.g. wine tasting facilities, restaurants and guesthouses);
- Rivers, Wetlands and floodplains: 1:50 year flood plain, 1:100 year floodplain and the 30 m buffer zone around river corridors;
- Heritage aspects such as landscapes, viewsheds, rural landscapes and gateways;
- Topography: major topographical features, e.g. Hills, ridgelines and focal points; Visual or aesthetic quality or scenery, slopes;
- The policy plans for desired direction and pattern of growth;

In the case of Laingsburg town:

- The Urban Edge is determined by a number of natural constraints, the most significant being the 1:50 year floodlines of the river corridors. These are particularly important in this case due to the terrible flood that occurred in Laingsburg in 1981.
- These floodlines have the effect of breaking Laingsburg into a number of islands making urban integration a challenge.

In the case of Vleiland:

- Future settlements should avoid locating on arable land as this is such a scarce resource.

In the case of Matjiesfontein:

- An Urban Edge need only be considered with regard to keeping the settlement suitably compact and easy to walk around in.

2.2.4 Guidelines for Resort Developments in the Western Cape

The term **resort** is understood to refer to holiday and recreational resorts which carry, or require, a **resort zoning** in terms of the relevant zoning scheme. (DEA&DP, 2005)

Hotels, guest houses, holiday apartments and bed-and-breakfast establishments in urban areas, such as could ordinarily be permitted under a business, general residential or other non-resort type zoning, are also not seen to be included in these guidelines.

Given the above it is generally used as a departure point that accommodation in resorts should be aimed at temporary occupation**,** to give more people access to the natural resources of the Western Cape. Care should therefore be taken that resort zone applications do not become vehicles for covert, permanently inhabited township establishments, which may often be described as *"exclusively elitist".* (DEA&DP, 2005)

As a general rule, the guidelines state, *freehold ownership associated with resort zoning* (that is, holiday housing, such consent use in a Resort Zone, or Resort Zone II, whether individual erf, sectional title, block sharing or other) *is not desirable in any area outside the Urban Edge*. (DEA&DP, 2005)

The following are the most important criteria for the location of a resort:

- **Planning Policies**

The planning policies include non-spatial policies such as IDP's as well as spatial policies such as WC-PSDF, Urban Edge Guidelines, SDF's, Urban Edges, Bioregional Planning policies, etc.

- **Availability of a Resource**

Resort applications outside urban areas can only be considered for approval if linked to a distinct resource (unless the area in question has already been demarcated for, amongst others, resort development in terms of an officially approved SDF or SDP). This mentioned resource relates to any amenity that results in recreation, that is, an area with special recreational attributes:

- Usually a natural feature that includes physical amenities such as a hot water spring, sandy beach, lake, lagoon or river. The latter may nevertheless, for example, only become relevant as a resource;
- Occasionally, an already existing, established, man-made feature, either within Urban Edges or in rural areas;
- Of such nature that it makes the subject property particularly favourable overall above any other in the area. (This means that it must be advantageously comparably distinguishable from surrounding properties) (ref: DEADP, 2005);
- Of high enough value for many holidaymakers to want to travel thereto from afar and spend more than one day there
- Accessible for the benefit of the general public, and
- Inseparable from the proposed resort to the extent that the permanence of access from the resort to the resource can be guaranteed. (DEA&DP, 2005)

Lastly, it must be a unique resource and the carrying capacity of the resources and surroundings must be taken into consideration. The guideline further proposes densities and floor areas:

- Small: 1-10 units - floor area not being more than 120m² per unit
- Medium: 11-30 units - floor area not being more than 120m² (or up to 175m² in sensitive natural/cultural heritage areas within the Urban Edge) per unit and total floor area of all buildings not being more than 3 600m²
- Large: 30-50 units, or, should there be less than 30 units, but the total floor area of all buildings still exceeds 3 600m² (approval of a resort of more than 50 units, though not impossible, is not considered to be the norm)

In terms of area densities the following are proposed:

		Maximum permitted number of units	
Generalized visual carrying capacity	Landscape type	Short term rental accommodation units	Units that can be individually alienated / separately allotted to individuals
High and medium	Mountains and hills	1 unit per 10ha	1 unit per 20ha
Low	Plains	1 unit per 50ha	1 unit per 100ha

Note: Local Municipalities, as part of their SDFs, or on a project basis funded by applicants, should determine and map landscape types.

Figure 2.2.4.1 Area Densities (DEA&DP, 2005)

The maximum floor areas recommended for other buildings that may be found in resorts are as follows:

- Bed and breakfast 350m² (maximum 5 bedrooms per unit) establishments (/guesthouses)
- Farmstalls 100m²
- Businesses 150m² (shops)
  250m² (restaurants)

The following unit sizes are proposed:

	Resort Zone without holiday housing consent[8]	Resort Zone outside urban edges	Resort Zone with holiday housing consent[9] within urban edges (but still within natural, relatively sensitive areas)
Maximum unit size floor space (m²)	**120m²**	**120m²**	**175m²**
Maximum number of storeys	**Single storey only**	**Single storey only**	**Single storey, and possible expansion of habitable space into loft**
Building height	**6,5m**	**6,5m**	**6,5m**
Individual exclusive use area	**n/a**	**250m²**	**300m²**

Figure 2.2.4.2 Unit Sizes (DEA&DP, 2005)

- **Environmental Opportunities and Constraints**

When considering the environmental opportunities and constraints the guidelines suggest that a "resort should not be permitted in a particular location, if its establishment will lead to damage or destruction of the environment. The concept of resort zone was, from the outset, based on the premise to give access to a greater number of people to areas of natural or cultural amenity value not otherwise available to them, without the potential destruction that may be associated with more formal development." (DEA&DP, 2005)

Implications for Laingsburg

The Floriskraal and Gamkapoort dams and the isolated farms of the Klein Swartberg and Moordenaars Karoo have potential for resorts.

2.2.5 Guidelines for Golf Courses, Golf Estates, Polo Fields and Polo Estates in the Western Cape

The guidelines have been produced to help decision-makers when dealing with applications for golf courses, golf estates, polo fields, polo estates and other developments of similar scale and/or complexity and as a reference for formulating SDF's and IDP's. (DEA&DP, 2005)
The objectives of the guidelines are:

- To promote responsible development, taking into consideration the imperative for transformation;
- To protect, enhance and maintain the natural resources and unique biodiversity of the Western Cape;
- To support the implementation of sustainable development principles;
- To support and enhance the implementation of bioregional planning in the Province;
- To promote well-functioning, integrated urban settlements, and to prevent urban sprawl;
- To inform decision-making with respect to golf courses, golf estates, polo fields and polo estates in all spheres of government, based on the principle of cooperative governance;
- To provide clarity into the application and assessment process, by clarifying requirements without creating expectations; and
- To improve the effectiveness of public participation. (DEA&DP, 2005)

The purpose of the location principles is to facilitate the appropriate siting or placement of development on the landscape.

- **Urban Areas**

The term "Urban Areas" refers to all land designated for urban development purposes within a demarcated Urban Edge. Developments that include golf courses, golf estates, polo could be more appropriate when:

- "In or immediately adjacent to the urban area, where it assists in defining an Urban Edge. Refer to the WCPSDF and provincial Urban Edge Guidelines;
- It forms part of the municipal open space system (to be read in conjunction with the following bullet), and
- Where residential components are added to existing amenities in urban areas, as a form of general/overarching densification, on condition that the recreational and open space/green lung function of such amenities is not compromised and provided that:
  - The site does not fall within an area that has been identified by the relevant Municipality concerned for urban densification;
  - If the site is located within the open space system/network, access to public amenities and open spaces is not disrupted;
  - The site has not been designated as being of sufficient cultural significance by heritage authorities to warrant it a "no-go" area for development;
  - The site does not fall within an area that has been identified as being of conservation significance, within the urban context;
  - The site does not negatively affect the role, function, public enjoyment and status of open space systems/networks, designated sites of cultural significance and/or sites identified as being of conservation significance;
  - The development or part thereof will not be located within the 30m development restriction area measured from the bank of a river, stream, wetland or any other natural surface water feature or within the following 1:50 year or 1:100 year flood lines, whichever is the most restrictive:
  - The water demand for the development is in accordance with the municipality's water services plan and that there is no risk of stress being placed on the municipal water supply;
  - Where water resources are required to supply the development, that these are not considered as being stressed by DWAF and other relevant authorities;
  - the area does not fall within the coastal zone as defined by relevant legislation, policies or plans, or within 30m of the edge of a cliff located on the coastline, or within 30m of the high water mark, or on primary dunes or on dune systems that are mobile (the most restrictive criteria will apply);
  - The development will not result in the removal of traditional access used by local communities;
  - The development will not result in existing public and/or traditional access to and along the coastline being disrupted (unless acceptable alternative access has been provided);
  - The development will not result in or contribute to visually obtrusive or ribbon development along the coastline or along cliffs and ridges." (DEA&DP, 2005)

- **Core Areas**

Core areas include officially proclaimed nature reserves, ecological corridors, critically endangered habitats and river corridors. No golf courses, golf estates, polo fields and polo estates should be located in core areas, as identified through the WCPSDF's bioregional planning categories.

- **Buffer Areas**

Buffer Areas include remaining natural habitat in endangered and vulnerable ecosystems, including remnants, natural habitat in less threatened ecosystems and extensive agricultural areas.

Development that includes a golf course or polo field component could occur on the border between Buffer and Urban Areas provided it:

- Results in long term Biodiversity offsets and / or heritage goals;
- Result in securing the viability of a significant agricultural unit or contribute significantly to land reform objectives;
- Limits the number of units so that secondary developments (shops, service stations, etc.) are not promoted;
- Does not entail any form of township development outside the Urban Edge;
- It not a significant heritage area;
- Does not contribute to urban sprawl and or leapfrogging;
- Is not in an area of medium or high value agricultural land;
- Is not in an area designated for emerging farmers;
- Does not use water resources (surface and ground) that are considered stressed by DWAF and others authorities does not pollute the natural water resource by fertilizer or treated effluent;
- Does negatively affect the open space network;
- Is not in coastal zone, within 30m of the edge of a cliff located on the coastline or within 30m of high water mark, or on the primary dunes or dune systems that are mobile;
- Does not impact on habitats / ecosystems that are defined as critically endangered;
- Does not disrupt ecological corridors;
- Does not fall within 30m of bank of river or 1:100 year flood line;
- Does not negatively affect river, natural spring or the catchments of a dam;
- Does derive water from rivers determined as being pristine / near pristine or stressed by DWAF and authorities;
- Does not remove traditional access, commonage etc.;
- Does not result in the inappropriate alteration of the landform (e.g. cut and fill); and
- Does not result in / contribute to visually obtrusive / ribbon development.

The following aspects must be considered in formulating development applications:

- Alternatives
- Spatial planning – compliance
- Land use – undertake a land use impact assessment
- Cultural heritage and VIA
- Biodiversity – how al biodiversity plans have been consulted
- Water resources
- Infrastructure and services
- Social impacts
- Employment and skills development
- Economic impact
- Management of planning, design, implementation and operational activities
- Social costs
- Urban Edge principles

- **Intensive agricultural areas**

These are areas with either agricultural potential or that are being cultivated. They are considered an important resource for food security and the agricultural economy.

No golf courses, golf estates, polo fields and polo estates should be allowed in intensive agricultural areas

Implications for the SDF / Laingsburg

The following aspects must be considered in the preparation of the SDF for the Laingsburg Municipality:

- Visual Impact
- Socio-economic integration
- Biodiversity protection
- Wise stormwater and water use
- Green / sustainable buildings promotion

The SDF needs to indicate Urban Edge proposals, and should make policies to guide potential proposals for development outside the Urban Edge that could be seen as leapfrogging or urban sprawl.

2.2.6 Provincial Growth and Development Strategy (PGDS), October 2006

The Provincial Growth and Development Strategy (PGDS) is a document aimed at guiding development and investment for the province to reach the goals of growth and integrated development.

The goal of the PGDS is: "Towards shared growth and integrated development path to create a "Home for all" by 2014".

The objectives of the PGDS include to:

- Promote shared growth and integrated development
- Identify shared principles and strategic goals
- Identify and promote locations for accelerated growth for the Western Cape
- Align planning, budgets and implement of all sectors of government in the province
- "Design institutional architecture and reform necessary for achieving shared growth and integrated development"
- "Identify the appropriate levers for government to shift to a development path for the Western Cape"
- "Provide a framework for improved collaboration and co-ordination of all stakeholders in the province that is focused on shared growth and integrated development agenda"
- Western Cape investment priorities include:
  - Acknowledging the ecological and climate imperatives in development
  - Addressing public transport and bulk infrastructure
  - Dealing with the history of spatially determined racial segregation and vulnerability
  - Expanding settlement choices for a diversity in housing and a multiplicity of land uses and income groups
  - Addressing marginalisation
  - Improving quality of life and environmental quality.
- Environmental imperatives and trends must be addressed including:
  - Climate change
  - Access to energy
  - Water scarcity
  - Waste and pollution
  - Biodiversity and ecological hotspots that transcends the ecological aspects of sustainability
- Economic imperatives and trends should focus on:
  - Economic growth
  - Globalisation
  - Economic structure
  - Informality and illegality
  - Economic participation
  - The knowledge economy
- Social imperatives and trends should address:
  - Demographic structure
  - Race
  - Vulnerable groups: youth and women
  - Burden of disease (health sector)
  - Poverty and vulnerability
  - Crime and violence
- Institutional imperatives and trends requiring attention:
  - Outdated and uncoordinated legislation
  - Limited alignment between provincial and local government strategies
  - Provincial and local powers and functions are not streamlined
  - Integrated, province-wide monitoring and evaluation system
  - Politics

TARGET AREAS	CURRENT STATUS LAINGSBURG	2005/2014 TARGET	P.A. TARGET	COMMENTS	SPATIAL REQUIREMENTS
GRP The same or better than the national GDP growth rate	± 4% pa (200 G.V.A pa) (MPBS, 2011)		4%	Main opportunities in Municipality: • Agriculture • Service – retail and transport, medical • Agro-industry • Eco and agri-tourism	• Increase land in production (commonage) • Increased productivity on land already under production • Space for operations • Industrial space for packing/transport • Greater density of attractions
Unemployment to 10%	Strict definition of unemployment approx. 552 are unemployed	To reduce from 24,5(to 10% requires approximately 222 jobs to be created	74 jobs to be created each year.	Opportunities include: • Agriculture – biggest single employer but declining • Manufacturing/ energy/ construction + services only sectors showing growth • Wholesale + retail including informal markets (require more upper income residents and compete with foreign business owners) Note: attracting retirees will increase retail and domestic work demand • Tourism	• See above • Create informal markets • Needs to attract more high income residents, pleasant and affordable residential opportunities • Facilities, schools, hospitals, golf courses etc.
Households in poverty reduce by 50%	Number of indigent families are unknown			• Identify number of indigent families.	
Improve from literacy rate by 50%	2007 No schooling and unspecified (23%) 794 Some primary schooling (17,27%) 596 Primary school and above (59,73%) 2062 Therefore, 40% are functionally illiterate 1381	To increate functionally literate from 60% to 80%	230 to become functionally literate pa.	• Increase numbers of primary and secondary school leavers • Big need for ABET courses: - sufficient facilities available - need for trainers and programs	• Use existing facilities / convert to multi-purpose if necessary
Reduce child mortality (reduce to 10%	unknown				
Reduce mother mortality	unknown				
Stabilize HIV	Current prevalence rate is 2,7%				• Health facilities available
Shelter for all	550 households on the waiting list	550 units to be confirmed	183 units pa.	• Mostly indigent who will add to Municipality's cost burdens unless off-grid technologies used, e.g. : o Water harvesting o Dry toilets o Solar hot water cylinders o Community refuse removal or covered by government grants for capital **and** operating costs	
Free basic services to indigents • Standpipe / 200m • 6000l / month • toilets 1:5 • electricity	74% of households have in-house access to water 85% of households have flush toilets 84,6% of households use electricity			• identify indigent families and needs • Eradicate bucket systems(note: may have been completed by now).	

Table 2.2.6.1 Laingsburg : Key Target Areas from PGDS

2.2.7 Rural Land Use Planning and Management Guidelines, May 2009

The guidelines have been prepared with the purpose of complementing the Guidelines for Rural Resorts, Golf Estates, Polo Fields and Polo Estates (DEA&DP, 2009).

The objectives of the guidelines are:

- To promote sustainable development in appropriate rural locations while ensuring that the poor share in the growth of the rural economy;
- To safeguard the functionality of life supporting ecosystem services;
- To maintain the integrity, authenticity and accessibility of farming, ecological, cultural and scenic rural landscapes and natural resources;
- To assist municipalities with the management of rural areas;
- To provide clarity on the type of development that is appropriate beyond the urban edge, as well as the scale and form of such development (DEA&DP, 2009)

The purpose of this document is to serve as a logical planning and management guideline for all types of rural land uses.

The Rural Settlement patterns in the Western Cape include:

- The farm homestead and associated outbuildings, historically enclosed around a werf;
- Workers accommodation (on-farm) i.e. labourers cottages located away from the werf;
- Villages and off-farm hamlets located along main movement routes;
- Rural residential sprawl usually located along the outskirts of urban centres;
- The change of working farms to weekend leisure destinations.

Guidelines on Managing Rural Land Use Change

- Decisions in terms of Rural Land Use applications are to be based on the following sustainable land use principles: social inclusion; effective protection and enhancement of the environment; prudent use of natural resources; the maintenance of high and stable levels of economic growth;
- Good quality and carefully sited development should be encouraged in existing settlements;
- Accessibility should be a key consideration in development decisions;
- New development in the countryside should be strictly controlled in terms of scale, height, colour, roof profile etc.;
- Prioritise the re-use of previously developed sites in preference to Greenfield sites;
- All development should be well developed and inclusive, in keeping and in scale with its surroundings, sensitive to the character of the landscape.

Rural Land Use Management Guidelines: Holiday Accommodation

- Avoid fragmentation of the cadastral unit, instead use leasehold for 3rd party ownership for holiday accommodation;
- Land for holiday accommodation should be non-alienable (i.e. rental, time-share, share block, fractional ownership);
- Resort development outside Urban Edge to not include individually alienable units;
- Precinct plans are to be provided and address the impact on agricultural activities and/or conservation and the impact of agricultural activities on the proposal;
- Proposals to be considered on marginal farming land and land of low environmental sensitivity and significance;
- Municipalities should solicit comments of surrounding properties and consider impact on rural landscape;
- Municipalities to ensure approved precinct development plans are adhered to and enforce the building regulations;
- EIA regulations and flood line restrictions are to be enforced.

Rural Land Use Management Guidelines: "On-Farm" Settlement of Farm Workers

- Farms are to be subdivided in order to balance the interests of the farm workers and its owners;
- Subdivided portions are required to be affordable and sustainable to their beneficiaries;
- All dwellings (proposed, new and existing) are to comply with building and engineering standards;
- If right of way servitudes are required, they are to be entrenched in the title deed of the parent farm.

Rural Land Use Management Guidelines: Tourist and Recreational Facilities

- Development applications are to include:
  - tenure arrangements, with leasehold used for 3rd party operators or owners of facilities;
  - buildings, landscaping and infrastructure provision;
  - access and parking arrangements;
  - nature and position of all proposed signage;
  - Business Plan specifying BEE arrangements;
  - Environmental, agricultural and visual impact assessments;
  - Environmental Management Plan;
  - Disaster Management Plan detailing search and rescues procedures.
- Consent use applications to be advertised for comment by interested and affected parties and adjoining property owner's;
- Applicable EIA regulations to be enforced by the local authorities and compliance with the approved EMP;
- Local authority to apply building regulations and ensure conditions of approval is adhered to.

2.2.8 Settlement Restructuring: An Explanatory Manual (March, 2009)

The Settlement Restructuring Manual was approved as a Structure Plan in terms of Section 4(6) of the Land Use Planning Ordinance (Ordinance 15 of 1985) on the 24th of June 2009. The purpose of this document is to guide government, labour, business and civil society order to create human settlements that are dignified and sustainable.

The document consists of the following:

- Land use management tools for 1) auditing vacant and underutilised land, 2) Strategies for densification and 3) Toolkits for applying tools and strategies;
- Strategies for urban integration;
- Toolkits for applying tools and strategies.

Vacant and underutilised land audit:

- The purpose of a vacant and underutilised land audit it to provide municipalities with a record of all the usable land parcels located within the urban edge. By having access to this information, a municipality is able to understand its future land use and urban restructuring opportunities;
- Land is considered vacant and underutilised if:
  - it has no identifiable land use;
  - there is no building or improvements;
  - its previous productive usage has ceased;
  - it would benefit from improvement and development.
- The following exclusion criteria is applicable to land audits:
  - high potential agricultural land and productive agricultural land;
  - land with a high biodiversity and conservation value;
  - road reserves;
  - protected nature areas;
  - 30m river corridors and 1:50 year floodplains;
  - land high in scenic value or that is visually sensitive;
  - buffer areas from hazardous services.

Densification Strategy:

- The purpose of the densification strategy is contain urban sprawl and fragmentation in order to achieve efficient, integrated and sustainable human settlements;
- Densification should be encouraged in the following manner:

- within areas with a high economic potential (provincial, district and local scale);
- along mobility routes in order to support public transport routes;
- along the periphery of open spaces in order to increase its surveillance;
- within areas that have been identified as public-sector investment areas;
- in selected areas of high private sector investment;

- The following should be mapped per settlement for which an urban edge is to be demarcated:
  - agricultural land and agricultural processing around urban areas;
  - smallholdings, rural land and small farms;
  - urban and regional open spaces and natural areas;
  - rivers and floodplains;
  - coastal zones (i.e. sea level rise);
  - landscapes that are considered to be high in value.

Strategies for Urban Integration:

- Integration is the mix of various land uses and/or income groups in specific areas which contributes to creating a whole functioning urban area;
- Physical integration includes well designed dense development which are linked to pedestrian friendly streets and a horizontal and vertical mix of uses (which includes residential, non-polluting industrial services, commercial and institutional uses);
- Integration is encouraged in 1) spaces where social integration can occur, 2) along public transport routes in order to improve access to opportunities, services and facilities and 3) where concentrations of major urban functions occur.

2.2.9 The Provincial Land Transport Framework, Provincial Government: Western Cape Department of Transport and Public Works, April 2011

The Provincial Land Transport Framework (PLTF) sets out the longer term vision (20-30 years) for transport for the Western Cape Province in line with the directives of the WC- PSDF. The long term vision for transport is intended to support:

- A fully Integrated Rapid Public Transport Network (IRPTN) in higher order urban regions through access to opportunity, equity, sustainability, safety and multi-modal interchange;
- A fully integrated rural Integrated Rural Transport Network (IRTN);
- A safe public transport system;
- A well maintained road network;
- A sustainable, efficient high speed rail long distance public and freight transport network;
- An efficient international airport that links the rest of the world to the choice gateway of the African Continent;
- International – standard posts and logistics system;
- A transport system that is resilient to peak oil; and
- A transport system that is fully integrated with land us.

The PLTF goals and objectives are:

1. An efficient, accessible and integrated multi-modal public transport system managed by capacitated and equipped municipal authorities
   - A 13% modal shift from private to public transport into Cape Town's CBD by 2014.
   - Increase the number of commuter rail train sets in operation from 81 train sets to 117 by 2016.
   - Develop a framework for the development of safe and accessible IPTNs in district by 2014
   - Establish land-use incentives and NMT improvements around 10 underdeveloped public transport nodes of provincial significance by 2014 (Provincial Key Projects).
   - Fully implement a universally accessible and multimodal IRT Phase 1a by 2014.
   - Increase user satisfaction of public transport facilities by 25% by 2014.
   - Organise courses and seminars dealing with infrastructure management, transport planning and land-use planning for district municipalities by 2014.
   - Bring commuter rail network from D+ to a C maintenance level on A corridors by 2016.
   - Bring minibus taxi recapitalization rate on national level by 2016.
   - Influencing parties in order to achieve a shift in contestable freight haulage from road to rail freight by 10% by 2014.

2. NMT as a pivotal part of all forms of transport planning in urban and rural areas
   - Organise courses and seminars dealing with infrastructure management, transport planning and land-use planning for district municipalities by 2014
   - Dedicated NMT Expanded Public Works Program projects by 2014.
   - Every provincial road project in the province must include a NMT component.
   - NMT Plans must be developed and implemented for each municipality Province, as a part of the mobility strategy and IPTN roll-out by 2014.
   - Dedicated cycle lanes in the Western Cape must be doubled by 2014.

3. A well maintained and preserved transport system
   - Reduce the road transport infrastructure backlog by 16% by 2014.
   - Bring commuter rail network from D+ to a C maintenance level on A corridors by 2016
   - Introduce economic decisions support tools to facilitate decision making with regard to road investment by 2014

4. A sustainable transport system
   - A 13% modal shift from private to public transport into Cape Town's CBD by 2014.
   - Shift in contestable freight haulage from road to rail by 10% by 2014.

5. A safe transport system
   - Reduction of the number of fatalities on the Western Cape roads by 50% by 2014.
   - The provincial and the Cape metro incident management plan will be expanded to include lower roads by 2014.
   - Implementation of an integrated transport safety management system by 2014.

6. A transport system that supports the province as a leading tourist destination
   - Introduce economic decision support tools to facilitate decision making with regard to road investment by 2014.

The PLTF notes that it is critical to resolve the conflict with land use planning and proposes the following:

- Densify the land use system along specific public transport corridors;
- Develop and implement incentive measures in al municipalities;
- Establish measure to disincentive outward sprawling low density settlements;
- Develop a holistic funding model for immediate and long term costs.

Laingsburg is located on the Cape Town to Gauteng N1 Regional Corridors. The PLTF notes that the ideal future scenario for the province is to permit strategic densification along the key transport corridors to pursue efficient, integrated public transport services. This will require investing in high growth and need settlements. Note: Laingsburg is a low growth (development) high need settlement and Matjiesfontein is a low growth, low need settlement. The towns in the Municipality would therefore not comply with this criterion.

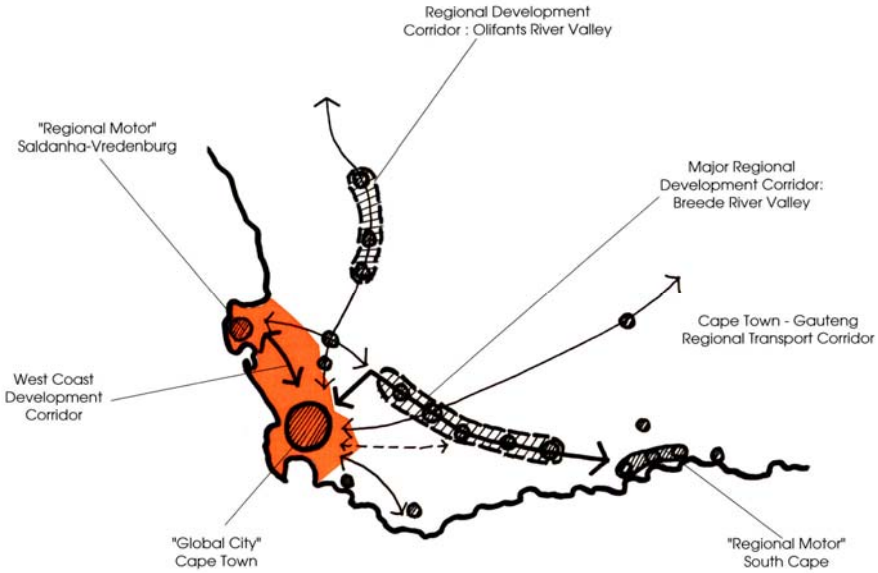


Figure 2.2.8.1 Patterns of Economic Activity (source: PSDF, 2006)

Implications for the SDF

1. It is not clear whether Laingsburg is potentially one of these 10 public transport nodes given its low ranking (high need and low growth development potential.)
2. Reducing the haulage from road to rail could improve (reduce) the traffic flows through Laingsburg Town but may have a negative impact on the economy of the town.
3. Laingsburg has already started improving the roads to accommodate NMT. However the quality of these need to be upgraded (e.g. width, lighting etc.).
4. There is no public transportation system in Laingsburg municipality.

2.3 DISTRICT POLICY

2.3.1 Central Karoo District Municipality, 2004

The following proposals, extracted from the SDF, see Figure 2.3.1.1, have relevance for the Laingsburg Municipal area:

1. The Land use proposals and guidelines are based on the Bio-regional planning approach. Using this approach, the Swartberg, Towerkop and Anysberg are identified as core conservation areas.

2. Three Bioregions are identified in this municipal area. These three bioregions are:
   - Witteberg;
   - Moordenaars Karoo; and
   - The Koup.

3. A number of resorts and or tourist related/ attraction areas area identified, namely:
   - Fisantekraal;
   - Kraankop;
   - Buffelsrivierpoort;
   - Paddevlei, Rietvlei, Verlorenhoek walking trail and Besemfontein walking trail;
   - Antjieskraal; and
   - Springfontein.

4. The SDF proposes that the rural roads be upgraded.

5. In terms of the settlements; the SDF identifies Laingsburg as the Local Main Town and Matjiesfontein as a Local Town.

Implications for Laingsburg Municipality

- Upgrade rural roads
- Preserve the core conservation areas.

2.3.2 Central Karoo District Growth and Development Strategy (2007 – 2022)

The Western Cape – Provincial Growth and Development Strategy is defined as an overarching strategy that encapsulates the mixture of all development potential in the Western Cape. The District Growth and Development Strategy provides a more detailed view of development and growth potential at a district level and is the overarching policy framework and strategy for realising shared growth and integrated development in the Province by 2014, through development activities that further the principles of economic growth, environmental integrity, equity and empowerment.

The Central Karoo District Growth and Development Strategy proposed the following strategies that may be of significance to the Laingsburg Municipality:

- Wind power generation project;
- Cold storage facility project;
- Water demand management strategy;
- Economic development agency;
- GAP housing development project;
- Uranium mine;
- Desert knowledge, research and development hub; and,
- Tourism expansion project.

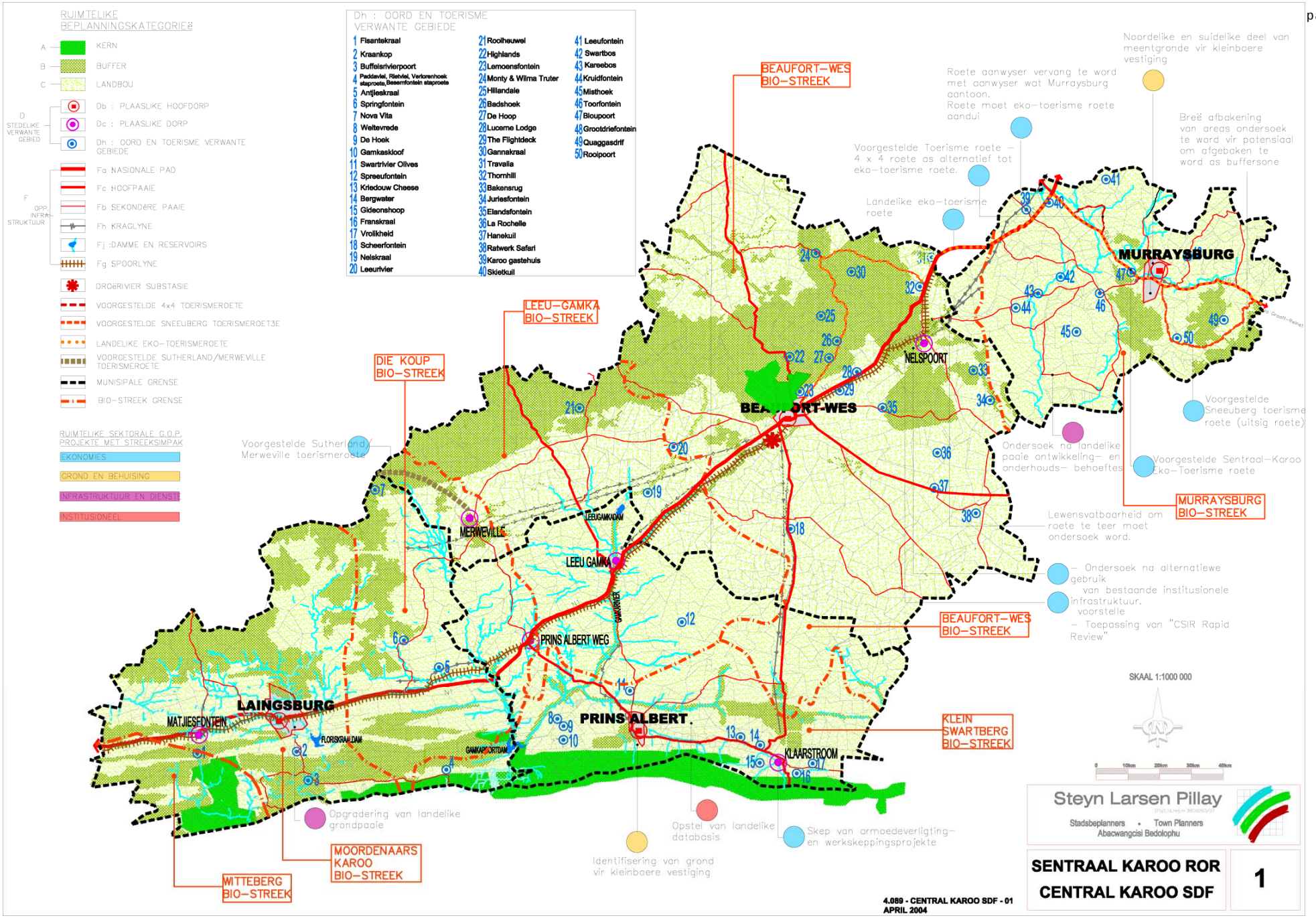


Figure 2.3.1.1 Central Karoo District Municipality SDF (source: Steyn Larsen Pillay, 2004)

2.4 MUNICIPAL POLICY

2.4.1 IDP 2010 – 2011

The IDP has the following as the vision for the Municipality:

"That Laingsburg Municipality will be desirable place to live, invest and visit, where all people may enjoy a sustainable quality of life by 2012."

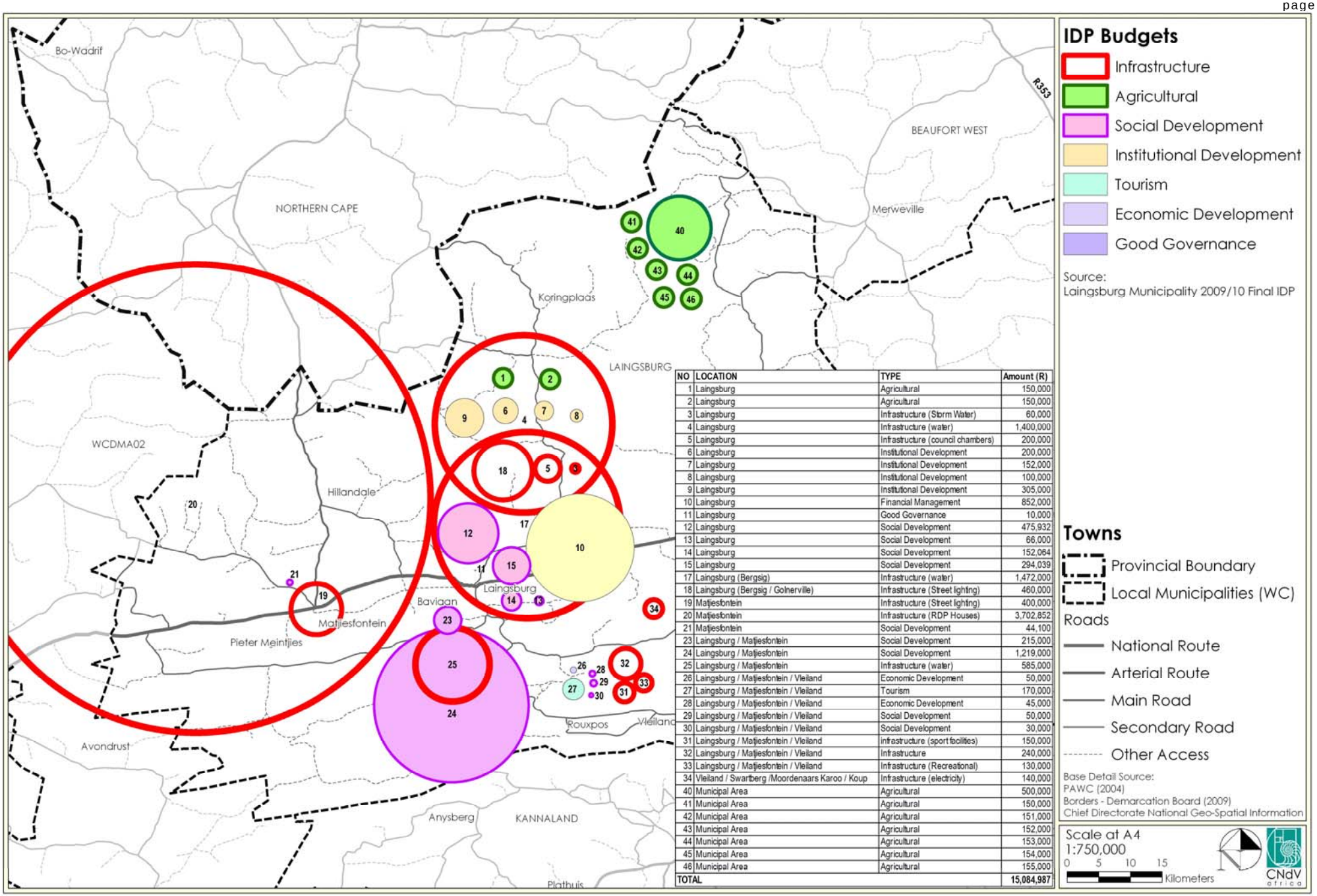
This vision is supported by the following mission:
"To create a people centred and economically viable municipality where all have equal access to:

- Basic social services;
- Educational and Skills enhancement programmes; and
- Job and entrepreneurial opportunities."

The IDP has the following objectives and planning strategies:

- "To create a stable social environment conducive to empowerment, social development and community care.
- The majority of the households increase their income from the current estimated average of R1000 to the national average minimum living income of R2400 per household.
- To ensure a stable social environment conducive for empowerment, social development and community care to eradicate poverty.
- Extend basic infrastructure and services to all residents in Laingsburg; provide all indigent households with basic services according national standards and income.
- To create an institution with skilled and informed employees who can provide a professional and effective service to its clientele guided by BATHO PELE Principles.
- Improvement/maintenance of Environmental Status of the Municipal area
- To achieve a strong financial position to withstand local and regional economic impact in the short and long-term for the implementation of responsible and sustainable development and economic growth."

NO	LOCATION	TYPE	DESCRIPTION	Amount (R)
1	Laingsburg	Agricultural	Use green waste for Composting Project	150,000
2	Laingsburg	Agricultural	Plant 100 trees, clean and green areas	150,000
3	Laingsburg	Infrastructure (Storm Water)	Prevent spread of storm water	60,000
4	Laingsburg	Infrastructure (water)	System to monitor water usage	1,400,000
5	Laingsburg	Infrastructure (council chambers)	Expand the council chambers	200,000
6	Laingsburg	Institutional Development	Compliance to legislation	200,000
7	Laingsburg	Institutional Development	Put office infrastructure in place	152,000
8	Laingsburg	Institutional Development	adequately trained and capacitated staff	100,000
9	Laingsburg	Institutional Development	Increase law enforcement and safety of community	305,000
10	Laingsburg	Financial Management	Using appropriate financial systems	852,000
11	Laingsburg	Good Governance	Ensure participatory of area committees	10,000
12	Laingsburg	Social Development	Older persons home	475,932
13	Laingsburg	Social Development	Older persons centre	66,000
14	Laingsburg	Social Development	ECD	152,064
15	Laingsburg	Social Development	Child & Families protection	294,039
16	Laingsburg	Social Development	ECD	0
17	Laingsburg (Bergsig)	Infrastructure (water)	Supply clean water	1,472,000
18	Laingsburg (Bergsig / Goldnerville)	Infrastructure (Street lighting)	supply high mass lighting	460,000
19	Matjiesfontein	Infrastructure (Street lighting)	supply high mass lighting	400,000
20	Matjiesfontein	Infrastructure (RDP Houses)	Provide housing	3,702,852
21	Matjiesfontein	Social Development	Older persons centre	44,100
22	Matjiesfontein	Social Development	ECD	0
23	Laingsburg / Matjiesfontein	Social Development	Sustainable Livelihoods	215,000
24	Laingsburg / Matjiesfontein	Social Development		1,219,000
25	Laingsburg / Matjiesfontein	Infrastructure (water)	Secure water from boreholes	585,000
26	Laingsburg / Matjiesfontein / Vleiland	Economic Development	Get at least 5 new businesses started	50,000
27	Laingsburg / Matjiesfontein / Vleiland	Tourism	Market Laingsburg as a destination	170,000
28	Laingsburg / Matjiesfontein / Vleiland	Economic Development	Improve small scale projects	45,000
29	Laingsburg / Matjiesfontein / Vleiland	Social Development	Crime Prevention	50,000
30	Laingsburg / Matjiesfontein / Vleiland	Social Development	Community Empowering	30,000
31	Laingsburg / Matjiesfontein / Vleiland	infrastructure (sport facilities)	Improve sport facilities	150,000
32	Laingsburg / Matjiesfontein / Vleiland	Infrastructure	Maintain existing infrastructure	240,000



NO	LOCATION	TYPE	Amount (R)
1	Laingsburg	Agricultural	150,000
2	Laingsburg	Agricultural	150,000
3	Laingsburg	Infrastructure (Storm Water)	60,000
4	Laingsburg	Infrastructure (water)	1,400,000
5	Laingsburg	Infrastructure (council chambers)	200,000
6	Laingsburg	Institutional Development	200,000
7	Laingsburg	Institutional Development	152,000
8	Laingsburg	Institutional Development	100,000
9	Laingsburg	Institutional Development	305,000
10	Laingsburg	Financial Management	852,000
11	Laingsburg	Good Governance	10,000
12	Laingsburg	Social Development	475,932
13	Laingsburg	Social Development	66,000
14	Laingsburg	Social Development	152,064
15	Laingsburg	Social Development	294,039
17	Laingsburg (Bergsig)	Infrastructure (water)	1,472,000
18	Laingsburg (Bergsig / Golnerville)	Infrastructure (Street lighting)	460,000
19	Matjiesfontein	Infrastructure (Street lighting)	400,000
20	Matjiesfontein	Infrastructure (RDP Houses)	3,702,852
21	Matjiesfontein	Social Development	44,100
23	Laingsburg / Matjiesfontein	Social Development	215,000
24	Laingsburg / Matjiesfontein	Social Development	1,219,000
25	Laingsburg / Matjiesfontein	Infrastructure (water)	585,000
26	Laingsburg / Matjiesfontein / Vleiland	Economic Development	50,000
27	Laingsburg / Matjiesfontein / Vleiland	Tourism	170,000
28	Laingsburg / Matjiesfontein / Vleiland	Economic Development	45,000
29	Laingsburg / Matjiesfontein / Vleiland	Social Development	50,000
30	Laingsburg / Matjiesfontein / Vleiland	Social Development	30,000
31	Laingsburg / Matjiesfontein / Vleiland	infrastructure (sport facilities)	150,000
32	Laingsburg / Matjiesfontein / Vleiland	Infrastructure	240,000
33	Laingsburg / Matjiesfontein / Vleiland	Infrastructure (Recreational)	130,000
34	Vleiland / Swartberg /Moordenaars Karoo / Koup	Infrastructure (electricity)	140,000
40	Municipal Area	Agricultural	500,000
41	Municipal Area	Agricultural	150,000
42	Municipal Area	Agricultural	151,000
43	Municipal Area	Agricultural	152,000
44	Municipal Area	Agricultural	153,000
45	Municipal Area	Agricultural	154,000
46	Municipal Area	Agricultural	155,000
TOTAL			15,084,987

Figure 2.4.1.1 IDP 2010 - 2011

NO	LOCATION	TYPE	DESCRIPTION	Amount (R)
33	Laingsburg / Matjiesfontein / Vleiland	Infrastructure (Recreational)	Provide safe and secure Recreational Facilities	130,000
34	Vleiland / Swartberg /Moordenaars Karoo / Koup	Infrastructure (electricity)	Provide 80 families on farms with energy	140,000
35	Municipal Area	Agricultural	Structured agricultural training	0
36	Municipal Area	Agricultural	Veterinary Service	0
37	Municipal Area	Agricultural	Sustainable Resource Management	0
38	Municipal Area	Agricultural	Farmer Support and Development	0
39	Municipal Area	Agricultural	Research and Development	0
40	Municipal Area	Agricultural	River works	500,000
41	Municipal Area	Agricultural	Border fencing	150,000
42	Municipal Area	Agricultural	Farm work advice office	151,000
43	Municipal Area	Agricultural	Land Care Forum	152,000
44	Municipal Area	Agricultural	CSW Business Trust	153,000
45	Municipal Area	Agricultural	Vleiland Harvesting of Mountain Stream	154,000
46	Municipal Area	Agricultural	Viskuil Broiler Production & Value Adding	155,000
TOTAL				15,084,987

Table 2.4.1.1 IDP Budget 2010 - 2011

2.4.2 Local Municipal SDF 2007

No special or unique spatial vision is proposed by the previous SDF. However, the SDF uses the overall vision and mission of the IDP as described in Section 2.4.1 above.

The proposals of the SDF are based on the bioregional spatial planning categories (SPC's) in the form of a framework plan for the rural areas.

Laingsburg town is identified as the main settlement and the administrative capital of the Municipality. The proposals for Laingsburg town are directed by the SDF.

Matjiesfontein, whose proposals are also directed by the SDF plan, is identifies as a resort and tourism related area.

The Anysberg Nature reserve is identified as a core conservation area.

The rurally located burial sites, churches and archaeological sites as well as the escarpments, hills, rivers and water bodies, including natural dams are identified as part of the buffer zones.

The SDF notes that the agricultural land should only be subdivided if it is based on the principle of sustainable development and should provide for development of alternative agriculture.

Alternative agricultural use that contributes to sustainable economic growth of non-urban areas that includes, tourism orientated development, developments that support agricultural industry, housing for farm labourers and small scale farming and intensive agriculture.

The following different type of housing development should only be developed when the percentage vacant erven is below the indicated percentages:

- Low density housing — less than 15% vacant – develop more opportunities
- Medium density housing — less than 30% vacant - develop more opportunities
- High density housing — less than 40% vacant -- develop more opportunities

The SDF proposes urban edges around Laingsburg and Matjiesfontein.

The SDF proposes the development of a public transport interchange adjacent to Erven 459 and 462 on the corner of Voortrekker and Van Riebeeck Roads.

The SDF also incorporates the Non-motorised transport master plan for the Municipality.

The SDF plan makes the following proposals for Laingsburg:
1. Identifies areas for medium and medium to high density infill housing;
2. Future extensions to eastward next to the N1 Freeway;
3. The above, future extension should include areas for industrial development;
4. An urban conservation area;
5. Proposed new township next to the Vleiland Road;
6. Excessively wide urban edge; and
7. Bicycle and public transport route to connect the various suburbs of Laingsburg.

The spatial proposals for Matjiesfontein are as follows:
1. The realignment of an excessively wide urban edge; and
2. Areas for infill housing.

Implications for Laingsburg Municipality

- The % surplus approach to promoting housing development requires large amounts of infrastructure to be installed but which then may not be used for a considerable time thereby creating large scale and unrecoverable costs to the muni and developers.
- It should not be pursued unless off-grid servicing technologies are proposed. Rather a demand management approach whereby housing supply is closely linked to proven housing demand should be followed, similar to that used by the banks when granting development finance, i.e. on a certain amount of proven pre-sales.

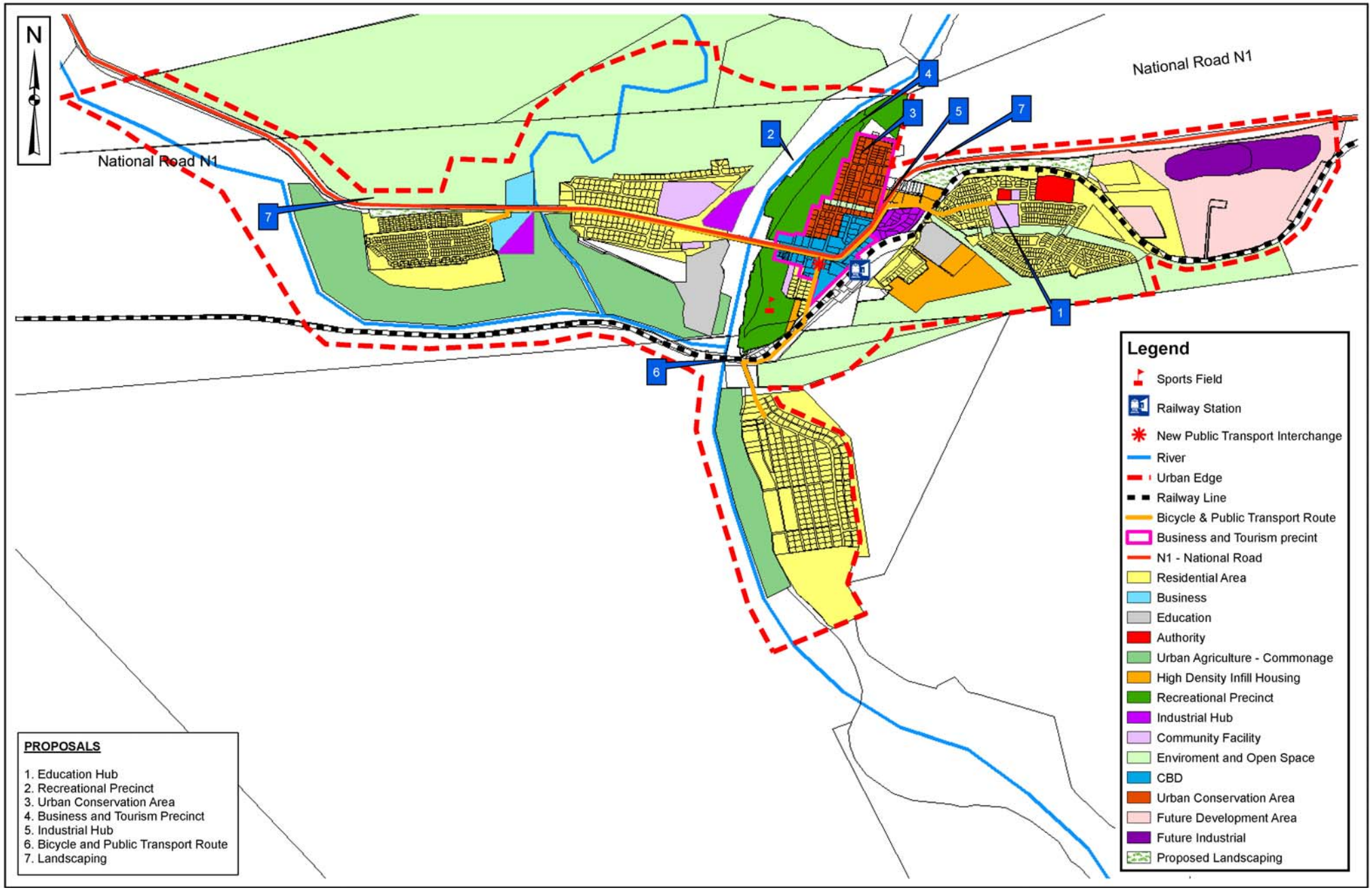


Figure 2.4.2.1 Laingsburg Integrated SDF (source: BKS, 2007)

2.5 CRITICAL FRAMEWORK SPATIAL PRINCIPLES

The Critical Framework comprising spatial principles is introduced in Phase 1 because principles on good spatial practise should inform all deliberations on spatial issues as a golden thread from the start. This will help to clarify the issues and vision in Phase 2 as well as provide a yardstick for assessing performance in the Spatial Analysis in Phase 3. These principles interpret the key policy requirements described in sections 2.1 to guide analysis and proposals.

Section 2(4)(a) of the Local Government Regulations No 796 of 2000 requires that an SDF should reflect the DFA principles. Section 3 (1) of the DFA presents an extensive list of principles for land development, some of which are aimed at influencing the spatial pattern of development, with others focused on administrative procedures and the facilitation of development.

Table 2.5.3.1 provides notes on the implementation of the DFA principles. This section provides a set of suggested spatial principles for adoption in the SDF that interprets the DFA principles and explains the practical implications of those principles. The proposed principles should be included as part of the background information presented as part of the first round of public participation in Phase 2.

Note: more principles specific to the vision and issues facing a particular municipality may emerge in the Phase 2 Issues and Vision, and Phase 3, Spatial Analysis and Synthesis.

2.5.1 Measuring Accessibility

The need to ensure that people have access to a variety of opportunities is implied in a number of the DFA principles (S3(c)(i), (iii)). This requires an understanding of the relationships between different activities in terms of spatial proximity (close and far), access and time. In the past accessibility has mostly been considered in terms of travel time in private vehicles, however, this measurement is not only environmentally unsustainable, as it is mostly dependent on access to private motor vehicles but also reflects a denial of the reality that the majority of our citizens do not have private vehicles, may not always be able to afford public transport and thus have to spend significant time and energy walking to fulfil their needs. Thus appropriate **walking distance** should always be used as the measure for accessibility. 20 minutes or 1km is regarded as an acceptable distance to walk and should be used as a basis of settlement design, see Figure 2.5.1.1.

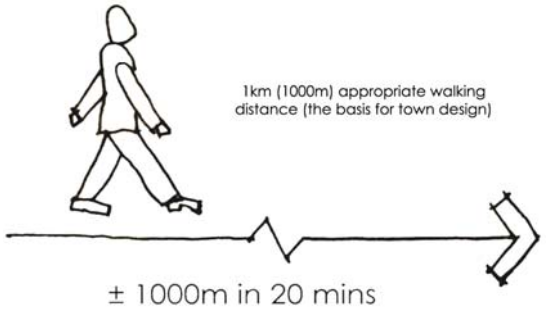


Figure 2.5.1.1 Walking distance

2.5.2 Functional integration

The implementation of the walking distance principle to promote greater access to opportunities for all people, will require the functional integration (DFA principles S3 (c)(i),(iii),(v)) of urban activities. At least **50% of urban activities** should be **within walking distance** of where people live, see Figure 2.5.2.1.

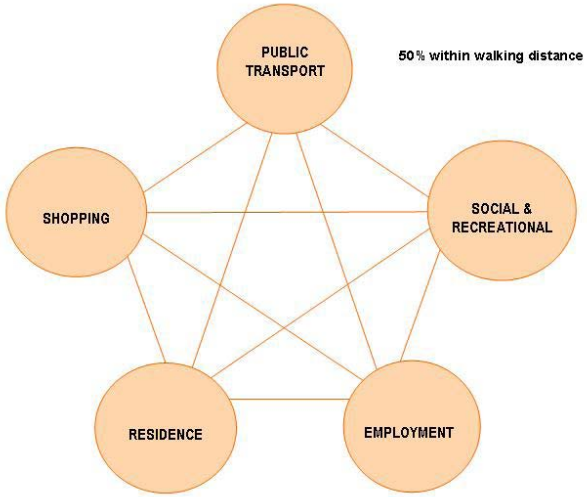


Figure 2.5.2 .1 Functional integration

2.5.3 Socio-economic integration

The principle of access and integration, also requires socio-economic integration (DFA principle S3(c)(i),(vii)). Little progress has been made in this regard since the advent of democracy. In reality there is often community resistance to integration of poor, middle and high income communities, and bank valuers often downgrade property values where informal settlements or low income housing is provided in close proximity to middle and high income housing. The use of a **socio-economic gradient** with relatively small differences in income and property value between adjacent communities can help mediate this problem.

Figure 2.5.3.1 illustrates how a high level of socio-economic integration can be achieved in a 1km radius, applying this principle.

In particular efforts should be made to locate low income neighbourhoods nearer to the core or nodes of settlements and away from the periphery.

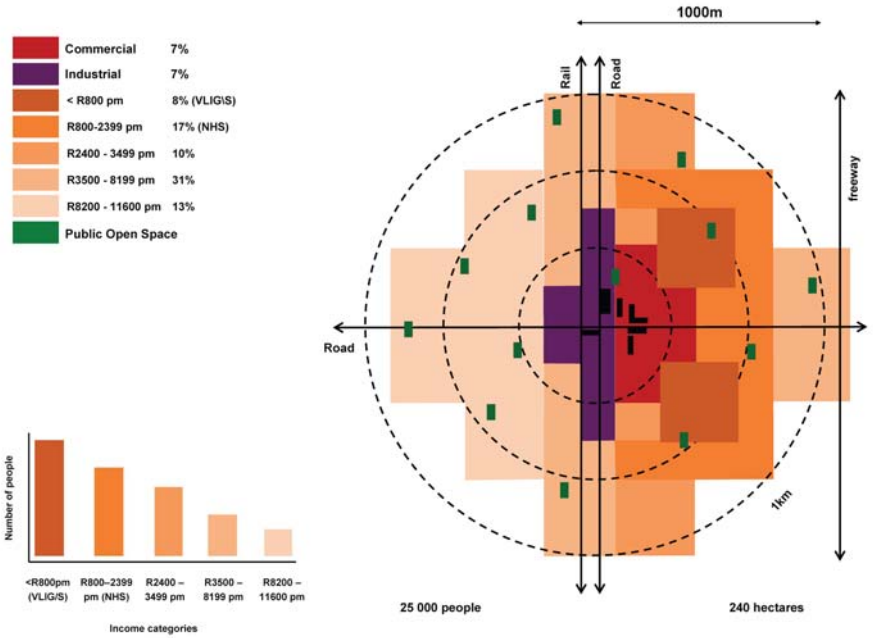


Figure 2.5.3.1 Socio-economic gradient (shows how different socio-economic groups can be planned within walking distance of each other)

Summary of DFA principle	Notes for implementation
Integration of social, economic, institutional, and physical aspects of land development	Understand and map the social, economic and physical aspects of the municipal area Ensure that proposals are realistic in terms of the institutional capacity and available funding of the municipality
Integration of rural and urban areas in support of each other	Understand the nature of the space economy and how urban and rural activities support each other (e.g. agriculture and processing) and adopt policies that could strengthen this relationship (e.g. protect agricultural land from development) Understand the roles of settlements in the space economy and promote future development that is supportive of the role.
Promotion of the proximity or integration of residential and employment opportunities	Use walking distance as a basis for settlement planning – ensure that all new development allows easy access for all people Make provision for mixed use development along development corridors
Optimise the use of existing resources	Understand and map the resource base of the municipality, particularly infrastructure networks Use the walking distance measurement to assess the accessibility of the resources to residents, when considering proposals
Promote mixed use development	Provide guidance on land use management guidelines for mixed use development Provide for a mix of uses in corridors and nodes
Discourage urban sprawl and promote densification	Delineate an urban edge Provide clear and practical policies and strategies to promote appropriate densification
Address the spatial legacy of apartheid	Understand and map the spatial patterns and obstacles to physical integration between previously segregated areas Introduce clear proposals and strategies to promote integration, particularly in relation to new housing development, such as a requirement to include gap housing in middle income developments Promote sustainable access to rural land opportunities for HDIs in the fields of agriculture, mining and tourism
Encourage environmentally sustainable development	Map and understand the role of the biophysical resource base in the municipality Include clear strategies that will protect and/or minimise the impact of development and human activities on this resource base (such as a setback for development from river corridors) Promote farming methods that do not erode or breakdown the structure of the soil, remove nutrients beyond sustainable nor pollute resources Minimise visual impact of agricultural and mining buildings, open cast mining and infrastructure, especially electrical powerlines, particularly on rural areas.

Table 2.5.3.1 Implementation of the DFA Principles

2.5.4 Efficient urban structure

Applying the principles of walking distance access and functional integration, will contribute to creating more efficient (i.e. where urban infrastructure is used optimally) settlements (DFA principle S3(iv), (vi)(vii). Currently settlements are characterized by segregation of land uses and low density development that cannot support public transport, or small businesses. To address these issues and achieve better access and integration, **appropriate densification** will have to be promoted in settlements, see Figure 2.5.4.1. Density targets should be as follows: 25 dwelling units per hectare should be the target **average** density for settlements that require internal public transport services (for use by all). In small rural settlements an average gross density of 12-15 dwelling units per hectare should be targeted so that they function within walking distance and reduce the impact on agricultural land and scenic landscapes. Within these average target ranges densities can increase towards the core and decrease to as low as 4 – 8 du/ha to the periphery.

In larger, more complex settlements a multi-nodal pattern following the same principles may be appropriate.

A further mechanism to achieve densification and integration is to **limit lateral growth of settlements** through the use an **urban edge** (DFA principle S3(c)(vi)). An urban edge will promote densification and integration and protecting valuable natural, agricultural and scenic resources, see Figure 2.5.4.1.

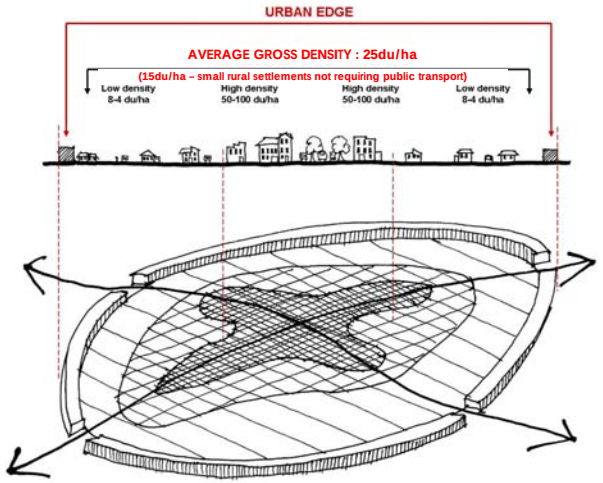


Figure 2.5.4.1 Appropriate densification for a single node settlement requiring internal public transport

2.5.5 A logical settlement hierarchy

The concept of nodal development allows for the efficient accommodation of a large population. In large urban areas decentralised nodes are connected by high speed arterials or railway lines. This concept is applicable to metropolitan municipalities and as well as local and district municipalities, where the various settlements should be allowed to grow optimally according to their character and function, whilst protecting agricultural, natural and scenic resources between settlements (DFA principles3(c)(ii), (iv)), see Figure 2.5.5.1.

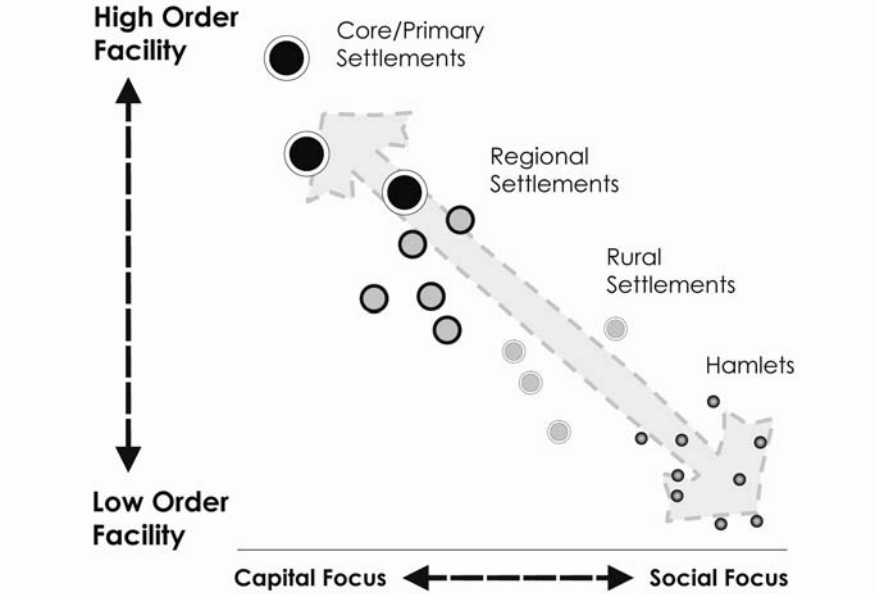


Figure 2.5.5.1 Hierarchy of Settlements (source: MCA, 2002)

Use land for its best use whether it is publicly or privately owned

Unless there are absolutely no other options land should be used for its highest and best use where practicable. For example, well located arable commonage land close to urban settlements should be used for intensive agriculture such as crop farming or market gardening rather than extensive agriculture such as livestock farming or peripheral RDP housing schemes.

2.5.6 A framework for promoting sustainability

Long term sustainability is a core thrust of the DFA (principle 3(c)(viii)) In order to ensure that sustainability is achieved whilst meeting the socio-economic demands and requirements facing municipalities, it is important to mediate between competing requirements.

The Ecological Socio-economic Relationship Framework, defines the relationship between ecological integrity, social justice and economic efficiency. It recognizes that economic efficiency is wholly dependent on the quality of human resources and their ability to participate in the economic system. In turn economic efficiency and social development is wholly dependent on the availability of eco-system services such as water, land, building materials and mineral resources. Because our planet is essentially a closed system (with solar energy as our only external input), it is not possible to exceed the capacity of the system in the long term, thus excessive demand in the short term has long term negative consequences. Figure 2.5.6.1 graphically illustrates the dependence of economic development and human well-being and reproduction on eco-system services.

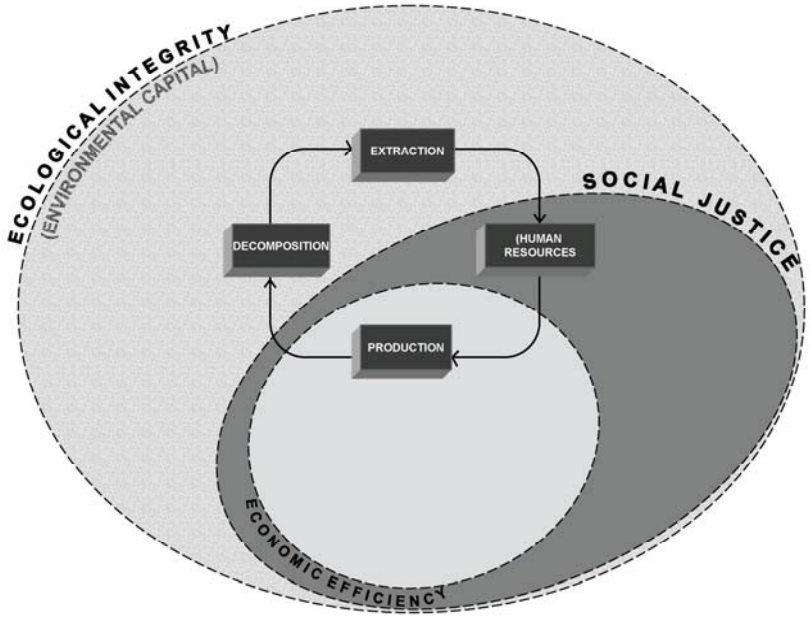


Figure 2.5.6.1 Relationship between bio-physical environment, economy and society

This closed cycle implies that **production** is dependent on human resources (i.e. **human reproduction**) and what can be **extracted** from the natural environment. In turn, waste from economic production and human reproduction cannot exceed the capacity of the environment to **decompose** waste.

2.5.7 Use of Sustainable Technologies

With respect to the following:

- Water (rainwater harvesting, grey water recycling);
- Waste water (bio-gas digesters, biolytics, enviro-loos, VLIP);
- Energy (HWCs, PVC Cells, passive design); and,
- Building materials (re-use local materials, labour based).

The use of sustainable technologies (see brackets) should be prioritised and conventional technologies used only if there are abundant resources, water, building materials, energy supplies already available, i.e. there is no need for bulk service augmentation or there are sufficient funds available either from the Municipality and/or the developer/occupiers to cover capital costs and operating costs for the long-term, i.e. at least 10 years.

2.5.8 Wide versus deep approach to low income housing provision

To promote equity limited public funds should be spent so that more (wide") people rather than fewer ("narrow") people benefit from them.

Because top structures on average cost four times as much as serviced sites four times as many people can benefit from prioritising the provision of basic services.

This implies that access to basic services via serviced sites should be prioritised before top structures.

Top structures can then be provided through subsidy instruments such as People's Housing Process (PHP) as well as mobilising their own resources via the granting of freehold tenure (by ensuring title deeds are provided).

Implications for Laingsburg Municipality

- The westernmost suburb, Bergsig, of Laingsburg town is 1.5 to 2km from the town centre and even further from Goldnerville. Further westward development should **not** be considered.
- Physical integration of the town is difficult to achieve with the river corridor and rail line constraints and the bridges and underpasses should be (re) configured to minimise bottle necking.
- Care must be taken not to promote economic activities that will drain income and local economic development opportunities out of the town, so as to ensure as many local wealth and job creating opportunities are retained in the town and, thereby, in close proximity to residents.
- Further development at Matjiesfontein and, if any settlement is to be considered at Vleiland, must take these principles into account.

3. THE CURRENT STATE OF THE MUNICIPALITY

Section 3 is set out according to the principles of a Strategic Environmental Assessment (SEA) as set out in the National Environmental Management Act, 1998 (Act 107 of 1998) and the Municipal Planning and Performance Management Regulations of 2001 promulgated in terms of the Municipal Systems Act 2000 (Act 32 of 2000).

3.1 A FRAMEWORK OF INTERRELATED SYSTEMS

There is always tension between the reality that life and all of its components function and are experienced as a single interrelated system, and the need to disaggregate these components for the purpose of research and teaching (hence the divisions at school into subjects and at university into faculties) and administration (compartmentalisation of government into departments and ministries). The last three to four decades have seen this tension emphasise separation to the extent that governments and educational institutions have become increasingly unable to address, cohesively, the various demands made of them.

However, an holistic approach can only be effective if it is carried as a golden thread through all the activities of government including background research, proposal formulation and implementation. This places a considerable challenge on the Laingsburg SDF to go beyond the traditional rational comprehensive approach to spatial planning in order to avoid compartmentalisation and to support the achievement of holistic governance. This is done in the Laingsburg SDF through the use of a "framework of interrelated systems", which recognises that activities in the Municipality occur as a multi-layered matrix in a single space - the geographical extent of the Municipality. Although there is clearly exchange outside the boundaries, e.g. imports and exports, fiscal transfers, energy transmission and cyclical and permanent migration, ultimately the Municipality depends on the resources within its boundaries.

Figure 3.1.1 illustrates this relationship by showing how the 26 layers of the matrix of the Municipal's analysis are all interrelated within the spatial extent of the Municipality, even though they may be separated for the purposes of research, implementation and management. At the macro level the layers can be grouped into three categories.

Bio-physical
Natural systems are the primary or foundational layer on which all of the others rest, acknowledging the natural capital base on which the other two set of layers must feed, in a sustainable way. Thus, geology, soils and climate form the basic geomorphological relationship which gives rise to hydrological, topographical and biodiversity patterns. Agriculture and mining are included in this sub-set due to their close relationship with the natural environment.

Socio-economic
Previous research (Gasson, 1998) shows a primary correlation between population distribution and the underlying resource pattern of natural environmental distribution, rather than with the pattern of the built environment. The pattern of the built environment is a derived rather than primary relationship. It is nothing more than a reflection of how the relationship between population requirements and natural resources is resolved. Therefore, the next set of layers resting on top of the natural systems layers relates to socio-economic trends.

Built
The final set of layers deal with the built environment, and the analysis that follows will show that it is with these layers and the patterns they follow that most problems with resource sustainability occur.

Planning, heritage and **environmental** policy are seen as three golden threads that have a transverse relationship with all the layers of the framework.

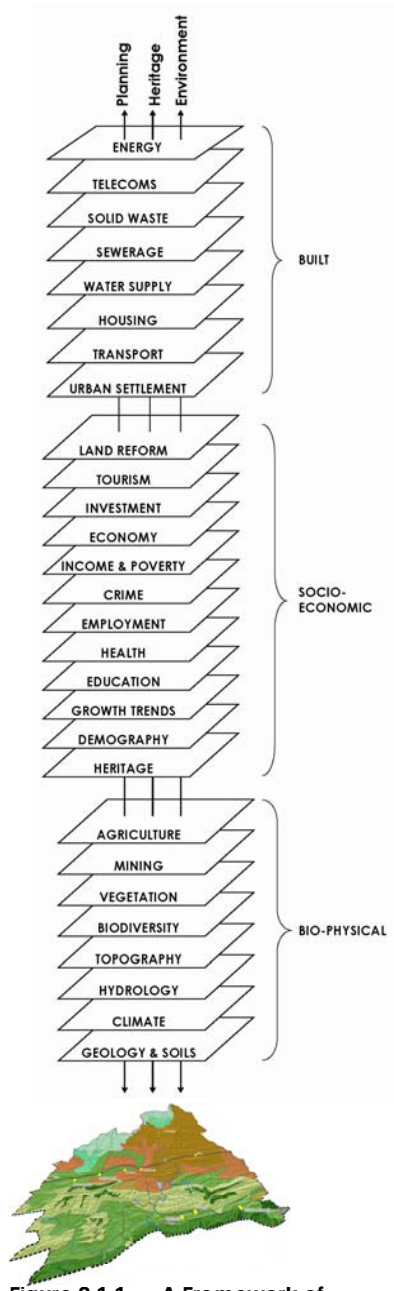


Figure 3.1.1 A Framework of Interrelated Systems

3.2 LAND

3.2.1 Geology and Soils

Figure 3.2.1.1 indicates the general pattern of the geology and soils within the Municipality. This distribution shows there are five geological formations in the Municipality.

The predominant formation is located generally north of a line between Hillandale and Koup and in small patches to the south is the Mudstone of the Moordenaars Karoo.

Mudstone or mudrock is a fine grained sedimentary rock (65%) that looks like sun-baked clay deposits. Mudstone is hardened mud or a mixture of silts, clays and particles and can include Shale or Argillite. Shale is generally found in thin layers and is a mixture of sedimentary rock including mud and a mix of flax or clay minerals and other traces of minerals including Quartz and Calzite. Argillite is a sedimentary rock that does not split easily and is formed from consolidated clay.

The second most predominant formation is Arenite, which is also a sedimentary rock but with sand grains of a more medium nature. Arenite is mainly formed by erosion of other rocks or by redeposits of sand. Arenite, along with Shale and Tillite, is found in east-west bands generally south of the N1. Tillite is a sedimentary rock that consists of consolidated masses of unweathered blocks.

- **Soils**

Figure 3.2.1.2 shows the various soil depths in the Municipality. The soils are generally shallow in the Mudstone areas of the Moordenaars Karoo except in the river valleys.

Deeper soils, with more potential for crop farming are found in the mountain belt comprising the southern half of the Municipality.

However, insufficient water is a major constraint in most of these areas except around Vleiland, see following section 3.2.7 which indicates this area receiving twice the rainfall of Laingsburg town.

Figure 3.2.1.3 shows the clay depths with the predominant clay depths less than 15% and the more high lying areas along the southern mountain ranges have portions of clay between 15 and 35% depths.

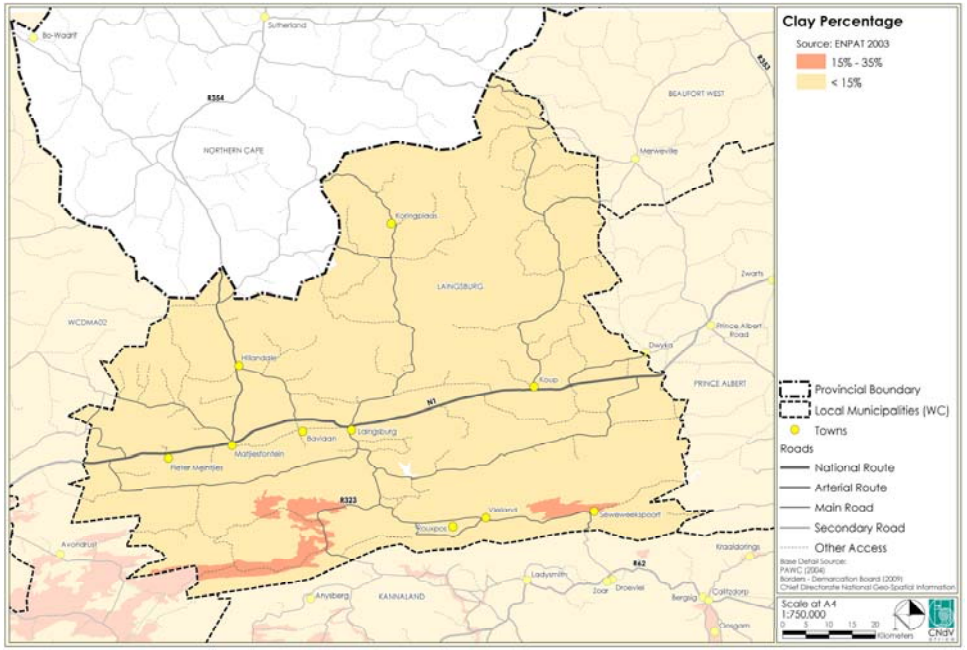


Figure 3.2.1.3 Clay depths

Implications for Laingsburg Municipality

- Arable land is an extremely scarce resource in the Municipality and must be protected at all costs.

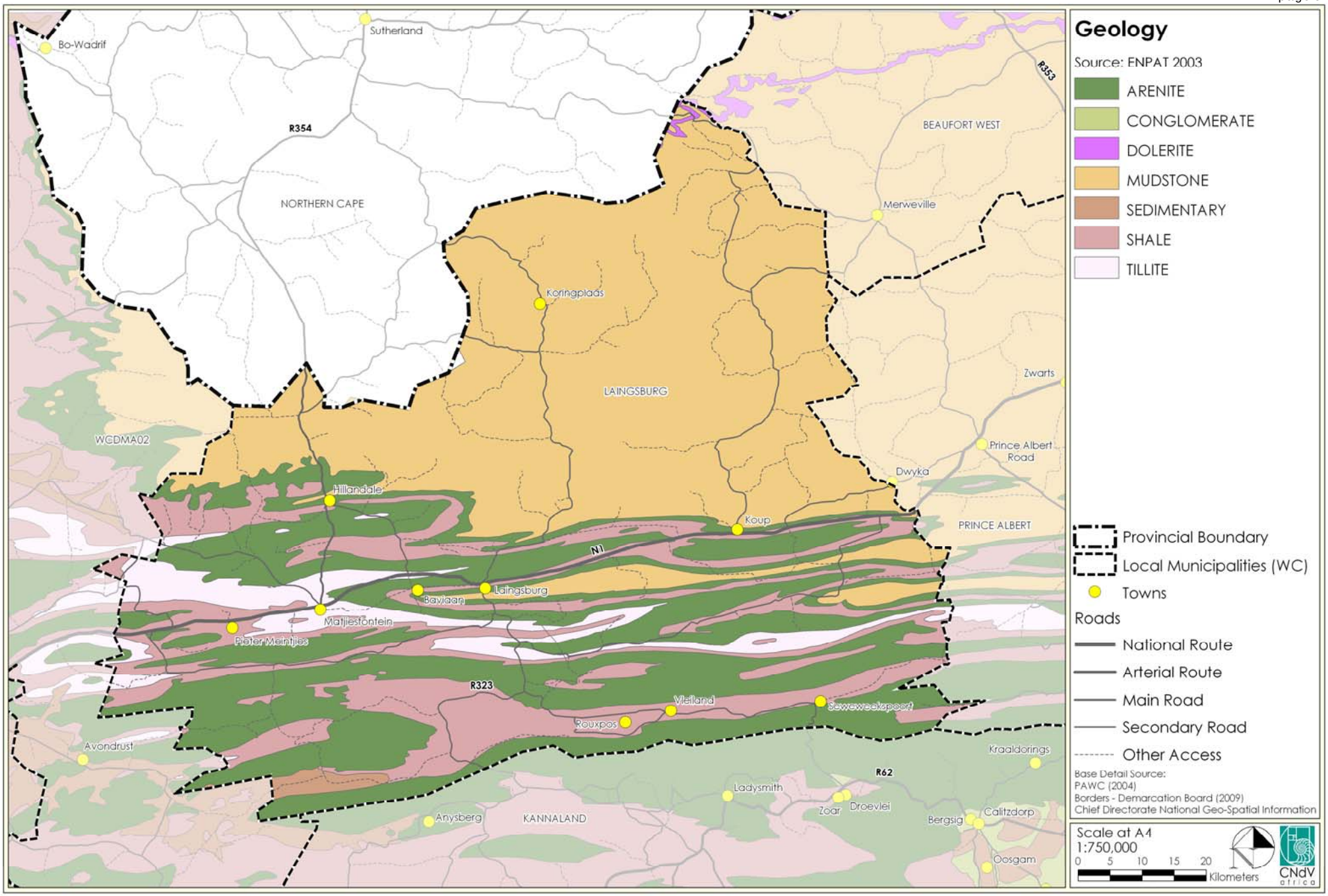


Figure 3.2.1.1 Geology (ENPAT)

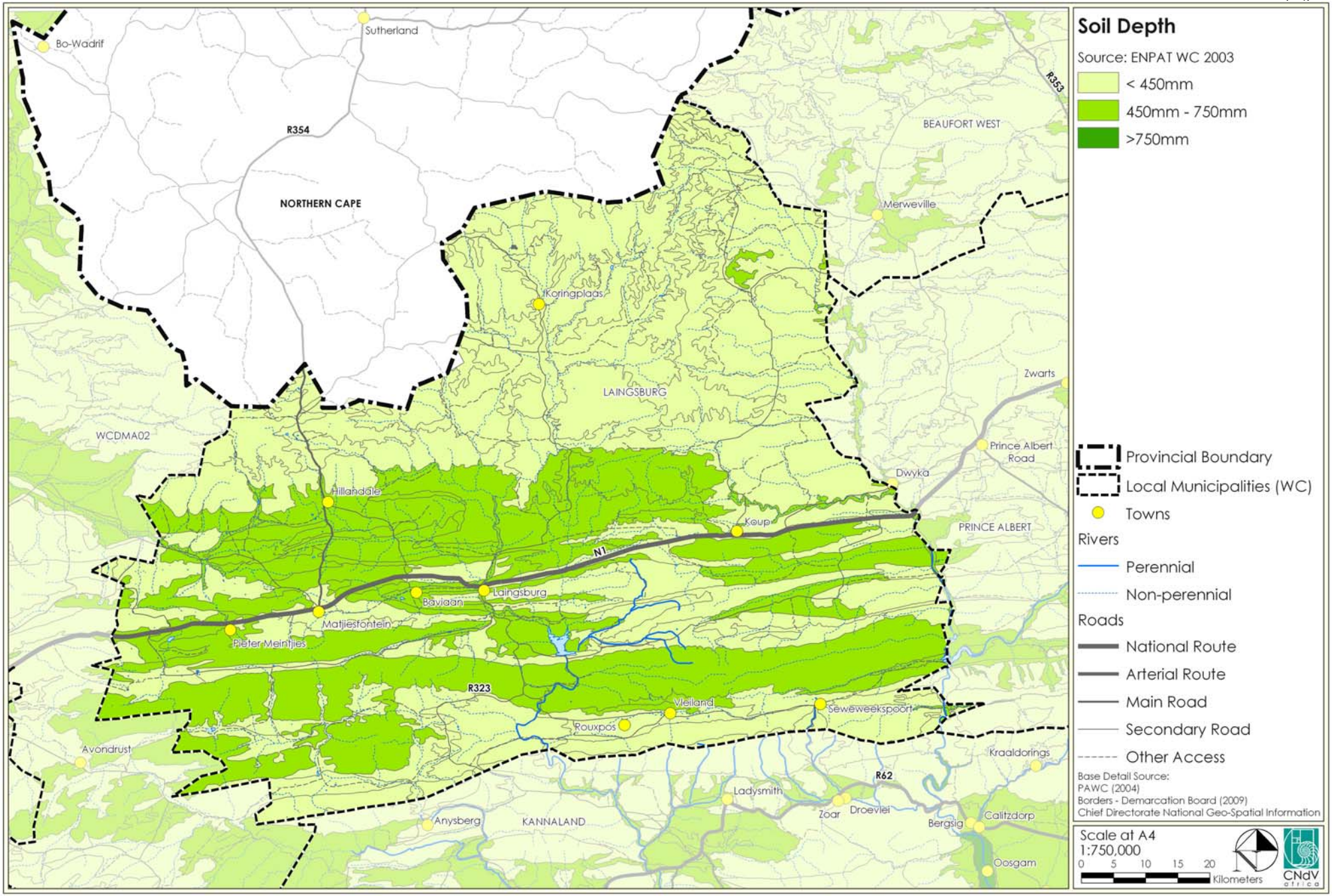


Figure 3.2.1.2 Soil Depth

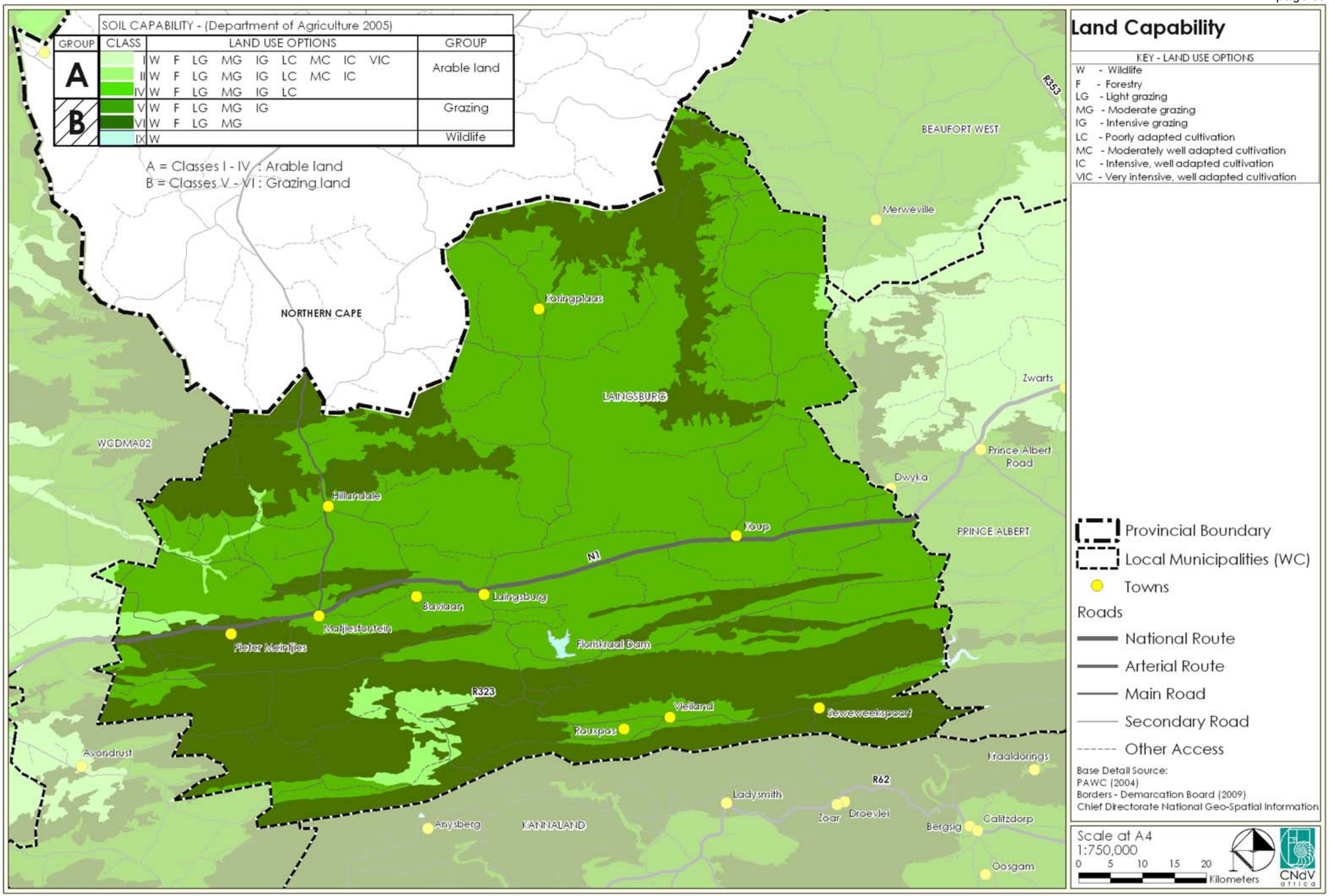


Figure 3.2.1.4 Land Capability

3.2.2 Climate

The weather data for Laingsburg Municipality is obtained from weather stations in Laingsburg town and Vleiland and shows that Laingsburg Municipality has a typical Karoo climate.

3.2.2.1 Temperature

The average monthly temperature and precipitation for Laingsburg town and Vleiland are shown on Figures 3.2.2.1a and b. This figure shows that the maximum temperatures are experienced between December and March with the highest being in the January and February months with Vleiland appears to be approximately 6°C higher than Laingsburg town that records Vleiland at 16°C. The lowest temperatures are experienced between June and July at about 4°C.

The mean annual minimum and maximum temperature are 9°C and 23°C for Laingsburg and 10°C and 22°C for Vleiland respectively.

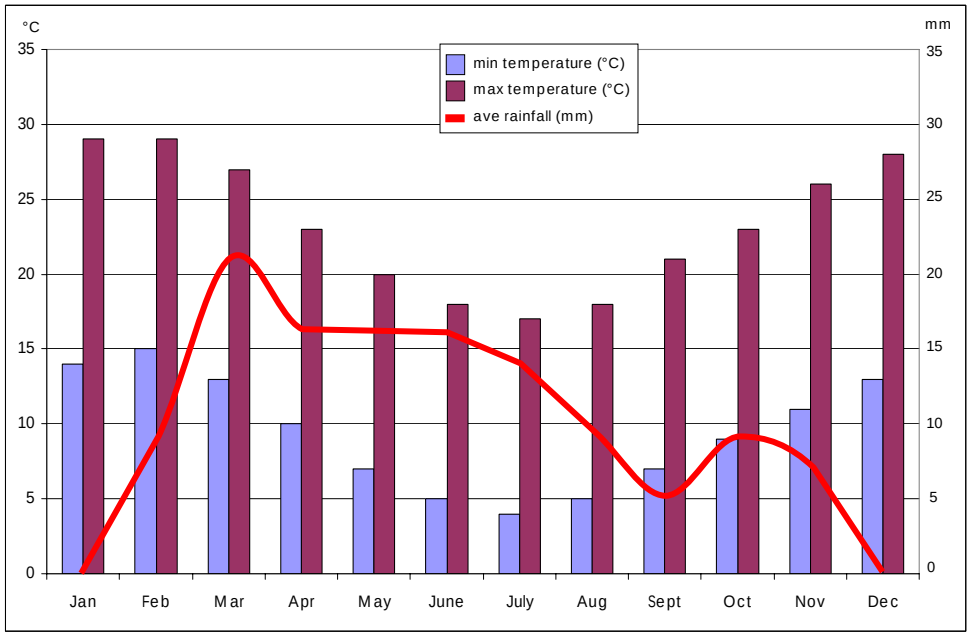


Figure 3.2.2.1a Average Annual Temperature and Precipitation: Laingsburg
(source: Agri-Informatics, 2011)

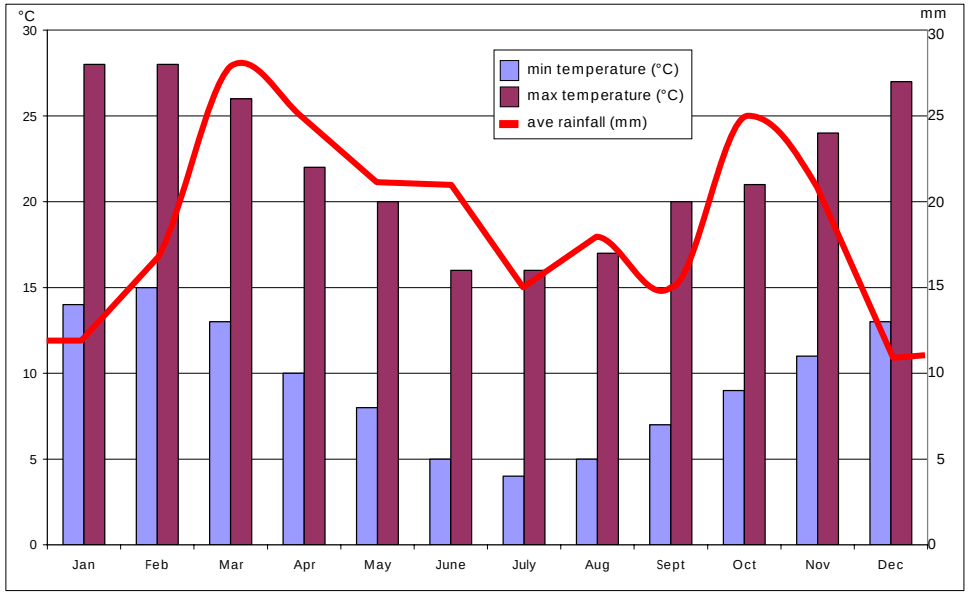


Figure 3.2.2.1b Average Annual Temperature and Precipitation: Vleiland
(source: Agri-Informatics, 2011)

3.2.2.2 Rainfall

Figures 3.2.2.1a and b shows that the highest rainfall months are recorded between March and June with the highest rainfall in March for Laingsburg town and between February and November for Vleiland. It appears that Vleiland has generally consistent rainfall throughout the year. The total annual mean rainfall for Laingsburg town is 110mm pa and for Vleiland is 230mm pa.

Laingsburg Municipality receives an average annual rainfall of about 175mm. however, only 9mm of rainfall was recorded in 2006, one of the driest rainfall seasons in years. Frost occurs during the winter months June to August.

Figure 3.2.2.2 shows the distribution of the mean annual rainfall in the study area. This figure essentially shows that the southern and the northern areas had the highest rainfalls recorded coinciding with the higher lying areas in the Municipality. The remainder of the area has a predominant rainfall average of between 114mm and 250mm. The Vleiland – Rouxpos area is the wettest part of the municipality.

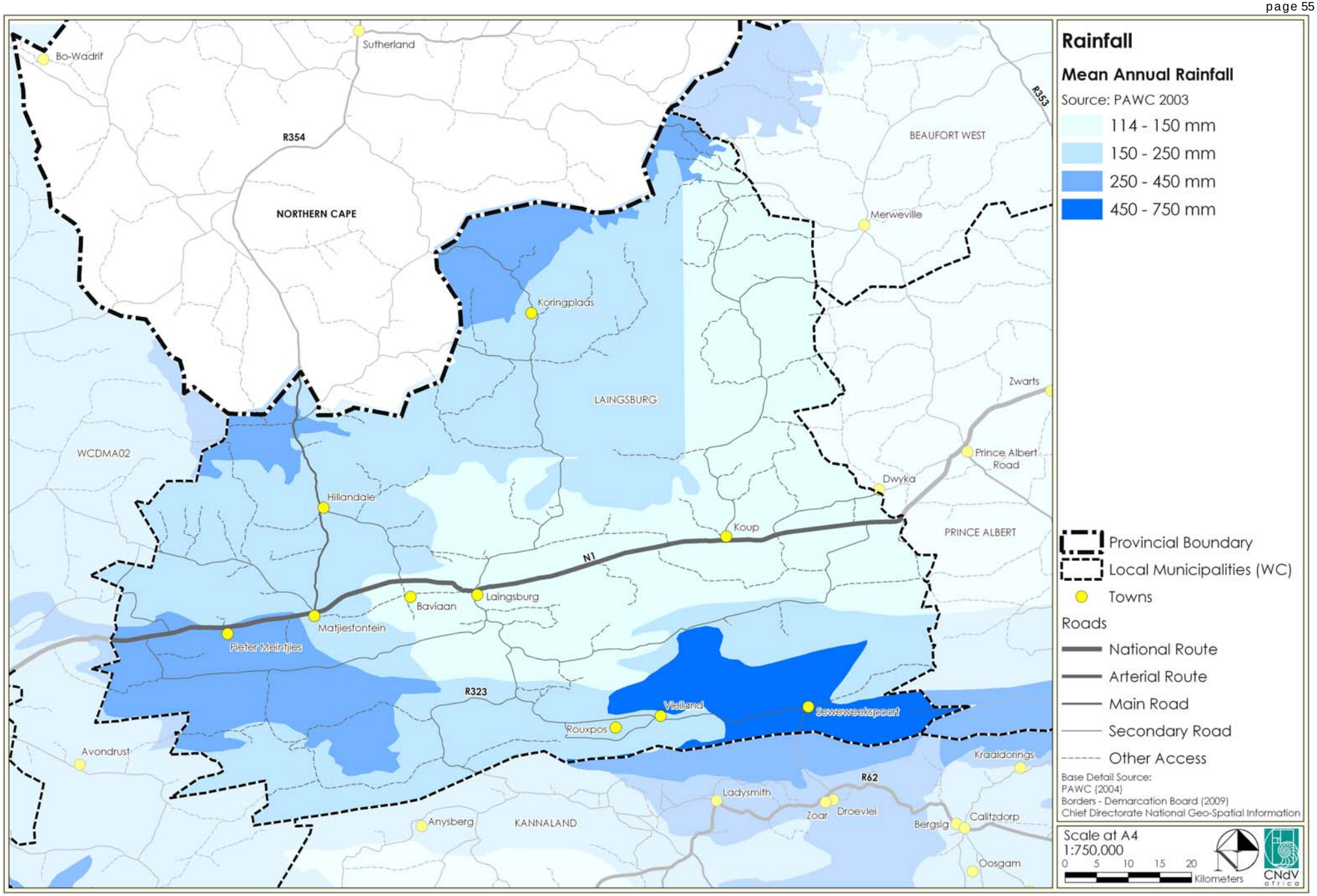


Figure 3.2.2.2 Climate

3.2.2.3 Wind

Figure 3.2.2.3 shows that the predominant wind direction is easterly. This is followed by south-south-westerly, westerly and west-north-westerly directions.

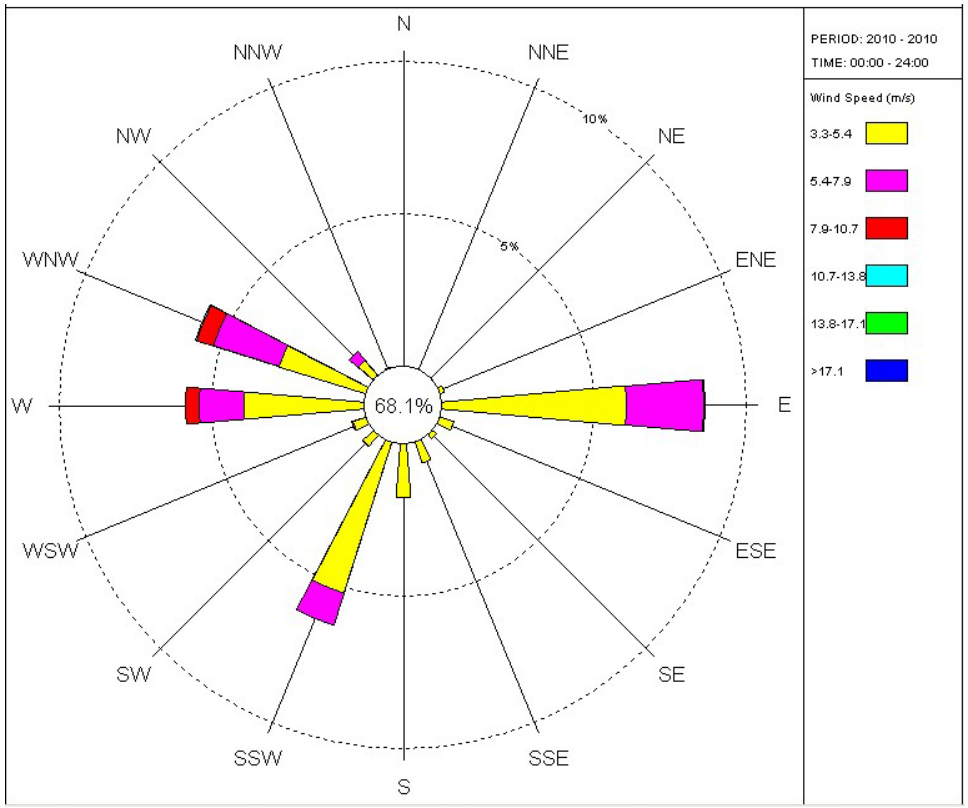


Figure 3.2.2.3 Average Annual Wind Speed and Direction: Laingsburg 2010
(source: SA Weather Services)

3.2.2.4 Climate change

As the rate of climate change accelerates it is expected that Laingsburg will experience a change in temperature and rainfall regimes. It is therefore important that the Municipality contributes to the efforts to reduce the emission of green house gasses and thereby delay the impact of climate change.

New urban development need to be planned with this in mind. The changes in the climate along with aspects such as the prevailing wind direction requires that new buildings, be it for offices, commercial or especially for residential use, be designed with a view to ameliorate these impacts.

The appropriate local and natural materials need to be sourced and appropriate thermal treatment of the buildings applied to ensure it maximises the use of natural energy and minimises the use of electricity for e.g. temperature regulation.

Climate change resilience areas are:

- Kloofs, which provide important connectivity and provide both temperature and moisture refuges.
- South facing slopes, which similar to kloofs, provide refuge habitats.
- Topographically diverse areas, which contain important altitudinal and climatic gradients which are important for climate change adaptation as well as ensuring a range of micro-climates are protected.
- Riverine corridors, which provide important connectivity in extensive arid environments, were identified.

Figure 3.2.2.4 show the areas that are important for promoting climate change resilience in the Municipality. These areas comprise refuge habitats.

Implications for the SDF

- The rainfall distribution map shows that the central areas are the drier areas.
- Cognisance needs to be taken of the dominant eastern wind direction; the low rainfall and high temperature in the area in the municipality.
- The landscapes that provide resilience to climate change need to be protected.
- The Vleiland, Rouxpos area enjoys all year round rainfall in comparison to the west of the Municipality, which when coupled with it receiving the highest rainfall creates the best arable land resource in the Municipality.

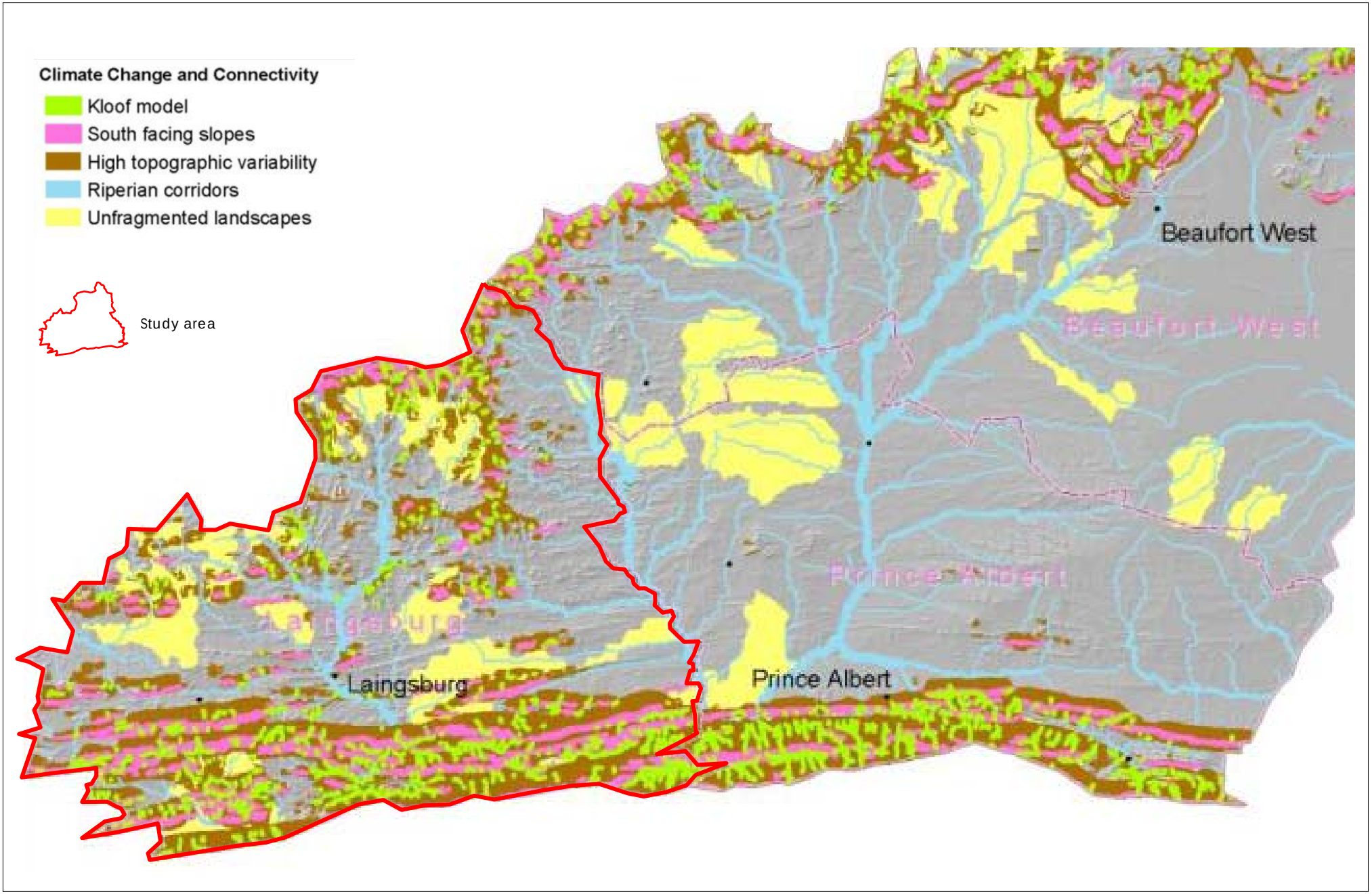


Figure 3.2.2.4 Features modeled from the landscape describing areas likely to be important in terms of climate change adaptation and connectivity (Biodiversity Assessment of the CKDM,, 2009)

3.2.3 Topography and Slopes

Figure 3.2.3.1 shows the topography of the study area.

The Municipal area is generally undulating with mountain ranges rising above the general level of the Karoo plains to the north and south. The general altitude of the Municipality is approximately 206m (676ft) above sea level and the highest mountains the Seweweekspoort Peak raises approximately 2320m (7628ft). (IDP, 2007-2012)

The difference in altitude in the study area ranges from about 500m in the river valleys, to over 2320m on the mountain peaks. The mountain ranges create a significant change in the relief of the area from north to south.

The Skaapberg, Karookop and Kromberge form the northern most boundary of the study area.

The area south of the N1 is dominated by east-west mountain ranges including the Klein Swartberge, containing the highest mountains in the municipality, and the Anysberg which form the southern boundary. The Elandsberge, De Witteberge, De Waaihoekberg, Anysberg, Klein Swartberge and the Matjiesgoetberge are found in a band south of the N1 and their valleys along the Bobbejaans and Buffels Rivers contain the settlements of the Municipality.

Figure 3.2.3.2 shows that the southern area is dominated by slopes greater than 1 in 4 along the east-west mountain ranges. There are also steep slopes in the northern area from the Brandberg up to the Grootkop and all along to the Kromberge and the Karookop in the north-western areas.

Implications for Laingsburg Municipality

- The southern area is particularly challenging for conventional farming. The northern areas are much more suited to conventional farming and grazing.

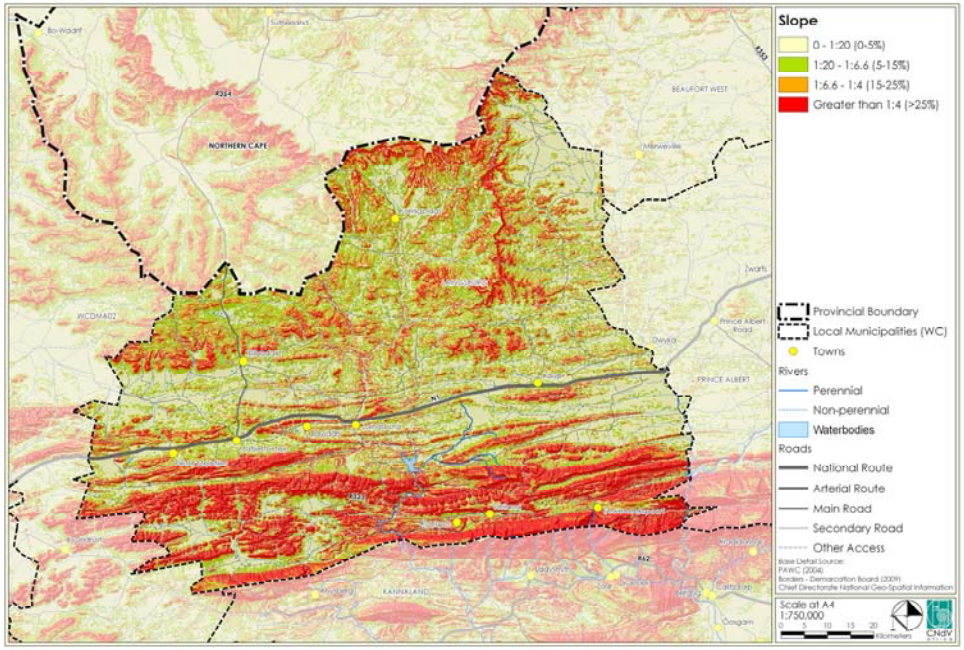


Figure 3.2.3.2 Slope

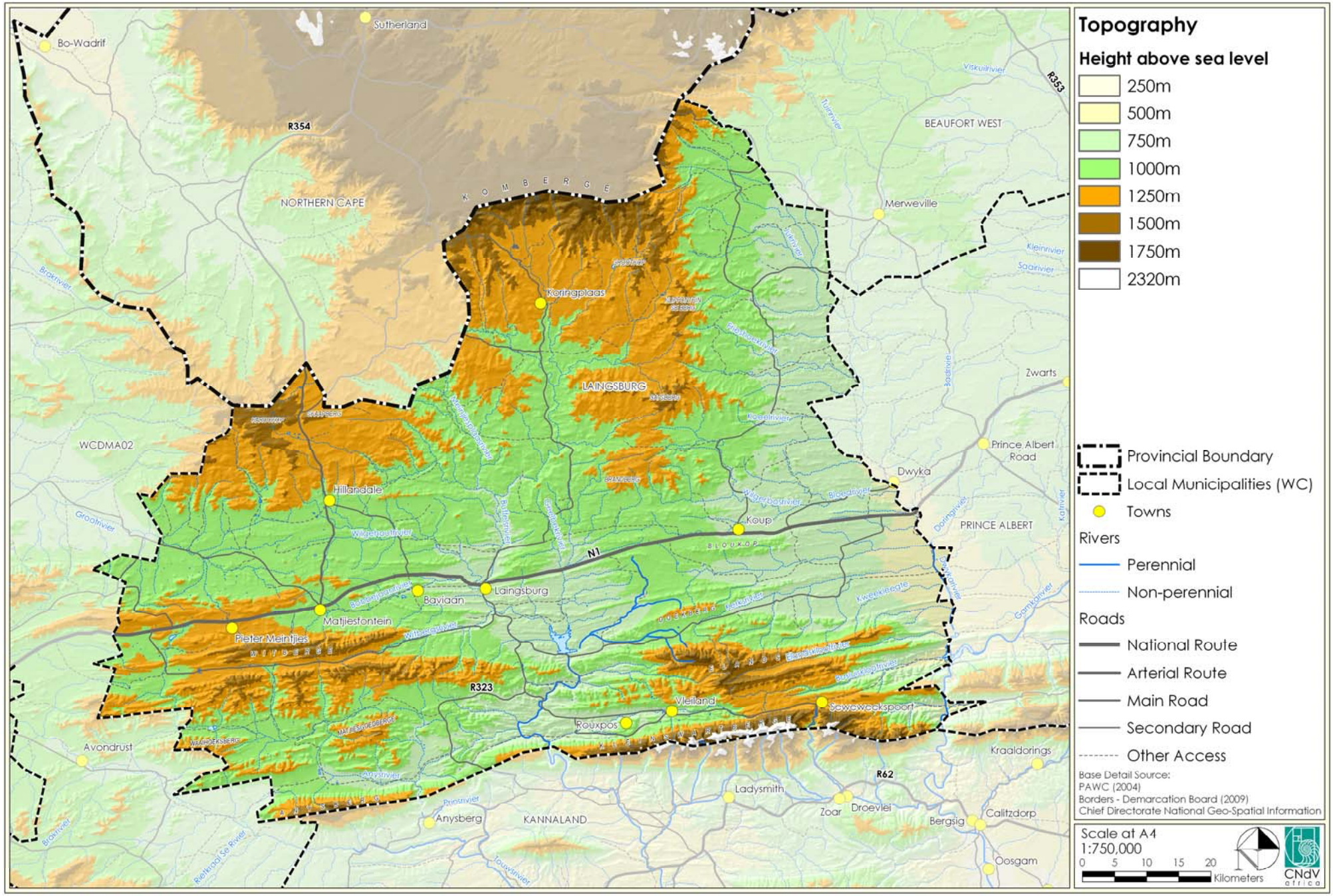


Figure 3.2.3.1 Topography

3.2.4 Water Resources (Hydrology)

Figure 3.2.4.1 shows the distribution of the rivers and tributaries through the study area. The major river through the area is the Buffels River flows into the Floriskraal Dam south-east of Laingsburg. Figure 3.2.4.2 shows the SANBI river conservation status which indicates that The Buffels, Wilgehout, Meintjiesplaas and Anys Rivers have been moderately modified. Special policy is required to protect them and restore them to an Unmodified or Natural state.

It is believed that Laingsburg has quite a strong aquifer with a great deal of ground water. However, this needs to be verified.

3.2.4.1 Water Conservation

There are three rivers which confluence at Laingsburg town, namely the Baviaans (Bobbejaans) which also flows through Matjiesfontein from the west, the Wilgehoutsriver and the Buffels from the north. The Witberg River also flows in a northern direction across the N1 and then the Wilgehoutsriver in a north-western direction into Hillandale. All of these run through the town which helps to understand the cause of the major floods in the 1980s.

Table 3.2.4.1 below shows the estimated crop water requirements for the key crops in the study area. This shows that the water requirements for different crops in Laingsburg and Vleiland. Lucerne has the greatest water requirement followed by stone fruit.

	Lucerne	Olives	Stone Fruit	Wine Grapes	Onion Seed
Laingsburg	1849	1029	1166	592	762
Vleiland	1754	972	1098	554	724
MEAN	**1801**	**1000**	**1132**	**573**	**742**

Table 3.2.4.1 **Estimated crop water requirements of the key crops in the study area** (source: Agri Informatics, 2011)

Note that the storage capacity for the Floriskraal dam is 50.3 million m². This is the largest dam in the district, followed by Gamkaspoort, Leeugamka and Oukloof, see Table 3.2.4.2.

3.2.4.2 Sustainable Utilisation Plans (SUPs)

DWA recognise that new dams have a social and economic role arising from the opportunities they offer in addition to their water supply function.

New dams now require that Sustainable Utilisation Plans be compiled to explore the social and economic potential of the waterbody and its surrounding land holdings. This potential can range from recreation and tourism to agri and aqua culture providing that the dam's primary function of water supply is not compromised.

District	Full Storage Capacity (Mm^3)
Floriskraal	50.3
Gamkapoort	36.3
Leeugamka	14.1
Oukloof	4.2

Table 3.2.4.2 Storage capacity of the four main dams in the Central Karoo District (source: Agri Informatics, 2011)

Implications for the SDF

- The poor status of the rivers requires a major improvement in farming practises and urban effluent management near the river banks.
- SUPs should be produced for the Floriskraal and Gamkaspoort dams.

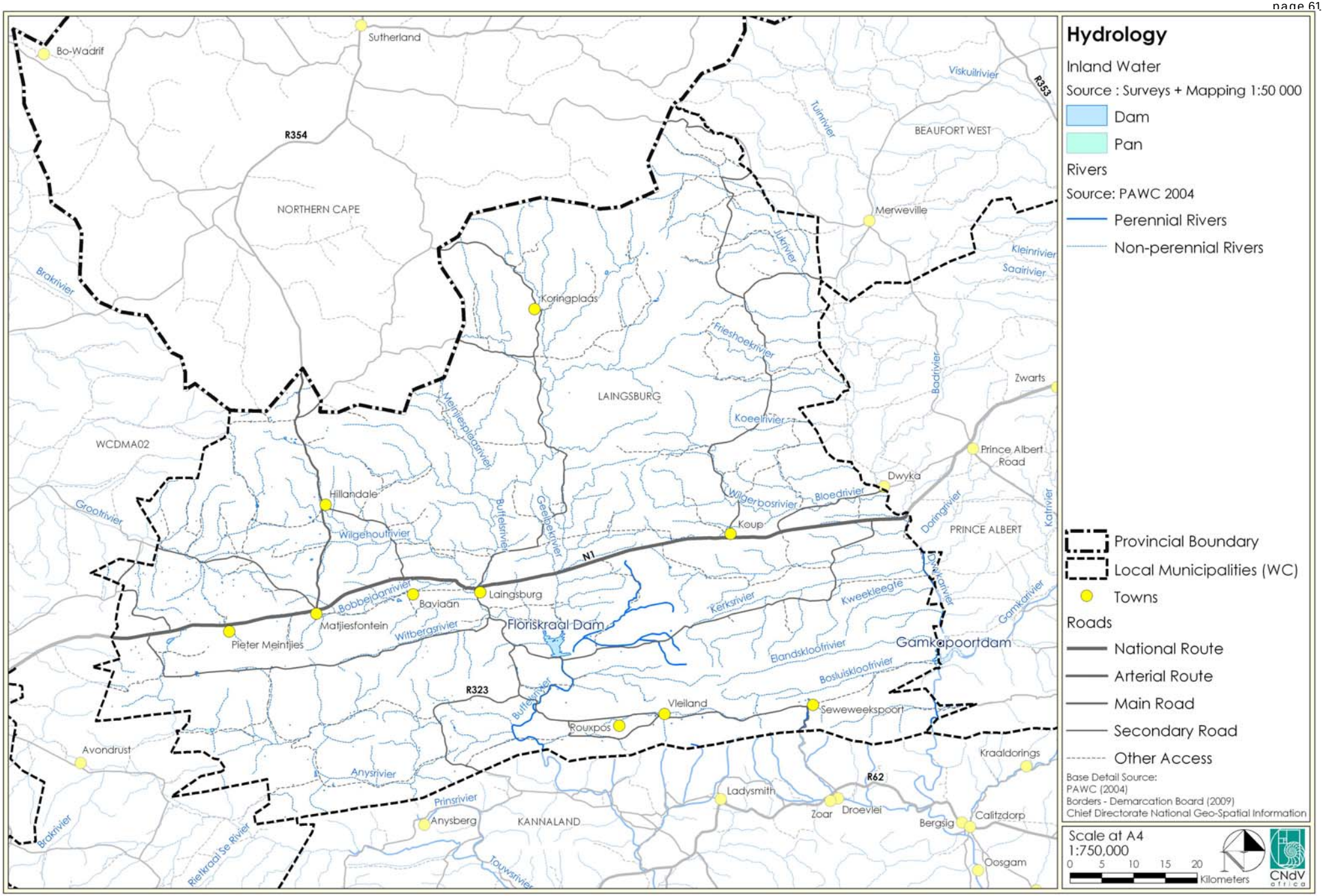


Figure 3.2.4.1 Hydrology: River Systems and Major Dams

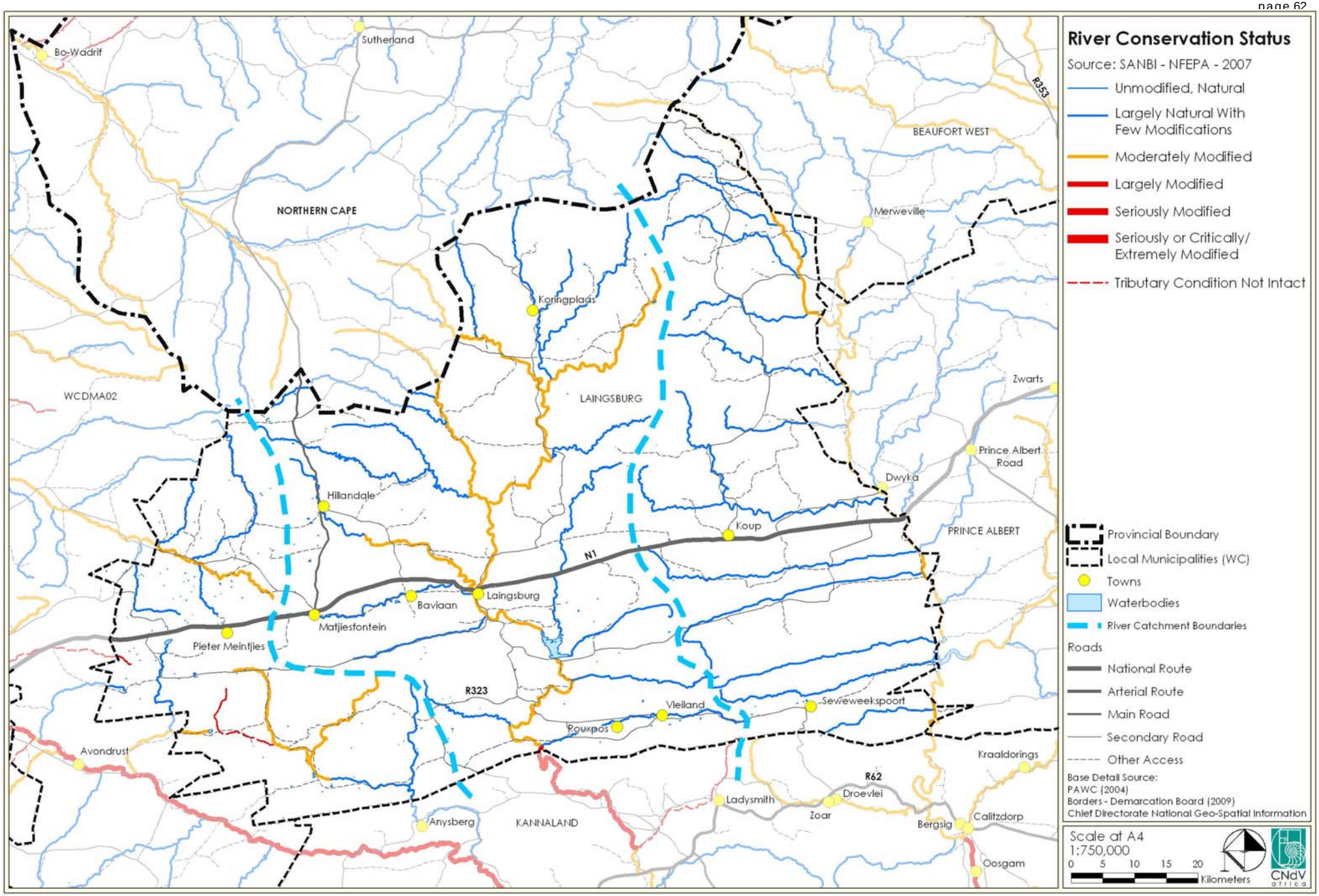


Figure 3.2.4.2 River Conservation Status

3.2.5 Biodiversity

Figure 3.2.5.1 shows the different biomes that present in the Municipal area. These biomes are in order of magnitude of land cover:

- the succulent Karoo;
- the fynbos;
- the Nama-karoo;
- the Azonal vegetation; and,
- the Albany thicket.

Table 3.2.5.1 shows the extent in hectares of the different biomes in the Central Karoo District (Central Karoo EMF, 2011). The table also shows that Laingsburg Municipality has the greatest percentage covered of the succulent Karoo biome as well as the fynbos biome compared with other Municipalities in the Central Karoo District. The table also shows that the Municipality has the highest number of vegetation types per Municipality, namely 19, out of the entire Central Karoo District.

Figure 3.2.5.2 shows the various vegetation types within the Municipality.

Biome	Beaufort West	Laingsburg	Prince Albert	Murraysburg	Central Karoo District
Albany Thicket Biome		8003	33658		41661
Azonal Vegetation	107332	14620	27816	58416	208184
Fynbos Biome	5556	265200	90048		360804
Grassland Biome	9742			5023	14765
Nama-Karoo Biome	1527684	245670	494651	477768	2745773
Succulent Karoo Biome	75	344276	168712		513063
Grand Total	1650389	877769	814885	541208	3884250
Number of SA veg types	9	19	13	6	29

Table 3.2.5.1 The extent (in hectares) of the biomes of the Central Karoo District (Mucina and Rutherford 2006), with the number of vegetation types per local Municipality (source: Central Karoo EMF, 2011)

The Nama-karoo has a high species diversity but it is generally of low to medium grazing quality with a carrying capacity of 41 – 80 hectares per animal unit per annum. It is mainly suitable for livestock farming with conservation of the indigenous plant species. (Laingsburg 2007 Status Quo Report)

The fynbos has high species diversity and is generally of low grazing quality and has a carrying capacity of 18 – 30 hectares per animal large stock unit (LSU) per annum. (Laingsburg 2007 Status Quo Report)

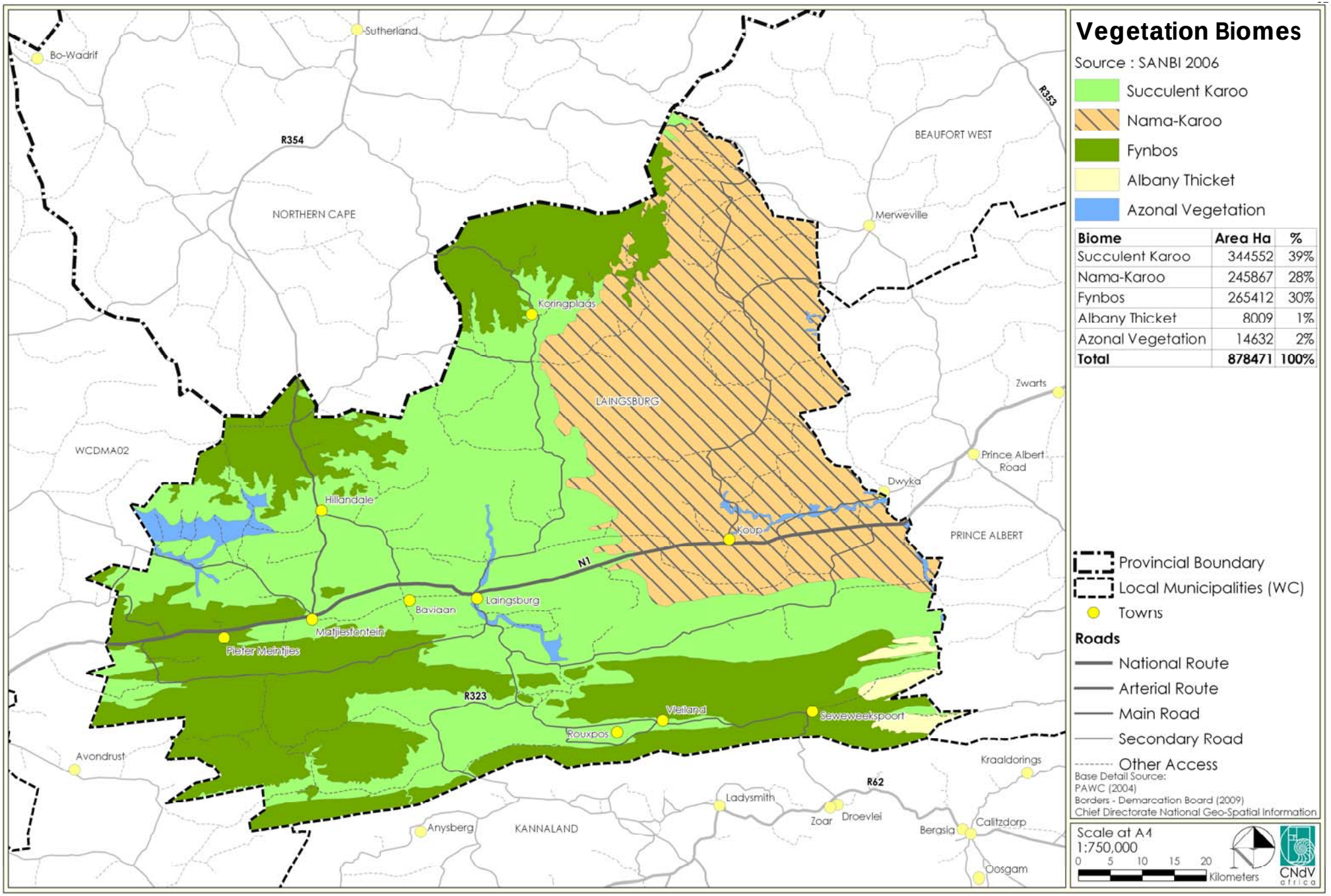


Figure 3.2.5.1 Vegetation: Biomes

Figure 3.2.5.2 shows the distribution of the different vegetation types within the biomes.

Table 3.2.5.2 shows the number of threatened plant species and their conservation status in the Central Karoo District per local Municipality. This indicates that out of the 126 threatened plant species 76 are found in the Laingsburg Municipality, one species is extinct, one species is presumed extinct, seven species are critically endangered, 20 are endangered and 47 are vulnerable. The SANBI biodiversity assessment for vegetation types shows that the majority of the area is Least Threatened, see Figure 3.2.5.3.

Threatened Plants	Beaufort West	Laingsburg	Prince Albert	Murraysburg	Central Karoo District
Extinct		1			1
Presume Extinct		1			1
Critically Endangered	1	7	6		11
Endangered		20	21	1	35
Vulnerable	2	47	38	4	78
Total Threatened	**3**	**76**	**65**	**5**	**126**

Table 3.2.5.2 Number of threatened plant species and their conservation status in the Central Karoo district and its constituent local municipalities (based on PRECIS data) (source: Central Karoo EMF, 2011)

Table 3.2.5.3 shows the land cover and the status in hectares and percentage of the land cover. This shows that 96% of the land in the Laingsburg Municipality is in a natural state. This is the highest percentage for any of the Municipalities in the Central Karoo District. Only 2% of the land in the Municipality is in a degraded state. This is the lowest percentage for any of the Municipalities in the Central Karoo District.

Land Cover	Beaufort West		Laings-burg		Prince Albert		Murraysburg		Central Karoo District	
Transformed	19292	1%	8905	1%	10196	1%	6041	1%	44434	1%
Cultivated	7152	0%	6808	1%	4001	0%	4491	1%	22453	1%
Degraded	175061	11%	20552	2%	72882	9%	41137	8%	309631	8%
Natural	1464936	88%	848786	96%	736293	89%	493505	91%	3543520	90%
Total	1666442	100%	885051	100%	823371	100%	545174	100%	3920038	100%

Table 3.2.5.3 Extent in Hectares, and percentage of total extent for each land cover class in the Local Municipalities and in the District. Data Source Skowno et al. (2009) (source: Central Karoo EMF, 2011)

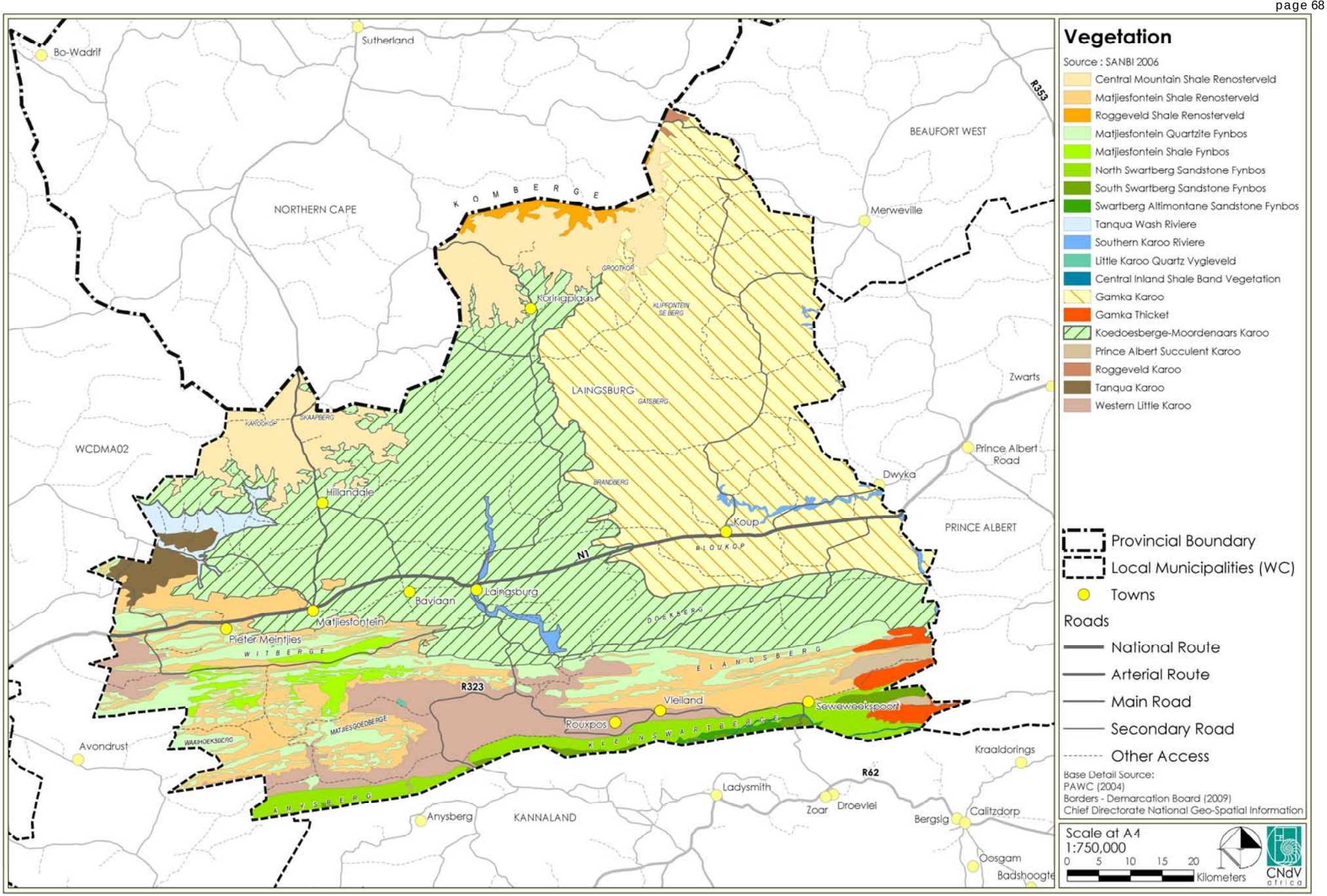


Figure 3.2.5.2 Vegetation Map

SANBI's classification of the vegetation status of the entire Municipality as Not Threatened suggests there is little that threatens the ecosystem's integrity. However, the poor status of the rivers, most of which are Critically Endangered suggest there are problems in the catchments.

The greatest threat to eco-system integrity is crop farming but there is very little potential. The next threat is inappropriate grazing. Appropriate grazing systems should be in place so that veld is restored. This will improve both its biodiversity and stock carrying capacity.

Figure 3.2.5.3 shows the critical biodiversity areas in the Laingsburg Municipality which includes areas that are formally protected areas, conservation areas, i.e. informally protected; critical biodiversity areas, ecological support areas and areas where there are no natural areas remaining. This map, along with Table 3.2.5.4 shows that:

- 47% of the area is identified as critical biodiversity areas;
- 28% as ecological support areas;
- 18% as other; and,
- 7% is under formal protection.

	Beaufort West	Laingsburg	Prince Albert	Murraysburg	Central Karoo District
Critical Biodiversity Area	424647 (26%)	412962 (47%)	196775 (24%)	165840 (31%)	1200226 (36%)
Ecological Support Area	435212 (26%)	249142 (28%)	169574 (21%)	188573 (35%)	1042502 (31%)
Formal Protected Areas	88096 (5%)	60115 (7%)	65297 (8%)	-	213509 (6%)
Informal Conservation Areas	3492 (0.2%)	-	-	-	3492 (0.1%)
Other	698938 (42%)	155550 (18%)	383238 (47%)	186793 (35%)	883312 (27%)
Grand Total	**1650388 (49%)**	**877769 (26%)**	**814887 (24%)**	**541207 (35%)**	**3343044 (100%)**

Table 3.2.5.4 Extent in hectares (percentage in brackets) of Critical Biodiversity Area (CBA) categories for the Central Karoo district and its constituent local municipalities (Skowno et al. 2009)

CapeNature, in their comment on the status quo report, indicated that the Municipality has a high level of environmental degradation. Therefore, the true threat status of the vegetation type is likely to be much worse than shown in the national biodiversity assessment. This is because the national biodiversity assessment only looked at the complete transformation of the area.

The land transformation and ecosystem status of the Municipality is regarded as very low. This should not lead to a low level of environmental protection of the area as unmanaged vegetation that may not be in a present threatened status may become threatened in the future. This means CBAs and Ecological Support Areas should also be safeguarded as a precaution else they could become threatened and critical in the future.

Implications for the SDF

- Appropriate grazing systems should be implemented on veld outside of formal conservation areas so as to improve biodiversity and stock carrying capacity.
- Property management is required of the catchments and particular stream bank activities throughout the Municipality.
- The CBAs are required in their natural state to sustain the biodiversity and the functioning of the ecosystem**.**
- CBAs should be classified as Core 1 Areas and Ecological Suport Areas should be classified as Core 2 Areas.
- The Gamka Karoo vegetation type has been identified as Vulnerable.

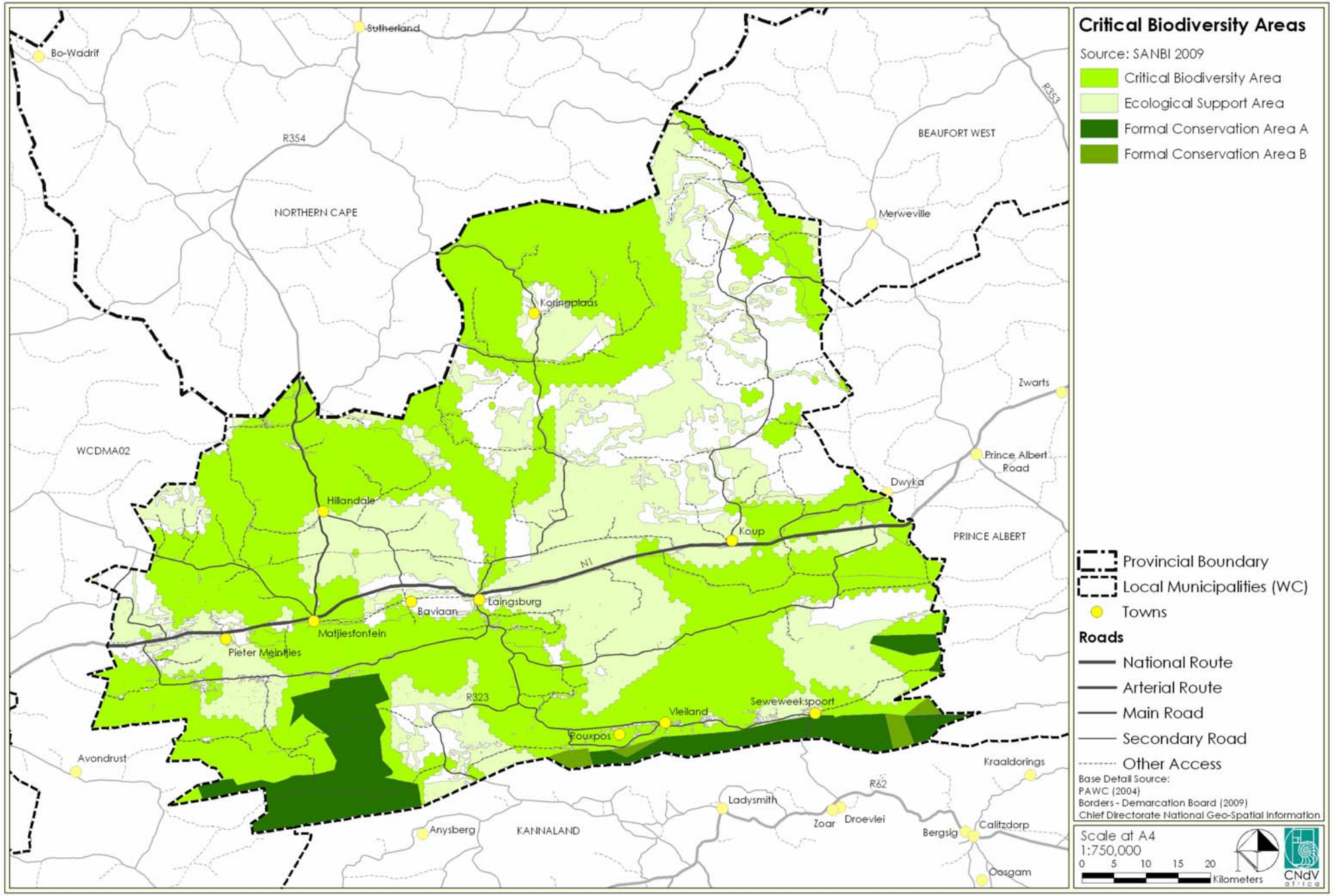


Figure 3.2.5.3 Critical Biodiversity Areas **(source: Central Karoo EMF, 2011)**

Conservation and Heritage

3.2.6.1 Biodiversity Conservation

Figure 3.2.6.1 shows that little of the Municipality is formerly conserved. The Anysberg Nature Reserve and the Towerkop Nature Reserve are Type 1 nature reserves, i.e. a national park / provincial nature reserve. The area south of Rouxpos, the Buffelspoort Nature Reserve is a mountain catchment area or a DWAF forest area. This is a Type 2 nature reserve. The Gamkaspoort and the Klein Swartberg catchment and nature reserve areas are located along the eastern and the south-eastern boundaries of the site.

Figure 3.2.6.2 show an extract from the Biodiversity Assessment of the Central Karoo District Municipality in 2003. This map shows that the majority in the Municipality is either very poorly protected or completed unprotected. The area in the southern portion of the municipality is where the biodiversity targets for habitat protection are generally being met.

Table 3.2.5.4 shows that only 7% of the municipality has formal protection status while 47% is designated as Critical Biodiversity Areas (CBAs) (i.e. areas to be safeguarded in natural state to maintain the function of the biodiversity and ecosystem) and an additional 28% are ecological support areas (i.e. areas that should be safeguarded to reduce the pressure on Critical Biodiversity Areas' Protected Areas).

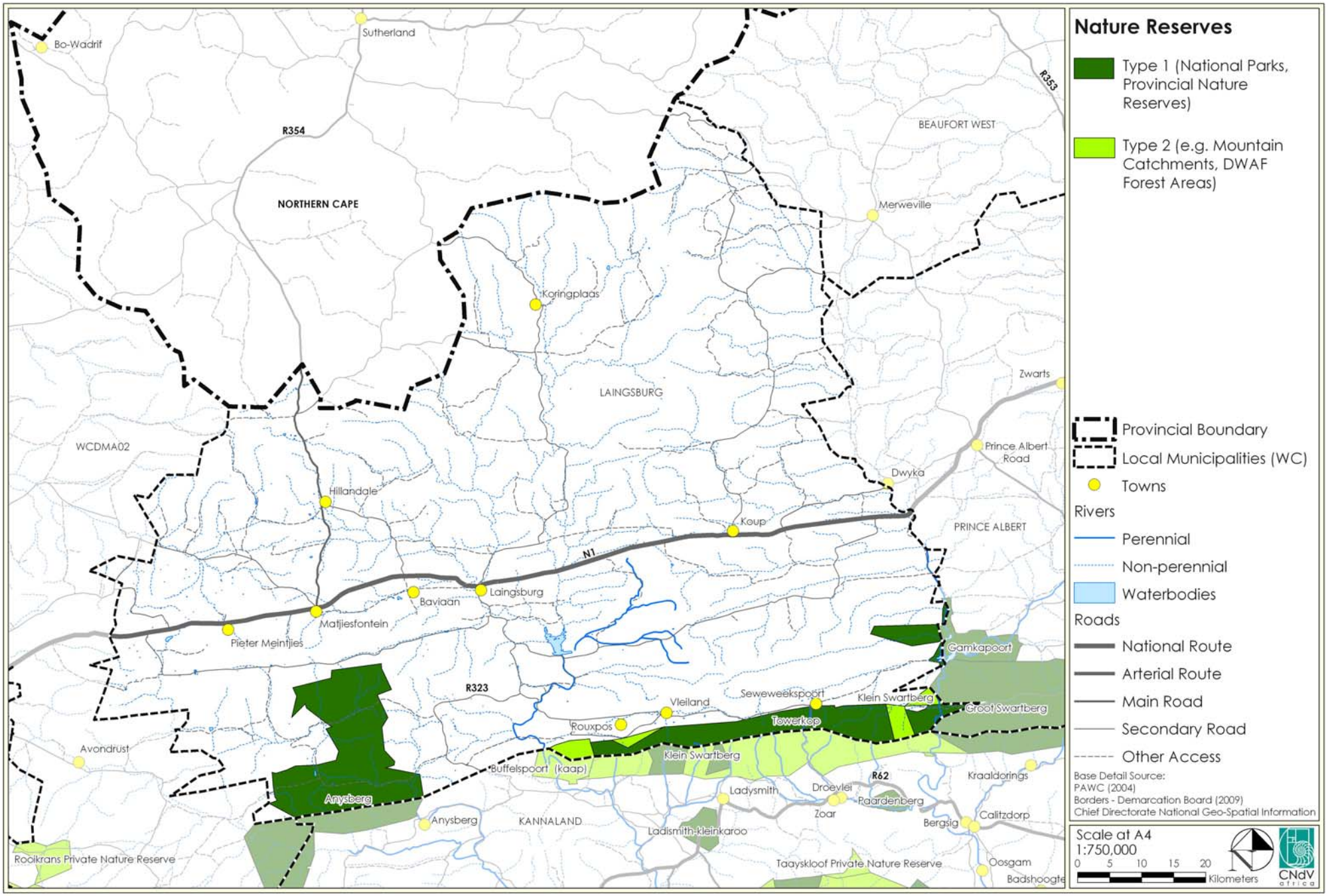


Figure 3.2.6.1 Conservation Areas

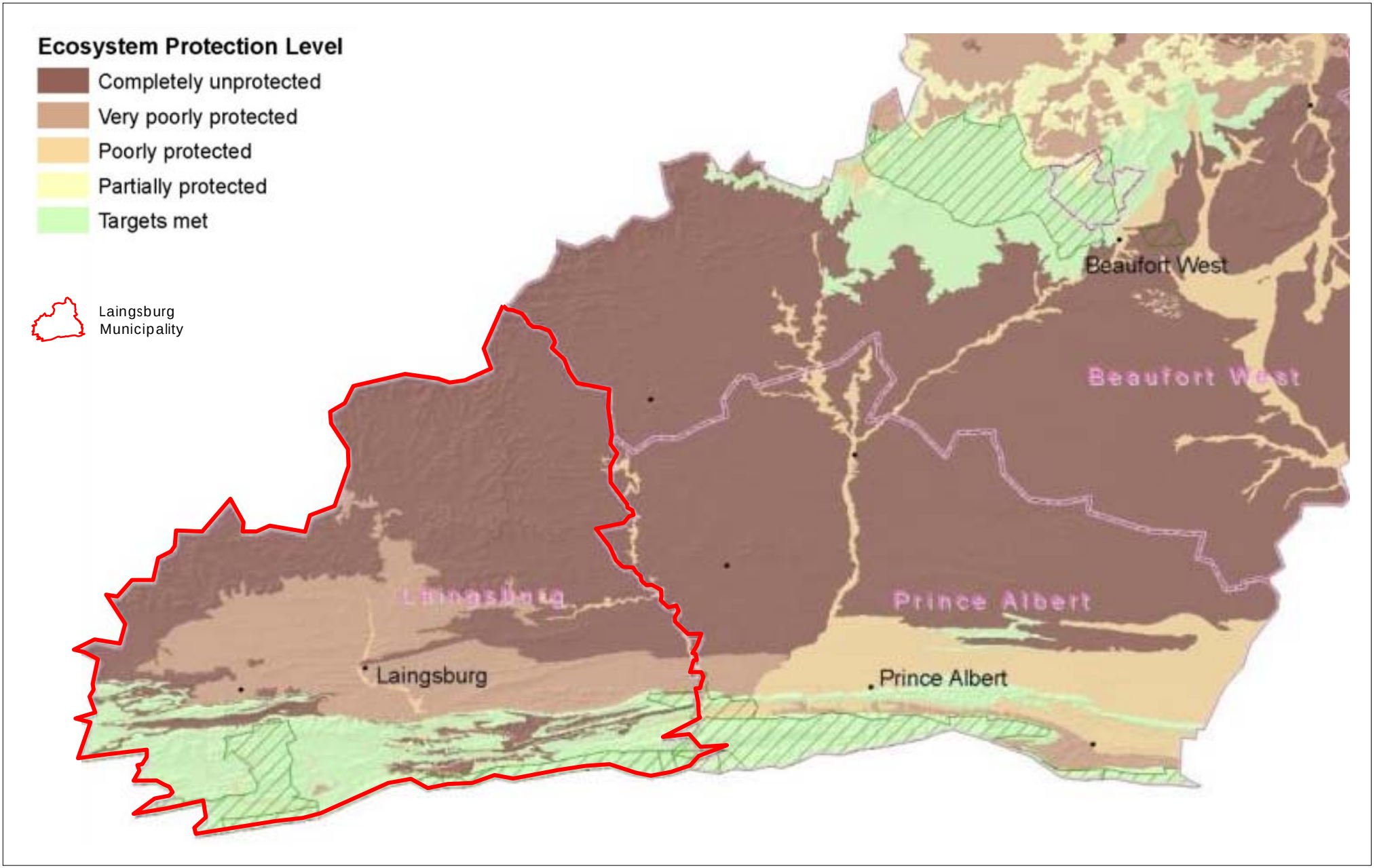


Figure 3.2.6.2 **Habitat Protection Levels in the Central Karoo District. A habitat is considered partially protected if 25-100% of its target is met in protected areas; poorly protected if 5-25% of target met; very poorly protected < 5% target met. If More than 100% of target is met in PA it is considered protected (target met). If none of the habitat occurs in PA then it is considered completely unprotected (Table 4).** (source: Central Karoo EMF, 2010)

3.2.6.2 Heritage

Laingsburg Municipality is rich in heritage precincts and holdings, except in the town where many historic buildings was destroyed in the 1981 flood. The national monuments and provincial conservation sites within the Laingsburg Municipality include the Anglo-Boer Blokhuis adjacent to the Geelbek River, the Anysberg Nature Reserve, Pieter Meintjiesfontein, Matjiesfontein and the Dutch Reform Church in Laingsburg (Laingsburg 2007 Status Quo Report for the Laingsburg SDF)

One of Matjiesfontein's best attributes is the well –preserved Victorian architecture that it displays.

The Moordenaarskaroo is so named as it used to be hideaway for murderers and robbers who fled to escape the law. The Thomas Bains scenic route through the Seweweekspoort was known as a smugglers route.

Laingsburg was established in 1881, initially called Bufelo, then Nassau then Laingsburg after the commissioner of the crown land, John Laing.

Historic events include:

- The town was formalised in 1881 and the municipality in 1904
- Matjiesfontein was established in 1884
- In 1862 Stefanus Greeff acquired Zoutevlakte (Salty Flats) that became the source of water, up to this day, for the town
- In 1879 he acquired Fischkuil, which is the original farm on which Laingsburg stands today, and the Buffelsrivier and started a settlement. It was surveyed to be established as a village
- He initially built a church
- His house was a very popular stop for travellers who passed through because it had shade and fresh drinking water
- In 1942 the N1 freeway through Laingsburg was completed
- 1981 the major flood in Laingsburg occurred. There is a museum commemorating this event in Laingsburg
- Matjiesfontein Hotel was a military hospital during the Anglo Boer War
- John Laing, then commissioner, allowed for the rerouting of a servitude, which gave rise to the development of the town, and essentially became named after him
- It was initially called Laings Town and became Laingsburg
- The municipality was extended to include Bergsig, Goldnerville and Matjiesfontein. (Central Karoo EMF, 2011)

The Karoo is an ancient, fossil-rich land with the largest variety of succulents found anywhere on earth and is therefore considered a wonder of the scientific world and immensely valuable to national and international conservation scientists.

The South African Heritage Resource Agency and Heritage Western Cape are currently in the process of compiling a heritage register. Matjiesfontein and the Dutch Reformed Church in Laingsburg already has heritage status. The other sites for heritage conservation are Laingsburg's:

- Lutheran Church Complex
- Town center
- Municipal Cemetery
- Dutch Reformed Church Hall

National monuments and Provincial Conservation sites within the Laingsburg Municipality include:

- Anglo-Boer Blokhuis adjacent to the Geelbek River
- Railway station at Matjiesfontein
- Anysberg Nature Conservation
- Gamkaskloof
- Pieter Meintjies Fontein

(source: Laingsburg Municipality SDF, 2007)

- **Floods**

30 years ago a catastrophic flood washed through Laingsburg town on 25 January 1981. 184 houses were destroyed and only 21 houses remained. 103 inhabitants lost their lives when 425mm of rain fell between the 24th and 25th January 1981. The average annual rainfall is 175mm. (IDP, 2007-2012) The Buffels River burst its banks at the confluence of the Buffels, Baviaans and Wilgehout Rivers. This resulted in large standing waves backing up through the town and then sweeping away large numbers of buildings and people when a number of piers on the rail-bridge against which flotsam had dammed collapsed. The aftermath of the flood remains as a significant event in the life of the town. The force of the water was so great that bodies were found as far as Mossel Bay. Ten of the survivors were rescued at the Floriskraal Dam about 21km away. (IDP2007)

The drama and tragedy of this event has great potential for tourism. A flood museum has been established but there would seem to be many more opportunities surrounding this event, for example, a "flood route".

Implications for the SDF

- The Municipality's heritage resource should be organised as attractions which, as well as celebrating their heritage status, can also be a source of economic opportunity for all sectors of the community, for instance:
  - N1 heritage route
    - Pieter Meintjies
    - Matiesfontein historic accommodation village
    - Laingsburg historic buildings
  - Flood Route – Laingsburg town to Floriskraal dam that includes various important sites in the town and a river bank route to the Floriskraal Dam.

Historic Lord Milner Hotel: Matjiesfontein


Well preserved architecture


Floriskraal Dam

Laingsburg Flood Museum


Old house in Laingsburg town historic core dd 1880


Church in Koringplaas dated 1917


NG Kerk in Klein Swartberg dd 1950


Matjiesfontein Transport Museum


Stone-faced house at Vleiland

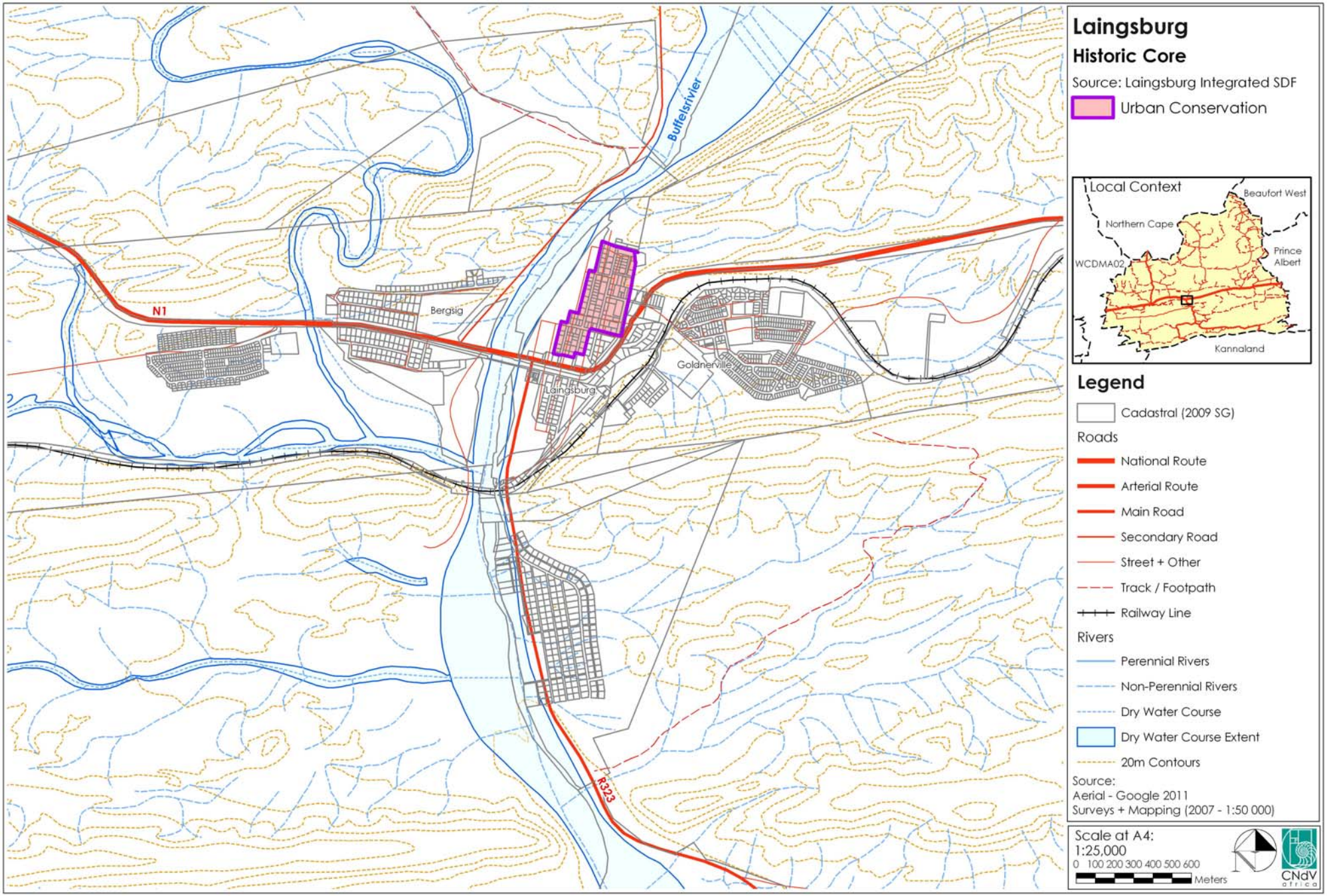


Figure 3.2.6.3 Heritage

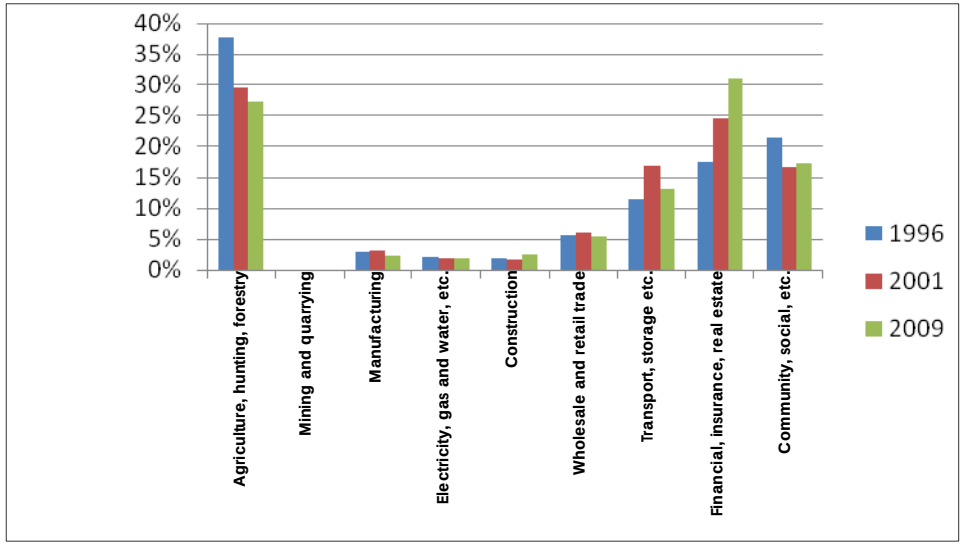
3.2.6 Agriculture

Agriculture has undergone extensive restructuring since the opening up of the South African economy and substantial growth took place between 1998 and 2002. (OABS, 2011) This growth was however impacted due to mounting pressures from market competition and legislative changes.

3.2.7.1 Contributions to GVA

Graph 3.2.7.1 shows a comparison of the GVA contribution from 1996 to 2009 in percentage values for the Laingsburg Municipality.

The agricultural sector's contribution to the GVA of the Laingsburg Municipality of 2009 was R45 million. This translated to 0.29% of the Western Cape and 0.07% of the national GVA. (OABS, 2011)



Graph 3.2.7.1 GVA % composition for Laingsburg Local Municipality (2009) (source: DBSA, 2009)

The contribution of the "Agriculture, hunting, forestry and fishing"-sector to total GVA for Laingsburg Local Municipal area declined for the period 1996 to 2009 from 38% to 27%. However, it remains a vital contributor to the local economy and remains one of the main drivers. The strong featuring of the "Financial, insurance and real estate" sector during the boom of the economy is unlikely to continue. This will leave Agriculture as the main driver of the local economy. (OABS, 2011)

Table 3.2.7.1 shows that the long term crops contribute 17% to the GVA, the short term crops 12%. The total gross margin for the Municipality is R66 million compared to the production income of R131 million.

This represents a gross margin of approximately 50%.

SEGMENT	GVA %	PI District [R]	GM District [R]
Long-term crops	17%	21,860,000	7,747,000
Short term crops	12%	15,990,000	3,198,000
Livestock	71%	93,457,025	55,436,373
TOTAL	**100%**	**131,307,025**	**66,381,373**

Table 3.2.7.1 Agricultural Production Income & Gross margin (GM) by segment (source: OABS, 2011)

3.2.7.2 Land capability

Figure 3.2.7.1 shows the land capability based on the soil classification. The majority of the land is classified as Group B with classifications of 5, 6 and 9 which is most suitable for grazing.

There are small pockets suitable for arable agriculture:

- west of the R323;
- north-west and west of Matjiesfontein; and,
- around Vleiland and Rouxpos.

However, it is only around Vleiland and Rouxpos where there is sufficient water for crop farming.

The portion around the Floriskraal dam on the Buffels River, south-east of Laingsburg, is identified for wildlife (game farming, see Figure 3.2.1.4.

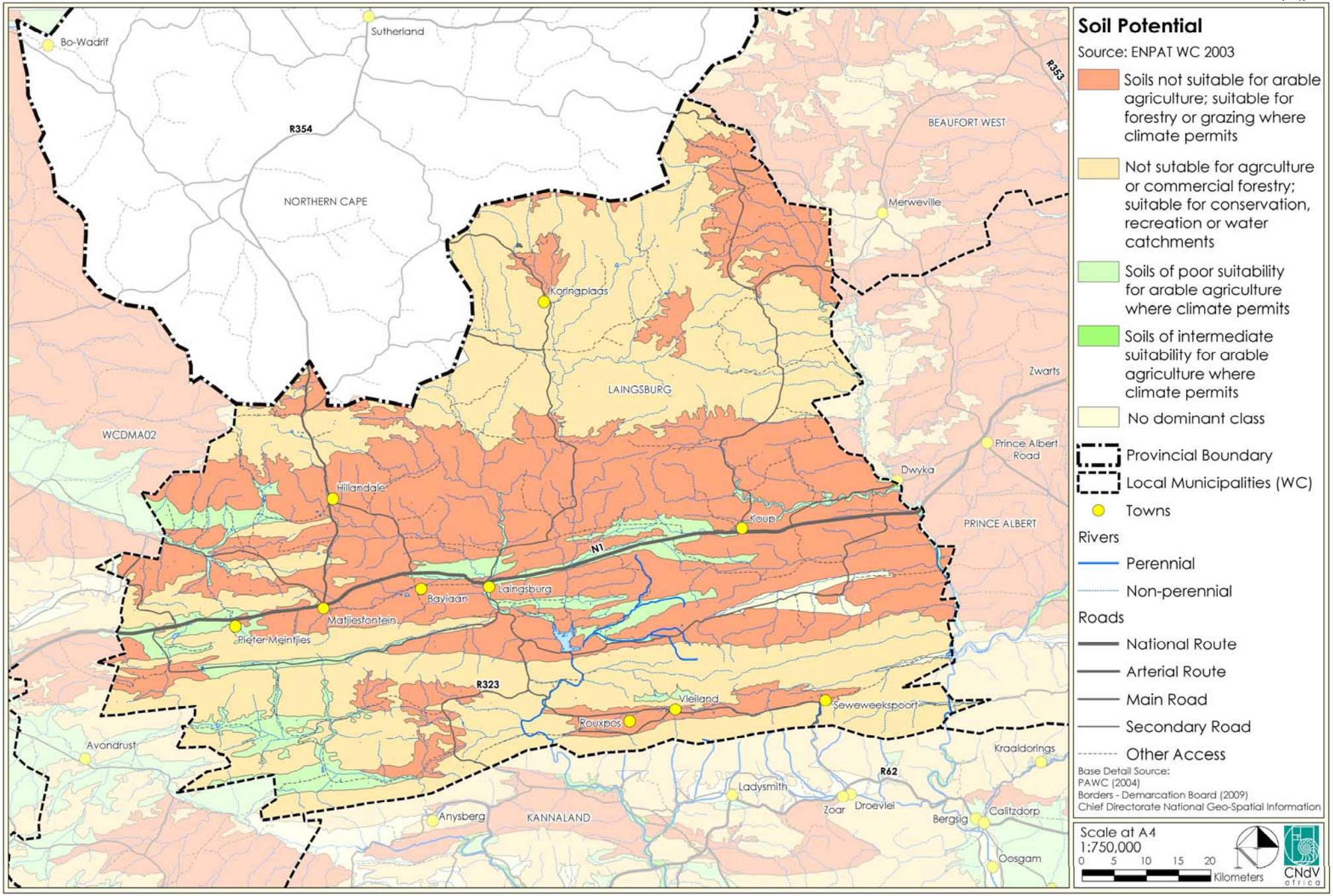
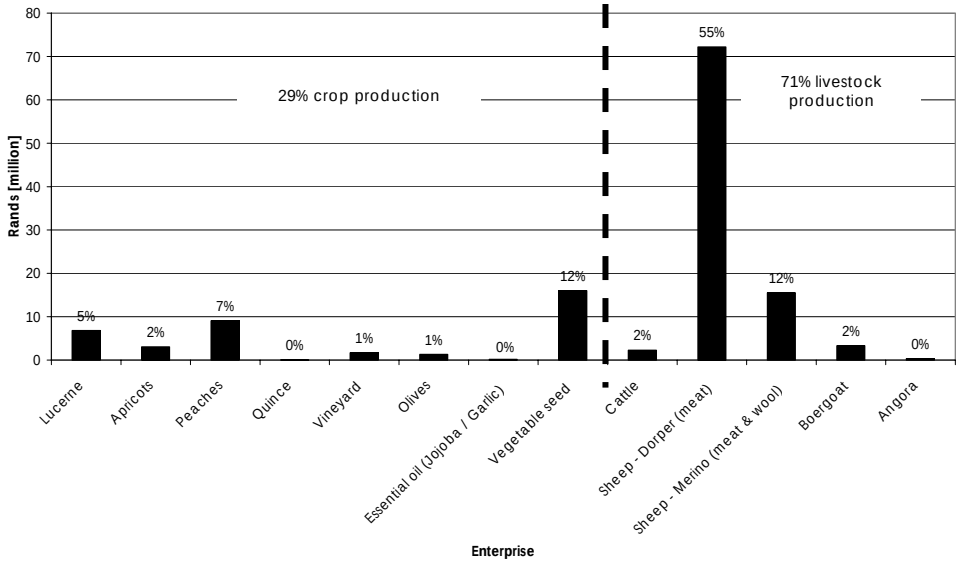


Figure 3.2.7.1 Soil Potential

3.2.7.3 Enterprise contribution to agricultural production

Graph 3.2.7.2 shows the contribution of the various enterprises to the total agricultural production income. This shows that the majority of the income is obtained from sheep farming 68%, 55% from meat, i.e. dorper sheep, and wool contributes to 12% from merino sheep.

71% comes from livestock production, with 29% from crop production.



Graph 3.2.7.2 **Enterprise Contribution to Total Agricultural Production Income** (source: OABS, 2011)

Of the R130 million production income the sheep farming contributes R77 million and production of vegetable seeds R16 million. Olives and essential oils are the highest producing long term crops at R8,000 and R40,000 per unit. Lucerne and peaches have produced the greatest gross margins under the short term crops. Under the livestock the boer goat and cattle are priced at R1,000 to R4,500 per unit. (OABS, 2011)

It should be noted that lucerne and peaches are the biggest contributor to the short term crop sector and sheep dominate the livestock sector, by contributing almost R51 million towards the gross margin. (OABS, 2011)

Agricultural Statistics 2010 estimates the agricultural debt for Laingsburg Municipality as calculated at R211,651,451 million which is about 17% of its asset value.

Table 3.2.7.2 shows an average contribution obtainable from a typical farm.

	Total district	Average farm
Number of farms	268	1
Total agricultural (ha)	878,100	3,276
Total arable (ha)	2,110	8
Jobs	1000	4
GDP contribution	R 131,307,025	R 489,952
Export	R 11,495,715	R 42,894

Table 3.2.7.2 **Average farm contribution** (source: OABS, 2011)

In terms of farm sizes it should be noted that that modern agriculture dictates that sustainable farming units become bigger due to decreasing margins on produce. Table 3.2.7.3 shows the distribution of the frequency of farm sizes. The greatest number of cadastrals are between 3000 – 5000ha.

DISTRICT	Number of Farm Enterprises per size category							
	<100ha	100-500ha	500-1000ha	1000-2000ha	2000-3000ha	3000-5000ha	5000-10000ha	<10000ha
BW	53	12	16	35	45	71	101	26
LB	24	20	16	45	31	58	34	13
MB	2	10	3	7	17	30	30	8
PA	48	18	20	30	28	35	46	8

Table 3.2.7.3 **Size distribution of farming enterprises** (source: Agri Informatics, 2011)

Table 3.2.7.4 shows that 3650ha is the minimum farm size for 500 SSU's in Laingsburg at a grazing capacity of 7.3ha/SSU.

DISTRICT	Grazing Capacity (ha/SSU)	Farm size per 500 SSU's (ha)
Beaufort West	4.3	2150
Laingsburg	7.3	3650
Murraysburg	2.9	1450
Prince Albert	6.0	3000

Table 3.2.7.4 **Minimum farm size for a 500 SSU enterprise** (source: Agri Informatics, 2011)

Table 3.2.7.5 shows that a number of farm enterprises are significantly smaller than the minimum size of small sheep farms.

DISTRICT	Grazing Capacity (ha/SSU)	Farm size per 500 SSU's (ha)
Beaufort West	120	32.6%
Laingsburg	161	65.7%
Murraysburg	17	15.7%
Prince Albert	141	61.3%

Table 3.2.7.5 Number of farms smaller than the minimum required size (source: Agri Informatics, 2011)

3.2.7.4 Agricultural Land Composition

Table 3.2.7.6 and Figure 3.2.7.2 shows the composition of the land within the Municipality. The aforementioned figure and table shows that the majority of the land is under veld, in other words, veld and mountain land used as grazing. Veld and mountain land uses approximately 97% of the land in the municipality.

ITEM	%	Hectares (ha)
Irrigation	0.13%	1,110
Irrigation - Orchards & LT Crops	0.13%	1,100
Irrigation - Short term crops	0.00%	10
Dryland	0.11%	1,000
Veld	85%	743,275
Mountain land	15%	131,715
Odd land	0.11%	1,000
TOTAL	**100%**	**878,100**

Table 3.2.7.6 Agricultural land composition – Laingsburg district (source: OABS, 2011)

Table 3.2.7.7 shows the percentage of the agricultural enterprises make-up of the land utilised for crops. This table shows that the long-term crops take up 30.7%, the short-term irrigation crops takes up 21.6%. The short-term dry land crops take up 47.6%. Of the long term crops, Lucerne and peaches take up 47% and 23% respectively. Short term crops are generally dependent on rotational fields and vegetable seeds. The short term dry land crops are generally oats / grazing.

TYPE OF ACTIVITY	Area (ha)	% of total	% of crop
LONG TERM CROPS	**645**	**30.71**	**100**
Lucerne	300	14.29	47
Apricots	100	4.76	16
Peaches	150	7.14	23
Quince	4	0.19	1
Vineyard	50	2.38	8
Olives	40	1.9	6
Essential oil (Jojoba / Garlic)	1	0.05	0
SHORT TERM IRRIGATION CROPS	**455**	**21.67**	**100**
Vegetable seed	200	9.52	44
Small-scale gardens	10	0.48	2
Rotation fields	245	11.67	54
SHORT TERM DRYLAND CROPS	**1000**	**47.62**	**100**
Oats (Grazing)	1000	47.62	100
TOTAL (land utilized for crops)	**2100**	**100**	

Table 3.2.7.7 Enterprise contribution of agricultural land – Laingsburg district

It is clear that the Laingsburg district is mainly suited for extensive farming with natural veld and mountain land contributing 97% of total area, with irrigation and dry land only 0,26% of the total area of 878 100 hectare. (OABS, 2011)

Table 3.2.7.8 shows the type of irrigation and land take in the municipality.

Region	Low intensity[1] irrigation		High intensity[2] irrigation		Total area cultivated (Ha)
	%[3]	Ha	%[3]	Ha	
District: Laingsburg	55.5	1300	44.5	1040	2340
Laingsburg	±40	124	±60	180	304
Below Floriskraal Dam	±10	20	±90	170	190
Upper Vleiland	±10	26	±90	240	266
Lower Vleiland	±50	377	±50	370*	747
Other	±90	753	±10	80*	833

1. Low intensity irrigation almost without exception entails lucerne fields that are irrigated when and if water is available.
2. High intensity irrigation refers to areas where water supply is more reliable and perennial crops could occur. In many areas (indicated by asterisk *) Lucerne remains the predominant crop.
3. percentages represent the perception of the interpreter after a visual inspection of satellite imagery.

Table 3.2.7.8 Estimated areas under irrigation in the Central Karoo District (source: Agri Informatics, 2011)

3.2.7.5 Agricultural Values

Table 3.2.7.9 shows the value of the different types of agricultural land. Irrigation land holds the highest value at R140,000/ha followed by short term crops of R80,000/ha. The valuation of all the agricultural land in the study area amounts to approximately R1 billion.

The market value for farmlands per hectare is shown in the following table:

ITEM	Hectares	Value/ha	Tot value
IRRIGATION	1,110		
Irrigation - Orchards & LT Crops	1,100	140,000	154,000,000
Irrigation - Short term crops	10	80,000	800,000
DRYLAND	1,000	1,000	1,000,000
VELD	743,275	1,000	743,275,000
MOUNTAIN LAND	131,715	1,000	131,715,000
ODD LAND	1,000	1,000	1,000,000
TOTAL	**878,100**		**1,031,790,000**

Table 3.2.7.9 Composition and valuation of agricultural land (source: OABS, 2011)

Table 3.2.7.10 shows the average value of the livestock in the Municipality valuing cattle at R4,500 a unit and boergoat at about R1,000 a unit. The total value of livestock given the total number of animals in the Municipality is approximately R1.05 billion.

Item	Quantity	Value/unit	Total value
Cattle	705	4,500	3,172,500
Sheep	109,385	900	98,446,500
Boergoat	3,250	1,000	3,250,000
Angora	335	800	268,000
TOTAL			**105,137,000**

Table 3.2.7.10 Composition and valuation of livestock (source: OABS, 2011)

The weighted mean grazing capacity for the different districts in the Central Karoo indicates that there is the highest grazing capacity in Laingsburg at 7.3% hectares per SSU, see Table 3.2.7.4 above.

Agricultural Statistics, 2010 shows the estimated agricultural debt for Laingsburg municipal district was calculated at R211 651 475 (17% of asset value).

3.2.7.6 Farmworkers

Table 3.2.7.11 shows there is approximately 1000 farmworkers in the Municipality; 400 in full term employment and 600 in part time employment.

Item	Number of Labourers	Annual Remuneration	Tot Yearly Remuneration
Full time employment	400	15,800	6,320,112
Part-time employment *(* Assumption 50% of year)*	600	15,800	4,740,084
TOTAL			**11,060,196**

Table 3.2.7.11 Laingsburg – Number of farm labourers employed & remuneration (source: OABS, 2011)

There has been a significant decline in permanent employment from approximately 870 (2001) to approximately 450, see Table 3.3.4.2 (pg 86). A number of these may have moved onto casual basis and are probably residing in Laingsburg town.

3.2.7.7 Types of agricultural businesses

The following is a list of the most significant agri-businesses who operate in the Laingsburg local municipal area:

- Koup Produsente Koöperasie
- Laingsburg Abattoir
- Buffelsrivier Abattoir
- 3 x Repair & Maintenance businesses
- Sakata
- Seminis
- JW Saad
- Stark Ayers
- Klein-Karoo Saad
- CMW
- BKB
- Roelcor
- Karoo Biltong
- Olyfpers
- A number of agri-tourism opportunities (see tourism section)

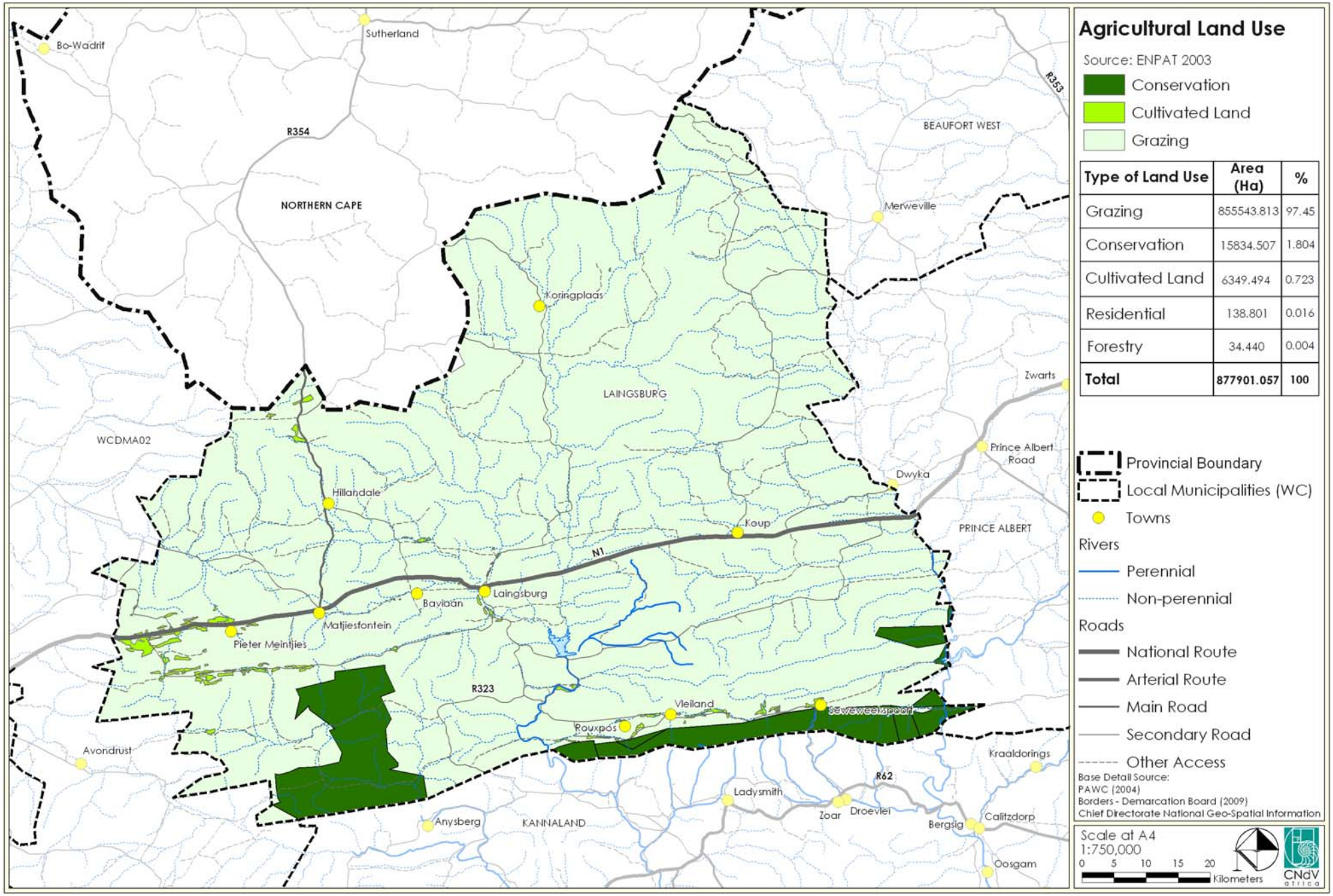


Figure 3.2.7.2 Agriculture in the Municipality

Table 3.2.7.12 shows the composition of a typical farm in the Laingsburg Municipality, namely an extensive karoo livestock farm and an irrigation farm. Characteristics of the two typical farm types are illustrated below.

Composition	Irrigation farm		Extensive sheep farm	
Irrigation - Orchards & LT Crops	25	ha		
Irrigation - Short term crops				
DRYLAND			5	ha
VELD	473	ha	2093	ha
MOUNTAIN LAND	2000	ha		ha
ODD LAND	2	ha	2	ha
TOTAL	**2500**	**ha**	**3000**	**ha**

Table 3.2.7.12 Typical farms – Laingsburg district (source: OABS, 2011)

The reality in modern agriculture dictates that sustainable farming units become bigger due to decreasing margins on produce. The two typical farms illustrated can be seen as minimum sizes for sustainable commercial agriculture in the Laingsburg.

3.2.7.8 Food Security

- **Food and fibre sources – farm gate to shop**
  - The United Nations Food and Agriculture Organisation (FAO) have determined daily dietary requirements of approximately 2000 plant calories and 500 animal calories per day;
  - Upper income diets can increase this intake to 7 500 to 8000 plant and 2 500 animal calories per day;
  - 2 500 calories per day is adequate for a vegetarian diet.
  - Land requirements for plant and animal calories are 2000 calories per m² per annum for plant foods and only 200 calories per m² per annum for animal foods, i.e. producing animal protein requirements (10 times as much land as plant protein);
  - A community of 8000 requires the following land for its food and fibre needs depending on its diet and income status, see Table 3.2.7.13:

Land required for food security					
	Diet	**C/day**	**People**	**C/m²/year**	**Total Ha**
Upper Income	Plant	8000	800	2000	117
	Animal	2500	800	200	365
	Number of People		**800**	**Sub-total**	**482**
Lower Income	Plant	2000	7200	2000	263
	Animal	1000	7200	200	1314
	Number of People		**7200**	**Sub-total**	**1577**
Total Number of People				**Total**	**2059**
All Vegetarian		2500	8000	2000	**365**

Table 3.2.7.13 Land required for food security: Laingsburg Municipality (source: Kilimakore Synergetics. **A Study on the Revitalisation of Rural Towns in South Africa**, May 2010)

Note: the impact of high income diets and animal food consumption can be seen on the demand for agricultural land.

- There is little food production on the agricultural land in the municipality, this being mainly used for grazing and conservation (mountain) areas.

- This implies that the vast majority of the municipality's food requirements are being imported from outside of the Municipality and distributed through the major food and grocery retailers as well as some corner shops and farm shops. This has implications for dietary composition, transport costs and energy consumption and inflationary pressures on food.

- There may be some informal production of fruit, vegetables and dairy that is consumed by staff but in the main food requirements are sourced through the retail industry at a hierarchy of outlets including:
  - wholesale supplies from agricultural coops
  - farm shops and corner shops
  - supermarkets and shopping centres of various sizes

- There are indications that the current formal food and grocery distribution network, mainly in the form of corner shops, supermarkets and shopping centres, will come under increasing pressure as a result of food inflation, decreasing purchasing power among most income groups but particularly the poor.

A separate informal marketing channel should be developed in the form of a network farmers' markets which could allow prices at the farm gate to increase but retail prices to drop by circumventing the agents and middlemen and formal retailers in the distribution channels, see box indicating distribution chain issues for small growers, see box below.

CASE STUDY: Lettuce Value Chain : Stellenbosch

Organic lettuce grown on Stellenbosch commonage:

Sold to packer at R7.15/kg
Packer sells lettuce to retailers | 28/3/2008 prices
Retailers sell lettuce at R68/kg

Grower now sells direct at Stellenbosch market at R40/kg

Kelly C, 2008. Value Chain in Agriculture Service Industry

3.2.7.9 Impact of Climate Change

Given the background of the Laingsburg local municipal area economy being predominantly dependent on agriculture as its economic base, the risks that climate change can potentially have on this agricultural production area is of great concern.

The main expected features of climate change is the long term rise in temperature, variability in precipitation, changes in precipitation patterns, changes in the growing season etc. Therefore, the aforementioned variables will definitely impact on the availability of water, for both rain-fed and irrigated agricultural production. Water availability is the most important limiting factor for crop production in the Laingsburg area. Furthermore, animal production will also be adversely affected in the light of dryer periods throughout the year. Given the extent of production in this area it could have implications in terms of food security.

Implications for the SDF

There is a need to:

- Regulate water demand especially for agricultural purposes.
- Protect ecological water reserves.
- Monitor biodiversity closely and eradicating alien vegetation.
- Evaluate livelihoods based on threatened resources.
- It is absolutely essential that all land capable of crop farming, i.e. has sufficient water and arable land is protected from other uses.
- Considering that crop production on the arable land of the municipality, comprising only 0.29% of the total land, contributes 29% of the total income, this land needs to enjoy the highest protection against its conversion to other uses. This applies particularly to the Vleiland and Rouxpos valleys.
- Good veld management practises need to be promoted to improve biodiversity and increase stock carrying capacity.
- Ecological corridors where grazing, crop farming and buildings are prohibited, should be declared along river banks. Their boundary should be a minimum of 30m from the bank or according to a setback line determined by a fresh water ecologist.

3.2.8 Building Materials and Mining

Figure 3.2.8.1 shows the distribution of mining applications within the Municipality. Applications have been issued to mine uranium on 50159ha and mining applications are in process on 7644ha. South Africa has the 4th largest uranium reserves in the world but is only ranked 12th in terms of production suggesting there could be considerable upside potential in mining this commodity if there is sufficient demand. (OECD NEA & IAEA, Uranium 2007: Resources, Production and Demand ("Red Book") World Nuclear Association.)

Table 3.2.8.1 shows the applicants and respective farms as well as the commodity, uranium, that is currently being mined.

Applicant	Farms	Commodity
JCI Gold Limited	Ptn 1 Drie Vaderlansche Rietvalleyn 49	Uranium
Mago Resources (Pty) Ltd	Ptns 1, 2, 3 Allemanshoek 1, Ptn 1 Wilgensbosch Kloof 2, remaining extent Farm 279, Farm 280	Uranium
Mago Resources (Pty) Ltd	Remaining extent and pt 1 farm 48, remaining extent of ptn 1 and ptn 5 Leeuwenvalley 50, remaining extent	Uranium
Mago Resources (Pty) Ltd	Remaining extent Drooge Heuvel 55 and remaining extent Springfontein 60	Uranium
Hymrai Properties 1 (Pty) Ltd	R/E and ptn 2 Drie Vaderlandsche Rietvalleyen 49	Uranium
Scarlet Ibis Investments 258 (Pty) Ltd	R/E Farm 45, Farm 46	Uranium
Stylestar Properties 176 (Pty) Ltd	Ptns 1, 2, 4 Spitze Kop 42	Uranium

Table 3.2.8.1 Applicant and Respective Farms being mined (source: Department of Mineral Resources)

Historically buildings were made from local sun baked brick and mud plaster. While very environmentally sustainable buildings made of these materials require constant maintenance.

Implications for the SDF

- Ensure that mines are rehabilitated topsoil is properly stockpiled and that the post mining platforms comply with the envisaged after mining use of the land.
- Should full-scale mining operations commence there will be economic impacts including:
  - Transport
  - Accommodation
  - Labour and maintenance
- Where possible fixed infrastructure including housing should reinforce and not dissipate existing settlements and infrastructure and road networks.

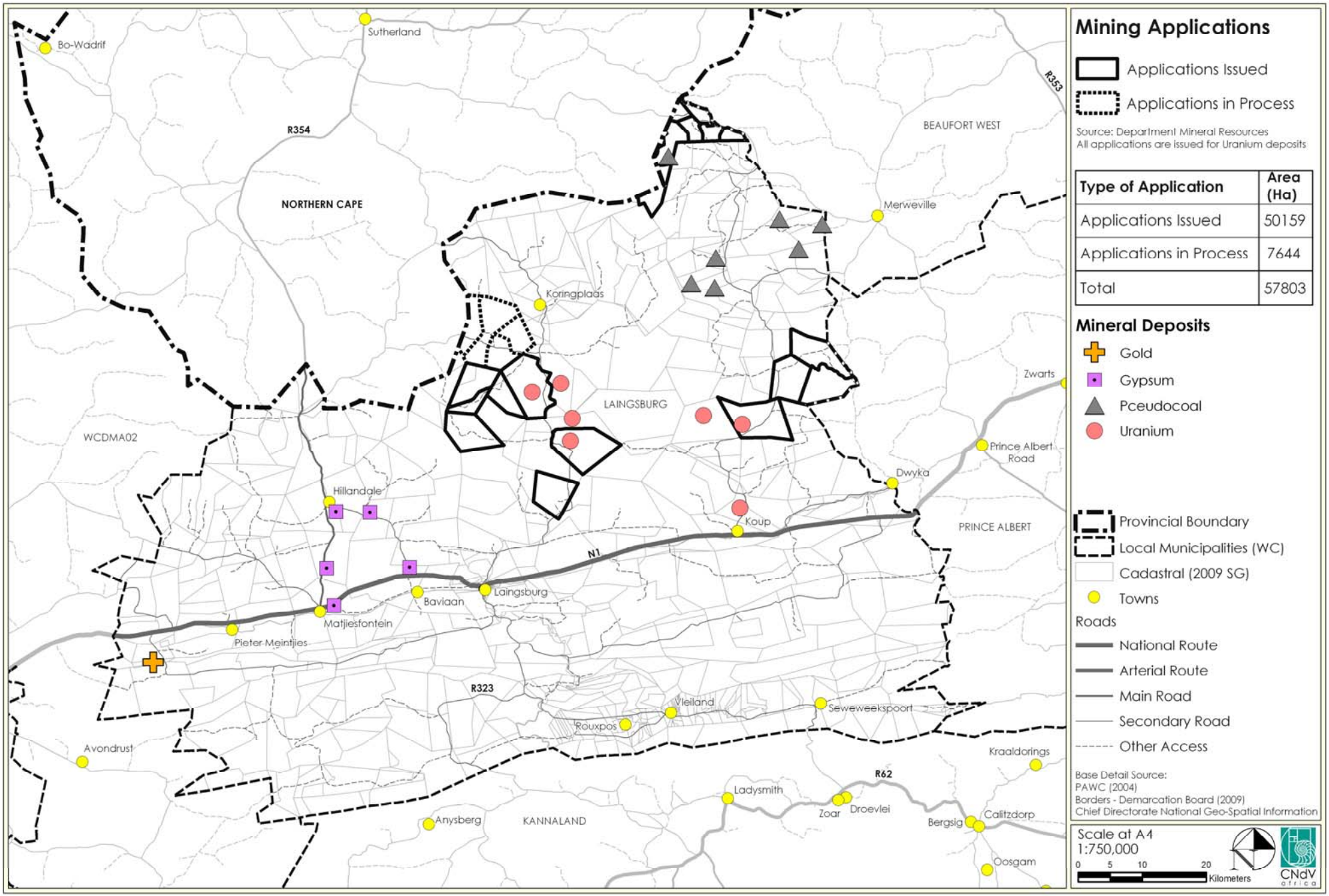


Figure 3.2.8.1 Mining

3.3 SOCIO-ECONOMIC CONDITIONS

3.3.1 DEMOGRAPHIC PROFILE

3.3.1.1 Overall Population

The Censuses report a total population of 5913 in 1996 and 6803 in 2001. The Community Survey reports a population of 5155 in 2007. The Socio-economic Profile for Laingsburg estimates a population of 7330 in 2006 and an estimated population of 7720 in 2010. (Community Survey, 2007)

This represents a 30,56% increase in overall population comparing the 1996 Census and 2007 Community Survey.

The 2007 Community Survey projects 4462 persons in 2010. This is disputed. The difference between the two sources attributed to the 2010 population is 3258. This is a large difference and requires clarification to ensure appropriate projections for future interventions. However, the municipal annual report indicates a figure of approximately 5600.

	Census 96	Census 2001	Socio-economic 2006	Community Survey 2007	Annual Report 2011
1996	5913				
2001		6803			
2006			7330		
2007 (source)				3331	
2010 (est.)			7720	4462	5607

Table 3.3.1.1 **Laingsburg population figures since 1996** (source: Census 1996, 2001; Socio-economic Profile 2006; Community Survey 2007; IDP (2007-2012))

The IDP has shown that Laingsburg has about 81% (5925) of the population, Matjiesfontein 7% (535) and the rural areas approximately 12% (870).

Overall population increased by 15% between 1996-2001 then apparently dropped by 24% by 2007 according to the Community Survey. The overall population decline presents an annual decline rate of 4,2% from 2001 to 2007. This raises the following issues:

- Was 1996-2001 Censi overstated?
- Was the community survey a Census or an extrapolation from a questionable sample.
- There are concerns over the veracity of the population numbers in the community survey.

If the community survey population figures are correct they have severe implications for:

i) whether housing and supporting infrastructure proposals are justified;
ii) financial sustainability of current operational and capital budgets.

The Community Survey, 2007 provides the following cautionary note to users of the survey that should be kept in mind when analysing the statistics:

- The estimated population is merely an approximation to 2001 numbers and not new data;

Systematic errors were observed in the population data, which include:

- An imbalance in the estimate of men relative to women;
- An underestimate of children younger than 10 years;
- An excess of those aged 85+, in particular among men;
- An undercount or errors in the women aged 20-34 from the Coloured population;
- Mal-distribution of the population by province; and,
- Excess of people aged 10-24 in the Western Cape.

(Socio-economic Profile 2006)

However, in summary, it would seem that the municipality's population has stabilised or is declining. This poses a number of challenges, particularly for human resources, generally, it is the most able who migrate in search of better opportunities. This overall trend may disguise changing patterns within different economic groupings for example, while poorer people may be leaving, wealthier people, possibly retirees, are settling in the Municipality.

Figure 3.3.1.1 shows that the study area is fairly sparsely populated. The majority of the population is located in two settlements namely, Laingsburg approximately 6000 and Matjiesfontein approximately 500.

The balance of the population, approximately 800 to 1000, live in the rural areas.

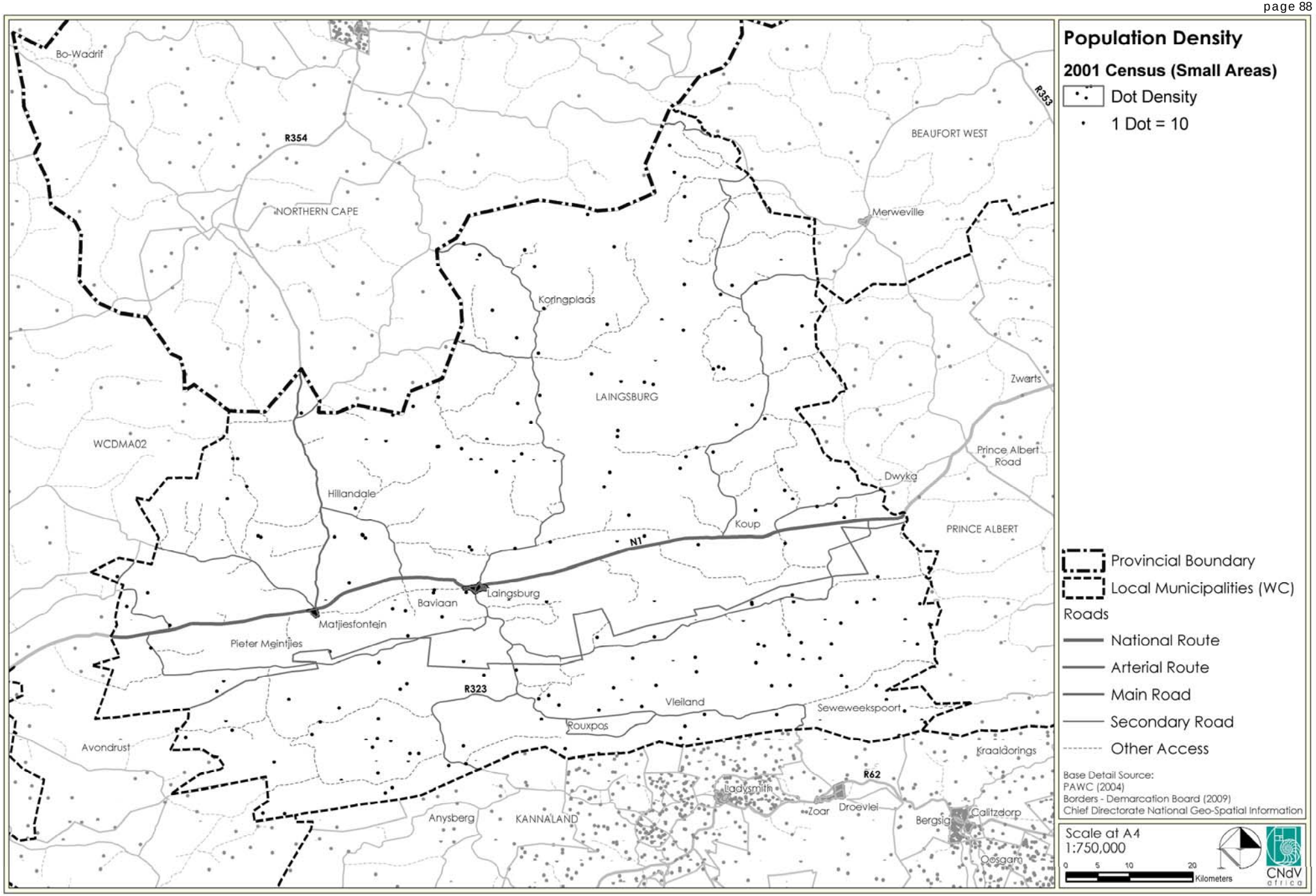


Figure 3.3.1.1 Population Density (2001)

3.3.1.2 Growth Rate

Using the Community Survey, and an estimated household size of 4, the estimated decrease in households between 2001 and 2007 (2006) is approximately 412; and between 2001 and 2010 is approximately 585.

However, using the Socio-economic Profile and an estimated household size of 4, the estimated increase in households between 2001 and 2006 is approximately 105; and between 2001 and 2010 is approximately 229.

Table 3.3.1.2 shows fairly gradual positive growth rates of above average growth rates of between 1.3% - 1.4% for the period between 2001 and 2010 given the Socio-economic Profile statistics. The average overall growth rates using the Community Survey reflects 15% positive growth between 1996 and 24.2% negative growth from 2001 to 2007.

Total population	(2001) : 6 808 (2006) : 7 330 (2007) : 5151 (2010) : 7 720	Population Density 0.8km² (Socio-economic Profile) (Community Survey 2007) (Socio-economic Profile) (Community Survey = 4462)
Population growth rate		**Average annual**
2001 – 2006		1.49%
2006 – 2010		1.305
Households		1959

Centre for Actual Research, 2005 (Population projections for the Western Cape 2001-2005)

Population growth rate	Average overall
1996 – 2001	+ 15%
2001 – 2007	- 24.2%

(source: Community Survey, 2007)

Table 3.3.1.2 Growth Rates

The various ethnic groups have shared fairly stable growth between 2001 and 2007, given the Community Survey estimates.

There is a discrepancy between the Socio-economic Profile and the Community Survey. Therefore, the appropriate figures to be used demands confirmation to determine whether there has been a decline or an increase in population. If there has indeed been an increase then this would warrant accommodation and services for approximately 229 more households.

3.3.1.3 Age Structure

Table 3.3.1.3 below and Table 3.3.1.4 shows the age structure of the population in the Municipality. This shows that at 2007; 26% of the population was younger than 15 years; 7% older than 65 years and 67% of the population was aged between 15 – 65 years.

In 1996 61,1% (3610) of the population was in the economically active bracket, i.e. aged between 15 and 65 years old, inclusive. By 2007 this percentage moved up to 67%.

Table 3.3.1.3 below shows the change of the overall composition of the different age cohorts.

Laingsburg Municipality	AGE					
	0-4	5-14	15-34	35-65	>65	Total
1996	600	1208	1854	1756	495	5913
2001	663	1291	2051	2159	516	6803
2007	543	781	1464	2021	351	5160
% change	-9.5%	-35.3%	-21.0%	+15.1%	-29.1%	-12.7%

Table 3.3.1.3 Age Structure (1996- - 2007) (source: Census, 1996, 2001; Community Survey 2007; www.Statsonline.com)

3.3.1.4 Gender

The Census shows that at 2001 the females were in the majority. However, that has changed in the 2007 Community Survey. This ratio has changed from 93.3 males per 100 females in 2001 to 104.6 males per 100 females in 2007.

Table 3.3.1.4 shows that the younger cohorts have a majority of males. This is a rather strange phenomenon. This is brought to an almost equal split as it progresses to the 65 year cohort.

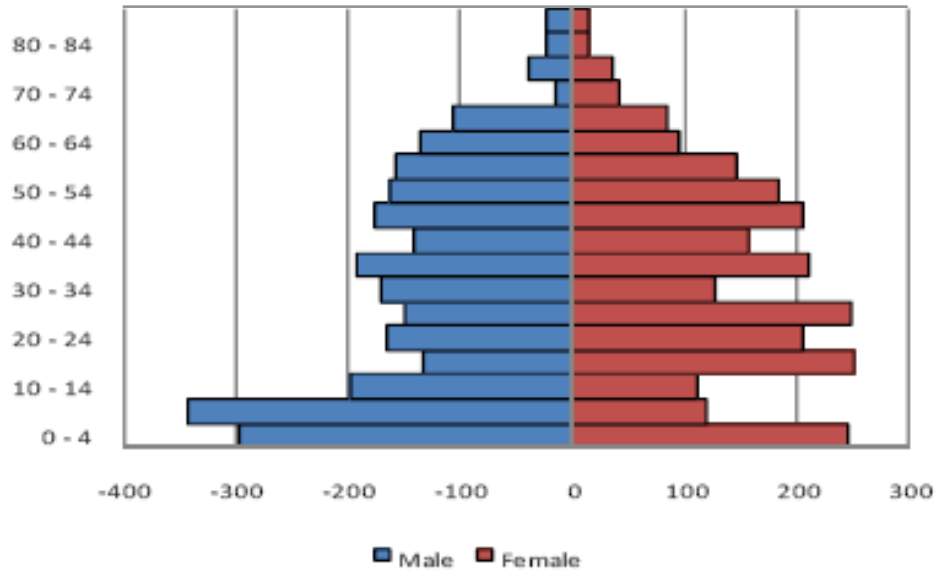
Age cohort	Male (%)	Female (%)	Total
0 – 14	64%	36%	26%
15 – 65	46%	54%	67%
>65	51%	49%	7%

Table 3.3.1.4 Male – female distribution per grouped cohorts (source: Socio-economic Profile 2007)

The age cohort with the most remarkable difference is the age group 5-14 that showed a decrease of -35.3%. All have shown a decrease except the age cohort 35-65% that showed an increase of 15%.

The age – sex pyramid for 2007, Graph 3.3.1.4, shows a rather skewed gender distribution with either the female population overstated or many of the males absent or understated.

Strong irregularities are observed in the 10-14, 20-24 and 30-34 age cohorts.



Graph 3.3.1.4 Age structure (Census 2001 and Community Survey 2007)

3.3.1.5 Ethnic Groupings

Table 3.3.1.5 below compares the race classifications between 2001 and 2007 and shows that the Black population has decreased by 23.8% to almost 62, the Coloured population marginally increased by 1%; the White population has decreased marginally by 0.5% and the Asian population marginally increased by 0.2%. This represents a significant outflow of the Black population from this Municipality.

Laingsburg Municipality	RACE (source: Census 2001; Community Survey 2007)				Total
	Asian	Black	Col	White	
2001	7 (0.1%)	143 (25%)	5612 (82.5%)	1041 (15.3%)	**6803**
2007	15 (0.3%)	62 (1.2%)	4305 (83.5%)	773 (15%)	**5155**
% change	8 (0.2%)	81 (-23.8%)	-1307 (-1%)	-268 (-0.3%)	-1648 (-24.2%)

Table 3.3.1.5 Population (sources: Census 2001; Community Survey 2007)

3.3.1.6 Migration

It should be mentioned that the majority of newcomers to the small towns will be former or existing farm-workers that move off the farms in search of employment. These farm workers will mostly be poor and will probably not be able to contribute financially to their housing in any significant manner and will most likely be recipients of indigent grants if South Africans.

Section 3.3.1.5 and Table 3.3.1.5 above show that Coloureds and Whites groupings have remained generally constant. There appears to have been a significant out-migration of about -23.8% of the Blacks in the area according to the Community Survey statistics of 2007.

3.3.1.7 Urbanisation and Population Distribution

The Municipality has a relatively high urban population of 88%, the majority of whom is located in Laingsburg (5925) and Matjiesfontein (535), see Table 3.3.1.7 and Graph 3.3.1.7.

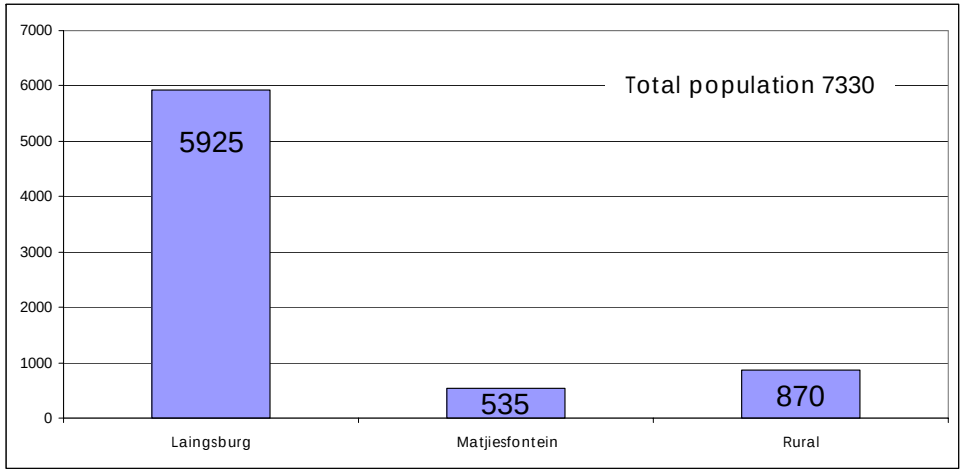
Survey Reviewed	Urban		Rural		Total
1996	3654	62%	2259	38%	5913
2010	6460	88%	870	12%	7720 (50%)* 4462 (-13%)**

* IDP 2007 – 2012 ** Community Survey 2007

Table 3.3.1.7 Urban – rural population split (source: IDP, Census 1996, 2001 and Community Survey 2007)

Laingsburg had 81% of the population and Matjiesfontein 7.3% at 2007.

With 12% (870) of the population living in rural areas and a rural population density of less than 1 person per hectare the Municipality is considered significantly rural in terms of the OECD urban / rural classification definitions (source: Kilimakore Synergetics, 2010)



Graph 3.3.1.7 Settlement population in the Municipality (IDP, 2007 – 2012)

3.3.2 Health

Figure 3.3.2.1 shows the distribution of health facilities within the Laingsburg Municipality. In this figure it is shown that the facilities are located only in Laingsburg and Matjiesfontein.

There are three primary health care facilities in the Municipality: one in Matjiesfontein and two in Laingsburg. Laingsburg has a district hospital as well as a clinic.

There is one doctor in the district hospital, three professional nurses in the primary health care medical facilities and six professional nurses in the district hospital. There are no primary health care doctors. This excludes private medical facilities sector personnel.

People in the Vleiland area travel to Zoar for medical purposes. There are no health facilities north of the N1 Freeway, and none in the other rural areas.

The rural areas are served by mobile clinic routes.

Discussion with the Provincial health practitioners indicated that there are 17 mobile clinic routes in the Municipality. At least one route is covered per day, sometimes even two. Figure 3.3.2.1 presents a rough indication of these routes. Laingsburg also services Sutherland and Merweville outside of the Municipality.

The Swartberg route takes 3 days and is completed every Friday, Saturday and Sunday. If there are medical emergencies, then the farmers bring the patients in either to Matjiesfontein or Laingsburg.

Table 3.3.2.1 below shows the following:

The HIV/AIDS prevalence rate has increased from 2% in 2005 to 2.7% in 2010.

HIV/AIDS related recorded deaths have doubled from 5 in 2005 to 10 in 2010.

No anti-retroviral treatment (ART) registered service points have been designated in the area for HIV/AIDS patients. This means no persons were receiving ARTs in state facilities in 2010.

There are 3 tuberculosis centres in the Municipality.

The measles immunization rates for first immunizations for those under 1 year old is 78% which is 12% below the national target of 90%.

The TB cure rate is 61% which is 24% below the national target of 85%. The nurses' patient workload per day is 23, 11 less than the national target of 1 nurse to 34 patients per day. Therefore, on average, there are more nurses available per patient in the Municipality than elsewhere nationally.

The national target for births below 2.5kg is 10%. This target is exceeded by 12% resulting in about 22% of the births being below 2.5kg. This is a great concern which could be as a result of malnutrition.

		National health targets	
Proportion under 1 with 1st measles immunization	78%	90%	
Percentage births under 2.5kg	22%	<10%	
TB prevalence per 100,000	1 048		
TB cure rate	61%	85%	
Patient – nurse workload per day	23	34	
HIV/AIDS prevalence rate (2005)	2.0%	HIV/AIDS prevalence rates (2010)	2.7%
Number of HIV/AIDS deaths (2005)	5	Number of HIV/AIDS deaths (2010	10

Table 3.3.2.1 Medical statistics (source: Socio-economic Profile, 2007)

There is one old aged home in Laingsburg, situated in the centre of town close to the N1 Freeway.

Sports facilities are located in Matjiesfontein, Laingsburg and Vleiland.

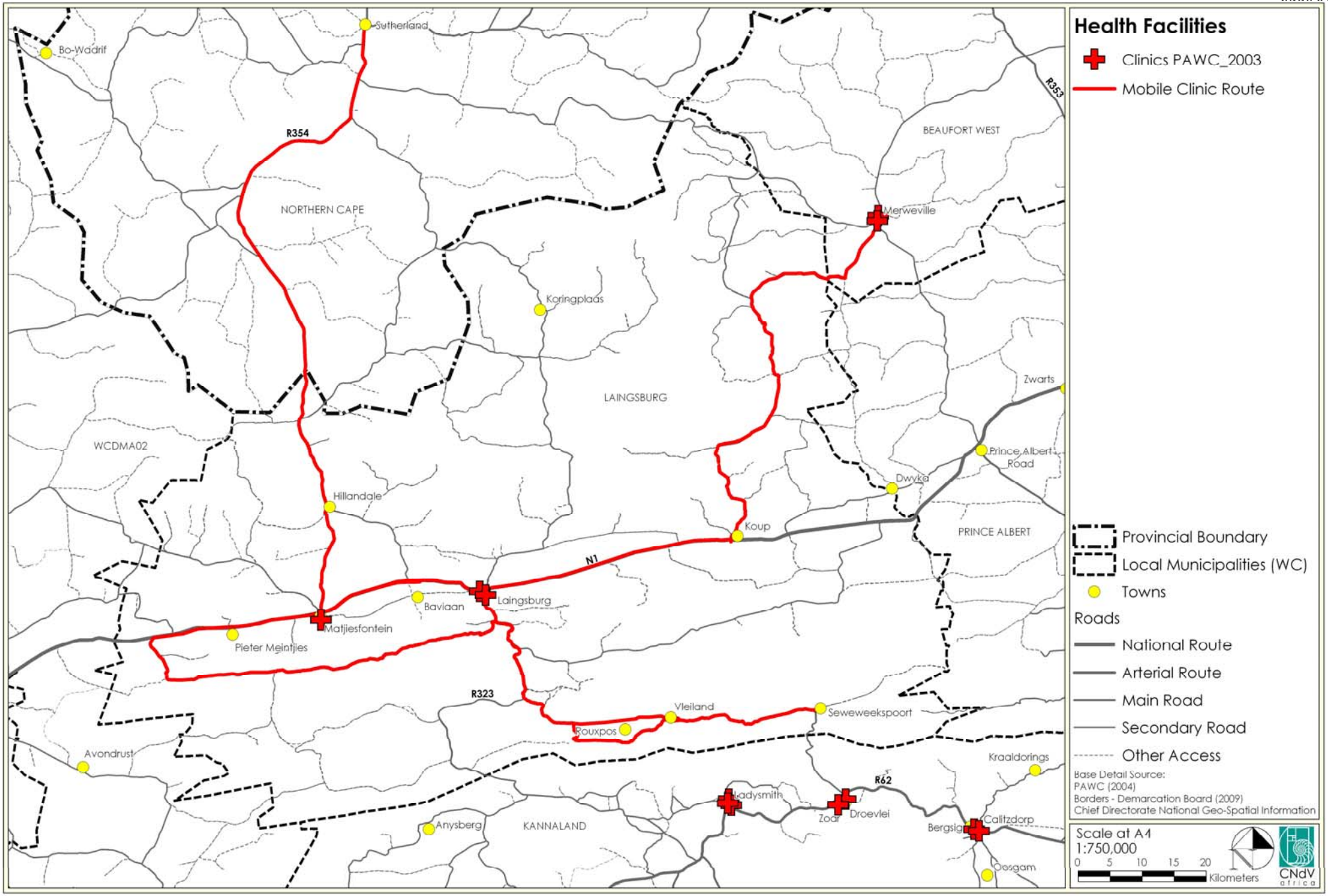


Figure 3.3.2.1 Health Facilities

3.3.3 Education

The education facilities map, Figure 3.3.3.1, shows the distribution of the primary, secondary and combined schools of the Municipality. The map shows that there are no dedicated secondary schools located in the Municipality.

There are two primary schools: one in Vleiland and the other in Matjiesfontein.

There are two combined (Junior and Secondary combined) schools in Laingsburg.

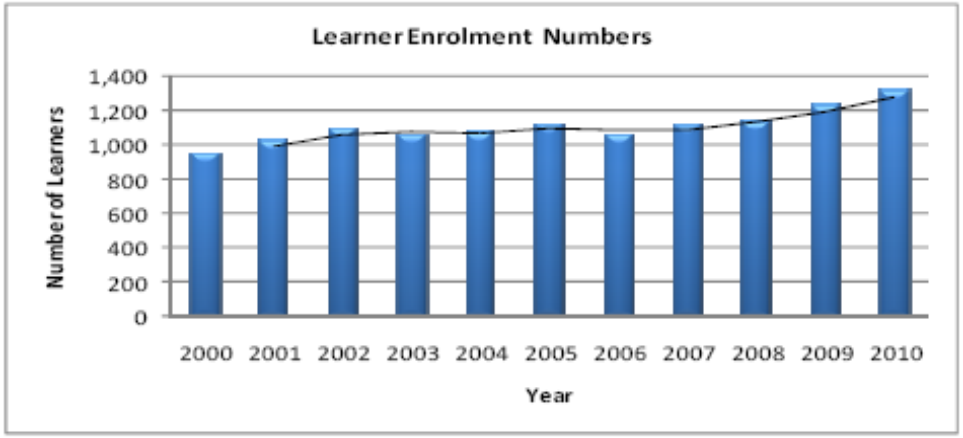
The abovementioned map also shows that the area north of the N1 Freeway is not serviced with education facilities and that the schools are generally distributed along the major road networks in the Municipality.

The following table, Table 3.3.3.1, shows the change in the education levels, considering the 2001 Census and 2007 Community Survey.

Education	>20 years old		
	2001	2007	% change
No School	826	768	-7,6%
Some Primary	1078	1112	3,1%
Complete Primary	399	471	15,3%
Secondary	1185	1177	-0,7%
Grade 12	514	545	5,7%
Higher	242	277	12,6%
Out of Scope/Unspecified/Institutions		813	
TOTAL	**4244**	**5163**	**17,8%**

Table 3.3.3.1 Levels of Education by Age (source: Census 2001/ Community Survey 2007)

Graph 3.3.3.1 shows that learner enrolment numbers have generally increased from about 949 in 2000 to about 1317 in 2010. This shows an annual average rate of 3.3%.



Graph 3.3.3.1 Laingsburg learner enrolment numbers in 2000 and 2010 (source: Western Cape Department of Education, 2010)

There are no Further Education and Training (FET) colleges in Laingsburg with the closest one being located in either Oudtshoorn, Paarl, Stellenbosch or Worcester.

Table 3.3.3.2 below shows that 60% of the population was literate in 2007 (i.e. 14 years old and older and have completed up to Grade 7). The Socio-economic Profile notes a literacy race of 62.6%. The table also shows that about 18.45% of the population had no schooling at all.

Level of education	Number	%
Up to Grade 6	596	17.27%
> Grade 7	2062	59.73%
No schooling	637	18.45%
Institution, unspecified and <5 years	157	4.55%
Total	**3452**	**100.00%**

Table 3.3.3.2 Level of Education (source: Community survey, 2007)

Figure 3.3.3.2 shows the spatial distribution of those without secondary school education. It appears that, based on the 2001 statistics, 60% of the population had some secondary and higher education, the majority of the population had no secondary education. This contradicts the Community Survey.

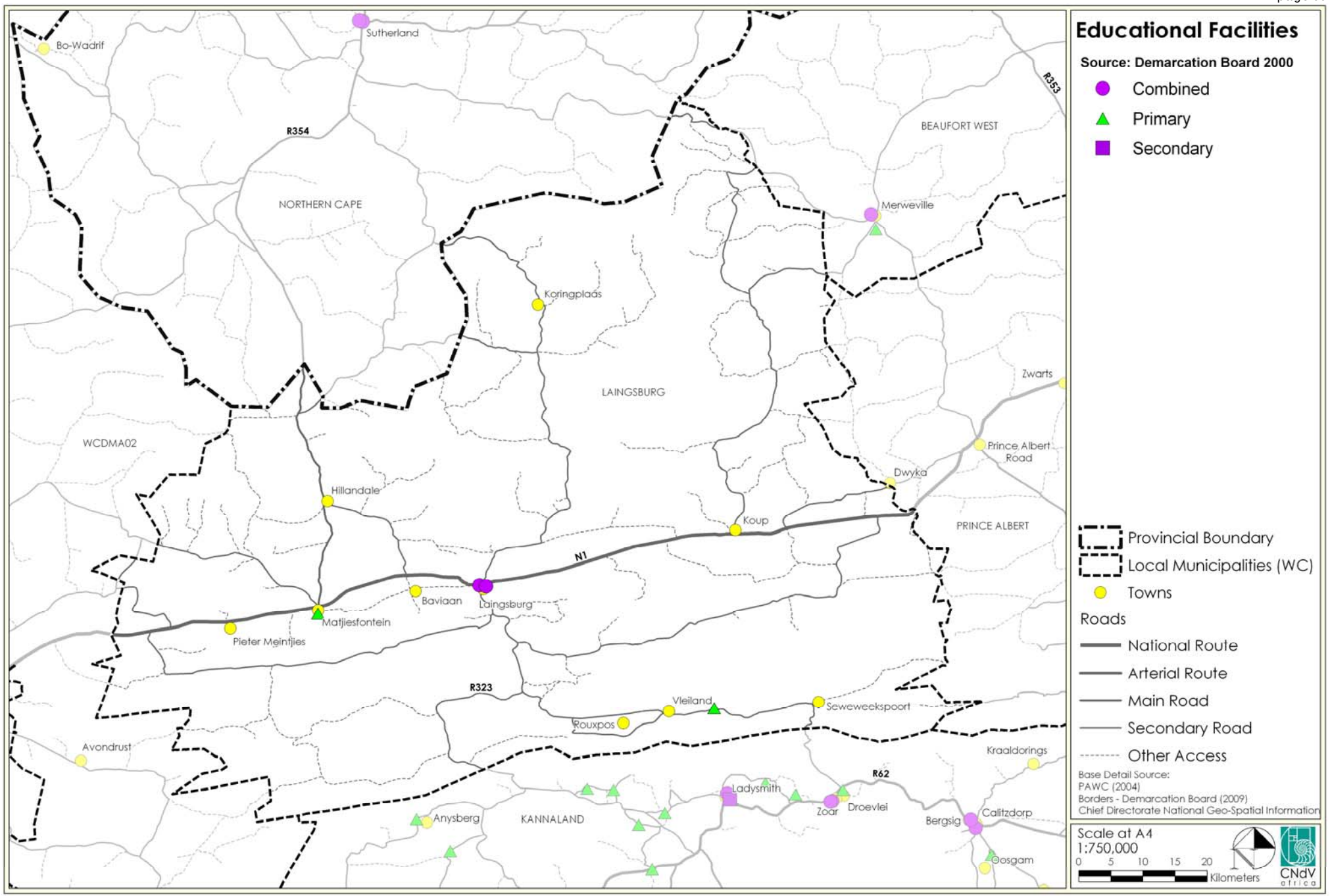


Figure 3.3.3.1 Educational Facilities

Implications for Laingsburg Municipality

- An FET college that can also accommodate skills training and entrepreneurial development training is required. This facility should preferably be accommodated in existing buildings.
- Due to the qulality of facilities, learners have to travel from outside their areas to Laingsburg. One example is cited in the public meeting where learners are transported in daily from Touwsriver.

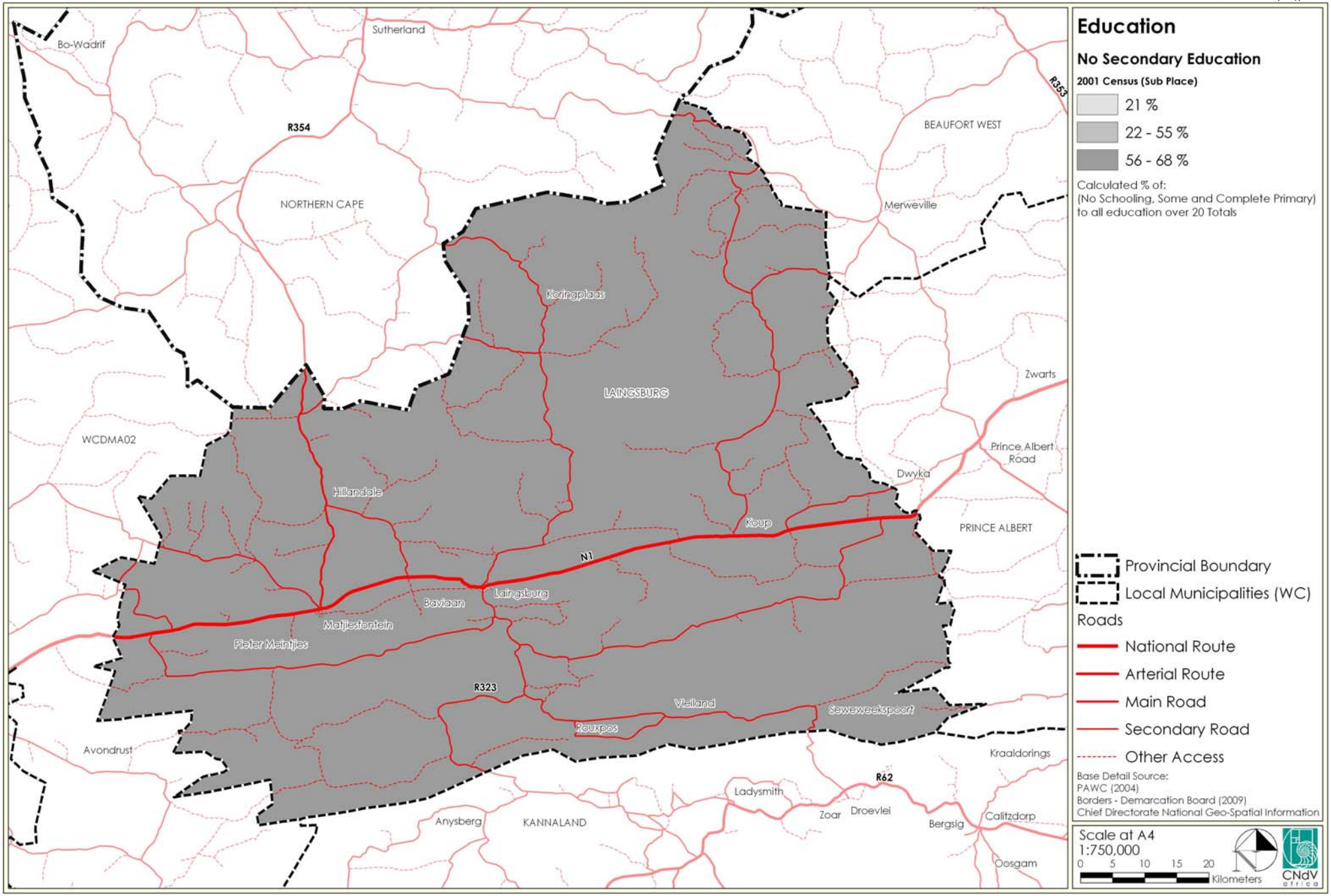


Figure 3.3.3.2 Census Education

3.3.4 Employment, Occupation and Income Levels

3.3.4.1 Labour Force

Table 3.3.4.1 shows that there has been a decrease in the economically active population of about 18.1% between 2001 and 2007. The total economically active population in 2007 was about 3478 persons. This is down from the 4245 person in 2001. The labour force showed a decline of 21.5%.

Table 3.3.4.1 further shows that in 2007 there were about 1669 persons employed, 552 persons unemployed and an unemployment rate of 24.9% that has decreased from 30.2% in 2001. However, this apparent improvement is due to the fast declining economically active population and not due to growth in actual employment. The decline indicates that the local employment market is unable to absorb all the entrants and participants.

	Total Ppn aged 15 -65	Labour force	LFPR	Employed	Unemployed	Unemployment rate (%)
2001	4,245	2,831	66.7	1,976	855	30.2
2007	3,478	2,221	63.9	1,669	552	24.9

Table 3.3.4.1 Characteristics of the total working age population and labour force, 2001 and 2007 (source: Statistics SA Census 2001 and Community Survey 2007)

3.3.4.2 Employment

Table 3.3.4.2 shows that there has been an average -7.29% annual decline or a -36.49% overall decline in employment between 2001 and 2007 which resulted in the nett loss of 1175 jobs during this period.

Sector	2001	% total	2007	% total	Diff Jobs	Growth PA	Annual Growth
Agriculture, hunting, forestry and fishing	866	46.81%	451	38.38%	-415	-47.92%	-10.30%
Manufacturing	54	2.92%	125	10.64%	71	131.48%	15.01%
Electricity, gas and water supply	12	0.65%	34	2.89%	22	183.33%	18.96%
Construction	63	3.41%	88	7.49%	25	39.68%	5.73%
Wholesale and retail	355	19.19%	188	16.00%	-167	-47.04%	-10.05%
Transport, storage and communication	63	3.41%	20	1.70%	-43	-68.25%	-17.41%
Finance, insurance, real estate & business	48	2.59%	81	6.89%	33	68.75%	9.11%
Community, social and personal services	389	21.03%	188	16.00%	-201	-51.67%	-11.41%
total	**1850**	**100.00%**	**1175**	**100.00%**	**-675**	**-36.49%**	-7.29%

Table 3.3.4.2 Sector contributions to employment 2001 vs 2007 (source: Multi-Purpose Business Solutions, 2011)

The sectors that shed the most jobs were in the primary economy: Agriculture, Hunting, Forestry and Fishing (415) and the tertiary: Wholesale and Retail, and Finance, Insurance, Real Estate and Business (both 167).

Figure 3.3.4.1 shows that the employment is concentrated around the urban areas, particularly Laingsburg.

Note: The Community Survey, 2007 provides the following cautionary note to users of the survey:

- Unemployment in the Community Survey is higher and less reliable (because of questions that were asked differently). (Socio-economic Profile 2007)

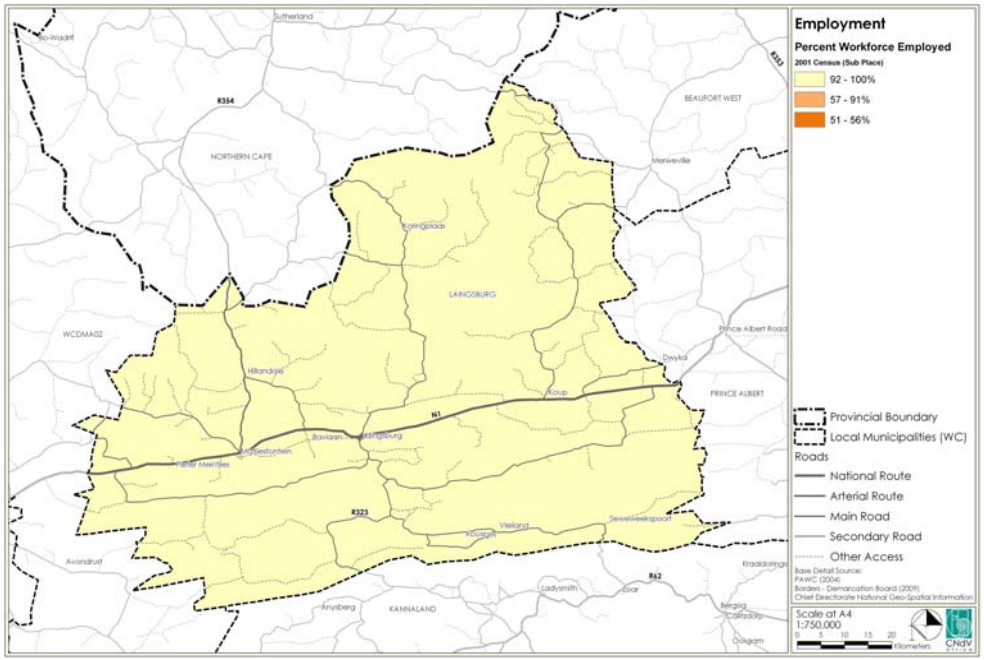


Figure 3.3.4.1 Employment

3.3.4.3 Sector Contribution to Employment

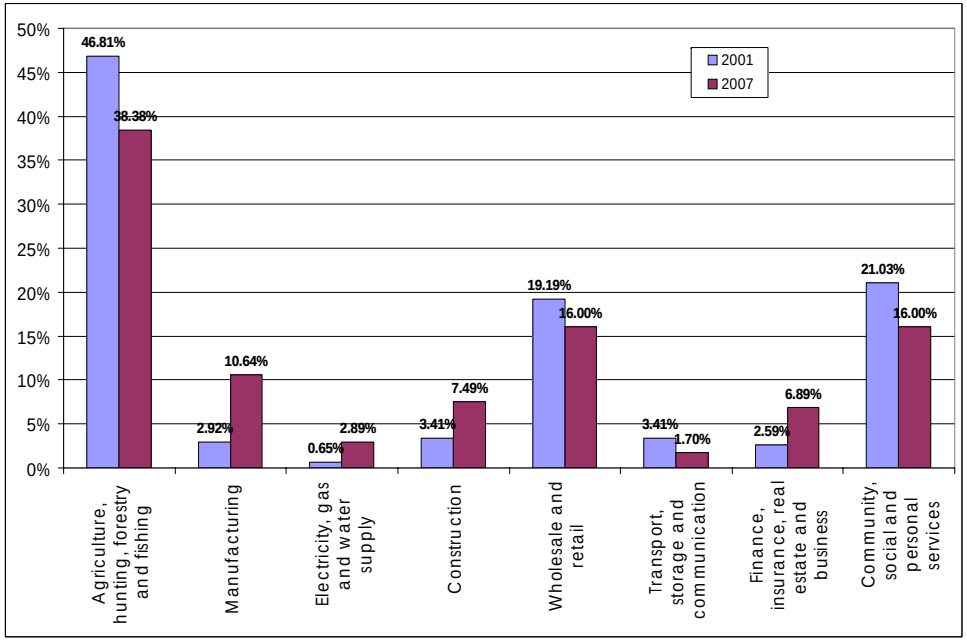
Tables 3.3.4.3 and Graph 3.3.4.1 show the sector contribution to employment comparing the Statistics SA Census of 2001 and the Community Survey of 2007.

The comparison between these surveys indicated that there has been a 36,49% reduction in the employment and an estimated 675 jobs between these two census periods.

Given the current recession situation and declining economy, it is expected that more jobs may have been lost since 2007.

					difference in employment			
Sector	**2001**	**% total**	**2007**	**% total**	**#**	**%**	**% pa**	**Overall % diff**
Primary Sector	866	46.81%	451	38.38%	-415	-47.92%	-10.30%	-8.43%
Secondary Sector	129	6.97%	247	21.02%	118	91.47%	13.23%	14.05%
Tertiary Sector	855	46.22%	477	40.60%	-378	-44.21%	-6,32%	-5.62%
total	**1850**	**100.00%**	**1175**	**100.00%**	**-675**	**-36.49%**	**-7.29%**	-36.49%

Table 3.3.4.3 Employment per sector comparisons 2001 and 2007 (source: Statistics SA, Community Survey 2007)



Graph 3.3.4.1 Industry: Contribution to employment per sector 2001 and 2007 (source: Stats SA, Community Survey 2007)

Agriculture is the only significant employment component of the primary economy and it declined by 10.3% per annum for the 2001-2007 period.

The secondary sector which comprises 1) manufacturing, 2) electricity, gas and water supply, and 3) construction showed an increase of 91.47% in jobs from 129 jobs in 2001 to 247 in 2007. The greatest increase in employment was in the electricity, gas, water supply as well as the manufacturing components sector which was 183% and 181%. Construction also showed an increase of 39.68%. The net gain in jobs has been 118 in the secondary sector.

The tertiary sector, composed of 1) wholesale and retail, 2) transport, storage and communication, 3) finance, insurance, real estate and business 4) community, social and personal services showed a 44% decline over the 2001–2007 period. This resulted in the loss of about 378 jobs. This was mainly due to a 47% decline in the wholesale and retail sector, 68% decline in transport, storage and communication and 51% decline in community, social and personal services. The financial services sector showed a 68% increase.

3.3.4.4 Unemployment

The analysis for unemployment is narrowly defined as based on the number of people who have not worked for 2 weeks prior to the survey date but have taken active steps to look for employment. This analysis shows that the unemployment is concentrated within the Coloured population at the highest rate of about 30.1% in 2007. This population group also represents about 80.6% of the total labour force and about 97.6% of the unemployed.

Population group	**Unemployment rate within group**	**Percentage share of the labour force**	**Percentage share of unemployed**
African	28.3	2.1	2.4
Coloured	30.1	80.6	97.6
Indian or Asian	0.0	0.0	0.0
White	0.0	17.3	0.0

Table 3.3.4.4 Racial profile of unemployment in 2007 (source: Stats SA, Community Survey 2007)

The unemployment by age cohort table is based on the 2007 Community Survey, Table 3.3.4.5 shows that the highest unemployment rate are amongst those between 15 and 19 years old about 60.8%. People between 25 and 34 show the second highest employment rate of 45.5%, make up the second largest proportion (24.8%) of the labour force and the largest share 30.8% of unemployment.

Age	Unemployment rate within group	Percentage share of the labour force	Percentage share of unemployed
15 -19	60.8	4.6	11.2
20 -24	45.5	14.6	26.8
25 -34	30.9	24.8	30.8
35 -44	21.3	25.0	21.4
45 -54	10.1	19.6	8.0
55 -65	3.9	11.5	1.8

Table 3.3.4.5 Unemployment (source: Statistics SA, Community Survey 2007)

Table 3.3.4.6 shows the number of jobs created per annum. Given a nett loss of jobs of -7.2% per annum, it is noted that more jobs are lost than created per annum, e.g. 1955 jobs were created between 2006 and 2008 with 307 as the nett loss between 2001 and 2007.

JOB CREATION	
Years	Jobs
2006/07	627
2007/08	626
20008/09	702
TOTAL	**1955**

Table 3.3.4.6 Job creation by the Municipality (source: Laingsburg Annual Report 2008/09)

Implications for Laingsburg Municipality

- The employment prospects in the Laingsburg Municipality are challenging in that a large portion of the economically active population are underskilled and under-educated which means their best employment prospects are in agriculture and service industries like tourism.
- However, both these sectors showed employment declines over the period 2001 – 2007 and this situation may have worsened during the subsequent recession.Manufacturing and transport have shown the most growth but need skills training and may also have competition from social grants.
- Permanent jobs declining in commercial agriculture although still dominant source of employment by far
- More casual labour residing in town
- Secondary sector employment increasing – manufacturing – serving N1 traffic (?)
- Government and tertiary sector employment declining
- Potential growth in tourism sector:
  - Gateway to Moordenaars Karoo and Klein Swartberg Wilderness areas;
  - Flood tours;
- Potential employment growth from “retiree / escape from the cities sector” for jobs in domestic work, retail, tourism.
- The FET college, with additional training and education modules, will be an essential component of an employment creation strategy in Laingsburg.

3.3.4.5 Income

Figure 3.3.4.2 provides a graphic representation of the geographical distribution of income in the municipality which shows that the southern areas have the lowest incomes. The percentage of households earning between R18,000 and R42,000pa (i.e. R1,500 – R3,500 pm) declined from 38.1% to 18.2% and between R42,000 to R54,000pa declined from 8.4% to 8.0% respectively. The number of households earning between R54,000 and R72,000pa increased from 6.5% to 9.6% in the period 2001 and 2009.

Table 3.3.4.7 shows the wage bills for the different sectors. This reflects that the majority of the wages are from the Finance, Insurance, Real Estate and Business Services component which is 34.73% of the overall income.

Economic sector	Gross Value Added				Growth for Period	Annual Growth
	2001	% of total	2009	% of total		
Agriculture, hunting, forestry and fishing	22 673	25.35%	27 069	22.15%	19.39%	2.24%
Manufacturing	3124	3.49%	2 838	2.32%	-9.15%	-1.19%
Electricity, gas and water supply	1 661	1.86%	2 023	1.66%	21.79%	2.50%
Construction	1 617	1.81%	3 013	2.47%	86.33%	8.09%
Wholesale & retail	5 604	6.27%	5 822	4.76%	3.89%	0.48%
Transport, storage and communication	15 034	16.81%	17 135	14.02%	13.97%	1.65%
Finance, insurance, real estate and business services	22 908	25.62%	42 448	34.73%	85.30%	8.01%
Community Services, social and personal services	16 805	18.79%	21 868	17.89%	30.13%	3.35%
TOTAL	**89 246**	**100.00%**	**122 216**	**100.00%**	**36.67%**	**3.98%**

Note: Rand value in R1000

Table 3.3.4.7 Sector contributions to GVA in 2001 and 2009 for the Laingsburg economy (source: Western Cape Provincial Treasury (2010), 2001 Census Survey (Statistics South Africa, 2003) and Community Survey (Statistics South Africa, 2007))

The second highest wage contribution sector is agriculture, hunting, forestry and fishing at 22.1% followed by Community, Social and Personal Services at 17.89% and Transport, Storage and Communication at 14.02%. The Laingsburg Municipality generates R122.2 million of Gross Value Added (GVA) whereas the Central Karoo only R1,130 million. The Laingsburg Municipality increased its GVA to the Central Karoo from 10.4% in 2001 to 10.81% in 2009. This reflects a 3.98% pa increase between 2001 – 2009 which reflects an overall increase of 36.67% increase over the period. (MPBS, 2011)

The largest sectors in the Laingsburg economy, namely, Finance, Insurance, Real Estate and Business Services as well as Agriculture, Hunting, Forestry and Fishing combined contributed to 50.97% of the GVA in 2001 and this increased to 56.88% in 2009.

Manufacturing showed a negative growth of -9.15%, see Table 3.3.4.7 above. The two sectors that show the greatest growth over the same period are Construction with 86.33%, followed by Finance, Insurance, Real Estate and Business with 85.30%.

Laingsburg Municipal area has a faster growth rate per annum of 3.98% compared to the Central Karoo District of 3.57%. (MPBS, 2011)

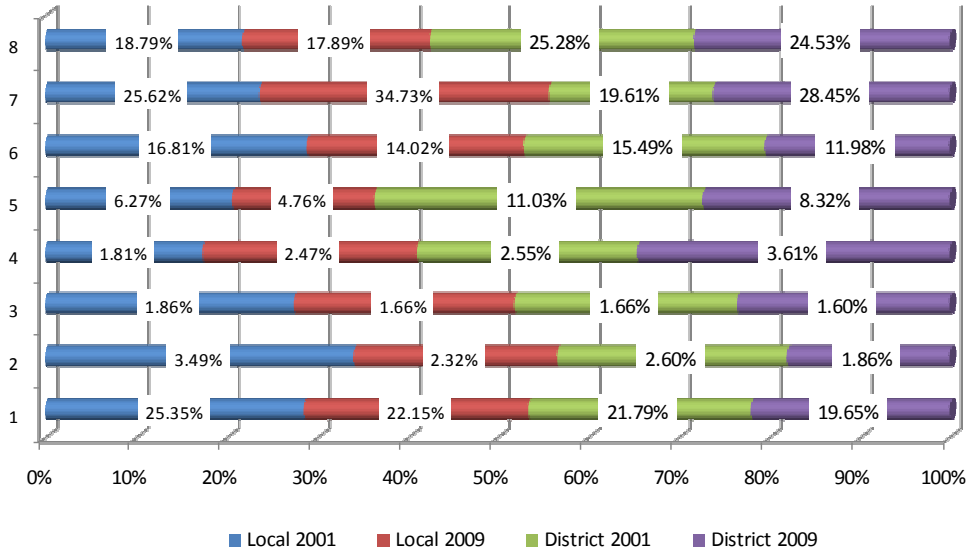
Graph 3.3.4.2 suggests that the Agriculture, Hunting, Forestry and Fishing sector has declined in terms of its contribution at the local and district level from 2001 to 2009. The contribution of Agriculture to the GVA of the local economy declined by 12,64% from 2001 to 2009, while the decline in the District economy was 9,82% over the same period.

Conversely, the Finance, Insurance, Real Estate and Business Services sector contribution to the local economy increased by 35,58% from 2001 to 2009, while an increase of 45,10% in the sector's contribution to GVA was achieved in the district municipal area over the same period. (JZ Bloom, 2011)

The tertiary sector has shown an increase of 3.93%. Overall there has been a 36.67% at 3.98% pa which represents a 36.67% overall increase or 3.98% pa increase. The overall sector contributions to the GVA has increased from R90 million in 2001 to about R122 million in 2009.

Sectors	Years		Difference	Direction
	2001	2009		
Primary	25.35%	22.15%	-3.20%	↓
Secondary	7.16%	6.44%	-0.72%	↓
Tertiary	67.48%	71.41%	+3.93%	↑
Overall (R89,426m in 2001 and R122,216m in 2009)			+36.67	+3.98pa

Table 3.3.4.8 Sector contributions to GVA (source: MPBS, 2011



Legend:

1 Agriculture, hunting, forestry and fishing
2 Manufacturing
3 Electricity, gas and water supply
4 Construction
5 Wholesale and retail
6 Transport, storage and communication
7 Finance, insurance, real estate and business services
8 Community, social and personal services

source: Adapted from Western Cape Provincial Treasury (2010)

Note: Mining and quarrying excluded due to lack of activity in the local or district municipality

Graph 3.3.4.2 Sector contributions to GVA for the local and district municipal areas in 2001 and 2009 (source: JZ Bloom, 2011)

3.3.4.6 Individual and Household Income

Graph 3.3.4.3 below, shows the individual income per different income category. This graph shows that more than 83.7% of the individuals earn less than R3 200 per month. This reflects a generally very poor population in the Municipality.

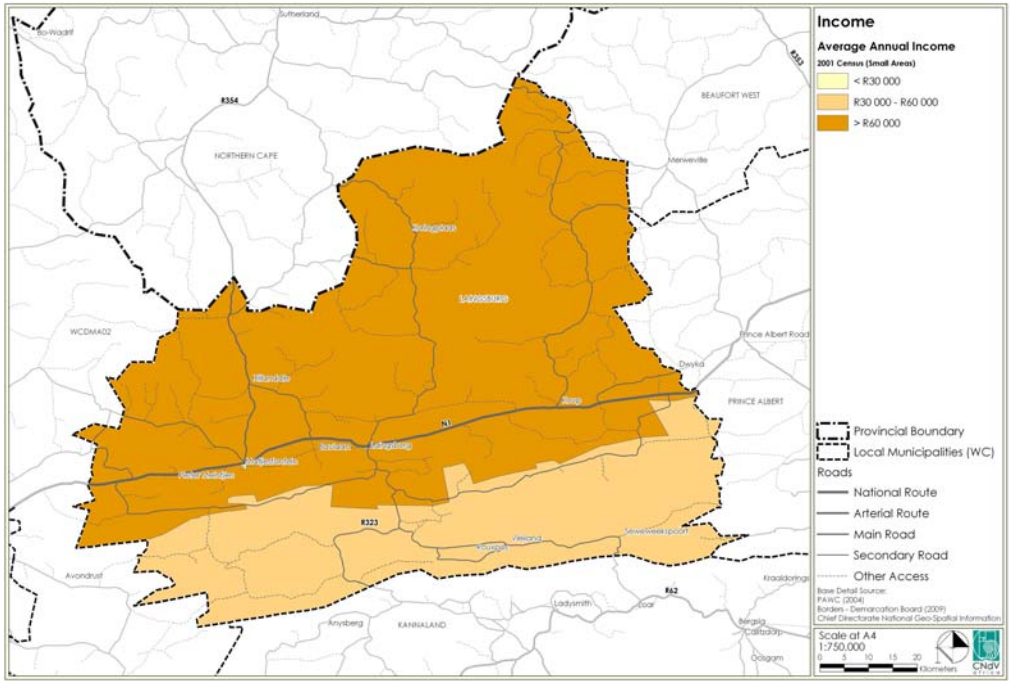
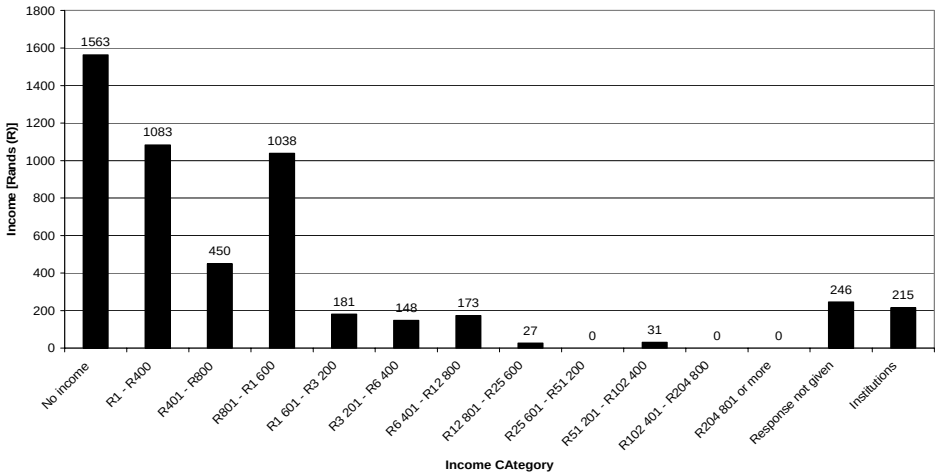


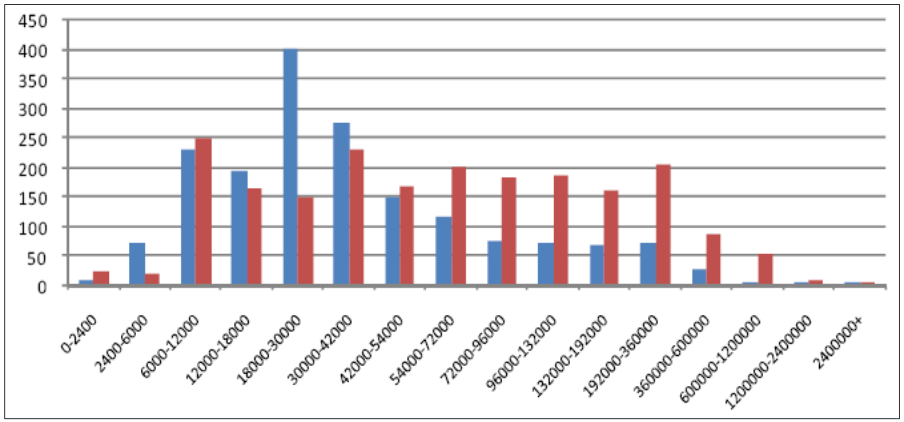
Figure 3.3.4.2 Income

The annual household income comparison between 2001 and 2009 is illustrated in Graph 3.3.4.4. This graph shows that generally the number of households earning more than R42 000 pa and more have increased and households earning less than R42 000 have decreased.



Graph 3.3.4.3 **Annual Individual Income** (source: Stats SA Community Survey, 2007)

This trend reflects an upward mobility of the people within the area except for the very low R0 – R2 400pa and the R6 000 - R12 000pa household categories. The overall conclusion is a general improvement in households income levels within the Municipality.

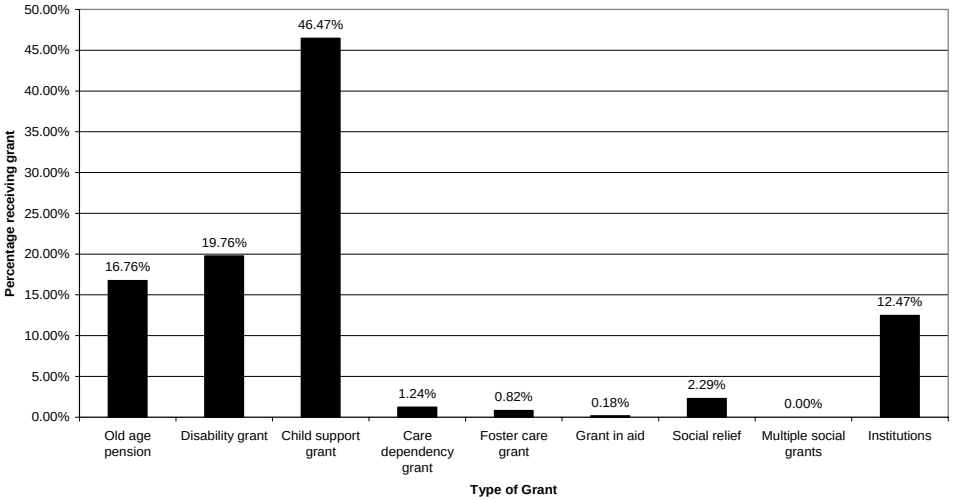


Graph 3.3.4.4 **Annual household income (2001 and 2009)** (source: Provincial Treasury, 2010)

The 2007 survey noted that about 1563 persons had no income, see Graph 3.3.4.4. This represents about 30% of the total population of the Municipality. The IDP notes that this figure is 5.7% or 111 households in 2010.

The attached map, Figure 3.3.4.2, shows the distribution of annual average household income. This map shows that the areas south of the N1 Freeway reflect the lower income population within the Municipality.

The following graph, Graph 3.3.4.5 shows the different types of social grants being received by members of the Laingsburg community. 46.47% of these grants are child support grants which is the biggest category followed by disability grants (19.76%), old age pensions (16.76%) and institutions (12.47%). Approximately 1700 social grants are being paid out within the Municipality.



Graph 3.3.4.5 **Social Grants** (source: Stats SA Community Survey, 2007)

Approximately 300 households are registered as indigents in the 2010 / 2011 financial year. (IDP, Socio-economic Profile)

There has been an increase (0.6 – 1.1%) in the number of households in extreme poverty (0 – R2400) between 2001 and 2009.

3.3.4.7 Local Economic Development

The local economic development plan or strategy that was completed in 2006 notes the sector structure of the Laingsburg economy as depicted in Table 3.3.4.9.

		GRP %	Employment %	Significance Index	Rank
A	**Primary Sector**				
1	Agriculture	31.1	41.8	72.9	1
2	Mining	0.5	0.4	0.9	
B	**Secondary Sector**				
3	Manufacturing	2.0	7.4	9.4	7
4	Electricity and Water	1.0	0.3	1.3	9
5	Construction and Repairs	1.6	4.4	6.0	8
C	**Tertiary Sector**				
6	Trade	7.9	23.5	31.4	2
7	Transport	13.8	4.7	18.5	5
8	Tourism	8.6	7.2	15.8	6
9	Finance and Insurance	16.8	2.3	19.1	4
10	Community, social and personal services	16.7	8.0	24.7	3
	Total	**100**	**100**		

Table 3.3.4.9 Sector Structure of the Laingsburg Economy (2002) (Source: Adapted from Central Karoo IDP, 2002 by Wolfgang Thomas (2006))

N.B: 1) To deduce actual values these percentages can be linked to the estimated total employment in 2002 of 2074 and a GRP of R64 million (less than 0.1% of the Western Cape); 2) The "significance index" is the sum of the GRP and the employment percentages.

Table 3.3.4.9 ranks the different sectors based on their contribution towards the gross regional product as well as its contributions to employment. In this regard agriculture has the highest significance index. This significance index is a combination of the percentage of gross regional product and employment, 73%. The significant index of 73 ranks agriculture as number 1, trade is ranked as number 2 with 31.4 as an index, community, social and personal services is ranked number 3 with 24.7 as its index. It should be noted that generally these are still the same priority as shown in the section above.

The LED study notes that Laingsburg Municipality has a number of elements that give it a competitive advantage. These are:

- Well established agricultural sector predominantly made up of sheep, (merino and dorper) farming for both meat and wool. It should be noted that these are historical elements that gave rise to the establishment of Laingsburg town. There is a small amount of crop farming occurring in the well watered valleys.
- Laingsburg town has tourism potential arising from its location along the N1 Freeway and the railway both of which connect between Cape Town and Gauteng.
- The Municipality has a primarily urban population. More than 80% of the population is located in Laingsburg and Matjiesfontein, which are the urban centres within the municipality.
- Civil services infrastructure seems to be adequately sized for the current and modest future projections.
- Good level of access to services are experienced in the area.

Although the LED strategy notes competitive advantages there are a number of challenges that Laingsburg needs to deal with:

- It has a single dominant economic sector; agriculture. As noted previously, sheep farming is the largest component of the dominant sector which is agriculture. There is a need to develop a more diversified economy for the area.
- A lack of employment opportunities and low levels of self-esteem.
- There are not many employment opportunities in the area and very few have self-employment opportunities.
- The shortage of skills – there are high illiteracy levels resulting in a poorly skilled population.
- Poverty and substance abuse – there are high levels of substance abuse in the area.
- The impact of mining does not seem to have been considered.
- Spatial segregation – Laingsburg town and Matjiesfontein depicts a similar pattern to most towns in South African towns where the legacy of apartheid planning is ingrained in the structure of settlements. Historically privileged groups are closer to town and marginalised groups are located further away from town. They are often separated by transport or river corridors. Both Laingsburg and Matjiesfontein have these patterns of residential segregation, see Sections 3.4.2 and 3.4.3.

This dilutes the economic resource of the town as so much time has to be spent walking to the CBD. This is particularly true of Bergsig in Laingsburg

town which is across two river corridors and a transport corridor approximately 1.5 – 2kms (30 to 40mins walk) from the town centre.

The vision of the LED strategy is to create sustainable communities in the central Karoo through local economic development. A number of projects are identified. These are shown on Table 3.3.4.10.

Agri-business	Transport and services	Tourism
1. Olive production and processing	1. Long distance taxi stops	1. Floriskraal dam – trout fishing
2. Cheese making	2. Installation of pedestrian and bicycle pathways	
3. Fruit and vegetable processing	3. Truck shop upgrade	
4. Cold storage facility	4. Truck stop and maintenance centre	
5. Skin hides and leather based craft production	5. Vehicle test centre	
6. Wood based products	6. Local taxi services	
	7. Pallet, crate and dry rack manufacturing	
	8. Sleeper wood furniture manufacturing	

Table 3.3.4.10 LED Project Proposals (source: LED, 2006)

A number of the abovementioned projects have already been completed, for example, the installation of pedestrian and bicycle paths.

3.3.5 Land Reform

Table 3.3.5.1 shows the results of a socio-economic profile survey of 17 users of the municipal commonages conducted as part of the Area Based Plan for the Central Karoo(ABP, 2008). This survey revealed that about 70% of the people farming on the commonage in Laingsburg are unemployed, 63% receive pension grants and that the average age of the head of the household is 59 years. Each of these persons interviewed had at least two dependants and only received an income of about R28 per month from agriculture.

	Laingsburg
No. of respondents	17
Socio-economic profile	
Av. no.of children	2.3
Av.no.of adults	2.1
Av.total household size	4.3
Av.monthly household income (R.)	1009
Av.income from agriculture (R.)	28
Av.age of head of household (yrs)	58.9
Sex of head of household	
Male%	81.2
Female%	18.8
Education level of head of household	
Av.grade	3.6
Employment status of head of h/hold	%
a. Full-time farmer	6
b. Farmworker	6
c. State official	0
d. Private sector	13
e. Own business	6
f. Unemployed	69
Grant received by head of household	
a. Pension	63
b. Child	6
c. Disability	0
d. Other/None	31
Other income (head of household)	
a. Produce sales	0
b. Spaza shop	0
c. "Smokkel"	0
d. Other	13

Table 3.3.5.1 Socio-economic profile of commonage and municipal land users
(source: Central Karoo ABP, 2008)

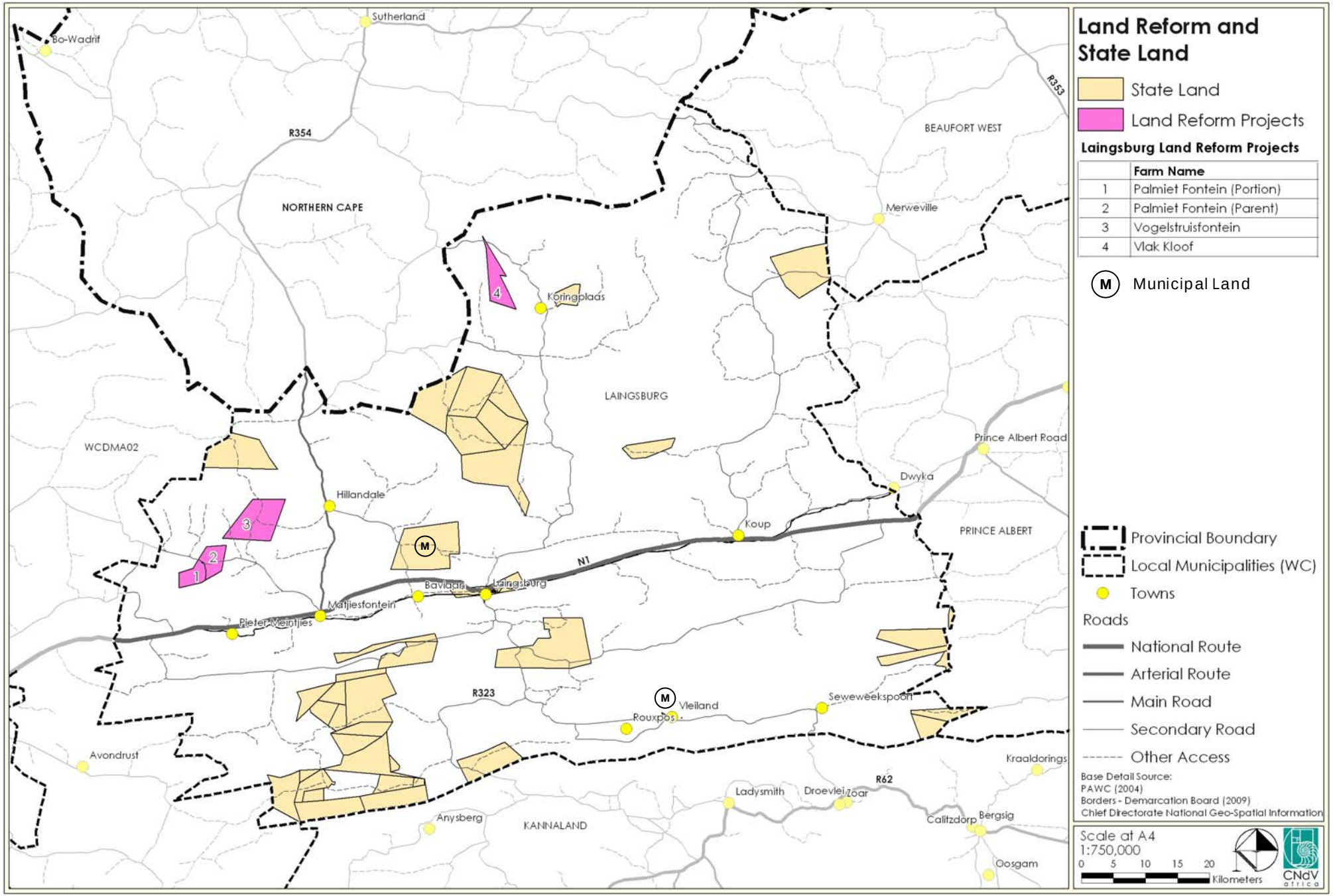


Figure 3.3.5.1 **Approved Land Reform Projects** (source: DRDLR, 2010)

The ABP makes the following observations are it relates to agricultural land reform:

- The last half a century has seen the increase in the size of farms, resulting in much fewer farms and the lost of farm related jobs. This resulted in the people moving to the urban settlements, e.g. Laingsburg.

An analysis of 30 farmers of the 154 farms in Laingsburg revealed the following with regard to the farm workers given the current practise and the common practice ten years ago:

- Currently have 73 permanent workers, compared to 94 workers;
- Currently 240.5 have head of stock, compared to 50.5 head of stock;
- Currently use 1443ha for stock compared to 303ha;
- Currently use 201,9ha for crops compared to 1,7ha; (ABP, 2008)
- Game and "life-style farming" has contributed to this trend by pushing land prices to above its productive value;
- The historic pattern of grouping land reform beneficiaries to get the benefit of amalgamated grants (to purchase the farm) did not work;
- The management of the commonages by the municipality is ineffective and the commonages are receiving growing pressure as a result of more stock on the commonages;
- There is a lack of co-ordination of the role players in land reform. (ABP, 2008)

The ABP notes that by 2008, only 0,89% of the agricultural land in the Central Karoo District was transferred to Blacks. This is considerably below the target of 30% of land that ought to be transferred by 2014. To achieve this target, about 162 000 ha would have to be transferred per year. (ABP, 2008)

The ABP noted that 1842 ha was available as commonage (6202 ha in Zoutkloof was leased to an emergent black farmer) and that the new demand for additional land is only 913ha leaving about 929ha as surplus. This new demand is based on the departure point that the commonage land will only be used for food security and emergent farmer entry. Therefore, the ABP argues that a number of farmers (larger stock owners) are in a position to move off the commonage onto bigger privately owned farms, leaving the commonage for truer emerging farmers.

The ABP calculates that Laingsburg would need about 11 769ha of land by about 2013 for the natural growth of stock. This land is for emerging farmers with less than 30 head of stock. A PLAS 1 Farm is for operations of between 30 and 90 head of stock. The assumption is that owners with more than 90 head of stock would get a PLAS 2 Farm. Famers with above 300 head of stock will be able, it is assumed, to buy their own private land.

The ABP proposes the following progression for aspirant stock farmers:

Level	No. of CSUs	Type of Property
Emergent	0 – 30	Commonage
	30 – 90	Plas 1 Farm
	90 – 300	Plas 2 Farm
Commercial	>300	Private purchase

The ABP notes that the process to transfer the Transnet land in Matjiesfontein (covering the current village) is currently in underway.

The ABP concluded that the current budget to purchase and transfer land by 2013 will only make 4% of a difference in the ownership of the agricultural land in the Central Karoo District. (ABP, 2008)

It is estimated that the above could produce about 35 new emergent farmers in Laingsburg by 2013.

Figures 3.3.5.1 and 3.3.5.2 show the Commonage, PLAS and LRAD land in the Laingsburg Municipality. The projects in the Laingsburg Municipality are: Zoutkloof and Laingsburg Commonages; and the Vleiland and Viskuil projects.

Implications for the SDF

- Laingsburg town commonage has the potential for emergent stock farming and agriculture where soils are suitable, water is available and there are farmers willing and able to begin food gardens and other forms of intensive agriculture.
- The potential of the Transnet land at Matjiesfontein should be investigated for partial use for intensive agriculture.
- The Vleiland area should also be investigated for similar potential.

Laingsburg LRAD and Commonage Land

LRAD

Index	Project	Farm	SG_#
31	VLEILAND PROJECT	BUFFELSRIVER	C0430000000022500000
32	VAN AS/ VISKUIL	VISKUIL	C0430001000000810000
32	VAN AS/ VISKUIL	VISKUIL	C0430001000001140000
32	VAN AS/ VISKUIL	VISKUIL	C0430001000000110000
32	VAN AS/ VISKUIL	VISKUIL	C0430001000012650000

COMMONAGES

Index	SG_#	Farm
12	C04300000000010200001	Zoutkloof
13	C04300010000000100000	Commonage

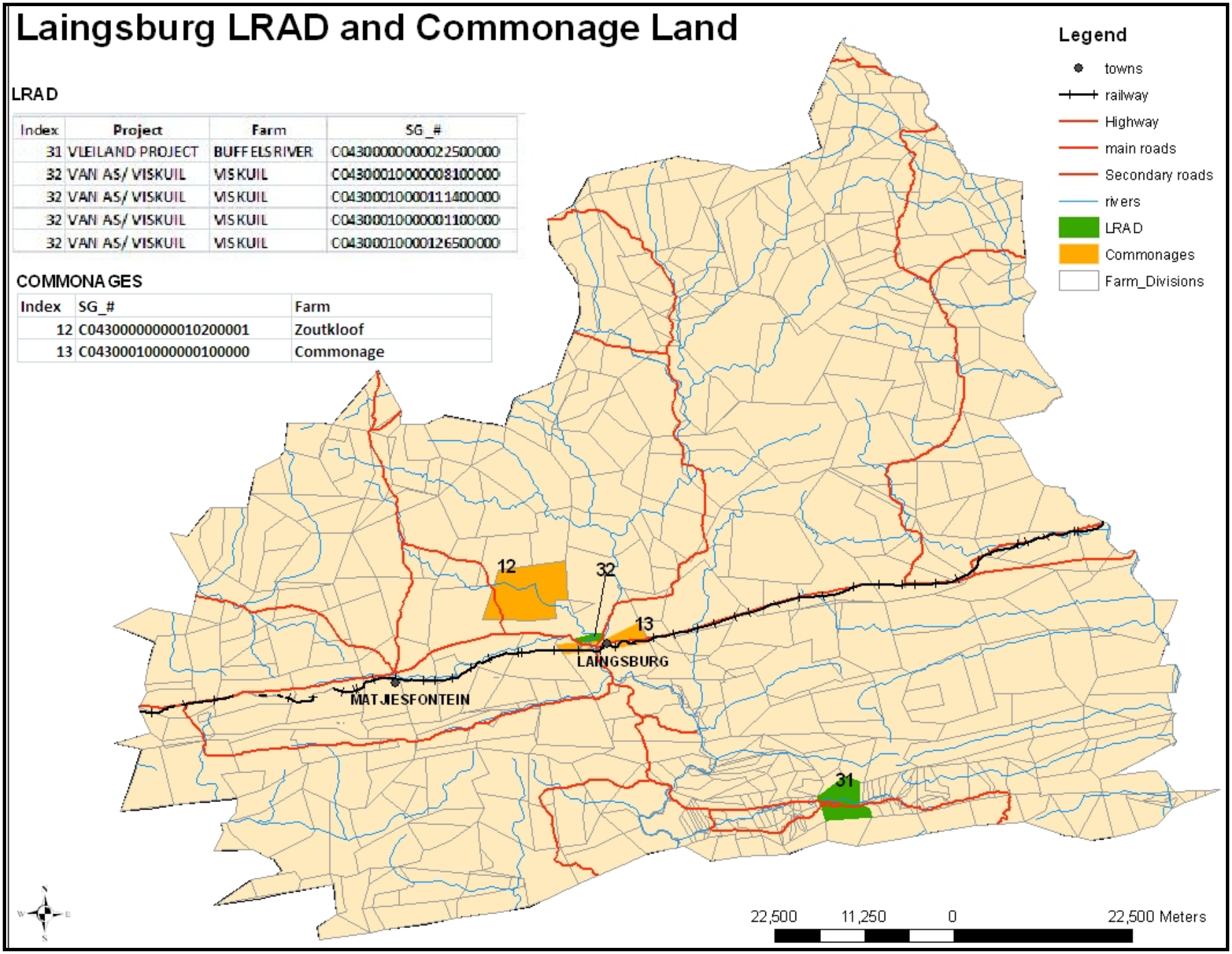


Figure 3.3.5.2 **Land Reform Projects** (source: Central Karoo ABP, 2008)

3.3.6 Cemeteries

Laingsburg town has four cemeteries and Matjiesfontein has one. These cemeteries are deemed as adequate to meet the needs of the Municipality.

Laingsburg town cemeteries are distinctively landscaped with the main roadways lined with Cyprus trees.

A similar, strong approach to landscaping should be extended to the CBD and other parts of town.

Implications for the SDF

- There is sufficient land for cemeteries in Laingsburg.

Photo 3.3.6.1 Laingsburg Cemetery

Photo 3.3.6.2 Goldnerville Cemetery

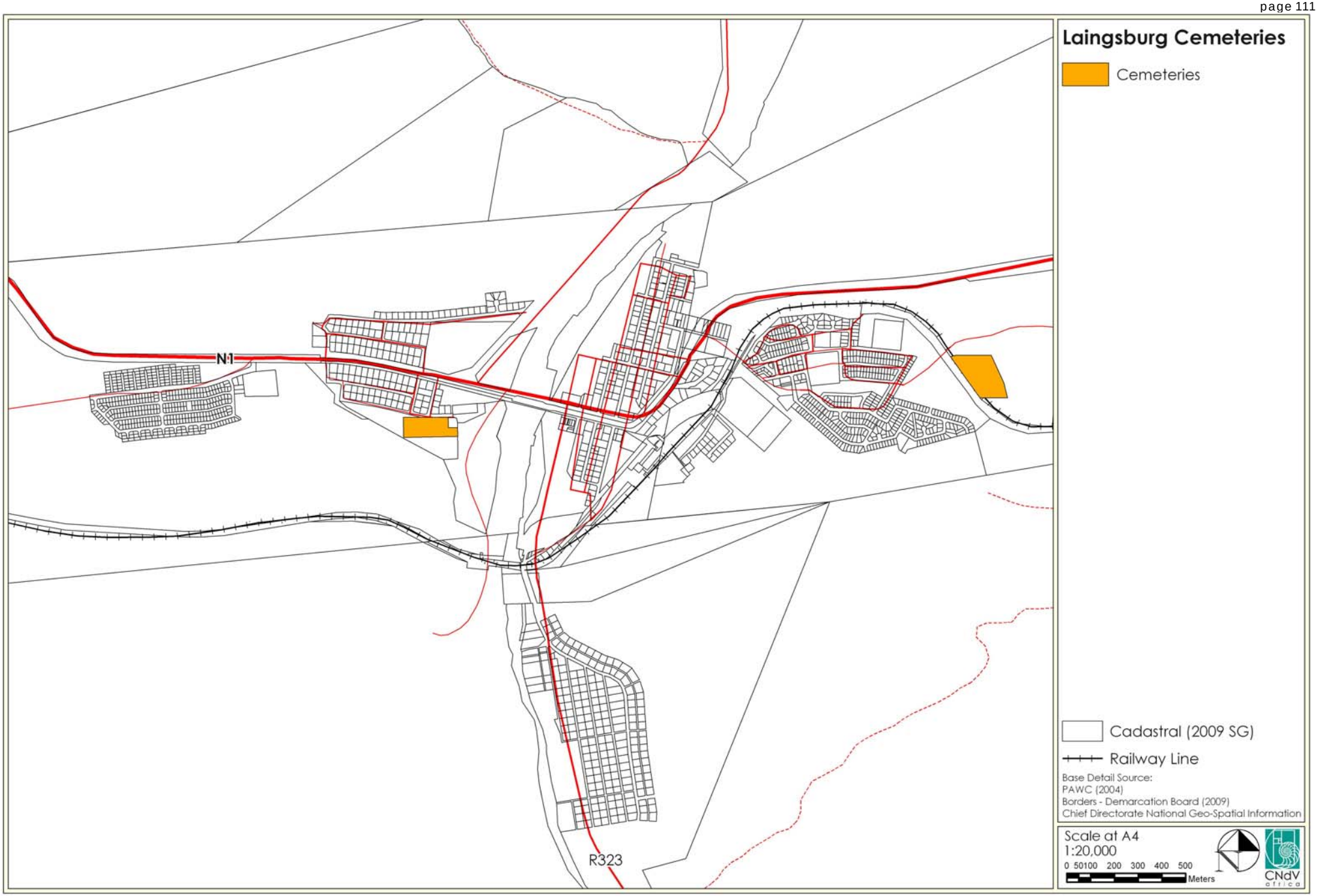


Figure 3.3.6.1 Cemeteries

3.3.7 Crime

There is only one police station located in Laingsburg town that services the entire 8781km² of the Municipality. A comparison of the five different categories of crimes for the Laingsburg station precinct is shown in Graph 3.3.7.1 and Graph 3.3.7.2.

The most commonly occurring crimes over the last 6 years have been those that require police action followed by Contact Crime and Property Related Crime. Within the first category the most dominant crimes committed were those relating to drugs and driving under the influence of alcohol or drugs. In 2005 and in the years between 2007 and 2010 there were an alarmingly high number of incidences reported.

There is a slightly reducing overall crime trend since 2007.

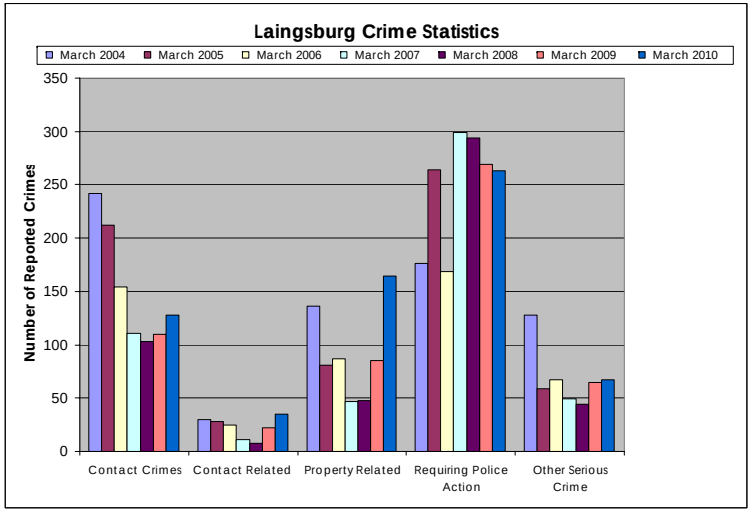
The category relating to contact crimes also show high numbers, with the most dominant crime committed being assault with the intent to inflict bodily harm. There has, however, been a trend of reduction in these crimes since 2004.

The property related crimes category has been dominated by burglary at residential premises and theft from motor vehicles. There was a significant decrease since 2004, but in 2009 and 2010 there were a large number of cases reported. Theft has been a major problem in the area, with 880 cases being reported over the last 6 years.

In general, there was a significant reduction in crimes between 2004 and 2009 except for the crimes requiring police action that appear to be high throughout the reporting periods. However, 2010 has shown to be a difficult year for fighting crime, with a significant increase in most crimes since 2005, see Graph 3.3.7.2.

The Laingsburg Municipality is currently implementing the Central Karoo District Crime Prevention Strategy of 2006 to help reduce crime.

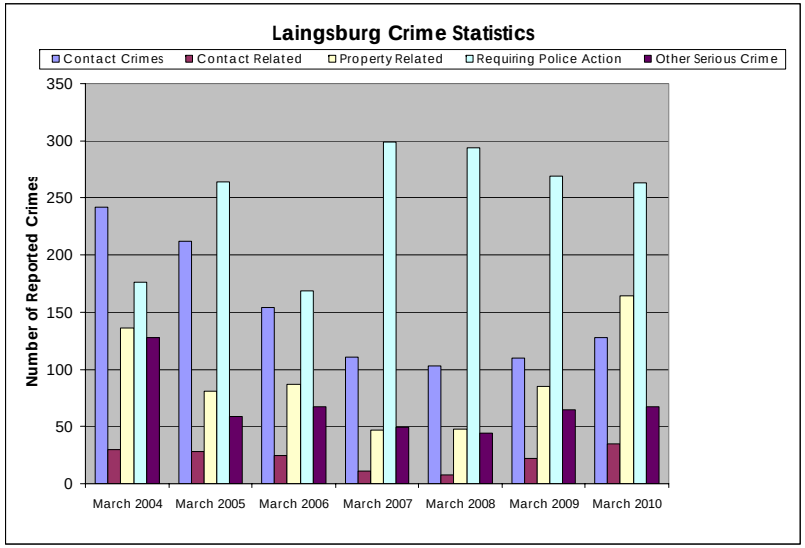
From consultations with the community it was reported that there has been an observed increase in rape and teenage pregnancies due to the abuse of minors by contract workers in the area.



Graph 3.3.7.1 Types of crime reported in the Municipality (source: www.saps.gov.za/statistics/)

Drug related crime has been on the increase from 2003 to 2010 at an average rate of 7.5% per annum.

Driving under the influence has also shown an upward trend at an average rate of 6.3% per annum.



Graph 3.3.7.2 Crime between 2004 and 2010

3.3.8 Property market patterns and growth pressures

The following average property / sale value are currently being experienced in the rural areas.

Dryland grazing land: 1 000/ha

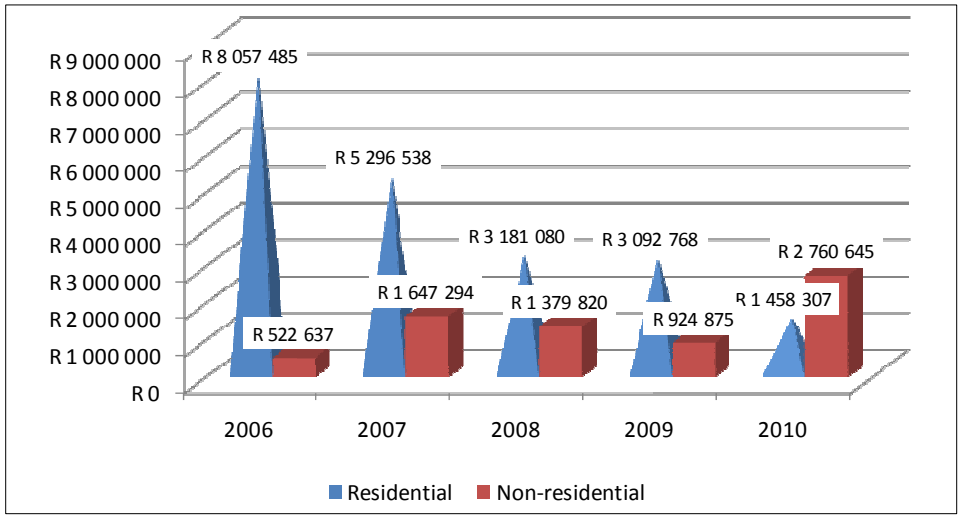
Dryland agricultural land: 80 000/ha

Irrigated agricultural land: 140 000/ha (OABS)

MPBS noted that there has been a general increase in new residential buildings over the period 2006 – 2010. The total value of buildings completed for that period totalled R28.3m. The split between residential and non-residential is 74.45% and 25.55% respectively.

In 2006 the value of new and renovated residential buildings completed was R8.1m which dropped to R1.5m in 2002. This is a reduction 81.9% over the period.

The value of non-residential building activity increased in the same period by 428.1% possibly linked to increase in manufacturing employment. This is a 51.6% change. The per annum change for residential buildings was -34.78%, see Graph 3.3.8.1 as well as Table 3.3.8.1.



Graph 3.3.8.1 A breakdown of the total value of residential and non-residential building activity on an annual basis for the period 2006 to 2010 (source: MPBS, 2011- prepared from data provided by the Laingsburg Municipality (2011))

Type	2007	2008	2009	2010
Residential	-34.27%	-39.94%	-2.78%	-52.85%
Non-residential	215.19%	-16.24%	-32.97%	198.49%

Table 3.3.8.1 Annual growth rates based on the value of residential and non-residential building activity (source: MPBS, 2011- adapted from information provided by the Laingsburg Municipality)

Table 3.3.8.2 below shows the growth rates for the residential and non-residential buildings specifically to retail (shopping) space for the period 2007 – 2010.

It should be noted that the value for the non-residential building activity started off a very low base.

Table 3.3.8.2 shows the number of projects and the total value per project and an average value per individual project for residential and non-residential projects. This shows that the average per residential project has declined from about R450 000 in 2006 to about R103 000 in 2010. The average number of residential projects were 18 in 2006 and about 11 in 2010.

	2006	2007	2008	2009	2010	Total
Residential						
Number	18	13	19	14	11	75
Value	R 8 057 485	R 5 296 538	R 3 181 080	R 3 092 768	R 1 458 307	R 21 086 178
Value/project	R 447 638	R 407 426	R 167 425	R 220 912	R 132 573	R 1 375 974
Non-residential						
Number	6	8	9	7	12	42
Value	R 522 637	R 1 647 294	R 1 379 820	R 924 875	R 2 760 645	R7 235 271
Value/project	R 87 106	R 205 912	R 153 313	R 132 125	R 230 054	R 689 510

Note: No weighting of larger vs. smaller building projects are applied to the calculation of the value per project

Table 3.3.8.2 Changes in residential and non-residential building activity (source: MPBS, 2011- prepared from data provided by the Laingsburg Municipality (2011))

In the case of non-residential buildings, the number of projects has doubled from 6 to 12 for the same period. The value for the buildings have also shown a remarkable increase from R87 000 per building in 2006 to R230 000 in 2010. This shows that the value of residential projects have decreased by 70.38% or at a rate of 26.23% pa on average. The number of residential projects decreased by 11.58%pa. The non-residential buildings showed an increase at a rate of 27.48% pa on average.

Implications for Laingsburg Municipality

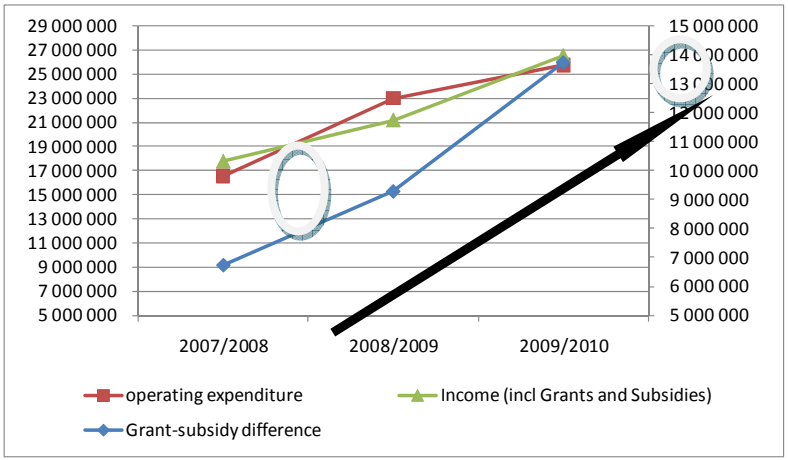
- There has been a decline in residential and an increase in commercial buildings suggesting a potential increase in employment depending on the nature of the activities in these buildings.
- Land suitable for dry land and irrigation crop farming is scarce and commands a considerable premium.
- Residential property prices ... to follow - NT

3.3.9 Municipal Finances

3.3.9.1 Income and Expenditure Pattern

This section is based on the financial records provided by the Municipality for the period of 2007/8 – 2009/10 and analysed by MPBS, 2011.

Graph 3.3.9.1 below shows the operating income increased by 49.34% at an average per annum rate of 22.24%. The operating expenditure increased by 55.56% or at an average per annum rate of 25.48%. This shows that the operating income exceeds the operating expenditure by 7.34%. This could be due to under-spending by departments or the non-achievement of predetermined milestones for 2007-2008.



Graph 3.3.9.1 **An illustration of the operating income and expenditure for the Laingsburg Municipality together with the difference between income with and without grants and subsidies over the period 2007/2008 to 2009/2010** (Source: Adapted from financial information provided by the Laingsburg Municipality (2010)

Graph 3.3.9.1 also shows an increase in the reliance on grants and subsidies to fund the operating expenditure. These grants increase by about 103.89% for the period indicated. Grants increased as a percentage of the operating revenue from 61.1% to 107.38%. This also shows that the grants and subsidies exceed the operating income generated by the Municipality as a result of its own activities. This is a concerning trend.

3.4.9.2 Provincial and National Transfers and Grants

Table 3.3.9.1 below shows the transfers from the Province to the Laingsburg Municipality for the period 2006/2007 to 2012/13. The gradual increase in the grants to the Municipality from R12,3m (2006) to R23,8m (2012) is clearly indicated. The intended spending over the current MTREF is anticipated to be R68,179 million.

Laingsburg Municipality's total budget increased from R27,694 million in 2008/09 financial year to R43,882 million in 2009/10 increasing further to R47,347 million in 2010/11. The growth in the budget is mainly due to the operating budget which increased by an annual average rate of 24.9 per cent from R22,888 million in 2008/09 to R35,683 million in 2010/11.

DEPARTMENT R'000	OUTCOME				MEDIUM-TERM ESTIMATE			
	AUDITED 2006/07	AUDITED 2007/08	AUDITED 2008/09	REVISED ESTIMATE 2009/10	2010 /11	CHANGE FROM REVISED ESTIMATE 2009/10	2011/12	2012/13
Community Safety	3 305	3 870	4 446	5 067	5 391	6.40	5 709	6 035
Education	3 661	4 139	4 871	5 642	6 267	11.08	6 785	7 172
Health	3 493	5 909	6 3999	7 588	8 473	11.66	9 059	9 604
Social Development								
Human Settlements	1 907	745	150	680	666	(2.06)	771	737
Environmental Affairs		200						
Transport & Public works			584	147	147		153	153
Agriculture								
Economic Development & Tourism								
Cultural Affairs and Sport		41	68	63	81	28.57	85	
Local Government				120	625	420.83	130	135
TOTAL	**12 366**	**14 904**	**16 518**	**19 307**	**21 650**	**12.14**	**22 692**	**23 836**
Total transfers to Laingsburg Municipality	2 034	1 016	212	753	1 382	83.53	986	872
Transfers as a percentage of Provincial Payment and Estimates	16.45	6.82	1.28	3.90	6.38	63.67	4.35	3.66

Table 3.3.9.1 **Provincial Payment and Estimate for Laingsburg Municipality** (source: 2010 Budget Estimates of Provincial Expenditure)

Table 3.3.9.1 shows the total projected provincial government investment in the Laingsburg Municipality from 2006/07 to 2012/13. The total provincial government spending over the 2010/11 MTREF in Laingsburg Municipality amounts to R68,179 million.

The largest share of this spending is made up from the following department:

- Health R27.136 million
- Education R20.224 million
- Community Safety R17.135 million
- Human Settlements R2.174 million

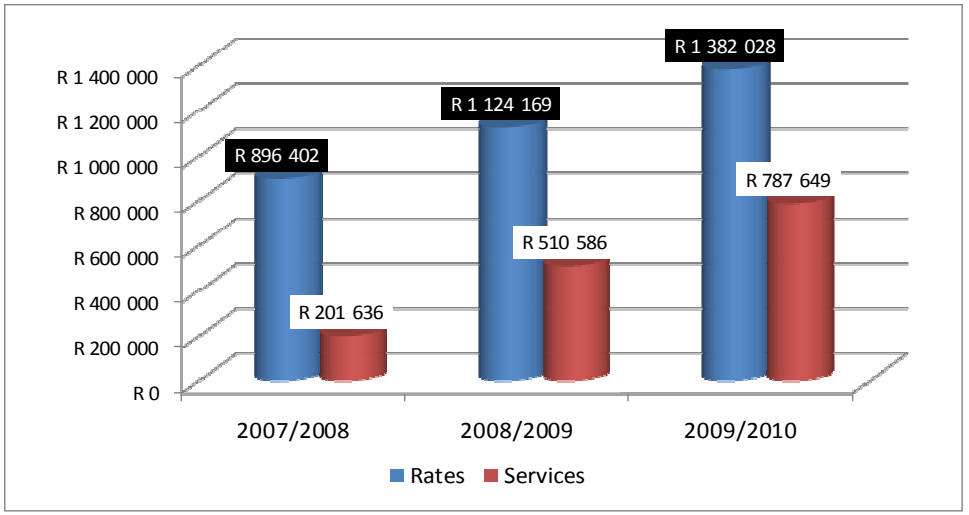
(2010/11 MTREF)

The unconditional equitable share grant account for 47.49 per cent of national transfers in 2010/11 it represents the largest proportion of all the national transfers to Laingsburg Municipality.

The largest national conditional grant is the municipal infrastructure grant (MIG), representing 38.8 per cent of the total national transfers.

3.3.9.3 Outstanding Rates and Services

Graph 3.3.9.2 below shows there has been an increase in the outstanding consumer debt for the period across all sectors in 2007/2008. The largest increase is due to services which is 153.2% and grew from about R200,000 to R510,000 in 2008/2009. The growth in the outstanding debt to service increased by another 54.26% to R790,000.



Graph 3.3.9.2 An illustration of outstanding debt in terms of rates and services from 2007/2008 to 2009/2010 (source: Multi-Purpose Business Solutions, 2011)

The outstanding rates increased from 25.41% to 22.94% between 2007 to 2010.

The overall debt increased by 97.5%. The rates component increased from R0.9m to R1.4m which represents a 54.18% increase. The services component increased from R0.2m to R0.8m which represents an increase of 290.62%. (OABS, 2011)

The per capita debt outstanding, based on the economically active population for 2001 was 63.1% (R515.63) and by 2007 was 66.50% (R633.41). (MPBS, 2011)

It should be noted that the outstanding debt related to services has increased at a faster rate than outstanding debt related to rates and in the overall total.

The arrears in rates and services and housing rentals are shown on the following tables:

Arrears in rates and services (and housing rentals)

	Total	Rates and taxes	Housing rentals
2009/2010:	R2,3m	R2,2m (95,7%)	R0.1m (R67 772)
2008/2009:	R1,7m	R1,6m (94,1%)	R0.07m (R111 807)

Total outstanding debtors represent 19,8% (2009/2010) and 16,7% (2008/2009) of the Actual Operating Income (as defined). The gross amount owed by debtors increased by 34,0% from 2008/2009 to 2009/2010. (Multi-Purpose Business Solutions, 2011)

It should be noted that rates and general services income represents about 82.8% of the actual operating income and that improved from 74.5% in the previous year. Grants and subsidies amounts to about 118.1% of the operating income which is up from 91.2%.

The equitable share for 2009/2010 is R5.5m which represents an increase from the R4.4m in 2008/2009.

Financial Performance Ratios

i) Cost Coverage (Actual Operating Income (as defined) / operating expenditure)

2009/2010 43,8%
2008/2009 44,3%

A figure above 100% would indicate operating income from own sources, i.e. sufficient to cover operating expenditure. The decrease in the ratio from 2008/2009 to 2009/2010 emphasizes the need for additional grants and subsidies to supplement operating income.

ii) Liquidity Net Current Assets: Net Current Liabilities

2009/2010 1,92 : 1
2008/2009 3,12 : 1

A decline in the ratio by R1,20 of current assets for each R1 of current liabilities (or 38,46% from 2008/2009 to 2009/2010) is a concern as this indicator highlights the ability of the Municipality to meet its short-term obligations. The current assets exceed the current liabilities by 92c in each rand of obligations. A safer margin would be 2:1. This trend must be monitored and corrective measures taken on a proactive basis should any further decline in the ratio occur.

iii) Solvency Total Liabilities to Total Assets

2009/2010: 16,1%
2008/2009: 13,2%

The solvency indicator offers an indication of the ability of the Municipality to meet its longer term obligations. The strong solvency ratio is mainly attributed to property plant and equipment assets that represent about 70% of the total assets of the Municipality. It appears that the Municipality has no loans outstanding.

Implications for Laingsburg Municipality

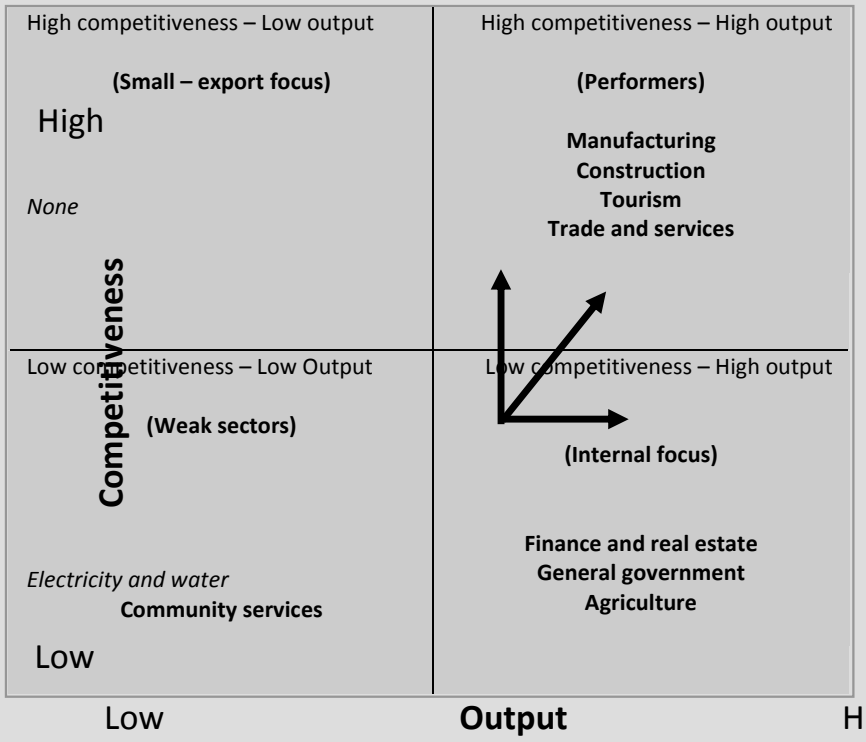
- The Municipal operating expenditure currently exceeds its income.
- Its own income in turn comprises 46% of its total income, the balance being made up of grants and subsidies.
- The arrears on rates is R1.2m and on services R0.8m.
- Therefore, even if debt collection is optimised the Municipality must be very careful that future economic growth and development must either bring in greater income than costs – e.g. upmarket development should be attracted, or if low income development is needed, its costs, particularly operating costs, should be minimised. This suggests that future development should include renewable technology with minimal operating costs, they should be conveniently located so as to minimise expected travel or they should be well located so that they present optimal business opportunities.

Implications for the SDF

- The reliance on grants and subsidies needs to be mentioned;
- There are minimal resources in terms of capacity and finances are available to fund growth initiatives;

A need exists to stimulate the local economy. This should be built on the strength of the core growth sectors that deliver gross value added and employment introduced strategies.

The most important contributors to the economy of the Laingsburg area, which are also aligned with a high value added and high employment focus, are wholesale and retail, community, social and personal services and agriculture.



Economic sector performance profile of the Laingsburg economy for competitiveness relative to production output
(source: Multi-Purpose Business Solutions, 2011)

Implications for the SDF

The preceding diagram considers the competitiveness of sectors in the Laingsburg economy to the production output of the specified sector. The aim of this assessment is to focus on develop the sectors of the Laingsburg economy that could be considered as performers as highlighted in the aforementioned diagram. The performing sectors of the local Laingsburg economy in terms of high output and high competitiveness need to include the secondary activities related to manufacturing and construction and tertiary sector activities of trade and services, including tourism and the sale of perishable and non-perishable products. (Multi-Purpose Business Solutions, 2011)

The main economic sectors driving economic growth and employment in Laingsburg at present are:

- Agriculture – extensive and intensive farming, the latter mainly in the Vleiland and Rouxpos valleys;
- Trade – probably largely serving the N1 traffic;
- Community, social and personal services – mainly government functions, especially municipal, health and education.
- Tourism – linked to the wilderness areas around Laingsburg town, the history of the town itself, including the flood, and Matjiesfontein would seem to have the greatest future growth potential.

3.4 URBAN SETTLEMENTS AND HIERARCHY

3.4.1 Hierarchy and Role of the Settlements

The municipality has one main settlement, Laingsburg town and one secondary settlement, Matjiesfontein.

The estimated population for the two settlements and the rural area is shown in Table 3.4.1.1.

They are connected via the N1 Freeway and the main Cape Town to Gauteng railway line. Laingsburg town serves as the main service centre, providing medical, educational, as well as limited commercial activities as well as administrative services.

Other smaller rural farm settlements include Vleiland in the south-east and Rouxpos. Vleiland has a church and a shop. They are essentially farming communities south of Laingsburg along the R323.

This area contains the most arable land in the municipality and receives the highest rainfall. The farm size is much denser with smaller "watererven" to increase the level of access to arable land and water. North of the N1 Freeway is Hillandale and Koringplaas which are large farm homesteads.

Laingsburg is strategically situated on the N1 Freeway road and rail transport corridor between Gauteng and Cape Town in a pass through the mountains at a crossing over the Buffels, Witteberge and Baviaans rivers.

Thus, commercial and private traffic along the N1 Freeway provides a captive market to Laingsburg at the end or beginning of the 200km stretch of road to Beaufort West.

Laingsburg town is also the set of local government and is a minor agricultural service centre.

Matjiesfontein's economic base is essentially a single tourist resort comprising a Victorian village across the railway line. The population largely comprises hotel staff and a few government employees.

	Population Numbers 2007
Laingsburg town	5925
Matjiesfontein	535
Rural	870
Total	**7330**

Table 3.4.1.1 Population per settlement (IDP, 2007 – 2012)

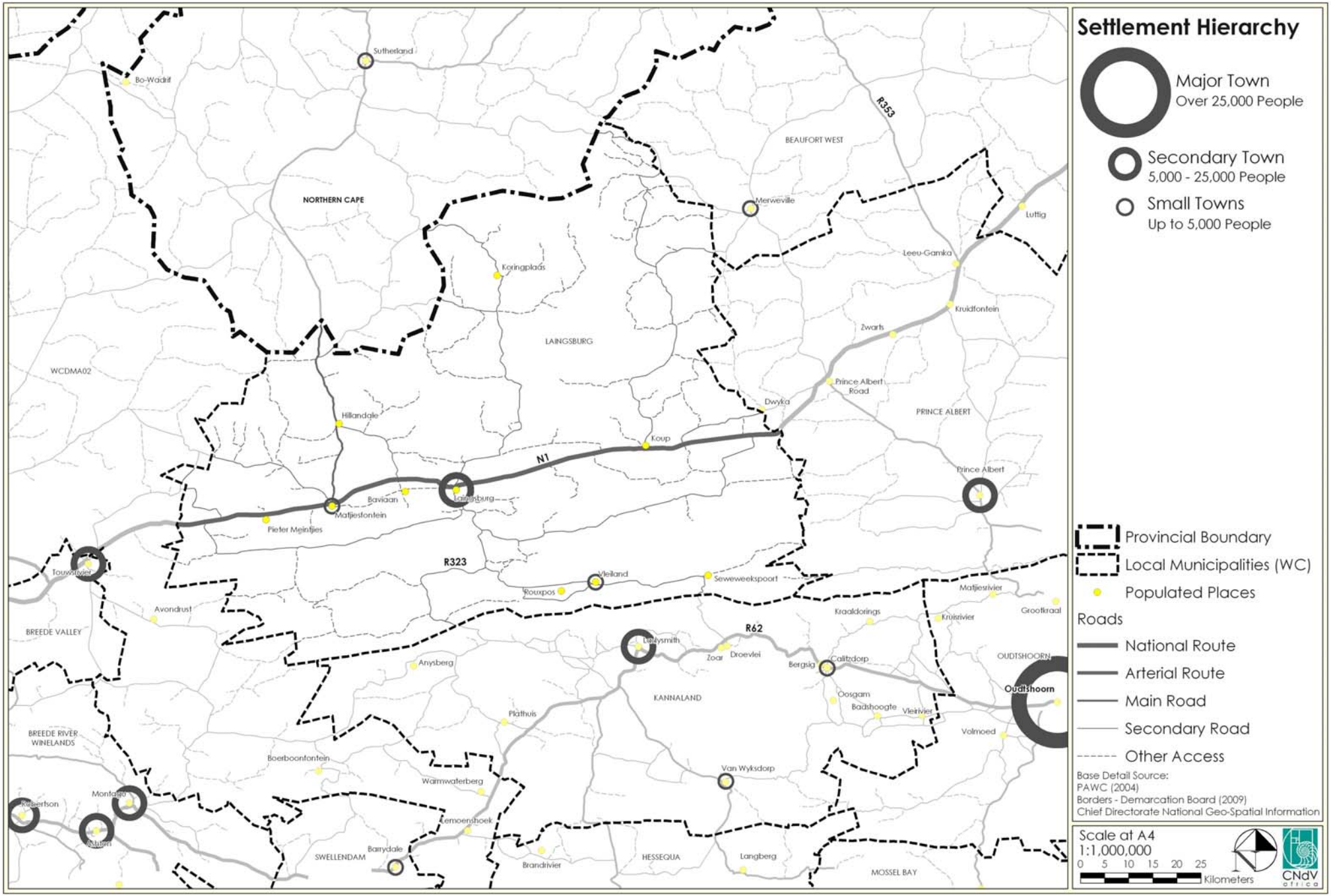


Figure 3.4.1.1 Hierarchy of Settlement, Linkages and investment priority

3.4.2 Laingsburg

- It is the largest node in the municipal area
- Located approximately 280km north east of Cape Town, 199km to Beaufort West and 1300km to Johannesburg along the N1 Freeway
- Established as a trading post in 1881
- Had numerous name changes from Buffelo, to Nassau, then later Laingsburg (in honour of commissioner John Laing
- Became a municipality in 1904
- The national road came through it when it was completed in 1942
- It has approximately 5323 people (IDP 2007-2012)
- Has facilities such as schools, hospitals, clinics, police station, municipality offices, tourism centre, museum, old age home, major petrol stop for trucks and passersby in the form of cars
- Has three rivers through the Bobbejaans, Buffalo and the Wilgehout.

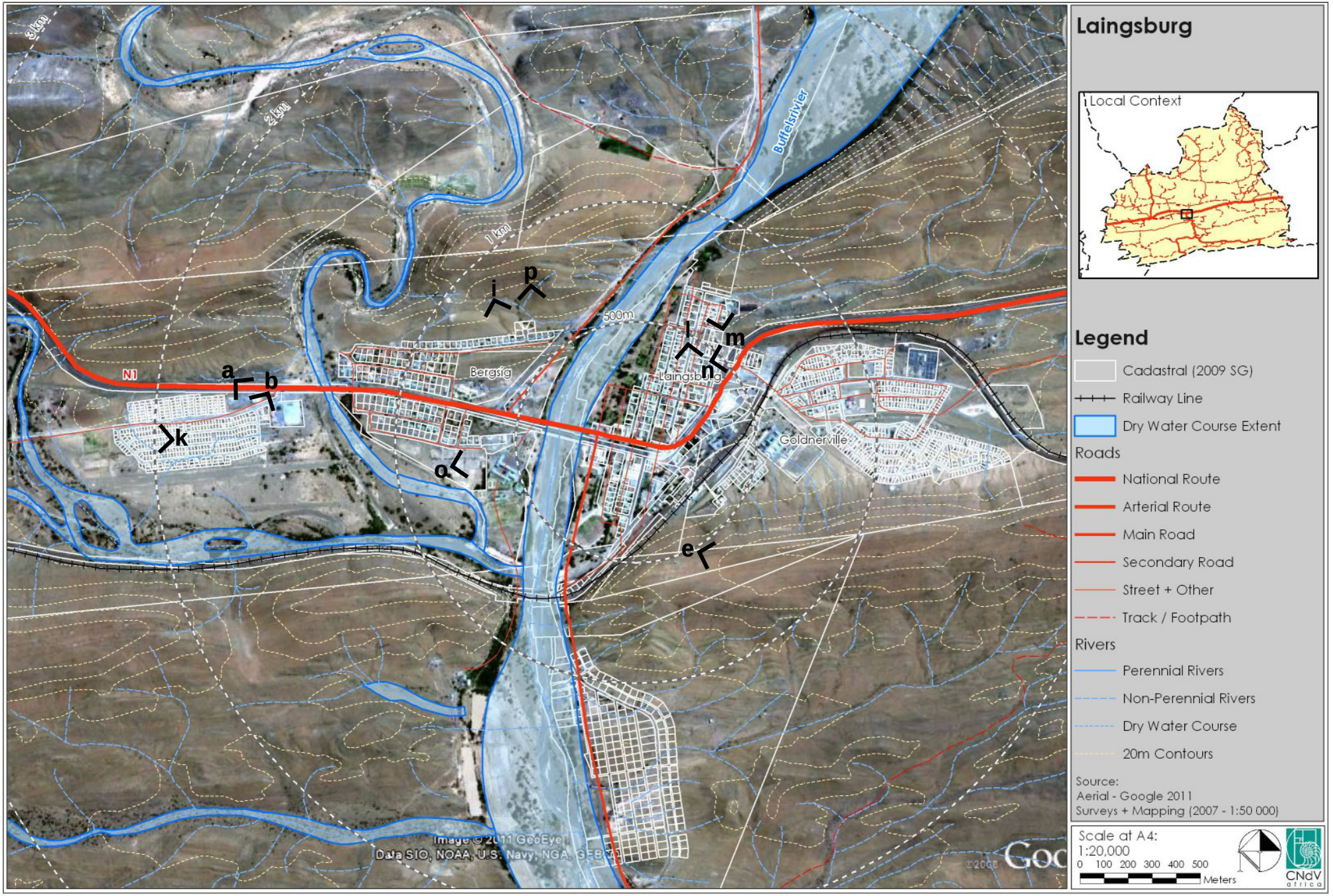


Figure 3.4.2.1 Laingsburg Aerial

a. Voortrekker Road (N1 through town) (Figure 3.4.2.1)

b. Truck stop: Bergsig – landscaping required (Figure 3.4.2.1)

c. Laingsburg CBD: note intrusive new jersey barriers to reduce accident risk

d. Voortrekker Road and Maritz Street intersection

Key plan: Laingsburg town

e. Voortrekker Road showing flood level

f. Shop and tourist precinct at the flood museum

g. The tourist precinct

h. Well-designed but remotely located open market at the tourism precinct

i. View over Bergsig to rail bridge in background

j. Big tree behind tourist precinct

k. RDP houses in Bergsig West

l. Historic house

IMAGES OF LAINGSBURG

m. Historic 1880 home

n. Historic architecture in Laingsburg

o. Bergsig cemetery

p. Views of Laingsburg

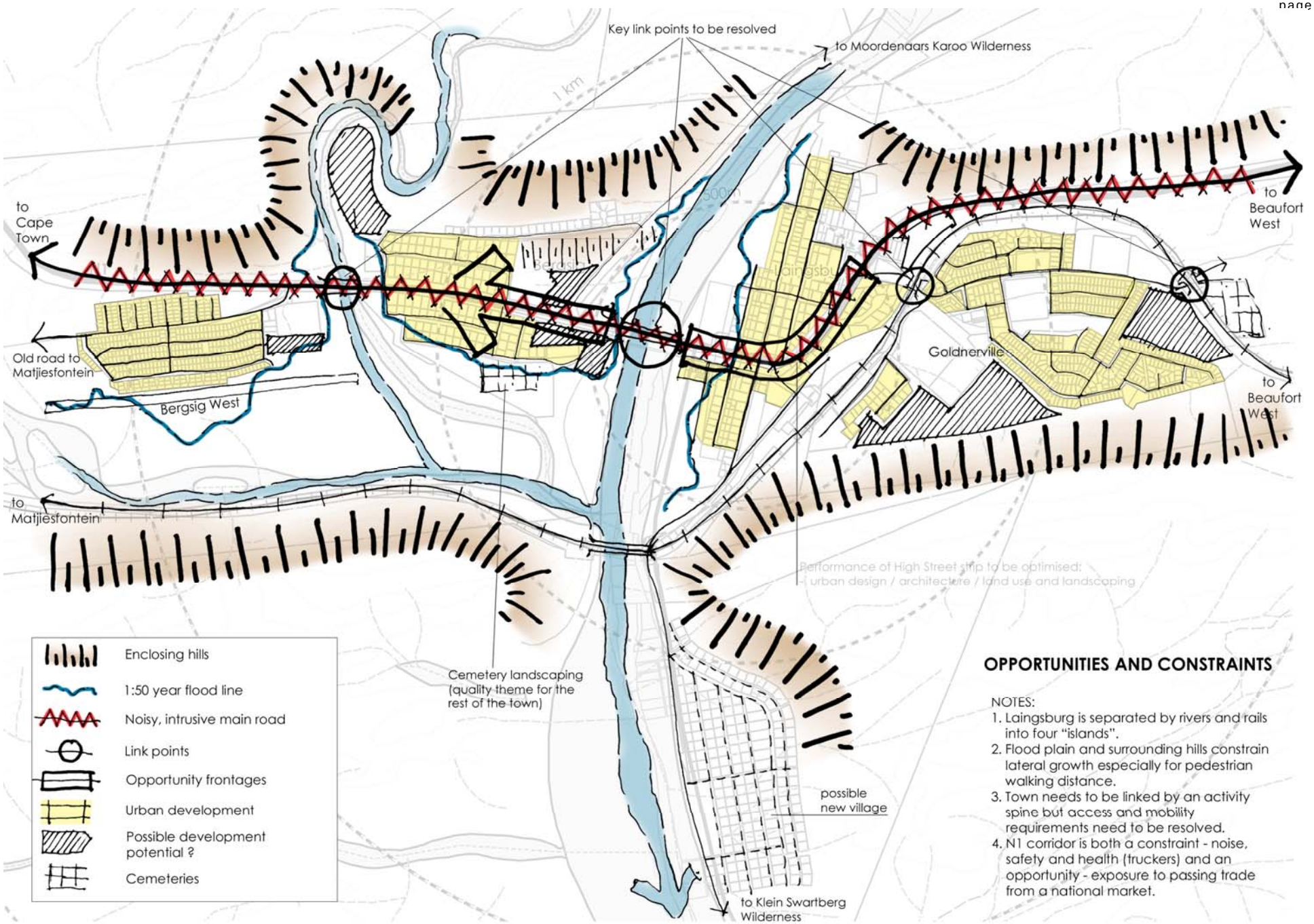


Figure 3.4.2.2 Laingsburg Analysis

3.4.3 Matjiesfontein

- Matjiesfontein was founded three years after Laingsburg in 1884 by James Douglas Logan during the early stages of the 1st Anglo-Boer war.
- The now famous Lord Milner Hotel was initially a military hospital.
- By 1899 it became a convalescent centre for relief from chest complaints.
- The hotel and adjacent buildings were to have become a historic village with Victorian architecture. The village was restored in 1970 and then declared a national monument.
- There are currently about 535 people living in Matjiesfontein. (IDP, 2007-2012)
- Has one main street flanked by the railway station to the south and the Lord Milner hotel to the north.
- There is a residential extension with schools and clinics and the odd shops, across the railway line.
- Access to Laingsburg is off the N1 Freeway via the R354

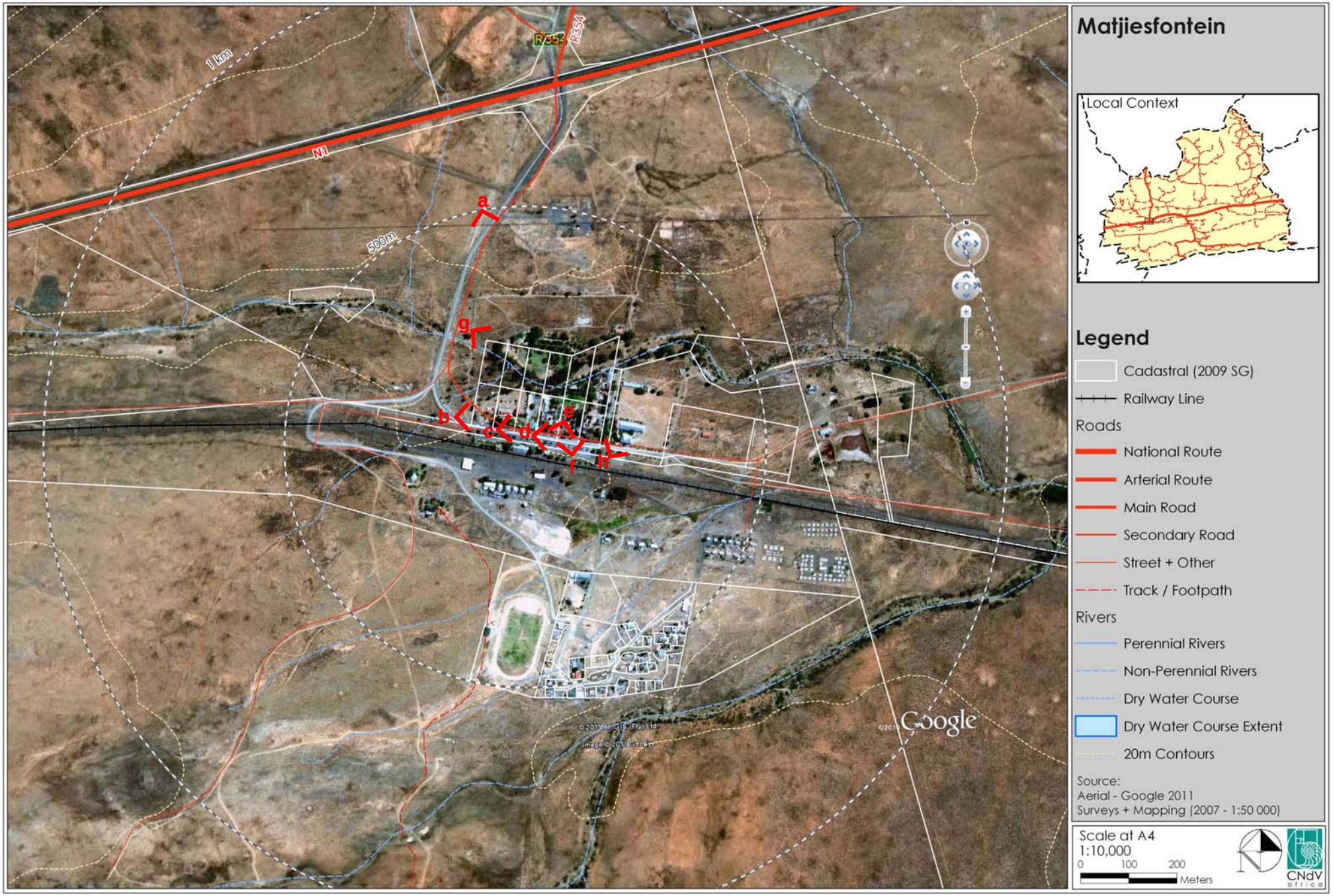


Figure 3.4.3.1 Matjiesfontein Aerial

a. Entering Matjiesfontein

b. Matjiesfontein entrance road

c. Victorian architecture : Matjiesfontein

d. Historic filling station

IMAGES OF MATJIESFONTEIN

e. Station at Matjiesfontein

f. Lord Milner hotel

g. Avenue linking to north bank of river

h. Matjiesfontein transport museum

i. Vehicle underpass between north and south section of village

j. Historic workers homes (heritage project)

k. Shop in southern section

l. Tavern in Matjiesfontein

IMAGES OF MATJIESFONTEIN

m. New roads in Matjiesfontein

n. Matjiesfontein railway station

o. Existing houses in Matjiesfontein

p. Railway land settlement

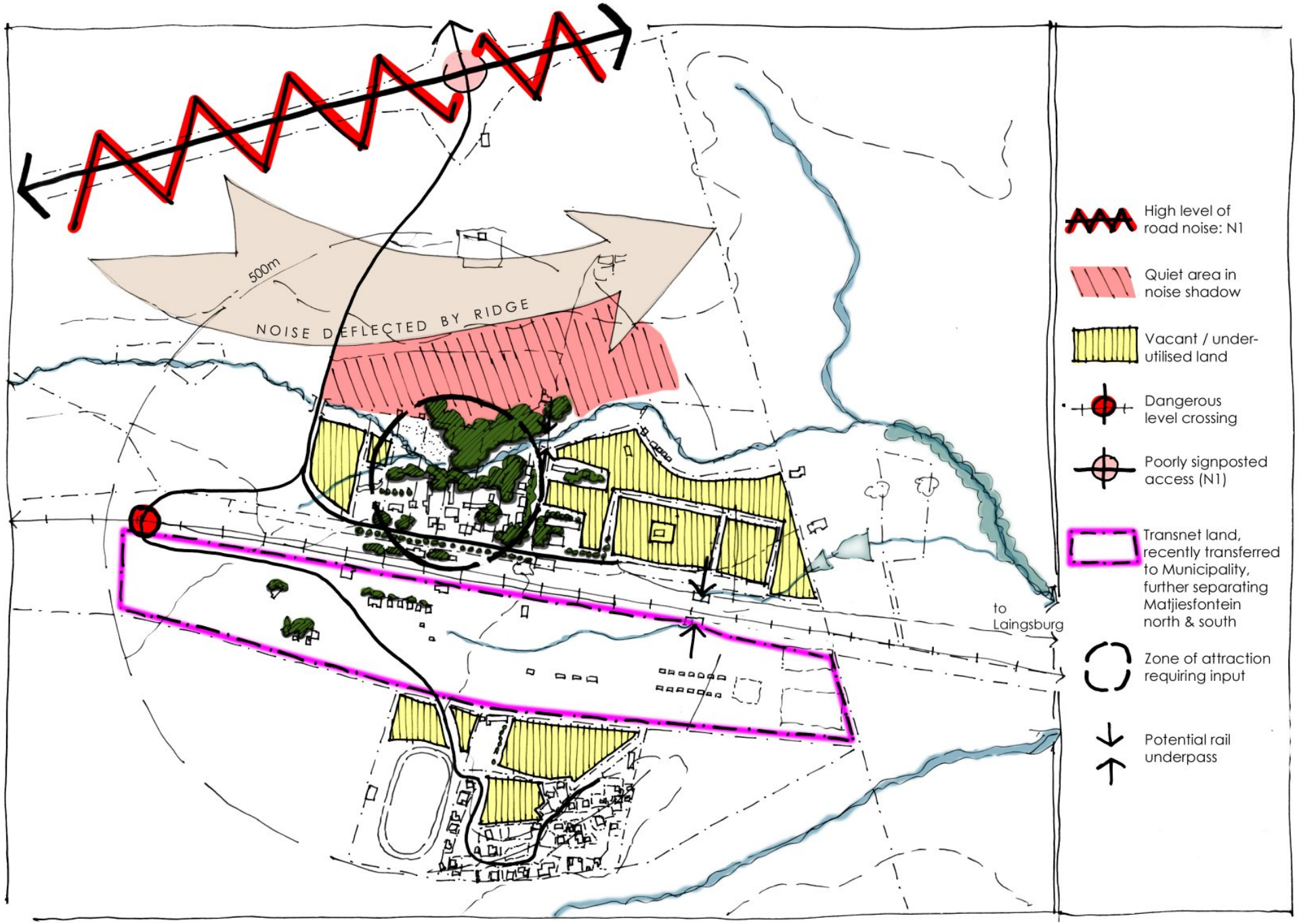


Figure 3.4.3.2 Matjiesfontein Analysis

3.4.4 Vleiland

Vleiland is a scattered collection of homes and community facilities stretching for 5kms along the Elandskloof River en-route from Laingsburg to Zoar, on the R62 to the south. It appears from the urban structure that the road originally passed through the village but the more recently the R323 bypassed it to the south.

It ranges from a church and school at Baartmansfontein to the west to the intersection with the Vleiland Road and the R323 to the east.

The cluster of dwellings at Soetdoornkloof, some 2.5kms to the south-west also forms part of this loose settlement, see Figure 3.4.4.2.

There is a new clubhouse and sportsfield approximately midway between Soetdoornkloof and Vleiland.

The river bank properties comprise small farms linking to the river in contrast to the much larger veld farms away from the river. This pattern is a response to the much higher fertility in the area as a result of being able to irrigate.

The Elandskloof River forms the northern boundary of the settlement with watererven (river farming plots) fronting onto the river.

A church, shop, sheds and houses are located both sides of the single and main road through this settlement.

The community notes that there used to be a police station, post office and a clinic, but these services have moved to Laingsburg. A mobile clinic visits the area once a week for medical services.

Thus, Vleiland has many of the ingredients of a small farming settlement although some of the community facilities have been moved away.

Currently, it is likely that the population is stagnant or declining.

The main market town for Vleiland is Laingsburg approximately 30kms away. This road is partially tarred.

For Vleiland to have a sustainable future it needs a solid economic base capable of growing to support an increasing number of people.

Currently the economic base appears to be largely based on irrigated crops and stock farming with a very few tourist (B&B) opportunities. If the average employment creation ratio for arable land, see Section 3.3.4 applies here, see Table 3.2.7.2 then the 26 hectares of arable land in this area, see Figure 3.4.4.2, could sustain 13-15 jobs, say 32 to 60 dependents.

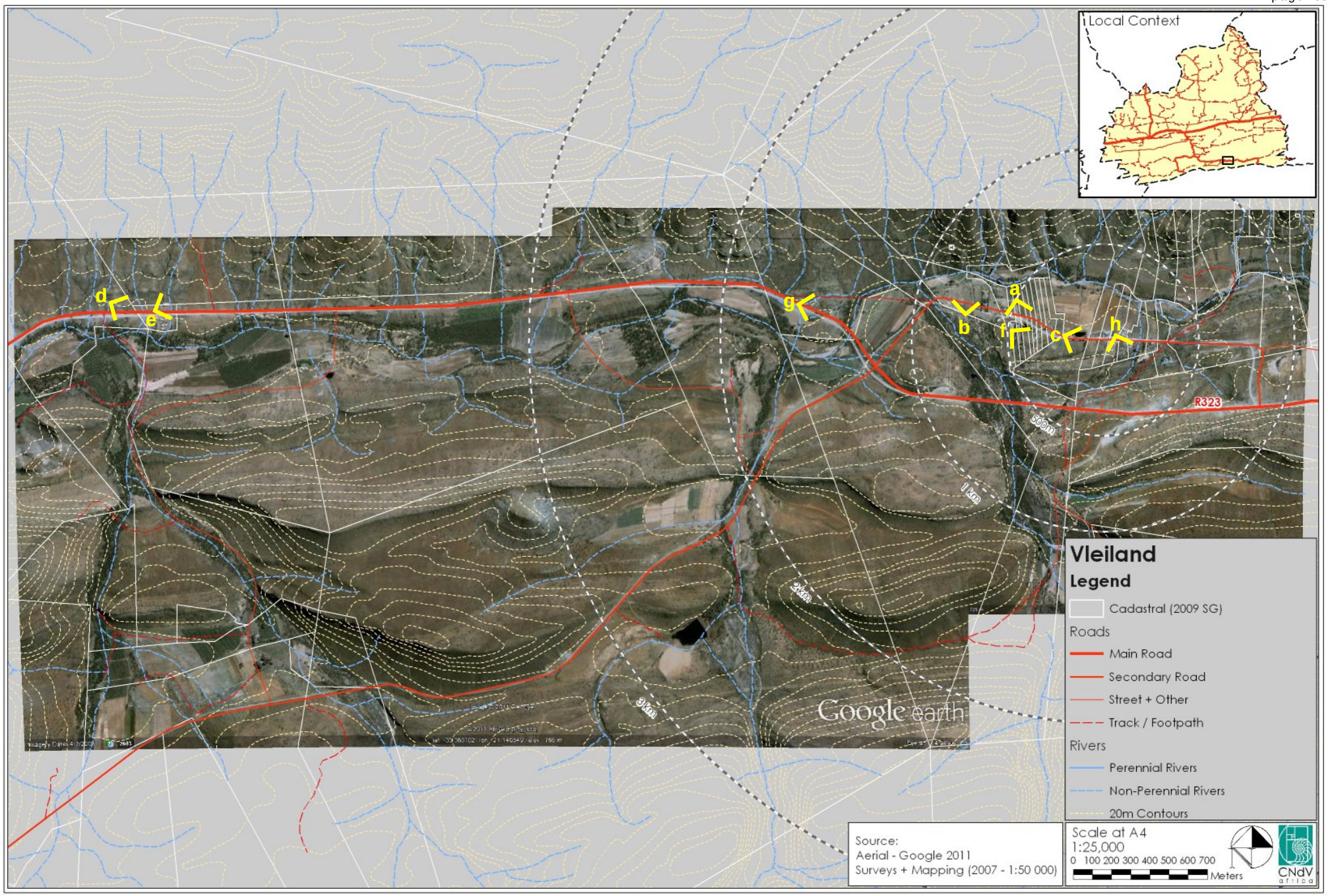


Figure 3.4.4.1 Vleiland Aerial

a. NG Kerk in Vleiland, 1950

b. Historic stone-faced house in Vleiland

c. Main street through Vleiland

d. Baartmansfontein Primary school west of Vleiland

IMAGES OF VLEILAND
See Figure 3.4.4.1

e. Church in Baartmansfontein

f. Houses in Vleiland

g. Sportsfield and pavilion in Vleiland area

h. Houses in Vleiland

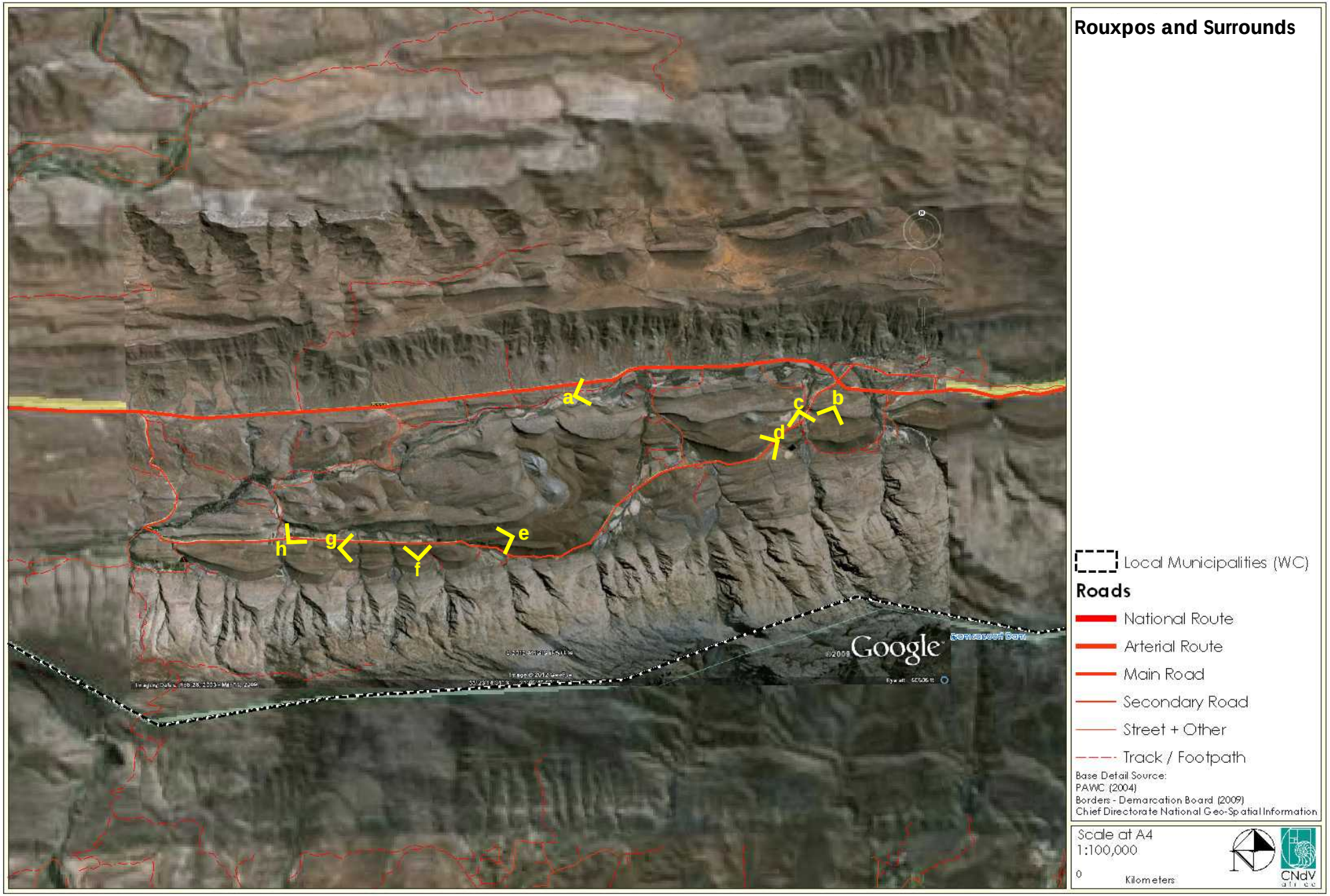


Figure 3.4.4.3 Rouxpos Aerial

a. Road to Rouxpos via Baartmansfontein

b. Homes en route to Rouxpos

c. Farmhouse at Soetdoornkloof en route to Rouxpos

d. Shop at Soetdoornkloof

IMAGES OF ROUXPOS FARMSTEAD AND SURROUNDS
See Figure 3.4.4.3

e. Family cemetery

f. Rouxpos farms

g. Rouxpos settlement

h. Rouxpos farm entrance

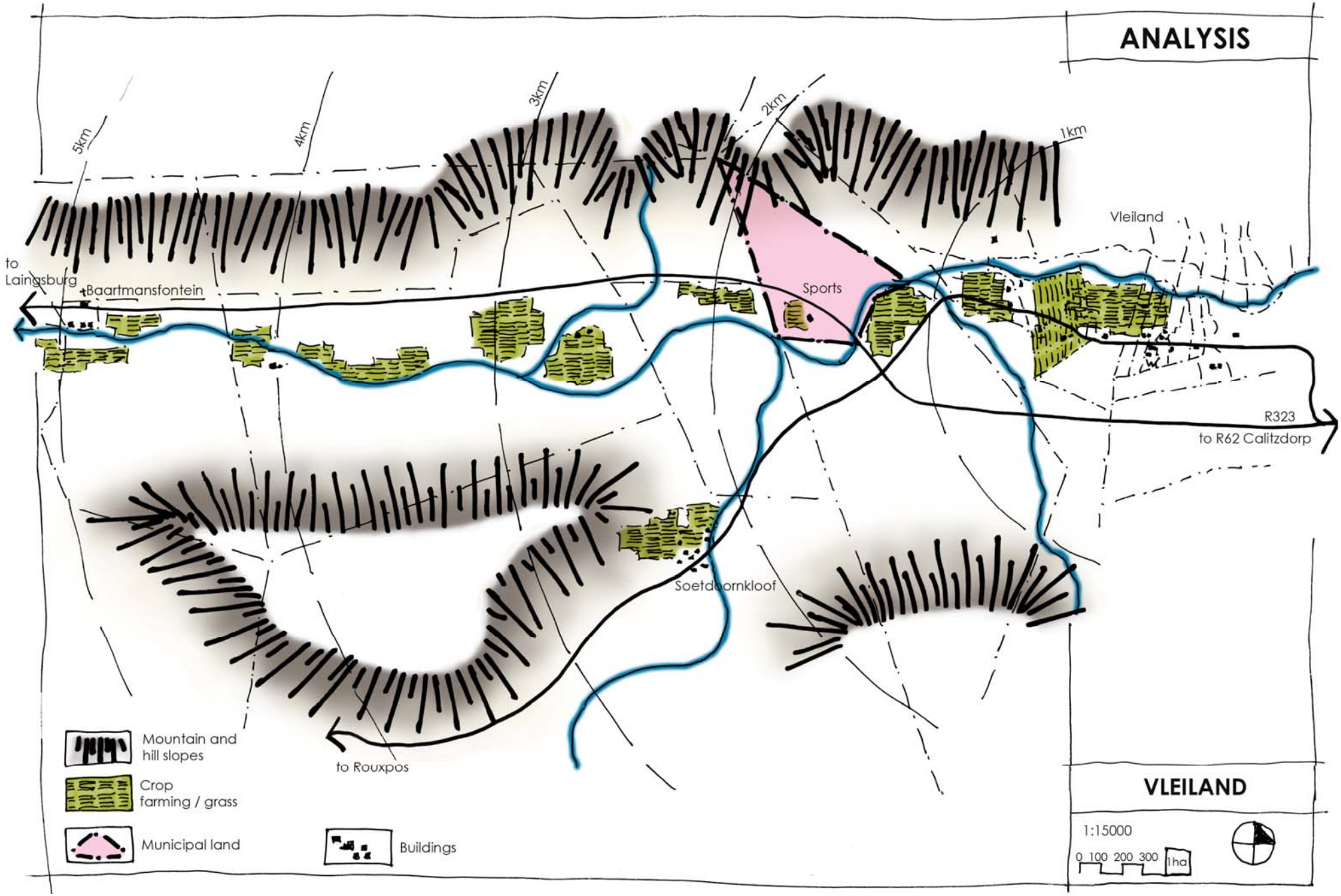


Figure 3.4.4.2 Vleiland Analysis

3.4.5 Moordenaars Karoo

The Moordenaars Karoo area represents the area in the municipality north of the N1 Freeway. This area is generally uninhabited except for a few farms and its associated settlements, namely Koringplaas and Hillandale.

The respective farm owners are responsible for the provision of housing and services to these households.

The accompanying images show the deserted and rural nature of these expansive areas.

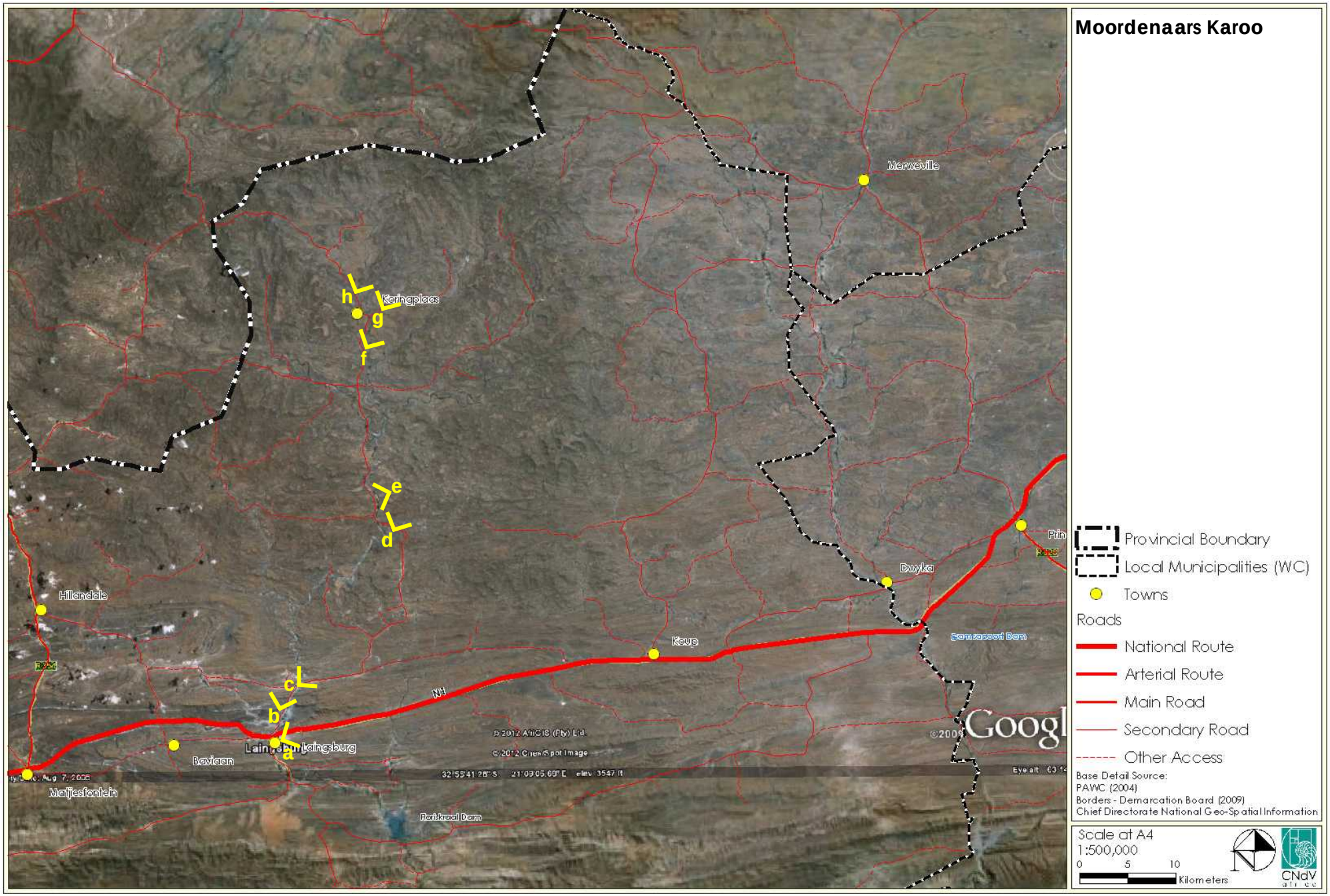


Figure 3.4.5.1 Moordenaars Karoo Aerial

a. Road north from Laingsburg

b. Main Road (untarred in Moodenaars Karoo)

c. Abandoned homestead

d. Remote houses in Moodenaars Karoo

IMAGES OF MOORDENAARS KAROO
(NORTH OF THE N1 FREEWAY)
See Figure 3.4.5.1

e. Bridge maintenance

f. Ruined cottages at Koringplaas

g. Koringplaas Church

h. Koringplaas Church and homestead in the background

3.4.6 Klein Swartberg

The Klein Swartberg area, as shown in Figure 5.2.1, represents the southern wilderness area in the municipality. This area is bounded by the N1 Freeway and the Klein Swartberg, in the north and south respectively.

The generally uninhabited area is characterised by predominantly extensive farming and limited patches of intensive farming around the Rouxpos and Vleiland areas.

This area has dramatic environmental features characterised by the mountain ranges and the impressive cosmic landscape with its long and panoramic viewsheds

The accompanying images shows the dramatic and picturesque nature of these areas.

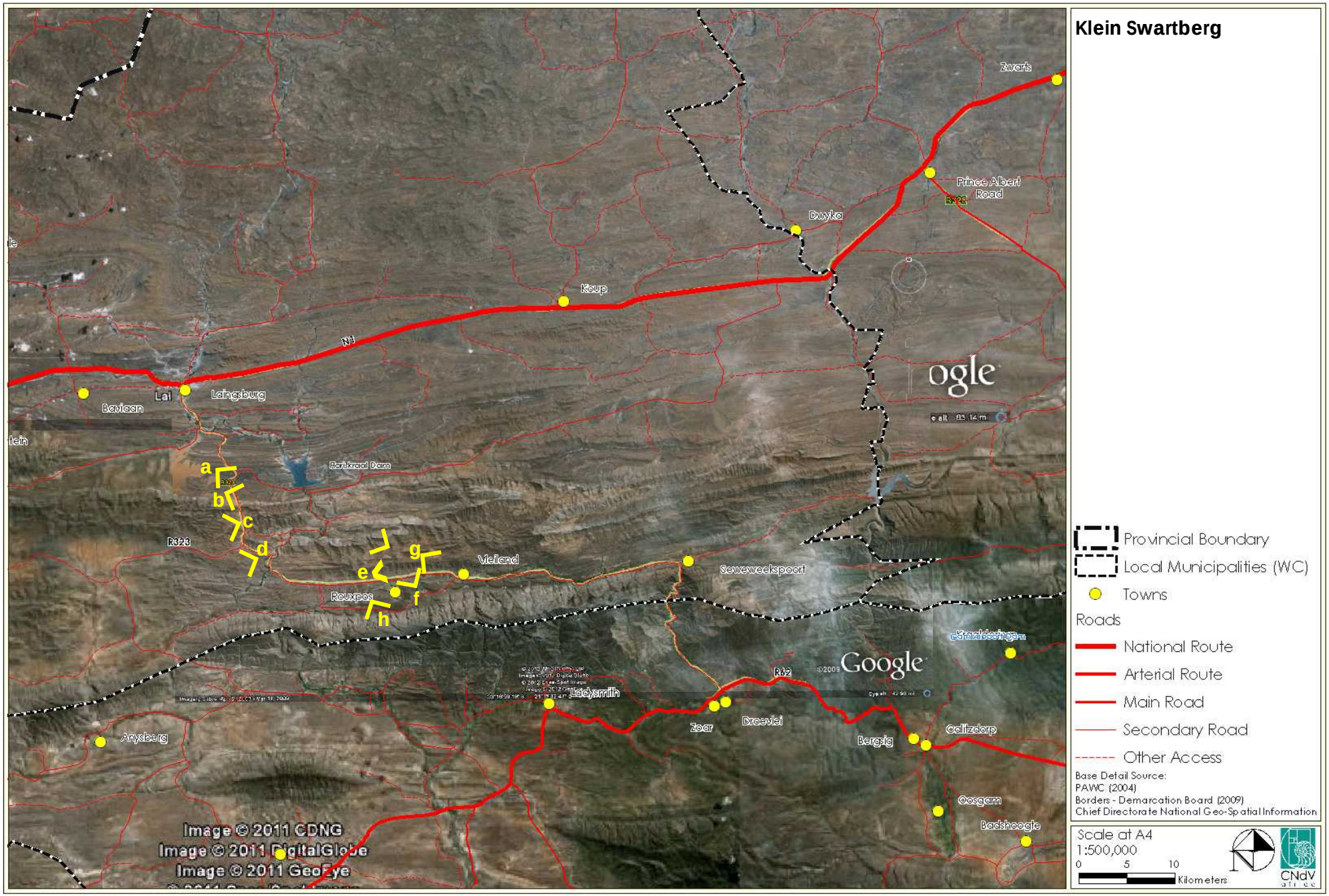


Figure 3.4.6.1 Klein Swartberg Aerial

a. West of Floriskraal Dam looking south

b. View of koppies west of Floriskraal Dam

c. Road through the mountains before Ladismith turn-off

d. Turn-off to Ladismith

IMAGES OF KLEIN SWARTBERG MOUNTAINS
(SOUTH OF THE N1 FREEWAY)
See Figure 3.4.6.1

e. Klain Swartberg Mountains at Baartmansfontein

f. Mountains around Baartmansfontein

g. Klein Swartberg Mountains farming in foreground at Baartmansfontein

h. Klein Swartberg looking south from Rouxpos

3.4.7 Transportation

3.4.7.1 Major Road and Rail Routes

Laingsburg Municipality is bisected by the N1 Freeway and the main railway line aligned from east to west.

These routes connect the Municipality to Worcester, Cape Town and Beaufort West. These routes are the main lifeline of the Municipality.

The two main settlements in the Municipality are Laingsburg town, which is the main settlement connected via the N1 Freeway, and Matjiesfontein situated approximately 700m from the N1 Freeway.

The N1 Freeway represents both a major opportunity and source of conflict. It has to accommodate large volumes of noisy passing traffic particularly heavy trucks through the middle of the town. The approach from the east is down a hill generally requiring the use of noisy exhaust brakes on large trucks. Some efforts have been made to calm traffic and improve safety but a lot more needs to be done.

The 2007 SDF noted that approximately 14 000 vehicles pass through Laingsburg per day. The Laingsburg Local Integrated Transport Plan (2009-2013) notes that the N1 carries about 3 365 vehicles per day in both directions. The comparison between the two either reflects a major drop in road traffic or a miscount. Notwithstanding the discrepancy the traffic volumes, although bringing limited economic benefits, also create a traffic hazard in the centre of town. This has resulted in functional but aesthetically monotonous landscaping, see Photo 3.4.7.1.

The railway line connects Matjiesfontein and Laingsburg to places further away such as Cape Town and Johannesburg. The railway line is used for both sleeper passenger and goods services including the prestigious Blue Train.

From Matjiesfontein the R354 Provincial Road connects the settlement to Sutherland. The R62 is connected from the south to Laingsburg via the R32.

The Shosholoza Meyl sleeper passenger train between Cape Town and Gauteng stops at Matjiesfontein. The latter has no other public transport.

Photo 3.4.7.1 Barriers in the middle of town

There are important gravel roads in the Municipality including the R354 north from Matjiesfontein to Sutherland and the R323 southwards to the R62. There have been requests to tar this road which is supported by the Integrated Transport Plan (CSIR, 2009) except for the section through the Seweweekspoort. The ITP suggests this should remain gravel for tourism and scenic purposes. However, the District Municipality motivates that this road is the preferred road to be tarred given it favourable geometrics.

Implications for the SDF

- N1 Freeway through Laingsburg requires further calming and beautification.
- The truck stop requires tree planting and landscaping.

3.4.7.2 Non-Motorised Transport

Laingsburg town residents generally travel on foot. Pedestrians have to walk long distances up to 2km from the newly developed Bergsig to the west. Goldnerville is better located. A pedestrian and cycle pathway has been constructed from Bergsig into town and also links the school and the hospital.

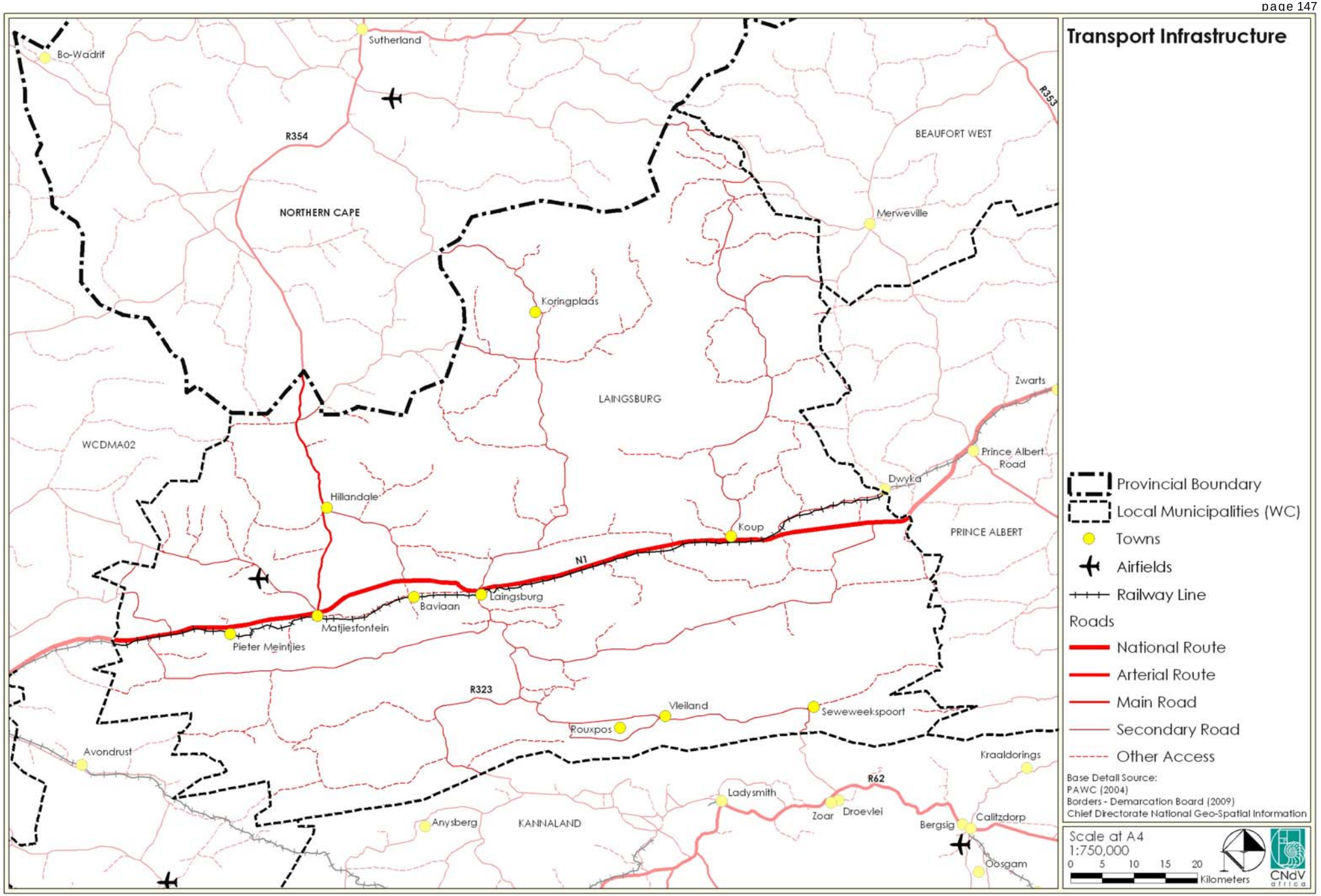


Figure 3.4.7.1 Access to Transport Infrastructure

3.4.7.3 Air Transport

There is one landing strip in the Municipality located close to Laingsburg town.

3.4.7.4 Public Transport

There is no public transport system in the area to assist the residents of Laingsburg and Matjiesfontein. A scholar service operates between Matjiesfontein and Touwsriver. Laingsburg is a major stop for long distance buses. Approximately 118 buses make scheduled stops in the town each week.

The following issues were identified by the IDP:

- Discussions with the SANRAL are critical
- The appointment of tenders of Maintenance Contractors of the N1 national road
- Empower local contractors in the appointment of tenders and not only local labour through the EPWP programme.
- Draw up a new town master plan using the sustainable and integrated settlement approach.

3.4.7.5 Potential Tourist Routes

Implications for the SDF

- Laingsburg town's existing refreshment station status can be built upon and strengthened.
- Its proximity to national road (N1) and rail routes (Cape Town / Gauteng) means it potentially enjoys far better links to the SA national capitals than many other Karoo towns.
- The school bus service should provide other off-peak commuter transport services.
- In the absence of public transportation, dedicated cycle routes between the settlements could help to strengthen the relationship between the settlements.

Matjiesfontein and Laingsburg were previously linked via a scenic district council road following the rail line.

Gates along this route have been locked in a number of places but has the potential to a scenic route alternative to the N1 Freeway between Matjiesfontein and Laingsburg.

To the south along the foot of the Swartberg, another scenic district council road used to link Seweweekspoort and Prince Albert until it was cut off by the Gamkaspoort dam.

Continuing this route, possibly via a pont across the dam (already proposed) could help considerably with the tourism strategy whose main principle is to try and encourage visitors to spend as much time in an area as possible.

Implications for the SDF

- A key goal for tourism strategies is to prolong the number of nights visitors stay in an area. This requires a wide range of attractions linked by a network of scenic routes. Laingsburg Municipality has a number of existing roads that could be upgraded into scenic routes suitable for sedan cars, 4x4s, and OMTBs including:
    - Moordenaars Karoo
    - Old road between Matjiesfontein and Laingsburg
    - Possible river bank route to Floriskraal dam
    - Laingsburg to Prince Albert through the Klein Swartberg via a future pont over the Gamkaspoort dam.

Photo 3.4.7.5.1 Road between Matjiesfontein and Laingsburg

Photo 3.4.7.5.2 Shop along the road at Soetdoornkloof en route to Rouxpos

3.4.7.6 Transport Improvement Proposals

The Municipality has about 23,22km and 1,65km of streets that are their maintenance responsibility in Laingsburg and Matjiesfontein, respectively. (CSIR, 2009) The same study also shows that there are about 272 parking bays in good tarred condition (except for 30 grave bays in Goldnerville) in Laingsburg town.

As discussed under section 3.4.7.1 the R354 north from Matjiesfontein to Sutherland and the R323 southwards are important from an economic stimulation perspective and need to be tarred. The District Municipality noted that it is not viable to upgrade these two roads.

The following priority transport improvement projects have been budgeted for between 2009 and 2012. See table 3.4.8.1

#	Type of project	Project description	2009/10	2010/11	2011/12
1.	New construction	Construction of public transport infrastructure and parking areas	450	500	
2.	New construction	Driver's licence and vehicle testing centre	380		
3.	New construction	Construction of a traffic office	500		
4.	Ongoing construction	New bus route, roads and stormwater provision: Majiesftn.	1 482		
5.	Upgrade	Upgrade of roads and stormwater provision: Bergsig	1 377		
6.	New construction	New community lighting		460	
7.	New construction	New high-mast lighting -Phase 2		400	
8.	Upgrade	Planning and construction of sidewalk and cycling route surfacing and upgrade		1 650	1 650
9.	Upgrade	Paving of access road in Matjiesfontein community		350	
TOTAL			**4 189**	**3 360**	**1 650**

Table 3.4.8.1 Priority Transport Improvement Projects and Budgets (in R1000s)(source: CSIR, 2009)

3.4.8 Solid Waste Management

Household refuse in the Laingsburg Municipality is collected on a weekly basis. Domestic refuge includes refuse from gardens and builders rubble. Commercial refuse removal is collected on a bi-weekly basis.

The refuse from Matjiesfontein is disposed of at a landfall site west of Laingsburg town. The socio-economic profile indicates that about 62% of the households had refuse removal services in 2001 which increased to 76.4% in 2007.

The above reduced the amount of refuse dumped from 35.8% in 2001 to 18.6% in 2007. Between 2001 and 2007 the amount of households that had access to refuse removal increased from 1.1% to 1.9%, see Table 3.4.8.2 below.

The waste generation for Laingsburg, obtained from the Integrated Waste Management Plan, prepared in 2005, is based on the 2001 population survey figures. See Table 3.4.8.2. It states that waste generated in Laingsburg is 1.2kg per person per day resulting in 5.4 tons per day. The waste for Matjiesfontein is 0.5kg per person per day resulting in 0.15 tons per day. Therefore, the waste generation in the Municipality is approximately 20.4 tons per week during the peak and 16.9 tons during off-peak periods.

Refuse Removal	Census 2001	Percentage share of households 2001	Percentage share of households 2007	Average annual growth 2001 - 2007 %
Removed by local authority at least once a week	1207	62.1%	76.4%	3.7%
Removed by local authority less often	6	0.3%	0.0%	-
Communal refuse dump	12	0.6%	1.1%	9.8%
Own refuse dump	696	35.8%	18.6%	-10.2%
No rubbish disposal	21	1.1%	3.9%	23.9%
Total	**1943**	**100.0%**	**100.0%**	

Table 3.4.8.2 Main source of refuse removal services, 2007 (source: Stats SA, Community Survey 2007)

Laingsburg town has one landfill site that was permitted in 1997 with a classification of General Waste, Communal Landfill and no significant leachate produced (GCB). This site is approximately 5 hectares and does not have any groundwater monitoring. It receives garden refuse, building rubble and domestic waste and put it into trenches at the landfill site. At 2005, the site had approximately 10 years left. There are no transfer station facilities within the Municipality.

Medical waste is transported to Beaufort West by means of a private company. No medical waste was seen in the landfill site in 2005 and it is assumed that it is well managed. The closest hazardous waste site is in Vissershok outside Cape Town. This makes it very problematic for Municipality to transport all of its hazardous waste to that facility.

At 2005, the operating cost exceeded the resources available to operate (including tariffs received) by R50,580. The tariffs for domestic waste was R24 per month and for commercial it was R110 per month per container. This will obviously have to be increased to provide for a better financial management of the operation.

Table 3.3.8.2 shows that, based on 20,4 tons of waste per week during peak season, at an average growth rate of the 2001 Census population of 2.5%, the total waste per year in 2011 would be 2880 tons. This is more than double the waste of 2005 if no recycling and separation takes place. This is concerning and requires intervention.

TOWN	CURRENT POPULATION 2005	WASTE GENERATED (kg/p/day)	TOTAL	TOTAL WASTE GENERATED (tons/year)										
				2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Laingsburg	4490	1.2		1967	2015	2064	2115	2167	2220	2274	2330	2387	2445	2505
Matjiesfontein	294	0.5		54	55	56	58	59	61	62	64	65	67	68
Farms	2576	0.5		470	482	493	506	518	531	544	557	571	585	599
			TOTAL	2491	2552	2613	2679	2744	2812	2880	2951	3023	3097	3172

Table 3.4.8.3 Waste generation summary and prediction for Laingsburg Local Municipality (source: KV3 Engineers, 2005)

NOTE: There is no weighbridge facilities at the Laingsburg Landfill Site therefore the quantity of waste disposed off at the landfill site is not measured and the exact number of receptacles collected at each of the

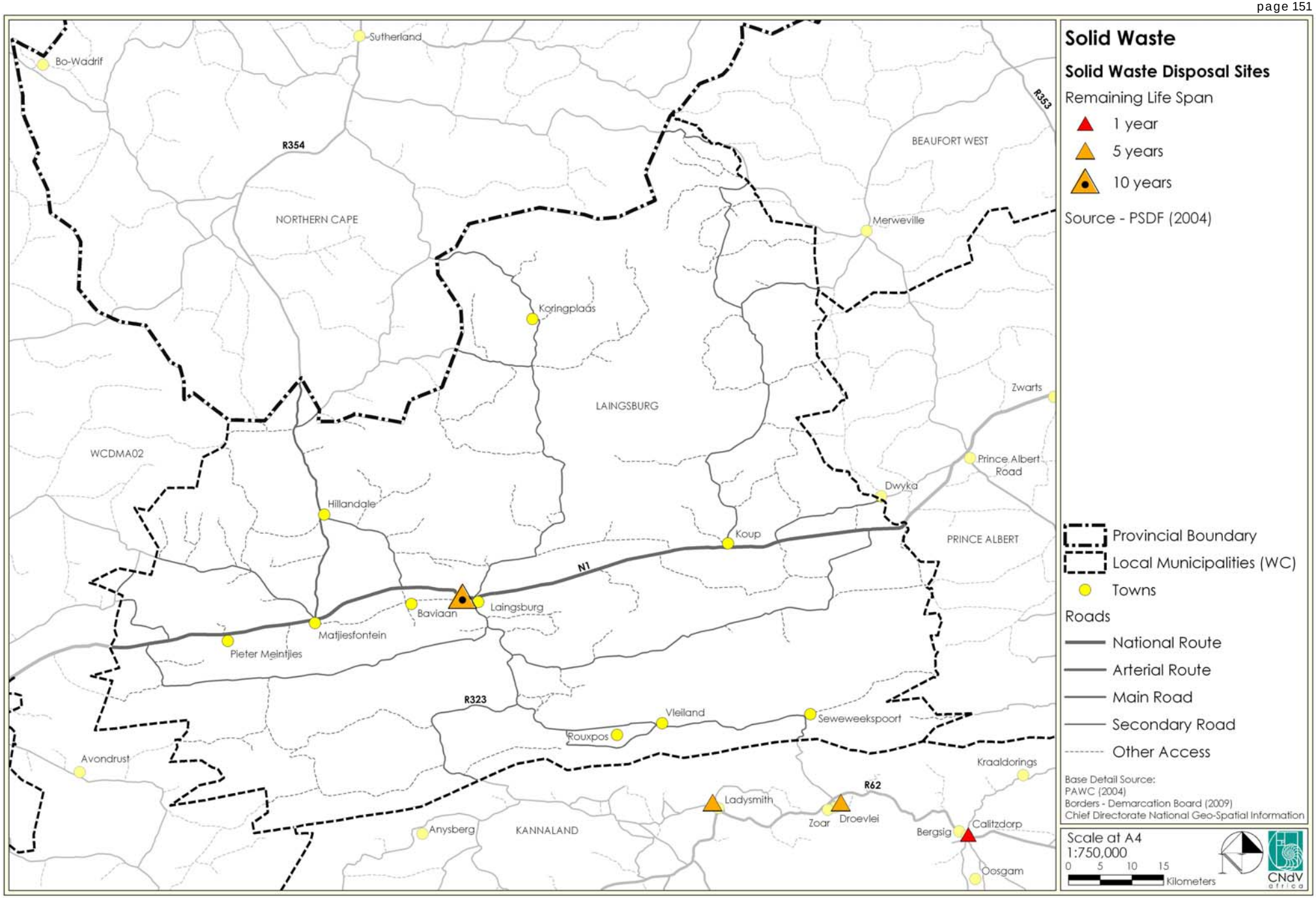


Figure 3.4.8.1 Solid Waste Disposal Sites

service points is not known. Therefore it was not possible to distinguish between the different types of waste generated within the respective areas and the volume of waste generated was purely based on the available population figures.

If the Polokwane Declaration is followed it would result in an estimated 1573 tons per annum reduction of waste. This means that an appropriate system for dealing with waste needs to be implemented. The strategy for the waste management is built on the following principle and sequence:

1. waste avoidance
2. waster minimization
3. waste reuse
4. waste recycling
5. waste treatment
6. waste disposal

Implications for the SDF

- An appropriate waste management system is needed.
- If the above is not implemented – a bigger or more landfill sites will be required.
- Opportunities for waste separation and recycling at the Laingsburg town landfill site should be investigated. These can also assist with low skilled job creation.

3.4.9 Water / Infrastructure

Figure 3.4.9.1 shows the water infrastructure plan. Laingsburg has its sources of water from the three existing rivers, reservoirs and a number of boreholes. These are: Wilgehout River, Bobbejaan River, Buffels River, New Town Reservoir and Goldnerville Reservoir, Soutkloof fountains, Soutkloof boreholes.

The IDP notes that there are six water reservoirs to capture water in the Municipality.

Water from Soutkloof is supplied to New Town Reservoir where it is distributed to households. Buffels River is used as a supplementary source of water.

Most of the water is from the underground water system. The size of the available water reserve in the acquifer needs to be determined.

Matjiesfontein is serviced from two boreholes from the Lord Milner Hotel. Two new boreholes were drilled and commissioned. (SDF Review, 2007)

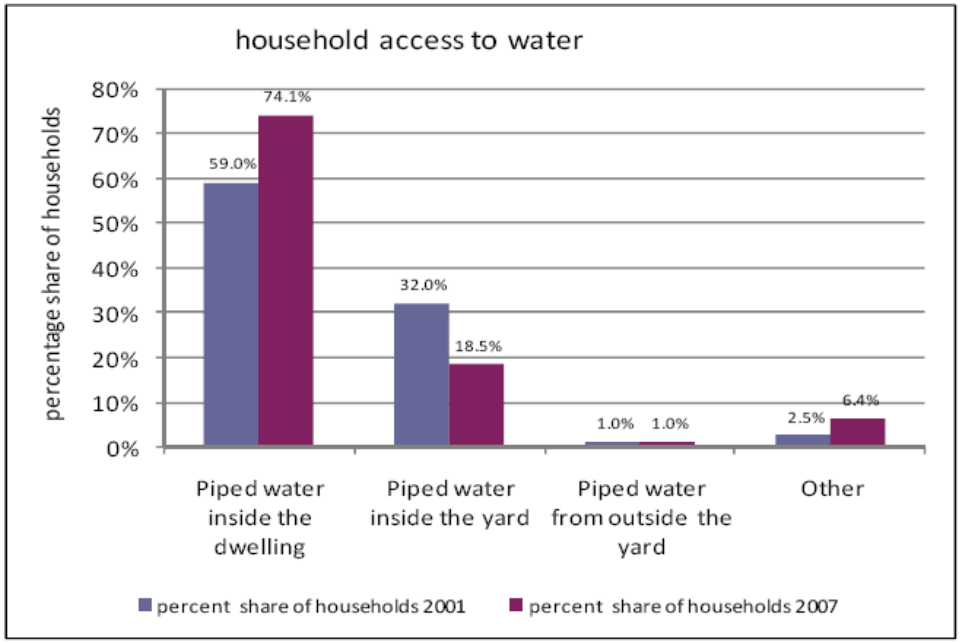
Generally, the Laingsburg Municipal region is well-serviced with water and there appears to be no foreseeable future water shortages even considering extensions. (2007-2012 IDP, pg 24)

Graph 3.4.9.1 shows the main water sources used by households. This 2001 and 2007 comparison shows that access to piped water inside dwellings have increased from 59% to 74% (± 15% increase) over the mentioned period.

The following issues were identified by the IDP:

- recycle the waste water for industrial use and identification of viable water sources for the future
- purify the water for Matjiesfontein
- drill a new borehole to provide Matjiesfontein with water
- continuous reviewing of our Water Services development plan

About 60% of the households have access to water. However, management and distribution of water in farming areas remains poor. Laingsburg town needs to investigate additional sources of water if it in tends to attract major developments to its region.



Source: Stats SA, Census 2001 and Community Survey 2007

**Other includes borehole, spring, dam, pool, river, stream, water vendor and rainwater tank.*

Graph 3.4.9.1 Main source of water used by households (source: Socio-economic Profile, 2007)

Implications for Laingsburg Municipality

- Laingsburg and Matjiesfontein's low rainfall, especially during the summer months, means that, while it should be encouraged, rainwater harvesting is unlikely to be sufficient for even the settlements' domestic water needs, never mind demand from commerce, industry and agriculture.
- A range of water demand management strategies for all sectors needs to be developed.

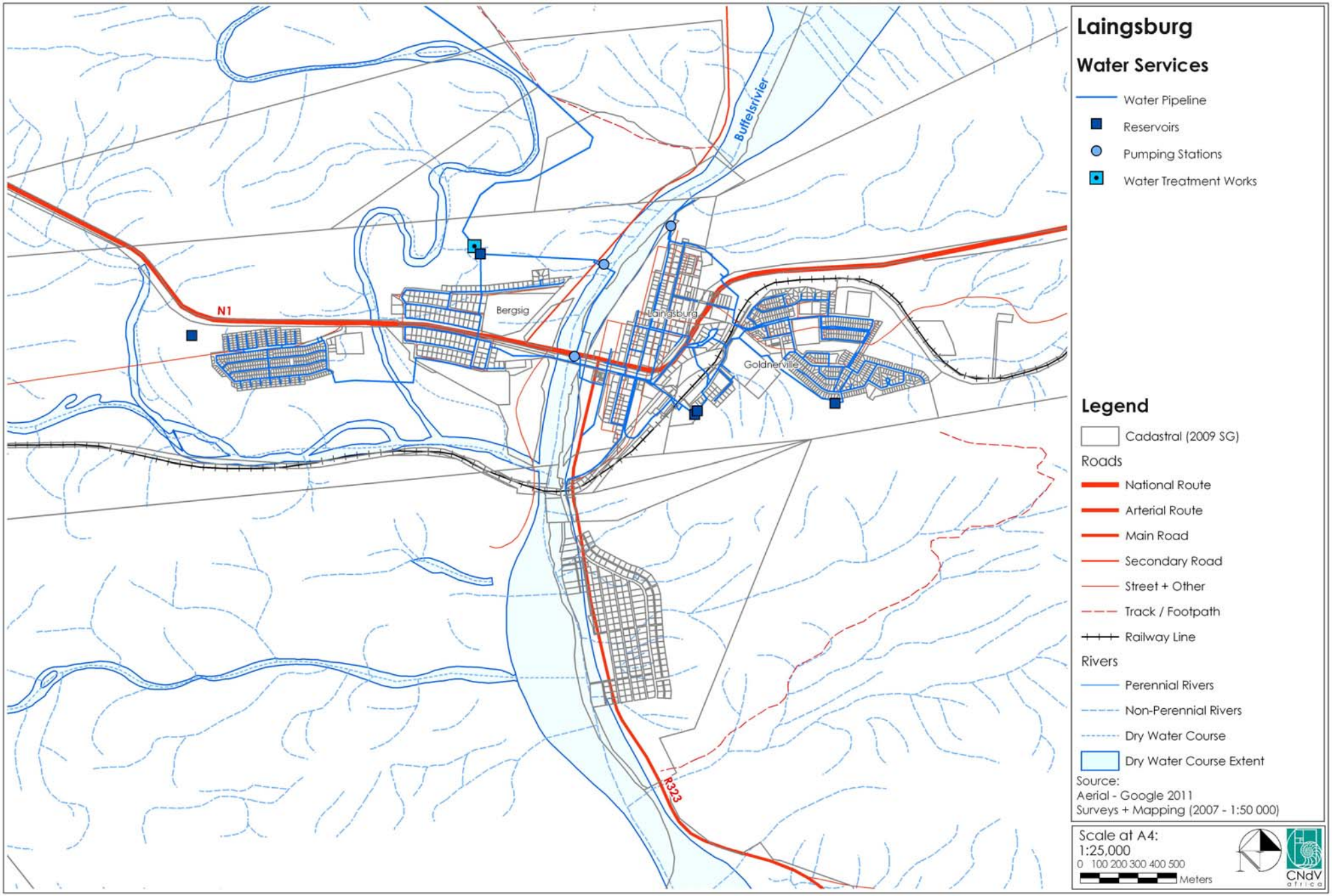


Figure 3.4.9.1 Water Supply Infrastructure

3.4.10 Waste Water Treatment (Sanitation)

There are two waste water treatment plants; one in Matjiesfontein and one in Laingsburg.

Waste Water Treatment for Laingsburg is above and for Matjiesfontein is below the Basic RDP standards.

The different types of waste water treatment facilities for Laingsburg are shown in Table 3.4.8.1. This table shows that 62.5% of the sanitation facilities are waterborne, 12.6% are using tanks and 7.8% have no facility. 3.1% still use the bucket system.

Most of the households in Matjiesfontein depend on ventilated improvement pits (VIPs). On the farms, 30% of the households have proper sanitation, 10% use VIPs and 5% the bucket systems. (IDP 2007)

In 2001 about 74.4% of households had access to flush toilets either by means of waterborne sewerage or septic tank. In 2007 this has increased to 91.1%. The bucket system has also decreased from 3.3% in 2001 to 2.1% in 2007. The attached shows the improvement made in terms of access to sanitation services.

Toilet facilities	2001	Percentage share of households 2001	Percentage share of households 2007	Average annual growth 2001 - 2007
Flush toilet (connected to sewerage system)	1196	61.6%	85.4%	5.8%
Flush toilet (with septic tank)	249	12.8%	5.7%	-12.3%
Dry toilet facility		0.0%	0.8%	N/A
Pit toilet with ventilation	188	9.7%	0.9%	-32.4%
Pit toilet with out ventilation	80	4.1%	1.7%	-13.7%
Chemical toilet	6	0.3%	0.0%	-100.0%
Bucket toilet system	64	3.3%	2.1%	-6.8%
None	160	8.2%	3.4%	-13.5%
Total	**1943**	**100.0%**	**100.0%**	

Table 3.4.10.1 **Main toilet facility used by households** (source: Statistics SA, Census 2001 and Community Survey 2007)

The sewer plan is indicated in Figure 3.4.10.1.

Implications for Laingsburg Municipality

- Care should be taken to extend the existing waterborne sanitation system, bearing in mind Laingsburg Municipality's water scarce situation, using conventional waterborne sanitation systems.
- Rather, off-grid, small bone, dry and alternative technologies such as bio-gas (permanent occupation) or enviro-loos / biolytics / ventilated improved pit latrines (VIPL) (also suitable for periodic occupation) should be used.

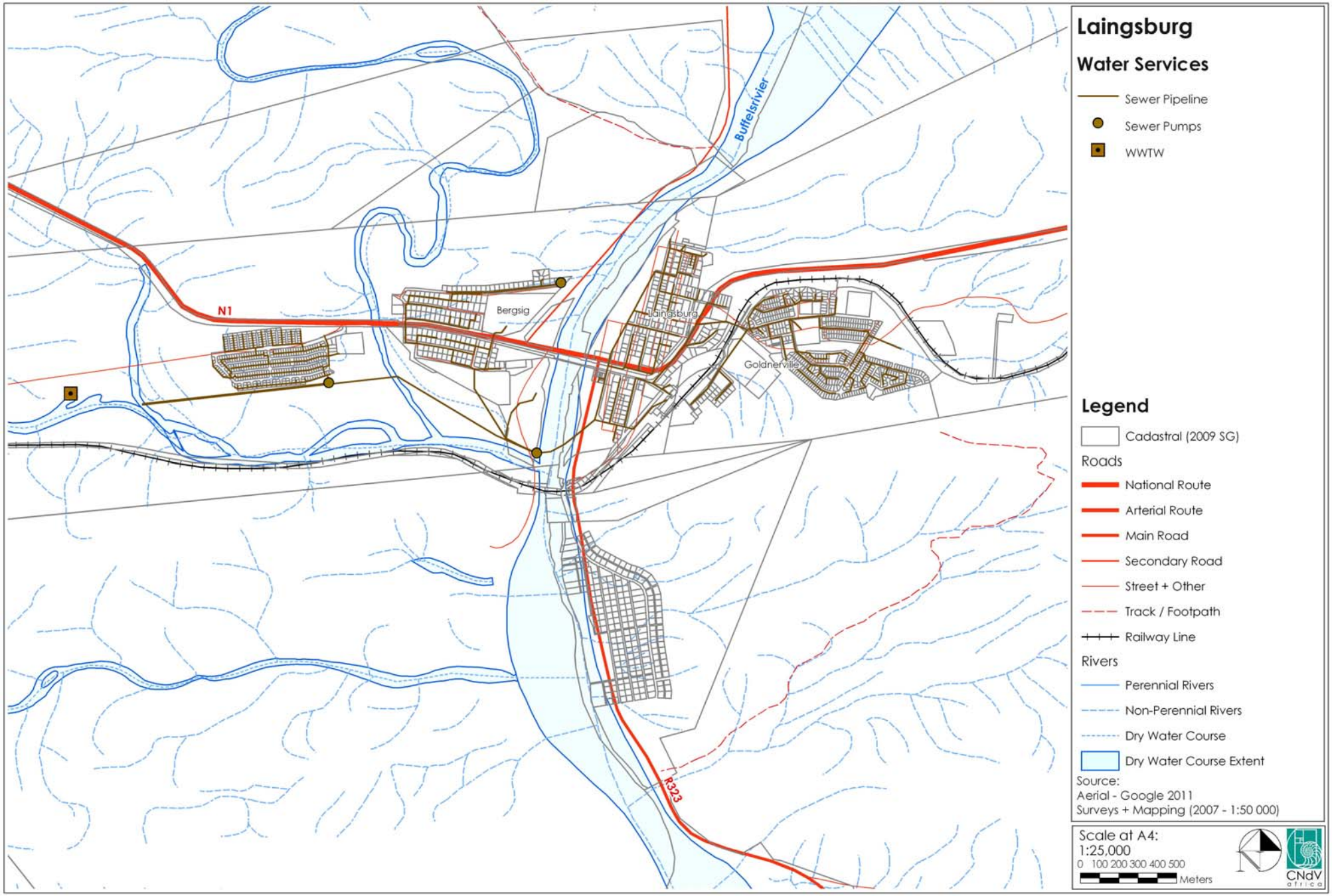


Figure 3.4.10.1 Waste Water Treatment Works: Laingsburg

3.4.11 Energy

The electricity network plan for the Municipality is shown in Figure 3.4.11.1. This plan shows three main east to west powerlines cutting through the Municipality. The first, and southern-most, generally in line with the N1 Freeway cutting across the N1 Freeway. The second one, north of the N1 Freeway, running parallel to the N1 Freeway, cutting across to Merweville which is outside of the study area. There is also a north-south running powerline connecting these two sets of lines into Laingsburg and then south towards Rouxpos.

The following issues were identified by the IDP:

Regular power cuts:

- Develop an Eskom Maintenance programme in partnership with Municipality
- Some people are using renewable energy and solar energy is the appropriate alternative, which could be used locally. Conduct a feasibility study should be conducted to produce surplus renewable and solar energy to the national power grid.

Energy sources for lighting	Census 2001	Percentage share of households 2001	Percentage share of households 2007	Average annual growth 2001 - 2007 %
Electricity	1417	72.9%	84.6%	2.7%
Gas	6	0.3%	0.8%	16.5%
Paraffin	18	0.9%	1.3%	6.3%
Candles	370	19.0%	10.2%	-9.7%
Solar	82	4.2%	1.6%	-15.0%
Other	49	2.5%	1.5%	-8.4%
Total	**1943**	**100.0%**	**100.0%**	**0.2%**

Table 3.4.11.1 Main type of energy/fuel used for lighting by households (source: Stats SA, Census 2001 and Community Survey 2007)

Table 3.4.11.1 above shows that 84,6% of the energy is obtained from electricity and 10% is from candles. Electricity has increased substantially from 72.9% in 2001 to 84,6%. Candles have been reduced from 19% in 2001 to 10,2%.

There has been a 16.5% growth per annum in the use of gas. There has also been a 15% per annum reduction in the use of solar energy which is concerning seeing that this is the cheapest form of energy.

An application for wind energy development has been made in the Municipality. While these projects feed into the national grid and do not have direct benefits for the local area they can have indirect benefits as a result of a reduced need for coal for the generation of electricity.

However, wind and solar projects can have other local benefits, particularly low level job creation, as well as disadvantages, particularly visual in important scenic landscapes.

Implications for Laingsburg Municipality

- Irrigation farming has higher energy demands and tariff increases presents a burden particularly for commercial and definitely for emerging farmers.
- Solar hot water cylinders and photovoltaic should be installed in all residential properties as well as industrial and commercial buildings.

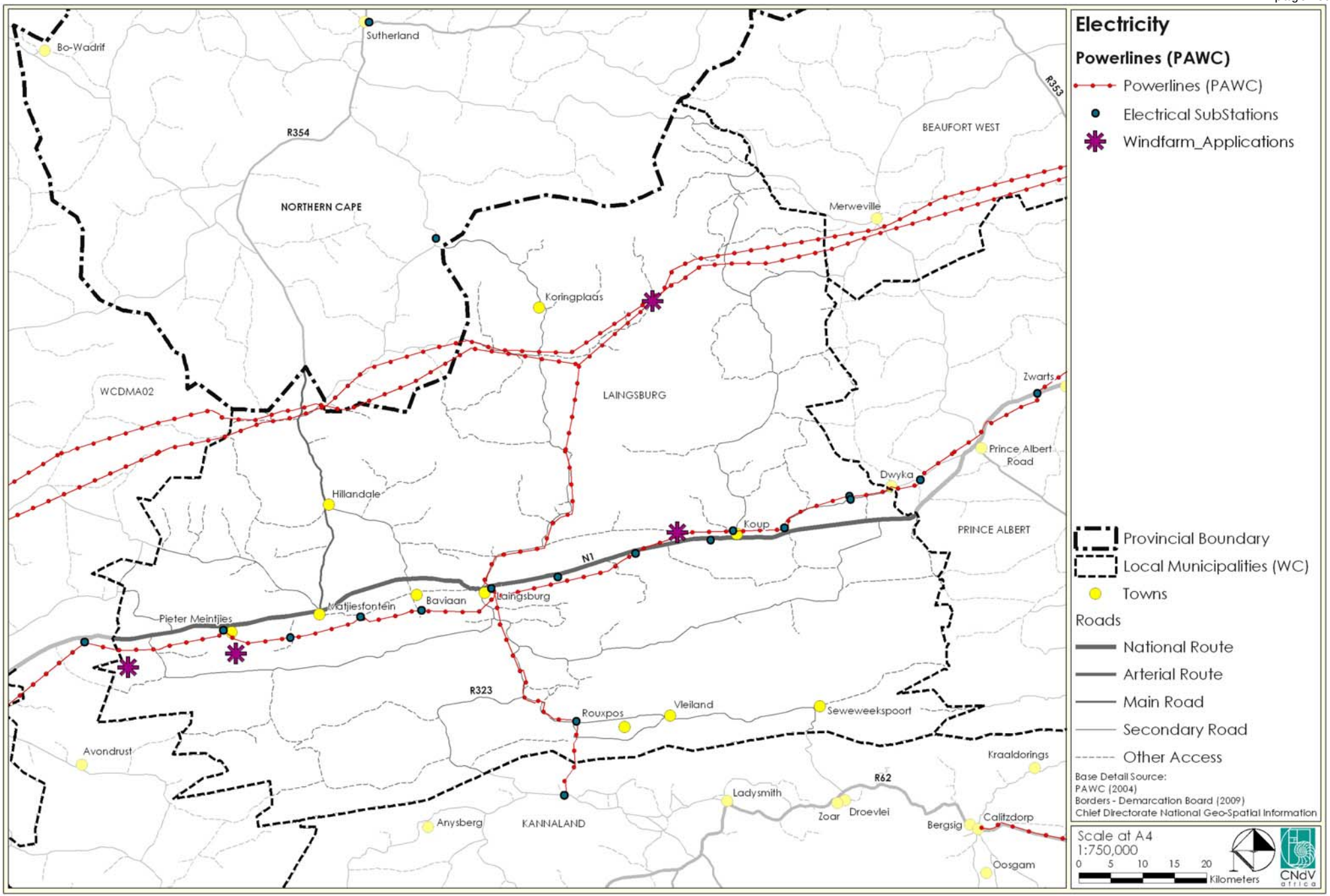


Figure 3.4.11.1 Electrical Supply Network

3.4.12 Telecommunications

The telecommunication plan for the Municipality reflects the existing pattern of infrastructure as indicated in Figure 3.4.12.1. This plan shows that the central east-west band of the Municipality has generally good access for both MTN and Vodacom networks.

The Vodacom network increases its scope in the southern areas down to the Anysberg Nature Reserve whereas the MTN increases its coverage northward between Koringplaas and Merweville.

Both networks do not cover the Koringplaas, Vleiland and Rouxpos areas. This is particularly concerning as people in those areas would not have access to cellular phone networks.

The national fibre-optic broadband cable is currently being laid up the N1. This has the advantage of being able to bring very high levels of interconnectivity to settlements along the N1 like Matjiesfontein and Laingsburg, see box.

Free and easy

For years I was beholden to residing and working in the city and fleeing to the West Coast to find my freedom in a small fishing village on weekends. I didn't think ADSL was available in the village, but I made some enquiries when the perfect property for a work-from-home business came up for sale.

Telkom made my dreams come true by offering me the best of both worlds. I watch the waves roll in on Yzerfontein beach (all 16 miles of it) while surfing the net and manning my e-business.

From my window I see ostriches bobbing in the field and wild francolins pottering in my garden.

Yet I'm still as close to my customers as I ever was in the city, thanks to ADSL. Telkom has enabled me to transplant my business anywhere. It's a rare commodity, the stuff dreams made of.

EW Lewis, Yzerfontein

(source: Telkom 365 Magazine, Issue 3, Spring 2011, pg 3)

Implications for the SDF

- Telkom line coverage applies to all the areas.
- Cellphone coverage into the Vleiland, Koringplaas and Rouxpos areas are required.
- Improvements in telecommunications can contribute to encouraging higher income permanent residents into the Municipality because it reduces dependence on the larger urban settlements to facilitate higher order transactions and activities.

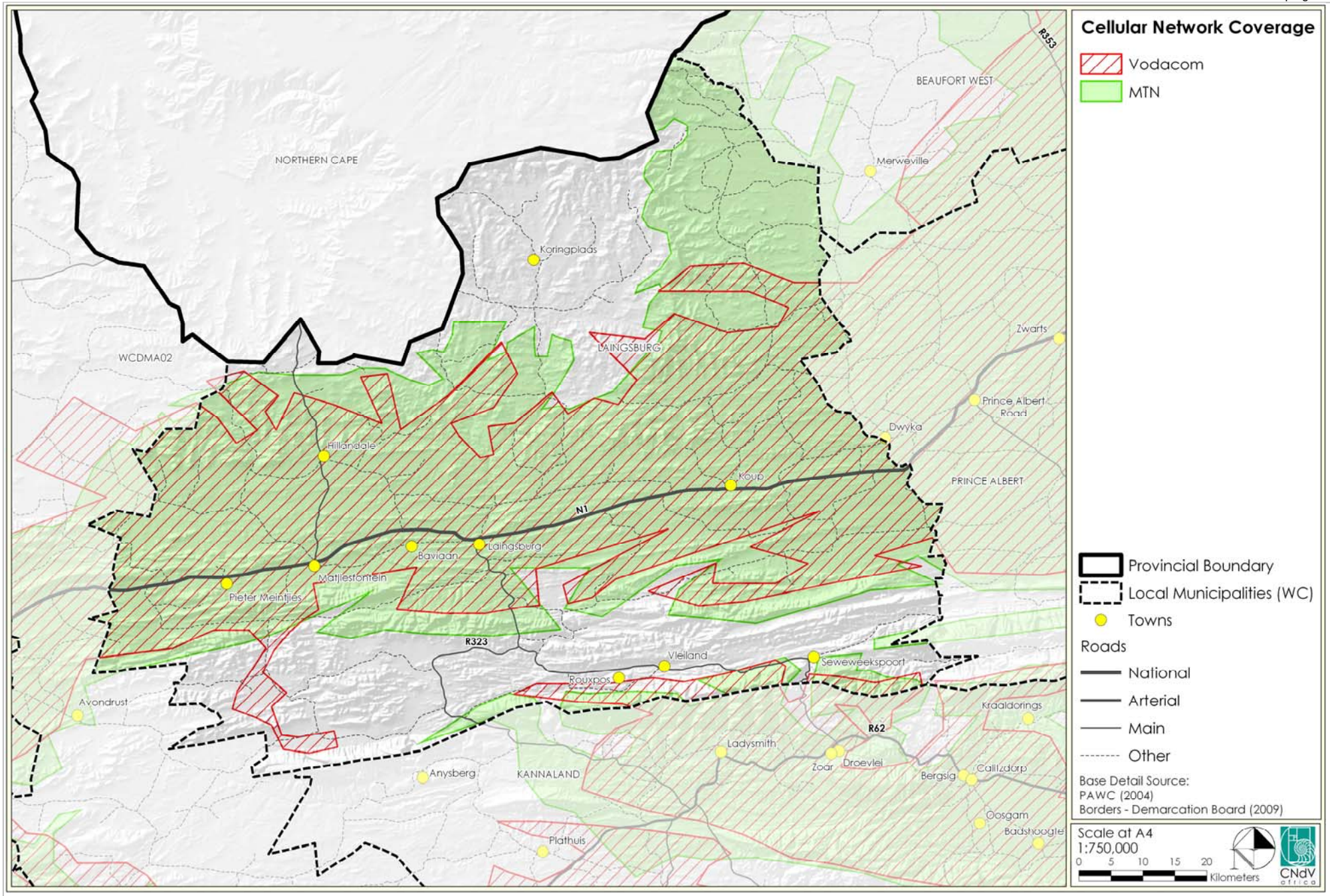


Figure 3.4.12.1 Telecommunications

3.4.13 Stormwater

With the memories of the 1981 flood still fresh in people's minds stormwater management is an important concern in Laingsburg.

The IDP notes that the current stormwater system for Laingsburg is sufficient to meet the needs of the local community. However, it requires upgrading and maintenance on a regular basis.

Matjiesfontein has no stormwater management system and has problems with stormwater overflow during the rainfall season. The IDP has made provision for a stormwater overflow system in Matjiesfontein.

A comprehensive Laingsburg Stormwater Master Plan was completed in 2010 which included estimates for the 1:2 year, 1:5 year, 1:50 and 1:100 year stormwater events. The latter seems to be similar to the 1:150 year flood and it is noted that particular significance under this 1:100 year flood conditions is the potential for flooding along the main drainage canal through Goldnerville and Oudorp. An accurate floodline determination is required in this regard.

With regard to the 1:50 year storm a number of potential flooding areas have been identified, namely, the area behind and adjacent to Acacia School, Fabriek Street, Voortrekker Street and Shell Garage, and the rail underpass to Goldnerville.

The Master Plan identifies a number of projects that requires detailed surveys and assessments to address the abovementioned potential flooding areas as well as the determination of the 1:100 year floodline.

Implications for the SDF

- No development should be permitted within the 1:50 year flood plain.
- Where urban development is permitted or intended within the 1:100 year floodline, the floor level of the proposed buildings should be above the 1:100 year flood level.
- The flood protection measures should be implemented for the areas identified as potential flood areas:
  - the area behind and adjacent to Acacia School,
  - Fabriek Street,
  - Voortrekker Street,
  - Shell Garage, and
  - the rail underpass to Goldnerville.

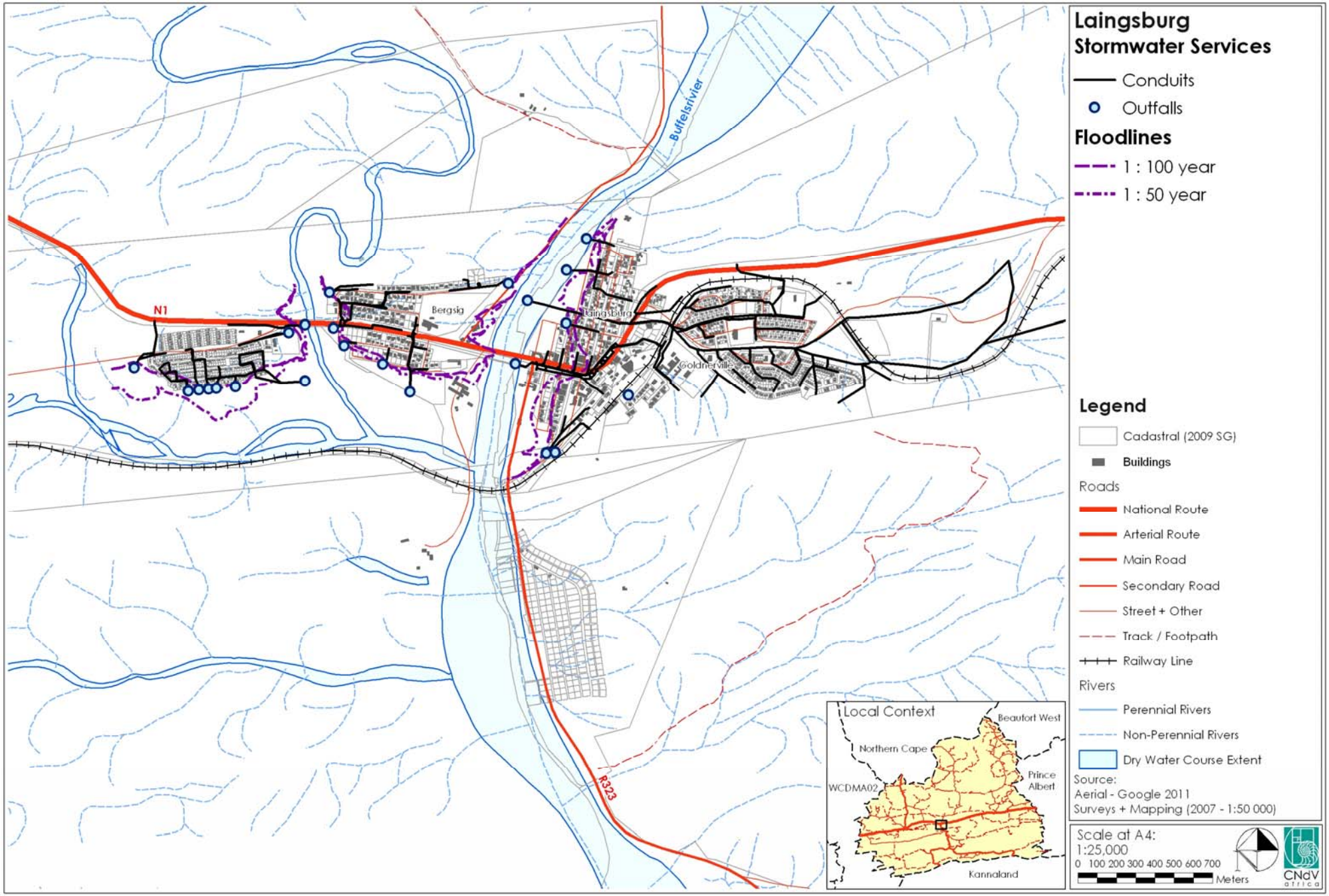
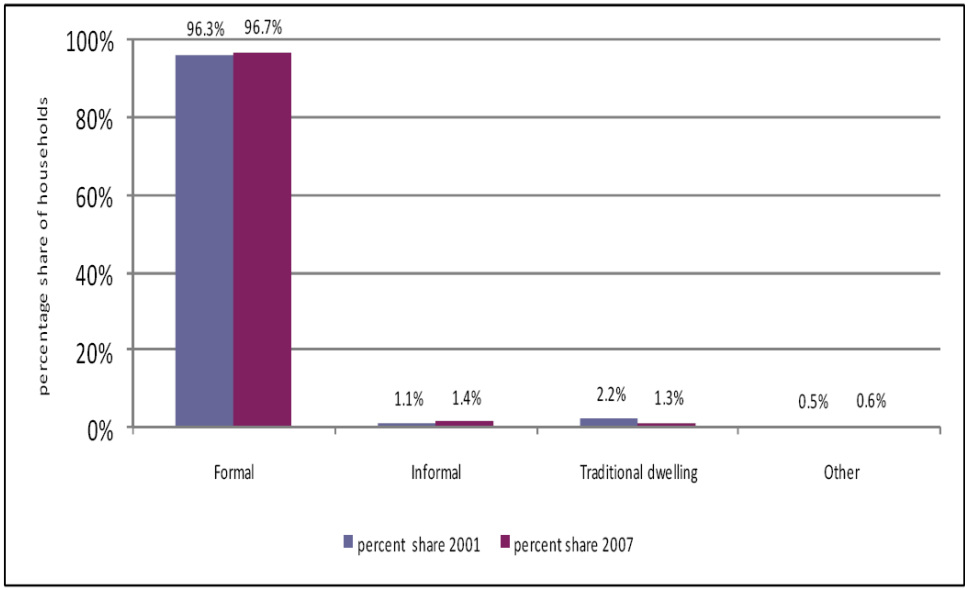


Figure 3.4.13.1 Stormwater

3.4.14 Housing

(Housing Plan 2008)

Graph 3.4.14.1 below shows that informal housing has showed a 0.3% increase between 2001 and 2007 and traditional dwellings have decreased by 0.9%. There has been therefore been no significant change in the housing situation in the Laingsburg municipality between 2001 and 2007. The IDP (2007-2012 IDP) notes that Laingsburg currently has a housing backlog of 524 RDP units of which 18% is attributable to Matjiesfontein. There is a GAP housing backlog of about 300 units for those who do not qualify for BNG housing.



Graph 3.4.14.1 Dwelling type occupied by households in Laingsburg (source: Stats SA, Census 2001 and Community Survey 2007)

In addition, the IDP (2007-2012 IDP) notes that approximately 300 units (indicated as 265 in housing Plan 2008) require urgent maintenance, currently being in a seriously dilapidated state.

The 2008 housing plan notes that the main strategies needed to address the following:

- Establishing a housing advice centre
- Providing sufficient and adequate information relating to housing
- Ensure that occupiers get title deeds
- Promote the people's housing process or self-build
- An integrated human settlement plan
- A town master plan for infrastructure
- A study of GAP houses with low income housing

The HSP lists the following projects that should be included in the spatial development framework:

- 95 units in Matjiesfontein
- 429 units for Laingsburg
- Upgrade of 265 dilapidated houses
- 300 GAP houses in Laingsburg

The following services/projects are needed according to the HSP:

- Water
- Electricity
- Drainage and stormwater
- Road infrastructure
- Street lighting
- the town establishment in Matjiesfontein

The HSP notes the following planned projects, see Table 3.4.14.1:

Project title	No. of units	Project value	Area	Project type	Comments
Matjiesfontein Phase 1	95	3,800,000	Matjiesfontein	RDP, Rural	Project packaging in process
Laingsburg Phase 3	429	17,160,000	Laingsburg	RDP, Urban	In process to buy land
Laingsburg Phase 4	265	3,975,000	Laingsburg	Upgrading	Houses are dilapidated

Table 3.4.14.1 Planned Projects (source: LM Final Housing Plan, 2008)

A total of 789 units are planned, 95 for Matjiesfontein and the remainder in Laingsburg at a total cost at the time of R24,935 million. Of the 789 units 265 will be the upgrade of dilapidated houses in Laingsburg.

To facilitate the development of the 524 new houses (the current backlog), and the upgrading of the 265 dilapidated houses, the following cashflow is proposed, see Table 3.4.14.2. This table shows that the intention was to have all the projects completed by 2010.

Project Title	No. of Units	Project Value	Ex Date to	Year 1 06/07	Year 2 07/08	Year 3 08/09	Year 4 08/09	Year 5 09/10	Totals
Current Projects: Section 1									
Bergsig Phase 2	108	4,320	4,320	4,320	-	-	-	-	4,320
Planned Projects: Section 2									
Matjiesfontein Phase 1	95	3,8	0	800	3,0	-	-	-	3,8
Laingsburg Phase 3	429	17,160	0	0	4,0	4,0	4,0	5,160	17,160
Laingsburg Phase 4	265	3,975	0	0	1,5	1,5	975	-	3,975

Table 3.4.14.2 Cash flow and Programs (source: LM Final Housing Plan, 2008)

The following is an update of the above and new projects according to the Manager Technical Services:

- The Municipality is currently undertaking an infill project of 180 of an initially anticipated 300 units in Goldnerville;
- The Matjiesfontein 95 units have been reduced to an infill project of only 39 units;
- The 429 (Phase 3) units is the completed Bergsig units; and,
- The upgrade of the 265 units has not been initialised.

It should be noted that the Department of Human Settlement will only support new conventional Breaking New Ground Housing (BNG) in the town of Laingsburg because of the relatively high development potential of the town and the generally low development potential of the surrounding smaller settlements, according to the Growth Potential of Towns Study (2010).

The Department notes that alternative means of Housing opportunity provision in the smaller rural settlements specifically partnerships with the private sector and the governmental departments must be investigated.

The above has implications for new BNG housing for those in need in Matjiesfontein and Laingsburg.

Implications for the SDF

- Identify appropriately located land for housing.
- The 2009/10 IDP review shows that the backlog of houses has increased to 550 BNG units and 350 GAP units. The increase in backlog is essentially due to the fact that the municipality does not have land available to develop housing. Therefore, it is unable to address the backlog and to prevent its increase. The Municipality initiated a process to buy land for commonage and housing.

3.4.15 Land Ownership

Figures 3.4.15.1 to 3.4.15.4 shows the pattern of land ownership in the Municipality, Laingsburg, Matjiesfontein and Vleiland.

This figure shows that the majority of the land is privately owned.

4.48% (71791ha) of the land is state owned, 0.52% (8315ha) of the land is owned by the local Municipality, most likely in the form of commonages.

A number of the state owned land is covered under various reserves, namely the Anysberg Nature Reserve; the Gamkapoort Nature Reserve; and the Klein Swartberg Nature Reserve; and the land around the Floriskraal Dam.

Except for Farm 225, Laingsburg, all the land in Vleiland is privately owned, which could present a challenge for urban expansion to accommodate subsidy housing. Clarity is still required on how many units are required in Vleiland.

Implications for the SDF

- Land is needed for housing in Vleiland. The Municipality needs to acquire appropriately located land for development.

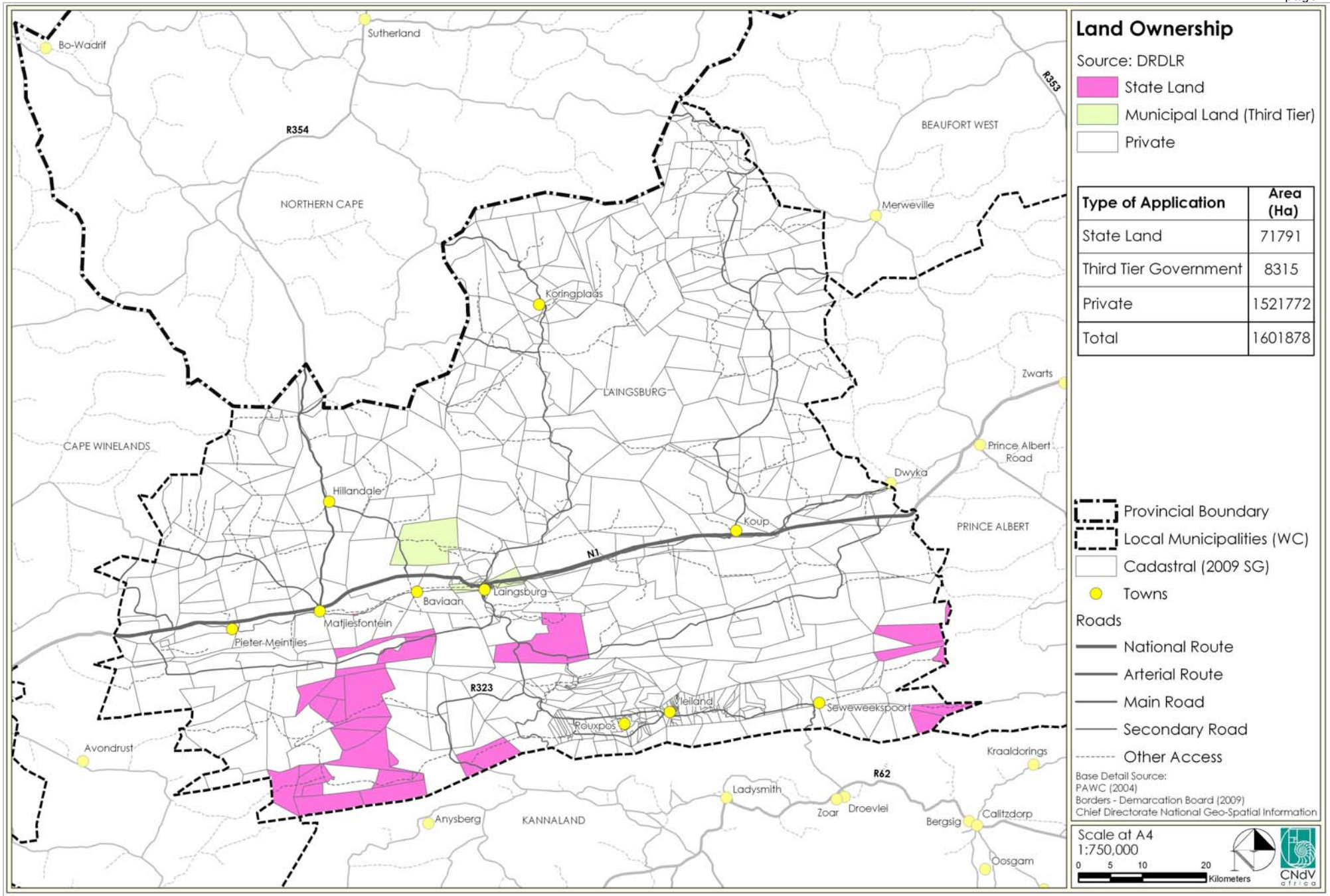


Figure 3.4.15.1 Ownership : Laingsburg Municipality

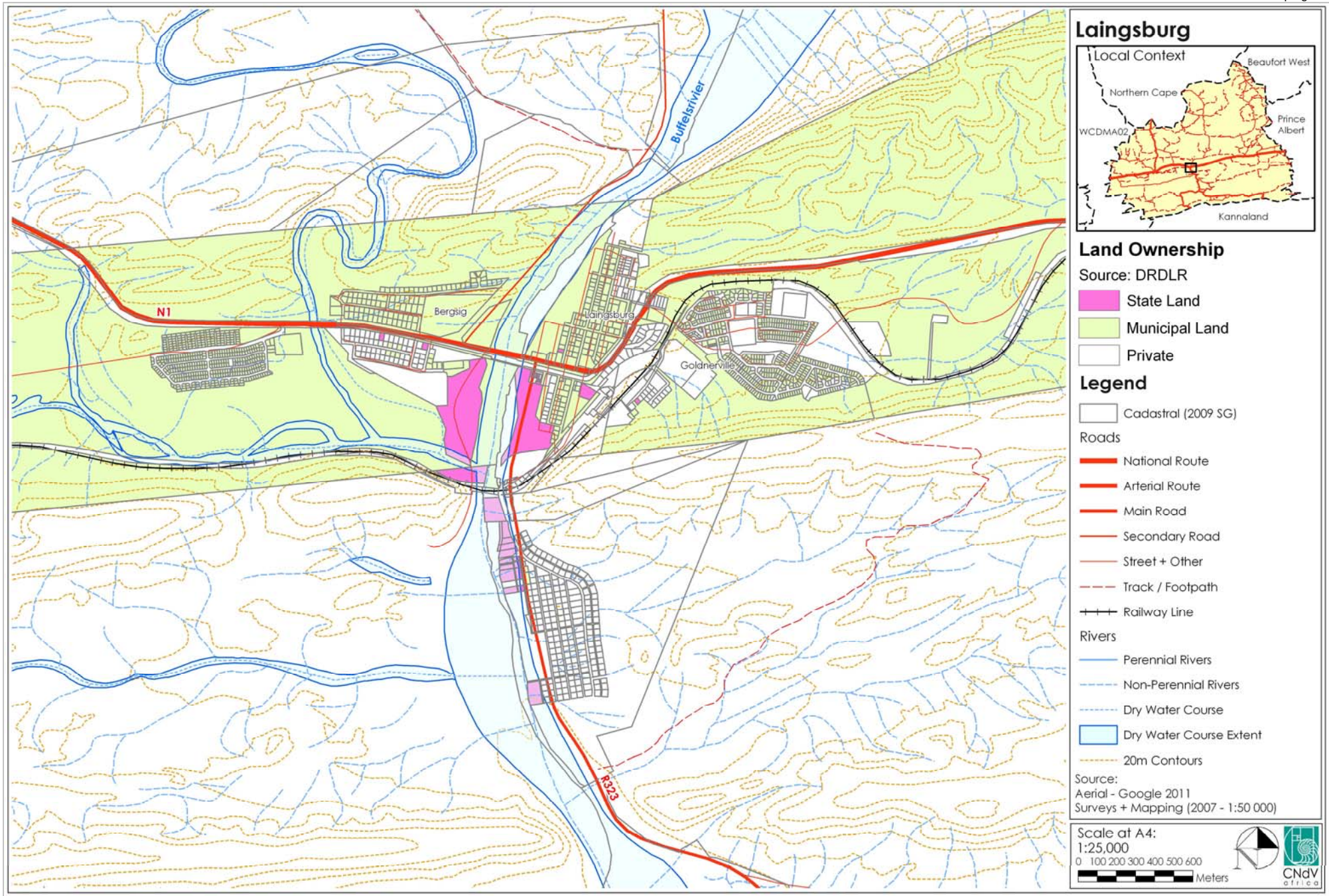


Figure 3.4.15.2 Ownership : Laingsburg Town

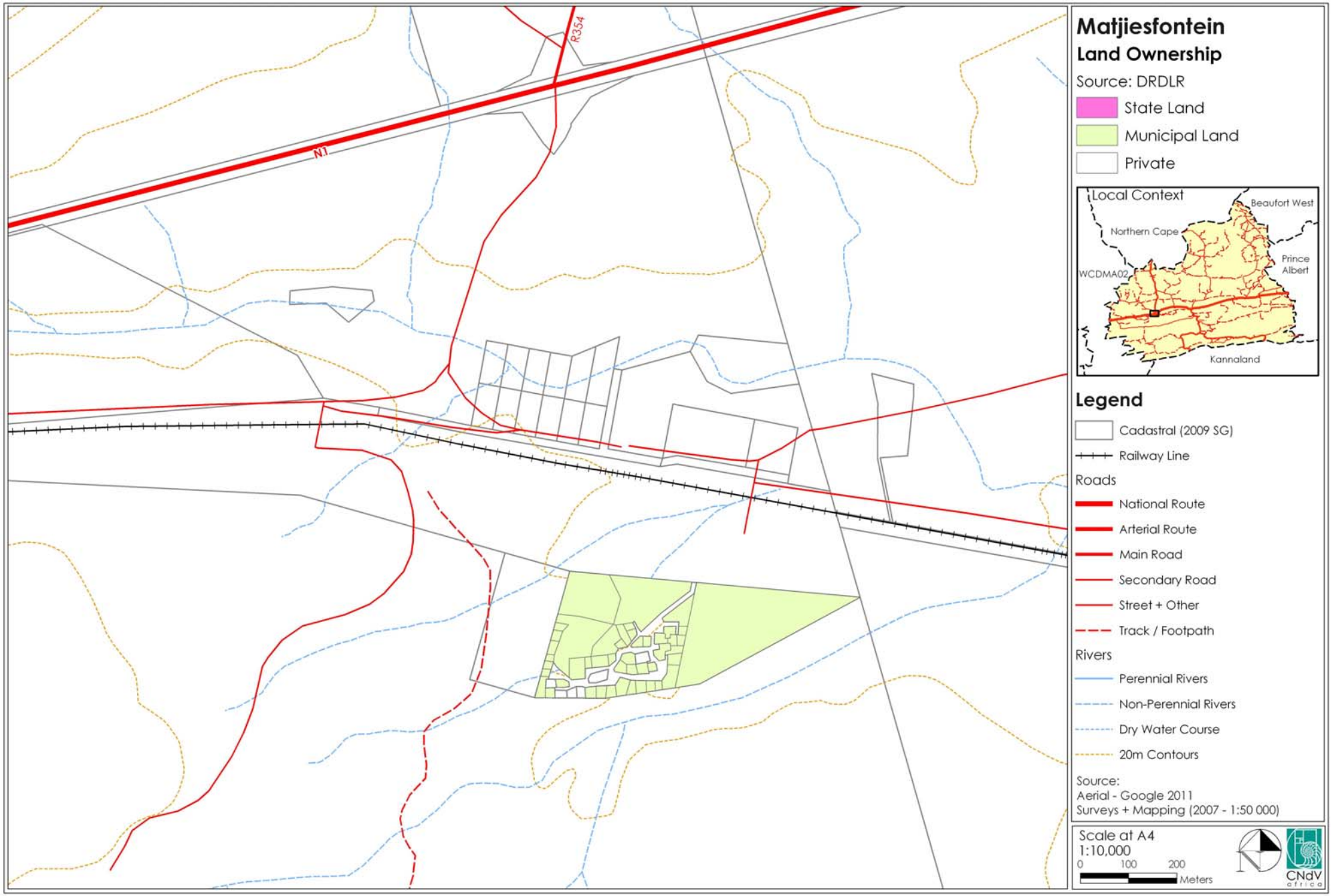
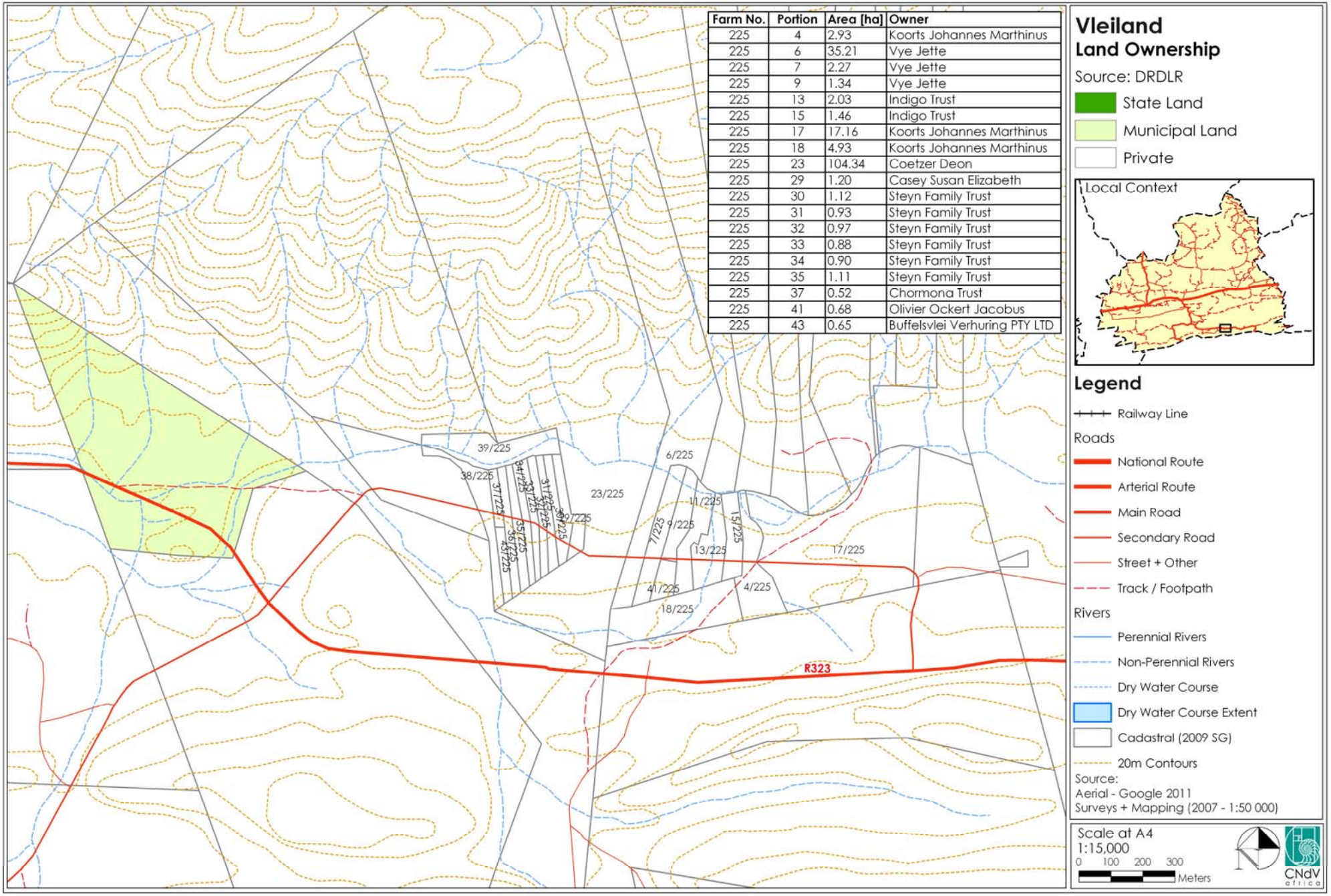


Figure 3.4.15.3 Ownership : Matjiesfontein



Farm No.	Portion	Area [ha]	Owner
225	4	2.93	Koorts Johannes Marthinus
225	6	35.21	Vye Jette
225	7	2.27	Vye Jette
225	9	1.34	Vye Jette
225	13	2.03	Indigo Trust
225	15	1.46	Indigo Trust
225	17	17.16	Koorts Johannes Marthinus
225	18	4.93	Koorts Johannes Marthinus
225	23	104.34	Coetzer Deon
225	29	1.20	Casey Susan Elizabeth
225	30	1.12	Steyn Family Trust
225	31	0.93	Steyn Family Trust
225	32	0.97	Steyn Family Trust
225	33	0.88	Steyn Family Trust
225	34	0.90	Steyn Family Trust
225	35	1.11	Steyn Family Trust
225	37	0.52	Chormona Trust
225	41	0.68	Olivier Ockert Jacobus
225	43	0.65	Buffelsvlei Verhuring PTY LTD

Figure 3.4.15.4 Ownership : Vleiland

3.4.16 Vacant Land

The 2008 housing plan notes that the municipality recently acquired land for housing as well as a commonage. It notes that there were six plots within the town that was not being utilised. Fifteen plots would be developed close to the residential area of Goldnerville and near the N1 in the direction of Beaufort West. The state owns nine plots in the town that will also be utilised. The municipality owns the farm Zoutkloof where the water is being currently supplied. The two commonages of Goldnerville and Bergsig are being used for small scale farming. The municipality had at that time engaged with Spoornet, owning land in Matjiesfontein, to obtain appropriate land for housing.

The vacant land in Laingsburg and Matjiesfontein are shown in Figures 3.4.16.1 and 3.4.16.2.

These maps illustrate that there is about 56ha of vacant land on both sides of the railway line, within about 500m from the hotel. This is assuming that the hotel is the centre of the settlement.

About 100 ha of vacant land is located around Laingsburg up to about the 2km radius. A sizable amount of additional land is vacant within the 2km radius but this land covered by restrictions such as the 1:50 year floodlines, watercourses and around the electrical substation.

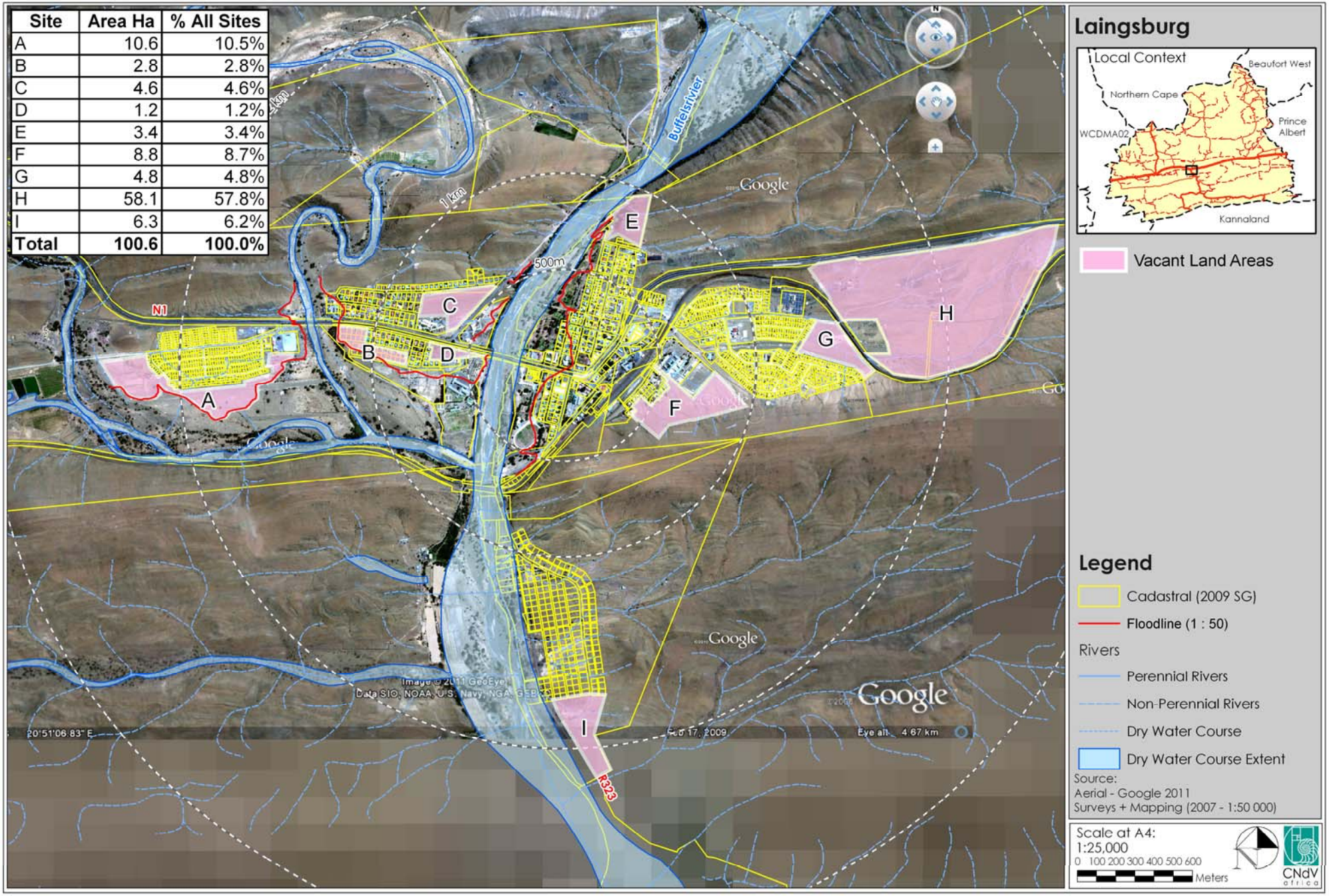


Figure 3.4.16.1 Vacant Land : Laingsburg

Site	Area Ha	% All Sites
A	4.0	7.1%
B	3.2	5.7%
C	0.7	1.3%
D	3.2	5.7%
E	5.1	9.1%
F	2.4	4.3%
G	6.6	11.8%
H	3.4	6.1%
I	8.6	15.4%
J	12.2	21.8%
K	2.5	4.4%
L	4.1	7.3%
Total	**56.0**	**100.0%**

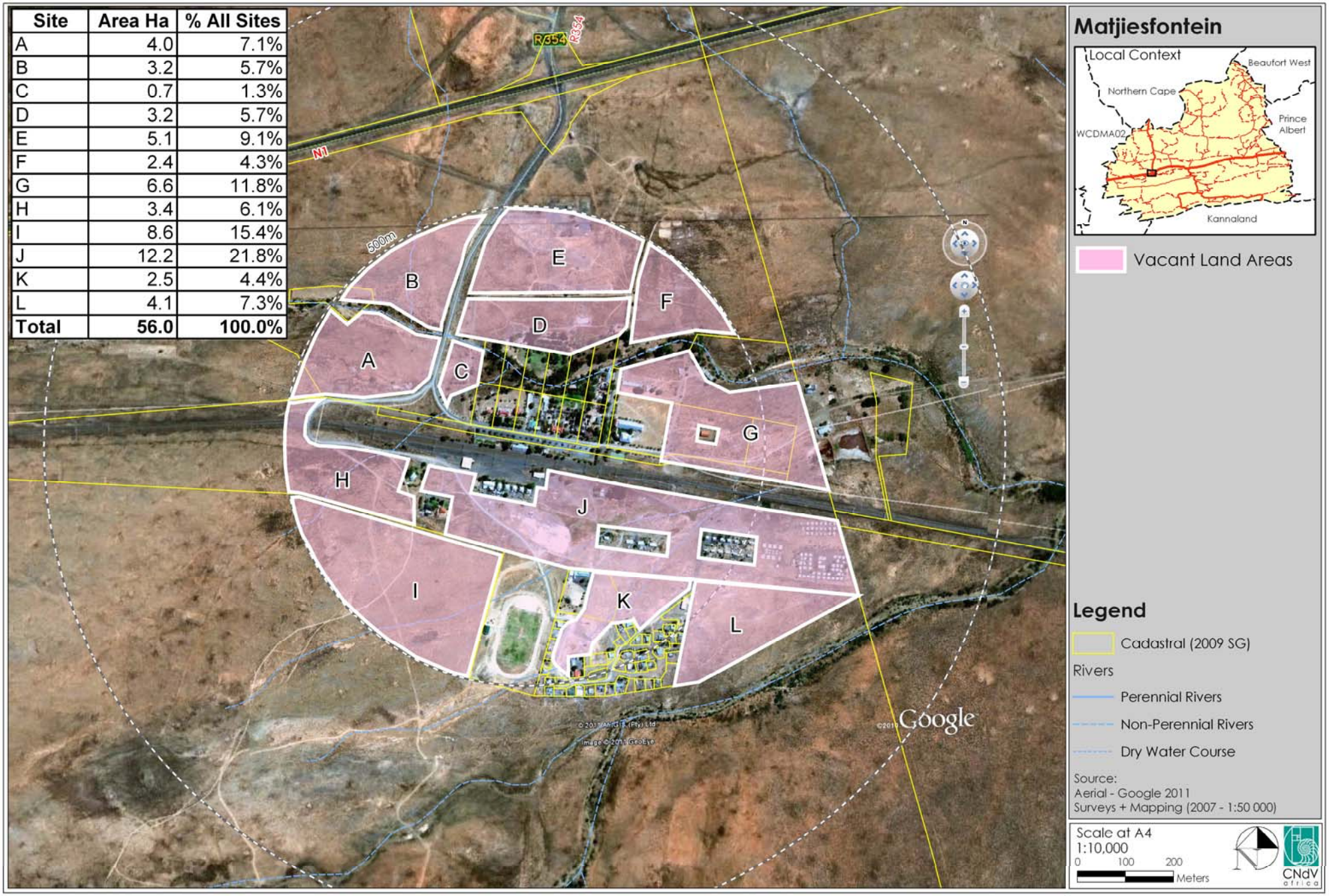


Figure 3.4.16.2 Vacant Land : Matjiesfontein

3.4.17 Tourism

The tourism industry plays a key role in the South African economy, both from its contribution to GDP and from its contribution to employment and tourism is dependent on both domestic and foreign visitors both in the sense of domestic to the Laingsburg and western cape and also in the sense of national as well as international visitors.

Laingsburg has a number of heritage sites and as a Municipality has numerous opportunities for the enhancement of its heritage and tourism opportunities. The N1 Freeway as it passes through Laingsburg presents with itself automatic patrons to tourism opportunities. These opportunities are generally limited to activities that are directly exposed to the N1 Freeway. This also includes activities located deeper in the municipality.

The SDF review data 2007 noted that approximately 14,000 vehicles pass through Laingsburg every day. This traffic in itself provides a great opportunity for tourism and the economy of Laingsburg.

Laingsburg also has a strong national and international iconic status in South Africa in that it was the place of the largest natural disaster, namely the great flood that happened in 1981. This presents tourism opportunities. However, the tourism opportunities and activities need to be diversified.

In this regard the traffic safety measures in Laingsburg town, such as the line of New Jersey barriers along the intersection with the N1 Freeway and Humphrey Street require amelioration.

Matjiesfontein village is known for its Victorian architecture and has approximately about 10,000 visitors per year. (IDP2007) However, these visitors to Matjiesfontein are essentially one day visitors with possible overnight stay opportunities. The aim should be to lengthen their stay, not only in Matjiesfontein, but also in the Municipality.

There is a need to enhance tourism industry by developing aspects such as skills development in the hospitality industry. Other aspects such as marketing and creating widespread awareness of the area and its opportunities are also required. A simple example of increased attention to marketing for tourism is the fact tha the entrnace and signage to the tourism musuem and precinct is so obscure on the N1 Freeway that it makes this area to lose out on potential patronage.

The Floriskraal Dam has been identified as an opportunity for development for the tourist economy in the area.

Further investigation is required around whether there is an SUP for the area around the dam. This is to ensure the maximum economic, social and tourism benefit is obtained from the dam whilst preserving the integrity of the ecological functions of the dam. This should also be done for the Gamkaspoort dam from which Laingsburg Municipality as well as Prince Albert Municipality can benefit.

The municipality could also potentially have a number of agri-tourist opportunities. These are as follows:

- ***Routes***
  - *Flood route*
  - *Several 4x4 routes*
- ***Farm stalls***
  - Oewer Farm Stall
- ***Farm overnight stay***
  - Josephkraal
  - Oskopvlakte
  - Blockhouse
  - Wagendrift
  - Rouxpos

The historic urban character, reflecting a typical Karoo character, has developed over the years and has been retained in certain areas. This provides another opportunity for tourist attraction. It is therefore necessary that appropriate architecture is encouraged in the building and extension work and that any new developments in do not detract from the town's urban landscape.

Implications for the SDF

- Tourism is one of the few economic sectors in the Municipality.
- It is potentially richly endowed with wilderness resources:
  - The Klein Swartberg, Moordenaars Karoo; and,
- Heritage resources:
  - Isolated cemeteries, buildings and monuments;
  - Matjiesfontein;
  - Laingsburg

4. PUBLIC PARTICIPATION

Three workshops were held with the IDP representative forum as part of the public participation process for the preparation of the Spatial Development Framework for Laingsburg.

Three workshops were held with the IDP representative forum as part of the public participation process for the preparation of the Spatial Development Framework for Laingsburg.

The intentions of the workshops were to give participants an opportunity to raise issues that concerned them and point out positive aspects that could contribute towards a future for the Municipality and settlements within it and to confirm the proposals.

Additional workshops were held with the outlaying communities of Matjiesfontein and Vleiland, given that the IDP workshops were held in Laingsburg and its community had easier opportunities to be present at these workshops.

The following issues / needs were raised:

1. **Matjiesfontein needs:**
   - police station, creches, business sites
   - Post office, clinic, public transport
   - The need for investments in the area and how this is tied to the principles of the National Spatial Development Perspective.

2. **Laingsburg needs:**
   - night shelters/ rehabilitation centres,
   - Pharmacy the closest one is in Worcester;
   - Public toilets facilities for tourists and visitors in town;
   - More housing. Note the river is a barrier segregating the communities.

3. **Vleiland needs:**
   - Land is needed for housing. All of the land in Vleiland is privately owned.

Public transport is needed to help people get to Laingsburg.

- Health facilities, at least a clinic is needed. There is only a mobile clinic service.
- Police service, post office
- Government Grants pay out points are required in the area.
- Process to purchase available small holdings take too long. But the time the tedious bureaucratic processes are completed the land is sold.

4. **Cross cutting issues that are prevalent throughout the area are as follows:**
   - Potable water shortages in : Vleiland, Matjiesfontein and Laingsburg
   - Need to development tourism potential
   - Smells from the waste water treatment works – it is too close to residential areas
   - Passenger train service needed

The following aspects regarding the vision or the municipality and the respective settlements were raised:

Unique aspects:

- Karoo architecture, products (land, fruit, agriculture)
- Caring, hospitable community
- Good working relationships
- Archaeology, Geology
- Local dishes (“Kaingbolle”, etc)
- Agricultural base- towns

Laingsburg:

- Main town for all services

Matjiesfontein:

- Tourism attractions (whole Municipality?)

Vleiland:

- Tourist focus: Baviaanskloof, Gamka farms, food production, fynbos

5. CONCEPTUAL DEVELOPMENT FRAMEWORK

5.1 OBJECTIVES AND PRINCIPLES FOR LAINGSBURG

5.1.1 Core Idea

Laingsburg Municipality has three main attributes on which to build its future; agriculture, transport and tourism.

Agriculture, although declining in economic growth and employment terms, remains the most important sector in the municipal economy. It comprises almost exclusively extensive farming (grazing) except for small patches of irrigable land in the river valleys which should be protected at all costs. Intensive agriculture (dryland and irrigation farming) provide high intensity low skilled employment.

The N1 road / rail corridor passes through Laingsburg town and immediately north of Matjiesfontein, carrying large volumes of goods and services. Laingsburg town is strategically located between Worcester and Beaufort West on this corridor and is thus well placed as a refreshment, maintenance and emergency services stop.

There is an existing multi-faceted but underdeveloped tourism economy with three key components; entire historic Victorian village with strong Boer War and South African literary links (Olive Schreiner), 1981 flood drama, and gateways to Moordenaars Karoo and Klein Swartberg Wilderness areas.

The above-mentioned economic potential can be further accelerated if linkages between these three components can be accelerated for example, farm stays in the wilderness areas; using the opportunity of travellers stopping in Laingsburg town for refreshments to introduce them to the other tourism activities.

Retirement destinations with goods facilities and lots of interesting things to do, stemming from the other economic components.

5.1.2 Objectives – urban, rural, linkage between urban and rural

5.1.2.1 Urban

- Integrate and break down sharp sense of difference between town and township.
- Increase thresholds for the support of business and community facilities in the township and town.
- Improve attractiveness of settlements, Laingsburg town and Matjiesfontein to attract people in the category LSM 7 – 10 to reside there, thereby increasing local demand, employment creation and, therefore, the size of the local economy.
- Ensure all urban residents have **appropriate** access to Municipal services that:
  - afford human dignity and privacy;
  - adequately address health and safety; and,
  - achieve minimum environmental standards w.r.t environmental quality:
    - Water – surface and underground;
    - Waste water (sewage); and,
    - Solid waste.

5.1.2.2 Rural

- Sustain long term carrying capacity of the land and water:
  - Intensive farming areas – maintain soil fertility, ensure sustainable water consumption regarding river flow and groundwater table; and,
  - Extensive farming areas – maintain and improve veld carrying capacity and species diversity.

- Ensure adequate infrastructure support for economy:
  - Transport – roads: provincial, district, freight, tourism, commuting, non-motorised transport, (walking, cycling, animal traction).

- Increase access to economic activities for Historically Disadvantaged Individuals (HDI):

- Transport services;
- Tourism; and
- Agriculture.

- Promote urban and rural linkages via the local economy:
  - Agri-tourism;
  - Agri-industry; and
  - Rural service centres (Laingsburg town).

5.1.3 Principles

5.1.3.1 Walking distance as the prime measure of access and good location:

- use all well located vacant land, i.e. within 1 to 2kms of urban centres; and,
- locate all future residential areas within walking distance of urban centres where space permits.

5.1.3.2 Functional integration:

- define single uniting structure of nodes and linkages between town and township; and,
- encourage supporting densification pattern and infrastructure provision.

5.1.3.3 Socio-economic integration:

- locate all future subsidy housing within walking distance of nodal centre where space permits;
- promote gap housing within up-market and subsidy housing; and,
- identify opportunities for infill, redevelopment.

5.1.3.4 Protect sensitive elements: rivers, wetlands, bio-diversity hot spots and heritage buildings and precincts:

- identify sensitive areas and demarcate conservation setback lines to be accurately defined later by specialist terrestrial and freshwater ecologist in negotiation with land owners and heritage professionals.

5.1.3.5 Ensure at least basic services to all residents either by Municipality or land owners:

- ensure minimum basic services to all using either conventional technology if bulk capacities are available and the Municipality and users can afford the monthly costs, or off-grid technologies, e.g.:
  - solar hot water cylinders;
  - Photovoltaic cells;
  - rainwater harvesting; and,
  - grey water recycling.

5.1.3.6 Implement projects on a focused, strategic and hierarchical basis with the largest investments for higher order facilities that will be enjoyed by the most number of people.

5.1.3.7 Appropriate Densification

There are two main aspects to this challenge. The first is to promote appropriate densification in urban settlements whereby settlement densities are increased according to a well thought out plan that takes into account environmental factors such as biodiversity and the water quality and quantity of river systems, public open space requirements and areas for economic activity.

In most South African settlements urban densities need to double.

Although the key relationship is population density, from an urban management point of view, densification is most easily managed by measuring dwelling units. There is a close relationship between population density and dwelling unit density, i.e. the number of dwelling units per hectare.

Two **average gross density** targets have been identified in relevant research. The first is 25du/ha in settlements large enough to require public transport services.

The second is 15du/ha in small rural settlements that should function within walking distance and minimise their consumption of surrounding agricultural and scenic land. It is likely that the second is will be more

appropriate in Laingsburg and Matjiesfontein. Vleiland is a very low density, very spread out settlement that will require an entirely different solution.

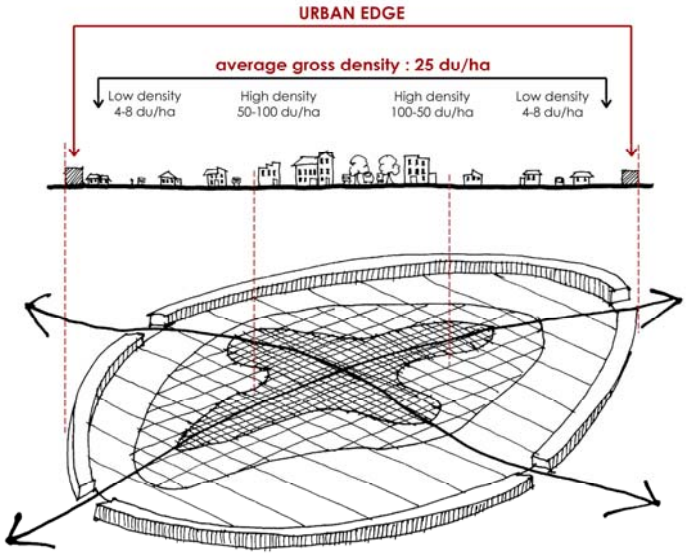


Figure 5.1.1 Appropriate Density

The concept of **average gross density** means that within the overall average gross density figure there can be considerable variation in net densities at the suburban and project level, see Figure 5.1.1.

Densities should increase close to highly accessible, well located nodes and corridors so that as many people as possible can take convenient advantage of these opportunities and can be much lower on the periphery for people who prefer this lifestyle and can afford the transport burden of peripheral locations.

Human settlement projects target net densities of 60du/ha and more. This means they should be located towards the centre of urban settlements and not on the periphery.

5.1.3.8 Land Use Management

There are two main aspects to Land Use management:

First, Broad Spatial Planning Categories as defined by the PSDF, which should be demarcated in the SDF.

Secondly, Land Use Management Schemes or Zoning or Town Planning Schemes.

These describe the detailed use of each property and are beyond the scope of this SDF.

The five broad Spatial Planning Categories provide policies for development and activities permitted are:

1. *Core areas*
   - o No conventional urban development;
   - o Conservation areas, river corridors, ridge line boundaries.
   - o Core 1 areas include Formally Protected Areas and Core 2 areas include Ecological Support Areas.
2. *Buffer areas*
   - o Buffer 1 areas include Critical Biodiversity Areas, Undeveloped rural land.
   - o Buffer 2 areas include Extensive Agriculture (grazing and browsing) especially large intact remnants next to CBAs and ESAs;
   - o No development beyond 1 building per 10 hectares; and,
   - o Development should be clustered (no further subdivisions below minimum farm size – Dept of Agriculture).
3. *Intensive agriculture areas*
   - o No development beyond 1 building per 10 hectares; and,
   - o Development should be clustered (no further subdivisions below minimum farm size – Dept of Agriculture).
4. *Urban Development*
   - o Increase gross average densities to 25du/ha in settlements requiring public transport;
   - o Increase gross average densities to 15du/ha in small rural settlements that do not require public transport;
5. *The Urban Edge*
   - o Urban settlement should be located within the Urban Edge;
   - o All other uses should, as a general rule, be located outside the Urban Edge;

- In some instances, e.g. small scale intensive agriculture, market gardens / allotments, may be located within the Urban Edge; and
- The Urban Edge should enclose sufficient land to accommodate the settlement's growth for the next 10 – 20 years.

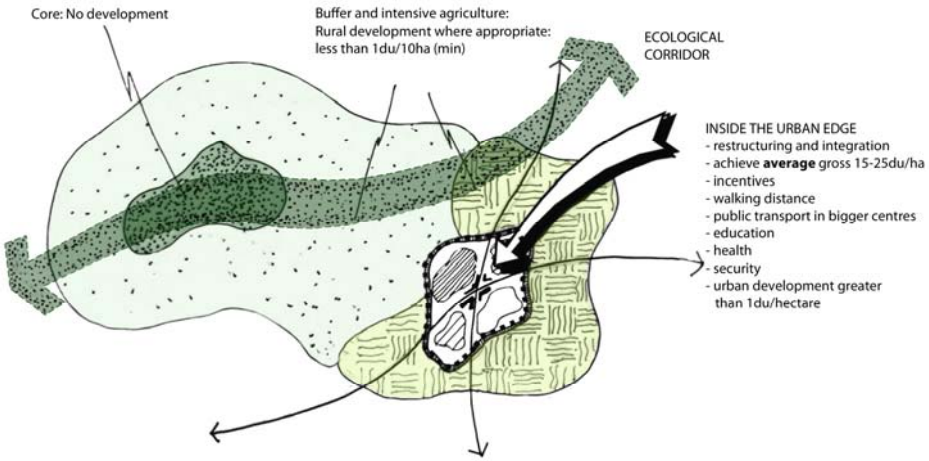


Figure 5.1.2 **Bio-regional Planning Zones (Spatial Planning Categories (SPCs)**

5.2 MACRO-CONCEPTUAL FRAMEWORK

5.2.1 Main spatial elements of the Municipality

The following six main spatial elements form the basis for organizing the Spatial Development Framework or the Municipality, see Figure 5.2.1

1. The N1 Freeway Corridor
   - Road freight, passenger and self-drive refreshment and maintenance station
   - Tourism market

2. Moordenaars Karoo Precinct
   - Extensive and some intensive agriculture
   - Wilderness/farm tourism

3. Klein Swartberg Mountain Precinct
   - Extensive and intensive agriculture
   - Wilderness/farm tourism

4. Node 1: Laingsburg
   - Transport
   - Agricultural service centre
   - Tourist gateway
   - Retirement centre
   - Administrative centre
   - Health, education facilities, etc.
   - Conventional low income housing development

5. Node 2: Matjiesfontein
   - Historic Victorian Village
   - Gateway to Sutherland Astronomy centre
   - Potential retirement centre
   - Conventional / alternative technology low income housing development

6. Node 3: Vleiland
   - New agri-village
   - Small intensive farming node
   - Land reform opportunities
   - Conventional / alternative technology low income housing development

Figure 5.2.1 illustrates the six core elements of the Municipality on which the spatial development framework must build.

5.2.2 Rural Development Concept for Agricultural Participation

- Small scale, supported intensive farming on commonages at Laingsburg town, Vleiland and possibly at Matjiesfontein.

- Successful candidates graduate to commercial crop or livestock farms via outright purchase or farm equity share arrangements, once they have successfully managed their farming operations

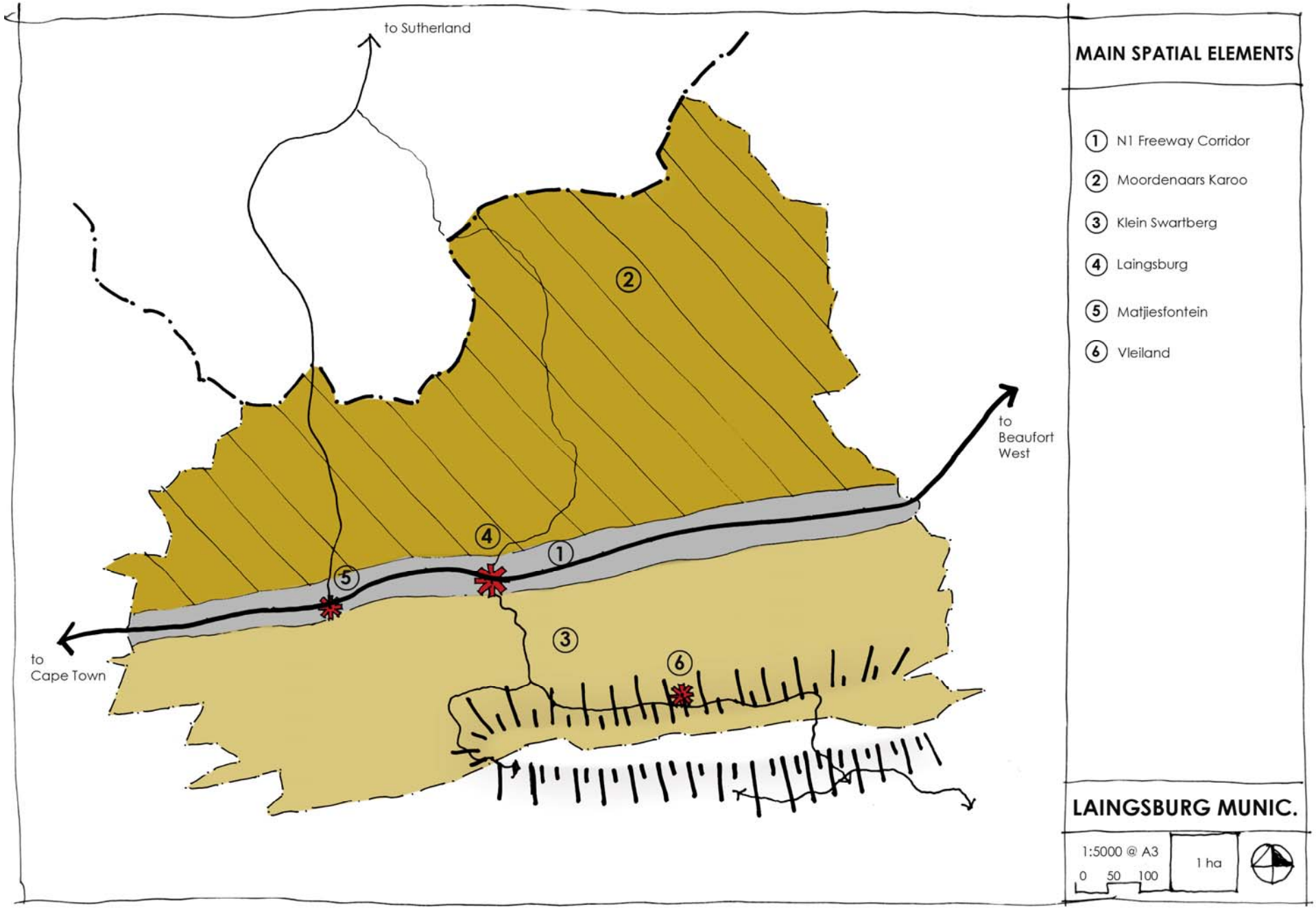


Figure 5.2.1 Laingsburg Municipality: Main spatial elements

5.3 CONCEPTUAL FRAMEWORK

Figure 5.3.1 shows the Conceptual Framework for the Municipality. This conceptual framework is based on bio-regional planning categories for Land Use Management outside of the Urban Nodes. Within the nodes the existing town planning schemes / Land Use Management Schemes (LUMS) containing the current existing real rights on the land will form the basis of detailed LUMS.

5.3.1 Broad Land Use Management

5.3.1.1 Core areas	Policies and Projects	
a. existing conservation areas	i.	Maintain the conservation status of the Anysberg and Klein Swartberg Nature Reserves.
	ii.	Promote the extension of these existing reserves into a continuous bio-diversity corridor through stewardship conservancies on private farms in this corridor along the Klein Swartberg Mountains, see Photo 5.1.
	iii.	Promote the development of a northern bio-diversity corridor including Karookop and the Komberge mountains that can eventually link to the Karoo National Park to the east.
	iv.	Consider rates rebates for privately owned land set aside for bio-diversity conservation purposes.
b. pans, wetlands and rivers	i.	Investigate a "flood trail" route including both terrestrial and aquatic sections depending on water levels along the Buffels River between Laingsburg and the Floriskraal dam but ensure that its ecological functioning is not compromised, see Photos 5.2 and 5.3.
	ii.	Declare ecological buffers around all wetlands, pans, rivers and tributaries that appear on base plans (Trig Survey 1:50000)
	iii.	Terrestrial and freshwater ecologists should finalize the alignment of these ecological corridors.
	iv.	Declare an interim 30m buffer zone from the banks of the wetlands or river tributaries.
	v.	There should be no ploughing and careful management of livestock grazing and watering points in this zone.
	vi.	There should be no urban development in this zone.

Photo 5.1 Conservation of mountain areas

Photo 5.2 Buffels River

Photo 5.3 Floriskraal Dam

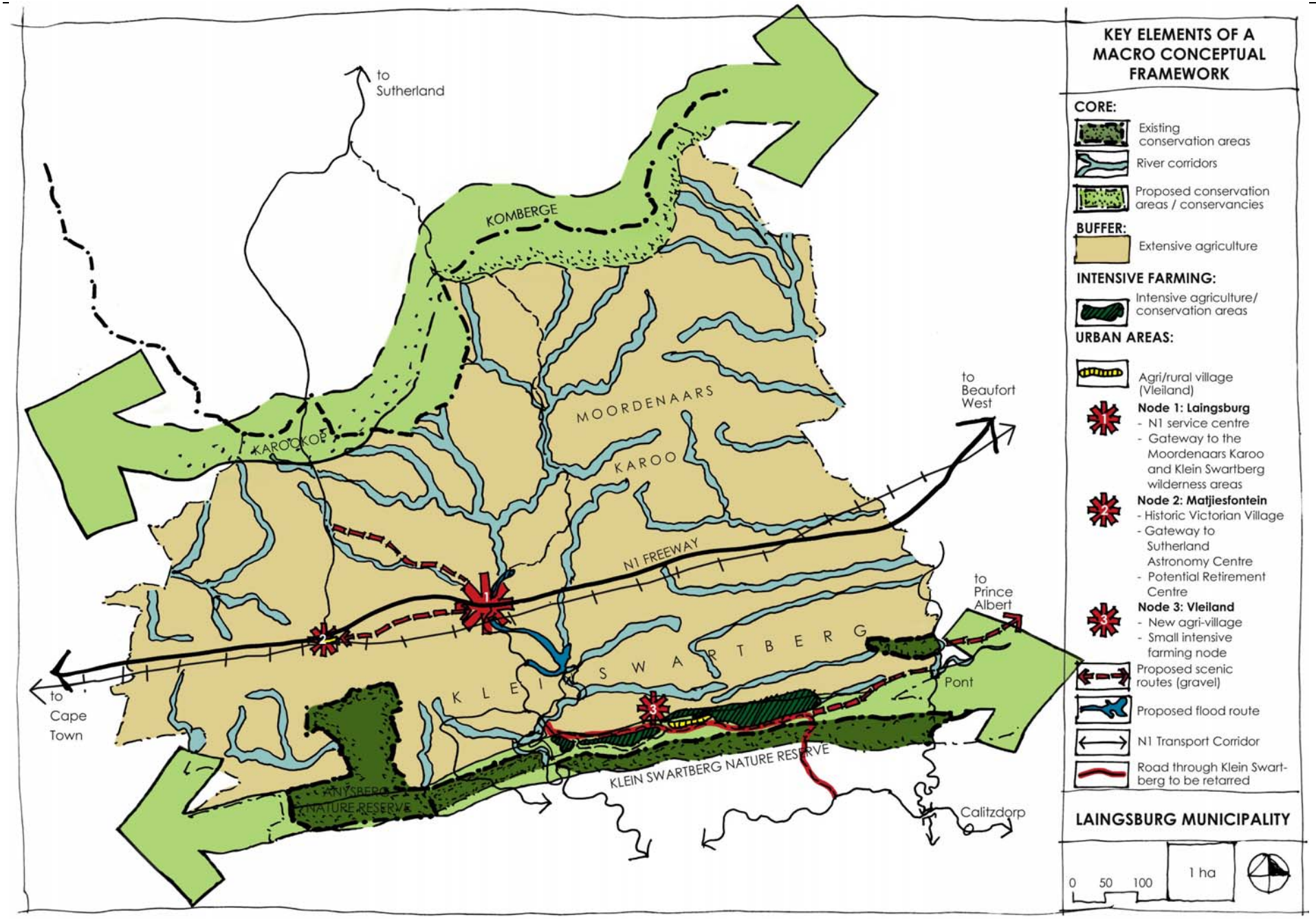


Figure 5.3.1 Laingsburg Municipality: Conceptual Development Framework

5.3.1.2 Buffer Areas

Policies and Projects

a. Extensive agriculture:
   - o Livestock
   - o Game

i. Manage all land not in Core Areas, Intensive Farming or within Urban Edges as Buffer Areas. There should be properly managed livestock or game farming in these areas, according to veld management and rotational grazing principles that improve biodiversity, bio-mass and stock carrying capacity over time.

ii. A lesser level of rates rebate than that proposed for Core Areas should be considered for land in this category depending on the quality of conservation status achieved.

Photo 5.4 Live-stock farming in Vleiland area

5.3.1.3 Intensive Farming Areas

Policies and Projects

a. Commercial farming areas

i. Protect intensive farming areas from urban development and other activities that may threaten their productive capacity. This land represents the most important economically and employment generational productive "plant" in the Municipality.

b. Commonage farming

i. Reserve those parts of the Municipal commonages at Laingsburg town, Matjiesfontein (if the Transnet land is successfully acquired for this purpose) and Vleiland not required for urban development and particularly those with highly fertile soil for small scale farming at the highest intensity possible depending on available fertile soil and water. These small farms should be managed as incubators for farmers to gain experience before moving onto larger commercial farms and enterprises.

ii. Promote conservation tillage, animal traction and other low energy, conservation friendly, low input cost agricultural methods.

iii. Investigate access to irrigation water.

iv. Parcel arable land into small farms for tenants to use as farm incubators.

v. Investigate irrigation potential on commonage land.

vi. Terminate leases with commercial farming tenants on commonage as soon as possible (look at ways to make up revenue (including new rates/tariffs schedules) so that they can be used for land reform incubation.

vii. Promote small scale livestock farming on non-arable areas.

Photo 5.5 Crop farming in Rouxpos

Photo 5.6 Crop farming in Vleiland area

5.3.1.4 Urban Areas

Policies and Projects

a. Urban Development

i. Future urban growth management in Laingsburg and Matjiesfontein should be according to the principles set out in section 5.1.3 above namely:
- Walking distance (1km/20mins)as the primary measure of access;
- Functional integration with a target of 50% of urban opportunities within walking distance of where people live;
- Socio-economic integration with the goal of accommodating the entire socio-economic cross-section found in a settlement within walking distance;
- Strongly promote the protection of the bio-physical environment for the eco-system services it provides for heritage, a sense of place and creates tourism opportunities.
- Ensure the provision of minimum basic services to all using either conventional technologies, or promote off-grid technologies including:
  - Solar hot water cylinders;
  - PV cells;
  - Rainwater harvesting; and,
  - Grey water recycling.
- Urban development programs and projects should be implemented on a focused, strategic, coordinated and hierarchical basis with the biggest investments in higher order facilities that will benefit the largest number of people.

Photo 5.7 Housing in Laingsburg

Photo 5.8 Housing in Laingsburg

5.3.1.5 Transport and Infrastructure

Policies and Projects

a. Upgrade provincial road network

i. Motivate and lobby for the upgrading of the following critical roads:
- R323 south to Calitzdorp (complete tarring of this route);
- R32 north to Sutherland (to remain gravel);
- Open gates and upgrade old road between Matjiesfontein and Laingsburg town.

ii. Include the upgrading of shoulders for cycling and pedestrian movement.

Photo 5.9 Roads requiring upgrading

5.4 LAINGSBURG TOWN: CONCEPTUAL SPATIAL DEVELOPMENT FRAMEWORK, see Figure 5.4.1

5.4.1 Public Open Space

5.4.1.1 Municipal nature areas

Policies and Projects

i. Establish an interim 30m ecological buffer measured from the banks around all river corridors until a final alignment is determined by a fresh water ecologist / civil engineer.
ii. Do not permit any urban development below the 1:50 year floodline or in this ecological buffer.
iii. There should be no ploughing and careful management of livestock grazing and watering points in this zone.

5.4.2 Urban Restructuring

5.4.2.1 Focal point intersections and gateways

i. The Conceptual Development Framework shows a number of focal point intersections in Laingsburg. These intersections should receive special treatment to enhance the quality of the urban environment around them. These intersections, that need to be enhanced, include:
   - Intersection off N1 Freeway to Bergsig (south of N1);
   - Intersection off Voortrekker Road to Moordenaars Karoo;
   - Intersection of Voortrekker Road at Shell garage;
   - Voortrekker and Humphrey Roads intersection (road to Seweweekspoort); and
   - Voortrekker Road/ N1 Freeway and Hugo Street intersection (entrance to Goldnerville)

ii. Appropriately landscape the gateway precinct along the N1 Freeway that signal the entrance into the town and manage the design of buildings around them to a common design theme to create high quality environments.

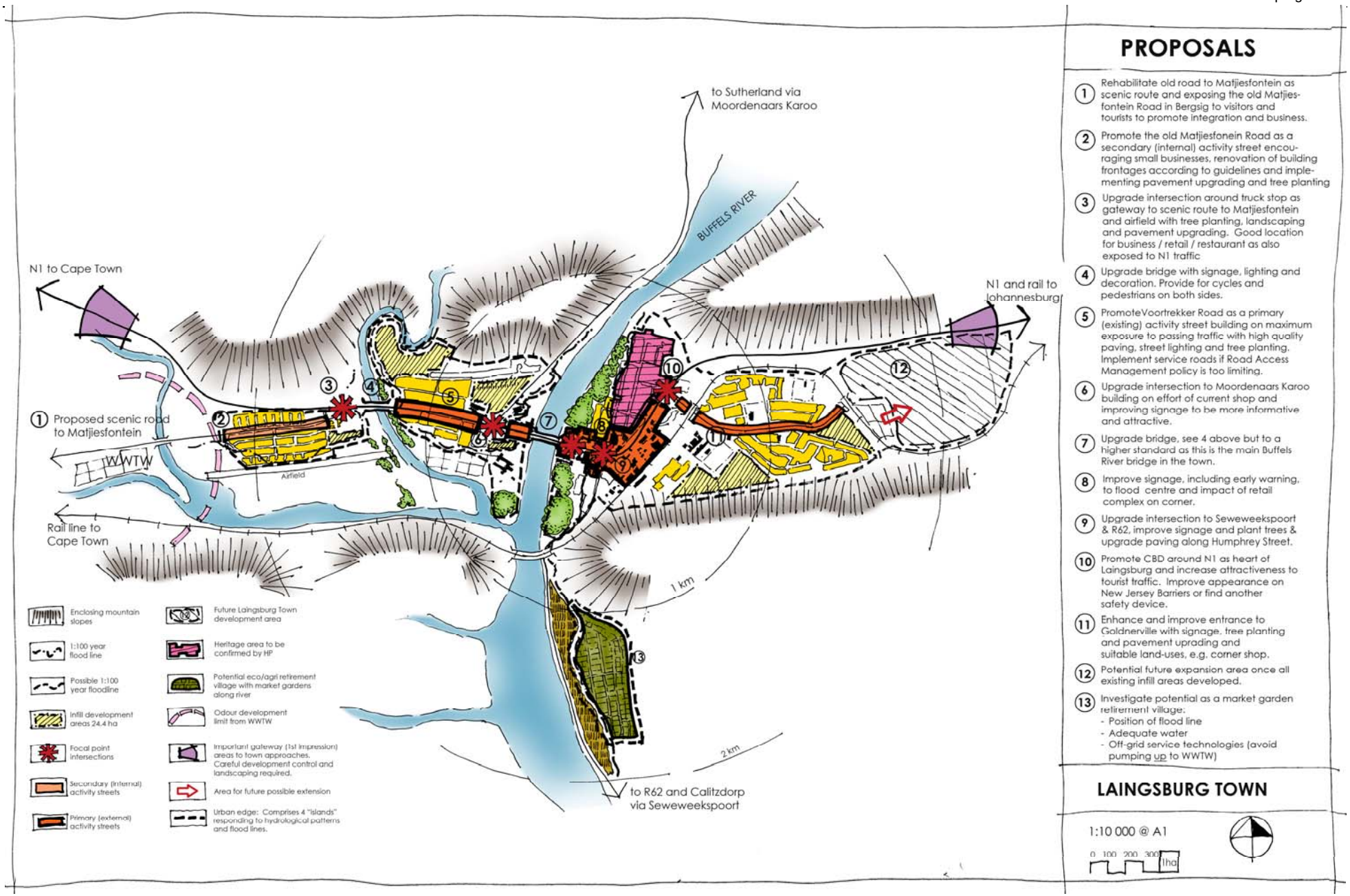
5.4.2.2 Road improvements

i. Rehabilitate the old Matjiesfontein road through Bergsig as a scenic route to encourage visitors and tourists and to promote the integration of business between Bergsig and the town and between Laingsburg town and Matjiesfontein.
ii. Promote the old Matjiesfontein Road through Bergsig as a secondary activity street by encouraging small business along it: the renovation of building frontages (to acceptable urban design guidelines); and through improved pavement treatment and landscaping.
iii. Promote Voortrekker Road as the primary activity street and maximize the exposure of buildings and activities to passing traffic. Ensure a high quality environment that is guided by urban design guidelines and supported by landscaping.
iv. Upgrade the identified bridges, and the following intersections to the truck stop; Humphrey and Voortrekker Roads; and the Moordenaars Karoo.
v. Meet with SANRAL to agree on N1 (Voortrekker Road) upgrading proposals.

Photo 5.10 Truck Stop

Photo 5.11 Intersection of Voortrekker Road and Riebeeck Street

Photo 5.12 Laingsburg CBD



PROPOSALS

1. Rehabilitate old road to Matjiesfontein as scenic route and exposing the old Matjiesfontein Road in Bergsig to visitors and tourists to promote integration and business.
2. Promote the old Matjiesfonein Road as a secondary (internal) activity street encouraging small businesses, renovation of building frontages according to guidelines and implementing pavement upgrading and tree planting
3. Upgrade intersection around truck stop as gateway to scenic route to Matjiesfontein and airfield with tree planting, landscaping and pavement upgrading. Good location for business / retail / restaurant as also exposed to N1 traffic
4. Upgrade bridge with signage, lighting and decoration. Provide for cycles and pedestrians on both sides.
5. PromoteVoortrekker Road as a primary (existing) activity street building on maximum exposure to passing traffic with high quality paving, street lighting and tree planting. Implement service roads if Road Access Management policy is too limiting.
6. Upgrade intersection to Moordenaars Karoo building on effort of current shop and improving signage to be more informative and attractive.
7. Upgrade bridge, see 4 above but to a higher standard as this is the main Buffels River bridge in the town.
8. Improve signage, including early warning, to flood centre and impact of retail complex on corner.
9. Upgrade intersection to Seweweekspoort & R62, improve signage and plant trees & upgrade paving along Humphrey Street.
10. Promote CBD around N1 as heart of Laingsburg and increase attractiveness to tourist traffic. Improve appearance on New Jersey Barriers or find another safety device.
11. Enhance and improve entrance to Goldnerville with signage, tree planting and pavement uprading and suitable land-uses, e.g. corner shop.
12. Potential future expansion area once all existing infill areas developed.
13. Investigate potential as a market garden retirement village:
    - Position of flood line
    - Adequate water
    - Off-grid service technologies (avoid pumping up to WWTW)

LAINGSBURG TOWN

1:10 000 @ A1

0 100 200 300 1ha

Figure 5.4.1 Laingsburg town : Conceptual Development Framework

		Policies and Projects
5.4.2.3	Focal points and gateways	i. Prepare urban design frameworks for the N1 Freeway through Laingsburg and for the gateway precincts. ii. Improve signage in the centre of town.
5.4.2.4	Waste water treatment works	i. Observe the required 400m buffer from the waste water treatment works, west of Bergsig. Do not permit any residential development in this buffer zone.
5.4.2.5	CBD	i. Promote the CBD as the heart of Laingsburg. This will require increasing the attractiveness of the area to tourist traffic, paying special attention to the removal of the New Jersey barriers, and providing sufficient and attractive signage, landscaping, urban design/building management, etc.

Photo 5.13 Historical buildings in Laingsburg

		Policies and Projects
5.4.3	**Urban Edge**	
5.4.3.1	Proposed alignment indicated on Figure 5.4.1	i. Urban Edge is aligned to limit further outward expansion, except for the proposed future eastward expansion area.
5.4.3.2	Urban expansion	i. Seven areas have been identified as future development areas. These areas are shown as Areas A-H on Figure 5.4.2. These areas amount to a total of 39,98ha. These areas should not automatically be considered as suitable for low income housing. They should accommodate mixed use but predominantly residential development according to the principles of functional and socio-economic integration and the socio-economic gradient. ii. It is proposed that areas A-F be developed prior to developing areas G and H. This is to encourage the infill and integration of the town before permitting the outward expansion of the town. iii. It is proposed that Area H be the subject of a detailed development framework study.
5.4.3.3	Heritage Area	i. Confirm the delineation of the heritage area in the centre of town with Heritage Western Cape.
5.4.3.4	Market Garden/ eco-agricultural / Retirement village	i. Investigate the potential of the established township south of Laingsburg to be a market garden/ eco- agricultural/ retirement village. This area is suitably located along the river for this purpose. ii. Investigate the viability of making the abovementioned proposed development independent of standard/ conventional – grid linked municipal services.

Photo 5.14 Laingsburg CBD

Photo 5.15 Vacant land east of Laingsburg

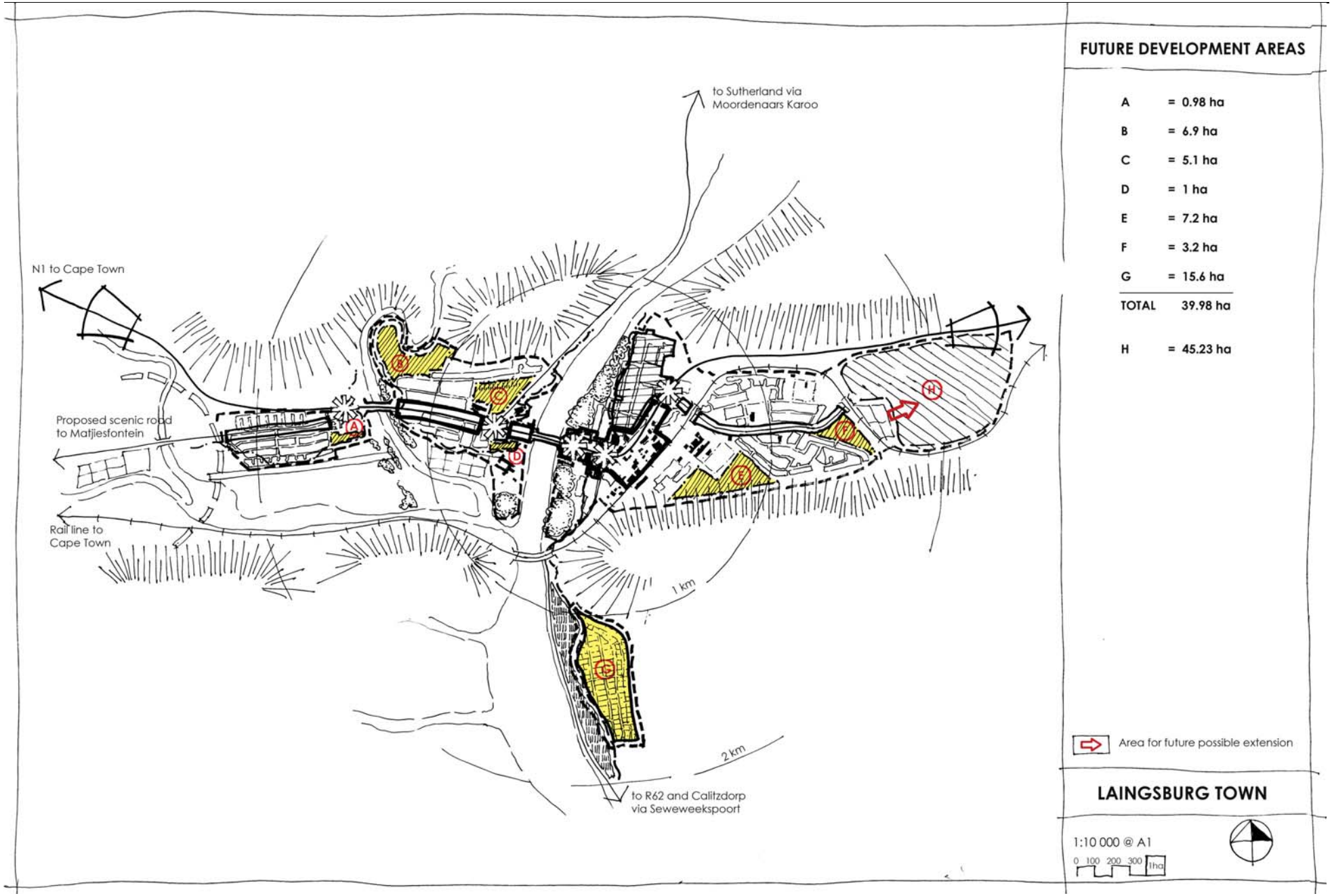


Figure 5.4.2 Laingsburg : Proposed Future Development Areas (Vacant Land)

5.5 MATJIESFONTEIN: CONCEPTUAL SPATIAL DEVELOPMENT FRAMEWORK

5.5.1 Public Open Space — Policies and Projects

5.5.1.1 Municipal nature areas

- Establish an interim 30m ecological buffer measured from the banks around all river corridors until a final alignment is determined by a fresh water ecologist / civil engineer.
- Do not permit any urban development below the 1:50 year floodline or in this ecological buffer.
- There should be no ploughing and careful management of livestock grazing and watering points in this zone.

5.5.2 Urban Restructuring

5.5.2.1 Focal Points and Gateways

i. Improve the signage and the sense of gateway at the intersection off the N1 Freeway towards Matjiesfontein.
ii. The gateway areas along the N1 Freeway signal the entrance into the town - a different environment. These gateway areas and the above-mentioned focal point intersections should be appropriately landscaped and the design of buildings around them should be managed to a common design theme to create high quality environments.
iii. Plan trees to screen off the noise from the N1 Freeway and to create an improved visual perspective of Matjiesfontein.

5.5.2.2 Road Improvements

i. Close the existing level crossing over the railway bridge to improve road safety. This is due to the increase number of accidents at level crossings.
ii. Upgrade the existing single culvert under the railway line to a double culvert to encourage vehicular movement. Increase the height, if necessary. This is to permit a stronger integration between the two components of the town, support High Street and provide a safer access solution to the southern components.
iii. Strengthen the High Street as the main access route into Matjiesfontein.
iv. Improve the landscaping and enhance the "outspan feeling" of the High Street Focus Area. Possibly retain the gravel feel.
v. Create a scenic link road between Matjiesfontein and Laingsburg.

5.5.3 Urban Edge

5.5.3.1 Proposed alignment indicated on Figure 5.5.1

i. Limit and future urban growth within the proposed urban edge.

5.5.3.2 Urban expansion

i. Areas 5 and 8 have been identified for future expansion areas.
ii. Promote the development of Area 5, approximately 4,3ha, for a retirement village
iii. Promote the development of Area 8, approximately 2,2ha, for additional BNG housing opportunities, if required.
iv. Investigate the development of Area 7, approximately 17ha for market gardening and / or residential development.

Photo 5.16 High Street

Photo 5.17 High Street entrance to Matjiesfontein

Photo 5.18 Vacant land in Matjiesfontein

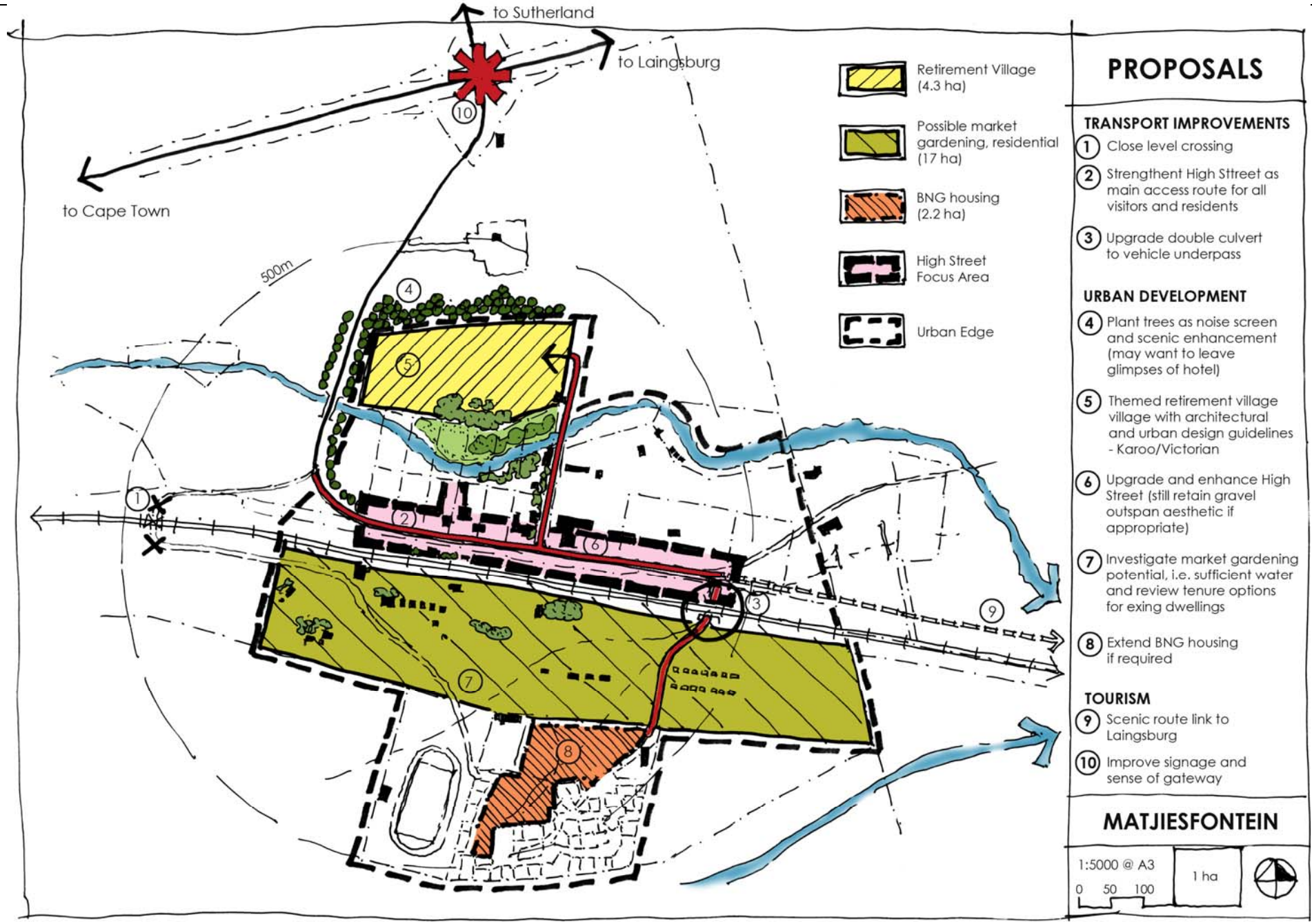


Figure 5.5.1 Matjiesfontein: Conceptual Development Framework

5.6 VLEILAND: CONCEPTUAL SPATIAL DEVELOPMENT FRAMEWORK

5.6.1 Public Open Space Policies and Projects

5.6.1.1 Municipal nature areas

- Establish an interim 30m ecological buffer measured from the banks around all river corridors until a final alignment is determined by a fresh water ecologist / civil engineer, see **A** on figure 5.6.1.
- Do not permit any urban development below the 1:50 year floodline or in this ecological buffer.
- There should be no ploughing and careful management of livestock grazing and watering points within the ecological buffer and below the 1:50 year floodline.

5.6.2 Urban Restructuring

5.6.2.1 Focal Points and Gateways

vi. Encourage the development of a tourist facility at the intersection of the R353 to Calitzdorp and the Road to Rouxpos, see **B** on Figure 5.6.1.

vii. The abovementioned area serves as a gateway area and signals the entrance to the proposed "new town" area. This area should be appropriately landscaped and trees planted to an acceptable theme.

5.6.3 Urban Edge

5.6.3.1 Proposed alignment

i. Limit and future urban growth within the proposed urban edge as shown, see **C** Figure 5.6.1

5.6.3.2 Urban expansion

i. Develop a new town/ agri- village at the location identified. This location is preferred for two reasons. It is closer to existing community facilities: school, church, crèche, sports complex and community hall than the existing Vleiland community. Second, because all the land at the existing Vleiland location are privately owned, hampering BNG projects. The land for the proposed agri-village is owned by the Municipality, see **D** on Figure 5.6.1.

ii. Confirm this area identified with in the proposed urban edge suffices for the anticipated need in the area. At this stage approximately 30 households are envisaged at 1000m² per plot. This configuration may change depending on the confirmed demand.

iii. A future expansion area (7.92 ha) is indicated but should only be developed if there is a need, i.e. the already indicated plots have been taken up, see **E** on Figure 5.6.1.

5.6.3.3 Market Gardening/ Agriculture

i. In the interim, develop the future potential expansion area for market gardening.

ii. The area north of the proposed residential area is allocated for stock farming, see **F** on Figure 5.6.1.

Photo 5.19 **Road to Vleiland requiring upgrading (see Church on left, crèche / school opposite the road)**

Photo 5.20 **Farm settlement in Rouxpos**

Photo 5.21 **Sports clubhouse in Vleiland**

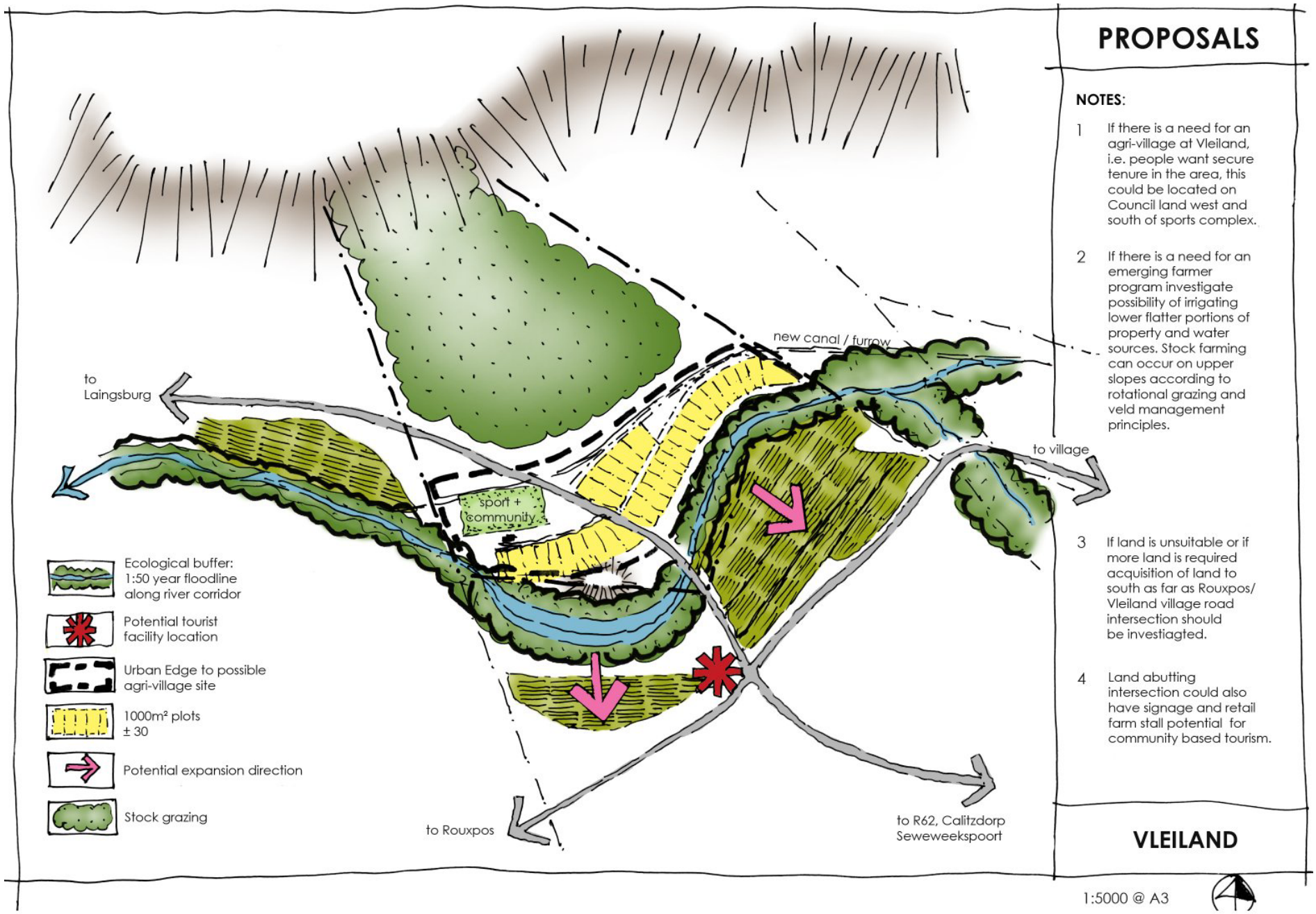
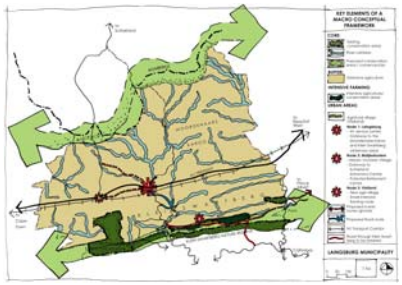


Figure 5.6.1 Vleiland: Conceptual Development Framework

5.7 ALIGNMENTS (vertical)

LAINGSBURG CONCEPTUAL FRAMEWORK



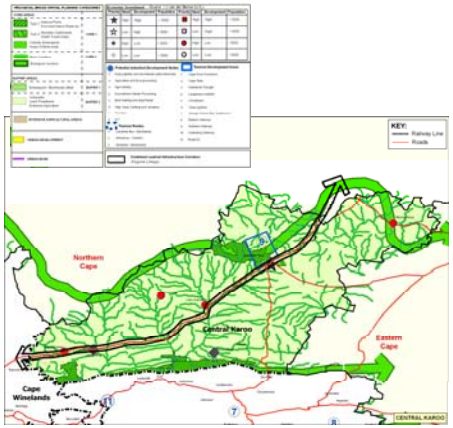
Settlements for urban investment

- Laingsburg;
- Matjiesfontein; and
- Vleiland (depending on the actual need in the area)

NSDP

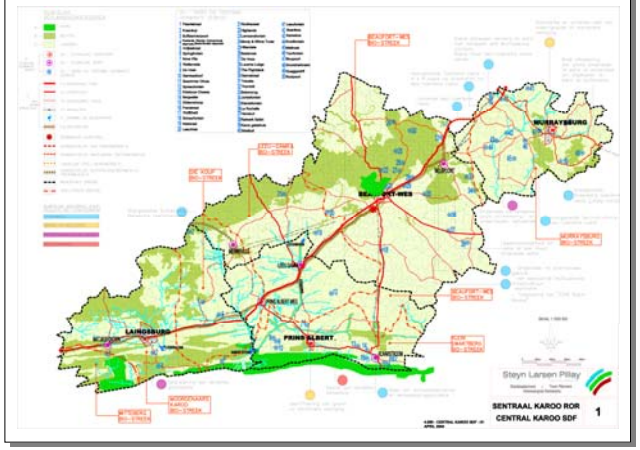
- Direct economic infrastructure investment to centres with growth potential, i.e. Laingsburg and Matjiesfontein; and
- Implement social capital investment where required: in towns and/or on farms where feasible.

WCP SDF



- Focus on settlements with potential;
  - o Laingsburg
- Laingsburg has high need and low development potential for a settlement with more than 5000 people;
- Matjiesfontein has high need and low development potential for a settlement with less than 5000 people;
- Reinforce the development potential and urban efficiencies of settlements such as Laingsburg that have growth potential;
- N1 and railway line, passing through the municipality, are strategic transportation corridors;
- Achieve ±4% GGP growth pa;
- Create ±74 jobs pa;
- Assist ±230 people to achieve functional literacy pa;
- Support construction of ± 183 dwelling units pa.
- Achieve synergy between veld management programs and biodiversity conservation.

Central Karoo SDF **Central Karoo PGDS**



- Laingsburg and Matjiesfontein are the main, and local towns, respectively;
- Three bioregions in the municipality:
  - o Witteberg;
  - o Moordenaars Karoo; and
  - o The Koup
- Conservation areas include:
  - o Anysberg; and
  - o Towerkop
- Resorts and Tourist related attractions include:
  - o Fisantekraal;
  - o Kraankop;
  - o Buffelsrivierpoort;
  - o Paddavlei, Rietvlei, Verlorenhoek walking trail;
  - o Besemfontein walking trail;
  - o Antjieskraal; and
  - o Springfontein.

- The following strategies are proposed that may have significance for Laingsburg:
- Wind power generation project;
- Cold storage facility project;
- Water demand management strategy;
- Economic development agency;
- GAP housing development project;
- Uranium mine;
- Desert knowledge, research and development hub; and
- Tourism expansion project.
- The Central Karoo SDF will be reviewed shortly.

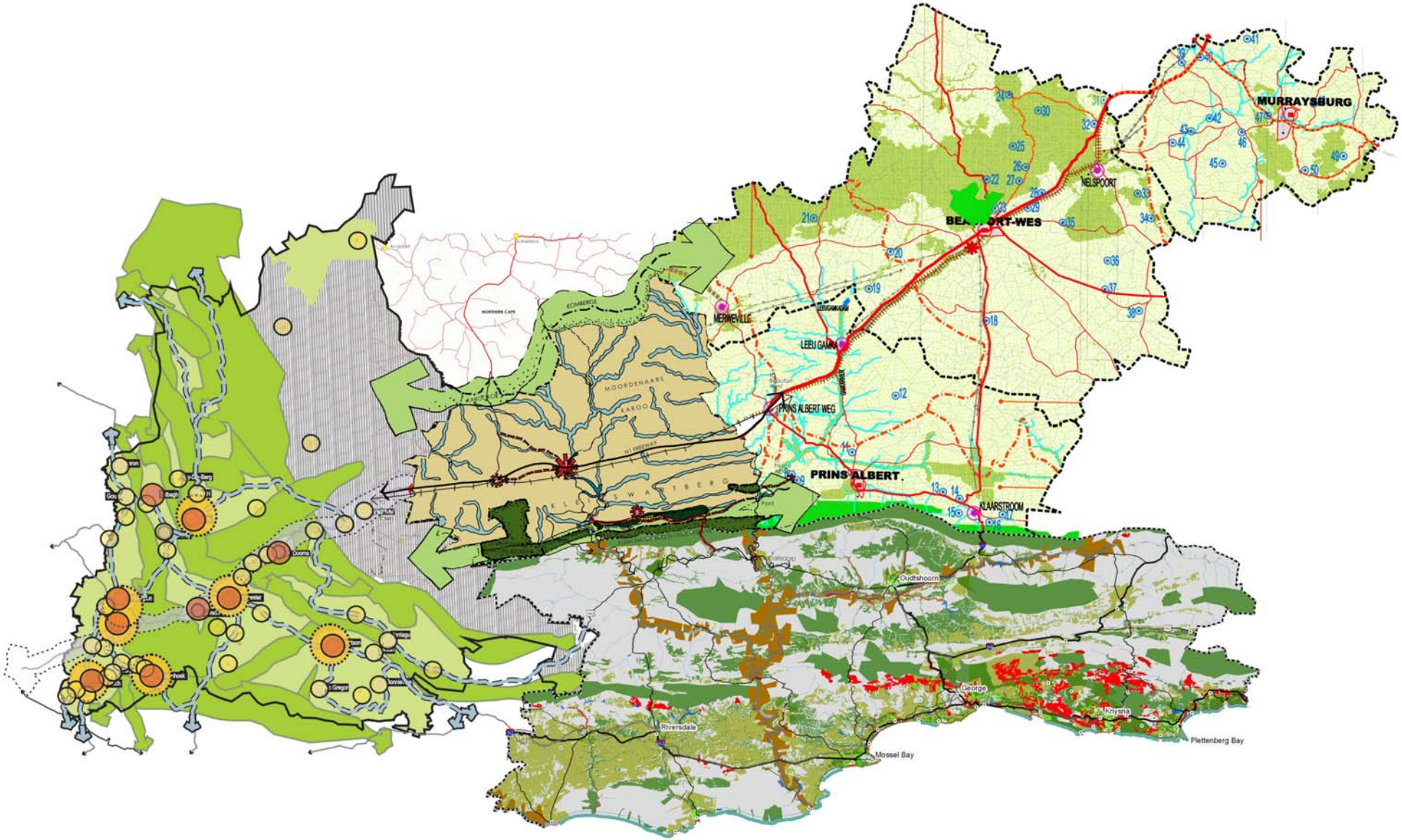


Figure 5.7.1 Laingsburg Conceptual SDP and surrounding Municipal SDFs

The vertical and horizontal alignments between the Laingsburg SDF and the other planning policies affecting and affected by this SDF are illustrated on the previous two pages.

The vertical alignment shows the relationship and alignment between the proposals and policies of the Laingsburg SDF; and the NSDP; Western Cape Provincial SDF; and the Central Karoo SDF and PGDS. The horizontal alignment shows graphically, on Figure 5.7.1 the relationship between the Laingsburg SDF and the abutting municipal and district SDF's.

The main proposals affecting the abutting and overarching mentioned policy instruments are:

- retaining the agricultural character and function of the area;
- concentrating urban development and activities within the existing urban settlements, namely Laingsburg, Matjiesfontein and an agri-village in Vleiland;
- upgrading the road between Laingsburg through the Klein Swartberg region in Vleiland;
- capitalizing on the unique tourism potential of the wilderness area of municipality, Laingsburg, the Floriskraal dam, the Klein Swartberg and De Pont;
- encouraging the further development of the small scale agriculture in the Klein Swartberg region close to Vleiland; and
- Continuing the southern (Anysberg and Klein Swartberg) and northern (Komberg and Karookop) east-west conservation corridors.

This clearly shows that the main policy proposals in the Laingsburg SDF are in line with those of the mentioned overarching policy documents.

The following proposals will have an impact of the abutting SDF's:

- Establishing the continuity of the southern (Anysberg and Klein Swartberg) and northern (Komberg and Karookop) east-west conservation corridors;
- Upgrading the road between Laingsburg through the Klein Swartberg region in Vleiland; and
- The establishment of a link across De Pont.

It is proposed that these SDF's also consider these proposals in the formulation of its respective SDF's to ensure continuity of the proposals and eventual implementation.

The review of the Central Karoo, Beaufort West, Kannaland and Prince Albert SDFs will be initiated shortly.

5.8 PRIORITY SETTLEMENTS FOR IMPLEMENTATION OF CRDP

Matjiesfontein and Vleiland ought to be considered as priority areas for the implementation of the CRDP.

5.9 RURAL TOWNS NEEDING REVITALISATION

Laingsburg (Goldnerville, Bergsig and the CBD) and Matjiesfontein require revitalization.

5.10 STRATEGIC LOCATED LAND FOR AGRI-VILLAGES AND AGRI-INDUSTRY

Vleiland, depending on the determination of the actual need, ought to be considered as a potential location for a small agri-village of about 30, 1000m^2 plots. No further agri-villages are proposed in the municipality.

Laingsburg and Matjiesfontein have sufficient land for agri-industrial development.

5.11 LAND FOR LAND REFORM AND PLAS

The following model is proposed:

1st Commercial farms – no further settlements

30kms radius for weekly or daily commuting to commercial farms from Laingsburg, Matjiesfontein or Vleiland.

Equity share will be best short to medium term approach to acquiring necessary management skills.

Outright purchase should be directed at farmers approaching retirement or wishing to sell.

2nd Commonage farms

Allotment basis, tool sheds / garages

Agro-industries and processing (This should be encouraged to develop at Laingsburg).

No residential development should be proposed on commonages.

Land reform incubator and nursery farming should be considered on commonage farms with support from Department of Agriculture, Services and other co-ops.

5.12 AREAS FOR THUSONG SERVICE CENTRES (MPCCs)

No further capital infrastructure outside of Laingsburg, Matjiesfontein and, potentially, at Vleiland is considered necessary. Bergsig in Laingsburg requires a community hall that could be used as a learning centre.

5.13 STRATEGIC DEVELOPMENT AREAS

See section 6.2, Figure 6.2.1 (Laingsburg)
See section 6.2, Figure 6.2.2 (Matjiesfontein)
See section 6.2, Figure 6.2.3 (Vleiland)

5.14 LAND FOR HOUSING AND OTHER INFRASTRUCTURE

See Section 5.13 above.

5.15 NODAL POINTS

See Section 5.14 above.

The nodal points in the municipality include:

- Laingsburg;
- Matjiesfontein; and
- Vleiland.

5.16 FUNCTIONAL CORRIDORS

The N1 is a functional corridor. The treatment of the N1 through Laingsburg requires a detailed study to enhance its value to the town.

Additional corridors that extend into Bergsig and Goldnerville are proposed. The properties abutting these corridors should be given special concession, through for example the relaxation of zoning requirements and special landscaping and urban design enhancement, to facilitate the development of the central streets as the spine of an activity street.

5.17 DEVELOPMENT EDGE AND DIRECTION FOR GROWTH

See Section 5.14 above.

No conventional urban development should be permitted outside the urban edge.

It is proposed that infill sites be development prior to the peripheral sites. This means that sites A-F in Laingsburg should be developed before sites G and H. See section 5.4.3

The further implication is that a detailed study, to determine the exact housing need in Vleiland, should be commissioned before any land is developed for an agi-village at this remote location.

5.18 DELINEATE MUNICIPAL AND DISTRICT ROADS

See Section 5.14 above.

5.19 DELINEATE PROPOSED BULK INFRASTRUCTURE

As a general rule future bulk infrastructure should be provided from off-grid technologies where feasible. Any urban or semi-urban development in the Vleiland should be prohibited to the use of off grid services.

5.20 ENVIRONMENTAL CONSERVATION AND SENSITIVE AREAS

See Section 5.14 above.

These areas include the following current formal conservation areas:

- Areas in Laingsburg and Matjiesfontein below the 1:50 year flood line. Note, floor levels of the houses need to be above the 1:100 floodline according to the National Water Act (Act 36 of 1998).
- Anysberg Nature Reserve;
- Klein Swartberg Nature Reserve; and
- Gamka Nature reserve.

The following areas are identified as proposed conservation areas:

- Komberge and Karookop corridor;
- Areas north of the Klein Swartberg Nature Reserve and south of the R323;

5.21 AREAS OF HIGH AGRICULTURAL POTENTIAL

See Section 5.14 above.
As discussed above, conventional urban development should be discouraged on agricultural land. Conversely stated, the conversion of agricultural land to conventional urban development should be prohibited. The very limited intensive agricultural land located in the Klein Swartberg region should be protected at all costs for the sake of food security and land reform/ emerging farmer development opportunities.

5.22 URGENT POLICY INTERVENTIONS

See Section 5.14 above.

6. THE SPATIAL DEVELOPMENT FRAMEWORK

The conceptual framework and the feedback received from the Phase 5 public participation, see Section 4.3, inform the Spatial Development Framework. It is depicted at two scales, the Municipality as a whole, see Figure 6.1.1 and at the level of the urban settlements, see Figures 6.2.1, 6.2.3 and 6.2.4.

It should be noted that the Spatial Development Framework is not a detailed plan indicating what activities should occur on each plot or erf. Rather it is a set of spatial guidelines and proposals giving effect to the principles of the DFA and MSA. This task is performed by the Land Use Management Scheme (LUMS) or Zoning Scheme.

Where necessary, detailed sectoral plans including urban design, landscaping and infrastructure plans for all or part of an urban settlement should be prepared to provide this level of detail. However, the PSC has requested the location of certain key social facilities and recommendations, subject to detailed site analysis and a survey of future user requirements are made.

Section 6 provides an overview of the SDF and Section 7 describes the proposals and their implementation in more detail.

In the meantime Section 7 which provides guidance on how the LUMS and the SDF may be aligned over time, has used the Provincial Model Scheme By-Law (Section 8 Scheme) for this purpose.

6.1 MUNICIPAL SDF

The following SPCs are applicable to the Municipal Land Use pattern:

6.1.1 Core Areas

Core 1 areas include the Anysberg, Klein Swartberg and Gamkaspoort Nature Reserves and Mountain Catchment Areas.

Core 2(a) areas include:

- the Karookop and Komberge Mountains which contribute towards a northern west-east ecological corridor that includes the Karoo National Park in the adjacent Beaufort West Municipality; and,
- the land to the east of the Anysberg Nature Reserve and between this nature reserve and the Klein Swartberg and Gamkaspoort Nature Reserves to consolidate a southern west-east ecological corridor.

Core 1(b): All rivers and their tributaries and the Floriskraal and Gamkaspoort Dams should be protected by an ecological corridor for an interim distance of 30m from the banks until a final determination to be completed by fresh water ecologists and engineers as required.

Low impact tourist activities, for example wilderness trails and the proposed flood trail should be promoted in the Core SPCs.

6.1.2 Buffer Areas

All land outside of Core, Intensive Agriculture and Urban Development SPCs should be used for Extensive Agriculture in terms of the Rural Land Use Planning and Management Guidelines (RLUPMG) Buffer 1 designation as this land does not occur in a matrix of patches of Intensive Agriculture but rather comprises vast unbroken expanses of Karoo veld interspersed with Extensive Agriculture. There is considerable opportunity for biodiversity conservation if proper Veld Management and appropriate Rotational Grazing methods to improve veld carrying capacity are used.

Mining operations, for example, uranium or hydraulic fracturing for gas or oil and subject to EIA and mining and prospecting permits, should only be permitted in Buffer Areas. Rehabilitation plans that will restore the land to its former use should be approved before mining commences and steps to preserve scarce resources such as top soil should be taken.

Renewable energy projects should only be permitted in Buffer Areas and should be located in areas of least agricultural and biodiversity quality and visual impact.

6.1.3 Intensive Agriculture

There are a few tiny patches of irrigated cultivation along the river banks which represent a precious and rare resource and should be protected. Where appropriate, for example, if water quality and quantity is not impacted, these areas should be increased.

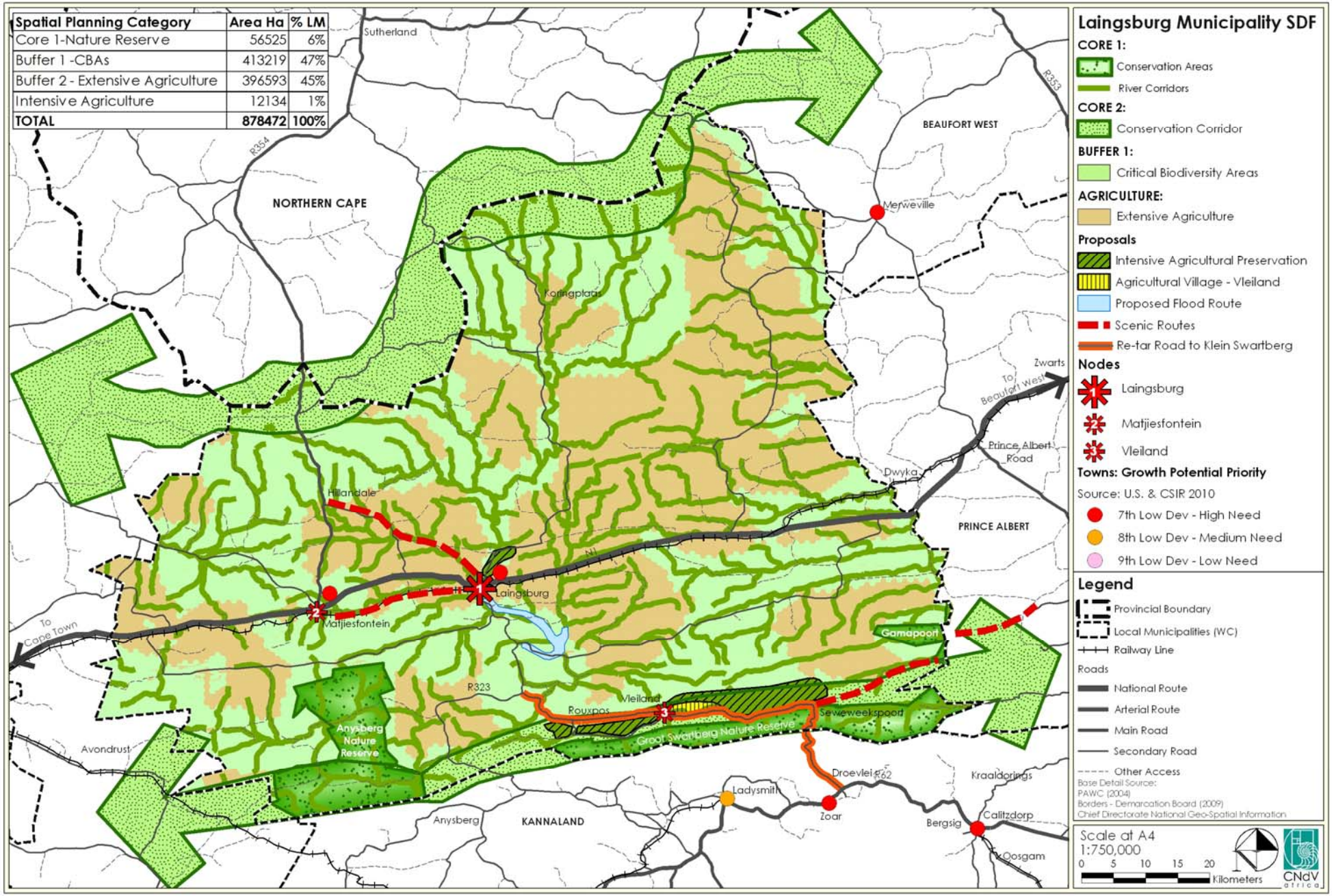


Figure 6.1.1 Laingsburg Municipal SDF

6.1.4 Urban Areas

This SPC includes all urban development within the Urban Edge including public open space. It excludes Municipal commonages which should be categorized, Core, Buffer or Intensive Agriculture depending on the best use of the land.

6.1.5 Urban Edges

With the exception of accompanying land that could be used for middle and upper income permanent residence, tightly drawn urban edges have been drawn around the settlements so as to focus attention on their integration and compaction.

6.1.6 Transportation Improvements

- Road networks:
  - Tar the R323 from current end of tar to R62 through Klein Swartberg to promote tourism in this area:
  - Open the currently locked gates and upgrade as a gravel scenic route the old road from Laingsburg town through Bergsig to Matjiesfontein.
  - Develop a cycle lane (NMT) network between the settlements in the municipality.

  - Provide signage:
    - To Sutherland and the observatory along the R354 at the Matjiesfontein intersection on the N1.
    - To Sutherland and the observatory along the Divisional Road 1481 (DR1481) at the Laingsburg town intersection on the N1.
    - To Sutherland via Koringplaas through the Moordenaars Karoo at the Laingsburg town intersection.
    - Provide signage in Laingsburg town and Matjiesfontein informing tourists of this route.

6.2 URBAN SETTLEMENTS

6.2.1 Commonage Land

Commonages are found in Laingsburg town, Matjiesfontein and at Vleiland.

Commonages should be used for their highest and best use, namely Extensive (Buffer SPC) or Intensive Agriculture or Urban Development depending on the characteristics of the land on which they are located whether they are inside or outside of the Urban Edge. Portions of commonages may also form part of Core SPCs, outside of the Urban Edge, or Open Space, inside of the Urban Edge, if they include environmentally sensitive land such as river or dam ecologic al corridors or flood plains.

Where commonages are suitable for Intensive or Extensive (Buffer SPC) Agriculture they should be used for emerging farmer incubator purposes as part of the Land Reform program. Commonage Development Plans (CDPs) should be drawn up in consultation with the Departments of Agriculture and Water Affairs. They should be linked to an FET centre where technical farming skills, business skills and entrepreneurial development training can take place. Successful emerging farmers can graduate from small commonage farms using low risk, low input technologies and animal traction to commercial farms either through outright purchase using the Proactive Land Acquisition Strategy (PLAS) or via Farm Equity Share (FES) projects. The incubator phase of this process should consider at least a 10 year horizon.

6.2.2 Open Space

Laingsburg town, Matjiesfontein and Vleiland's river systems provide important eco-system services including drinking and irrigation water, ground water recharge, biodiversity conservation, including habitat for birds and small mammals, and recreational open space. They must be protected and urban or intensive agricultural development that may threaten this resource prohibited, by, for example, implementing interim 30 metre setbacks from river banks or dam shorelines. These can be adjusted when necessary with detailed ecological and flood-line studies on a specific property.

Where Urban Development abuts Open Space it should face onto it across single sided roads lining the open space and must not turn its back on it with boundary walls as this removes surveillance and creates conditions for dumping and anti-social behavior.

Where Open Space has tourism appeal appropriately located and sensitively designed resorts can be located.

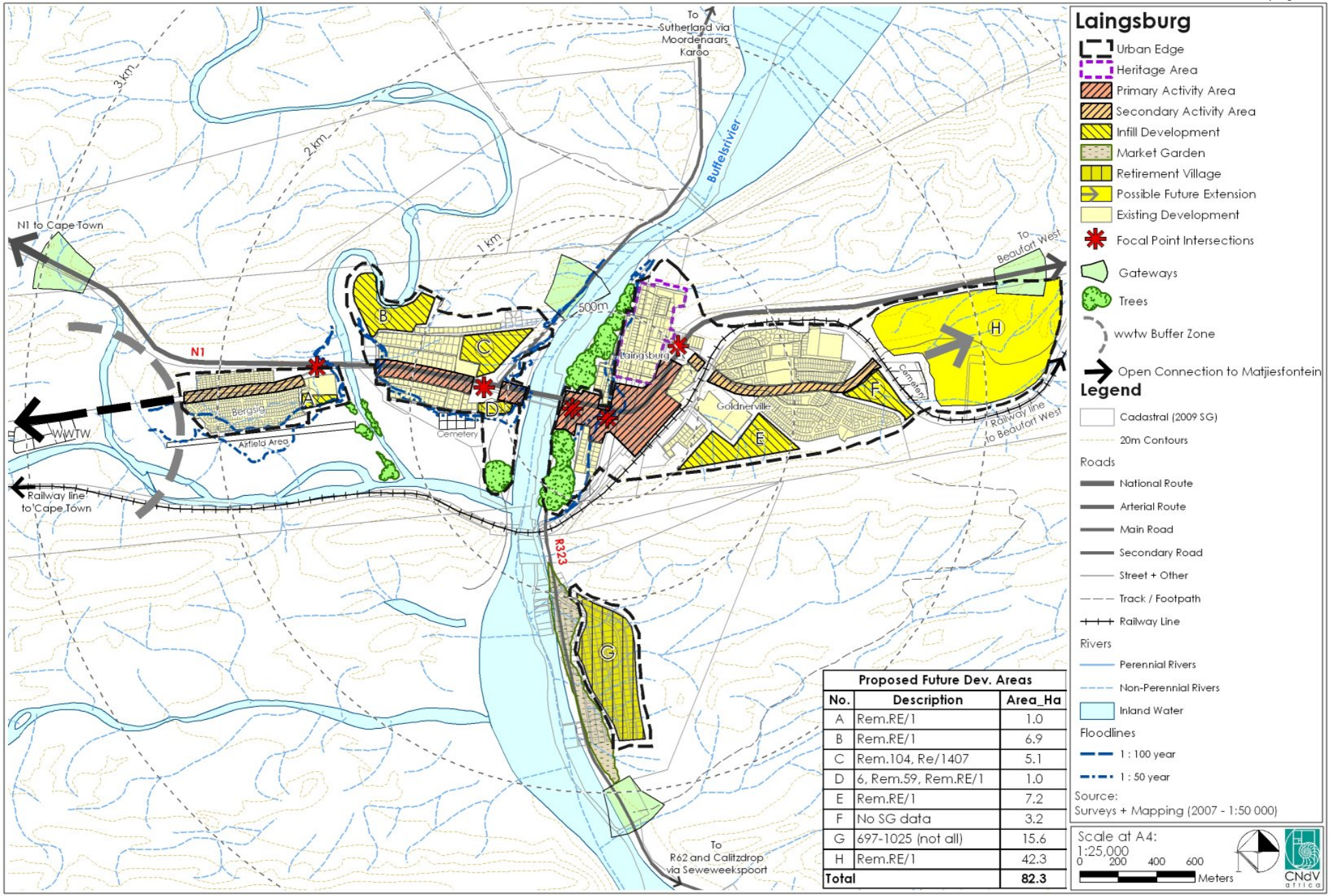
The Commonage at Vleiland should be regarded differently. There is no conventional urban settlement with an Urban Edge at present in this area. Residential dwellings should be permitted on the proposed Commonage plots here.

6.2.3 Intensification Areas

Both Laingsburg town and Matjiesfontein suffer from spatial separation although this is partly due to significant natural (rivers) and built (rail and roads) features about whose alignment nothing can be done.

In Laingsburg town more intense development on the land abutting primary and secondary activity streets, see Figure 6.2.1, should be encouraged so as to strengthen business and community facility thresholds along these routes. This should be informed by urban design and landscape guidelines that ensure that a pleasant and attractive pedestrian environment results. This redevelopment should take into account existing historic buildings and precincts, particularly in Laingsburg town where so much heritage was destroyed in the flood.

Physical cohesion in Laingsburg town can also be improved by an innovative design retrofit to the N1 which serves both as a national through route and the main street of the town. This will involve upgrading, hard and soft landscaping and urban design and land-use guidelines for the sections, bridge crossings and key intersections along the N1 between the Bergsig truck-stop and the Goldnerville intersection. Peripheral route sections through Bergsig and Goldnerville must also be included and their tourism potential promoted, for example around the Thusong Centre in Goldnerville.



Proposed Future Dev. Areas		
No.	Description	Area_Ha
A	Rem.RE/1	1.0
B	Rem.RE/1	6.9
C	Rem.104, Re/1407	5.1
D	6, Rem.59, Rem.RE/1	1.0
E	Rem.RE/1	7.2
F	No SG data	3.2
G	697-1025 (not all)	15.6
H	Rem.RE/1	42.3
Total		82.3

Figure 6.2.1 Laingsburg town SDF

A large strategic piece of Transnet land separating the north and south sides of Matjiesfontein village has recently been transferred to the municipality, see Figure 6.2.2 and, due to its size, will offer opportunities not only for urban development but space extensive activities such as small scale farming providing there is sufficient water and other resources available.

The concept of Intensification is not considered applicable at Vleiland, see Figure 6.2.3. Even if the proposed agri-village proves necessary it should really function as a collection of large rural food gardens on 1 000m^2 plots rather than an intense urban settlement.

6.2.4 Arrival Gateways

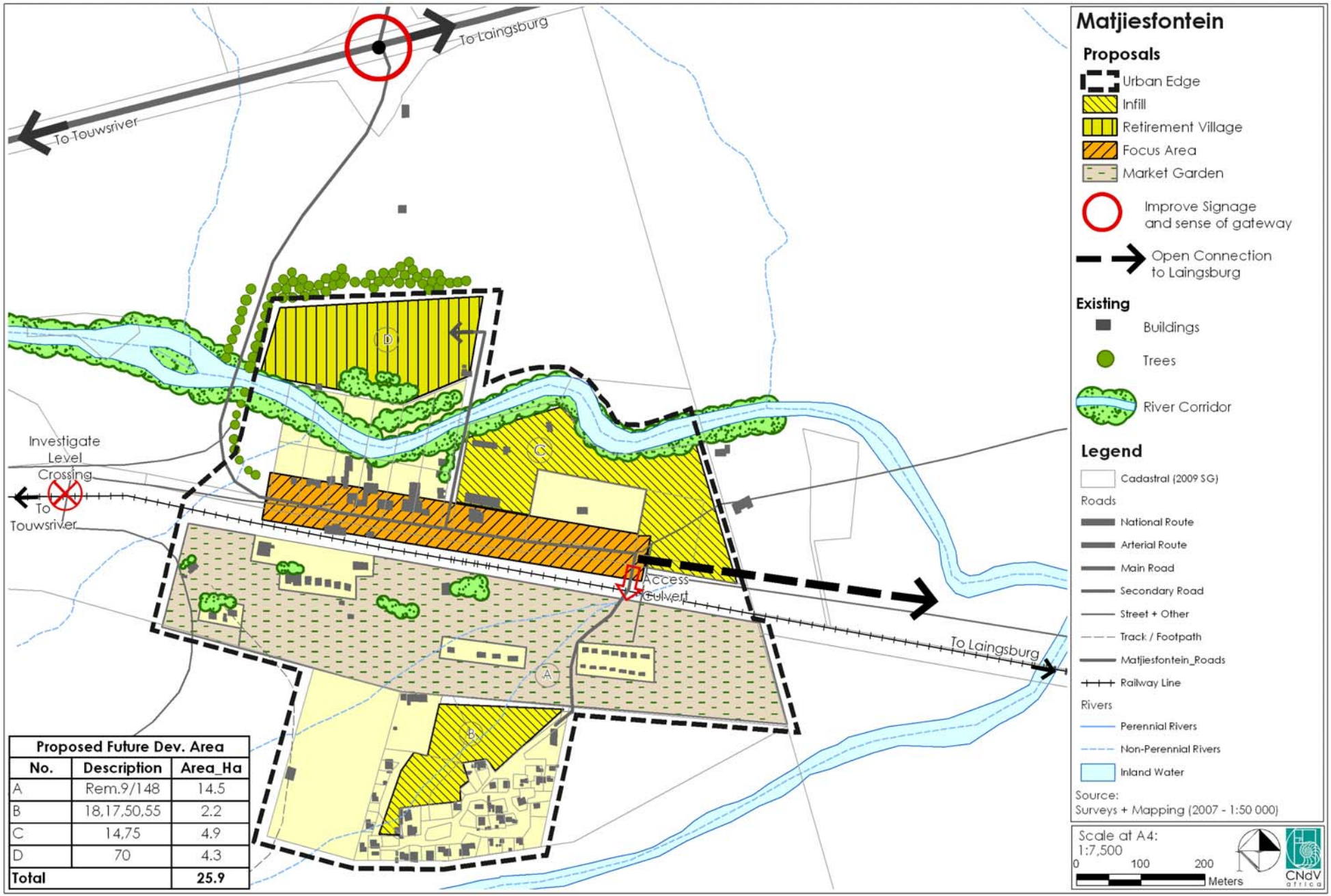
Laingsburg town has a strong sense of arrival from both east and west along the N1. From the west there is a memorable view of a kopje with the town's name emblazoned on it with white washed stones, a tradition in many small Karoo towns to aid particularly light aircraft pilots.

The impact of this entry is diminished somewhat by a row of Bergsig houses virtually abutting the road reserve, a location which also exposes residents to considerable road noise and potential traffic hazards. The eastern entrance descends down a prominent hill giving an excellent view of the town before it is entered.

Care must be taken that, over time, as a result of implementing standardized street lighting, kerbing, signage and other road side street furniture that these arrival gateways do not lose the character they give to the town.

Matjiesfontein has a single entrance off the N1 at the 4 way intersection to Sutherland. It has a prominent building with a flagpole next to it. Discussions should be held with the transport authorities to see if more inviting signage would be permitted and where exactly it should be located.

Locating a farm stall at the intersection of the Vleiland and Rouxpos roads through the Klein Swartberg would help to create a sense of arrival in this very spread out settlement.



Proposed Future Dev. Area		
No.	**Description**	**Area_Ha**
A	Rem.9/148	14.5
B	18,17,50,55	2.2
C	14,75	4.9
D	70	4.3
Total		**25.9**

Figure 6.2.2 Matjiesfontein SDF

6.2.5 Vacant Land Opportunities

Laingsburg town has a number of well-located parcels of land within the current urban area whose development has been identified as a priority in the public participation process before peripheral land is considered.

Efforts can be made to prevent further spatial separation by developing well located vacant land within the settlements as a priority.

6.2.6 Road Networks

The road cross-section and adjacent land-use plan through Laingsburg town should be amended so that it promotes the greatest possible economic benefit to local residents as well as permitting satisfactory levels of through traffic.

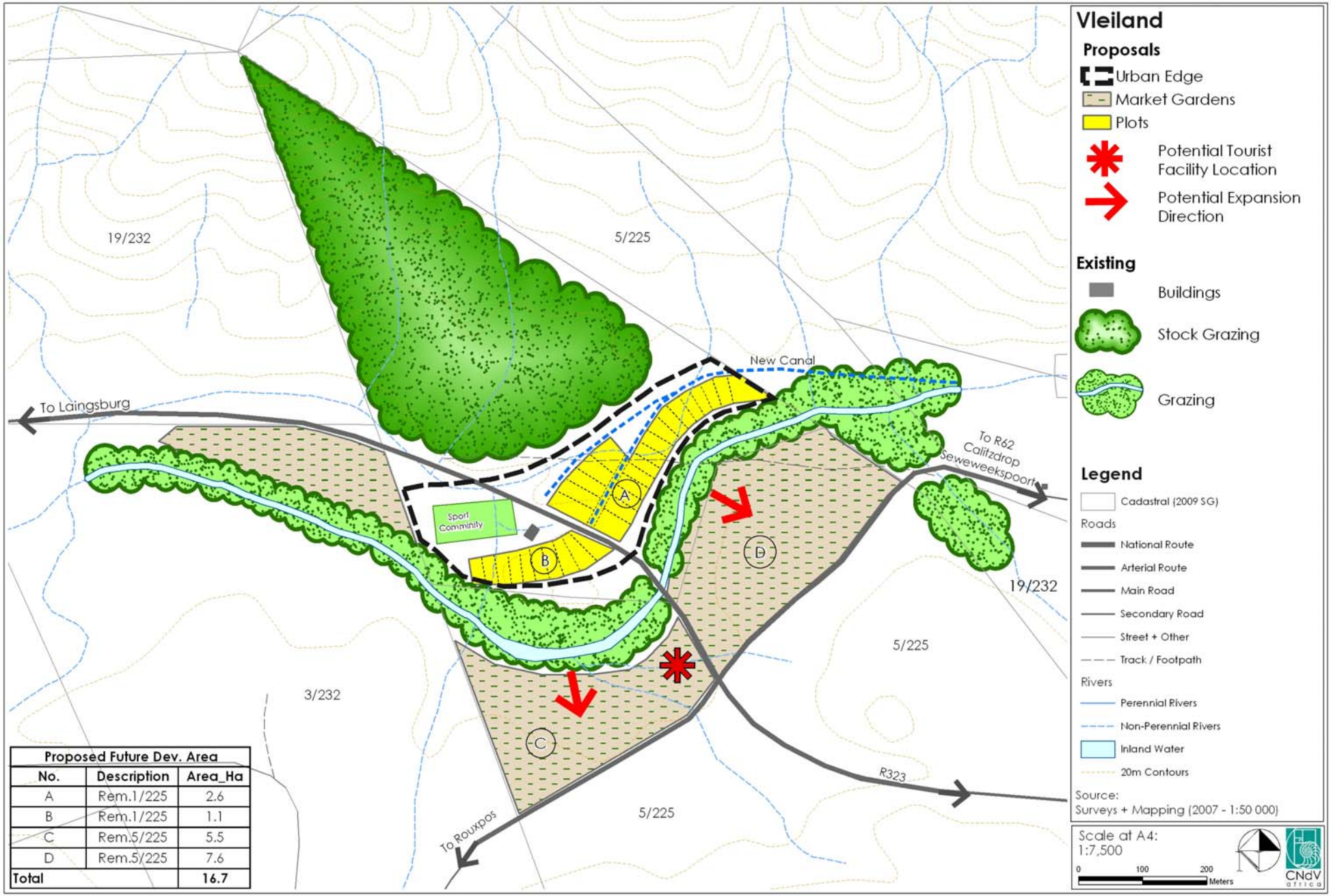


Figure 6.2.3 Vleiland SDF

7. IMPLEMENTATION FRAMEWORK

7.1 SHARED STRATEGIC SPATIAL VISION

The following spatial vision is proposed:

"That Laingsburg Municipality is and will continue to improve as a desirable place to live, invest and visit based on its potential as the Oasis Gateway to the Great Karoo, Moordenaars Karoo and Klein Swartberg, so that all of its residents may enjoy a sustainable way of life."

Goals:

- To improve the quality and knowledge of the tourism attractions in the municipality;
- To integrate the municipality's settlements through appropriate rural and urban development;
- To conserve and extend the municipality's agricultural resources and promote wider access to them; and,
- To strengthen Laingsburg town's role as a transport support, refreshment and emergency service centre straddling on the national Cape Town – Gauteng transport corridor.

7.2 STRATEGIES AND PROCESS TO INVOLVE DECISION MAKERS

Figure 7.2.1 illustrates the strategy and process followed to involve decision makers in the formulation of the SDF.

The Project Steering Committee (PSC) comprised:
- Municipal officials;
- Provincial officials; and
- National and provincial sector departments.

The PSC's role was to ensure the participation of sector departments and to ensure that the requirements of the Terms of Reference were adhered to.

The Project Management Team (PMT) was composed of representative from the following organizations/ departments:
- Department of Rural Development and Land Reform (DRDLR);
- Department of Environmental Affairs and Development Planning (DEA&DP);
- The Laingsburg Municipality; and
- The consultants.

The PMT was responsible for the flow of information, technical inputs and assisted with the logistics on the project.

There were a number of strategic community / stakeholder engagements during the process:

Firstly, the initial spatial vision and issues workshop was held on 25 February 2011. This workshop was convened with the IDP Rep. Forum and held in Laingsburg. The IDP Rep Forum represents a wide socio-economic cross-section of the Municipality.

The second series of interactions was to present the Status Quo work. This work was presented to the Matjiesfontein Community on the 10th of June 2011 and to the Vleiland Community on the 24th of August 2011.

Thirdly, the conceptual spatial development framework for the Municipality as a whole, Laingsburg, Matjiesfontein and Vleiland, was workshopped by the IDP Representative Forum comprising community representatives and councilors on 30 January 2012.

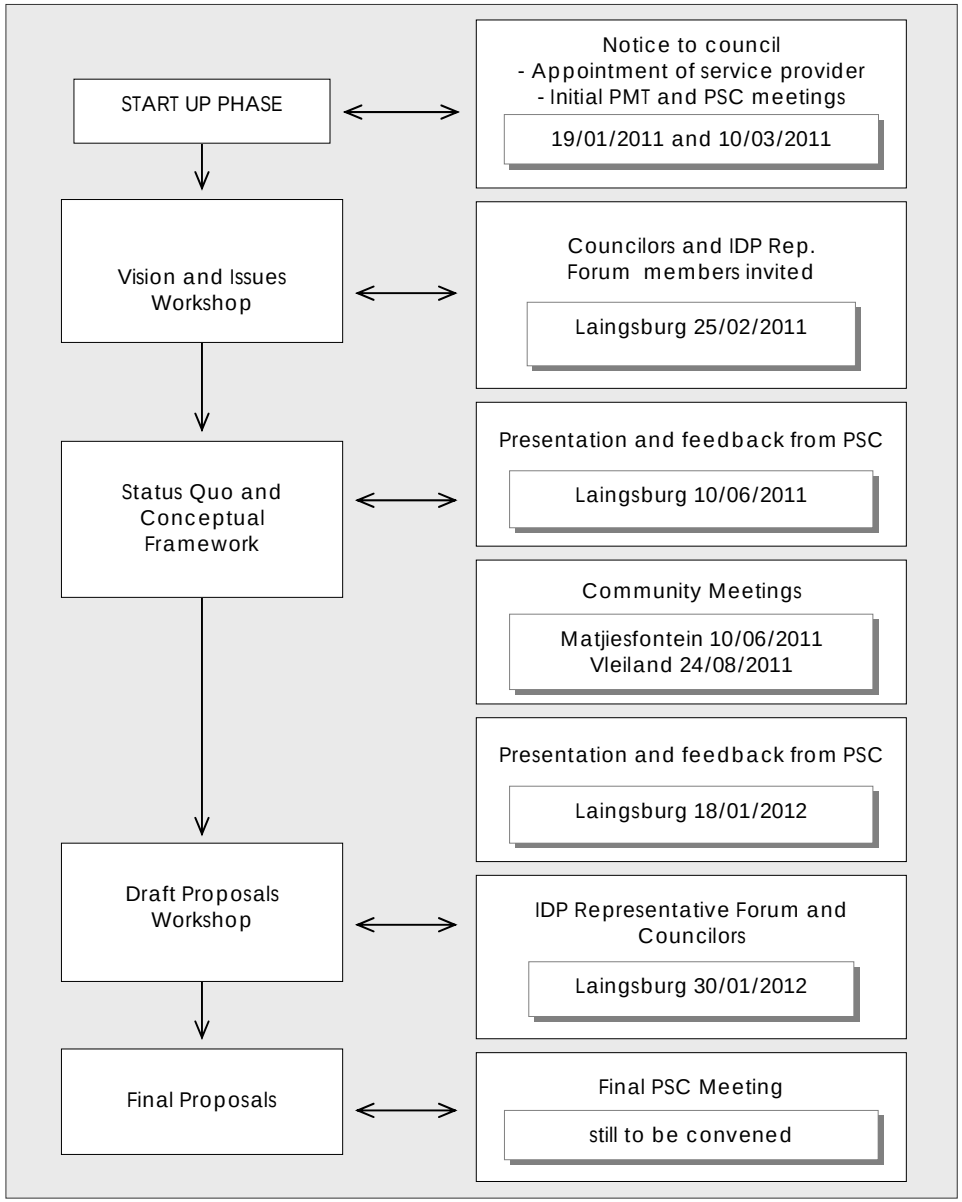


Figure 7.2 .1 Involvement of Stakeholders

7.3 STRATEGIES AND POLICIES TO IMPLEMENT THE FRAMEWORK

The SPC's provide the SDF's Land Use Management Guidelines. They are equivalent to the zones of the Land Use Management Scheme (LUMS). The SPC's provide guidance for the amendment of the LUMS.

Applications for amendment of the LUMS that will be aligned with the SPC's should be processed timeously where as those that are not aligned should be discouraged.

7.3.1 Spatial Planning Categories (SPC's)	Land uses and activities	Responsible Department
Core Areas: • Core 1: Anysberg, Klein Swartberg and Gamkaspoort Nature Reserves; • Critical Biodiversity Areas (CBAs) including Karookop, Komberg and unprotected portions of Klein Swartberg; and, • Major dams, river and tributary corridors	• Primarily "no-go" areas for urban development; • Conservation management activities including alien clearing, research and environmental education (EE) • "non-consumptive low impact eco-tourism including visitor overnight accommodation • Harvesting of natural resources subject to EMP • If buildings cannot be located in adjacent buffer areas they should in existing disturbed areas and "touch the earth lightly" principles and off-grid technologies used • No ploughing or urban development within river eco-corridors	Municipal planning department and inspectorate CapeNature Dept Environmental Affairs and Development Planning Dept of Agriculture Dept of Water Affairs
Buffer areas: • All land outside of Core, Intensive Agriculture and Urban Development SPCs • Includes Extensive Agriculture on commonages	• Game and stock farming according veld management and rotational grazing principles that improve bio-diversity • Following development options to be confined to existing disturbed areas and farm homestead precincts: - Low density Rural Residential Development; - Resort and holiday accommodation; - Tourist and recreational facilities; - Additional dwelling units • Increasing either of these activities should result in offsets that extend Core areas.	Municipal planning department and inspectorate CapeNature Dept Environmental Affairs and Development Planning Dept of Agriculture Dept of Water Affairs
Intensive agriculture: Irrigation farming along rivers: • Maximize cropping intensity • Identify opportunities for broadening participation • Includes intensive agriculture on commonages	• Only activities related to the primary agricultural enterprise are permitted; • Farm buildings and associated structures – homesteads, farm worker accommodation, sheds and barns • Additional dwelling units: 1 per 10 has to a maximum of 5 • Ancillary rural activities of appropriate scale that do not detract from primary agricultural enterprise including; - Small-scale rural holiday accommodation - E.g. farm-stay, B&B, guesthouse, boutique hotel, restaurant, rural lifestyle retail m function venue,. Farm-stall - Local product processing	Municipal planning department and inspectorate Dept Environmental Affairs and Development Planning Dept of Agriculture Dept of Water Affairs

Table 7.3.1 Spatial Planning Categories

7.3.1 Spatial Planning Categories (SPC's)	Land use and activities	Responsible Department
Urban Development: • All towns, villages and hamlets within Urban Edges • Excludes dispersed rural settlements such as Vleiland	• Includes areas for housing (human settlements) intensification areas, open space, mixed use, industrial and commercial uses and community facilities	Municipal planning department and inspectorate Dept Environmental Affairs and Development Planning Dept of Water Affairs
Urban Edge • Urban Edge lines as shown on Figures 6.2.1, 6.2.2 and 6.2.3 should be adopted as the furthest lateral extent of the urban settlements for the next decade.	• Delineated by interim or medium term urban edge drawn to assist with compacting the settlement to achieve a sustainable average gross density of 14 – 15 dwelling units per hectare in the case of Laingsburg town and Matjiesfontein and to exclude Intensive Agriculture, Buffer and Core land.	Municipal planning department and Inspectorate Dept of Agriculture Dept Environmental Affairs and Development Planning Dept of Water Affairs

Table 7.3.1 Spatial Planning Categories (cont.)

7.4 CONFIGURE SECTOR PLANS

The sector plans should contain the SDF plans for Municipality and two urban centres as their primary spatial informant. They should take the SDF proposals into account as follows (see facing page as well):

MUNICIPAL SDF	WASTE MANAGEMENT (DWA)	WATER SERVICES (DWA)	HOUSING SECTOR (Prov Dept of HS)	SERVICES AND INFRASTRUCTURE (Prov Dept of PW & T)	
SPCs					
Core: • Existing and proposed public and private sector conservation areas • River systems	• N/A	• Assist Dept of Agric and Municipality to protect river corridors	• N/A	• Minimize disturbance of protected areas by infrastructure crossings and alignments and efficient quality.	
Buffer: • Extensive Agriculture including Land Reform opportunities	• N/A	• N/A	• N/A	• N/A	
Intensive agriculture: • Irrigation farming along river banks • Including Land Reform opportunities	• N/A	• Encourage water demand management and enhanced irrigation efficiencies • Monitor water quality • Promote bio-farming and other techniques to reduce nutrient loads in hydrological systems • Supply water rights for land reform projects	• N/A	• Ensure balance between water supply infrastructure for agriculture and urban development	
Municipal wide infrastructure • Old road: Laingsburg town-Matjiesfontein • Scenic routes to Sutherland • Klein Swartberg Road • Flood route • New Pont at Gamkaspoort dam	• N/A	• N/A	• N/A	• N/A	
Urban development: • N1 through Laingsburg Town (LT) • Intensification corridor thru LT • BNG and GAP housing (HS) • Middle and Upper income housing • Off-grid services	• Promote separation at source, waste recycling	• Promote of grey water recycling, reuse of effluent for irrigation	• Ensure SDF proposals integrated into HSP and location and land use of BNG and GAP schemes contribute to overall IDP and SDF goals • Promote use of off-grid services especially in remote locations	• N/A	

	ROADS, PUBLIC TRANSPORT AND NMT (Dept of Transport & Public Works)	ENVIRONMENTAL MANAGEMENT (Dept of Environment/ Dept of Agriculture)	TOURISM (Dept of Tourism)	LAND REFORM (Dept Rural Development & Land Reform)	DISASTER MANAGEMENT
	• N/A	•	• N/A	• N/A	• N/A
	• N/A	• Promote veld rehabilitation and rotational grazing to enhance bio-diversity • Monitor water quality • Promote bio-farming	• N/A	• Ensure livestock farming does not damage bio-diversity through poor grazing methods • Ensure water rights for land reform projects	• Ensure adequate fire protection and burn management
	• N/A	• Monitor borehole abstraction water and ground water levels and recharge rates • Provide extension services to emerging farmers • Promote bio-farming on commonage • Draw up commonage development plan	• N/A	• Promote bio-farming on commonage • Draw up commonage development plan	• N/A
	• Upgrading of roads to be investigated and included in district and provincial infrastructure plan	• Facilitate EIAs for proposed • Infrastructure projects	• Assist with development of tourist routes including funding for projects such as proposed pont at Gamkaspoort dam	• N/A	• N/A
	• PDPW&T to assist in negotiations with SANRALs re reconfiguration of N1 through Laingsburg Town	• Promote integrated stormwater design including the use of permeable paving and swales in urban development areas • Ensure continuity between connected rural and urban ecological corridor areas	• N/A	• N/A	• Ensure adequate fire protection: • Building setbacks • Electrical compliance • Careful use of combustible materials

7.5 LAND USE MANAGEMENT SYSTEM GUIDELINES

Note: The SDF is a policy framework and does not give or take away the real rights on individual properties prescribed by the land use management system. An SDF should also not make detailed proposals for each individual property in the Municipality or its urban settlements.

The table below makes recommendations on how the proposed draft Land Use Management Scheme can be aligned with the SDF's proposed spatial planning categories (SPCs).

SDF Designation		LUMS Designation	
SPC	**Notes**	**Zoning (Provincial Model By-Law)**	**Alignment Comments**
Core:	• Designated nature – no development of any sort • Formally proclaimed public – provincial or Municipal - or private nature reserves • River corridors - No development of any sort	• Open Space Zone 1	As a general rule there should be no development in this SPC although this zone permits tourist facilities and holiday accommodation as a consent use subject to an Environmental Management Plan. Such development should rather be encouraged in the Buffer SPC.
Buffer: Extensive Agriculture	• Livestock farming on natural veld according to strict veld management and rotational grazing principles.	• Open Space Zone 2	In addition to the activities permitted under Open Space Zone1, either as of right or by consent, this zone also permits Agriculture. It is proposed that in this zone this be defined as Extensive Agriculture only and does not permit any of the activities under Agriculture Zone 1 of the Model By-law. Agriculture Zone 1 should be used to control homesteads and other ancillary buildings used for agricultural purposes as well as Intensive Agriculture, see below.
Intensive Agriculture	• Crop farming areas as the most economically and low skilled employment generation resource.	• Agriculture Zone 1	This zone also permits a dwelling house, B&B, home occupation and conservation as of right and provides for a wide range of consent uses including; guest house, hotel, holiday accommodation, farm stall or shop, aqua-culture, feed lots, horticulture, plant nursery, riding school, service trade, mining and commercial kennels. Some of these uses such as mining should not be permitted on land designated for Intensive Agriculture if there is no chance of land being rehabilitated for Intensive Agriculture purpose.
Urban Development	• All activities within the Urban Edge of settlements.	All the following zones: • Single Residential • General Residential • Business • Industrial • Community • Authority • Transportation • Open Space, Nature and Resort zones	There are a number of sub-zones in each of these zones which can be applied depending on the nature of the activity that has to be controlled. Details of these are found in the scheme regulations. Their detailed application within urban settlements should be made and/or reviewed in a LUMS designation exercise separate to SDF preparation that focuses on the LUMS in detail.
Overlay Zones			In addition to the detailed zones to be applied on a detailed property or portion of a property basis the Model By-law also allows for a number of more flexible overlay zones including Subdivisional Area, Heritage, Environmental Protection, Special Management Area, Bio-regional, Urban Edge, Scenic Drive, Local Area, Special Planning, Activity Spine and Airport. These zones do not override the conditions of the base zones but provide additional policy guidance. They are also usually applied in a detailed LUMS designation exercise.

7.6 TOOLS TO FACILITATE URBANISATION ONTO STRATEGIC DEVELOPMENT AREAS

7.6.1 Integrated Human Settlement Projects

Housing generally comprises about 70% of a settlement's land use and its pattern and form is a major influence on the level of integration and sustainability. Low income housing, including BNG (Breaking New Ground, formerly known as RDP), and Social/Gap, (catering for those who earn too much to receive BNG housing but too little to qualify for bank mortgages), can often comprise between 30 to 50% of the housing in a settlement. Thus, how and where housing is developed can have a major impact on urbanization management.

The public participation process indicated that there is already concern in Laingsburg Municipality with the traditional approach of locating low income housing on the settlement periphery. Thus, the land situated to the east of Goldnerville, previously considered as suitable for a human settlement project, has now been relegated to the long term while other, better located, housing opportunities are addressed first.

Laingsburg town has three housing challenges at present. First, is the renovation of 265 dilapidated houses. These units are already in place and this project will not have an impact on the strategic use of land to promote integration. Secondly, there is a need to construct approximately 430 new units. These units should be strategically located so that they reinforce rather than weaken convenience, the ability to create business and support for community facilities, and the efficient use of existing services. Thus, smaller, but well located vacant sites should be targeted for these units including parcels E and F for BNG housing, see Figure 6.2.1. Thirdly, there is a need for about 300 social and GAP units. Parcel C should be investigated for social and GAP housing, see Figure 6.2.1.

At the detailed level the principle of the Socio-economic Gradient should be used to guide the layout of the various project income bands and their relationship with adjacent residential areas.

7.7 LINKAGES BETWEEN URBAN AND RURAL

Figure 7.7.1 illustrates the complex set of linkages between urban and rural whose spatial aspects the SDF seeks to optimize.

These linkages begin with the close relationship between the economy, household wages and employment. Agriculture, particularly grain farming provides the primary employment and economic drives. Previously, spatially, there was a close relationship as most farmworkers stayed on farms where they received most of the services, water, food, etc. necessary to sustain life.

Over time urban areas and the wider transport linkages have played an increasingly important role in this relationship as higher volumes of crops are exported, and inputs imported. There has also been an increasing move of labour to town where residential services are increasingly supplied and funded by the Municipality.

A key aspect of maintaining and enhancing these linkages is to ensure the quality of the physical transport mechanisms, e.g. roads and rail and information technology, Telkom and internet.

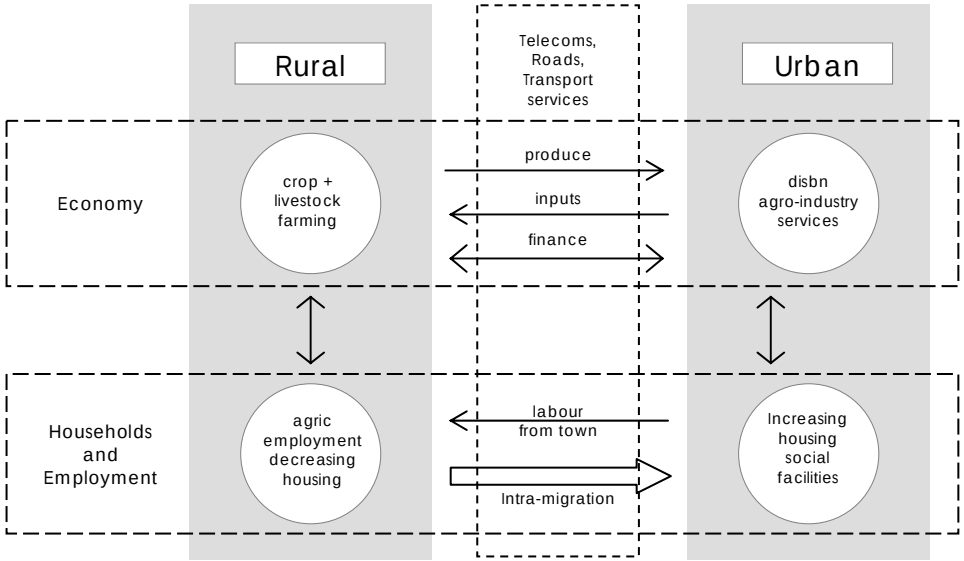


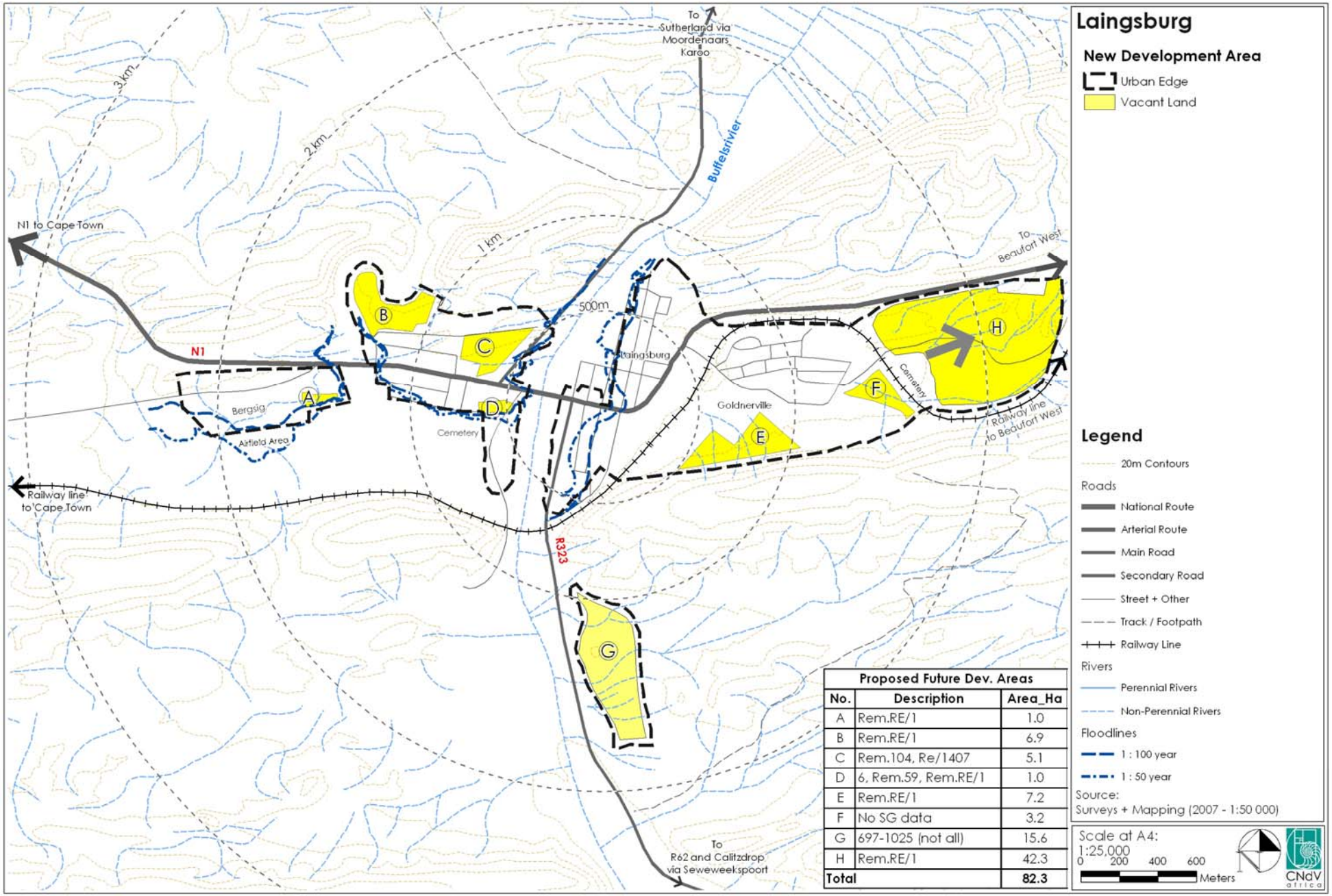
Figure 7.7.1 Urban and Rural Linkages

7.8 VACANT LAND

This section identifies vacant land in Laingsburg town, Matjiesfontein and Vleiland that is capable of development.

7.8.1 Laingsburg Town

No.	Erf	Area (has)	Description	Possible use	Comment
A	Rem RE/1	1,0ha	Vacant land behind the truck stop	Breaking New Ground (BNG) Possible residential. Outside 2km radius from town centre.	Good opportunity for infill development. Need to observe the floodline and airfield restriction zone.
B	Rem RE/1	6,9ha	Vacant land north of Nuwe Dorp on the river bend.	Medium to high income housing within 2km from the town centre.	Good opportunity for properties with river frontage and views. Close to the reservoir.
C	Rem 104, RE/1407	5,1ha	Vacant land off the road leading to the Moordenaars Karoo	Medium to high income housing within 1km from the town centre.	Good opportunity for Gap and Medium income housing.
D	6, Rem 59, Rem RE/1	1ha	Vacant land south of and abutting the N1 Freeway	Residential within 1km from the centre of town	Good access and proximity to town.
E	Rem RE/1	7,2ha	Vacant land behind Acacia Primary School	Breaking New Ground (BNG) housing opportunity within 1km from the centre of town.	Currently being investigated for BNG housing development. Close to the exiting Goldnerville township.
F	No SG data	3,2ha	Vacant land east of Goldnerville	Opportunity for Breaking New Ground (BNG) housing and business along the road within 2km from the centre of town.	Should only be considered after parcels numbered 1-5 have been developed.
G	697-1025 (not all)	15,6ha	Vacant land, old registered township along the road to the R62	Opportunity for medium to high income housing, market garden plots or a retirement village	Within 2km from the centre of town, yet still a remote feel to the location.
H	Rem RE/1	45,23ha	Vacant land east of the cemetery	Opportunity for mixed use development about 2km from the centre of town.	Should only be considered after the parcels numbered 1-6 have been developed. Requires a development framework study.
Total		**82,3ha**			

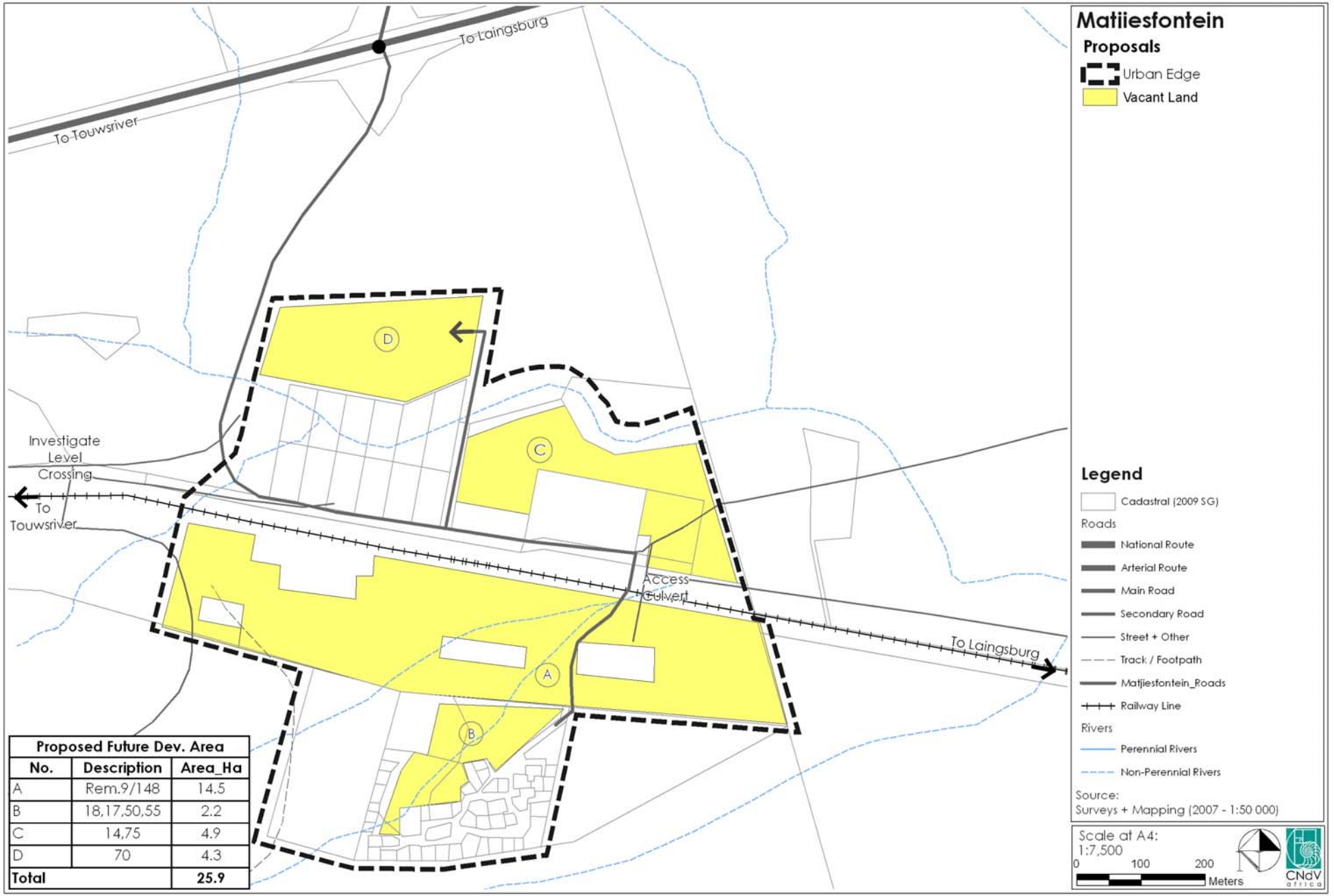


Proposed Future Dev. Areas		
No.	Description	Area_Ha
A	Rem.RE/1	1.0
B	Rem.RE/1	6.9
C	Rem.104, Re/1407	5.1
D	6, Rem.59, Rem.RE/1	1.0
E	Rem.RE/1	7.2
F	No SG data	3.2
G	697-1025 (not all)	15.6
H	Rem.RE/1	42.3
Total		**82.3**

Figure 7.8.1 Vacant Land: Laingsburg town

7.8.2 Matjiesfontein

No.	Erf	Area (has)	Description	Possible use	Comment
A	Rem 9/148	14.5	Transnet land currently being transferred to the Municipality within 1km of the centre of the settlement	Immediate use could be market gardening. Future use could include an integrated development of different income groups and land uses.	Good opportunity for integrating Matjiesfontein and stimulating development in the area. This area requires a development framework.
B	18, 17, 50, 55	2.2	Existing vacant land in the centre of Matjiesfontein South	Breaking New Ground housing with business opportunities along the roads leading into Matjiesfontein South.	To form part of the above development framework study.
C	14, 75	4.9	Vacant land behind the hotel precinct	Gap, medium and high income housing and commercial opportunities along the main road	Privately owned land within 1km of the centre of Matjiesfontein.
D	70	4.3	Vacant land within 1km of the centre of town	Possible permanent housing opportunity, e.g. a retirement village.	This site is protected from the noise along the N1 Freeway and the best location for a retirement village.
	Total	**25.9**			

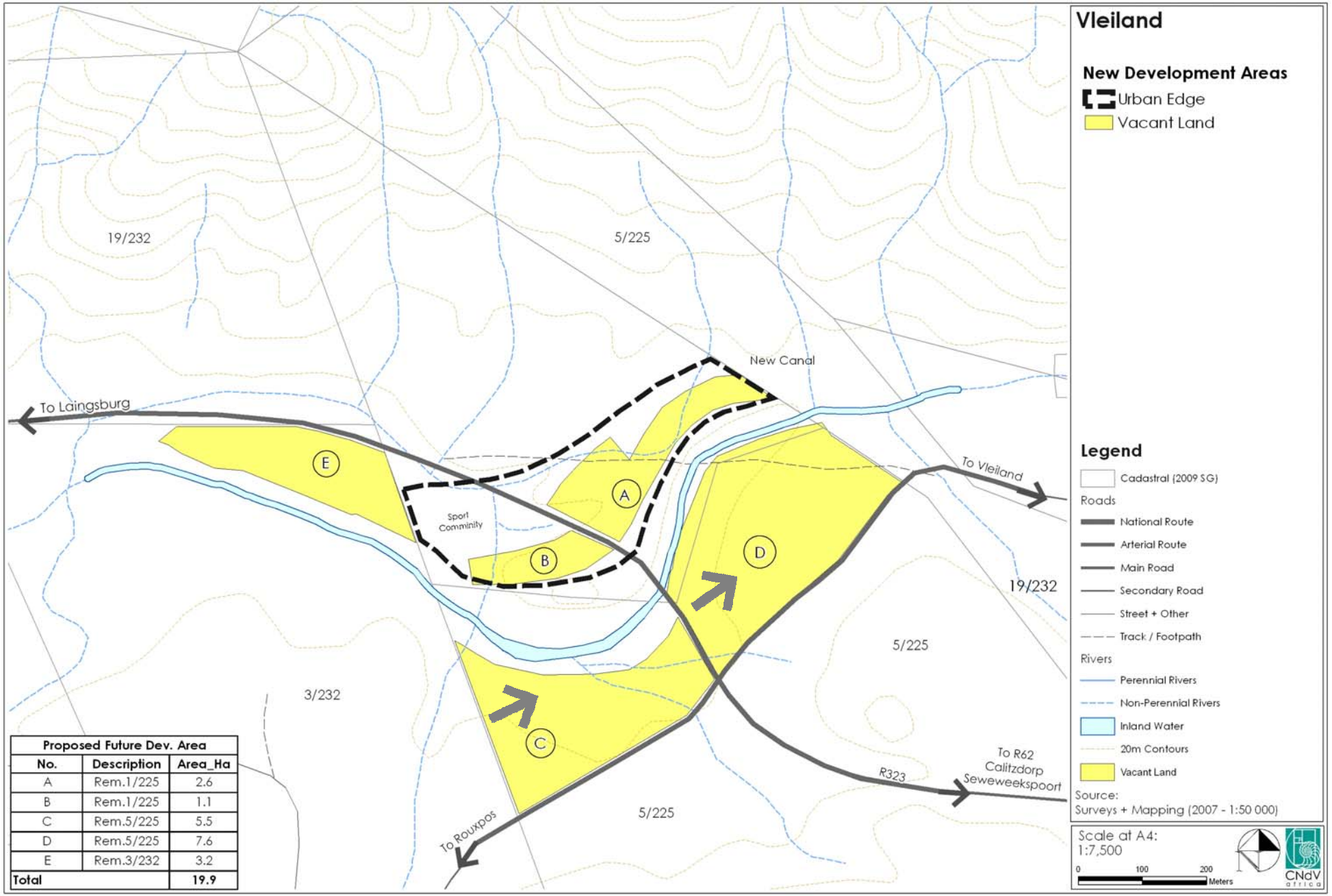


Proposed Future Dev. Area		
No.	**Description**	**Area_Ha**
A	Rem.9/148	14.5
B	18,17,50,55	2.2
C	14,75	4.9
D	70	4.3
Total		**25.9**

Figure 7.8.2 Vacant Land: Matjiesfontein

7.8.3 Vleiland

No.	Erf	Area (has)	Description	Possible use	Comment
A	Rem 1/225	2.6	Municipal owned land on which the sports fields and clubhouse are currently located.	Market Garden housing plots	Only municipal owned land in the area, close to Vleiland and the surrounding farms and on the R323 to the R62 and Seweweekspoort.
B	Rem 1/225	1.1	Municipal owned land on which the sports fields and clubhouse are currently located.	Market Garden housing plots	Only municipal owned land in the area, close to Vleiland and the surrounding farms and on the R323 to the R62 and Seweweekspoort.
C	Rem 5/225	5.5	Municipal owned land on which the sports fields and clubhouse are currently located.	Small scale market gardening, intensive agriculture, possible farm stall / restaurant type of development.	Only municipal owned land in the area, close to Vleiland and the surrounding farms and on the R323 to the R62 and Seweweekspoort.
D	Rem 5/225	7.6	Municipal owned land on which the sports fields and clubhouse are currently located.	Small scale market gardening, intensive agriculture	Only municipal owned land in the area, close to Vleiland and the surrounding farms and on the R323 to the R62 and Seweweekspoort.
E	Rem 3/232	3.2	Abutting the municipal owned land.	Small scale market gardening, intensive agriculture.	Privately owned land for market gardening/ intensive small scale agriculture
Total		**19.9**			



Proposed Future Dev. Area		
No.	Description	Area_Ha
A	Rem.1/225	2.6
B	Rem.1/225	1.1
C	Rem.5/225	5.5
D	Rem.5/225	7.6
E	Rem.3/232	3.2
Total		19.9

Figure 7.8.3 Vacant Land: Vleiland

7.9 CAPITAL EXPENDITURE FRAMEWORK

7.9.1 Laingsburg Municipality, See Figure 7.9.1

Proposal No.	Proposal name	Project / Policy Description	Cost Estimate (Rs)	Finance Source	Implementing Agent	Comment	Institutional Capacity	Possible/potential benefit
1	Scenic road: Matjiesfontein to Laingsburg	Signage and upgrade of gravel road (± 30kms)	7 500 000	MIG/IDC tourism/DBSA	Municipality	Requires safeguards and cooperation with land owners	Consultants and local contractors	Increase in the number of tourists to the region
2	Scenic road: Laingsburg town to Sutherland (R354)	Signage	50 000	Dept PW & T/ Dept Econ Dev	Municipality	Road already well maintained, signage required on N1 and R354	Municipality/consultants (graphic designers)	Increase in the number of tourists to the region
3	Scenic Road: Laingsburg town via Moordenaars Karoo to Sutherland	Signage in Laingsburg town	25 000	Dept PW & T/ Dept Econ Dev	Municipality	Road already well maintained. Signage required on N1. May require interface with Namakwa district municipality in N Cape	Municipality/consultants (graphic designers	Increase in the number of tourists to the region
4	Scenic Road: End of tar on R323 to R62 (± 75kms) (CHECK)	Signage and tarring of road	112 500 000	MIG/IDC tourism/DBSA	Dept PW&T	Sedan cars decreasingly and tour coaches refuse to travel on gravel roads	Consultants and contractors	Increase in the number of tourists to the region
5	Scenic Road: Laingsburg to Prince Albert via new pont	Upgrade gravel road to Gamkaspoort dam, install pont and continue to Prince Albert	5 000 000	IDC tourism/DBSA, Dept PW & T/ Dept Econ Dev	Dept PW&T, Dept Econ Dev	Almost unique touring opportunity which, together with project 4, will strengthen tourism flows. Requires interface with Prince Albert Municipality.	Consultants and contractors	Increase in the number of tourists to the region

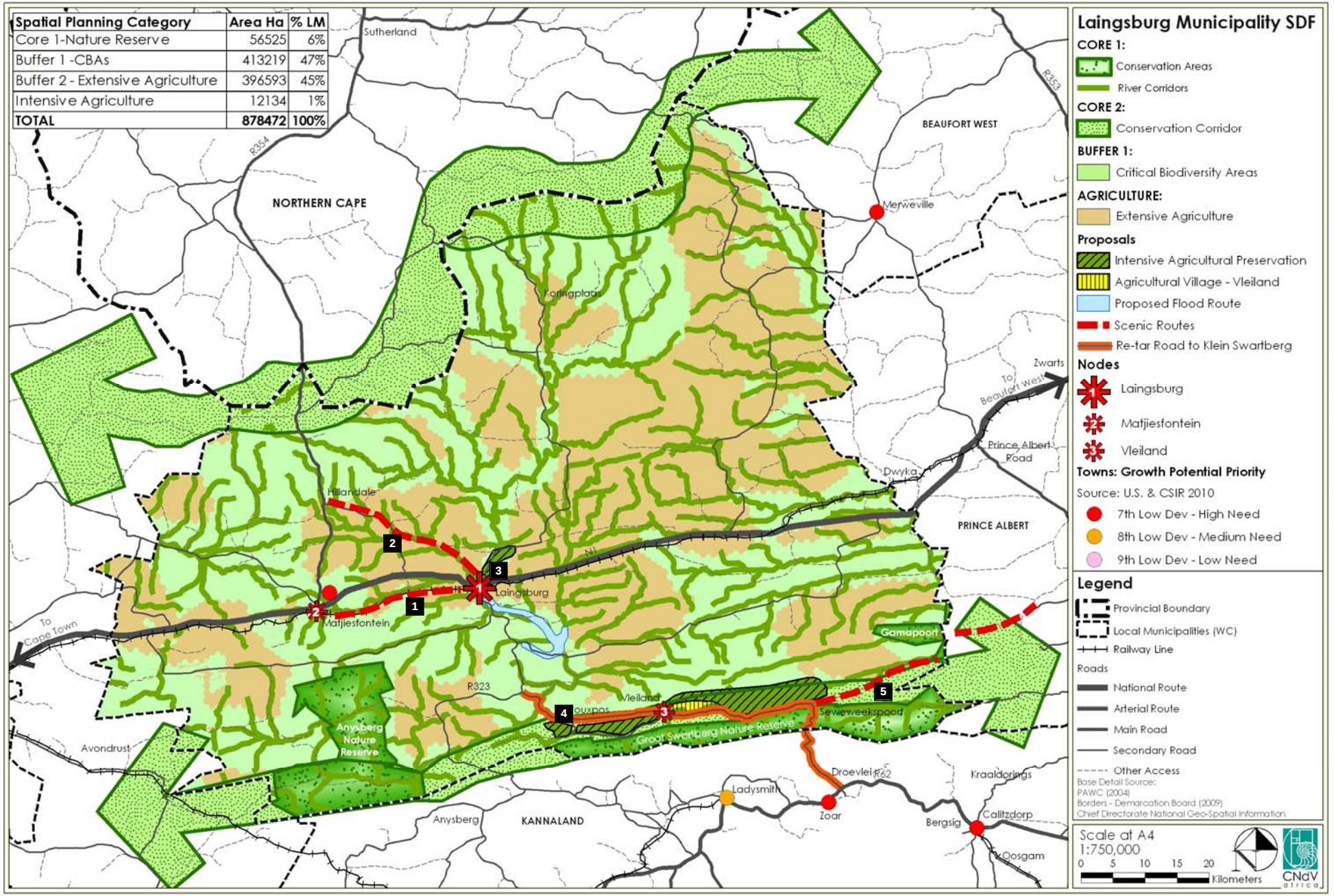


Figure 7.9.1 Laingsburg Municipality Capital Expenditure Framework

7.9.2 Capital Expenditure Projects: Laingsburg Town, see Figure 7.9.2

Proposal No.	Proposal	Project / Policy Description	Cost Estimate (Rs)	Finance Source	Implementing Agent	Comment	Institutional Capacity	Possible/potential benefit
1	Matjiesfontein Road through Bergsig (500 metres)	Upgrade Matjiesfontein Road through Bergsig as a township tourism and business corridor route	500 000	DEA&DP, NDPG grant	Municipality	Critical that this upgrade is part of a long distance link to Matjiesfontein otherwise will function as a dead end and only have a very small attractive power	Consultants (design) local contractors where possible	Increase tourism potential
2	Bergsig intersection/truck stop	Upgrade intersection to celebrate entrance to Bergsig	250 000	SANRAL, NDPG funding	Municipality/ SANRAL	Design and build intersection as gateway to Laingsburg and Bergsig with hard landscaping across the N1, like opposite Essopville entrance in Beaufort West, trees and attractive signage and lighting	SANRAL/Municipality Consultants and contractors, local where possible	Improve visual aesthetics of the town
3	N1 entrance past Bergsig	Upgrade this approach to present the best quality entrance to Laingsburg town '	500 000	SANRAL, Dept PW&T	SANRAL/ Municipality	Will also help to and protect Bergsig residents from unacceptable noise levels from N1	Consultant project managers, employ local contractors where possible	Improve visual aesthetics of the town
4	Wilgehout River bridge and Buffelshout River crossing upgrade	Upgrade bridge with signage, lighting, decoration and provide for cycle paths and pedestrians	250 000	SANRAL, Dept PW&T	SANRAL/ Municipality	No comment	Consultant project managers, employ local contractors where possible	Improve safety for road users and NMT users
5	Voortrekker Road urban design upgrade	Urban design framework to resolve mobility/access demands on N1 through town as well as between Bergsig Truck stop and Goldnerville intersections. This should extend from the west of Bergsig through to the Thusong Centre in Goldnerville (township tourism centre)	140 000	DEA&DP	SANRAL/Municipality	Promote Voortrekker Road as a primary (existing) activity street building on its high exposure to passing traffic with high quality paving, street lighting, and tree planting. May need to implement service roads depending on RAG	Urban design, landscape architecture and transport engineering consultants	Improve safety for road users and NMT users
6	Moordenaars Karoo and Klein Swartberg intersections and entrance to Flood Museum.	Create interesting entrance to these roads	150 000	SANRAL Dept PW &T	SANRAL/Municipality	Build on current efforts of shop at intersection and install informative and attractive signage	Urban design, graphic design, landscape architecture	Increase tourism potential Improve visual aesthetics of the town
7	Food garden, off-grid permanent residential area	Investigate potential of promoting development of this land with an off-grid permanent residential middle to upper income housing	50 000	Municipality/ land owners	Municipality/ land owners	This land may have potential to be unconventionally developed using off-grid engineering technology and high speed voice and data telecoms as a permanent residential/retirement scheme.	Estate agents, planners, engineers.	Reduce pressure on municipal infrastructural networks
8	Composting project (IDP)	Use green waste for composting	150 000	municipality	Municipality	No comment	Local contractors	Waste minimization
9	Landscaping project (IDP)	Plant 100 trees, clean and green areas	150 000	municipality	Municipality	No comment	Local contractors	Improve visual aesthetics of the town
10	Stormwater management (IDP)	Investigate areas prone to flooding especially area around Goldnerville underpass	60 000	municipality	Municipality	Goldnerville Underpass raised as a problem during public participation	consultants	Reduce risk of potential flooding
11	Water consumption (IDP)	Install system to monitor water usage	1 400 000	Municipality	Municipality	No comment	consultants	Reduce water usage

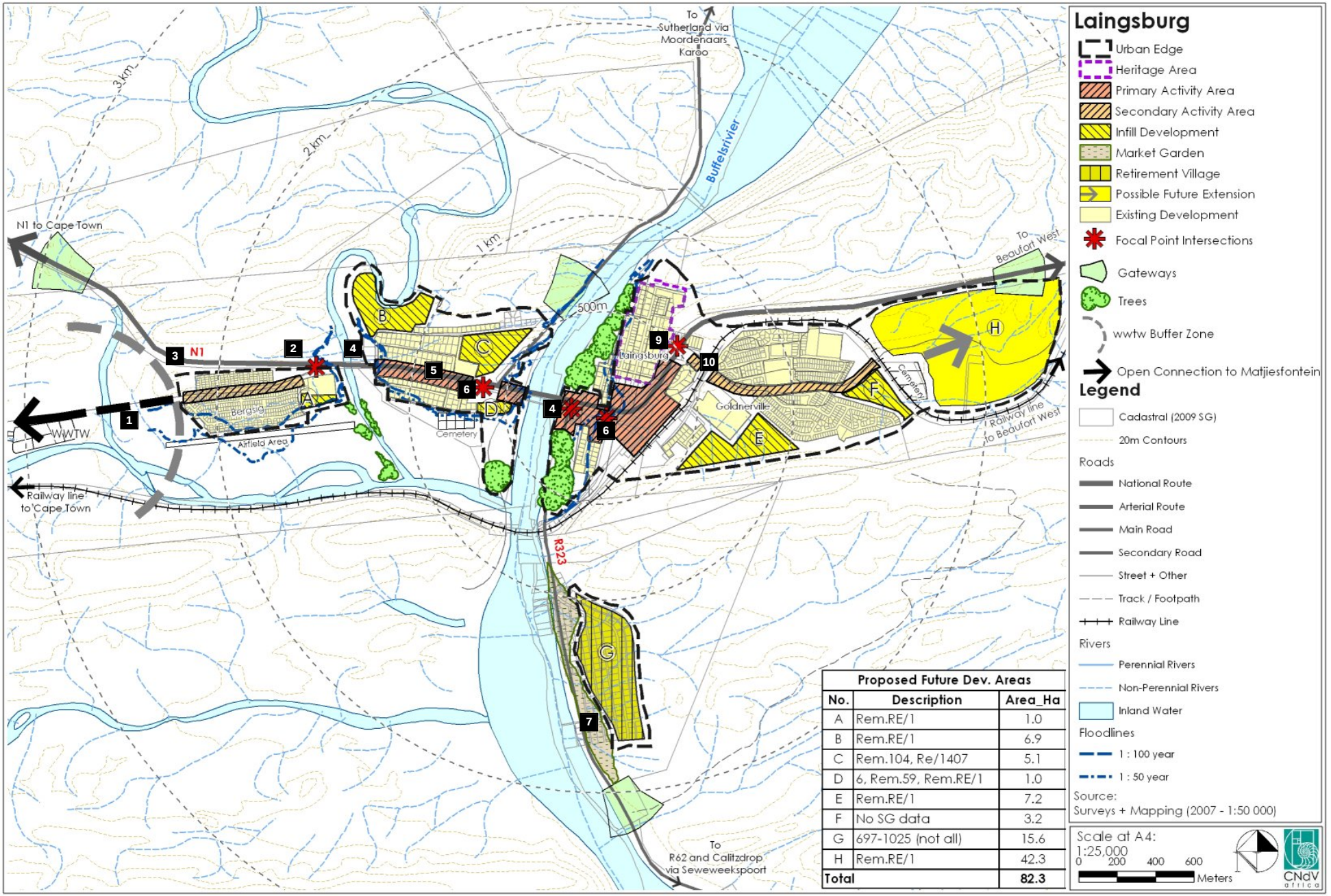


Figure 7.9.2 Laingsburg Town Capital Expenditure Framework

7.9.3 Capital Expenditure Projects: Matjiesfontein, see Figure 7.9.3

Proposal No.	Proposal name	Project / Policy Description	Cost Estimate (Rs)	Finance Source	Implementing Agent	Comment	Institutional Capacity	Possible/potential benefit
1	Matjiesfontein Housing – 95 units	PHP support project	3 702 000	DHS, green building funders	Municipality, DHS	No funding to be provided for top structures, will need to be off grid, may eco-build workshops with participants (beneficiaries)	Consultants, contractors and participant (beneficiary) resources	Reduce pressure on municipal infrastructural networks
2	Level Crossing	Review need for level crossing.	75 000	Dept T&PW, Spoornet	Disaster Management	If needed at all consider whether only necessary for emergency vehicles while all other traffic uses upgraded culverts, see project 2.	Consultants	Improve safety for road users
3	Extension of Main street	Review whether current upgraded section requires review and extension of this character to culverts	100 000	DEA&DP, Dept Econ Dev	Municipality	Investigate extending current high character to include entrance to culverts	Consultants	Improve safety for road users
4	Culvert underpass upgrade	Feasibility study to establish whether culverts can be upgraded	150 000	Dept T&PW, Spoornet	Dept T&PW	Spoornet under great criticism at level crossings – important opportunity to see if most traffic can be diverted under culverts, improve integration between north and south sides of line	Consultants: traffic and structural engineering	Improve safety for road users
5	Permanent residential project	Feasibility study for landscaping upgrading and permanent upmarket residential project	To land owners cost	Land owner	Land owner	Need to promote permanent residential development, may be retirees to complement and support hotel	Municipality to require feasibility study before entertaining project further	Improve visual aesthetics of the town
6	Former Transnet Land	Investigate best use of this land for residential and market gardening	150 000	Municipality, Dept of Agric, Dept of Econ Dev	Municipality	Investigate best use of land w.r.t. water availability, soil fertility, reuse of existing buildings and unused capacity elsewhere	Consultant team: Urban designer, agronomist, civil engineer	Improve visual aesthetics of the town
7	Vacant land in current township	Investigate use of this land in conjunction with project 2.6 above	Include with project 2.6	Municipality, Dept of Agric, Dept of Econ Dev	Municipality	Depending on extent of land required in project 2.6 above review best use of remaining land	See above	Increase socio-economic opportunities
8	N1 signage	Review whether these is any need to improve signage	Include with projects 2.2 or 2.3	Municipality, hotel owner	Municipality, SANRAL		Tourism, marketing, graphics expert	Increase tourism potential

NOTE: No Capital Expenditure or Feasibility projects are indicated for Vleiland at this point in time.

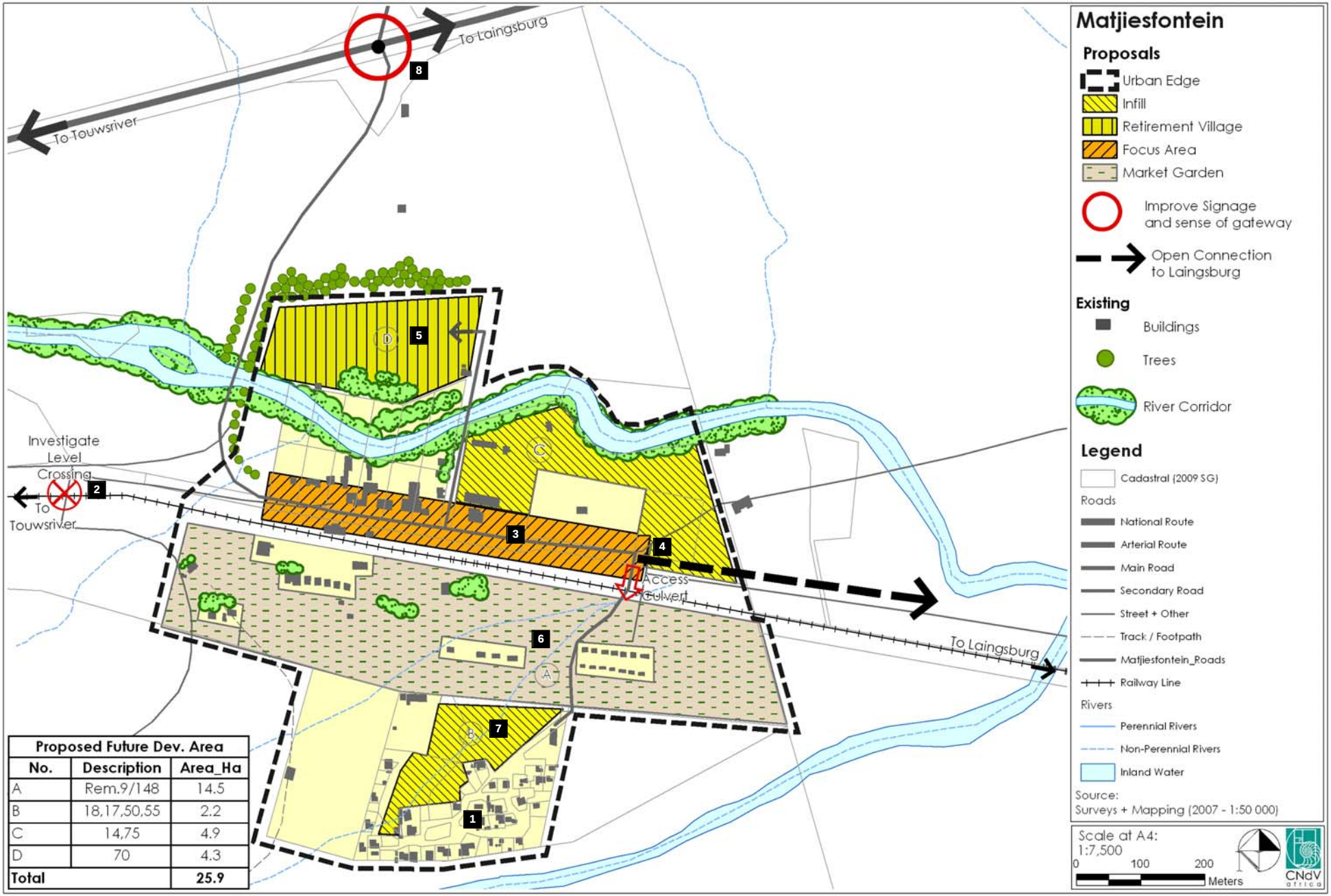


Figure 7.9.3 Matjiesfontein Capital Expenditure Framework

7.10 MONITORING AND EVALUATION

Phase 7 of Preparing the SDF, Monitoring and Evaluation, will only occur after the SDF is approved. It should occur as follows:

7.10.1 Review progress in IDP

The annual review of the IDP should include a review of progress on the policy amendments and project implementation of the SDF according to the priority listings and expenditure programs of the various sector departments' budgets.

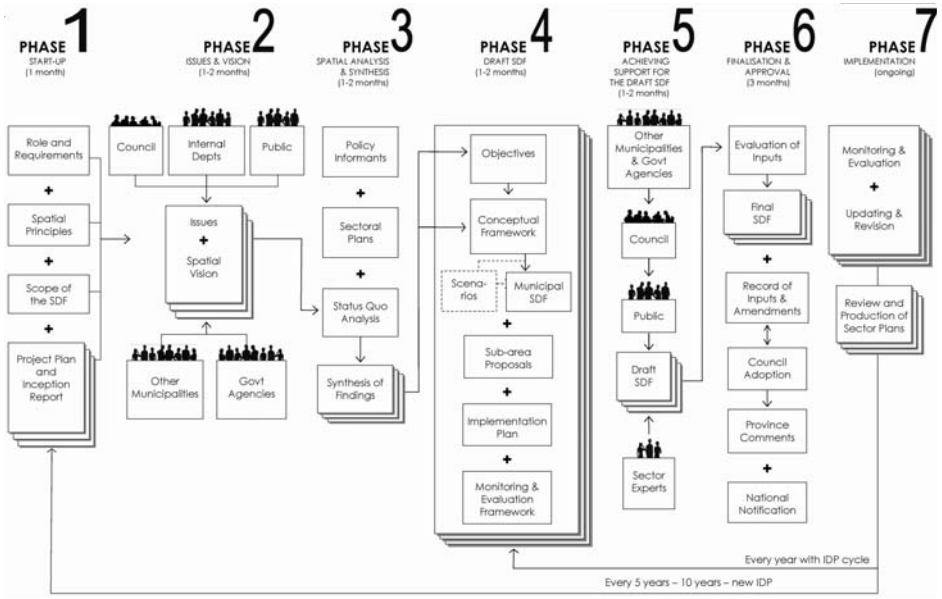


Figure 7.10.1 Phases in the process of completing and SDF (source: CNdV, 2010)

Figure 7.10.1 above shows that after the completion of the SDF in Phase 6, the SDF will be implemented through the various sectoral plans during Phase 7, see Figure 7.10.2. During this phase the implementation of the SDF should be monitored on at least a 2 month basis by the IDP's annual reporting on the progress of the various implementation/ sectoral plans. This review should also comment on the SDF. This is shown on Figure 7.10.1.

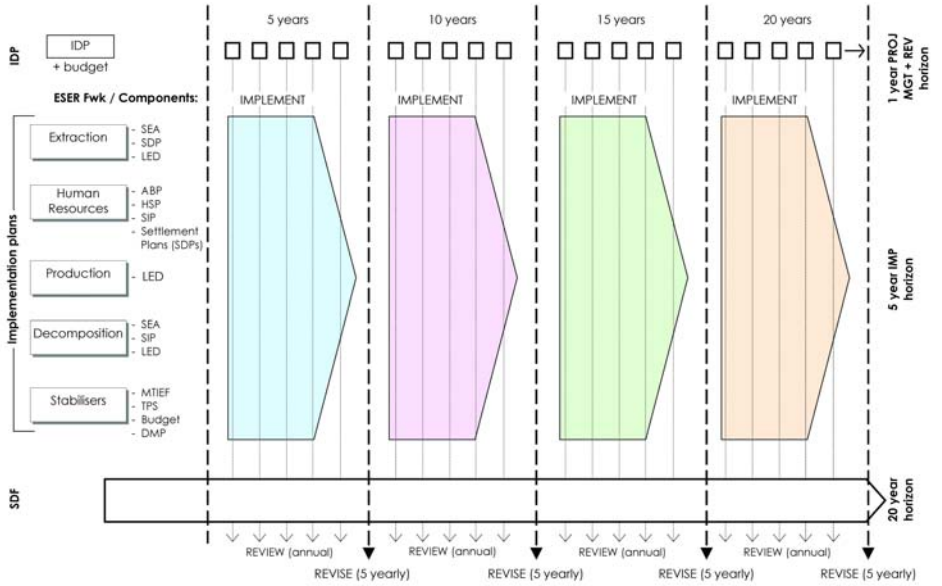


Figure 7.10.2 Proposed Relationship between IDPs, Implementation Plans, including HSPs and SDFs (source: CNdV, 2010)

Figure 7.10.2 further shows that the SDF is the common spatial base on which all the implementation plans should be executed.

Figure 7.10.2 also shows that the SDF should be revised and updated at least every each 5 years in parallel with the IDP and Implementation Plans. Ideally, the Sector Implementation Plans and the IDP should start and end on the same 5 year cycle.

Although the SDF is reviewed every year in the IDP and is revised every 5 years it needs to take a longer term view. The SDF should take a 20 to 30 year perspective on the growth direction of a municipality and settlements. It will be the only plan in the municipality taking such a long term view.

The alignment with the various legislative requirements is shown in Annexure 1.

7.11 MARKETING

Hold a SDF Development Conference with 3 themes:

- Agricultural development and participation;
- Urban settlement restructuring; and
- Financing, tourism and partnerships: Municipal / provincial.

7.11.1 Permanent Residence and Retirement Destinations

The Municipality should market the two centres, Laingsburg and Matjiesfontein as permanent residence retirement destinations to potential residents looking for quiet, well managed country towns with affordable property, good health facilities, recreational facilities and sports clubs and good road and telecoms infrastructure.

7.11.2 Tourism and Concessions

The Municipality should assist together with the provincial tourism and economic development departments in marketing the Municipality's tourist attractions including:

- Agri-tourism;
- Hunting and photographic safaris;
- Event festivals such as the flood related activities/ festival as a destination;
- The flood museum;
- B&Bs in towns and on farms;
- The flood, nature, geological, historical and wilderness (Moordenaars Karoo and Klein Swartberg) routes.

7.11.3 Design Management and Presentation

Care should be taken regarding the urban quality of new buildings, conserving existing historic buildings and upgrading with tree planting and landscaping the current main streets.

Appropriate attention should be given to signage throughout the municipality including areas as enter and in the main centres of Laingsburg town and Matjiesfontein.
The various gateway areas into the aforementioned centres should be carefully managed that ensure attractive and effective signage welcomes the visitors into them.

The municipality has the advantage of the N1 and the Cape Town-Gauteng railway line and should capitalise on this traffic that expose many travelers and potential tourists to the municipality.