

# Spatial Development Framework

2021

**Bitou Local Municipality**  
Approved by Council  
Resolution C/6/16/03/22 on  
31 March 2022



## EXECUTIVE SUMMARY

### a) Background and SDF Objectives

During January 2018 the Bitou Local Municipality (LM) commissioned the Review of the Bitou Municipal Spatial Development Framework 2017 in order to bring it in line with the content and process requirements of the Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA).

The proposed new Spatial Development Framework (SDF) for Bitou LM seeks to address spatial, environmental and socio-economic issues confronting the municipality. It also assists the municipality to efficiently manage current spatial development processes and pressures, and to strategically prepare for projected future developments in the municipal area.

More specifically, the SDF aims towards achieving the following objectives:

- Providing a spatial representation of the land development policies, strategies and objectives of the municipality in the context of local, district, provincial and national directives;
- Coordinating and integrating the spatial expression of the sectoral plans of the local and/ or provincial sector departments;
- Addressing inefficient, impoverished and scattered land use patterns where the poor is generally located far away from places of socio-economic opportunities;
- Indicating the desired and intended pattern of land use development in the urban and rural parts of the municipality, including the delineation of areas in which development in general or development of a particular type would not be appropriate;
- Managing the conflicting demand between agriculture, forestry, urban expansion and biodiversity conservation areas;
- Providing mechanisms for the establishment of a functional relationship between urban and rural areas – both spatially and economically;
- Identifying priority investment areas in urban and rural parts of the municipality;
- Focusing on defining the economic footprint of the municipality and formulating strategies on how this can be enhanced in a sustainable manner;
- Coordination and alignment of the municipal SDF with the district and provincial SDF, neighbouring municipal SDFs, and any other regional plans applicable;
- Channel public and private investment into priority areas and align the capital investment programmes of the municipality and different government departments into these areas in pursuit of the five SPLUMA principles;
- Link all of the above to the Municipal Budget via the Bitou Integrated Development Plan (IDP).

## b) Salient Features and Development Projections

- The Bitou LM population stands at approximately 59 157 people comprising an estimated 20 040 households.
- The Bitou LM population growth rate (3.8%) and household growth rate (5.8%) are significantly higher than that of any of the surrounding municipalities which could pose serious future challenges in terms of service delivery and job creation.
- Although the matric pass rate in the Bitou LM has been improving consistently over the past few years, very few of these learners continue with tertiary education/skills development. (Only 6.8% of the population have tertiary qualifications).
- The Bitou LM unemployment rate is very high (27.9%) compared to the Garden Route District average of 18.7%.
- Approximately 64.1% of households earn less than R3 500 per month. This poverty is mainly concentrated in Kranshoek, New Horizons, Bossiesgif, Kwanokuthula, Green Valley and Kurland.
- The Bitou LM has a relatively small economy, contributing only 7.4% of the Garden Route District's economy, compared to it representing 8.6% of employment opportunities and 9.7% of the District Municipality's population.
- The bulk of the economic activity and employment opportunities are located in Plettenberg Bay town, while the potential in Harkerville, Wittedrift and Kurland/The Crag/Covie is limited.
- The Bitou LM forms part of Oudtshoorn-Garden Route area and the municipal area is specifically earmarked for the promotion of Tourism, Agriculture and Public Service. It is not designated as an industrial node

of national or regional significance. Instead it is required to focus on the promotion of tourism, and specifically eco-tourism linked to the richest floral region in the world, the Cape Floristic Region.

- The 38 000 ha of agricultural land pose opportunities to create jobs and sustainable livelihoods focusing on the following commodities: essential oils, winter grains, lucerne, dairy farming, floriculture (Fynbos and Honeybush), fruit (macadamia nuts and berries), olives and wine grapes.
- The housing demand stands at approximately 8 238 units which need to be addressed at appropriate densities on well-located land and with due consideration to the establishment of economic activities in these areas.
- The provision of community facilities and sufficient engineering services also need to be considered as part of the housing programme, in line with the national objective to establish sustainable human settlements.
- The projected additional population up to 2025 is about 17 968 people, representing 7 755 additional households.
- By 2040 the Bitou LM would need to accommodate an estimated additional 107 000 people, representing approximately 42 808 households.
- When adding the current housing backlog of 8 238 units (households) to the 7 755 additional households, then approximately 548 ha of land would be required for urbanisation purposes up to 2025 earmarked (at an average gross density of about 29 units/ha). This excludes the land demand for holiday accommodation which represents non-permanent residents.

- By 2040 the amount of land required will stand at about 1 066 ha comprising 692 ha for housing and 374 ha for other uses (calculated at average density = 27 units /ha).
- The 1 066 ha represents about 49.5% of the existing urban footprint of the Bitou LM, estimated at about 2 157 ha.

### c) Spatial Proposals

**Diagram 1** graphically illustrates the structure and sequence of the main components representing the Spatial Proposals of the Bitou LM SDF.

The overarching long term Spatial Development Vision for the Bitou LM is:

***"To Become The Garden Route's Sustainable Tourism Hub for the Benefit of All"***. Bitou LM should thus, in terms of this vision, do the following:

- Facilitate the increase of tourism attractions that attract tourists and wealthy residents. These include promoting accessibility through the upgrading of the airport, installation of excellent IT services, providing more sport and recreational facilities, providing MTB and hiking trails, allowing more accommodation and restaurant venues;
- Ensure that this strengthening of attractions is not done at the expense of the natural or social environment;
- Ensure that every effort is made to broaden access to economic opportunities spinning off this wealthy core market, e.g. tour guides,

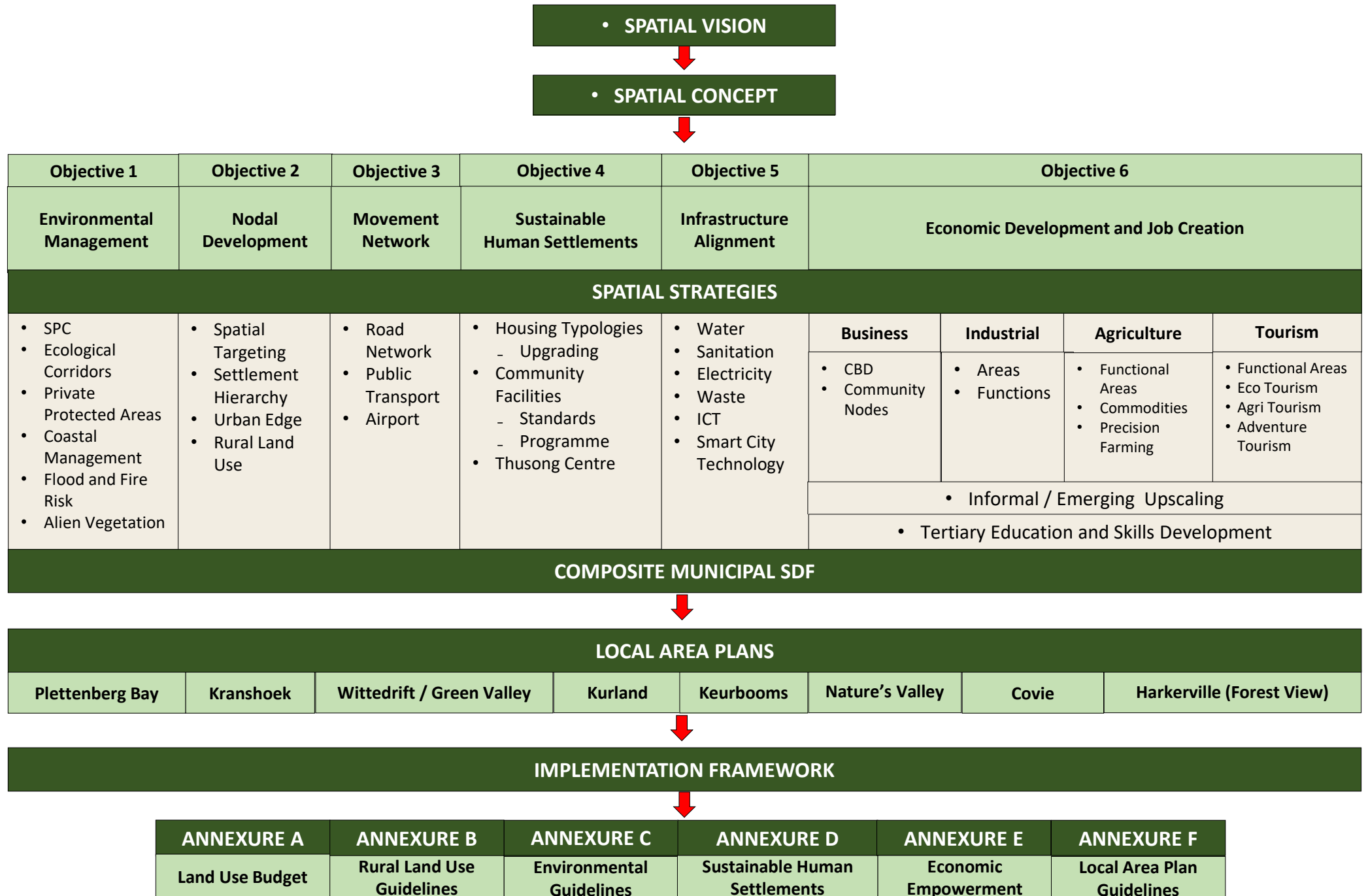
guest houses, street markets and public transport interchanges integrated into shopping centres, township retail which is designed as tourism attractions easily accessible to external passing traffic;

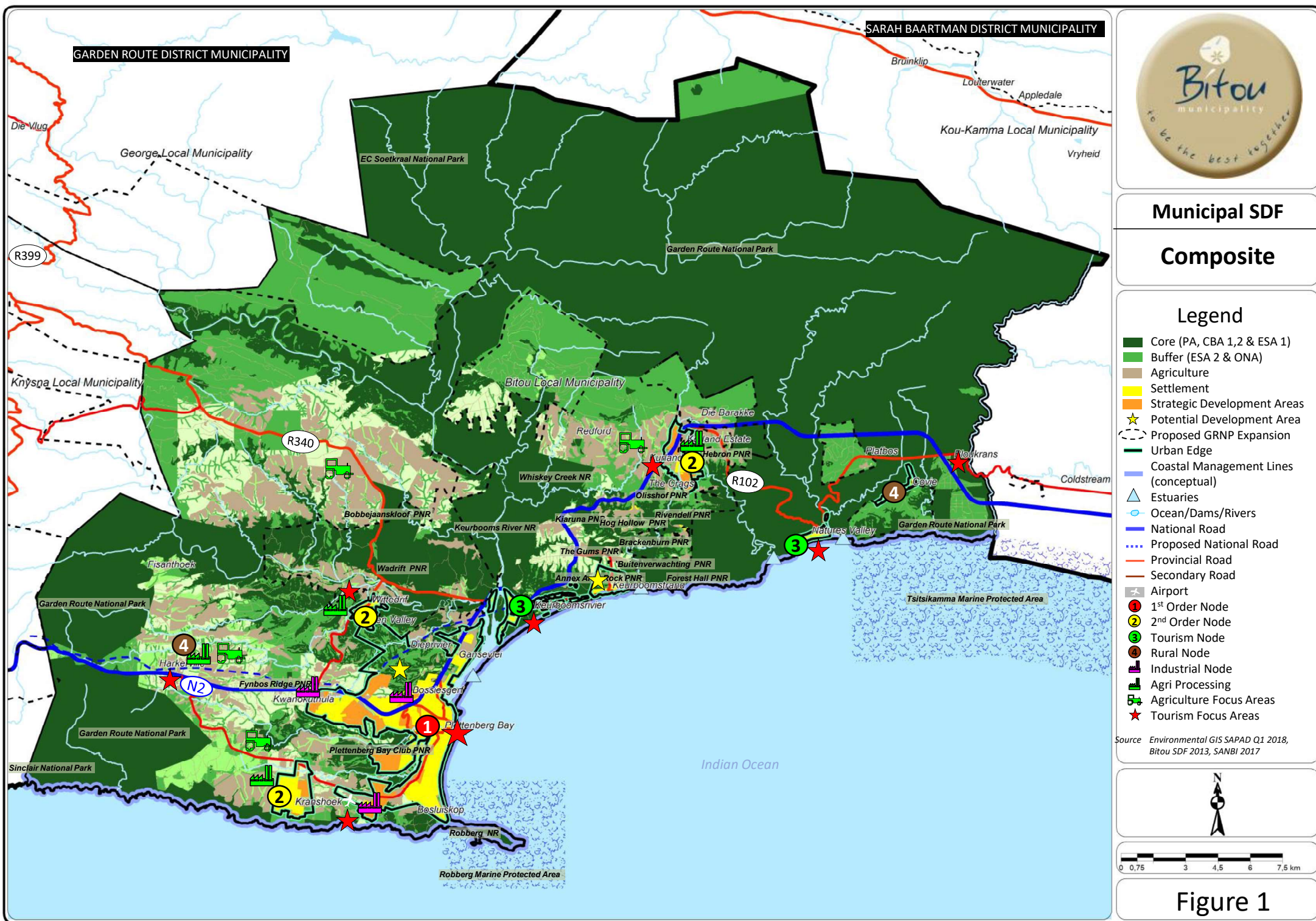
- Direct the majority of public resources to ensure that the settlements work as well as possible for the poor and middle income groups, and that the social and economic needs of permanent residents are sufficiently met through effective public service delivery and integration.
- This includes planning and implementing spatial restructuring and integration programmes such as Coming Together and extending this approach to other settlements such as Kranshoek, Kurland and Wittedrift;
- Agriculture, although a minor economic sector in the Bitou economy remains important as a creator of low skilled jobs and the limited amount of arable land means that protection and better use of this resource should occupy a high priority.

The Bitou Spatial Development Framework to achieve the above is graphically illustrated on **Figure 1** and is based on the following six Objectives and Priority Actions:

#### **Objective 1: Facilitate the protection and sustainable management of the natural environmental resources.**

- Action 1.1: Contain development and manage rural areas through appropriate application of Spatial Planning Categories (SPCs)
- Action 1.2: Establish ecological corridors to protect continuous biodiversity patterns and to adapt to environmental changes.





- Action 1.3: Provide incentives to protect and conserve all the important terrestrial, aquatic and marine habitats
- Action 1.4: Manage development along the coastline in a sustainable and precautionary manner and manage public access to the coastline and estuaries.
- Action 1.5: Manage and mitigate flood and fire risks.
- Action 1.6: Implement alien vegetation management mechanisms.

**Objective 2: Direct and align growth to capacity, resources and opportunity in relation to a regional settlement hierarchy.**

- Action 2.1: Prioritise development and investment in accordance with the Bitou LM settlement hierarchy
- Action 2.2: Contain settlement sprawl by means of an urban edge as growth management instrument
- Action 2.3: Manage development in rural and agricultural landscapes

**Objective 3: Optimise regional connectivity and mobility as well as local access and accessibility via a comprehensive movement network.**

- Action 3.1: Capitalise on the economic opportunities posed by the N2 coastal corridor.
- Action 3.2: Upgrade and maintain the secondary road network to enhance access to all areas in the Bitou LM
- Action 3.3: Facilitate the establishment of a comprehensive public transport network which will serve as backbone to spatial restructuring and integration within the municipality.

- Action 3.4: Upgrade the Plettenberg Bay Airport as a means to stimulate local economic development

**Objective 4: Facilitate the establishment of sustainable human settlements in all identified nodes.**

- Action 4.1: Actively promote development aligned to Smart Growth Principles in all settlements.
- Action 4.2: Identify strategically located land as priority housing development areas.
- Action 4.3 Promote the development of a diverse range of housing typologies offering multiple choices in terms of affordability, density and tenure options.
- Action 4.4: Rationalise and cluster community facilities in highly accessible Multi-Purpose Community Centres (Thusong Centres)
- Action 4.5: Locate regional community facilities at higher order nodes and ensure that all nodes are provided with services and facilities appropriate to nodal function and size.

**Objective 5: Manage regional infrastructure implementation and management**

- Action 5.1: Align infrastructure implementation and upgrading programmes with land use development programmes
- Action 5.2: Promote the development of “green technology/energy” and incrementally implement the Smart City Concept

**Objective 6: Identify and optimally utilise economic development opportunities in a sustainable manner.**

- Action 6.1: Implement programmes aimed at promoting economic upscaling of emerging entrepreneurs as part of the “Township Economy”.
- Action 6.2: Align tertiary education and skills development programmes to priority economic sectors
- Action 6.3: Promote business uses within strategically located mixed use nodes.
- Action 6.4: Facilitate limited light industrial and commercial development at designated strategic locations
- Action 6.5: Promote agriculture focusing on priority commodities in four functional areas
- Action 6.6: Utilise precision farming to minimise the impact of agriculture on natural resources
- Action 6.7: Support emerging farmers to become part of the mainstream economy
- Action 6.8: Promote a comprehensive range of tourism activities based on the key characteristics of the identified functional tourism areas

It is important to note that the BLM SDF forms part of the Integrated Development Plan of the Municipality (in line with section 26 (e) of the Municipal Systems Act) and that it does not represent a parallel process thereto. The SDF related projects/initiatives which are deemed critical towards the future development of the BLM were identified and included in the Capital Investment Framework of the BLM SDF.

The next step would be for these projects to be incorporated into the Bitou Integrated Development Plan (IDP) as part of the annual IDP Review Process and subsequently also form part of the list of projects to be considered during the annual BLM budgeting process.

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## 1. INTRODUCTION

### 1.1 Background

During January 2018 the Bitou Local Municipality (LM) commissioned the Review of the Bitou Municipal Spatial Development Framework 2017 in order to bring it in line with the content and process requirements of the Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA).

### 1.2 Study Objectives

The proposed new Spatial Development Framework (SDF) for Bitou LM will seek to address spatial, environmental and socio-economic issues confronting the municipality. It will also assist the municipality to efficiently manage current spatial development processes and pressures, and strategically prepare for projected future developments in the municipal area.

More specifically, the SDF will aim towards achieving the following objectives:

- Providing a spatial representation of the land development policies, strategies and objectives of the municipality in the context of local, district, provincial and national directives;
- Coordinating and integrating the spatial expression of the sectoral plans of the local and/ or provincial sector departments;
- Addressing inefficient, impoverished and scattered land use patterns where the poor is generally located far away from places of socio-economic opportunities;
- Indicate the desired and intended pattern of land use development in the urban and rural parts of the municipality, including the delineation of areas in which development in general or development of a particular type would not be appropriate;
- Managing the conflicting demand between agriculture, forestry, urban expansion and biodiversity conservation areas;
- Providing mechanisms for the establishment of a functional relationship between urban and rural areas – both spatially and economically;
- Identifying priority investment areas in urban and rural parts of the municipality;
- Focusing on defining the economic footprint of the municipality and formulating strategies on how this can be enhanced in a sustainable manner;
- Coordination and alignment of the municipal SDF with the district and provincial SDF, neighbouring municipal SDFs, and any other regional plans applicable;
- Channel public and private investment into priority areas and align the capital investment programmes of the municipality and different government departments into these areas in pursuit of the five SPLUMA principles;
- Link all of the above to the Municipal Budget via the Bitou Integrated Development Plan (IDP).

### 1.3 Project Methodology

The project approach and methodology followed in preparing the Bitou SDF is graphically illustrated on **Diagram 1** and briefly summarised as follow:

#### a) PHASE 1: POLICY CONTEXT AND VISION DIRECTIVES

■ **Activity 1: Start Up/Inception:** As a first step an Inception Meeting with the Project Committee was held on 26 January 2018 to confirm the scope of work and project programme required in the compilation of the new Bitou SDF. The institutional structure towards management of the project and the consultation process to be followed were also finalised during this Inception Phase.

■ **Activity 2: Review and Synthesis of Legislative and Policy Context.** This firstly entailed a review of *national* spatial policy directives which the SDF needs to align with (NDP, NSDP, MTREF, etc.), as well as a summary of the implications thereof for the Bitou SDF. Secondly, it confirmed key provisions and founding spatial principles of both *SPLUMA* and provincial spatial planning legislation, and gave an indication how these would be applicable to the Bitou SDF process.

■ **Activity 3: Formulation of Draft Spatial Vision:** Activity 3 involved the **formulation of a Draft Spatial Vision** for Bitou LM based on the outcome of Activity 2.

Phase 1 of the project was completed by the end of March 2018.

#### b) PHASE 2: SPATIAL CHALLENGES AND OPPORTUNITIES

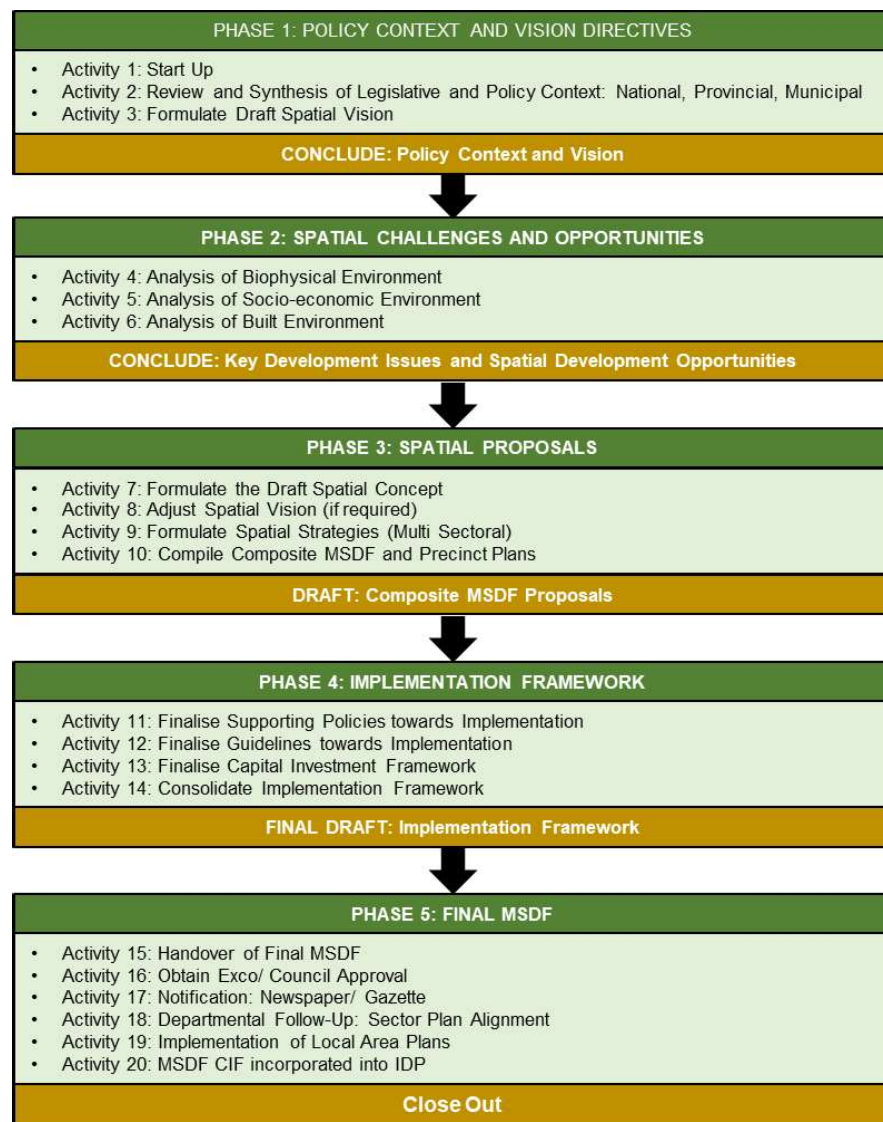
Phase 2 comprised the identification of past, current and likely future **Spatial Challenges and Opportunities** in the Bitou LM area relating to the Biophysical, Socio Economic and Built Environment.

Phase 2 concluded with the identification and a synthesis of the **Key Development Issues** and **Spatial Development Opportunities** for the Biophysical Environment, Socio-Economic Environment and Built Environment of the Bitou LM. This was completed by the end of June 2018.

Stakeholder Focus Groups of the Municipal Stakeholder Forum were presented with the findings during a series of area specific and stakeholder workshops held in July 2018 in order to obtain additional information and comments.

#### c) PHASE 3: SPATIAL PROPOSALS

Phase 3, **Spatial Proposals** entailed the compilation of the Draft Spatial Concept for the future development of the municipal area, highlighting the inherent spatial rationale/ logic which all future development should be based on.

**Diagram 1: Project Methodology and Critical Milestones**

The Spatial Strategies articulate how the spatial vision and concept are to be achieved, with specific focus on measures to (a) **protect** threatened or scarce spatial assets, (b) bring about spatial **change** and (c) initiate **new** development. It also incorporates aspects such as environmental management, economic infrastructure and job creation, social infrastructure, transportation, rural development, human settlement development etc.

More detailed proposals were also formulated for the identified functional areas within the municipality e.g. Kranshoek, Kwanokuthula, New Horizons/Qolweni, Wittedrift-Green Valley, Kurland, Covie etc. Where available, existing Local Area Plans (e.g. Keurbooms and Nature's Valley) were incorporated into the SDF.

Phase 3 and the Supporting Policies and Guidelines component of Phase 4 were completed by the end of October 2018 where after the draft SDF was adopted by the Bitou Municipal Council on 7 December 2018. The draft SDF was then published for a 60-day public comment period which commenced on 14 December 2018 and extended up to 12 February 2019.

#### d) PHASE 4: IMPLEMENTATION FRAMEWORK

Phase 4 dealt with the SDF **Implementation Framework** which includes the **Municipal Policies** and **Guidelines** towards implementation of the SDF as well as a **Capital Investment** for implementation of the SDF (Activity 13).

The Capital Investment Framework informs and supplements the MTEF contained in the Bitou IDP.

Phase 4 concluded with a **Consolidated Implementation Framework** for the Bitou SDF; also highlighting the institutional arrangements needed for the adoption and future implementation of the SDF.

#### e) PHASE 5: FINAL SDF

Phase 5, **Final SDF** will conclude with Council Approval and Notification on the approved SDF in local newspapers scheduled for the latter half of 2019.

#### 1.4 Consultation Process

The stakeholder consultation programme during the Bitou SDF process is depicted in the information box (overleaf) and summarised as follow:

Following from the Inception Meeting on 26 January 2018, a Notification on the SDF Review was placed in the CX Press and What's New In Plett newspapers on 14 and 15 March 2018 respectively. The advertisement informed the public about the purpose of the SDF Review and the SDF process that will be followed. It also invited stakeholders to register as interested and affected parties; and requested such to submit any information/concerns they wanted to be addressed as part of the SDF process.

Phase 1: Policy Context and Vision was completed and presented to the Project Committee on 23 March 2018, and the Phase 2: Spatial Analysis on 2 July 2018. Thereafter a series of workshops were held with various stakeholder groups during the period 2-11 July 2018 which included a presentation to Councillors on 6 July 2018 to provide feedback on findings and inputs received on Phase 1 and 2.

On 6 November 2018 Phase 3: Spatial Proposals was presented to the Project Committee and the same presentation was made to the Bitou Section 80 Committee on 19 November 2018 where the Draft SDF was approved for Public Consultation. The Project Team was then requested to make the same presentation to a larger group of Councillors on 3 December 2018 as the meeting felt that the SDF provided a clear spatial context towards the Bitou IDP review process which was also underway at the same time. Full Council approved the Draft SDF for public consultation on 7 December 2018.

The Notification on the draft SDF was published in the same two newspapers and the Provincial Gazette on 12, 13 and 14 December 2018 and invited public comments on the draft SDF up to 12 February 2019 (60 Days).

On 6 March 2019 a summary of comments received on the draft SDF was presented to Councillors where after the amendments were made. The Final SDF was presented to the Project Committee on Tuesday, 18 June 2019.

| Date                                | Meeting   | Purpose   |
|-------------------------------------|---|---|
| 26 January 2018                     | Project Committee Meeting 1   | Project Inception Presentation                                      |
| 14 March 2018                       | Local Newspaper Notice: Call for Registration and Stakeholder Input | CX Press  |
| 15 March 2018                       |   | What's New In Plett   |
| 23 March 2018                       | Project Committee Meeting 2   | Phase 1: Policy Context and Vision Presentation                     |
| 2 July 2018                         | Project Committee Meeting 3   | Phase 2: Spatial Analysis Presentation                              |
| 2 July 2018                         | Local Private Town Planners/ Developers                             | Development Initiatives / Trends and Applications                   |
| 3 July 2018                         | Keurbooms Estuary Forum   | Keurbooms Estuary Inputs  |
| 3 July 2018                         | Plett Environmental Forum   | Environmental Inputs  |
| 3 July 2018                         | Ward 2 Representatives  | Area Specific Inputs  |
| 4 July 2018                         | New Horizons/Kwanokhuthula  | Area Specific Inputs  |
| 5 July 2018                         | Kranshoek   | Area Specific Inputs  |
| 5 July 2018                         | Harkerville   | Area Specific Inputs  |
| 5 July 2018                         | Keurbooms Ratepayers  | Area Specific Inputs  |
| 6 July 2018                         | Bitou Councillors   | Phase 1 and 2: Findings and Consultation Inputs Received            |
| 11 July 2018                        | Kurland/Covie   | Area Specific Inputs  |
| 6 November 2018                     | Project Committee Meeting 4   | Phase 3: Spatial Proposals Presentation                             |
| 19 November 2018                    | Bitou Section 80 Committee  | Phase 1, 2 and 3: Draft Report Presentation                         |
| 3 December 2018                     | Bitou Councillors   | Phase 1, 2 and 3: Draft Report Presentation / Relevance to IDP      |
| 7 December 2018                     | Bitou Council   | Phase 1, 2 and 3: Draft Report: Approval for Public Consultation    |
| 12 December 2018                    | Draft Report: Call for Stakeholder Comments / Inputs                | CX Press  |
| 13 December 2018                    |   | What's New In Plett   |
| 14 December 2018                    |   | Provincial Gazette  |
| 14 December 2018 – 12 February 2019 | Public Comment  | Draft Report Comment Period   |
| 6 March 2019                        | Bitou Councillors   | Summary of Comments/ Inputs Received and Phase 4 Summary / Projects |
| 18 June 2019                        | Project Committee Meeting 5   | Final Report  |
| To be determined                    | Bitou Council   | Final Approval  |

## 2. LEGISLATIVE AND POLICY CONTEXT

The Constitution of the Republic of South Africa 1996 provides municipalities with their own, original powers and functions. The legislation flowing forth from the Constitution therefore enables municipalities to fulfil their roles as a tier of government in its own right. This section sets out how the SDF should guide spatial planning and land use management in the context of the National and Provincial Legislation and Policy Framework.

### A: NATIONAL LEGISLATION

#### 2.1 Spatial Planning and Land Use Management Act 16 of 2013

The Spatial Planning and Land Use Management Act, Act 16 of 2013 (SPLUMA) provides the legislative foundation for all spatial planning and land use management activities in South Africa. It seeks to promote consistency and uniformity in procedures and decision-making. Its policy objectives aim to address historical spatial imbalances and embed the principles of sustainable development into land use and planning regulatory tools, and legislative instruments, such as SDFs and their supporting tools, such as zoning schemes.

##### a) Contents of a Municipal Spatial Development Framework:

Section 21 of SPLUMA stipulates that a municipal SDF must:

- give effect to the development principles and applicable norms and standards set out in Chapter 2;
- include a written and spatial representation of a five-year spatial development plan for the spatial form of the municipality;
- include a longer term spatial development vision statement for the municipal area which indicates a desired spatial growth and development pattern for the next 10 to 20 years;
- identify current and future significant structuring and restructuring elements of the spatial form of the municipality, including development corridors, activity spines and economic nodes where public and private investment will be prioritised and facilitated;
- include population growth estimates for the next five years;
- include estimates of the demand for housing units across different socio-economic categories and the planned location and density of future housing developments;
- include estimates of economic activity and employment trends and locations in the municipal area for the next five years;
- identify, quantify and provide location requirements of engineering infrastructure and services provision for existing and future development needs for the next five years;
- identify the designated areas where a national or provincial inclusionary housing policy may be applicable;
- include a strategic assessment of the environmental pressures and opportunities within the municipal area, including the spatial location of

environmental sensitivities, high potential agricultural land and coastal access strips, where applicable;

- identify the designation of areas in the municipality where incremental upgrading approaches to development and regulation will be applicable;
- identify the designation of areas in which—
  - i. more detailed local plans must be developed; and
  - ii. shortened land use development procedures may be applicable and land use schemes may be so amended;
- provide the spatial expression of the coordination, alignment and integration of sectoral policies of all municipal departments;
- determine a capital expenditure framework for the municipality's development programmes, depicted spatially;
- determine the purpose, desired impact and structure of the land use management scheme to apply in that municipal area; and
- include an implementation plan comprising of—
  - i. sectoral requirements, including budgets and resources for implementation;
  - ii. necessary amendments to a land use scheme;
  - iii. specification of institutional arrangements necessary for implementation;
  - iv. specification of implementation targets, including dates and monitoring indicators; and
  - v. specification, where necessary, of any arrangements for partnerships in the implementation process.

## 2.2 National Development Plan 2030

The National Development Plan 2030 - *Our future – make it work* - is a plan for the country to eliminate poverty and reduce inequality by 2030 through uniting South Africans, unleashing the energies of its citizens, growing an inclusive economy, building capabilities, enhancing the capacity of the state and leaders working together to solve complex problems.

The key objectives and actions put forward by the NDP are summarised in **Table 1** (overleaf), with the specific objectives applicable to the Bitou LM elaborated upon in the second column.

The NDP sets out the following **principles** for development, which are enforced through SPLUMA:

- **Spatial justice:** The historic policy of confining particular groups to limited space, as in ghettoisation and segregation, and the unfair allocation of public resources between areas, must be reversed to ensure that the needs of the poor are addressed first rather than last.
- **Spatial sustainability:** Sustainable patterns of consumption and production should be supported, and ways of living promoted that do not damage the natural environment.

**Table 1: National Development Plan Objectives and Actions**

| <b>NATIONAL DEVELOPMENT PLAN</b><br><b>Our Future Make it Work</b> |   |
|--|---|
| <b>OBJECTIVES AND ACTIONS</b>                                      | <b>OBJECTIVES APPLICABLE TO THE BITOU LOCAL MUNICIPALITY (IDP and SDF)</b>  |
| Economy and Employment   | <ul style="list-style-type: none"> <li>• Reduce the cost of living for poor households and costs of doing business through microeconomic reforms.</li> <li>• Broaden the expanded public works programme to 2 million fulltime equivalent jobs by 2020.</li> </ul>  |
| Economy Infrastructure – basic infrastructure                      | <ul style="list-style-type: none"> <li>• The proportion of people with access to the electricity grid should rise to at least 90% by 2030, with non-grid options available for the rest.</li> <li>• Ensure that all people have access to clean, potable water and that there is enough water for agriculture and industry, recognising trade-offs in the use of water.</li> <li>• By 2030 public transport will be user-friendly, less environmentally damaging, cheaper and integrated or seamless.</li> <li>• Consolidate and selectively expand transport and logistics infrastructure, with the N2 through the Eastern Cape being a key focus area.</li> </ul> |
| Environmental Sustainability and Resilience                        | <ul style="list-style-type: none"> <li>• Absolute reductions in the total volume of waste disposed to landfill each year.</li> <li>• Carbon price, building standards, vehicle emission standards and municipal regulations to achieve scale in stimulating renewable energy, waste recycling and in retrofitting buildings.</li> <li>• All new buildings to meet the energy efficiency criteria set out in South African National Standard 204.</li> </ul>   |
| Integrated and Inclusive Rural Economy                             | <ul style="list-style-type: none"> <li>• Improved infrastructure and service delivery, a review of land tenure, service to small and micro farmers, a review of mining industry commitments to social investment, and tourism investments.</li> <li>• Create tenure security for communal farmers, especially women, investigate different forms of financing and vesting of private property rights to land reform beneficiaries that does not hamper beneficiaries with a high debt burden.</li> </ul>  |
| Positioning South Africa in the Region and the World – economy     | <ul style="list-style-type: none"> <li>• Implement a focused regional integration strategy with emphasis on road, rail and port infrastructure in the region.</li> </ul>  |
| Transforming Human Settlements                                     | <ul style="list-style-type: none"> <li>• Reform the current planning system for improved coordination.</li> <li>• Develop a strategy to densify cities, promote better located housing and settlements.</li> <li>• Ensure safe, reliable and affordable public transport.</li> <li>• Provide SDF norms, including improving the balance between location of jobs and people.</li> <li>• Provide incentives for citizen participation for local planning and development of spatial compacts.</li> </ul>   |

| NATIONAL DEVELOPMENT PLAN<br>Our Future Make it Work       |  |
|--|--|
| OBJECTIVES AND ACTIONS                                     | OBJECTIVES APPLICABLE TO THE BITOU LOCAL MUNICIPALITY (IDP and SDF)  |
| Improving Education, Training and Innovation               | <ul style="list-style-type: none"> <li>• Improve access to Early Childhood Development Programmes.</li> </ul>  |
| Promoting Health Care for All                              | <ul style="list-style-type: none"> <li>• Strengthen the health system.</li> </ul>  |
| Social Protection (social welfare)                         | <ul style="list-style-type: none"> <li>• Expand existing public employment initiatives to create opportunities for the unemployed.</li> </ul>  |
| Building Safer Communities (policing)                      | <ul style="list-style-type: none"> <li>• Increase community participation in crime prevention and safety initiatives.</li> <li>• Implement the National Rural Safety Strategy Plan in high risk areas involving all role-players and stakeholders.</li> </ul>  |
| Building a Capable and Developmental State (institutional) | <ul style="list-style-type: none"> <li>• Improve relations between national, provincial and local government.</li> </ul>   |
| Fighting Corruption (institutional)                        | <ul style="list-style-type: none"> <li>• Develop clear rules restricting business interests of public servants.</li> <li>• Develop restraint-of-trade agreements for senior civil servants and politicians at all levels of government.</li> <li>• All corrupt officials should be made individually liable for all losses incurred as a result of their corrupt actions.</li> </ul>         |
| Nation Building and Social Cohesion – social compact       | <ul style="list-style-type: none"> <li>• Improve public services and spaces as well as building integrated housing and sport facilities in communities to ensure sharing of common spaces across race and class.</li> <li>• Promote citizen participation in forums such as Integrated Development Plans, Ward Committees, School Governing Boards and Community Policing Forums.</li> </ul> |

■ **Spatial resilience:** Vulnerability to environmental degradation, resource scarcity and climatic shocks must be reduced and ecological systems should be protected and replenished.

■ **Spatial quality:** The aesthetic and functional features of housing and the built environment need to be improved to create liveable, vibrant and valued places that allow for access and inclusion of people with disabilities.

■ **Spatial efficiency:** Productive activity and jobs should be supported, and burdens on business minimised. Efficient commuting patterns and circulation of goods and services should be encouraged, with

regulatory procedures that do not impose unnecessary costs on development.

## 2.3 Draft National Spatial Development Framework 2018

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

■ **Frame One: Urban Regions, Clusters and Development Corridors as the engines of national transformation and economic growth:**

To focus and sustain national economic growth, drive inclusive economic development and derive maximum transformative benefit from urbanisation and urban living;

■ **Frame Two: Productive Rural Regions and Regional Development Anchors as the foundation of national transformation:** To ensure national food security, rural transformation and rural enterprise development and quality of life in rural South Africa through a set of strong urban-rural development anchors in functional regional-rural economies;

■ **Frame Three: National Ecological Infrastructure System as enabler for a shared and sustainable resource foundation:** To protect and enable sustainable and just access to water and other national resources for quality livelihoods of current and future generations;

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

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

The five frames formed the foundation for the formulation of a National Spatial Development Framework. In terms of the NSDF (**Figure 1**) the Bitou LM falls within the Key National Development Corridor along the coastline of South Africa where the N2 freeway connects the cities of Cape Town, Mossel Bay, Port Elizabeth, East London, Durban and Richards Bay, which all have harbours and tourism potential. The Garden Route, which stretches from Mossel Bay to Storms River and traverses the Bitou LM, is an important component of this corridor, with inherent freight and tourism potential. It is earmarked for Eco-resource Production and Livelihood, emphasising the importance of the sustainable use of natural assets in eco-tourism and economic development.

## 2.4 Integrated Urban Development Framework and Implementation Plan 2016

The Integrated Urban Development Framework (IUDF) sets out the policy framework for transforming and restructuring South Africa's urban spaces. The IUDF is guided by the vision of creating 'liveable, safe, resource-efficient cities and towns that are socially integrated, economically inclusive and globally competitive, where residents actively participate in urban life'.

The IUDF's premise is that **jobs, housing and transport** should be used to promote urban restructuring as outlined in the NDP. Critical levers for spatially transforming towns and cities are integrated transport and affordable mobility, which also helps to strengthen rural-urban linkages. The IUDF advocates a **Transit Orientated Development (TOD)** approach to

## NATIONAL SPATIAL DEVELOPMENT FRAMEWORK

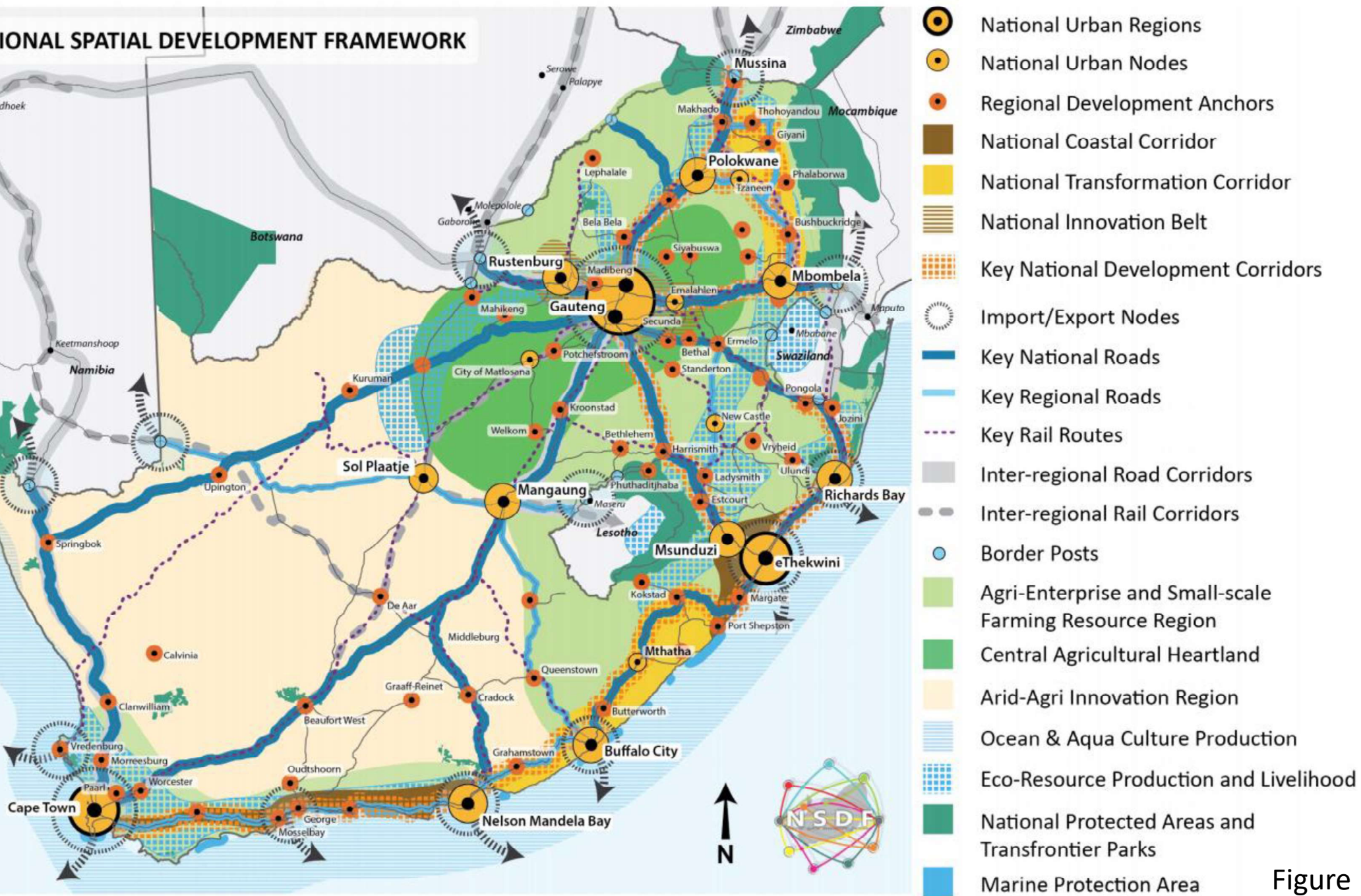


Figure 1

urban design. This promotes higher-density urban developments along mass transit corridors, and should inform investments in human settlements in order to improve access and inclusion. To achieve this will require better alignment of transport, land-use, human settlements and resource-efficient, integrated infrastructure.

### 2.5 National Freshwater Ecosystems Priority Areas 2011

This Act puts forward a map and strategic spatial priorities for the preservation of South Africa's aquatic ecosystems and the sustainable use of water resources. The Atlas explains the rationale for healthy ecosystems and the inextricable links between economic, social and ecological systems.

Three free-flowing rivers in the Bitou LM area (Keurbooms-, Bitou- and Groot River) were flagged based on their importance for ecosystem and biodiversity value, and six priority wetlands/estuaries were also listed.

### 2.6 National Biodiversity Strategy and Action Plan 2015-2025

The National Biodiversity Strategy and Action Plan (NBSAP) has endeavoured to integrate the country's obligations under the Convention of Biological Diversity and Global Development Agenda into South Africa's national development and sectoral planning frameworks. It provides a framework to integrate biodiversity needs into sectoral plans and strategies.

The NBSAP notes that South Africa ranks as the third most biologically diverse country in the world, containing three of the world's 34 biodiversity hotspots, including the Cape Floristic Region in the South Western Cape where the Bitou LM area is located.

### 2.7 National Biodiversity Assessment 2018

This assessment captures the challenges and opportunities of South Africa's natural environment in the context of social and economic change and the requirements of ecosystem services. This has been completed in terms of NEMBA (National Environmental Management: Biodiversity Act 10 of 2004) to monitor and report regularly on the state of biodiversity.

Specifically, it recommends that the following functional areas be taken into account in land use planning and environmental assessment:

- Critically Endangered and Endangered Ecosystems;
- Critical Biodiversity Areas and Ecological Support Areas;
- River and Wetland FEPA's (Freshwater Ecosystems Priority Areas);
- Priority Estuaries.

## 2.8 National Environmental Management: Protected Areas Act

The Protected Areas Act provides for the formal protection of a network of ecologically viable areas that are representative of South Africa's biodiversity and natural landscapes. It deals with stewardship programmes, such as conservancies, several of which exist in the Bitou LM area. The NPAES makes recommendations about protected area expansion and includes marine protected areas, listing the South Western Cape bioregions as priorities in the marine environment for assessment.

## 2.9 Regional Industrial Development Strategy 2006

In 2006 the Department of Trade and Industry formulated the Regional Industrial Development Strategy (RIDS) with the aim to promote regions based on their key comparative advantages and to design support measures appropriate for each region.

The Bitou LM forms part of the Oudtshoorn-Garden Route area. It is classified as a Major Trade/Tourism/Agriculture/Public Service Region with a scarcely populated hinterland. The dominant economic base in this region is services/tourism, followed by manufacturing, infrastructure and lastly agriculture. It is located in close proximity to the Nelson Mandela-Couga Region, which is an export corridor and port region likely to benefit from IDZ initiatives.

## 2.10 National Transport Master Plan 2005-2050

The main purpose of the National Transport Master Plan 2005-2050 is to motivate a prioritised programme for interventions to upgrade the transportation system in South Africa. Its goal is to develop a dynamic, long-term and sustainable land use / multi-modal transportation system for the development of networks, infrastructure facilities, interchange and terminal facilities, and service delivery strategies for South Africa.

With respect to the Bitou LM the N2 coastal corridor extending from the northern parts of KwaZulu-Natal, southwards along the coastline right up to Cape Town is of strategic significance as the section through the municipal area forms part of the Garden Route.

## B: PROVINCIAL LEGISLATION

## 2.11 Western Cape Land Use Planning Act 2014 and Regulations

The purpose of the Western Cape Land Use Planning Act, Act 3 of 2014 (LUPA) is to consolidate legislation in the Western Cape Province that relates to spatial planning and to co-ordinate public investment. It is strongly aligned with SPLUMA and requires municipal spatial development frameworks to be aligned with provincial development plans and strategies.

## 2.12 Western Cape Provincial Spatial Development Framework 2014

The Western Cape Provincial Spatial Development Framework was formulated by the Department of Environmental Affairs and Development Planning. The aims thereof are as follows:

- To give spatial expression to the Provincial Strategic Plan.
- To serve as a basis for coordinating, integrating and aligning “on the ground” delivery of national and provincial departmental programmes;
- To support municipalities to fulfil their Municipal Planning mandate in line with national and provincial agendas;
- To communicate government’s spatial development intentions to the private sector and civil society.

The Western Cape Provincial SDF gives priority to bolstering the spatial performance of the Southern Cape region.

**Figure 2** depicts the Western Cape Provincial SDF. The Provincial SDF indicates George as the regional center for the eastern part of the province, with Knysna and Plettenberg Bay being smaller centres along the Regional Connector Route (N2). It earmarks the area along the Garden Route as a tourism route with leisure activities of provincial significance.

## 2.13 ONECAPE 2040

ONECAPE 2040 is a deliberate attempt to stimulate a transition towards a more inclusive and resilient economic future for the Western Cape Province. It articulates a vision about how the people of the Western Cape can work

together to develop the economy and society. It seeks to set a common direction to guide planning and action and to promote a common commitment and accountability to sustained long-term progress. **Table 2** summarises the salient features of this initiative.

**Table 2: OneCape 2040**

| GOALS                            |  |
|----------------------------------|--|
| <b><i>Educated Cape:</i></b>     |  |
| Provincial                       | <ul style="list-style-type: none"> <li>• Manage schools based excellence</li> <li>• Facilitate local multi-sectoral knowledge &amp; innovation partnerships</li> </ul>             |
| Local and District               | <ul style="list-style-type: none"> <li>• Facilitate ECD provision and ensure every child has access to a library and sports facilities</li> </ul>                                  |
| <b><i>Enterprising Cape:</i></b> |  |
| Provincial                       | <ul style="list-style-type: none"> <li>• Fund provincial public and community works programmes at scale</li> <li>• Facilitate social enterprise creation and resourcing</li> </ul> |
| Local and District               | <ul style="list-style-type: none"> <li>• Implement and provide supplementary funding for public and community works programmes</li> <li>• Reduce land development costs</li> </ul> |
| <b><i>Green Cape:</i></b>        |  |
| Provincial                       | <ul style="list-style-type: none"> <li>• Use transport, energy, housing and bulk service budgets to lead green change</li> </ul>   |
| Local and District               | <ul style="list-style-type: none"> <li>• Use bulk services and energy budgets to lead green change and incentivise green building technologies</li> </ul>                          |

## Western Cape Provincial SDF

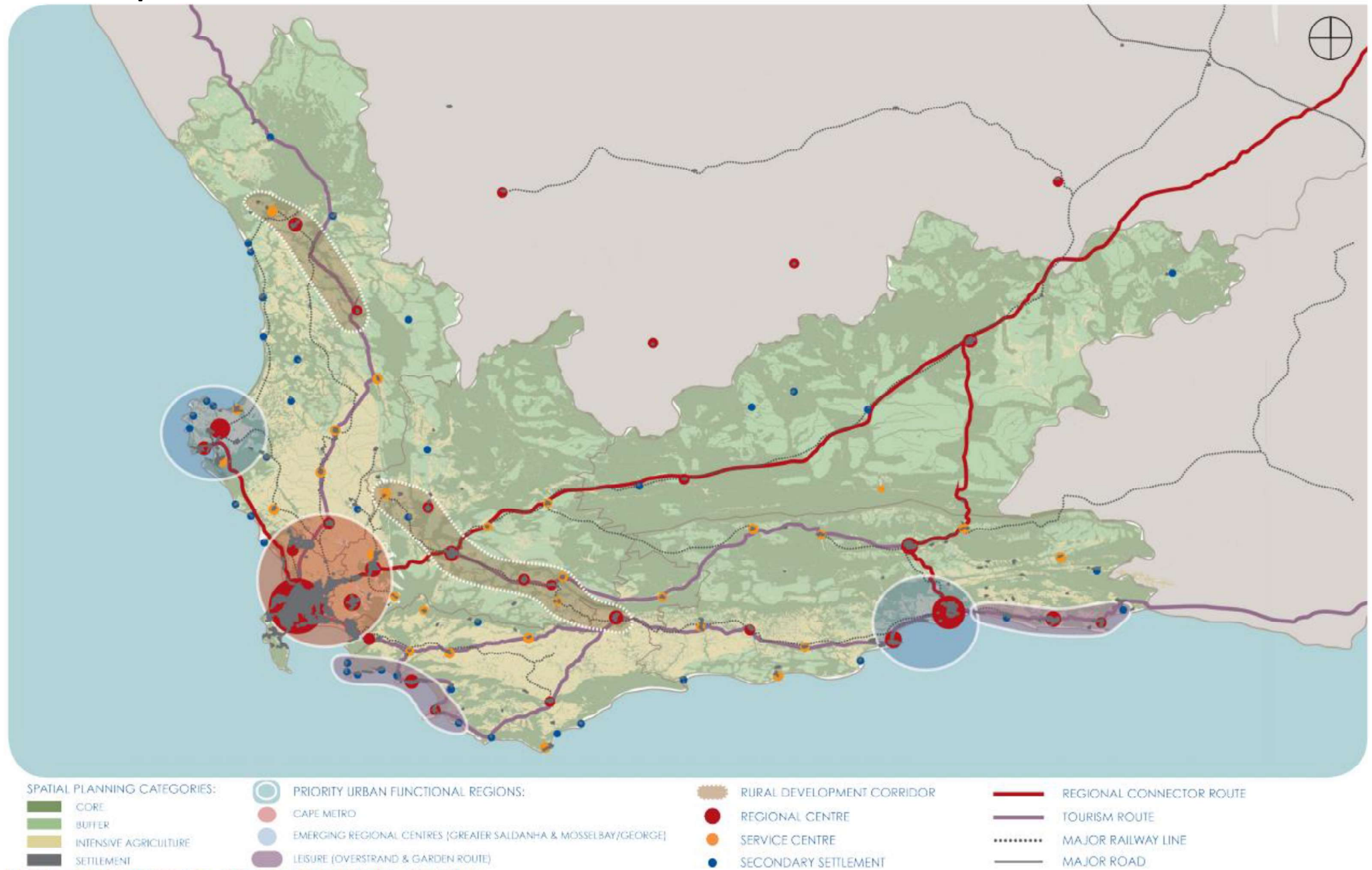


Figure 2

| <b>Connecting Cape:</b> |   |
|-------------------------|---|
| Provincial              | <ul style="list-style-type: none"> <li>Facilitate regional and global partnerships with emerging markets</li> </ul>   |
| Local and District      | <ul style="list-style-type: none"> <li>Facilitate inter-community collaboration</li> </ul>  |
| <b>Living Cape:</b>     |   |
| Provincial              | <ul style="list-style-type: none"> <li>Invest more in public transport services and community infrastructure</li> <li>Incentivise rather than fund housing</li> </ul> |
| Local and District      | <ul style="list-style-type: none"> <li>Invest in public transport and safety</li> </ul>   |
| <b>Leading Cape:</b>    |   |
| Provincial              | <ul style="list-style-type: none"> <li>Facilitate and reward service excellence</li> </ul>  |
| Local and District      | <ul style="list-style-type: none"> <li>Collaborate to deliver world class services</li> </ul>   |

**Diagram 2** is a succinct summary of the most important aspects of national and provincial principles that should underpin the Bitou SDF.

#### 2.14 Western Cape Biodiversity Spatial Plan Handbook 2017

The handbook acknowledges that ecosystem goods and services are the foundation for the economy for inclusive economic growth and the sustainable delivery of basic services. It proactively identifies priority biodiversity areas and ecological infrastructure to enable forward planning as per Goal 4 of the Western Cape Government's Provincial Strategic Plan (2014 – 2019), *"to enable a resilient, sustainable, quality and inclusive living environment."* The handbook is linked to the Aichi Targets for the UN's

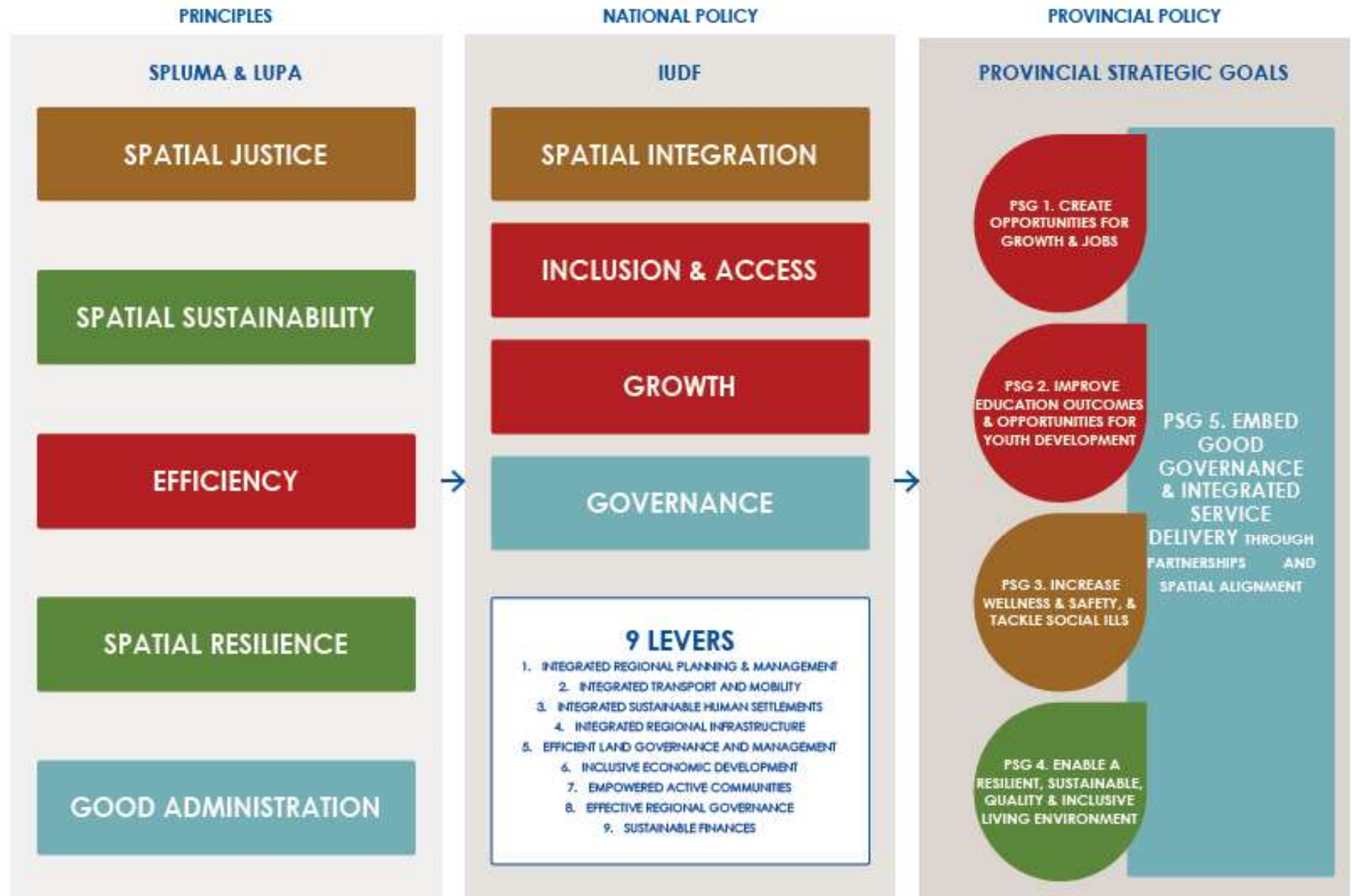
Convention on Biological Diversity and the National Biodiversity Strategy and Action Plan of 2015.

The handbook describes the various biomes of the Western Cape, the sensitivities and ecosystem threat status which includes the following that may be relevant in the Bitou LM area:

- Critically endangered Garden Route Granite Fynbos, Knysna Sand Fynbos,
- Endangered Garden Route Shale Fynbos,
- Vulnerable Southern Cape Dune Fynbos, Southern Cape Valley Thicket

The document describes the most easterly MPA managed by CapeNature as being Robberg MPA (see the CapeNature Management Plan for Robberg). Further east however, and into the Eastern Cape is the Tsitsikamma MPA which falls under the management of SANParks (see below).

The document makes reference to the studies done by Van Niekerk and Turpie (2012) that looked at estuarine systems, including the Keurbooms in Plettenberg Bay which have been listed as the 17<sup>th</sup> most important estuary in in South Africa terms of its conservation value (National Biodiversity Assessment commissioned by the South African Biodiversity Institute).



### 2.15 Western Cape Coastal Management Programme 2016

The Western Cape Coastal Management Programme (CMP) includes a comprehensive list of relevant programmes, projects and strategic planning documents and identifies the following nine priority areas are listed and described, dealing with:

- Social and economic development and planning
- Cooperative governance and local government support
- Facilitation of coastal access
- Climate change and building resilient communities
- Land and marine based sources of pollution and waste
- Natural and cultural resource management
- Estuarine management
- Capacity building, advocacy and education
- Monitoring, compliance and enforcement

The document defines the coastal zone, each zone's characteristics and sensitivities, the responsible authority and the authority responsible for adjustment.

Priority Areas were incorporated into management objectives and implementation strategies, with the following three relevant to the Bitou SDF:

- Priority Area 1: Coastal overlay zones should be incorporated into reviewed local SDFs and Municipal zoning schemes.

- Priority Area 2: Coastal Vulnerability and Risk Assessment analysis should be finalised and inform the SDF reviews and priority management interventions.
- Priority Area 3: Coastal access to land designated by Local Governments should be included in reviewed SDFs.

### 2.16 Western Cape State of Biodiversity Report 2017

The report, together with the Western Cape Biodiversity Spatial Plan identifies the most critical areas for biodiversity conservation to underpin the new Protected Areas (as per the Western Cape Protected Area Expansion Strategy), conservation actions on private land, environmental authorisations and biodiversity spatial planning and mainstreaming, which would include SDFs.

Estuaries are described as forming an integral part in the ecosystem, connecting terrestrial systems, freshwater processes and the ocean. In the Bitou LM area, the Piesang Estuary is noted as having industrial effluent (brine) or wastewater discharged into or near to it from the desalination plant. The Western Cape Estuaries Programme is being implemented in the Bitou LM and an Estuary Management Plan has been drawn up for the Keurbooms Bitou system; the Piesang River Estuary; the Sout (East) River Estuary; and the Matjies River Estuary. The following status is assigned to the estuaries in the Bitou LM area:

- Keurbooms: High Importance, high biodiversity priority, low change in flow, low pollution, medium habitat loss, low fishing effort

- Matjies: Low to average importance, low biodiversity priority, low change in flow and pollution and habitat loss, low fishing effort
- Salt: Low to average importance, high biodiversity priority, low change in flow and pollution and habitat loss, low fishing effort
- Groot: Important, priority system, low biodiversity priority, low change in flow and pollution and habitat loss, medium fishing effort
- Bloukrans: Low to average importance, low biodiversity priority, low change in flow and pollution and habitat loss, low fishing effort

The report notes that since 2012, there are significant increases in the number of Endangered and Vulnerable species of plants, largely due to habitat loss but also due to illegal collecting and taxonomic revisions. Competing land use pressures include agriculture and urban expansion, industrial development, mining, renewable energy installations and coastal development. Additional threats include habitat loss, climate change (drought, fires, increasing temperatures, changing weather patterns, etc.), invasive plants, etc.

Invasive plants (IAPs) are noted as a critical issue, particularly in light of the threat of fire, water shortages and also the threats to biodiversity. While management of these IAPs is attempted at great cost, biocontrol is still the most cost effective means of control and agents have been released in areas of Bitou LM for some species and are being monitored by CapeNature. Public awareness is also needed to prevent further spread and ensure ongoing management on private land.

## 2.17 Western Cape Protected Area Expansion Strategy 2015-2020

Once an area is declared a Protected Area, this provides the strongest and most secure level of statutory protection to be afforded to biodiversity. **In line with the National Protected Areas Expansion Strategy, 2016, the Western Cape Strategy** focuses on Biodiversity Stewardships to protect conservation-worthy lands, the transfer of commercial forest exit lands and other state-owned lands into conservation custodianship, the purchase of land in collaboration with NGO's or donors to be declared as Protected Areas and the declaration of priority marine habitats.

The Conservation Action Priorities Map included in the Expansion Strategy document includes some areas in Plettenberg Bay targeted for formal Protected Area expansion.

Additionally, CapeNature and BirdLife South Africa have a partnership in the management of Important Bird and Biodiversity Areas (IBA's). The Tsitsikamma IBA was recently declared in the Bitou LM Area. Eden to Addo, based in Plettenberg Bay, has a MoU signed with CapeNature to increase the extension capacity in the area to sign up more Biodiversity Stewardship Agreements. The Robberg Coastal Corridor was the first project entered into by CapeNature and Eden to Addo, and was recently declared.

### **2.18 Cape Nature Ordinance, No. 19 of 1974, Western Cape Nature and Environmental Conservation Ordinance Amendment Act No. 8 of 1999, Western Cape Nature Conservation Laws Amendment Act No. 3 of 2000**

This Ordinance and amended Acts pertaining to this legislation are the policy directive of CapeNature and fall within the ambit of their responsible mandate pertaining to, but not solely, towards biodiversity conservation and nature reserves in the Western Cape. This legislation is applicable to any municipality in terms of land use planning where land has been identified for biodiversity stewardship agreements or where there is a conservation need to proclaim a formal nature reserve or protected area.

The CapeNature offices of the Bitou LM are represented on municipal forums so as to assist the municipality with law enforcement and co-management of watercourses and coastal resources within the Bitou LM. As with other municipalities, CapeNature is the executive arm of the Western Cape Nature Conservation Board (WCNCB) obliged to:

- Promote, ensure and enhance biodiversity conservation and related matters within the framework of sustainable development;
- Render services and provide facilities for research, education and awareness in connection with biodiversity and related matters in the province; and
- Generate income, within the framework of any applicable policy determined by the responsible minister of the provincial cabinet.

CapeNature has recently completed environmental management plans for both Robberg and Keurbooms which provide strategic and operational interventions for the Bitou LM. A recent report indicates that CapeNature during the reporting period completed a database of all legal and illegal jetty/slipway structures built alongside rivers below the high-water mark, as the organisation is responsible for the leasing of these structures. With combined resources from CapeNature, the Department of Environmental Affairs and Development Planning (DEA&DP), various municipalities and the Department of Water Affairs, all structures have been recorded. This data will be used by the municipality to ascertain environmental compliance and law enforcement as well as provide guidance on new applications.

### **2.19 Western Cape Infrastructure Framework 2013**

The Western Cape Infrastructure Framework (WCIF) is a long-term strategic framework that aligns with the ONECAPE 2040 Vision and timeframe. The framework sets out high-level transitions required to achieve the optimised development agenda and is broken down in sub-infrastructure sectors (see **Table 3**). The PSDF strategically aligns with these transitional agendas to ensure the optimisation and alignment of provincial planning policies with service delivery.

The Bitou LM should specifically consider the aspects surrounding water, transport and settlement in the formulation of the SDF.

**Table 3: WCIF Proposed Transitions**

| SECTOR     | WCIF PROPOSED TRANSITIONS   |
|------------|---|
| Energy     | <ul style="list-style-type: none"> <li>• Introduce natural gas processing infrastructure to use gas as a transition fuel.</li> <li>• Promote the development of renewable energy plants in the province and associated manufacturing capability.</li> <li>• Shift transport patterns to reduce reliance on liquid fuels.</li> </ul>   |
| Water      | <ul style="list-style-type: none"> <li>• Have more stringent water conservation and demand-management initiatives, particularly at municipal level.</li> <li>• Develop available groundwater resources.</li> <li>• Adopt more widely the reuse of wastewater effluent as standard practice.</li> <li>• Adopt large-scale desalination once it becomes the “next best” option to resolve inevitable water shortages in Saldanha, Cape Town and the Southern Cape.</li> <li>• Expand and diversify agriculture to increase availability of surface water but reduce the water intensity of the sector, given the limited availability of water for irrigation.</li> </ul>                                   |
| Transport  | <ul style="list-style-type: none"> <li>• Invest in public transport and non-motorised transport (NMT) infrastructure, particularly in larger urban centres.</li> <li>• Prioritise general freight rail over bulk freight.</li> <li>• Shift freight traffic from road to rail along major routes.</li> </ul>   |
| Settlement | <ul style="list-style-type: none"> <li>• Continue to provide basic services to achieve national targets.</li> <li>• Diversify the housing programme, with greater emphasis on incremental options.</li> <li>• Integrate settlement development, prioritising public service facilities in previously neglected areas.</li> <li>• Improve energy efficiency in buildings through design standards.</li> <li>• Consolidate management of state land and property assets for optimal use.</li> <li>• Distribute health and education facilities equitably.</li> <li>• Innovate in the waste sector to increase recycling and reuse, including the adoption of waste-to-energy in the longer term.</li> </ul> |
| ICT        | <ul style="list-style-type: none"> <li>• The availability of a strong broadband infrastructure network is central to efficient communications and internet services and will play a key role in achieving the Provincial objectives.</li> </ul>   |

## 2.20 Western Cape Provincial Land Transport Framework 2013

The Western Cape Provincial Land Transport Framework sets out a long term vision for transport in the Western Cape and states that by 2050 the transport system in the Western Cape will be:

- Fully Integrated Rapid Public Transport Networks (IRPTN) in the higher-order urban centres of the Province;
- Fully Integrated Public Transport Networks (IPTN) in the rural regions of the province;
- A safe public transport system;
- A well maintained road network;
- A sustainable, efficient, high speed, long distance rail network (public and freight transport);
- An efficient international airport that links the rest of the world to the choice gateway of the African continent;
- International-standard ports and logistics systems;
- A transport system that is resilient to peak oil.

These aspects have to be followed through in the Bitou SDF, through measures such as strict urban edges, densification, clustering of civic and business activities, development along identified corridors and the promotion of public and NMT (Garden Route District SDF, 2017).

## C: DISTRICT AND LOCAL PLANS AND POLICIES

### 2.21 Garden Route District Integrated Development Plan and Spatial Development Framework

The Garden Route District IDP formulates a set of objectives for the District, which include:

- Promote healthy and socially stable communities;
- Build a capacitated workforce and communities;
- Conduct regional bulk infrastructure planning and implement projects, roads maintenance and public transport;
- Manage and develop council fixed assets;
- Promote sustainable environmental management and public safety;
- Ensure financial viability of the Garden Route District Municipality;
- Promote good governance;
- Grow the District economy.

It states that if the Garden Route District is to achieve its full potential as a sustainable and integrated District, there are **six central issues** that must be addressed explicitly in the SDF to meet the provisions of SPLUMA, LUPA, the PDSF, Provincial Sustainable Transport Programme (PSTP), the Provincial Strategic Plan and Provincial Land Transport Framework. These are:

- Regional resource capacity constraints;
- Regional competitive advantage;
- Sprawling low density settlement;

- Constrained regional accessibility;
- Erosion of biodiversity and cultural landscapes; and
- Sustainability of agriculture and rural settlements.

It is a key requirement that alignment between the SDF and IDP is achieved. Ultimately, the SDF 20-year time horizon should provide the long-term vision for the IDP's 5-year implementation and delivery cycle.

The Garden Route District SDF was adopted in 2017. It embodies the vision and focus for the District, which is later translated into specific spatial proposals. Some of the key tensions noted in the Garden Route SDF include:

- Sprawling urban and rural development versus its sense of place, environmental assets and agricultural and tourism potential;
- Regional infrastructure and mobility versus the need to protect the quality and character of towns and rural landscapes that underpin the qualities that draw investment into the area;
- Growth and economic development versus water scarcity, waste crisis and loss of environmental and agricultural assets; and,
- Gas, oil, fracking and the potential impacts of associated development and industry on the scenic and cultural landscape and “garden” qualities of Garden Route District.

There are four overarching integrative and connected strategic spatial drivers of change which form the focus of the Garden Route SDF and which

are fundamental to achieving co-ordinated spatial planning for the sustainable growth and resilience of the District as reflected on **Diagram 3**. The most important features noted on the Garden Route District SDF as depicted on **Figure 3** below include the following:

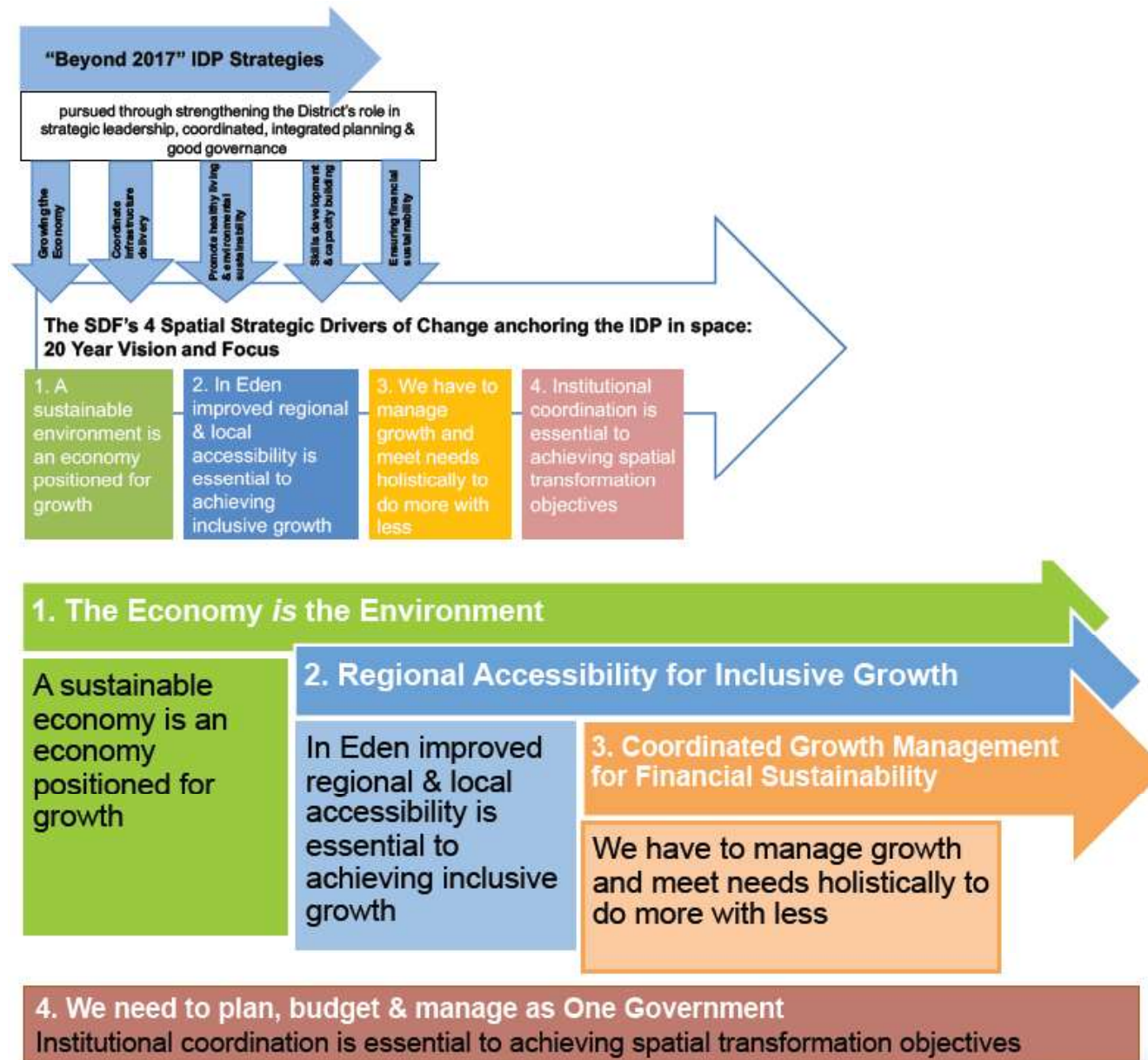
- The Bitou LM area forms part of the Garden Route Landscape with extensive areas earmarked for protection and conservation;
- Route N2 is the most prominent national east-west route serving the District (the coastal corridor);
- Plettenberg Bay town and surrounds are to be consolidated as a Coastal Center along route N2;
- Keurboomstrand and Nature's Valley represent two more settlements forming part of the Garden Route SDF Settlement Hierarchy.

## 2.22 Garden Route Rebuild Initiative 2018

The Garden Route Rebuild Initiative (GRRi) was created in response to the fire crises in 2017, to not only address the immediate crises, but also to “build back better.” It was formulated through the cooperation of the Western Cape Government Disaster Management, Garden Route District Municipality, Knysna Municipality and Bitou LM.

The Garden Route Vision is as follows:

*The Garden Route will strive to be an inclusive and thriving region that unlocks the potential for all who live, work, travel and play here.*



# Garden Route District Composite SDF

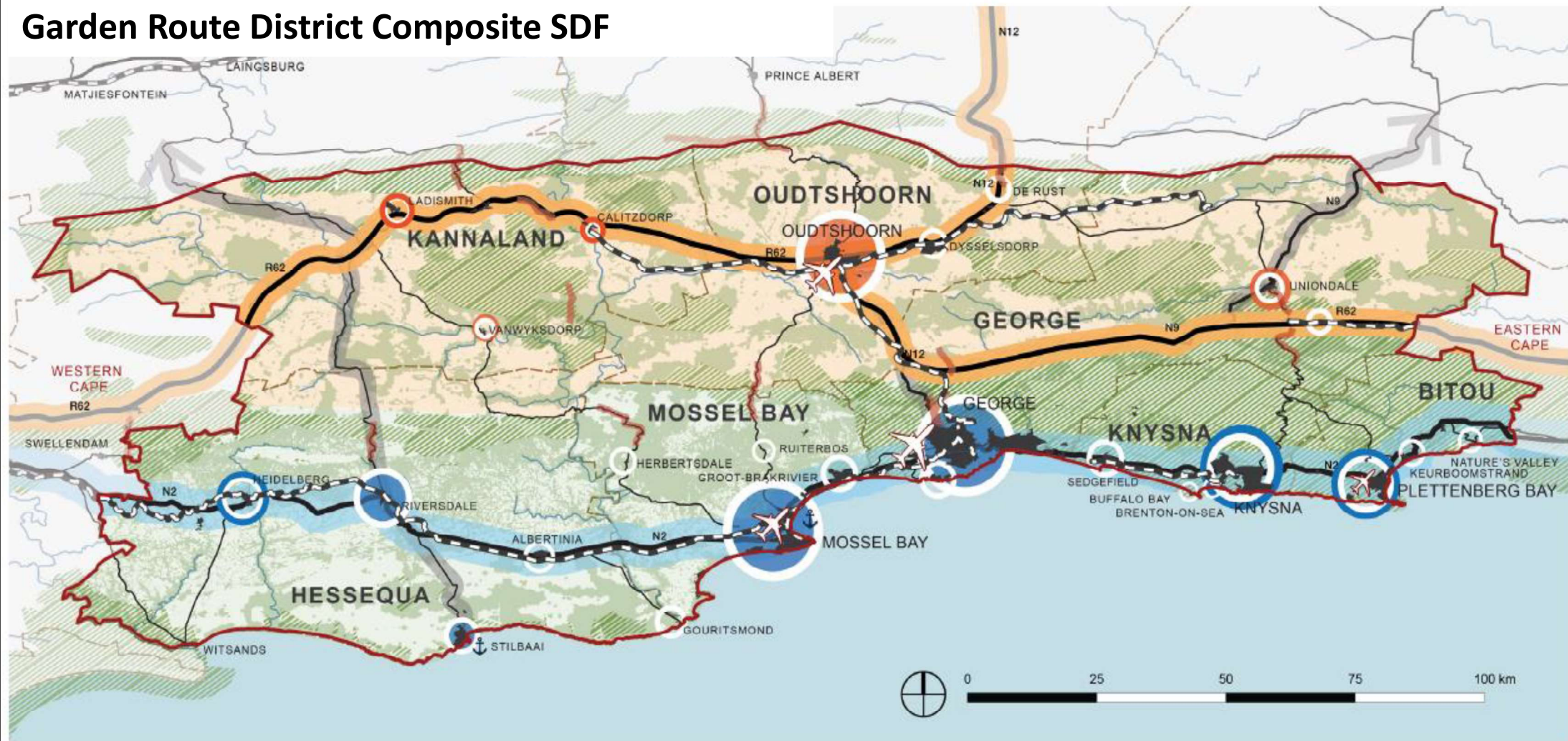
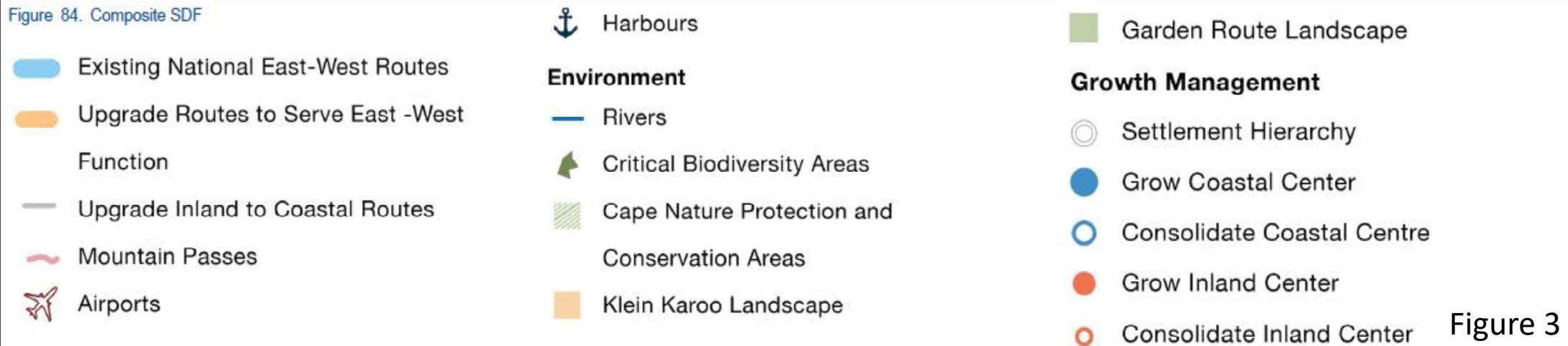


Figure 84. Composite SDF



The strategy to achieve this vision is centered on six strategic pillars and nineteen initiatives set out in **Diagram 4** (overleaf). It is of critical importance for the Bitou LM to **include these initiatives in its IDP and SDF**.

### 2.23 Garden Route (Eden) District Municipality Wetland Report 2017

The wetlands within Garden Route District are considered to be high-value 'ecological infrastructure', in that they provide vital habitat for flora and fauna, but also provide critical ecosystem services to the municipality. These include flood attenuation, water filtration, erosion control and water storage (regulatory services) as well as food provision, supply of raw materials and clean drinking water (provisioning services). The wetlands within the municipality also play a pivotal role in disaster risk management as well as reducing the impacts of climate change within the region.

The report indicates that many of the wetlands within the District are under severe threat and thus require careful consideration during the spatial planning process. These threats are largely due to historical degradation, deliberate draining of wetlands to make way for development and agriculture, inappropriate development within the close proximity to the wetlands, poorly regulated agricultural practices, contamination through chemical, sewage, effluent and stormwater seeps, sedimentation, water abstraction and the spread of invasive alien plants.

The following four policy recommendations represent headline messages which local municipalities need to consider and implement when developing







policies that jointly address urban planning and management and the wise use of wetlands:

- Wetlands and the range of services they provide are essential elements of the supporting infrastructure of urban and peri-urban settlements.
- The wise use of wetlands contributes to socially and environmentally sustainable urban and peri-urban areas.
- Any further degradation or loss of wetlands as a result of urban development or management should be avoided, and where not possible, any impacts should be mitigated, and any residual effects appropriately compensated for by offsets such as wetland restoration.
- The full participation of local communities, municipalities and government sectors involved in urban and peri-urban spatial planning and wetland management decision making is vital to creating sustainable urban and peri-urban settlements.

### 2.24 Garden Route (Eden) Coastal Access Audit 2017

The National Environmental Management: Integrated Coastal Management Act 24 of 2008 (ICMA) assigns municipalities with the responsibility of designating coastal access to land and managing coastal access in line with the following points of departure:

- The public has the right of physical access to the sea, and along the sea shore, on a managed basis;
- The public has the right of equitable access to the opportunities and benefits of the coast, on a managed basis;

|   |   |  | Project Management Office currently implementing |
|---|---|--|--|
| Strategic pillar  | Proposed initiatives  | Alignment to IDP   |  |
|    | Strengthening the tourism sector to support year-round tourism in the Garden Route    | i Enhance unified Garden Route tourism value proposition   | ✓  |
|   |   | ii Enhance Garden Route counter-seasonal offerings to support year-round tourism   | ✓  |
|   |   | iii Broaden offerings around nature, culture, and sport/adventure (e.g., biodomes, township business development, golf routes) | ✓  |
|    | Developing light manufacturing industries to support local employment                 | i Create a facilitation program for the niche manufacturing industry   | ✓  |
|   |   | ii Develop a needs-to-skill matching platform with partner for green economy artisans  | ✓  |
|   |   | iii Launch a Garden Route Green Expo to showcase and celebrate sustainable building  | ✓  |
|    | Supporting local businesses to thrive in an enabling environment                      | i Support ease-of-doing business through an investment facilitation centre and SMME mobile business lab                        | ✓  |
|   |   | ii Launch an inclusive Knysna business chamber   | ✓  |
|    | Creating a "skills mecca" for training in the Garden Route                            | i Pilot coding and hospitality programs  | ✓  |
|   |   | ii Create a "skills mecca" of locally and internationally recognised skills providers  | ✓  |
|  | Facilitating inclusive urban development that erodes apartheid-era spatial boundaries | i Develop affordable, mixed-income housing with adequate supporting infrastructure   | ✓  |
|   |   | ii Improve last-mile and long-distance affordable and effective transport  | ✓  |
|   |   | iii Implement municipality citizen-centric dashboards to improve service delivery  | ✓  |
|  | Ensuring the resilience and sustainability of infrastructure and livelihoods          | i Enhance fire and water security (catchment, harvesting and wetlands)   | ✓  |
|   |   | ii Develop waste beneficiation project(s) across Eden district   | ✓  |
|   |   | iii Run awareness and education campaigns to promote "resilient mindsets"  | ✓  |
|   |   | iv Offer incentives (rates rebates) to households for "greening"   | ✓  |
|   |   | v Legislate feed-in tariff for excess solar power to be bought by national suppliers   | ✓  |
|   |   | vi Integrate human resilience development into GRRI projects   | ✓  |

- There is a need to preserve, protect or promote historical and cultural resources and activities of the coast.
- Opportunities for public access must be provided at appropriate coastal locations in context of the environment and social opportunities and constraints; and
- Public access must be maintained and monitored to minimise adverse impacts on the environment and public safety and to resolve incompatible uses.

In order for Bitou LM to incorporate the above into the land use management process, the Garden Route Coastal Access Audit 2017 made the following recommendations to be addressed in future:

- An excessive amount of access paths exist in certain areas and consideration needs to be given to consolidating such accesses.
- All efforts should be made to resolve disputes related to historical access.
- Discussions should be held and an agreement entered into between the Department of Public Works, the Surveyor General and the Western Cape Government in respect of:
  - the alienation/sale of state land/coastal public property including Admiralty Reserve;
  - support of the alteration of curvilinear boundaries to straight lines and the implications this has in respect to restricting public access;
  - future control and management of coastal public property and Admiralty Reserve;

- the potential to enter into agreements with land owners to share responsibility for the management and maintenance of such land;
- access by subsistence fishermen - designated access routes (and not informal routes) should be agreed upon; however these agreements should ensure protection of private property and enforceable penalty measures when this is breached.

- Designated Coastal Access Sites/Routes in terms of ICM Act should be managed as follows:

- a) signpost entry points to that coastal access land;
- b) control the use of, and activities on, that land;
- c) protect and enforce the rights of the public to use that land to gain access to coastal public property;
- d) maintain that land so as to ensure that the public has access to the relevant coastal public property.

## 2.25 Garden Route (Eden) District Coastal Management Lines Report 2017

The purpose of the report was to delineate the coastal management line; to establish the EIA (environmental impact assessment) setback line; and to serve as an audit of coastal access in the Garden Route District Municipality (see separate report summary above: Garden Route Coastal Access Audit 2017). This was undertaken as per the Integrated Coastal Management Act.

In the Bitou LM area, the main features used for delineation of the CML were protected areas, the 100 year risk zone, sensitive biodiversity (WCBSP), 50 year risk line and the 5m amsl (above mean sea level) contour.

The various coastal zones are listed, described and applicable management controls are tabled in the report. Implementation mechanisms include municipal zoning schemes, EIA regulations, and national protected areas. A list of activities that require regulation and those that are exempted from regulation is provided as well as parameters for development in the coastal risk zone.

## **2.26 Garden Route (Eden) District Coastal Management Programme 2012**

The Garden Route (Eden) District Coastal Management Programme (CMP) was developed in accordance with the requirements of Chapter 6 (Section 48, 49 and 50) of the National Environmental Management: Integrated Coastal Management Act (Act 24 of 2008; ICM Act).

This programme has the following implications for the Bitou LM planning department in terms of its Land Use Scheme:

- Adopt the land use decision-making protocols which are indicated in the coastal planning scheme;
- Identify land use change applications that may contribute to linear coastal development which is undesirable;

- Subject all land use applications in the coastal zone to an EIA with a heritage impact assessment (where applicable), cumulative impact assessment and carrying capacity assessment;
- Discourage informal settlements in the coastal zone where there is lack of services;
- Restrict the sub-division of agricultural land for resorts and other high impact tourist, business or industry related land use activities;
- Developments must not infringe on or detract from sites of heritage significance in the coastal zone.

## **2.27 Garden Route Biosphere Reserve Proclamation 2017**

The Garden Route Biosphere Reserve (GRBR) was declared at a UNESCO MAB (Man and Biosphere) ICC Panel in Paris in June 2017. The area (698 363ha) extends from the George Municipal area in the west to the Van Stadens River in the east, with the northern boundary roughly being the R62 running through the Langkloof. Recognition was granted due to the biodiversity of the area (Fynbos, Afromontane forests, Eastern Cape thicket, lakes, wetlands, three Marine Protected Areas), existing recognition (two Hope Spots, the Tsitsikamma Important Bird Area, Robberg World Heritage Site, Wilderness Lakes Ramsar Sites) and high degree of endemism of species.

The Garden Route Biosphere Reserve should fulfil the three required functions of a UNESCO biosphere, namely:

- A conservation function;

- A development function where sustainable biodiversity-based development opportunities are sought and where such socio-economic opportunities are developed; and
- A logistic support function where innovative research, education and institutions exist and aim to be developed to support the conservation and development functions.

A Management Plan for the GRBR is currently being produced in order to implement the strategies associated with the functions noted above, including:

- A Socio-Economic Development Strategy;
- A Project Identification Prioritisation And Funding Strategy;
- An Environmental Education And Capacity Building Strategy; and
- A Marketing and Communication Strategy.

## 2.28 Garden Route (Eden) District Rural Development Plan 2016

The Garden Route District Rural Development Plan (RDP) focuses on achieving three components of rural development:

- Meeting basic human needs;
- Rural enterprise development;
- Developing agri-village industries, sustained by credit facilities and value chain markets.

The plan's overall goal is to improve the material conditions and life chances of those people living in rural areas defined as "poverty pockets" (that is, people whose lives are presently defined by a state of impoverishment). The

plan also focuses on the pillars of land reform which land redistribution, land restitution, land development, land tenure and administration.

Agricultural development has been identified as a key sector for rural economic transformation. As a result, the Rural Economic Transformation Model (RETM) is followed to fast-track agricultural development - consisting of four components, namely: community, cropping, land and livestock.

As illustrated in **Figure 4** an Agri-hub is proposed for Oudtshoorn. This hub is to be developed as a networked innovation system of agri-production, processing, logistics, marketing, training and extension services. Farmer Production Support Units (FPSUs) have been prioritised in Dyssseldorp and Haarlem, while Zoar, Ladysmith, George and Riversdale have also been earmarked as future FPSUs. The Rural Development Plan also identified Potential FPSUs in Wittedrift, Harkerville and Kranshoek in the long term.

## 2.29 Garden Route (Eden) District Integrated Transport Plan 2016

The Garden Route Integrated Transport Plan (ITP) is structured around seven objectives namely:

- Provide Integrated Public Transport Networks (IPTN) in rural regions;
- Prioritise the provision of public transport services among higher density settlements to improve viability of public transport subsidies;
- Provide public transport and NMT infrastructure, particularly in larger urban centers;
- Supply safe public transport services;
- Ensure that there is a well-maintained road network;

# GARDEN ROUTE AGRI-PARK COMPOSITE MAP

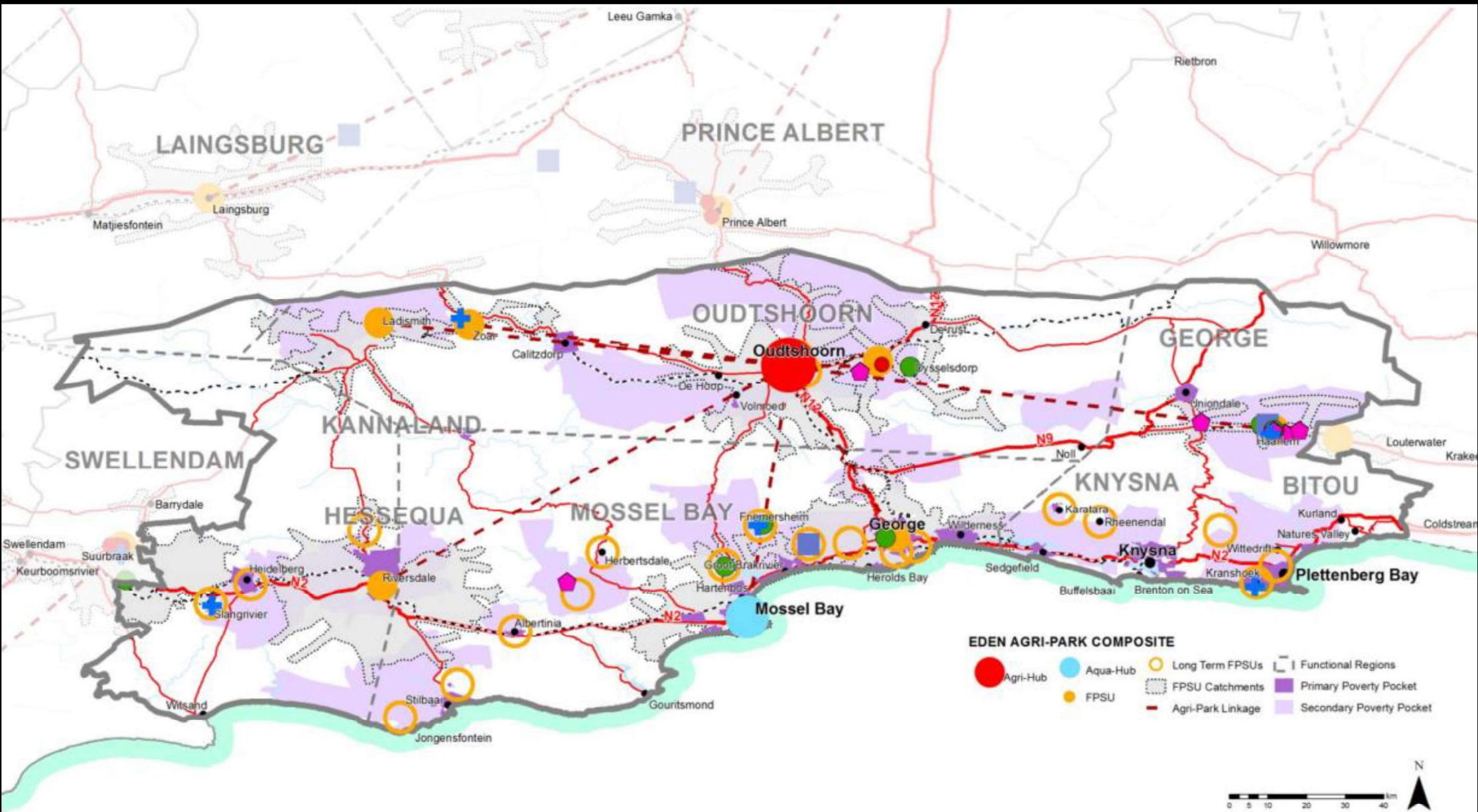


Figure 4

- Shift contestable freight from road to rail and prioritise general freight over bulk freight;
- Create the institutional capacity and administrative environment to perform the functions required of the municipality by the NLTA.

The vision is to establish a demand-responsive, sustainable, balanced and equitable rural transport system that allows the basic access needs of individuals to be met, is affordable, operates efficiently, offers choice of transportation modes, and supports a vibrant economy.

### 2.30 Garden Route (Eden) District Mobility Strategy 2012

The Mobility Strategy presents concepts for public transport within the Garden Route District and puts in place an overall framework within which individual projects within the various municipalities can be implemented (Figure 5).

There are inter-urban services between towns, as well as express long distance services. The rural services proposed around major towns are a clear indication of the dependence of the rural areas on the urban areas. There are strong links to the east and west, emphasizing the importance of the Garden Route Corridor (N2).

### 2.31 Bitou LM Integrated Development Plan

The section below provides a crisp summary of the Bitou LM's Integrated Development Plan 2019/2020 (IDP).

The following vision was set:

#### **Vision 2030**

*"To be the best together"*

*"Om saam die beste te wees"*

*"Sobalasela Sonke"*

The initial thrust of the municipality was to address the disjuncture in service delivery, inequality, unemployment and economic participation caused by the apartheid system which benefited a certain racial group at the neglect or exploitation of other.

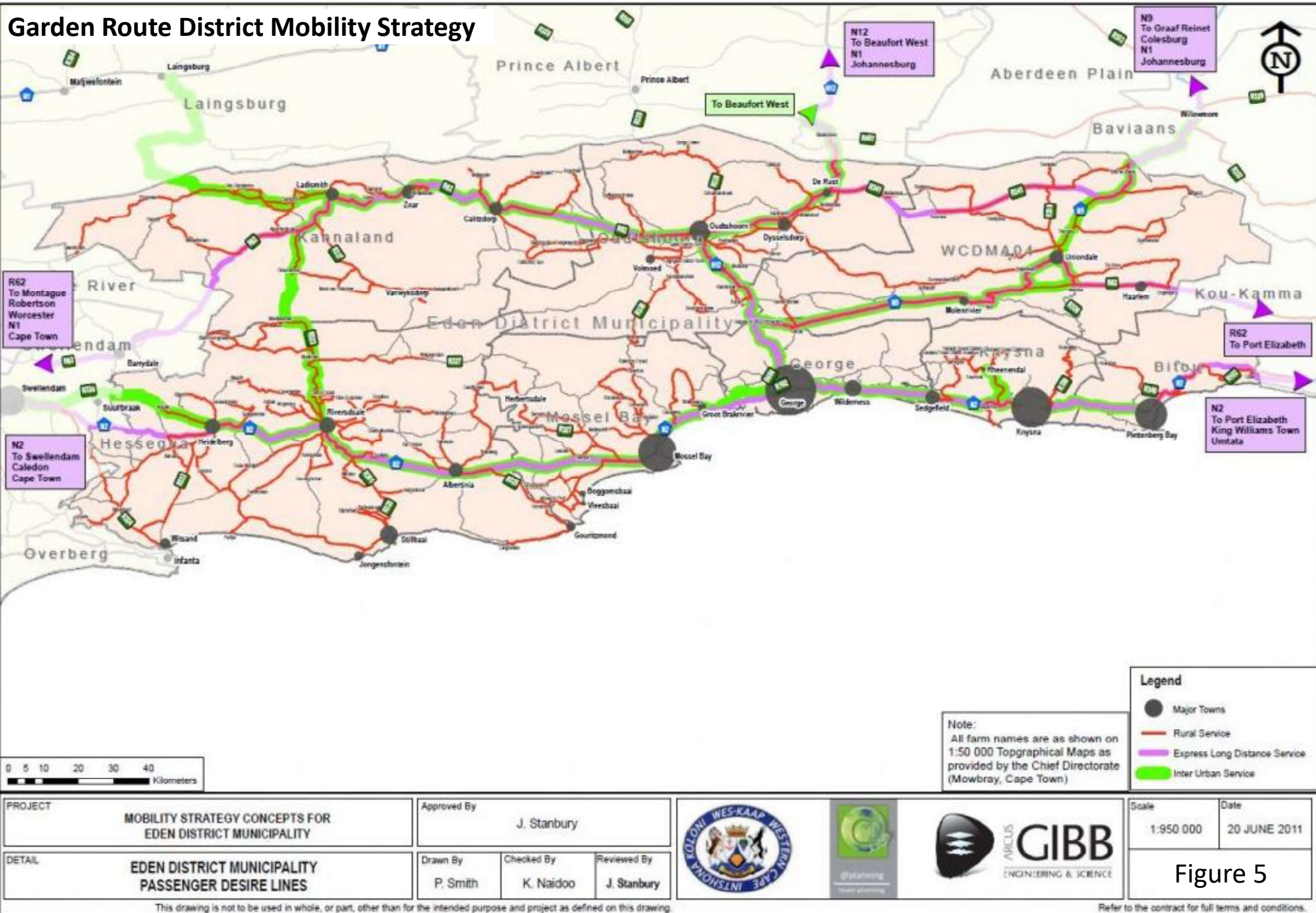
The mission statement reads as follows:

#### **Mission Statement**

*"We partner with communities and stakeholders to sustainably deliver quality services so that everyone in Bitou can live and prosper together"*

The municipality recognises the importance of building partnerships with communities and stakeholders for sustainably delivering services in the next five years.

# Garden Route District Mobility Strategy



|         |   |  |  |             |             |             |  |
|---------|---|--|--|-------------|-------------|-------------|--|
| PROJECT | MOBILITY STRATEGY CONCEPTS FOR EDEN DISTRICT MUNICIPALITY |  |  | Approved By | J. Stanbury |             |  |
| DETAIL  | EDEN DISTRICT MUNICIPALITY PASSENGER DESIRE LINES         |  |  | Drawn By    | Checked By  | Reviewed By |  |
|         |   |  |  | P. Smith    | K. Naidoo   | J. Stanbury |  |



This drawing is not to be used in whole, or part, other than for the intended purpose and project as defined on this drawing.

Refer to the contract for full terms and conditions.

This will be done in accordance with the Key Performance Areas and Strategic Objectives noted in **Table 4**. The IDP emphasizes the strong link between the IDP and SDF. It states that the SDF should seek to influence the restructuring of urban and rural settlement patterns throughout the municipal area. It should also identify key areas for the purpose of focusing both public and private investment (spatial targeting). The aim is to identify projects in these areas which will have a high impact and high visibility within the area, and which will benefit the entire community.

**Table 4: Bitou LM IDP Strategic Objectives**

| KEY PERFORMANCE AREAS                           | OBJECTIVES   |
|---|--|
| KPA 1:<br>Strategic planning for transformation | Objective 1.1 Spatially integrate areas separated by apartheid;<br>Promote access for poor to work, recreational and commercial opportunities                                      |
| KPA 2:<br>Economic development                  | Objective 2.1 Grow the local economy, create jobs, empower previously disadvantaged, and transform ownership patterns.<br>Objective 2.2. Economic development of the local economy |
| KPA3: Community and social development          | Objective 3.1 Eradicate poverty and uplift previously disadvantaged communities, promote social cohesion   |
| KPA 4:<br>Infrastructure development            | Objective 4.1 Provision of basic services  |

|                                     |   |
|-------------------------------------|---|
| KPA 5:<br>Institutional development | Objective 5.1 Build a capable, corruption-free administration that is able to deliver on its developmental mandate                                      |
| KPA 6: Financial sustainability     | Objective 6.1 Manage expenditure prudently, grow revenue base and build long-term financial sustainability to invest in social and economic development |
| KPA 7: Public participation         | Objective 7.1 An active and engaged citizenry, able to engage with and shape the municipality's programme   |

### 2.32 Synthesis

**Table 5** (overleaf) summarises the specific implications for the Bitou LM resulting from the national, provincial and municipal policies and sector plans.

**Table 5: Proposals for Bitou LM originating from national, provincial and district policies and legislation**

| CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA      |   |   |  |
|---|---|---|--|
| National Development Plan Our Future Make It Work | National and Provincial Legislation and Policies Applicable to the Bitou SDF  | District Policies Applicable to the Bitou SDF   | Specific Implications for the Bitou SDF  |
| <b>OBJECTIVES AND ACTIONS (SPATIAL RELEVANCE)</b> |   |   |  |
| Economy and Employment                            | <ul style="list-style-type: none"> <li>SPLUMA</li> <li>National Development Plan 2030</li> <li>Integrated Urban Development Framework and Implementation Plan 2016-2019</li> <li>Regional Industrial Development Strategy (RIDS)</li> <li>ONECAPE 2040</li> <li>Western Cape Provincial Strategic Plan</li> <li>Western Cape Provincial SDF</li> <li>Garden Route Rebuild Initiative</li> </ul> | <ul style="list-style-type: none"> <li>Garden Route District (GRD) Integrated Transport Plan</li> <li>GRD Mobility Strategy</li> </ul>  | <ul style="list-style-type: none"> <li>NDP: Bitou LM forms part of the Key National Development Corridor along the N2 and is earmarked for Eco-resource Production and Livelihood.</li> <li>SIP 3: South-Eastern node and corridor development – N2-Wild Coast Highway</li> <li>SIP 11: Agri-logistics, rural infrastructure and tourism infrastructure, such as the tourism nodes in the Bitou LM.</li> <li>RIDS Core Regions and Spatial Economic Linkages - Oudtshoorn-Garden Route area identified</li> <li>NATMAP: Transport link to Saldanha and Tourism route from Cape Town to Port Elizabeth</li> <li>GR District Mobility Strategy: link to the National Development Corridor</li> </ul> |
| Economy Infrastructure – basic infrastructure     | <ul style="list-style-type: none"> <li>National Infrastructure Development Plan</li> <li>Transport Master Plan (NATMAP)</li> <li>Western Cape Infrastructure Framework</li> <li>Western Cape Provincial Land Transport Framework</li> </ul>   | <ul style="list-style-type: none"> <li>Garden Route District Integrated Waste Management Plan</li> <li>Garden Route District Transport Plan</li> <li>Garden Route District Mobility Strategy</li> </ul> | <ul style="list-style-type: none"> <li>SIP 10 and 11: Address electricity, water and sanitation backlogs.</li> <li>Cooperate with the DM to establish a new regional landfill site.</li> <li>Improve public transport services between towns.</li> <li>Enable walkable and viable public transport services.</li> <li>Promote and facilitate a modal shift to NMT.</li> <li>Address parking problems that exist all year, rather than only during holiday season.</li> </ul>   |

| CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA      |  |  |   |
|---|--|--|---|
| National Development Plan Our Future Make It Work | National and Provincial Legislation and Policies Applicable to the Bitou SDF   | District Policies Applicable to the Bitou SDF  | Specific Implications for the Bitou SDF   |
|   | <ul style="list-style-type: none"> <li>Garden Route Rebuild Initiative</li> </ul>  |  | <ul style="list-style-type: none"> <li>Co-ordinate planning of freight overnight facilities to minimise the impact of freight on noise and congestion in towns.</li> </ul>  |
| Environmental Sustainability and Resilience       | <ul style="list-style-type: none"> <li>National Freshwater Ecosystems Priority Areas 2011</li> <li>National Biodiversity Strategy and Action Plan 2005</li> <li>National Biodiversity Assessment 2011</li> <li>National Environmental Management: Protected Areas Act</li> <li>WC Biodiversity Spatial Plan Handbook</li> <li>WC Coastal Management Programme</li> <li>WC State of Biodiversity Report</li> <li>WC Protected Area Expansion Strategy</li> <li>Cape Nature Ordinance 1974, WC Nature and Environmental Conservation Ordinance 1999, WC Nature Conservation Laws 2000</li> </ul> | <ul style="list-style-type: none"> <li>GRD Municipality Wetland Report</li> <li>GR Coastal Access Audit</li> <li>GR Coastal Management Lines</li> <li>GR Coastal Management Programme</li> <li>Biosphere Reserve Application</li> <li>GR Biosphere Reserve Strategy Documents</li> </ul> | <ul style="list-style-type: none"> <li>Incorporate the proclaimed Garden Route Biodiversity Reserve (UNESCO Biosphere Reserve) in the SDF.</li> <li>Incorporate outcomes of the Biodiversity Spatial Plan Handbook</li> <li>Coastal Management Programme:               <ul style="list-style-type: none"> <li>Coastal overlay zones should be incorporated in the SDF and Land Use Scheme, and Coastal Vulnerability and Risk Assessment analysis should inform SDF interventions</li> <li>Coastal access to land designated by local governments should be included in the SDF by 2021</li> </ul> </li> <li>Protect the identified estuaries, specifically Keurbooms and areas containing threatened and endangered Fynbos</li> <li>The Conservation Action Priorities Map (Western Cape Protected Area Expansion Strategy) identifies areas in Plettenberg Bay to be considered for formal Protected Area expansion in the SDF</li> <li>Important Bird and Biodiversity Areas: Tsitsikamma IBA, Eden to Addo and Robberg Coastal Corridor were recently declared</li> <li>LUS should indicate the high water mark along rivers and address illegal structures within the high water mark</li> <li>Protect wetlands in the SDF and LUS</li> </ul> |

| CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA      |  |  |  |
|---|--|--|--|
| National Development Plan Our Future Make It Work | National and Provincial Legislation and Policies Applicable to the Bitou SDF   | District Policies Applicable to the Bitou SDF  | Specific Implications for the Bitou SDF  |
|   |  |  | <ul style="list-style-type: none"> <li>LUS and planning policies should give clear guidance on access to coastal areas, specifically in terms of access permission agreements, routes, signage and maintenance</li> <li>SDF and LUS to incorporate the Coastal Management Lines</li> <li>LUS to adopt the decision making protocols indicated in the Coastal Management Programme. The LUS should provide clear guidelines on development in accordance with the Programme, specifically regarding undesirable linear coastal development</li> <li>Incorporate the Biosphere Reserve Strategy Documents for the Garden Route Biodiversity Reserve (UNESCO Site) into the IDP, SDF and LUS</li> </ul> |
| Integrated and Inclusive Rural Economy            | <ul style="list-style-type: none"> <li>National Comprehensive Rural Development Programme</li> </ul>   | <ul style="list-style-type: none"> <li>Garden Route District Rural Development Plan</li> </ul> | <ul style="list-style-type: none"> <li>Implement the Eden Agri-Park Park FPSU</li> <li>Agrarian Transformation</li> <li>Rural Development</li> <li>Land Reform</li> </ul>  |
| Transforming Human Settlements                    | <ul style="list-style-type: none"> <li>Development of Sustainable Human Settlements (Breaking New Ground)</li> <li>Neighbourhood Development Grant (NDPG)</li> <li>Western Cape Provincial Spatial Development Framework 2014</li> </ul> | <ul style="list-style-type: none"> <li>Garden Route District IDP and SDF</li> </ul>            | <ul style="list-style-type: none"> <li>Upgrade all informal settlements by 2030</li> <li>NDPG Implementation to promote economic activity in disadvantaged areas.</li> <li>Promote compact, mixed use development around a comprehensive public transport network linking all major activity nodes within settlements.</li> <li>Encourage development of medium and higher density housing typologies and a variety of tenure alternatives.</li> <li>Minimise the impact of settlements on the natural resources.</li> </ul>   |

| CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA               |  |   |   |
|--|--|---|---|
| National Development Plan Our Future Make It Work          | National and Provincial Legislation and Policies Applicable to the Bitou SDF   | District Policies Applicable to the Bitou SDF                               | Specific Implications for the Bitou SDF   |
|  | <ul style="list-style-type: none"> <li>Provincial Urban Edge Guidelines</li> <li>Southern Cape Regional Spatial Implementation Framework</li> </ul>  |   | <ul style="list-style-type: none"> <li>Enhance “green” technology in all aspects of human settlement development (building material, infrastructure, energy, communication etc.).</li> </ul>  |
| Building a Capable and Developmental State (institutional) | <ul style="list-style-type: none"> <li>Municipal Systems Act</li> <li>Municipal Structures Act</li> <li>Spatial Planning and Land Use Management Act (SPLUMA)</li> <li>Western Cape Land Use Planning Act and Regulations</li> </ul> | <ul style="list-style-type: none"> <li>Garden Route District IDP</li> </ul> | <ul style="list-style-type: none"> <li>Align with national, provincial and district legislation and policies in IDP and SDF formulation</li> <li>Iterative process – feed up into national and provincial departments</li> <li>Formulate a land use scheme for Bitou LM and include provincial development guidelines.</li> </ul> |

### 3. SITUATIONAL ANALYSIS: SPATIAL ISSUES AND CHALLENGES

#### 3.1 INSTITUTIONAL

##### 3.1.1 Cadastral Base and Institutional Boundaries

**Figure 6** depicts the institutional boundaries of the Bitou LM. It is bordered by the Kou Kamma Local Municipality to the north-east, George Local Municipality to the north-west and Knysna Local Municipality to the west.

The Bitou LM covers an area of approximately 991.89 km<sup>2</sup> and is divided into seven wards. Wards 1 and 7 are mostly rural in nature while wards 2 to 6 mainly constitute the urban parts of Plettenberg Bay town and surrounds. The northern parts of the Municipality comprise a number of large farms with the cadastral density increasing significantly to the south. The municipal area is made up of 234 parent farms, approximately 1 852 farm portions and an estimated 14 000 erven located in the various proclaimed townships.

##### 3.1.2 Land Ownership

**Figure 7** shows the land ownership patterns in the Municipality. From the figure it is clear that the majority of land in the Municipality (66.35%) is privately owned / not owned by any sphere of government. The remaining land is owned by provincial/national government (31.98%) and the Bitou LM (1.67%).

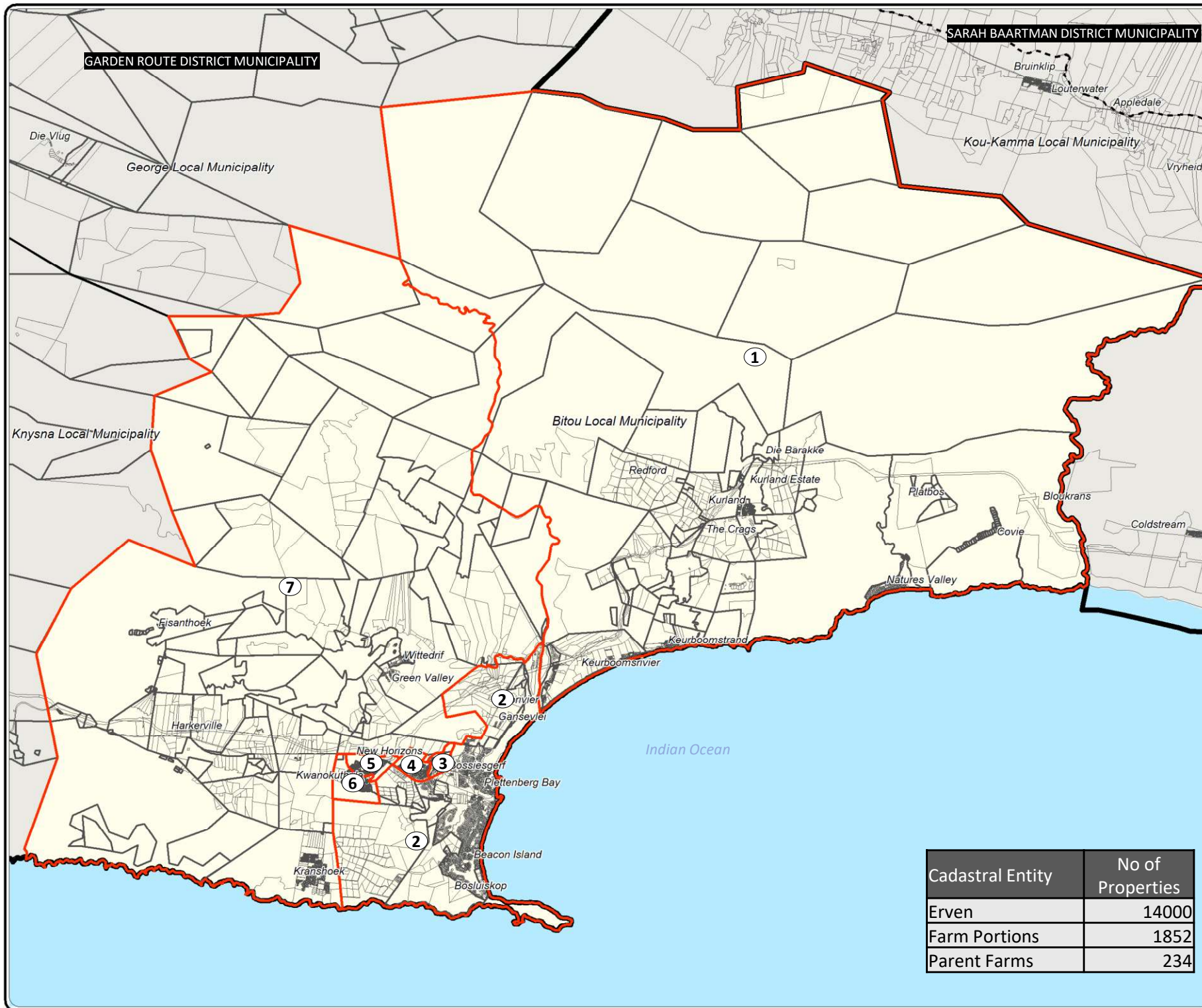
Large parts of the state-owned land comprises nature reserves and national parks including the Garden Route National Park, Robberg Nature Reserve and provincial reserves like the EC Soetkraal Nature Reserve and Keurbooms River Nature Reserve.

Large parts of the road reserve for the N2 bypass are also publicly owned (SANRAL).

##### 3.1.3 Land Reform

The following land parcels are earmarked for land reform projects by the Department of Rural Development and Land Reform (DRDLR). A total of six projects are underway. The various projects have been numbered on **Figure 8**.

It should be noted that the central and northern parts of Erf 562 in Kurland is in the process of being donated and transferred to the Bitou LM by the Department of Rural Development and Land Reform. This land will be utilised for housing purposes while only about 11 ha located at the southern end of the property will be used for agricultural purposes (refer to project number 4 in **Table 6**).



## Ward Boundaries (2016)

### Legend

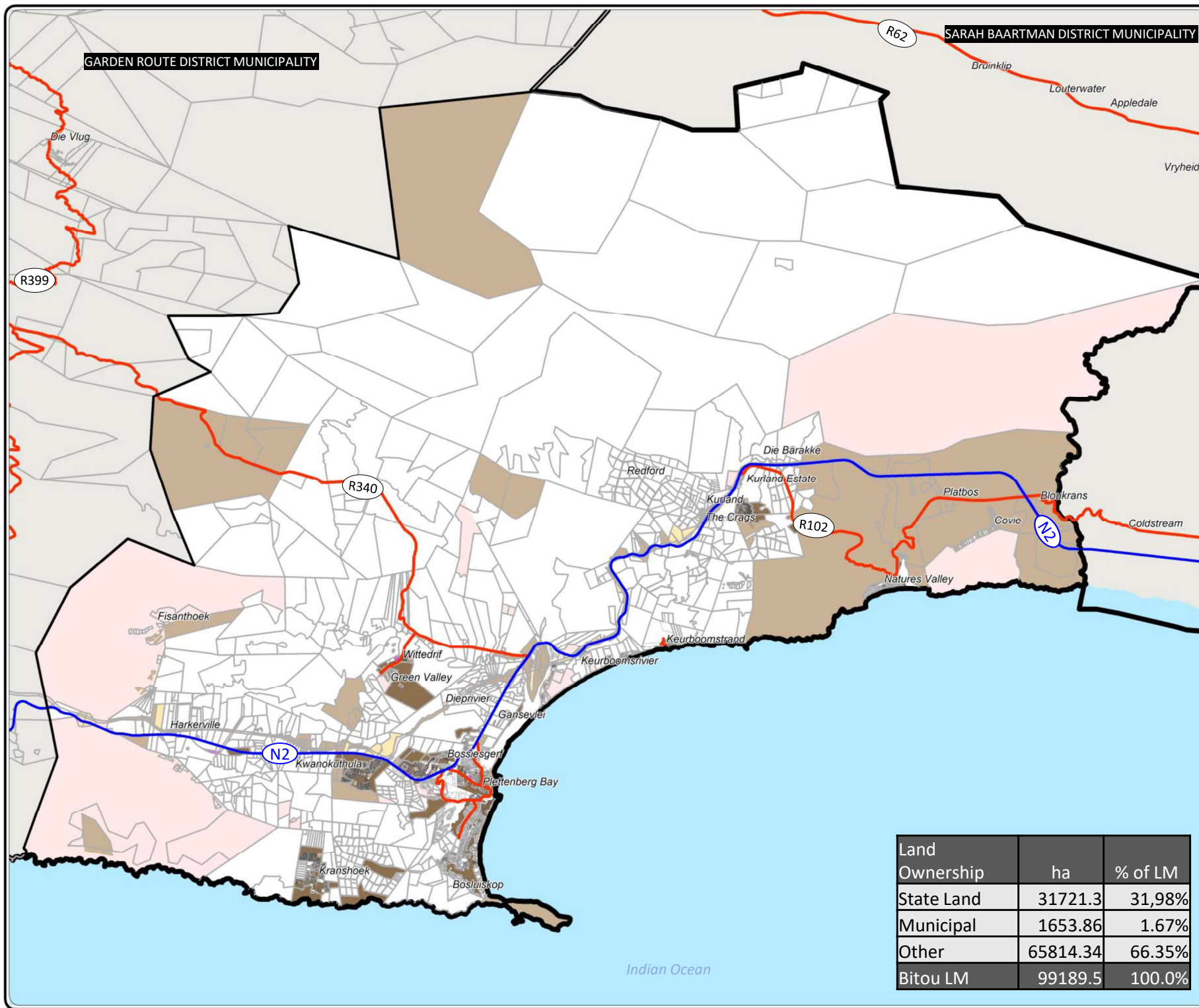
- 1 Ward Boundary / Number
- Bitou Local Municipality
- Other Local Municipalities
- Erven
- Farm Portions
- Parent Farms

Source: Demarcation Board 2011



| Cadastral Entity | No of Properties |
|------------------|------------------|
| Erven            | 14000            |
| Farm Portions    | 1852             |
| Parent Farms     | 234              |

Figure 6

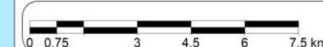


## Land Ownership

### Legend

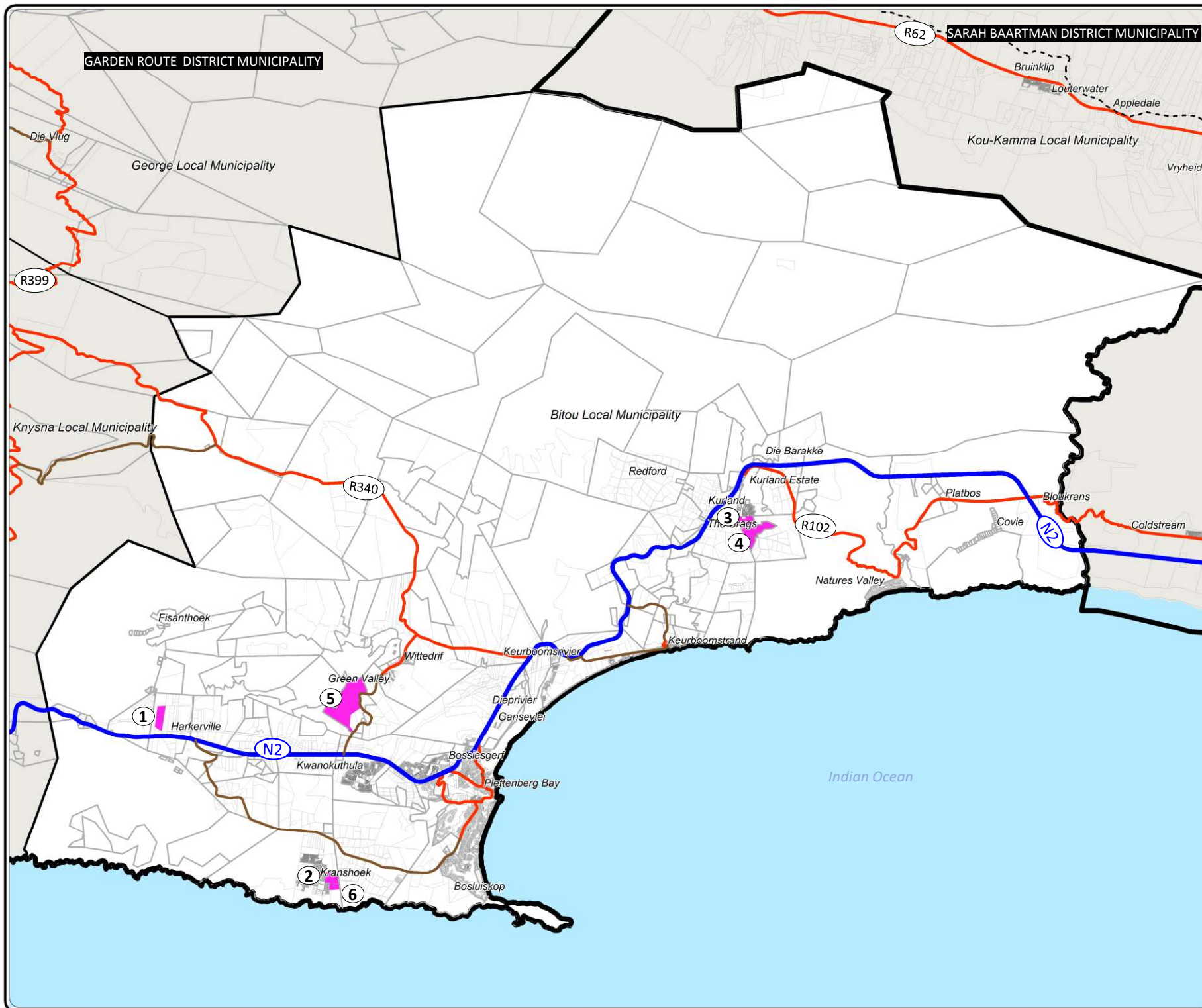
- Undetermined
- Private
- Parastatal
- National / Provincial
- Municipal
- Other Local Municipalities
- Cadastral
- National Roads
- Provincial Roads
- Secondary Roads
- Railway
- Ocean

Source: Bitou LM SDF 2013



| Land Ownership | ha       | % of LM |
|----------------|----------|---------|
| State Land     | 31721.3  | 31,98%  |
| Municipal      | 1653.86  | 1.67%   |
| Other          | 65814.34 | 66.35%  |
| Bitou LM       | 99189.5  | 100.0%  |

Figure 7



## Land Reform

### Legend

- Land Reform Projects
- National Roads
- Provincial Roads
- Secondary Roads

Source: Bitou LM SDF 2013



Figure 8

**Table 6: Land Reform Projects**

| PROJECT NAME                       | PROPERTY DESCRIPTION                                    | TYPE       | HA   | BENEFICIARIES   | FARMING ACTIVITIES                     |
|------------------------------------|---|------------|------|-----------------|--|
| 1. Harkerville                     | Portion 22 of the farm No. 422                          | Settlement | 32   | 40 Households   | Settlement                             |
| 2. Ericaville                      | Portion 7 of the Farm Kranshoek No.432                  | SLAG       | 38.5 | 94 households   | Honeybush tea, proteas, vegetables     |
| 3. Forest Hall 1 Simunye Farmstead | Remaining extent of the Farm 303                        | LRAD       | 9.5  | 19              | Vegetables                             |
| 4. Forest Hall PLAS Project        | Remainder of Erf 562 Kurland                            | PLAS       | 86   | Lease           | Vegetables (11ha)<br>Settlement (95ha) |
| 5. Bitou PLAS Project              | Remainder of Farm No. 487                               | PLAS       | 179  | 5 Beneficiaries | Livestock grazing                      |
| 6. TRANCRAA Kranshoek              | Portion 29 (portion of portion 6) of the farm Kranshoek | TRANCRAA   | 11   | 4000            | Livestock and vegetables               |

## 3.2 SOCIO ECONOMIC OVERVIEW

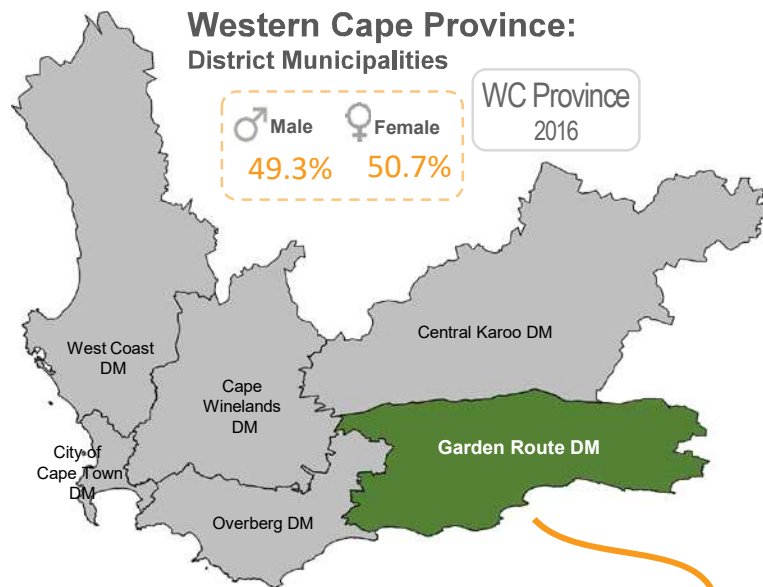
The following section highlights the most salient socio-economic features of the Bitou LM as derived from information contained in Stats SA Census 2011 and Stats SA Community Survey 2016.

### 3.2.1 Demographic Profile

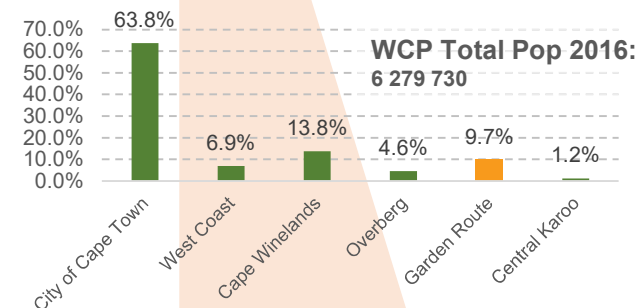
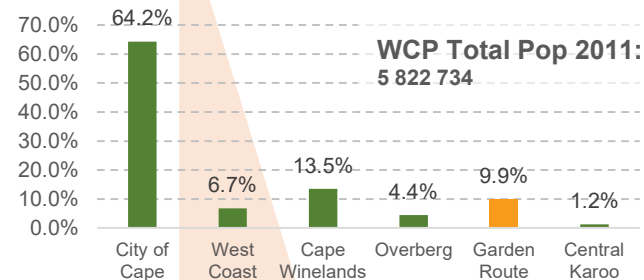
#### a) Population Distribution and Population Growth Profile

**Diagram 5** illustrates the provincial and district population breakdown which is summarised as follows:

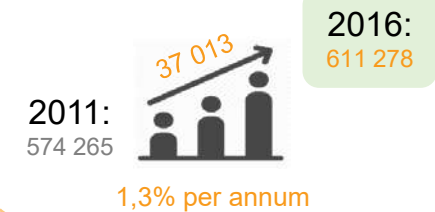
- The Western Cape Province population (2016) is estimated at 6,279 million people of which the Garden Route District represents about 611 278 people which is 9.7% of the provincial population.
- The total population of the Garden Route District increased from 574 265 in 2011, to 611 278 in 2016 – an increment of 37 013 individuals with an annual growth rate of 1.3% per annum.
- The Garden Route District population (2016) comprises an estimated 191 407 households, with an average household size of 3.2 persons per household.
- The Garden Route District gender profile indicates slightly less males (48.9%) compared to females (51.1%).



**Total Population Western Cape Province**



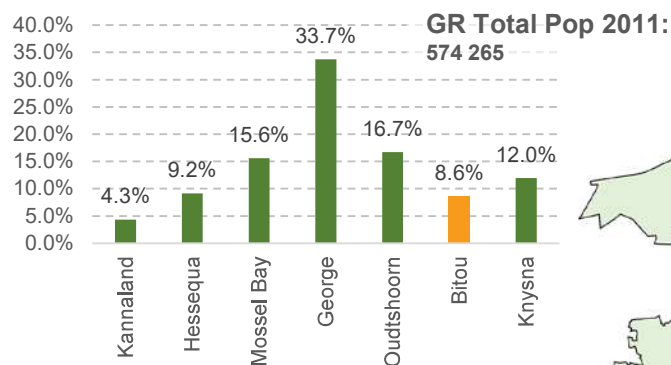
**Garden Route DM Population Growth: 2011-2016**



**Growth in DM's: 2011-**

| 2016              | 2011-2016 |
|-------------------|-----------|
| City of Cape Town | 264 990   |
| Cape Winelands    | 78 510    |
| West Coast        | 44 637    |
| Garden Route      | 37 013    |
| Overberg          | 28 610    |
| Central Karoo     | 3 236     |
| Total WC          | 456 996   |

**Garden Route DM Total Population**



**Garden Route District: Local Municipalities**



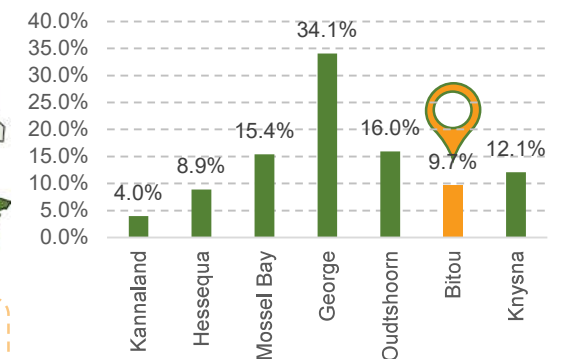
**GR DM:**

Households: 191 407 (2016)  
Avg. HH Size: 3.2 per/HH

GR DM 2016

Male 48.9% Female 51.1%

**Garden Route DM Total Pop 2016: 611 278**



Source: Stats SA Census 2011  
Stats SA Community Survey 2016

- **From Diagram 6 and Table 7** it is evident that Bitou LM represents 9.7% of the Garden Route District population with an estimated population of 59 157 people by 2016.
- Bitou LM recorded the highest population growth rate per annum among municipalities in the Garden Route District for the period 2001-2011 (5.4%) and the period 2011-2016 (3.8%). This is significantly higher than the Garden Route District's growth rate for the same two periods which was 2.4% and 1.3% respectively. The annual population increase in Bitou LM during the 2011-2016 period was about 2 000 people per annum.
- **Diagram 6** shows that the Bitou LM comprised about 21 914 households in 2016 with an average household size of 2.7 persons per household.
- The number of households increased at a rate of about 5.7% per annum between 2011 and 2016 which is higher than the population growth rate of 3.8% for the same period which indicates a gradual decrease in average household size (in line with the national trend).
- The majority of people moving to the Bitou LM area are from the Eastern Cape. Most of these people are low skilled individuals who are searching for employment opportunities.
- Some of the individuals also find themselves staying longer or permanently after the termination of their seasonal contract. The

seasonal nature of Bitou LM's economy is the causality of seasonal migration.

#### b) Age and Gender Profile

- The Bitou LM's gender profile is evenly balanced: male (50%) to female (50%) (refer to **Diagram 7**).
- The Bitou LM's Age and Gender Profile (population pyramid) indicates a larger young adult distribution aged 20 to 44, representing 43% of the total Bitou LM population (Diagram 7). The male population aged 20 to 44 represents 44% of the total male population; whilst the female population aged 20 to 44 represents 42% of the total female population.

#### c) Education Profile

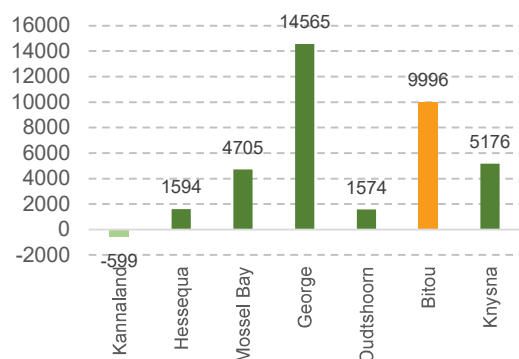
- It is evident from Diagram 7 that the secondary school level of education in Bitou LM increased from 49.8 in 2011 to 55.8% in 2016. However, it is alarming that the level of no schooling increased significantly, from 2.5% in 2011 to 9.6% in 2016.

## Total Population Growth Garden Route DM, 2011-2016

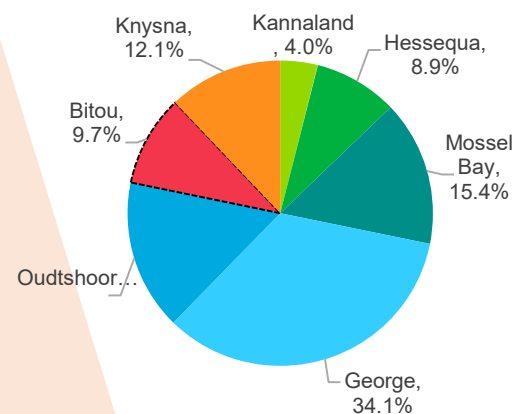
|              | 2011-2016     |
|--------------|---------------|
| George       | 14 565        |
| Bitou        | 9 996         |
| Knysna       | 5 176         |
| Mossel Bay   | 4 705         |
| Hessequa     | 1 594         |
| Oudtshoorn   | 1 574         |
| Kannaland    | -599          |
| <b>Total</b> | <b>37 011</b> |

**Growth Rate**  
2011-2016

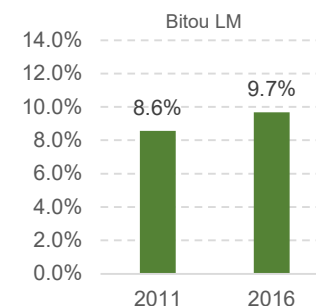
1.3%



## Population Contribution Garden Route DM 2016



Bitou LM Total Population Contribution to the GR District Increased by 1.1% from 2011 to 2016.



Source: Stats SA Census 2011  
Stats SA Community Survey 2016

## Total Bitou LM Population

Bitou LM Population  
Growth Rate: 2011-2016

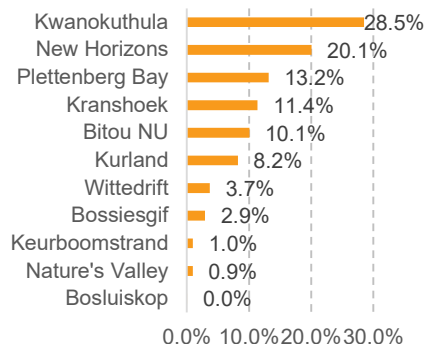
3.8%

2011:  
49 162

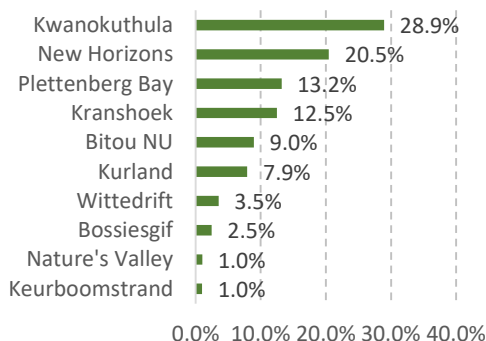


2016:  
59 157

### Bitou LM Population Distribution, 2011

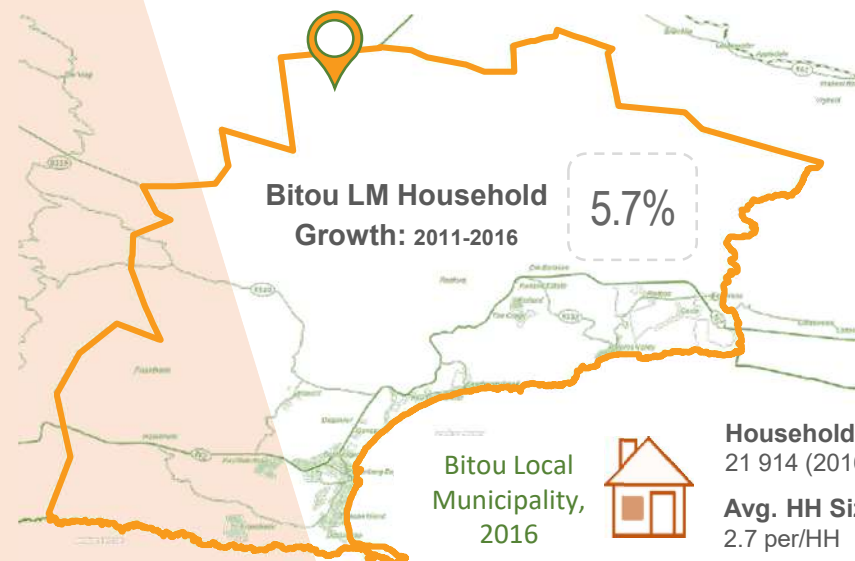


### Bitou LM Population Distribution, 2016



Bitou LM Household  
Growth: 2011-2016

5.7%



Bitou Local  
Municipality,  
2016



**Households:**  
21 914 (2016)  
**Avg. HH Size:**  
2.7 per/HH

**Table 7: Garden Route District Municipality: Population 2001-2016**

| Population                   |                |               |                |               |                |               | Incremental Population |               | Incremental Population p.a. |              | % Growth p.a. |             |
|------------------------------|----------------|---------------|----------------|---------------|----------------|---------------|------------------------|---------------|-----------------------------|--------------|---------------|-------------|
| Local Municipality           | Census 2001    | %             | Census 2011    | %             | CS 2016        | %             | 2001-2011              | 2011-2016     | 2001-2011                   | 2011-2016    | 2001-2011     | 2011-2016   |
| George                       | 149 436        | 32,8%         | 193 672        | 33,7%         | 208 237        | 34,1%         | 44 236                 | 14 565        | 4 424                       | 2 913        | 2,6%          | 1,5%        |
| Oudtshoorn                   | 84 692         | 18,6%         | 95 933         | 16,7%         | 97 509         | 16,0%         | 11 241                 | 1 576         | 1 124                       | 315          | 1,3%          | 0,3%        |
| Mossel Bay                   | 71 494         | 15,7%         | 89 430         | 15,6%         | 94 135         | 15,4%         | 17 936                 | 4 705         | 1 794                       | 941          | 2,3%          | 1,0%        |
| Knysna                       | 52 035         | 11,4%         | 68 659         | 12,0%         | 73 835         | 12,1%         | 16 624                 | 5 176         | 1 662                       | 1 035        | 2,8%          | 1,5%        |
| Bitou                        | 29 182         | 6,4%          | 49 162         | 8,6%          | 59 157         | 9,7%          | 19 980                 | 9 995         | 1 998                       | 1 999        | 5,4%          | 3,8%        |
| Hessequa                     | 44 114         | 9,7%          | 52 642         | 9,2%          | 54 237         | 8,9%          | 8 528                  | 1 595         | 853                         | 319          | 1,8%          | 0,6%        |
| Kannaland                    | 23 971         | 5,3%          | 24 767         | 4,3%          | 24 168         | 4,0%          | 796                    | - 599         | 80                          | - 120        | 0,3%          | -0,5%       |
| <b>Total Garden Route DM</b> | <b>454 924</b> | <b>100,0%</b> | <b>574 265</b> | <b>100,0%</b> | <b>611 278</b> | <b>100,0%</b> | <b>119 341</b>         | <b>37 013</b> | <b>11 934</b>               | <b>7 403</b> | <b>2,4%</b>   | <b>1,3%</b> |

**Table 8: Garden Route District Municipality: Households 2001-2016**

| Households                   |                |               |                |               |                |               | Incremental Households |               | Incremental Households p.a. |              | % Growth p.a. |             |
|------------------------------|----------------|---------------|----------------|---------------|----------------|---------------|------------------------|---------------|-----------------------------|--------------|---------------|-------------|
| Local Municipality           | Census 2001    | %             | Census 2011    | %             | CS 2016        | %             | 2001-2011              | 2011-2016     | 2001-2011                   | 2011-2016    | 2001-2011     | 2011-2016   |
| George                       | 38 867         | 32,6%         | 53 551         | 32,6%         | 62 722         | 33,1%         | 14 684                 | 9 171         | 1 468                       | 1 834        | 3,3%          | 3,2%        |
| Oudtshoorn                   | 18 124         | 15,2%         | 21 910         | 13,4%         | 23 362         | 12,3%         | 3 786                  | 1 452         | 379                         | 290          | 1,9%          | 1,3%        |
| Mossel Bay                   | 20 060         | 16,8%         | 28 025         | 17,1%         | 31 766         | 16,8%         | 7 965                  | 3 741         | 797                         | 748          | 3,4%          | 2,5%        |
| Knysna                       | 14 913         | 12,5%         | 21 893         | 13,3%         | 25 877         | 13,7%         | 6 980                  | 3 984         | 698                         | 797          | 3,9%          | 3,4%        |
| Bitou                        | 8 763          | 7,3%          | 16 645         | 10,1%         | 21 914         | 11,6%         | 7 882                  | 5 269         | 788                         | 1 054        | 6,6%          | 5,7%        |
| Hessequa                     | 12 510         | 10,5%         | 15 873         | 9,7%          | 17 371         | 9,2%          | 3 363                  | 1 498         | 336                         | 300          | 2,4%          | 1,8%        |
| Kannaland                    | 6 070          | 5,1%          | 6 212          | 3,8%          | 6 333          | 3,3%          | 142                    | 121           | 14                          | 24           | 0,2%          | 0,4%        |
| <b>Total Garden Route DM</b> | <b>119 307</b> | <b>100,0%</b> | <b>164 109</b> | <b>100,0%</b> | <b>189 345</b> | <b>100,0%</b> | <b>44 802</b>          | <b>25 236</b> | <b>4 480</b>                | <b>5 047</b> | <b>3,2%</b>   | <b>2,9%</b> |

Source: STATS SA, Population Census, 2001, 2011, Community Survey 2016

## Bitou LM Age & Gender Profile 2016

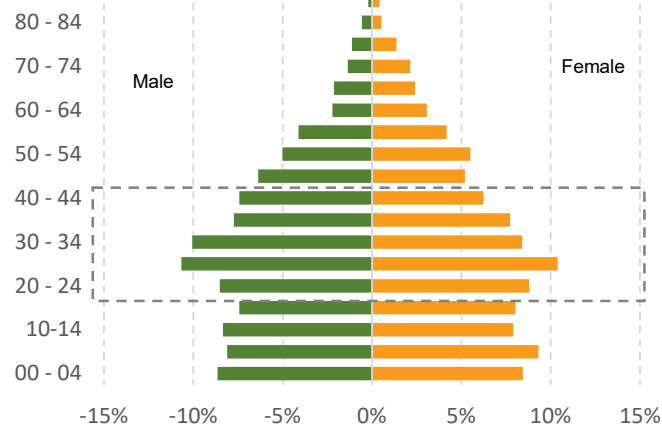
Largest segment of the Bitou LM pop is Aged: **20-44** (43%)

**Male**

50%

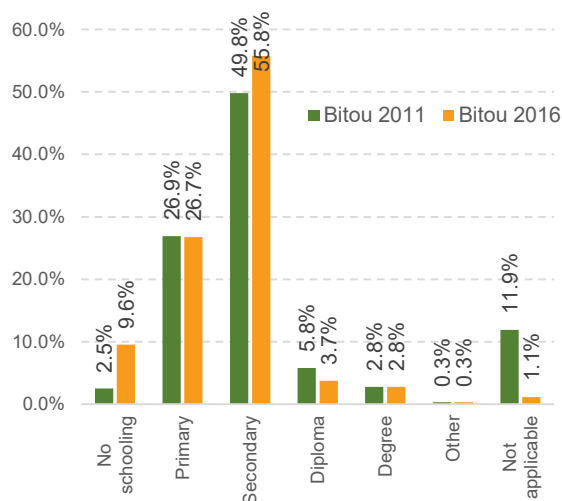
**Female**

50%

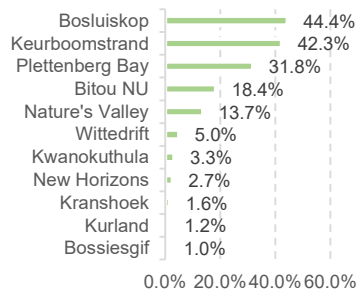


Source: Stats SA Census 2011  
Stats SA Community Survey 2016

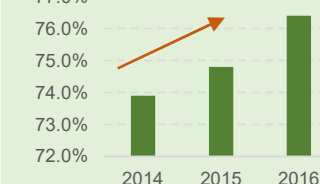
## Bitou LM Education Profile 2016



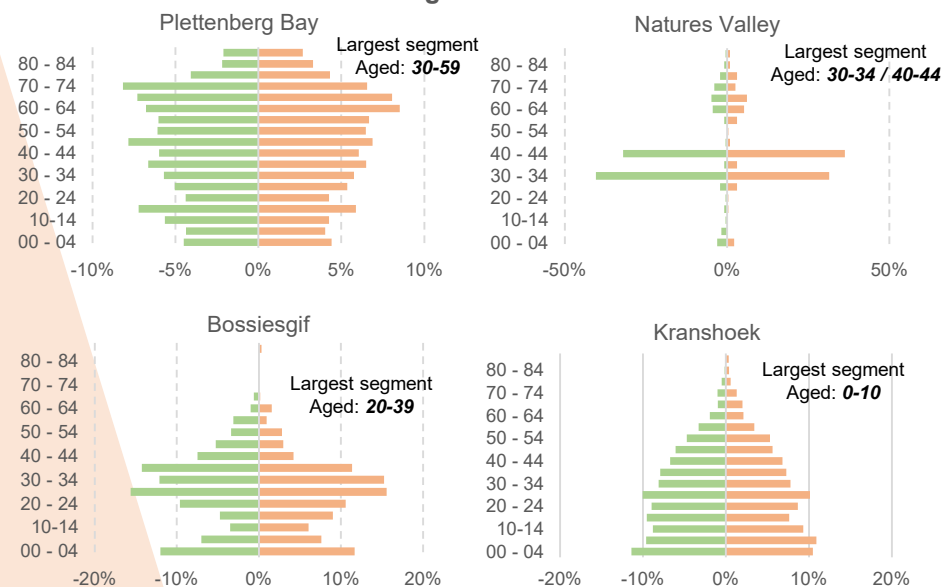
### Highest Tertiary Education 2016: (Diploma & Degree)



### Matric Pass Rate



## Age Profile 2011



### Increase in Level of Education (2011-2016)

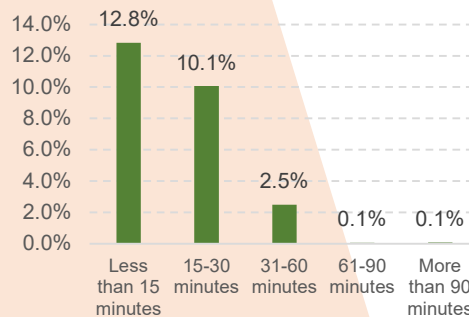
**No Schooling**

Increased: 7.1%

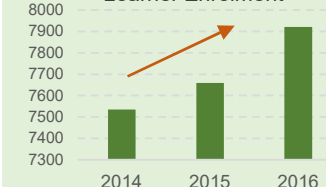
**Secondary Schooling**

Increased: 6.0%

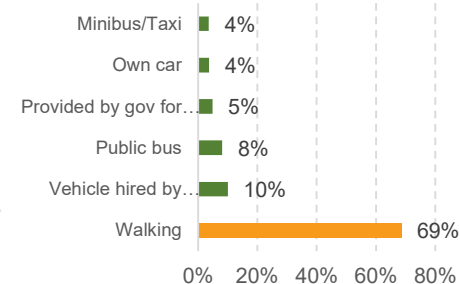
### Time taken to get to educational institution:



### Learner Enrolment



### Mode of transport to school / education facility:



### AGE COHORTS

The table below depicts the population composition regarding age cohorts. The total population is broken down into three different groups: Age 0 - 14: children; Age 15 - 65: working age population; Age 65+: seniors. A comparison with the base year of 2011 and the estimated numbers for 2023 show a growth in the percentage of seniors, a decline in the percentage of children despite a slight growth in total numbers, and a steady percentage in the working age population.

| Year | Children: 0 - 14<br>Years | Working Age: 15<br>- 65 Years | Aged: 65 + | Dependency<br>Ratio |
|------|---------------------------|-------------------------------|------------|---------------------|
| 2011 | 12 386                    | 33 649                        | 3 128      | 46.1                |
| 2018 | 14 159                    | 38 197                        | 4 066      | 47.7                |
| 2023 | 14 483                    | 41 820                        | 4 881      | 46.3                |

Source: Department of Social Development, 2017

This is an important factor in the calculation of the dependency ratio. In Bitou, this ratio was 46.1 in 2011 and will be 46.3 in 2023, after a peak of 47.7 in 2018. This ratio expresses the dependency of people who are part of the workforce (age 15 - 65) and those who are depending on them (children and seniors). A higher dependency ratio means a higher pressure on social systems and the delivery of basic services.

(Source: 2017 Socio-economic Profile: Bitou Municipality)

- Tertiary education (diploma and/or a degree) percentages are also consistently lower than in 2011, which is concerning. There is a significant difference in percentage of population with tertiary qualifications between the middle and high income areas and the disadvantaged communities (Kwanokuthula, New Horizons, Kranshoek, Kurland and Bossiesgif).
- Learner enrolment within the Bitou LM increased at a growth rate of 5.1% between 2014 (7 353) and 2016 (7 920), indicating improved access to education within the Bitou LM area.

- The matric pass rate of the Bitou LM increased since 2014. In 2016 the matric pass rate was 76.4%, 2.5% higher compared to the 2014 pass rate of 73.9%. However, the Bitou LM area matric pass rate remains well below the District's average of 85.8%.
- It is evident that 12.8% of learners spend less than 15 minutes to get to educational institution, and 10.1% spend between 15 and 30 minutes to get to educational institution. The time travelled correlates with the mode of transport to get to a school / education facility, indicating that 69% of learners walk to the school / education facility they attend.

### 3.2.2 Economic and Employment Profile

The **Western Cape Municipal Economic Review and Outlook, 2017** was used in compiling the Economic and Employment Profile.

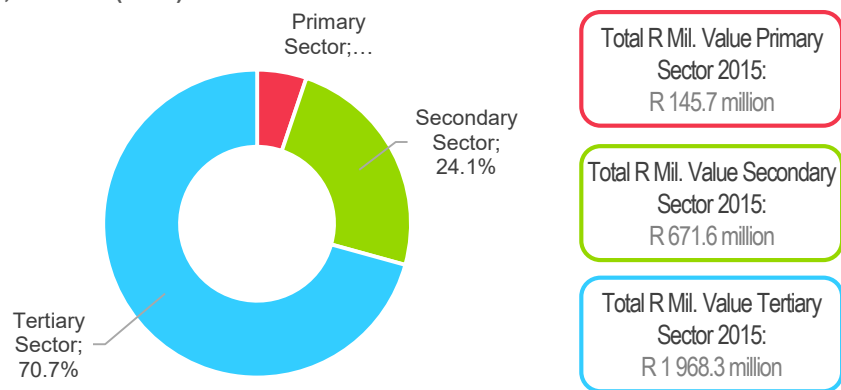
#### a) Economic Activity

The Bitou LM area is geographically the smallest municipal area within the Garden Route District and has the second smallest economy, contributing 7.4% to the economy of the District (refer to **Diagram 8**). Most of the economic activity occurs in Plettenberg Bay town.

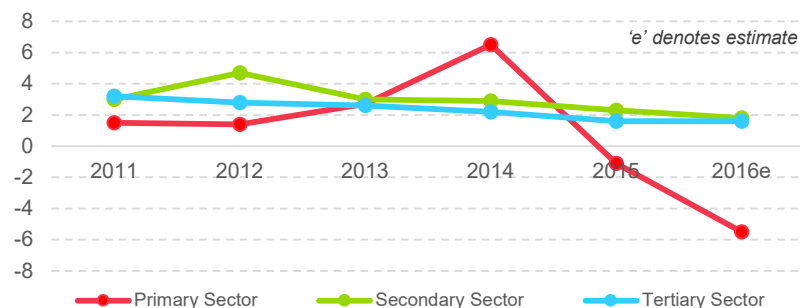
The Bitou LM area has a regional gross domestic product amounting to R2.79 billion (2015). Economic activity in the Bitou municipal area is dominated by the tertiary sector which amounted to R1.97 billion (or 70.7%) in 2015. The tertiary sector is estimated to have grown by 1.6% in 2016,

## Bitou LM Gross Domestic Product

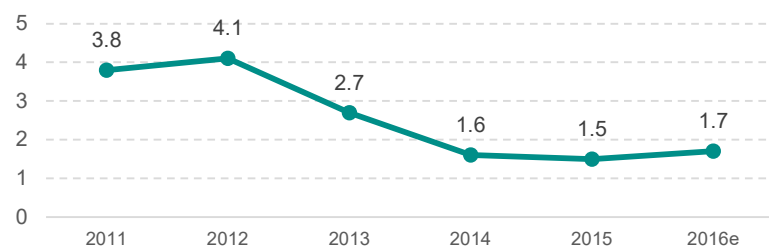
R2785,6 million (2015)



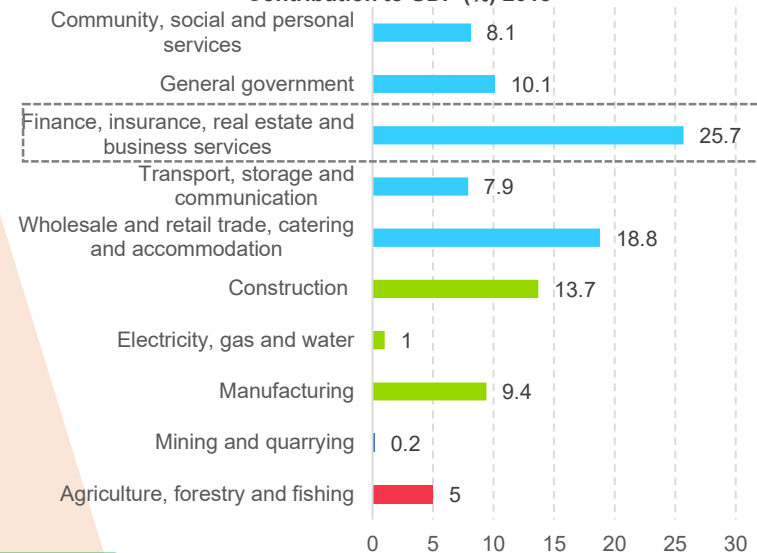
Real GDP growth (%) - 2010-2016e



Wholesale and retail trade, catering and accommodation GDP growth (%) - 2010-2016e



Contribution to GDP (%) 2015

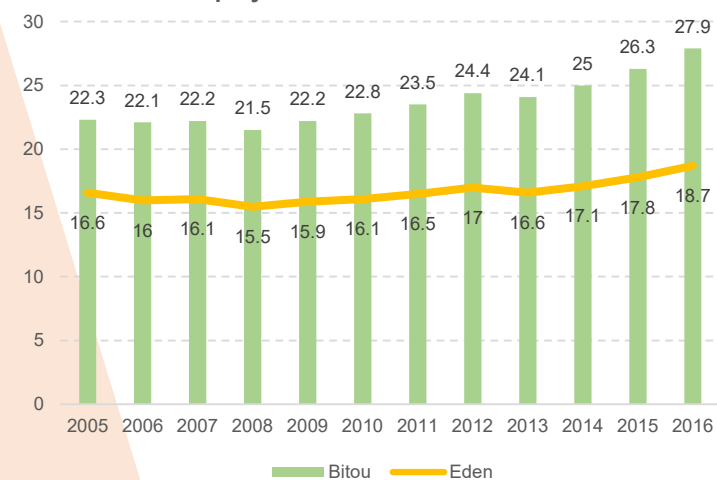


7.4% of the Eden District Economy

Unemployment Rate 2005-2016: Increased by 5.6%

Bitou LM Unemployment Rate increased from 2011 onward, to 27.9% in 2016.

Unemployment Rates 2005-2016



Source: Western Cape Municipal Economic Review and Outlook 2017

boosted by the finance, insurance, real estate and business services sector and the wholesale, retail trade, catering and accommodation sector (see **Table 9** below). The finance, insurance, real estate and business services sector recorded an average growth of 2.7% between 2005 and 2015, and has continuously reported high growth rates post the 2008 recession.

The secondary sector has also been recovering from the 2008 recession with even higher growth rates than the tertiary sector. The secondary sector, which totaled R671 million in 2015, grew by an average of 4.2% between 2005 and 2015. Real GDP growth for the secondary sector was slower in 2016 compared to 2012 but still positive, with a recording of 1.8% growth estimated for 2016. The secondary sector within the Bitou LM's economy is largely supported by the construction industry which recorded high growth rates in 2012 and 2013 at 5.0% and 4.8% respectively. However, this high growth in the construction industry slowed down by 2.0% in 2016.

The primary sector, which totaled R145 million in 2015, continues to struggle in terms of growth. Both the agriculture, forestry and fishing subsector, as well as mining and quarrying declined significantly by 5.5% and 7.5% respectively.

Table 9 indicates the Bitou LM's Gross Domestic Product per Region's (GDP) performance per sector.

The economic sectors that contributed the most to the Bitou LM's economy in 2015 was the finance, insurance, real estate and business services (25.7%), followed by the wholesale and retail trade, catering and

accommodation (18.8%) (which reflects the activities of the tourism industry), and thirdly the construction (13.7%) sectors.

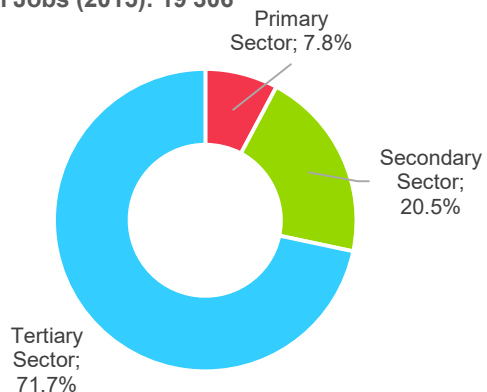
It is evident that one of the main economic industries, which is reflected across a number of sectors, is the tourism industry, which is highly seasonal in the Bitou LM area. A weakening national economy will affect domestic tourism and therefore have a major impact on the economy of the Bitou LM, as tourists tend to travel less during tough economic times. The wholesale and retail trade, catering and accommodation GDP growth percentage for the period 2010-2016e clearly indicate a decline in economic growth of this sector.

## b) Employment by Sector

There were approximately 19 306 people employed within the Bitou LM area in 2015 (refer to **Diagram 9**), translating to 8.6% of employment in the Garden Route District. The area is only the sixth largest employer in the District, after George, Mossel Bay, Oudtshoorn, Knysna and Hessequa municipal areas. The table below indicates the trend in employment growth within each economic sector in the Bitou LM's area.

## Bitou LM Employment by Sector: 2005-2016

Total Jobs (2015): 19 306

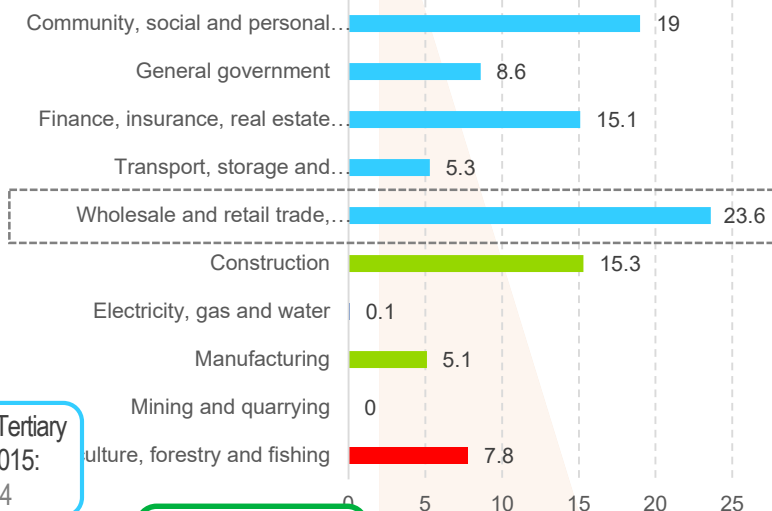


Total Jobs Primary Sector 2015: 1 507

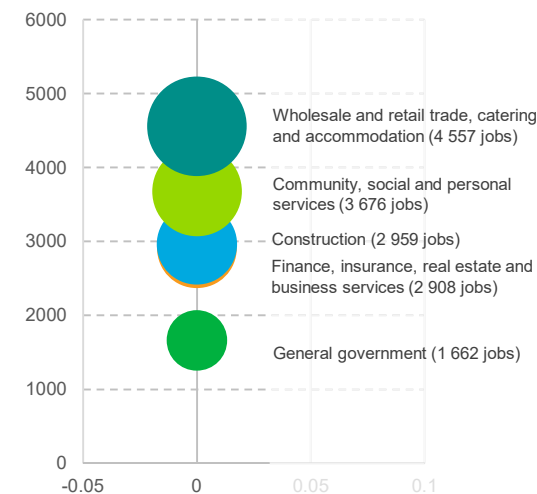
Total Jobs Secondary Sector 2015: 3 965

Total Jobs Tertiary Sector 2015: 13 834

### Contribution to Employment (%) 2015

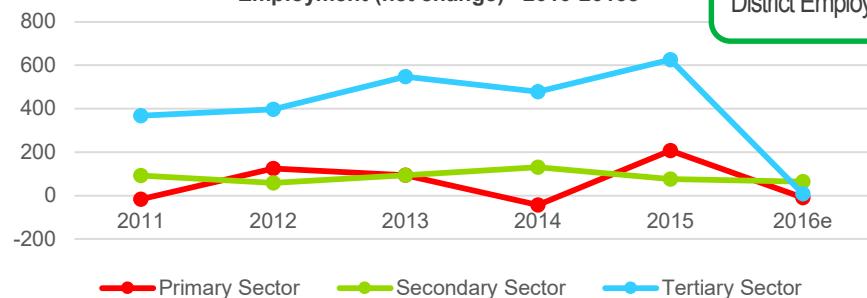


### Number of jobs 2015 (Top 5 Sectors)



Source: 2017 Socio-economic Profile: Bitou Municipality

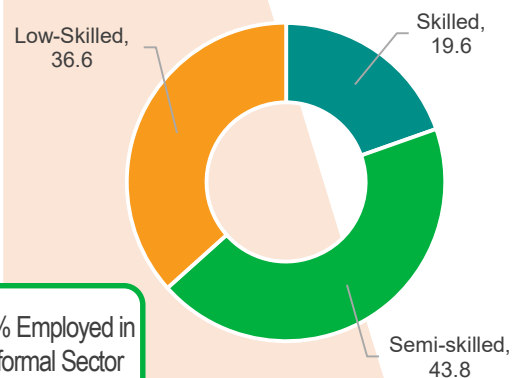
### Employment (net change) - 2010-2016e



8.6% of the Eden District Employment

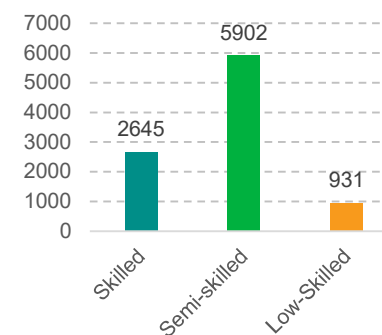
## Bitou LM Employment by Skill: 2015

### Formal Employment by Skill



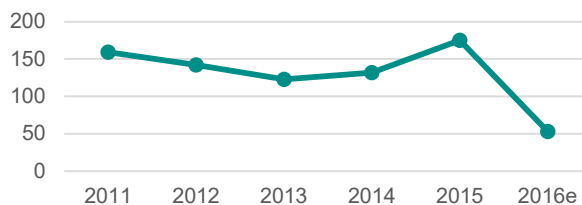
30% Employed in Informal Sector

### Number of Jobs by Skill



Source: Western Cape Municipal Economic Review and Outlook 2017

Wholesale and retail trade, catering and accommodation  
Employment growth (nett change) – 2010-2016e



**Table 9: Bitou LM GDPR performance per sector, 2005 - 2016**

|  | to GDP (%)  | value        |            |            |            |            |            |            |             |             |
|--|-------------|--------------|------------|------------|------------|------------|------------|------------|-------------|-------------|
|  | 2015        | 2015         | 2005-2010  | 2010-2011  | 2011       | 2012       | 2013       | 2014       | 2015        | 2016e       |
| <b>Primary Sector</b>                                  | <b>5.2</b>  | <b>145.7</b> | <b>2.4</b> | <b>2.2</b> | <b>1.5</b> | <b>1.4</b> | <b>2.7</b> | <b>6.5</b> | <b>-1.1</b> | <b>-5.5</b> |
| Agriculture, forestry and fishing                      | 5           | 140.6        | 2.6        | 2.3        | 1.5        | 1.7        | 2.7        | 6.5        | -1.1        | -5.5        |
| Mining and quarrying                                   | 0.2         | 5.1          | -1.8       | 0.5        | 1.4        | -5.3       | 1.6        | 5.2        | -0.6        | -7.5        |
| <b>Secondary Sector</b>                                | <b>24.1</b> | <b>671.6</b> | <b>4.2</b> | <b>3.2</b> | <b>3</b>   | <b>4.7</b> | <b>3</b>   | <b>2.9</b> | <b>2.3</b>  | <b>1.8</b>  |
| Manufacturing  | 9.4         | 262.3        | 2.8        | 2.9        | 4.9        | 3.3        | 1.4        | 1.3        | 3.6         | 2.2         |
| Electricity, gas and water                             | 1           | 28.4         | 1.9        | 4.1        | 2.5        | 20.4       | -1         | -0.8       | -0.5        | -6.2        |
| Construction   | 13.7        | 381          | 6          | 3.4        | 1.2        | 5          | 4.8        | 4.6        | 1.4         | 2           |
| <b>Tertiary Sector</b>                                 | <b>70.7</b> | <b>1968</b>  | <b>3</b>   | <b>2.5</b> | <b>3.2</b> | <b>2.8</b> | <b>2.6</b> | <b>2.2</b> | <b>1.6</b>  | <b>1.6</b>  |
| Wholesale and retail trade, catering and accommodation | 18.8        | 524.4        | 3          | 2.7        | 3.8        | 4.1        | 2.7        | 1.6        | 1.5         | 1.7         |
| Transport, storage and communication                   | 7.9         | 219.7        | 1.9        | 0.7        | 2.2        | 1.1        | 0.4        | 1          | -1.2        | 0.7         |
| Finance, insurance, real estate and business services  | 25.7        | 716.6        | 2.7        | 2          | 2.3        | 1.8        | 2.1        | 1.5        | 2           | 1.1         |
| General government                                     | 10.1        | 281.6        | 5.2        | 5.3        | 7.4        | 4.8        | 6.4        | 5.1        | 2.5         | 3.2         |
| Community, social and personal services                | 8.1         | 226          | 3.3        | 2.6        | 2.1        | 3.4        | 2.5        | 3.7        | 1.4         | 1.7         |
| <b>Total Bitou</b>                                     | <b>100</b>  | <b>2786</b>  | <b>3.2</b> | <b>2.6</b> | <b>3.1</b> | <b>3.1</b> | <b>2.7</b> | <b>2.6</b> | <b>1.5</b>  | <b>1.2</b>  |

Source: Western Cape Municipal Economic Review and Outlook 2017

Note: "e" denotes estimate

The tertiary sector employed 13 834 people (or 71.7%) in 2015, and most of the jobs were in the wholesale and retail trade, catering and accommodation sub-sector (4 557 or 23.6%), followed by community, social and personal services (3 676 or 19.0%) and the finance, insurance, real estate and business services (2 908 or 15.1%). The difference between jobs created and jobs lost (net employment) has remained positive for the tertiary sector although the positive balance shrunk between 2011 and 2016.

The secondary sector is mainly driven by the construction industry contributing 2 959 jobs (15.3%) to Bitou LM's total employment.

The primary sector in the Bitou LM economy employed 1 507 people (or 7.8%) in 2015, with almost all of the jobs falling under the agriculture, forestry and fishing sector (1 501).

**Table 10** (see overleaf) indicates the employment by sector for the Bitou LM in 2015 (refer to Diagram 9).

It is evident that the largest GDPR economic sector (Finance, insurance, real estate and business services), is not necessarily the largest employing sector (Wholesale and retail trade, catering and accommodation).

### c) Skills Levels

**Table 11** (see overleaf) shows the employment by skill level. Most of the formally employed workers in the Bitou LM area are semi-skilled (43.8%), with 36.6 per cent being low-skilled and 19.6% being skilled. Total formal employment has been increasing by an average annual rate of 1.0% over the last decade. The tourism industry requires workers of a variety of skills, ranging from low-skilled (waiters, cleaners etc.) to skilled workers (marketing, finance, etc.).

**Table 10: Bitou LM Employment by Sector\***

| Sector   | Contribution to employment (%) 2015 | Number of jobs 2015 | Trend        |              | Employment (net change) |            |            |            |            |           |
|--|-------------------------------------|---------------------|--------------|--------------|-------------------------|------------|------------|------------|------------|-----------|
|  |                                     |                     | 2005 - 2015  | 2010 - 2015  | 2011                    | 2012       | 2013       | 2014       | 2015       | 2016e     |
| Primary Sector   | 7.8                                 | 1 507               | -253         | 366          | -17                     | 125        | 94         | -43        | 207        | -9        |
| Agriculture, forestry and fishing                      | 7.8                                 | 1 501               | -250         | 368          | -17                     | 125        | 96         | -43        | 207        | -9        |
| Mining and quarrying                                   | 0                                   | 6                   | -3           | -2           | -                       | -          | -2         | -          | -          | -         |
| Secondary Sector                                       | 20.5                                | 3 965               | 390          | 452          | 92                      | 59         | 94         | 131        | 76         | 65        |
| Manufacturing  | 5.1                                 | 989                 | -224         | -26          | -8                      | -43        | 32         | -27        | 20         | -23       |
| Electricity, gas and water                             | 0.1                                 | 17                  | 5            | 2            | -                       | -          | -          | 1          | 1          | 1         |
| Construction   | 15.3                                | 2 959               | 609          | 476          | 100                     | 102        | 62         | 157        | 55         | 87        |
| Tertiary Sector  | 71.7                                | 13 834              | 4 456        | 2 414        | 367                     | 397        | 547        | 478        | 625        | 8         |
| Wholesale and retail trade, catering and accommodation | 23.6                                | 4 557               | 1 330        | 731          | 159                     | 142        | 123        | 132        | 175        | 53        |
| Transport, storage and communication                   | 5.3                                 | 1 031               | 365          | 168          | 5                       | 42         | 48         | -11        | 84         | -168      |
| Finance, insurance, real estate and business services  | 15.1                                | 2 908               | 806          | 414          | 67                      | 38         | 79         | 65         | 165        | -5        |
| General government                                     | 8.6                                 | 1 662               | 672          | 327          | 88                      | 54         | 57         | 133        | -5         | 57        |
| Community, social and personal services                | 19                                  | 3 676               | 1 283        | 774          | 48                      | 121        | 240        | 159        | 206        | 71        |
| <b>Total Bitou</b>                                     | <b>100</b>                          | <b>19 306</b>       | <b>4 593</b> | <b>3 232</b> | <b>442</b>              | <b>581</b> | <b>735</b> | <b>566</b> | <b>908</b> | <b>64</b> |

**Table 11: Employment by Skill Level\***

| Formal employment by skill | Skill level contribution (%) 2015 | Average growth (%) 2005 - 2015 | Number of jobs 2015 |
|----------------------------|-----------------------------------|--------------------------------|---------------------|
| Skilled                    | 19.6                              | 1.6                            | 2 645               |
| Semi-skilled               | 43.8                              | 0.4                            | 5 902               |
| Low-Skilled                | 36.6                              | 1.4                            | 4 931               |
| <b>Total Bitou</b>         | <b>100</b>                        | <b>1.0</b>                     | <b>13 478</b>       |

\*Source: Western Cape Municipal Economic Review and Outlook 2017

### 3.3.3 Development Pressures per Sector

#### PRIMARY SECTOR

##### Agriculture, Forestry and Fishing

This sector comprised R133.95 million (or 6.1%) of the Municipality's GDP in 2015. It displayed steady growth of 2.8% for the period 2005 - 2015, but nevertheless slowed in the post-recessionary period (the sector experienced a relatively low growth rate of 0.9% over the period 2010 – 2015).

Agriculture, forestry and fishing employed 7.9% of the Municipality's workforce. Employment growth over the period 2005 – 2015 has contracted by 0.8% per annum on average. Employment picked up significantly after the recession and grew at a rate of 4.4% per annum on average since 2010. On net employment, 226 jobs have been lost since 2005- not all of the jobs lost prior to and during the recession have been recovered.

The labour force in the primary sector is characterised by a relatively large proportion of low skilled labour. The majority (40.3 percent or 614 workers) of the workforce in agriculture, forestry and fishing operate within the semi-skilled sector, which has experienced a contraction of 0.7% since 2005, nevertheless grew by 4.6% per annum over the post-recession period (2010 – 2015).

The low-skilled sector employs 572 workers and the sector has contracted at a rate of 2.0% per annum since 2005 but experienced a notable recovery of 3.9% per annum over the post-recession period term (2010 – 2015). The skilled sector employs the smallest proportion of the industry's workforce (10.2% or 155 workers). This segment has shown robust growth post-recession (5.7% per annum), but a 0.4% per annum growth rate over the long term (2005 – 2015). The informal sector makes up 12.1% of the industry's workforce and was the only sector to experience meaningful long-term growth as employment grew by 2.7% per annum over the period 2005 – 2015. Informal employment within the agriculture, forestry and fishing industry furthermore experienced robust growth of 4.4% per annum since 2010.

**Table 12: Agriculture, Forestry, Fishing Sector GDP**

| GDP        |              | 2015            | Trend 2005 – 2015 | Recovery 2010 – 2015 |
|------------|--------------|-----------------|-------------------|----------------------|
|            |              | R133.95 million | 2.8%              | 0.9%                 |
| Employment |              | 1 525           | -0.8%             | 4.4%                 |
| Skills     | Skilled      | 155             | 0.4%              | 5.7%                 |
|            | Semi-skilled | 614             | -0.7%             | 4.6%                 |
|            | Low-skilled  | 572             | -2.0%             | 3.9%                 |
|            | Informal     | 184             | 2.7%              | 4.4%                 |

## SECONDARY SECTOR

### a) Manufacturing

The manufacturing sector comprised R195 million (or 8.9%) of the Municipality's GDP in 2015. The sector has experienced robust growth of 3.1% per annum on average over the period 2005 – 2015. GDP growth in the latter half of the decade (3.9% for period 2010 – 2015) outstripped the municipal growth rates when compared with the long term trend for the industry and the overall municipal GDP growth rate (2.5%) over the period under review.

The manufacturing industry employed 5.1% of the Municipality's workforce. Employment growth has contracted over the past decade hovering at -1.1% per annum over the period 2005 – 2015. Employment has nevertheless remained at a similar level in the post-recessionary period, contracting at 0.8% per annum. A disproportionately large number of workers employed in the manufacturing sector are classified as semi-skilled (41.1%) and low-skilled (19.7%). Only 13.0% of those employed in the manufacturing sector are categorised as skilled and a slightly larger number (26.2%) operate within the informal sector. All the aforementioned categories have failed to record meaningful growth rates and hence meaningful employment growth in the post-recessionary period.

**Table 13: Manufacturing Sector GDP**

| GDP        |              | 2015         | Trend 2005 – 2015 | Recovery 2010 – 2015 |
|------------|--------------|--------------|-------------------|----------------------|
|            |              | R195 million | 3.1%              | 3.9%                 |
| Employment |              | 978          | -1.1%             | -0.8%                |
| Skills     | Skilled      | 127          | 0.7%              | 0.7%                 |
|            | Semi-skilled | 402          | -1.8%             | -1.6%                |
|            | Low-skilled  | 193          | -1.1%             | -1.1%                |
|            | Informal     | 256          | -0.4%             | 0.3%                 |

**b) Construction**

The construction sector comprised R225.7 million (or 10.3%) of the municipality's GDP in 2015, making it the smallest sector in the region. Construction has nevertheless been the fastest growing industry since 2005, with growth averaging 7.0% per annum. GDP growth has nevertheless slowed since the recession and averaged 3.6% over the period 2010 – 2015 as the sector struggles to fully recover after the recession but maintains its position as fastest growing industry.

The construction sector employed only 15.1% of the Municipality's workforce. Employment in the municipality's construction sector has grown by 3.7% per annum since 2005. Approximately 2 925 jobs have been created on net since 2005. However, subdued growth has been witnessed

over the period 2010 – 2015 (where employment growth averaged 2.3% per annum).

The majority (50.8%) of the workers employed in the construction industry operate within the informal sector. Employment growth within this sector has been consistently high since 2005 (9.0 % per annum on average). *Low-skilled* employment makes up 10.1 percent and semi-skilled employment makes up 35.5% of the workforce in the construction industry, and both sectors have been experiencing sharp contractions post- recession. Workers employed in these sectors who have lost their jobs may have found employment in the informal sector. Skilled employment makes up only 3.6% of the construction industry's workforce, and has experienced robust growth over the past decade, with growth nevertheless slowing since 2010.

**Table 14: Construction Sector GDP**

| GDP        |              | 2015           | Trend 2005 – 2015 | Recovery 2010 – 2015 |
|------------|--------------|----------------|-------------------|----------------------|
|            |              | R225.7 million | 7.0%              | 3.6%                 |
| Employment |              | 2 925          | 3.7%              | 2.3%                 |
| Skills     | Skilled      | 105            | 3.6%              | 1.1%                 |
|            | Semi-skilled | 1 039          | 0.9%              | -1.4%                |
|            | Low skilled  | 296            | -1.9%             | -4.3%                |
|            | Informal     | 1 485          | 9.0%              | 8.1%                 |

## TERTIARY SECTOR

Commercial services encompass the wholesale & retail trade, catering & accommodation, transport, storage and communication and finance, insurance, real estate & business services industries. This sector comprised R1.23 billion (or 56.2%) of the Municipality's GDP in 2015 (the largest sector in the region) (**Table 15**). The industry grew steadily over the period 2005 – 2015 (3.1% per annum compared to the overall municipal average of 3.6%), the sector also performed modestly in the post-recessionary period continuing to grow at a rate of 2.1% per annum on average. This sector employed 44.5% of the municipality's workforce (making it the largest employer).

Employment has shown moderate growth throughout the past decade recording a 3.8% growth rate per annum. Employment growth has not maintained this trajectory, tapering off (2.3%) over the period 2010 – 2015 as the sector remains on par with the sluggish growth across other industries in the Municipality post-recession (overall municipal employment growth averaged 2.5% per annum over this period). The commercial services industry has created 2 568 jobs on net since 2005.

A large proportion (33.6%) of the industry's workforce are classified as *semi-skilled*, while 12.9% are classified as *low-skilled* and 14.6% are classified as *skilled*. The *low-skilled/semi-skilled/skilled* workforce has shown moderate growth both prior to and post-recession. Informal employment within the commercial services industry makes up 38.9% of the industries workforce

and has experienced robust growth of 11.4% per annum since 2005, and lower but still strong growth of 5.0% per annum over the last 5 years.

**Table 15: Tertiary Sector GDP**

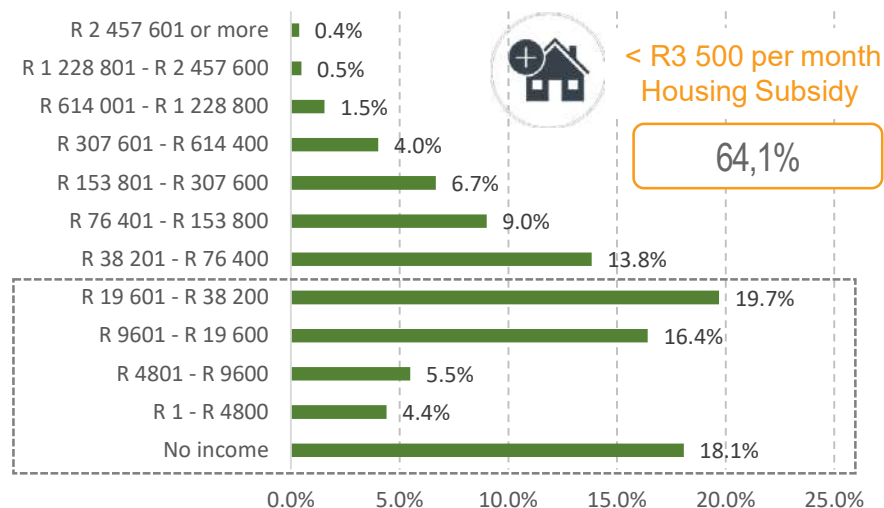
| GDP        |              | 2015          | Trend 2005 – 2015 | Recovery 2010 – 2015 |
|------------|--------------|---------------|-------------------|----------------------|
|            |              | R1.23 billion | 3.1%              | 2.1%                 |
| Employment |              | 8 602         | 3.8%              | 2.3%                 |
| Skills     | Skilled      | 1 258         | 0.6%              | 0.5%                 |
|            | Semi-skilled | 2 891         | 1.3%              | 0.9%                 |
|            | Low-skilled  | 1 107         | 1.4%              | 1.1%                 |
|            | Informal     | 3 346         | 11.4%             | 5.0%                 |

### 3.2.3 Income and Expenditure

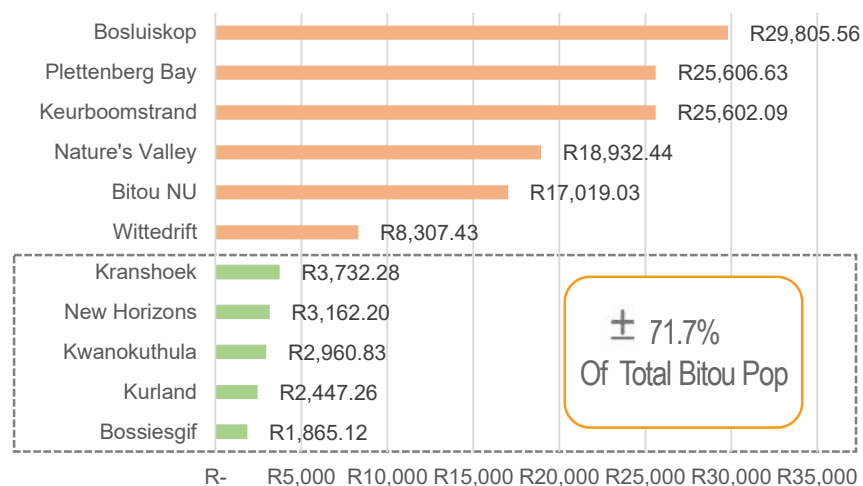
In a growing economy among which production factors are increasing, most of the household incomes are spent on purchasing goods and services. Therefore, the measuring of the income and expenditure of households is a major indicator of a number of economic trends (refer to **Diagram 10**).

Primarily, the **Household Income** is a good indication of the number of households within the municipal area qualifying for housing subsidies. In line with the Western Cape housing subsidy assistance programme, households earning a monthly household income (before deductions) less than R3 500 can apply.

## Bitou LM Annual Household Income: 2011 (%)



## Average Household Income per Month, 2011

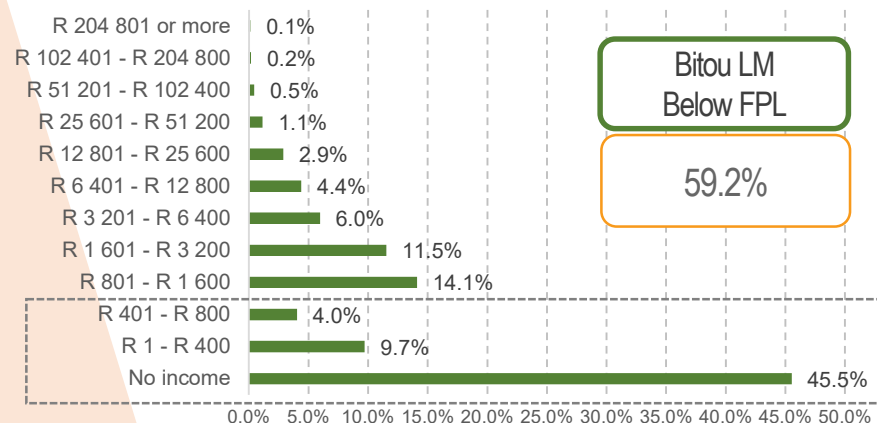


## Bitou LM Food Poverty Line : 2011



**< R758 per month**

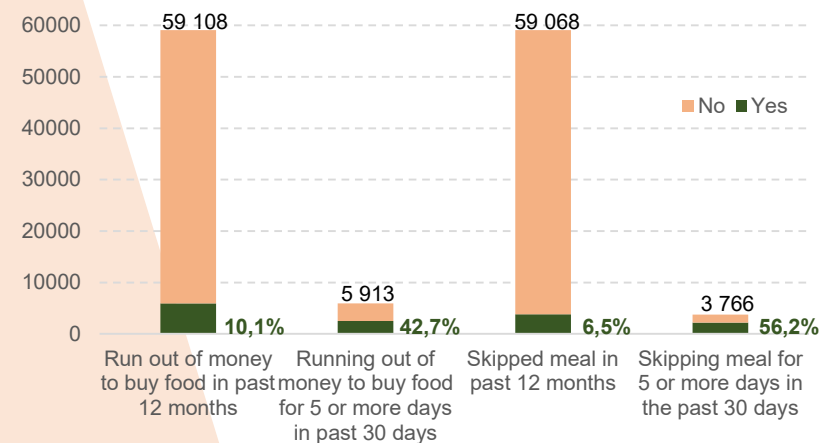
## Bitou LM Individual Income per Month (%)



## Indigent Households:

- 3843 in 2015
- 4434 in 2016

## Bitou LM Community Survey 2016 Food Security



Source: Stats SA Census 2011  
Stats SA Community Survey 2016

From Diagram 10 it is evident that 64.1% of the Bitou LM's households (10 666) earn less than R3 183 per month, thus qualifying for a housing subsidy.

The **Food Poverty Line** is a development indicator based on individual monthly income. This poverty line represents the amount of money that a person needs every month to purchase enough food to consume around 2,100 calories per day. Stats SA uses the figure of 2,100 calories per day as it is the United Nations threshold for the minimum daily energy requirement for someone living in an emergency situation. People living below this poverty line are considered to live in “extreme poverty”, as they are not able to afford to eat enough food to meet their basic physical needs. In 2017, the lower-bound poverty line was adjusted up to R758 per person per month and the upper-bound poverty line was adjusted up to R1 138 per person per month.

It is evident that 59.2% of the population recorded an individual monthly income of less than R800 per month, thus living below the poverty line. In terms of Food Security, 56.2% of 3 766 respondents interviewed indicated that they had skipped a meal for 5 or more days in a 30-day period, while about 6.5% of around 59 068 respondents indicated that they had skipped a meal over the past 12 months.

Indigent households in the Bitou LM area have increased from 3 843 in 2015 to 4 434 in 2016. This trend is in line with the increase of unemployment and lower economic growth. If this trend continues, it could impact on the

financial sustainability of the municipality and its ability to maintain the provision of services.

### 3.2.4 Bitou LM Economic Development Implementation Plan

The Bitou LM aims to create an environment conducive to private sector development which should lead to social upliftment of the broader community as well as an increase in public sector income. It acknowledges that economic development is the result of a multi-stakeholder cooperation in support of common development goals.

The six main sectors and industries identified as economic opportunities in the municipal area include:

- Tourism;
- Agriculture (including forestry) and more specifically Agri-processing – new;
- Marine biodiversity and aquaponics;
- Manufacturing and processing activities;
- Retail, wholesale and trade;
- Business including retail, finance, services and property.

Some of the commonly agreed preconditions for local economic growth in the Bitou LM are the following:

- Creating an environment conducive to investment through removal of red tape, increasing certainty for investors through planning and

establishing development plans in consultation with local business and other stakeholders;

- Upgrading, installation and maintenance of suitable bulk and link services, inclusive of electricity networks, potable water, sewerage, solid waste removal and transport linked to municipal sector plans and the Bitou SDF;
- Strengthening commercial transport, telecommunications and energy systems in consultation with external service providers;
- Enhancing education, health and social security services in consultation with sector departments and linked to the development plans;
- Strengthening the capacity of local residents to ensure effective participation in the envisaged economic opportunities;
- Participation in regional and provincial development initiatives;
- Good governance principles are established in the municipality.

With the above as background the LED department currently focuses on the following programmes and associated potential projects as listed in the table below:

**Table 16: Economic Development Implementation Plan**

| <b>BITOU ECONOMIC DEVELOPMENT IMPLEMENTATION PLAN</b> |   |
|---|---|
| <b>Programme 1: Tourism Development Programme</b>     |   |
| 1.  | Events Project                                    |
| 2.  | Plett Tourism Organisation                        |
| 3.  | Hotel and Conference Facility                     |
| 4.  | Robberg-Kranshoek Cultural Bridge Project         |
| <b>Programme 2: Business Development Programme</b>    |   |
| 1.  | Green Economy Project                             |
| 2.  | Contractor Development (Preferential Procurement) |
| 3.  | SMME Development (Accommodating Informal Traders) |
| 4.  | SMART Town Project                                |
| 5.  | Integrated Transport System                       |
| 6.  | Bio-Dome Project (Harkerville)                    |
| 7.  | Agriculture                                       |
| 7.1   | Agri Project (Land Reform/Utilisation)            |
| 7.2   | Harkerville Agri Project/ Village (Forest View)   |
| 7.3   | Agri Processing (Downstream Beneficiation)        |
| 7.4   | Tunnel Farming (Including Vertical Farming)       |
| 8.  | Airport Development                               |
| 9.  | Co-Ops for Recycling and Waste Reduction          |
| <b>Programme 3: Investment Development Programme</b>  |   |
| 1.  | Sewell Street Precinct                            |
| 2.  | Ladywood Civic Precinct                           |
| 3.  | Kwano Precinct                                    |
| 4.  | Marine Way Precinct                               |
| 5.  | Promoting Trade and Investment (Film and Media)   |
| 6.  | Land Development Project (RSEP)                   |
| 7.  | Expanded Public Works Programme (EPWP)            |
| 8.  | Community Work Programme (CWP)                    |

### 3.3 NATURAL ENVIRONMENT

#### 3.3.1 Topography and Hydrology

**Figure 9** illustrates the main topographical and hydrological features of the Bitou LM area. In broad terms it comprises a mountainous northern region and a more evenly sloped southern coastal region. The coastal region generally ranges between 0 – 250m above sea level. Slopes remain flat along the coastal region and become more undulating in the north where slopes of greater than 1:4 are prevalent. The mountainous northern parts reach heights of up to 1537m above sea level along the northern boundary of the Bitou LM. This highest watershed line also represents the southern border of the Langkloof along the Outeniequa Mountains.

As illustrated on Figure 9 the municipal area is divided into the following four main catchment areas:

- A narrow southern catchment around the Piesang River which links into the Piesang River Estuary;
- The Bitou River catchment which runs into the Keurbooms Estuary;
- The Keurbooms River catchment which also flows into the Keurbooms Estuary at Plettenberg Bay and which represents the largest catchment in the municipality – covering the central and northern parts of the municipal area. The Palmiet River covers the far-northern extents of this catchment
- The fourth main catchment covers the eastern part of the municipality and it consists of the Matjies River, the Sout River, the Bobbejaans

River, the Groot River and the Bloukrans River which represents the eastern boundary of the Bitou LM. The Salt River flows into the Salt River Estuary and the Groot/ Bobbejaan's River into the Groot River Estuary.

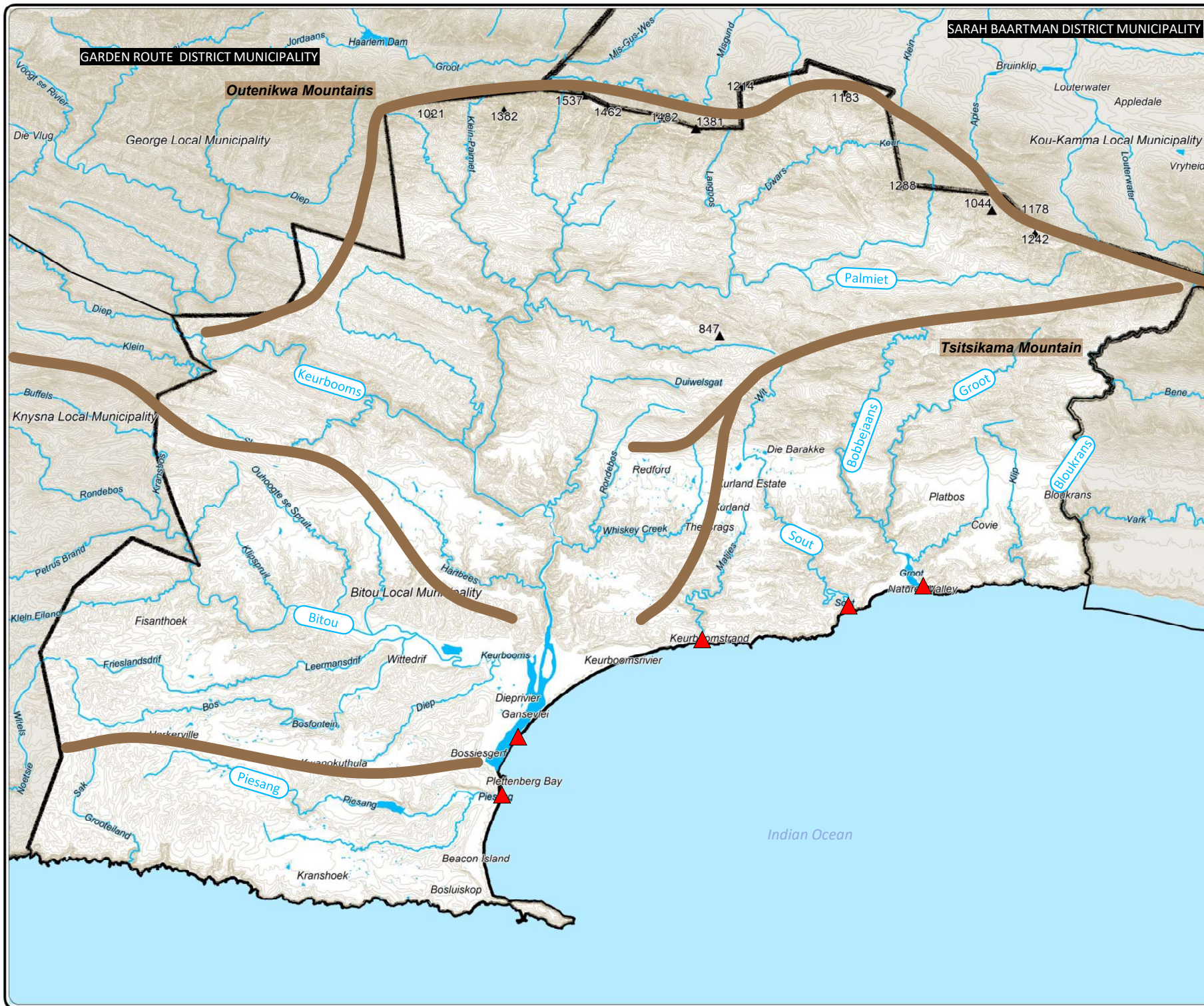
#### 3.3.2 Geology and Soils

As shown on **Figure 10** the majority part of the municipal area consists of Arenite, a sedimentary rock with sand grains of a medium nature. It is usually formed by erosion of other rocks or by sand deposits. The majority of Arenite is mountainous and steep sloping which is characteristic of the northern parts of the municipality.

Sedimentary deposits and rock types are located around the Keurbooms River mouth and along the south western coastal strip in the vicinity of Harkerville. Sediment consists of deposits of minerals and organic materials which are well suited for arable agriculture.

Conglomerate rock can be found in the vicinity of Wittedrift and near Kranshoek. Conglomerate consists of round fragments (larger than sand) which are cemented together and has very little commercial use apart from being used as decorative pebbles in gardens etc.

A long section of shale comprising clay minerals and quartz grains runs in an east west direction through the central parts of the municipality as depicted on Figure 10. A few smaller sections are also located in the north-



## Topography and Hydrology

### Legend

- Municipal Boundary
- Dams/Wetlands/Estuaries
- Rivers
- Contours
- Spot Heights
- Estuaries
- Primary Watershed Lines

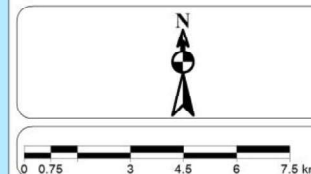
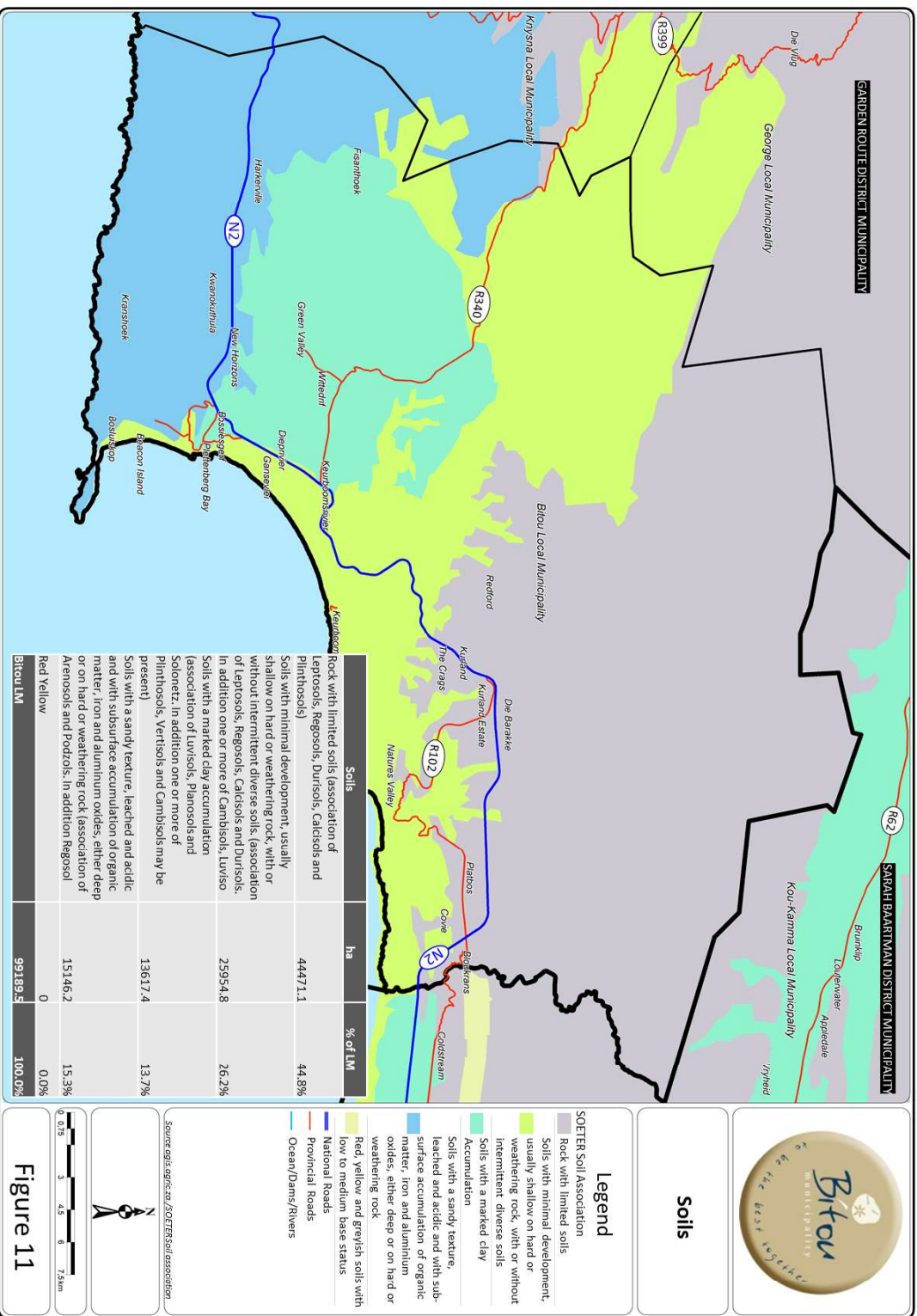
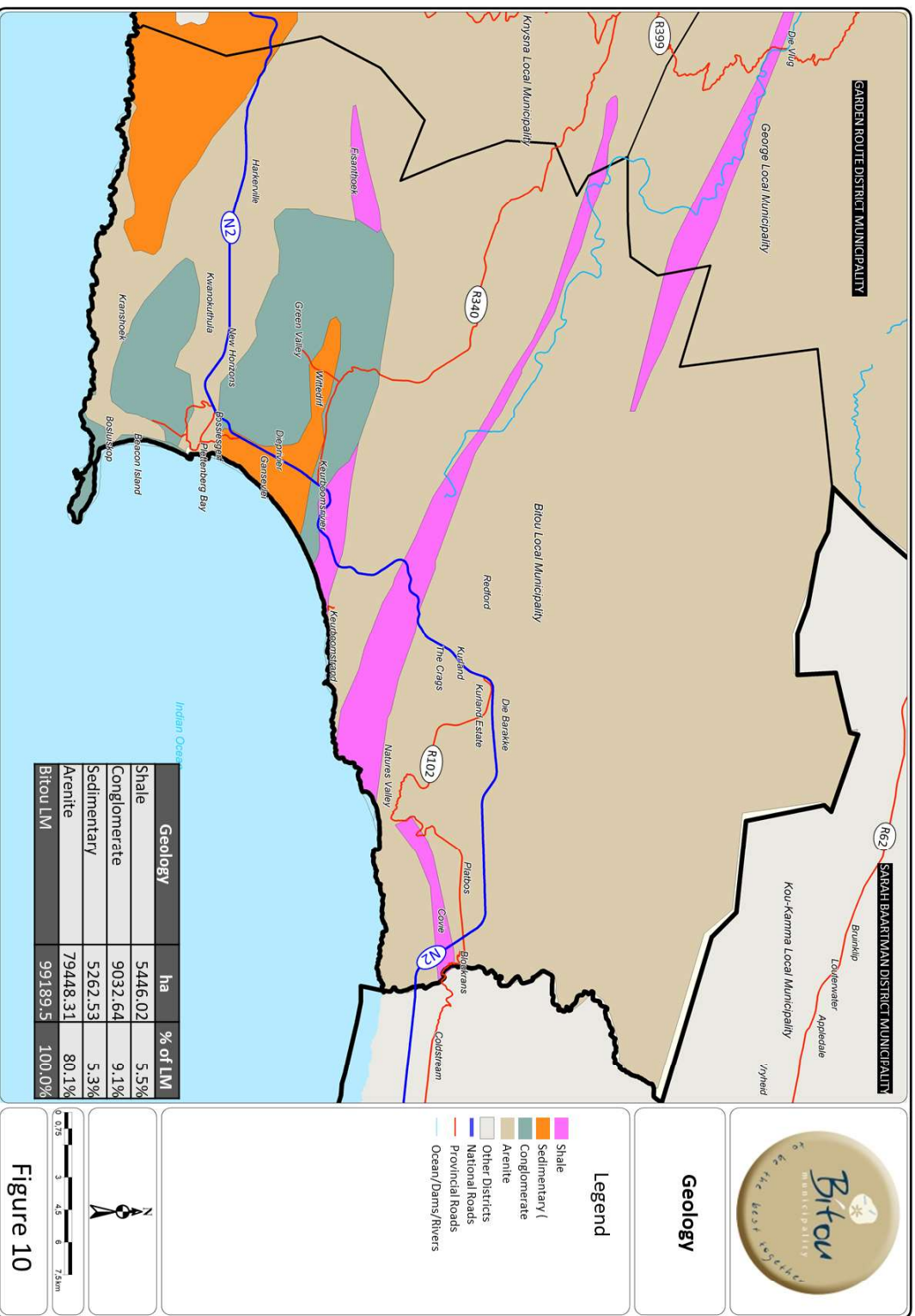


Figure 9



west, the east (near Covie) and in the west. Shale is most commonly found in lakes, lagoons, river deltas and floodplains.

According to **Figure 11** a higher concentration of clay soils can be found around Wittedrift with the remainder of the municipality containing soils with shallow weathering rock (around Keurbooms River and eastwards along the coastline up to the Bloukrans River) and soils with a sandy texture (around Kranshoek and towards Harkerville).

The deepest soil can be found to the west of Kranshoek, around Wittedrift and along the coast between Plettenberg Bay and Keurboomstrand.

### 3.3.3 Climate

The Bitou LM experiences its highest temperatures during the months of December to March ( $\pm 22^{\circ}\text{C}$  to  $\pm 24^{\circ}\text{C}$ ) and its lowest temperatures from June to August ( $\pm 10^{\circ}\text{C}$  to  $\pm 11^{\circ}\text{C}$ ).

The highest rainfall month is August with an average rainfall of 80mm being recorded. The lowest rainfall month is February with an average rainfall of 28mm. The higher rainfall areas receive about 1000mm – 2000mm annually and are located in the northern, coastal and southern regions of the municipal area. The central parts receive slightly less rainfall, 500mm – 1000mm. The higher rainfall areas generally coincide with the higher lying areas to the north.

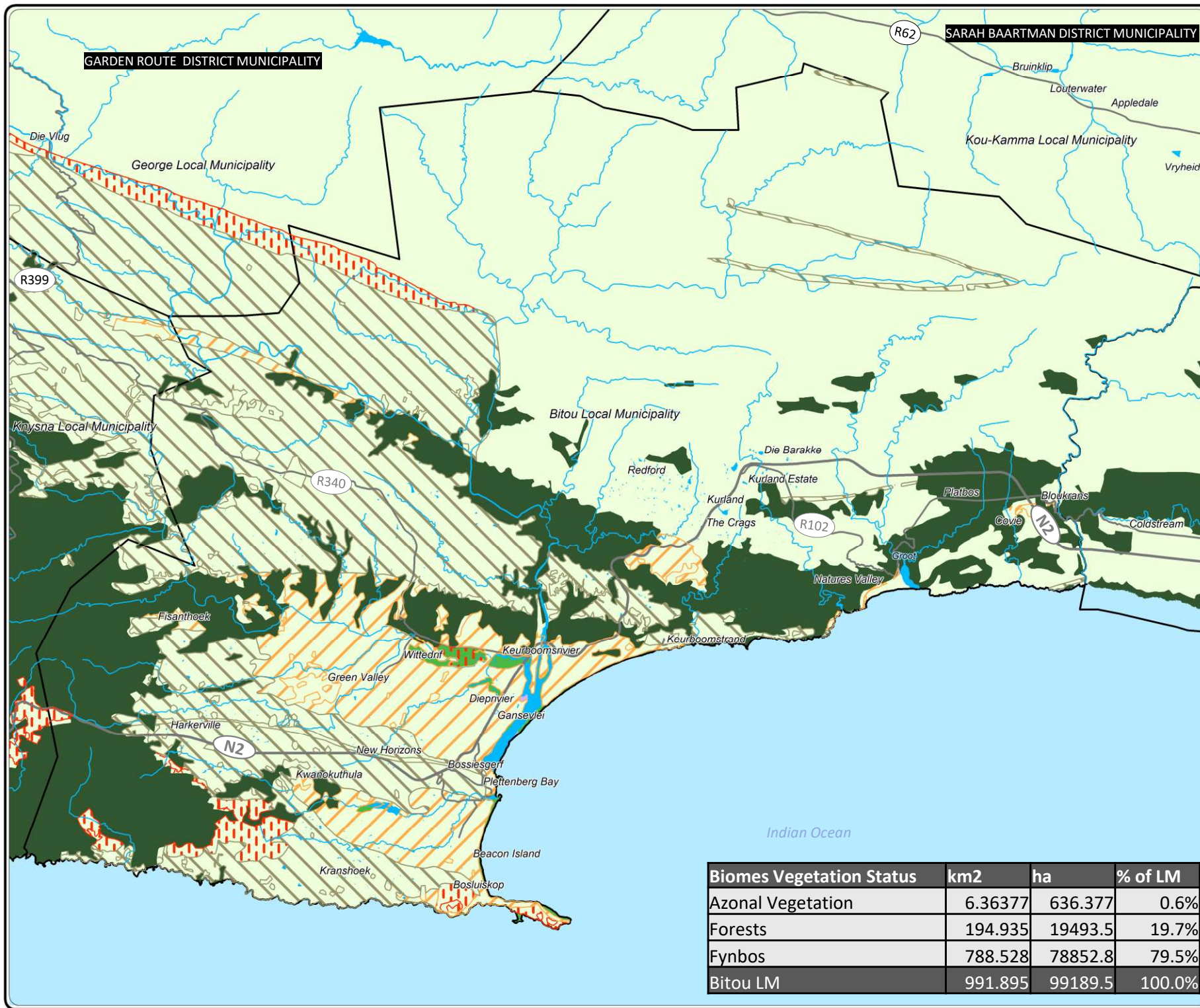
The predominant wind direction in the Bitou LM is westerly to west-south-westerly and west-north-westerly. The average mean annual wind speed is a moderate 4 – 5m/s.

The main expected features of climate change which may impact on the Bitou LM 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 domestic use and for both rain-fed and irrigated agricultural production. Water availability is the most important limiting factor for crop production in the Bitou LM 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.

### 3.3.4 Biodiversity

#### 3.3.4.1 Biomes and Vegetation Types

**Figure 12** shows the spatial distribution and extent of the different biomes represented in the Municipal area. It includes the Fynbos Biome which covers all parts of the municipal area (79.5% of the land); a Forest Biome located along an east-west strip through the central parts (19.7%); and the Azonal Biome around the Bitou River and Keurbooms Estuary (0.6%).



## Biomes and Vegetation Status

### Legend

- Vegetation**
- Forest
  - Fynbos
  - Azonal Vegetation
- Vegetation Status**
- Critical
  - Endangered
  - Vulnerable
- National Roads  
— Provincial Roads  
— Dams/Rivers

Source SANBI GIS Vegetation Map 2012  
SANBI BSP EcoSystem Threat Status 2016



| Biomes Vegetation Status | km2     | ha      | % of LM |
|--------------------------|---------|---------|---------|
| Azonal Vegetation        | 6.36377 | 636.377 | 0.6%    |
| Forests                  | 194.935 | 19493.5 | 19.7%   |
| Fynbos                   | 788.528 | 78852.8 | 79.5%   |
| Bitou LM                 | 991.895 | 99189.5 | 100.0%  |

Figure 12

Critically endangered vegetation occurs in the vicinity of Robberg, Wittedrift and to the far north-west along the Shale belt. Endangered vegetation areas are clustered to the north of Kranshoek in the Piesang Valley and from Plettenberg Bay towards Wittedrift around the Bitou River; and in the area to the south-west of The Craggs.

### 3.3.4.2 Biodiversity, Conservation and Heritage

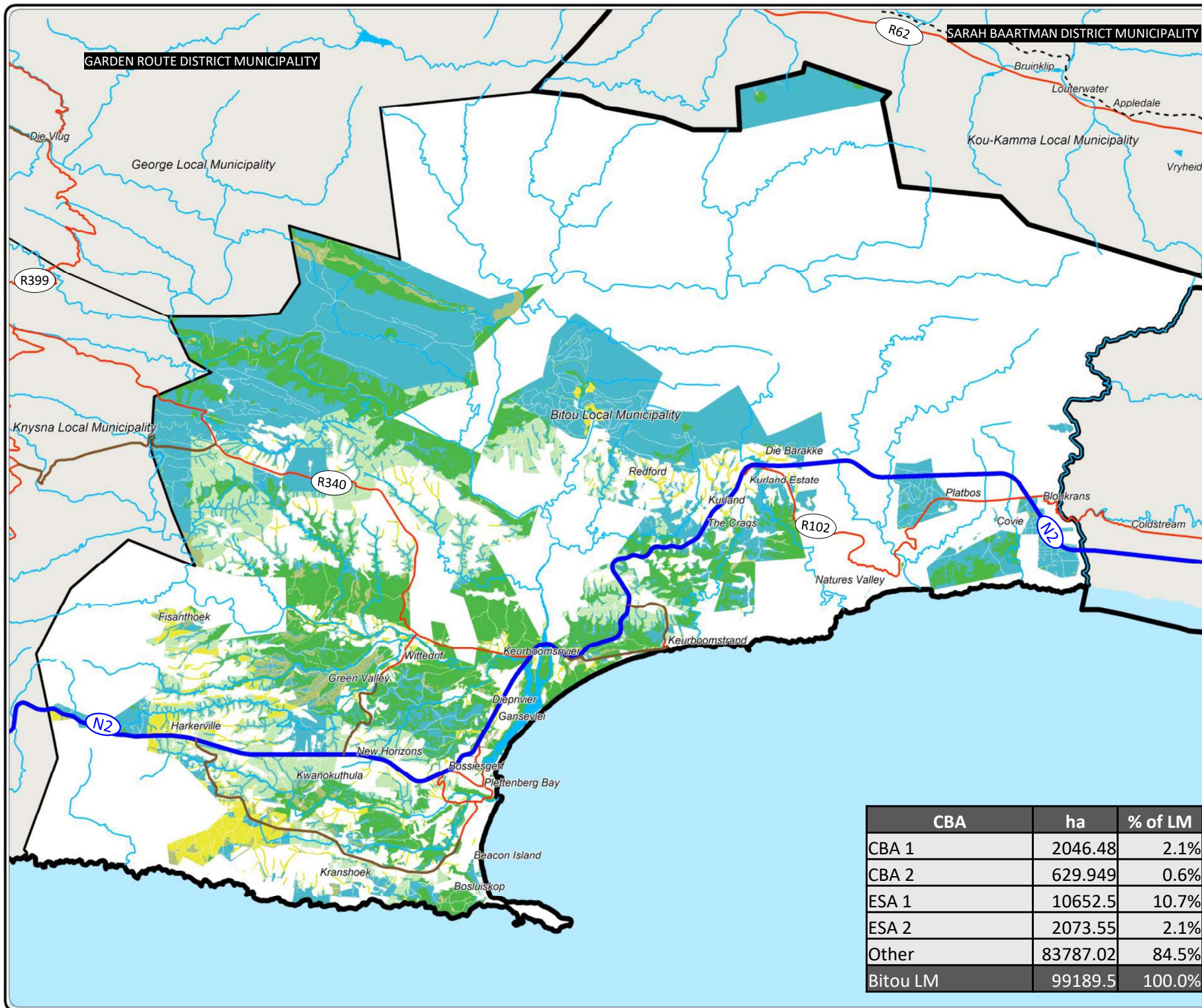
**Figure 13** shows the Biodiversity status of the municipality. Critical Biodiversity Areas (CBA 1) represent about 2.1% of all land in the municipality.

CBA 2 areas (about 0.6% of all land) mostly represent functional extensions/linkages of CBA1 areas while the Environmental Support Areas (ESA) are widely distributed through the remaining parts of the municipality covering an estimated 12.8% of the municipal area.

Large parts of the Municipality (50 666ha) are formally conserved (SANBI 2011). These areas consist of National Parks (45%), Provincial Nature Reserves (5%), Private Nature Reserves (1%) and Marine Protected Areas (0.05%) as listed below. **Figure 14** also illustrates the areas (terrestrial and marine) earmarked for future expansion of the Protected Areas footprint in the Bitou area.

|                               |  |
|-------------------------------|--|
| <b>National</b>               | <ul style="list-style-type: none"> <li>Garden Route National Park (including Whiskey Creek and Sinclair National Parks)</li> <li>EC Soetkraal Nature Reserve;</li> <li>Buitenverwachten Nature Reserve.</li> </ul>   |
| <b>Provincial</b>             | <ul style="list-style-type: none"> <li>Robberg Nature Reserve;</li> <li>Keurbooms River Nature Reserve.</li> </ul>   |
| <b>Private</b>                | <ul style="list-style-type: none"> <li>Plettenberg Bay Country Club;</li> <li>Wadrif Nature Reserve;</li> <li>Bobbejaanskloof Private Nature Reserve;</li> <li>Kiaruna Nature Reserve;</li> <li>Hog Hollow Nature Reserve;</li> <li>Olisshof Nature Reserve;</li> <li>Backenburn Nature Reserve;</li> <li>The Gums Nature Reserve;</li> <li>Annex Arch Rock Nature Reserve;</li> <li>Forest Hall Nature Reserve;</li> <li>Hebron Nature Reserve;</li> <li>Rivendell Nature Reserve.</li> </ul> |
| <b>Marine Protected Areas</b> | <ul style="list-style-type: none"> <li>Tsitsikamma National Park;</li> <li>Robberg Nature Reserve.</li> </ul>  |

The Garden Route National Park is located in the north and south-western parts of the municipal area and covers a large part of the municipal area. The park protects large Southern Cape indigenous forests (of national importance), fynbos areas, mountain catchments, rivers and lakes and is regarded as one of the most pristine national parks in South Africa.



## Biodiversity Areas (2017)

### Legend

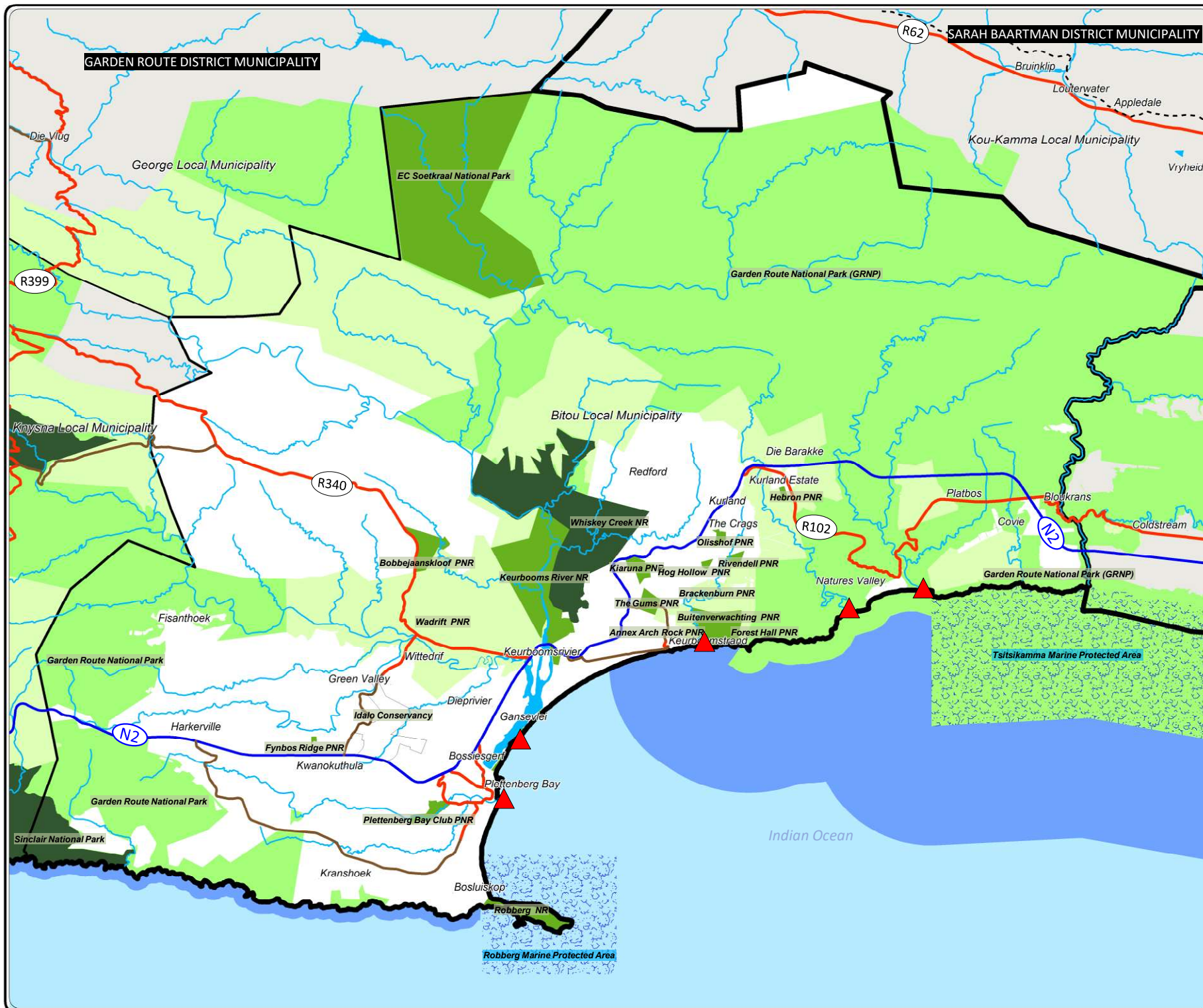
- CBA 1
- CBA 2
- ESA 1
- ESA 2
- National Roads
- Provincial Roads
- Dams/Rivers

| CBA      | ha       | % of LM |
|----------|----------|---------|
| CBA 1    | 2046.48  | 2.1%    |
| CBA 2    | 629.949  | 0.6%    |
| ESA 1    | 10652.5  | 10.7%   |
| ESA 2    | 2073.55  | 2.1%    |
| Other    | 83787.02 | 84.5%   |
| Bitou LM | 99189.5  | 100.0%  |

Source SANBI BSP Critical Biodiversity Areas 2017



Figure 13



## Protected Areas

### Legend

- National Park
- Provincial Nature Reserve
- Private Nature Reserve
- Forest Nature Reserve
- Marine Protected Area
- GRNP Proposed Expansion Area
- Proposed Marine Buffer
- Estuaries
- National Roads
- Provincial Roads
- Ocean/Dams/Rivers

Source: Environmental GIS SAPAD Q4 2018;  
Environmental GIS SACAD Q4 2018;  
Bitou SDF 2013



**Figure 14**

### 3.3.4.3 Heritage

The South African Heritage Resources Act (SAHRA) deals with the protection and management of heritage resources which it defines as, *“those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.”*

The South African Heritage Resources Agency (SAHRA) has declared four sites in the municipality as Provincial Heritage Sites (previously National Monuments). The four sites are:

- **The Old Timber Store, Timber House Lot:** The Old Timber Store was built in 1787 and has been disused since 1817 when the timber trade relocated to Knysna. The building was beautifully restored in 1893 and still remains today;
- **The Van Plettenberg Beacon Replica, Timber House Lot:** Governor Joachim Baron van Plettenberg, from the Dutch East India Company erected the Van Plettenberg Bay Beacon to indicate that Plettenberg Bay (then called Bahia Formosa) would belong to the Company. This occurred in 1778 and from that day the town was named after the governor as Plettenberg Bay. The Beacon Isle navigational beacon was erected in 1772 and today a beacon of stone still exists in roughly the same location as the original wooden structure;

- **The St. Andrews Church, Redbourne:** The St Andrews Anglican church in the Piesang Valley, built by William Henry Newdigate in the mid 1800's is another historical monument and the oldest ecclesiastical building in the district;
- **The Robberg Nature Reserve:** The reserve is a pristine example of animal and plant life existing in a unique coastal environment.

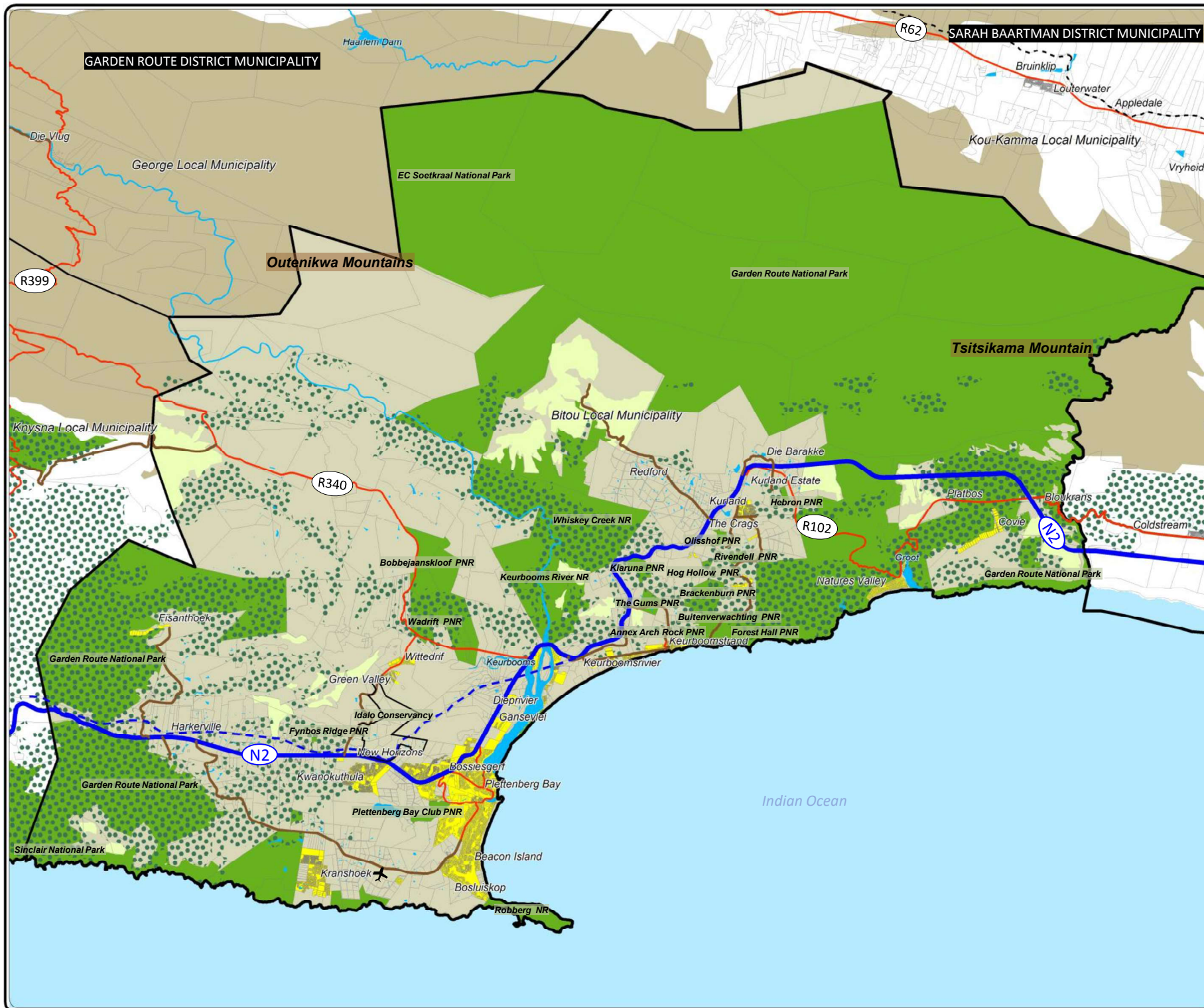
While there is a lack of capacity within the provincial department to manage these resources, it is important that historical and cultural sites are noted and flagged for planning purposes. The local Historical Society is fairly active in collating the historic records of the area.

In terms of development and planning, developers are required to inform the Heritage Resource Agency of a development (Section 38 of the Act) and, if necessary, undertake a Heritage Impact Assessment. (Refer to **Annexure C9** of this document for more detail).

## 3.4 MUNICIPAL LAND USE AND SPATIAL STRUCTURE

### 3.4.1 Hierarchy and Functional Role of Settlements

**Figure 15** depicts the municipal spatial structure and the distribution of some of the main land uses. Plettenberg Bay town is the largest settlement area in the municipality. It serves as the main service centre to the municipality providing the higher order medical, educational, commercial, business and administrative services to the population. It comprises the



## Municipal Spatial Structure and Movement Network

### Legend

- Municipal Boundary
- Towns and Settlements
- Mountain Range
- Protected Environments
- Indigenous/Natural Forest
- Extensive Agriculture
- Forest Plantation
- Dams/Estuaries
- Rivers
- National Roads
- Proposed N2 Bypass
- Provincial Roads
- Secondary Roads

Source: Environmental GIS SAPAD Q4 2018;  
Environmental GIS SACAD Q4 2018;  
EX Plan Google Earth Imagery 2018;  
Bitou SDF 2013;  
SANBI Vegetation Map 2012

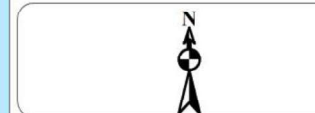


Figure 15

Central Business District in the central core area with high income residential development extending to the north along the Keurbooms Estuary and south along the coastline towards the Robberg Nature Reserve. Further to the west along route N2 are the low income residential areas of New Horizons and Bossiesgif (north of N2) and to the far-west the low income Kwanokuthula residential area (south of N2).

Kurland and Kranshoek are two smaller low income residential settlements to the north-east and south-west of Plettenberg Bay respectively. Kurland is located along route N2 while Kranshoek is more isolated and only accessible from the extension of Robberg Road.

A third small rural settlement (mixed income) exists at Wittedrift/Green Valley which is located to the north-west of Plettenberg Bay in an area characterised by extensive agricultural activity along the floodplain of the Bitou River.

Covie is a very small rural settlement surrounded by forests in the far-eastern extents of the municipal area.

Keurbooms River and Nature's Valley are well-known holiday towns/villages located along the coastline to the east of Plettenberg Bay. Both of these two areas have a limited number of permanent residents.

### 3.4.2 Movement Network and Hierarchy

#### 3.4.2.1 Major Road Network

The road network within the Municipality consists of a number of National, Provincial and District roads as illustrated on Figure 15.

The N2 freeway is the highest order route in the municipal area, traversing the Bitou LM in an east-west direction. In addition to serving the local population, it also plays an important role as an inter-provincial link between the Western Cape and the Eastern Cape; and in terms of the National Transport Master Plan it is intended to become a continuous coastal route linking the harbours of Richards Bay, Durban-eThekweni, East London, Port Elizabeth, Mossel Bay and Cape Town to one another. The Bitou section of this route falls between Port Elizabeth and Mossel Bay.

According to the Western Cape Road Network Information System (RNIS), the Average Annual Daily Traffic (AADT) along route N2 is estimated at approximately 12 500 vehicles passing through Bitou LM. The N2 freeway also forms part of the main freight movement between Cape Town and Port Elizabeth with an estimated 4.6 billion tons (or 7%) of the total annual national freight volume being transported between Cape Town and Port Elizabeth.

The mobility function of route N2 is continuously under pressure due to the extensive development occurring between Knysna and Plettenberg Bay which require more frequent direct access from the road.

Other important higher order routes in the municipal area include the following:

- R340 which links up with route R399 (Prince Alfred's Pass) from Knysna from where it runs through the Outenikwa Mountains towards Uniondale;
- Route R102 which serves Covie and Nature's Valley and which comprises the Groot River and Bloukrans Passes with associated scenery;
- Several lower order routes providing access to the rural parts of the municipality including:
  - Redford (northwards) and Forest Hall (southwards) in the vicinity of The Craggs-Kurland;
  - Road P394 providing access to the Keurbooms coastal strip;
  - The link road from Wittedrift to the N2 at Kwanokuthula;
  - Robberg Road providing access to the southern rural parts of the municipality around Kranshoek and towards Harkerville; and
  - The northward link from Harkerville towards Fisanthoek.

**Figure 16** illustrates the movement network in and around Plettenberg Bay town in greater detail with the following to be noted:

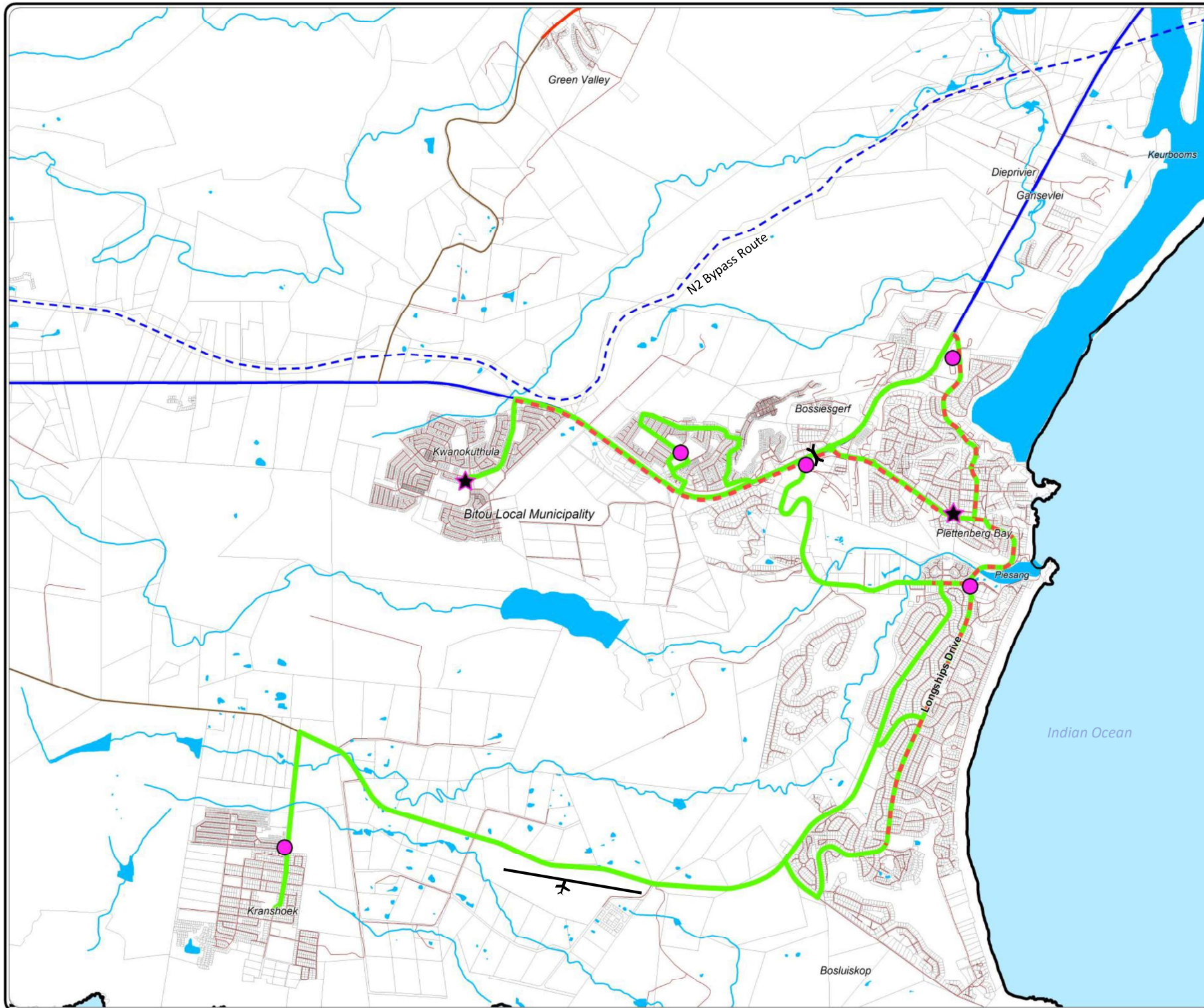
- Route N2 serves Goose Valley, the eastern part of the Central Core Area, New Horizons/Ladywood and Kwanokuthula;

- Beacon Drive and Marine Drive provide access to the main town from route N2. These two roads converge in the Plettenberg Bay CBD from where it provides access to the main beach and Piesang Valley Estuary;
- Piesang Valley Road links the southern extensions of Plettenberg Bay to route N2;
- Robberg Road links into Piesang Valley Road from where it runs in a southerly direction parallel to the coastline towards the Whale Rock Estates. From here it turns west passing the Plettenberg Bay Airport and the Kranshoek settlement from where it eventually links back into route N2 in the vicinity of Harkerville;
- Longships Drive is a lower order route running parallel to the east of Robberg Road and serving the surrounding residential areas right up to Whale Rock Ridge, where it links into the road providing access to the Robberg Nature Reserve.

In order to ensure that route N2 maintains its mobility function as inter provincial transport corridor, an alternative alignment has been identified for it from Keurbooms River towards Kwanokuthula as a western bypass, as shown on Figure 15 and 16.

#### 3.4.2.2 Public Transport

With 64% of the Bitou LM's population falling in the low income category it is inevitable that the majority part of the population is dependent on public transport as their only means of transport. Long distance services are



## Local Movement Network

### Legend

- ★ Taxi Rank
- Transfer Facility
- ✈ Pedestrian Bridge
- Pedestrian/Cycle Route
- Main Public Transport Route
- National Roads
- Proposed N2 Bypass
- Provincial Roads
- Secondary Roads
- Other Roads
- ✈ Airport
- Dams/Estuaries
- Rivers



Figure 16

provided by bus service operators, for e.g. Translux, Greyhound, City to City and Intercape which operate from the Shell Ultra City along route N2. Taxis also provide periodic long-distance services to Cape Town, Port Elizabeth, Willowmore and even up to Beaufort West.

Locally the main mode of public transport in the Bitou LM is the minibus-taxi while the only bus service in the municipality is for taking children to school. The primary public transport route in Plettenberg Bay is Marine Drive and route N2 from Kwanokuthula which are supplemented by other routes like Beacon Way, Piesang Valley and Robberg Roads. The highest volume of public transport occurs along the section from the taxi rank in Kwanokuthula, along route N2, into New Horizons at the new Magistrates' Court; then eastwards along route N2 up to the Piesang Valley taxi rank and then along Marine Drive up to the taxi rank in the CBD of Plettenberg Bay. Smaller formal/informal transfer points/facilities exist at New Horizons, Longships Drive intersection and at Kranshoek. Large numbers of hitch hikers also use the area next to Old Nic's as an important pick up point travelling towards Port Elizabeth. It should also be noted that there is no regular minibus taxi commuting service between Plettenberg Bay and Knysna/George. Hence large numbers of commuters hitch hike from Plettenberg Bay to these destinations.

#### **3.4.2.3 Non-Motorised Transport**

The Garden Route ITP indicates that there are more people who use non-motorised transport than public transport in Plettenberg Bay. Approximately

25% of commuters either walk or cycle. The most prominent pedestrian route in the municipal area is the pedestrian walkway/cycle lane along route N2 from Kwanokuthula towards town including the section of Marine Way from the Shell Garage to the CBD.

The Bitou IDP also noted in the past that walkways and bicycle lanes are required along the N2 between Kurland and The Craggs; along Beacon Way and along Longships Drive. It also stated the need for improved walkways and pedestrian crossings at schools in order to improve the safety of learners.

The need for a pedestrian bridge over the N2 to facilitate safe crossing of pedestrians at New Horizons and Kwanokuthula has also been noted. (There is one pedestrian bridge across route N2 in the vicinity of the Piesang Valley Road intersection opposite to Qolweni).

#### **3.4.2.4 Air Transport**

The Plettenberg Bay Airport is located to the southwest between Plettenberg Bay town and Kranshoek. The airport precinct covers an area of approximately 62 hectares and the facility comprises the following specifications as tabled below:

**Table 17: Plettenberg Bay Airport Specifications**

| Location        | ICAO Code | IATA Code | Usage     | Runway             | Runway Dimensions |
|-----------------|-----------|-----------|-----------|--------------------|-------------------|
| Plettenberg Bay | FAPG      | PBZ       | Civillian | Paved, not lighted | 1220 x 20 meters  |

One scheduled operator (CemAir) used to carry approximately 14, 000 passengers per annum between Cape and Johannesburg to Plettenberg Bay. CemAir operated 16 sectors per week out of season and 8 sectors per day in season. The airline moved approximately 170 passengers per day in peak through the airport. This excluded all general aviation activities.

CemAir's license has been suspended and it is uncertain what the future holds in this regard. The Plettenberg Bay Airport is furthermore home to a very successful sky diving operation as well as scenic gliding and aerobatic flights. There are currently 45 hangars with a waiting list for a further 23 hangars.

In order to accommodate the number of passengers carried by the airport it has to maintain a CAT/4 fire and emergency capability which implies the permanent presence of a fire fighting unit/station at the airport to serve both the on-field requirements as well as catering for the surrounding community.

Further critical infrastructure upgrades proposed/ planned for the airport precinct include the following:

- **Runway Extension:** Development possibilities include a 250-meter runway extension, a new terminal building, development of new hangars, a light industrial park, improved let-down facilities, and an extension of the ramp and parking facilities;
- **Airport Terminal Building Upgrade:** Funding is required for the proper separation of airside and landside activities and arrivals and departures. The threat of global terrorism and trafficking of illicit goods is also relevant to a small airport like Plettenberg Bay, hence aviation security needs to be maintained from point of departure to arrival;
- **Runway Rehabilitation:** The estimated cost for this initiative is around R3 000 000.00;
- **Hangar Space:** Further development budget for extension of hangar space as well as taxiways and supply of water and electricity is required. Hence the development of additional hanger accommodation will make the airport increasingly attractive to aircraft assemblers, Aircraft Maintenance Organisations, high-value manufacturing/assembly, and logistics, which could create much-needed employment opportunities and revenue in Bitou LM. In addition, the recent completion of the upgrade of Robberg Road between the Airport and Knysna will result in a much larger pool of potential users which will enhance the economic potential of the Plettenberg Bay Airport;
- **Airport Partners:** The aim is to put in place appropriate mechanisms for the development of the terminal building in conjunction with properly qualified partners on a Build-Operate-Transfer (BOT) basis. Such partners will bring vast technical and legal skill, access to resources,

and well-established supplier networks, and importantly ensure airport neutrality and fair access for all. They are also well positioned to ensure profitability, as the airport should be run as a business with a profit motive.

### 3.4.3 Economic Activity

The following section highlights the spatial distribution and extent of the main economic activities in the Bitou LM area:

#### 3.4.3.1 Forestry

As illustrated on **Figure 17** commercial plantations are mainly clustered in four functional areas within the Bitou LM:

- The Platbos area both to the east and west of the Groot River in the vicinity of route N2 in the far-eastern extents of the municipality;
- The areas adjacent to the north and north-west of Kurland and the Redford Farms and down towards Keurbooms around route N2 in the central parts of the municipality;
- The areas along Robberg Road from Kranshoek towards Harkerville;
- The areas to the west and north-west of Wittedrift.

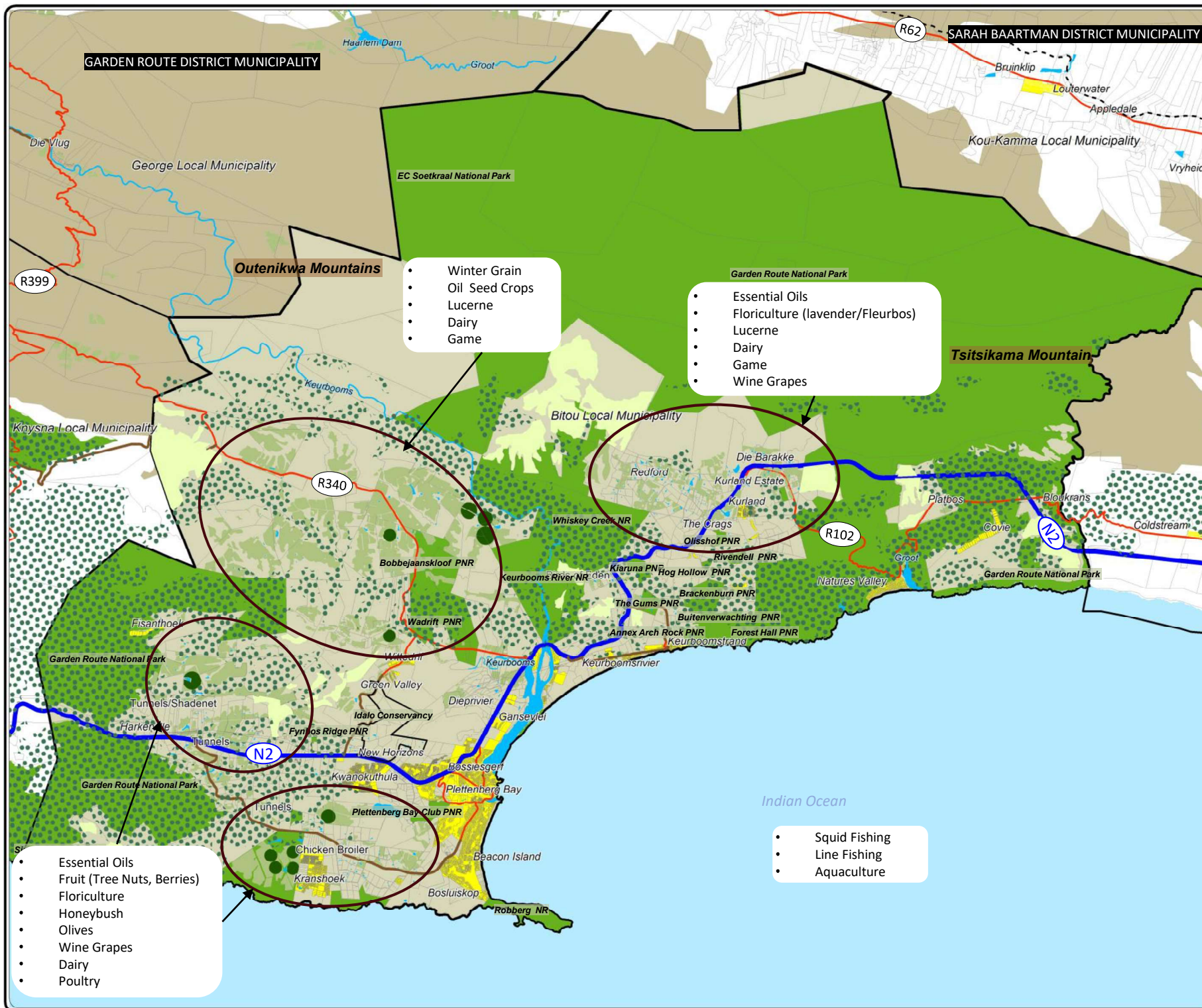
Collectively these plantation areas cover about 3 134 ha of land which represents about 3.15% of the total area of the municipality.

#### 3.4.3.2 Agriculture

Commercial agriculture does not make a significant contribution in the Bitou LM area since only a relatively small area can be cultivated. Approximately 38 000 ha of land (38.3% of the total municipal area) is utilised for agricultural purposes in the Bitou LM, of which cultivated fields comprise about 5 000 ha (5.04% of the municipal area) with only about 10% being irrigated (500 ha) (refer to Figure 17). Of the 5 000 ha of cultivated land only about 50% is currently actively utilised (about 2500 ha). The remaining balance of agricultural land of about 33 000 ha comprise bush and veldt partly used for grazing.

There are four functional agricultural areas within the Bitou LM area as schematically illustrated on Figure 17:

- The Wittedrift Valley and Uplands is the area with the most extensive commercial agricultural activities. The area comprises about 2 500 ha of cultivated land extending north-westwards along route R340 (see **Figure 18**). According to the Garden Route Rural Development Plan the main commodities in this area include Winter Grain, Oil Seed Crops, Lucerne, Dairy and Game;
- The Kurland-Redford area (**Figure 19**) accommodates mainly dairy farming, wine grapes, floriculture, essential oils, lucerne and game;
- Areas to the north, east and west of Kranshoek (**Figure 20**) produce commodities like essential oils, fruit (mainly tree nuts and berries), floriculture, honeybush, olives, wine grapes, dairy and poultry;
- The same holds for the parts of Bitou LM around Harkerville and northwards towards Fisanthoek (**Figure 21**).



## Agriculture and Forestry

### Legend

- Towns and Settlements
- Extensive Agriculture
- Annual Crop Farming
- Pivot Irrigation
- Commercial Plantations
- Indigenous Forests
- Protected Environment
- Mountain Range
- National Roads
- Provincial Roads
- Dams/Rivers
- Agri Focus Areas

Source: CSIR Agri Hub (2015);  
Bitou SDF 2013;  
EX Plan Google Earth Imagery 2018  
SANBI Vegetation Map 2012

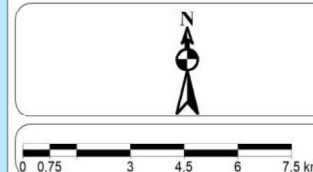


Figure 17



## Wittedrift Valley and Uplands Agricultural Area

### Legend

- Dams/Rivers
- National Roads
- Provincial Roads

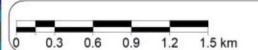
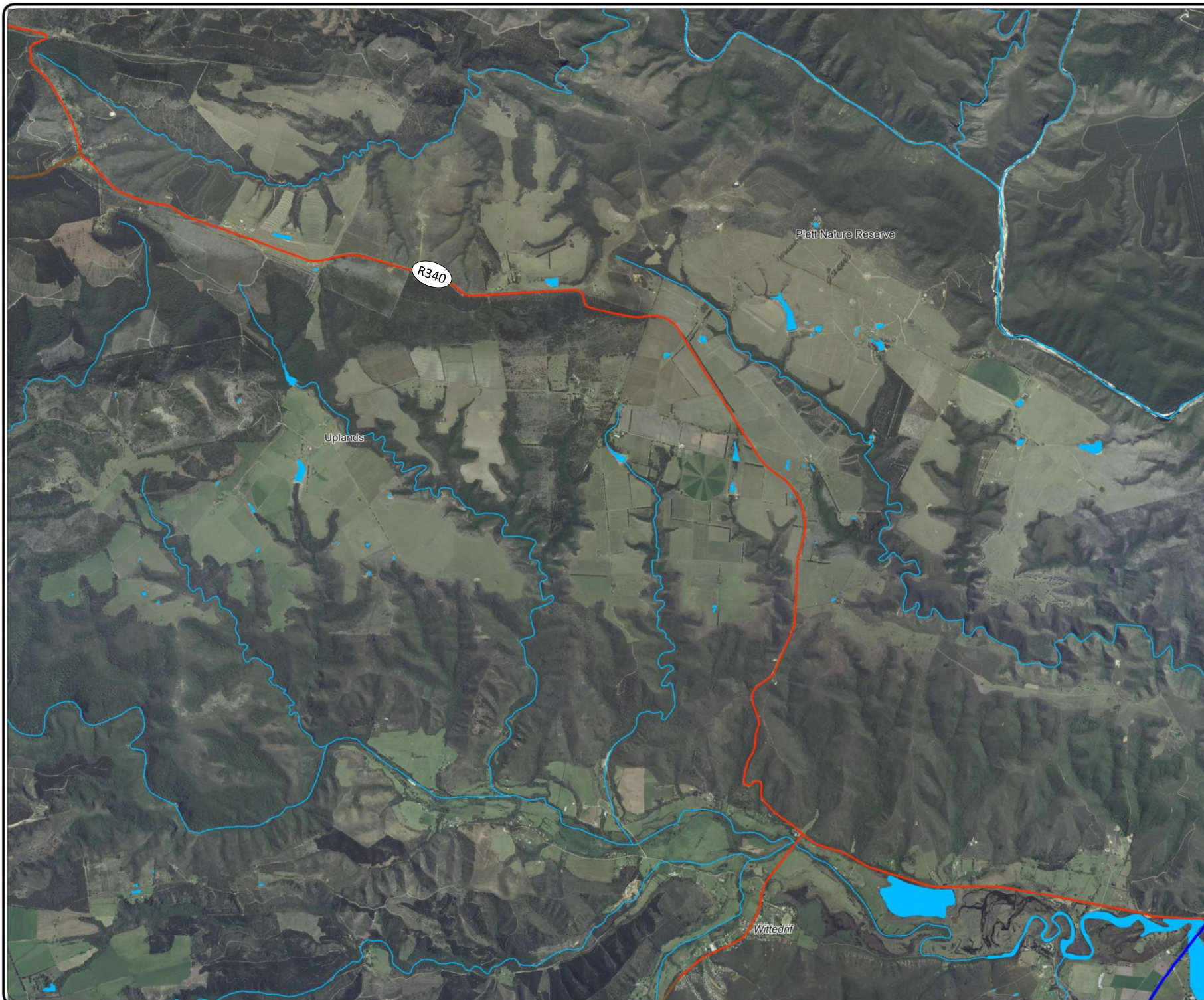


Figure 18





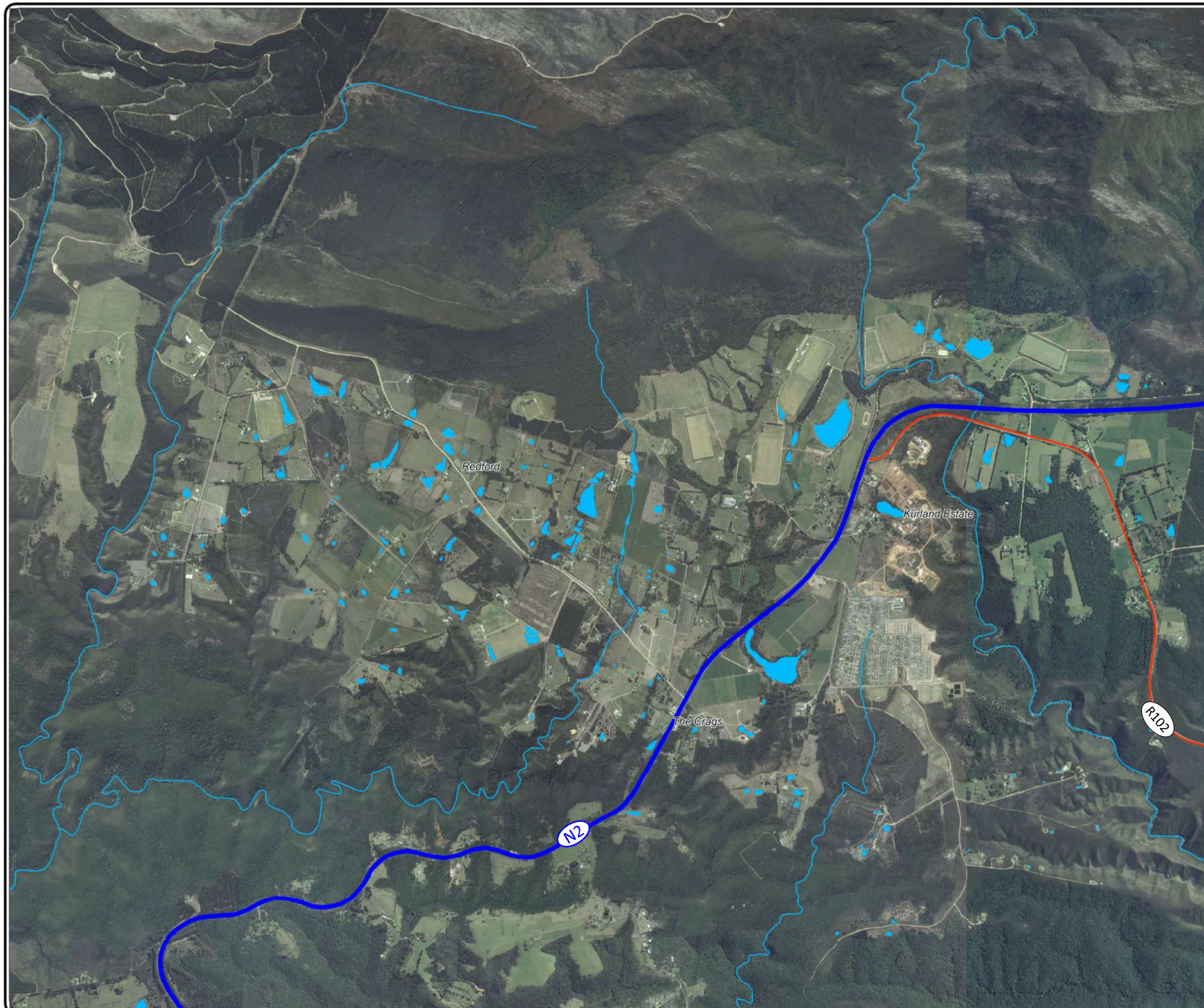
## Kurland and Redford Agricultural Area

### Legend

- Dams/Rivers
- National Roads
- Provincial Roads



Figure 19





## Kranshoek Agricultural Area

### Legend

- Dams/Rivers
- National Roads
- Provincial Roads
- Secondary Roads



Figure 20



## Harkerville Agricultural Area

### Legend

- Dams/Rivers
- National Roads
- Provincial Roads
- Secondary Roads



Figure 21



The following agri-businesses operate in the region:

- Len Hobson Agribusiness and Macadamia Consultant;
- Agricultural Services – Kleinberg Estates;
- Melton Organic Farm – The Craggs; and
- Tuinroete Agri – Piesang Valley

Large scale commercial farming operations are limited to enterprises such as Jakkalskraal Dairy farm, Sassenheim, Dagbreek Eiers, Forest Fresh Mushrooms, and Royston Farms.

Expansion of the following agricultural activities is to be addressed:

- Dairy production which has experienced positive growth since 2008;
- Beef production given the significant increases in demand;
- Honeybush farming which could be expanded to also add value and develop a variety of products to meet the demands/preferences of consumers;
- Fynbos production to respond to the growing export market and the growing trend towards environmentally friendly and organic products.

Honeybush tea in particular represents a significant opportunity for Agri-processing. Currently, all tea is transported to Somerset West for drying and cutting incurring additional costs for farmers. The potential for the establishment of a processing plant is high, as potential farmers from the Langkloof area would also be users of a processing plant.

Other agricultural opportunities which have been identified as being suitable for small scale and emerging farmers include:

- Vegetable and dried vegetable (form of tunnel farming);
- Poultry farming;
- Berry farming (tunnel farming);
- Viticulture and wine farming;
- Macadamia nuts;
- Cut flowers;
- Fish farming and Mari-culture;
- Biotech and organic farming;
- Fruit production (form of tunnel farming).

### **One Household One Hectare Programme**

The Bitou LM has agreed to be part of the One Household One Hectare program driven by the Department of Rural Development and Land Reform (DRDLR). The details of the Bitou Local Municipal Agriculture programme are as follows:

- Year 1 (2017/18): Kranshoek: Ericaville / Harkerville;
- Year 2 (2018/19): Kwanokuthula / New Horizons;
- Year 3 (2019/20): Craggs / Wittedrift / Covie;
- Year 4 (2020/21): Agri-processing initiative.

The Agri-farming and Agri-processing opportunities are key to poverty eradication, alleviation and economic growth strategies.

### 3.4.3.3 Mining and Quarrying

Denron and Robberg Quarries are the two leading companies actively mining at least seven quarries in the municipality. These two companies are the main suppliers of quarry aggregates: sand, stone and all other related road building materials.

Kurland Bricks also operates a quarry for the production of bricks to the north of Kurland Village.

### 3.4.3.4 Industrial/Commercial

The Bitou LM has one industrial/commercial area of significance next to Bossiesgif/Qolweni along route N2. Activities are mostly commercial in nature and no significant manufacturing occurs in the area. Almost all the stands in this area are developed as shown on **Figure 22**. The few undeveloped industrial stands to the south-west along route N2 have been invaded by informal dwellers and have now been earmarked for the in-situ formalisation of the informal settlement.

Tenants within the industrial area have raised safety and security concerns during the consultation process. There is currently no access control into the industrial area and the establishment of access control measures requires further investigation. Theron Street is the main access road to the industrial area but it is also the only road towards the residential area to the north.

### 3.4.3.5 Business

Business is mainly confined to the Central Business District of Plettenberg Bay as well as the two shopping centres located at the northern end of Plettenberg Bay at the N2-Beacon Road intersection.

A smaller business node also exists at the intersection of Piesang Valley Road/Beacon Isle Drive while local retail at Kranshoek, Kwanokuthula, New Horizons, Wittedrift, Kurland/ Craggs and Nature's Valley is limited to the very basic convenience goods and services to the respective local communities.

### 3.4.3.6 Tourism

Being part of the internationally acclaimed Garden Route the Bitou LM is one of the most popular tourism destinations in the Western Cape and South Africa.

It offers a wide range of popular tourism facilities/services and activities within in the municipality area as illustrated on **Figure 23**. These include renowned beaches, various historic sites (Beacon replica), Griekwa Monument, St. Andrews Redbourn Church, Forest Hall and Matjies River Cave, hiking and cycling trails, hotels and conference facilities and sightseeing features. Several very popular and well frequented nature reserves, including Robberg Nature Reserve (a World Heritage Site) and the Garden Route National Park are also located within the region.



## Plettenberg Bay Industrial Area

### Legend

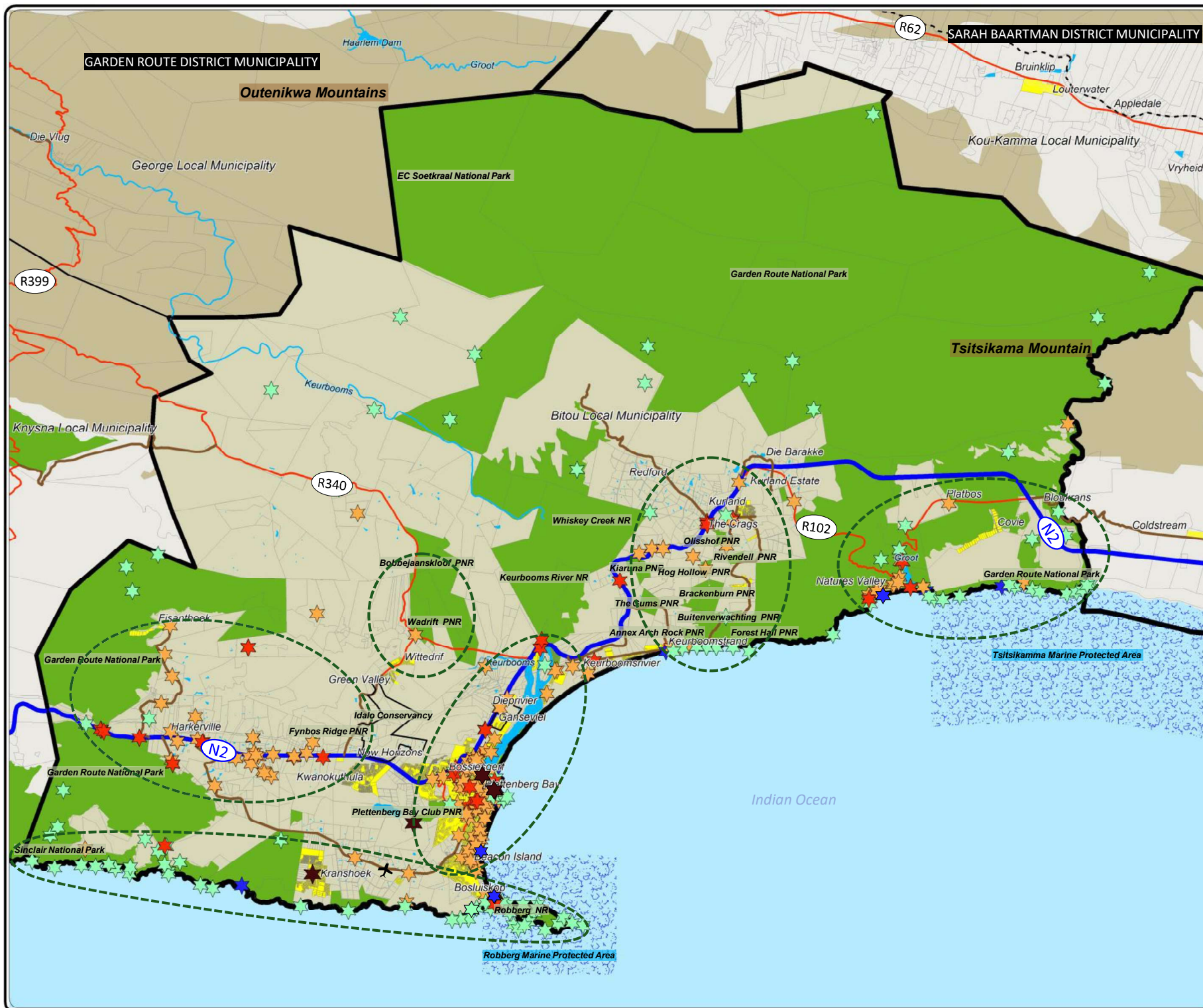
- Industrial Area
- National Roads
- Provincial Roads



0 10 20 40 60 80 100 m

Figure 22





## Tourism

## Legend

- ★ Activity
- ★ Beach
- ★ Conference / Accommodation
- ★ Historic
- ★ Scenery
- Marine Protected Area
- Protected Environment
- Mountain Range
- Extensive Agriculture
- National Roads
- Provincial Roads
- Dams/Rivers
- Tourism Functional Areas



Figure 23

- In 2010 Plettenberg Bay was awarded two accolades in the annual TripAdvisor Travelers Choice Awards. The town was also voted the third best Beach and Sun Destination in Africa and the eighth most popular wildlife destination in Africa. The town is also home to the locally and internationally renowned Plettenberg Bay beach and the iconic Beacon Isle Hotel, the Keurbooms Estuary and Keurboomstrand. As graphically illustrated on Figure 23 these facilities form part of a large cluster of tourism infrastructure and activities in the central part of the municipal area.
- Nature's Valley, which is located approximately 30km from Plettenberg Bay within the Tsitsikamma Forest is considered to be the most unspoilt area in the Bitou LM. The area is frequented for its indigenous forests, pristine coastline and the De Vasselot Rest Camp which forms part of the Tsitsikamma National Park. The internationally acclaimed Otter Hiking Trail stretches between Nature's Valley and Storms River, while the Groot River Pass and Bloukrans Pass are also popular tourist attractions.
- The Crags/Kurland is known for its polo fields, wildlife sanctuaries (the Elephant Sanctuary, Tenikwa Wildlife Sanctuary, Monkeyland, Birds of Eden), arts and crafts (The Mill) as well as the Bramon, Newstead, Kay and Monty, Lodestone and Redford Wineries.
- Wittedrift is visited for its abundance of bird life and natural beauty and it is the gateway to the Prince Alfred's Pass (another significant tourism attraction) from Plettenberg Bay.

- The Robberg-Kranshoek coastline area holds significant latent potential which is intended to be unlocked by the Robberg-Kranshoek Cultural Bridge project.
- The broader Harkerville area around route N2 is renowned for the extensive network of cycling trails, the Garden of Eden to the west thereof, as well as a number of tourism attractions located along the route (restaurants, accommodation, periodic fresh produce markets etc.).

#### 3.4.4 Housing

The Bitou LM's housing backlog as per a Housing Demand Audit and Database compiled during 2010 totals about 4 292 units as indicated on **Table 18**. The Western Cape Municipal Economic Review and Outlook (2017) estimates the housing backlog in Bitou LM at 4 829 units, comprising 1 765 backyard units and 3064 informal settlement units.

The Western Cape Province Department of Human Settlements provided the backlog figures per settlement as registered in their Housing Demand Database shown in the last two columns on Table 18. According to this information the backlog is closer to 8 238 units, but it should be kept in mind that non-qualifiers are hesitant to register their names on the database. Thus the actual demand could be significantly higher than reflected in the Demand Database. The following should be noted with regards to the Demand Database figures reflected on Table 18 (also refer to **Figure 24**):

- Kwanokuthula holds the largest backlog, totalling about 2 944 units.



- The New Horizons/Bossiesgif figure of 2 403 units comprises 899 units in New Horizons and 1 514 units in Bossiesgif.
- The Green Valley total stands at 330 units and Kranshoek demand stands at 1 207 units.
- Kurland/The Crags registered a demand of approximately 884 units.
- In Covie the registered demand is 24 units.
- In Harkerville the number is 65.
- The demand registered in Plettenberg Bay town is 371 units.

**Table 18: Comparative Housing Demand Summary, 2010/2012**

| PRECINCT                | Housing Demand Audit and Database (2010) | Housing Backlog (Council 2012) | Municipal Economic Outlook (2017) % |             | Western Cape Housing Demand Database |                |
|-------------------------|--|--------------------------------|-------------------------------------|-------------|--------------------------------------|----------------|
| Kurland/The Crags       | 674                                      | 432                            | 507                                 | 10%         | 884                                  | 10.73%         |
| Wittedrift/Green Valley | 277                                      | 198                            | 232                                 | 5%          | 330                                  | 4.01%          |
| Kranshoek               | 486                                      | 699                            | 820                                 | 17%         | 1207                                 | 14.65%         |
| Kwanokuthula            | 1373                                     | 1879                           | 2204                                | 46%         | 2944                                 | 35.74%         |
| New Horizons/Bossiesgif | 1476                                     | 800                            | 938                                 | 19%         | 2403                                 | 29.17%         |
| Harkerville             | 3  | 80                             | 94                                  | 2%          | 65                                   | 0.79%          |
| Plettenberg Bay         | 3  | 29                             | 34                                  | 1%          | 371                                  | 4.50%          |
| Covie                   |  |                                |                                     |             | 24                                   | 0.29%          |
| Other                   |  |                                |                                     |             | 10                                   | 0.12%          |
| <b>Total</b>            | <b>4292</b>                              | <b>4117</b>                    | <b>4829</b>                         | <b>100%</b> | <b>8238</b>                          | <b>100.00%</b> |

**Table 19** (overleaf) summarises the current project pipeline for the Bitou LM for the period 2018-2021 as provided by the municipality.

The location of the projects is indicated on Figure 24 and the details of the above mentioned programme are dealt with as part of the discussion on each of the towns/settlements in Bitou LM in section 3.4.7 of this document.

### 3.4.5 Community Facilities

The existing community facilities located within the Bitou LM are summarised in **Table 20**.

#### 3.4.5.1 Education

Public primary schools are located in Plettenberg Bay, New Horizons, Kwanokuthula (2), Kranshoek, Harkerville, Wittedrift and Kurland/The Crags (**Figure 25**). One combined school is located in Wittedrift while secondary schools exist in Kwanokuthula and New Horizons. Four private schools also exist in the municipal area as illustrated on Figure 25 (not included in Table 21). There are no schools in the areas of Keurboomstrand, Nature's Valley and Covie. The availability of tertiary education facilities such as FET colleges and training centres are limited with the South Cape College located in Kwanokuthula being the most prominent.

#### 3.4.5.2 Health and Welfare

In 2016, The Bitou LM had a total number of six primary healthcare facilities – five fixed Primary Health Care Clinics as well as one Community Health Care Centre. In addition, there are seven Anti Retro Viral Treatment and seven Tuberculosis treatment sites within the municipal area.

**Table 19: Bitou LM Housing Project Pipeline: 2018-2021**

|  | Units        | Construction Readiness     | Feasibility Applications     | Land Acquisition  |
|--|--------------|----------------------------|------------------------------|---|
| Kwanokuthula IRDP Phase 4: Top Structures<br>Kwanokuthula IRDP/UISP Phase 5 and 6 (120 UISP) | 441<br>1 562 |                            | Planning Fees<br>(2018-2021) |   |
| Ebenezer IRDP/UISP<br>Qolweni: 735 informal, New Horizons: 735 backyard                      | 1 469        |                            | Planning Fees (EIA)          | Ebenezer Portions 3, 42, 44<br>Portion 20 Farm Hillview |
| Qolweni Phase 3A: Top Structures   | 169          | (2018-2020)                | Planning Fees<br>(2018-2021) | Erf 9834 Minnaar's Land<br>(2018-2019)                  |
| Qolweni Phase 4A (UISP): Serviced Sites  | 382          | (2018-2020)                |                              |   |
| Qolweni Phase 4B (UISP): Serviced Sites  | 303          | (2020-2021)                |                              |   |
| Qolweni Phase 5 (UISP): Serviced Sites   | 99           | (2020-2021)                |                              |   |
| Shell Ultra City (IRDP/FLISP): Serviced Sites  | 80           | Serviced Sites (2019-2020) |                              |   |
| Green Valley Phase 2 (IRDP/UISP)<br>(122 UISP)   | 730          |                            | Planning Fees<br>(2018-2021) | Portion 28; Farm 306<br>Wittedrift (2018-2019)          |
| Kurland UISP Phase 3 (UISP): Serviced Sites  | 74           | (2019-2020)                | Planning Fees<br>(2018-2021) | Land transfer in progress<br>(Farm 562)                 |
| Kurland UISP Phase 4 (UISP)<br>(500 Eventually)  | 270          |                            |                              |   |
| Kranshoek IRDP Phase 3<br>(Farms 432 Portions 7,8,9)   | 1 457        |                            |                              | Farm 432: Portions 7, 8, 9                              |
| Harkerville Housing Projects<br>Not to Proceed   |              |                            |                              |   |
| <b>Total Units</b>   | <b>7036</b>  |                            |                              |   |

The Community Health Centre is located in Plettenberg Bay while the primary health care clinics are located in Kwanokuthula, New Horizons, Kranshoek, Kurland and Wittedrift (refer to **Figure 26**). There is also a private Mediclinic hospital located in Plettenberg Bay town.

**Table 20: Summary of Public Community Facilities in Bitou LM**

|                         | Primary School | Secondary School | Combined School | Primary Health Care | Community Health Centre | Police   | Fire Brigade | Community Centre/Club | Municipal Office | Library  |
|-------------------------|----------------|------------------|-----------------|---------------------|-------------------------|----------|--------------|-----------------------|------------------|----------|
| Plettenberg Bay         | 1              |                  |                 | 1                   | 1                       | 1        | 1            | 1                     | 1                | 1        |
| Qolweni/Bossiesgif      |                |                  |                 |                     |                         |          |              |                       | 1                |          |
| New Horizons            | 1              | 1                |                 | 1                   |                         |          |              | 1                     | 1                | 1        |
| Kwanokuthula            | 2              | 1                |                 | 1                   |                         | 1        |              | 1                     | 1                | 1        |
| Kranshoek/Harkerville   | 2              |                  |                 | 1                   |                         |          | * 1          | 1                     | 1                | 1        |
| Wittedrift/Green Valley | 1              |                  | 1               | 1                   |                         |          |              | 1                     | 1                |          |
| Kurland/The Craggs      | 1              |                  |                 | 1                   |                         |          | * 1          | 1                     | 1                | 1        |
| <b>Total</b>            | <b>9</b>       | <b>2</b>         | <b>1</b>        | <b>6</b>            | <b>1</b>                | <b>2</b> | <b>3</b>     | <b>6</b>              | <b>7</b>         | <b>5</b> |

\* Sub Station

### 3.4.5.3 Sports and Recreation

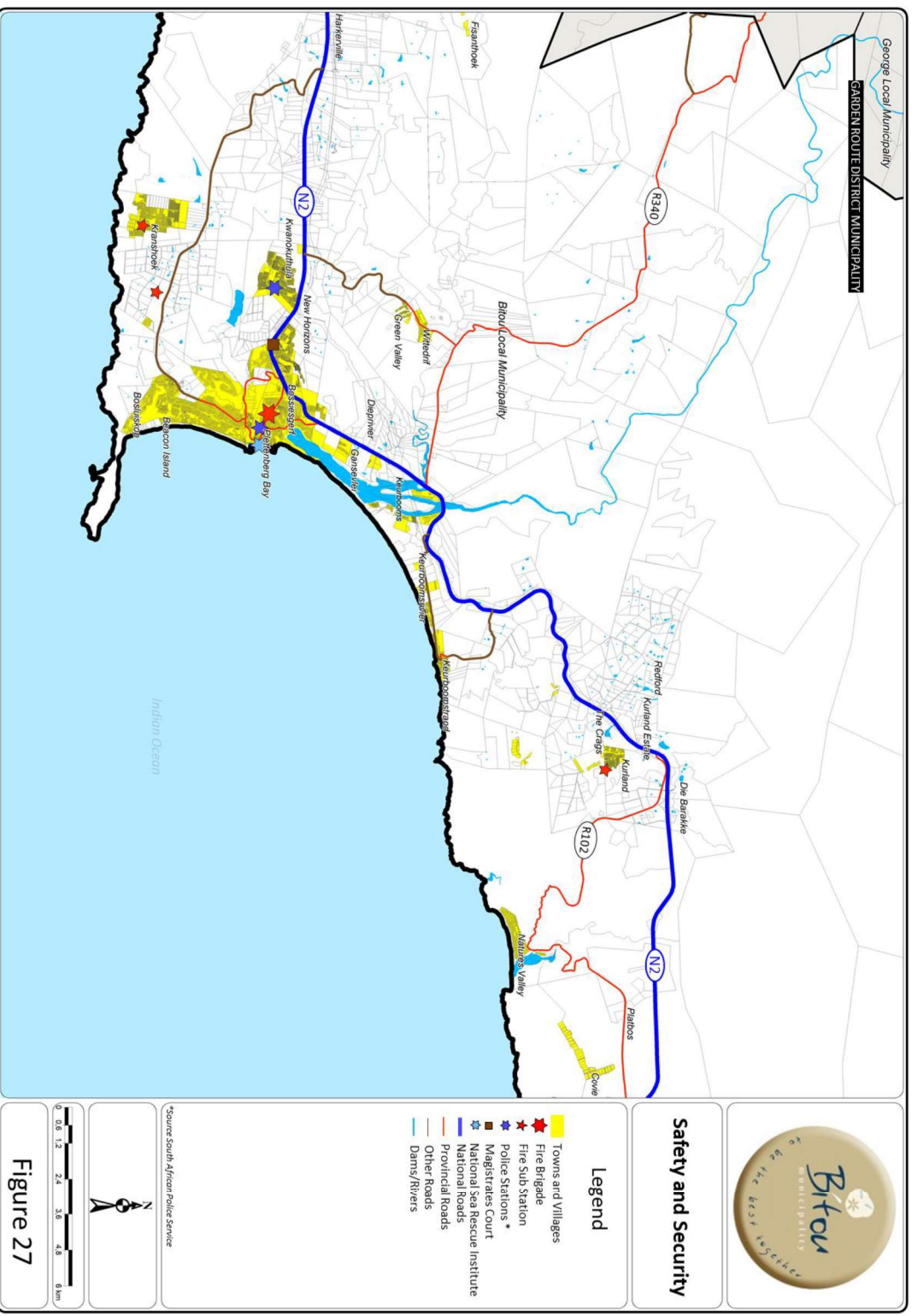
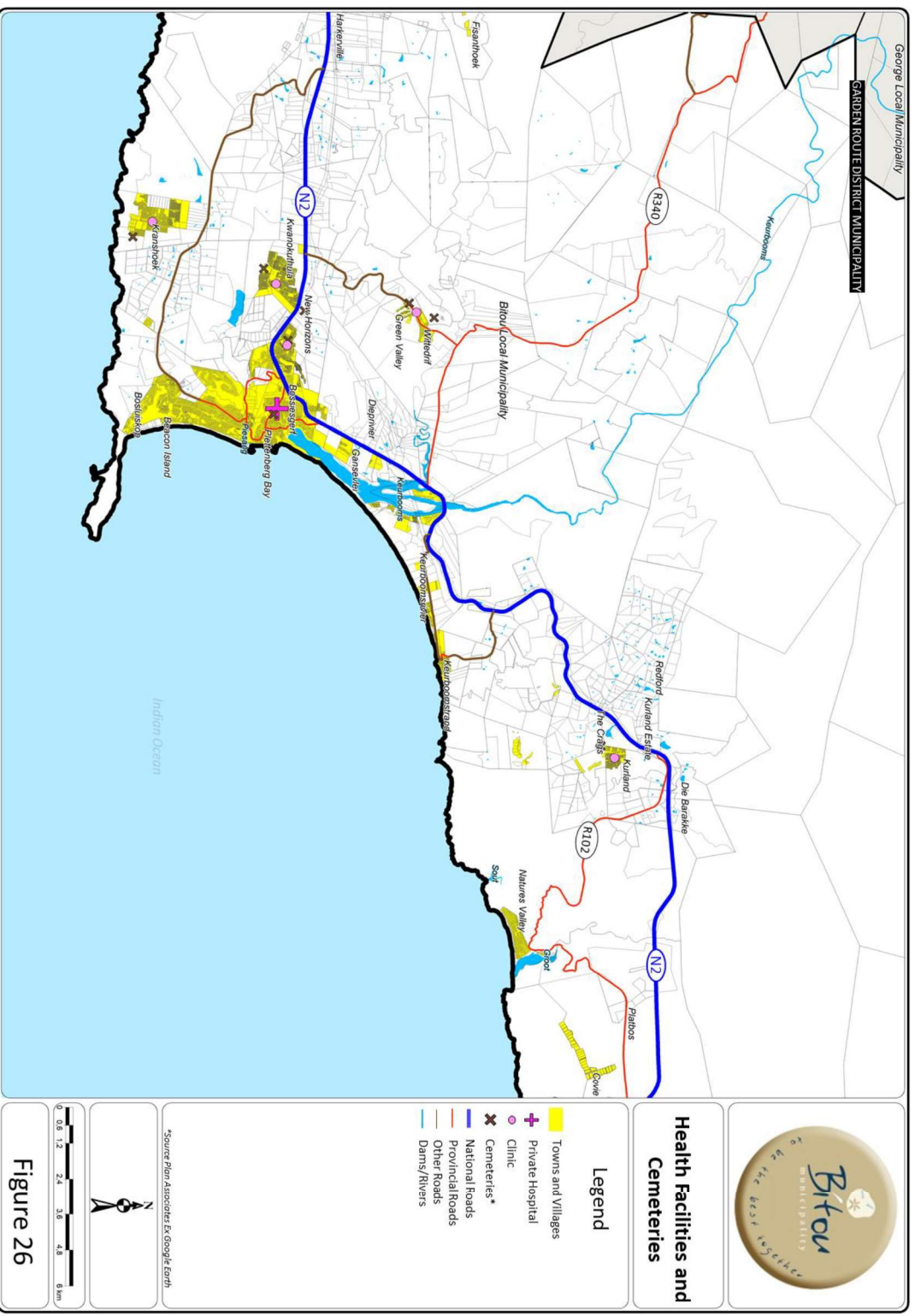
Several sports and recreation facilities are located in various parts of the municipality.

### 3.4.5.4 Safety and Security

The Bitou LM holds two police stations (Plettenberg Bay and Kwanokuthula); one Magistrates' Court (New Horizons); one Fire Brigade Emergency Service in Plettenberg Bay; and two Fire Sub-Stations at Kurland and Kranshoek respectively (refer to **Figure 27**). The airport also holds a localised firefighting service while the National Sea Rescue Institute (NSRI) station at Central Beach offers maritime safety and first aid response services to the public. It should also be noted that the Bitou LM has a Law Enforcement Office (enforcing municipal by-laws) and a Traffic Department which deals with traffic offences and traffic management.

The following aspects have been prioritised for implementation:

- Technical rescue equipment improvement;
- Upgrading of buildings;
- Hazmat equipment improvement;
- Airport fire-fighting services improvement;
- Upgrade Kurland fire sub-station;
- Upgrade Kranshoek fire sub-station.



### 3.4.5.5 Cemeteries

The municipality currently have eight cemeteries located throughout the municipal area. The majority of the cemeteries have no spare capacity as shown in the table below.

**Table 21: Cemetery Capacity**

| LOCATION        | NUMBER OF CEMETERIES | % FULL |
|-----------------|----------------------|--------|
| Plettenberg Bay | 1                    | 100%   |
| Wittedrift      | 2                    | 100%   |
| Kranshoek       | 1                    | 50%    |
| Kwanokuthula    | 1                    | 50%    |
| New Horizons    | 1                    | 100%   |
| The Crag        | 2                    | 60%    |

Investigations are underway to establish one central cemetery for the municipality as a whole and the proposed location at this stage is to the west of Ebenezer.

### 3.4.6 Engineering Services

**Diagram 11** depicts the level of service provided within the Bitou LM as recorded in the 2016 Community Survey (StatsSA). The following can be concluded in this regard:

- Diagram 11 shows that about 87.1% of households in Bitou LM receive piped water from within the stand (2016).

- In terms of sanitation an estimated 97.1% receive sanitation services comprising either flush toilets, chemical toilets or pit toilets with ventilation.
- Diagram 11 also indicates that 97.3% of households have electricity supply within the house.
- About 90.6% of households in the Bitou LM have access to refuse removal services which represents a 2.1% increase since 2011.

The following section provides more detail regarding the capacity and distribution of bulk engineering services within the municipal area.

#### 3.4.6.1 Water

##### EXISTING WATER SYSTEM

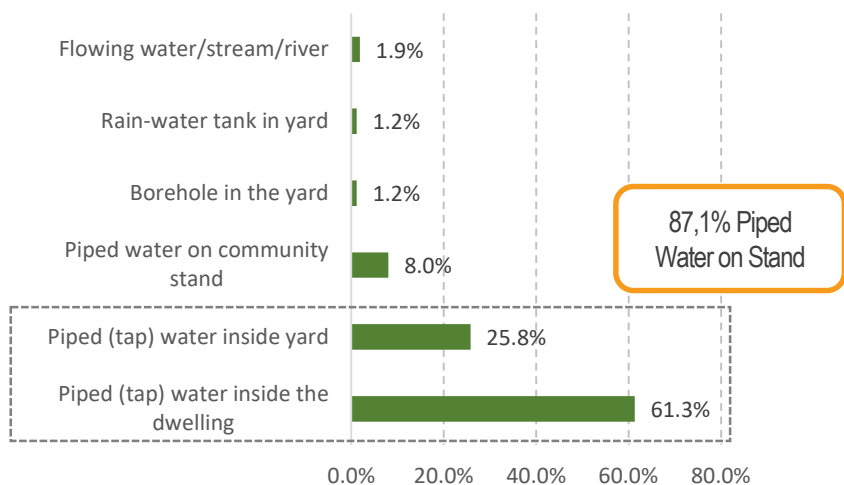
Bitou LM consists of seven wards and is the only Water Services Authority (WSA) within the Bitou LM's management area. The Bitou LM is also the Water Services Provider (WSP). Bitou LM's management area includes the following towns and Water Distribution Systems:

- **Plettenberg Bay System:** Plettenberg Bay, Kranshoek, Wittedrift/Green Valley, Keurboomstrand, Kwanokuthula, New Horizons, Ladywood and Qolweni/Bossiesgif.
- **Nature's Valley System:** Nature's Valley.

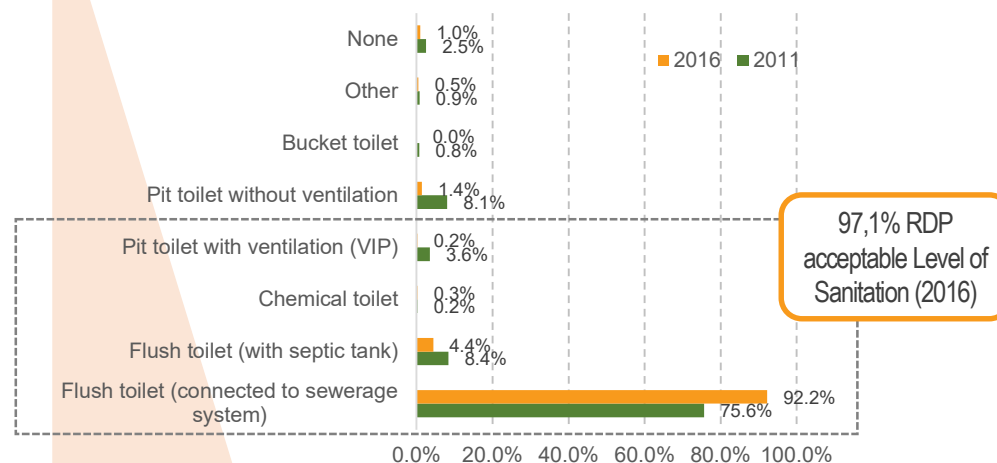
**Table 22** provides an overview of the major water infrastructure components for the various distribution systems in Bitou Management Area which are briefly discussed below:

## Source of Water 2016

### Main source of water for drinking 2016

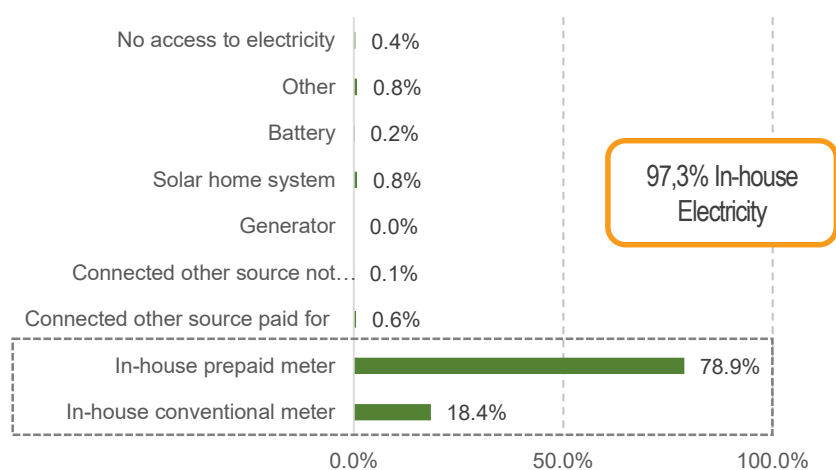


## Sanitation 2011 - 2016

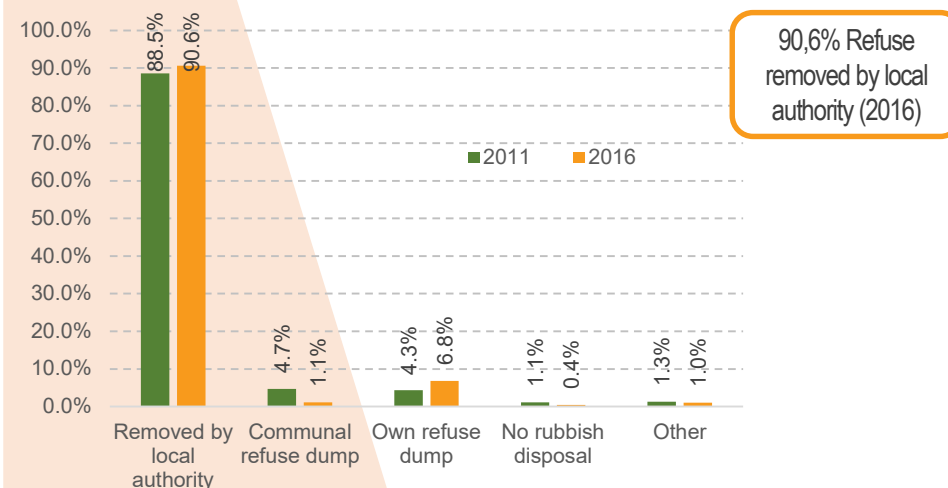


## Source for Lighting 2011 - 2016

### Household access to electricity 2016



## Refuse Removal 2011 - 2016



**Table 22: Summary of Bulk Water Supply and Reticulation Infrastructure**

| Water Distribution System | Bulk Supply (Resources)   | WTW (Capacity in MI/d)                                       | Bulk and Network Reticulation (km)  | Number of Water Pump Stations | Total Storage Capacity (MI) |
|---------------------------|---|--|-------------------------------------|-------------------------------|-----------------------------|
| Plettenberg Bay           | Keurbooms River (Weir), Piesang River (Roodefontein Dam), Groundwater and Seawater (Desalination) | Plettenberg Bay WTW (22 MI/d)<br>Desalination Plant (2 MI/d) | Bulk 54.395<br>Reticulation 241.775 | Raw (2)<br>Potable (19)       | 52.876                      |
| Kurland                   | Wit River   | Kurland WTW (0.6 MI/d)                                       | Bulk 2.335<br>Reticulation 4.945    | Raw (1)                       | 1.500                       |
| Natures Valley            | Groot River   | Natures Valley WTW (1 MI/d)                                  | Bulk 0.765<br>Reticulation 10.065   | Raw (1)<br>Potable (1)        | 0.600                       |

#### a) Plettenberg Bay System

Bulk water supply to the town is from the Keurbooms River and the Roodefontein Dam on the Piesang River. The diversion pipeline from the Keurbooms River to the Water Treatment Works (WTW) comprises of a short rising main and a 500mm diameter gravity pipeline with a 450 l/s capacity. Raw water from the Roodefontein Dam is delivered to the WTW via a pipeline with a transfer capacity of approximately 290 l/s.

A 2 MI/day seawater desalination plant was also constructed during 2010 and seven production boreholes can also supply additional groundwater to the town. The raw water is treated at the WTW, which consist of a DAF plant and a sedimentation plant, where after it is distributed to the consumers.

The capacity of the DAF Plant is 15 MI/d and capacity of the sedimentation plant is 12 MI/day. The total capacity for the two plants is therefore 27 MI/day with a filtration capacity of 27 MI/day.

Various bulk storage reservoirs and a few water towers are available, which are used to store treated water for supply to users in Plettenberg Bay, Kranshoek, Kwanokuthula, New Horizons, Wittedrift and Green Valley and Keurboomstrand. The sizes of the reservoirs vary from 6 MI to 0.5 MI, providing a total treated water storage capacity of 52.876 MI.

The existing water system and distribution zones layout for Plettenberg Bay, Kranshoek, Wittedrift and Keurboomstrand is indicated on **Figure 28** and summarised in **Table 23**.

#### b) Kurland System

Kurland is supplied with run-off water abstracted from a weir constructed on the Wit River. Water is abstracted through a 150mm diameter AC pipeline and pumped over a distance of 700m to the WTW.

The maximum capacity of the source and the WTW is 600 KI/day and only satisfies the current demand. Two new boreholes were recently equipped and initial tests indicates that the boreholes would be able to supply an additional 432 KI/day. The existing water system and distribution zones layout for Kurland is indicated on **Figure 29** and summarised in **Table 24**.

# Legend

- Network Pipes
- Existing bulk supply
- Existing reservoirs / towers
- Existing pumping station
- H Existing zone valve
- V Existing non-return valve
- V Existing Water Treatment Plant (WTP)
- P Existing pressure reducing valve
- Railway line
- River
- Coastline

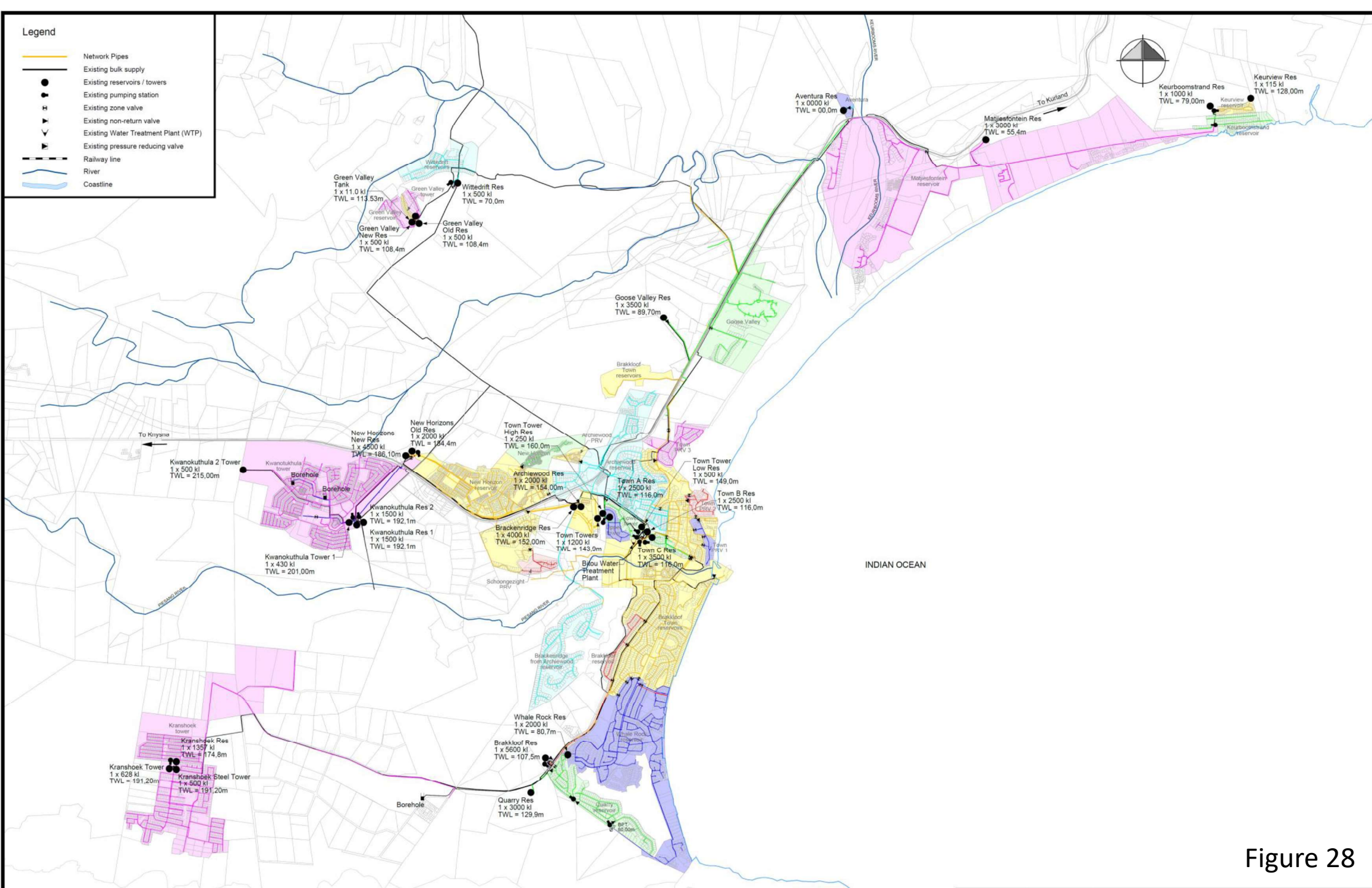


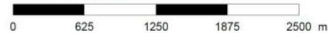
Figure 28



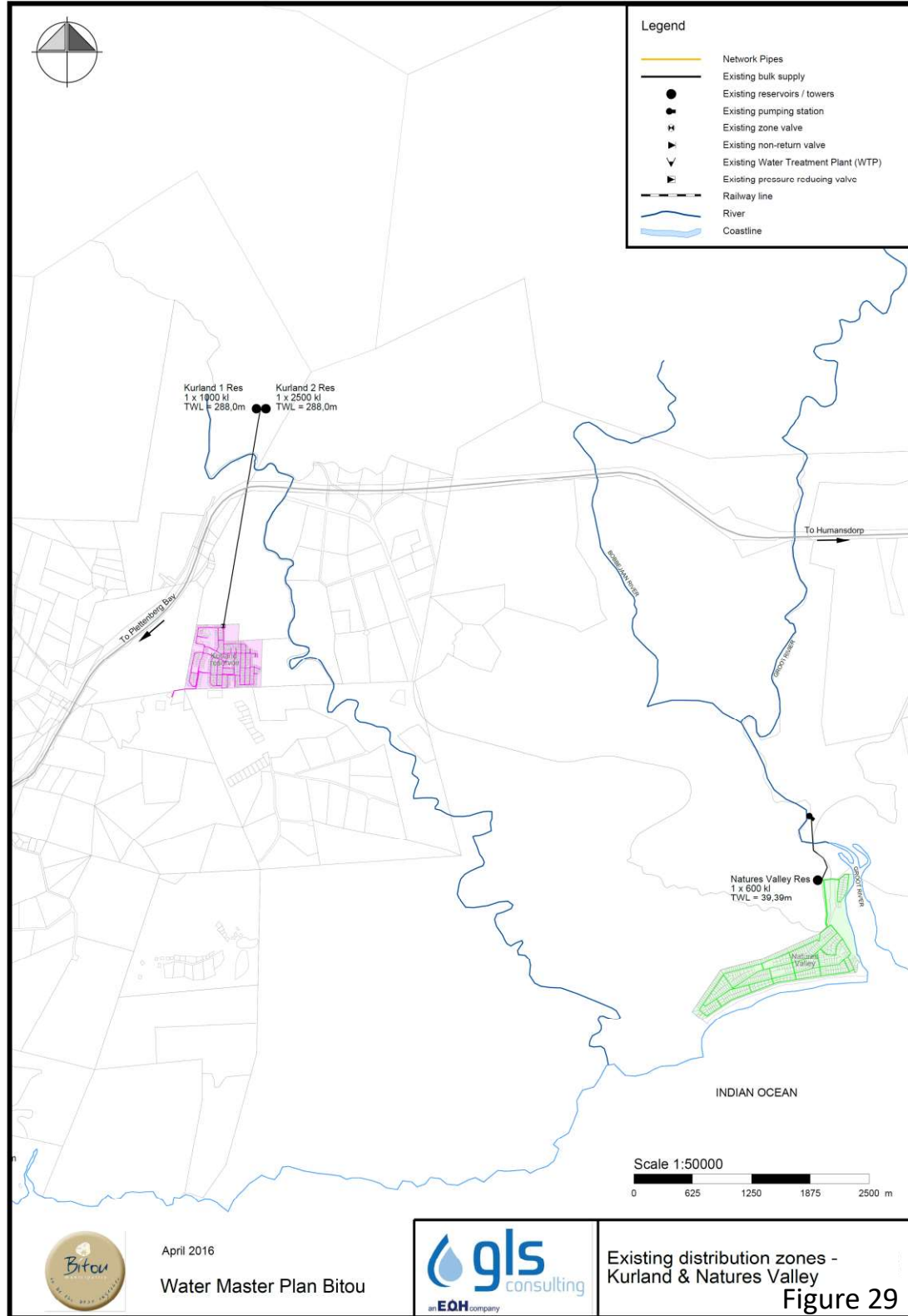
April 2016

Water Master Plan Bitou

Scale 1:50000



Existing distribution zones - Plettenberg Bay



April 2016

Water Master Plan Bitou



Existing distribution zones -  
Kurland & Natures Valley

Figure 29

**Table 23: Water System Distribution Zones Layout**

| WATER SOURCE AND STORAGE STATUS QUO |  | CAPACITY   |
|-------------------------------------|--|--|
| Plettenberg Bay                     | <b><u>Archiewood Reservoir:</u></b> Archiewood reservoir serves the Industrial Area, Formosa Garden Village and part of the Bowling club area. The water source for the Archiewood reservoir is the Plettenberg Bay water treatment works.   | <i>Reservoir capacity = 2 ml</i>   |
|                                     | <b><u>Brackenridge Reservoir:</u></b> The Brackenridge reservoir serves the Brackenridge development area. The water source for the Brackenridge reservoir is the Plettenberg Bay water treatment works.   | <i>Reservoir capacity = 4 ml</i>   |
|                                     | <b><u>Tower Reservoir:</u></b> The Tower reservoir serves Plettenberg Bay Central, Police Station and Cutty Sark areas. The water source for the Tower reservoir is the Plettenberg Bay water treatment works. The Tower Reservoir consists of three reservoirs with the following capacity:               | <i>Tower reservoir = 1.2 ml;<br/>Tower Upper reservoir = 0.25 ml;<br/>Tower Lower reservoir = 0.5 ml</i>   |
|                                     | <b><u>Town Reservoir:</u></b> The Town reservoirs serve the greater Plettenberg Bay town area. The water source for the Town reservoir is the Plettenberg Bay water treatment works. The Town reservoir consists of three reservoirs with the following capacity:  | <i>Reservoir A = 2.5 ml;<br/>Reservoir B = 2.5 ml;<br/>Reservoir C = 3.5 ml</i>  |
| New Horizon                         | The New Horizon reservoir serves the community of New Horizon and Castleton complex and it consists of two concrete reservoirs. The water source for the New Horizon reservoir is the Plettenberg Bay water treatment works and three boreholes.   | <i>Concrete reservoir = 2 ml;<br/>Concrete reservoir = 4.5 ml</i>  |
| Kwanokuthula                        | The water source for the Kwanokuthula reservoirs is the New Horizon reservoir which in turn gets its water from Plettenberg Bay water treatment works. The Kwanokuthula reservoir serves the community of also known as Hillview. It consists of two steel tower reservoirs and three concrete reservoirs. | <i>Steel tower reservoir 1 = 500 kl;<br/>Steel tower reservoir 2 = 430 kl;<br/>Concrete reservoir 1 = 1.5 ml;<br/>Concrete reservoir 2 = 1.5 ml;<br/>New concrete Reservoir = 3.5 ml</i> |
| Whale Rock                          | The Whale Rock reservoir in the Whale Rock area and it supplies water to Whale Rock Gardens and Whale Rock. The main water source for the reservoir is the Plettenberg Bay water treatment works. It can also get water from the Robberg reservoir.  | <i>Reservoir capacity = 2 ml</i>   |
| Brakkloof                           | The Brakkloof reservoir supplies part of Longships Drive and Robberg Road areas as well as Robberg en Kranshoek reservoir. The main water source for the reservoir is the Plettenberg Bay WTW and Airport borehole.  | <i>Reservoir capacity = 6 ml</i>   |

| WATER SOURCE AND STORAGE STATUS QUO |   | CAPACITY  |
|-------------------------------------|---|---|
| <b>Robberg (Quarry)</b>             | The Robberg reservoir is situated on the Robberg quarry and the water source for the reservoir is the Brakkloof reservoir. It supplies the Robberg Beach End and Whale Rock Ridge development areas.  | <i>Reservoir capacity = 3 ml</i>  |
| <b>Goose Valley</b>                 | The Goose Valley reservoir serves the Goose Valley golf course development, the Matjiesfontein reservoir and Wittedrift reservoir. The main water source for the reservoir is the Plettenberg Bay water treatment works.                      | <i>Reservoir capacity = 3.5 ml</i>  |
| <b>Keurbooms Balancing</b>          | The Keurooms balancing tanks are situated on the Plettenberg Bay Game Reserve. It supplies water to the Plettenberg Bay WTW.  | <i>Tank 1 = 1 ml;<br/>Tank 2 = 3 ml</i>   |
| <b>Kranshoek</b>                    | The water source for the reservoirs is the Brakkloof reservoir which in turn gets its water from Plettenberg Bay's water treatment works. Three (3) reservoirs serve the community of Kranshoek.  | <i>Concrete tower reservoir = 628 kl;<br/>Steel tower reservoir = 500 kl<br/>Header reservoir = 1,357 ml</i>  |
| <b>Wittedrift</b>                   | The Wittedrift reservoir supplies the Wittedrift community and Green Valley reservoir with water. The water source for the reservoir is the Goose Valley reservoir.   | <i>Reservoir capacity = 500 kl</i>  |
| <b>Green Valley</b>                 | The Green Valley reservoirs supply the community of Green Valley with water. The water source for the reservoir is the Wittedrift reservoir.  | <i>Old Reservoir capacity = 500 kl<br/>New Reservoir capacity = 500 kl<br/>Elevated tank capacity = 11 kl</i> |
| <b>Keurboomstrand</b>               | The Keurbooms top reservoir supplies the Keurbooms Strand area with water. The water source for the Keurbooms top reservoir is the Matjiesfontein reservoir. The water source for the Matjiesfontein reservoir is the Goose Valley Reservoir. | <i>Reservoir capacity = 1 ml;<br/>Matjiesfontein reservoir = 3 ml</i>   |

**Table 24: Kurland Water System**

| WATER SOURCE & STORAGE STATUS QUO   |
|---|
| <p>The Kurland reservoirs are situated in the Kurland area and serve Kurland village, hotel and polo area. The water source for the reservoirs is the Kurland water treatment which that gets its water supply from the Wit River.</p> <p>Reservoir capacity: <i>Reservoir 1 = 1 MI; Reservoir 2 = 0.5 MI</i></p> |

**c) Nature's Valley System**

Raw water for Nature's Valley is abstracted from the Groot River, which flows into the sea at Nature's Valley. The capacity of the pump station and WTW is 1 MI/day.

The existing water system and distribution zones layout for Nature's Valley are indicated on **Figure 29** and summarised in the following table:

**Table 25: Nature's Valley Water System**

| <b>WATER SOURCE AND STORAGE STATUS QUO</b>   |
|--|
| The Nature's Valley reservoir provides water to Nature's Valley village, De Vasselot Camping Resort and Tsitsikamma National Park.<br><i>Reservoir capacity = 600 kl</i> |

**d) Harkerville**

Harkerville water is supplied through a municipal borehole owned by the Bitou LM.

**Table 26: Harkerville Water System**

| <b>WATER SOURCE &amp; STORAGE STATUS QUO</b>  |
|---|
| The source is the borehole which is situated inside the fence of the reservoir. Harkerville reservoir serves the Harkerville rural area.<br><i>Reservoir capacity = 100kl</i> |

**WATER MASTER PLAN**

The latest Bitou LM Water Master Plan (WMP) was compiled by GLS Consulting in June 2016. The WMP identified future land use and water demand scenario based on the potential future land developments as obtained in consultation with the Municipality's town planning consultants. The future system planning was done to satisfy the future water demands with the following outcome for each water distribution system.

**a) Plettenberg Bay**

The existing Bitou LM water distribution system has insufficient capacity to supply the future water demands for the fully occupied scenario and the additional future development areas. The proposed master plan items are presented in **Figure 30**.

The most significant proposed upgrade of the existing distribution system is the re-zoning of the existing Brakkloof/Town reservoir zone and the Quarry BPT zone to form the Town reservoir zone, the Brakkloof reservoir zone and an enlarged Whale Rock reservoir zone. The existing Plett BPT is re-commissioned to supply the enlarged Whale Rock zone from the north, while the Whale Rock reservoir and Quarry BPT will supply the zone from the south. This new zone will lower the existing high static pressure that is currently experienced within the Brakkloof/Town reservoir zone.

Another major upgrade is the rezoning of the existing Kwanokuthula tower zone and the New Horizon reservoir zone that currently experiences low static pressures.

A few distribution pipelines are also required to reinforce water supply within the Plettenberg Bay distribution network.

**BULK SYSTEM**

The existing bulk water supply system has insufficient capacity to supply the future water demands for the fully occupied scenario and the additional future development areas.



**Water Treatment Plant (WTP)**

- A new WTP is proposed on Erf 11174 to augment the capacity of the existing Central WTP. The combined capacity of the existing Central WTP and the proposed new WTP should be for a future AADD of 35 240 kℓ/d.

**Reservoirs**

- A new 2,0 Mℓ reservoir is proposed for the new Roodefontein area. This reservoir should be filled from a sump with a controlled inflow in order to sustain the pressure in the network.
- A new 3,5 Mℓ Roodefontein Lower reservoir is proposed for the future Roodefontein Lower zone.
- A new 6,5 Mℓ Roodefontein Upper reservoir is proposed for the future Roodefontein Upper zone.
- A new 3,0 Mℓ New WTP reservoir is proposed on the site of the proposed New WTP.
- When additional storage capacity is required for Kwanokuthula, a new 14,0 Mℓ reservoir (this reservoir can be phased) should be constructed at the existing Kwanokuthula reservoir site.
- New reservoirs with a capacity of 3,5 Mℓ are proposed for the Goose Valley Estate. This zone should be supplied from a sump with a controlled inflow in order to sustain the pressure in the network.
- When additional storage capacity is required for the Matjiesfontein zone, a new 5,0 Mℓ reservoir should be constructed at the existing Matjiesfontein reservoir site.

- A new 0,6 Mℓ Keurboomstrand Upper reservoir is proposed for the future Keurboomstrand Upper reservoir zone and the Keurboomstrand Upper booster zone.

**Feeder mains**

The following feeder mains require upgrading in future:

- The existing 250 and 300 mm Ø rising mains from the existing Central WTP to the Brakkloof reservoir should be reinforced with a new 350 mm Ø rising main when the existing rising mains nears capacity.
- Upgrading of the 100 mm Ø feeder main between Kranshoek reservoir and Kranshoek towers.
- The existing 300 mm Ø rising main between the New WTP and the New Horizon reservoirs should be reinforced with a new 400 mm Ø rising main when the existing rising main nears capacity.
- The existing 200 mm Ø rising main between the New Horizon reservoirs and the Kwanokuthula reservoirs should be reinforced with a new 400 mm Ø rising main when the existing rising main nears capacity.
- Upgrading of the feeder main to the Kwanokuthula booster pump station.
- Upgrading of the 200 mm Ø feeder main to Matjiesfontein reservoir.

The following new feeder mains will be required in future:

- New rising main between Brakkloof reservoir and Roodefontein Lower reservoir.
- New rising main between Roodefontein Lower and Upper reservoirs.

- New rising main from New WTP to Archiewood and New Horizon reservoirs.
- New feeder main to the proposed Goose Valley booster pump station.
- New 350 mm Ø feeder main from New WTP to Matjiesfontein reservoir.
- New 100 mm Ø rising main from Keurboomstrand reservoir to Keurboomstrand Upper reservoir.
- New feeder main to proposed Keurboomstrand Upper booster pump station.
- New 300 mm Ø rising main from the New WTP to the existing Central WTP to augment supply to the existing Central WTP if capacity problems occur.

### ***Pump stations***

The following pump stations require upgrading in future:

- Upgrading of the Central WTP to Brakkloof reservoir pump station.
- Upgrading of the Brakkloof to Quarry reservoir pump station.
- Upgrading of the Kranshoek reservoir to Kranshoek towers pump station.
- New pump station at the existing Central WTP to the Town Tower reservoir.
- New pump station at Brakkloof reservoir to proposed Roodefontein Lower reservoir.
- New pump station at proposed Roodefontein Lower reservoir to proposed Roodefontein Upper reservoir.
- New pump station at New WTP to Archiewood and New Horizon reservoirs.

- Upgrading of the New Horizon to Kwanokuthula pump station.
- New Kwanokuthula booster pump station.
- Upgrading of the Kwanokuthula reservoir to Kwanokuthula Upper tower pump station.
- New pump station at New WTP to Goose Valley reservoir.
- New Goose Valley booster pump station.
- New booster pump station to Wittedrift.
- Upgrading of the Keurboomstrand sump to Keurboomstrand reservoir pump station.
- New pump station at Keurboomstrand reservoir to proposed Keurboomstrand Upper reservoir.
- New Keurboomstrand Upper booster pump station

### **b) Kurland**

The existing Kurland water distribution system is under stress at this stage with very low pressures during the day (especially over weekends) the proposed master plan items are presented in **Figure 31**.

A few distribution pipelines are required to reinforce water supply within the Kurland distribution network.

### **BULK SYSTEM**

The existing bulk water supply system does not have sufficient capacity to supply the future water demands for Kurland. The current average water demand is 577 Kl/day and the capacity of the purification plant is only 600



Kl/day. The WTP therefore needs to be upgraded before any developments can take place.

### **Reservoirs**

- No new reservoirs are required in future

### **Feeder mains**

- No feeder mains require upgrading in future.

### **Pump Stations**

- No future pumping stations are required.

### **c) Nature's Valley**

The existing Nature's Valley water distribution system has sufficient capacity to supply the future water demands for the fully occupied scenario. Two reinforcement pipelines are however proposed to improve the conveyance in the network. The proposed master plan items are presented in Figure 31.

### **BULK SYSTEM**

The existing bulk water supply system has sufficient capacity to supply the future water demands for the fully occupied scenario.

### **Reservoirs**

- No new reservoirs are required in future.

### **Feeder mains**

- No feeder mains require upgrading in future.

### **Pump stations**

- No future pumping stations are required.

### **3.4.6.2 Sanitation**

There are two Waste Water Treatment Works (WWTW) located in the Bitou LM, the Gansevlei and the Kurland WWTW.

#### **a) Plettenberg Bay System (Gansevlei WWTW)**

The existing Plettenberg Bay sewer drainage system is represented on **Figures 32, 33, 34 and 35**.

Plettenberg Bay is fully serviced with a formal sewer reticulation system. The Bossiesgif informal area is supplied with communal ablution facilities. The sewer drainage system consists of 58.4 km of rising mains and 221.7 km of gravity pipelines. There are seventy (70) sewer pump stations operated by Bitou LM with capacities between 3 l/s and 110 l/s. The capacity of the Gansevlei WWTW is 9.000 Ml/day.

#### **b) Kurland System**

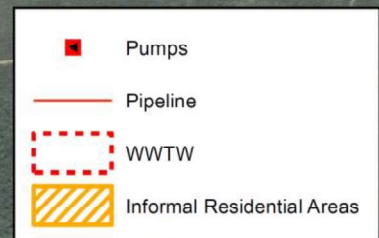
Kurland is partly serviced with a formal sewer reticulation system. The informal area is supplied with communal ablution facilities. The sewer drainage system consists of 0.7 km of rising mains and 5.3 km of gravity




- Pumps
- Pipeline
- - - WWTW
- Informal Residential Areas

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| AMENDMENT |      |         |         |             | <div>SCALE FOR REDUCED PLAN</div> <div>SHOWN ON ORIGINAL DRAWING</div> |      | <div><div><b>WorleyParsons</b><br/>resources &amp; energy</div></div> <div>P.O. Box 388<br/>MELBURN TOWN<br/>TEL: (021) 512 3000<br/>FAX: (021) 512 3002<br/>email: <a href="mailto:enquiries@wpp.co.za">enquiries@wpp.co.za</a></div> | DESIGNED | CONSULTING ENGINEER | CLIENT                  | PROJECT  | DRAWING DESCRIPTION         | SCALE      | Figure 34 | 00 |        |
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22



Pumps

Pipeline

WWTW

| AMENDMENT |      |         |         |             | <div>SCALE FOR REDUCED PLAN</div> <div>DO NOT USE ORIGINAL DRAWING</div> |       | <div><b>WorleyParsons</b><br/>resources &amp; energy</div> | DESIGNED | CONSULTING ENGINEER | CLIENT             | PROJECT                 | DRAWING DESCRIPTION                                | SCALE                        | DATE       | REV NO |
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pipelines. There is one sewer pump station that pumps the sewage to the Activated Sludge WWTW, with a capacity 0.500 Ml/day. The existing Kurland sewer drainage system is represented on **Figure 36**.

#### c) Nature's Valley System

There is no formal sewer system in Nature's Valley and the existing houses are supplied with septic tanks and conservancy tanks. These tanks are emptied on a regular basis and the sewage is transported to the Kurland sewage works for treatment.

#### Harkerville

These areas are not connected to a waterborne sewage system and still make use of pit toilets.

#### 3.4.6.3 Electricity

The electricity network plan for the Municipality is shown in **Figure 37**. The plan shows one main west to west powerline cutting through the southern parts of the Municipality parallel to the north of the alignment of the N2 freeway up to New Horizons/Bossiesgif from where electricity is distributed to all the towns and the agricultural focus areas noted earlier in this report.

No long term plan currently exists for electricity management in the municipality. Eskom have indicated a short supply for 8 to 10 years (they require R315m for system upgrades). There are currently no significant alternative energy sources being used in the municipality.

#### 3.4.6.4 Stormwater

The capacity of the current stormwater assets is insufficient to carry the amount of runoff water. Most of the roads were built without the proper storm water and kerbing to channel the runoff water. The design of channels, especially crossing roads should be redesigned properly with storm water pipes underneath the roads.

Due to climate change, the area is experiencing more severe runoff where the current infrastructure is unable to cope. The other challenge is the storm water intrusion into the sewer system and which occasionally floods certain pump stations.



Area effected by underground water need to be connected to existing storm water through installing subsoil drains channels etc. to reduce damage to road surfaces.

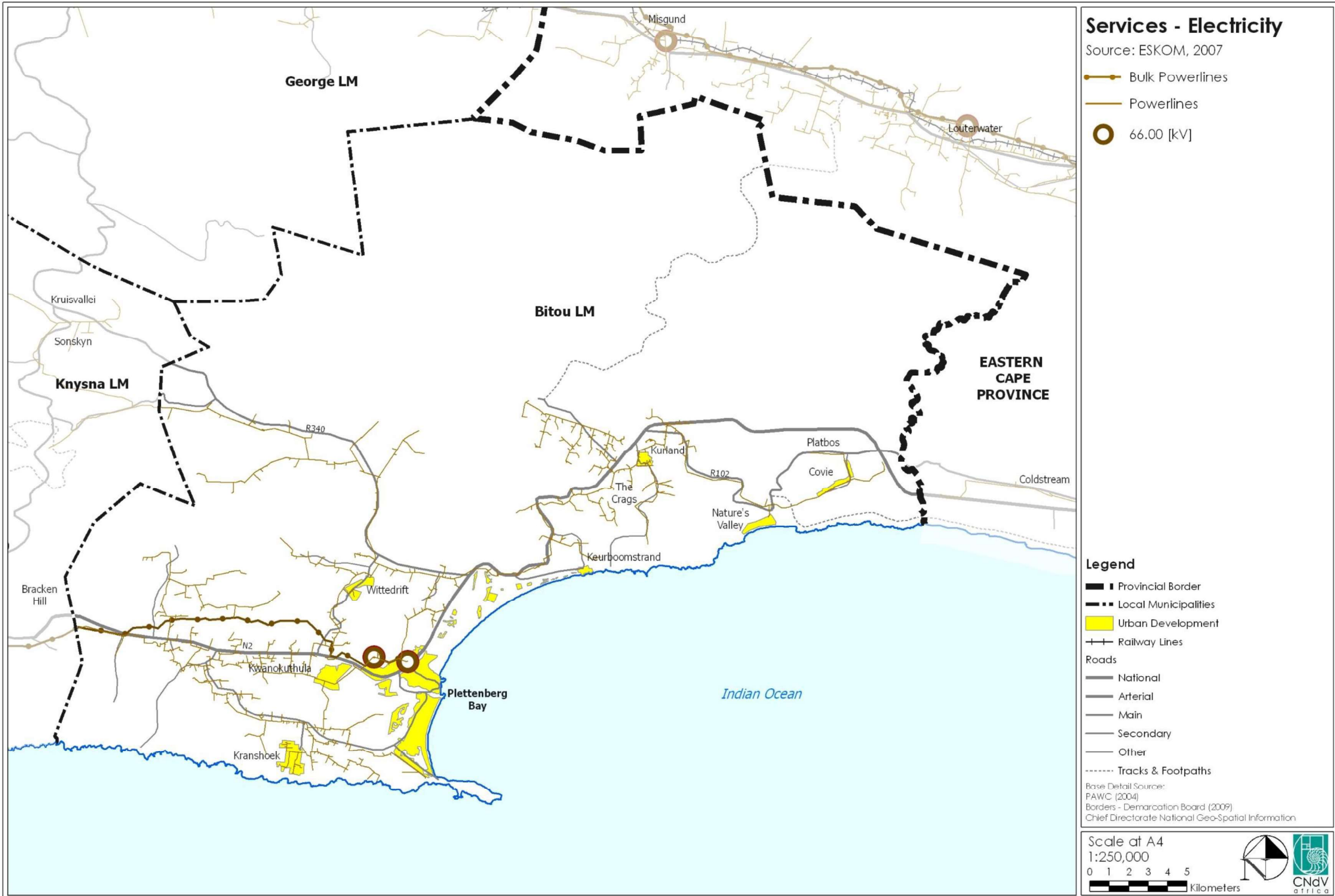
#### 3.4.6.5 Refuse Removal

Waste is collected from a number of waste collection points around Nature's Valley, Kurland, Wittedrift, Kranshoek and Plettenberg Bay from where it is compacted at Kwanokuthula and transported to the regional landfill site at Mossel Bay.

Future plans are to collect waste from a number of waste collection points and then to consolidate it at Kwanokuthula from where it will be sorted for



| AMENDMENT |      |         |         |             | <br>SCALE FOR REDUCED PLAN<br>40MM ON ORIGINAL DRAWING |  | <br><b>WorleyParsons</b><br>resources & energy<br><br><small>P.O. Box 398<br/>Melville, NSW 2205<br/>Tel: +61(0)2 9712 3000<br/>Fax: +61(0)2 9712 3001<br/>email: sales@wpcorp.com.au</small> | DESIGNED | CLIENT     | PROJECT                               | DRAWING DESCRIPTION          | SCALE     |
|-----------|------|---------|---------|-------------|---|--|--|----------|------------|---------------------------------------|------------------------------|-----------|
| NO.       | DATE | CHECKED | DONE BY | DESCRIPTION | CONSULTING ENGINEER   | BITOU MUNICIPALITY                               |  | DATE     | DATE       | EXISTING SEWER SYSTEM LAYOUT: KURLAND | 1:15 000<br>(On Original A3) |           |
|           |      |         |         |             |   | PRIVATE BAG X1002<br>PLESTERSBURG BAY<br>6600    |  |          | APRIL 2013 |                                       | REV NO.                      |           |
|           |      |         |         |             |   | Tel: +27(0)41 501 3000<br>Fax: +27(0)41 533 6196 |  |          |            |                                       |                              |           |
|           |      |         |         |             | CHECKED   | DATE   |  |          |            |                                       | <b>Figure 36</b>             |           |
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recycling (as a job creation initiative). The remaining waste will then be compacted and transported to Mossel Bay.

In terms of **recycling**, the Local Economic Development (LED) unit is developing a recycling swap shop and skills development centre in the Kurland community. The project aims to achieve the following objectives:

- Cost reduction methods to counter the rising cost of waste management in Bitou LM.
- A waste management value chain that will promote broader community participation in waste management and recycling.
- Education and promotion of recycling as a means of income creation.
- Eradication of illegal dumping sites.

The development of the Kurland Recycling Swap Shop and Skills Development Centre will not only assist Bitou LM in its Constitutional duties in terms of Schedule 5B of the Constitution of South Africa (Act 108 of 1996), but will also result in a reduction of recycled waste from the waste stream and therefore bring about a reduction in the cost of waste management.

The involvement of local communities in waste management through recycling furthers Council's strategic objective of strengthening the local economy by creating much needed job opportunities where unemployment affects up to 80% of communities. Therefore the project will assist with socio-economic development in the community of Kurland and will be expanded to other areas in Bitou LM in future.

### 3.4.7 Local Area Spatial Structure and Land Use

#### 3.4.7.1 Plettenberg Bay

**Figure 38** depicts the spatial structure and land use of Plettenberg Bay. It is conceptually divided into a number of functional areas as listed below, each with its unique history, character and land use features:

- Central Core Area (Main Town);
- New Horizons/ Qolweni/Ladywood;
- Kwanokuthula;
- Piesang Valley/ Beacon Island/Whale Rock; and
- Goose Valley.

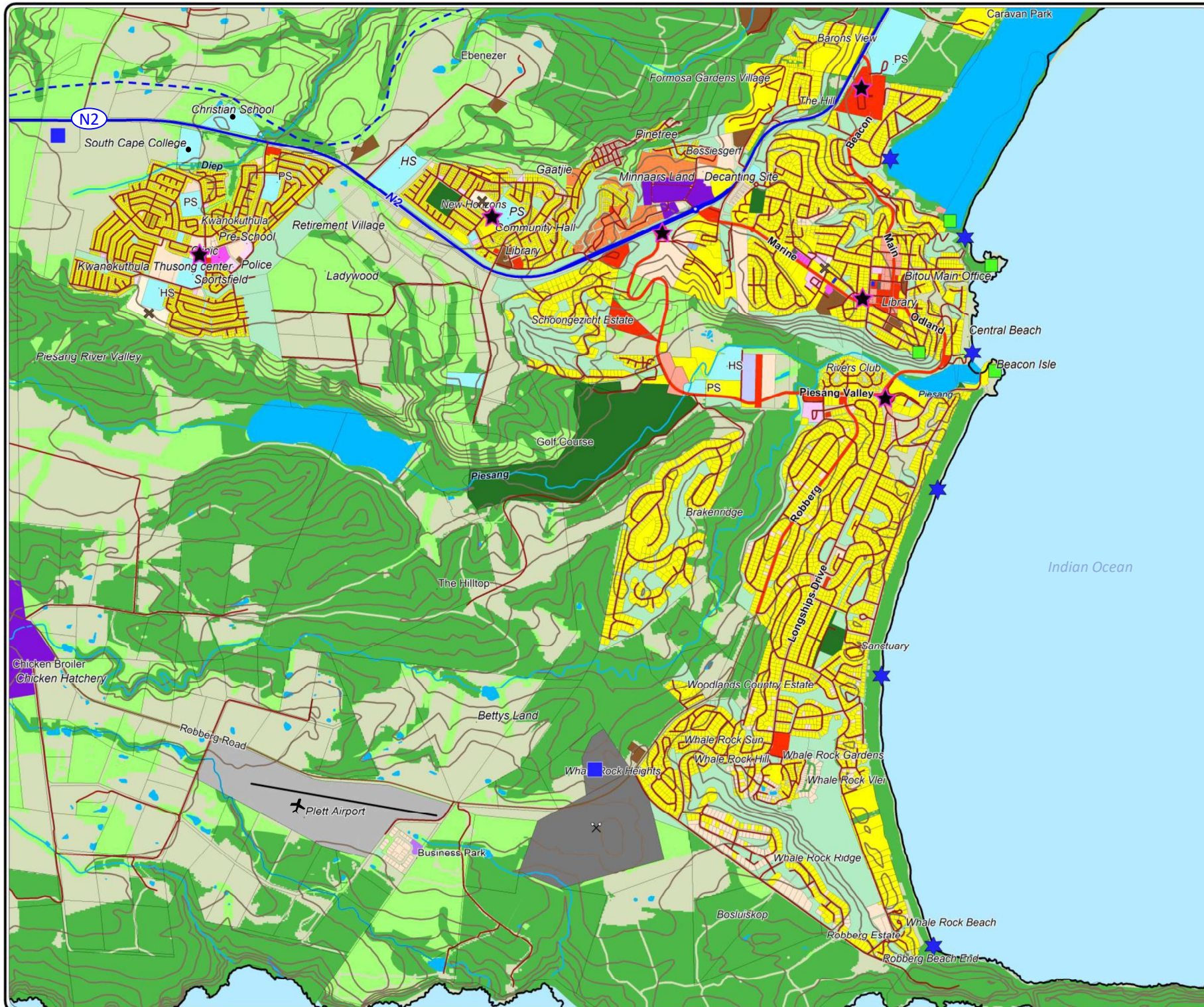
The most salient features of each of these functional areas are briefly discussed in the section below:

##### a) Main Town

**Figure 39** illustrates in more detail the main land use features of Plettenberg Bay Main Town and surrounds. The following are notable in this regard:

- The Central Business District is located along Main Street up to the intersection with Marine Drive. It comprises a mixture of retail, office and residential/accommodation uses to the east and west of Main Road (the western section is more extensively developed than the eastern part due to topographic conditions).





## Main Town Spatial Structure

- Business
- Offices
- Mixed Use
- Municipal
- Community Facilities
- Educational
- Informal Settlement
- Residential
- ✕ Cemetery
- Hospital / Clinic
- Light Industrial
- Industrial
- Sports and Recreation
- ★ Taxi Facility
- Vacant
- Extensive Agriculture
- Open Space
- Core Area (1 and 2)
- Buffer (1 and 2)
- National Roads
- Proposed N2 Bypass
- Provincial Roads
- Secondary Roads
- Other Roads
- Contours
- Dams/Rivers
- Waste Transfer Station
- ✈ Airport
- ✕ Quarry
- ★ Beach
- Landmark



0 0.1 0.4 0.6 0.8 1 km

Figure 39

- Several public/community facilities exist around the CBD including the municipal offices to the west, the post office and police station to the south, and the library and main taxi rank to the west.
- Directly to the west along Marine Drive is a cluster of municipal services including the Traffic Department, Law Enforcement, Fire Brigade/Emergency Services and Technical Services Depot.
- Two decentralised shopping centres have been established at the intersection between Beacon Way and route N2 at the northern entrance of town.
- To the south-east of the CBD is a small retail cluster at the main beach of Plettenberg Bay.
- The industrial area is located at the western end of Marine Way on the opposite side of route N2. This area is almost fully developed with only a few undeveloped erven to the south fronting onto route N2. The industrial area mainly comprises commercial activities, such as builder's yards (Plett Building Supplies) and fisheries (Robberg Fisheries) and a few small service industries. No significant manufacturing occurs in the area.
- It is also important to note the occurrence of an extensive informal settlement (Qolweni/Bossiesgif) to the north and west of the industrial area. Informal dwellers have also occupied a few undeveloped industrial stands located next to route N2.
- Prominent tourism features in Plettenberg Bay Main Town include: The Keurbooms Estuary with Lookout Beach, Lookout Rocks and Lookout Deck to the south-east at the existing estuary mouth; and Piesang

Valley Estuary with Central Beach as well as the Beacon Isle Hotel located estuary mouth.

**b) Piesang Valley, Beacon Island Estate, Whale Rock**

- The southern extensions of Plettenberg Bay are separated from the Main Town by the Piesang Valley with the Piesang River running along the valley and into the estuary at the main beach.
- The valley contains large areas of Shale Fynbos and is designated as a Critical Biodiversity Area.
- A few retail facilities are clustered around the Piesang Valley Road/Longships Drive intersection and westwards along Piesang Valley Road up to the traffic circle. To the south along Longships Drive is another small business node with an approved future business node further south in the Whale Rock Ridge area.
- Several low intensity land uses occur along Piesang Valley Road within the floodplain area including a crèche, a private school, a horse riding facility and the River Club residential development.
- To the south is the Brackenridge Private Estate, Beacon Island Estate, Woodlands Country Estate, and several separate Whale Rock residential estates at the southern end of Longships Drive.
- This area also comprises the so-called millionaire's row along the coastline with three swimming beaches along this strip.
- The link road between Robberg Road, Longships Road and the Robberg Nature Reserve represents the southern border of this area.

### c) New Horizons/Qolweni/Bossiesgif

This area is located adjacent to the west of Plettenberg Bay Main Town and to the north of route N2 as illustrated on **Figure 40**. New Horizons makes up the central and western part of this precinct and comprises middle to low income residential development with a primary and secondary school as well as sports fields and a community hall. The new Magistrates' Court and library are located at the main entrance to New Horizons from route N2. These facilities were constructed as part of the Coming Together Initiative (Refer to **Table 27** for a summary of this initiative). The area also comprises some local business activity, informal trade and public transport services in the central part adjacent to the south of the primary school.

To the north-east is the linear Pinetree/Gaatjie area which has been incrementally developed/formalised over the past ten years (still ongoing). There are approximately 735 backyard units in the New Horizons area which are earmarked to be formalised in Ebenezer to the northwest (also refer to Table 19).

The Qolweni residential area is located further to the east along route N2 (between New Horizons and the Main Town). It is an informal settlement which extends right up to the industrial area on land which was earmarked for a Community Node in terms of the Coming Together Initiative.

To the north of the industrial area is the Bossiesgif residential area and an informal settlement on Erf 3585 (Minnaar's Land) which has been acquired for formalisation purposes. The land parcel adjacent to the east on the

opposite side of the access road is earmarked to be utilised for temporary decanting purposes.

A pedestrian bridge and informal market have been constructed across route N2 in the vicinity of Piesang Valley road (as part of Coming Together Initiative).

The current housing backlog/demand registered for this area stands at about 2 403 units (including New Horizons) and all the areas marked P3, P4 and P5 on Figure 40 earmarked for in-situ upgrading/formalisation in the Bitou LM Housing Project Pipeline as depicted in Table 19. The Qolweni projects total approximately 953 units, while approximately 735 households are also earmarked to be accommodated in the Ebenezer Phase 1 project to the north-west of New Horizons.

The land to the south of New Horizons on the opposite side of route N2 comprises the Schoongezicht Security Estate which gains access from Piesang Valley Road to the east. To the west thereof is a proposed new retirement village bordering onto route N2. It is also important to note the two areas demarcated as Restructuring Zones for promotion of Social Housing at the Piesang Valley-N2 intersection (B) and at the future Town Centre (E) precinct respectively.

### d) Kwanokuthula

Kwanokuthula is located adjacent to the south of the N2 freeway and a few kilometres to the west of the Plettenberg Bay CBD (**Figure 41**). It consists



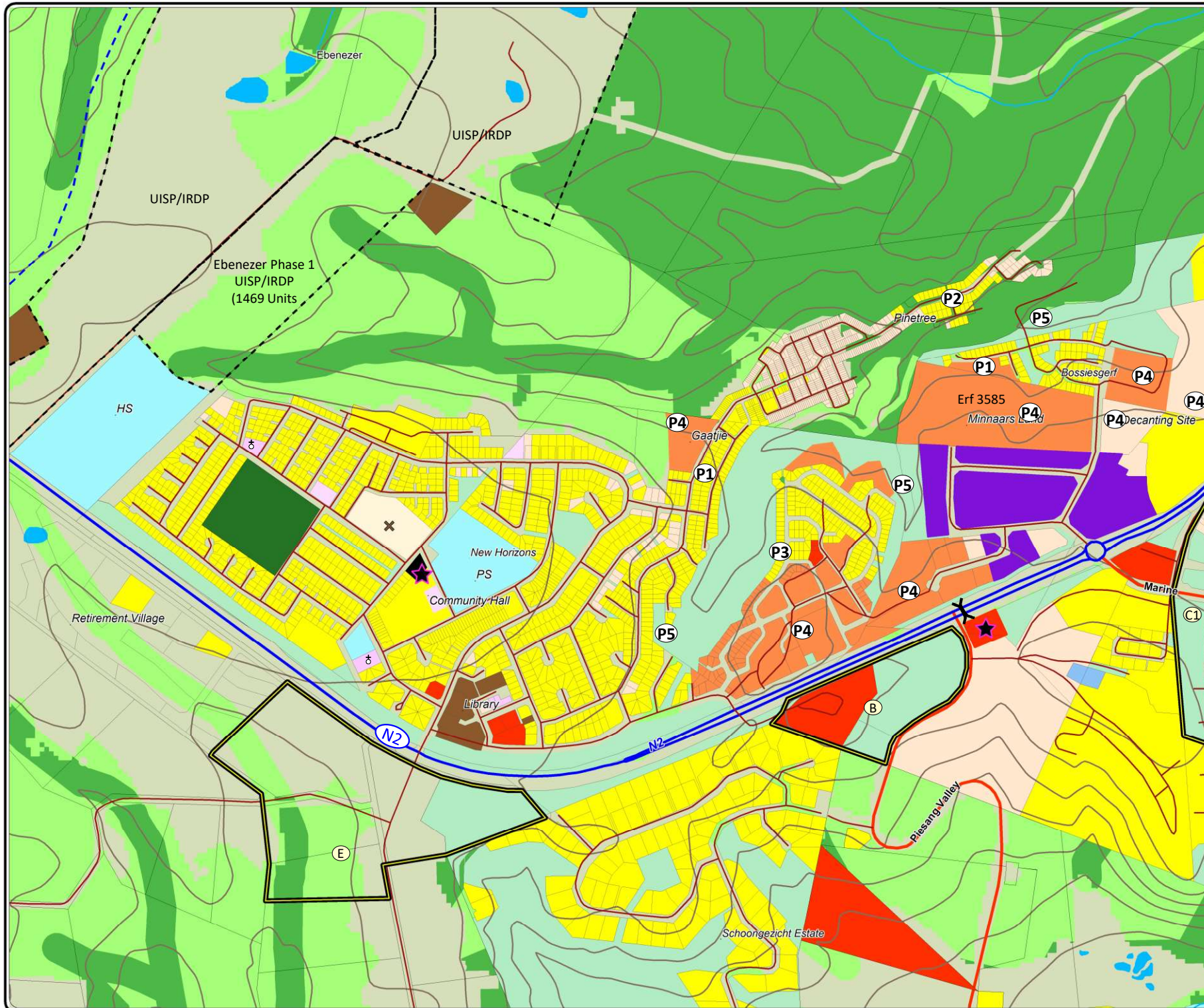
## New Horizons Spatial Structure

- Business
- Municipal
- Community Facilities
- ⛔ Church
- Educational
- Informal Settlement
- Residential
- ✕ Cemetery
- Industrial
- Sports and Recreation
- Vacant
- Extensive Agriculture
- Open Space
- Core Area (1 and 2)
- Buffer (1 and 2)
- National Roads
- Provincial Roads
- Secondary Roads
- Other Roads
- ✈ Pedestrian Bridge
- Contours
- Dams/Rivers
- ⬮ Restructuring Zones
- ⬮ Housing Project Area
- ★ Taxi Facility



0 30 120 180 240 300 m

Figure 40





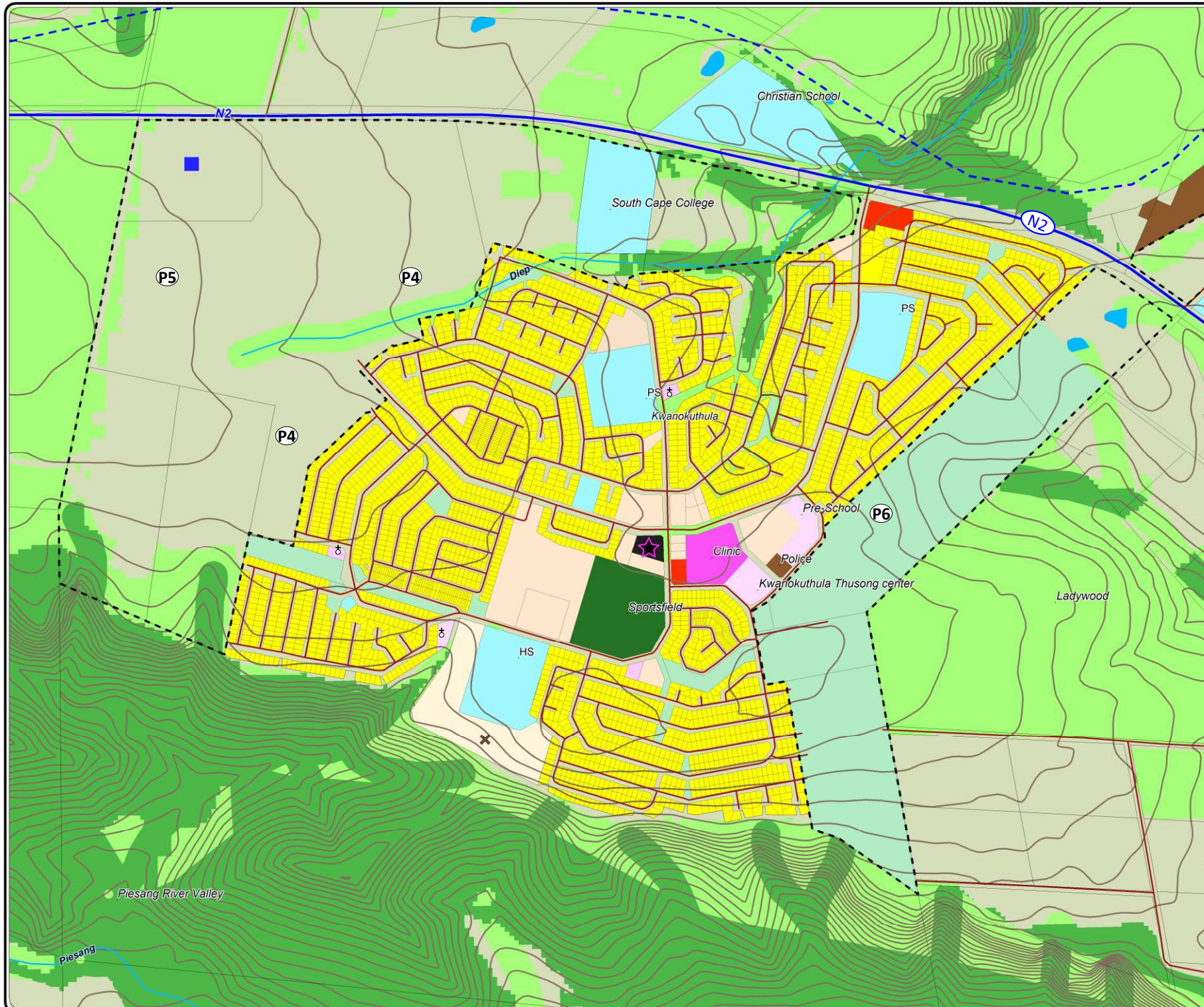
## Kwanokuthula Spatial Structure

- Business
- Municipal
- Community Facilities
- ⛪ Church
- Educational
- Residential
- ✕ Cemetery
- Clinic
- ★ Taxi Facility
- Vacant
- Extensive Agriculture
- Open Space
- Core Area (1 and 2)
- Buffer (1 and 2)
- National Roads
- Proposed N2 Bypass
- Provincial Roads
- Secondary Roads
- Other Roads
- Contours
- Dams/Rivers
- Waste Transfer Station
- Housing Project Area



0 30 120 180 240 300 m

Figure 41



of a number of formal residential townships with a fair amount of vacant land to the east and west thereof. To the north it borders onto the South Cape College which offers courses in Hospitality, Tourism, Engineering and Consumer Studies. Opposite to the north across route N2 is the Plettenberg Bay Christian School (Private).

The housing demand registered for this area stands at about 2 944 units (refer to Table 18).

The eastern buffer strip (P6) is earmarked for the future mixed use Kwano City as part of the Coming Together Initiative. Several components of the centrally located Kwano Urban Node initiative have been constructed over the past few years including a multi-purpose community centre, school, police station, a pre-school and children's shelter facility. The node also holds the Kwanokuthula taxi rank and a number of informal traders that are active around the taxi rank.

The main business activity of Kwanokuthula is clustered to the north at the entrance from route N2 where a small neighbourhood centre exists.

The municipal waste transfer facility is located at the western end of Kwanokuthula.

As shown on **Figure 42** (the Kwanokuthula "Sectoral Plan") the entire area to the west of Kwanokuthula up to the Ebenezer intersection is earmarked for future residential development. These areas are indicated as P4 and P5

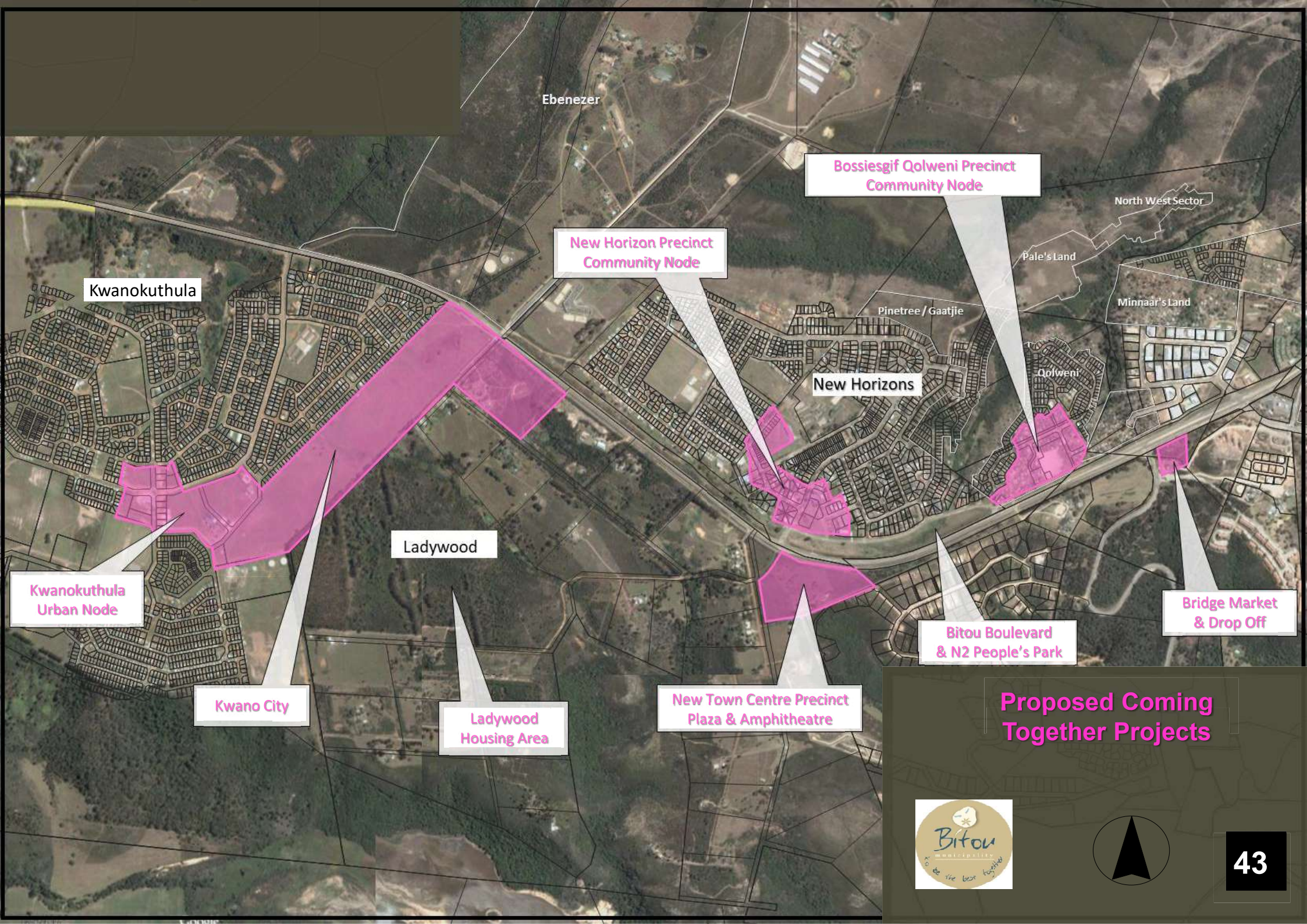
on Figure 41 and the projects are intended to provide approximately 2 003 residential units as depicted in the Bitou Housing Project Pipeline (Table 19). The remaining demand will in future be accommodated in the Ebenezer area to the north of route N2. The Ladywood area to the east of Kwanokuthula is earmarked for future residential, commercial and government use and will functionally fill the vacant gap between Kwanokuthula and Plettenberg Bay Town.

**Table 27: Coming Together Initiative**

This initiative is an urban integration project that intended to create a strong linkage between the Plettenberg Bay CBD and previously separated township areas of Kwanokuthula, New Horizons, Bossiesgiff and Qolweni. The key objective is to bring **economic development**, **government services** and **social services** closer to the majority of the people. This requires the future **shifting the centre of gravity** of economic investment, job-creation and development towards the townships. This will assist in **capital formation** in the townships and in the creation of collateral value for existing and new home- and business owners.

The project proposes the development of two new key **mixed use nodes** in the form of Kwano City and the New Town Centre (Government Services Precinct), and three urban/community nodes at Kwanokuthula, New Horizons and Qolweni respectively as depicted on **Figure 43**. The N2 corridor acts as an integration spine through these areas.





Ebenezer

Bossiesgif Qolweni Precinct  
Community Node

New Horizon Precinct  
Community Node

North West Sector

Pale's Land

Minnaar's Land

Kwanokuthula

Pinetree / Gaatjie

New Horizons

Qolweni

Ladywood

Kwanokuthula  
Urban Node

Bridge Market  
& Drop Off

Bitou Boulevard  
& N2 People's Park

Kwano City

Ladywood  
Housing Area

New Town Centre Precinct  
Plaza & Amphitheatre

Proposed Coming  
Together Projects



### e) Goose Valley

Goose Valley comprises the strip of land along route N2 between Market Square/Plettenberg Bay Primary School and the Keurbooms River Bridge, as shown on **Figure 44**. It mainly comprises tourism and recreational land uses and includes the following prominent features:

- Old Nick's Village with the municipal Waste Water Treatment Works to the east thereof;
- Keurbooms Lagoon Caravan Park opposite to the east of route N2;
- The Tides, Turtle Creek and Goose Valley residential and golf estates located in the narrow strip between route N2 and the Keurbooms Estuary;
- A recently approved retirement village (Clarisons) to the west of route N2 opposite the Golf Estate;
- BUCO hardware, Plett Yamaha Boat Dealership and Denron Cement/ Brick/ Rock Suppliers clustered together in a triangular area between route N2 and the link road to Emily Moon;
- The old polo fields which have been converted into vineyards close to the Bitou River bridge;
- The Bitou and Keurbooms River estuary and floodplain running parallel to the east of route N2;
- The alignment of the future N2 bypass route which will run to the west of Goose Valley towards Ebenezer in the vicinity of New Horizons to the south-west.
- Currently, there is public and private sector interest towards the development of small patches of "developable" land with exceptional views on Portions 1, 2, 72, 73 and 74 of Farm Ganse Valleï 444, Portion

7 of Farm 306 and Portion 28 of Farm Wittedrift 306/28 as depicted on Figure 44 and **Figure 45**.

- Further to the north of route R304 there is also private sector interest towards a mixed use development on portions of the farm Hanglip in the vicinity of Wittedrift (also refer to **Figure 46**).

### 3.4.7.2 Kranshoek

Kranshoek is located approximately one kilometre to the south of Robberg Road to the south-west of Plettenberg Bay town (refer to **Figure 47**). It comprises approximately 820 households which gain access via a single entrance road linking the settlement to Robberg Road. The current registered housing demand for the area stands at about 1 207 units.

Community facilities include a new primary school at the northern entrance to the settlement and a clinic on the corner of Van Rooyen and Loop Street (with a frail care centre to the south thereof). It also has a community hall, library and office of the Department of Housing and Settlements clustered in the Kranshoek Community Centre in the central part of the village while a new sports and recreation facility was recently developed to the south-east of the Kranshoek Community Centre. The cemetery is located at the far south-eastern end of the settlement.

Adjacent to the west of the Community Centre is a Griqua monument and the old primary school to the north-west thereof. A waste transfer facility is located at the northern entrance of the settlement next to the new primary



## Goose Valley Spatial Structure

- Business
- Municipal
- Community Facilities
- Educational
- Informal Settlement
- Residential
- ✕ Cemetery
- Light Industrial
- Industrial
- Sports and Recreation
- ★ Taxi Facility
- Vacant
- Extensive Agriculture
- Open Space
- Core Area (1 and 2)
- Buffer (1 and 2)
- National Roads
- Proposed N2 Bypass
- Provincial Roads
- Secondary Roads
- Other Roads
- Contours
- Dams/Rivers
- ★ Beach
- Housing Project Area
- ★ Public/Private Development Interest

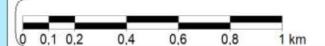


Figure 44

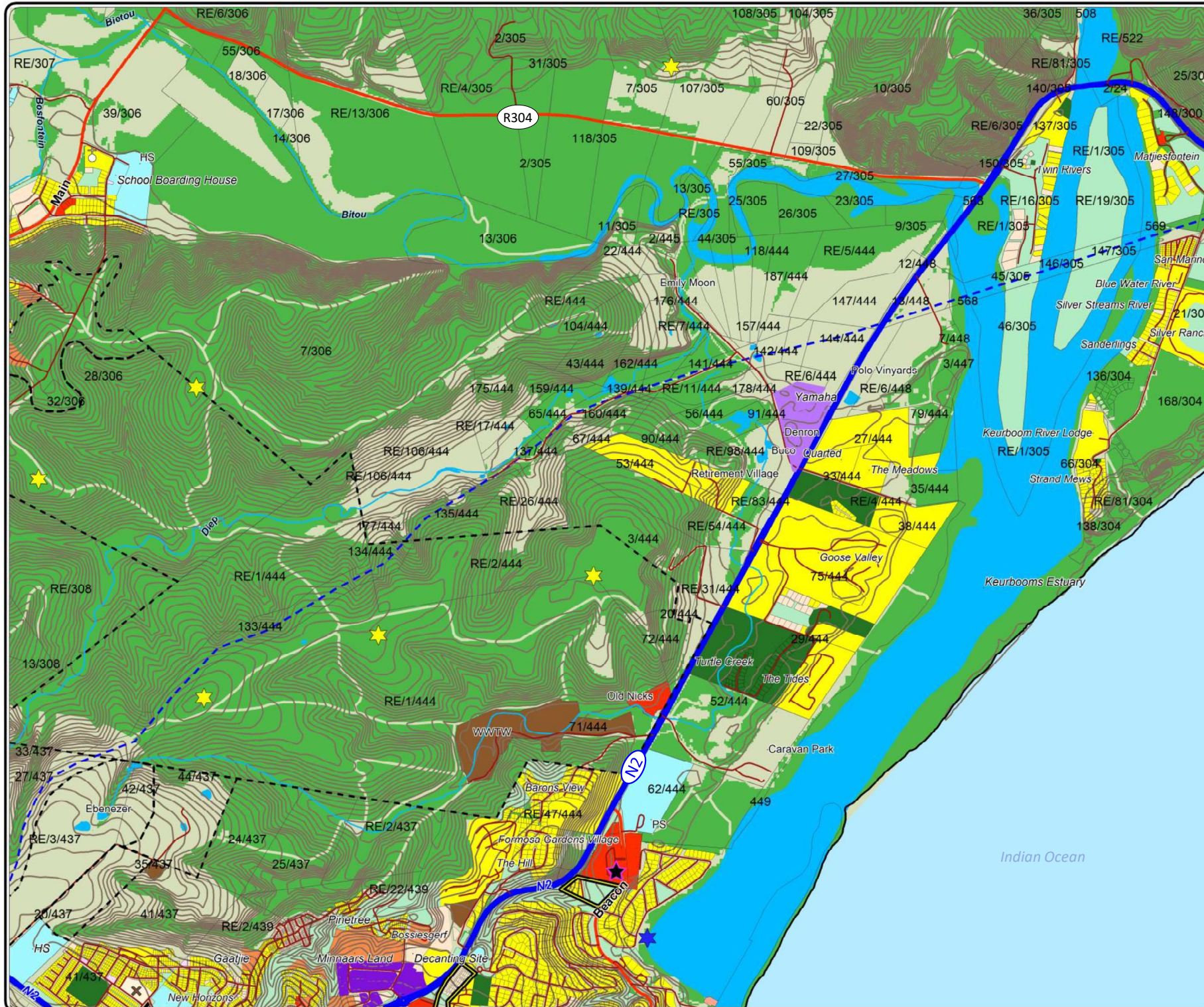




FIGURE 45



FIGURE 46



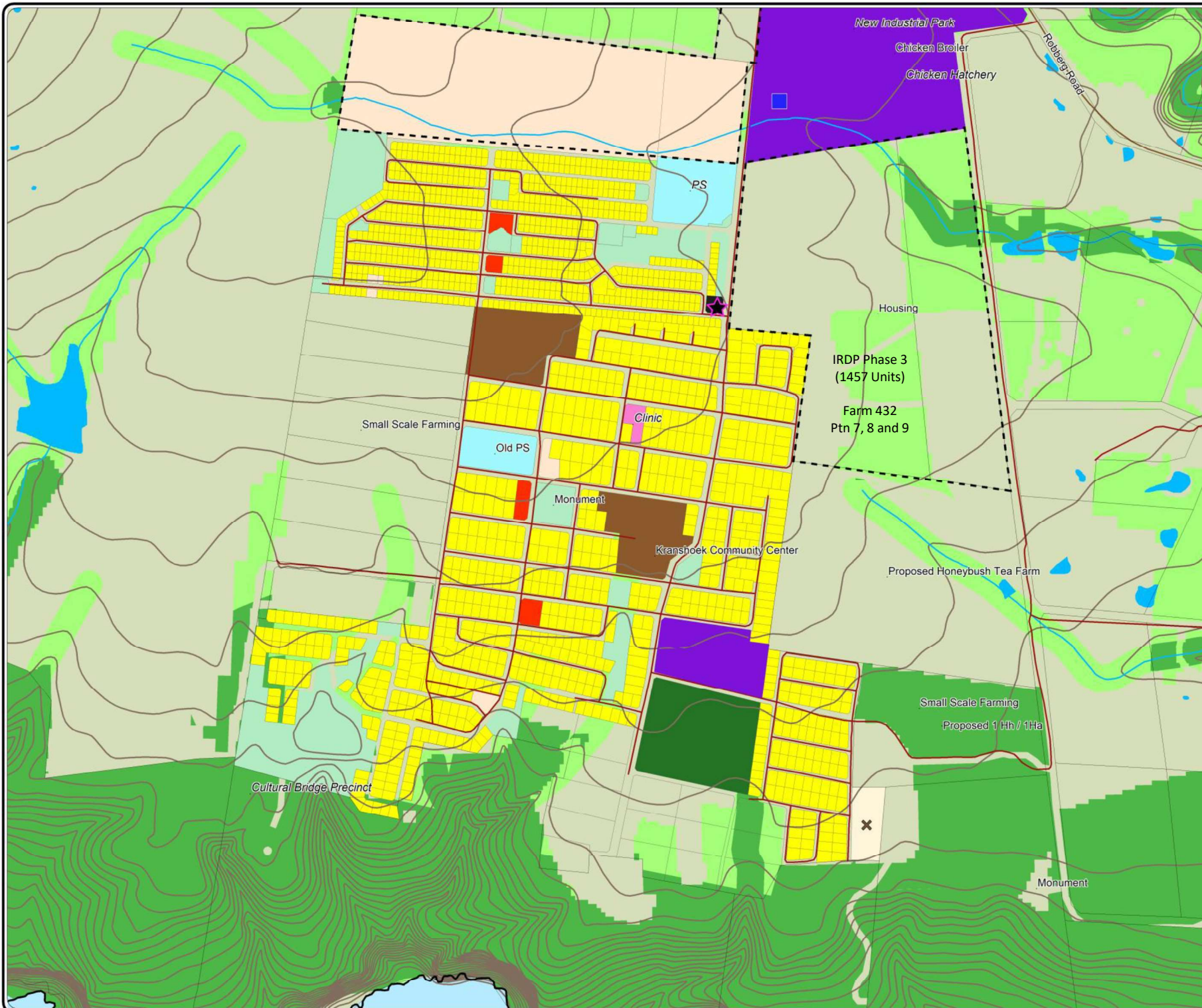
## Kranshoek Spatial Structure

- Business
- Municipal
- Community Facilities
- Clinic
- Educational
- Residential
- ✕ Cemetery
- Industrial
- Sports and Recreation
- ★ Taxi Facility
- Vacant
- Extensive Agriculture
- Open Space
- Core Area (1 and 2)
- Buffer (1 and 2)
- Secondary Roads
- Other Roads
- Contours
- Dams/Rivers
- Waste Transfer Station
- Housing Project Area



0 30 120 180 240 300 m

Figure 47



school, while an informal taxi holding area exists to the south thereof along the main internal access road.

Several small businesses (shops) are located within the western parts of Kranshoek. The larger business area along the main access road (between the community centre and the sports and recreation facility) comprises a number of low-key service industries/commercial activities.

There are also a number of small farms located adjacent to the west of Kranshoek. These are actively farmed by members of the community. Some limited agricultural activity also occurs to the east of the settlement with two properties as depicted on Figure 47 earmarked for Honeybush Tea farming and for One Household/One Hectare purposes respectively. Both these initiatives are driven by the Department of Rural Development and Land Reform.

The land to the north-east of Kranshoek comprises a new Industrial Park which already accommodates a chicken farm. The site to the south thereof is earmarked for future housing ( $\pm 1457$  units) (Portions 7, 8 and 9 of Farm 432) and forms part of the Housing Project Pipeline of Bitou LM (refer to Table 19).

Also notable is the number of large vacant erven located around the southern end of the village. Apparently these properties are privately owned by members of the community but it is reported that there are outstanding tenure status issues in the area.

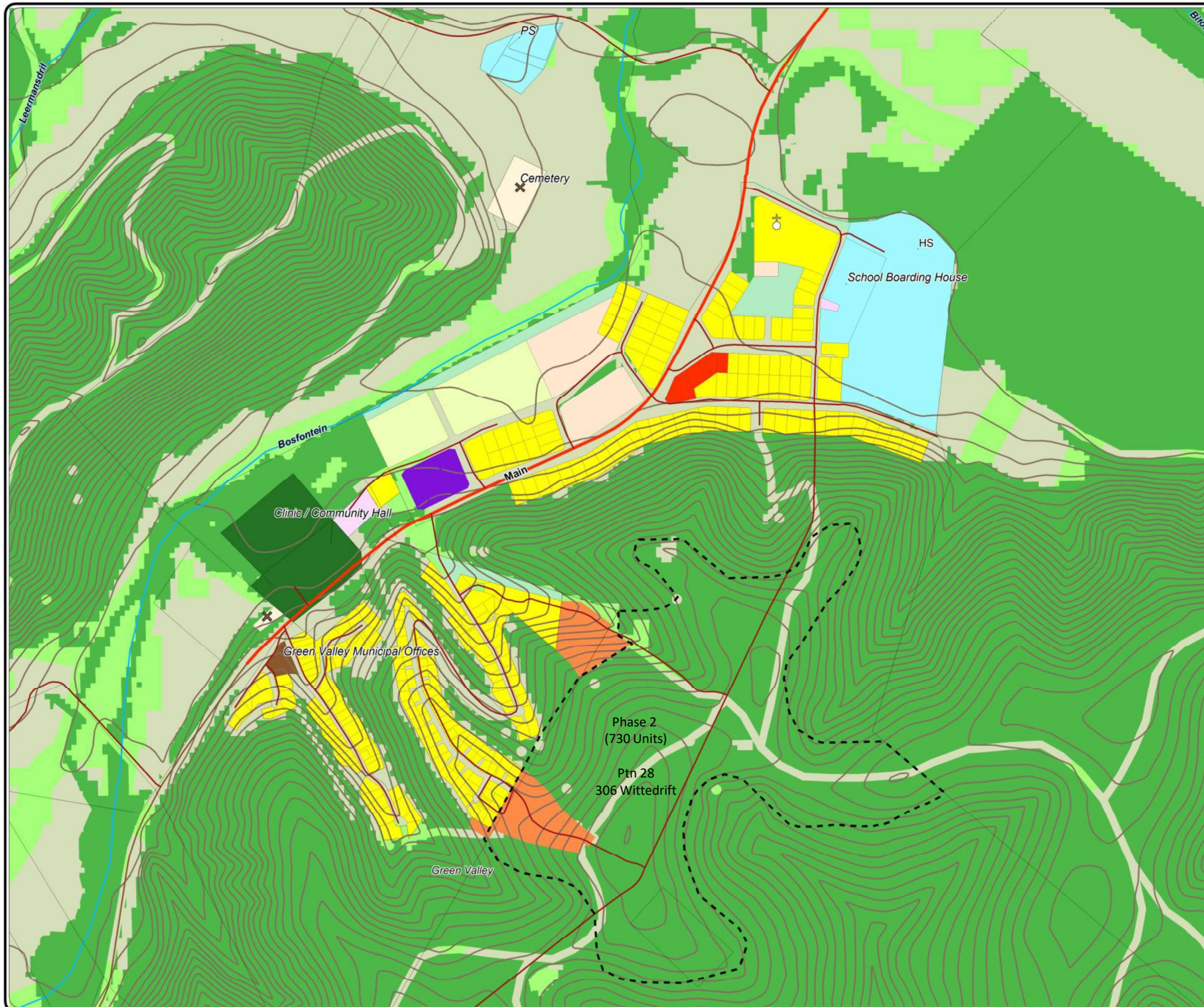
The Kranshoek Cultural Bridge initiative comprising, amongst others, a proposed hotel and conference facilities to the south of Kranshoek is in the planning phase, but no more details about this initiative could be obtained. It should be noted that the land to the south between the village and the coastline belongs to the Bitou LM.

#### 3.4.7.3 Wittedrift/Green Valley

This settlement is located to the north of Plettenberg Bay on the edge of the floodplain of the Bitou River (**Figure 48**). It is surrounded by extensive areas of high biodiversity with intermittent agricultural activity.

In the central part it has a small crescent shaped convenience retail node that represents the heart of the settlement.

To the north-east thereof is the Wittedrift Combined School (with boarding house) which is double medium (Afrikaans and English). The primary school and cemetery are located about 600 meters to the north-west of the town. Further to the south-west along Main Road is a recently completed medium density residential development with a small community hall, a clinic and sports fields clustered together. Further to the west along Main Road is the Green Valley municipal office.



## Wittedrift Spatial Structure

- Business
- Municipal
- Community Facilities
- ⛔ Church
- Educational
- Rural Residential
- Residential
- Informal Settlement
- ✕ Cemetery
- Industrial
- Sports and Recreation
- Vacant
- Extensive Agriculture
- Open Space
- Core Area (1 and 2)
- Buffer (1 and 2)
- Provincial Roads
- Secondary Roads
- Other Roads
- Contours
- Dams/Rivers
- - - Housing Project Area



0 30 60 120 180 240 300 m

Figure 48

The Green Valley area comprises low income houses established in three linear clusters due to topographical constraints. The current registered demand for housing is for 330 units (refer to Table 18). On top of the hill is a relatively flat area (Portion 28 of the Farm Wittedrift 306) which is earmarked for future housing purposes (about 730 units) in terms of the existing Bitou LM Housing Project Pipeline. This land belongs to the Department of Rural Development and Land Reform.

Some residents are employed on the surrounding farms while others work in the few service industries and the community facilities located in Wittedrift. A number of residents commute to Plettenberg Bay for employment purposes.

#### 3.4.7.4 Keurbooms River

The Keurbooms area (**Figure 49**) includes a number of disparate resorts, retirement villages and lodges extending from the eastern banks of the Keurbooms River estuary and floodplain along the coastline over a distance of approximately 5 kilometres. It comprises the following prominent developments:

- Keurbooms River holiday resort with various typologies, single residential, group housing and gated estates;
- The Keurbooms Hotel complex;
- A number of retirement villages to the east thereof;
- Various holiday resort townships to the east culminating in Keurbooms Strand which also has a small restaurant. This area links back to route

N2 via Game Street which is a gravel road passing through a number of farms;

- Spectacular views of the area are enjoyed from the old N2 route which winds its way down the outside of the hill overlooking the floodplain and estuary with dramatic views through to Plettenberg Bay.
- The access road from Keurbooms River intersects with the N2 only 100 metres from the intersection with the road to Keurbooms Strand. The well-known Thyme and Again farmstall is located in this vicinity.

#### 3.4.7.5 Kurland

The broader Kurland area comprises a number of disparate components located approximately 20 kilometers from Plettenberg Bay along route N2 as illustrated on **Figure 50**. It includes the following:

- Kurland hotel and polo estate to the west and north across the N2 and which was earmarked to be converted into a mixed income residential estate some ten years ago (also refer to **Figure 50.1**);
- Kurland garage and post office, the closest there is to a commercial node in the area and which is currently in the process of redevelopment by AFGRI;
- Kurland Bricks and Timber which provides most of the employment that is available in the area;
- Kurland village, a number of loosely linked township extensions with no real core;
- The Craggs, also a well-known name, but whose main focus appears to be a filling station and shop further south along the N2 route and does not appear to be functionally part of the Kurland settlement components.

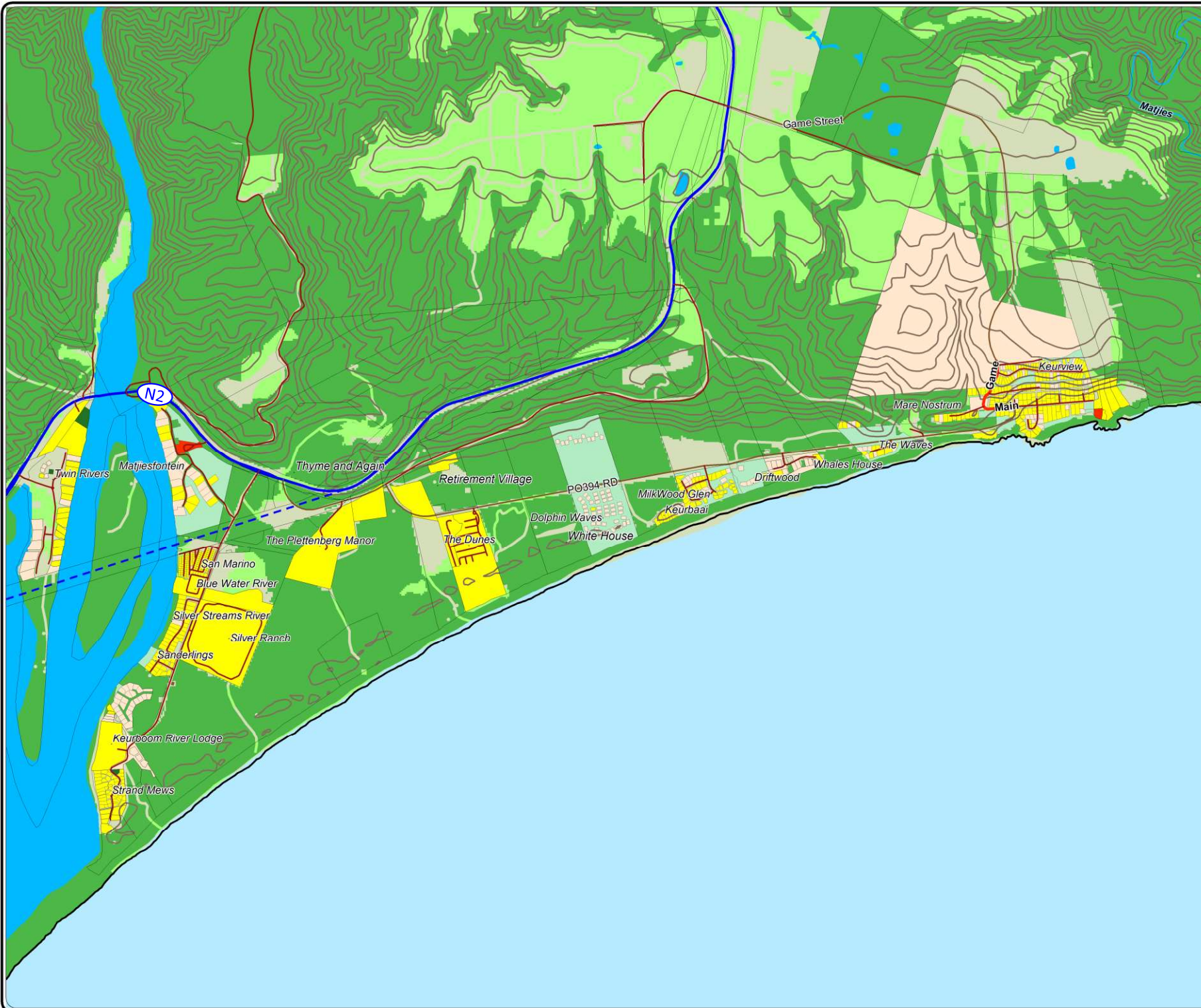


## Keurbooms Spatial Structure

- Business
- Residential
- Sports and Recreation
- Vacant
- Extensive Agriculture
- Open Space
- Core Area (1 and 2)
- Buffer (1 and 2)
- National Roads
- - - Proposed National Roads
- Provincial Roads
- Secondary Roads
- Other Roads
- Contours
- Dams/Rivers



Figure 49



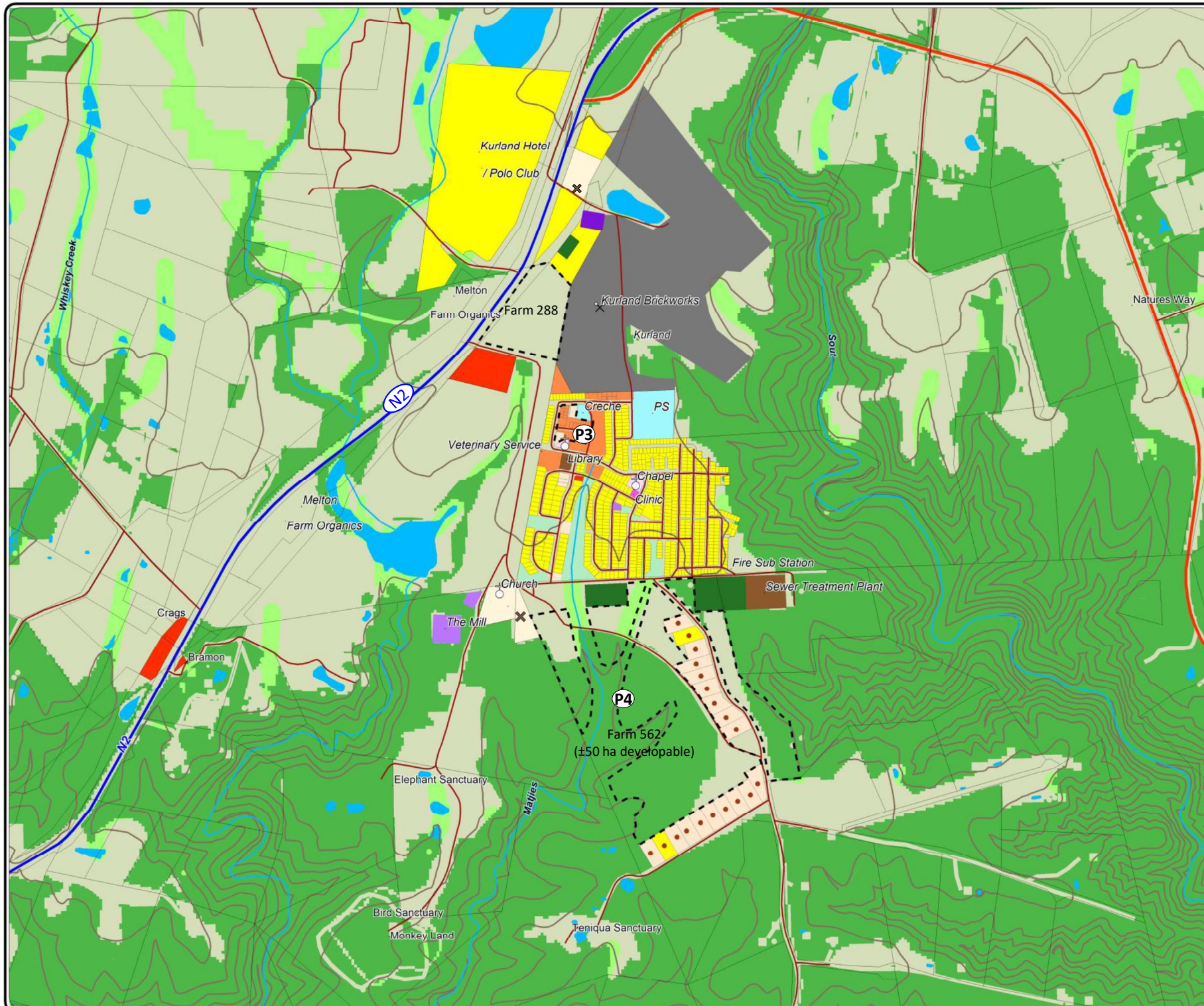


## Kurland Spatial Structure

- Business
- Municipal
- Community Facilities
- ⛪ Church
- Clinic
- Educational
- Informal Settlement
- Residential
- ✕ Cemetery
- Light industrial
- Industrial
- Sports and Recreation
- Vacant
- Extensive Agriculture
- Open Space
- Core Area (1 and 2)
- Buffer (1 and 2)
- National Roads
- Provincial Roads
- Secondary Roads
- Other Roads
- Contours
- Dams/Rivers
- ✕ Quarry
- Proposed Housing Project Area
- Land Reform Plots



Figure 50





N2. These settlement components are located on relatively flat land along route

To the north and east are intensive agricultural areas which mainly consist of dry land pasture for horses, cattle and dairy farms with some horticulture. Further to the east across the Salt River Gorge are more pastures and intensive agriculture.

The natural area to the south and east of Kurland village consists of a complex series of dramatic deep gorges and V-shaped river valleys. Most of the vegetation in this area is Sandstone Fynbos with indigenous as well as plantation forests in the valleys.

Kurland village comprises approximately 930 formal houses with an informal settlement (Zawa-Zawa) covering the north-western part of the village as illustrated on Figure 50. It has a registered demand of 884 units (refer to Table 18). In terms of the Bitou Housing Project Pipeline this area is earmarked for in-situ upgrading (74 units) while future expansion of the town is planned towards the south on Farm 562 Kirbywood (see P4 on Figure 40). This site comprises approximately 50ha of developable land under ownership of the Department of Rural Development and Land Reform. The transfer of a portion of the land to the Bitou LM is underway.

In terms of the Bitou Housing Project Pipeline this site should accommodate approximately 270 units in the short to medium term, but the total development potential is estimated at about 500 units. There is currently an application for a small Temporary Relocation Area (TRA) on about 0.8 ha of

the land in order to accommodate people to be relocated from where the 74 units of Phase 3 will be developed. The southern triangular-shaped end of this property as well as the 19 larger erven illustrated on Figure 50 are earmarked for agricultural project by the Department of Rural Development and Land Reform (Refer to Figure 8 and Table 7 in this report).

A portion of Farm 288 to the north-west of Kurland Village has been considered for housing development and the estimated yield from this area is about 134 units. The development of this site makes sense as it links the Kurland Hotel and Polo Estate, Kurland Bricks, the old residence and Kurland Village to one another. The land is under private ownership and no progress has been made towards the acquisition thereof. (It does not appear in the Bitou Housing Project Pipeline).

The existing village holds a library and a community hall at the western entrance, a crèche and primary school to the north, and a clinic in the central part. To the south is a church and cemetery, two sports fields, children's playgrounds and a fire substation next to the sewerage treatment plant at the south-eastern end of the village.

The filling station along route N2 was recently bought by AFGRI which intends to upgrade the filling station and retail facility (which currently holds a general dealer and postal service). The land to the west of Kurland and up to route N2 is intensively utilised for agricultural purposes and includes, amongst other, Melton Farm Organics Plant.



The area to the south and east is characterised by several tourism attractions like Birds of Eden, Elephant Sanctuary, Monkeyland and Tenikwa Wildlife Sanctuary as well as Forest Hall and a number of private conservancies. The Mill Restaurant and a number of smaller tourism shops are also located in this area.

#### 3.4.7.6 Nature's Valley

Nature's Valley (**Figure 51**) is a holiday township which originated during the 1930s as a result of farmers taking their annual holidays on the banks of the Groot River Estuary. The 400 houses are serviced with municipal water, electricity and basic tarred roads, but there is no municipal piped sewer system (only septic tanks).

Strict land use and building guidelines apply (restrictive conditions of title) in the area due to the limited infrastructure availability and the sensitive natural environment.

A small shop is located at the south-western end of the town and a wooden church (which also serves as a community hall) in the central part which is also used as a community hall. A municipal waste collection point exists along Forest Drive at the north-eastern end of the village.

The town is located next to the Groot River and is surrounded by steep slopes to the north, west and east and by the coast to the south. It is accessed via route R102 which winds its way down off the inland plateau along the Groot River Pass towards the town.

The De Vasselot Rest Camp and Caravan Park, which forms part of the Garden Route National Park, is located along the northern end of the Groot River estuarine.

#### 3.4.7.7 Covie

Historically, Covie (**Figure 52**) was a woodcutter's location established in 1883 in terms of a Deed of Grant. In 1884 the land was divided into 30 allotments, with the remainder of the land, measuring approximately 650 hectares, was declared as a commonage and used for communal grazing.

The Covie community lodged a claim in terms of the Restitution of Land Rights Act 22 of 1994 for 16 allotments, the commonage and the section thereof incorporated into the Tsitsikamma National Park, arising from forced removals from properties previously occupied by them or their ancestors in Covie. The Regional Land Claims Commissioner for the Western Cape Province was satisfied that the claim lodged on behalf of the Covie community met all requirements set out in section 2 of the Act, and that the claimants were entitled to restoration as just and equitable award in settlement of their claim.

Subsequently a service provider was appointed in July 2005 by the Commission on the Restitution of Land Rights, to complete a Development Plan with the Covie community for land awarded to the community. The team developed four (4) planning scenarios as outlined below:

- The Greenfield Land Allocation Model;



## Natures Valley Spatial Structure

- Business
- Church/Community Hall
- Residential
- Accommodation
- Refuse Collection Site
- Vacant
- Extensive Agriculture
- Open Space
- Core Area (1 and 2)
- Buffer (1 and 2)
- Public Parking
- Provincial Roads
- Other Roads
- Contours
- Dams/Rivers

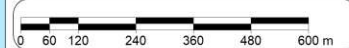
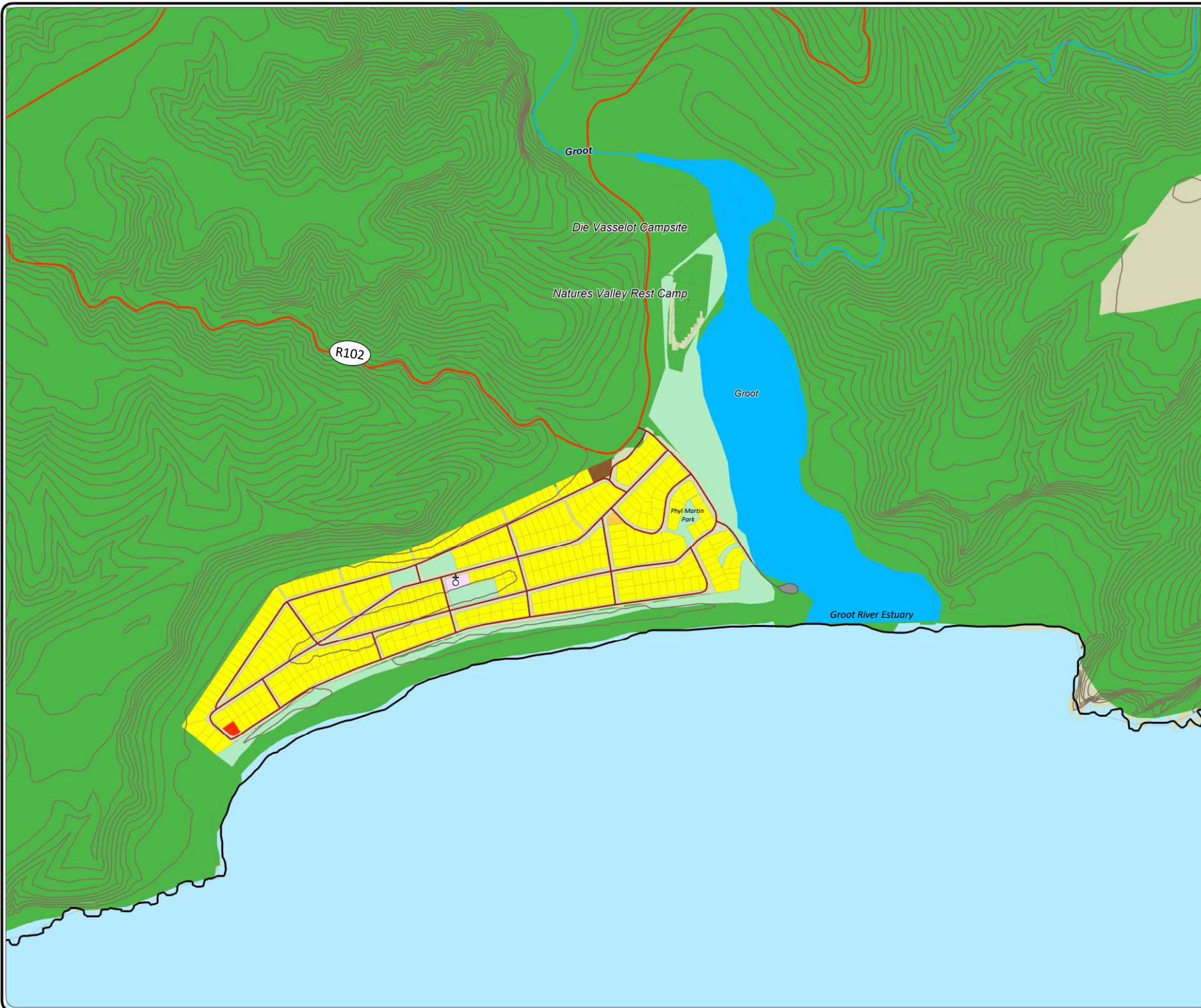
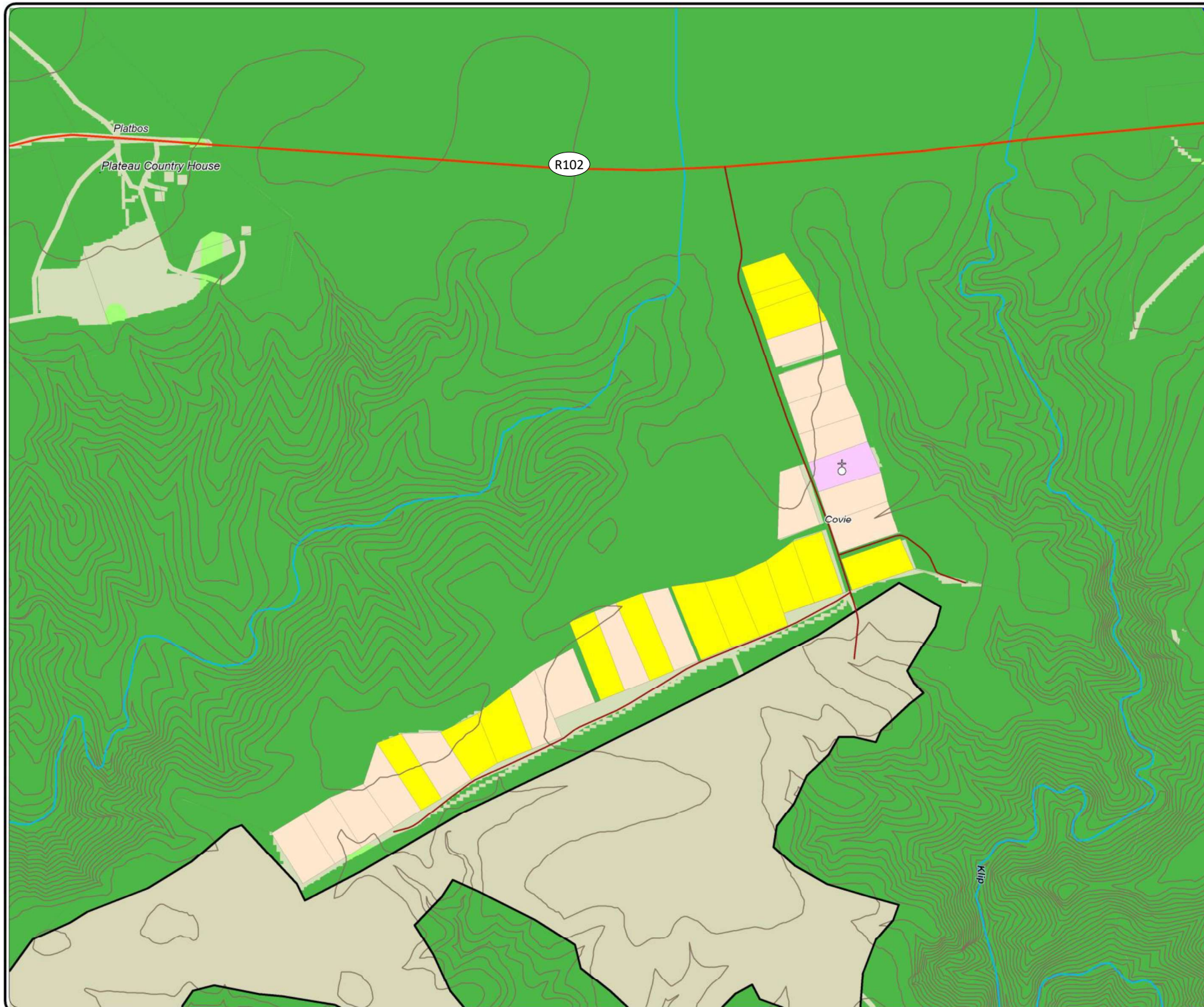


Figure 51





## Covie Spatial Structure

- ⛪ Church/Library/Community Hall
- Residential
- Vacant
- Commonage Pastures
- Extensive Agriculture
- Core Area (1 and 2)
- Buffer (1 and 2)
- Provincial Roads
- Other Roads
- Contours
- Dams/Rivers

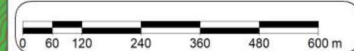


Figure 52

- The Consolidation Land Allocation Model;
- The Multi-Tenure Land Allocation Model; and
- The Extended Multi-Tenure Land Allocation Model

Each of these plans were evaluated against the requirements set by the community through vigorous consultation processes. The Multi-Tenure Land Allocation Model (MTLA) was selected as the preferred model and makes provision for:

- Ten family allotments of 2 ha each;
- Family meetings are to be conducted so as to clarify to whom 'use of benefit' within these families is to be allocated;
- The model proposes that up to four housing units be erected on each family allotment so as to maximise the number of beneficiaries;
- That separate allotments of 2 600 m<sup>2</sup> be made available to the 47 beneficiaries who had tenancy rights (renters) within Covie;
- The 28 families residing in Covie as 'informal residents' to be provided with 2 600 m<sup>2</sup> allotments;
- The MTLA's town plan makes provision for a mixed use development scenario comprising residential, agricultural and light 'home based' industry initiatives.

According to information obtained from the municipality during the process very little progress has yet been made regarding the implementation of the preferred model in the Covie area.

#### 3.4.7.8 Harkerville/Forest View

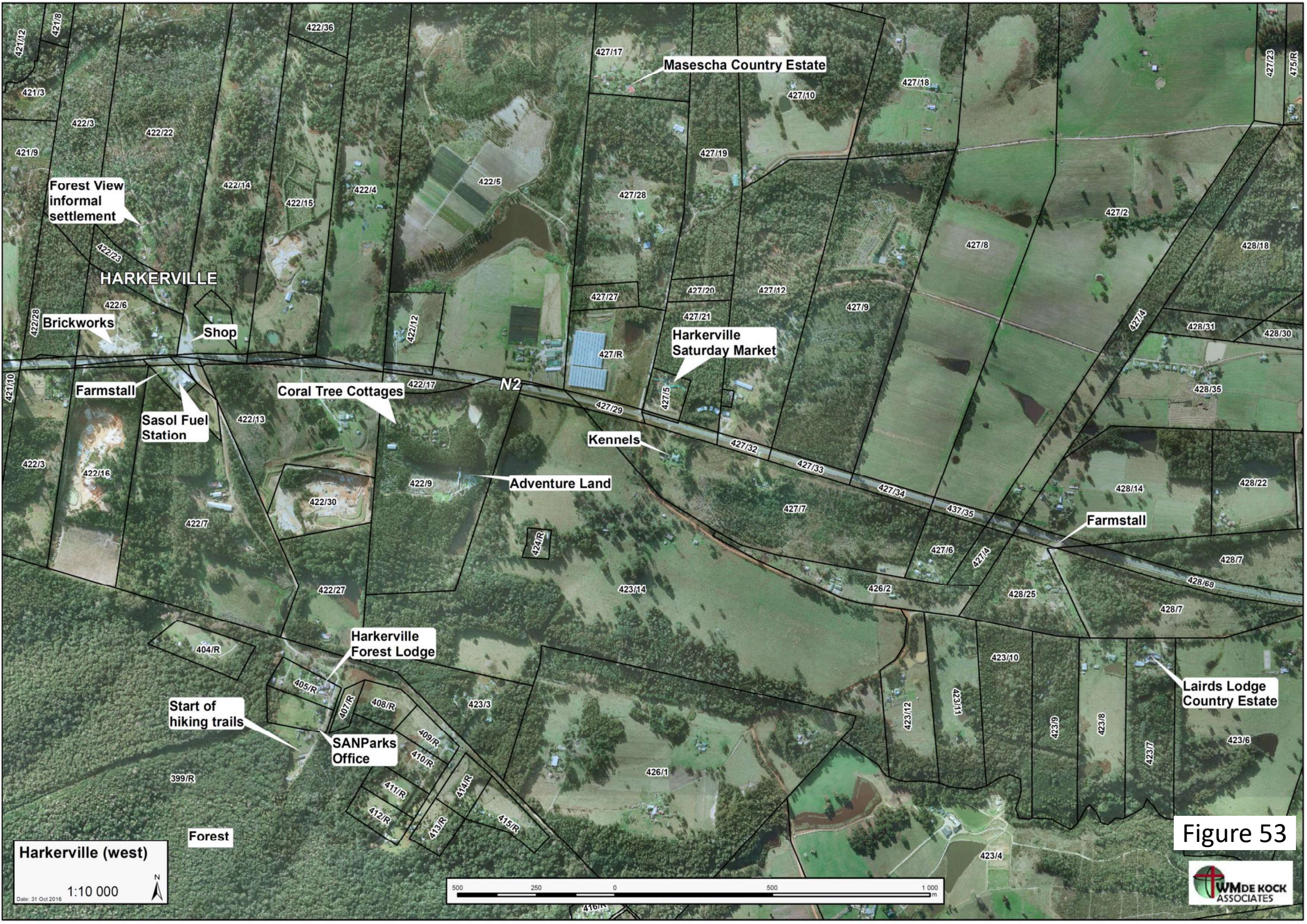
Forest View is an informal settlement located on Farms 422/22 (Municipal owned) and 422/23 (SANRAL owned) in the Harkerville area (refer to **Figure 53**). It comprises an estimated 40 families of which about 50% have been residing on the site for more than 10 years. The land covers an area of about 32 hectares.

During November 2016 a study was undertaken to determine the desirability of the establishment of a permanent rural settlement in this area. In terms of compliance to current provincial policy the study concluded as follow:

"It is unlikely that a proposal for an urban settlement will be approved against the background of the principles mentioned (in the Western Cape Policy for the Settlement of Farm Workers, 2000). A rural project where an agricultural project with associated housing is developed on the other hand, could be more readily considered.

A combination of the components and principles of the WC agri-village concept with the Farmer Production Support Unit (FPSU) could be further explored. However, to develop a project around the reality of the present number of families of which most are not even involved in the present small agricultural project is not justified. A sound and viable project needs to be planned first with an estimated number of workers. A settlement can then be planned with these families as core while others involved in bona fide agriculture in the local area can be included".

From a "Spatial Land Use Pattern" perspective the study concluded that "this area may be suitable for the establishment of an agri-village settlement



Harkerville (west)

1:10 000

Date: 31 Oct 2016



with agricultural activities. It needs further investigation in terms of the whole Harkerville and stakeholder inputs need to be taken into account.

The engineers are planning preliminary services for Forest View Barracks but it needs to be investigated further in the light of the eventual plan for an agri-village. The policy guidelines indicate that full and sustainable services must be provided”.

The study notes that while the only settlement typology that may be considered is linked to an agricultural project and an agri- village, the principles for it as set out in the Provincial planning guidelines, must be adhered to. Cognisance should also be taken of the pitfalls and risks that have been shown to happen in similar situations in the past, including:

- The settlement becomes a dormitory town with residents working in Plettenberg Bay or Knysna;
- It can lead to a limited agricultural project that is not sustainable with most of the residents not involved in it;
- It can lead to a housing project with no social infrastructure; and
- It can lead to a settlement which is not adequately served with basic services.

### 3.5 CONCLUSIVE SUMMARY: KEY DEVELOPMENT ISSUES AND SPATIAL IMPLICATIONS

#### 3.5.1 Regional Access

- The Bitou LM area comprises only a narrow strip of land suitable for development with limited access to the inland via Prince Alfred’s Pass.
- The major inland links are located at George-Mossel Bay-Oudtshoorn about 120 kilometers to the west and Nelson Mandela Bay approximately 200 km to the east of Bitou LM.
- The Bitou LM area also lacks harbours providing any significant access to the ocean.
- Hence the only significant links to surrounding regions are the section of the N2 coastal corridor passing through the municipality and the Plettenberg Bay Airport, which is currently used below its potential.

#### 3.5.2 Regional Economic Function

- The Bitou LM forms part of Oudtshoorn-Garden Route area and the municipal area is specifically earmarked for the promotion of Tourism, Agriculture and Public Service. It is not designated as an industrial node of national or regional significance. Instead it is required to focus on the promotion of tourism, and specifically eco-tourism linked to the richest floral region in the world, the Cape Floristic Region.
- The Tourism potential should be optimally developed, also providing opportunities to disadvantaged communities to participate as this is the main economic sector of the Bitou LM.

- The 38 000 ha of agricultural land pose opportunities to create jobs and sustainable livelihoods focusing on the following commodities: essential oils, winter grains, lucerne, dairy farming, floriculture (Fynbos and Honeybush), fruit (macadamia nuts and berries), olives and wine grapes.

### 3.5.3 Socio Economic Considerations

- The Bitou LM population growth rate (3.8%) and household growth rate (5.8%) are significantly higher than that of any of the surrounding municipalities which could pose serious future challenges in terms of service delivery and job creation.
- The housing demand of more than 8 238 units needs to be addressed at appropriate densities on well-located land and with due consideration to the establishment of economic activities in these areas.
- The provision of community facilities and sufficient engineering services also need to be considered as part of the housing programme, in line with the national objective to establish sustainable human settlements. New development areas must be able to link into existing bulk networks and utilise existing community facilities in surrounding areas – even if it is only temporary.
- Approximately 64.1% of households earn less than R3 500 per month. This poverty is mainly concentrated in Kranshoek, New Horizons, Bossiesgif, Kwanokuthula, Green Valley and Kurland.
- The Bitou LM has a relatively small economy, contributing only 7.4% of the Garden Route District's economy, compared to it representing 8.6%

of employment opportunities and 9.7% of the District Municipality's population.

- The bulk of the economic activity and employment opportunities are located in Plettenberg Bay town, while the potential in Harkerville, Wittedrift and Kurland/The Crags/Covie is limited. This should be taken into consideration in the planning and provision of government subsidised housing to the poor.
- Although the matric pass rate in the Bitou LM has been improving consistently over the past few years, very few of these learners continue with tertiary education/skills development.

### 3.5.4 Population Projections and Land Use Budget (Implications)

- The spatial implications of the projected future population and associated number of households to be accommodated in the municipal area are determined by means of a Land Use Budget.
- **Annexure A** comprises a comprehensive Land Use Budget for the Bitou LM for 2025 and 2040 respectively.
- Following is a brief summary of the Bitou LM Land Use Budget based on the assumption that growth trends of the Bitou LM as recorded for the period 2001 to 2016 will continue over the next two decades (up to 2040). (Also refer to **Table 28**).

**Table 28: Bitou LM: Growth and Land Use Budget Summary 2025, 2040**

|  | Scenario 2: 2025              | Scenario 2: 2040              |
|--|-------------------------------|-------------------------------|
| Annual Increase:<br>Assumptions        | 1993 People<br>871 Households | 1993 People<br>871 Households |
| Population Increment                   | 17 968                        | 47 843                        |
| Household Increment                    | 7 755                         | 20 894                        |
| Population Total                       | 77 125                        | 107 000                       |
| Household Total                        | 29 669                        | 42 808                        |
| Land Required<br>(Incl. Backlog)* (ha) | 548                           | 1 066                         |
| - Housing (ha)                         | 350                           | 692                           |
| - Other Land Uses (ha)                 | 198                           | 374                           |
| Average Gross Density (du/ha)          | 29                            | 27                            |

Note: \* Existing Bitou LM Backlog = 8 238 units

\*\*Existing Urban Footprint = 2 157 ha

- The Bitou LM population has been increasing at a rate of 3.8% per annum (1 998 persons/annum) over the period 2001-2016.
- Similarly, the number of households has been increasing at a rate of about 5.7% (871 households per annum).
- The projected additional population up to 2025 is about 17 968 people, representing 7 755 additional households.
- Should this trend continue, the Bitou LM would need to accommodate an estimated additional 107 000 people, representing approximately 42 808 households by 2040.
- When adding the current housing backlog of 8 238 units (households) to the 7 755 additional households, then approximately 548 ha of land would be required for urbanisation purposes up to 2025 (based on an

average gross density of about 29 units/ha). About 242 ha of the 548 ha represents land required to accommodate the existing backlog.

- This includes 350 ha for housing purposes and 198 ha for other land uses, e.g. community facilities, economic activities, streets, open space etc. It should also be noted that the 548 ha is based on projected permanent residents and does not specifically cater for additional holiday accommodation (non-permanent residents). Hence, the demand in terms of land required may be slightly higher than the Land Use Budget estimate in order to cater for future additional or holiday accommodation.
- By 2040 the amount of land required to accommodate permanent residents will stand at about 1 066 ha comprising 692 ha for housing and 374 ha for other uses (average density = 27 units /ha).
- The 1 066 ha required from now up until 2040 represents about 49.5% of the existing urban footprint of the Bitou LM, estimated at about 2 157 ha.
- The above figures are based on certain assumptions in terms of population growth and development density (as described) and are merely intended to be indicative and are not absolute.

### 3.5.5 Key Issues per Settlement

#### a) Plettenberg Bay Town

- The relocation of retail from the CBD to the new node developing around the northern end of Beacon Way has a detrimental effect on the CBD and draws economic activity further away from the low income communities in Kwanokuthula, New Horizons and Bossiesigif.
- Implementation of the Coming Together Initiative aimed at the consolidation and integration of historically segregated communities is slow and currently only comprises the development of public facilities e.g. a Magistrates' Court, Libraries etc.
- Very little progress has been made in terms of economic development and job creation around the mixed use nodal points identified as part of this initiative.
- The existing industrial area is gradually invaded by informal structures and a number of valuable industrial erven fronting onto route N2 have been earmarked for in-situ formalisation of the informal settlement.
- Most of the land identified for future low income housing is located on the urban periphery to the west and north-west of Kwanokuthula and New Horizons, not making any significant contribution towards spatial restructuring of the town.
- Similarly, the dominant housing typologies are single, low density Breaking New Ground (BNG) units with very few multi-storey units being developed.
- The very strategically located Ladywood area and Kwano City precinct located between Kwanokuthula and Plettenberg Bay town are still

undeveloped and there seems to be no coherent vision and strategy towards the future development of this area.

- Very little progress has been made in terms of enhancement of pedestrian and cyclist movement along and across route N2 (west) from the traffic circle up to Kwanokuthula (as recommended in the Bitou SDF 2013).
- The recent upgrading of Robberg Road past the Plettenberg Bay Airport and Kranshoek up to Harkerville resulted in increased development interest/pressure – especially along the section from Whale Rock up to the entrance to Kranshoek. This is a very strategic area in the context of future development of Plettenberg Bay, both in terms of enhancement of the role of the airport towards economic growth and development of the town, and in terms of eventually incorporating Kranshoek into the broader Plettenberg Bay urban complex.
- The nature of future development in the Goose Valley area around route N2 and westwards need to be clarified as some development pressure exist in the area.

#### b) Kranshoek

- Kranshoek is functionally isolated with a very fragmented and incoherent land use pattern.
- It also has long outstanding and unresolved matters related to land ownership/tenure upgrading which limits investment in the area.
- The recent upgrading of Robberg Road and increased development interest in the areas around the airport provide opportunities for the internal restructuring of the town and to functionally link it to the broader regional economy.

- The new industrial area adjacent to the north of the settlement and the proposed Cultural Bridge Initiative to the south along the coastal corridor between Kranshoek and Robberg Nature Reserve could provide much needed job opportunities.
- Local access into the settlement (from Robberg Road) and secondary linkages to the airport precinct need to be addressed.
- New housing projects for Kranshoek need to be aligned with the new development context of the town.

#### c) Wittedrift/Green Valley

- Wittedrift/Green Valley historically developed as a service centre to the surrounding farming communities.
- The settlement is relatively isolated with limited economic development potential/prospects.
- The Western Cape Province Housing Demand Database registered a demand of about 330 units in the area.
- The settlement is surrounded by areas of high biodiversity and natural constraints such as floodlines and ridges which limits the expansion potential.
- The Bitou Housing Development Pipeline identified a housing project of 730 BNG units on top of the ridge on land which is owned by the Department of Rural Development and Land Reform. It is highly likely that the fact that the land is government-owned resulted in it being identified for BNG housing purposes and not the location of the land.

#### d) Keurbooms

- Due to environmental constraints the Keurbooms area will never develop into one consolidated settlement area.
- The fragmented nature of the settlement and limited access to this area, as well as the fact that the majority of the resident population is seasonal in nature, also impact negatively on the economic development (job creation) potential of the area.

#### e) Kurland

- Similar to Wittedrift/Green Valley the economic development potential of Kurland is limited while the demand for housing (884 units) continuously increases.
- Expansion options for Kurland are limited to two areas: Farm 562 to the south and two private owned farm portions (intensively used for agricultural purposes) located towards route N2 to the west.
- A portion of Farm 562 is in the process of being transferred to the Bitou LM in order to be utilised for the development of about 270 units. The project is included in the Bitou Housing Project Pipeline.
- A plan to establish a high income residential estate on the Kurland Polo Estate adjacent to the west of Kurland Village has not materialised over the past decade and seems to have been shelved. This compromises the development concept for the area as defined in the Bitou SDF 2013.
- The community expressed an urgent need for a secondary school, additional primary school, a satellite police station and a skills development centre to be developed in the area.
- Economic development and job creation in the area is essential and agriculture and tourism are the two main sectors.

**f) Nature's Valley**

- The settlement cannot expand and maintaining the tourism character thereof is essential as it is very isolated with very limited economic development potential.

**g) Covie**

- Implementation of the Multi-Tenure Land Allocation Model approved some fourteen years ago is now long overdue as the village seems to be dying slowly.
- It is important to find ways and means to create jobs in and around the settlement – the two main sectors are agriculture and tourism.

**h) Harkerville**

- It is essential to get clarity regarding the future development concept for the Forest View settlement.

## 4. SPATIAL PROPOSALS

**Diagram 12** graphically illustrates the structure and sequence of the main components representing the Spatial Proposals of the Bitou LM SDF. It is briefly summarised as follows:

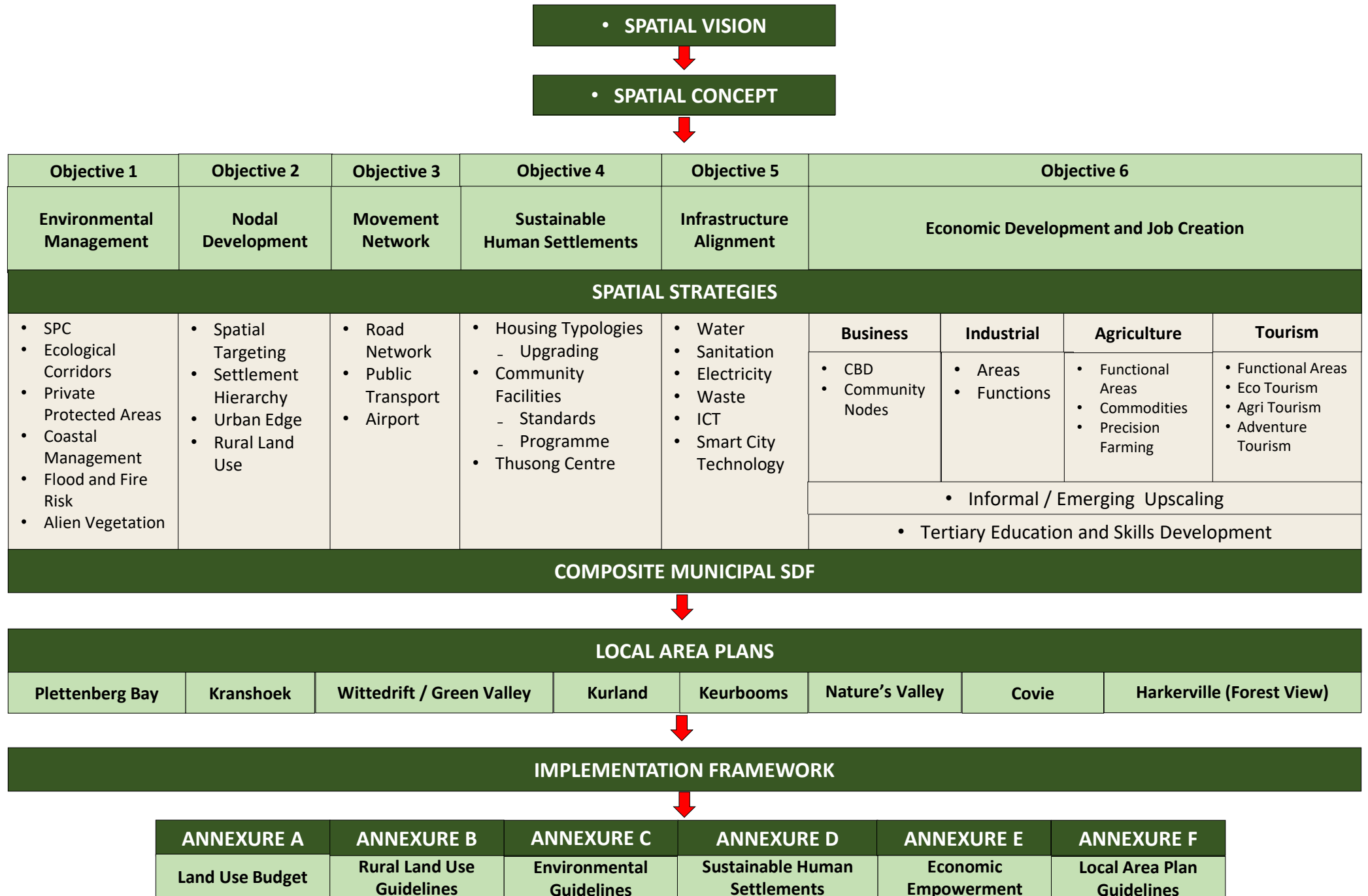
- Section 4.1 defines the Spatial Vision for the Bitou LM.
- Section 4.2 translates the Spatial Vision into a more detailed Spatial Concept which is based on six main Development Objectives that serve as points of departure towards future development in the municipal area.
- Section 4.3 unpacks the Spatial Strategies towards the realisation of the Spatial Concept. This is done by means of a number of Actions per each of the six Development Objectives.
- These Spatial Strategies are consolidated into the Composite SDF in section 4.4.
- Following from this a number of more detailed development guidelines are formulated as Local Area Plans for each of the major settlement areas within the Bitou LM (section 4.5).
- Detailed policies and guidelines relevant to either the Composite SDF or the Local Area Plans are contained in a number of annexures.
- The Implementation Framework as illustrated on Diagram 12 is discussed in section 5 of the document.

### 4.1 SPATIAL DEVELOPMENT VISION

The overarching long term Spatial Development Vision for the Bitou LM is:

***”To Become The Garden Route’s Sustainable Tourism Hub for the Benefit of All”***

- The vision acknowledges the reality that the Bitou LM’s greatest economic asset is natural resources that make it attractive to the local and international tourism market.
- These environmental resources include seemingly untouched mountainous forests, extensive sandy beaches supplemented with a number of pristine estuaries and a rich biodiversity;
- The quality of Bitou LM’s natural environment is a key factor in the success of the municipality as a tourism attraction, providing the resource for recreational activities such as golf courses, polo fields, bird watching, fynbos routes as well as hiking and mountain biking trails. It also provides the setting for holiday homes and tourist rental accommodation with spectacular views.
- The challenge created by such lifestyles that are only accessible to the wealthy is to ensure that the benefits of supplying the resources needed to sustain them are spread as widely as possible, allowing the poor to participate in the urban and rural economy of the municipality to the greatest extent possible;
- Bitou LM should thus, in terms of this vision, do the following:



- Facilitate the increase of tourism attractions that attract tourists and wealthy residents. These include promoting accessibility through the upgrading of the airport, installation of excellent IT services, providing more sport and recreational facilities, providing MTB and hiking trails, allowing more accommodation and restaurant venues;
- Ensure that this strengthening of attractions is not done at the expense of the natural or social environment;
- Ensure that every effort is made to broaden access to economic opportunities spinning off this wealthy core market, e.g. tour guides, guest houses, street markets and public transport interchanges integrated into shopping centres, township retail which is designed as tourism attractions easily accessible to external passing traffic;
- Direct the majority of public resources to ensure that the settlements work as well as possible for the poor and middle income groups, and that the social and economic needs of permanent residents are sufficiently met through effective public service delivery and integration.
- This includes planning and implementing spatial restructuring and integration programmes such as Coming Together and extending this approach to other settlements such as Kranshoek, Kurland and Wittedrift;
- Agriculture, although a minor economic sector in the Bitou economy remains important as a creator of low skilled jobs and the limited amount of arable land means that protection and better use of this resource should occupy a high priority.

## 4.2 SPATIAL CONCEPT

The main objective of the Bitou LM is to achieve a balance between development and the environment to ensure that growth is spatially just, financially viable and environmentally sustainable by working towards compact, vibrant, liveable and efficient settlements serving all communities.

The proposed Spatial Development Concept to achieve the above is graphically illustrated on **Figure 54** and is based on the following six Objectives:

**Objective 1: Facilitate the protection and sustainable management of the natural environmental resources.**

The natural environmental resources of the Bitou LM are fundamental to future economic development in the area as the two key economic sectors to the municipality (tourism and agriculture) are both resource based.

Hence it would be important to protect and conserve all important terrestrial, aquatic and marine habitats in the BLM as conceptually illustrated on Figure 54.

This would require the containment of urban development and efficient management of rural development in accordance with a coherent set of development guidelines.



**Objective 2: Direct and align growth to capacity, resources and opportunity in relation to a regional settlement hierarchy.**

As illustrated on Figure 54, settlement development should be consolidated in a number of functional nodes of which Plettenberg Bay Town is the highest order. Secondary nodes of significance include areas such as Kranshoek, Wittedrift/Green Valley and Kurland, while areas like Keurbooms and Nature's Valley are limited to holiday accommodation and recreation as primary functions. Covie and Harkerville/Forest View are categorised as smaller rural nodes with agriculture being the primary economic base.

**Objective 3: Optimise regional connectivity and mobility as well as local access and accessibility via a comprehensive movement network.**

Regional connectivity and mobility is provided by route N2 which links the Bitou LM to a number of important towns and cities along the South African coastline including Richards Bay, Durban/eThekweni, East London, Port Elizabeth, George, Mossel Bay and Cape Town. The other route of strategic significance in terms of regional connectivity is route R340 which provides an inland link to the Klein Karoo and beyond. Local sections of route R102 act as tourism routes and also provide access to Covie, Nature's Valley and Keurbooms River. Robberg Road connects Kranshoek and the southern rural parts to Plettenberg Bay Town and to route N2.

At local level access and connectivity should be enhanced in order to ensure optimal utilisation of economic opportunities and efficient service delivery in all parts of the municipality.

The Plettenberg Bay Airport which is located along Robberg Road could also play a significant role towards future economic development in the area – both in terms of tourism and business promotion.

**Objective 4: Facilitate the establishment of sustainable human settlements in all identified nodes.**

Settlement footprints should be contained at all cost in order to alleviate pressure on the natural resources of the municipality and to optimise the efficient use of resources (e.g. land) and infrastructure (e.g. engineering services) within existing towns and settlements.

Linked to the above the municipality should promote compact, mixed land uses which will also enhance walkability within all settlements.

Expansion of the urban footprint should be directed to strategically located priority development areas which will contribute towards the overall consolidation of the currently fragmented urban footprint of the municipality.

The development of a diverse range of housing typologies for all income groups, at low, medium and higher densities and offering a variety of tenure

alternatives should be a priority. This applies to housing for permanent residents and for holiday accommodation.

Linked to the principle of sustainable human settlements the Bitou LM need to rationalise and cluster community facilities at strategically located and accessible points in all the identified settlement areas within the municipal area. The clustering of such facilities will be aimed at providing one-stop services (especially to people dependent on public transport) and to add to the “critical mass” required to also stimulate local economic development around these areas.

**Objective 5: Manage regional infrastructure implementation and management**

Engineering services maintenance and expansion programmes need to be aligned to land use development programmes and the Bitou LM should incrementally promote the establishment of the Smart City Concept which focusses on utilising information and communication technology to advance economic development, safety and security, governance, environmental management, transport etc.

**Objective 6: Identify and optimally utilise economic development opportunities in a sustainable manner.**

From the situational analysis it was concluded that the most viable economic sectors which the Bitou LM should focus on are tourism, agriculture, business and light industrial/service industries.

Tourism and agriculture are natural resource based activities, hence it is important to align programmes towards the future development of these sectors with the spatial distribution of such resources, with due consideration to the relevant environmental management programmes.

Business development should be promoted in appropriately located mixed use precincts in all settlements, with the existing Central Business District and future Civic Node being the primary business nodes in the municipality.

In the context of the NDP/NSDF, Western Cape Province SDF and the Eden/Garden Route SDF no regional industrial function is assigned to the Bitou LM. Instead, the Bitou LM should focus on the establishment of local service industries, agri industries and “green” industries (e.g. waste to energy) that are compatible with the tourism and conservation focus of the municipality.

Tertiary education and skills training should be aligned with the priority economic sectors within the Bitou LM to optimally utilise local opportunities in these sectors.

Special mechanisms are to be put in place to provide opportunity for emerging entrepreneurs to do “incremental economic up-scaling” to eventually become part of the mainstream economy of the municipality.

### 4.3 SPATIAL STRATEGIES

This section unpacks each of the six development objectives of the Bitou LM Spatial Development Framework by way of a number of actions per objective.

#### 4.3.1 Environmental Management

##### **Objective 1: To facilitate the protection and sustainable management of the natural environmental resources**

The Bitou LM is fortunate to be situated within the smallest, but richest floral kingdom in the world, where 70% of the 9 600 plant species of the Cape Floristic Region (CFR) that occur here are found nowhere else on earth. Archaeologically, there is also evidence to show that the origins of modern man, dating back some 160 000 years, are situated within this area.

This historical, cultural and ecological wealth is given recognition through the extent of the area of Protected Environments found within the Bitou LM boundaries, the inclusion within the UNESCO MAB recognised Garden Route Biosphere Reserve and the World Heritage status of the CFR, as well

as the number of international and national tourists that flock to the area, simply to experience its beauty.

*“The aesthetic value of the CFR landscape cannot be ignored – for its recreational, educational, inspiration and tourism benefits. While it may be perceived that these are intangible benefits, it must be acknowledged that the economies of many small, coastal towns are driven by their natural beauty. The need for responsible and ethical tourism within this sensitive and beautiful ‘shrine’ is obvious ..... It is good decision-making that will protect and preserve the environmentally sensitive life forms that have created the superlative natural beauty of the Garden Route.”*

*Dr R Robinson: Former CEO of SANParks*

The environmental and historical/cultural well-being of the Bitou LM is therefore the foundation of its economic well-being.

#### **Action 1.1: Contain development and manage rural areas through appropriate application of Spatial Planning Categories (SPCs)**

The Western Cape Biodiversity Spatial Plan (WCBSP) has identified Protected Areas (PAs), Critical Biodiversity Areas (CBAs), Ecological Support Areas (ESAs) and Other Natural Areas (ONAs) for the whole of the Bitou LM area. These categories should inform decision-making regarding developments, their location and context and should guide planning, environmental assessments, authorisations and resource management within the Bitou LM.

Furthermore, the Western Cape Land Use Planning Guidelines: Rural Areas (2019) requires that, “At a minimum the SDF needs to delineate the area into the following SPCs (Spatial Planning Categories):

- Core
- Buffer
- Agriculture
- Settlement.

Similarly, UNESCO’s MAB (Man and Biosphere) Programme requires that Biosphere Reserves are zoned into Core (formally protected areas), Buffer

(areas surrounding formally protected areas) and Transition areas (town and areas where intensive land use takes place).

**Table 29** shows the relationship of categories between the Western Cape Province (WCP) Biodiversity Spatial Plan Handbook, the Spatial Planning Categories referred to in the Rural Guidelines and the UNESCO MAB Biosphere Reserve zonations:

**Table 29: Correlation of Spatial Planning Categories**

|                             |             | WESTERN CAPE BIODIVERSITY SPATIAL PLAN CATEGORIES |       |       |       |       |                              |                |     |
|-----------------------------|-------------|---|-------|-------|-------|-------|------------------------------|----------------|-----|
|                             |             | PROTECTED AREAS                                   | CBA 1 | CBA 2 | ESA 1 | ESA 2 | ONA (natural / near natural) | ONA (degraded) | NNR |
| SPATIAL PLANNING CATEGORIES | CORE 1      |   |       |       |       |       |                              |                |     |
|                             | CORE 2      |   |       |       |       |       |                              |                |     |
|                             | BUFFER 1    |   |       |       |       |       |                              |                |     |
|                             | BUFFER 2    |   |       |       |       |       |                              |                |     |
|                             | AGRICULTURE |   |       |       |       |       |                              |                |     |
|                             | SETTLEMENT  |   |       |       |       |       |                              |                |     |
| UNESCO MAB ZONATIONS        | CORE        |   |       |       |       |       |                              |                |     |
|                             | BUFFER      |   |       |       |       |       |                              |                |     |
|                             | TRANSITION  |   |       |       |       |       |                              |                |     |

Categories on the Biodiversity Spatial Plan Map and their Recommended Corresponding Spatial Plan categories and UNESCO MAB Zonations (Western Cape Land Use Planning: Rural Guidelines, 2018 & Western Cape Biodiversity Spatial Plan Handbook, 2017)

The Bitou LM adopts and recommends the application of the WCP Rural Guidelines (2019) and the associated Spatial Planning Categories in the Bitou SDF. The following land uses are permitted per Spatial Planning Category as defined below (Also refer to **Annexure B** for a summary of the WCP Land Use Planning Guidelines for Rural Areas 2019):

**Core 1: Critical Biodiversity Areas 1 and Protected Areas:** These include habitats classified as highly irreplaceable, critically endangered, or endangered terrestrial (land), aquatic (rivers, wetlands & estuaries) and marine habitats. It also includes essential biological corridors vital to sustain their functionality. These areas must be regarded as no-go for development and must be kept in a natural state, with a management plan focused on maintaining or improving the state of biodiversity. There should be no further loss of natural habitat and degraded areas should be rehabilitated.

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

**Buffer 1:** These areas may be degraded but still play an important role in supporting the functioning of PAs or CBAs, and are essential for delivering ecosystem services. These areas should be restored and/or managed to minimise impact on ecological infrastructure functioning; especially soil and

water related services. Two components of the rural landscape make up Buffer 1 Areas: (i) Ecological Support Area 2: Restore and/or manage to minimise impact on ecological infrastructure functioning; especially soil and water-related services. (ii) Other Natural Areas: Minimise habitat and species loss and ensure ecosystem functionality through strategic landscape planning. Offers flexibility in permissible land-uses, but some authorisation may still be required for high-impact land-uses.

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

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

**Figure 55.1** depicts the spatial distribution and extent of each of the SPC's noted above as part of the Biophysical Environment.

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

#### LAND USE GUIDELINES

- Section 4, Tables 4.1 and 4.2 of the Western Cape Province Biodiversity Spatial Plan Handbook provide very specific land-use guidelines for CBA, ESA, NNA & NNR categories, including rivers, wetlands, forests and estuaries

(<https://www.capenature.co.za/about-us/2017-western-cape-biodiversity-spatial-plan-handbook-download/>)

Western Cape Province Land Use Planning: Guidelines: Rural Areas (2019)  
(refer to **Annexure B**)

#### MANAGEMENT GUIDELINES AND ENVIRONMENTAL IMPACT ASSESSMENTS

- Wetlands, Estuaries and Dams: Refer to **Annexure C1** of this document.
- Indigenous Forests: Refer to **Annexure C2**.

#### PROPOSED SCREENING PROCESS FOR CBA AND ESA AREAS

- Refer to **Annexure C3** of this document.

#### Action 1.2: Establish ecological corridors to protect continuous biodiversity patterns and to adapt to environmental changes.

Informal conservation areas within the Bitou LM boundaries include several Private Nature Reserves (PNR) and conservancies as depicted on Figure 14 in this report. Although not gazetted protected environments, it may be prudent to note them as areas that are voluntarily and cooperatively managed for their environmental integrity. Conservancies are also useful tools in the establishment and management of ecological corridors where willing landowners exist and where incentive schemes may be applied.

Ecological corridors can create linkages between existing natural but fragmented landscapes, enabling the survival of plant and animal populations through the provision of safe migration routes between areas.

The principle of corridors should also be incorporated into the urban setting to encourage a green space network that ties in with biodiversity corridors, promotes outdoor recreation, creates safe outdoor areas for tourists and locals to walk and that creates riparian, wetland and estuarine buffer zones in urban areas. Furthermore, such spaces should protect indigenous forest, coastal dunes, and be utilised to showcase the Bitou floral kingdom through the establishment of indigenous gardens, botanical gardens or areas for outdoor education.



The following is a list of proposed ecological corridors in the Bitou LM area as depicted on Figure 55.1:

- 1) Robberg Coastal Corridor linking Robberg Nature Reserve to Garden Route National Park;
- 2) Robberg Vlei Corridor linking Robberg to Coastal Corridor;
- 3) Piesang Valley Riparian and Catchment Corridor;
- 4) The Keurbooms Estuary/ Estuarine which is a key focus area in terms of habitat connectivity;
- 5) Bitou Wetland Corridor: The Core 1 and 2 in the Bitou Valley between the Garden Route National Park, Wadriest Private Nature Reserve and Keurbooms Nature Reserve have been identified as an ideal corridor, linking protected environments and providing protection to ecosystem services;
- 6) Hog Hollow Corridor: It is proposed that the Bitou Wetland Corridor be extended eastwards to incorporate this existing cluster of private Conservancies from where it can link up with the Tsitsikamma Nature Reserve and the Keurbooms Estuarine Corridor;
- 7) Upper Keurbooms River Corridor: This corridor links into the cluster of Nature Reserves - comprising Whiskey Creek Nature Reserve and Keurbooms River Nature Reserve – from where it extends westwards into the George and Knysna LM's.

**Action 1.3: Provide Incentives to protect and conserve all the important terrestrial, aquatic and marine habitats**

Private land owners of land with important biodiversity find it difficult to bear the responsibility and costs of managing and conserving large areas of biodiversity. The Fiscal Benefits Project was launched to address this through the provision of tax incentives as a financial benefit for landowners declaring protected areas.

Furthermore, the WCP Land Use Planning Guidelines: Rural Areas (2019), with reference to Core areas states as follows:

*Where possible, incentivise incorporation using the following designations:*

- *Private Land: Stewardship Agreements or as a Protected Environment or Nature Reserve in terms of NEM: PAA*
- *Municipal Land: Nature Reserve in terms of NEM: PAA*
- *Forest Nature Reserves through the National Forestry Act and Wilderness Areas through Wilderness Act*
- *Title deed restrictions where land has been designated under the Stewardship Program or declared a Nature Reserve or Protected Environment*
- *The zoning of private properties to Open Space III as a mechanism for conservation in terms of the 2016 DEADP Standard Draft Zoning Scheme By-Law.*
- *SARS tax incentives*

SANPARKS Protected Area Expansion programme identifies priority CBAs which, through landowner agreements, may be incorporated into the PA or enter into one of several types of stewardship agreements.

The Bitou LM wish to address this matter by allowing a rural land owner at least some form of development to enable him/her to be able to “pay” for conservation. The following guideline will be used to determine the number of residential units to be allowed by way of a consent application under the Agriculture and Conservation Use Zones in the Bitou Land Use Scheme (subject to size limitations and architectural requirements):

| Farm size       | Number of Units Allowed                                |
|-----------------|--|
| < 2,5 ha:       | 2 units  |
| ≥ 2,5 < 5,5 ha: | 3 units  |
| ≥ 5,5 < 8 ha:   | 4 units  |
| ≥ 8 ≤ 43 ha:    | $\frac{a-8}{5} + 5$ , (where $a$ = farm size)<br>units |
| ≥ 43 ha:        | 12 units   |

**Action 1.4: Manage development along the coastline in a sustainable and precautionary manner and manage public access to the coastline and estuaries.**

In terms of the Integrated Coastal Management Act, ICMA (24 of 2008), municipalities need to have a coastal management programme that is reviewed every five years and that is adopted as part of the SDF. Management objectives can be facilitated through the development of coastal planning schemes.

In terms of development applications, specific erven have been identified in the Outeniqua Sensitive Coastal Area Extension due to their location within

the sensitive coastal area, and specific activities (listed in schedule 1) require permission from the Local Authority (See **Annexure C4**).

A development set-back line (DSL) is included as provided for in the Environmental Impact Assessment regulations to be applied by local authorities through the SDF and Planning Schemes using the Coastal Management Lines (CML).

Although these are draft management lines, until they have been finalised and the Bitou CMLs adopted, they should be flagged for consideration with development applications. (See **Annexure C5.1**).

**Public Access to Coastline and Estuaries:** All inhabitants of the District Municipality should have broadly equitable and easy access to public coastlines and estuary resources. However, human intervention in these areas should be minimal and be aimed at only increasing the passive recreational value of the resource.

**Action 1.5: Manage and mitigate flood and fire risks.**

**Flood Risks:** Land uses must be managed to reduce the risk of flooding and to protect human life and property in the case of extreme flooding. Where critical infrastructure and areas are located within flood risk areas, the resilience of these settlements in the instance of extreme events will be compromised.

Flood risk mitigation strategies must be integrated into the land use management and infrastructure master planning systems of the municipality. Sustainable urban drainage systems and ecologically sound rural practices must be adopted when planning new development and approving changes to existing land uses.

The design of new infrastructure, in particular stormwater systems, should consider the higher frequency of flooding associated with extreme weather conditions.

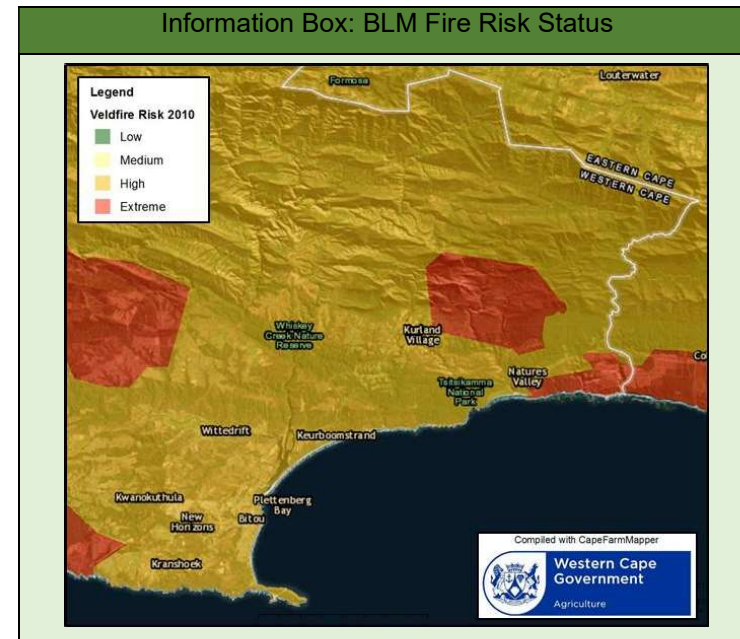
As a general principle, large rivers should have a buffer zone of a minimum width of 150m, medium rivers a zone of 75m and smaller rivers a 32m buffer. No development should occur within 1: 100 floodlines surrounding rivers (DEA&DP, 2017). This will ensure that water quality and wildlife habitats are protected. In addition, it will aid in designating where settlements should be developed or expanded and will aid in preventing the dumping of waste and chemicals in rivers.

New development should not be allowed to occur on slopes steeper than 1: 4 as this new construction and land cleared for development increases erosion and stream siltation.

Overlay zones should be developed for the most critical features noted above and incorporated into municipal planning systems.

**Fire Risk:** The SDF recognises that veld fire is a natural ecological process that occurs in many parts of the region. However, if this is not managed or settlement patterns exacerbate the risk of veld fire, it places great risk to life and property at significant economic and social cost.

The Garden Route District Municipality's Disaster Risk Management Department must be provided an opportunity to input into development applications in interface areas where veldfire is a risk – a protocol between Garden Route District and Bitou LM should be developed to facilitate this. The management of veldfire risk must also be integrated into the planning By-Laws and the urban edge management of the Bitou LM.



High veldfire risk areas and Asset Protection Zones – the zone between the built environment and the hazard area within which modifications are made to protect the built environment – should be identified and incorporated as overlay zones into the Bitou LM’s land use planning system.

Landowners in fire prone areas should be encouraged to join the Southern Cape Fire Protection Association (FPA). Vacant properties which are poorly managed and present a fire risk should be identified and measures put in place to enhance the management and mitigate the fire risk of these properties.

Management Zones must be in line with guidelines found within the ecosystem guidelines for environments in the Western Cape (2016).

#### **Action 1.6: Implement alien vegetation management mechanisms.**

Alien vegetation reduces biodiversity, exacerbates fire and flood risk and invades wetlands and catchment areas which lose the ability to retain rainwater runoff that feeds rivers from which municipal water supply is obtained. In addition, the loss of riverine vegetation results in a higher rate of erosion and estuarine siltation.

Guidelines for the monitoring, control and eradication of alien invasive species can be found in Section 76 of the National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004 (NEMBA) and ecosystem guidelines for environments in the Western Cape Province (2016), and should be implemented in the Bitou LM.

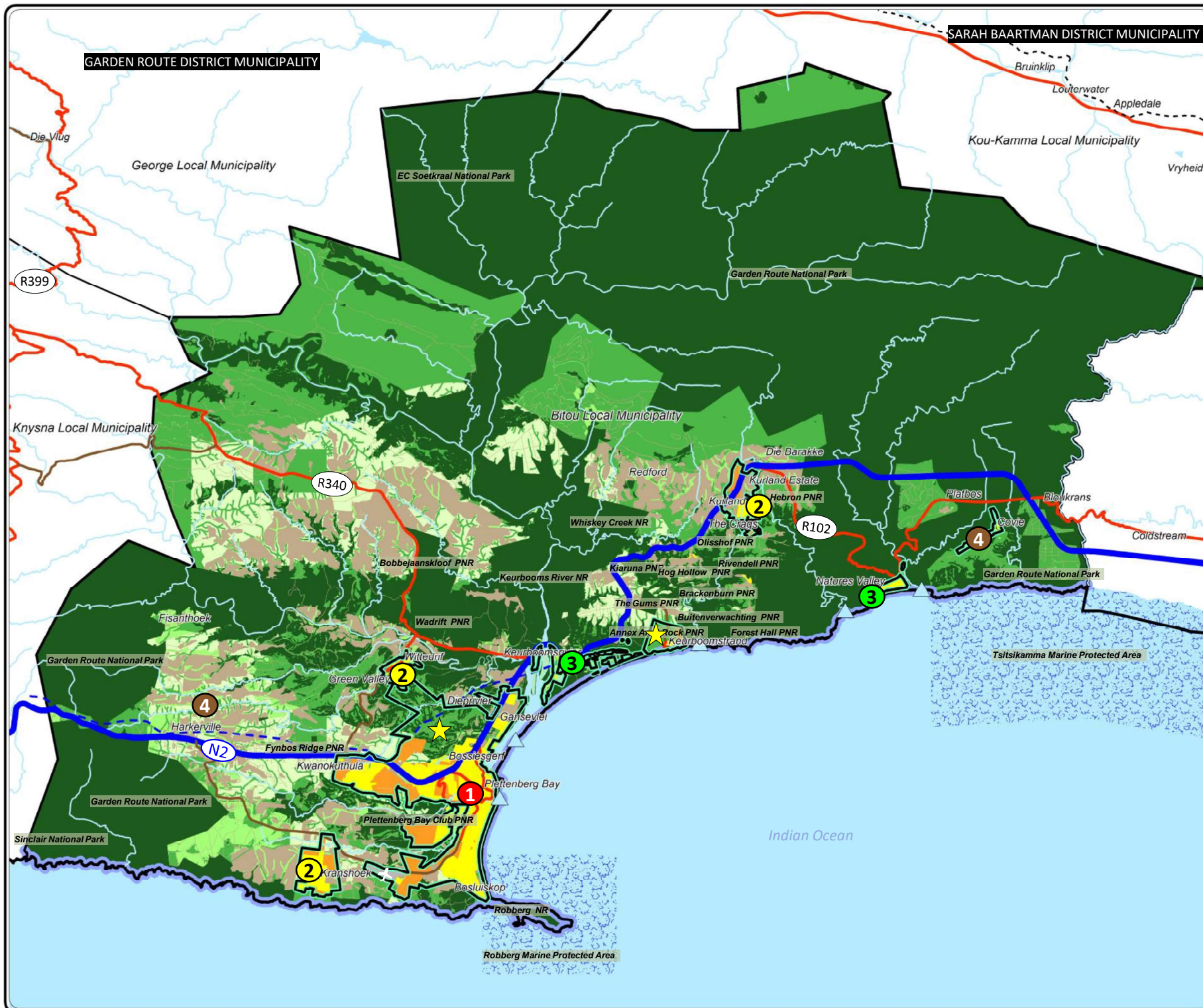
### **4.3.2 Settlement Hierarchy**

**Objective 2: Direct and align growth to capacity, resources and opportunity in relation to a regional socio-economic hierarchy of settlements**

#### **Action 2.1: Prioritise development and investment in accordance with the Bitou LM settlement hierarchy**

The largest part of the Bitou LM area of jurisdiction comprises a wealth of environmental and cultural-historic resources which need to be protected as the foundation of the municipality’s future economic well-being. In order to minimise the impact on these resources it is essential that human settlement and economic activities be consolidated around a number of strategically located settlements/nodal points within the municipality as depicted on **Figure 55.2**.

These settlements will become the focal points for social and economic investment (spatial targeting) by all spheres of government as well as the private sector. Each of these settlements should comprise a diverse range of urban land uses including housing, community facilities, economic activities (job opportunities), basic engineering services like water, sanitation and electricity, a comprehensive movement network and local open space system.



## Municipal SDF

### Built Environment

#### Legend

- Core 1 (PA & CBA 1)
- Core 2 (CBA 2 and ESA 1)
- Buffer 1 (ESA 2)
- Buffer 2 (ONA)
- Agriculture
- Settlement
- Strategic Development Areas
- Potential Development Areas
- Urban Edge
- Coastal Management Lines (conceptual)
- Estuaries
- Ocean/Dams/Rivers
- National Road
- Proposed National Road
- Provincial Road
- Secondary Road
- Airport
- 1<sup>st</sup> Order Node
- 2<sup>nd</sup> Order Node
- Tourism Node
- Rural Node

Source: Environmental GIS SAPAD Q1 2018, Bitou SDF 2013, SANBI 2017

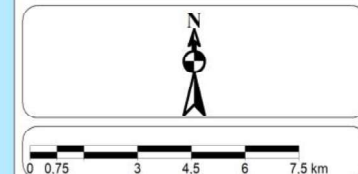


Figure 55.2

Consolidating and densifying the urban fabric around these settlements should result in high density mixed uses which not only enhance the viability of the public transport system, but also optimise the operational and financial efficiency of engineering and social infrastructure and services provided. Furthermore it will significantly reduce travel costs/ distances within the urban area which is a major benefit to the poor.

The size, function and associated range of land uses/ activities provided by the settlements would differ based on factors such as historic development, location, economic potential and environmental constraints. **Table 30** below depicts the proposed hierarchy of settlements within the Bitou LM area.

**Table 30: Hierarchy of Settlements**

| Hierarchy    | Town                    | Population (2016) | Population (2040) | Population Order | Community Facilities | Economic Activity             |
|--------------|-------------------------|-------------------|-------------------|------------------|----------------------|-------------------------------|
| First Order  | Greater Plettenberg Bay | 38 477            | 70 480            | >20 000          | Higher Order         | Comprehensive/ Regional       |
| Second Order | Kranshoek               | 7 396             | 15 936            | >5 000           | Middle Order         | Limited Regional /Local       |
|              | Kurland                 | 4 693             | 7 893             | >5 000           | Middle Order         | Limited Regional/ Local       |
|              | Wittedrift              | 2 082             | 3 282             | 1 500-5 000      | Middle Order         | Limited Regional /Local       |
| Rural Node   | Covie                   | 92                | 119               | <1 500           | Basic (Mobile)       | Agriculture                   |
|              | Harkerville             | 143               | 185               | <1 500           | Basic (Mobile)       | Agriculture                   |
| Tourism Node | Nature's Valley         | 610               | 1 330             | Periodic         | -                    | Tourism/Holiday Accommodation |
|              | Keurboomstrand          | 595               | 1 175             | Periodic         | -                    | Tourism/Holiday Accommodation |

The first order node (Plettenberg Bay) holds the largest population in the municipal area, hence it would also accommodate the higher order community facilities/ public services like Civic Centre, Magistrates Court,

Police Station, Regional Hospital, Fire Brigade and Emergency Services etc. It also comprises the most comprehensive range of economic activities and services including retail, office, industrial, commercial, tourism etc. serving not only the local market, but also the region.

The second order nodes (Kranshoek, Kurland and Wittedrift) have smaller populations which warrant the provision of typical middle order community facilities (e.g. clinics, pre-schools, primary schools, community hall, library, and municipal satellite office) and have a limited range of economic activities predominantly serving the local needs.

The Rural Nodes (Covie and Forest View/Harkerville) have very small populations which would normally be served by way of periodic community services like a mobile clinic or library and sometimes a mobile police unit. Economic activity in a Rural Node will mostly be focused on the basic natural resources available within the area e.g. agriculture, forestry, tourism etc.

Existing small forestry villages that are under public ownership may be formalized with the sole purpose to provide qualifying residents (from these longstanding communities) security of tenure. Such formalization process should not be seen as a stop towards the establishment of a new town/ rural nook but is merely intended to facilitate a tenure upgrading process. Hence, none of these villages (except Covie) have been earmarked as a Rural Node in the SDF.

The Tourism Nodes mostly comprise holiday homes/accommodation which are periodically occupied (during the holiday season). As a rule community facilities are not provided in these areas and the economic base is limited to tourism related activities.

These nodal points should be carefully planned, maintained and managed as these represent the major areas of future population growth, service delivery and economic development within the Bitou LM.

It is essential to compile/maintain detailed Local SDF's to guide and direct the location, type, extent and phasing of development in these areas. Such Local SDF's should determine the future spatial structure, function and associated land use composition of these areas – not only to ensure orderly, cost efficient and sustainable development, but also to harness private investor confidence and to attract investment.

### **Action 2.2: Contain settlement sprawl by means of an urban edge as growth management instrument**

The Bitou SDF promotes radical settlement transformation in support of accessible, walkable, inclusive and livable environments that offer multiple opportunities for all sectors of society. This approach in turn facilitates the protection of environmentally sensitive and agricultural land, as less land will need to be developed. Hence the Bitou SDF defined an urban edge aimed at containing lateral urban sprawl within the municipality as illustrated on Figure 55.2.

It should be noted that the urban edge is to be viewed as a conceptual, indicative measure (growth management tool) aimed at illustrating a concept, rather than being an exact line with statutory status.

The urban edge is a proposed limit for expansion of any urban node beyond which development should not occur unless the land is already provided with, or can connect directly to existing municipal services infrastructure.

All land development applications for the use of land abutting an urban edge should be considered consistent with the SDF if the land has at any time in the past been used or designated for any urban development, which includes all development of land where the primary use of the land is for the erection of structures.

This includes all erven zoned and used for residential, business, commercial, industrial, institutional, less- or informal residential and services uses, i.e. zonings where the primary use would be the construction of a building development, thus residential estates on farms and golf estates would be defined as urban uses, albeit that the “primary use” is “agriculture” or “private open space” and the “secondary use” is “residential”.

### **Action 2.3: Manage development in rural and agricultural landscapes**

Development in the rural and agricultural landscapes of the Bitou LM should be managed in line with the guidelines provided in Western Cape Province Land Use Planning Guidelines: Rural Areas (2019) as summarised in Annexure B in this report.

By implication these guidelines indicate the type of land uses that can be developed outside the urban edge as well as the conditions applicable.

#### 4.3.3 Movement Network

**Objective 3: Optimise regional connectivity and mobility as well as local access and accessibility via a comprehensive movement network.**

The aim is to establish a comprehensive, multi modal movement network serving the urban and rural parts of the municipality, linking all the identified nodal areas to one another, and functionally linking the municipal area to surrounding regions and major destinations as depicted on **Figure 55.2**.

#### **Action 3.1: Capitalise on the economic opportunities posed by the N2 coastal corridor.**

Route N2 is the most important route serving the Bitou LM. It is part of a national coastal corridor extending from Cape Town past Mossel Bay, Port Elizabeth, East London, Durban-eThekweni and Richards Bay harbour towns/cities, from where it functionally links to Mozambique and Swaziland and further north-westwards through Mpumalanga Province right up to the City Deep Inland Port in the City of Johannesburg (via route N17).

The section of route N2 from Kwanokuthula up to the Marine Drive traffic circle is an important structuring element in the context of the Bitou LM. It is the only continuous link between the communities of Kwanokuthula, New

Horizons, Qolweni-Bossiesgif and Plettenberg Bay main town and is earmarked to serve as the primary means to integrate these communities economically and socially into the urban fabric of the broader Plettenberg Bay town area. However, being part of the national coastal corridor, the mobility function of the route is just as important. The proposed N2 bypass as graphically illustrated will restore the mobility function of this route in future. This would lead to the future downscaling of the function of the existing road, opening up more opportunities for the functional integration of the communities of Kwanokuthula, New Horizons, Qolweni, Bossiesgif and Plettenberg Bay.

#### **Action 3.2: Upgrade and maintain the secondary road network to enhance access to all areas in the Bitou LM**

The secondary road network feeds from route N2 and serves the entire tourism population visiting/ passing through the Bitou LM. Hence, it is important that signage along route N2 be properly planned to promote the tourism precincts and associated activities located along the route.

It is furthermore important to commence with an initiative to facilitate the upgrading/ rehabilitation of the eastern section of the Bloukrans Pass which falls under the Eastern Cape Provincial Administration. The Western Cape section of this route was rehabilitated after the floods of 2012 but no rehabilitation has been done on the Eastern Cape section since then.

This is one of the most scenic passes along the Garden Route (with a breath-taking view of the Bloukrans Bridge as well) but it has been closed for public use for the past six years. This is also to the detriment of the Coldstream and Covie communities residing at both ends of the pass.

The following are the most important secondary routes in the Bitou LM:

- Route R340 which joins route R399 from Knysna (Prince Alfred's Pass) from where it runs northwards up to route R62 in the Langkloof/ Klein Karoo which connects to George, Graaff Reinet and Port Elizabeth;
- Route R102 which provides local access to Covie and Nature's Valley via the Groot River Pass and to Coldstream via the Bloukrans Pass;
- Route P394 which serves the Keurbooms area from route N2;
- The strategic link road from Kwanokuthula to Wittedrift;
- Robberg Road which serves the southern parts of Plettenberg Bay town past the Plettenberg Bay Airport towards Kranshoek and right up to Harkerville;
- The access road serving Kurland Village and a range of agricultural, conservation and tourism activities up to Forest Hall;
- The access road from The Craggs into the Redford farms area; and
- Three access roads in the vicinity of Harkerville providing access to Fisanthoek and to Forest View to the north, and to the forestry station to the south.

**Action 3.3: Facilitate the establishment of a comprehensive public transport network which will serve as backbone to spatial restructuring and integration within the municipality.**

Public transport (long and short distance) operates along route N2 between Kurland and Kwanokuthula with a horseshoe-shaped link towards Plettenberg Bay CBD and from there south- and westwards towards the Plettenberg Bay Airport and Kranshoek.

This network will play a fundamental role in terms of the spatial restructuring of Plettenberg Bay town as discussed in greater detail in section 4.5.1 of this document.

**Action 3.4: Upgrade the Plettenberg Bay Airport as a means to stimulate local economic development**

The Plettenberg Bay Airport is also an important component of the movement network of the municipality as it is intended to stimulate economic development along the southern Robberg coastal corridor.

There is ample space for the upgrading of the airport and to use the enhanced status of the airport as catalyst towards logistics and tourism related development in the surrounding areas along the Robberg Corridor towards Kranshoek.

#### 4.3.4 Sustainable Human Settlements

**Objective 4: Facilitate the establishment of sustainable human settlements in all identified settlement areas.**

##### **Action 4.1: Actively promote development aligned to Smart Growth Principles in all settlements.**

The following Smart Growth Principles should be applied in all settlements within the Bitou LM:

- Provide for a mix of different kinds of land uses, e.g. residential, retail, business, and recreational opportunities.
- Create well-designed, compact neighbourhoods where the different activities are in close proximity to each other.
- Provide a variety of transportation choices, including private, public and non-motorised transport opportunities that are safe.
- Create a variety of housing opportunities, i.e. in terms of function, form and affordability.
- Encourage growth in existing communities through infrastructure upgrade, urban renewal, new amenities and densification.
- Preserve open spaces, natural beauty, and environmentally sensitive areas.
- Protect and enhance agricultural lands and secure these as a productive land base for food security, employment, etc.
- Utilise smarter and cheaper infrastructure and green buildings and promote renewable and sustainable technologies.

- Foster a unique neighbourhood identity building on the unique and diverse characteristics of each community.
- Engage citizens to participate in community life and decision-making.

##### **Action 4.2: Identify strategically located land as priority housing development areas.**

At present the estimated housing backlog (demand) in the Bitou LM stands at approximately 8 238 units. Furthermore, the projected incremental demand up to 2025 stands at 7 755 units and an additional 13 139 units by 2040. The land required to accommodate the housing demand (backlog and increment) totals about 548 ha by 2025 and an additional 518 ha by 2040 (total = 1 066ha).

As a principle, the bulk of housing should be developed within the settlement areas identified in the municipality, and more specifically in Plettenberg Bay, Kranshoek, Wittedrift/Green Valley and Kurland which represent the higher order nodes.

Rural housing based on the Rural Housing Subsidy Programme/ Peoples Housing Programme should be provided at Harkerville (Forest View) and Covie which are earmarked as Rural Nodes. Residents not qualifying/ contributing to the functionality of the Rural Node should preferably be accommodated in one of the higher order nodes where opportunities for sustainable livelihoods are significantly enhanced.

The non-qualifying families of informal settlements in activity nodes should, in principle, be accommodated on pro-actively planned and serviced formal township stands. These stands can be made available by way of rental agreement, permission to occupy, or full ownership in the case of residents who would qualify for a subsidy but for which no subsidy is available at present.

The Strategic Development Areas earmarked to accommodate the bulk of future residential development within the municipality are graphically illustrated on Figure 55.2 and include the following:

- The western extensions of Kwanokuthula, Ebenezer and the Ladywood area around route N2 in Plettenberg Bay;
- A few land parcels (including proposed Plettenberg Bay Botanical Estate) along the Robberg Road corridor in the vicinity of Plettenberg Bay Airport and towards Kranshoek;
- Three areas to the north, north-east and south of Kranshoek;
- Several land parcels within and around Green Valley and Wittedrift;
- Several parcels around Kurland Village.
- Several portions of the farm Ganse Vallei 444 to the north-west of Plettenberg Bay and towards Wittedrift are included as a Potential Development Area within the urban edge of the BLM. Detailed environmental assessment processes will in future determine the exact extent of the developable land within this area.

It is important that these areas be functionally incorporated into the existing urban fabric in line with the Smart Growth Principles noted above.

The development of land identified as Priority or Strategic Development Areas should take into account the surrounding area(s) in terms of context, character, prevailing property values, aesthetics and other factors as may be determined by the Municipality, as to not unreasonably detract from the aforementioned aspects and general appeal of the area(s) in question.

#### **Action 4.3 Promote the development of a diverse range of housing typologies offering multiple choices in terms of affordability, density and tenure options.**

It is important to note that it is possible to do low, medium and high-density development for low income, middle income and high income communities as graphically illustrated in **Annexure D1**. Unfortunately, low density typologies dominate the urban landscape in Bitou LM as is the case in all urban areas in South Africa.

The municipality should actively pursue strategies to promote medium and higher density residential development for all income groups with the aim to achieve/ maintain an average density of about 25 units/ha for all new developments (as a guideline) in line with density targets set in the SDF Land Use Budget as contained in Annexure A.

In the case of low income, the subsidy scheme only makes provision for single residential full title BNG Units which normally result in densities around 20 units/ha. The only subsidised medium to higher density typologies are Community Residential Units (CRU) and Social Housing both of which only cater for the rental market.

There are, however, several initiatives underway throughout South Africa to develop “RDP Flats” and/or medium density double storey row housing or semi-detached RDP units in order to increase density yields in marginalised areas.

The same principle would apply to middle- and high-income development where medium to high density typologies should be actively promoted especially around the business nodes and along major public transport routes in the municipal area.

**Action 4.4: Rationalise and cluster community facilities in highly accessible Multi-Purpose Community Centres (Thusong Centres)**

It is essential to continuously strive towards consolidating community facilities at strategic locations within the urban fabric in order to provide one-stop services. This follows the nationally approved concept of a multi-purpose Thusong Centre. Preferably these community facility clusters should also be combined with local business areas in order to add to the “critical mass” required to maintain/ enhance business activities in these areas.

This concept is briefly described in **Annexure D2** and should be promoted in all mixed use nodes within the various settlements in the Bitou LM.

**Action 4.5: Locate regional community facilities at higher order nodes and ensure that all nodes are provided with services and facilities appropriate to nodal function and size.**

Community facilities should be provided to all human settlement areas in accordance with the CSIR Guidelines for the Provision of Social Facilities for small/ medium towns as stipulated in the **Table 1 in Annexure D3**.

In the context of the Bitou LM the long term vision is to establish an institutional node / civic node in Ladywood opposite the community node in New Horizons (part of the Coming Together Initiative).

As a principle all higher order community facilities as well as the bulk of municipal services and functions should be relocated and consolidated in this Civic Node, including municipal offices, council chambers, licensing department, technical services etc. The new Magistrates’ Court and library are already located in this vicinity. Other high order services such as the police and fire brigade/emergency services could also be consolidated here in future.

Annexure D3 (Table 2) comprises a summary of estimated additional community facilities required in the various settlement areas based on the Land Use Budget per area and the CSIR standards applied.

#### 4.3.5 Infrastructure

**Objective 5: Manage regional infrastructure implementation and maintenance.**

##### **Action 5.1: Align infrastructure implementation and upgrading programmes with land use development programmes**

Engineering services are critical towards the establishment of sustainable human settlements and facilitating economic development and job creation. Hence, infrastructure investment within the Bitou LM should be primarily be focussed on:

- Maintaining existing infrastructure and associated equipment, and
- Expanding infrastructure to serve the identified Strategic Development Areas (and Potential Development Areas) within the municipal area.

##### **Urban Areas are defined as:**

- Where existing township development exists within the Urban Edge;
- Extensions of existing urban development where development is contiguous (i.e. abutting) to existing municipal infrastructure services within the Urban Edge; and
- Resort and industrial developments outside of the Urban Edge where, by prior arrangement, service provision can be feasibly provided.

Developments in all other areas will be responsible for providing capital, operating and management costs, their own bulk (treatment plants), as well

as link and individual services to the standards required by DWAF and the municipality.

##### **Action 5.2: Promote the development of “green technology/energy” and incrementally implement the Smart City Concept**

In line with the Smart City concept as illustrated in **Annexure D4**, the Bitou LM should focus on the following important “Bio Wise” transitions over the short to medium term:

##### **Water**

- More stringent water conservation and demand-management initiatives;
- Increase water-use efficiency and equitable distribution through appropriate incentives;
- Develop available groundwater resources;
- Adopt the re-use of wastewater effluent as standard practice;
- Adopt large-scale desalination option to resolve water shortages;
- Improve monitoring and reporting to ensure best practice and standards in water and wastewater management.

##### **Energy**

- Promote and enable energy efficiency and demand side management;
- Promote the development of renewable energy plants;
- Enhance universal access to clean, renewable energy services.

## Transport

- Invest in public transport and non-motorised transport (NMT);
- Promote and enable low carbon transportation and shift transport patterns to reduce reliance on liquid fuels.

## Waste

- Reduce waste volumes and increase recycling and re-use;
- Introduce waste-to-energy initiatives in the longer term;
- Invest in clean technology and value adding to waste.

## Information and Communication Technology

- Establish a strong broadband and fibre infrastructure network to ensure efficient communications and internet services.



## Bio Wise Principles

## 4.3.6 Economic Development and Job Creation

**Objective 6: Identify and optimally utilise economic development opportunities in a sustainable manner.**

**Action 6.1: Implement programmes aimed at promoting economic upscaling of emerging entrepreneurs as part of the “Township Economy”.**

There is a wide variety of economic activities that can be pursued in a “Township Economy” as listed in **Annexure E1**. The Bitou LM should actively promote the establishment of as many as possible of these enterprises within the settlement areas in order to promote economic development and job creation.

There is also little support for the informal economy, while township economies are unable to retain local spending power. Many of the challenges are as a result of insufficient institutional capacity and lack of strong instruments for implementation.

- NDP

Linked to the above, a variety of formalised informal trading structures should be encouraged at strategic locations within business areas and close to community facilities (Thusong Centres), public transport facilities and public open spaces within the Bitou LM.

Informal trading, skills training of informal traders, and proper management and regulation of designated informal trade areas should be dealt with as a consolidated programme in the Bitou LM (as covered in the Bitou Economic Development Implementation Plan (2018)).

**Annexure E2** provides more detail about informal trade empowerment and upgrading and illustrates various 'levels' of informal trade. These range from traders operating without formalised informal trading structures in 'level 1' and up to 'level 4' where traders are incorporated into the formal economy within the retail and manufacturing/ service industry sectors.

Following from the above, it is vital that provision be made – both physically and institutionally – for a variety of entrepreneurial activities at all nodes. Initiatives to encourage and support entrepreneurship may include, amongst others, a variety of trade stalls at strategic locations (such as along major pedestrian movement lines of public transport transfer facility) within nodes and at major tourism destinations.

It could also involve the establishment of an “LED Warriors Forum” to make potential entrepreneurs aware of the different opportunities available and to guide them towards establishing themselves in the municipal economy. The Bitou private sector could also provide mentorship assistance to emerging entrepreneurs in such programmes.

#### **Action 6.2: Align tertiary education and skills development programmes to priority economic sectors**

The South Cape College already provides courses in tourism and hospitality services, but there is significant scope to enhance skills in a range of programmes (also refer to the list of possible economic activities as part of a Township Economy as depicted in **Annexure E1**). Care should be taken that local skills development centers are established in each of the three second order settlements in the Bitou LM: Kranshoek, Wittedrift -Green Valley and Kurland.

#### **Action 6.3: Promote business uses within strategically located mixed use nodes.**

Business activity should be promoted within each of the settlement areas in the Bitou LM. The primary business node in the Bitou LM is the Plettenberg Bay Central Business District which provides the most comprehensive range of retail and office related services and facilities.

Apart from this, a number of secondary business nodes (community nodes) are proposed in New Horizons, Kwanokuthula, Longships Drive, Whale Rock, Kranshoek, Harkerville, Wittedrift, and Kurland. More detail in this regard is provided in section 4.4 of this document.

#### **Action 6.4: Facilitate limited light industrial and commercial development at designated strategic locations**

In the context of the Garden Route District and Western Cape Provincial SDF no large scale/ regional industrial function has been assigned to the Bitou LM (Mossel Bay, George, Port Elizabeth and East London are the major industrial nodes).

There is, however, scope for local industrial activity comprising light industries, service industries, and commercial activity. The existing industrial area in Plettenberg Bay accommodates a range of these activities but it is almost fully developed.

Hence it is proposed that Council commences with a process towards the establishment of a new industrial area in Plettenberg Bay Town, and more specifically in the vicinity of Kwanokuthula along route N2 as depicted on **Figure 55.3**. More details are included in section 4.5.1.3 of this report.

Provision is also made for increased light industrial activity in the vicinity of the Plettenberg Bay Airport and Kranshoek (refer to section 4.5.1.4). The Bitou SDF also provides for the establishment of agri-industries on farms in line with the Western Cape Province Land Use Guidelines: Rural Areas (2019) – refer to **Annexure B**, but as a principle agri-industries should be promoted at the three secondary settlement areas (Kranshoek, Wittedrift/Green Valley and Kurland) as each of these three settlements are located in one of the functional agricultural areas of the Bitou LM.

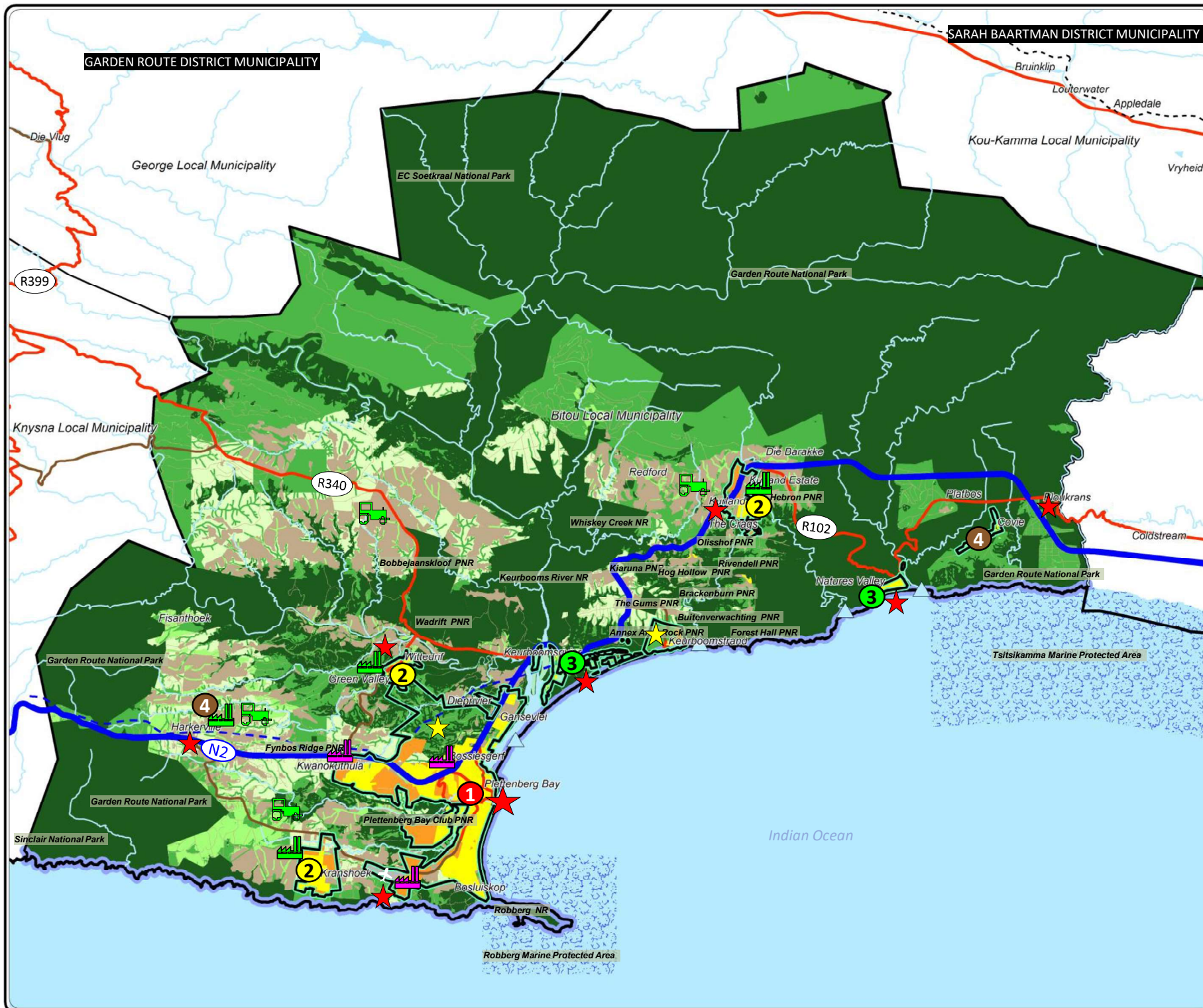
#### **Action 6.5: Promote agriculture focusing on priority commodities in four functional areas**

None of the areas within the Bitou LM form part of the Agri Park concept for the Garden Route District. Oudtshoorn is earmarked as the future Agri Hub while the preliminary Farmer Production Support Units (FPSU's) for the district include Riversdale, Ladismith, Zoar, George, Dysveldorp and Haarlem.

However, the Wittedrift, Kranshoek and Harkerville areas have been identified as potential future Farmer Production Support Areas within the Garden Route District.

As illustrated on **Figure 55.3** there are four functional agricultural areas within the Bitou LM:

- **The Harkerville-Fisanthoek area:** This area is suitable for commodities such as essential oils, floriculture, fruit (strawberries and tree nuts), olives, wine grapes, dairy and poultry.
- **The Kranshoek-Harkerville area:** has potential for limited commercial forestry while Kranshoek is specifically suitable for honeybush.
- **The Wittedrift-Uplands area** around route R340 which is suitable for winter grains, oil seed crops, lucerne, cattle and dairy farming.
- **The Kurland-Redford area** which is suitable for commodities like essential oils (lavender/ herbs), floriculture, Lucerne, wine grapes, dairy, game/ wildlife and commercial forestry towards the north-west.



## Municipal SDF

### Economic Environment

#### Legend

- Core 1 (PA & CBA 1)
- Core 2 (CBA 2 and ESA 1)
- Buffer 1 (ESA 2)
- Buffer 2 (ONA)
- Agriculture
- Settlement
- Strategic Development Areas
- Potential Development Area
- Urban Edge
- Coastal Management Lines (conceptual)
- Estuaries
- Ocean/Dams/Rivers
- National Road
- Proposed National Road
- Provincial Road
- Secondary Road
- Airport
- 1<sup>st</sup> Order Node
- 2<sup>nd</sup> Order Node
- Tourism Node
- Rural Node
- Industrial Node
- Agri Processing
- Agriculture Focus Areas
- Tourism Focus Areas

Source Environmental GIS SAPAD Q1 2018, Bitou SDF 2013, SANBI 2017

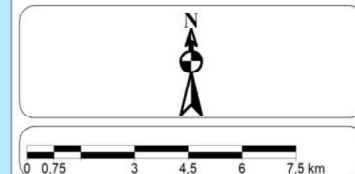


Figure 55.3

Agriculture related interventions should be aimed at optimising agricultural production and downstream beneficiation in line with the most suitable commodity value chains relevant to each of the areas noted above. **In this regard, the potential to establish aquaculture in Bitou also warrants further investigation.**

#### **Action 6.6: Utilise precision farming to minimise the impact of agriculture on natural resources**

Against the backdrop of the limited water resources available in the region and in line with the “Smart Development” concept which aims to use ICT as a means to advance development, it is furthermore recommended that the Bitou LM promotes the introduction of Controlled Environment Farming/ Precision Farming in the municipal area.

This approach optimises the use of resources such as water, energy, and space, and could provide a means of income to a number of emerging/ small farms in the municipality. It also poses the opportunity to promote agri tourism. (Refer to **Annexure E3** for more detail in this regard.)

**Controlled Environment Agriculture** is a technology-based approach toward food production including hydroponics, aquaculture, and aquaponics. The aim of CEA is to provide protection and maintain optimal growing conditions throughout the development of the crop which takes place within an enclosed growing structure such as a greenhouse or building. CEA optimises the use of resources such as water, energy, space, capital and labour.

**Vertical Farming** is the practice of producing food in vertically stacked layers, such as in a skyscraper, used warehouse, or shipping container. The modern ideas of vertical farming use indoor farming techniques and controlled-environment agriculture (CEA) technology, where all environmental factors can be controlled. These facilities utilise artificial control of light, environmental control (humidity, temperature, gases ...) and fertigation. Some vertical farms use techniques similar to greenhouses, where natural sunlight can be augmented with artificial lighting and metal reflectors.

*“We believe strongly that vertical farming can be a driver for sustainability in cities, but it’s a young emerging industry with a very green face, focused on growing local, pesticide-free food, using less water, and creating potentially green jobs”. (Henry Gordon-Smith, vice chair of AVF).*

#### **Action 6.7: Support emerging farmers to become part of the mainstream economy**

It is important that emerging farmers be supported in the Bitou LM as a means to contribute towards poverty alleviation, enhancing food security, and establishing sustainable livelihoods. This can be achieved by way of implementing a number of measures as defined in the Emerging Farmer Upscaling Model illustrated in **Annexure E4**.

The Forest View area could serve as a pilot project in the Bitou area to promote the establishment of successful emerging farmers.

### **Action 6.8: Promote a comprehensive range of tourism activities based on the key characteristics of the identified functional tourism areas**

A number of functional tourism precincts have been identified for the Bitou municipality area as depicted on **Figure 55.3**. These include the following:

- The Bloukrans-Groot River passes precinct which includes Covie and Nature's Valley with the main theme being ecotourism and leisure;
- The Kurland-The Craggs-Redford precinct which includes ecotourism (wildlife sanctuaries), adventure sport, hiking trails, agri-tourism (wine/ dairy farms), leisure and accommodation facilities;
- Keurboomstrand and Keurbooms River precinct including adventure sport, accommodation and leisure activities;
- Plettenberg Bay Main Town with the most comprehensive range of tourism activities and facilities offered in the municipal area;
- N2-Harkerville precinct with a similar range of tourist and recreational facilities as Kurland-The Craggs-Redford;
- Wittedrift which is more oriented towards ecotourism and agri-tourism;

Through proper planning, branding and signage these six areas should be developed individually but also to contribute towards the collective tourism vision and strategy for the municipality as defined by Plett Tourism. The planning should be based on inputs from the local stakeholders (formal and informal), and should be aimed at optimising the tourism value chain (experiences/ activities) within each of the precincts based on the local resources available.

## **4.4 COMPOSITE SDF**

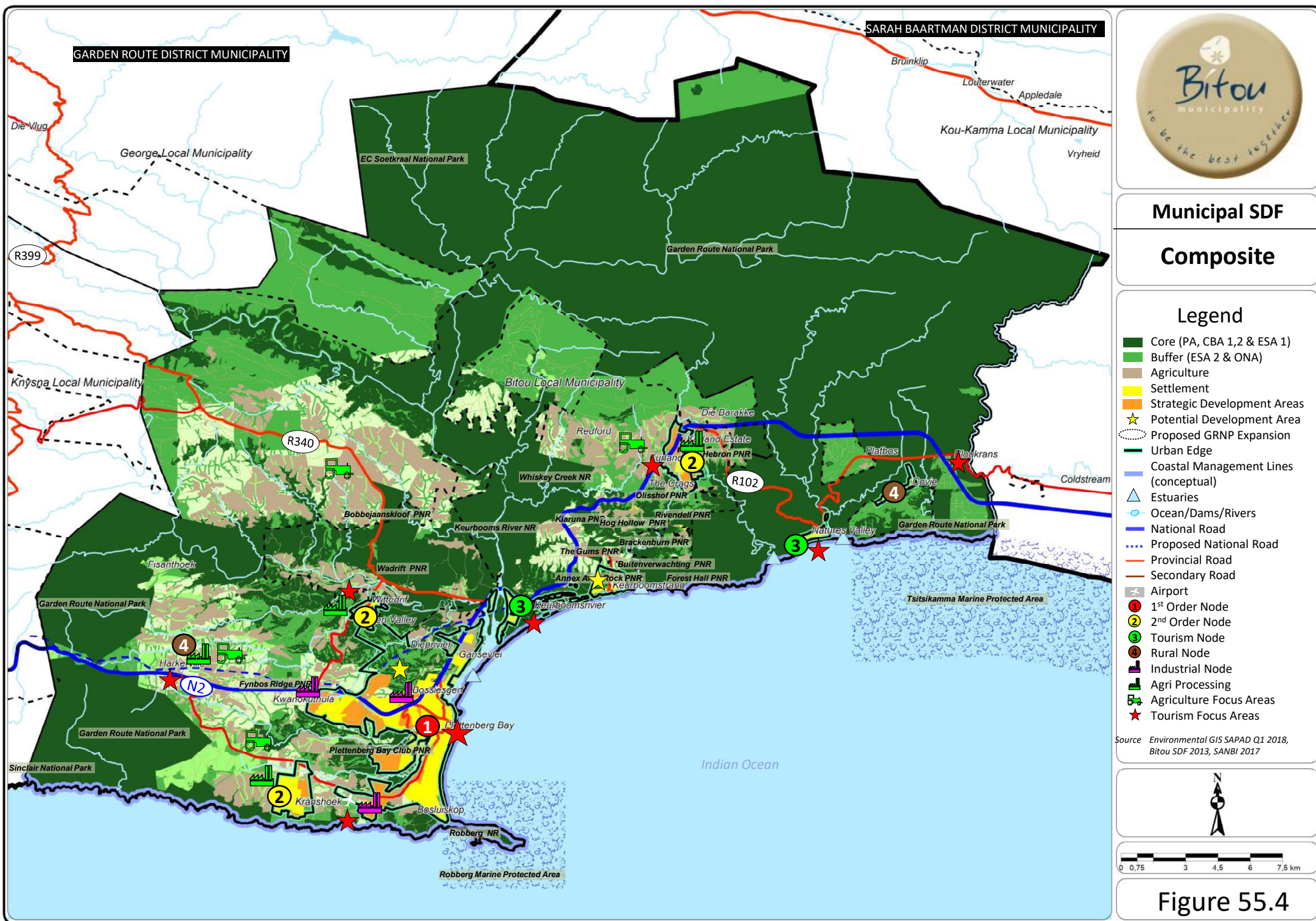
**Figure 55.4** represents the Composite SDF for Bitou LM emanating from the Spatial Vision, Spatial Concept and Spatial Strategies as defined in sections 4.1, 4.2 and 4.3 above.

## **4.5 SETTLEMENT SPATIAL STRUCTURE AND DEVELOPMENT PROPOSALS**

The following section provides some more details pertaining the proposed spatial structure and associated development proposals for each of the settlement areas in the Bitou LM.

### **4.5.1 Plettenberg Bay**

| Development Rationale   |
|---|
| <p>This is the activity hub of the Municipality. Its economic theme should evolve around tourism, retail and service industrial development. It must incorporate an institutional theme to facilitate the development of state administrative functions and it will accommodate the bulk of future residential development.</p> |
| <p>The Kwanokuthula/New Horizons/Plettenberg Bay integration corridor should be promoted in this area in line with the Coming Together Project. It entails the development of the Ladywood area for infill development between the three previously segregated development areas, the</p>                                       |



| Development Rationale  |
|--|
| upgrading of the New Horizons and Kwanokuthula neighbourhoods and the establishment of private sector investment initiatives in and around the segregated townships. |
| In the medium to longer term Kranshoek should also be functionally incorporated by way of the Robberg Road corridor.   |
| Development must be of a mixed market nature, to create economic benefits for cross-subsidisation of the lower end developments.                                     |

**Figure 56** depicts the development concept and associated proposals for Plettenberg Bay Town which is summarised as follow:

#### a) Core Landscape Areas

- The Piesang River Valley should be developed as a series of private nature reserves which are designed in such a way that sufficient security and privacy is afforded to future residents but that public and environmental benefits are maximised;
- The valley also has a role in consolidating the main attractions that Plettenberg Bay has to offer, namely upmarket leisure and lifestyle opportunities;
- As it is unlikely that public funding can be secured in this context, hence this will have to be leveraged from private interests;

- However, it is essential that private development impacts as little as possible on the environmental integrity of this area, therefore the following is proposed:
  - As much land as possible should be incorporated into conservation reserves;
  - Limited residential accommodation should be considered.
- Robberg Road should be enhanced as a scenic route, and the scenic quality of the area south of the access road to Robberg Nature Reserve should also be maintained;
- River corridors should be designated as Core 1 SPCs with no ploughing or urban development permitted within 32 metres of the banks unless set-back lines have been determined by a fresh water ecologist.
- The estuarine and coastal set back lines based on the Coastal Management Guidelines should be applied;

#### b) Urban Restructuring

- The main challenge facing this urban settlement is to ensure that future development improves the current urban structure;
- The long term vision in this regard is to consolidate the urban structure along the u-shape extending from Kwanokuthula to Plettenberg Bay main town, southward along Robberg Road and Longships Drive towards Whale Rock and from there westwards past the airport and up to Kranshoek;



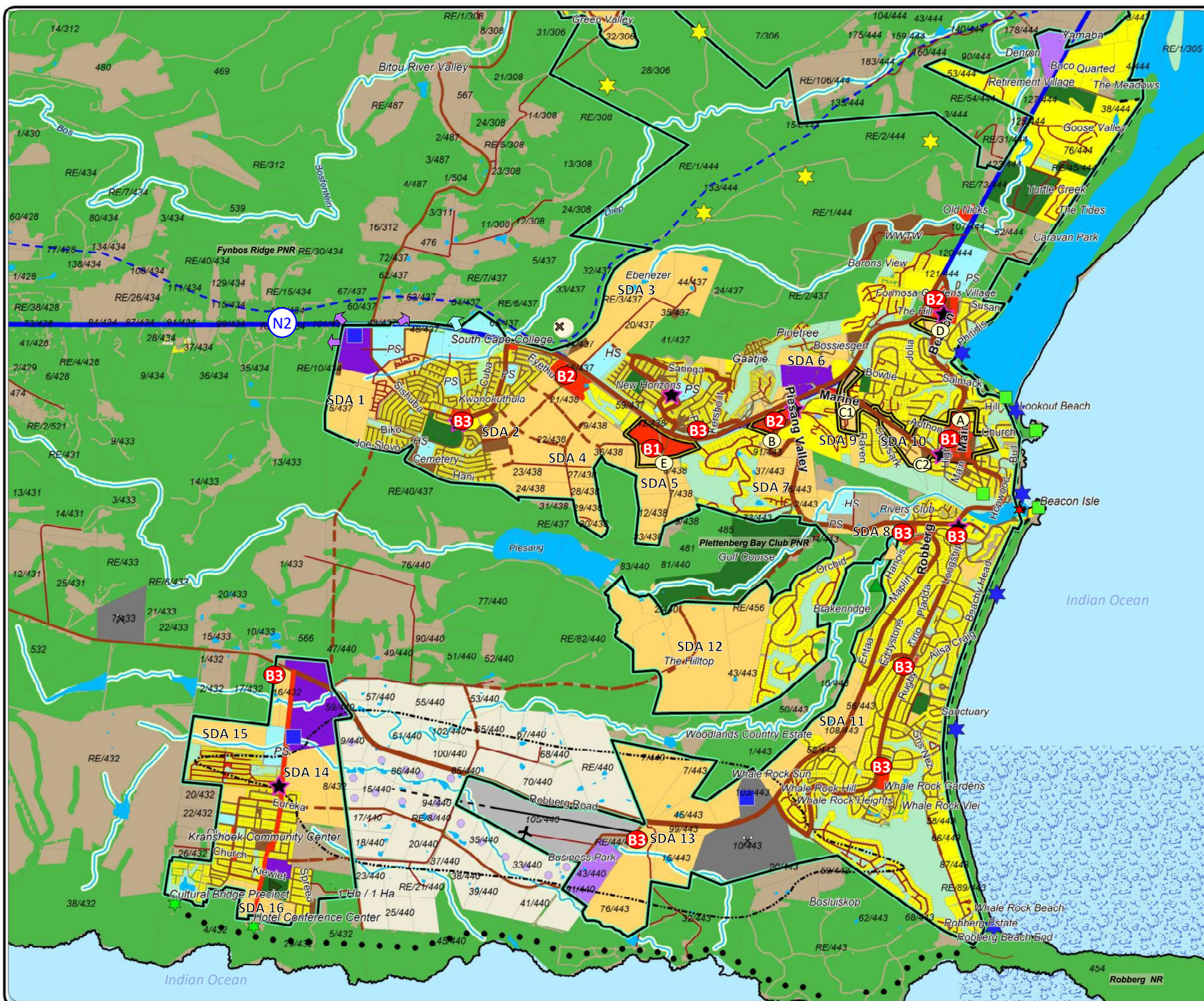
## Bitou SDF

### Plettenberg Bay Development Proposals

- Biodiversity Area (Core and Buffer)
- Marine Protected Area
- Open Space
- Agriculture
- Small Holding
- Small Holding: Service Industry
- Urban
- Strategic Development Areas
- Educational
- Municipal / Community Facility
- Business
- Light Industrial
- Industrial
- Sports and Recreation
- National Rd
- Proposed N2 Bypass
- Provincial Rd
- Secondary Rd
- Priority Public Transport Network
- Strategic Links
- Taxi Facility
- Waste Transfer Station
- Proposed Botanical Garden
- Airport
- Quarry
- Beach
- Landmark
- Cultural Bridge
- Noise Contour
- Tourism Anchors
- Proposed Cemetery
- Waterfront Walkway
- Urban Edge
- Dams / Rivers
- Restructuring Zones
- Potential Development Area
- Small Boat Harbour



Figure 56



- A local transport system is key to achieving the above and the priority public transport network as illustrated on Figure 56 will serve as the backbone towards the restructuring of the town;
- The first step in this process is the “integration corridor” along route N2 and Marine Drive in line with the Coming Together initiative which has already made a number of proposals in this regard;
- A series of nodes containing varying concentrations of commercial, industrial and community facilities are proposed as a corridor along route N2 and Marine Drive up to the existing CBD, and from there southwards along Longships Drive up to Whale Rock;
- These will essentially fulfil local functions for their abutting neighborhoods, as well as working together as a system along which agglomeration and critical mass benefits can be derived through exposure to regional traffic and associated larger markets;
- Along route N2 the creation of maximum access, single sided service roads which offer continuous visual exposure to N2 traffic, but to which access is only taken at the intervals prescribed by the relevant Road Access Management Guidelines, is a critical success factor. Thus, access intersections off the N2 should be spaced between 800 and 1000 meters;
- These service roads should be property landscaped and provided with public and non-motorised transport facilities and short and long term parking;
- Area specific appropriate development should be consolidated along Piesang Valley Road and further southward along Robberg Road up to the Plettenberg Bay Airport;

- Mixed-use development should be focused at the nodes in order to increase the economic opportunities for the local community, and residential development in all the areas along the integration corridor should be at medium densities of about 25 units per hectare (as a guideline);
- Further expansion of Kranshoek should be predominantly towards the north and north-east in order to link up with Robberg Road and to gradually develop towards the airport and Plettenberg Bay main town;
- Almost all the priority areas for future development (Strategic Development Areas) are located along this public transport network which represents the backbone towards the future spatial restructuring of Plettenberg Bay Town;
- All the Gazetted Restructuring Zones (A, B, C1, C2, D and E) earmarked to accommodate future medium density Social Housing are also located along this network as illustrated on Figure 56.

### c) Urban Development

The **priority movement network** comprises the following main components:

- Route N2 bypass which will allow for the future downscaling of the mobility function of route N2 through the existing urban fabric of Plettenberg Bay.
- Beacon Way, Marine Drive and Piesang Valley Road which provide linkages from route N2 (existing) to the Central Business District, Central Beach and the southern residential areas.

- Robberg Road which serves as a mobility route to all the residential areas to the south, providing a link to the Robberg Nature Reserve, and serving as the southern movement corridor linking up with the Plettenberg Bay Airport, Kranshoek and Harkerville further towards the west.
- Robberg Road is supplemented by the lower order Longships Drive which runs parallel to the east thereof providing more direct access to the surrounding residential areas.
- A proposed road link between Kranshoek and Kwanokuthula (and Wittedrift-Green Valley further to the north) would complete a circular movement network which would optimise connectivity between all communities in and around Plettenberg Bay.
- Similarly, a road link needs to be established from Kranshoek northeastwards, past the Plettenberg Bay Golf Club and up to Piesang Valley Road in the vicinity of Brackenridge.

**Business activity** should be consolidated around the following priority business nodes:

|     |   |
|-----|---|
| B1: | <ul style="list-style-type: none"> <li>■ Plettenberg Bay CBD;</li> <li>■ Ladywood CBD/ Future Civic Precinct;</li> </ul>  |
| B2: | <ul style="list-style-type: none"> <li>■ Beacon Way-N2 Regional Business Node (Market Square and Checkers Shopping Centers);</li> <li>■ Piesang Valley – Qolweni Regional Business Node along N2,</li> <li>■ Kwanokuthula Regional Business Node (part of Kwano City);</li> </ul> |

- |    |  |
|----|--|
| B3 | <ul style="list-style-type: none"> <li>■ New Horizons Community Business Node;</li> <li>■ Kwanokuthula Community Business Node;</li> <li>■ Piesang Valley/ Longships Business Community Nodes (3 in total);</li> <li>■ Whale Rock Community Business Node,</li> <li>■ Airport Business Node (Medium Term)</li> <li>■ Kranshoek Community Business Node.</li> </ul> |
|----|--|

**Industrial activity** should be consolidated around the following three areas:

- The existing Industrial Area at the N2 traffic circle which should be protected from further informal settlement intrusion from the surrounding areas. The possibility of introducing access control measures to some parts of the industrial area to improve safety and security should be investigated.
- The proposed future Kwanokuthula Industrial Area at the Waste Transfer Station around the intersection between Wittedrift Road and N2;
- The new industrial area at the Kranshoek-Robberg Road intersection.

It is recommended that a “bulky item” waste disposal facility be established on the existing Kwanokuthula waste transfer station site or adjacent to the west thereof in order for local entrepreneurs from the surrounding marginalised communities to strip and recycle working components from fridges, stoves, washing machines, computers and other home appliances as a means to enhance sustainable livelihoods.

It is also recommended that light industrial uses/ service industries be allowed on the small holdings between the Airport Business Park and Kranshoek subject to certain conditions related to engineering services requirements, noise and air pollution, traffic impact and visual appearance.

Several **Strategic Development Areas** have been identified as priority areas to consolidate the urban fabric around the u-shaped integration corridor. These areas will accommodate the bulk of the short to medium term residential development in the town (combined with community facilities and economic activity), and much of this land forms part of the existing Bitou Housing project pipeline.

The identified **Potential Development Areas** to the north of Plettenberg Bay between Green Valley, Goose Valley and Ebenezer are also included within the urban edge and can be gradually prepared for development by undertaking the necessary environmental impact assessments and township establishment processes on the developable parts thereof.

Preliminary investigations show that approximately 29 ha of land on Wittedrift 306/28 is flatter than 1:4 and could yield about 1 278 residential units at an average density of about 44 units/ha.

On Ganse Vallei 444/1 an estimated 130,6 ha of land is flatter than 1:4 which could yield around 4 713 units at average density of 36 units/ha.

Hence, the estimated future residential yield for this Potential Development Area stands at about 6 000 residential units.

Further detailed studies need to be undertaken over the next few years and all the required rezoning and similar approvals will have to be obtained before any development is allowed in this area.

The following section provides more detailed proposals for individual functional areas in Plettenberg Bay:

#### 4.5.1.1 Goose Valley

As illustrated on **Figure 56.1** much of this area is low lying and flood prone as it borders onto the Bitou River to the north and Keurbooms River to the east. Hence, the existing BUCO/ Denron precinct and The Meadows and higher lying parts of the old polo fields to the east thereof represent the northern urban edge, with the remainder of the areas northwards up to the Bitou River being earmarked for agricultural activity.

To the south the urban edge is extended southwards from Turtle Creek/The Tides right up to the primary school (across the caravan park) in order to allow for the future consolidation of the urban fabric of the main town with the Goose Valley area.

In order to retain the scenic Garden Route character and to fit in with the existing character of the surrounds it is recommended that future development around route N2 be limited to Holiday Accommodation, Low Impact Tourist and Recreational Facilities and Low Density Housing which



## Bitou SDF

### Goose Valley Development Proposals

- Biodiversity Area (Core and Buffer)
- Open Space
- Agriculture
- Urban
- Educational
- Municipal / Community Facility
- Business
- Light Industrial
- Sports and Recreation
- National Road
- - - Proposed N2 Bypass
- Provincial Road
- Secondary Road
- ★ Taxi Facility
- Priority Public Transport Network
- - - Waterfront Walkway
- Urban Edge
- Dams / Rivers
- ★ Potential Development Area

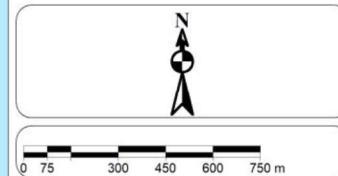
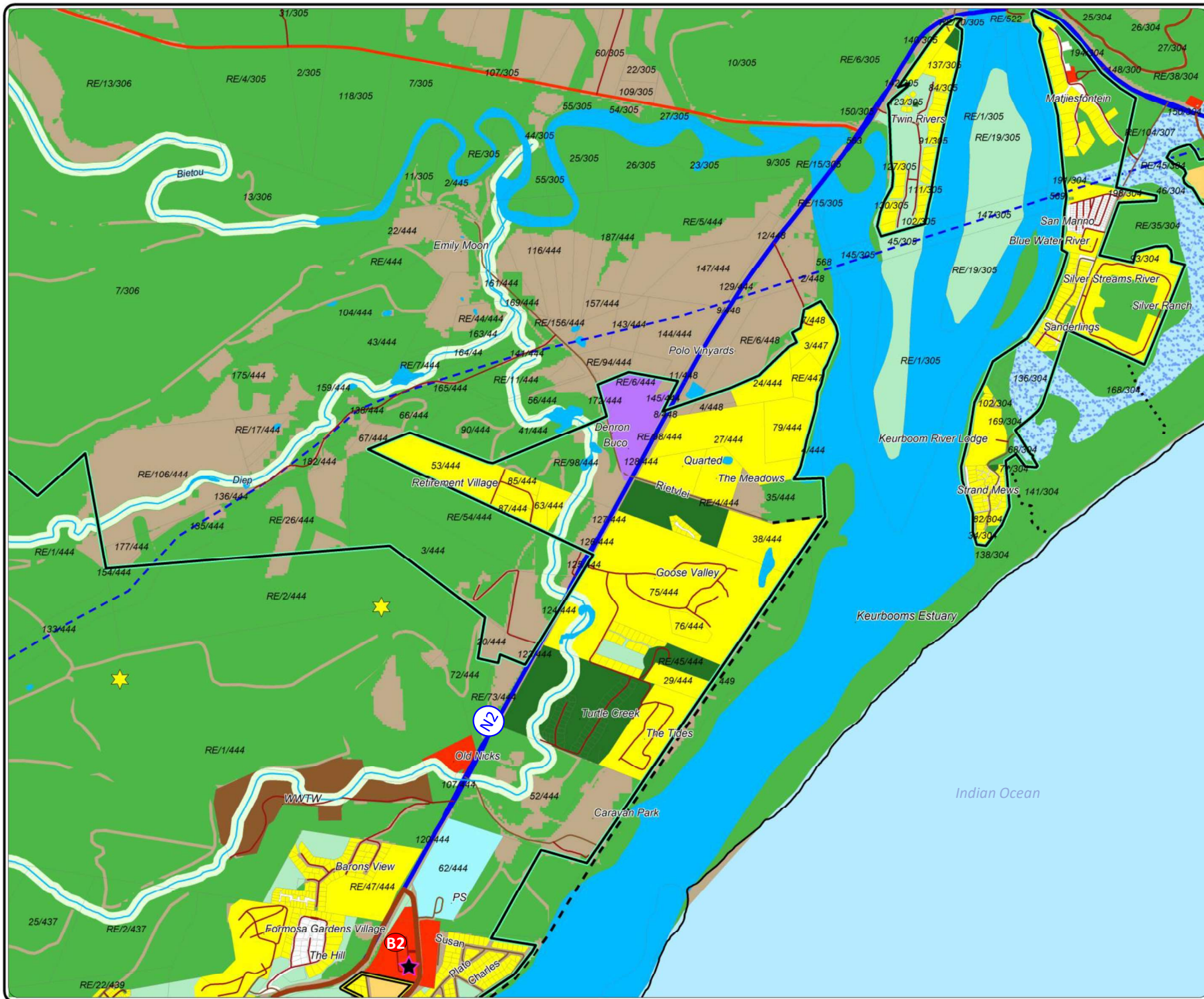


Figure 56.1

should be considered on a restricted basis and subject to road access management standards/ requirements along route N2.

As noted under section 4.5.1 above, it is envisaged that several portions of the farm Ganse Valle 444 to the west of route N2 may become developable (public and private development) in the foreseeable future, hence this area is included within the urban edge.

It is proposed that the Lookout Park be established as a Private Nature Reserve with a pathway extending from Wedge to the Whale Tail. From there the entire lagoon side (Farm 449) should be established as a MPA (or similar agreement) with a pathway extending from the Lookout Beach to the end of the Lagoon Edge at The Meadows.

This will allow for access to be established along the lagoon side and it will link up the fragmented public open space. The entire pathway is on public open space. The MPA will not only contribute towards the Marine Protected Areas of South Africa, but will enforce regulations to reduce/ eliminate overexploitation of marine living resources, and as the estuary is a BGCMA priority estuary, it warrants this level of protection.

#### 4.5.1.2 Plettenberg Bay Main Town

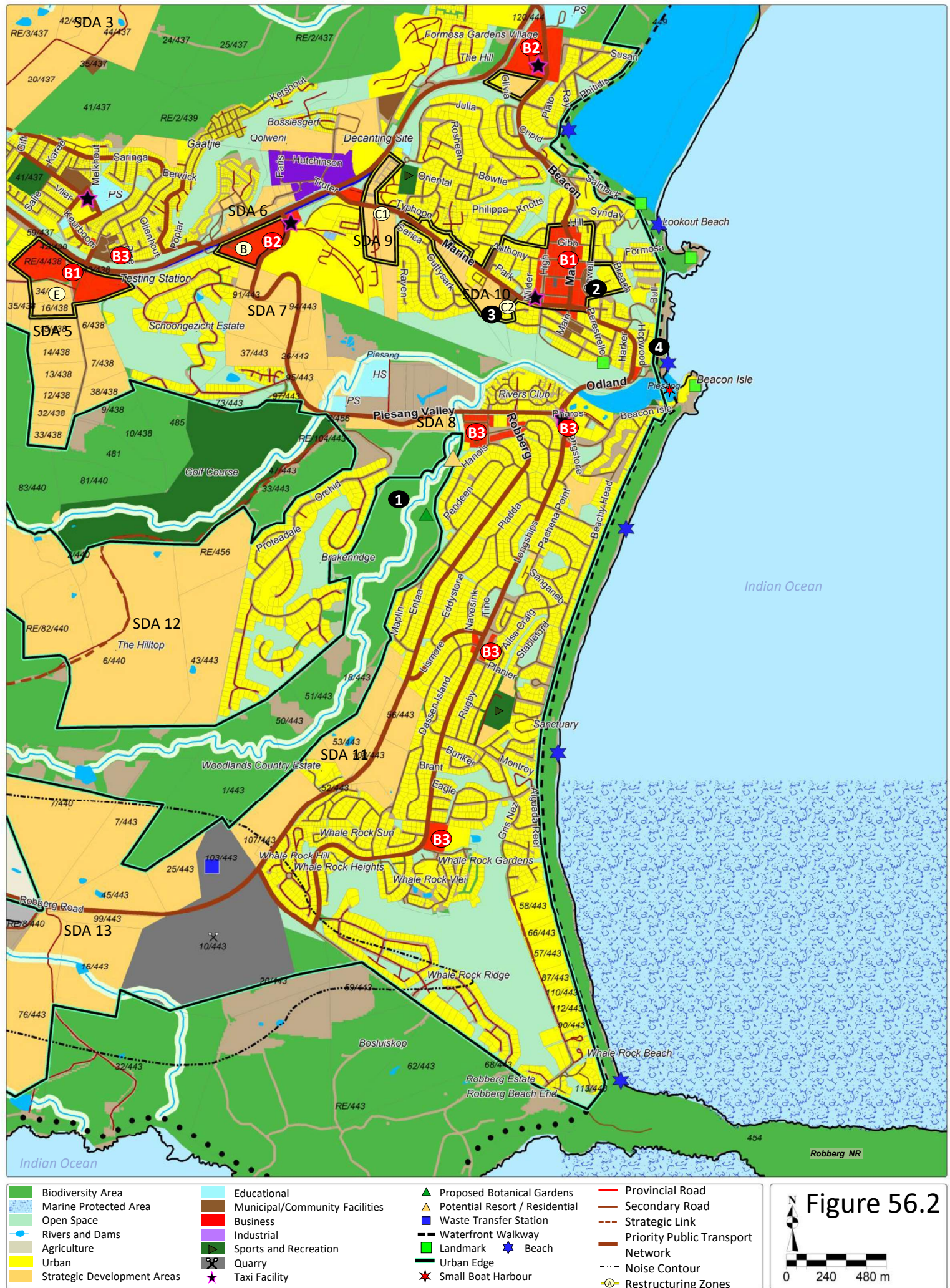
The following proposals should be noted with regards to the Plettenberg Bay main town area as depicted on **Figure 56.2**:

##### a) Piesang Valley and Surrounds:

- The open space system located on municipal owned Erf 1895<sup>(1)</sup> between the Brackenridge Residential Estate and Robberg Road offer an ideal location and environment for the establishment of a botanical garden which would add to the leisure and lifestyle opportunities offered in the valley. The north-eastern end of this precinct could also be considered for the establishment of a resort/ caravan park and/or limited residential development.
- Mixed income residential development should be promoted along Piesang Valley Road in SDA7 and SDA8 as and where environmental conditions are suitable. SDA8 could also accommodate tourism related business activities as and where such opportunities may present itself. All development in SDA7 and SDA8 will be subject to the road access management (250 m spacing) and sight distance requirements of the provincial roads authority as Piesang Valley Road is a provincial road (Class 3).
- The number/ density of units have to be based on the size and shape of the land portions and may vary from site to site.
- The rural character of the properties north of Piesang Valley Road should be protected and limited to low density tourism and equestrian residential (where appropriate), taking into account floodlines and environmental sensitivities. No further subdivision of properties north of Piesang Valley Road should be allowed and further buildings should be set back at least 30 m from the road.



## Bitou SDF : Plettenberg Bay Development Proposals



- The land along Robberg Road north and south of Woodlands Country Estate (SDA11) may be developed for residential purposes (medium density) in order to complete the development strip up to the old waste disposal site.
  - The Hilltop precinct (SDA12) can be developed as a functional extension of the Brackenridge precinct subject to Core and Buffer features within the area. It is also important to accommodate the strategic link road from Piesang Valley Road through this area and up to the Jackalskraal Road in the vicinity of Kranshoek (refer to Figure 56).
  - Several land parcels in the residential area, e.g. adjacent to the north and south of the rugby field, as well as the portion of erf 256 to the west of Longstone Park form part of the Strategic Development Areas network of the Bitou SDF and could be considered for residential purposes in line with a Council Resolution (2008) in this regard.
  - It is the intention of the Bitou Council to identify similar infill development opportunities in future, and as and when land is so identified it will not be deemed to be in conflict with the provisions of the Bitou SDF.
  - Special effort should be made to brand the entire coastal strip from Robberg Beach to the south right up to the proposed Lookout Park Private Nature Reserve the north, and from there towards Poortjies beach and up to The Meadows as one continuous “public pathway” offering a range of leisure related activities and facilities adding to the tourism offering of the town.
  - The creation of a strategic link between Griz Nez Avenue and Robberg Beach End will create a continuous north – south link through to Robberg and will also serve as an escape route should fires break out in the surrounding areas (as it did in 2017).
- b) Upper Town and CBD:
- The Bitou CBD is supported by a number of key functions which include retail, office, public services (municipal offices and community facilities), tourism and residential.
  - The continued shift of mainstream retail to the Market Square and the new Checkers Center at the northern end of Beacon Way continuously erode the retail function of the CBD.
  - Similarly, the intended future relocation of the municipal offices and some community facilities to the Civic Precinct in the Ladywood Business Node (B1) will also impact negatively on the functionality of the CBD.
  - This means that the three remaining functions need to be strengthened as much as possible: tourism, office and residential.
  - Tourism can be strengthened through the creation of space for small local businesses to provide a unique tourist experience comprising sidewalk cafes, bars, curio shops, boutiques etc. combined with a range of tourism accommodation and entertainment options (mainly clustered along Main Street).
  - The catalytic intervention recommended in this regard is the establishment of an international hotel and conference facility on the current premises of the Bitou Municipality<sup>(2)</sup> (Sewell Street 2138 and 4131) once the municipal offices relocate to Ladywood.

- The office function in the CBD should be retained as far as possible and in this regard it is important that the Bitou Land Use Scheme clearly defines “Home Occupation” as use zone, as well as the development parameters associated with it. This in order to limit the flee of conventional office uses from the CBD to the residential townships.
- With the “Home Occupation” definition and development parameters clarified it is essential that proper policing measures also be put in place to monitor the nature of “home occupation” activities in the residential areas and to ensure that conventional office uses do not establish in the residential areas under the guise of “Home Occupation”.
- Main Street has been reconstructed over the past ten years, but it is important now that High Street also be incrementally upgraded/ redeveloped over a period of time as it represents the second leg of the north-south oriented “traffic box” around which the CBD is developed.
- There is no dedicated public funding available for this purpose, but Council could facilitate/ support private sector redevelopment initiatives for properties fronting onto High Street (east and west).
- One option in this regard is to allow future developers along High Street to provide 90° (or angled) parking in the street reserve bordering the property (in accordance with specifications to be provided by the Municipality, including paving, space for pedestrian movement, landscaping, etc.) much in the same way that parking is already provided in Main Street.
- In this way the High Street road reserve will be incrementally upgraded over a period of time while the properties bordering onto it are redeveloped with more favourable parking conditions than the 1 per 25 m<sup>2</sup> on site as is currently required.
- The business footprint of the CBD could then extend up to (and including) the row of erven bordering High Street to the west (from Park Street up to Langdown Street).
- Residential densification (2 to 3-storey walk-ups) can be allowed through redevelopment on all erven to the west of High Street which fall within the CBD Restructuring Zone as demarcated on **Figure 56.2**.
- Similarly, the land parcels which will become redevelopable once the existing municipal services located to the south of Marine Drive are relocated to the Ladywood Civic precinct, are all earmarked as part of a Strategic Development Area (SDA10) and should be used for future development of 3 and 4-storey residential units (bonded and subsidised with various tenure alternatives).
- Potential also exists for medium density (3 to 4-storey) residential development north and south of the Shell Ultra City (SDA9) further to the west along Marine Drive, as well as Erf 542 next to Market Square.
- It should be noted that the CBD, SDA9 and SDA10 all form part of one of the Restructuring Zones of the Bitou Local Municipality (i.e. it is intended to accommodate medium density housing, including Social Housing).
- The open space network proposed in the Coming Together plan for the CBD also links up very well with the proposed Lookout Park Private Nature Reserve and the continuous beachfront “public pathway” specifically from Robberg Beach up to The Meadows as proposed above. It should also be considered to create a road link between the

Lookout Deck (bottom of Hill Street) and Milkwood Manor parking area (Salmack Road).

- Increased pressure for redevelopment of a number of sites in the vicinity of Central Beach necessitates the formulation of a comprehensive precinct plan to ensure a coherent approach towards the redevelopment of parts of this precinct. This could include the area<sup>(4)</sup> between Beacon Isle Hotel and up Lookout Park as shown on Figure 56.2 and should also incorporate the proposed small boat harbour (for which the Bitou Local Municipality is contractually bound at this stage) and which forms part of this precinct.

#### 4.5.1.3 Kwanokuthula-New Horizons-Qolweni Integration Corridor (Coming Together)

**Figure 56.3** provides a spatial perspective on development proposals along the N2 integration corridor of Plettenberg Bay Town, extending from Kwanokuthula in the west up to the Marine Drive traffic circle to the east. It is briefly summarised as follow:

- The proposed N2 bypass route borders the area to the north-west and will accommodate the bulk of high mobility regional traffic in future. (This alignment is also a strong structuring element in this area as it defines the future (fairly permanent) urban edge);
- The construction of route N2 bypass will provide the opportunity for the existing route N2 to be downscaled in terms of its mobility and access standards. It then becomes the activity spine around which the various

communities residing along the route are functionally, socially and economically integrated;

- The new Bitou Town Centre / Civic Node<sup>(B1)</sup> is a declared Restructuring Zone<sup>(E)</sup> which is earmarked to accommodate the future Municipal Offices, including Technical Services, and the Municipal Licensing Department and Fire Brigade, as well as business uses adjacent to the west thereof.
- Council should re-assess the amount of land required to accommodate all the public uses noted above, and may consider acquiring portions 34/438 and 35/438 which represent the southern end of this Restructuring Zone, for future municipal use.
- Opposite to the north is the New Horizons Community Node which comprises the new Magistrates' Court, library, municipal satellite offices, a crèche and a clinic combined with some local business activities. Adjacent to the east of the Magistrates Court (on Erf/R/2299) a new Trading Area will be created as part of the Regional Socio-Economic Programme (RSEP). The community hall further to the north functions as a youth centre with the taxi facility to the west thereof, and a proposed new Community Public Square to be developed opposite the community hall (also part of the RSEP);
- The Qolweni Community Node area (refer to Figure 43) is mostly earmarked for residential use with only a small part of it still allocated to a cultural village. There is, however, an opportunity to establish future business uses and medium density residential development to the south at the N2 – Piesang Valley Road intersection to also serve the needs of the Qolweni community. (This area is also a Restructuring



# Bitou SDF

## Kwanokuthula/ New Horizons / Qolweni Development Proposals

- Biodiversity Area (Core and Buffer)
- Open Space
- Agriculture
- Urban
- Strategic Development Areas
- Potential Development Area
- Educational
- Municipal / Community Facility
- Business
- Industrial
- Sports and Recreation
- National Road
- Proposed N2 Bypass
- Provincial Road
- Secondary Road
- Strategic Links
- Priority Public Transport Network
- Taxi Facility
- Waste Transfer Station
- Proposed Cemetery
- Urban Edge
- Restructuring Zones
- Dams / Rivers

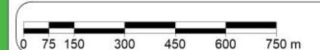
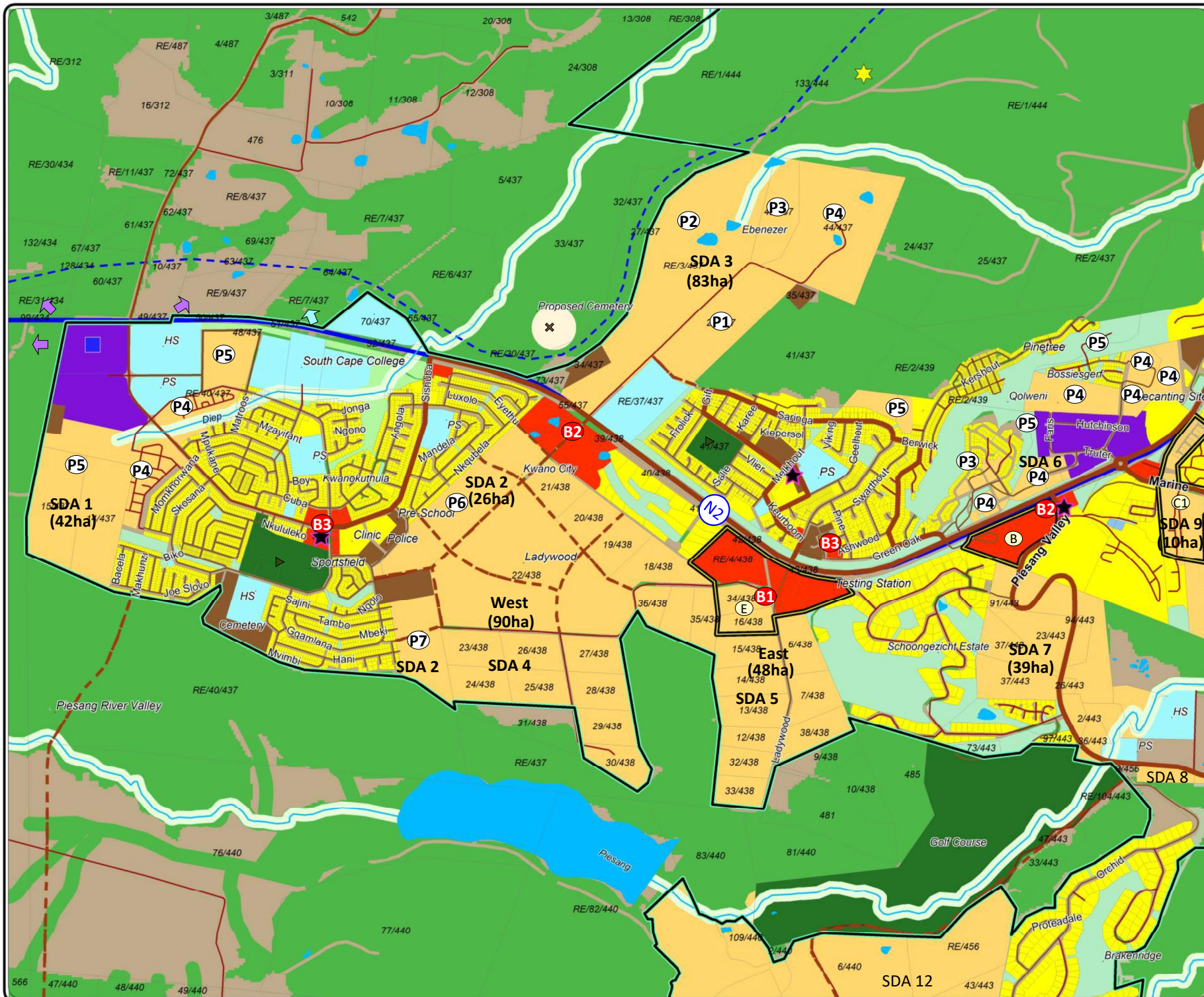


Figure 56.3



Zone which means that it is earmarked to accommodate Social Housing);

- The two quadrants of the Kwano City Node<sup>(B2)</sup> at the north-western end of the Ladywood area are earmarked for business and could comprise a combination of retail and service industries combined with multi-storey residential uses. The focus should be on economic empowerment of surrounding marginalised communities benefitting from the visual exposure of regional traffic along route N2 to the north thereof (refer to Annexure E);
- The Kwanokuthula Community Node<sup>(B3)</sup> which is centrally located within the residential area should be further enhanced with the establishment of a comprehensive sports and recreational facility, a wide range of community facilities clustered around this area (which already comprises a Thusong Center, Library, Police Station, Children's Shelter, Pre School Crèche, the taxi rank and some informal trade) and the strengthening of local business activity;
- The existing cemetery is proposed to be expanded to the west of the existing high school;
- The area around the existing waste transfer station is earmarked for future industrial use which would include activities associated with waste processing and recycling. This industrial area can be expanded further to the west in future (also refer to the proposal regarding a bulky item waste disposal facility under section 4.5.1(c), or alternatively to the two sites north of route N2 which border onto the future intersection of the Wittedrift Road and N2 bypass. (This is a long term prospect which can only materialise when the N2 bypass is constructed). The major advantage to these two sites is the visual exposure to regional traffic

along route N2 bypass (when constructed), while access could be gained from existing N2 or the Wittedrift Road;

- To the east of the industrial area it is proposed that provision be made for an additional primary and secondary school to cater for future residential expansion of the area (P4 and P5) in line with the local precinct plan (refer to Figure 42);
- It is recommended that the possibility be investigated that the capacity of the South Cape College as a tertiary institution be expanded in order to provide more opportunities for post school skills development – especially in the tourism and agriculture sectors.
- As illustrated on Figure 56.3 several areas have been earmarked as Strategic Development Areas/ Priority Housing Development Areas along the N2 Integration Corridor. Some of these are already defined as housing projects as part of the Bitou Housing Project Pipeline while others are merely identified as areas suitable for future human settlement development. **Table 31** provides a brief summary of the areas/projects identified.
- The Ladywood area comprises approximately 138 ha of land which could be utilised for a wide range of housing typologies and income brackets, including bonded, gap market and subsidised. This is a prominent infill area in the context of N2 Integration Corridor and it requires a more detail precinct plan in order to pre-actively guide the future development of the area. This precinct plan should be compiled with due consideration to the following proposed conceptual guidelines:
  - The Civic Node<sup>(B1)</sup> and Kwano City Node<sup>(B2)</sup> represent the two major business nodes, and combined with the Kwanokuthula Node<sup>(B3)</sup>

adjacent to the west, should be sufficient to serve all local business and commercial needs of the surrounding communities.

- ❑ A retirement village is planned to the north between Kwanokuthula and the Civic Node.
- ❑ The Ladywood road network is proposed to effectively link up with the road network of Kwanokuthula as graphically illustrated on Figure 56.3 with two access points onto route N2 at the two nodes.
- ❑ Several housing projects are already planned in the narrow strip along the western boundary with Kwanokuthula (SDA2), including a project comprising 120 UISP and 353 Social Housing units in the short term; and in the medium term two more mixed housing projects (IRDP/GAP/Social) on the remaining ± 25 ha of this strip.
- ❑ It is recommended/ envisaged that the entire SDA4 (90 ha) will be developed in the medium to longer term with a similar typology composition (IRDP, GAP and Social) to that of SDA2.
- ❑ The eastern precinct (SDA5) which represents about 48 ha of land should be earmarked for bonded rental, sectional title and full title residential units. It should include entry level bonded (GAP Market), Social Housing, and middle and higher income bonded units clustered around the Civic Node.
- ❑ From discussions with the engineering services department it was indicated that the Ladywood area will require a sewer pump station in order for this area to link into the upgraded outfall sewer line serving the Kwanokuthula–New Horizons–Qolweni cluster.
- ❑ In the short term water can be provided from the bulk network and storage facilities of Kwanokuthula (especially the western parts of Ladywood), but in the long term it will require a more

comprehensive solution possibly involving linking into the new bulk to be provided for development in the Ebenezer area opposite to the north.

- The detailed urban design guidelines pertaining to pedestrian/ cycling walkways as well as the utilisation of public spaces along existing route N2 as defined in the Coming Together Report should be read in conjunction with Figure 56.3.

**Table 31: Summary of Areas/ Projects Identified**

| Kwanokuthula           |                   |                    |                      |
|------------------------|-------------------|--------------------|----------------------|
| Kwanokuthula Phase 4   | IRDP              | Short Term         | 441 Top Structures   |
| Kwanokuthula Phase 5   | IRDP/UISP         | Short Term         | 1562 Units           |
| Kwanokuthula Phase 6   | UISP              | Short Term         | 120 UISP/ 353 Social |
| Kwanokuthula Phase 6   | IRDP/GAP/Social   | Medium Term        | 16,9 ha              |
| Kwanokuthula Phase 7   | IRDP/GAP/Social   | Medium Term        | 8,7 ha               |
| Ebenezer               |                   |                    |                      |
| Ebenezer P1:           | IRDP/ Social/ GAP | Short Term         | 1469 Units           |
| Ebenezer P2, P3 and P4 |                   | Medium – Long Term |                      |
| Qolweni                |                   |                    |                      |
| Qolweni Phase 3A       | UISP              | Short Term         | 382 Serviced Sites   |
| Qolweni Phase 4A       | UISP              | Short Term         | 169 Top Structures   |
| Qolweni Phase 4B       | UISP              | Short Term         | 303 Serviced Sites   |
| Qolweni Phase 5        | UISP              | Short Term         | 99 Planning          |
| Ladywood               |                   |                    |                      |
| West                   | IRDP/ Social/ GAP | Medium Term        | 90 ha                |
| East                   | GAP/ Bonded       | Medium Term        | 48 ha                |

#### 4.5.1.4 Robberg-Airport-Kranshoek Corridor

**Figure 56.4** illustrates the development proposals for the area which are summarised as follow:

- The coastal strip is intended to functionally link the Robberg Nature Reserve to the proposed tourism node south of Kranshoek (the Cultural Bridge) via a protected area which also caters for a continuous hiking/ MTB route all along the coastline;
- The Robberg quarry will continue to be operational to the south of Robberg Road while the old quarry/ refuse disposal site to the north of the road is in process of rehabilitation whereafter it will only function as a waste transfer station;
- Residential development can be accommodated along Robberg Road in Strategic Development Area 13 where a number of township applications are in process. This may include a future business node<sup>(B3)</sup> at the entrance to the airport precinct.
- In line with expansion plans for the Plett Airport provision should be made for the future extension of the airport runway towards the west;
- The Plett Business Park could expand to the south in future as and when demand for airport related logistics/ light industrial activities increase;
- It is recommended that the small farms north and south of Robberg Road in the vicinity of the airport be earmarked as Agricultural Zone II in line with the draft Western Cape Zoning Scheme By-law. This implies

that the primary use becomes “Smallholding” which primarily serve as places of residence for people seeking a rural lifestyle with limited agricultural activity. Consent uses in this area can include any of the following:

- |   |  |
|---|--|
| • Agricultural industry                       | • Plant nursery                          |
| • Animal care centre                          | • Quarry                                 |
| • Aqua-culture                                | • Renewable energy structure             |
| • Farm shop                                   | • Riding school                          |
| • Freestanding base telecommunication station | • Rooftop base telecommunication station |
| • Guest house                                 | • Second dwelling                        |
| • Intensive animal farming                    | • Tourist facilities                     |
| • Intensive horticulture                      | • Utility service                        |

- It is furthermore recommended that the small farms/ holdings (purple dots on Figure 56.4) bordering the airport to the south and/ or within the airport noise zone be allowed to operate additional low intensity service industries/ home industries which would both serve an existing need of the town and support economic activity around the airport. This would typically include servicing/ repair of domestic/ office appliances, upholstery, window blinds, electrical/ plumbing contractors/ workshops, assembling and packaging, storage (indoor), courier services, logistics buildings and home workshops (carpenter, welding, etc.).
- This strip extends from the existing Plett Business Park right up to the new industrial area at Kranshoek. It should be noted that this is a



transitional arrangement/ consent and all activities are subject to health and safety requirements as well as standards pertaining to noise and air pollution, traffic impact, aesthetic characteristics and bulk service limitations. For this reason it is still excluded from the Urban Edge;

- Agricultural activity should be maintained/ strengthened in all areas surrounding.

#### **Airport Development**

*Appropriate development of the facility to accommodate air traffic that does not compromise the nature of the town should be carefully managed over a 10, 20, and 30 year timeline.*

*The runway presently accommodate aircraft capable of carrying around 30 to 35 passengers, but it could be extended should there be a demand for larger lanes.*

*Upgrading the airport would encourage and accommodate current general aviation activities, such as the parachuting, skydiving training and flight school companies.*

*Considerable economic value will also be gained by carefully managing the tenant mix when new hangars are made available. Aircraft constructors, refurbishers, and AMO's (Aircraft Maintenance Organisation) will all create skills employment opportunities.*

*Appropriate mechanisms can be put in place for the development of the terminal building with properly qualified partners on a build-operate-transfer basis.*

*Source: Bitou Economic Development Implementation Plan (2018)*

#### **4.5.2 Kranshoek**

##### **Development Rationale**

Kranshoek should also develop as a future growth node. This area has a unique cultural theme that should be enhanced by creating suitable opportunities for the development of tourist attractions in unique natural environments and settings. It is to be promoted as a balanced, self-sufficient settlement with commercial and retail frontages onto the main road and a possible resort onto the coast to the south. A long term development corridor is proposed to the east along Robberg Road past the airport and back towards Plettenberg Bay. Developments should commence from the Kranshoek node and must eventually link Kranshoek and Plettenberg Bay, while also serving a potential tourist and scenic road, while the bio-diversity corridor along the coastal section should be retained.

**Figure 57** depicts the spatial proposals for the future development of Kranshoek as summarised below:

##### **a) Core Landscape Areas**

- Robberg Road passing the access intersection should be treed and landscaped as a scenic route with non-motorised transport facilities. These should be in keeping with the rural road environment and should be designed more as a rural path than an urban side walk;



## Bitou SDF

### Kranshoek Development Proposals

- Biodiversity Area (Core and Buffer)
- Open Space
- Agriculture
- Small Holding
- Small Holding with Service Industry
- Urban
- Strategic Development Areas
- Educational
- Municipal / Community Facility
- Business
- Industrial
- Sports and Recreation
- Secondary Road
- - - Strategic Links
- Priority Public Transport Network
- ↔ Activity Spine
- ★ Taxi Facility
- Waste Transfer Station
- Monument
- ★ Tourism Anchors
- Cultural Bridge
- Urban Edge
- Dams / Rivers
- - - Noise Contour
- Agri Industries

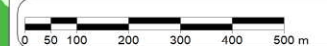
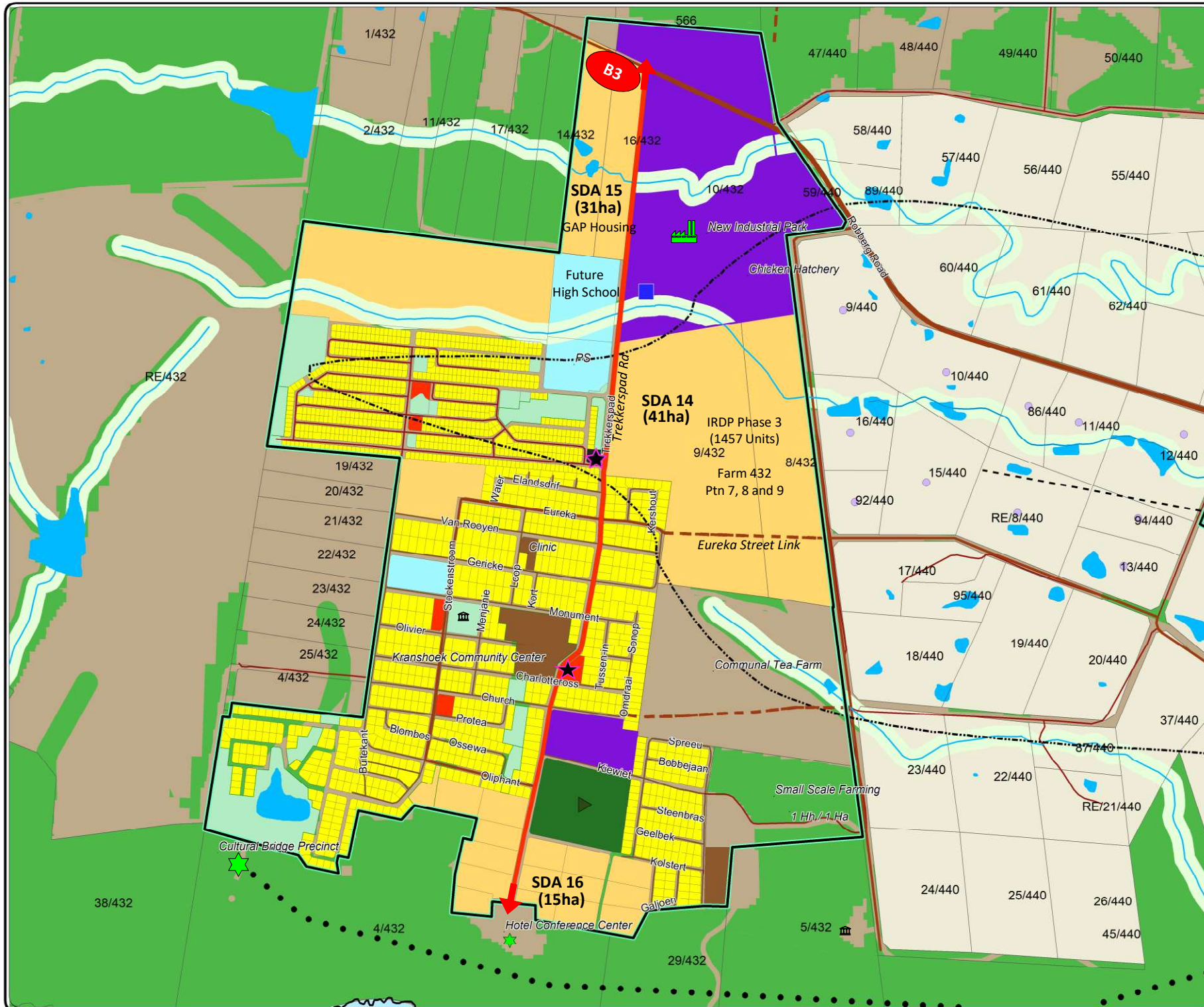


Figure 57



- A visually exposed urban entrance to Kranshoek is essential and land near the entrance road should be used for this purpose. Those CBAs near the intersection with Robberg Road can be managed as such,
- Agricultural land abutting the west and east boundaries of Kranshoek should be retained for this purpose and its more intense use encouraged, especially by members of the community;
- The area to the south of Kranshoek forms part of the proposed southern coastal corridor (including Robberg Cultural Bridge). This area should be protected from extensive development with the only activities being tourism related, including the proposed Kranshoek cultural interpretive centre and hotel/ conference facility as well as walking/ hiking trails passing through the area;
- Those parts of the coastal corridor not required for the proposed resort should be designated as Core 1 SPC but included as a community or private nature reserve or as a contractual national park over which the community has some say.
- The remainder of this corridor that could be used for a resort should be designated as a Buffer 1 SPC which promotes conservation but allows economic activities.

#### **Robberg (Kranshoek) Cultural Bridge Project**

- *The project has not advanced due to the Trancraa transfer process of land to the Kranshoek CPA;*
- *Once the community hold title to the land, they have something of economic value to contribute as partners in the venture;*
- *The proposed development consists of two components: the historical interpretive centre, along with a conference venue/ performance/ exhibition space, and associated shops, restaurants and the like; and on an adjacent piece of land a tourist accommodation facility and a conference facility;*
- *The project scoping suggests that a 400 bed hotel would make the conference venue viable;*
- *Initial budget estimates for the project are estimated at R90 million as a first phase.*

*Source: Bitou Economic Development Implementation Plan (2018)*

#### **b) Urban Restructuring**

- It is necessary to develop a simple but effective urban structure or framework to organize the current and future spatial activities of the Kranshoek settlement;
- It is proposed that this takes the form of a single spine along the main route of the settlement (Trekkerspad) connecting from the Robberg Road to the proposed resort node to the south of the settlement;
- This will form the main access road to the proposed resort and it should be as appealing to visitors as possible as well as to promote the image of the settlement and its residents, i.e. Kranshoek 'High Street'.

- Therefore, it should be properly landscaped and provided with NMT facilities that are contiguous with those proposed for Robberg Road.
- East-west linkages between Kranshoek and the airport should be strengthened over time with two main links as illustrated on Figure 57.

### c) Urban Development

- Future expansion of Kranshoek should be towards the north (closer to Robberg Road) and towards the east (closer to the airport) with Trekkerspad being the main activity spine along which land uses should be consolidated and intensified;
- The site to the north-east at the Trekkerspad and Robberg Road intersection is an approved industrial area and it is recommended that the future waste transfer facility for Kranshoek be incorporated into this area instead of the current location next to the primary school;
- The land parcel adjacent to the north of the new primary school should be earmarked for a future high school which would also create opportunity for the sharing of facilities between the two schools e.g. library, tennis courts etc. and it would contribute to the Trekkerspad activity spine;
- Gap market residential development should be concentrated in SDA 15 to the north of the existing township while mixed subsidised (IRDP) and Gap housing should be consolidated in SDA 14 on Farm 432 to the east where a project for 1 457 units is currently being planned. This could also include a small business node in the vicinity of the existing informal taxi facility along Trekkerspad;
- If not actively utilised for agricultural purposes then SDA16 to the south could be utilised for future Bonded Housing (close to the proposed Hotel/ Conference facility);
- The proposed future business node for Kranshoek<sup>(B3)</sup> is located at the northern end of Trekkerspad at the intersection with Robberg Road to strengthen the entrance to Kranshoek and where it will also serve regional traffic;
- The existing children's playpark opposite the Kranshoek Community Center next to Trekkerspad should be incorporated into the Community Center precinct in order to minimise the risk for children crossing this busy road. This site can then be utilised for local business uses and a taxi rank, supplementing the Community Center as well as the adjacent industrial area and the sports and recreation center further to the south;
- As many as possible community facilities/ services should be incorporated into the Community Center in future in order for it to become a multipurpose "Thusong Center" providing one-stop services to the community.
- The old primary school could be converted into office facilities for the Griqua Conference or Tertiary Training Center which could also include a heritage centre functionally linking to the existing Griqua monument located to the south-east thereof;
- The small scale agricultural activities along the western end of the town should be intensified as a means to enhance sustainable livelihoods. This should be supplemented with the proposed communal tea farm and 1 household/ 1 hectare initiative to the south-east which form part of the **Land Reform** initiatives driven by Department of Rural Development and Land Reform.

#### 4.5.3 Wittedrift

| Development Rationale   |
|---|
| Future development must be based on the settlement planning principles of walking distance as the primary measure of access, and functional and socio-economic integration between Wittedrift and Green Valley. |

**Figure 58** depicts the spatial proposals for the Wittedrift/Green valley area as described below:

##### a) Core Landscape Areas

- The river corridors and flood plain should be protected as a Core 2 SPC in which no development or plowing is permitted within 32 m of the banks unless a set-back line has been determined by a freshwater ecologist;
- Development in this area is likely to be more vulnerable to flooding and a flood line determination study should be undertaken if more development is contemplated in the low lying areas;
- Critical Biodiversity areas should be designated as Core 1b SPCs and their conservation encouraged by way of private nature reserves or conservancies in which limited development according to the Provincial guidelines for development outside of the Urban Edge;
- Urban design, landscape and architectural guidelines are required to minimise negative visual impacts on the landscapes;

- In general all new and existing buildings in Wittedrift should be subject to Urban Design Guidelines to ensure that construction and renovation enhance rather than detract from the settlement sense of place;
- Within the proposed Urban Edge CBAs should be managed as municipal nature reserves.

##### b) Urban Restructuring

- Main Street becomes the central axis along which a variety of land uses are to be consolidated and intensified.
- Appropriate intensification of abutting properties and small home retail and service businesses taking advantage of passing trade along this route can be permitted;
- In order to strengthen the sense of arrival in Wittedrift, better integrate Green Valley into the rest of the settlement, a new business node is proposed at the community centre in the vicinity of Green Valley;
- This should link through to the existing node formed by the current CBD;
- The section of the route running through the settlement should be properly landscaped and treed and a pleasant pedestrian and cycle environment created for residents and visitors;
- In the medium term the southern section of this road, from Green Valley towards route N2 should be upgraded to a tar road.



## Bitou SDF

### Kurland Development Proposals

- Biodiversity Area (Core and Buffer)
- Open Space
- Agriculture
- Urban
- Strategic Development Areas
- Educational
- Municipal / Community Facility
- Business
- Light Industrial
- Sports and Recreation
- National Road
- Provincial Road
- Secondary Road
- Strategic Links
- Quarry
- Urban Edge
- Dams / Rivers
- Agri Industries
- Pedestrian Boulevard
- ★ Proposed Secondary School

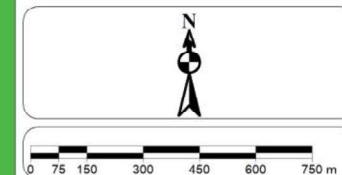
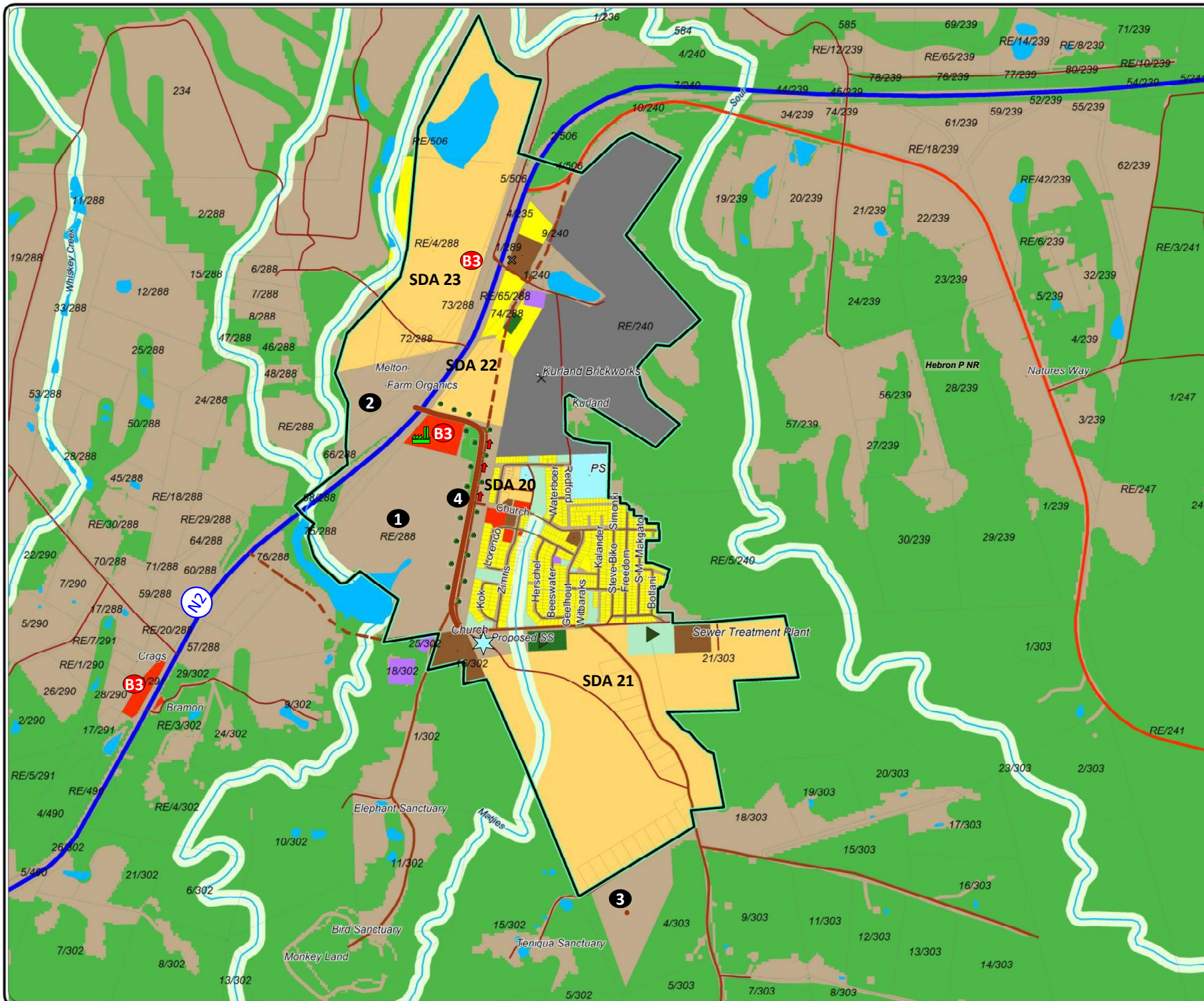


Figure 59





## Bitou SDF

### Wittedrift Development Proposals

- Biodiversity Area (Core and Buffer)
- Open Space
- Agriculture
- Urban
- Strategic Development Areas
- Potential Development Area
- Educational
- Municipal / Community Facility
- Business
- Industrial
- Sports and Recreation
- Open Space
- Provincial Road
- Secondary Road
- Strategic Links
- Urban Edge
- Dams / Rivers
- Agri Industries
- MPCC Multi Purpose Community Center
- Central Axis

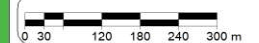
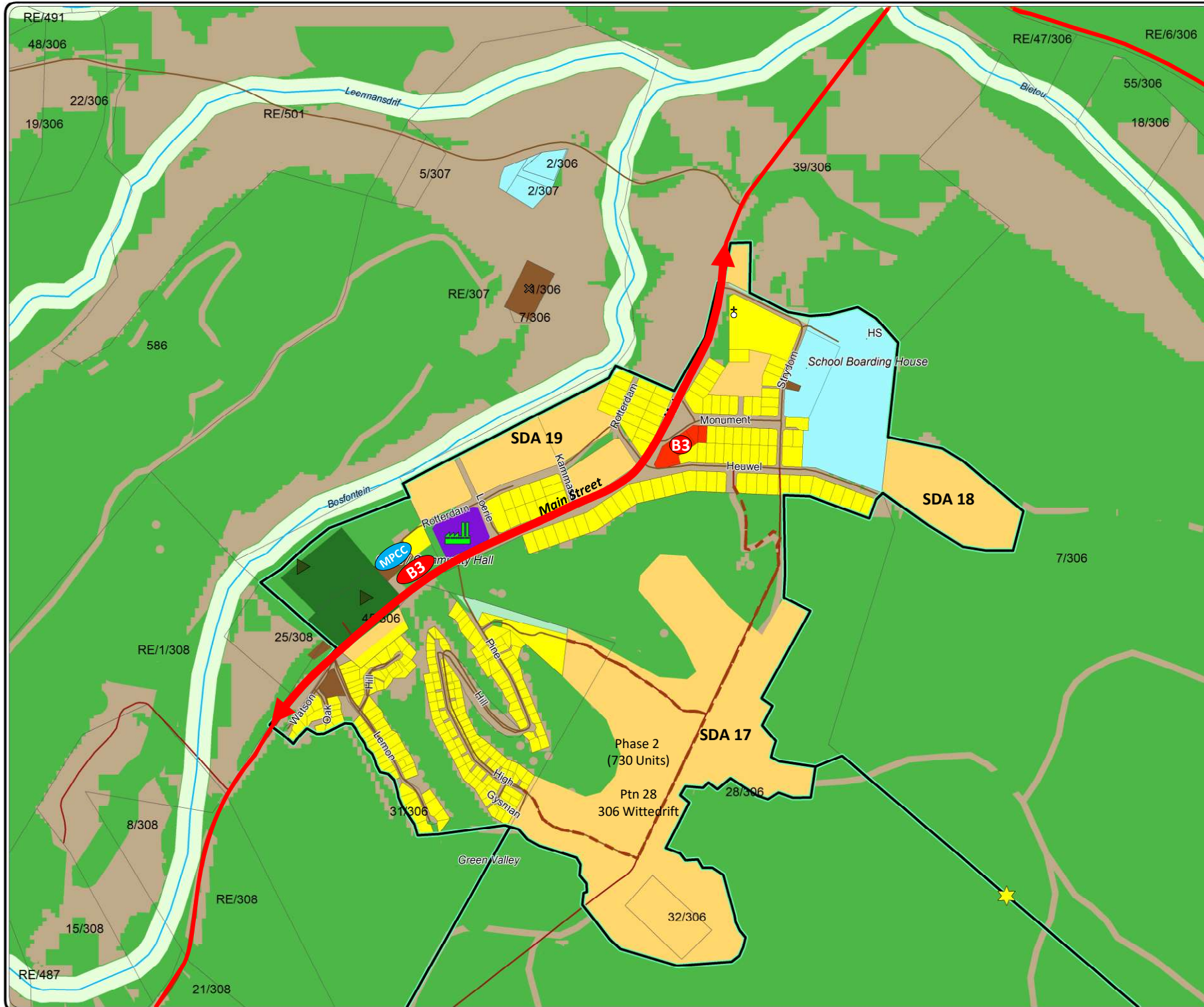


Figure 58



### c) Urban Development

- Several Strategic Development Areas have been identified where the current and future housing demand can be accommodated:

- Portion 28 of the Farm Wittedrift 306 (SDA17) at the top of the hill adjacent to Green Valley: This government owned land is already listed as a project in the Bitou Housing Project Pipeline (Green Valley Phase 2) and is intended to cater for the development of 730 IRDP units to address the current backlog (informal settlements in Green Valley) and to cater for future demand (GAP and IRDP);

*(Note: The farm is significantly larger than the footprint illustrated on Figure 58, but the footprint and urban edge are based on the draft concept layout plan for the site).*

- SDA 18 at the eastern end of the town next to the high school which could be utilised for bonded housing in the medium to longer term or for the establishment of a tertiary education facility;
- SDA 19 comprising several smaller land parcels in the central parts of Wittedrift which could be utilised for Bonded, Gap and/ or Social Housing purposes (subject to floodlines, etc.);

- Additional community facilities should in future be consolidated as a Multi-Purpose Community Center (MPCC) where the sports fields, community hall and clinic already exist;

- The road network should be extended and upgraded to effectively link the Green Valley Phase 2 area to both Green Valley and Wittedrift;

- Extensive agriculture should be promoted and enhanced in future in order enhance the sustainability of the area as a whole. The area has

been identified as a potential future Farmer Production Support Unit (FPSU) in the Garden Route District Rural Development Plan. This could lead to increased demand for agri-industries in the area which could possibly be located near the existing light industrial activity in the vicinity of the proposed MPCC and second business node (when the need arises);

- The proposed Hanglip development initiative to the north-east of Wittedrift could also make a significant contribution towards job creation and economic empowerment in the broader area and is acknowledged as a Potential Development Area.

#### 4.5.4 Kurland

| Development Rationale  |
|--|
| Kurland and The Craggs have a well-defined tourism character, with numerous accommodation establishments on small holdings and farms. It also has timber and brick yards, dairies and winery, which give it a different, service industrial character. Its theme should thus relate to the tourism attractions in an agricultural setting, while permitting the urban component to expand. |
| Urban expansion should create a spread of market sectors (including middle and high income) to complement the existing low income residential neighbourhood, while not detracting from the rural land uses and tourism attractions.  |
| It should become a balanced mixed income and mixed use urban settlement according to the principles of walking distance, access and functional and socio-economic integration.   |

**Figure 59** represents the land use/ development proposals for Kurland summarised as follow:

#### a) Core Landscape Areas

- The river corridors should be designated as a Core 2 SPC and urban development and plowing prohibited within 32 meters of their banks unless other set back lines are determined by a fresh water ecologist.
- The intensive Agricultural land in these areas should be protected and their more productive use encouraged with the exception of land which could contribute towards consolidating the existing fragmented development pattern between Kurland Hotel, Kurland Bricks and Kurland Village.
- The CBAs should be designated as Buffer 1 SPCs in which tourism and accommodation facilities are permitted in order to fund the creation of more private nature reserves and conservancies to enhance bio-diversity protection in this area;

#### b) Urban Restructuring

- In order to create a legible and economically viable framework on which a future integrated Kurland village can logically develop the following is proposed:
  - Two nodes are created along route N2 linking Kurland estate to the west with Kurland village to the east at the existing intersections with Kurland garage and Kurland hotel.

- The Kurland hotel intersection can be reinforced by closing the current Nature's Valley road intersection on the inside of a long curve on the N2 and linking it to this intersection and from there southwards up to the access road to Kurland Village. This would have the advantage of reducing the number of intersections onto the N2 in this vicinity;
- To better link the existing Kurland Village into this system it is proposed that the current access road be improved as follows: It is landscaped, treed and lit and provided with pedestrian and cycling facilities from Kurland Garage southwards up to the stone church from where it turns off to the various attractions and resorts in the area;
- **In the long term, the possibility to create a direct link from the church, northwards up to route N2, should be investigated.**

#### c) Urban Development

- The Kurland UISP Phase 3 project which entails the in situ formalisation of the informal settlement in Kurland will yield approximately 74 residential units in SDA20 which is located in the northern parts of Kurland;
- The remaining demand of about 270 units is earmarked to be relocated / accommodated as part of Kurland UISP Phase 4 in SDA21 on Farm 562 to the south of Kurland village.
- **This farm as illustrated on Figure 59 holds capacity to accommodate approximately 500 residential units (50 ha) of which an appropriate**



## Bitou SDF

### Kurland Development Proposals

- Biodiversity Area (Core and Buffer)
- Open Space
- Agriculture
- Urban
- Strategic Development Areas
- Educational
- Municipal / Community Facility
- Business
- Light Industrial
- Sports and Recreation
- National Road
- Provincial Road
- Secondary Road
- Strategic Links
- Quarry
- Urban Edge
- Dams / Rivers
- Agri Industries
- Pedestrian Boulevard
- ★ Proposed Secondary School

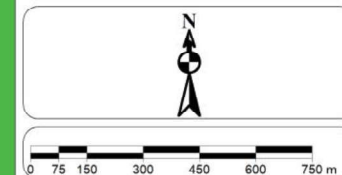
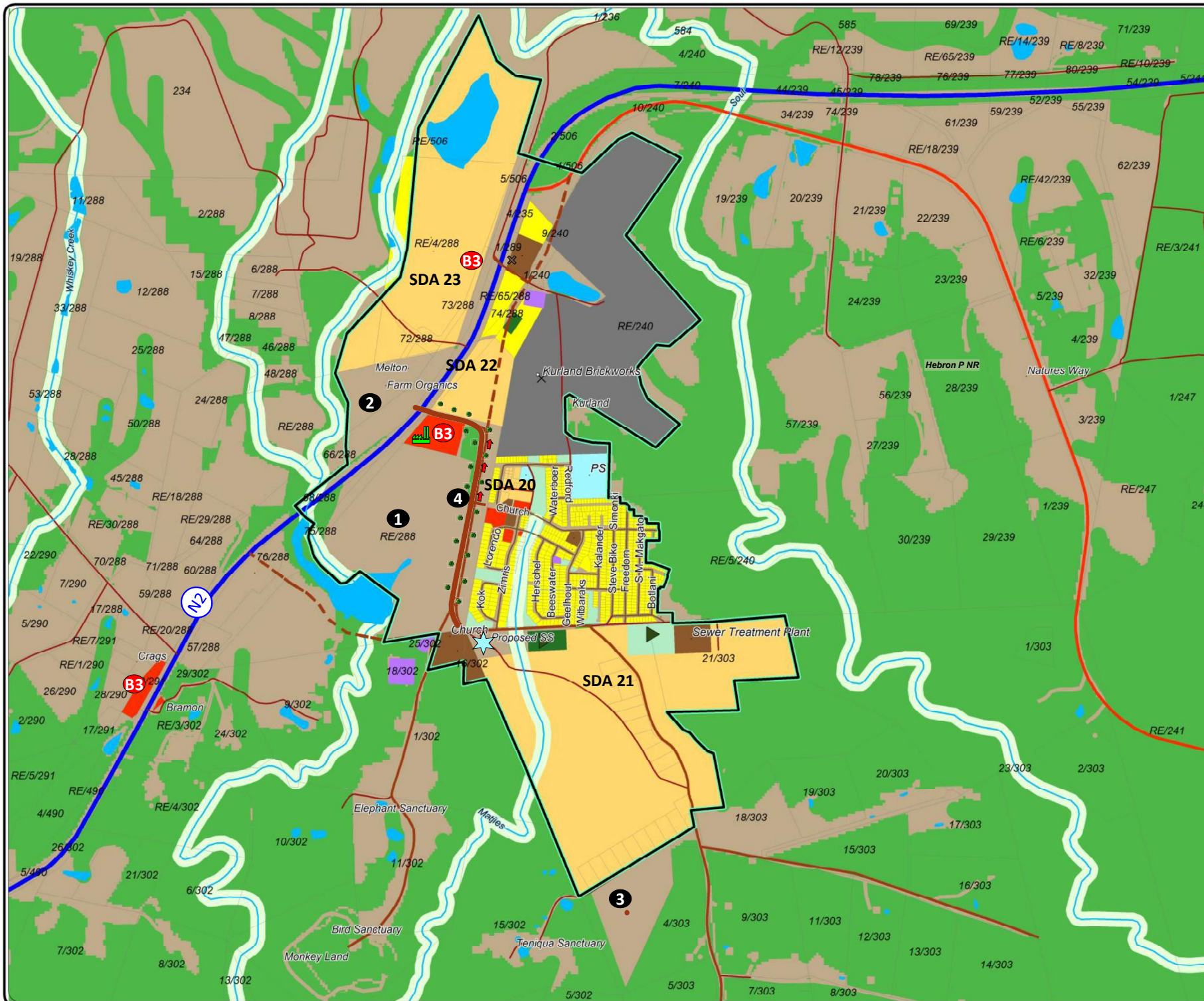


Figure 59



portion ( $\pm 40\%$ ) should be GAP market bonded housing for middle income residents;

- The agricultural land to the northwest of Kurland (SDA22) should be developed as the next phase pending future high income development in SDA23 at Kurland Polo Estate and Kurland Bricks (refer to Figure 50.1 in this report);
- The intensively utilised agricultural land<sup>(1and2)</sup> to the west of Kurland around N2 should be protected from development as these form part of the functional Redford-Kurland agricultural area. It could however become developable in the long term once SDA 20, 21 and SDA 22 are fully developed;
- The formalisation of the existing informal settlement within Kurland Village will clear several strategically located erven in the vicinity of the existing municipal office and library<sup>(4)</sup> at the north western end of the village. It is recommended that this land be earmarked for business purposes (which will also serve the high volumes of passing tourist traffic) and that this become the main entrance into existing Kurland Village.
- This node is located along the natural pedestrian movement desire line of residents walking towards the filling station next to route N2 where most public transport services (taxis) are provided;
- The strip of land between the proposed Kurland entrance and the filling station could be utilised for mixed use development in the medium to longer term, but the first priority following the clearance of the Kurland entrance should be to develop the land surrounding the entrance before it is invaded again;

- It is recommended that provision be made for a future secondary school next to the cemetery in the new residential area (Phase 4) to the south and a satellite police station in the proposed Kurland Village business node. The community also noted the need for Tertiary Education / Skills Development centre to be established. Some of the infrastructure (offices etc.) of Kurland Bricks may be utilised in this regard.

#### 4.5.5 Keurbooms and Environs

A detailed Local Area Spatial Plan (2013) was compiled for Keurbooms River and Environs in consultation with relevant stakeholders.

**Annexure F1** comprises a short extract of the Local Area Spatial Plan which is divided into three components namely, general proposals, development nodes and the establishment of a Conservation Management Area. At the end of the Annexure is a brief summary of the current issues in the area which were noted by local stakeholders as part of the Bitou SDF consultation process.

Following below is a concise summary of the broad Development Rationale for the area which should be read in conjunction with **Figure 60**. (For more detail, please refer to Annexure F1).



## Bitou SDF

### Keurbooms Development Proposals

- Biodiversity / Conservation Management Area
- Agriculture
- Agriculture / Future Development / Rehabilitation
- Urban
- Strategic Development Areas
- ★ Potential Development Area
- Business
- National Road
- - - Proposed N2 Bypass
- Provincial Road
- Secondary Road
- - - Beach Access
- Urban Edge
- - - Urban Edge to be determined on submission of SDP
- Dams / Rivers
- Wetlands

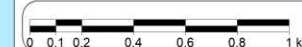
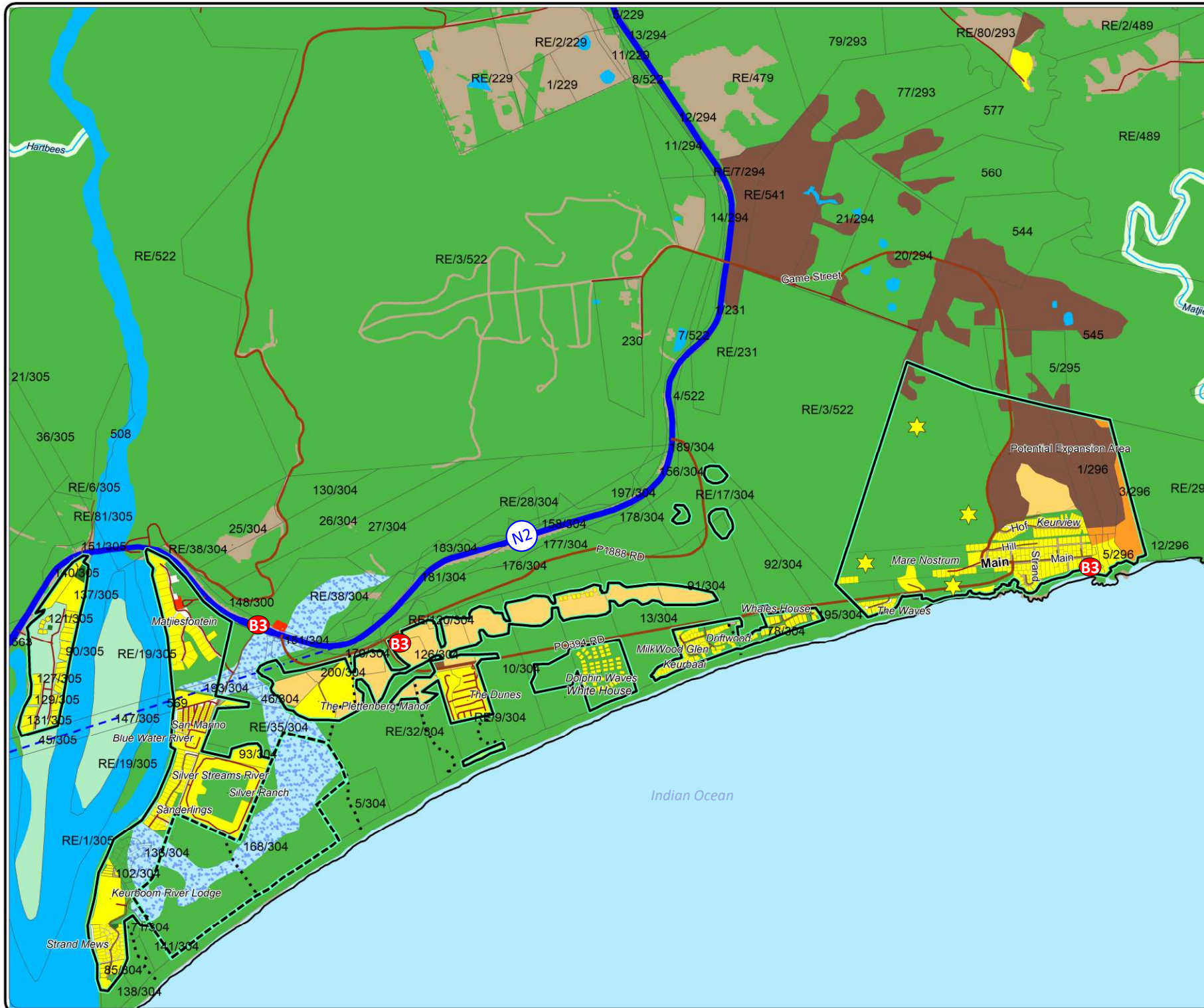


Figure 60



### Development Rationale

A strong holiday/resort character predominates the area. It is fairly homogenously developed with residential and resort uses, wedged between sea and the coastal plateau slopes. Altering its character by permitting commercial and other non-residential development could detract from the area's attraction. The theme should thus be a low density residential one.

#### a) Core Landscape Areas

- The interior of the flood plain should be kept free of further development and should be conserved as a Buffer 1 SPC conservancy or private nature reserve. This is proposed rather than the Core 1 SPC recommended by SANBI or CBAs so that private owners are able to obtain some development rights in order to create the resources necessary to maintain the conservancy;
- The fringes of the river and the coast should be protected as Core 2SPCs. The alignment of this SPC can be determined by a fresh water ecologist;
- The road to Keurbooms Strand, the first section of the road to Keurboom beach as well as the old N2, should be declared as scenic routes;
- This does not necessarily mean that they are converted to treed avenues but rather that their view and scenic quality is protected from inappropriate urban development. This can be achieved by preparing

a visual resource management corridor along the routes for which guidelines are prepared for development within this corridor.

#### b) Urban Restructuring

- A low key node<sup>(B3)</sup> around the Thyme and Again farm stall is proposed where the Keurbooms River access road intersects with the N2;
- This node location could be reinforced by closing the current Keurbooms Strand road intersection with the N2, linking it across to the Keurbooms River access road intersection;
- This would also have the advantage of reducing the number of intersections with very short spacing between them on the N2 in this vicinity;
- Two more lower order business nodes<sup>(B3)</sup> are proposed at the intersection between road P1888 and P0349, as well as at the far eastern end of Main Street where some business already exist.

#### 4.5.6 Nature's Valley

**Annexure F2** comprises an extract from the recently completed and more detailed Nature's Valley Local Area Spatial Plan which was compiled in consultation with local stakeholders. Following below is a brief summary of the Development Rationale for the Nature's Valley and Surrounds as graphically illustrated on **Figure 61.1**. (The more detailed development proposals from the community are included in Annexure F2).



## Bitou SDF

### Natures Valley Development Proposals

- Biodiversity Area  
(Core and Buffer)
- Open Space
- Urban
- Strategic Development Areas  
(Council Resolution: 2008)
- Municipal / Community Facility
- Business
- Provincial Road
- Secondary Road
- Urban Edge
- Dams / Rivers

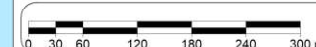


Figure 61.1



### Development Rationale

Nature's Valley represents the heart of the Tsitsikamma section of the Garden Route National Park with limited access and capacity for development. Its theme should be linked to its limited size, environment and setting, i.e. a low density and intensity use residential area primarily for holiday purposes.

The following key proposals are put forward for this area:

- Nature's Valley falls within the Outeniqua Sensitive Coastal Area (OSCA) and is subject to the regulations that were promulgated by the Department of Environmental Affairs and Tourism during November 1998. The implementation of these regulations that encompass the natural environment of Nature's Valley should be a priority;
- With a view to development of safe and an efficient movement system, a number of issues should be considered including signage, removal of vegetation encroachment, pedestrian crossings, parking and limiting heavy vehicle traffic to suitable roads within the village;
- The possibility of declaring the open spaces and parks as protected areas in the Coastal Zone in terms of the provisions of the National Environmental Management: Protected Areas Act, 2003, should be investigated;
- Consideration should also be given to have the public open spaces declared as "special management areas" in terms of section 23 of the National Environmental Management: Integrated Coastal Management Act 2008 (Act No 24 of 2008);

- **Implement the Groot River Estuary and Groot River Mouth Management Plans once these are finalized and approved;**
- It should be noted that, in line with a Council Resolution (2008), the school erf adjacent to the south of the church along St Andrews Road; the Phyl Martin Park; the erven around the waste collection site; and the two public open spaces between Forest and St Georges avenue have been identified as potential Strategic Development Areas;
- The future of the town depends to a large degree, on the level of infrastructure availability and maintenance of such infrastructure. Issues that are to be addressed include:
  - Efficient service delivery with specific reference to water supply, sewage and domestic waste management;
  - Introduction of a monitoring and evaluation system, and
  - Area based management.

#### 4.5.7 Covie

### Development Rationale

Covie should be retained as a rural node with development to be limited in accordance with the precinct plan which was compiled for the area and which allowed for the establishment of a maximum of households.

The community submitted a Land Restitution Claim which was approved during July 2005.

In consultation with the community the Multi-Tenure Land Allocation Model (MTLA) was selected as the preferred model which makes provision for:

- Up to four housing units be erected per family allotment so as to maximise the number of beneficiaries (total capacity =  $30 \times 4 = 120$  units);
- A mix use land scenario of residential, agricultural and light 'home based' industry initiatives.

No progress has yet been made regarding the implementation of the preferred model in the Covie area.

In view of the above the following guidelines for Covie contained in the Bitou SDF (2013) are still applicable (refer to **Figure 61.2**):

#### a) Core Landscape Areas

- The National Park land comprises Core 1 SPCs in which no development is permitted;
- Those parts of the commonage used for or with potential for farming should be retained and designated with the Intensive Agriculture SPC;
- If the community is to be given access to the plantations to the east access should be provided;
- The balance of the commonage should be designated Buffer 1 in which tourism accommodation can be permitted;
- Consideration should be given to these parts of the commonage being declared a community conservancy similar to those at Leliesfontein and Riemvasmaak in the Northern Cape.

#### b) Urban Restructuring

- Consideration should be given to establishing a small node at the intersection of the core access road and route R102;
- This could include a small heritage centre/room possibly funded as part of a concession to operate a resort on the commonage, a farm stall and/or a market, both of which could be operated on a periodic basis e.g. during the peak tourist season;
- It is important that the sense of place created by the first section of the access road through the forest be retained.

#### c) Urban Development

- A demand for approximately 100 dwellings has been identified (capacity = 120 units) which could be constructed through the Peoples Housing Programme (PHP);
- It will not be viable for the municipality to fund conventional services on such a small scale in such an isolated location. Hence, off grid, renewable technologies should be incorporated into the buildings;
- It is important that the sense of place created by the first section of the access road through the forest be retained;
- The opportunity for a resort between an operator and the community could be considered but it should be noted that the Plateau Country House located about 2 kilometres away had to close down some two years ago;

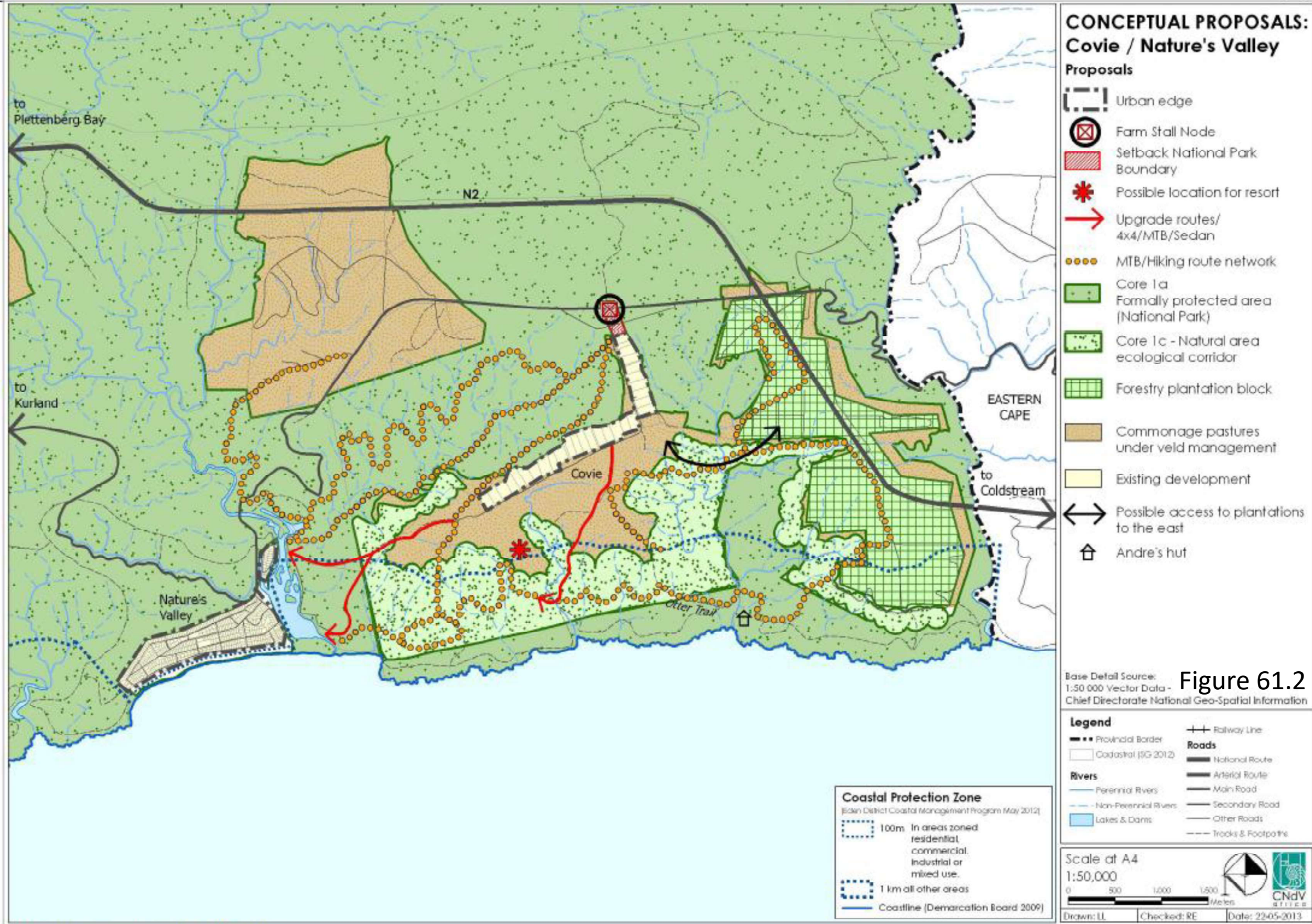


Figure 5.14.3 Covie / Nature's Valley SDF

- Support existing small-scale tourism ventures driven by the Covie community.
- The upgrading/ reconstruction of the collapsed parts of the Bloukrans Pass (Eastern Cape Section) and subsequent re-opening of the pass could enhance the economic viability of the ventures noted above as this would lead to increased tourist traffic along Route R102.

#### 4.5.8 Forest View (Harkerville)

In the areas of Harkerville and Forest View, any housing development should be limited in order to maintain the rural agricultural character of the area. Forest View should be developed strictly in accordance with the agri-village concept where the agricultural potential of the land should determine the size of the residential use to be established on the land (refer to **Figure 62**).

The feasibility study conducted for the area concluded and recommended the procedure to establish a rural settlement in Harkerville (Forest View) subject to the following:

- A comprehensive planning process is followed, resulting in a comprehensive business plan for the project as whole;
- An implementation plan is compiled which will ensure sustainability for the community with commitments towards providing all the social infrastructure that is required.

This could be aligned with the “Emerging Farmer” and “Precision Farming” concepts as illustrated in Annexure E3 and E4 of his document.

#### 4.6 ALIGNMENT WITH SURROUNDING MUNICIPAL SDF'S

**Diagram 13** below illustrates the spatial alignment between the Bitou SDF and the SDFs of the three surrounding municipalities.

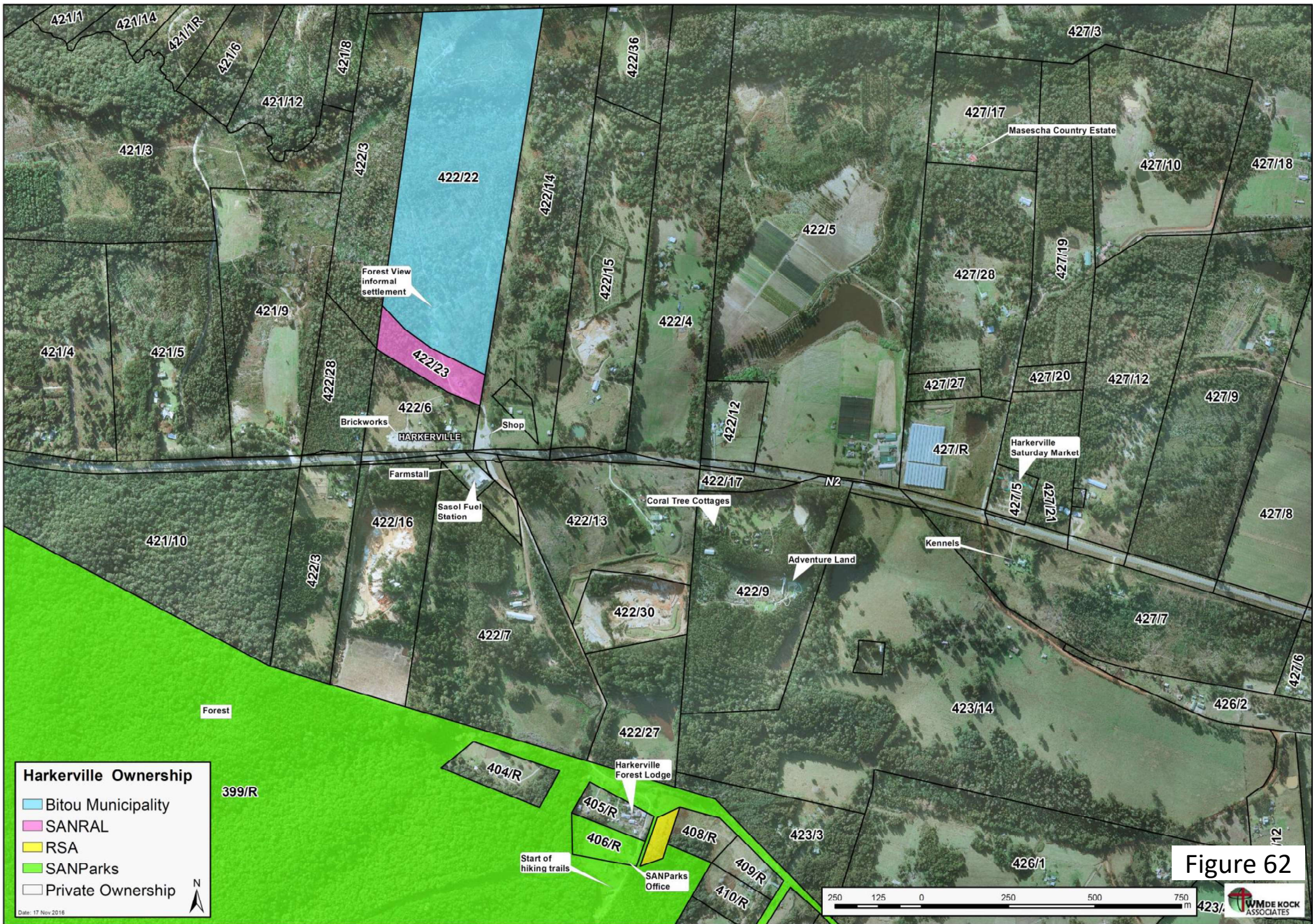
To the east in the Kou Kamma Local Municipality the Bitou SDF links into the Forestry Lease Areas and Biodiversity Core along route N2. The forestry activity continues into the Platbos and Covie areas within Bitou LM.

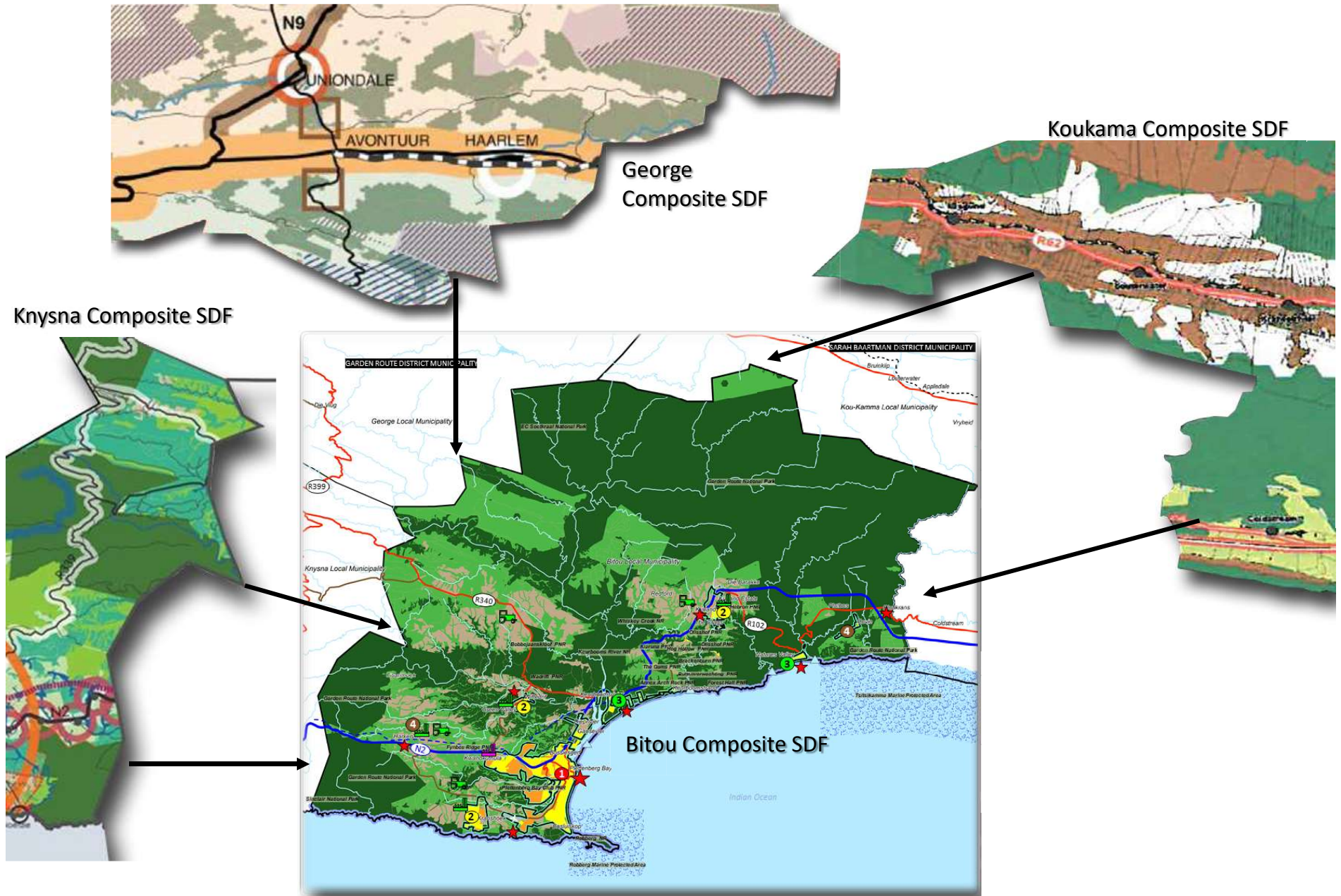
To the north-east there is also perfect alignment of the Biodiversity Core area forming part of the Garden Route National Park in both municipal areas.

To the north-west the Bitou SDF also aligns well with the Greater George SDF which earmarked the areas bordering Bitou LM as either Garden Route National Park Expansion Areas or Cape Nature Protection and Conservation Areas.

To the west the Core Area area of the Bitou SDF aligns with the Core and Buffer designation in the Knysna SDF. The tourism and agriculture activity along route N2 in the Harkerville area continues in the Knysna area with a number of small Rural Hamlets along route N2 towards Knysna town.

The Bitou SDF is well aligned with the SDF's of the three bordering local municipalities.





## 5. IMPLEMENTATION PROGRAMME

### 5.1 CAPITAL INVESTMENT FRAMEWORK

#### 5.1.1 Sector Implications

The following general actions should be taken to ensure the successful implementation of the proposals contained in the Bitou Spatial Development Framework:

- Through the IDP Process ensure that the Bitou LM IDP Programmes are aligned with, and adhere to the spatial proposals, guidelines and objectives advocated by the SDF.
- Establish a comprehensive municipal GIS system which incorporate environmental, land use and infrastructure information. This should be linked to the Bitou Land Use Scheme and should also comprise a range of overlay zones to inform decision-making processes pertaining to land use management and it could also assist the budgeting process.
- The department responsible for economic development and planning should ensure that a balance is maintained between conservation initiatives and tourism, agriculture and urban activities.
- All core and buffer areas should be appropriately protected and incentive schemes should be put in place to promote development of ecological corridors on privately owned land (public-private partnerships).
- The current draft coastal management lines need to be implemented and a comprehensive management plan should be compiled for the Bay area.
- The department responsible for land use planning / management should:
  - Consistently assess development applications in line with the objectives and strategic spatial directives provided in the SDF.
  - Launch a capacity building programme aimed at establishing a “paradigm shift” amongst all service providers and stakeholders (politicians and officials of all spheres of government) towards a “principles based and strategy led” planning and management approach for the Municipality. This would ensure that unnecessary political pressure(s) does not derail the collective actions needed to restructure the spatially fragmented and unsustainable spatial structure of the Municipality.
  - Ensure that each Local Area Spatial Plan (Precinct Plan) process in the BLM focuses on incorporating the BLM SDF Directives into the Local Area Spatial Plan;
  - Ensure that the Bitou Land Use Scheme is properly aligned to the BLM SDF Spatial Planning Categories. **Table 32** is the “Linkage Table” between the SDF and LUS, illustrating which LUS Use Zones are compatible (and could be considered for approval) in each of the SDF Spatial Planning Categories. Important directives pertaining to the review of the Bitou LUS include the following:

- Generally increase densities to limit urban expansion and relax development controls to promote rather than constrain development;

**Table 32: Conceptual Linkage Plan, based on WC Rural Planning Guidelines**

| Land Use Scheme: Use Zones →   |   | Residential | Business | Industrial | Service Industries/Commercial | Institutional | Educational | Municipal services and infrastructure | Government | Agricultural                            | Open Space | Conservation/Protected Areas | Resort/Tourism/Recreation Facilities | Mining 1 & Quarrying | Growth Management Strategy |   |
|--------------------------------|---|-------------|----------|------------|-------------------------------|---------------|-------------|---------------------------------------|------------|---|------------|------------------------------|--------------------------------------|----------------------|----------------------------|---|
| SDF: Spatial Planning Category | CBA Category  |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| RURAL                          |   |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            | Overlay Zones<br>Environmental: e.g. CBA's, Ecological Corridors, Coastal Management Zones, Coastal Setback Lines, Flood and Fire Risk Zones<br>Transitional Zones: UISP<br>Restructuring Zones: Social Housing<br>Integration Zones: Nodes and Corridors |
| Core 1                         | PA, CBA1  | X           | X        | X          | X                             | X             | X           | X                                     | X          | 2,4, 2,5, 3,1, 4,1                      | 3,1, 4,1   | 1, 3,1, 4,1                  | 1, 3,1, 4,1                          | X                    |                            |   |
| Core 2                         | CBA2, ESA1  | X           | X        | X          | X                             | X             | X           | X                                     | X          | 2,4, 2,5, 3,1, 4,1                      | 3,1, 4,1   | 1, 3,1, 4,1                  | 1, 3,1, 4,1                          | X                    |                            |   |
| Buffer 1                       | ESA2, ONA   | X           | X        | X          | X                             | X             | X           | X                                     | X          | 2,2, 2,6, 2,7, 3,1, 3,3, 4,5            | 3,1, 4     | 1, 3,1, 4,1                  | 3,1, 4                               | X                    |                            |   |
| Buffer 2                       | ONA   | X           | 5.       | X          | X                             | X             | X           | 8.                                    | 8.         | 2, 2,2, 2,3, 3,1, 3,3, 3,4, 4,5,6       | 3,1, 4     | 1, 3,1, 4,1                  | 3,1, 4                               | ✓                    |                            |   |
| Agriculture                    |   | 3,2         | 5.       | 6.         | 6.                            | 7.            | 7.          | 8.                                    | 8.         | 2-2,3, 2,6, 2,7, 3,1, 3,3, 3,4, 4,1,5,6 | 3,1, 4     | 1, 3,1, 4,1                  | 3,1, 4,1                             | ✓                    |                            |   |
| URBAN                          |   |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| Settlement                     |   | ✓           | ✓        | ✓          | ✓                             | ✓             | ✓           | ✓                                     | ✓          | ✓                                       | ✓          | 1, 3,1, 4,1                  | 3,1, 4                               | X                    |                            |   |
| X                              | Use Zone not allowed  |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| ✓                              | Use Zone allowed  |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| Compatible uses:               |   |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 1.                             | Conservation  |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 2.                             | General Agriculture   |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 2.1                            | Small scale Farming   |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 2.2                            | Extensive Agriculture (subject to conditions)   |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 2.3                            | Space Extensive and Nuisance Urban Uses ( eg waste water treatment plants)                |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 2.4                            | Only existing Livestock, Grazing and Game Farming allowed (subject to conditions)         |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 2.5                            | Harvesting of Natural Resources (subject to conditions)                                   |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 2.6                            | Forestry and Timber Plantations   |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 2.7                            | Extension of Extensive Agriculture (subject to conditions)                                |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 3.                             | Rural Accomodation  |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 3.1                            | Tourist Accommodation   |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 3.2                            | Small Holding/Lifestyle Estate  |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 3.3                            | Agri- (farm ) worker Accommodation  |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 3.4                            | Additional dwellings (subject to conditions)  |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 4.                             | Tourist and Recreation Facilities   |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 4.1                            | Low inapct Tourism Facilities   |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 5.                             | Rural Business (serving the needs of rural communities/tourists as well as agriculture)   |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 6.                             | Industry in Rural Areas (support the rural economy/ tourism/conservation and agriculture) |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 7.                             | Community Facilities and Institutions   |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |
| 8.                             | Infrastructure Installations  |             |          |            |                               |               |             |                                       |            |   |            |                              |                                      |                      |                            |   |

### Functional Relationship between SDF, LUS, Linkage Table and Growth Management Strategy

```
graph TD; SDF[Spatial Development Framework] <--> LP[Linkage Plan / Table]; LP <--> LUS[Land Use Scheme]; SDF --> GMS[Growth Management Strategy]; LUS --> GMS;
```

**Spatial Development Framework**

- Spatial Plan Categories
  - Core areas
  - Restructuring Priorities
  - Urban Development

**Linkage Plan / Table**

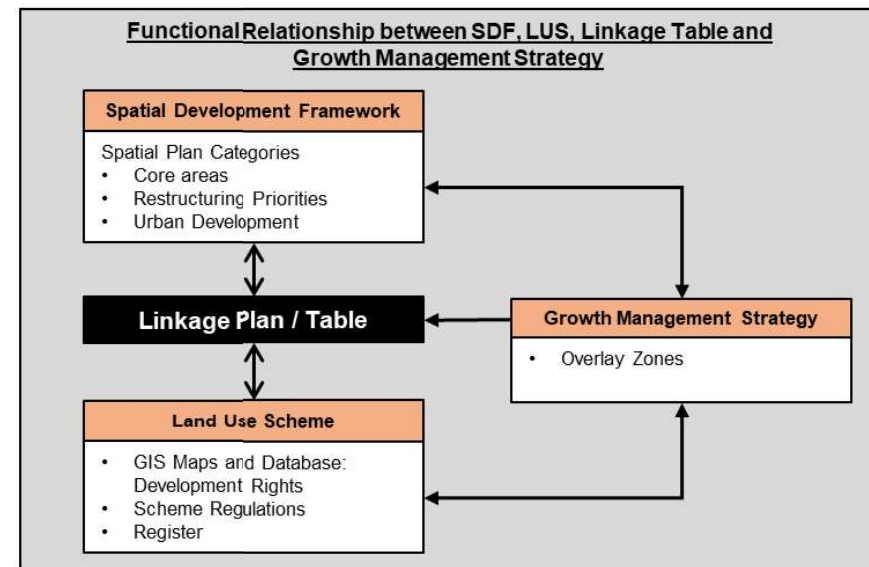
**Land Use Scheme**

- GIS Maps and Database: Development Rights
- Scheme Regulations
- Register

**Growth Management Strategy**

- Overlay Zones

Source: Western Cape Land Use Planning Guidelines: Rural Areas



- Use Zone definitions should be more inclusive in order to generally promote mixed use development;
- Refine the “Home Enterprise” definition and parameters in the LUS in order to protect the Bitou CBD from proliferation of commercial uses in the residential areas under the guise of occupational practice;
- Furthermore, the Land Use Scheme must comply with the following requirements stipulated in the Spatial Planning and Land Use Management Act, 2013 (SPLUMA):
  - *“24.(2) A land use scheme adopted in terms of subsection (1) must – (g) give effect to municipal spatial development frameworks and integrated development plans”.*
  - *“25.(1) A land use scheme must give effect to and be consistent with the municipal spatial development framework and determine the use and development of land within the municipal area to which it relates in order to promote – (a) economic growth; (b) social inclusion; (c) efficient land development; and (d) minimal impact on public health, the environment and natural resources”.*
  - *“26.(5) A municipality may, after public consultation, amend its land use scheme if the amendments is – (a) in the public interest; (b) to advance, or is in the interest of a disadvantaged community; and (c) in order to further the vision and development goals of the municipality”*
  - *“27.(1) A municipality may review its land use scheme in order to achieve consistency with the municipal spatial development framework, and must do so at least every five years”.*
  - *“28.(1) A municipality may amend its land use scheme by rezoning any land considered necessary by the municipality to achieve the development goals and objectives of the municipal spatial development framework”.*
- The Municipality is in the process of compiling a new SPLUMA-compliant Land Use Scheme (also known as a Town Planning or Zoning Scheme). Due to the strategic importance of certain priority projects/ properties as identified below, and with the relevant stipulations from SPLUMA as backdrop, it is the intention of the Municipality to, during the compilation process of the new Land Use Scheme, transition (rezone) such properties to suitable residential or other zonings as required to affect the envisaged development of the properties. The priority projects/ properties include the following:
  1. The vacant portions of erf 1893 Plettenberg Bay, adjoining the Plett rugby field (also known as unregistered erf 12886 and 12887);

2. A vacant portion along the western extent of Longstone Park (erf R/256 Plettenberg Bay), where an infill housing development was previously approved but has since lapsed;
3. The envisaged Municipal Office Complex in Ladywood (erf 12624, and possibly R/5/438);
4. All current and planned Municipal housing pipeline projects;
5. The proposed site for the development of a University (whichever location as will be determined shall be deemed as being consistent with the SDF).

The abovementioned properties have been indicated as “Priority Development Areas” on the relevant development proposal figures.

- Minimal impact on public health, the environment and natural resources will be ensured through carrying out detailed site investigations/ studies, as may be required in terms of relevant legislation or policy before the new land use rights are exercised. Such investigations may include Engineering Services or Traffic Impact Studies, Environmental Assessments, etc. Where necessary, spare bulk engineering services capacity should be reserved for purposes of the priority projects in certain areas, should the capacity of services be limited in those areas. This may include limitations on increased development rights on

existing properties, such as a temporary prohibition on the approval second dwelling houses on single residential erven in the affected area(s), until such time as the priority projects are completed or the engineering services capacity is increased.

- As part of a broader Growth Management Strategy the LUS should comprise a number of Overlay Zones to inform decision-making and to direct investment including:
  - i. **Environmental Overlay Zones:**  
Comprising various environmental features like areas of high biodiversity, floodlines, fire hazard risk areas, coastal management lines etc.
  - ii. **Restructuring Zones:**  
Dedicated for specific housing typologies (e.g. social housing).
  - iii. **Special Development Zones / Integration Zones:**  
With development controls aimed at achieving specific development objectives e.g. higher residential densities, extensive mixed land use etc. along priority corridors or within specific nodes along the priority public transport network in Plettenberg Bay.
  - iv. **Transitional Zones:**  
Providing for a specific Residential Use Zone for Category B informal settlements which will be

incrementally upgraded over a period of time in line with the UISP programme and where interim basic services should be provided

**v. Residential Use Zones:**

(e.g. Res 4) where uses such as a spaza, shebeens, taverns and certain service industries may be exempted from formal application processes (in line with Section 38(9) of SPLUMA).

- At the core of the Growth Management Strategy of the Bitou LM should be the following strategic objectives:
  - Determine priority areas for short-medium term investment and allocation of future development rights;
  - Re-direct the respective capital investment programmes of the Service Departments to address the short-term problem areas and strategic priority areas;
  - Limit future development rights in infrastructure problem areas within the municipality until backlogs have been addressed;
  - Identify priority investment areas (e.g. Strategic Development Areas) for the public and private sector, specifically in respect of municipal infrastructure;
  - Introduce development conditions that are congruent with global best-practice standards relating to resource efficiency (Smart Growth);

- Introduce development obligations relating to the full spectrum of inclusionary housing (i.e. subsidised housing, bonded, rental / social housing) in identified priority areas;
- Apply a package of incentives to promote and facilitate development that subscribes to the socio-economic and spatial imperatives of the municipality in priority areas (especially around public transport corridors).

- The existing / proposed movement network should be maintained / upgraded / constructed through agreements with the South African National Roads Agency (SANRAL) and the Provincial Department of Transport.
- The housing department should ensure that the bulk of the subsidised housing stock is provided within the Strategic Development Areas (**Table 33**) and in accordance with the typology directives provided in the SDF (especially with regards to higher densities). This will contribute towards the effective consolidation and restructuring of the municipal urban structure.
- **Table 34** (see overleaf) shows that the 23 Strategic Development Areas identified comprise above 936 ha of land compared to the 1 022 ha required for urbanisation purposes up to 2040 as determined from the SDF Land Use Budget. It should, however, be kept in mind that the Ganse Valleï Potential Development Area which is currently not included as a Strategic Development Area in the SDF could accommodate an estimated 6 000 units. This area will most probably become a Strategic Development Area during the next Bitou SDF

review when all the more detailed environmental assessments are completed.

- The projects planned in the Bitou Housing Project Pipeline consist of about 7 036 housing units which is not even enough to cater for the existing backlog / demand which is 8 139 units.
- The department responsible for social services should ensure that community facilities and services are consolidated within Thusong centers or in designated mixed-use nodes / areas.
- Development of community facilities should be aligned with the housing programme in consultation with the relevant provincial departments.
- Engineering Services should ensure that the bulk of its capital expenditure is focused on infrastructure development and service delivery within the designated settlement areas and more specifically in Strategic Development Areas demarcated in the SDF.

**Table 33: Strategic Development Areas (SDA's): Housing Typologies on Land Earmarked for Development (ha)**

| SDA | Township                  | Housing Typologies        | Area ha |
|-----|---------------------------|---------------------------|---------|
| 1   | Kwanokhuthula West        | IRDP/UISP                 | 42      |
| 2   | Kwano City                | IRDP/UISP, Social, Gap    | 26      |
| 3   | Ebehezer                  | IRDP, Social, Gap         | 83      |
| 4   | Ladywood West             | IRDP, Social, Gap         | 90      |
| 5   | Ladywood East             | Gap, Bonded               | 48      |
| 6   | Qolweni-Bossiesgif        | UISP                      | 18      |
| 7   | Upper Piesang Valley Road | Bonded Low-Medium Density | 39      |
| 8   | Lower Piesang Valley Road | Bonded Low Density        | 5       |

| SDA               | Township                   | Housing Typologies        | Area ha    |
|-------------------|----------------------------|---------------------------|------------|
| 9                 | Marine Drive East          | Bonded Low-Medium Density | 10         |
| 10                | Marine Drive West          | Social Housing            | 6          |
| 11                | Robberg Road South         | Bonded Low-Medium Density | 43         |
| 12                | The Hilltop / Betty's Land | Eco-Estate (1-3 u/ha)     | 142        |
| 13                | Plett Botanical Esstate    | Eco-Estate (1-3 u/ha)     | 136        |
| 14                | Kranshoek East             | IRDP, Social              | 41         |
| 15                | Kranshoek North            | Gap                       | 31         |
| 16                | Kranshoek South            | Bonded                    | 15         |
| 17                | Wittedrift (Green Valley)  | IRDP, Gap                 | 31         |
| 18                | Wittedrift North           | Bonded                    | 5          |
| 19                | Wittedrift West            | Social, Gap, Bonded       | 8          |
| 20                | Kurland Village            | IRDP Social               | 1          |
| 21                | Kurland South              | IRDP, Social, Gap         | 35         |
| 22                | Kurland North West         |                           | 7          |
| 23                | Kurland Polo               |                           | 46         |
| <b>Total Area</b> |                            |                           | <b>936</b> |

- Sector Plans like the Water Master Plan, Roads Master Plan, Integrated Transport Plan and Electricity Master Plan must be aligned to the spatial directives and growth projections provided in the SDF when these are reviewed / updated in future.
- The Finance Department should annually assess whether the Municipality spends the bulk of its capital within the priority focus areas –i.e. the proposed corridors, activity nodes and Strategic Development Areas identified in each settlement.

**Table 34: Demand vs Supply**

| Township  | Item                  | Incremental Demand needed per Town (calculated from LUB) |                     |                     |                                | Supply         |                       |
|---|-----------------------|--|---------------------|---------------------|--------------------------------|----------------|-----------------------|
|   |                       | Demand Database (Backlog)(ha)                            | Inc. 2016-2025 (ha) | Inc. 2025-2040 (ha) | 2016-2040 (incl. Backlog) (ha) | SDA Areas (ha) | Planned Current Units |
| <b>Kwanokuthula/ New Horizons/ Qolweni-Bossiesgif</b> | Dwelling Units        | 5 347  | 4 489               | 7 655               | 17 491                         |                | 4 425                 |
|   | Land (ha)             | 155  | 176                 | 301                 | 632                            | 307            |                       |
| <b>Plettenberg Bay Town</b>                           | Dwelling Units        | 371  | 1 164               | 1 957               | 3 491                          |                | 810                   |
|   | Land (ha)             | 11   | 47                  | 79                  | 137                            | 409            |                       |
| <b>Kranshoek</b>                                      | Dwelling Units        | 1 207  | 987                 | 1 686               | 3 880                          |                | 1 457                 |
|   | Land (ha)             | 38   | 41                  | 70                  | 148                            | 87             |                       |
| <b>Wittedrift</b>                                     | Dwelling Units        | 330  | 152                 | 253                 | 735                            |                | -                     |
|   | Land (ha)             | 10   | 6                   | 10                  | 27                             | 44             |                       |
| <b>Kurland</b>  | Dwelling Units        | 884  | 495                 | 832                 | 2 211                          |                | 344                   |
|   | Land (ha)             | 26   | 19                  | 33                  | 79                             | 89             |                       |
| <b>Total Area</b>                                     | <b>Dwelling Units</b> | <b>8 139</b>   | <b>7 287</b>        | <b>12 383</b>       | <b>27 808</b>                  |                | <b>7 036</b>          |
|   | <b>Land (ha)</b>      | <b>240</b>   | <b>289</b>          | <b>493</b>          | <b>1 022</b>                   | <b>936</b>     |                       |

### 5.1.2 Priority Projects / Actions for Implementation

proposals contained in the Bitou Municipal SDF. The locations of these projects are illustrated on **Figure 63**.

Following from the above, **Table 35** provides a list of priority projects to be initiated in the Bitou LM area based on the findings and development



**Table 35: List of Priority Projects**

|                      | Project  | Responsibility  | Estimated Cost | Year 1-2 | Year 3-5 | Year 5+ |
|----------------------|--|---|----------------|----------|----------|---------|
| <b>Environment</b>   |  |   |                |          |          |         |
| 1.                   | Formulate policy to enhance Ecological Corridors through Conservation Estate with rate rebates, tax incentives and sectional title schemes | BLM: Economic Development and Planning  | R200,000       | X        |          |         |
| 2.                   | Implement Coastal Management Lines (Draft)   | BLM: Economic Development and Planning  | In house       | X        |          |         |
| 3.1                  | Formulate/Implement Alien Invasive Management Plans  | BLM: Economic Development and Planning  | R150,000       | X        |          |         |
| 3.2                  | Compile Municipal Open Space Management Plan   | BLM: Economic Development and Planning  | R300,000       | X        |          |         |
| 3.3                  | Compile Heritage Resources Register (National Heritage Resources Act)  | BLM: Economic Development and Planning  | R200,000       | X        |          |         |
| 3.4                  | Creation of a Special BLM Economic Development and Planning rating category for conservation   | BLM: Economic Development and Planning  | In house       | X        |          |         |
| 4.                   | Establish Disaster Risk Management Protocol with GRDM: Flood and Fire Risk   | BLM: Economic Development and Planning;<br>BLM Branch Public Safety;<br>Garden Route DM | In house       | X        |          |         |
| 5.                   | Management Plan for Bay area between Robberg and Tsitsikamma MPA's   | BLM: Economic Development and Planning;<br>WC: DEADP                                    | R300,000       |          | X        |         |
| 6.                   | Registration of Lookout Nature Reserve   | BLM: Economic Development and Planning;<br>Cape Nature;<br>WC: DEADP                    | TBD            | X        |          |         |
| <b>Town Planning</b> |  |   |                |          |          |         |
| 7.                   | Establish/Strengthen Municipal GIS and LUS with Environmental Overlay Zones  | BLM: Economic Development and Planning  | R500,000       | X        |          |         |
| 8.                   | Implement SMART City Principles: Workshops/Awareness Campaigns   | BLM: Economic Development and Planning;<br>BLM: Engineering Services                    | In house       |          | X        |         |
|                      | Compile Precinct Plans for the following priority areas:   |   |                |          |          |         |
| 9.                   | • Ladywood   | BLM: Economic Development and Planning  | R300,000       | X        |          |         |
| 10.                  | • Piesang Valley   | BLM: Economic Development and Planning  | R250,000       |          | X        |         |
| 11.                  | • Beachfront precinct – Beacon Isle up to Lookout  | BLM: Economic Development and Planning  | R300,000       | X        |          |         |
| 12.                  | • Kurland  | BLM: Economic Development and Planning  | R250,000       |          | X        |         |

|                                    | Project   | Responsibility  | Estimated Cost | Year 1-2 | Year 3-5 | Year 5+ |
|------------------------------------|---|---|----------------|----------|----------|---------|
| 13.                                | • Forest View   | BLM: Economic Development and Planning                        | R250,000       | X        |          |         |
| 14.                                | • Kranshoek   | BLM: Economic Development and Planning                        | R250,000       |          | X        |         |
| 15.                                | • Goose Valley  | BLM: Economic Development and Planning                        | R250,000       |          |          | X       |
| 16.                                | Prepare open space utilisation and densification framework per settlement           | BLM: Economic Development and Planning                        | R400,000       | X        |          |         |
| <b>Housing and Social Services</b> |   |   |                |          |          |         |
|                                    | Facilitate incremental implementation of 3-year housing programme:                  |   |                |          |          |         |
| 17.                                | • Kwanokuthula IRDP Phase 4   | BLM: Directorate Housing;<br>WC: Department Human Settlements | R37,5 million  | X        |          |         |
| 18.                                | • Kwanokuthula IRDP/UISP Phase 5 and 6 (120 UISP)                                   | BLM: Directorate Housing;<br>WC: Department Human Settlements | TBD            |          | X        |         |
| 19.                                | • Kwanokuthula IRDP/UISP Phase 6 and 7  | BLM: Directorate Housing;<br>WC: Department Human Settlements | TBD            |          |          | X       |
| 20.                                | • Ebenezer IRDP/UISP Phase 1<br>Qolweni: 735 informal<br>New Horizons: 735 backyard | BLM: Directorate Housing;<br>WC: Department Human Settlements | TBD            |          | X        |         |
| 21.                                | • Ebenezer IRDP/UISP Phase 2, 3 and 4   | BLM: Directorate Housing;<br>WC: Department Human Settlements | TBD            |          |          | X       |
| 22.                                | • Qolweni Phase 3A  | BLM: Directorate Housing;<br>WC: Department Human Settlements | R24,5 million  | X        | X        |         |
| 23.                                | • Qolweni Phase 4A (UISP)   | BLM: Directorate Housing;<br>WC: Department Human Settlements | R22,9 million  | X        |          |         |
| 24.                                | • Qolweni Phase 4B (UISP)   | BLM: Directorate Housing;<br>WC: Department Human Settlements | R17,3 million  | X        | X        |         |
| 25.                                | • Qolweni Phase 5 (UISP)  | BLM: Directorate Housing;<br>WC: Department Human Settlements | TBD            | X        | X        |         |
| 26.                                | • Shell Ultra City (IRDP/FLISP)   | BLM: Directorate Housing;<br>WC: Department Human Settlements | R3,6 million   | X        |          |         |
| 27.                                | • Green Valley Phase 2 (IRDP/UISP) (122 UISP)                                       | BLM: Directorate Housing;<br>WC: Department Human Settlements | TBD            |          | X        |         |

|                             | Project   | Responsibility  | Estimated Cost | Year 1-2 | Year 3-5 | Year 5+ |
|-----------------------------|---|---|----------------|----------|----------|---------|
| 28.                         | <ul style="list-style-type: none"> <li>Kurland UISP Phase 3 (UISP)</li> </ul>                       | BLM: Directorate Housing;<br>WC: Department Human Settlements   | R4,4 million   | X        |          |         |
| 29.                         | <ul style="list-style-type: none"> <li>Kurland UISP Phase 4 (UISP)</li> </ul>                       | BLM: Directorate Housing;<br>WC: Department Human Settlements   | TBD            |          | X        |         |
| 30.                         | <ul style="list-style-type: none"> <li>Kranshoek IRDP Phase 3 (Farms 432 Portions 7,8,9)</li> </ul> | BLM: Directorate Housing;<br>WC: Department Human Settlements   | TBD            |          | X        |         |
| <b>Land Acquisitions</b>    |   |   |                |          |          |         |
| 31.                         | Portion 28: Farm 306 Wittedrift   | BLM: Directorate Housing;<br>WC: Department Human Settlements   | R5,1 million   | X        |          |         |
| 32.                         | Portions 3,42,44 Ebenezer   | BLM: Directorate Housing;<br>WC: Department Human Settlements   | TBD            | X        |          |         |
| 33.                         | Erf 9834 Minnaar's Land   | BLM: Directorate Housing;<br>WC: Department Human Settlements   | R1,5 million   | X        |          |         |
| 34.                         | Portion 20; Farm Hillview No 437 Ebenezer (Transfer Duties)   | BLM: Directorate Housing;<br>WC: Department Human Settlements   | R800,000       | X        |          |         |
| <b>Community Facilities</b> |   |   |                |          |          |         |
| 35.                         | Negotiate development of community facilities aligned with housing programme                        | BLM: Community Services;<br>WC: Department Human Settlements / Health / Education / Social Development / Community Safety / Cultural Affairs and Sport. | TBD            | X        | X        | X       |
| <b>Roads and Transport</b>  |   |   |                |          |          |         |
| 36.                         | Lobby for construction of N2 bypass   | BLM: Roads, Transport and Stormwater (RTS);<br>WC: Department Transport and Public Works;<br>SANRAL   | TBD            |          | X        |         |
| 37.                         | Upgrade Kwanokuthula – Green Valley link  | BLM: Roads, Transport and Stormwater (RTS);<br>WC: Department Transport and Public Works  | TBD            | X        |          |         |
| 38.                         | Bloukrans Pass upgrade (Eastern Cape)   | BLM: Roads, Transport and Stormwater (RTS);<br>WC: Department Transport and Public Works;<br>EC: Department Transport and Public Works                  | TBD            | X        |          |         |

|                             | Project   | Responsibility  | Estimated Cost                 | Year 1-2 | Year 3-5 | Year 5+ |
|-----------------------------|---|---|--------------------------------|----------|----------|---------|
| 39.                         | Ensure proper maintenance of priority secondary tourism routes: Forest Hall, Redford, Keurbooms, Harkerville, R340                      | BLM: Roads, Transport and Stormwater (RTS); WC: Department Transport and Public Works                   | Annual Allocation              | X        | X        | X       |
| 40.                         | Incremental development of the priority public transport network and facilities.  | BLM: Roads, Transport and Stormwater (RTS)  | Annual Allocation              | X        | X        | X       |
| 41.                         | Upgrading of the Plett Airport  | BLM: RTS, LED and LUM; ACSA   | Annual Allocation              | X        | X        | X       |
| <b>Engineering Services</b> |   |   |                                |          |          |         |
| 42.                         | Alignment of water, sanitation, electricity and roads as well as storm water infrastructure construction with housing programmes:       | BLM: Engineering Services;<br>BLM: Economic Development and Planning;<br>BLM: Division Human Settlement | In house                       | X        | X        | X       |
|                             | <b>Water</b>  |   |                                |          |          |         |
| 43.                         | <ul style="list-style-type: none"> <li>New Water Treatment Plant to Goose Valley reservoir pump station and bulk supply pipe</li> </ul> | BLM: Engineering Services   | R1,4 million                   | X        |          |         |
| 44.                         | <ul style="list-style-type: none"> <li>New Kurland WTP</li> </ul>   | BLM: Engineering Services   | TBD                            |          | X        | X       |
| 45.                         | <ul style="list-style-type: none"> <li>New 3 ML reservoir at new Plettenberg Bay WTW</li> </ul>   | BLM: Engineering Services   | R8,8 million                   | X        |          |         |
| 46.                         | <ul style="list-style-type: none"> <li>New 8 ML (Upper) and 5ML (lower) reservoir in Roodefontein area</li> </ul>                       | BLM: Engineering Services   | R17,8 million<br>R12,6 million |          |          | X       |
| 47.                         | <ul style="list-style-type: none"> <li>New 0.5 ML Keurboomstrand (reservoir upper)</li> </ul>   | BLM: Engineering Services   | R3,07 million                  |          | X        |         |
| 48.                         | <ul style="list-style-type: none"> <li>New 2 ML Matjiesfontein reservoir.</li> </ul>  | BLM: Engineering Services   | R6,75 million                  |          | X        |         |
| 49.                         | <ul style="list-style-type: none"> <li>New Wadrift Dam</li> </ul>   | BLM: Engineering Services   | R2 million p.a.                | X        | X        | X       |
| 50.                         | <ul style="list-style-type: none"> <li>Several pump station upgrades</li> </ul>   | BLM: Engineering Services   | Annual Allocation              | X        | X        | X       |
|                             | <b>Sewer Treatment Plant Upgrade</b>  |   |                                |          |          |         |
| 51.                         | <ul style="list-style-type: none"> <li>Upgrade Outfall Sewer: Kwanokuthula-Gansevlei</li> </ul>   | BLM: Engineering Services   | R7 million                     | X        | X        |         |
| 52.                         | <ul style="list-style-type: none"> <li>Upgrading Outfall Sewer: Dunes</li> </ul>  | BLM: Engineering Services   | R4,5 million                   | X        | X        |         |
| 53.                         | <ul style="list-style-type: none"> <li>Kurland WWTW Upgrade</li> </ul>  | BLM: Engineering Services   | R500,000                       | X        |          |         |
|                             | <b>Electricity</b>  |   |                                |          |          |         |
| 54.                         | <ul style="list-style-type: none"> <li>Formulate Renewable Energy Policy</li> </ul>   | BLM: Engineering Services   | R200,000                       | X        |          |         |

|                             | Project  | Responsibility   | Estimated Cost | Year 1-2 | Year 3-5 | Year 5+ |
|-----------------------------|--|--|----------------|----------|----------|---------|
| 55.                         | <ul style="list-style-type: none"> <li>Informal Settlement Upgrading Programme (Qolweni)</li> </ul>  | BLM: Engineering Services  | Annual         | X        | X        | X       |
|                             | Refuse Disposal  |  |                |          |          |         |
| 56.                         | <ul style="list-style-type: none"> <li>Establish Waste Recycling Units in all Settlements</li> </ul>   | BLM: Engineering Services/LED  | TBD            | X        | X        | X       |
| <b>Economic Development</b> |  |  |                |          |          |         |
| 57.                         | Establish Bitou "LED Warriors" Forum   | BLM: Division Economic Development   | In house       | X        |          |         |
| 58.                         | Formulate Business/Commercial/Industrial Up-scaling Policy and Pilot Projects  | BLM: Division Economic Development   | R200,000       | X        |          |         |
| 59.                         | Continuously manage / monitor development of each of the business nodes and industrial areas   | BLM: Division Economic Development   | In house       | X        | X        | X       |
| 60.                         | Enhance safety and security in all economic activity nodes/areas with specific focus on possible access control in part of Plett Industrial Area             | BLM: Division Economic Development;<br>BLM: Branch Public Safety; SAPS;<br>Local Tenants/Stakeholders                                      | In house       | X        |          |         |
| 61.                         | Formulate Tertiary Education and Training Strategy   | BLM: Division Economic Development;<br>BLM: Section Social Development;<br>WC: Education Department  | R400,000       | X        |          |         |
| 62.                         | Establish stakeholder forums for each of the functional tourism precincts and facilitate compilation of a plan/strategy/marketing brochure for each of these | BLM: Division Economic Development;<br>WC: Department of Economic Development and Tourism;<br>WC: Department of Cultural Affairs and Sport | R600,000       | X        | X        |         |
| 63.                         | Implementation of Robberg Cultural Bridge Project  | BLM: Division Economic Development;<br>WC: Department of Economic Development and Tourism;<br>WC: Department of Cultural Affairs and Sport | R90,000,000    | X        | X        | X       |
| 64.                         | Branding of tourism precincts with road signage  | BLM: Division Economic Development/SANRAL  | In house       | X        | X        | X       |
| <b>Land Reform</b>          |  |  |                |          |          |         |
|                             | Monitor / facilitate progress with DRDLR Land Reform Initiatives in:   |  |                |          |          |         |
| 65.                         | <ul style="list-style-type: none"> <li>Kwanokuthula</li> </ul>   | Department Rural Development;<br>BLM: Economic Development and Planning  | In house       | X        | X        | X       |
| 66.                         | <ul style="list-style-type: none"> <li>Kranshoek</li> </ul>  | Department Rural Development;  | In house       | X        | X        | X       |

|     | Project                   | Responsibility  | Estimated Cost | Year 1-2 | Year 3-5 | Year 5+ |
|-----|---------------------------|---|----------------|----------|----------|---------|
|     |                           | BLM: Economic Development and Planning                                  |                |          |          |         |
| 67. | • Forest View/Harkerville | Department Rural Development;<br>BLM: Economic Development and Planning | In house       | X        | X        | X       |
| 68. | • Wittedrift              | Department Rural Development;<br>BLM: Economic Development and Planning | In house       | X        | X        | X       |
| 69. | • Kurland                 | Department Rural Development;<br>BLM: Economic Development and Planning | In house       | X        | X        | X       |
| 70. | • Covie                   | Department Rural Development;<br>BLM: Economic Development and Planning | In house       | X        | X        | X       |

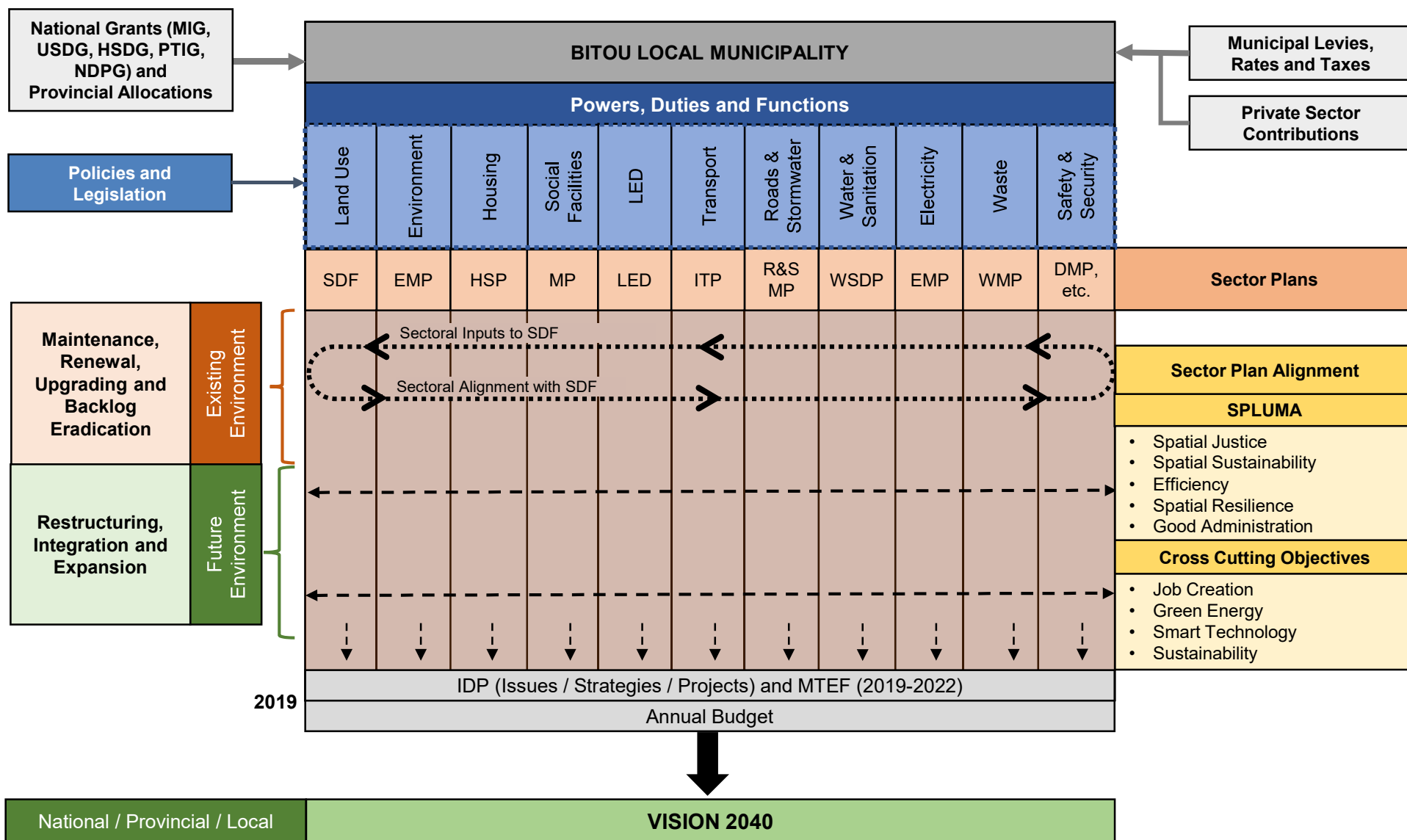
## 5.2 SECTORAL ALIGNMENT

**Diagram 14** (overleaf) illustrates the context of the Bitou SDF within the broader municipal institutional environment which is briefly summarised as follow:

- The Bitou Local Municipality has a set of legally mandated powers, duties and functions assigned to it in terms of the provisions of the Municipal Structures Act.
- The powers, duties and functions of the municipality translate into a number of sectors departments / units like land use, transport, housing, environment, engineering services, economic development etc. within the municipality. Most of these sectors are guided by sector specific policies and legislation and are required to compile sector plans aligned to these. For example and Integrated Transport Plan (ITP) is compiled in terms of the requirements of the National Land Transport Act and a

Water Services Development Plan (WSDP) in terms of the Water Services Act.

- Sector Plans deal with the existing environment within the municipality and the planned/proposed future environment (3, 5, 10 years or longer into the future). In the existing environment the focus is on maintenance, renewal, upgrading and backlog eradication. The future environment deals with the expansion of the settlement areas which also provide opportunities for spatial restructuring and integration.
- It is essential that these sector plans are all based on a common Vision for the municipal area. Such Vision is normally based on/derived from the National Vision (NDP), a Provincial Vision (One Cape 2040 and Western Cape SDF) and /or District/Municipal Vision documents.
- The Municipal Spatial Development Framework (SDF) represents the Spatial Vision for the municipal area and it serves to provide guidance in this regard to all the other sectors as well.



- When the SDF is compiled (during the Situational Analysis) it is informed by all the other sectors inputs e.g. the Environmental Management Plan may indicate all areas to be earmarked for protection (core, buffer etc.), the Water Services Development Plan may indicate the areas most suitable or unsuitable to provide engineering services, and the Housing Plan may provide information on areas earmarked / acquired for future development.
- The SDF considers all these inputs, identify spatial contradictions and then formulates a consolidated spatial plan (based on growth projections) which earmarks specific areas in the municipality for different future land uses e.g. the future open space system; the priority housing development areas, economic activity areas, areas for future community facilities, consolidated movement network serving all these areas etc.
- When the sector plans are revised in future, these plans should be based on the SDF growth projections and be informed by the proposed location, extent and nature of land use proposed in the municipal SDF. This process is referred to as sectoral alignment.
- There are also some cross-cutting themes that need to be addressed by all sectors within the municipality. These include aspects such as job creation, promoting the green agenda, introduction of smart technology and overall sustainability enhancement.
- In this way it is ensured that all projects identified by the various sector plans (and incorporated into the annual Municipal IDP, MTEF and Budget) are spatially aligned and that all infrastructure investment

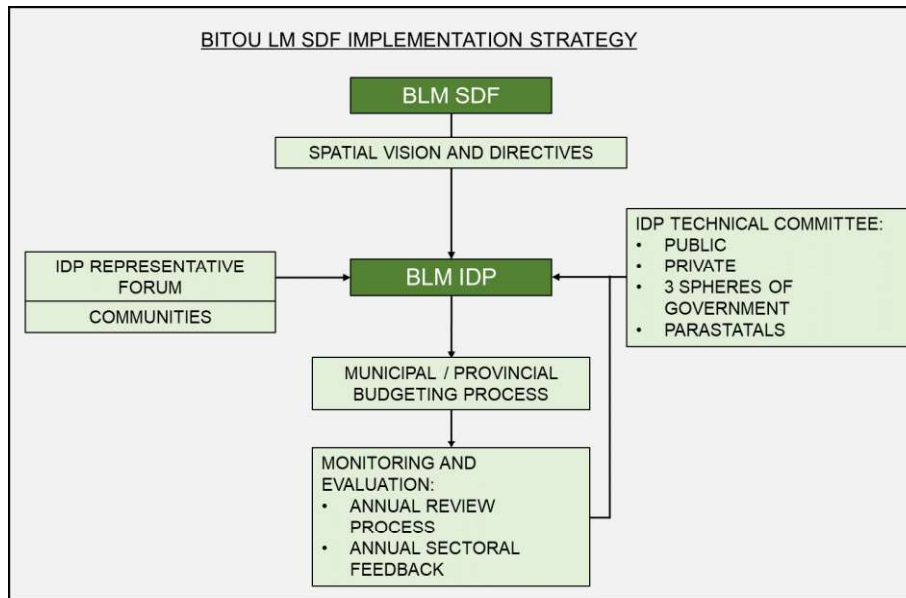
within the municipality is congruent with the broader development vision as captured in the Municipal Spatial Development Framework.

- Collective sectoral investment in the correct areas within the Bitou municipality over an extended period of time will inevitably result in enhanced spatial justice, efficiency, sustainability and resilience, and effectively represents good administration – the five principles of SPLUMA.

### 5.3 IMPLEMENTATION AND ALIGNMENT WITH IDP

It is important to note that the BLM SDF forms part of the Integrated Development Plan of the Municipality (in line with section 26 (e) of the Municipal Systems Act) and that it does not represent a parallel process thereto. The SDF related projects/initiatives which are deemed critical towards the future development of the BLM were identified and included in the Capital Investment Framework.

The next step would be for these projects to be incorporated into the Bitou Integrated Development Plan (IDP) (Refer to **Diagram 15**). For example, the proposed environmental projects/actions emanating from the SDF should feed into the Objectives, Strategies and Projects under Environmental and Health Services in the municipal IDP from where the projects are incorporated into the budgeting process of the Municipality.

**Diagram 15: BLM SDF Implementation Strategy**

Many of the projects following from the SDF may already be listed in the BLM IDP, but the SDF may serve to better illustrate the strategic significance and spatial logic of such.

In essence, the SDF incorporates, aligns, and integrates various sectoral spatial issues and highlight the functional relationship between these e.g. the importance of the construction of a certain section of road to unlock the development potential of a specific underdeveloped area.

Another important aspect to consider is the fact that a SDF does not entail the compilation of a number of sectoral studies as part of the process. Instead, it rather focuses on capturing the findings and recommendations of

various sectoral studies, and superimposing these spatially over each other in order to identify contradictions and to assess the collective impact these may have on the area.

In this way the SDF provides a multi-sectoral, integrated perspective on future development in the BLM. Having identified the important projects/initiatives to be implemented following from the SDF, it is important for BLM officials to continuously monitor whether these projects/initiatives are being incorporated into the relevant development Objectives, Strategies and Projects in the IDP of the Municipality, and that these projects are appropriately prioritised in the budgeting process, from where implementation will follow.

This is a continuous process which should be followed as part of the annual IDP Review Process, and should also be dealt with as part of the annual Performance Management Assessment.



# BITOU SDF

ANNEXURE



Die Vlugg

R339

R340

Redford

Kurland Estate

The Craggs

R402

Bloukrans

Natures Valley

Keurboomstrand

Wittedrif

Keurboomsrivier

Dieprivier

Gansevlei

Plettenberg Bay

Kranshoek

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## ANNEXURE A: BITOU LM GROWTH PROJECTIONS AND LAND USE BUDGET

**1 Population Projections**

The Socio-Economic Profile of Bitou LM (2017) estimated the municipal population for 2018 at 56 422 people with projected incremental population of 4762 people by the year 2023. This translates to an annual increment of 952 people at a rate of 1.6% per annum over the five-year period (see **Table 1** below).

A major concern regarding this information is the fact that the 56 422 people estimated for Bitou LM (2018) is almost 3000 people less than the 2016 population (59 157 people) recorded in the Central Statistical Services Community Survey (2016).

The Garden Route District Spatial Development Framework (2017) projected a total population of 75 418 by 2040 for the Bitou LM as depicted on **Table 2** (see overleaf). This translates to a total increment of 16 261 people at 678 people per annum over the period 2016 to 2040.

However, the actual population growth in Bitou LM for the period 2001 – 2016 has been about 1999 people per annum as depicted in Table 29. Hence the population projection of only 678 people per annum over the next 24 years as projected in the Garden Route SDF may be unrealistically low. (The Garden Route SDF report noted this as a “conservative” projection).

With the above as background the project team formulated two population growth scenarios for Bitou LM as depicted in **Table 3** on overleaf.

**Table 1: Bitou LM Socio Economic Profile, 2018-2023**

| Population |        |        |        |        |        |        | Increment | Inc/ p.a. | %Growth p/a |
|------------|--------|--------|--------|--------|--------|--------|-----------|-----------|-------------|
|            | 2018   | 2019   | 2020   | 2021   | 2022   | 2023   | 2018-2023 | 2018-2023 | 2018-2023   |
| Bitou LM   | 56 422 | 57 404 | 58 369 | 59 321 | 60 259 | 61 184 | 4 762     | 952       | 1.6%        |

*Source: Socio-Economic Profile of Bitou LM, Department of Social Development, 2017*

**Table 2: Garden Route District Municipality: Population Projections 2001-2040**

| Local Municipality           | Population     |             |                |             |                |             |                |             | Incremental Population p.a. |              |              | % Growth p.a. |             |             |
|------------------------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|-----------------------------|--------------|--------------|---------------|-------------|-------------|
|                              | Census 2001    | %           | Census 2011    | %           | CS 2016        | %           | 2040           | %           | 2001-2011                   | 2011-2016    | 2016-2040    | 2001-2011     | 2011-2016   | 2016-2040   |
| George                       | 149,436        | 33%         | 193,672        | 34%         | 208,237        | 34%         | 256,293        | 36%         | 4,424                       | 2,913        | 2,002        | 2.6%          | 1.5%        | 0.9%        |
| Oudtshoorn                   | 84,692         | 19%         | 95,933         | 17%         | 97,509         | 16%         | 90,393         | 13%         | 1,124                       | 315          | - 297        | 1.3%          | 0.3%        | -0.3%       |
| Mossel Bay                   | 71,494         | 16%         | 89,430         | 16%         | 94,135         | 15%         | 123,035        | 17%         | 1,794                       | 941          | 1,204        | 2.3%          | 1.0%        | 1.1%        |
| Knysna                       | 52,035         | 11%         | 68,659         | 12%         | 73,835         | 12%         | 87,611         | 12%         | 1,662                       | 1,035        | 574          | 2.8%          | 1.5%        | 0.7%        |
| <b>Bitou</b>                 | <b>29,182</b>  | <b>6%</b>   | <b>49,162</b>  | <b>9%</b>   | <b>59,157</b>  | <b>10%</b>  | <b>75,418</b>  | <b>10%</b>  | <b>1,998</b>                | <b>1,999</b> | <b>678</b>   | <b>5.4%</b>   | <b>3.8%</b> | <b>1.0%</b> |
| Hessequa                     | 44,114         | 10%         | 52,642         | 9%          | 54,237         | 9%          | 62,070         | 9%          | 853                         | 319          | 326          | 1.8%          | 0.6%        | 0.6%        |
| Kannaland                    | 23,971         | 5%          | 24,767         | 4%          | 24,168         | 4%          | 26,547         | 4%          | 80                          | - 120        | 99           | 0.3%          | -0.5%       | 0.4%        |
| <b>Total Garden Route DM</b> | <b>454,924</b> | <b>100%</b> | <b>574,265</b> | <b>100%</b> | <b>611,278</b> | <b>100%</b> | <b>721,367</b> | <b>100%</b> | <b>11,934</b>               | <b>7,403</b> | <b>4,587</b> | <b>2.4%</b>   | <b>1.3%</b> | <b>0.7%</b> |

Source: Garden Route District Population Profile to 2040 (WCG, 2016), Garden Route District Spatial Development Framework, October 2017

**Table 3: Bitou LM: Population Projection Scenarios, 2016, 2025, 2040**

| Scenario 1: Garden Route SDF |             |        |        |           |           |           |                |           |           |               |           |           |
|------------------------------|-------------|--------|--------|-----------|-----------|-----------|----------------|-----------|-----------|---------------|-----------|-----------|
|                              | Projections |        |        | Increment |           |           | Increment p.a. |           |           | % growth p.a. |           |           |
|                              | 2016        | 2025   | 2040   | 2016-2025 | 2025-2040 | 2016-2040 | 2016-2025      | 2025-2040 | 2016-2040 | 2016-2025     | 2025-2040 | 2016-2040 |
| Population                   | 59,157      | 64,797 | 75,418 | 5,640     | 10,621    | 16,261    | 627            | 708       | 678       | 1.0%          | 1.0%      | 1.0%      |
| Households                   | 21,914      | 24,706 | 30,173 | 2,792     | 5,467     | 8,259     | 310            | 364       | 344       | 1.3%          | 1.3%      | 1.3%      |

| Scenario 2: Trend |             |        |         |           |           |           |                |           |           |               |           |           |
|-------------------|-------------|--------|---------|-----------|-----------|-----------|----------------|-----------|-----------|---------------|-----------|-----------|
|                   | Projections |        |         | Increment |           |           | Increment p.a. |           |           | % growth p.a. |           |           |
|                   | 2016        | 2025   | 2040    | 2016-2025 | 2025-2040 | 2016-2040 | 2016-2025      | 2025-2040 | 2016-2040 | 2016-2025     | 2025-2040 | 2016-2040 |
| Population        | 59,157      | 77,125 | 107,000 | 17,968    | 29,875    | 47,843    | 1,996          | 1,992     | 1,993     | 3.0%          | 2.2%      | 2.5%      |
| Households        | 21,914      | 29,669 | 42,808  | 7,755     | 13,139    | 20,894    | 862            | 876       | 871       | 3.4%          | 2.5%      | 2.8%      |

Source: Garden Route District Population Profile to 2040 (WCG, 2016), Garden Route District SDF, October 2017

Note: Annual incremental population in line with 2001-2016 growth rate (approximately 2 000 people p.a.)

Scenario 1 is based on the Garden Route District SDF projection while Scenario 2 represents a continuation of the growth rate recorded in the Bitou LM for the period 2001 to 2016.

Scenario 1 projects an incremental population of 16 261 people from 2016 to 2040 ( $\pm 670$  people/ annum) which translates to about 8321 new households (1,95 people per household).

Scenario 2 projects an incremental population of 47 843 people ( $\pm 1993$  people/ annum in line with the trend over the past 15 years) representing an estimated 20 894 additional households from 2016 to 2040. The average household growth rate in this scenario stands at about 2,8% per annum which is relatively low when compared to the actual annual household growth rate of 5,7% recorded between 2011 and 2016 (refer to Diagram 6 in the main report).

The average household size for this period is about 2,3 people/household compared to the 2,7 people/household recorded in 2016. This is due to the fact that average household size is continuously decreasing across South Africa.

According to Scenario 2 the incremental population up to 2025 will be 17 968 people (7755 households), and from 2025 to 2040 an additional estimated 29 875 people (13 228 households).

## **2 Land Use Budget: 2016-2025**

**Table 4** comprises the Land Use Budget for the Bitou LM (2016-2025) for both Scenario 1 and Scenario 2. It also incorporated the existing Bitou LM housing backlog of 8238 units as registered in the Western Cape Housing Demand Database.

For the high-income households an average density of 20 units/ha was applied and for the middle and low income an average density of 40 units/ha and 56 units/ha respectively. This translates to an average gross density of 25 units/ha under Scenario 1 and 26 units/ha under Scenario 2. If the existing backlog (which is mostly low income) is added, it translates to about 32 units/ha under Scenario 1 and 29 units/ha under Scenario 2.

For Scenario 1 + Backlog the land required for urbanisation purposes by 2025 totals about 349 ha of which 221 ha (63%) would be required for residential purposes. About 22 ha will be required for educational facilities, 14 ha for sports and recreation, and 5 ha for other community facilities.

Scenario 2 + Backlog requires about 548 ha of land of which 350 ha is for residential use; 32 ha for educational facilities; and 20 ha for sports and recreation. The Scenario 2 + Backlog incremental population would justify approximately 14 692m<sup>2</sup> of additional retail floor space and 1469m<sup>2</sup> of additional office floor space in the Bitou LM (subject to current over-/ under supply).

Table 4: Bitou LM: Incremental Land Use Budget 2016-2025

|                                   | Demand Database |            |             | Bitou Scenario 1<br>(2016-2025) |            |             | Bitou Scenario 2<br>(2016-2025) |            |             | Total: Sc1 + Backlog |            |             | Total: Sc2 + Backlog |            |             |
|-----------------------------------|-----------------|------------|-------------|---------------------------------|------------|-------------|---------------------------------|------------|-------------|----------------------|------------|-------------|----------------------|------------|-------------|
| Facilities                        | Requirement     |            |             | Requirement                     |            |             | Requirement                     |            |             | Requirement          |            |             | Requirement          |            |             |
|                                   | number          | ha         | %           | number                          | ha         | %           | number                          | ha         | %           | number               | ha         | %           | number               | ha         | %           |
| <b>Number of Units</b>            | <b>8 238</b>    | <b>148</b> | <b>61%</b>  | <b>2 792</b>                    | <b>73</b>  | <b>68%</b>  | <b>7 755</b>                    | <b>202</b> | <b>66%</b>  | <b>11 030</b>        | <b>221</b> | <b>63%</b>  | <b>15 993</b>        | <b>350</b> | <b>64%</b>  |
| High Income (@500m² (20du/ha))    | -               | -          |             | 617                             | 31         |             | 1 714                           | 86         |             | 617                  | 31         | 14%         | 1 714                | 86         | 24%         |
| Middle Income (@250m²(40du/ha))   | -               | -          |             | 385                             | 10         |             | 1 070                           | 27         |             | 385                  | 10         | 4%          | 1 070                | 27         | 8%          |
| Low Income (@180m²(56du/ha))      | 8 238           | 148        |             | 1 790                           | 32         |             | 4 971                           | 89         |             | 10 028               | 181        | 82%         | 13 209               | 238        | 68%         |
| <b>Population</b>                 | <b>22 243</b>   |            |             | <b>5 640</b>                    |            |             | <b>17 968</b>                   |            |             | <b>27 883</b>        |            |             | <b>40 211</b>        |            |             |
| Nett residential Density          | 56              |            |             | 38                              |            |             | 38                              |            |             | 50                   |            |             | 46                   |            |             |
| <b>Business (m²)</b>              | <b>6 673</b>    | <b>2</b>   | <b>1%</b>   | <b>1 692</b>                    | <b>1</b>   | <b>1%</b>   | <b>10 781</b>                   | <b>4</b>   | <b>1%</b>   | <b>8 365</b>         | <b>3</b>   | <b>1%</b>   | <b>17 454</b>        | <b>6</b>   | <b>1%</b>   |
| <b>Offices (floor area in m²)</b> | <b>667</b>      | <b>0,2</b> | <b>0%</b>   | <b>169</b>                      | <b>0,1</b> | <b>0%</b>   | <b>1 078</b>                    | <b>0,4</b> | <b>0%</b>   | <b>836</b>           | <b>0,3</b> | <b>0%</b>   | <b>1 745</b>         | <b>1</b>   | <b>0%</b>   |
|                                   |                 |            |             |                                 |            |             |                                 |            |             |                      |            |             |                      |            |             |
| <b>Education</b>                  |                 | <b>18</b>  | <b>7%</b>   |                                 | <b>4</b>   | <b>4%</b>   |                                 | <b>14</b>  | <b>5%</b>   |                      | <b>22</b>  | <b>6%</b>   |                      | <b>32</b>  | <b>6%</b>   |
| Small Crèche                      | 9               | 0          |             | 2                               | 0          |             | 7                               | 0          |             | 12                   | 0          |             | 17                   | 0          |             |
| ECD Hub and Care Centre           | 1               | 0          |             | 0                               | 0          |             | 1                               | 0          |             | 1                    | 0          |             | 2                    | 0          |             |
| Primary (including Grade R)       | 3               | 9          |             | 1                               | 2          |             | 3                               | 7          |             | 4                    | 11         |             | 6                    | 16         |             |
| Secondary                         | 2               | 9          |             | 0                               | 2          |             | 1                               | 7          |             | 2                    | 11         |             | 3                    | 15         |             |
| <b>Health Services</b>            |                 | <b>1</b>   | <b>0%</b>   |                                 | <b>0</b>   | <b>0%</b>   |                                 | <b>1</b>   | <b>0%</b>   |                      | <b>1</b>   | <b>0%</b>   |                      | <b>1</b>   | <b>0%</b>   |
| Primary Health Clinic             | 1               | 0          |             | 0                               | 0          |             | 1                               | 0          |             | 1                    | 0          |             | 2                    | 0          |             |
| Community Health Centre           | 0               | 1          |             | 0                               | 0          |             | 0                               | 0          |             | 0                    | 1          |             | 1                    | 1          |             |
| <b>Safety and Security</b>        |                 | <b>0</b>   | <b>0%</b>   |                                 | <b>0</b>   | <b>0%</b>   |                                 | <b>0</b>   | <b>0%</b>   |                      | <b>1</b>   | <b>0%</b>   |                      | <b>1</b>   | <b>0%</b>   |
| Police                            | 0               | 0          |             | 0                               | 0          |             | 0                               | 0          |             | 0                    | 0          |             | 1                    | 1          |             |
| Fire Station                      | 0               | 0          |             | 0                               | 0          |             | 0                               | 0          |             | 0                    | 0          |             | 1                    | 0          |             |
| <b>Social /Cultural</b>           |                 | <b>2</b>   | <b>1%</b>   |                                 | <b>1</b>   | <b>1%</b>   |                                 | <b>2</b>   | <b>1%</b>   |                      | <b>3</b>   | <b>1%</b>   |                      | <b>4</b>   | <b>1%</b>   |
| Local Library                     | 1               | 0          |             | 0                               | 0          |             | 1                               | 0          |             | 1                    | 0          |             | 2                    | 0          |             |
| <b>Social Services</b>            |                 |            |             |                                 |            |             |                                 |            |             |                      |            |             | -                    | -          |             |
| Worship Centre                    | 7               | 1          |             | 2                               | 0          |             | 6                               | 1          |             | 9                    | 1          |             | 13                   | 2          |             |
| Post Office/ICT Access Point      | 2               | 0          |             | 1                               | 0          |             | 2                               | 0          |             | 3                    | 0          |             | 4                    | 0          |             |
| Communtiy Hall (small)            | 2               | 1          |             | 1                               | 0          |             | 2                               | 1          |             | 3                    | 1          |             | 4                    | 2          |             |
| <b>Sports and Recreation</b>      |                 | <b>11</b>  | <b>5%</b>   |                                 | <b>3</b>   | <b>3%</b>   |                                 | <b>9</b>   | <b>3%</b>   |                      | <b>14</b>  | <b>4%</b>   |                      | <b>20</b>  | <b>4%</b>   |
| Sports Facilities and Parks       |                 | 7          |             |                                 | 2          |             |                                 | 5          |             |                      | 8          |             |                      | 12         |             |
| Regional Parks                    |                 | 4          |             |                                 | 1          |             |                                 | 4          |             |                      | 6          |             |                      | 8          |             |
| <b>Streets</b>                    |                 | <b>59</b>  | <b>24%</b>  |                                 | <b>26</b>  | <b>24%</b>  |                                 | <b>74</b>  | <b>24%</b>  |                      | <b>85</b>  | <b>24%</b>  |                      | <b>133</b> | <b>24%</b>  |
| <b>TOTAL</b>                      |                 | <b>242</b> | <b>100%</b> |                                 | <b>108</b> | <b>100%</b> |                                 | <b>306</b> | <b>100%</b> |                      | <b>349</b> | <b>100%</b> |                      | <b>548</b> | <b>100%</b> |
| Gross Density                     | 34              |            |             | 26                              |            |             | 25                              |            |             | 32                   |            |             | 29                   |            |             |

Assumption: 22% High Income, 14% Middle Income, 64% Low Income (Source: Community Survey 2016)

### 3 Land Use Budget: 2016-2040

**Table 5** (see overleaf) represents the Bitou LM Land Use Budget for 2016 up to 2040. Scenario 1 (low population growth rate) requires about 318 ha of additional land for urbanisation purposes up to 2040 (average density of 28 units/ha). However, if the current growth rates prevail (Scenario 2) then the Bitou LM would require about 824 ha of additional land for urbanisation by 2040 (average density of 25 units/ha). This is more than double of what is required in the low scenario.

If the current backlog is added to Scenario 1 then the land required up to 2040 increases to 559 ha resulting in an average gross density of 29 units/ha. Scenario 2 with the current backlog would require 1 066 ha of land for urbanisation purposes which translates to an average gross density of 27 units/ha.

This incremental urban footprint (1 066 ha) represents about 49,5% of the existing urban footprint of the Bitou LM which is around 2 157 ha.

**Table 6** depicts the estimated land required per town/settlement in the Bitou LM (based on Scenario 2 + Backlog) up to 2025 and 2040 respectively. Plettenberg Bay town requires approximately 223 ha of land for urbanisation purposes up to 2025 and an additional 380 ha up to 2040 (Total = 603 ha).

Kranshoek requires an estimated 110 ha up to 2040; Wittedrift about 17 ha and Kurland about 53 ha.

**Table 5: Scenario 2 Incremental land needed per town/settlement (2016-2040), (including land to accommodate backlog)**

| Towns                           | 2016-2025  |             | 2025-2040  |             | 2016-2040   |             |
|---------------------------------|------------|-------------|------------|-------------|-------------|-------------|
|                                 | ha         | %           | ha         | %           | ha          | %           |
| Plettenberg Bay Town            | 47         | 16%         | 79         | 16%         | 126         | 16%         |
| New Horizons/Bossiesgif         | 69         | 24%         | 119        | 24%         | 188         | 24%         |
| Kwanokuthula                    | 106        | 37%         | 182        | 37%         | 288         | 37%         |
| <b>Subtotal Plettenberg Bay</b> | <b>223</b> | <b>77%</b>  | <b>380</b> | <b>77%</b>  | <b>603</b>  | <b>77%</b>  |
| Kranshoek                       | 41         | 14%         | 70         | 14%         | 110         | 14%         |
| Wittedrift                      | 6          | 2%          | 10         | 2%          | 17          | 2%          |
| Kurland                         | 19         | 7%          | 33         | 7%          | 53          | 7%          |
| <b>Subtotal</b>                 | <b>66</b>  | <b>23%</b>  | <b>113</b> | <b>23%</b>  | <b>179</b>  | <b>23%</b>  |
| <b>Total</b>                    | <b>289</b> | <b>100%</b> | <b>493</b> | <b>100%</b> | <b>782</b>  | <b>100%</b> |
| <b>Gross Density (du/ha)</b>    | <b>25</b>  |             | <b>25</b>  |             | <b>25</b>   |             |
| <b>%</b>                        | <b>37%</b> |             | <b>63%</b> |             | <b>100%</b> |             |

Table 6: Bitou LM: Incremental Land Use Budget 2016-2040

|  | Demand Database |            |             | Bitou Senario 1<br>(2016-2040) |            |             | Bitou Senario 2<br>(2016-2040) |            |             | Total: Backlog+Sc1 |            |             | Total: Backlog+Sc2 |              |             |
|--|-----------------|------------|-------------|--------------------------------|------------|-------------|--------------------------------|------------|-------------|--------------------|------------|-------------|--------------------|--------------|-------------|
| Facilities                                   | Requirement     |            |             | Requirement                    |            |             | Requirement                    |            |             | Requirement        |            |             | Requirement        |              |             |
|  | number          | ha         | %           | number                         | ha         | %           | number                         | ha         | %           | number             | ha         | %           | number             | ha           | %           |
| <b>Number of Units</b>                       | <b>8 238</b>    | <b>148</b> | <b>61%</b>  | <b>8 259</b>                   | <b>215</b> | <b>68%</b>  | <b>20 894</b>                  | <b>544</b> | <b>66%</b>  | <b>16 497</b>      | <b>363</b> | <b>65%</b>  | <b>29 132</b>      | <b>692</b>   | <b>65%</b>  |
| High Income (@500m <sup>2</sup> (20du/ha))   | -               | -          |             | 1 825                          | 91         |             | 4 618                          | 231        |             | 1 825              | 91         | 25%         | 4 618              | 231          | 33%         |
| Middle Income (@250m <sup>2</sup> (40du/ha)) | -               | -          |             | 1 140                          | 28         |             | 2 883                          | 72         |             | 1 140              | 28         | 8%          | 2 883              | 72           | 10%         |
| Low Income (@180m <sup>2</sup> (56du/ha))    | 8 238           | 148        |             | 5 294                          | 95         |             | 13 393                         | 241        |             | 13 532             | 244        | 67%         | 21 631             | 389          | 56%         |
| <b>Population</b>                            | <b>22 243</b>   |            |             | <b>16 261</b>                  |            |             | <b>47 843</b>                  |            |             | <b>38 504</b>      |            |             | <b>70 086</b>      |              |             |
| Nett residential Density                     | 56              |            |             | 38                             |            |             | 38                             |            |             | 45                 |            |             | 42                 |              |             |
| <b>Business (m<sup>2</sup>)</b>              | <b>6 673</b>    | <b>2</b>   | <b>1%</b>   | <b>4 878</b>                   | <b>2</b>   | <b>1%</b>   | <b>28 706</b>                  | <b>10</b>  | <b>1%</b>   | <b>11 551</b>      | <b>4</b>   | <b>1%</b>   | <b>35 379</b>      | <b>12</b>    | <b>1%</b>   |
| <b>Offices (floor area in m<sup>2</sup>)</b> | <b>667</b>      | <b>0,2</b> | <b>0%</b>   | <b>488</b>                     | <b>0,2</b> | <b>0%</b>   | <b>2 871</b>                   | <b>1,0</b> | <b>0%</b>   | <b>1 155</b>       | <b>0,4</b> | <b>0%</b>   | <b>3 538</b>       | <b>1</b>     | <b>0%</b>   |
| <b>Education</b>                             |                 | <b>18</b>  | <b>7%</b>   |                                | <b>13</b>  | <b>4%</b>   |                                | <b>38</b>  | <b>5%</b>   |                    | <b>31</b>  | <b>5%</b>   |                    | <b>56</b>    | <b>5%</b>   |
| Small Crèche                                 | 9               | 0          |             | 7                              | 0          |             | 20                             | 0          |             | 16                 | 0          |             | 29                 | 1            |             |
| ECD Hub and Care Centre                      | 1               | 0          |             | 1                              | 0          |             | 2                              | 0          |             | 2                  | 0          |             | 4                  | 0            |             |
| Primary (including Grade R)                  | 3               | 9          |             | 2                              | 7          |             | 7                              | 19         |             | 6                  | 15         |             | 10                 | 28           |             |
| Secondary                                    | 2               | 9          |             | 1                              | 6          |             | 4                              | 18         |             | 3                  | 15         |             | 6                  | 27           |             |
| <b>Health Services</b>                       |                 | <b>1</b>   | <b>0%</b>   |                                | <b>1</b>   | <b>0%</b>   |                                | <b>2</b>   | <b>0%</b>   |                    | <b>1</b>   | <b>0%</b>   |                    | <b>2</b>     | <b>0%</b>   |
| Primary Health Clinic                        | 1               | 0          |             | 1                              | 0          |             | 2                              | 0          |             | 2                  | 0          |             | 3                  | 1            |             |
| Community Health Centre                      | 0               | 1          |             | 0                              | 0          |             | 1                              | 1          |             | 1                  | 1          |             | 1                  | 2            |             |
| <b>Safety and Security</b>                   |                 | <b>0</b>   | <b>0%</b>   |                                | <b>0</b>   | <b>0%</b>   |                                | <b>1</b>   | <b>0%</b>   |                    | <b>1</b>   | <b>0%</b>   |                    | <b>2</b>     | <b>0%</b>   |
| Police                                       | 0               | 0          |             | 0                              | 0          |             | 1                              | 1          |             | 1                  | 1          |             | 1                  | 1            |             |
| Fire Station                                 | 0               | 0          |             | 0                              | 0          |             | 1                              | 0          |             | 1                  | 0          |             | 1                  | 0            |             |
| <b>Social /Cultural</b>                      |                 | <b>2</b>   | <b>1%</b>   |                                | <b>2</b>   | <b>1%</b>   |                                | <b>5</b>   | <b>1%</b>   |                    | <b>4</b>   | <b>1%</b>   |                    | <b>8</b>     | <b>1%</b>   |
| Local Library                                | 1               | 0          |             | 1                              | 0          |             | 2                              | 0          |             | 2                  | 0          |             | 4                  | 0            |             |
| <b>Social Services</b>                       |                 |            |             |                                |            |             |                                |            |             |                    |            |             | -                  | -            |             |
| Worship Centre                               | 7               | 1          |             | 5                              | 1          |             | 16                             | 2          |             | 13                 | 2          |             | 23                 | 4            |             |
| Post Office/ICT Access Point                 | 2               | 0          |             | 2                              | 0          |             | 5                              | 0          |             | 4                  | 0          |             | 7                  | 0            |             |
| Communtiy Hall (small)                       | 2               | 1          |             | 2                              | 1          |             | 5                              | 2          |             | 4                  | 2          |             | 7                  | 4            |             |
| <b>Sports and Recreation</b>                 |                 | <b>11</b>  | <b>5%</b>   |                                | <b>8</b>   | <b>3%</b>   |                                | <b>24</b>  | <b>3%</b>   |                    | <b>19</b>  | <b>3%</b>   |                    | <b>35</b>    | <b>3%</b>   |
| Sports Facilities and Parks                  |                 | 7          |             |                                | 5          |             |                                | 14         |             | -                  | 12         |             | -                  | 21           |             |
| Regional Parks                               |                 | 4          |             |                                | 3          |             |                                | 10         |             | -                  | 8          |             | -                  | 14           |             |
| <b>Streets</b>                               |                 | <b>59</b>  | <b>24%</b>  |                                | <b>77</b>  | <b>24%</b>  |                                | <b>200</b> | <b>24%</b>  |                    | <b>136</b> | <b>24%</b>  |                    | <b>258</b>   | <b>24%</b>  |
| <b>TOTAL</b>                                 |                 | <b>242</b> | <b>100%</b> |                                | <b>318</b> | <b>100%</b> |                                | <b>824</b> | <b>100%</b> |                    | <b>559</b> | <b>100%</b> |                    | <b>1 066</b> | <b>100%</b> |
| Gross Density                                | 34              |            |             | 26                             |            |             | 25                             |            |             | 29                 |            |             | 27                 |              |             |

Assumption: 22% High Income, 14% Middle Income, 64% Low Income (Source: Community Survey 2016)

ANNEXURE B: WESTERN CAPE: LAND USE PLANNING GUIDELINES: RURAL AREAS (2019)

Source: Western Cape Land Use Planning Guidelines: Rural Areas, 2019

## 1. CONSERVATION

- Rural conservation priorities should be determined by the WC Biodiversity Spatial Plan and the associated handbook.
- Biodiversity offset Guidelines should be considered.
- Mechanisms for formally /informally protected areas of endangered-, irreplaceable biodiversity- or natural areas should be considered.
- The National Heritage Resources Act (Act 25 of 1999) provides for protection of heritage resources of cultural significance.
- Consider a range of community-based conservation programmes
- Land Use Approval: in accordance with an approved **Management Plan** (e.g. management of alien species, fires, grazing and harvesting, enforcement of current conservation policy).
- Buildings and infrastructure limited to environmental/tourist accommodation/utility services.
- Not more than 1 homestead permitted.
- Employees should be accommodated in existing settlements, unless too far for daily commuting.
- Accommodation in proclaimed nature reserves should be limited to tourist accommodation.

## 2. AGRICULTURE

**2.1 Location:** could be accommodated in the following SPC's:

Agriculture, Buffer 1, Buffer 2

### 2.2 Extensive Agriculture:

- Can be accommodated on land in Buffer 1 and Buffer 2 SPC's, that is not designated for conservation purposes
- Accommodate "nuisance" space extensive agricultural enterprises and agricultural industries within Buffer 2 and Agricultural SPC's

### 2.3 Farm Buildings:

- Farm Buildings and associated structures (e.g. 1 homestead, barns, agri – worker housing etc.) should be clustered within the farmstead precinct.
- The number of agri-worker housing units must be reasonably connected to the bona fide primary farming and agricultural activities on the farm.
- Buildings accommodating ancillary "on -farm" activities (e.g. Guest House) should be located within the farm stead precinct, subject to conditions.
- The farmstead precinct should be landscaped.

- Ancillary “on-farm” activities should not detract from the functionality and integrity of farming practices, and be of an appropriate scale and form.
- Camp sites of multiple free standing or linked structures of a temporary nature may include caravans and tents, but exclude mobile homes, are usually classified as resort development, but can be permitted on agricultural land, dependant on scale. (Should be low impact scale and intensity -maximum of 10 tent/caravan stands).

#### **2.4 Additional Dwelling Units:**

- Restricted to 1du/10ha, to a maximum of 5 units; 175m<sup>2</sup> maximum floor area including garage, building height 1 storey (6.5m).
- Additional dwelling units should be non-alienable, whether individual erf, sectional title, share block or by any other means.
- Additional dwelling units should not be allowed within 1km from the coast.
- Whilst it is preferable that additional dwelling units form part of the farmstead precinct, dispersed rental units should be in visually unobtrusive locations, and be self-sufficient in terms of services.

#### **2.5 Other Activities:**

- Other intrusive land uses should be located in urban areas. Only activities that are appropriate in a rural context should be allowed.

- Large scale resorts, tourist and recreation facilities that detract from the functionality and integrity of productive farming land should not be allowed.

#### **2.6 Development Applications:**

- Should include a locality plan to indicate how it contributes to the clustering of nodal areas in the rural landscape.
- A Site Development Plan must also be submitted.

### **3. LAND REFORM**

#### **3.1 Agricultural Projects**

- The guidelines with respect to Agriculture, remains applicable to land reform projects.
- The primary rights and development parameters applicable to agricultural zoned land in respect of 1 homestead, agricultural buildings and agri - worker housing are relevant. The provision of housing to all beneficiaries is discouraged, as only 1 homestead is allowed. The remaining occupants could be accommodated as agri - workers, but settlement formation should be guarded against. The number of agri – worker units must be reasonably connected to the bona fide farming and agricultural activities on the farm.
- Rural development plans, should inform SDF's

#### **3.2 Small scale farming in the urban fringe**

- Reserve areas suitable for small scale farming due to its characteristics and location (e.g. in close proximity to urban

areas, or along rural movement routes). New agricultural holdings in the urban fringe (within the Agricultural SPC are encouraged for cultivation and livestock purposes).

- The Western Cape Policy for the establishment of Agricultural Holdings in the Urban Fringe (2000), provides more detail on location, scale and planning of agricultural holdings.
- Agricultural Holdings are primarily established to give land reform beneficiaries access to land for farming purposes, to provide food security, or contributing to the economy.
- Minimum size: 8 000m<sup>2</sup>, and should include an independent/secured water source.
- Authorities should closely monitor and control the subdivision of land for agricultural purposes, to ensure a sustainable agricultural unit.
- The size of Agricultural Holdings and local circumstances, especially the availability of engineering services, should inform what tenure conditions are applicable.
- In order to prevent urbanisation of the agricultural holdings in the urban fringe, authorities should restrict residential rights.
- Land reform beneficiaries are encouraged to settle in nearby settlements. Only in exceptional cases, can 1 dwelling per Agricultural Holding be permitted.

### 3.3 Tenure Security

- The Western Cape Policy for the Settlement of Farm workers (2000), explains how and where various settlement options can be achieved.
- Except for agri – villages and the formalisation of missionaries, forestry and conservation settlements, no new settlement should be permitted in the rural area.
- “On -farm” settlement options are available to agri workers who reside on the farm.
- “Off the -farm” settlement should be directed to existing settlements where beneficiaries may own their own homes.
- The option of agri –workers to secure tenure in agri –villages, should only be considered, when the short and long term financial, environmental and social sustainability of such a project and be ensured, and existing settlements are too far away to commute to.

## 4 RURAL ACCOMMODATION

The WCG approach is to prevent further development of extensive residential lifestyle properties (i.e. smallholdings) in the rural landscape. Accommodation in the rural areas cater for the following two types:

#### 4.1 Tourist Accommodation

- Large scale tourist accommodation should preferably be provided in or close to urban areas.
- Tourist accommodation in rural landscape can be allowed if, of an appropriate scale and form, appropriate to SPC. Should not detract from SPC character.
- Tourist accommodation situated in the rural landscape should be clustered in visually discreet nodes.
- Cater exclusively for temporary accommodation for in transit visitors.
- Whilst it is preferable that additional dwelling units form part of the farmstead precinct, dispersed rental units should be in visually unobtrusive locations, and be self-sufficient in terms of services.
- Additional dwelling units should not be allowed within 1km from the coast and tidal rivers.
- Restricted to 1du/10ha, to a maximum of 5 units; 175m<sup>2</sup> maximum floor area including garage, building height 1 storey (6.5m)
- Additional dwelling units should be non-alienable, whether individual erf, sectional title, share block or by any other means.
- Camp sites of multiple free standing or linked structures of a temporary nature may include caravans and tents, but exclude mobile homes, are usually classified as resort development, but can be permitted on agricultural land, dependant on scale. (Should be low impact scale and intensity)
- Location should avoid high risk areas, e.g. fire, flooding etc.

- Application should be accompanied by a Locality and Site Development Plan.
- **Resort Development guidelines summary** (see report for more detail)
  - A resort development should be closely associated with a resource which distinguish the site in terms of amenity value, from surrounding properties. May not be located within productive agricultural landscapes.
  - Resort applications outside urban areas can only be considered if linked to a unique resource, unless demarcated in SDF for resort development.
  - Only in exceptional cases where special desirability factors can be motivated, would new resorts be considered.
  - Development will be confined to nodes and ribbon development should be avoided.
  - Rural resorts should be compact, clustered, and a range of accommodation types is encouraged.
  - The resort density norms table /graph should be used to establish the maximum number of units permitted on land outside the Urban Edge.

#### 4.2 Agri-(Farm) Worker Housing

- Part of normal farm operations and applicable to all rural SPC's.
- Accommodation for any other employee involved in any other land use not zoned for agriculture, is strongly discouraged.

- Farm Worker Housing should be non-alienable, whether individual erf, sectional title, share block or by any other means.
- 175m<sup>2</sup> maximum floor area including garage, building height 1 storey (6.5m). Only in exceptional circumstances should higher than single storey buildings be considered.
- The placement of units should not undermine the sustainable utilisation of agricultural resources.
- Should be clustered, where possible, along rural movement routes, existing services and housing.
- The number of units must reasonably be connected to the bona fide farming activities. Apply employee ratio norms (ratio of workers/ha per produce).
- The option of “off-the- farm” settlement in agri-villages should only be considered when existing settlements are too far away to commute to.
- The establishment of agri- villages is regarded as a new settlement.
- Accommodation should preferably be provided on the land where most production takes place, and on the larger unit.
- A Site Development Plan should be submitted and the appropriate zoning/consent use applicable be approved.

## 5 TOURIST AND RECREATIONAL FACILITIES.

- Whilst tourist and recreational facilities should be accommodated across the rural landscape (i.e. in all SPC's), the nature and scale of

the facility needs to be closely aligned with the environmental, cultural and local characteristics of the area.

- Any facility not directly related to the rural landscape should preferably be located within or close to the urban areas.
- Avoid establishing facilities with any on-site employees' residences in rural areas. Employees should be accommodated in existing settlements.
- A large-scale recreational facility which includes a residential component, should be located in the urban fringe, with the residential component treated as an extension of the urban fabric.
- The scale of a development must be limited to the extent that it will not promote secondary development on or around the site, such that a new, unplanned development node is created.
- The development should not result in the removal of access used by local communities, particularly when they are dependent on such access for their livelihood.
- Should not result in or contribute to visually obstructive or ribbon development along the coastline, visually sensitive areas, cliffs and ridges.
- Services should not result in a significant impact on society, agricultural resources, or the environment – e.g. pollution of surface and groundwater.
- Development applications should include Locality Plan, Site Development Plan, Environmental/Landscape assessment.

## 6 RURAL BUSINESS

- Appropriate Rural Businesses could be accommodated in all SPC's, but subject to restrictions and conditions.
- Place bound Rural Businesses (ancillary to agriculture or serving rural needs) include farm stalls, farm shops, restaurants and venue facilities (e.g. conferences, weddings).
- Businesses should preferably be located within the farmstead precinct, and be of appropriate scale and vernacular design.
- Private educational and institutional facilities, rehabilitation and wellness centres are regarded as business and not community facilities, and should be located in urban areas.
- Non-place bound businesses, should be located within urban areas, and should only be considered in exceptional circumstances.
- Development applications should include a Locality Plan and Site Development Plan.
- Farm shop: limited to selling daily requisites to agri/farm-workers. Maximum floor space: 100m<sup>2</sup> including storage.
- Farm stall: selling products produced and processed on the farm to tourists and travellers. Maximum floor space: 100m<sup>2</sup> including storage.
- Restaurant and Venue facilities to be of a scale compatible with surrounding rural context.

## 7 MINING AND INDUSTRY IN RURAL AREAS

- Limited to Buffer 2, Agriculture and Settlement SPC's.
- Industry in rural areas should support the rural economy, conservation and tourism (at an appropriate scale).
- Place bound agricultural industries (locally sourced products) should be located within the farmstead precinct
- Agricultural industries should be subservient or related to the dominant agricultural use of the property and/or surrounding farms.
- Non-place bound industries (not ancillary to agriculture or serving the rural needs) should be located in urban areas.
- Industries associated with tourists' facilities can be accommodated.
- Extractive industry (i.e. quarrying and mining) and secondary beneficiation (e.g. cement block production, premix asphalt plants etc) have to take place at the source. Biodiversity offset must be considered.
- All industries should exclude any permanent on-site accommodation for workers/labourers
- The subdivision of agricultural land to accommodate industries should be discouraged and only used as last resort.
- Conditions should be imposed to effectively manage waste and effluent.
- Application should be accompanied by a Locality-, and Site Development Plan

## 8 COMMUNITY FACILITIES AND INSTITUTIONS

- Should be located in Buffer 2, Agriculture and Settlement SPC's.
- Where-ever practical, should be located in settlements, and not in isolated locations, and should be for the exclusive or primary use of the local rural community. Location within the rural landscape only in exceptional circumstances, e.g. when travel distances are too far, or rural population concentrations justifies the provision of facilities. Preferably along regional accessible routes.
- "On -farm" facilities: existing farm structures should be utilised.
- Facilities to be located on disturbed areas, or areas of low biodiversity/agricultural potential.
- Nodal clustering of facilities in service points should be promoted. The scale and frequency as per departmental specifications, informed by local scale, form and vernacular of buildings.
- The subdivision of agricultural land to accommodate community facilities, should be discouraged. Lease agreements are preferred, so that buildings can be re-used for agricultural activities if the service is discontinued.
- Application should be accompanied by a Locality-, and Site Development Plan

## 9 INFRASTRUCTURE INSTALLATIONS

- Infrastructure installations should preferably be located in Buffer 2, Settlement SPC's.
- Only essential infrastructure should be located within the Agricultural SPC.
- Where locations inside urban areas are impractical, then extensive agricultural areas peripheral to settlements are preferable.
- Installations to be located on disturbed areas, or areas of low biodiversity/agricultural potential.
- Every care should be taken to limit any negative impact on the environment.
- Any installations/infrastructure that has reached the end of its productive life, or has been abandoned, should be removed.
- All access routes utilised during the construction phase should be restored to its original state after completion of the infrastructure
- No subdivision of agricultural land to accommodate infrastructure, will be allowed, unless the application adheres to the norms and standards for approval of the sub-division of agricultural land.
- Installations of infrastructure should comply with all norms and standards relating to lighting, buffer zones, signs, commercial advertising, height, setbacks, landscaping, screening and architectural design.
- Avoid establishing installations with any permanent onsite employees' residential component.

## 10 URBAN DEVELOPMENT

### 10.1 Urban

- Low density sprawl /urban encroachment into the rural landscape should be limited to the minimum.
- Spatial growth pressures should be managed with tools such as the urban edge.
- Smart growth principles such as integration, intensification and urban restructuring should be promoted. Include growth management tools as part of SDF.
- All areas recognised as urban nodes, urban development or expansion areas, should be reflected as part of the Settlement SPC.
- Municipal SDF's should specifically deal with urban fringe development issues, e.g. Big Box developments should be limited in the urban fringe.
- Consider the settlement hierarchy of WC and take into account the role, character and location of urban areas.
- In remote locations, or exceptional cases, new development in the rural areas should be channelled to existing nodes.
- In all cases the provision of housing and associated services to rural communities should preferably take place in existing settlements.
- No new settlement should be permitted in the rural landscape; except agri-villages, or the formalisation of existing missionaries, forestry and conservation settlements.

### 10.2 Smallholdings/Lifestyle estates

- The establishment of new small holdings (e.g. rural lifestyle-, agricultural estates) is not encouraged, but if planned, then it should be limited to appropriate locations close to settlements, and should not be permitted in agricultural areas. (size between 4 000m<sup>2</sup> and 3 ha recommended in the urban fringe)
- The location should not have a detrimental effect on high and medium potential agricultural land or land of biodiversity significance.
- A Management and Site Development Plan should be compiled.
- Existing smallholdings in CBA's and ESA's are encouraged to include measures, to manage the biodiversity on site and minimise impacts, and may include overlay zones to manage additional restrictions.
- A clear distinction must be made between smallholdings of a residential -, and those of a bona fide agricultural nature (agricultural holdings i.e. small-scale farming in the urban fringe).

**NOTE: Decisions on Deviation from Guidelines are described in  
Annexure A of the WC Rural Areas Guidelines**

**A decision maker is not prohibited from taking a decision on a land development application if the decision deviates from the guidelines, provided that the application must motivate to justify the deviation.**

## ANNEXURE C: ENVIRONMENTAL GUIDELINES

### ANNEXURE C1: WETLANDS, ESTUARIES AND DAMS

**Map 1: Bitou's Estuaries, Wetlands & Dams**



Bitou's wetlands and estuaries provide vital habitat for flora and fauna, as well as critical ecosystem services to the Municipality (and inhabitants of Bitou). Furthermore, their aesthetic and activity value associated with tourism and the tourism economy that drives Plettenberg Bay is extremely significant.

Bitou's main estuaries, wetlands and dams include the following, with more and more dams being constructed in the rural agricultural areas:

Keurbooms Estuary  
 Salt River Mouth  
 Groot River Mouth  
 Matjies River Estuary  
 Piesang River Estuary  
 Bitou Wetland  
 Roodefontein Dam

Estuaries and wetlands in the Bitou area fall within Protected Areas, Critical Biodiversity Areas or Ecological Support Areas. The Eden SDF (2017) states, "the economy is the environment". With this, these areas are considered to be of high value in terms of their ecological infrastructure and they are protected in terms of the following legislation or structures:

- The National Water Act, 36 of 1998 (NWA)
- The National Environmental Management Act, 36 of 1998 (NEMA)
- The National Environmental Management Act, 36 of 1998 Regulations
- The National Environmental Management: Biodiversity Act, 10 of 2004 (NEM: BA)

- The Conservation of Agricultural Resources Act, 43 of 1983 Regulations
- Draft Coastal Management Lines for Eden District, 2018: (<https://sites.google.com/site/rhdhvcoastal/>)
- The Keurbooms Bitou Estuary Management Plan
- The Piesang River Estuary Management Plan
- The Sout River (East) Estuary Management Plan
- The Matjies River Estuary Management Plan

It is important to note that the Keurbooms Estuary has been ranked as the 18th most important estuary in South Africa in terms of biodiversity with an overall importance score of 88 out of a possible 100. The Keurbooms Bitou Estuary Management Plan has specific recommendations for the management of the system and local by-laws have been produced to manage activities on the system. Managing authorities include Bitou Municipality and CapeNature and the Keurbooms Bitou Estuary Management Forum who works with agencies in the management of local estuaries.

Impacts threatening the health of the wetland and estuarine systems include the following:

- Unmanaged and illegal water extraction
- High water demand agricultural activities
- Land use activities impacting soil and vegetation cover resulting in soil erosion, siltation
- Use of pollutants near water bodies
- Sewage infiltration into systems
- Instream dams, bridges, causeways, jetties or weirs impeding flow into or within systems
- Activities taking place within a system that, over time, result in bank erosion
- Resource use from a system (fishing, bait collecting, harvesting of reeds, etc.) that is illegal and/or unmanaged and/or unmonitored
- Uncontrolled or illegal use of craft
- Unmanaged invasive alien vegetation in catchment and riparian areas impacting water flow into estuaries and wetlands
- Inappropriate development

Applicable sections from legislation and guidelines

- The National Water Act, 36 of 1998 (NWA):
  - a. Abstraction of water from a wetland, impeding or diverting the flow of water in a watercourse, altering the bed, banks, course of characteristics of a wetland and discharging water containing waste or discharging pollutants into a water course are all actions that are not permitted and any development or activity that results in this is not permitted.
  - b. Any activity or development that results in the illegal, unlawful, unpermitted abstraction, use or storage of water should not be permitted.
  - c. Chapter 3, Part 4 of the Act deals with prevention of pollution
  - d. Chapter 4 of the Act deals with water use.

- e. Chapter 14, Part 3 of the Act requires Municipalities to identify the 100 year flood line on maps so that informed decision making is possible. Currently in the Bitou Municipal area the 1:100 year floodline applies and development within this zone should not be considered.
  - The National Environmental Management Act, 36 of 1998 (NEMA):
    - a. NEMA states that environmental authorisation is required for listed activities, including specified activities within 32 or 100 metres of a watercourse (this includes a wetland or estuary), depending on the activity.
    - b. Chapter 1 deals with environmental management principles and section 4 is of particular relevance, dealing with sustainable development and environmental impacts, access, heritage, waste, public participation and resource issues.
  - The National Environmental Management Act, 36 of 1998 (NEMA), Environmental Impact Assessment 2014 (as Amended) Regulations:
    - a. The Regulations deal with the Environmental Impact Assessment processes, procedures, timeframes and authorities and, attached to this, are the lists of activities that require authorisation prior to commencement of that activity. Listing notice 1 sets out activities deemed to be less impactful and which legally require a basic assessment process which Listing Notice 2 includes activities that result in more impact and which require a scoping process and an environmental impact assessment.
  - b. **Listing 1** includes the following:
    - (12) The development of—
      - (i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or
      - (ii) infrastructure or structures with a physical footprint of 100 square metres or more;
- where such development occurs—
- (a) within a watercourse;
  - (b) in front of a development setback; or
  - (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; —
- excluding—
- (aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;
  - (bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;
  - (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;
  - (dd) where such development occurs within an urban area;
  - (ee) where such development occurs within existing roads, road reserves or railway line reserves; or
  - (ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the

- commencement of development and where indigenous vegetation will not be cleared.
- (13) The development of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50 000 cubic metres or more, unless such storage falls within the ambit of activity 16 in Listing Notice 2 of 2014.
- (15) The development of structures in the coastal public property where the development footprint is bigger than 50 square metres, excluding—
- (i) the development of structures within existing ports or harbours that will not increase the development footprint of the port or harbour;
  - (ii) the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;
  - (iii) the development of temporary structures within the beach zone where such structures will be removed within 6 weeks of the commencement of development and where coral or indigenous vegetation will not be cleared; or
  - (iv) activities listed in activity 14 in Listing Notice 2 of 2014, in which case that activity applies.
- (17) Development—
- (i) in the sea;
  - (ii) in an estuary;
  - (iii) within the littoral active zone;
  - (iv) in front of a development setback; or
  - (v) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater;

in respect of—

- (a) fixed or floating jetties and slipways;
- (b) tidal pools;
- (c) embankments;
- (d) rock revetments or stabilising structures including stabilising walls; or
- (e) infrastructure or structures with a development footprint of 50 square metres or more

but excluding—

- (aa) the development of infrastructure and structures within existing ports or harbours that will not increase the development footprint of the port or harbour;
  - (bb) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;
  - (cc) the development of temporary infrastructure or structures where such structures will be removed within 6 weeks of the commencement of development and where coral or indigenous vegetation will not be cleared; or
  - (dd) where such development occurs within an urban area.
- (18) The planting of vegetation or placing of any material on dunes or exposed sand surfaces of more than 10 square metres, within the littoral active zone, for the purpose of preventing the free movement of sand, erosion or accretion, excluding where —
- (i) the planting of vegetation or placement of material relates to restoration and maintenance of indigenous coastal vegetation undertaken in

- accordance with a maintenance management plan; or
- (ii) such planting of vegetation or placing of material will occur behind a development setback
- (19) The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse; but excluding where such infilling, depositing, dredging, excavation, removal or moving—
  - (a) will occur behind a development setback;
  - (b) is for maintenance purposes undertaken in accordance with a maintenance management plan;
  - (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;
  - (d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or
  - (e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.
- (19A) The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from—
  - (i) the seashore;
  - (ii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater; or
  - (iii) the sea; —

but excluding where such infilling, depositing, dredging, excavation, removal or moving—

- (f) will occur behind a development setback;
- (g) is for maintenance purposes undertaken in accordance with a maintenance management plan;
- (h) falls within the ambit of activity 21 in this Notice, in which case that activity applies;
- (i) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or (*Publisher's note – Numbering as published in Gazette No. 40772*) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.
- (48) The expansion of—
  - (i) infrastructure or structures where the physical footprint is expanded by 100 square metres or more; or
  - (ii) dams or weirs, where the dam or weir, including infrastructure and water surface area, is expanded by 100 square metres or more;

where such expansion occurs—

- (a) within a watercourse;
- (b) in front of a development setback; or
- (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse;

excluding—

- (aa) the expansion of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;

- (bb) where such expansion activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;
  - (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 23 in Listing Notice 3 of 2014, in which case that activity applies;
  - (dd) where such expansion occurs within an urban area; or
  - (ee) where such expansion occurs within existing roads, road reserves or railway line reserves.
- (52) The expansion of structures in the coastal public property where the development footprint will be increased by more than 50 square metres, excluding such expansions within existing ports or harbours where there will be no increase in the development footprint of the port or harbour and excluding activities listed in activity 23 in Listing Notice 3 of 2014, in which case that activity applies.
- (54) The expansion of facilities—
- (i) in the sea;
  - (ii) in an estuary;
  - (iii) within the littoral active zone;
  - (iv) in front of a development setback; or
  - (v) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater;
- in respect of—
- (a) fixed or floating jetties and slipways;
  - (b) tidal pools;
  - (c) embankments;
  - (d) rock revetments or stabilising structures including stabilising walls; or

- (e) infrastructure or structures where the development footprint is expanded by 50 square metres or more,
- but excluding—
- (aa) the expansion of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour; or
  - (bb) where such expansion occurs within an urban area.
- (55) Expansion—
- (i) in the sea;
  - (ii) in an estuary;
  - (iii) within the littoral active zone;
  - (iv) in front of a development setback; or
  - (v) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater;
- in respect of —
- (a) facilities associated with the arrival and departure of vessels and the handling of cargo;
  - (b) piers;
  - (c) inter- and sub-tidal structures for entrapment of sand;
  - (d) breakwater structures;
  - (e) coastal marinas;
  - (f) coastal harbours or ports;
  - (g) tunnels; or
  - (h) underwater channels;
- but excluding the expansion of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.

- (66) The expansion of a dam where—
- (i) the highest part of the dam wall, as measured from the outside toe of the wall to the highest part of the wall, was originally 5 metres or higher and where the height of the wall is increased by 2,5 metres or more; or
  - (ii) where the high-water mark of the dam will be increased with 10 hectares or more.

c. **Listing 2** includes the following:

- (16) The development of a dam where the highest part of the dam wall, as measured from the outside toe of the wall to the highest part of the wall, is 5 metres or higher or where the high-water mark of the dam covers an area of 10 hectares or more.
- (24) The extraction or removal of peat or peat soils, including the disturbance of vegetation or soils in anticipation of the extraction or removal of peat or peat soils, but excluding where such extraction or removal is for the rehabilitation of wetlands in accordance with a maintenance management plan.
- (26) Development—
  - (i) in the sea;
  - (ii) in an estuary;
  - (iii) within the littoral active zone;
  - (iv) in front of a development setback; or
  - (v) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater;

in respect of —

- (a) facilities associated with the arrival and departure of vessels and the handling of cargo;
- (b) piers;
- (c) inter- and sub-tidal structures for entrapment of sand;
- (d) breakwater structures;
- (e) coastal marinas;
- (f) coastal harbours or ports;
- (g) tunnels; or
- (h) underwater channels;

but excluding the development of structures within existing ports or harbours that will not increase the development footprint of the port or harbour.

d. **Listing 3** includes the following:

|      |  |  |
|------|--|--|
| (12) | <p>The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</p>   | <p><b>i. Western Cape</b></p> <ul style="list-style-type: none"> <li>i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</li> <li>ii. Within critical biodiversity areas identified in bioregional plans;</li> <li>iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas;</li> <li>iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or</li> <li>v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.</li> </ul> |
| (14) | <p>The development of—</p> <ul style="list-style-type: none"> <li>(i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or</li> <li>(ii) infrastructure or structures with a physical footprint of 10 square metres or more;</li> </ul> <p>where such development occurs—</p> <ul style="list-style-type: none"> <li>(a) within a watercourse;</li> <li>(b) in front of a development setback; or</li> <li>(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse; excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.</li> </ul> | <p><b>Western Cape</b></p> <ul style="list-style-type: none"> <li>i. Outside urban areas: <ul style="list-style-type: none"> <li>(aa) A protected area identified in terms of NEMPAA, excluding conservancies;</li> <li>(bb) National Protected Area Expansion Strategy Focus areas;</li> <li>(cc) World Heritage Sites;</li> <li>(dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;</li> <li>(ee) Sites or areas listed in terms of an international convention;</li> <li>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</li> <li>(gg) Core areas in biosphere reserves; or</li> <li>(hh) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined.</li> </ul> </li> </ul>   |

|      |   |   |
|------|---|---|
| (16) | <p>The expansion of reservoirs, excluding dams, where the capacity will be increased by more than 250 cubic metres.</p>   | <p><b>i. Western Cape</b></p> <ul style="list-style-type: none"> <li>i. A protected area identified in terms of NEMPAA, excluding conservancies;</li> <li>ii. In areas containing indigenous vegetation; or</li> <li>iii. Inside urban areas: <ul style="list-style-type: none"> <li>(aa) Areas zoned for use as public open space; or</li> <li>(bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose, including residential areas.</li> </ul> </li> </ul>   |
| (23) | <p>The expansion of—</p> <ul style="list-style-type: none"> <li>(i) dams or weirs where the dam or weir is expanded by 10 square metres or more; or</li> <li>(ii) infrastructure or structures where the physical footprint is expanded by 10 square metres or more;</li> </ul> <p>where such expansion occurs—</p> <ul style="list-style-type: none"> <li>(a) within a watercourse;</li> <li>(b) in front of a development setback adopted in the prescribed manner; or</li> <li>(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse; excluding the expansion of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.</li> </ul> | <p><b>i. Western Cape</b></p> <ul style="list-style-type: none"> <li>i. Outside urban areas: <ul style="list-style-type: none"> <li>(aa) A protected area identified in terms of NEMPAA, excluding conservancies;</li> <li>(bb) National Protected Area Expansion Strategy Focus areas;</li> <li>(cc) World Heritage Sites;</li> <li>(dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;</li> <li>(ee) Sites or areas listed in terms of an international convention;</li> <li>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</li> <li>(gg) Core areas in biosphere reserves; or</li> <li>(hh) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined.</li> </ul> </li> </ul> |

- The National Environmental Management: Biodiversity Act, 10 of 2004 (NEMBA) provides for the management and conservation of species and ecosystems that warrant protection. Threatened and endangered species and ecosystems are identified and reference is made to activities in section 24 of the National Environmental Management Act in terms of specified activities and the issuing of permits for restricted activities involving listed threatened or protected species.
  - a. Chapter 5 deals with the prevention of the spread of alien and invasive species and the control of these. Many invasive species either thrive and/or are found around riparian and wetland areas and this thus has relevance.
  - b. Chapter 6 pertains to the regulation of bioprospecting involving indigenous biological resources and the equitable sharing of benefits arising from this. This is relevant in the Bitou area for several indigenous plants that may be grown commercially (for example, Honeybush tea, various species of Buchu, African Potato, indigenous aromatherapy oils, etc).
  - c. Chapter 7 provides for the regulation of the issuing of permits for undertaking restricted activities linked to threatened or protected species, alien or invasive species, bioprospecting and exporting linked to this.
- The Conservation of Agricultural Resources Act, 43 of 1983 Regulations:
  - a. Part II 15B(9) & 15C(3)(a) state that unless authorisation has been obtained (National Water Act), no land user shall allow

category 2 OR 3 plants to occur within 30 meters of the 1:50 year flood line of a river, stream, spring, natural channel in which water flows regularly or intermittently, lake, dam or wetland.

- b. Part I 7.(1). Making reference to the Water Act, no land user is allowed to use the vegetation in a vlei, marsh or water sponge or within the flood area of a water course of within 10 metres horizontally outside the flood area in a manner that damages the natural agricultural resources.
  - c. Part I 7.(3) (a) & (b) Unless written permission has been granted, no land user may drain or cultivate a vlei, marsh or water sponge or a portion thereof or cultivation any land on his farm within the flood area of a water course or within 10 metres horizontally outside the flood area of a water course.
  - d. Part I 8.(1) No land user may divert run-off water from a water course to any other water course without permission.
- Draft Coastal Management Lines for Eden District, 2018 (APPLICABLE TO ESTUARIES):

Features for the Bitou Municipal area used for delineation of the draft coastal management lines for Eden District Municipality were listed as follows:

|                           |  |
|---------------------------|--|
| Knysna to Plettenberg Bay | 100yr risk zone<br>Sensitive biodiversity (WCBSP)<br>Protected Area<br>(Note the development island in the Harkerville area) |
| Plettenberg Bay           | Protected area   |

|  |   |
|--|---|
|  | 50yr risk line<br>5m amsl contour   |
| Plettenberg Bay to<br>Keurboomstrand,<br>including the<br>Keurbooms River<br>estuary | 100yr floodline<br>Sensitive biodiversity (WCBSP)<br>Protected Area<br>100yr risk line<br>50yr risk line                      |
| Keurbooms River to<br>Nature's Valley  | Protected Area<br>Sensitive biodiversity (WCBSP)<br><i>(Note development islands at Nature's<br/>Valley and further East)</i> |

In terms of the EIA Regulations, the Draft Coastal Management Lines (2018) includes an appendix with a list of activities that trigger an EIA:

#### LISTING NOTICE 1

- a. Activity 17 (II) & (IV) Development in an estuary or; If no development setback exists, within 100 metres inland of the high water mark of the sea or estuary, whichever is the greater.
- b. Activity 19A (II): The infilling of depositing of material of more than 5m<sup>3</sup> into an estuary or a distance of 100m inland of the high water mark of the sea or an estuary, whichever distance is the greater.
- c. Activity 48 (II), (a), (b) & (c): The expansion of dams or weirs, where the dam or weir, including infrastructure and water surface area, is expanded by 100m<sup>2</sup> or more where such expansion occurs within a watercourse, in front of a development setback or, if no setback exists, within 32m of a watercourse, measured from the edge of a watercourse.
- d. Activity 54 (II) & (IV): The expansion of facilities in an estuary or in front of a development setback.

- e. Activity 55 (II), (IV) & (V), (b), (c): Expansion in an estuary or in front of a development setback or within a distance of 100m inland of the high water mark of the sea of an estuary (whichever is the greater) in respect of piers and inter and sub-tidal structures for entrapment of sand.

#### LISTING NOTICE 2

- a. Activity 26 (II), (IV) & (V), (b), (c): Development in an estuary or in front of a development setback or within a distance of 100m inland of the high water mark of the sea of an estuary (whichever is the greater) in respect of piers and inter and sub-tidal structures for entrapment of sand.

#### LISTING NOTICE 3

- a. Activity 4 (II) (bb): Development of a road wider than 4m with a reserve less than 13,5m in areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined.
- b. Activity 10 (III) (cc): The development and related operation of facilities or infrastructure for the storage or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 m<sup>3</sup> inside urban areas on the watercourse side or estuary side of the development setback line or within 100m from the edge of a watercourse where no such setback line has been determined or

in an estuarine functional zone where no such setback line has been determined.

- c. Activity 12 (III): The clearance of an area of 300m<sup>3</sup> or more of indigenous vegetation, unless required for maintenance purposes in accordance with a management plan, 100m inland from the high water mark of an estuarine functional zone.
- d. Activity 13 (I): The development and operation of any size of facility of aquaculture in areas on the estuary side of the development setback line or in an estuarine functional zone where no setback line has been established.
- e. Activity 14 (I), (II), (a), (b), (c), (hh): The development of dams or weirs exceeding 10m<sup>2</sup> (including infrastructure) or structures with a footprint of 10m<sup>2</sup> or more within a watercourse, in front of a development setback or, if no setback is established, within 32m of a watercourse edge, or in areas on the estuary side of the development setback line or in an estuarine functional zone.
- f. Activity 18 (II)(bb): The widening of a road by more than 4m, or lengthening by more than 1km in areas on the estuary side of the development setback line or in an estuarine functional zone where no setback line has been established.
- Integrated Coastal Management Act, 24 of 2008: This Act includes estuarine management and aims to maintain the natural attributes of coastal landscapes, control pollution, inappropriate development and other adverse effects on the coastal environment.

- a. Chapter 2, Part 3: Each municipality is required to designate strips of land as coastal access in order to secure public access to coastal public property, with appropriate signage, control of use, provision of facilities, etc. This includes access to estuarine areas with public property designation.
- b. Chapter 4 of the Act deals with estuaries and refers to the national protocol and estuarine management plan and the need to ensure that the management plan aligns with Parts 1, 2 and 3 of Chapter 6 of this Act wherein Part 3 48 (4) states that a municipality may adopt a coastal management programme as part of an IDP and Spatial Development Framework.
- c. Chapter 6, Part 7 56 discusses coastal planning schemes in coastal zones and may be applied in the context of the Bay Management Plan (Kingwill, Robinson, WWF, et al).
- d. Chapter 7 deals with the protection of the coastal environment and refers to Section 28 of NEMA, including the coastal environment as an area of avoidance for pollution or environmental degradation. The Minister may issue coastal protection notices to people responsible for activities that are identified as being inappropriate or illegal.
- e. Chapter 7, Part 3 63 (1): Environmental authorisations for coastal activities that are considered in terms of NEMA, must take into account the factors listed under 63 (1) and (2), including estuarine and coastal management programmes applicable in the area, as well as the cumulative effect of an activity.
- f. Chapter 8, 69: No person may discharge effluent or pollution into an estuary without special authorisation.

## ANNEXURE C2: INDIGENOUS FORESTS

**Map 1: Indigenous Forests**

Both Southern Afrikanian Forest and Southern Coastal Forest (or Western Cape Milkwood Forest) types are found in the area. Forests are fairly resilient ecosystems, despite being impacted by a history of logging and resource use. However fragmentation of forested areas should be avoided at all costs.

Ideally, forests should have buffer areas surrounding them to protect them from the impacts of land-use practices in the area and which form dispersal corridors between forest patches for safe animal migrations.

Invasion by alien vegetation poses one of the greatest threats to the health of the forests in the area, along with inappropriate developments impacting connectivity between forest patches.

According to the Western Cape Biodiversity Spatial Plan Handbook (2017), where forests are in areas classified as ESA's, these areas should be maintained in as near natural state as possible to retain ecological functioning. In some areas the indigenous forest may support the functioning of protected areas or critical biodiversity areas. Should the forested area occur in a CBA, no further loss of natural habitat should take place and degraded areas should be rehabilitated. Development should be avoided in these areas.

Over and above this, the following legislation and documents pertain to the protection of forests (See Annexure 1B):

- The National Forests Act 84 of 1998
- Policy, Principles & Guidelines for the Control of Development Affecting Natural Forests, 2009 (DAFF)
- The National Forests 84 of 1998:

- a. Chapter 3, Part 1, 7.(1) prohibits any person from cutting, disturbing, damaging or destroying any indigenous tree or removing a tree from a forest without permission;
  - b. Chapter 3, Part 1, 10. (1) prevents anyone from cutting, damaging, disturbing or removing any forest produce from a protected area without permission;
  - c. Chapter 3, Part 1, 15 (1) refers to trees declared as being protected by the Minister and prohibits anyone from damaging or removing them without permission;
  - d. Chapter 4, Part 2, 23. (2) prevents any person from engaging in any activity in a State forest without a licence if a licence is required.
- Policy, Principles and Guidelines for Control of Development Affecting Natural Forests, 2009 (DAFF):

The document was produced by DAFF to provide support for the understanding and implantation of the National Forests Act, 84 of 1998. The importance/rationale for the protection of indigenous forests are highlighted as follows:
- i. This biome has the highest diversity of plant species per unit area (418 per hectare compare to 98 per hectare for the Fynbos);
  - ii. Forests are important areas as carbon sinks (mitigating climate change impacts);
  - iii. They are important in the functioning of water catchments and erosion control;
  - iv. They are important for ecotourism (a vital part of Bitou's economy)
- a. The document also states that no land uses that will significantly impact on forest habitats (residential, capital infrastructure and agricultural developments) must be permitted in or near indigenous forests, referring to the National Forests Act.

**ANNEXURE C3: SUGGESTED SCREENING PROCESS FOR CBA & ESA AREAS**

This pre-application screening process prevents the irreversible net loss of biodiversity and it is a defining principle of international best practice. (Western Cape Biodiversity Spatial Plan Handbook (WCBDSPH, 2017)) Further, the pre-application screening process will determine whether an Environmental Authorisation is required. It ensures compliance with local objectives. It will speed up the development process through identifications of alternatives which might not bear the same environmental weight. Lastly, it will allow the proponent to design a developmental proposal taking into consideration the environmental constraints (WCBDSPH, 2017).

Pre-Application Screening Process (Environmental consultant)

If the area is defined as CBA / ESA / Critically Endangered or Endangered:

1. An environmental consultant must be appointed by the applicant;
2. The environmental consultant must ground-truth the ecological status of the area with what is present;
3. Compromises and solutions must be identified which minimises the impacts on biodiversity and conflicts in the land use;
4. One should maximise the connectivity in CBA's and ESA's and avoid removal of intact natural habitat and fragmentation;
5. Unavoidable impacts must be minimized;
6. Take the opportunity to conserve biodiversity by setting aside a part of the land to be managed for conservation purposes;
7. Take the opportunity to promote alien eradication and control strategies;
8. Remedy habitat degradation and fragmentation through rehabilitation;
9. Promote long-term persistence of taxa of conservation concern;
10. Further, they must conduct a screening process to determine if an Environmental Authorisation is required;
11. Alternatives must be identified in selecting the best practicable environmental option;
12. Any recommendations must be made in terms of ensuring environmental management which protects sensitive, vulnerable, highly dynamic or stressed ecosystems and ensures that the project is consistent with the 'Duty of Care' principal, i.e that the proponent has taken reasonable measures to prevent any significant degradation of the environment;
13. When significant impacts are unavoidable the process as defined by the WCBSPH must be followed;
14. All protected trees need to be demarcated and protected, or a license must be obtained from Forestry.

Process (Municipal officials)

If the area is defined as CBA / ESA / Critically Endangered or Endangered:

1. An environmental consultant must be appointed by the applicant;
2. Conservation agreements must be considered and promoted;
3. If the ecosystems reflect their current status, an EMP must be a condition to ensure mitigation of detrimental effects to CBA/ESA/Endangered ecosystems;
4. The EMP must address the continual eradication and control of Invasive Alien Species and;
5. The EMP must address the continued conservation of the ecosystems;
6. If an environmental authorisation is required, an EMP must still be a development condition and its objectives must reflect those mentioned above. The same EMP can be used, as long as it reflects the local objectives.

#### ANNEXURE C4: COASTAL AREAS

- Outeniqua Sensitive Coastal Area Extension Act: Certain areas have been designated as sensitive in terms of these regulations and require approval from the local municipality should any of the following activities wish to be undertaken:
  - a. Disturbance of vegetation – trampling, cutting or removal of vegetation.
  - b. Earthworks – excavation, moving, removal, depositing or compacting of soil, sand, rock or rubble.
  - c. Dredging – dredging, excavation, removal or moving of soil, sand or rock from a river, tidal lagoon, tidal river, floodplain or wetland.
  - d. Dune stabilisation – planting on, or covering with any vegetation, natural or synthetic material of, dunes or exposed sand surfaces, or the erection of structures and walls thereon with the purpose of preventing the sand from being eroded, accreted or moved by wind or water.
  - e. Should a property be contained within these areas an application for an OSCAER permit is to be applied for through the Town Planning Department of the Economic Development and Planning of the municipality prior to the activity being undertaken.
- Integrated Coastal Management Act, 24 of 2008:
  - a. Chapter 2, Part 1, 11 (1) (2) Ownership of public property rests with the citizens of the Republic and is held in trust by the State. It is inalienable, cannot be sold, acquired and rights over it cannot be acquired.
  - b. Chapter 2, Part 1, 15 (1) (2) No person may require that the state or anyone else take measures, including construction, maintain or extend any structure, to prevent the erosion or accretion of the seashore, coastal public property or of land adjacent to coastal public property, unless the erosion is caused by an intentional act or omission.
  - c. Part 2, 16 (1) (2), 17 This section specifically defines the Coastal Protection Zone which requires protection, conservation and maintenance of the natural functioning as far as possible.
  - d. Chapter 7, Part 3, 63 deals with environmental authorisations for activities in coastal areas and refers to NEMA, estuarine management plans, coastal management programmes, coastal management lines and coastal management objectives, thereby giving effect to these documents.
  - e. Chapter 8, 69 (1)(2)(3) states that no person may discharge effluent into coastal waters without special permission.
  - f. Chapter 8, 70 prohibits incineration or dumping at sea.

## ANNEXURE C5: COASTAL MANAGEMENT LINES

Features for the Bitou Municipal area used for delineation of the draft coastal management lines for Eden District Municipality were listed as follows:

|  |   |
|--|---|
| Knysna to Plettenberg Bay  | 100yr risk zone<br>Sensitive biodiversity (WCBSP)<br>Protected Area<br><i>(Note the development island in the Harkerville area)</i> |
| Plettenberg Bay  | Protected area<br>50yr risk line<br>5m amsl contour   |
| Plettenberg Bay to Keurboomstrand, including the Keurbooms River estuary | 100yr floodline<br>Sensitive biodiversity (WCBSP)<br>Protected Area<br>100yr risk line<br>50yr risk line                            |
| Keurbooms River to Nature's Valley                                       | Protected Area<br>Sensitive biodiversity (WCBSP)<br><i>(Note development islands at Nature's Valley and further East)</i>           |

EIA listed activities (activities not allowed without following due process and being granted permission) related to development set-backs are included as follows (excluded here are those pertaining to estuaries, dams and watercourses):

## LISTING NOTICE 1

- a. 12 (ii) (b) The development of infrastructure or structures with a footprint of 100m<sup>2</sup> or more in front of a development setback.
- b. 17 (i) (iii) (iv) (v) (a) (b) (c) (d) (e) Development in the sea, estuary, littoral active zone, in front of a development setback or within a distance of 100m inland of the high water mark of the sea.
- c. 18 (i) (ii) Planting of vegetation or placing material on dunes or exposed sand surfaces of more than 10m<sup>2</sup> within the littoral active zone, to prevent the free movement of sand, erosion or accretion, unless this relates to restoration and/or maintenance of indigenous coastal vegetation as part of a management plan or it occurs behind a development setback.
- d. 19A(i) (ii) (iii) Infilling or depositing of material of more than 5m<sup>3</sup> into, or dredging, excavation, removal of soil, sand, shells, pebbles, or rock of more than 5m<sup>3</sup> from the seashore, the littoral active zone or a distance of 100m inland of the high water mark of the sea/estuary or the sea.
- e. 54 (i) (iii) (iv)(v) (a) (b) (c) (d) (e) The expansion of facilities in the sea, within the littoral active zone, in front of development setbacks (or within 100m inland of the high water mark of the sea) in respect of jetties, tidal pools, embankments, rock revetments or stabilising structures, infrastructure where the development footprint is expanded by 50m<sup>2</sup> or more.

- f. 55 (i) (iii) (iv) (v) (b) (c) (d) Expansion in the sea, within the littoral active zone, in front of a development setback (or within 100m inland of the high water mark of the sea) in respect of piers, inter- and sub-tidal structures for entrapment of sand, breakwater structures.

#### LISTING NOTICE 2

- a. Activity 26 (i), (iii) (iv) (v) (b) (c) (d): Development in the sea, within the littoral active zone, in front of a development setback or within a distance of 100m inland of the high water mark of the sea in respect of piers, inter and sub-tidal structures for entrapment of sand and breakwater structures.

#### LISTING NOTICE 3

- a. Activity 10 (III) (aa): The development and related operation of facilities or infrastructure for the storage or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 m<sup>3</sup> inside urban areas seawards of the development setback line or within

200m from the high water mark of the sea (if no development setback line is determined).

- b. Activity 12 (III): The clearance of an area of 300m<sup>3</sup> or more of indigenous vegetation, unless required for maintenance purposes in accordance with a management plan, 100m inland from the high water mark of an estuarine functional zone.
- c. Activity 13 (I): The development and operation of any size of facility of aquaculture in areas on the estuary side of the development setback line or in an estuarine functional zone where no setback line has been established.
- d. Activity 14 (I), (II), (a), (b), (c), (hh): The development of dams or weirs exceeding 10m<sup>2</sup> (including infrastructure) or structures with a footprint of 10m<sup>2</sup> or more within a watercourse, in front of a development setback or, if no setback is established, within 32m of a watercourse edge, or in areas on the estuary side of the development setback line or in an estuarine functional zone.

**ANNEXURE C5.1: SUGGESTED COASTAL DEVELOPMENT PARAMETERS FOR APPLICATION AT MUNICIPAL LEVEL**

Specific development management parameters are the most basic form of regulation and can be imposed relative to the different projections of coastal risk to reduce risks to public and private property or human life. Accordingly, such controls should satisfy one or more of the following objectives:

- reduce public liability
- reduce risk to human life
- prevent intensification of development in the risk zone, but allow exercising of existing rights
- maintain coastal environmental quality and amenity
- prevent encroachment that will impact on the integrity of the shoreline ecology
- inform planned retreat
- prevent densification of rural areas

Effectively three management zones are identified in this project, i.e. the area below the DSL, the area below the CML and the area considered to be at risk from dynamic coastal processes. The EIA regulations will regulate the area below the DSL, but further guidelines for development need to be applied within the CML and Risk Zone. Accordingly, a set of general development parameters for application in the CML zone is proposed in **Table 1**, with more specific development parameters applicable to the Risk Zone in **Table 2**.

Note that further refinement is possible, and indeed necessary, within each local authority in order to align with local development management schemes and concerns. Necessarily, this would follow preparatory work that integrates the CML, DSL and CPZ into the local SDF, and formal adoption of the lines by the Province.

**Table 1: Development parameters for application below the CML**

| General parameters applicable to areas below the CML |  |
|--|--|
| 1)   | Development and activities may not result in removal or destruction of vegetation which could either destabilize a primary or significant dune, or cause an adverse effect on the beach and dune system due to increased erosion.  |
| 2)   | Development and activities may not result in structure-induced scour, or removal or disturbance of in situ sandy sediments of the beach and dune environment to such a degree that an adverse effect to the beach and dune system would result from either reducing the existing ability of the system to resist erosion during a storm or lowering existing levels of storm protection to adjacent properties and structures. |
| 3)   | Development and activities may not affect natural processes in a manner that results in increased rates of erosion along the shoreline on either side of the development or activity.  |

- 4) Existing coastal processes, including dune migration and littoral drift, should, where possible, not be impeded and indigenous vegetation must be maintained.
- 5) Development and activities may not direct discharges of water or other effluent in a seaward direction in a manner that would result in adverse effects. The activity shall be designed so as to minimize erosion induced surface water runoff within the beach and dune system and to prevent additional seaward or off-site discharges.
- 6) Development and activities may not result in a change in groundwater movement that significantly alters subsoil conditions, soil (sand) stability or vegetation seaward of the structure.
- 7) Development and activities may not impede public access and/or accessibility to the coast, public amenity or public recreation.
- 8) As per Section 28 of the National Environmental Management Act (Act 107 of 1998), all landowners, any person in control of land or premises or any person who has a right to use land or premises are obliged under a 'duty of care' to take appropriate measures to minimise or prevent pollution or degradation of the coastal environment during the execution of lawful activities.
- 9) Decisions and actions related to the coastal zone must take a risk averse and cautious approach, which takes into account the limits of current knowledge about the consequences of decisions and actions, and which promotes the integrity of coastal ecological systems and functions.

**Table 2: Development parameters for application in the Risk Zones**

| Specific development parameters for development in the coastal risk zone   |
|--|
| <ol style="list-style-type: none"> <li>1) New construction other than coastal defences: <ol style="list-style-type: none"> <li>a) The developer shall furnish the permitting authority with a land surveyor's certificate identifying where any predicted rise in sea level and anticipated coastal surge will affect the property; and in response, the permitting authority may require that: <ol style="list-style-type: none"> <li>i. a particular street or common boundary building line shall be complied with; or that</li> <li>ii. the finished floor level of a building shall be raised.</li> </ol> </li> <li>b) New structures must preferably be elevated on pilings, posts, piers-and-joists, column or similar foundations without breakaway walls, designed in a manner as to not impede the flow of flood waters or wave action, and reduce the potential accumulation of debris below the structure;</li> <li>c) Any enclosed spaces below a minimum finished floor level specified in terms of item 1)a)ii) shall not be used for human occupancy and shall be designed to equalize automatically hydrostatic forces on exterior walls by allowing for the entry and exit of floodwaters;</li> <li>d) During conceptual building design, consideration must be given to issues of privacy, overshadowing, reflectivity and visual impact, as well as the apportionment and positioning of higher risk site areas for parking, open space and recreational areas;</li> </ol> </li> </ol> |

- e) Only fully enclosed / self-contained effluent storage and treatment systems will be permitted if links to sewer mains are not possible. These must be located outside of risk areas, or otherwise on the landward side of structures or either side of structures, in accordance with prescriptions of a suitably qualified person to ensure suitable sealing and safety;
- f) Municipal bulk infrastructure, and where possible reticulation networks, are to be located outside the overlay zone unless related to coastal public amenity (e.g. playground);
- g) Expendable structures such as boardwalks or viewing platforms shall be sited so that their failure does not have adverse impact on the beach and dune system, any adjoining major structures, or any coastal protection structure;
- h) No infilling and excavation may occur within the 1:100 year floodline area of a river/estuary or within the estuarine functional zone;
- i) New structures or the alteration of existing structures may not result in the casting of a shadow onto the beach at winter solstice (i.e. 21 June) between 10am and 3pm;
- j) Reflective glass / mirror glass may not be used in a manner that would cause glare to coastal space users;
- k) Structural designs, site layouts and any barriers must be shown to accommodate wind-blown sand movement, with the intended outcome being unimpeded sand movement and avoidance of increased turbulence; and

- 2) On request by the applicant, the permitting authority shall make available any relevant information it has in order to enable compliance with sub-item 1);
- 3) Vegetated corridors between buildings should not be encroached into by permitting relaxation of setbacks in the sides paces;
- 4) In respect of boundary demarcation:
  - a) Public-owned land shall not be fenced, enclosed or utilised for any other use than that provided for in terms of its current zoning;
  - b) Boundary walls, fencing etc. may not be erected below the high-water mark, except where the structures are specifically permitted as coastal defence structures;
  - c) Fencing or other barriers on the seaward side of properties exposed to occasional wave action must be designed to limit structural damage to the fence or barrier and associated negative impacts on the environment; and
  - d) Boundary walls adjoining public access routes may not exceed 1.8m in height in order to promote the safety of pedestrian routes through public surveillance;
- 5) Dune rehabilitation may not prevent public access to public property unless sanctioned by the authority, in which case alternative access must be provided;
- 6) Access points / paths to the beach must be consolidated and consist of raised wooden / recyclable plastic boardwalks without concrete foundations to reduce adverse effects on dunes and associated vegetation;

- 7) Gardening and landscaping may not result in removal or destruction of vegetation which will either destabilize a primary or significant dune, or cause a significant adverse effect on the beach and dune system due to increased erosion by natural coastal processes or human movement, or detrimentally affect the ecology or habitat;
- 8) In respect of planning and suitable appearance of coastal defences:
- a) Coastal defences shall be sited as far landward as practicable and designed to minimize adverse effects on the beach and dune system, fauna, flora, geology and existing structures within its proximity, and shall not interfere with public beach access or enjoyment;
  - b) The structural design of coastal defence structures must:
    - i. Integrate the defence of all properties within an area experiencing beach regression;
    - ii. Be designed and certified by a professionally registered structural engineer;
    - iii. Remain stable under the hydrodynamic and hydrostatic conditions for which they are proposed;
    - iv. Provide a level of protection compatible with existing topography; and
    - v. Be safe for animals and humans interacting with the structure;
  - c) Materials used in physical barriers must
    - i. Be applied consistently and uniformly across multiple properties within an area experiencing beach regression;

- ii. Have, where visible, a texture and/or colouring that matches the general aesthetic of the adjacent beach or coastal zone;
- iii. Not be of a form or nature that can be broken up, shredded or displaced by coastal processes; and
- iv. Not be injurious to humans or animals (i.e. no spikes, barbed wire, razor-wire or the like to be affixed to physical barriers, and no electrification below 1.8m above ground level);

In respect of an application for approval of an activity, the permitting authorities may require information from an applicant it deems necessary, which may, inter alia, include:

1. A site development plan
2. A landscape plan
3. A tree or vegetation survey
4. A site survey by a registered land surveyor indicating existing ground levels of the property and adjacent properties, contours, rocky features, dunes, trees, structures, etc.
5. A clear and comprehensive method statement
6. A statement of anticipated impact significance
7. Coastal modelling assessments and reports
8. Specialist studies, evaluations, audits or research by independent, suitably qualified and/or professionally person(s)
9. Details of measures aimed at mitigation of anticipated adverse effects
10. Comment from interested and affected parties
11. Environmental, botanical or other audit or research information
12. Photographs

## ANNEXURE C6: RIVERS

Fresh water is a vital resource for ecological health, human well-being and economic development. The quantity and quality of water from our rivers is shaped by the health of the ecosystems that they pass through. Bitou's main water source is the Keurbooms River, which is fed by the Palmiet River and which, with the Bitou River, feeds the Keurbooms Estuary.

Main river systems in the area, from west to east, are:

- Piesang
- Bitou (Bietou)
- Keurbooms
- Palmiet
- Matjies
- Sout (Salt)
- Groot
- Bobbejaan
- Bloukrans

The National Freshwater Ecosystems Priority Areas (NFEPA) project was undertaken to provide guidance on the management of river, wetland and estuarine systems and to identify the condition of systems in order to prioritize management actions. It supports the implementation of the National Water Act, the Biodiversity Act and the Protected Areas Act.

**Map 1: Main rivers of the Bitou Municipal area**



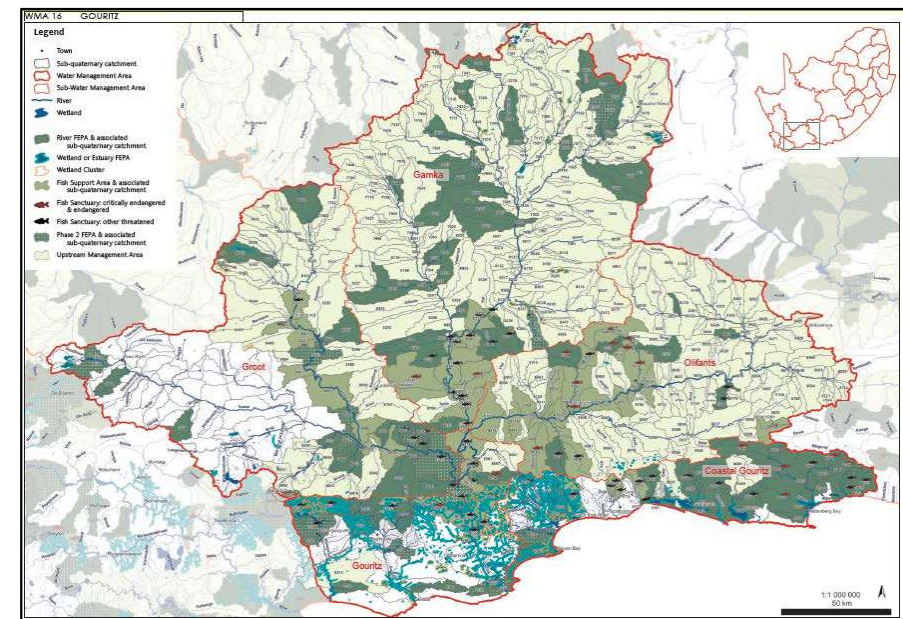
The Groot River, east of Nature's Valley, is listed in the National Freshwater Ecosystems Priority Areas as a flagship priority free flowing river (one of three rivers in the entire province) due to the fact that it has not been dammed and flows undisturbed from its source to the confluence. Other priority rivers listed include the Bitou/Palmiet system and Bloukrans River. In the Western Cape Biodiversity Spatial Plan, the Keurbooms and Bitou

systems are listed as Critical Biodiversity Areas (estuary and wetland), with the Keurbooms Estuary being classified as an estuary of “High Importance”.

The Salt River (East) is of significant scientific value. The Salt River (and several river systems to the east of this) is the focus of ongoing research into the occurrence of many yet unnamed aquatic insects that occur in these systems, most of which, where these insects occur, are fishless systems. Due to lack of predation, the insects have not had to go through much evolutionary adaptation over millions of years and therefore provide fascinating research information (Albany Museum, Rhodes University, Grahamestown – Dr Ferdy de Moor, et al.) and should be conserved and managed as CBA1 sites. Some recent studies have added approximately 22 potential new species and seven previously undescribed genera to the collection of aquatic invertebrates (Western Cape State of Biodiversity, 2017, pg54).

The Western Cape Sustainable Water Management Plan (2017 – 2022) identifies invasive alien plants as one of the major threats to water resources in the Western Cape. The document states that “*well managed ecological infrastructure can buffer human settlements and built infrastructure against extreme events like floods and droughts, playing a crucial and cost-effective role in disaster risk reduction. A healthy landscape includes healthy mountain catchments, rivers and wetlands. Rehabilitating degraded landscapes has proven to be a long term and cost-effective way of contributing to soil formation and disaster risk reduction.*

**Map 2: Gouritz Water Management Area (NFEPA Atlas, 2011, pg 30)**



The following management actions will contribute towards a resilient environment:

- Invasive alien plant clearing
- Healthy wetlands and estuaries
- Healthy riparian areas
- Monitoring and evaluation of systems that results in identified rehabilitation or mitigatory action

The following documents, reports and legislation provide guidelines, support and legal frameworks to the management of water resources in the area:

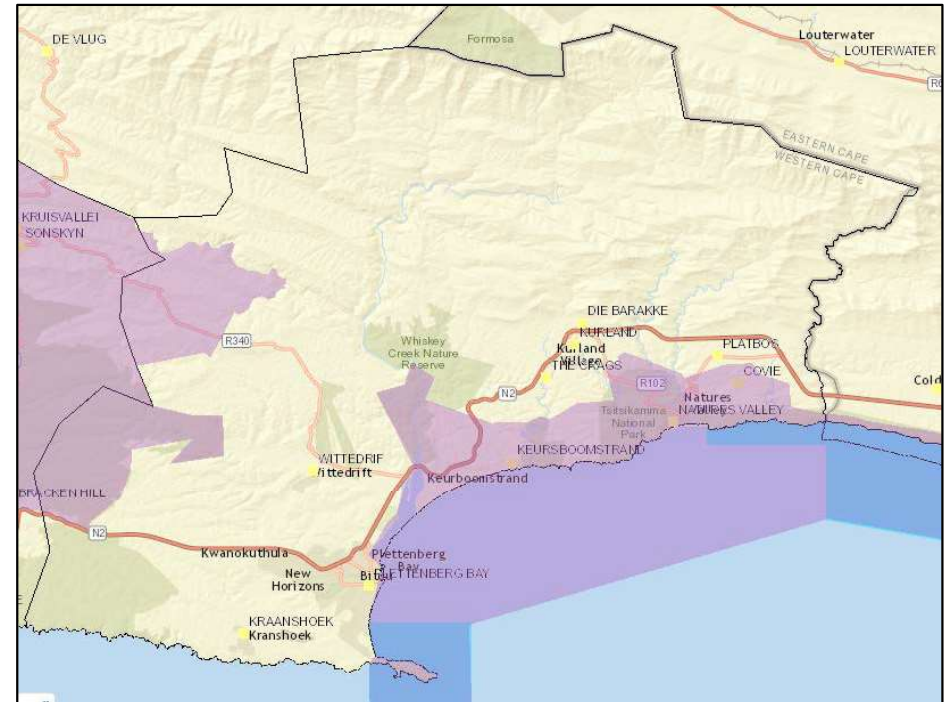
- The National Freshwater Ecosystems Priority Areas (2011):  
The guiding principles to freshwater ecosystem management provide a very useful tool for general management principles  
[https://www.researchgate.net/publication/265385578\\_ATLAS\\_of\\_Freshwater\\_Ecosystem\\_Priority\\_Areas\\_in\\_South\\_Africa\\_Maps\\_to\\_support\\_sustainable\\_development\\_of\\_water\\_resources](https://www.researchgate.net/publication/265385578_ATLAS_of_Freshwater_Ecosystem_Priority_Areas_in_South_Africa_Maps_to_support_sustainable_development_of_water_resources)
- National Water Act (36 of 1998)
- National Environmental Management: Biodiversity Act (NEM: BA), 10 of 2004
- National Environmental Management: Protected Areas Act (NEM:PAA), 57 of 2003
- National Freshwater Ecosystem Priority Areas: Guiding principles for managing freshwater ecosystems (NFEPA Atlas, 2011, pg 4).

## ANNEXURE C7: IMPORTANT BIRD AND BIODIVERSITY AREAS

Important Bird and Biodiversity Areas are sites of global significance for bird conservation, identified nationally through multi-stakeholder processes using globally standardized criteria. Birds have been shown to be effective indicators of biodiversity hotspots, and so IBAs hold and afford protection to a large and representative proportion of other animals and plants too. They also work towards ensuring healthy habitats, thus providing a number of ecosystem services, such as the provisioning of clean water, and therefore benefit people as well. The network of IBAs also provides much-needed resilience against a rapidly changing climate.

Both the Outeniqua and Tsitsikamma IBA's have received global recognition (from BirdLife SA and BirdLife International), with both areas falling mostly within existing PS's under the management of CapeNature or SANParks. The Tsitsikamma IBA has actively involved support from the Nature's Valley Trust and BirdLife Plett who work with CapeNature and BirdLife South Africa on management and development issues.

**Map 1: Important Bird Areas**



**ANNEXURE C8: NATURAL CAPITAL AND VALUATION OF/PAYMENT FOR ECOSYSTEM SERVICES (PES):  
A CAUTIONARY BUT BENEFICIAL CONSIDERATION**

Although a controversial debate, the value and valuation of ecosystem services and payment for these services is, more and more becoming a discussion point and tool for future planning, as is natural capital. The Western Cape Government is in the process of developing an ecological infrastructure investment framework and alien invasive species strategy for the Western Cape Province. Precedent exists, and is becoming more commonplace in areas, where tourism or aesthetics are potentially impacted (and are strong economic drivers), as well as ecosystem services, for a legal case against developers or those granting approvals for developments that impact negatively on natural areas, ecosystem services or vistas. In such cases the asset value/s of the natural capital or ecosystem service has/ve been established, the impact of a development or activity has resulted in a reduction in income or production which has been proved and demonstrated, and legal action taken for the loss of capital/value/production results. So while there may not, as yet, be legislation that identifies and protects ecosystem services or natural capital, there does exist precedented legal response which is cause for consideration in granting approvals for activities in the landscape.

While this may seem restrictive, there are situations where areas with tourism economies (e.g. Seychelles) or natural resources / ecosystem services (e.g. medicinal plants, etc.) have innovatively used their natural capital to leverage funding to enhance/increase their natural capital, protect

the blue economy, or to estimate future incomes that are sustainable and beneficial all round. Preferred future economies that are contextually relevant and do not impact, but rather enhance the natural capital, that reflect the true value of ecosystem services, can be modelled and thus plans for development that is ecologically, socially and financially sustainable should be more relevant.

A draft document is currently being produced the includes the Keurbooms River Catchment, that provides a business case, based on the results of an ecosystem service valuation and exploration of payment for ecosystem services, for Invasive Alien Plant clearing and rehabilitation. The benefits of this are:

- Alien clearing
- Job creation through clearing programmes, land rehabilitation, processing of biomass, use of by-product and transportation
- Restoration of indigenous habitat
- Provision of fresh water resulting from removal of invasive aliens
- Reduced fire risk
- Enhanced biodiversity
- Extension of ecological corridors (climate change mitigation)
- The Eden SDF, 2017, lists an action to develop an ecosystem service inventory to manage risks and designate core ecosystem service zones to be protected (where rivers and wetlands are adjacent to infrastructure).

## **ANNEXURE C9: NATIONAL HERITAGE RESOURCES**

In terms Section 38 of the National Heritage Resources Act (Act 25 of 1999) an application for a Notice of Intent to Develop needs to be submitted to Heritage Western Cape should the development proposal include certain activities namely linear development exceeding 300m in length, construction of a bridge exceeding 50m in length, changing the character of the site exceeding 5 000m<sup>2</sup> or the rezoning of a site exceeding 10 000m<sup>2</sup> in extent.



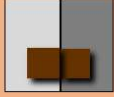



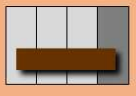







Section 27 of the NHRA specifies the protection of declared national or provincial heritage resources and that no person may destroy, damage, deface, excavate, alter or remove from its original position, subdivide or change the planning status of a provincial heritage site or a provisionally protected place or alter or demolish any structure or part of a structure older than 60 years.

A permit needs to be applied for in terms of Section 34 of the NHRA should any works at a heritage site be proposed and this might require the undertaking of a full Heritage Impact Assessment as determined by Heritage Western Cape before such permit to undertake the proposed works is granted.

## ANNEXURE D: SUSTAINABLE HUMAN SETTLEMENTS

## ANNEXURE D1: HOUSING DENSITIES / TYPOLOGIES

## HOUSING TYPOLOGIES AND DENSITY

|                        | Housing Type | Erf Configuration                   | Erf Area               | Gross Density | Nett Density              | Building Size              | Coverage | Building Height | Housing Tenure | Subsidy Option                  |                        | ANNEXURE D1.1   |   |
|------------------------|--------------|-------------------------------------|------------------------|---------------|---------------------------|----------------------------|----------|-----------------|----------------|---------------------------------|------------------------|---|---|
| Low Density            | 1            | Detached Housing                    | 12m x 20m              | 240m²         | 25du/ha<br>88p/ha         | 42du/ha<br>147p/ha         | 30m²     | 13%             | 1 Storey       | Full Ownership                  | Project Linked Subsidy |    |    |
| Medium-Density Housing | 2            | Single Storey Semi-Detached Housing | 9m x 16m               | 144m²         | 33du/ha<br>115p/ha        | 69du/ha<br>242p/ha         | 36m²     | 25%             | 1 Storey       | Full Ownership                  | Project Linked Subsidy |    |    |
|                        | 3            | Double Storey Semi-Detached Housing | 7m x 16m               | 112m²         | 73du/ha<br>255p/ha        | 99du/ha<br>346p/ha         | 48m²     | 21%             | 2 Storey       | Full Ownership, Sectional Title | Project Linked Subsidy |    |    |
|                        | 4            | Single Storey Row Housing           | 4.5m x 12m<br>7m x 12m | 54m²<br>84m²  | 59du/ha<br>207p/ha        | 120du/ha<br>420p/ha        | 52m²     | 38%             | 1 Storey       | Full Ownership                  | Project Linked Subsidy |    |    |
| Medium-High Density    | 5            | Double Storey Row Housing           | 4.5m x 12m<br>7m x 12m | 54m²<br>84m²  | 118du/ha<br>413p/ha       | 358du/ha<br>1245p/ha       | 52m²     | 38%             | 2 Storey       | Full Ownership                  | Project Linked Subsidy |  |  |
|                        | 6            | Walk-Ups                            | n/a                    | n/a           | 80u/ha<br>280p/h          | 160u/ha<br>560p/h          | n/a      | n/a             | 3-4 Storey     | Rental or Sectional Titles      | Institutional Subsidy  |  |  |
|                        | 7            | Flats                               | n/a                    | n/a           | 100-200u/ha<br>350-700p/h | 200-400u/ha<br>700-1400p/h | n/a      | n/a             | 4-8 Storey     | Rental or Sectional Title       | Institutional Subsidy  |  |  |

Source: Guideline Document for Higher Density Residential Development, Housing Department Ekurhuleni Metropolitan Municipality, July 2005

Source: Guideline Document for Higher Density Residential Development, Housing Department Ekurhuleni Metropolitan Municipality, July 2005

|                | HIGHER INCOME   | MIDDLE INCOME  | LOW INCOME   |
|----------------|---|--|--|
| LOW DENSITY    |  <p>12 Units per hectare<br/>42 persons per hectare</p>    |  <p>18 units per hectare<br/>63 persons per hectare</p>    |  <p>25 units per hectare<br/>88 persons per hectare</p>               |
| MEDIUM DENSITY |  <p>35 units per hectare<br/>123 persons per hectare</p>   |  <p>55 Units per hectare<br/>192 persons per hectare</p>   |  <p>73 units per hectare<br/>255 persons per hectare</p>              |
| HIGH DENSITY   |  <p>85 units per hectare<br/>297 persons per hectare</p> |  <p>90 units per hectare<br/>315 persons per hectare</p> |  <p>100 – 200 units per hectare<br/>350-700 persons per hectare</p> |

**MANGAUNG TOWNSHIP**



**JOHANNESBURG - FLEURHOF**



**JOHANNESBURG - FLEURHOF**



**JOHANNESBURG – PAPERBARK VILLAGE**



**JOHANNESBURG – NEWTOWN  
BRICKFIELDS DEVELOPMENT**



**JOHANNESBURG – NEWTOWN  
BRICKFIELDS DEVELOPMENT**

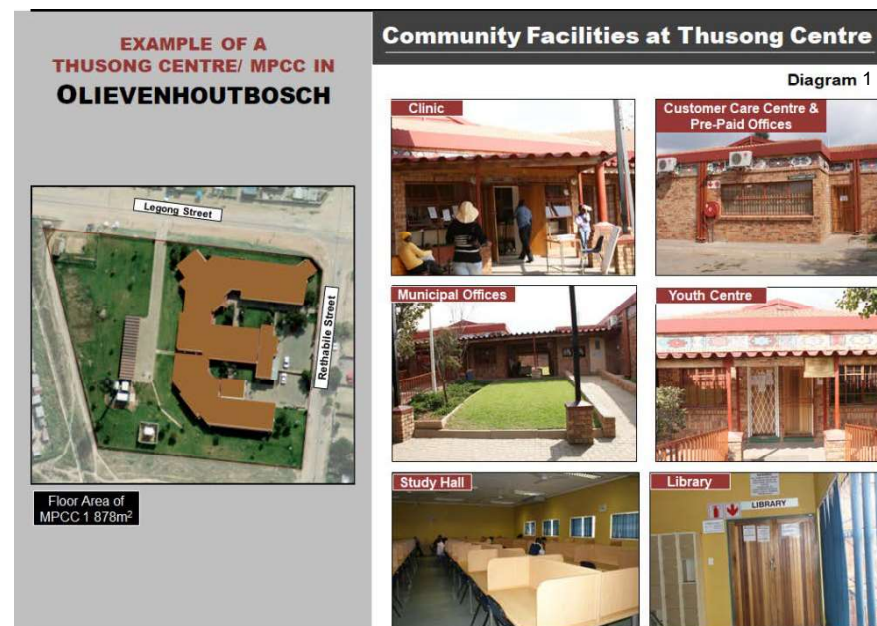


## ANNEXURE D2: THUSONG CENTRE CONCEPT

## INCREMENTAL DEVELOPMENT OF A THUSONG CENTRE/MPCC

Essentially, a Thusong Centre is “a focal point at which a comprehensive range of essential services can be obtained by people living in its vicinity”. The key to the success of Thusong Centre development is rooted in the principle of focused and deliberate government investment spending within and around a strategically selected spatial point, to ensure that these centres develop to provide an extensive range of community facilities. Such points are typically major intersections, and/or consolidated with existing cluster(s) of business activity and social services. A good example of a Thusong Centre/ MPCC in Olievenhoutbosch is depicted on **Diagram 1**.

The development of a Thusong Centre takes place over time and is based on an incremental growth process guided and stimulated by a number of strategic investments by various spheres of government (i.e. public investment). This process is, however, not limited to a single building as noted in the example above, but can also relate to the incremental development of a broader precinct (refer to **Diagram 2**).



Very briefly, the first step in the physical development of a Thusong Centre could be the establishment of a community hall which is utilised for a variety of functions, including serving as a SASSA pay-out point by the end of the month; accommodating the mobile clinic once a week; serving as an ABET centre during certain times of the week; etc. Because of the concentration of people at the community hall during the week, a formal/ informal public transport facility may establish which, in turn, attracts informal trade.

As the Thusong Centre develops, a greater variety of more permanent community facilities may be added by various spheres of government, including a clinic, post office, and police station.



With the increased intensity of activity and visitors at the precinct, the initial informal trade at the public transport facility can transform into some formal retail activities. Low and medium density residential development should be developed in close proximity around the node which not only enhances the viability of existing community facilities, but also strengthens the capacity for local economic development as the “critical mass” in the precinct increases.

Associated with the residential development follows the establishment of educational facilities like a crèche, primary school and sports fields. Over a period of time the node expands incrementally, and as more functions and associated residential activities are added, it may eventually also accommodate specialised services like adult education (FET colleges and ABET centres), some commercial activities like hardware stores and even light service industries.

## ANNEXURE D3: COMMUNITY FACILITIES PROVISION STANDARDS AND GUIDELINES

Table 1: CSIR Guidelines for the provision of Social Facilities (small/medium towns)

| FACILITY                                   | AVERAGE THRESHOLD            |
|--|------------------------------|
| <b>Local facilities</b>                    |                              |
| Crèche                                     | 1/2 400 population           |
| Primary School (including Grade R)         | 1/7000 population            |
| Post Office                                | 1/10 000 population          |
| Community Hall                             | 1/10 000 population          |
| Secondary School                           | 1/12 500 population          |
| ECD Hub and Care Centre                    | 1/20 000 population          |
| Library                                    | 1/20 000 population          |
| Primary Health Clinic                      | 1/24 000 population          |
| Sports Facilities and Parks                | 0.5ha/1 000 population (60%) |
| <b>Regional facilities</b>                 |                              |
| Tertiary Education                         | Variety of institutions      |
| *Community Health Centre                   | 1/60 000 population          |
| Police                                     | 1/60 000 population          |
| Fire Station                               | 1/60 000 population          |
| Solid Waste Disposal Site/Recycling Depot  | One per Municipality         |
| Civic Centre/Municipal-/Government Offices | One per Municipality         |
| District Magistrate's Court                | One per Municipality         |
| Regional Parks                             | 0.5ha/1 000 population (40%) |

\*Hospital: 1/300 000 people

In view of the above standards and the Land Use Budgets compiled for each of the areas in Bitou LM it is recommended that future additional community facilities be prioritised in line with the directives provided in **Table 2** below:

**Table 2: Additional Community Facilities to be Prioritised**

| Facilities                                      |  | Plettenberg<br>Bay Town | New<br>Horizons/<br>Qolweni/<br>Bossiesgif | Kwanoku<br>thula | Kranshoek | Wittedrift/<br>Green<br>Valley | Kurland |
|---|--|-------------------------|--|------------------|-----------|--------------------------------|---------|
| LOCAL FACILITIES                                |  |                         |  |                  |           |                                |         |
| Primary School<br>(including Grade R)<br>1:7000 | 2016   | •                       | •  | ••               | •         | •                              | •       |
|   | 2016-2025                                      |                         | ○  | ○                |           |                                |         |
|   | 2025-2040                                      | ○                       | ○  | ○○               | ○         |                                |         |
|   |  |                         |  |                  |           |                                |         |
| Secondary School<br>1:12 500                    | 2016   |                         | •  | •                |           | ◆                              |         |
|   | 2016-2025                                      | ○                       |  |                  | ○         |                                |         |
|   | 2025-2040                                      |                         | ○  | ○                |           |                                | ○       |
|   |  |                         |  |                  |           |                                |         |
| Thusong Centre                                  | Primary Health<br>Clinic<br>1:24 000           | 2016                    | •  | •                | •         | •                              | •       |
|   |  | 2016-2025               |  |                  |           |                                |         |
|   |  | 2025-2040               |  |                  |           |                                |         |
|   |  |                         |  |                  |           |                                |         |
|   | Community hall<br>1:10 000                     | 2016                    | •  | •                | •         | •                              | •       |
|   |  | 2016-2025               |  |                  |           |                                |         |
|   |  | 2025-2040               |  | ○                | ○         |                                |         |
|   |  |                         |  |                  |           |                                |         |
|   | Library<br>1:20 000                            | 2016                    | •  | •                | •         |                                | •       |
|   |  | 2016-2025               |  |                  |           | ○                              |         |
|   |  | 2025-2040               |  | ○                |           |                                |         |
|   |  |                         |  |                  |           |                                |         |
|   | Municipal-<br>/Government Office<br>(Paypoint) | 2016                    | •  | ••               | •         | •                              | •       |
|   |  | 2016-2025               |  |                  |           |                                |         |
|   |  | 2025-2040               |  |                  |           |                                |         |
|   |  |                         |  |                  |           |                                |         |
|   | Police<br>(mobile/satellite)<br>1:60 000       | 2016                    | •  | •                |           |                                |         |
|   |  | 2016-2025               |  |                  |           |                                |         |
|   |  | 2025-2040               |  |                  |           |                                |         |
|   |  |                         |  |                  |           |                                |         |
|   | Post Office/Postal<br>Service<br>1:10 000      | 2016                    | •  | •                | •         | •                              | •       |
|   |  | 2016-2025               |  | ○                | •         |                                |         |
|   |  | 2025-2040               |  | ○                | ○         |                                |         |
|   |  |                         |  |                  |           |                                |         |
|   | Sports and<br>Recreation/Parks/Open<br>Space*  | 2016                    | •  | •                | •         | •                              | •       |
|   |  | 2016-2025               | □  | □□               | □□        |                                | □       |
|   |  | 2025-2040               | □□   | □□□              | □□□       | □                              | □       |
|   |  |                         |  |                  |           |                                |         |

## ANNEXURE D4: SMART CITY CONCEPT

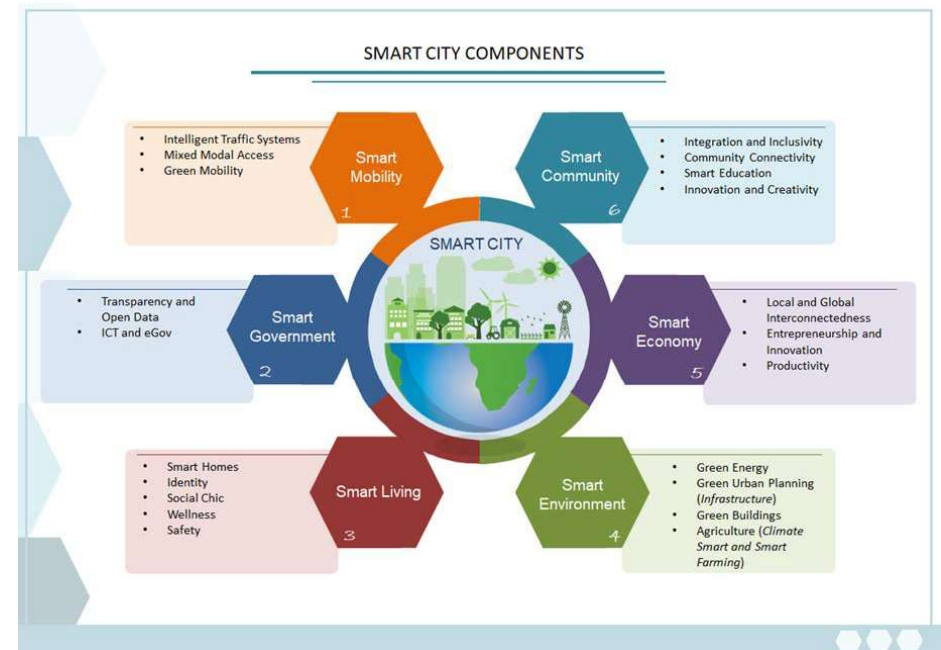
**What is a Smart City?**

A **Smart City** primarily uses **information and communication technologies (ICT)** to enhance quality, performance and interactivity of urban services, to reduce costs and resource consumption and to improve contact between citizens and government. It connects human capital, social capital and ICT infrastructure in order to address public issues, achieve a sustainable development and increase the quality of life of citizens.

Smart city applications are developed with the goal of improving the management of urban flows and allowing for real time responses to challenges. A smart city may therefore be more prepared to respond to challenges than one with a simple 'transactional' relationship with its citizens.

**Smart Mobility** aims to provide an on-demand mobility system that would allow customers to choose among motorised public and private transport modes and / or non-motorised transport modes to assemble the fastest or cheapest way of getting anywhere they need to go at any time. It includes new mobile technologies and intuitive apps which integrate public transportation, better infrastructure, and car sharing.

**Smart Government** entails the use of innovative policies, business models, and technology to address the financial, environmental, and service challenges facing public sector organizations. It relies on open and accessible consolidated information systems and communication networks from which the public becomes better informed about whether the government is performing and conforming to highest ethical standards.



**Smart Communities** are strategic, purposeful, and resourceful. They are driven by long-term commitments to safeguard their natural resources and economic opportunities for future generations, and preserving the beauty, vitality, and equity of the region. These communities protect their ecological assets from destruction or degradation, promote renewable energy solutions, and practice sustainable development.

**Smart Living** is fuelled by the rise of devices and objects connected to the internet – wearables, home appliances, fashion accessories etc. Internet-connected appliances that communicate with one another, more efficient energy usage and cloud-enhanced home security are just some of the developments that consumers are starting to enjoy. Advances in technology, such as mobile and GPS-enabled devices, live data sensors, and big data, have created a foundation for governments to develop better services, foster accountability, and increase transparency. When disaster incidents strike, critical information exchange across departmental, municipal, and jurisdictional lines expedites communication to at-risk populations and hastens their evacuation from harm's way. It tracks disasters in real-time, locate medical resources, align logistics, coordinate response teams, and automatically publish updated maps that keep the media and public informed. Similarly, GIS highlight recurring crime hot spot locations, and help deploy critical resources to the right place at the right time. Real-time monitoring tools are used to regulate infrastructure and manage natural and manmade threats like vandalism/ theft.

A **Smart Environment** aims to provide more efficient urban structure, buildings and energy. A compact city characterised by medium and high density mixed use environments which are designed around efficient multi modal public transport systems. Careful building design to reduce heat loads, maximise natural light and promote the circulation of fresh air and installation of solar heaters and water harvesting infrastructure. Green energy generated from natural sources: solar power, wind power, hydropower, geothermal energy, biomass and biofuels. Monitoring and controlling operations of urban and rural infrastructures like bridges, railway tracks, on- and offshore- wind-farms and it can also be used for scheduling repair and maintenance activities.

**Smart Economies** are largely the result of the influence of ICT applications on all aspects of urban economy, which in turn changes the land-use system. Main Economic Sectors influenced by Smart Technology include:

- Banking and Finance
- Education and Research
- ICT, Mobile and Telecommunications
- Travel, Tourism and Transportation
- Healthcare and Social Welfare
- National Security and Defence
- Retail and Distribution
- Energy and Utilities

## ANNEXURE E: ECONOMIC EMPOWERMENT / UPSCALING GUIDELINES

## ANNEXURE E1: TOWNSHIP ECONOMY: POTENTIAL JOB CREATION OPPORTUNITIES

| Main Sectors                 | Secondary Category           | Examples of Business Opportunities   |
|------------------------------|------------------------------|--|
| <b>1. Business</b>           | Retail (Formal)              | Butchery, Bottle store, Cellphone, Café, Clothing, Tombstones, Fast Food, General Dealer, Farm Shop, Plant Nursery   |
|                              | Retail (Informal)            | Street Vending/Food Seller, Fruit & Vegetable Seller, Brick Making, Liquor Seller, Shebeen, Tavern, Spaza, Tombstone Trader  |
|                              | Retail (Markets)             | Crafters Market, Food & Fresh Produce Market   |
|                              | Personal Services            | Hair & Beauty Salons, Fashion Designer, Laundrette, Gym, Traditional Healer  |
|                              | Offices                      | Burial Society, Banks, ATM, Financiers/Cash Loans, Internet Café, Renting of Machinery, Home Office, Security Companies  |
|                              | Motor Vehicle Related Retail | Car Sales Lot, Car Wash, Cash for Scrapyard, Motor Spares, Filling Station   |
| <b>2. Service Industries</b> | Services                     | Dress Making/Tailors/Manufacture Uniforms, Bakery/Catering, Engraving, Printing, Picture Framing, Jewellery Manufacturing, Watch/Cellphone Repairs, Shoe Repairs, Key Cutting, Dry Cleaners, Funeral Services (Parlour/Undertaker), Basket Ware and Cane Furniture, Office Furniture, Upholstery |
|                              | Infrastructure               | Sanitation (plumbers), Electrician, Security Gates & Fencing, Mobile Toilets, Solar Panels/Geysers   |
|                              | Green Economy                | Cleaning Services, Waste Collection and Sorting/Recycling  |
| <b>3. Tourism</b>            | Retail (Formal)              | Craft/Curio Shop, Coffee Shop, Restaurant  |
|                              | Retail (Informal)            | Crafters Market, Food & Fresh Produce Market   |
|                              | Offices                      | Tourist Operators  |
|                              | Hospitality Establishment    | Hotel, Guest House, Bed & Breakfast, Conferencing, Camp Sites  |
|                              | Services                     | Catering & Events, Heritage Tourism, Sports/Adventure Tourism, Water Sports and Recreation Parks, Tourist Guide, Hunting Guide   |

| Main Sectors                              | Secondary Category                          | Examples of Business Opportunities  |
|---|---|---|
| <b>4. Creative Industry</b>               | Services                                    | Arts & Crafts Workshops/Exhibitions, Cinemas, Music & Entertainment, Music & Video Production, Fashion Designer, Jewellery Manufacturing, Bead Making, Leather/Hide Products, Coordination of Cultural Events |
| <b>5. Community Services</b>              | Medical & Health                            | Hospital and Clinic, Substance Abuse Treatment/War on Drugs, Hospice/Nursing/Care Centre (treatment and care for HIV/AIDS and other chronic ailments), Traditional Healer                                     |
|   | Funeral / internment services (confinement) | Burial Society, Catering-, Renting-, Cemetery Services  |
|   | Institutional Care Facility                 | Orphanage/Children's Home, Shelters, Soup Kitchen, Care for Elderly, Assisting the Elderly with Social Grants   |
|   | Cultural Facilities                         | Community Centres, Church and Religious Services  |
|   | Educational Facilities                      | Crèche & pre-schools, Schools, Sports Coaching, FET Colleges, Feeding schemes for schools and hospitals   |
|   | Other Education                             | Motor vehicle driving school, Special education - disabilities, Initiation school, Dancing /Music/Art Schools   |
|   | Protection services                         | Security Guards   |
|   | Emergency services                          | Ambulance Services/Paramedics   |
|   | Administrative                              | Postal/Courier Services   |
|   | Animal Care Facilities                      | Indoor / outdoor kennels, Veterinarian clinic, Animal rehabilitation centres  |
|   | ICTS  | Internet Solutions, Multimedia Service Centres, Internet Cafes, Electronic Repairs, ICT Recycling Depots  |
| <b>6. Agriculture and Agro Processing</b> | Animal production                           | Livestock/Poultry Farming   |
|   | Crop production                             | Vegetable/Herb Farming  |
|   | Agricultural industry                       | Milling, Feed Mixing, Processing/Sorting/Packing of Farm Produce, Farm Stall, Oil refinery, Biofuels  |
| <b>7. Transport</b>                       | Services                                    | Taxi Operators/Associations, Logistics companies, Tour Operators  |
|   | Infrastructure                              | Paving of Walkways and Cycle Lanes  |
| <b>8. Finance</b>                         | Services                                    | Stokvels, Money Lending Schemes, Burial Societies   |

| Main Sectors                            | Secondary Category                           | Examples of Business Opportunities  |
|---|--|---|
| <b>9. Manufacturing</b>                 | Production & Manufacturing                   | Food production, Bakery, Manufacturing of Machinery-/Metal (steel)- /Non-metal (charcoal/tar/bricks)- /Clothing and Textile-/ Wood and Furniture (Carpentry) Products, Abattoir |
|   | Motor Service related (Light) Industry       | Fitment centre/Vehicle repairs, Panelbeater/Auto body, Towing Service, Motor Workshop   |
|   | Engineering Service related (Light) Industry | Engineering Workshop e.g. welding, cutting, joinery, pumps, pipes and fitting, etc. Electrical Workshop/Contractors, Lawnmower Repairs  |
| <b>10. Commercial</b>                   | Warehousing & storage                        | Storage Facilities, Storage and selling of coal, sand, building material, Scrap Yard, Recycling Depot, Auction Yard   |
| <b>11. Construction and Real Estate</b> | Services                                     | Construction Business, Property Developers, Estate/Renting Agents   |
|   | Infrastructure                               | Builders, Carpenters, Brick/Paving layers, Electricians, Plumbers   |
| <b>12. Mining</b>                       | Active Mining                                | Sand Mining, Quarrying  |
|   | Mining Rehabilitation                        | Cleaning Services, Waste Collection and Planting of new vegetation  |

## ANNEXURE E2: INFORMAL TRADE /SERVICES INDUSTRY UPSCALING

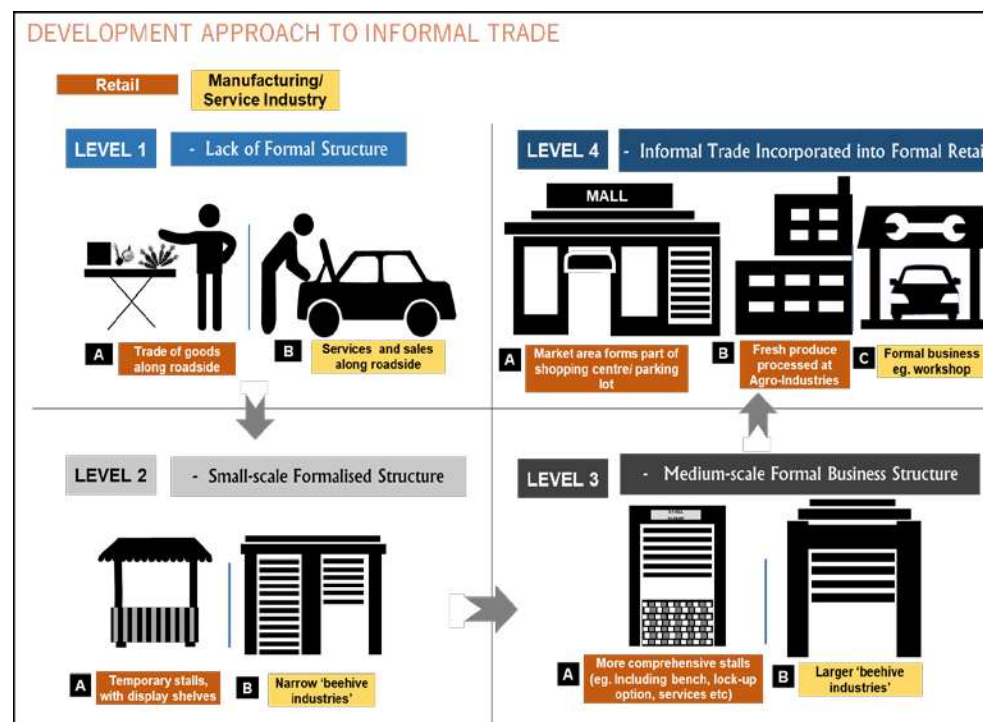
## ANNEXURE E2.1

**Informal Trade Empowerment and Upscaling**

|                |   |
|----------------|---|
| <b>Level 1</b> | Informal trading business in a form of selling perishable or non-perishable goods, and informal motor repair businesses are being conducted without adequate formalised informal structures.  |
| <b>Level 2</b> | Formalised informal trading structures in this level are very basic. Level 2a structures are temporary and may be placed along pedestrian movement desire lines where space is limited. Level 2b structures are more permanent in nature, and may be utilised by small emerging service industries.   |
| <b>Level 3</b> | The structures at Level 3 are permanent and typically larger in size when compared with 'level 1' informal trading structures. Level 3a includes features such as lock-up roller doors for over-night storage, and may include water and sanitation services shared between traders. This allows for more comprehensive retail activities including food preparations and/ or service industries such as internet cafes, kiosk, electronic repair services, motor repairs services and welding works. |

**Level 4**

Level 4 provides that informal traders be incorporated into the formal economy (as illustrated on Diagram 12) by way of providing permanent and formalised trading structures as part of a shopping centre or business incubation centre.

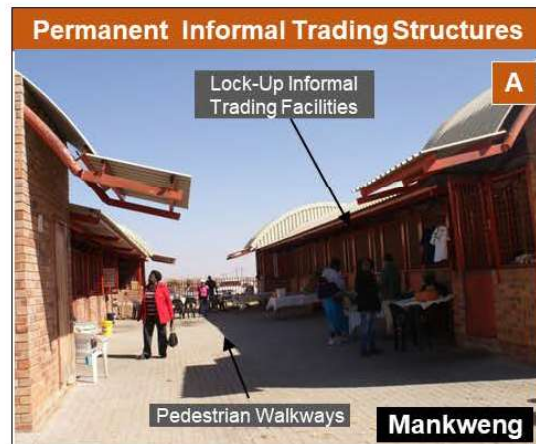


## DEVELOPMENT APPROACH TO INFORMAL TRADE

### Level 2 - Small-scale Formalised Structure



### Level 3 - Medium-scale Formal Structure



## DEVELOPMENT APPROACH TO INFORMAL TRADE

### Level 4 - Informal Trade Incorporated into Formal Retail

Market area forms part of shopping centre/ parking lot



LOCAL EMPOWERMENT INDUSTRIAL ZONE-  
BEEHIVE SERVICE INDUSTRY

SMME INFRASTRUCTURE - Linear Beehive Buildings



Shipping Containers – Emerging Local Businesses



LOCAL EMPOWERMENT INDUSTRIAL ZONE-  
BEEHIVE SERVICE INDUSTRY



PROMINENT TOURISM DESTINATIONS DESIGNED FROM SHIPPING CONTAINERS



ANNEXURE E3: PRECISION FARMING

ANNEXURE E3.1

Vertical Farming in Green Building



Horizontal Farming in Green Building



Vertical Farming in an Iron-Zinc Vertical Box



ANNEXURE E3.2



**ANNEXURE E4: EMERGING FARMER UPSCALING****Support Emerging Farmers to Become Part of the Mainstream Economy**

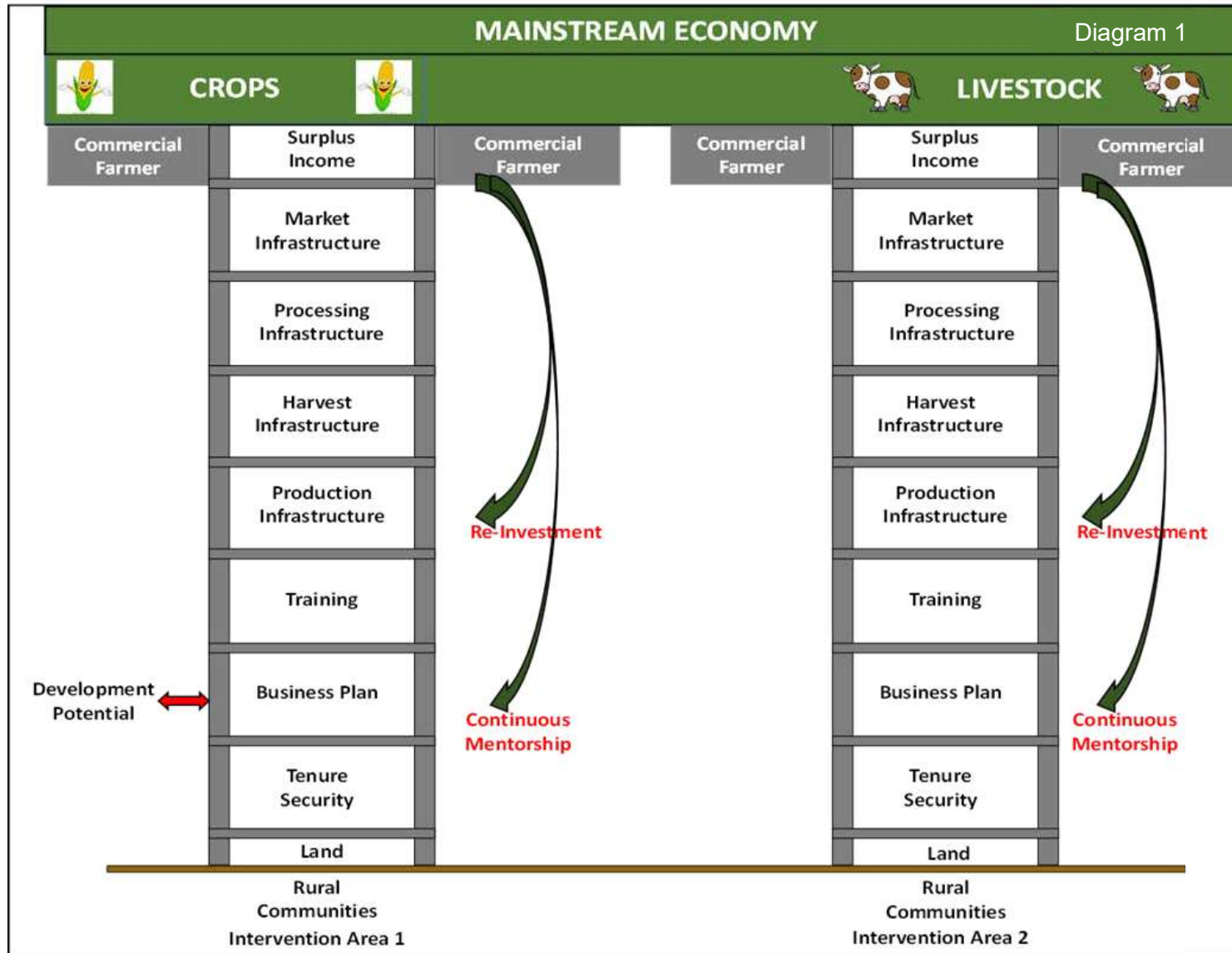
It is important that emerging farmers be supported in the Bitou LM as a means to contribute towards poverty alleviation, enhancing food security, and establishing sustainable livelihoods. This can be achieved by way of implementing the following measures in identified Rural Intervention Areas (to be read in conjunction with **Diagram 1**):

- Increasing land availability and tenure security for agricultural purposes through prioritised processing of Land Claims/ Restitution processes in this area.
- Exploiting the opportunities offered by the potential of the agricultural land identified within the area (in conjunction with Department of Rural Development and Land Reform).
- Significantly increasing production per hectare beyond the subsistence farming yield.
- Providing training support to emerging and small-scale farmers and ensuring that appropriate skills development takes place in line with the most appropriate farming activities in the area.
- Encouraging the use of different crops and new planting, harvesting and processing techniques.
- Supporting a variety of farming concepts including intensive commercial farming, small scale commercial farming (vertical farming/

precision farming), subsistence farming, aquaculture development, and agro processing industries.

- Providing production and harvesting infrastructure in order to create production surplus in the area.
- Increasing job creation in the area through labour-intensive agricultural projects and extending the agriculture value chain by way of agro-industries and agro-tourism.
- Establishment of a fresh produce market which would support the globally growing demand for organic (chemical free) produce and 'farmer's markets', while supporting small-scale farmers by creating offset areas for both individually and communally harvested produce from surrounding areas.

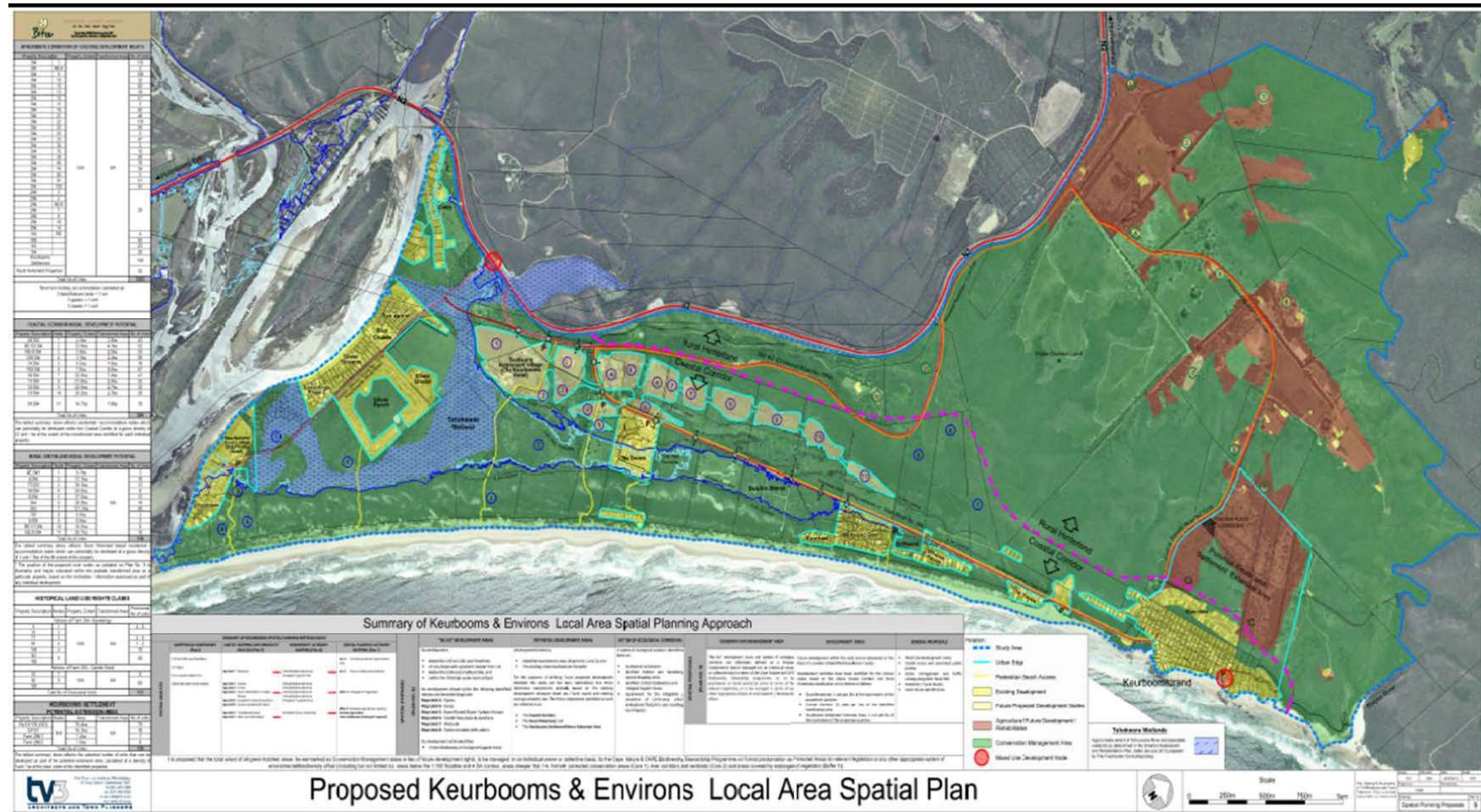
The surplus income generated through the initiatives above would assist emerging farmers to become part of the mainstream economy as shown on Diagram 1.



ANNEXURE F: LOCAL AREA PLAN GUIDELINES

ANNEXURE F1: KEURBOOMS RIVER DEVELOPMENT GUIDELINES

Figure 1: Proposed Keurboom & Environs Local Area Spatial Plan



## 1. GENERAL PLANNING PROPOSALS

### ■ **Mixed Use development nodes**

A low key node around the farm stall is proposed where the Keurbooms River access road intersects with the N2 and has been identified in the Bitou SDF as potential site for a periodic farmers market.

### ■ **Coastal access and associated public parking**

Existing access opportunities to the beachfront have been identified and indicated on the proposals plan. It is considered that existing identified accesses is sufficient to provide adequate access to the beachfront.

The identified access opportunities will however have to be supplemented with appropriate public parking areas which as a general principle will have to be located along Main road 394 with board walk access to the beachfront as alternatives closer to the beachfront is restricted due to the very high level of sensitivity of the frontal dune system. Public parking areas to be developed in this regard should however be done in manner so as not to detract from the scenic qualities of the main road in question.

Additional considerations coupled to the above include the provision of ablution facilities, refuse bins, access control, life guard services and on- going maintenance.

### ■ **Access management and traffic calming along Main Road 394**

Due to the number of existing accesses leading off Main Road M394 as well as potential future accesses that maybe required servicing some of the development nodes proposed to the north is proposed that access be properly managed. In this regard a number of consolidated proposed access points have been identified and is indicated on the proposals plan. The main principle applied in this regard was to consider the existing main accesses along the M394 in order to ensure that any access to the opposite side of M394 will be duly aligned.

In conjunction with the above it is proposed that consideration be given to the development of the consolidated access points in manner that will serve as traffic calming along the M394 as well, for example the provision of mini-circles.

### ■ **Pedestrian / Cycle Routes**

It is proposed that the pedestrian / cycle route being developed along main Road M394 be extended along Divisional Road 1888 (the Old N2) and back along Minor Road 7218 through the rural hinterland section of the study area. In this manor a circular pedestrian / cycle route can be established.

### ■ **Scenic Route Identification**

It is proposed that Divisional Road 1888, Main Road M394 and Minor Road 7218 be declared as scenic routes views and scenic quality is protected from inappropriate development. This can be achieved by

preparing a visual resource management corridor along the routes for which guidelines are prepared for developments within this corridor.

## 2 PROPOSED DEVELOPMENT NODES AND DENSITIES

The proposed future development within the study area is structured into a number of identified development nodes with development densities applied in accordance within the division of the study area into three functional spatial components namely:

- The Coastal Corridor;
- The Rural Hinterland; and
- The potential future Keurbooms Settlement Extension Area

The methodology for the application of the identified densities and the resulting development potential for the various identified development nodes are contained in the sections below.

### ■ Proposed Rural Hinterland Development Nodes

The Rural Hinterland primarily constitutes the area to the north of the existing Keurboomstrand settlement and is generally defined by a number of larger agricultural zoned properties. It is evident that these agricultural units that make up the Rural Hinterland component within the Study Area is not extensively utilised for active commercial farming, if at all. This scenario is not likely to change and given the general sensitive environmental / biodiversity character of the study area it is

not deemed desirable to promote the expansion of agriculture in this particular context.

Given the above scenario properties within the Rural Hinterland is unlikely to generate any sustainable income from commercial farming enterprises and alternatives will have to be considered in order to fund the future management/ maintenance of these properties, which otherwise runs the risk of becoming derelict over time.

It is argued that the most likely income generating alternative would have to primarily focus on tourism / holiday making given the general surrounding environment and relative proximity to the coastline. It is also considered that the extent / nature of additional rights granted should in fact be able to generate a sustainable income stream to fund the anticipated / required environmental / biodiversity offsets / arrangements on an on-going basis.

In view of the above considerations it is argued that as agricultural areas/units across the Western Cape Province differ significantly in size, soil potential and therefore ability to generate a sustainable income from actual commercial agricultural activities conducted etc. A “one shoe fits all” approach based on the current generalised provision of a maximum of five additional units per agricultural unit is therefore not considered to be appropriate in this particular context.

It is within the above context that the provision of limited holiday accommodation opportunities based on a 1 unit / 3ha basis is motivated for the proposed Rural Hinterland Nodes. This density provision is based on the current density standard being applied by Bitou LM in this regard.

It should be noted that the Rural Hinterland includes a fairly large state owned property namely Remainder of Portion 3 of Farm 522 which property has been excluded from any Rural Hinterland development node proposal, as well as any related calculations.

#### **Extent of Proposed Nodes:**

The extent of the proposed development nodes as conceptually indicated on plan is based on a proposed development footprint of 250m<sup>2</sup> per unit. For example, if a particular property has been allowed 10 units based on the extent thereof this would result in a proposed total nodal development footprint of 2500m<sup>2</sup> indicated on plan.

In addition to the above it should be noted that the footprint extent (calculated at 250m<sup>2</sup> / unit) for the proposed 118 units within the Rural Hinterland totals 2,95ha which constitutes only 0,54% of the total Rural Hinterland area (543ha). This is considered to be a very limited impact given the potential environmental offsets that can be established through conditions of approval related to granting these rights.

#### **Location of Proposed Nodes:**

The proposed development nodes have been strictly located within areas that have been identified as being transformed with no natural remnants remaining.

In this regard it should however be recognised that the actual extent of the available transformed footprint areas used as criteria for the siting of nodes almost without exception substantially exceeds the extent of the proposed development node itself, and as a result opportunities do exist in a number of instances for alternative siting of nodes on a particular property, based on a more detail analysis of the property itself.

For the purposes of the conceptual siting of nodes as depicted on the proposals plan consideration was given to criteria such as, but not limited to:

- The location of any other existing development on the property so as to enhance the principle of clustering of development;
- Proximity of existing roads both from an access as well potential visual impact consideration;
- Features such as dams and natural drainage systems.

#### **Development Potential:**

The cumulative development potential calculated for all of the identified Rural Hinterland Development Nodes is indicated in the table below.

**Table 7: Rural Hinterland Nodal Development Potential**

| RURAL HINTERLAND NODAL DEVELOPMENT POTENTIAL   |      |                 |                  |             |
|--|------|-----------------|------------------|-------------|
| Property Description   | Node | Property Extent | Transformed Area | No of Units |
| RE/541   | 1    | 9.7ha           | N/A              | 3           |
| 4/294  | 2    | 31.1ha          |                  | 10          |
| 77/293   | 3    | 39.1ha          |                  | 13          |
| 10/294   | 4    | 24.6ha          |                  | 8           |
| 6/294  | 5    | 37.5ha          |                  | 13          |
| 544  | 6    | 28.8ha          |                  | 10          |
| 545  | 7    | 121.3ha         |                  | 40          |
| 787  | 8    | 8.9ha           |                  | 3           |
| 5/295  | 9    | 8.6ha           |                  | 3           |
| RE/17/304  | 10   | 16.5ha          |                  | 6           |
| RE/2/304   | 11   | 28.7ha          |                  | 10          |
| Total number of units  |      |                 |                  | 118         |
| The tabled summary above reflects Rural Hinterland based residential / accommodation nodes which can potentially be developed at a gross   |      |                 |                  |             |
| *The position of the proposed rural nodes as indicated on Plan No. 9 is illustrative and maybe relocated within the available transformed area on a particular property, based on the motivation / information assessed as part of any individual development application submitted. |      |                 |                  |             |

#### ■ Proposed Coastal Corridor Development Nodes

The Coastal Corridor is defined by a number of smaller properties located within an approximate 1km offset from the high watermark extending from the Bitou River in the direction of the Keurboomstrand settlement. For this area a gross density profile of 12 units per ha of the identified transformed

footprint area is proposed. The latter is based on the guideline of 15 units per hectare proposed for smaller rural settlements as contained in the Draft Bitou SDF (2013).

#### ■ Extent of Proposed Nodes:

The extent of the proposed development nodes as conceptually indicated on plan is based on the measured footprint of the identified transformed area as indicated on plan.

#### ■ Location of Proposed Nodes:

The proposed development nodes are strictly located within areas that have been identified as being transformed with no natural remnants remaining. The nodes are predominantly located to the north of Main Road 394, but also include a number of properties with existing established development footprint which properties maybe subject to redevelopment in future. Should redevelopment of such properties be considered, it is proposed that it be developed in accordance with the proposed 12 units / ha density profile as defined above.

#### ■ Development Potential:

The cumulative development potential calculated for all of the identified Coastal Corridor Development Nodes is indicated in the table below.

**Table 2: Coastal Corridor Nodal Development Potential**

| COASTAL CORRIDOR NODAL DEVELOPMENT POTENTIAL   |      |                 |                  |             |
|--|------|-----------------|------------------|-------------|
| Property Description   | Node | Property Extent | Transformed Area | No of Units |
| 24/304   | 1    | 4.3ha           | 3.6ha            | 43          |
| RE/32/304  | 2    | 33.6ha          | 4.3ha            | 52          |
| RE/4/304   | 3    | 2.9ha           | 2.0ha            | 24          |
| 126/304  | 4    | 3.3ha           | 2.4ha            | 29          |
| 31/304   | 5    | 9.5ha           | 1.6ha            | 19          |
| 192/304  | 6    | 7.8ha           | 5.6ha            | 67          |
| 10/304   | 7    | 22.0ha          | 3.4ha            | 41          |
| 11/304   | 8    | 21.8ha          | 2.9ha            | 35          |
| COASTAL CORRIDOR NODAL DEVELOPMENT POTENTIAL   |      |                 |                  |             |
| Property Description   | Node | Property Extent | Transformed Area | No of Units |
| 12/304   | 9    | 22.0ha          | 2.7ha            | 32          |
| 13/304   | 10   | 20.2ha          | 2.3ha            | 28          |
| 91/304   | 11   | 14.7ha          | 1.6ha            | 19          |
| Total Number of Units  |      |                 |                  | 389         |
| The tabled summary above reflects residential / accommodation nodes which can potentially be developed within the Coastal Corridor at a gross density of 12 unit / ha of the extent of the transformed area identified for each individual property. |      |                 |                  |             |

### ■ Potential Future Keurbooms Settlement Extension Area

In order to specifically allow for the future extension of the Keurbooms settlement, should the need arise, a potential extension area has been identified for this purposes directly abutting and north of the existing settlement.

The motivation for identifying the particular area includes the following considerations:

- The area is directly abutting to the existing settlement area and extends inland therefore creates a consolidated nodal development pattern limiting potential ribbon development extension in future;
- The majority of the properties included in this area were included within the legal jurisdiction of the previous Keurbooms Local Council Area and is by proclamation exempted from the provisions of the Subdivision of Agricultural Land Act, Act 70 of 1970.
- Significant portions of the properties included have been classified as transformed areas in terms of the Environmental Sensitivity and Habitat Mapping analysis conducted.
- Approximately 3977m<sup>2</sup> has been reserved by virtue of a servitude area registered over Erf 157 for a potential future landfill site within the potential extension area.

**Table 3: Keurbooms Settlement Future Potential Extension Area**

| KEURBOOMS SETTLEMENT FUTURE POTENTIAL<br>EXTENSION AREA  |       |        |                     |             |
|--|-------|--------|---------------------|-------------|
| Property<br>Description  | Nodes | Area   | Transformed<br>Area | No of units |
| Re Erf 156 (563)   | N/A   | 79.4ha | N/A                 | 79          |
| Erf157   |       | 16.3ha |                     | 16          |
| Farm 296/1   |       | 7.4ha  |                     | 7           |
| Farm 296/2   |       | 7.6ha  |                     | 8           |
| Total No of Units  |       |        |                     | 110         |
| The tabled summary above reflects the potential number of units that<br>can be developed as part of the potential extension area, calculated at<br>a density of 1unit / ha of the total extent of the identified properties. |       |        |                     |             |

#### ■ Historic Development Rights

In addition to the proposed Coastal and Rural Hinterland development nodes as well as potential future Keurbooms settlement extension area there also exists certain historic land use rights claims in respect of a number of properties included within in the Keurbooms River and Environs LASP study area. These properties are listed in the table below. A provisional number of units have been allocated to each of the properties in order to establish the approximate extent of development to be generated by these claims. It should be noted that these numbers have been obtained from various consultants involved with the current individual processes of clarifying with the relevant controlling authorities the exercising of these rights. The numbers as indicated is therefore considered to be a provisional indication which is subject to change pending the final outcome of each

individual process / agreements to be concluded with the relevant controlling authorities.

**Table 4: Historic Land Use Rights Claims**

| HISTORICAL LAND USE RIGHTS CLAIMS  |       |                 |                  |                         |
|------------------------------------|-------|-----------------|------------------|-------------------------|
| Property Description               | Nodes | Property Extent | Transformed Area | Provisional No of units |
| Portions of Farm 304 -Sanderlings  |       |                 |                  |                         |
| 5                                  | 1     | N/A             | N/A              | 4 - 6                   |
| 32                                 | 2     |                 |                  |                         |
| 71                                 | 3     |                 |                  | 4 - 6                   |
| 81                                 | 4     |                 |                  | 1 - 2                   |
| 136                                | 5     |                 |                  | 10                      |
| 141                                | 6     |                 |                  | 20                      |
| 168                                |       |                 |                  |                         |
| Portions of Farm 304 - Candle Wood |       |                 |                  |                         |
| 16                                 | 7     | N/A             | N/A              | 0                       |
| 92                                 | 8     |                 |                  | 69                      |
| 129                                |       |                 |                  |                         |
| Total No of Provisional Units      |       |                 |                  | 113                     |

#### ■ General Development Conditions

Granting of any development rights within either of the abovementioned development node scenarios and or exercising of historic land use rights claims will be subject to strict urban design, architectural and land use guidelines being approved for individual developments, as well as each development approval being tied to an appropriate set of environmental

offsets i.e. clearing of alien vegetation, establishment and maintenance of ecological corridors, committing to an appropriate Cape Nature Stewardship Programme and or similar environmental conservation / management arrangement.

### **Proposed Conservation Management Area**

It is proposed that the “No Go” development areas including the system of ecological corridors be collectively defined as a broader Conservation Area to be managed (on an individual owner or collective basis) in terms of the Cape Nature Biodiversity Stewardship programme or any other similar appropriate conservation management programme.

The above can be done on a voluntary basis and is to be promoted amongst property owners. In addition committing to an appropriately identified Stewardship / Management Programme should be required as an environmental offset in return for the granting of any additional development rights in future.

### **Supplementary Planning Proposals**

The following proposals supplementary to the Keurboom Local Area Spatial Plan have been received from the Keurboom Property Owners Association as part of the Bitou SDF Consultation process:

- The greater Keurboom area is an environmentally sensitive part of Bitou and unique in its position as a prime tourist destination for its natural beauty.
- Existing zoning, rulings and intended uses should be upheld and applied by Council.
- Developments to be done in a balanced way so as not to disturb the overall character of the area.
- Acceptable land uses in the area include the following:
  - low density and mixed use property developments suitable for holiday, tourism and retirement;
  - smallholding residential suitable for niche type agri such as vineyards, olives, soft citrus, honey bush;
  - light agri-related industry such as nurseries and hydroponics;
  - outdoor activities focused on eco-tourism, marine activities, trail-running, hiking and biking;
- The following matters should be investigated / addressed via the annual Bitou IDP / Budgeting process:
  - Development of an official hiking trail between Keurbooms and Natures Valley;
  - Formulation of a Keurboom estuary and river banks management plan including a policy on jetties;
  - Dedicated beach accesses including walkways, boardwalks and guidelines on the standards of blue flag beaches;
  - Proper infrastructure and precautions for risks of fires and storm water;

- Bitou ownership of the two access roads P394 and the existing gravel road connecting KB to N2;
- Upgrading of the two existing water reservoirs in terms of pressure, hygiene and safety;
- Provision of additional public parking space for Keurboom village;
- Providing soft street lights for Keurboom village;
- Opening a small municipal satellite office in KB village manned by an overseer for improved coordination of local service delivery duties.

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**LEGEND**

|  |  |  |  |
|--|--|--|--|
|  | RESIDENTIAL ZONE I   |  | TAXI PICK-UP AND ACCESS CONTROL FACILITY                                       |
|  | RESIDENTIAL ZONE III   |  | PEDESTRIAN CROSSINGS WITH ROADS SIGNS AND ELEVATED PAVING BLOCK SURFACED AREAS |
|  | OPEN SPACE / PARKS PROTECTED AREAS                                     |  | PUBLIC PARKING (TO BE CONSTRUCTED)   |
|  | BUSINESS (SHOP)  |  | WALKWAYS / PATHS   |
|  | CHURCH / COMMUNITY HALL  |  | PAVED ROAD SURFACES  |
|  | MUNICIPAL  |  |  |
|  | ROADS  |  |  |
|  | URBAN EDGE   |  |  |
|  | COASTAL PROTECTION ZONE DEMARCATION LINE ( 100m FROM HIGH WATER MARK ) |  |  |

**TSITSIKAMMA NATIONAL PARK (DE VASSELOT SECTION)**

TO PLETTENBERG BAY

GROOT RIVER LAGOON

ESTUARY

INDIAN OCEAN

PUBLIC PARKING

COASTAL PROTECTION ZONE DEMARCATION LINE ( 100m FROM HIGH WATER MARK )

HIGH WATER MARK

Figure 61

THE PRACTICE GROUP

36 886 MENLO PARK 01 02 TEL 012 - 3621741

PLAN 05

SCALE 1 : 7500

0m 10m 20m 30m

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Key strategies have been identified to facilitate the realization and ultimately the Nature's Valley LSDF objectives. These strategies are summarised as follow:

➤ **Intensify Environment Awareness Campaigns**

Nature's Valley falls within the Outeniqua Sensitive Coastal Area (OSCA) and is subject to the regulations that were promulgated by the Department of Environmental Affairs and Tourism during November 1998. The implementation of these regulations that encompass the natural environment of Nature's Valley should be a priority.

Closer co-operation and involvement by the Department of Agriculture, Forestry and Fisheries in the implementation of the Forest Act for the protection of indigenous and protected trees as well as certain vegetation communities in Nature's Valley is required.

In partnership with SANPARKS more environmental education programs should be implemented with the involvement of local schools and neighboring communities that could include an information centre. (This process is being achieved effectively by the Nature's Valley Trust, which is supported and funded to a degree by owners of NV properties)

➤ **Eliminate Weaknesses in the Road System to Improve Safety for all Road Users**

With a view to development of safe and an efficient movement system, a number of issues should be considered including signage, removal of vegetation encroachment, pedestrian crossings, parking and limiting heavy vehicle traffic to suitable roads.

➤ **Develop and Implement Appropriate Land Use and Urban Design Guidelines**

■ **Land Uses, development and design guidelines**

The need exists for representatives of the Nature's Valley property owners and the Bitou Local Municipality's Town Planning Section to reach consensus on building restrictions and design guidelines for Nature's Valley. This is one of the main objectives of the Local Spatial Development Framework.

Due to the relatively early date of establishment of Nature's Valley township, many town planning controls such as density, height and coverage of buildings and building lines were registered as conditions of title in respect of each erf in Nature's Valley. These restrictive conditions of title have successfully ensured the peaceful and nature orientated urban environment of Nature's Valley and should be retained at all cost.

Design guidelines should be compiled in conjunction with the Municipality and accepted by the property owners of Nature's Valley to ensure compatibility of future development within Nature's Valley environment.

### **Public Open Space and Parks**

Approximately 3.1 ha of public open space or parks exists within the Nature's Valley township. The community has played a leading role in developing the Phyl Martin Park (Erf 429) as a botanical garden for indigenous flora and in establishing an indigenous nursery. Similarly the Fynbos Reserve has been successfully rehabilitated as a rare remaining example of coastal dune fynbos and once the habitat of the Brenton Blue Butterfly. Both these open spaces fulfill the function of open air classrooms for environmental education. Although erven 380 (wetland reserve) and 381 (forest reserve) remain undeveloped or unused and can be classified as passive open spaces, work is progressing on the forest reserve. Invasive alien vegetation has been removed, all the indigenous trees identified and listed and a short meander created.




The principle of "use it or lose it" also applies and the pressure for development of unutilized open space will increase in future. A minimum level of utilization is required of which conservation and environmental education should form the basis.

The possibility of declaring the open spaces and parks as protected areas in the Coastal Zone in terms of the provisions of the National Environmental Management: Protected Areas Act, 2003, should be investigated.

Consideration should also be given to have the public open spaces declared as "special management areas" in terms of section 23 of the National Environmental Management: Integrated Coastal Management Act 2008 (Act No 24 of 2008).

### **Improve, Manage and Monitor Infrastructure and Services Provision**

The future of any town depends to a large degree, on the level of infrastructure availability and maintenance of such infrastructure. Whether a city or township works well or not is a function of the responsiveness of the municipality's departments to ensure that the town is kept clean and functional. Issues that are to be addressed include:

-  Efficient service delivery with specific reference to water supply, sewage and domestic waste management;
-  Introduction of a monitoring and evaluation system;
-  Area based management.

The establishment of Nature's Valley as a City Improvement District in terms of the provisions of, inter alia, Section 21 of the Companies Act and as a Special Rating Area in terms of the Municipal Property Rates Act, 2004 (Act 6 of 2004) and Municipal Finance Management Act, 2003 (Act 56 of 2003) should be investigated.

### **Promote Communication, Co-Ordination and Engagement**

To a large degree sustainable neighborhoods are about participation and the building of partnerships. Participation structures or stakeholder groups can take many forms, but it is important that there are dedicated structures that can co-ordinate stakeholder involvement. Public awareness and dissemination of information are important elements in the involvement of a

community. A community that is aware and capacitated to understand the benefit of the Nature's Valley Local Spatial Development Framework can be one of the most valuable assets in Nature's Valley. It is therefore important to involve the community and stakeholders in the planning, monitoring and even in implementation of the Nature's Valley LSDF.

### **Natures Valley Design Guidelines**

|   |   |
|---|---|
| <b>Pedestrian movement should be enhanced</b>   | <ul style="list-style-type: none"> <li>(1) Pedestrian walkways or sidewalks should be considered where necessary to avoid vehicle/pedestrian conflict.</li> <li>(2) Raised deck type walkways should be considered over wetland areas, indigenous forest areas and estuary edge to improve access and reduce impact.</li> <li>(3) Additional and integrated road signage indicating pedestrian movement and priority should be implemented.</li> <li>(4) In the long term, pedestrian crossings could be elevated and paved with paving blocks in order to demarcate such areas of high pedestrian movement and crossings and enhance traffic calming.</li> <li>(5) Negotiate with SANParks to create a wheelchair friendly raised access way over the coastal dune to an environmentally acceptable viewing point.</li> </ul>  |
| <b>Cyclist movement should be safe</b>  | <ul style="list-style-type: none"> <li>(1) Additional and integrated road signage should be implemented in addition to pedestrian movement, indicating that the streets of Nature's Valley are used by pedestrians and cyclists.</li> </ul>   |
| <b>Vehicular movement (speed and visibility) should be managed to ensure a pedestrian and cyclist friendly environment.</b> | <ul style="list-style-type: none"> <li>(1) The roads of Nature's Valley have a tarred surface (black top) of approximately 3 metres wide. The width should be maintained in order to enhance traffic calming and maintenance of the character of Nature's Valley as a pedestrian and cyclist friendly area.</li> <li>(2) Additional traffic calming measures such as additional speed humps should be considered on specific sections of road. In identified areas with more pedestrian movement, the roadways should rather be substituted with elevated paved areas mentioned in paragraph 7.1.1.</li> <li>(3) Additional road signs indicating maximum speed limit of 40 km/h should be implemented at intervals of 500 metres.</li> <li>(4) Vegetation of street reserves must be encouraged to enhance natural ambience and traffic calming without creating blind spots.</li> </ul> |

|  |  |
|--|--|
| <b>All new building activity should comply with endorsed building guidelines, building regulations and restrictive conditions of title</b> | <p>(1) The existing building guidelines of the Natures Valley Ratepayers Association must be reviewed workshopped and endorsed by the majority of property owners and the Municipality. Such guidelines must be expanded to address, inter alia, the following issues:</p> <ul style="list-style-type: none"> <li>- Aesthetics relating to existing ambience of Nature's Valley</li> <li>- Restrictive conditions of title as praedial servitudes.</li> <li>- Interpretation of Restrictive conditions of title.</li> <li>- Compatibility with the Nature's Valley's natural environment and sense of place.</li> <li>- Conservation of indigenous and protected vegetation.</li> <li>- Rainwater capture and storage</li> <li>- Building Materials.</li> <li>- Fencing.</li> <li>- Formal driveways.</li> <li>- Wildlife movement patterns.</li> </ul> <p>(2) Assessment of building plans by an approved ratepayers representative body (such as the NVRA) prior to approval by the Municipality is regarded as essential in achieving compliance with current building guidelines and restrictive conditions of title. A means to ensure compliance with this principle is to be investigated. (The assessment of plans by the NVRA, prior to submission for municipal approval is currently an informal agreement with Bitou Municipality which is beneficial to both parties, in view of the specific Restrictive conditions of title applicable to all properties in Natures Valley)</p> |
| <b>Stormwater Management System</b>  | <p>(1) The existing stormwater drainage system must be assessed and checked to ensure that all sections are functional. The system should be modified or upgraded where necessary to eliminate the routine flooding of houses. If necessary, pump stations should be introduced to achieve a satisfactory outcome. Routine bi-annual maintenance of the system by the municipality is to be carried out. The point of discharge into the estuary is to be rebuilt to ensure long term sustainability and protection of the surrounding environment.</p>  |
| <b>Potable Water Management System</b>   | <p>(1) Adequate water storage should be ensured by constructing a reservoir with a minimum 48 hour reserve capacity for domestic purposes. This increase is also necessary to strengthen the fire-fighting capacity.</p> <p>(2) Standby plant which serves the water treatment and pumping plant is to be automated to function during Eskom power supply outages.</p> <p>(3) Estuary level management protocols to be agreed with SANParks to ensure artificial breaching is carried out before the potable water intake point in the Grootrivier is contaminated with salt water.</p> <p>(4) Remote monitoring of the treatment plant is to be introduced to ensure early warning of any malfunction which could affect water supply availability.</p>   |

**Natures Valley Management and Development Strategies**

|  |   |
|--|---|
| <b>Rezoning and Subdivision</b>                              | <p>(1) Development controls such as historical land use and minimum erf size should be endorsed by the Municipality in conjunction with the NVRA to prevent over development, loss of the tranquil character of Nature's Valley and over utilization of infrastructure capacity constraints. The praedial servitude nature of restrictive conditions of title of properties in Nature's Valley must be considered with any new development proposed. The municipality must take cognizance of the relevant case law in this respect, as mentioned under para 2.3</p>  |
| <b>Restrictive Conditions of Title/Building Restrictions</b> | <p>(1) Undertake a review of the existing title deeds applicable to NV properties with a view to updating out of date restrictions and providing clarity on those restrictions which are misleading or require clear definition. Such clarification should be based on the needs of modern families and changes in society. This should clarify such issues as a clear definition of "normal outbuildings". Second dwellings should not be considered, however separate, single storey accommodation of a limited size is already commonplace and a definition of what is acceptable is required. Clarification of limitations to be placed on self-catering accommodation in accordance with Residential 1 zoning is urgently required.</p> <p>The objective of such a review being to minimize opportunities for misinterpretation and the potential disputes that can arise from such mis-interpretation. Any changes should not lead to densification or change the existing character and ambience of Natures Valley.</p> <p>In view of the fact that the title deeds in NV are considered praedial servitudes, any changes, clarifications or definitions will need to be agreed to in principle by all owners of property in NV.</p> <p>(2) In the interest of protecting the impact on the surrounding National Park, the estuary and the coastal dune, specific restrictions should be considered for properties abutting these ecologically sensitive areas.</p> <p>(3) The following restrictions applicable to Residential Zone 1 properties in NV are considered vital in maintaining the integrity and ambience of the urban environment.</p> <p>Maximum Height of Building : 12,5m (Refer to point (4) below)</p> <p>Maximum Residential Density : 1 dwelling unit per erf</p> <p>Maximum coverage : 50%</p> <p>Buildings lines/set backs Street 6.3m, rear 3.15m, side 3.15m</p> <p>(4) It must be noted that apart from the title deed conditions, the Zoning Scheme regulations applicable to Bitou Municipality are also applicable to buildings in NV. In this respect, the most onerous condition applies. (for example, building height, where a maximum of 8,5m above Natural Ground Level (NGL) is applied).</p> <p>(5) Bitou Municipality is in the process of developing new Zoning Scheme Regulations which are due to be promulgated in 2019.</p> |

|                             |   |
|-----------------------------|---|
|                             | <p>Consideration to be given to including an “overlay zone” for NV which could define the requirements for a “low intensity residential zone”. Such requirements could include the following:</p> <ul style="list-style-type: none"> <li>- Max coverage: 30%</li> <li>- Max Bulk factor: 1</li> <li>- Max building height: 8,5m to highest point above NGL.</li> <li>- Building Lines: As per existing (NV Title Deeds)</li> <li>- Provision for the suspension of title deed conditions, such as minor building line infringements where these are logical and well-motivated, rather than the lifting of restrictive conditions of title.</li> </ul> <p>(6) Consider options for increased co-operation between the NVRA and Bitou Municipality in policing of irregular or illegal building activities.</p>  |
| <b>Urban Management</b>     | <p>(1) Maintenance issues that, as a minimum, should be monitored and dealt with as part of the management function of Nature's Valley, should be incorporated in a management plan.</p> <p>Good progress in this respect was accomplished with the signing of a “Memorandum of Understanding” between the NVRA and Bitou Municipality. The agreement which was signed in 2017 includes the employment of a Superintendent to represent the municipality in NV and Covie. The superintendent was deployed in 2016. While creating a platform to increase the degree of co-operation between the parties, it is intended to improve the efficiency and quality of maintenance services in NV and Covie.</p> <p>The Agreement includes for the employment of permanent assistants to the Superintendent as well as a vehicle and equipment essential for routine maintenance operations in the township. These components of the agreement have not yet been met and ongoing efforts by the NVRA are necessary to ensure the success of this very positive venture which is in the interest of owners in NV and Covie, but also the municipality.</p>   |
| <b>Water and Sanitation</b> | <p>(1) Bulk capacity of the water reticulation system should be monitored in relation to peak demand during the high season.</p> <p>(2) The condition of the water purification and reticulation infrastructure should be monitored on a regular basis.</p> <p>(3) Sewage in Natures Valley is currently dealt with by a combination of septic tanks and conservancy tanks. Soil conditions in some areas of the township are not suited to septic tanks and soak-aways and in most instances conservancy tanks have been installed in these areas, however checks need to be undertaken to ensure that this is the case. Previous studies and recommendations to improve the management of sewage in Natures Valley have not been implemented and a study conducted on behalf of the municipality in 2017/18 is being considered. The NVRA have expressed reservations about the recommendation contained in this latest study as they appear unrealistic and not suited to nature of the problem in NV. An effective resolution is urgently required, however it should be based on more detailed research into the quality of the ground water in NV over a widespread area and should be conducted over a period of at least 2 years to understand the impact of seasonal changes in occupancy in the</p> |

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|   | <p>township. Monitoring of contamination levels in the Groot Rivier lagoon are conducted by the municipality on a routine basis and should be continued until sewage management has been improved.</p> <p>(4) Some useful work was done in the past on mapping the different soil types in NV as this has a big impact on the effectiveness of septic tanks and soak-aways. The accuracy of this data needs to be checked and maps updated, to simplify decision making on sewage disposal options.</p> <p>(5) A Water User's Association should be established in respect of the Groot River consisting of representatives of the NVRA, SANPARKS, NVT and DWAF in terms of the provisions of Chapter 8 of the National Water Act, 1998 (Act 36 of 1998).</p>   |
| <b>Roads, Sidewalks and Stormwater Drainage</b> | <p>(1) Regular repair of the road shoulders and potholes is required especially after torrential rains.</p> <p>(2) Maintain road signs, names and markings as well as traffic signals.</p> <p>(3) Trimming of vegetation growing in the road reserves must be done in accordance with the parameters set by the NVRA and Bitou Local Municipality.</p> <p>(4) Due to the limited paved area of the roads of Nature's Valley, traffic movement can only be achieved by vehicles partially driving on the unpaved sidewalks of the roads. This in itself is a traffic calming measure but causes the shoulders of the roadways to deteriorate at a faster rate than normal placing greater emphasis on the local authority to maintain the roads. A form of curbing that will prevent the crumbling of the road shoulder should be investigated and discussed with the local authority for implementation. Apart from improving the aesthetics of the road system, such an intervention would reduce the likelihood of major repaving of roads being necessary in the near future.</p> <p>(5) The existing stormwater drainage infrastructure although inadequate, needs to be maintained as a minimum measure to minimize flooding. This activity is an important part of the role of the municipal superintendent and his team.</p> <p>(6) Heavy vehicles exceeding 10 tons should be discouraged from entering Natures Valley to minimize the wear and tear on the inadequate road system.</p> |
| <b>Electricity</b>                              | <p>(1) Bulk supply capacity is to be reviewed on an annual basis to ensure its adequacy.</p> <p>(2) The condition of the infrastructure is to be routinely checked by the municipality and a routine maintenance program introduced.</p> <p>(3) Switchgear required to complete the ring main in NV is to be installed.</p> <p>(4) The HV Eskom supply to NV is routed overhead in the adjoining forest and is subject to damage from falling trees. Routine inspection and reporting by Eskom via the municipality to be introduced.</p>   |
| <b>Open Space and Conservation</b>              | <p>(1) Maintain parks and open spaces and where applicable maintain pedestrian walkways traversing open spaces.</p> <p>(2) Eradicate exogenous and listed trees and plants.</p> <p>(3) Investigate ways to protect the open spaces and parks from alienation, rezoning and development.</p>   |
| <b>Waste Management</b>                         | <p>(1) Ensure the use of wheelie bins on each property by owners and visitors. The baboon-proofing of wheelie-bins to be made obligatory.</p> <p>(2) Maintain frequent and routine collection of waste at the waste transfer station and cleaning of the site.</p>  |

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|   | <p>(3) Waste recycling by all owners and visitors to be encouraged and routine collection intervals to be maintained, particularly during holiday season.</p> <p>(4) Measures to prevent of illegal dumping of organic waste should be investigated and implemented.</p> <p>(5) Public waste bins (municipal and SANParks) are to be baboon-proofed and collections maintained.</p> <p>(6) Liaise with the municipality regarding the planned upgrade to the WTS. Such upgrading to include improved baboon-proofing.</p>  |
| <b>Illegal Uses and Activities</b>          | <p>(1) Enforce policies and municipal by-laws in respect of illegal land use, signage, keeping of pets, dogs on leashes and dog regulations on the beach.</p>  |
| <b>Community Involvement and Facilities</b> | <p>(1) Investigate the feasibility of obtaining financial assistance with the maintenance of public infrastructure i.e. NG church/community hall situated on Erf 379.</p> <p>(2) Liaise on a regular basis with South African National Parks in respect of maintenance of public toilet facilities situated on dune erf (Erf 444) and at lagoon parking and Beach Path No 1.</p> <p>(3) Public toilets and shelter should be provided at the entrance to Nature's Valley to improve conditions for workers waiting for transport. Such facility will require routine servicing and regular maintenance.</p>  |
| <b>Safety and Security</b>                  | <p>(1) Ensure adequate and visible policing during peak holiday periods and take action against alcohol abuse in public areas.</p> <p>(2) Safety guidelines to be compiled and implemented.</p> <p>(3) Investigate the implementation of a security presence at the entrance to NV to monitor and record the passage of unusual vehicles and pedestrians. Such presence and recording to take the form of a security guard and/or security cameras and should not create any hindrance or discomfort to the public at large.</p> <p>(4) NVRA to manage and co-ordinate liaison with the NV community on security matters and incidents.</p> <p>(5) Liaise with SAPS, Craggs Security and local Security Services companies such as Fidelity-ADT, SMHART etc on an ongoing basis</p> <p>(6) Implement excellent waste management strategies to minimise baboon raiding activities and educate and inform the community on the potential for baboon invasion of properties.</p> <p>(7) Investigate the allocation of municipal funding to assist with baboon management programs. This would be in line with other affected areas in the Western Cape.</p> |