# 4. SPATIAL PROPOSALS AND SPATIAL DEVELOPMENT FRAMEWORK

# 4.1. SDF PROPOSALS FOR THE LOCAL MUNICIPALITY FOR THE NEXT 5 YEARS (MACRO LEVEL MAP)

# 4.1.1. OBJECTIVES THAT REFLECT THE DESIRED SPATIAL FORM OF THE MUNICIPALITY ON THE MACRO LEVEL MAP

The visualising of the Letsemeng Local Municipality by way of proposed spatial initiatives was undertaken, utilizing a set of structuring elements. The Spatial Development Framework Maps of these spatial initiatives are attached. The spatial initiatives as reflected in the Spatial Development Framework are important to guide the development of the municipality.

The structuring elements are as follows:

## CENTRES

Centres represent a classification of localities according to specific and specialized services of regional or provincial importance or a centre of activities. The following centres have been identified in Letsemeng:

- Administrative centre: Koffiefontein
- Heritage centre: Luckhoff
- Agricultural centre: Jacobsdal

These centres have the potential to attract tourists and investors due to their unique features, historic value, economic value and special characteristics. These are localities with concentrated development (facilities, services and economic opportunities) of such importance and with a sphere of influence. It is where specialization of services or products can take place. The larger the influence of a centre, the more intense the development associated with the centre and the greater the density and area that the centre will occupy. Social and economic development programs can be initiated in each of the Letsemeng Local Municipality centres where such a developmental concentration exists or has potential to exist. It is therefore important that the rehabilitation of these areas be promoted, looking at their competitive advantage. They can be supported by access to residential, business sites and urban form that will deliver the long-term vision for Letsemeng Local Municipality.

## NODES

These are localities where development (facilities, services and economic opportunities) tends to concentrate. All nodes across the municipality should at least contain commercial, business and residential activities, as all are destined to be mixed-use nodes. Different types of nodes were distinguished as follows:

(a) Economic growth nodes are localities where economic growth is promoted and a variety of activities will tend to cluster in and around the nodes. Koffiefontein is identified as the most important economic growth node within the Letsemeng Local Municipality, as it is the municipality's administrative centre and a mining town. Petrusburg is also identified as a

future economic growth node due to the potential of the N8 national road that passes through it. Koffiefontein as well as Jacobsdal and Petrusburg nodes all offer development potential and need to be stimulated in order to stimulate growth. These nodes should be developed in order to draw investment from nearby regions. Those that have not been identified as economic growth nodes will continue to exist as service centres, such as Oppermansgronde and Luckhoff.

Capital investment needs to be focussed in Koffiefontein, Petrusburg and Jacobsdal nodes, where development is likely to be more sustainable in the future. Both public and private initiatives in these areas should be supported and diversified. This will have the effect that a greater need for new residential sites, housing and infrastructure will arise in these areas, thus requiring the allocation of grants for capital investment projects to favour these localities more than those with limited growth potential.

The development of mix uses along nodes needs to be investigated for future economic growth, including:

- Focused development initiatives at key nodal points to develop the municipality;
- The long term sustainability of all land development practices;
- Building of capacity amongst emerging land users such as miners, government official and farmers;

Luckhoff and Oppermansgronde have a stagnant or limited economic growth potential. Feasibility study should be done for economic potential, which could be developed with social services in support of those areas where growth stagnant. It is therefore proposed that attention should be paid to education, health and social infrastructure in these service nodes to allow a sustainable quality of life for people staying there in these towns.

(b) **Restitution nodes** are concentrated human settlements at a low scale, which are mostly agricultural orientated and most of the economic opportunities lie in the utilization of the natural resource base. They are also nodes whereby land is utilized for communal grazing or other agricultural activities by the community and usually support subsistence farming activities. Oppermansgronde has been identified as the main restitution node.

Management plans for commonages should be compiled and implemented by the Letsemeng Local Municipalities. This will allow kraals for livestock within commonage land to be provided and managed where required through Spatial Development Framework (SDF) and Land Use Scheme.

(c) Tourism Nodes offer leisure and tourism products to the consumer. The unique features, historic value or special characteristics of landmarks in Koffiefontein, Jacobsdal and Luckhoff can potentially attract tourists. The tourism development potential of these areas needs to be enhanced in order to improve their attractiveness to tourists. Particular attention should be paid to the marketing of these nodes to tourists and should be included in the implementation plans. Careful consideration should be given to advertising and building design when new developments are established in towns earmarked as tourism nodes, as this can negatively affect the marketability of such towns as tourist destinations.

(d) Nature Reserves and Conservancies nodes are localities protected by legislation for their environmental quality and sustainability. This refers to the Vanderkloof dam and Kalkfontein dam which are located within the Letsemeng Local Municipality proximity. The conservations of these areas should be maintained and promoted in the implementation plans.

## CORRIDORS

**Tourism corridors** are tourism routes that link tourist destinations of unique cultural and natural value. These routes support development focusing on the hospitality and tourism industry along them. These tourism destinations should also be promoted and made visible through strategically placing tourism signage's along speciafied routes such as the R48 connecting the R705 to Jacobsdal, the R704 to Koffiefontein.

**Transport corridors** are routes of high mobility (movement) that establish a linkage between areas of significance, with an optimal travel time. Routes such as the N8, R48, R705 and R704 have developmental potential that should be investigated and promoted as there is an existing mobility's activity linking main and local towns in the municipality and neighbouring cities. The N8 links the Northern Cape with the Free State, connecting Kimberley to Bloemfontein. This is an important route due to the number of trucks that use it for logistical purposes. The same can be said about the R705 and R48 which Northern Cape with De Aar and Faurismith.

The municipality has minimal public transport available between the towns and the surrounding cities which are Bloemfontein and Kimberly. The increase in the provision of public transport may results in the efficient access for locals.

**Development corridors** are characterized by higher order ribbon-like development along routes that can be classified as transport (movement) axes. The N8 passing through Petrusburg and R48 is a potential development corridor in Letsemeng Local Municipality. However, this does mean that development will be continuous for the full length of the corridor. It is foreseen that the presence of economic activity along these routes will require special attention in terms of the planning of access and exits to and from commercial activities on the entrance of Petrusburg in order not to interfere with the mobility of the corridor itself. Economic development should thus be promoted on the key intersections of the development corridors with minimal negative impact on the mobility of the corridor.

# 4.1.2. PROPOSALS ON MACRO LEVEL FOR WHOLE OF LOCAL MUNICIPALITY ACCORDING TO SPCs

## 4.1.1 Spatial planning categories

The Spatial Planning Categories (SPCs) provide a framework to guide decision-making regarding land-use at all levels of planning. The designation of SPCs does not change existing zoning or land-use regulations or legislation. SPCs merely help to clarify and facilitate coherent decision-making that can lead to better zoning, bylaws and regulations. The SPCs, furthermore, provide a framework through which land-use decisions can be standardised throughout the province.

× W	Α	CORE	A.a	Statutory Protected Areas
X	В	BUFFER	B.a B.b B.c	Non-Statutory Conservation Areas Ecological Corridors Urban Green Areas
R	С	AGRICULTURAL AREAS	C.a C.b	Extensive agricultural areas Intensive agricultural areas
	D	URBAN RELATED	D.a D.b D.c D.d D.f D.f D.j D.h D.j D.k D.l D.m D.n D.n D.n D.n D.n D.n D.n D.n D.n	Main Towns Local Towns Rural Settlements Tribal Authority Settlements Communal Settlements Institutional Areas Authority Areas Residential Areas Business Areas Service Related Business Special Business Special Business SMME Incubators Mixed Use Development Areas Cemeteries Sports fields & Infrastructure Airport and Infrastructure Resorts & Tourism Related Areas Farmsteads & Outbuildings
	E	INDUSTRIAL AREAS	E.a E.b E.c E.d E.e	Agricultural industry Industrial Development Zone Light industry Heavy industry Extractive industry
	F	SURFACE INFRASTRUCTURE & BUILDINGS	F.a F.b F.c F.d F.f F.f F.h F.i F.k F.l	National roads Main roads Minor roads Public Streets Heavy Vehicle Overnight Facilities Railway lines Power lines Telecommunication Infrastructure Renewable Energy Structures Dams & Reservoirs Canals Sewerage Plants and Refuse Areas

# 4.1.2 MACRO SPATIAL DEVELOPMENT FRAMEWORK PROPOSALS

Α	CORE AREAS
A.a	STATUTORY PROTECTED AREAS (CONSERVATION AREAS)
	Areas designated in terms of legislation for biodiversity conservation, defined categories of outdoor recreation and non-consumptive resource use. Conservation purposes are purposes normally or reasonably associated with, the use of land for the protection of the natural and/or built environment, including the protection of the physical, ecological, cultural and historical characteristics of land against undesirable change.
•	Areas around the Orange River, VanDerKloof Dam and the Kalkfontein Dam need to be maintained as protected areas per the 2016 Free State Biodiversity plan; A heritage and cultural Study must be compiled for the Local Municipality to ensure future conservation;
B	BUFFER AREAS
B.b	ECOLOGICAL CORRIDORS
	Linkages between natural habitats or ecosystems that contribute to the connectivity of the latter and to the maintenance of associated natural processes.
•	The areas surrounding the Vanderkloof Dam should be maintained as significant development areas, tourism and recreational activities should favourably be considered; Areas of ecological significance on the commonage properties should be identified through a study; Flood lines must be taken into account when development are planned maintaining the 50 and 100 years flood line;
B.c U	JRBAN GREEN AREAS
•	Study should be done to understand the municipalities open spaces in terms of their significance and how to sustainably protect or utilise them within the prescribed environmental regulations;
С	AGRICULTURAL AREAS
C.a	EXTENSIVE AGRICULTURAL AREAS
	Agricultural areas covered with natural vegetation, used for extensive agricultural enterprises, e.g. indigenous plant harvesting, extensive stock-farming, game-farming, eco-tourism.
• • •	Land for small scale farming and commonage must be identified and ownership verified through a study to potentially enhance opportunities for emerging farmers; The land along the R48, R 705 and S1181 are proposed to be agricultural development areas catering for the encouragement, stock, game farming and econ-tourism; A feasibility study should be done in Oppermansgronde for the development of an agricultural centre; Assist with access to land and provide support to emerging farmers; Sustainable and coordinated commonage projects should be developed that are regulated by the Local Authority to ensure the productive utilization of commonage land;

# C.b INTENSIVE AGRICULTURAL AREAS

Agricultural areas used for intensive agricultural practices, e.g. crop cultivation, citrus, lucerne, dates, vineyards, intensive stock farming on pastures.

- Explore the agricultural benefits potential of the Vanderkloof Dam near Luckhoff and Riet River irrigation networks, serving Oppermansgronde and Jacobsdal respectively;
- Promote agro-processing enterprises and initiatives such as Botebo wines in Jacobsdal, Boitumelo Vineyard in petrusburg;
- Encourage cropping and animal production;
- Processing and packaging of crop specific products in association with crop suitability index of Free State agricultural master plan;

#### URBAN

# D URBAN RELATED AREAS

## **D.a MAIN TOWNS**

Smaller towns and rural settlements that fall under the jurisdiction of Category B Municipalities (i.e. towns and rural settlements forming part of a Local Municipality).

Undertake land audit for all land in the towns to guide identification of municipally owned land available for development such as land for gap housing market and business sites;

## Koffiefontein

Serves as the administration centre of the municipality which is economically boosted by the Petra mine. The enhancement of the town as the economic node can also allow the town to economically diversify due to the fact that mines to operate forever.

## Jacobsdal/Ratanang/Sandershoogte:

Serves as an economic growth, agriculture and tourism development node within the Letsemeng Municipality and is situated approximately 45 km Northwest of Koffiefontein. Access to the town is gained from the R704 route between Koffiefontein and links with Kimberley. The town should be promoted as the Agricultural Services Centre and key regional tourist destinations;

## **Petrusburg/Bolokanang**:

Serves as a commercial and social service centre within the Letsemeng Municipality and is situated approximately 55 km Northeast of Koffiefontein. Access to the town is gained from the N8 route between Bloemfontein and Kimberley. This town can be promote by the N8 to serve as an important link (transport support services) between Bloemfontein and Kimberly; Maintain Regional Agroprocessing Centre and secondary Agricultural Service Centre, social functions such as residence, education and medical services;

# D.b LOCAL TOWNS

## Luckhoff/Relebohile/Teisesville:

Serves as a general heritage service centre within the Letsemeng Municipality and is situated approximately 85 km South of Koffiefontein. Access to the town is gained from the R48 route between Koffiefontein and De Aar. The town should be maintained as the alternative general Agricultural Service Centre to surrounding farming areas with social Functions such as residence, education and medical services;

## **Oppermansgronde**:

• Serves as a general agricultural service centre (Restitution Area) within the Letsemeng Municipality and is situated approximately 35km West of Koffiefontein. Access to the town is gained from the S647 route between Koffiefontein and Luckhoff supporting. The town should also be maintained as the general agricultural service area to surrounding farming areas with social functions such as residence, education and medical services.

# **D.c RURAL SETTLEMENTS**

## Phambili

This area is located 55 Km west of Jacobsdal which is surrounding by agricultural farms (crops and stock). It is important that the area be promote land tenure through township establishments and upgrading of the informal settlement and possibly turn it into an Agri-village.

# D.g AUTHORITY AREAS

Areas designated for governmental purposes and other official uses, e.g. municipal offices, offices of parastatals (Telkom, Eskom) (areas zoned for authority purposes).

• Municipal owned building need to be maintained, used or leased to potential investors or people who want to utilise;

## D.q RESORTS AND TOURISM RELATED AREAS

*Tourism-related nodes and amenities that form part of a designated Hospitality Corridor.* 

Strengthen the linkage of Vanderkloof Dam and the Kalkfonteinlfontein nature reserve as tourism node through the R48 passing Luckhoff and R704 Koffiefontein respectively;

- A Diamond and Wine Tourism Corridor is identified to reach Jacobsdal from Koffiefontein and maybe linking with Jagersfontein Mine;
- The Horizon Tourism Corridor linking Kimberley with Jacobsdal, Koffiefontein, Fauresmith and Philippolis;
- Koffiefontein, Luckhoff and Jacobsdal are proposed Tourist nodes along the Tourism Corridor, and should be developed;
- A Tourism Development Plan needs to be compiled;

INDUSTRIAL

## E INDUSTRIAL RELATED AREAS

• A land audit needs to be undertaken to identify appropriate and available land for industrial development;

## SURFACE INFRASTRUCTURE

# F INDUSTRIAL RELATED AREAS

## F.a NATIONAL ROADS

• Promote N8 to serve as an important logistic and development corridor between Bloemfontein and Kimberly;

## F.b MAIN ROADS

- Upgrading of road infrastructure road building through proper gravelling in all towns (long term);
- Provincial Road R704 linking Koffiefontein with Fauresmith needs to be maintained;
- Provincial Road R705 linking Koffiefontein with Jacobsdal needs to be maintained;
- Provincial Road R48 linking Petrusburg with Koffiefontein, Luckhoff and Van Der Kloof Dam need to be maintained and potholes filled;
- The main roads in each of the towns need to be upgraded and maintained;
- Pavements on the main roads in each town need to be upgraded, cleaned and maintained;

## F.c MINOR ROADS

- A dilapidated gravel road (S1181 and S657) links Oppermansgronde, Jacobsdal with Koffiefontein need to be maintained and used as an alternative route between Koffiefontein and Jacobsdal;
- Paving and tarring of internal streets and resealing and repairing of current tar roads;

# F.f RAILWAY LINES

• Investigate feasibility to utilise the railway service more optimally in Petrusburg;

# F. RENEWABLE ENERGY STRUCTURES

• Letsemeng is ideally located for the development of Solar Farms;

## F.L. SEWAGE PLANTS AND REFUSE AREAS

- All landfill site needs to be upgraded and maintained;
- Upgrade sewage and water treatment plans;

## 4.2. SDF PROPOSALS FOR EACH TOWN IN THE LOCAL MUNICIPALITY FOR THE NEXT 5 YEARS (MICRO LEVEL MAP)

#### **4.2.1. KOFFIEFONTEIN**

Koffiefontein is the main business and administrative centre of the Municipality. The town has mining and agricultural activities that have potential to attract people and other economic activities. Koffiefontein needs to be further developed to draw investment (economic and infrastructure) through strategically working with the private and public sector, as well as the local community.

## OBJECTIVES THAT REFLECT THE DESIRED SPATIAL FORM FOR EACH TOWN IN THE LOCAL MUNICIPALITY ON THE MICRO LEVEL MAP

#### NODES

It is necessary to maintain the sense of place created by uniqueness of the coffee pot at the entrance to the town. This should be developed as an entrance node to the town through the upgrading of the coffee pot, installation of a welcoming and directional signage's and landscaping.

The existing main node in Koffiefontein is the town centre which can be enhanced through increasing business activities, markets and other opportunities should be promoted and provided with access to small and informal businesses in well-located spaces so to maximize economic opportunities in Koffiefontein and Ditlhake. The De Beers and Edward Street in the town centre need to be upgraded easy and efficient mobility. An effort to maintain sense of place, tree planting, bins and street furniture will make the town centre a more attractive and distinctive node.

Intensification of the town centre can be facilitated through the land use changes that support business development and to guide the development of all the two nodes in Koffiefontein town and Ditlhake.

#### CORRIDORS

Koffiefontein does not have corridors, but activity streets, namely De Beers, Groottrek and Edward. The primary activity street is De beers Street which is the extension of the R704 which is proposed to be part of the tourism route. De Beers Street must be intensified and extended as an activity street to connect with Ditlhake via Edward Street. This strengthens the linkage between the town and Ditlhake creating a potential node to develop at the junction with Edward Street. Developing an active economic node to Ditlhake entrance along this street will encourage development from Ditlhake into the town centre. An actively developed activity street will stretch from the western entrance of Ditlhake to the eastern exit from town with the aim of activating the town entrance and its activity streets.

# **KOFFIEFONTEIN: SPATIAL PROPOSALS ACCORDING TO THE SPCS**

<b>B. BUFFER AREAS</b>	
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**B.b ECOLOGICAL CORRIDORS** 

Linkages between natural habitats or ecosystems that contribute to the connectivity of the latter and to the maintenance of associated natural processes.

- Riet River buffer lines must be taken into account when development are planned towards the east maintaining the 50 and 100 years flood line;
- All areas adjacent to streams and rivers should be seen as environmentally sensitive;
- Additional development guidelines should be designed to ensure sustainable development maintaining 100 m distance from rivers and streams buffer;

**B.c URBAN GREEN AREAS** 

Municipal open spaces that form in integral part of the urban structure.

- The commonage Riet River riverbank and riparian zone to the north of town and Ditlhake;
- The Adventure Dam adjacent to the mining village can be actively used for recreational purposes;
- The 'monument Koppie' with the SA-War memorial west of the town can be revitalised as a relaxation and be used for recreational purposes;
- The entrance of the town must be designed, developed and maintained as urban parks;
- Urban agriculture: garden allotments must be established on commonage land adjacent to the town;

## C. AGRICULTURAL AREAS

C.a EXTENSIVE AGRICULTUAL AREA

• Encourage small stock farming inclusive of potential diversification of crops and improving access to land for emerging farmers with the end goal of achieving farming that can in future lead to the processing and packaging of farming produce;

C.b INTENSIVE AGRICULTUAL AREA

- Irrigation canal can make intensive farming viable in Koffiefontein;
- Encourage intensive Agriculture activities to the north west of Diamanthoogte and to the south-east of Koffiefontein;

# **D. URBAN RELATED AREAS**

## D. h RESIDENTIAL AREAS

Areas designated for residential purposes, e.g. single title erven, group housing, estates, 'GAP housing and residential smallholdings.

Koffiefontein

• Future residential expansion in Koffiefontein should be through densification of existing residential areas;

# Ditlhake

- Future short-term expansion for residential erven should be towards north western direction;
- Expand residential development on the vacant erf 1651 next to Ethembeni clinic for gap housing market;
- All identified sites for development must first be subjected to suitability investigations, specifically in terms of its geotechnical conditions and provision of services;

#### D.i BUSINESS AREAS

Areas designated for activities associated with retail and service industries, e.g. shops, restaurants, professional offices (areas zoned for business purposes).

Improve access to business sites in core activity areas;

#### Koffiefontein:

- Future expansion for business erven through densification of the earmarked vacant area;
- Expansion of the proposed mix use land to link with the proposed development of De Beers and , Groottrek and Edward as activity Streets;
- Identify a taxi pick up point and suited area for street hawkers;
- Promote existing businesses in the Koffiefontein CBD along the activity streets;
- Support where a node does not yet exist and it is desirable, land-use change applications must be supported;

#### Ditlhake

- Existing small business nodes should be supported and strengthened;
- Edward Street as a proposed activity street has been identified to link the commercial activities of the existing central business area of Koffiefontein, via planned mix use or business park serving Ditlhake outside the CBD;

#### Diamanthoogte

- Linking Diamanthoogte with the proposed activity street through increased business activity along Edward Street;
- Future medium term expansion for business erven next to Ethembeni Clinic;

#### D.m MIXED USE DEVELOPMENT AREAS

Areas designated for innovative combinations of land-use, e.g. residential/light business; light industry/light business (in terms of various municipal zonings).

• The Senwes and Transnet land should have a combination of housing, office, retail, medical, recreational and commercial. A precinct plan has been developed for the vacant SENWES and Transnet land for gap housing or medium to density residential and mixed-use development (diverse housing options, commercial and business activities) in Koffiefontein;

#### D.f INSTITUTIONAL AREAS

Areas designated for schools, colleges, churches, mosques, and other institutional purposes.

• Manage and provide sites for institutional purposes and community facility needs west of the Ethembeni clinic;

#### **D.n CEMETERIES**

Cemeteries and formal burial parks, excluding crematoriums.

- The cemetery in Ditlhake and town needs to be maintained;
- The Heritage War Graves in Koffiefontein need to be maintained and marketed as a tourist spot;

## D.0 SPORTS FIELDS AND INFRASTRUCTURE

Dedicated sports fields together with the associated infrastructure, parking areas, and services.

• Upgrading and maintenance sport facilities in town and in Ditlhake;

## D.q RESORTS AND TOURISM RELATED AREAS

Tourism-related nodes and amenities that form part of a designated Hospitality Corridor.

- The town must retain a clear, compact form, distinct and reputation of nodes and landmarks must be maintained;
- The coffee pot at the current entrance is a town icon. This must be retained, fixed, maintained and celebrated. Similarly, the stream that runs through this entrance symbolizes the water without which coffee cannot be made. This stream and its riparian area must be treated as an ecological unit, restored to its natural state and nurtured as such;
- A Diamond and Wine Tourism Corridor is proposed from Jacobsdal to Koffiefontein and linking to Jagersfontein Mine;

# E. INDUSTRIAL RELATED AREAS

Areas designated for light industrial activities associated with the service industry (e.g. repair of motor vehicles) including warehouses and service stations.

- Koffiefontein has several general and service industries, spread over the town which should be maintained and supported;
- A survey of all general and service industries in Koffiefontein is required to determine the latent and effective demand for erven. This activity can, in most cases, co-exist with other land uses, it should be accommodated as part of mixed-use development nodes;
- The street block opposite (South) the cemetery has been turned into illegal waste dump. The waste dump must be closed and completely removed through a waste recycling project;
- General industrial uses need to be encouraged and developed especially between Koffiefontein and Ditlhake;

## E.e EXTRACTIVE INDUSTRY

Settlements and infrastructure associated with multiple consumptive resource extraction, e.g. mining.

- The physical and environmental impacts of the mining activities need to be monitored to ensure sustainability;
- Investigate and implement potential impact projects with the likes of Petra Diamonds Mine to sustain the economy of Koffiefontein post Mining activities ;

## SURFACE INFRASTRUCTURE

# F. SURFACE INFRASTRUCTURE AND BUILDINGS

## F.b MAIN ROADS

Public streets and parking areas within main town and rural settlements.

- Upgrading of road infrastructure road building through proper gravelling in all towns (long term);
- The neglected bridge that gives access to Koffiefontein on the R48 needs to be upgraded as soon as possible;
- Upgrade the secondary access point is from S647 to Jacobsdal now mainly services the farming communities;
- Providing shelters at the pickup point on the corner of the R48 and R 704 and in Ditlhake along the Edward Street;
- A new entrance to Koffiefontein from the R48 directly into the CBD is proposed as a long term 10-20 years proposal;

## F.b MINOR ROADS

- Paving and tarring of internal streets and resealing and repairing of current tar roads;
- De Beers and Edward street need to be maintained as the main internal streets and street furniture need to be installed along De Beers, Groottrek and Edward Street;

• All road markings need to be repainted, Signage for roads and streets needs replacement in town;

## SURFACE INFRASTRUCTURE

Areas designated as municipal and private surface infrastructure

Provision of electricity to all households without electricity;

- Preference must be given for green infrastructure, local knowledge, material and labour;
- Sewerage plant (pump stations) need to be maintained;
- New landfill needs to be identified and licensed;

#### **4.2.2. PETRUSBURG**

Nodal and corridor developments will, over time enhance the quality of Petrusburg and Bolokanang. The areas surrounding north of Petrusburg have good cultivated agricultural land, while the Southern area is renowned for livestock farming.

## OBJECTIVES THAT REFLECT THE DESIRED SPATIAL FORM FOR EACH TOWN IN THE LOCAL MUNICIPALITY ON THE MICRO LEVEL MAP

#### NODES

All nodes must contain commercial activities, as all are destined to be mixed-use nodes. An economic node is proposed at the entrance to Bolokanang and at Petrusburg town off-ramp from the N8. This will allow potential economic activities on both entrances and by so doing give Petrusburg a better economic value.

#### CORRIDORS

The N8 in Petrusburg is proposed as the development corridor which is important for the development of the town. Economic activities can be boosted by the passing traffic on the N8 and that can have a trickling effect on the town. Such an effect should also be promoted via the internal streets. The activity streets should allow for markets and opportunities to facilitate small and informal businesses in well-located spaces to maximize economic opportunities. Petrusburg's main activity street is Monument Rd and the lower order activity streets will be Pretorius Street and Monument Rd towards Bolokanang.

# PETRUSBURG: SPATIAL PROPOSALS ACCORDING TO THE SPCS

B.c URBAN GREEN AREAS	
Municipal open spaces that form in integral part of	the urban structure.
• The existing garden allotments South of Boloka	nang should be supported to remain operational;
C AGRICULTURAL AREAS	
C.B INTENSIVE AGRICULTURAL AREAS	

- Letsemeng Municipality should lease commonage land to lessors and upgrading in terms of supporting infrastructure and farming practices;
- Promoting existing crop farming such as Conway Khuze in Petrusburg;

## D URBAN RELATED AREAS

#### D.h RESIDENTIAL AREAS

Areas designated for residential purposes, e.g. single title erven, group housing, estates, 'GAP housing and residential smallholdings.

- Update the waiting lists in conjunction with local housing committees and prioritisation of housing and erf needs;
- Expanding residential development north of Bolokanang and gap market housing on the right side entrance of the Petrusburg town;
- The provision of water and taps for all sites and bulk water supply in areas with water shortages, sanitation for all sites and replacement of all bucket systems;

#### **Petrusburg:**

- Extensions in Petrusburg are proposed towards the east. No future need for residential expansion is foreseen for the short medium term in Petrusburg;
- Allocate erven and supply basic infrastructure in the new established townships opposite the existing fuel station;

#### **Bolokanang:**

- Future short term residential development next to the Bolokanang cemetery;
- Medium term extension of Bolokanang to the south west of Bolokanang
- Spatially little can be done to further integrate the former separate towns and it can be argued that the greater Petrusburg functions well as an integrated unit. It is however proposed that social facilities be developed in Bolokanang on the new established township in order to balance the disparity of amenities compared with Petrusburg;

#### D.i BUSINESS AREAS

Areas designated for activities associated with retail and service industries, e.g. shops, restaurants, professional offices (areas zoned for business purposes).

Support existing businesses with resources, training and development;

#### **Petrusburg:**

- Petrusburg is fairly developed, however there is still much room for the densification of the CBD;
- Business development should be encouraged to expand further along the main Monument Rd street in a western direction;

#### **Bolokanang:**

- There is the potential to create an activity street/ spine along Monument Rd running through the town;
- Smaller business node is proposed along the main entrance road to Bolokanang;

## D.m MIXED USE DEVELOPMENT AREAS

Areas designated for innovative combinations of land-use, e.g. residential/light business; light industry/light business (in terms of various municipal zonings).

- Investigate the proposal of having one stop shop in Petrusburg along the N8 on the intersection with R48 to Koffiefontein;
- Mixed Use Development areas are proposed along the major access roads and in the western side of Petrusburg;
- All identified sites for development must first be subjected to suitability investigations, especially in terms of its geotechnical conditions, accessibility and services provision;

## D.f INSTITUTIONAL AREAS

Areas designated for schools, colleges, churches and mosques and other institutional purposes.

• Manage and provide sites for institutional land uses and community facility needs;

## D.n CEMETERIES

Cemeteries and formal burial parks, excluding crematoriums.

- Maintenance of the cemetery sites adjacent to the N8 needs to be done;
- Extension of existing cemetery to the south of Bolokanang is proposed;

## D. 0 SPORTS FIELDS AND INFRASTRUCTURE

Dedicated sports fields together with the associated infrastructure, parking areas, and services.

- Upgrading existing sport facilities in Bolokanang;
- Build new multi-recreational facilities with swimming pools and multi sport codes on the new established township;

## D.q RESORTS AND TOURISM RELATED AREAS

Tourism-related nodes and amenities that form part of a designated Hospitality Corridor.

Petrusburg has no declared heritage sites. Nonetheless, several old buildings epitomize a past era. These should be preserved and emulated in new developments in the 'old town'. Although the SAHR Act protects all structures older than 60 years, ignorance often leads to the destruction of heritage material causing the local character to be lost. The municipality must guard against such a loss.

- The town must retain a clear, compact form the clarity and prominence of nodes and church landmarks on the entrance of Bolokanang must be enhanced;
- Promote the "Potato Fest" in Petrusburg;

## INDUSTRIAL

# **INDUSTRIAL RELATED AREAS**

Industrial development activities area associated with the service industry (e.g. repair of motor vehicles and including warehouses and service stations e.g. silos, wine cellars, packing facilities, excluding abattoirs)

- A survey of all industries Petrusburg' is required to determine the latent and effective demand for development;
- Future factories should settle along the railway linestation;
- Agricultural industry should be stimulated at the proposed industrial area towards the west of Petrusburg;

SURFACE INFRASTRUCTURE

# SURFACE INFRASTRUCTURE AND BUILDINGS

## F.a NATIONAL ROADS

Public streets and parking areas within main town and rural settlements.

• The potential of the N8 to be a development corridor can attract development to spread to Petrusburg and Bolokanang;

# F.b MAJOR ROAD

- All internal roads need upgrading and maintenance;
- A taxi pick up point is needed with appropriate infrastructure on the entrance of Bolokanang;

## F.f RAILWAY LINES

Transport and associated infrastructure.

• Rail travel and transport must become an important element of the municipality's logistical infrastructure as the railway station can be actively used for goods transportation;

# SURFACE INFRASTRUCTURE

Areas designated as municipal and private surface infrastructure

- Provision of electricity to all households without electricity and investigate an alternate water sources as the town is dependent on boreholes;
- Preference must be given for green infrastructure, local knowledge, material and labour;
- The current landfill site has adequate capacity, however requires maintenance;

#### 4.2.3. JACOBSDAL

Jacobsdal has a number of existing commercial and business activities within its town as part of primary node that must be supported through complimentary activities. It is important that activity streets be encouraged along Voortrekker and Hoop Street to support the existing and proposed nodes and possibly create a secondary node between Ratanang and Jacobsdal town.

# OBJECTIVES THAT REFLECT THE DESIRED SPATIAL FORM FOR EACH TOWN IN THE LOCAL MUNICIPALITY ON THE MICRO LEVEL MAP

#### NODES

All nodes must contain viable commercial and business activities as proposed along Hoop Street within proximity of the recreation centre-community hall area in Ratanang-Sandershoogte. The primary economic node is the centre of the town should be maintained.

## CORRIDORS

The R705 is proposed to be a tourism route which will link Jacobsdal, Koffiefontein and Petrusburg. It is therefore important that the link from R705 is enhancement and Voortrekker Street as a main activity street. A secondary activity street is proposed along Hoop Street in a westerly direction of Jacobsdal, extending through Ratanang-Sandershoogte. The more the development is encourage along activity streets the more opportunities become available to boost the wine routes in and around Jacobsdal for tourism attraction and promotion of business taking into the area.

# JACOBSDAL: SPATIAL PROPOSALS ACCORDING TO THE SPCS

#### **B BUFFER AREAS**

#### **B.b ECOLOGICAL CORRIDORS**

Linkages between natural habitats or ecosystems that contribute to the connectivity of the latter and to the maintenance of associated natural processes.

- All areas adjacent to streams and Riet Rivers should be considered environmentally sensitive areas maintaining 50 and 100 years flood line;
- The location of canals, irrigated land and high potential agricultural land in the areas surrounding Jacobsdal needs to be treated as sensitive areas with consideration of conservation and sustainability;

**B.c URBAN GREEN AREAS** 

Municipal open spaces that form in integral part of the urban structure.

• Initiate garden allotment between Ratanang-Sandershoogte;

## C AGRICULTURAL AREAS

# C.a EXTENSIVE AGRICULTURAL AREA

- Letsemeng Municipality must lease the land to lessors, where utilization of the land will be mandatory for horticulture (vegetables and fruit) and fowl, but not for the keeping of stock;
- Jacobsdal also has an irrigation scheme that supplies water to crops over a huge area, this need be used sustainably;
- Promote area of rich and diverse agricultural activities such as vineyards and has highest concentration of suitable land for the production of fats and oils;
- Promote sustainable irrigation systems especial in Jacobsdal;
- Investigate the possibilities of establishing of an Agri-Village in Phambili;

## D URBAN RELATED AREAS

## D.h RESIDENTIAL AREAS

Areas designated for residential purposes, e.g. single title even, group housing, estates, 'GAP housing and residential smallholdings.

Compiling of interactive waiting lists in conjunction with local housing committees and prioritise housing allocations (RDP);

## Jacobsdal:

• Residential expansion in the form of densification and integration of existing areas;

## **Ratanang:**

- Integration of Ratanang and Jacobsdal is important and should be encouraged;
- Medium term expansion should be in a northern direction, across the S651;
- Develop erf 811 and erf 321 for residential expansion gap market housing;
- Expand residential development north of Ratanang;

## Sandershoogte:

- Short term expansion for residential erven through densification and integration of existing residential areas;
- Medium term expansion should be in a western direction;

## Phambili:

- Land tenure through site allocation should be provided to residents through the development of a formal Township;
- An Agri-village should be developed to accommodate the residents to be self-sustainable in providing produce, water, sanitation, etc;

## D.i BUSINESS AREAS

Areas designated for activities associated with retail and service industries, e.g. shops, restaurants, professional offices (areas zoned for business purposes).

The town centre is the business hub. Applications for business zoning on erven adjacent to existing business erven, adjacent to Voortrekker, Hoop and Kerk Streets should be supported;

#### Jacobsdal:

• Promote and maintain the CBD spatially as sufficient room exists for the densification;

## Ratanang/ Sandershoogte:

• A small business node at a central location is proposed for Ratanang;

# D.f INSTITUTIONAL AREAS

Areas designated for schools, colleges, churches and mosques and other institutional purposes.

- The town needs one additional secondary schools;
- Need for the building of a new clinic eastern side of Ratanang ext 5;

## D. m MIXED USE DEVELOPMENT AREAS

Areas designated for innovative combinations of land-use, e.g. residential/light business; light industry/light business (in terms of various municipal zonings).

• Allow for markets and other opportunities to facilitate small and informal businesses in welllocated areas to maximize economic opportunities along the proposed activity streets;

## D. n CEMETERIES

Cemeteries and formal burial parks, excluding crematoriums.

- Unregistered graves should be formalized, registered and fenced in Phambili;
- The existing cemetery can be expanded along the S1406 road North of Ratanang if there is a need;

# D. o SPORTS FIELDS AND INFRASTRUCTURE

Dedicated sports fields together with the associated infrastructure, parking areas and services.

• Upgrading existing sport facilities in Ratanang;

## D.q RESORTS AND TOURISM RELATED AREAS

Tourism-related nodes and amenities that form part of a designated Hospitality Corridor.

- Jacobsdal has three declared heritage sites: the blockhouse, the NG church and the Magersfontein Burgher Memorial: these must be preserved as they form part of the town's symbol;
- The primary school in the town's main building is architecturally valuable, but it needs maintenance;
- Jacobsdal Wine Cellar is a unique feature of the town. This can be enhanced if a commercial node is created at the Southern entrance to the town. It is proposed that the 'wine' character of the entrance be used to form a specific, grape-wine-themed gateway to Jacobsdal, not commercial but agricultural, to suggest wine making and tasting;
- Local symbols, landmarks and the unique built form must be cherished, preserved and maintained;
- The SA-War blockhouse must be restored and celebrated as part of the town's image;
- A Diamond and Wine Tourism Corridor was being identified reaching from Jacobsdal to Koffiefontein and maybe linking with Jagersfontein Mine;
- The Horizon Tourism Corridor linking Kimberley with Jacobsdal, Koffiefontein, Fauresmith and Philippolis;

## E INDUSTRIAL RELATED AREAS

Areas designated for light industrial activities associated with the service industry (e.g. repair of motor vehicles) including warehouses and service stations.

• Zero waste projects must be pursued. The ideal site for this would be south west of Ratanang-

Sandershoogte to make use of local labour

- Industrial development should be focused closer to south west of Ratanang and Sandershoogte;
- Light Industrial Uses needs to be encouraged and develop especially between Jacobsdal and Ratanang;
- Projects such as bottling and distillery must be identified to compliment and further develop the industries that are currently operating;

## SURFACE INFRASTRUCTURE AND BUILDINGS

## F.b MAIN ROADS

Public streets and parking areas within main town and rural settlements.

Upgrading of road infrastructure – road building through proper gravelling in all towns (long term); Paving and tarring of internal streets and resealing and repairing of current tar roads.

- The S1189 to Modder River and Koffiefontein is the most prominent road in the region. This road holds potential for Jacobsdal economy;
- The R705 from Jacobsdal to Kimberley connecting to N12 should be maintained. This is an important access road to Kimberley and should be used for marketing the produce from Jacobsdal;
- A portion of the access road to the winery needs to be upgraded for it holds a very strong tourism and economic force;

#### F SURFACE INFRASTRUCTURE

Areas designated as municipal and private surface infrastructure

- Hoop Street activity street will strengthen the link between the Jacobsdal CBD and Ratanang;
- Jacobsdal has small erven making subdivision of these is impracticable.
- Density increases will be supported at all nodes and along the activity streets;
- Preference must be given to green infrastructure, and local knowledge, material and labour;
- Identify a landfill site for upgrading and registration;

## **4.2.4. LUCKHOFF**

Luckhoff has a unique built form which must be cherished, preserved and maintained. Furthermore, the town must retain a clear compact form. Promoting activity along main streets and nodes will strengthen Luckhoff's spatial form and consequently enhance the town image.

## **OBJECTIVES THAT REFLECT THE DESIRED SPATIAL FORM FOR EACH TOWN IN THE LOCAL MUNICIPALITY ON THE MICRO LEVEL MAP**

#### NODES

The town centre is the economic node that should be enhanced through the Voortrekker Street and Phil Sanders Avenue junction. The secondary proposed node should be on the corner of Voortrekker Street and the R48 junction. This will enhance efficient access for residences in Relebogile and the CBD itself which will be supported by the proposed activity street.

#### CORRIDORS

The R48 passing Luckhoff has the potential to be a tourism corridor as it connects Vanderkloof nature reserves with R704 and R705 to Koffiefontein and Jacobsdal respectively. The vehicle activity of the R48 can bring much needed economic and traffic

activity along the Voortrekker Street as the proposed activity street. The municipality must also allow for markets and other opportunities by facilitating small and informal businesses in well-located spaces to maximize economic opportunities.

# LUCKHOFF: SPATIAL PROPOSALS ACCORDING TO THE SPCS

B BUFFER AREAS
B.b ECOLOGICAL CORRIDORS
Linkages between natural habitats or ecosystems that contribute to the connectivity of the latter and to the maintenance of associated natural processes.
• All areas along River buffer development should be designed to ensure sustainable development maintaining 50 and 100 year flood line;
• All areas adjacent to streams and rivers should be seen as environmental sensitive;
B.c URBAN GREEN AREAS
Municipal open spaces that form in integral part of the urban structure.
• Preserve the natural stream and buffer east to west of the Luckhoff between the town and Relebogile;
C AGRICULTURAL AREAS
C.b INTENSTIVE FARMING AREAS
<ul> <li>Game farms should be encouraged around Luckhoff;</li> <li>Promote cattle and sheep farming which dominate farming practice in Luckhoff;</li> <li>Commonage upgrading in terms of supporting infrastructure and farming practices;</li> <li>Support unit infrastructure for cropping, animal production and game farming;</li> <li>Enhance access to land for emerging farmers north of Luckhoff;</li> </ul>
D URBAN RELATED AREAS
D.h RESIDENTIAL AREAS
Areas designated for residential purposes, e.g. single title erven, group housing, estates, 'GAP housing and residential smallholdings.
Compile of interactive waiting lists in conjunction with local housing committees and prioritisation of housing allocations (RDP).
<ul> <li>Residential development to be promoted north west and east of Relebogile and South of the town;</li> <li>Relebohile and Teisesville are well integrated;</li> <li>Luckhoff:</li> </ul>
• Vacant areas in Luckhoff can be utilized for housing purposes through densification and redevelopment of existing sites;
Relebohile:
<ul> <li>The layout of new residential areas at Relebohile can be developed to the north;</li> <li>It is proposed that medium and proposed new residential development should be North of Relebohile across the R48;</li> </ul>
Teisiesville:
<ul> <li>Medium term development for residential purposes for Teisesville should be to the west;</li> </ul>

professional offices (areas zoned for business purposes).

- Enhance and density existing businesses and improve access to new business sites;
- It is proposed that the current status quo be maintained. New businesses should be accommodated in the CBD through densification;

# D.f INSTITUTIONAL AREAS

Areas designated for schools, colleges, churches and mosques and other institutional purposes.

• A new clinic is needed closer to the residents in along Voortrekker Street;

## D.m MIXED USE DEVELOPMENT AREAS

Areas designated for innovative combinations of land-use, e.g. residential/light business; light industry/light business (in terms of various municipal zonings).

- Investigate potential one stop shop on the proposed node on the corner of Voortrekker Street and R48;
- Ensuring the sustainability of the local economy by promoting activity street and nodal development will strengthen Luckhoff's legibility;

## D.n CEMETERIES

Cemeteries and formal burial parks, excluding crematoriums.

• The cemeteries need to be maintained on a regular basis;

## D.0 SPORTS FIELDS AND INFRASTRUCTURE

Dedicated sports fields together with the associated infrastructure, parking areas and services.

- Upgrade the netball courts and swimming pool at the sports facility in town;
- Maintain the sports facilities in town as they remain dilapidated;

## D.f RESORTS AND TOURISM RELATED AREAS

Tourism-related nodes and amenities that form part of a designated Hospitality Corridor.

• Promote heritage sites in Luckhoff;

## INDUSTRIAL

E

# INDUSTRIAL RELATED AREAS

Areas designated for light industrial activities associated with the service industry (e.g. repair of motor vehicles) including warehouses and service stations.

- Light and service industrial activities are preferred along Voortrekker Street, north of R48, along with business and commercial;
- Initiate recycling projects to collect and recycle material;

# SURFACE INFRASTRUCTURE AND BUILDINGS

## F.b MAIN ROADS

Transport and associated infrastructure.

• Provide shelters at the taxi pick up point on the corner of Voortrekker Street and R48;

## F.I SEWAGE PLANT AND REFUSE AREAS

Areas designated as municipal and private surface infrastructure

- Preference must be given for green infrastructure as well as the use of local knowledge, material and labour;
- A new landfill need to be developed east of Relebogile and be licensed;

## 4.2.5. OPPERMANSGRONDE

The town must retain a compact form as not much development is expected. The ridge to the west of the town forms a definitive natural edge and is a potential site for a landmark that could become an icon for Oppermansgronde.

# OBJECTIVES THAT REFLECT THE DESIRED SPATIAL FORM FOR EACH TOWN IN THE LOCAL MUNICIPALITY ON THE MICRO LEVEL MAP

## NODES

The existing activities on the town's entrance will need to be enhanced to make develop into an economic node. This can result in bringing more economic activities such as businesses or markets on the gateway giving it more clearer spatial and economic value.

#### CORRIDORS

Oppermansgronde does not have corridors, however a development of the mix uses along activity Street can be encouraged to give clearer spatial appearance to Oppermansgronde. The main access road into town is the activity street.

# **OPPERMANSGRONDE:** SPATIAL PROPOSALS ACCORDING TO THE SPCS

## D URBAN GREEN AREAS

Municipal open spaces that form in integral part of the urban structure.

• Identify garden allotments;

## C. AGRICULTURAL AREAS

## C.a EXTENSIVE AGRICULTURAL AREAS

- The Bozrah irrigation project has an influence on Oppermansgronde development;
- Oppermansgronde vineyards must be supported;
- Urban agriculture: garden allotments must be established on commonage land adjacent to the town. The Communal Property Association (CPA) must lease the land to lessors who have to utilize the land for horticulture (vegetables and fruit) not the keeping of stock;
- Sustainable and coordinated commonage projects should be developed that are regulated by the Local Authority to ensure the productive utilization of commonage land;
- Linkage to agro processing of produce of Oppermansgronde in Koffiefontein;

## **D. URBAN RELATED AREAS**

#### D.h RESIDENTIAL AREAS

Areas designated for residential purposes, e.g. single title erven, group housing, estates, 'GAP housing and residential smallholdings.

- Allocated vacant residential sites and provide infrastructure services;
- Expansion to the north of Oppermansgronde is proposed for future residential erven;

#### D.i BUSINESS AREAS

Areas designated for activities associated with retail and service industries, e.g. shops, restaurants, professional offices (areas zoned for business purposes).

- The access street leading into Oppermansgronde road should become an activity street because existing business and commercial activities;
- Business activity in other parts of town, such as corner shops, doctors' consulting rooms, etc. will also be supported where desirable and business sites need to be established;

## **D.f INSTITUTIONAL AREAS**

Areas designated for schools, colleges, churches, mosques, and other institutional purposes.

• One primary school is required, however additional class can be added on the existing intermediate school;

#### D.m MIXED USE DEVELOPMENT AREAS

Areas designated for innovative combinations of land-use, e.g. residential/light business; light industry/light business (in terms of various municipal zonings).

• Allow for markets and other opportunities to facilitate small and informal businesses in welllocated in and along the entrance of the Oppermansgronde to maximize economic opportunities and passing traffic;

## D.n CEMETERIES

Cemeteries and formal burial parks, excluding crematoriums.

• A site for a cemetery within the rural town needs to be considered, due to the residential expansion of the town to the north;

## D.0 SPORTS FIELDS AND INFRASTRUCTURE

Dedicated sports fields together with the associated infrastructure, parking areas, and services.

- Proposed new sport facilities west of Oppermansgronde;
- The schools have one sports field; this need to accommodate the current and future need; Upgrading of sport facility;

## D.q RESORTS AND TOURISM RELATED AREAS

Tourism-related nodes and amenities that form part of a designated Hospitality Corridor.

- The remainder of communal land in Oppermansgronde should be managed according to an Environmental Management Programme to ensure the retention of its original nature, as a location for film shooting, eco-tourism and game farming;
- No development must be allowed on ridges;
- Oppermansgronde as the place has no unique built form. However, the traditional vernacular architecture kept in future developments where possible;

#### **INDUSTRIAL**

## E. INDUSTRIAL RELATED AREAS

Areas designated for light industrial activities associated with the service industry (e.g. repair of motor vehicles) including warehouses and service stations.

• Industrial activities will be supported around the access road into town;

## SURFACE INFRASTRUCTURE AND BUILDINGS

F.b Major ROADS

Public streets and parking areas within main town and rural settlements.

Upgrading of road infrastructure – road building through proper gravelling in all towns (long term); Paving and tarring of internal streets and resealing and repairing of current tar roads.

- The S1381 road connecting Koffiefontein and Oppermansgronde need to be paved/tarred;
- Transport infrastructure needs to be expanded to this town to link efficiently with other neighbouring towns;
- Provide a taxi pick up point on the towns entrance;

# F.I SEWAGE PLANTS AND REFUSE AREAS

Areas designated as municipal and private surface infrastructure

• The landfill needs to be fenced and maintained;