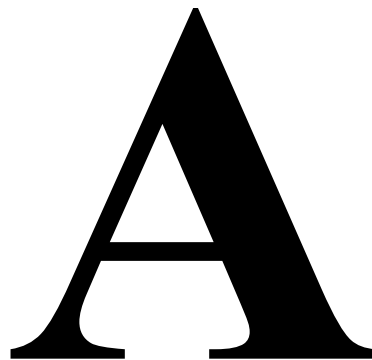


REGIONAL SPATIAL DEVELOPMENT FRAMEWORK (RSDF 2010-11)



CITY OF JOHANNESBURG:

ADMINISTRATIVE REGION A

DRAFT

(REVIEW OF THE APPROVED 2009/10 RSDF)

RSDF A

CITY OF JOHANNESBURG: ADMINISTRATIVE REGION A

March 2010

**ANNEXURE TO THE CITY OF JOHANNESBURG
SPATIAL DEVELOPMENT FRAMEWORK - SUBMITTED
AS A COMPONENT OF THE IDP IN TERMS OF THE
MUNICIPAL SYSTEMS ACT, 2000**

**(TO BE SUBMITTED AS A COMPONENT OF THE CITY OF
JOHANNESBURG'S LAND DEVELOPMENT OBJECTIVE IN
TERMS OF THE DEVELOPMENT FACILITATION ACT, 1995)**

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EXECUTIVE SUMMARY

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Region A is located on the northern periphery of the City of Johannesburg Metropolitan area, bordered by Region C and Region E to the south, Mogale City Local Municipality to the west, City of Tshwane Municipality to the north and City of Ekurhuleni Municipality to the east.

This region is still largely undeveloped with large tracts of land still being agricultural holdings and farm portions. The predominant land uses include, but are not limited to, industries, conference and hospitality facilities, low to high-density residential areas and environmental conservation areas. There is potential for eco-tourism related activities and urban agriculture in the western part of the region, due to this area's environmental quality and its association with other regional tourism destinations, such as the Hartbeespoort Dam (in Mogale City Local Municipality).

The region's unique defining features include the N1 Development Corridor¹, Midrand Metropolitan Node, Kyalami Speciality Node, Lanseria Airport and Grand Central Airport, all of which contribute towards the region's economy. Other existing and potential prominent areas of employment include the Fourways Regional Node, the industrial areas of Kya Sands, Commercias (in the City of Ekurhuleni Municipality) and Centurion (in the City of Tshwane Municipality), the Northgate Regional Node (in Region C) as well as the Woodmead and Rivonia Regional Nodes (in Region E).

The Gautrain station at Midrand offers an opportunity for further land use intensification and urban regeneration within the Midrand CBD. Careful considerations have been made in the Midrand Gautrain Station Precinct UDF (2008) to integrate this development with the Midrand Node and surrounding proposed developments such as Zonki'zizwe. The Bus Rapid Transit (BRT) System, Phase 1 of which affects Region A in Sunninghill, is a major public transport upgrade initiative by the City. Efforts have to be made to ensure that the marginalized areas of Greater Ivory Park and Diepsloot benefit from these major public transport initiatives.

Major development pressures are experienced in Glen Austin A. H., the greater Kya Sands area and the greater Fourways and Kyalami area. There is currently a high demand for industrial storage facilities and guesthouses in the formalized areas in and around Glen Austin A.H. The high-density residential developments within the greater Fourways area and the pockets of informal settlements, particularly in the north and western parts of the region², could potentially encroach on the Urban Development Boundary and some of the region's environmentally sensitive areas. Development pressures on the city's UDB are exacerbated by developments that are taking place in the neighbouring municipality of Mogale City (for example), which are putting an additional strain on the City of Johannesburg's bulk infrastructure.

Ivory Park and Diepsloot are two densely populated marginalised areas, where major backlogs still exist in terms of infrastructure and housing provision. The economic opportunities in these areas are still very limited and stronger linkages with other areas of opportunity are necessary. The negligible number of sites with business rights in these areas has resulted in the proliferation of illegal and unregulated informal sector activities.

In terms of the City's Growth Management Strategy (GMS) the area possesses each of the categories classified in the GMS. The region has a large areas which are classified as Consolidation Areas (medium priority area) as well as large areas which fall outside of the Urban Development Boundary which forms part of the Peri Urban Management Areas (low priority area). The Greater Diepsloot and Greater Ivory Park areas are classified as Marginalised areas and are among the most prioritised areas in terms of the GMS. Together with this classification the Public Transport Management Area, which affects Sunninghill and Midrand, is also a high priority area in terms of public transport provision and transit oriented development. Expansion areas have also been identified in the region, which includes areas around Lanseria Airport, Diepsloot and Crowthorne and sections of Blue Hills.

¹ The N1 corridor is a prominent feature, consisting of office and high technology industries along this major north-south linkage.

² The informal settlements in the western and northern parts are mainly in the Kya Sands area and Diepsloot.

SECTION ONE
INTRODUCTION

1. INTRODUCTION

1.1 ROLE OF THE REGIONAL SPATIAL DEVELOPMENT FRAMEWORK

The Regional Spatial Development Framework (RSDF), together with the Spatial Development Framework (SDF), represents the prevailing spatial planning policy within the City of Johannesburg. These spatial planning policy documents are prepared and adopted in terms of the Municipal Systems Act, Act 32 of 2000 as an integral component of the City's Integrated Development Plan (IDP).

This Regional Spatial Development Framework must be read in conjunction with the overarching Spatial Development Framework. The SDF provides a city wide perspective of challenges and interventions within the City and the RSDFs are primarily regional and local implementation tools that:

- Contextualise development trends and challenges within a regional context.
- Prescribe localised development objectives and guidelines (e.g. density, land use etc.).
- Provide a more detailed reflection of the SDF objectives, strategies and policies as they impact on local area planning.
- Reflect localised Precinct Plans and Development Frameworks adopted through official Council protocols.
- Capture the most updated information in terms of regional developmental trends, issues and community needs.
- Add substantive value to the budgeting and spatial development processes within the City by identifying local development interventions.

The following figure illustrates the different City plans that are applicable to different scales. This range of plans is complimented by the Regional Urban Management Plans (RUMPS) that focuses on addressing urban management issues per administrative region.

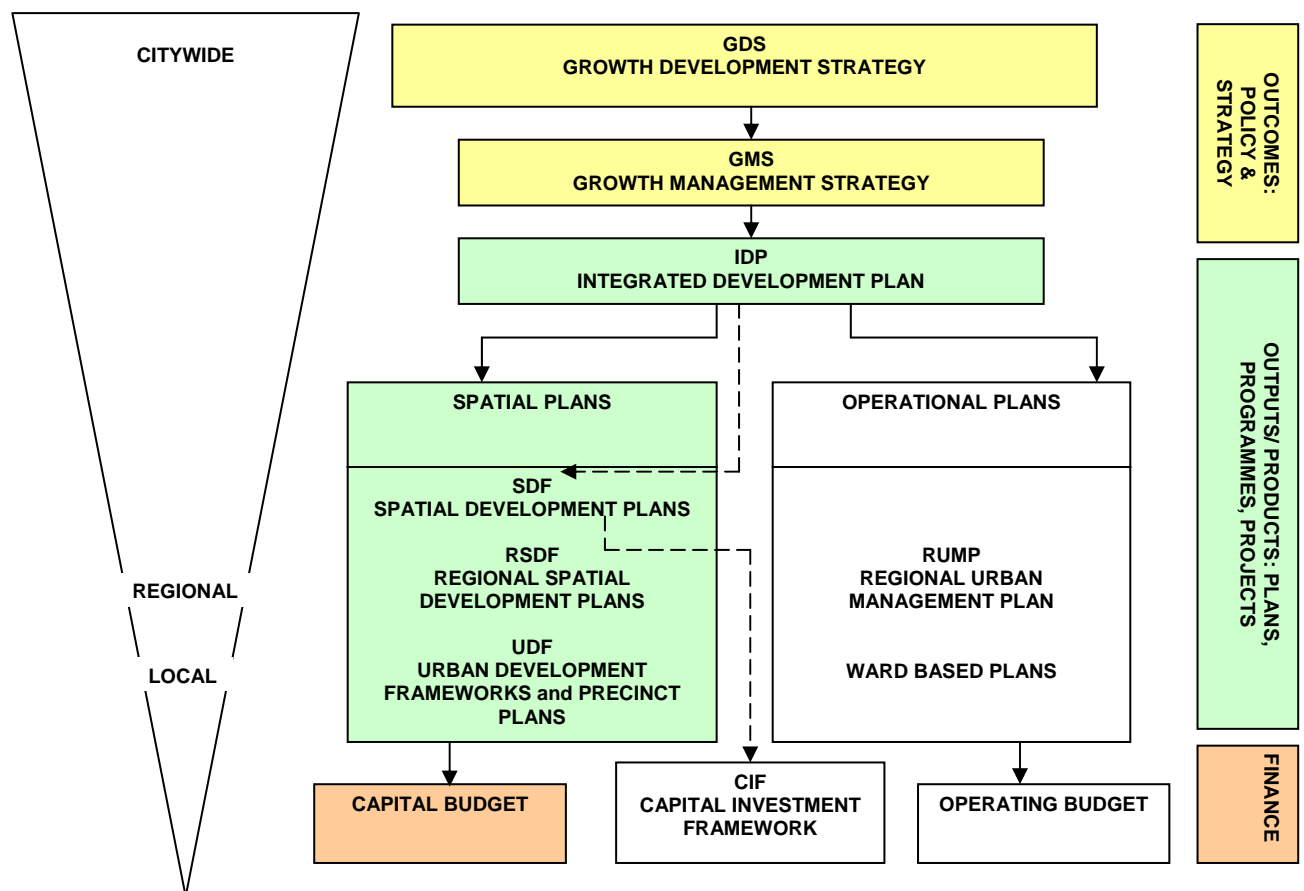


Figure 1: Hierarchy of City Plans

1.2 HOW TO USE AND INTERPRET THIS DOCUMENT?

The RSDF aims to be a concise and user-friendly document that comprises the following six (6) sections:

- SECTION 1:** Provides an introduction and overview to the document.
- SECTION 2:** Summarises the current state of the region that includes regional characteristics, issues, trends and implications.
- SECTION 3:** Sets out the regional applicability of the city wide structuring elements, policies and strategies and relates this to the regional context. It also provides a short overview of approved and proposed Development Frameworks and Precinct Plans in the region.
- SECTION 4:** Includes the development management tables per Sub Area that prescribe localised development objectives and guidelines.

1.3 DOCUMENT PROVISOS:

To guide the interpretation and application of the contents of this RSDF document and its plans and figures the following should be noted (Document Provisos):

- Details on the generic policies and strategies of the City such as that of the Nodal and Movement Strategies, etc, are contained within the city wide SDF. The regional specific RSDF and the SDF are to be used in conjunction with one another when assessing any potential development application.
- The Assessment Framework provides a tool for evaluating any potential application and should any particular development demonstrate a meaningful contribution to the City's strategies and desired urban structure, the merits should be considered.
- The interventions and guidelines in the Sub Area management tables and the proposals in approved Precinct Plans should guide and inform the assessment of any potential development application, but should not be considered to grant any specific rights nor negate the merits of any particular proposal.
- This document is the successor to the RSDF for this region as approved in 2009.
- This document subscribes to the vision, planning principles, strategies, policies, and by-laws of the City, and where ambiguities arise these shall prevail.
- This document subscribes to the legislative prescriptions of National and Provincial tiers of Government, and where ambiguities arise these shall prevail.
- This document is submitted as an annexure to the SDF, which in turn is a component of the IDP in terms of the requirements of the Municipal Systems Act. This document is a component of the SDF, which is the (LDO) submission to DPLG in terms of the DFA.
- This document may be superseded by Development Frameworks and Precinct Plans, project lists and programmes, policies, studies, sub-programmes, project-business plans that may be approved by Council subsequent hereto.
- This document incorporates certain previously approved Council Policies, Development Frameworks and Precinct Plans and where ambiguity exists or more information may be required, these shall act as source documents.
- Approved Development Frameworks and Precinct Plans within this RSDF are deemed to be relevant for up to five years. At the discretion of the Directorate: Development Planning and Facilitation, the Development Framework or Precinct Plan can either be rescinded, revised or retained.
- The maps and plans contained within the RSDF are strategic and conceptual and do not suggest a site-specific representation (unless stated as such under a Precinct Plan).
- The maps / diagrams and graphic representations are merely conceptual indications of the desired future functioning within the region and in order to achieve the desired functioning / goal; projects, sub-programmes, and programmes should be accordingly rolled out / implemented.

- Any delineation of a line, which may have a perceived site-specific interpretation, should not be construed as such (unless stated as such under a Precinct Plan or cadastral delineated (e.g. Urban Development Boundary).
- The Administrative and Sub Area boundary lines are merely administrative and / or planning tools and should not be interpreted as a form of division.

1.4 UNDERSTANDING THE CONTEXT OF EACH DEVELOPMENT PROPOSAL

Understanding the potential impact of each and every development irrespective of its scale and location is key to determining a future City that is sustainable, efficient and accessible to all.

Prospective developments come in all shapes and sizes and the impact of a single development may be city wide or neighbourhood in nature.

As an example, the establishment of a single, large shopping centre may impact significantly on the spending and traffic patterns of a number of regions. The impact of the development may even be felt city wide.




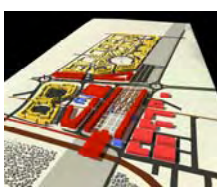
Conversely, a single subdivision in a residential suburb, in line with an applicable Town-Planning Scheme, is unlikely to have a material impact on the ambience or functioning of a neighbourhood or the City as a whole. However, a proliferation of subdivisions or township establishment applications in an area may well begin to impact on the ambience, character and functioning of a suburb and ultimately the broader Region.

Where physical and social infrastructure is planned and co-ordinated in conjunction with these trends the impact should be positive and not compromise the livelihoods of existing communities. In an instance where the provision of services is outpaced by development, the impact of this change is likely to be detrimental to the neighbourhood and broader region.

The following figure illustrates a broad assessment framework for all prospective developments, irrespective of scale with a view to considering “the bigger picture” of a Johannesburg that aspires to be sustainable, efficient and accessible to all.

The assessment framework compels a prospective developer to consider this bigger picture by assessing and demonstrating the contribution of a new development to the City’s strategies and desired urban structure. The broad assessment framework is supported by the set of Development Indices based on Sustainable Human Settlement Principles that will also be used to ensure quality developments.

Table 1. An Assessment Framework for Prospective Developments

				
	CITY CONTEXT ASSESSMENT	SITE SPECIFIC ASSESSMENT	OPPORTUNITIES AND CONSTRAINTS	DETAILED DESIGN
OBJECTIVE	Assessing implications and demonstrating impact of development on city strategies and desired urban structure / form	Assessing implications and demonstrating impact on the neighbourhood	Recognising opportunities / mitigating against constraints	Optimising the development via application of sound urban design guidelines
EXAMPLES OF ASPECTS TO CONSIDER	Movement Nodal development Densities Open space system Sustainable neighbourhoods Corridor development Alignment with Urban Development Boundary	Availability of infrastructure (social / physical) Compatibility/ Character of surrounding areas Adequacy of access Site topography Natural features	Linkages with public transport system Opportunities for increased density Provision of open space Scale / mix of developments	Arrangement of buildings / sites Promote frontage development Indicate pedestrian links / public space provision Focus intensive development on major routes and spaces Storm water treatment
RESOURCES AVAILABLE	IDP / SDF	SDF / RSDF Inputs from respective MOEs	RSDF Sub Area Management Tables Precinct Plans	Urban Design Guidelines Site Development Plan Architectural drawings Service Agreements

1.5 IMPROVING THE QUALITY OF HUMAN SETTLEMENTS

In addition, to the broad assessment framework discussed in the previous section, the City has introduced a set of Development Indices based on Sustainable Human Settlement (SHS) Principles. These principles are considered in the following section and represent the proposed minimum “thresholds” and requirements which apply to residential development proposals resulting into 20 dwelling units and non-residential development proposal on a 2000 square metre site or more. The principles of SHS would also need to be considered in any new Precinct Plan / Development Frameworks whether commissioned by the City or privately.

In summary, SHS Indices is aimed at the following:

- Improving the spatial, social, economic and environmental quality of human settlements.
- Promoting sustainable land-use planning and management.
- Promoting the sustainable and integrated provision of infrastructure and services.
- Promoting sustainable energy and transport systems in human settlement.

Nine key elements are identified as vital to the creation of sustainable human settlements, and they are:

- Spatial integration.
- Integrated public transport and walkability.
- Resource management and environmental sustainability.
- Open space system.
- Legibility.
- Economic opportunities.
- Safety and security.
- Adequate infrastructure and service provision.
- Security of tenure and mixed housing typologies.

The SHS indices are to be applied at the Township Establishment/Rezoning process and the Site Development Plan stage. The aforementioned SHS elements will be evaluated on each development proposal within the threshold. Under each element, there is a score and/or weighting which will determine the level of sustainability of the development on that particular element i.e. Spatial Integration and energy efficiency. The scoring and weighting incorporates both qualitative and quantitative aspects of the proposals and would become the basis for determining the level of sustainability. Should a development proposal not meet the minimum threshold, mitigating aspects would need to be negotiated to an acceptable sustainability standard between the City and the prospective developer.

SECTION TWO
REGIONAL ANALYSIS

Plan 1. Locality Plan

Plan 2. Broad Land Uses

2. REGIONAL ANALYSIS

2.1 REGIONAL CHARACTERISTICS

2.1.1 Location

Region A, as illustrated on Plan No. 1, is one of seven demarcated administrative regions that constitute the City of Johannesburg. Within the larger Gauteng metropolitan area, Region A is bordered by Mogale City Local Municipality to the west, City of Ekurhuleni to the east and City of Tshwane to the north. Within the City of Johannesburg administrative boundary, Region C and Region E form the southern boundaries of Region A.

2.1.2 Residential Development

The region includes formal townships, informal settlements, agricultural holdings and farm portions. The most urbanised areas are around the Fourways, Sunninghill and Midrand areas. Two prominent marginalized areas, Diepsloot and Greater Ivory Park (including Kaalfontein and Rabie Ridge) form part of Region A, as well as a number of informal settlements such as Kya Sands.

The marginalized areas of Diepsloot and Greater Ivory Park require integration into the broader urban network. The most prominent needs arising from these marginalized areas encompass employment opportunities, business sites and local retail which have resulted in large scale, unregulated informal trade. As part of the Upgrading of Marginalized Areas Programmes, development frameworks (namely the Diepsloot Government Precinct UDF, Diepsloot Activity Street UDF, Bambanani Industrial Node UDF and the Swazi Inn UDF) addressing spatial, social and economic inequalities have been prepared.

Increased densities and pressure for development in many parts of the region are causing infrastructure capacity constraints and a threat to the biodiversity of the environment.

2.1.3 Nodal development

The Region has a satisfactory hierarchy of nodal developments that include Midrand Metropolitan Node, Fourways Regional Node, Sunninghill Regional Node, Carlswald District Node, San Ridge Square District Node, Cedar Square District Node and several neighbourhood nodes. Region A's speciality nodes such as Kya Sands, Lanseria Airport and Kyalami (from a tourism and industrial function perspective) play a significant role in the growth and sustainability of the region's wealth. These different nodes provide employment opportunities to populace residing within the region. Nodes in the adjacent regions and municipalities, due to their close proximity to and accessibility from Region A, present potential employment opportunities for the region's population and workforce. These nodes include Northgate Regional Node (in Region C), Strijdom Park Industrial Area (in Region B), Woodmead Regional Node (in Region E), Rivonia Regional Node (in Region E), Commercialia (in the City of Ekurhuleni) and Centurion (in the City of Tshwane).

The Kyalami Speciality Node, which contributes to the region's uniqueness, has significant potential to contribute to economic growth and tourism especially with the Fifa World Cup taking place in South Africa during 2010. The node's proximity to hospitality and conference facilities, other nodes, a major freeway and the city's road network enhances the node's capability to contribute to the region's economy.

The management of Kya Sands industrial node (with particular reference to the existing informal settlements located in the surrounding area) is required to maintain the character of non-urban residential areas and prevent environmental degradation.

The eastern half of the region is characterised by high-tech developments, warehousing, distribution centres and office developments along the N1 strip, which results in a large influx of skilled labour into the region on a daily basis.

2.1.4. Water

The City is providing water infrastructure under two programmes: The Water Reservoir Upgrading Programme and the Bulk Water Distribution Programme (see Plans 5 and 6).

The legends of these aforementioned plans can be described as follows:

- No upgrading: No programme is necessary for these areas as the reservoir capacity is adequate.
- Existing: A program is being implemented currently to address current (existing) backlogs.
- Existing and ultimate: A program is being implemented currently to address current (existing) backlogs and to provide additional capacity for future demand.
- 5 Year: Reservoir upgrading programmes will be initiated in 5 years time to address capacity in these areas.
- 5 year and ultimate: Reservoir upgrading programmes will be initiated in 5 years time to address capacity in these areas, and to create additional capacity for future demand.
- Ultimate: Reservoirs that serve these areas will only be upgraded in the long term.

2.1.5 Electricity

- There are currently two electricity distribution supply authorities in this Region.
 - City of Johannesburg (in the developed area) supplies approximately 40% but sells approximately 80% of the total demand in the developed areas.
 - Eskom supplies the rest of the area, especially the areas in Diepsloot, Ivory Park and Kaalfontein. The status of electricity capacity in the Eskom supplied areas remains unconfirmed.
- The current networks in many of the rural or low-density agricultural areas were not designed to cater for the high rates of development that are currently occurring in the region.
- Although legal connections were provided for the new houses built in Diepsloot and Ivory Park, a high number of illegal connections still exist in these areas. This raises concerns from both a safety and an investment return perspective.
- In areas such as Diepsloot and Extensions, less than 25% of power capacity is reached. This means that more work still needs to be done to service these areas.
- Kya Sands, Glen Austin and parts of Kaalfontein are power capacity hot spots for the region.
- The Grand Central Substation is currently being upgraded to service the Midrand CBD.

2.1.6 Road Network

The north-south linkages such as the N1, R55, R511 and R512 link this Region to a variety of urban opportunities. Malibongwe Drive (R512), William Nicol (R511), Main road (R55), Witkoppen Road (R564), the N14 and N1 are well established and form the basis for strong mobility spines.

The general conditions of roads in Greater Ivory Park and Diepsloot are poor. These areas are also experiencing a backlog in terms of the upgrading of gravel roads.

The east-west linkages are less defined in comparison to the north-south linkages. Due to large traffic volumes travelling through the region daily, heavy congestion occurs along the region's major movement routes. The following intersections operate at a high level of congestion and this results in traffic delays:

- Olifantsfontein I/C West Terminal.
- Allandale I/C West Terminal.
- N1 Buccleuch Interchange.
- R562 (Olifantsfontein) / Lever Road.
- K 101 / K 58 West Street.
- K 101 / George Road.
- K 101 / Douglas Road.
- K 101 / Douglas Road.
- New Road / Sixteenth Road.
- K 101 / Allandale Road.
- Witkoppen Road/ Rivonia Road
- William Nicol Drive/ Fourways Boulevard

The existing road infrastructure within the region is inadequate to cater for the increased developments at the desired densities.

2.1.7 Public Transportation

Region A has diverse transportation modes ranging from and dominated by taxis and buses that serve the residents and workers in the area. Due to a large number of people travelling through the region daily, heavy congestion occurs along the major movement routes and intersections particularly the N1 highway and William Nicol Drive. The Bus Rapid Transit system (Phase 1 affecting the Sunninghill area) and Gautrain Rapid Rail link (affecting the eastern parts of the region, particularly Midrand) are also being planned and developed to provide an alternative mode of public transport in the Region to provide citywide connectivity.

2.1.8 Waste Management

- Adequate service standards are provided in the developed suburbs including domestic, commercial, industrial, garden waste and special waste removal services.
- There are 100 skip containers servicing the informal areas within the Region.
- Enforcement of by-laws for the control of illegal dumping is ineffective and requires improvement.
- The large tracts of vacant land in the Region are vulnerable to illegal dumping.
- For disposal purposes the landfill site at Chloorkop is currently being used.
- A new landfill site is being proposed. Two potential sites are under consideration, the most likely one being situated near Northern Farm. The proposal is currently in process.
- The new site, if developed, will be large enough to service not only in Region, but will eventually be able to take over the role of the Linbro Park site in Region E.

2.1.9 Sewer

- The Western Klein Jukskei sub-catchment serves the built-up area in the western parts of the region.
- Expansion of the network will have to be investigated to supply the Blue Hills area.
- The growth in the N1 strip necessitates the urgent upgrade of the outfall sewer pipeline from the area north of Olifantsfontein Road.
- The main outfall has spare capacity to serve approximately 400 000 extra people.
- The northwest half of the region is mostly without any waterborne sanitation, both bulk and reticulation.
- The western parts of the region lie within the Northern Drainage Basin and are served by the Northern Wastewater Treatment Works, which has spare capacity to serve an approximate additional 1 075 000 persons. The controlling factor in this catchment area is the Diepsloot Outfall which can serve an approximate additional 1 000 000 people.

2.1.10 Storm-water Drainage

- An established storm-water system serves the built-up areas of the region. Further densification in the built-up areas may, in certain instances, severely impact on the existing drainage system. Improvement of the system needs to take place in a planned manner.
- The lack of adequate control measures in the marginalised areas is causing serious problems with storm-water runoff, resulting in flooding and erosion.

Plan 3. Infrastructure Hotspots (Roads and Power)

Plan 4. Infrastructure Hotspots (Stormwater, Sewer and Waste)

Plan 5. Water Reservoir Upgrading Programme

Plan 6. Bulk Water Distribution Programme

2.2. KEY ISSUES

2.2.1. Spatial and Economic issues

- The formalisation of a large number of informal settlements in the Region, including Kya Sands and Lion Park and Diepsloot.
- The majority of issues facing the region are related to the mushrooming of informal settlements in the largely non-urban sections of the region requiring to be formalised.
- The incorporation of lower-income housing typologies into the broader urban fabric to directly address the existing spatial inequalities within the region, while providing a range of different housing types for various income groups.
- There is a high level of informality in the marginalized areas that needs to be addressed. Marginalized areas and informal settlements have poor levels of infrastructure, high levels of poverty and unemployment.
- There is a need for residential and business development along and around the Gautrain station to support the functionality of the station. This will ensure optimal utilisation of the services and infrastructure, infill development is required in the remaining undeveloped land parcels within this part of the region.
- Businesses in the region occur haphazardly. Proper business sites and informal trading facilities need to be identified in strategic locations.
- Formal public transport facilities need to be located where clustering of mixed land uses exist. Proper structures need to be erected in order to address the needs of commuters, the transport industry and any other affected users.
- The region is affected by the lack of spatial integration. Due to spatial inequalities, marginalized areas and informal settlements are located on the outskirts of the region, resulting in long travelling distances and costly travelling fees.
- The urban areas of the region have grown dramatically over the past few years. Typical developments have included high-tech industries and offices along the N1 highway and around the Fourways Regional Node. These developments, as well as the rapid development of residential areas, place substantial pressure on the city's bulk electricity, water and road infrastructure.

2.2.2 Infrastructure and Services

- The region in general has capacity limitations in bulk electricity and water provision. Infrastructure carrying capacity must be constantly monitored and upgraded to match the rate at which development take place within the region.
- Given the under-developed and agricultural nature of a large part of the region (especially the western parts of the region), a substantial part of the region is not serviced by bulk infrastructure. The urbanised areas are also experiencing problems with regards to bulk infrastructure due to urban expansion (such as that occurring in Kya Sands, Glen Austin and Kaalfontein).
- There is a need to address service delivery in the marginalised areas.
- Efforts in Diepsloot, Ivory Park and the surrounding areas should be focused on the upgrading of social and physical infrastructure as catalysts for economic development, proper land invasion management and the implementation of current housing programmes.

SECTION THREE
DEVELOPMENT POLICIES AND
STRATEGIES

3. DEVELOPMENT POLICIES AND STRATEGIES

This section provides a more detailed reflection of the Spatial Development Framework's (SDF) objectives, strategies and policies as they impact on local area planning, as well as illustrating the Growth Management Strategy. It also provides brief overviews of the region-specific Development Frameworks and Precinct Plans that have been developed to give effect to the vision for the region and the City.

3.1 DEVELOPMENT STRATEGIES

The SDF provides a comprehensive overview of the Spatial Development Strategies and the desired urban form for the City. Therefore this section should be read in conjunction with the SDF (2010/2011).

3.1.1. Growth Management Strategy

In addition to the SDF component, a Growth Management Strategy (GMS) was developed to compliment the seven other SDF strategies. The strategy is detailed in the Spatial Development Framework 2010/2011. The GMS prescribes where, and under what conditions, growth can be accommodated. The future growth of the City must ensure that population and economic growth is supported by complimentary services and infrastructure whilst also meeting spatial and socio-economic objectives. The two key objectives of the strategy are to:

- Determine priority areas for short-medium term investment and allocation of future development rights.
- Re-direct the respective capital investment programmes of the City's service providers to address the short-term hotspots and strategic priority areas.

The GMS sets high, medium and low priority areas across the City and describes specific interventions:

High Priority (i.e. 2008-2011 Capital Investment and immediate Service Upgrading)

Public Transport Priority Areas:

The locations noted below represent the backbone of a revitalised and integrated public transportation system. The multi-billion Rand investments of Gautrain and the Bus Rapid Transit System (BRT) represents the City and State's commitment to realising a world-class public transportation system that facilitates movement within and beyond the City's borders and is efficient and accessible to all communities. The expanded system being developed represents a significant and complimentary advancement of the current bus and taxi services rendered within the City.

The locations below also represent latent opportunities to restructure the current fragmented City form and to provide more inclusive environments for the City's communities. Issues relating to appropriate and effective densities, mixed-uses and infrastructure provision are foremost in the City's designation of these areas as priority areas from an infrastructure perspective. City budgets relating to infrastructure will be co-ordinated to ensure that these imperatives are met. Additionally, aspects relating to Inclusionary Housing to facilitate affordable and "gap-market" housing and incentives to facilitate socially geared developments in these locations are critical. In this regard the City has approved a density bonus incentive along the northern section of the BRT (Parktown to Sunninghill route) and is considering additional incentives such as the fast tracking of applications.

The Public Transport Priority Areas for Region A are as follows and are explained as such:

a) The Gautrain Station Precinct at Midrand

In an attempt to reduce the traffic congestion along the city's major arterials, the Gautrain Rapid Rail Link was introduced. Together with the existing north-south linkages, the Gautrain Rapid Rail Link, connect the major urban centres in the City of Johannesburg and the City of Tshwane. The UDF for the Gautrain station precinct in Midrand was prepared and it is envisaged to become a catalyst for development, thereby contributing towards the revitalization of the Midrand CBD.

The City's main objective in this area is to urgently address the backlog in traffic, and to facilitate the development of inclusionary housing and mixed use developments within the station precinct.

The Gautrain Station UDF's main objectives are to:

- Reduce traffic congestion by promoting public transport usage.
- Encourage pedestrian movement and the use of non-motorised transport.
- Attract investments into the precinct.
- Encourage mixed economic activities within and around the precinct.
- Promote high-density residential development.

Opportunities within the Gautrain Station Precinct in Midrand

The Midrand Gautrain station precinct:

- Has access to a good transportation network.
- Has large numbers of vacant land suitable for development.
- Has both urban and rural characters.
- Has mixed land uses ranging from economical, residential, institutional, social to recreational uses.

Constraints within the Gautrain Station Precinct in Midrand

- Infrastructure constraints, especially in relation to water and electricity.
- Low densities to sustain major nodal developments.
- A deteriorating urban environment.
- Limited public transport facilities.

Interventions in support of the objectives of the Midrand Gautrain Station UDF

- Support nodal and high residential development around the station precinct.
- Support station related uses such as a Gautrain Visitors Center.
- Support the establishment of a formal trade market.
- Improve public transport facilities.
- Encourage pedestrian links and cycling lanes.
- Encourage the sense of place within the station precinct.
- Protect open spaces and wetland.
- Upgrade the road infrastructure, stormwater drainage system and public environment.

b) BRT Phase 1: Parktown-Sunninghill

Opportunities within Sunninghill

- Has good transportation network that makes the area accessible
- Has large number of vacant land suitable for development
- Has mixed land uses ranging from economical, residential, institutional, social to recreational uses.

Constraints within Sunninghill

- Infrastructure constraints, especially in relation to water and electricity
- Low densities to sustain major nodal development
- Limited public transport facilities

Interventions in support of the Land-use and Design Guidelines for the BRT

- Support high residential development along the BRT Phase 1 corridor in Sunninghill.
- Support uses such as hotels and guesthouses to facilitate the use of the BRT Station.
- Improve public transport facilities
- Encourage pedestrian links and cycling lanes.
- Encourage the sense of place within the station precinct.
- Upgrade the road infrastructure, stormwater drainage system and public environment.

Marginalised Areas

The continued City commitment to the upgrading and economic upliftment of the following locations places them within the highest priority category of the five Growth Management Areas and reinforces the commitment to service upgrading (e.g. gravel roads upgrading, eradication of informal settlements etc.).

The transformation of these locations from their previous dormitory township status to vibrant, integrated communities are central to the principles of the Growth and Development Strategy such as “facilitated social mobility” and “settlement restructuring”

The City via a series of incentives and targeted infrastructure provision will support developments that foster an increased economic development and labour-intensive industries. A full suite of incentives have been developed and include Fast-Tracking of applications, Application Fee and Bulk Contributions exemptions.

The two marginalized areas in Region A are **Diepsloot** and **Greater Ivory Park**.

Opportunities within marginalised areas

- They are regarded as high priority areas in terms of State housing provision.
- They are regarded as high priority areas in terms of municipal infrastructure provision.
- Informal settlement upgrade is already taking place within both marginalised areas.
- There is an opportunity to have various housing typologies and to provide a range of tenure options within both marginalised areas.
- There is an opportunity to support local economic development.
- There are possibilities to encourage private sector investment in the marginalised areas.

Constraints within marginalised areas

- The presence of informal settlements.
- High population densities.
- Poor sanitation and storm water drainage.
- The presence of gravel roads.
- Unregulated small businesses.
- Limited social and institutional facilities.

Interventions

- Identify Activity streets.
- Support nodal development and recognise them as structuring elements.
- Support high residential development along activity streets.
- Support the establishment of formal trade markets and incubator businesses.
- Improve public transport facilities.
- Encourage pedestrian links and cycling lanes.
- Improve the sense of place within demarcated nodes.
- Protect natural open spaces and wetlands.
- Upgrade road infrastructure, storm water drainage and public environment.

Medium Priority (i.e. immediate remedial infrastructure upgrading. New Capital Investment 2011-2015)

Consolidation Areas

The greatest impact of the Growth Management Strategy will undoubtedly be felt in the Consolidation Areas. The primary objective of the Consolidation Areas is to prevent the compounding of the infrastructure constraints, most notably relating to energy and traffic but also noting the significant impact of large-scale and incremental developments on water and sanitation, storm water management and social amenities.

There are two sub-categories within the Consolidation Areas, namely:

- Infrastructure encumbered areas
- Non-encumbered infrastructure areas

Infrastructure encumbered areas: The areas are not within the public transportation “footprint” described earlier in the section and have been determined in relation to the capacity of City Power’s sub-stations (where 90% or more of the design-capacity has been exceeded during Winter 2007 load-readings). The status of these localities will be re-evaluated on an annual basis in consultation with the respective Municipal Owned Entities including City Power.

It is within these localities that the City will actively limit further developments until current deficiencies are addressed (noting that they do not enjoy short-term priority status in terms of service upgrading). This limitation will apply to incremental and large-scale developments and will affect individual property owners and the development community alike.

It is acknowledged that a number of the spatial policies relating to densification will be affected by these limitations (e.g. densification along the City’s mobility routes). The City remains committed to these principles and long-term objectives. However, it cannot commit to the provision of the requisite infrastructure short-term and consequently will not as a matter of course support subdivisions, rezoning or township establishment development applications in the short term, noting the provisions of the section below.

Exemptions to Limitations on Development Applications: The City would not support development applications in Encumbered Infrastructure Consolidation Areas relating to rezoning and / or township establishment and / or subdivisions unless:

- The application would necessitate less than 20% increase of the existing power and energy usage OR
- The application is able to carry the costs of the requisite bulk infrastructure upgrading at the cost of the developer AND
- The application would necessitate less than 20% of the current traffic generation of the current land use and intensity AND
- The rezoning has the implicit support of each of the Transportation / JHB Water / City Power and
- JHB Water and City Power commit to reserving capacity for the development

The provisions of i) can be set-aside if energy efficient designs / components of the development can reduce the energy demands to standards prescribed by City Power.

When the reserve capacity for each City Power depot is reached NO further Township Establishment approvals or rezoning to be approved until new reserves are made available.

In the case of the **non-encumbered infrastructure areas** the prevailing provisions of the Regional Spatial Development Framework Sub Area Management Tables will apply.

Region A has a large number of consolidation areas – please refer to the Sub Area management tables in Section 4.

Expansion Areas

To the north and south of the City, potential land resources presently beyond the Urban Development Boundary (UDB) have been identified and the proposal to include them within the UDB are included in the SDF and RSDFs for Regions A and G. Conditions relating to Consolidation Areas for development applications are applicable for Expansion Areas.

Low Priority (i.e. no infrastructure upgrading / provision before 2020)

Peri Urban Areas

Localities beyond the extent of the Urban Development Boundary comprise the Peri-Urban Management Areas. There are no short or medium term obligations or plans to service these areas. Region A has Peri-Urban Areas - please refer to the Sub Area management tables in Section 4.

For details on the GMS refer to the Spatial Development Framework 2010/2011.

The following table provides a summary of the other seven Development Strategies and their instruments and the SDF objectives.

Table 2. Development Strategies, Instruments and Objectives

Spatial Development Strategies	SDF instruments	Objectives
Supporting an efficient movement system	<ul style="list-style-type: none"> ▪ Road Hierarchy ▪ Strategic Public Transportation Network (SPTN) ▪ Gautrain Stations ▪ Existing rail network 	<ul style="list-style-type: none"> ▪ Support public transport. ▪ Reduce travel and transport cost. ▪ Promote accessibility of communities to employment, recreation and social opportunities. ▪ Protect the mobility function of major arterials and roads. ▪ Ensure that the movement system links with and is supported by strong high intensity nodes and higher density residential development.
Ensuring Strong Viable Nodes	<ul style="list-style-type: none"> ▪ Nodal Hierarchy ▪ Nodal Profiles and Boundaries ▪ Management guidelines 	<ul style="list-style-type: none"> ▪ Ensure clustering of various activities (work, live, play and pray) at appropriate locations. ▪ Support viable public transport. ▪ Maximise opportunities and diversity at accessible points.
Strategic Densification	<ul style="list-style-type: none"> ▪ Strategic Densification Priority Areas ▪ Base and minimum density guidelines proposals 	<ul style="list-style-type: none"> ▪ Promote appropriate densities and densification. ▪ Promote the optimal use of existing and future infrastructure and resources.
Initiating and Implementing Corridor Development	<ul style="list-style-type: none"> ▪ East West Development Corridor (EWDC) ▪ North South Development Corridor (NSDC) 	<ul style="list-style-type: none"> ▪ Determine appropriate interventions. ▪ Maximise opportunities. ▪ Facilitate linkages. ▪ Manage new developments in a co-ordinated fashion.
Supporting Sustainable Environmental Management	<ul style="list-style-type: none"> ▪ Johannesburg Metropolitan Open Space System ▪ Design Guidelines 	<ul style="list-style-type: none"> ▪ Create a network of open spaces ▪ Support sustainable storm water catchment practices. ▪ Protect important environmental areas. ▪ Promote the prevention and reduction of pollution.
Facilitating sustainable housing environments in appropriate locations	<ul style="list-style-type: none"> ▪ Spatial location and database of the City's informal settlements ▪ Housing Programme ▪ Pilot Projects 	<ul style="list-style-type: none"> ▪ Develop appropriate housing typologies. ▪ Promote adequate provision of social and economic amenities.
Managing Urban Growth and	<ul style="list-style-type: none"> ▪ Land use guidelines ▪ Subdivision of Land Table ▪ Amendment Procedures 	<ul style="list-style-type: none"> ▪ Combat urban sprawl. ▪ Create economies of urbanisation.

Spatial Development Strategies	SDF instruments	Objectives
Delineating an Urban Development Boundary		<ul style="list-style-type: none"> ▪ Focus on in-fill and redevelopment. ▪ Support efficient infrastructure provision (capital investment). ▪ Provide a mechanism for effective growth management. ▪ Support a more efficient urban form that is public transport orientated. ▪ Protect environmentally sensitive areas, agricultural land and open space. ▪ Support a multi-modal transportation system.

Plan 7. Growth Management Strategy

3.1.2 Supporting an Efficient Movement System

The Movement Strategy is premised on the provision and maintenance of a highly accessible movement system and network that supports a range of modes (road, rail and non-motorised transport modes, public and private) and activities at various levels, intensity and scale. It specifically endorses the promotion of public transport as the means to increase accessibility of opportunities to all City users.

Road Network Hierarchy and Management Guidelines

In order to develop an appropriate and functional movement network for the City, a study was commissioned by the Johannesburg Roads Agency and Transportation Planning and Management Directorate, in 2004. The Transportation Department has recently updated this study (February 2010) in order to reflect the current status of the network as well as to align the classification of the City's roads with the official roads policy for planning and development of road infrastructure in South Africa; Road Infrastructure Strategic Framework for South Africa (RISFSA). The updated study focuses on the following elements:

1. Road Reclassification: according to the RISFSA classification scheme
2. A Proposed future Road Network based on 5 and 10 year scenarios which include:
 - Priorities for implementation (upgrades and implementation of new roads)
 - Land acquisition associated with the future road network
 - Protection of road development corridors
 - City's Freight Network

Roads provide two types of services, namely the provision of traffic mobility and access. The relationship between these two factors differs depending on the functionality of the road and is further classified in Table 3 below.

The reclassification of roads under the RISFSA classification system has resulted in a number of roads being downgraded from Mobility Spines and Mobility Roads. This has a direct impact on the permissible densities applied to the properties formally located on Mobility Spines and Mobility Roads.

Table 3. Network of Road Hierarchy

FUNCTIONAL ROAD CLASSIFICATION	LAND USE	FUNCTION AND DESIGN	REGION A
Highway (Class 1)	<ul style="list-style-type: none"> No direct access to land uses. 	<ul style="list-style-type: none"> Accommodates mainly national, regional and longer distance metropolitan trips. Access is restricted to the interchanges only. 	N1 N14/R28
<p>Mobility Spines (Class 2)</p> <p>A Mobility Spine is an arterial along which through traffic flows with minimum interruption (focus on providing mobility). Development abutting the spine is in terms of specific policy criteria relating to the type of land use to be accommodated and to level of access.</p> <p>More often than not it will be the main arterial road between major nodes or between nodes and the freeway and motorway system.</p>	<ul style="list-style-type: none"> Mixed land uses at identified intersection nodal points Predominantly higher density residential Non-residential uses to be determined by the relevant RSDF Sub-area table, or if not specifically dealt with in the applicable RSDF then by Table 5.7: Ancillary Uses Guidelines for Mobility Spines 	<ul style="list-style-type: none"> Mainly for inter regional and metropolitan trips. No direct access should be allowed. Access intersections provided at designated roads (highways and mobility roads) Access from side roads or service roads. . Restrictions on frontage access to be controlled. Provide public transport facilities at designated locations to ensure safe pedestrian access Incorporate designated SPTN / BRT routes. Ensure managed pedestrian access Consider pedestrian movement, NMT and public transport services. Provision for pedestrian safety. 	Sixth Road Cedar Road William Nicol Drive Witkoppen Road Pelindaba Road Malibongwe Drive Main Road – Pitts – Main Fifth Avenue Pitts Road Allandale – Kyalami Walton Road – New Road Old Pretoria Main Road Republic Road (Proposed BRT) R562 K101 (Proposed BRT) Rivonia Road Woodmead Drive/K71 Dale Road K27/Olifantsfontein Road
<p>Mobility Roads (Class 3)</p> <p>A Mobility Road carries mainly intra regional traffic i.e. traffic of a local nature. . It is of a lower order than a mobility spine but maintains the focus on mobility along the route. It often connects mobility spines or neighbourhood nodes.</p>	<ul style="list-style-type: none"> Local nodal development Predominantly higher density residential Non-residential uses to be determined by the relevant RSDF Sub-area table, or if not specifically dealt with in the applicable RSDF then by Table 5.8: Ancillary Uses Guidelines for Mobility Roads 	<ul style="list-style-type: none"> Shorter distance distribution and mainly metropolitan trips. Performs a collector and distributor function, by collecting and distributing trips onto the mobility spine network and to and from neighbourhood nodes. Incorporate future SPTN / BRT feeder and distribution routes. Must safely accommodate public transport and pedestrian movement Limited direct access. Provision of pavements and cycle lanes for pedestrians and cyclists. 	Uranium Street Zanneblom Lane Fourways Boulevard Garden Road – Seventh Road Lever Road – Harry Galaun 6th Road-Smuts Drive – Baker – Janadel Avenue Church Street Alexander Avenue Old Olifantsfontein Road Makhaya Drive (Ivory Park)
<p>Activity Street (Class 4)</p> <p>An Activity Street is a local street where access to the activity along the street is of paramount importance. Mobility is compromised in favour of the activity.</p>	<ul style="list-style-type: none"> Residential Business Retail All uses to be of a local and fine grain nature 	<ul style="list-style-type: none"> Accommodate pedestrian intensive uses with active frontages at street level. High level of (direct) access. Speed calming. Must safely accommodate public transport and pedestrian movement Provide public transport facilities. Priority for pedestrians and cyclists in traffic management. Activity preferably one erf deep. 	Malibongwe Drive (Ivory Park) Makhanya Drive (Ivory Park) Twenty/Ninth September/Acacia/Archerfish Roads (Ebony Park, Ivory Park, Kaalfontein) JB Marks Informal Settlement/ Diepsloot Road (Diepsloot Activity Street)
<p>Local Residential Street (Class 5)</p> <p>A local Residential Street is a local road that serves primarily local traffic accessing the served area.</p>	<ul style="list-style-type: none"> Residential uses Low intensity non-residential uses, as per relevant RSDF Sub-area table. 	<ul style="list-style-type: none"> Provides direct access to residential property. Facilitates mixed traffic within neighbourhoods safely and at low speed. Provision of pavements for pedestrians. Feeds into arterial roads and used to access Activity Streets. Vehicle and Pedestrian conflicts to be addressed safely. Consider pedestrian movement and NMT 	

Table 4: Ancillary Use Guidelines for Mobility Spines

No. of Storeys	2	3	4
Permissible developable ground floor area for non-residential use*	7.5%	10%	15%

*Not exceeding 500m²

Table 5: Ancillary Use Guidelines for Mobility Roads

No. of Storeys	2	3	4
Permissible developable ground floor area for non-residential use*	5%	7.5%	10%

*Not exceeding 500m²

The east-west link between Ivory Park and the Midrand CBD is limited and needs to be addressed to ensure better spatial integration. The mobility function is critical for the existing east-west routes. It must be a primary consideration when reviewing applications pertaining to erven along Mobility Roads.

There are specific cases where non-residential development or the allocation of rights for non-residential uses on affected erven along identified Mobility Spines and Roads pre-date the implementation of the Movement Strategy. This has given rise to situations where existing rights are not recognised in terms of Council policy and applications to reinforce or improve these rights are rejected.

Generally, major roads in Region A are overburdened and the construction of the following proposed major roads will in future enhance better mobility within the region:

Proposed K46: North-south route that will follow the alignment of William Nicol Drive, which currently forms the eastern boundary of the Diepsloot settlement.

Proposed K56: East-west link that connects the Region to Ekurhuleni and Mogale City. The road will also connect several significant nodes in the Region.

Proposed K54/R562: East-west route that will run through the centre of the Diepsloot settlement. This route is critical towards the effective functioning of the Diepsloot/Tanganani areas

Proposed K27: East-west route that ends at William Nicol Drive and is likely to have an impact on the expansion of Diepsloot.

Proposed K33: North South route that traverses the western parts of the Region along Kya Sands toward Lanseria

Proposed PWV 5 & PWV 9: East west and north south routes respectively through the region.

The final category of road identified is the local residential street. These include the vast majority of the roads within Region A.

Public Transport Infrastructure and Initiatives in Region A

Strategic Public Transport Network (SPTN)

The high car ownership levels within Region A constitute some of the factors that contribute towards the severe traffic congestion and car related pollution within the region. The other factors include the region's central location between Johannesburg and Pretoria and; the region's major nodes that provide employment opportunities thereby attracting traffic from beyond the regional and municipal boundaries.

The Strategic Public Transport Network is one of the initiatives by the City to improve accessibility, mobility, encourage the use of public transport and, reduce traffic congestion. The SPTN is based on a network of routes along the City's primary mobility spines linking and enhancing accessibility between residential departure points and nodal destination points. The physical features of the SPTN include:

- Dedicated lanes if traffic volumes warrant it.
- A network to give priority to public transport, e.g. High Occupancy Vehicle Lanes.
- Park and ride facilities.
- Public transport facilities focussed at nodes.
- Transfers at identified interchange nodes.

Roads in Region A where public transport routes are proposed in terms of the SPTN include:

- Pelindaba Road
- K101
- William Nicol Drive

These routes are identified in the Sub Area Management Tables in Section 4. No additional density will be applied for erven affected by the proposed SPTN routes. Additional densities in terms of the SDF guidelines will be considered along Rivonia Road Phase 1 BRT route.

Bus Rapid Transit (BRT)

In November 2006 the City approved the upgrading of the SPTN to a Bus Rapid Transit (BRT) System which is defined as a "high quality bus-based transit system that delivers fast, comfortable and cost-effective urban mobility through the provision of segregated right-of-way infrastructure, rapid and frequent operations, and excellence in marketing and consumer service" (Wright and Hook, 2006 in Rea Vaya Scoping Study).

BRT is not a move away from the SPTN, but a more aggressive system based on similar principles to the SPTN. Aspects of the SPTN have been retained to work in conjunction with BRT systems and routes.

The long term vision of the BRT is to have a transport system that places more than 80% of the population of the City within 500m of the BRT route or its feeder system. This will achieve a goal the City has of improving the quality of life of citizens of the City by providing them with a high quality and affordable public transport system.

The BRT system consists of a hierarchy of three routes, namely BRT trunk routes, complimentary routes and feeder routes.

The full phase 1 BRT routes impacting on Region A are:

1. Lenasia to Sunninghill.

To support the BRT initiative, the City will actively support higher density residential development proposals along the routes and at nodal destination points. The City has approved land use and design principles in February 2008, for the northern extent of phase 1, i.e. Parktown to Sunninghill (see plan and relevant Sub Area Management Tables in Section 4). Most of the BRT station locations have been finalised and further work on the BRT Land Use guidelines has been completed for the entire phase 1. Rivonia Road is the only road in Region A that is affected by the BRT system. The

implementation of the BRT Phase 1B, which affects the Region, has been refined and as such the route from Parktown to Sunninghill is planned for implementation in the longer term.

Gautrain

Currently Region A has no rail transport system. This is to change with the current construction of Gautrain Rapid Railway Link that will connect the Central Business District, Rosebank, Sandton and Midrand with OR Tambo International Airport and the City of Tshwane. The introduction of a high-speed rail system will add great economic value and will assist in alleviating traffic congestion in the region.

The minimum frequency of trips between Johannesburg and Tshwane will initially be six trains per hour in each direction and will operate approximately 18 hours per day. This public transport service will include dedicated, exclusive bus services to transport passengers to and from stations along defined routes.

One station is to be constructed in Region A at Midrand along K101. It is foreseen that the link between Sandton and the City of Tshwane, affecting the Region at Midrand, will be completed by March 2011.

The development of the station will concentrate commuters in the nodes concerned and will provide impetus for further economic opportunities and growth within these areas. Furthermore opportunities will arise within the node to accommodate commuters who rely upon the Gautrain to access other parts of the province.

The physical, spatial and economic integration of the Gautrain Station precinct with surrounding areas and initiatives such as Greater Ivory Park and the proposed Zonkizizwe development on the Old Mutual Property land is crucial for its success. The Urban Development Framework addresses the strategic integration of the Gautrain Station at Midrand into the existing urban environment.

The stations and the proposed road based distribution network will align closely to the Strategic Public Transport Network. The Gautrain will provide another alternative to car-based transport and will contribute directly to addressing traffic congestion in Region A, specifically along the N1 highway.

Non Motorised Transport

A framework for Non-Motorised Transport (NMT) was adopted in February 2008, which seeks to guide the planning and implementation of programmes and facilities for the multiple needs of NMT users.

NMT includes all forms of transportation that is human powered. This includes walking, cycling, rickshaws, wheelchairs, animal-drawn carts and recreational activities such as equestrian sports, rollerblading, skating and scooters. In Johannesburg, non-motorised forms of transport are predominantly represented by walking and cycling modes.

The strategic objectives of the NMT framework are to:

- Establish a dedicated network of high quality pedestrian and cycling routes across the city.
- Establish pedestrian and cycling modes of transport as preferred modes for short distance and convenience related trips within the City.
- Increase the percentage modal split of cycling and walking as preferred modes of transport.
- Facilitate access to the city for marginalized and low income communities.
- Integrate NMT modes with other strategic public transportation initiatives within the city including the Gautrain, Metrorail and BRT.
- Promote increased access to educational institutions by NMT modes.
- Place NMT at the forefront of congestion and environmental management plans within the city.
- Maximise local economic development opportunities related to cycling.
- Maximise tourism opportunities related to NMT.

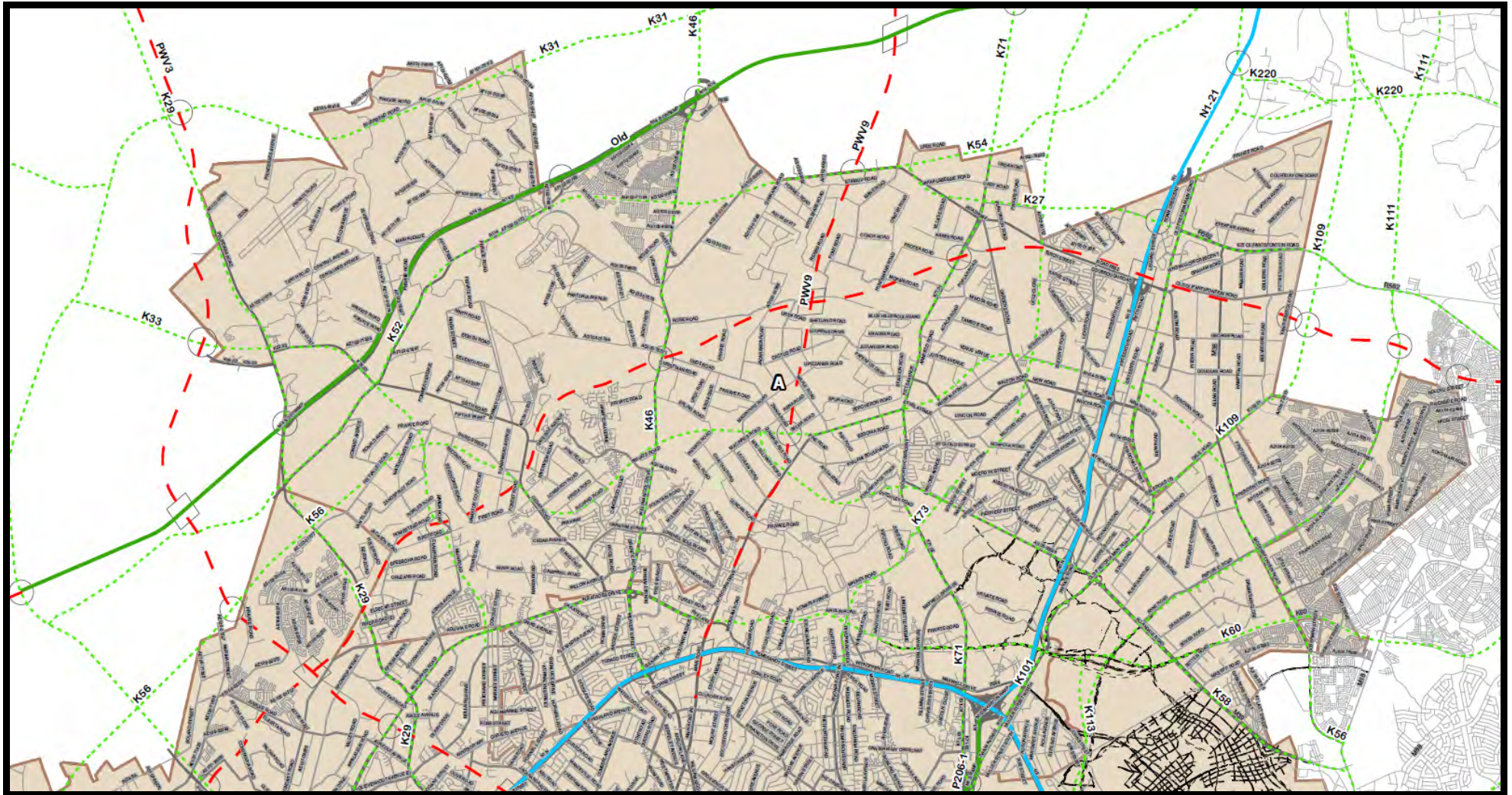
NMT is recognised as an important factor in supporting public transport, functioning both as a feeder to public transport nodes and enabling safe and easy access to key activities surrounding public transport nodes. It is acknowledged that good linkages to stations and a high quality public environment are crucial in supporting the investment currently being made in public transport infrastructure. A good public environment encourages people to use public transport and facilitates walking to and from the station and instils a sense of permanence, therefore economic investment in the City.

The framework for NMT identifies numerous priority areas throughout the city including all Gautrain stations and BRT phase 1 stations. These align with GMS priority areas for infrastructure investment and densification.

The priority areas in Region A are illustrated on the strategic route maps in Section 3 and includes:

- Diepsloot to Fourways Route along William Nicol
- Ivory Park to Schools and Midrand Route

Plan 8. Movement



Plan 9. Proposed Roads – Region A

Plan 10. Non Motorised Transport

3.1.3. Ensuring Strong Viable Nodes

The Nodal Strategy is premised on the clustering of various activities at appropriate and accessible nodal locations to provide the City with a network of opportunity centres. Nodes are locations of concentrated activity. They are associated with the concentration of employment opportunities and high density residential developments that are located along Mobility Roads and Spines. As such, nodes act as destinations points for public transport.

The Nodal Strategy uses a Nodal Hierarchy to define the City's nodes and to describe the management approach to these nodes.

Specific aspects of the nodal management guidelines are detailed below in the discussion pertaining to the major nodes in Region A and in the relevant Sub Area Management Tables.

The nodes in Region A are critical in maintaining the economic prominence enjoyed by the City. The table below considers the metropolitan, regional, district and specialist nodes located within Region A as defined in terms of the Nodal Hierarchy.

Table 6: Application of the Nodal Hierarchy in relation to Region A

Metropolitan Node	Regional Nodes	District Nodes	Specialist Nodes
<ul style="list-style-type: none"> ▪ Midrand 	<ul style="list-style-type: none"> ▪ Sunninghill ▪ Fourways ▪ Waterfall City (emerging) 	<ul style="list-style-type: none"> ▪ San Ridge Square ▪ Carlswald Lifestyle Centre ▪ Cedar Square ▪ Diepsloot 	<ul style="list-style-type: none"> ▪ Kya Sands ▪ Lanseria ▪ Diepsloot Government Node ▪ Bambanani

A further category of nodes that affects Region A are neighbourhood nodes. These serve the immediate residential area wherein they are located, and are often located on Mobility Roads. In Region A there are a large number of such nodes (listed in Figure 9).

Metropolitan Nodes

These nodes are of metropolitan significance in terms of attracting people from areas beyond the metropolitan boundaries of the City. They have a distinct urban profile and are situated on Mobility Spines supported by Mobility Roads with access to highways. A variety of goods, services and speciality products are offered at these nodes.

The ongoing redevelopment of these nodes is paramount. It is critical that the growth of the metropolitan node is managed in order to ensure access and circulation and to ensure that the interface with neighbouring areas is protected.

Midrand is the only Metropolitan Node in Region A.

Midrand

The Midrand node is identified as a metropolitan node in the SDF. It is characterised by a wide range of land uses such as residential, industrial, retail and commercial developments that are supported by civic and service amenities. The node is located along two major arterials connecting the City of Johannesburg and the City of Tshwane. It has, in the last decade, seen significant growth in the information and telecommunications industries, high-tech and light industries, the corporate office market, and a relatively smaller retail component. The residential component of the node is increasing on an annual basis.

In terms of mobility, roads are performing at peak capacity with extreme congestion experienced along the major north-south links. The increasing residential infill developments west of the N1 warrant the need to improve the east-west linkages in order to encourage the maximum utilization of the node. For this reason a development framework has been formulated to provide development direction for the Midrand Station Precinct, namely the Midrand Gautrain Urban Development Framework (2008).

The critical strategic planning issues for the Midrand node are:

- The implementation of the Midrand Gautrain Station Development Framework
- The lack of a defined core of the node.
- The decline in the number of shopping centres within the node.
- The need to increase infrastructure capacity to promote intense residential densities west of the N1 within the metropolitan node.
- Improving and expanding pedestrian connections within the node.
- Integrating the Gautrain Station development with the Midrand node.
- Upgrading the public environment.
- Integrating the disparate precincts that comprise the node.
- Promoting high-density residential development within the node.
- Addressing traffic congestion within the metropolitan node.
- Improving public transport facilities as part of the SPTN.
- The confinement of large-scale retail facilities within the nodal boundary.

Regional Nodes

These nodes serve specific regions or sub-regional areas. These nodes are situated on Mobility Spines supported by Mobility Roads and fulfil a variety of functions.

Regional nodes in Region A are Sunninghill and Fourways.

Sunninghill

The Sunninghill node is characterised by a large concentration of offices, mainly in the form of office parks, including Sunninghill Office Park, Unisys Park, The Crescent and Ariel Office Park. A growing residential demand has seen a number of high-density residential developments emerging in the Node. Sunninghill Hospital as well as religious facilities, post office and pre-schools are also located within the node.

The critical strategic planning issues for the Sunninghill node are:

- Limited Social Facilities
- Improving and expanding pedestrian connections within the node.
- Roads upgrade to address congestion
- Promote high-density residential development within the node
- Improve public Transport Facilities in relation to BRT and its integration with other modes of transport

Fourways

The Fourways node is characterised by major office developments such as Fourways Office Park, Fourways Golf Park, and Fourways Boulevard as well as retail and residential uses. Commercial developments include Fourways Crossing shopping centre, Fourways Mall regional shopping centre, Fourways Value Mart, Pine Slopes, and Monte Casino Gaming and Entertainment centre.

The critical strategic planning issues for the Fourways node are:

- Define the south-eastern extent of the Fourways node.
- Contain non-residential development to the node.
- Protect against non-residential intrusion into residential areas.
- Support residential densification within the nodal boundary.
- Support the development of an internal shuttle for the Fourways node.
- Support the development of a network of pedestrian walkways within the three quadrants that make up Fourways node.

- Promote high-density residential development within the node
- Facilitate the implementation of non-motorised transport route

District Nodes

These nodes serve one or more neighbourhoods (Sub Areas). They are predominantly located on Mobility Roads. Activities are of a local nature providing for convenience, daily needs and social services. Pedestrian access is relatively easy.

The City of Johannesburg's policy towards district nodes in Region A is to ensure that they are contained within their delineated boundaries. Access to nodes via public transport and residential densification in support of public transport will be a critical guiding factor. Intensification of non-residential uses will be permitted in district nodes in conjunction with ongoing revitalisation of the node.

The district nodes within Region A are:

- San Ridge Square.
- Carlswald Lifestyle Centre.
- Cedar Square

The guidelines for the development of district nodes are as follows:

- In support of the SPTN ensure that adequate provision is made for public transport in District Nodes and that development is integrated with the public transport facilities.
- Non-residential development to occur within nodes (offices, retail, institutional) and must be strengthened and encouraged in order to give further legibility to the node so that the node is developed as a destination.
- Residential densification in nodes will be supported in order to contribute to the development of vibrant nodes, and if applicable, the development of the proposed public transport network.
- Intensification of uses within district nodes is subject to the availability of services and infrastructure.

The bulk infrastructure and height requirements should be applied to proposed developments in accordance with the site-specific requirements of the development applications, any precinct plan and town planning scheme that may be applicable.

Neighbourhood Nodes

Mixed-use neighbourhood nodes are nodes that serve a neighbourhood (township) and may even serve adjacent neighbourhoods. Neighbourhood nodes provide for daily needs, based primarily on convenience related services and products such as:

- Social and community facilities (i.e., libraries, crèches, etc).
- Open space.
- Doctor's consulting rooms.
- Convenience related shopping/services, which may include uses such as convenience grocers, dry cleaners, butchers, local fruit and vegetable shops, laundromat, video rental stores.
- Public garages.
- Restaurants, coffee shops and take-away shops.
- Hairdressers/beauty parlours.

Region A has a number of neighbourhood nodes, which vary in size and function. The Spatial Development Framework 2009/10 (Section 5.2) outlines some of the current challenges for this nodal type across the City, which the RSDF is attempting to address.

The following principles as outlined in the nodal guidelines of the SDF detail the City's approach towards neighbourhood nodes:

- Discourage the development of new neighbourhood nodes beyond identified locations.
- Support the redevelopment of existing neighbourhood nodes.
- Integrate new nodal development with public transport and the SPTN where possible.

- Ensure a balance between parking at the node and public transport infrastructure.
- Residential densification is encouraged within, adjacent and contiguous to an existing neighbourhood node.

The list below illustrates the neighbourhood nodes which are not in any way exhaustive. Section 4 provides more detail information relating to the management guidelines for neighbourhood nodes and include, but not limited to:

- Design guidelines.
- Guidelines on whether to expand or contain the nodes.
- Desired land uses within the nodes and land use controls where appropriate.
- Desired land uses in the surrounding area.
- Land use controls.
- Specific density requirements around the nodes

Where reference is made to neighbourhood nodes in the Sub Area Management Tables, cognisance should be given to the above-mentioned principles and management guidelines. The neighbourhood nodes which have not been discussed in length in the Sub Area Management Tables is part of a longer term project to identify and establish management guidelines in terms of each node's characteristics and needs, which will be incorporated into subsequent reviews.

Table 7 . Identified Neighbourhood Nodes

SUB AREA	NEIGHBOURHOOD NODE	AFFECTED TOWNSHIP
10	Kopanong Shopping Centre	Ivory Park
10	Ebony Park Mall	Ebony Park & Ivory Park
10	Rabie Ridge	Rabie Ridge
10	Lord Khanyile Sports Complex	Ivory Park
10	Swazi Inn	Ivory Park
10	Proposed Yarona Shopping Centre	Kaalfontein
10	Noorwyk Centre	Noordwyk
5	Midway Mews	Halfway House Ext 2, Halfway Gardens
6	Vorna Valley	Halfway Gardens Ext 12, 13, 7; Vorna Valley Ext 71, 75, 48, 62; Kyalami Hills Ext 3, 4
6	Halfway Gardens	Halfway Gardens Ext 40, 25, 13, 1; Vorna Valley Ext 80
6	Crowthorne	Crowthorne A. H.
11	The Bridge	Bucleuch
7	Sunninghill Village	Sunninghill & Sunninghill Ext 3
7	Sunhill Centre	Sunninghill
7	The Square	Sunninghill
7	Chilli lane Centre	Paulshof A.H. Ext 3
7	Cambridge Crossing	Paulshof Ext 1, 45
4	Fourways Gardens Centre	Fourways Ext 10; Witkoppen Ext 3
4	Waterford	Craighavon A.H.
4	Riverwalk	Maroeladal Ext 19
4	Valley Shopping Centre	Dainfern Ridge
4	Lonehill Shopping Centre	Lonehill Ext 9, 8
4	The Fern	Dainfern
3	Diepsloot	Diepsloot West
1	Hertford Junction	Farm Bultfontein 533-JQ
4 & 2	Broadacres Shopping Centre	Needwood, Stratford, Needwood Ext 4, Maroeladal Ext 8

Specialist Nodes

Specialist nodes are of a specialised nature in terms of being used for a single retail, entertainment, commercial or industrial use. Region A has three specialist nodes of an industrial nature.

- The **industrial nodes** in Region A are:
 - Kya Sands
 - Lanseria
 - Kyalami.

It is critical that the services, infrastructure and high levels of access are maintained to ensure that these nodes can maximise their economic potential. The City understands the importance of promoting the successful development of its economic base by directing industrial activities to the most competitive locations, so that these sectors may flourish and create employment opportunities for city residents.

A Study on Industrial Land has just been completed and it:

- Specifies the industrial uses with growth potential in Johannesburg.
- Identifies competitive location for industrial uses to grow.
- Examines existing industrial areas and identify the highest and best uses for older industrial zones.
- Recommends policies, programmes, incentives and strategies required to resolving key issues in the supply of industrial land and in the development of older industrial zones.

The study uses four categories of industrial nodes to illustrate potential and priorities. These categories are: the expansion of existing industrial nodes, the regeneration of existing industrial nodes, and the change in zoning away from industrial to new industrial areas. Two of these categories apply to Region A. The implications for Region A's industrial nodes are as follows:

Expansion of existing industrial node/zoning: Nodes prioritised for sample assessments of potential expansion in Region A include the Kya Sands/Hoogland, which is partly in Region C.

Kya Sands/Hoogland/Mosteyn Park Area: Residential uses are rapidly filling-in to areas surrounding Kya Sand and there is the likelihood that this area will become an "island" in the near future, with all of the attendant long-term issues. There are proposals for additional industrial development in the area and if land is zoned for industry to the north and west, then there is the opportunity for expansion and greater sustainability over the long-term. Ideally, such areas on the urban fringe should not be promoted for industrial development unless they offer significant competitive advantages. Such promotion is not truly environmentally sustainable. Due to the prospective development eventually putting a strain on infrastructure capacity in this area, the Kya Sand area has been ranked lower than some of the other prospective expansion nodes.

Change of Zoning Away from Industrial: Several nodes were prioritised throughout the city for examining the potential for a change away from industrial use. Lanseria Airport in Region A was identified as one of the nodes.

Lanseria Airport Area: Lanseria's designation as an international airport has added to speculation that it could become a hub for new industrial and other development. Whilst the airport is likely to spin-off a moderate amount of industry over time (to compliment the base that is already there), there is no other competitive advantage to this location for industrial development.

It is suspected that such development would occur mainly because there are so few other "Greenfield" locations for industry. The airport is relatively isolated from other parts of the urbanised area and massive development there will exacerbate infrastructure constraints. Whilst there will be a need for employment opportunities near the emerging Cosmo City, Lanseria is located in the opposite direction from normal commuter movement patterns. Fiscal and other resources will be stretched and diverted to such newly developing areas and away from existing business nodes and urban infrastructure.

Even if the developers propose to build their own sewer system, it will require maintenance (along with roads, water, storm water, power, and other infrastructure) in perpetuity. Whilst it is extremely important to encourage the development of new industrial areas, such areas should ideally be oriented to expansion (and linkage) of existing industrial nodes, or located centrally within an existing infrastructure corridor where they help meet both economic development and planning objectives.

Locating new industrial (let alone residential) development on the urban fringe is unsustainable. There is a need to conduct a fiscal cost-benefit analysis for development in this area to ensure that it would generate a net fiscal benefit to the City of Johannesburg, if such massive developments were allowed to go ahead industrial development should be limited to aviation and agricultural-related activities within the area immediately surrounding the airport.

Plan 11. Nodes

3.1.4 Increased Densification of Strategic Locations

The City seeks to promote strategic residential densification across the regions in order to promote a more compact urban form.

Strategic densification is promoted:

- In and around acknowledged and defined nodes – as per SDF classification and relevant Development Frameworks/Precinct Plans.
- Along transport routes, notably the Phase 1 BRT routes, Gautrain Stations, Mobility Spines and Mobility Roads in support of public transport.
- Within areas of focussed public-sector investments (e.g. Midrand Station Precinct, Greater Ivory Park, Greater Diepsloot Area).
- In selected areas of strong private sector investment and economic activity as highlighted in the RSDFs.

Residential densification in Region A is promoted within nodes; along critical mobility routes; in relation to low-income housing initiatives and; in consideration of the site specific requirements of a given application.

Densification must go hand in hand with the provision of housing solutions for low to middle income earners. Residential development must contribute to the development of a compact city.

As discussed above the mixed-use nodes in Region A are identified as key areas for residential densification.

There is a number of Mobility Roads, Spines and Activity Streets in Region A, as detailed above, where increased residential densities would be considered. Similarly, the phase 1 BRT route along Rivonia Road is eligible for increased densities. Other proposed Strategic Public Transport Network routes will not be eligible for the increased densities until such routes are in the planning and design phases.

In Region A, increased densities relating to subsidised housing will relate to the provision of housing solutions for low to middle income groups, especially in eradicating informal settlements such as Diepsloot.

Specific areas identified for the promotion of strategic residential densification relating to the GMS Priority areas in Region A are:

- Midrand Gautrain Station Precinct
- Sunninghill Node
- Diepsloot and Ivory Park (infill)

NB: Motivations for densification proposals on proposed / planned new roads will only be considered where there is Medium-Term capital commitment by the implementing authority.

For further information relating to strategic densification refer to the SDF.

3.1.5 Initiating and Implementing Corridor Development - North/South Development Corridor (NSDC)

The development of corridors has been identified as a potential instrument to restructure the City into robust, efficient and well-connected urban areas, as well as contributing to city wide economic growth and job creation. This can be achieved by unlocking inherent and under-utilised economic and social development potential with existing nodal development, (current and proposed) road and rail infrastructure.

The North South Development Corridor (NSDC) is one of two city corridor initiatives that have been developed to facilitate the social and economic restructuring of strategic sections of the City. It extends from Orange Farm, north via Lenasia and Soweto to the central anchor point of the CBD. From the CBD it continues north through Sandton to Midrand. It extends beyond the municipal boundaries to Sedibeng to the south and Tshwane to the north.

Region A forms part of the central-north section of the NSDC, which is characterised by a high degree of investment, economic development and associated employment opportunities. Private transport dominates in this section and congestion is the main constraining mobility factor. The development of the corridor in Region A will aim at facilitating private investment through strategic public spending (Midrand Gautrain Stations) (see Section 5). Major movement lines that are incorporated in the NSDC in Region A include:

- The N1 Highway.
- Rivonia Road arterial.
- Louis Botha Avenue/Eastern Service Road/Pretoria Main Road.
- The Gautrain route.

The opportunities focused upon in terms of the NSDC include:

- Utilising and upgrading existing infrastructure and amenities.
- Reinvestment and the identification and execution of development possibilities.
- Undertaking densification at strategic locations if services are available.
- Capitalising on redevelopment of Midrand and Sunninghill as a result of the development of the Gautrain and BRT respectively.
- The promotion of further economic growth and development.

3.1.6 Supporting Sustainable Environmental Management

The Environmental Strategy promotes the effective management of the City's environmental resources to develop a sustainable and quality living environment for all. Defined open spaces function as ecological, social and institutional structuring elements that contribute directly to the preservation of the City's heritage.

The guiding principles of the Integrated Environmental Management Framework apply to all land developments within the City.

The Johannesburg Metropolitan Open Space System (JMOSS) lays the foundation of an interconnected and managed network of open spaces supporting interactions between social, economic and ecological activities, sustaining and enhancing both ecological processes and human settlements. The objectives of JMOSS are important considerations for spatial planning processes to ensure sustainable development.

In Region A, environmental management, more specifically the management and further development of open spaces, is an important issue given the region's natural environment quality. Moreover, there are areas in the region such as Diepsloot and Ivory Park, where the quality of open spaces are generally poor and need to be upgraded. As such, the development and maintenance of open spaces, especially within key nodes and along key mobility roads, is critical. Similarly, the conservation of existing ecological open spaces within the region, and the identification of potential ecological open spaces are important.

The environmental policy issues relating to the management of open spaces and, to development applications close to watercourses and ridges apply.

Water Courses

The following requirements apply:

A buffer of a minimum of 32 metres each side of the watercourse edge (or greater as is necessary to maintain ecological functioning) shall be provided adjacent to all wetlands and watercourses. The 1:100 year flood-line should be respected at all times.

Wetlands are also an integral part of the ecological network and a preliminary study has been undertaken to identify wetlands in the City. Wetlands are indicated on the JMOSS plan for information purposes, to ensure that developments and development applications take them into account.

Ridges (i.e. Rietfontein Ridge)

Development on ridges should not be allowed. Where development is considered, it should be subject to certain conditions (i.e. ecological audit or an environmental impact study). Furthermore, a 200-metre buffer should be reserved between the foot of the ridge and the proposed development.

Johannesburg Open Space Framework

As densities increase, the need to preserve and manage the finite open spaces is increasingly important. In Region A, this is an important consideration, because of rapid development and existing backlogs of open spaces.

The City has completed its Open Space Framework, which provides a policy framework that is linked to a GIS support tool for open spaces in the City. Development guidelines relating to open spaces are contained within the Open Space Framework and the SDF. Developments must address these conform to these guidelines in the conceptualisation, design and construction phases.

Environmental Management Frameworks

The City's Department of Environment has developed an Environmental Management Framework (EMF) for Kyalami and Modderfontein. The framework identifies sensitive environmental areas and prescribes parameters for the development of the areas concerned. Details of the EMF are captured in Section 4 (in the relevant Sub Areas). Future development must support the protection and enhancement of environmentally sensitive areas that have been identified by the Environmental Management Framework.

Table 8 below highlights the environmentally sensitive areas in the Region.

Table 8. Environmentally Sensitive Areas in Region A

Ridges	Rietfontein Ridge.
Wetland	<ul style="list-style-type: none"> ▪ Farm Waterval ▪ Lanseria ▪ Blue Hills ▪ Kya Sands ▪ Fourways ▪ Diepsloot
Egoli Granite grassland	<ul style="list-style-type: none"> ▪ Farm Waterval ▪ Farm Nietgedacht ▪ Lanseria
Conservation Areas	<ul style="list-style-type: none"> ▪ Rietfontein Ridge Conservation Area. ▪ Glen Austin Pan.
Dyke	
Dolomitic Areas	<ul style="list-style-type: none"> ▪ Ivory Park ▪ Kaalfontein
Previously Mined Areas	

Bushbaby	<ul style="list-style-type: none">▪ Craigavon▪ Salfred▪ Witkoppen▪ Fourways
Giant Bullfrog	<ul style="list-style-type: none">▪ Glen Austin▪ Blue Hills▪ Witpoort▪ Farm Nietgedacht
Urban Agriculture	

Plan 12. Johannesburg Metropolitan Open Space System

3.1.7 Facilitating Sustainable Housing Environments in Appropriate Locations

The Housing Strategy aims to facilitate fundamental change in the City by promoting the provision of sustainable human settlements that are in close proximity to economic opportunities and social amenities. Appropriate housing typologies meeting a range of needs throughout the City are a prerequisite to a City that is accessible, efficient and sustainable. Beyond the provision of accommodation, new housing delivery must address the provision of adequate social and economic amenities to ensure the concept of sustainable housing environments.

The City's Housing programmes form the basis of the City's delivery targets of developing 100 000 units by 2011. These units must be made available to include a range of tenure options and typologies. In Region A, the greatest housing backlogs are in Diepsloot, Ivory Park and numerous informal settlements within the region. Projects to facilitate sustainable housing environments that cater for a range of economic needs have been initiated by a range of State entities.

Part of the City's housing strategy is to develop a policy for inclusionary housing. Inclusionary housing is currently defined as "Inclusionary Housing seeks to fill gap between provision of subsidised public housing and private housing provision by leveraging off private residential developments. The provision of subsidised housing remains the core responsibility of State but is included in the definition of affordable housing and the tenets of Inclusionary Housing Policy." Due to the large number of informal settlements in the Region, private large-scale developments need to consider catering for this gap market in order to achieve sustainable housing environments in the Region. Section 5.6.4 in the SDF details the City's current position on inclusionary housing.

Table 9. Current Housing Projects in Region A

	Project Name	No. of Units
1	Diepsloot West Ext. 5	800
2	Kya Sands	2411
3	Lion Park	10239
4	Ivory Park Consolidation	14000

3.1.8 Managing Urban Growth and Delineating the Urban Development Boundary

The Urban Development Boundary is one of the growth management tools used by the City Of Johannesburg. The main purpose of this tool is to curb the costly peripheral expansion of the City and to direct growth towards the presently serviced and priority service areas of the City. The Northern Areas Development Framework proposed amendment of the UDB, which is now effected. However there are very specific conditions attached to these proposals, which are outlined below:

- Linkage to the Land Use Budget estimates for settlement expansion up to year 2020.
- Containment of urban sprawl and the promotion of infill and densification.
- The creation of corridors along primary routes.
- To allow for expansion of affordable housing projects, such as Cosmo City, and the formalisation of informal settlements, such as Nooitgedacht.
- The cost implications of establishing new infrastructure for new township developments in remote areas.
- The conservation of environmentally sensitive areas.
- The protection of high-potential agricultural land where applicable.
- Provision of inclusionary housing.
- Full provision of bulk engineering services by developers in areas of insufficient capacity.
- Social amenities that cannot be accommodated within the Urban Development (including Schools, Clinics, Cemetery, Religious facilities).

Riverglen Extensions

The City takes cognisance of the rights granted on Riverside View Ext. 9. These rights were gained via the Development Facilitation Act (DFA). The City has been active in negotiating how this development can be accommodated and developed given infrastructure and other developmental

issues on the properties affected. These negotiations have included discussions with neighbouring proposed and planned developments and the respective service utilities to ensure co-ordinated planning and infrastructure development.

For the purposes of this review, contingent on the successful outcome of discussion relating to infrastructure in the area, the properties affected will be considered as being within the UDB and considered to be an Expansion Area in terms of the City's Growth Management Strategy. The formal amendment of the UDB will be considered in the relevant SDF review once the on-going discussion and deliberation with the City and service providers has been concluded. In considering the application, the City is cognisant of the following:

- Inclusionary Units to be made available on site (and in line with the City's definition of Inclusionary housing)
- Land donations for subsidised housing initiatives in the north
- The Developers undertaking to management of Porcupine Park

Criteria for Development within and beyond the Urban Development Boundary

Development **within the City's UDB** will be considered in terms of their compliance with prevailing RSDF (and their inherent Sub Area Management Tables), applicable Development Frameworks, Precinct Plans and schemes for a specific area.

Land located **beyond the City's UDB** is predominantly rural and agricultural in nature. Naturally, the concurrent land uses tend to be of a lower-intensity and density. There are however areas where the distinction between urban and rural is blurred.

Development outside the UDB will be considered in terms of compliance with the following criteria:

- Agriculture: purposes normally associated or reasonably necessary in connection with agricultural purposes and agri-villages. This includes only dwelling units related to the agricultural use of the property.
- Conservation Areas and Nature Reserves: Areas designated for nature conservation, which may include tourism facilities (accommodations/restaurants) and recreational facilities directly related to the main use.
- Tourism and recreational related facilities: Outdoor and tourism related activities including hiking trails, hotels, 4x4 trails, restaurants, curio markets, conference facilities, wedding venues, game lodges and other similar uses with a rural character not causing a nuisance or having a detrimental effect on the environment.
- Farm stalls.
- Rural residential uses and agricultural holdings.
- Any other related development or service, provided that the proposed development:
- Services primarily a local market; or
- Is located at a service delivery centre or central place to the community.

Proposed activities that conform to the above land use criteria will be further evaluated noting whether:

- The development is in an area that has been identified to be ecologically sensitive or contains Red Data Species – proposals would not generally be supported in these instances.
- The development would have a detrimental effect on the environment – applicable environmental legislation will prevail.
- Bulk infrastructure capacities would be exceeded – proposals would not generally be supported in these instances.
- The development will be in keeping with the character / ambience of the surrounds.

The subdivision of land outside the UDB will only be allowed if it complies with the following criteria and associated table:

Compliance with land use criteria noted above.

- Division is within the parameters of the subdivision of land.
- An existing second dwelling is not the primary motivation for the subdivision.

- Subdivision of productive agricultural areas with agricultural potential should only be allowed in special circumstances and only with the written consent from the National Department of Agriculture.
- Where a subdivision is motivated because of a road, river or servitude physically severing land, the reason for the severance should be proven. The provision of services and registration of servitudes should be to the satisfaction of the local authority.
- There shall be no obligation on Council or MOE's to render services in any form whatsoever.

Table 10. Subdivision of Land

Category	Size	Min Portion
Minor	4ha and below	1 Morgen (+/- 0.8ha)
Intermediate	4ha - 10ha	1 ha
Major (a)	10ha - 20ha	2 ha
Major (b)	20+ha	4ha

It is important to note that once a property has been divided in terms of the criteria above, it may not be further subdivided again unless there is a material change in circumstance within the broader area that would necessitate a review of the UDB. This condition is to be included in all division of land application approvals.

Plan 13. Urban Development Boundary

3.2. PROMOTING INNOVATIVE GOVERNANCE SOLUTIONS

In order to contribute to achieving this principle of the Growth and Development Strategy through the spatial restructuring of Region A, there are a number of processes and relationships that need to be strengthened and defined. These are:

- The relationship between the City of Johannesburg, the Province, National Government and key stakeholders in Region A, in order to ensure that the development programmes within the region achieve their key objectives.
- Strengthening the relationship between the City of Johannesburg, City of Tshwane, Mogale City Local Municipality and the City of Ekurhuleni concerning the following issues:
 - Demarcation and municipal cross border issues (e.g. the management of the Ivory Park / Tembisa interface area by the City of Johannesburg and the City of Ekurhuleni).
 - Environmental management.
 - Key municipal projects such as:
 - The development of the Swazi Inn precinct.
 - The proposed Cradle City Development.
 - The implementation of the Bus Rapid Transit
 - The introduction of the Gautrain Rapid Rail Link.
- Building relationships with developers and property owners to ensure the sustainable development of Greenfield sites.

3.3 APPROVED PRECINCT PLANS/DEVELOPMENT FRAMEWORKS APPLICABLE TO REGION A

For further details regarding these precinct plans and development frameworks, refer to the original precinct plan documents, and to the Sub Area Management Tables in Section 4 of the RSDF.

The approved precinct plans and development frameworks that are applicable to Region A are:

- The Erand Precinct Plan.
- The Glen Austin Development Plan.
- The Sunninghill Node Precinct Plan.
- The Fourways North East Precinct Plan.
- Northern Areas Development Frameworks, 2008
- Bambanani Industrial Node UDF, 2008
- Midrand Gautrain Station UDF, 2008
- Diepsloot Government Precinct UDF, 2008
- Diepsloot Activity Street UDF, 2008
- Diepsloot District Node, 2008
- Swazi Inn Development Framework, 2008

The urban development frameworks that were approved in 2008 and 2009 are summarized below:

3.3.1 Midrand Gautrain Station UDF, 2008

The Midrand Gautrain Station UDF encourages mixed land uses within and around the station precinct. It further promotes the use of public transport by providing effective public transport services with appropriate supporting vehicle and pedestrian links. The UDF supports a variety of business activities and other ancillary land uses such as a Gautrain Visitors' Centre. Strategic densification within the station precinct is supported in order to encourage the proper functionality of the rail station.

The UDF promotes the use of buses, taxis, and non-motorised transport, as well as pedestrian movement. The UDF proposes parking facilities that will enable the station to be an integrated transport hub. The UDF supports a public urban park and a market square to house a range of informal trading facilities.

3.3.2 Bambanani Industrial Node UDF, 2008

The Bambanani Industrial Node UDF promotes the concentration of mixed land uses (such as industrial and commercial land uses) within the industrial node that will contribute towards revamping the node, attracting investment into the area, supporting local economic development and, creating

employment opportunities for residents of Greater Ivory Park. The UDF supports incubator businesses, warehousing, manufacturing, offices, and retail.

The overall vision of the UDF is to establish a central business district for Greater Ivory Park that is comprised of two existing nodes, one proposed node and the Bambanani Industrial node. The UDF promotes the utilisation of public transportation, thereby proposing the taxi rank upgrading. It further promotes pedestrian and cycling movement in support of the Non-Motorised Transport strategy.

3.3.3 Diepsloot Government Precinct UDF, 2008

Diepsloot Government Precinct aims to revitalize the Diepsloot West area by giving order to the land uses within this area, enhancing the public realm, promoting safety and, effective pedestrian and vehicular flows. The UDF supports the establishment of a defined institutional node with a retail component. Social facilities such as a community youth center, clinic and a police station are among the land uses that are supported by the UDF. Strategic residential densification is also supported within the precinct.

3.3.4 Diepsloot Activity Street UDF, 2008

The Diepsloot Activity Street UDF aims at guiding development along and, providing the strategic functionality of, the activity street. The Diepsloot Activity Street forms a critical connection between the two main east-west collector routes in the northern part of Diepsloot. The activity street is lined on both sides by small business ranging from taverns, spaza shops, telephone containers to informal trade.

The UDF supports densification along the activity street; promotes a home-based business environment and; encourages the optimum utilisation of public open spaces. It further proposes road, sidewalk, and storm water upgrading to enable easy pedestrian and vehicular flows. The interventions aimed at promoting the use of public transportation include the formalization of taxi facilities.

3.3.5 Swazi Inn UDF, 2009

The objective of the Swazi Inn Urban Development Framework is to provide a set of development principles, as well as specific development guidelines and interventions, to enable the sustainability of the Swazi Inn precinct. The Framework among other interventions identifies Swazi Inn as neighbourhood node and, encourages both first and second economy activities to co-exist. Like the Diepsloot Activity Street UDF, it promotes a home-based business environment.

The UDF proposes road and sidewalk upgrading in order to enhance pedestrian and vehicular flows. Like the Diepsloot Government Precinct UDF, the Swazi Inn UDF promotes safety by proposing increased street lighting and traffic calming measures within the precinct.

3.4 PROPOSED PRECINCT PLANS/DEVELOPMENT FRAMEWORKS APPLICABLE TO REGION A

3.4.1 Diepsloot Development Framework and Business Plan

In 2008 the Johannesburg Development Agency undertook to implement projects in Diepsloot, based on the approved development Frameworks through the National Treasury's Neighbourhood Development Partnership Grant (NDPG) fund. The initial stages of implementation presented a number of challenges due to the lack of an overall spatial and infrastructure framework for Diepsloot. It was established that projects undertaken by the JDA, MOEs and other funders are not consolidated, coordinated or prioritised and are not based on a clear long term plan for the area.

The above-mentioned issue, together with other issues regarding development in Diepsloot, has led to the initiation of the Diepsloot Development Framework and Business Plan. The plan is to coordinate development efforts and prioritise developments through a comprehensive business plan to ensure sustainable development and expenditure in the area. The scope of work includes, but is not limited to, an overall spatial development framework, which takes cognisance of previous plans

and frameworks, urban design issues, housing and infrastructure plans and programming of capital investment projects in the area.

SECTION 4

SUB AREA DEVELOPMENT MANAGEMENT TABLES

4. SUB AREA DEVELOPMENT MANAGEMENT TABLE

The intention of the development management table is to provide guidance as to how development must take place by taking into account growth pressures within the region. A large number of areas contained in the Sub Area table are guided and managed in term of the Northern Areas Frameworks. The key components of the frameworks are as follows:

- 8 Sub Area boundaries³;
- Land use management guidelines that have been packaged into an easy-reference land use management schedule for guiding development applications;
- Land use definitions to accompany the LUM schedule;
- An allocation table for the floor area of micro enterprises; and
- A density bonus programme.

³ The sub area boundaries are functional boundaries that were demarcated for the purposes of the 'Northern Areas Development Frameworks' study

Plan 14. Sub Areas

Plan 15. Northern Areas Development Framework

Table 11. Land Use Management Schedule

Broad Land Use Category	Land Use Category	Zone 1	Zone 2	Zone 3	Zone 4A	Zone 4B	Zone 5A	Zone 5B	Zone 6A	Zone 6B	Zone 7	Zone 8	Zone 9	Zone 10
		Medium-density residential zone	Low-density residential zone	Rural residential zone	Metropolitan mixed-use nodal core	Metropolitan mixed-use nodal periphery	Regional mixed-use nodal core	Regional mixed-use nodal periphery	District mixed-use nodal core	District mixed-use nodal periphery	Commercial and light industrial zone	Airport expansion zone	Institutional zone	Conservation zone
Residential	Very low-density			•										•
	Low-density		•											
	Medium-density	•	•											
	High-density	•			•	•	•	•	•	•				
	Accommodation	•			•	•	•	•	•	•		▼		
Community	Educational	•	•	•									•	
	Medical				•	•	•	•	•				•	
	Religious	▶	▶	▶										
	Social			•									•	
Business	Retail				•	•	•	•	•	•		▼		
	Office				•	•	•	•	•	•	▲	▼		
	Entertainment				•	•	•	•	•	•				
	Motor trade				•	•	•	•	•	•	▲	▼		
	Micro enterprise	▶		▶										
Institutional	Municipal					•		•		•	▲	▼	•	
	Government					•		•		•	▲	▼	•	
Industrial	Light										▲	▼		
	Commercial					•					▲	▼		
Open space	Active	•	•	•		•		•		•			•	
	Passive	•	•	•	•	•	•	•	•	•	•	•	•	•
Agriculture	Agriculture			•									•	•
Minimum FAR		n/a	n/a	n/a	2.4 (4)	0.8 (2)	1.8 (3)	1.2 (2)	0.8 (2)	n/a	n/a	n/a	n/a	n/a
Maximum FAR		n/a	n/a	n/a	4.8	2.4	3.6	2.4	1.6	1.2	0.8	0.8	0.8	n/a
Maximum Coverage		n/a	n/a	n/a	60%	40%	60%	60%	40%	40%	40%	40%	40%	n/a
Maximum Height		4 storeys	3 storeys	2 storeys	8 storeys	6 storeys	6 storeys	4 storeys	4 storeys	3 storeys	2 storeys	2 storeys	2 storeys	n/a
Minimum Residential Density		30 u/ha	10 u/ha	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Maximum Residential Density		160 u/ha	30 u/ha	2 u/ha	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1 u/ha

Source: Maluleke Luthuli and Associates, 2007

- ▲ Subject to developers providing own bulk services
- ▼ Subject to not impeding the future long-term expansion of Lanseria Airport
- ▶ Subject to relevant policy document

Development on Portion 119 of the farm Diepsloot (located in Zone 6A) is required to allocate 70% of its floor area for residential use. Zone 1 and 3 allow for micro enterprises. Micro enterprises are defined as businesses or enterprises that are attached to and supplement a residential component. The residential component remains the primary land use associated with the property. This definition does not cater for the development of neighbourhood shopping centres. Such centres are better suited for the proposed mixed-use nodes, in particular the District Mixed-Use Nodes. District Mixed-Use Nodes have a 2km service radius, making such centres within easy reach for day-to-day shopping purposes.

Table 12. Micro Enterprise Floor Area Allocation

Land Use Management Zone	Zone 1: Medium-Density Residential Zone				Zone 3: Rural Residential Zone
	1 storey	2 storeys	3 storeys	4 storeys	n/a
Number of building storeys	1 storey	2 storeys	3 storeys	4 storeys	n/a
Maximum % of building floor area to be allocated to micro enterprises	5%	7.5%	10%	15%	20%
Ceiling building floor area to be allocated to micro enterprises	Up to a maximum floor area of 500m ² per property				

The Table above provides guidelines for the approval of micro enterprises as part of the township establishment or rezoning application process. The provision of building floor area for micro enterprises is linked to the residential component of the building; requiring the residential floor area to remain the dominant land use associated with the building. The floor area provided for micro enterprises may not exceed 500m² per property. Practically, this translates to the following examples:

- A single storey 120m² house comprising a 6m² hairdresser
- A 2-storey 300m² house comprising a 22.5m² home office
- A 4-storey 1500m² walk-up comprising a 300m² café
- A single storey 400m² rural residential property comprising a 80m² veterinary clinic

Table 13. Density Bonus Programme

Category	Definition	Metropolitan Mixed-Use Node		Regional Mixed-Use Node		District Mixed-Use Node	
		Zone 4A Metropolitan mixed-use nodal core	Zone 4B Metropolitan mixed-use node periphery	Zone 5A Regional mixed-use nodal core	Zone 5B Regional mixed-use node periphery	Zone 6A District mixed-use nodal core	Zone 6B District mixed-use nodal periphery
Middle income dwelling units	Dwelling units with a unit floor area not exceeding 80m ² .	15% added to floor area if 10% of floor area is dedicated to medium-income units, with a 1.5% floor area increase for every percentage increase in floor area dedicated to medium-income dwelling units above 10% and;					
Low income dwelling units	Dwelling units with a unit floor area not exceeding 60m ² .	20% added to floor area if 10% of floor area is dedicated to low income units, with a 2.0% floor area increase for every percentage increase in floor area dedicated to low-income dwelling units above 10% and;					
Very-low income dwelling units	Dwelling units qualifying for and accessing the Housing Subsidy and Restructuring Grant within a Restructuring Zone. Zones 1A, 1B, 2A and 2B are considered Restructuring Zones.	25% added to floor area if 10% of floor area is dedicated to very low income units, with a 2.5% floor area increase for every percentage increase in floor area dedicated to very low-income dwelling units above 10% and;					
Community facilities	Including a crèche, primary school, secondary school, tertiary education institution, clinic, day-hospital, hospital, community hall, library, post office, police station or emergency service centre all open to the general public for a minimum period of 15 years.	10% added to floor area if 5% of floor area is dedicated to social facilities, with a 2% density increase for every percentage increase in floor area dedicated to social facilities above 5% and;					
Pedestrian facilities	Including a pedestrian thoroughfare on the property, pedestrian mall on the property, town square on the property or a minimum 2m street-front sidewalk on the property all accessible to the general public for the life-span of the density bonus	0.5m ² added to floor area for every 1m ² dedicated to pedestrian facilities and;	0.5m ² added to floor area for every 2m ² dedicated to pedestrian facilities and;	0.5m ² added to floor area for every 1m ² dedicated to pedestrian facilities and;	0.5m ² added to floor area for every 2m ² dedicated to pedestrian facilities and;	0.5m ² added to floor area for every 2m ² dedicated to pedestrian facilities and;	0.5m ² added to floor area for every 3m ² dedicated to pedestrian facilities and;
Vehicle access	Use of a non-public transport route vehicle entrance, shared vehicle access, service road access or park and ride facility for the life-span of the density bonus	10% added to building floor area for a non-public transport route vehicle entrance or a shared vehicle access or a service road access and 2m ² added to floor area for every 1m ² dedicated to a park and ride facility to a;					
Maximum FAR of:		7.2	3.6	5.4	3.6	2.4	1.6
Maximum Coverage of:		60%	40%	60%	60%	40%	40%
Maximum Height of:		12 storeys	9 storeys	9 storeys	6 storeys	6 storeys	4 storeys
Parking reduction		1% parking reduction for every 0.1 FAR earned using density bonus					
Maximum parking reduction:		8%	4%	12%	4%	4%	3%

Source: Maluleke Luthuli and Associates, 2007

Table 14: Land Use Definitions – Northern Areas Framework

Broad Land Use Category	Land Use Category	Land Use Definition	Typical Land Uses
Residential	Very low-density	Land use allowing rural living on agricultural holdings using single dwelling units	Single dwelling unit
	Low-density	Land use allowing traditional suburban living using single dwelling units	Single dwelling unit
	Medium-density	Land use allowing the horizontal and vertical grouping of dwelling units up to 3 storeys in height	Group housing Second dwelling unit Backyard rental unit Semi-detached housing Commune Retirement village Children's home
	High-density	Land use allowing the horizontal and vertical grouping of dwelling units up to 4 storeys in height	Row housing Walk-up apartments Flats
	Accommodation	Land use for the purpose of letting individual rooms for residential accommodation	Boarding house Hotel Guest house Resort Hostel
Community	Educational	Land use where child-care service are provided and where children, adolescence and adults receive formal education	Crèche Pre-primary school Primary school Secondary school Technical school Technical college Skills training centre Satellite campus Adult education centre
	Medical	Land use where patients are given medical treatment or advice	Clinic Community hospital Day hospital Medical consulting rooms
	Religious	Place of worship and religious education	Church Mosque Temple
	Social	Land use that provides municipal or social services to local communities	Community hall Library Post office Pension pay-point Customer care centre Police station Fire brigade Emergency services
Business	Retail	Land use that allows the trading of retail goods	Hypermarket Supermarket Specialist retailers (e.g. clothing and furniture) Banking branches

Broad Land Use Category	Land Use Category	Land Use Definition	Typical Land Uses
	Office	Land use for the performance of administrative or professional functions	Professional offices Conference facility
	Entertainment	Place of entertainment that is usually associated with the retail industry	Entertainment centre Restaurant Fast food outlet Tavern
	Motor trade	Land use that allows the retail, repair and maintenance of motor vehicles	Filling station Vehicle service centre Vehicle showrooms
	Micro enterprise	Business or enterprise attached to and supplementing a residential component. The residential component remains the primary land use associated with the property.	Home office Home-based medical consulting room Non-disturbing home enterprise (e.g. hair dresser or day care centre) Mini market Coffee shop Farm stall
Institutional	Municipal	Land use associated with the daily operation and functioning of the municipality	Administrative offices Parking garage Taxi holding and or parking area Municipal training facilities Bus depot Electrical purpose Equipment stores
	Government	Land use associated with the daily operation and functioning of the national or provincial government	Administrative office Railway reserves and stations Telecommunication
Industrial	Light	Land use for non-pollution industries used for manufacturing purposes	Non-noxious factories Maintenance and repair workshops Engineering works Builders yard
	Commercial	Land use for the handling and storage of cargo and the wholesale of goods	Distribution centre Wholesale trade Warehousing Cartage and transport services
Open space	Active	Open space that has a recreational function linked to it	Public park Play ground Sports field Sports club Cultural heritage site Amusement park Recreation area
	Passive	Open space that has a hazard avoidance or natural resource conservation function	Private open space Conservancy Protected area River flood areas Geological unsuitable land Topographically unsuitable land Hazardous zones (e.g. pollutions areas)

Broad Land Use Category	Land Use Category	Land Use Definition	Typical Land Uses
Agriculture	Agriculture	Land use that is intended of subsistence of commercial farming purposes and uses generally associated with plants and animals.	Subsistence farming Commercial farming Communal agriculture Agriculture skills training facilities Nursery Veterinary clinic Animal kennel

4.1. SUBURBS PER SUB AREA

In order to deal with the application of the region-wide goals, objectives and development strategies regarding movement, activity and the environment, it was necessary to divide Region A into 12 Sub Areas, based on the following criteria:

- The area covered by community submissions.
- Homogeneity in residential density and character/requirements.
- Land use homogeneity.
- Natural/environmental features.
- Economic investment.

NB: Development applications should be guided and approved in line with the GMS, Movement, Nodal and Density Strategies. Where applicable, the following strategies shall apply: UDB, JMOSS, IEM, NMT, SHS and relevant UDFs.

Table 15. Sub Area Management Table – List of Townships

LIST OF TOWNSHIPS AS PER ALPHABETICAL ORDER	
Airdlin A.H.	Sub Area 7
Barbeque A.H.	Sub Area 6
Barbeque Downs	Sub Area 7
Barbeque Downs Ext 5	Sub Area 6
Beaulieu	Sub Area 6
Beverley A.H.	Sub Area 4
Bloubostrand Extensions 2, 3, 10-12, 16-18	Sub Area 4
Blue Hills	Sub Area 5
Botesdal 529-JQ	Sub Area 1
Boundary Park Ext 1	Sub Area 2
Brendavere Agricultural Holdings	Sub Area 2
Broadacres Agricultural Holdings	Sub Area 4
Broadacres Extensions 1 And 2	Sub Area 4
Buccluech	Sub Area 11
Bultfontein 533-JQ	Sub Area 1
Carlswald A.H.	Sub Area 6
Carlswald Estate	Sub Area 6
Chartwell Agricultural Holdings	Sub Area 2
Countryview	Sub Area 5
Craigavon Agricultural Holdings	Sub Area 2
Crowthorne A.H.	Sub Area 6
Dainfern	Sub Area 4
Dainfern Ridge	Sub Area 4
Diepsloot	Sub Area 3
Diepsloot 388-JR (Diepsloot Nature Reserve)	Sub Area 1
Diepsloot Agricultural Holdings	Sub Area 3
Diepsloot Reception Area	Sub Area 3
Diepsloot West and Extensions	Sub Area 3
Ebony Park	Sub Area 10
Erand A.H.	Sub Area 9
Erand Gardens	Sub Area 9
Farm Witkoppen 194-IQ	Sub Area 2
Farmall Agricultural Holdings	Sub Area 2

Farmall Agricultural Holdings Extension 1	Sub Area 1
Fourways Extensions 8, 10, 14, 15	Sub Area 4
Fourways Gardens	Sub Area 4
Glen Austin	Sub Area 12
Glen Austin Ext 1	Sub Area 12
Glen Nerine A.H.	Sub Area 4
Glenferness A.H. & Extensions	Sub Area 8
Grand Central Airport	Sub Area 9
Halfway Gardens	Sub Area 6
Halfway House & Extensions	Sub Area 6
Halfway House Estates A.H.	Sub Area 6
Headway Hill	Sub Area 9
Houtkoppen 193-IQ	Sub Area 2
Inandan Agricultural Holdings	Sub Area 2
Ivory Park	Sub Area 10
Johannesburg North	Sub Area 2
Kaalfontein	Sub Area 10
Kengies	Sub Area 4
Kleve A.H.	Sub Area 4
Knopieslaagte	Sub Area 8
Kya Sand And Extensions	Sub Area 2
Kyalami A.H. & Extensions	Sub Area 8
Kyalami Estates	Sub Area 6
Kyalami Gardens	Sub Area 6
Kyalami Hills	Sub Area 6
Kyalami Park	Sub Area 6
Leeuwkop Prison	Sub Area 8
Lindley 528-UQ	Sub Area 1
Lonehill	Sub Area 4
Marise A H	Sub Area 7
Magaliessig Extensions 4 & 40	Sub Area 4
Maroeladal Extensions 5, 7, 8	Sub Area 2
Midridge Park	Sub Area 9
Millgate Farm Agricultural Holdings	Sub Area 2
Mostyn Park Agricultural Holdings	Sub Area 2
Needwood	Sub Area 4
Nietgedacht 535-JQ	Sub Area 1
Nooitgedacht 534 JQ	Sub Area 1
Noordwyk	Sub Area 5
North Champagne Estates Agricultural Holdings	Sub Area 2
Palmlands Agricultural Holdings	Sub Area 4
Paulshof & Extensions	Sub Area 7
Plooyville A.H.	Sub Area 7
Rabie Ridge	Sub Area 10

Randjiesfontein	Sub Area 12
Randjiespark	Sub Area 9
Randjiespark Estate	Sub Area 12
Rietvallei 538-JQ	Sub Area 4
Riverbend Agricultural Holdings	Sub Area 2
Riverglen	Sub Area 3
Saddlebrook	Sub Area 8
Sagewood	Sub Area 5
Salfred	Sub Area 2
Sandpark A.H.	Sub Area 2
Stratford	Sub Area 4
Summerset	Sub Area 5
Sunninghill	Sub Area 7
Sunninghill Park	Sub Area 7
Sunrella Agricultural Holdings	Sub Area 1
Tanganani	Sub Area 3
Treesbank A.H.	Sub Area 4
Trevallyn Agricultural Holdings	Sub Area 2
Trevallyn Agricultural Holdings Extension 1	Sub Area 2
Vorna Valley	Sub Area 6
Waterval	Sub Area 6
Willaway	Sub Area 6
Witkoppen Extensions	Sub Area 4
Zevenfontein	Sub Area 4
Zwartkop/Rooiwal 530-JQ	Sub Area 1

4.2 SUB AREA DEVELOPMENT MANAGEMENT TABLES

The tables below provide specific objectives, interventions and guidelines at a more detailed and local level, required from a Land Use Management (or other sector) perspective, in order to achieve the development objectives for the Sub Area. These interventions and guidelines should be used (in conjunction with City Policies and Precinct Plans) in considering whether development proposals would be permissible.

Development Strategies as noted in Section 3 should be applied throughout each Sub Area where appropriate and where no specific controls are proposed. Where applicable, area-based and case-specific policies and plans should inform decision-making and guide development proposals and decisions.

SUB AREA 1 (LANSERIA PRECINCT)

BULTFONTEIN 533-JQ, BOTESDAL 529-JQ, DIEPSLOOT 388-JR (DIEPSLOOT NATURE RESERVE), LANSERIA, LINDLEY 528-UQ, NIETGEDACHT 535-JQ, NOOITGEDACHT 534 – JQ, SUNRELLA A.H. &ZWARTKOP/ROOIWAL 530-JQ

Mogale City Local Municipality, the City of Tshwane and the N14 highway border sub Area 1 in the west, north and south respectively. The key-structuring element within the sub area is the Lanseria speciality node, which is surrounded by agricultural holdings and farm portions. Over half of the sub area is undevelopable due to the presence of large tracts of environmental conservation areas that are outside the Urban Development Boundary (UDB). The proposed Cradle City, which is a major development, straddles between Johannesburg, Tshwane and Mogale City. The proposed development (refer to the Cradle City Master Plan, 2008) is subject to the necessary infrastructure provision by the developer which must be in line and adhere to GMS Principles.

Development applications in this sub area are to be assessed in accordance with the Lanseria Development Framework 2020 (2008), which should be read in conjunction with the Growth Management Strategy (GMS) noting that the area falls within the expansion areas and peri-urban areas.

Unless the availability of infrastructure and other bulk services can be confirmed by the relevant MOEs and core departments, applications for densification, land use intensification and /or other uses will not be supported.

DEVELOPMENT OBJECTIVE 1

Promote the development of a sustainable long term spatial structure to ensure the efficiency of the sub area in a city and provincial wide context.

Interventions	Guidelines
1.1 Promote the development of the demarcated Specialist Node in the sub area (subject to the provision of infrastructure)	1.1.1 Support suitable commercial and light industrial land uses within the node, which illustrates linkages and compatibility with airport, and transport activities. 1.1.2 No residential densification will be supported in this node, however accommodation establishments may be considered.
1.2 Promote mixed land use developments as shown and demarcated in the Lanseria Development Framework 2020 (2008).	1.2.1 Apply Land Use Management Standards as contained in Land Use Management Schedule.

<p>1.3 Promote higher density residential development in this sub area as demarcated in the Lanseria Development Framework 2020 (2008).</p>	<p>1.3.1 Support densities between 30units/ha and 50units/ha along identified mobility roads. 1.3.2 Apply the Land Use Management Schedule as contained in the said framework. 1.3.3 Applications shall be assessed on their individual merits. Development controls shall be granted based on the suitability of the application within the local context as discussed in this sub area and Section 3.1.3.</p>
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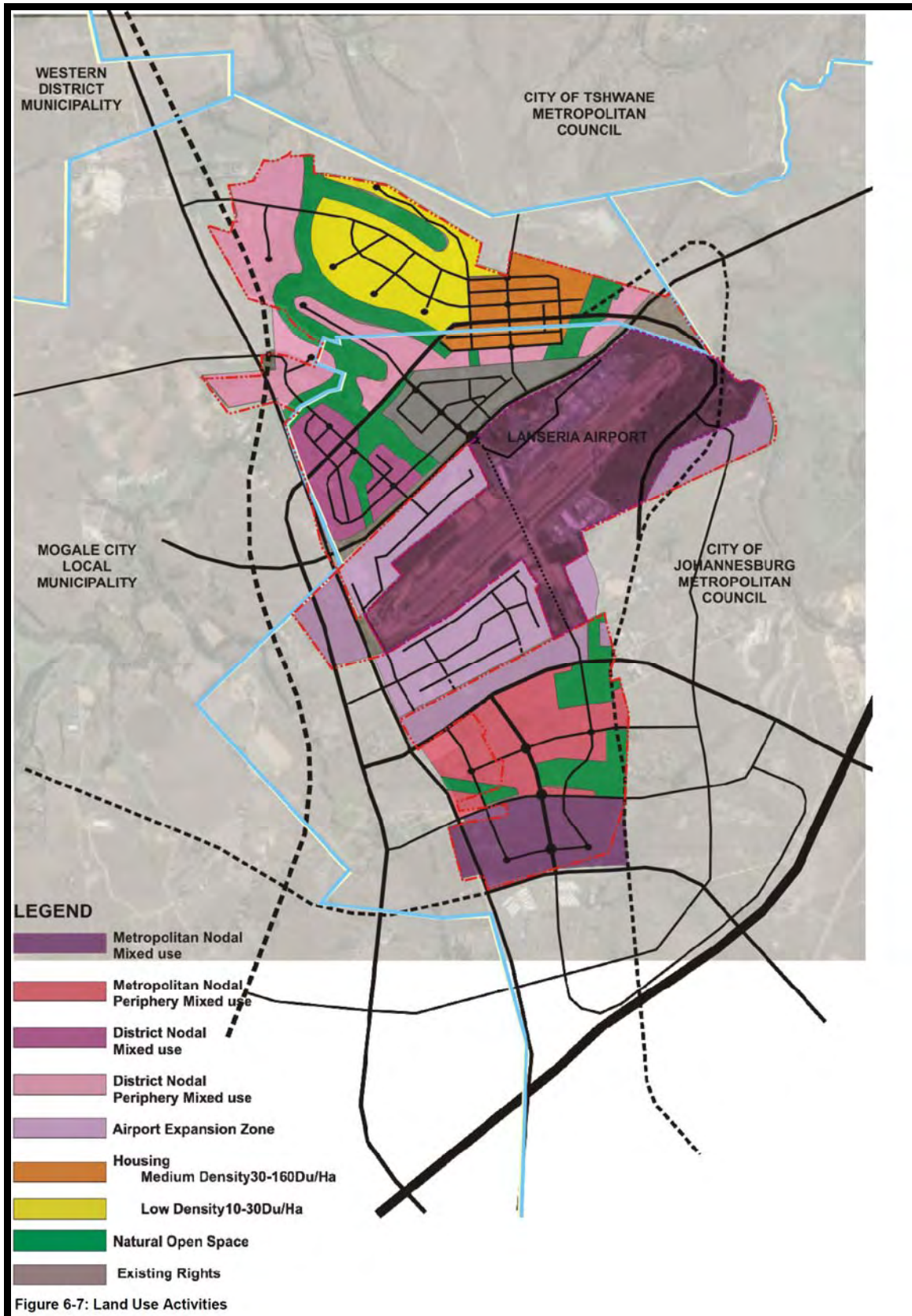
<p style="text-align: center;">DEVELOPMENT OBJECTIVE 2 To stimulate the economic development potential of Sub Area 1.</p>	
<p style="text-align: center;">Interventions</p>	<p style="text-align: center;">Guidelines</p>
<p>2.1 Promote hospitality services developments along Malibongwe Drive Extension (R512).</p>	<p>2.1.1 Integrate the hospitality corridor with Hartebeespoort Dam as a tourist destination and the International Heritage Site. 2.1.2 Permissible land uses shall include conference facilities, hotels, guesthouses and lodges, wedding facilities, eco-tourism facilities, restaurants, arts and craft markets.</p>

DEVELOPMENT OBJECTIVE 3 Promote the protection of open space and conservation areas in the sub area.	
Interventions	Guidelines
<p>3.1 Protect and conserve the use of the Diepsloot Nature Reserve.</p>	<p>3.1.1 Support low-density residential developments to buffer and protect the nature reserve. 3.1.2 Support non-residential uses promoting eco- tourism. 3.1.3 Establish public-private partnerships. 3.1.4 Preserve the natural Open Spaces according to JMOSS. 3.1.5 IEMP.</p>
<p>3.2 Formalise the landfill site in the Diepsloot Nature Reserve, with specific reference to:</p> <ul style="list-style-type: none"> - Establish appropriate Integrated Environmental Management Plans (IEMP) and Systems (EMS). - Obtain approval from the Department of Water Affairs and Forestry. - Implement an interface with the Diepsloot residential area. - Ensure proper access management off William Nicol Drive. - Disease vectors: obtain specialist input on concerns. - Risk assessment to investigate implications of sub-standard or abnormal operating conditions. - Further consultation with interested and affected parties regarding the Diepsloot cemetery. 	<p>3.2.1 Environmental Impact Assessment and Management Plan. 3.2.2 Implementation of EMF guidelines and recommendations.</p>

Plan 16. Sub Area 1 – Lanseria/Sunrella

Plan 17. Lanseria Development Framework

Plan 18. Lanseria Speciality Node



Plan 19. Cradle City Master Plan (2008)

SUB AREA 2 (KYA SAND PRECINCT)

BRENDAVERE A.H., BOUNDARY PARK EXTENSION 1, CRAIGAVON A.H., CHARTWELL A.H., FARMALL A.H., HOUTKOPPEN 193-IQ, INADAN A.H., JOHANNESBURG NORTH, KYA SAND AND EXTENSIONS, MAROELADAL EXTENSIONS 5,7 &8, MILLGATE FARM A.H. and MOSTYN PARK A.H., NORTH CHAMPAGNE ESTATES A.H., RIVERBEND A.H., SANDPARK A.H., SALFRED, TREVALLYN A.H. & TREVALLYN A.H. EXTENSION 1

The Kya Sands speciality node, which comprises mainly of industrial land uses, forms a key structuring element within Sub Area 2. The sub area is also characterised by several mixed housing projects that have been initiated by the public and private sector. The remainder of the sub area is predominantly rural in character, comprising of agricultural holdings and farm portions. Over half of the sub area falls outside the Urban Development Boundary where no further township establishments can be supported.

Development applications in this sub area are to be assessed in accordance with the Kya Sands Development Framework 2020 (2008), which should be read in conjunction with the Growth Management Strategy (GMS). In terms of the GMS the sub area has a large consolidation area which includes Kya Sand, Trevallyn, Inadan and Riverbend. Farmall, Chartwell and North Champagne Estates are located in a Peri Urban Management Area and is also located outside of the UDB. Millgate Farm is located in an expansion area. This sub area is not viewed as a high priority area, however two informal settlements are present. The Kya Sand informal settlement is in planning phase for formalisation and redevelopment.

Unless the availability of infrastructure and other bulk services can be confirmed by the relevant MOEs and core departments, applications for densification, land use intensification and /or other uses will not be supported.

DEVELOPMENT OBJECTIVE 1.

Promote the development of a sustainable spatial structure to ensure compatibility and integration of different land uses in the sub area.

Interventions	Guidelines
1.1 Encourage investment and reinvestment of commercial and light industrial uses in the current extent of the demarcated Kya Sand Speciality Node	1.1.1 Support land uses of commercial and light industrial nature subject to the provision and/or availability of infrastructure (See the Kya Sand Development Framework 2020 of 2008)
1.2 Encourage appropriate densities for residential developments in the sub area.	1.2.1 Support densities of up to 100du/ha on the eastern boundary of the node as an interface area. 1.2.2 Incrementally decrease residential densities in Inadan A.H and Riverbend A.H. away from the Kya Sand Speciality Node 1.2.3 Applications shall be assessed on its individual merit and development control shall be granted based on suitability within the scope of the Kya

	Sand Precinct land use management table.
1.3 Preserve the non-urban residential and agricultural related land uses and character in the Chartwell, North Champagne Estates and Farmall area which is located outside of the UDB.	1.3.1 Support land uses that complement and protect the environment character of the area e.g. recreational facilities of low intensity, guesthouses, nurseries, seed farming, hydroponics, equestrian facilities 1.3.2 UDB guidelines to apply
1.4 Support residential densification in Inadan, Riverbend and Milgate Farm	1.4.1 Kya Sands Development Framework 1.4.2 Scaling-down principle shall apply

DEVELOPMENT OBJECTIVE 2 To identify and assemble land for the resettlement of the Riverbend Informal Settlement.	
Interventions	Guidelines
2.1 Contain the extent of the existing Riverbend Informal Settlement.	2.1.1 Zero tolerance for “shack-farming” and land invasion. 2.1.2 Moratorium on doubling up, extension of structures and influx. 2.1.3 Implementation of the Housing Strategy.
2.2 Verification and updating of the community profile to establish the housing needs and identify potential beneficiaries, taking cognisance of Provincial Housing Waiting List.	2.2.1 Cosmo City Housing Development Initiative. 2.2.2 Develop a strategy for non-qualifiers.
2.3 Identification of suitable land for housing development.	2.3.1 Guided by the Urban Development Boundary Strategy. 2.3.2 IEMP. 2.3.3 Practice strategic densification to accommodate the housing need

DEVELOPMENT OBJECTIVE 3 To develop Kya Sand Informal Settlement as a sustainable human settlement.	
Interventions	Guidelines
3.1 Formalise the Kya Sands informal settlement	3.1.1 Zero tolerance for “shack-farming” and land invasion. 3.1.2 Support mixed housing typologies . 3.1.3 Support community facilities such as clinics, places of instruction, places of public worship and medical consulting rooms 3.1.4 Support Local Economic Development Opportunities along strategic routes in the area.

Plan 20. Sub Area 2 – Millgate/Farmal/ Chartwell AH/Kya Sand

Plan 21.Kya Sands Development Framework

Plan 22. Kya Sands Speciality Node

SUB AREA 3 (DIEPSLOOT PRECINCT)

**DIEPSLOOT, DIEPSLOOT A.H. DIEPSLOOT RECEPTION AREA
 DIEPSLOOT WEST AND EXTENSIONS**

Sub Area 3 consists mainly of the Diepsloot Nature Reserve and the marginalized area of Diepsloot West and Extensions. The key issues within the Diepsloot marginalised area are the need to foster local economic development. The limited number of business sites and key structuring elements (e.g. activity streets and mixed use nodes) are hampering large scale local economic development. The haphazard proliferation of unregulated small home-based businesses within the marginalised area is also as a result of the above. The remainder of the sub area includes agricultural holdings and farm portions that fall within and outside the Urban Development Boundary.

Development applications in this sub area are to be assessed in accordance with the Diepsloot Development Framework 2020, The Diepsloot Activity Street Framework, the Diepsloot Government Node Precinct and the Diepsloot District Node Framework, which should be read in conjunction with the Growth Management Strategy (GMS). Unless the availability of infrastructure and other bulk services can be confirmed by the relevant MOEs and core departments, applications for densification, land use intensification and /or other uses will not be supported.

Diepsloot is a high priority area for public investment in terms of the GMS.

DEVELOPMENT OBJECTIVE 1

To ensure socio-economic integration, infrastructure upgrading, consolidation and long-term sustainability of Diepsloot and Extensions.

Interventions	Guidelines
1.1 Promote the development of a sustainable urban environment in the sub area.	1.1.1 Implement the Diepsloot Development Framework 2020 1.1.2 Support the development of different housing typologies, and affordable housing options for a range of income levels. 1.1.3 Encourage the provision of community facilities, nodal development, open spaces and economic activity. 1.1.4 Encourage mixed land uses in identified areas (as per the relevant frameworks)
1.2 Improve access to Diepsloot and Extensions.	1.2.1 Promote the upgrading of William Nicol Extension and intersections. 1.2.2 Promote the development of Inter-modal transport facilities in the sub area. 1.2.3 Encourage the development of pedestrian crossings (William Nicol Drive Extensions and the R28). 1.2.4 Promote the upgrading of

	internal roads with new developments. 1.2.5 Promote the upgrading of bulk infrastructure services with new developments.
DEVELOPMENT OBJECTIVE 2 Strengthen the economic growth and social development of Diepsloot.	
Interventions	Guidelines
2.1. Strengthen the Diepsloot Government Precinct neighbourhood node.	2.1.1 Support retail and commercial land uses such as supermarkets, Internet cafés, hairsalons, restaurants, chemists, drycleaners, informal trade on designated demarcated sites, offices, medical consulting rooms and any other uses listed in the Diepsloot Government Precinct Urban Development Framework (2008). 2.1.2 New developments must illustrate integration with surrounding established developments in the node through elements of design, accessibility and pedestrianisation in the precinct area. 2.1.3 Improve pedestrian access through sidewalk upgrading and the introduction of cycle lanes along a 2km radius from the node's core, in line with the approved NMT strategy (2009).

DEVELOPMENT OBJECTIVE 3 To enable access to housing and security of tenure in the contained Diepsloot and Extensions.	
Interventions	Guidelines
3.1 Implement the current housing development initiatives in support of the de-densification and upgrading of Diepsloot and Extensions.	3.1.1 Consult the City of Johannesburg's Housing Strategy and Diepsloot Marginalized Area Programme.

Plan 23. Sub Area 3 - Diepsloot

Plan 24. Diepsloot Development Framework

Plan 25. Diepsloot Activity Street Development Framework

Plan 26. Diepsloot Government Precinct Development Framework

Plan 27. Diepsloot District Node Urban Development Framework

SUB AREA 4 (FOURWAYS PRECINCT)

BEVERLEY A.H., BLOUBOSRAND EXTENSION 2, 3, 10-12 & 16-18, BROADACRES A.H., BROADACRES EXTENSIONS 1, 2., BROADACRES A.H., DAINFERN, FARM WITKOPPEN 194-IQ, FOURWAYS MALL, FOURWAYS GARDENS AND EXTENSIONS 8, 10, 14 and 15. KENGIES A.H., LONEHILL, PALMLANDS A.H., RIETVALLEI 538-JQ, WITKOPPEN EXTENSIONS 3, 6 and ZEVENFONTEIN

Sub Area 4 is characterised by high-density urban residential components and well defined mixed use nodes. The Fourways regional node, together with several district and neighbourhood nodes spread throughout the sub area, provide various services and employment opportunities. A well-defined Strategic Public Transport System (SPTN) connects the sub area to the rest of the City. The majority of non-residential land uses within the sub area are concentrated along William Nicol Drive, Cedar Road and Witkoppen Road, thereby generating high traffic volumes along these three mobility spines.

Development applications in this sub area are to be assessed in accordance with the relevant Spatial Development Policies (i.e. Density Policy, Mobility Policy etc) as amendments have been made in the RSDP pertaining to the Fourways Development Framework 2020 (2008).

The Growth Management Strategy (GMS, 2008) should further be consulted. The sub area falls within an identified consolidation area. Unless the availability of infrastructure and other bulk services can be confirmed by the relevant MOEs and core departments, applications for densification, land use intensification and / or other uses will not be supported.

DEVELOPMENT OBJECTIVE 1

Promote the development of a sustainable spatial structure to ensure the efficiency, compatibility and integration of various land uses in the sub area.

Interventions	Guidelines
<p>1.1 Support land use intensification and mixed use developments within demarcated nodal areas in the sub area.</p>	<p>1.1.1 Contain non-residential development the Fourways Regional Node and identified neighbourhood nodes in the sub area.</p> <p>1.1.2 Support residential densification within demarcated nodes.</p> <p>a) Regional Nodes (no upper limit defined) – 100+ du/ha</p> <p>b) Neighbourhood Nodes – densities between 30-50 du/ha can be supported within the demarcated node (site specifics to be considered in the assessment of such applications)</p> <p>1.1.3 Encourage the development of pedestrian movement and cycling lanes in accordance with the approved Non-Motorised transportation policy with new developments or redevelopments.</p>

<p>1.2 Support strategic densification (where services are available) along the SPTN</p> <ul style="list-style-type: none"> o Witkoppen Road, William Nicol Drive and Cedar Road have been classified as Mobility Spines. o Further William Nicol Drive and Witkoppen Road are part of the proposed future BRT Network. o The sub area is affected by future proposed roads – K33, K56 and PWV5 	<p>1.2.1 Residential densities of between 50-70 du/ha will be supported on Mobility Spines. No direct access to be taken off Mobility Spines. However, due consideration may be given to increased densities of up to 90du/ha along the proposed BRT route.</p> <p>1.2.2 Support residential densities ranging between 30–50 du/ha, within 200m radius of William Nicol Drive.</p> <p>1.2.3 Applications along future proposed roads should take into consideration the impact of such roads.</p>
<p>1.3 Support the development of hospitality related services along William Nicol Road, north of the contained node at William Nicol/Pieter Wenning Road and south of the proposed PWV5.</p>	<p>1.3.1 Permissible land uses: hotels, conference facilities, and guesthouses.</p>
<p>1.4 Protect and support open spaces.</p>	<p>1.4.1 Trees and open spaces for new townships, densification and /or nodal development shall be planted. Site development plan shall be used as a tool to enforce such.</p>

DEVELOPMENT OBJECTIVE 2 To rehabilitate land in Zevenfontein after relocation of informal settlements to Cosmo City.	
Interventions	Guidelines
<p>2.1. Rehabilitate and protect the land of Zevenfontein informal settlements to prevent from further illegal invasions.</p>	<p>2.1.1 Zero tolerance for “shack-farming” and land invasion.</p> <p>2.1.2 Implementation of the Housing Strategy.</p>
<p>2.2. Verify and update community profile to establish housing need and identify non-qualifiers remaining, taking cognisance of the Provincial Housing Waiting List.</p>	<p>2.2.1 Develop a strategy for non-qualifiers.</p> <p>2.2.2 Cosmo City Housing Development Initiative.</p>
<p>2.3. Implement a Relocation Strategy and rehabilitation initiative.</p>	<p>2.3.1 Phased development.</p> <p>2.3.2 Development of sustainable communities.</p>

Plan 28. Sub Area 4 – Fourways/Dainfern

Plan 29. Fourways Development Framework

Plan 30. Fourways Regional Node

SUB AREA 5 (BLUE HILLS PRECINCT)

BLUE HILLS, COUNTRYVIEW AND NOORDWYK

Sub Area 5 is characterised by a predominantly semi-rural environment in the west and dense urban townships in the east. The sub area forms the western boundary of the Midrand metropolitan node. Two potential neighbourhood nodes in Noordwyk Ext 23 and Blue Hills serve the entire sub area. Three north-south mobility routes and one east-west mobility spine connect the sub area to the rest of the region and the City of Tshwane. While most of Sub Area 5 falls within the Urban Development Boundary, the extreme western sections of Blue Hills A.H fall outside the UDB.

Development applications in this sub area are to be assessed in accordance with the relevant Spatial Development Policies (i.e. Density Policy, Mobility Policy etc) as amendments have been made in the RSDF pertaining to the Blue Hills Development Framework 2020 (2008).

The Growth Management Strategy (GMS, 2008) should further be consulted. The sub area falls within an identified consolidation area. Unless the availability of infrastructure and other bulk services can be confirmed by the relevant MOEs and core departments, applications for densification, land use intensification and / or other uses will not be supported.

DEVELOPMENT OBJECTIVE 1

To retain and enhance the urban environment through the strengthening of economic growth and strategic densification within the Sub Area

Interventions	Guidelines
<p>1.1 Support strategic densification (where services are available) along Mobility Roads and Spines</p> <ul style="list-style-type: none"> o Main Road and Road R562 have been classified as Mobility Spines. o Seventh Road has been classified as a Mobility Road. o The sub area is affected by future proposed roads – PWV 5, K27, K27, K73 & K54 	<p>1.1.1 Residential densities of between 70 - 90 du/ha will be supported on properties, or any portion of a property, within a distance of 200m along a Mobility Spine.</p> <p>1.1.2 No direct access to be taken off Mobility Spines.</p> <p>1.1.3 Residential densities of between 30 – 50 du/ha to be supported on properties, or any portion of a property, within a distance of 200m along Mobility Roads.</p> <p>1.1.4 Applications along future proposed roads should take into consideration the impact of such roads.</p>
<p>1.2 Support economic growth in demarcated nodal areas.</p>	<p>1.2.1 Develop and strengthen the Blue Hills Node by containing non residential development in the demarcated nodal area, including the Specialist Node (between proposed K73 in the east, Plantation Road in the north, ain Road in the west and two erven south of Road R562 – Refer to Plan 34)</p> <p>1.2.2 Residential densities higher than 100du/ha can be supported within the Blue Hills node (as described above and shown on Plan 34)</p>

	<p>1.2.3 Residential densities between 40 - 80 du/ha can be supported on land or any portion of land within 500m from the demarcated nodal boundary of the Blue Hills Node.</p> <p>1.2.4 Light Industrial and Commercial uses can be supported in the demarcated Specialist Node – erven north of Plantation Road, one erf deep to the east and west of Main Road.</p> <p>1.2.5 Erven contained between Road R562, Main Road and Plantation Road can be developed for Light Industrial and Commercial purposes as part of the Specialist node mentioned in 1.2.4 above.</p>
<p>1.3 Manage the growth of the Noordwyk Centre neighbourhood node by consolidating the non-residential uses within the Noordwyk Centre neighbourhood node (Erven 1/226, 1/225 Noordwyk Ext 19)</p>	<p>1.3.1 No further expansion of the existing Noordwyk Centre towards the east.</p> <p>1.3.2 Restrict non-residential uses to existing building structures. Permissible land uses may include, but are not restricted to, beauty salons, real estate agents' offices, doctor's rooms and crèches.</p> <p>1.3.3 Land uses not to disturb the existing residential character of the area.</p> <p>1.3.4 Consider community-oriented local business uses on erven 15/1229-17/1229 and 26/1227 Noordwyk Ext 19.</p>

Plan 31. Sub Area 5 – Summerset/Bluehills

Plan 32. Blue Hills Development Framework

SUB AREA 6 (KYLAMI PRECINCT)

BARBEQUE A.H., HALFWAY GARDENS, HALFWAY HOUSE AND EXTENSIONS, KYALAMI ESTATE, KYALAMI PARK, VORNA VALLEY AND WATERVAL, CROWTHORNE AND CARLSWALD A.H

Sub Area 6 consists of the Kyalami Speciality Node, several neighbourhood nodes, high density residential developments, agricultural holdings and farm portions. Despite some parts of the sub area comprising low residential densities, the majority of the sub area is developed at medium to high densities. The sub area is connected to the rest of the region via several mobility roads and spines, which experience severe traffic congestion. The vast majority of the sub area falls within the Urban Development Boundary. The sub area also has an environmentally sensitive area. The sub area further experiences some infrastructure difficulties, especially in the Crowthorne A.H. area.

Development applications in this sub area are to be assessed in accordance with the relevant Spatial Development Policies (i.e. Density Policy, Mobility Policy etc) as amendments have been made in the RSDF pertaining to the Kyalami Development Framework 2020 (2008).

The Growth Management Strategy (GMS, 2008) should further be consulted. The sub area falls within an identified consolidation area. Unless the availability of infrastructure and other bulk services can be confirmed by the relevant MOEs and core departments, applications for densification, land use intensification and / or other uses will not be supported.

DEVELOPMENT OBJECTIVE 1

To retain and enhance the urban neighbourhood environment and character of the residential areas.

Interventions	Guidelines
1.1 Encourage strategic residential densification in the sub area.	1.1.1 Kyalami Boulevard / Allandale Road & K71 are classified as Mobility Spines. Densities between 50 – 70 du/ha may be supported. 1.1.2 Walter Road is also classified as a Mobility Spine, however a maximum density of 50du/ha may be considered adjacent to this road as per Plan 36. 1.1.3 Seventh Road is identified as a Mobility Road. Properties to the west of this road, between Harry Galaun and one erf south of Walton Road may be considered at a maximum density of 30du/ha. Properties to the north of Harry Galaun may be considered at the same density – Refer to Plan 36. 1.1.4 Carlswald A.H. (central area as shown on Plan36) may have a maximum density of 5 du/ha increasing to 15 – 20 du/ha on

	<p>properties abutting higher residential density even as described above and shown on the attached plan.</p> <p>1.1.5 Properties to the north of Whiskin Avenue (Crowthorne A.H – area) - no densification can be supported until such time when adequate services are available, therefore it is deemed as a future residential area.</p>
<p>DEVELOPMENT OBJECTIVE 2 To manage the growth and developments of nodes within the Sub Area.</p>	
<p>Interventions</p>	<p>Guidelines</p>
<p>2.1 Encourage the development of a concentrated node to the south of Main Road, east of Hawthorne Road and east of Pitts Avenues bordered by the Kyalami Specialist Node (Kyalami Park) in the south.</p>	<p>2.1.1 As per the Kyalami Development Framework 2020 plan, this node is to develop as a District Mixed Use node with Mixed Use Nodal Periphery uses on the properties adjacent to Hawthorne Road (as per Plan 36). Zone 6A and 6B are applicable as per the land use management table contained in the above mentioned plan.</p>
<p>2.2 Manage the growth of Halfway Gardens neighbourhood node (Erf 242, Halfway Gardens Ext 117) by consolidating the intensive non-residential uses within the neighbourhood node.</p>	<p>2.2.1 No further expansion of the existing Halfway Gardens Centre towards the east and west.</p> <p>2.2.2 Permissible land uses may include, but are not restricted to, beauty salons, real estate agents' offices, doctor's rooms and crèches.</p> <p>2.2.3 Land uses not to disturb the existing residential character of the area.</p> <p>2.2.4 Consider community-oriented local business uses in the interface areas south of Le Roux Ave, directly adjacent to Halfway Garden's Centre and north of Halfway Gardens Centre along Smuts Avenue.</p> <p>2.2.5 Promote traffic calming at the intersection of Le Roux Avenue and Smuts Street.</p> <p>2.2.6 Improve pedestrian access by introducing cycle lanes along a 2km stretch of Le Roux Ave (as per NMT strategy) and upgrading sidewalks along Le Roux and Smuts Streets.</p>

Plan 33. Sub Area 6 - Kyalami

Plan 34. Kyalami Development Framework

Plan 35. Kyalami Speciality Node

SUB AREA 7 (SUNNINGHILL PRECINCT)

PAULSHOF AND SUNNINGHILL (REGIONAL NODE)

The Sunninghill Regional Node features as a strong structuring element within Sub Area 7. The sub area is extensively developed to the west of K71 while, the north-eastern sections comprise of vacant land parcels. Sub Area 7 is connected to the rest of the region via a network of mobility spines that experience severe traffic congestion during peak flow. The Parktown-Sunninghill Phase 1 BRT route, which affects the southern sections of this sub area at Rivonia Road, aims to address the traffic congestion experienced in the sub area.

Development applications in this sub area are to be assessed in accordance with the Sunninghill Development Framework 2020 (2008), which should be read in conjunction with the Growth Management Strategy (GMS). The sub area is predominantly a consolidation area but the south of the sub area is a Public Transport Management Area. Unless the availability of infrastructure and other bulk services can be confirmed by the relevant MOEs and core departments, applications for densification, land use intensification and /or other uses will not be supported.

DEVELOPMENT OBJECTIVE 1

To encourage densification in the Sub Area in support of the Public Transportation and the local economy.

Interventions	Guidelines
1.1 Promote the strategic densification in and around the Sunninghill Regional Node	1.1.1 Support residential densities between 30 –50, within 200m of Mobility Spine 1.1.2 Along Mobility Spines support high densities between 50units/ha to 70 units/ha 1.1.3 Support residential densities of 100 + du/ha within the Regional Node
1.2 Support non motorised transportation	1.2.1 Developments in the Regional Node must consider NMT development to make the node accessible via all modes of transport.
1.3 Sunninghill Node is a classified Regional Node and has been demarcated as such.	1.3.1 Support mixed-uses ranging from retail, offices, residential and entertainment facilities.

<p>1.4 Consolidate and contain the non-residential uses within the Sunninghill Centre neighbourhood node (Erf 971 Sunninghill Ext 84).</p>	<p>1.4.1 No further horizontal expansion of the Sunhill Centre neighbourhood node.</p> <p>1.4.2 No further FAR increases to be permitted in the Sunhill Centre shopping centre.</p> <p>1.4.3 Restrict non-residential uses to the node's existing building structures. Permissible land uses may include, but are not restricted to, beauty salons, real estate agents' offices, and doctor's rooms.</p> <p>1.4.4 Land uses not to disturb the existing residential character of the area.</p>
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Plan 36. Sub Area 7 - Sunninghill

Plan 37. Sunninghill Development Framework

Plan 38. Sunninghill Regional Node

SUB AREA 8 (WITPOORT PRECINCT)

KYALAMI A.H., GLENFERNESS A.H. AND EXTENSIONS, KNOPIESLAAGTE, KYALAMI A.H. AND EXTENSIONS, LEEUWKOP PRISON, SADDLEBROOK

The entire sub area falls outside the Urban Development Boundary. It comprises mainly of environmentally sensitive areas, natural open spaces, agricultural holdings and farm portions. This means that no further township establishments can be supported on any erven within Sub Area 8.

Development applications in this sub area are to be assessed in accordance with the Witpoort Development Framework 2020 (2008), which should be read in conjunction with the Growth Management Strategy (GMS) which identifies this area as a Peri Urban Management Area. Unless the availability of infrastructure and other bulk services can be confirmed by the relevant MOEs and core departments, applications for densification, land use intensification and /or other uses will not be supported.

**DEVELOPMENT OBJECTIVE 1
 Protect environmental qualities and amenities in the sub area**

Interventions	Guidelines
1.1 Support low densities and preserve the non-urban residential and agricultural related uses in areas outside the UDB.	1.1.1 Development of land outside the UDB to be guided by Urban Development Boundary Strategy. 1.1.2 Allow low residential density between 2units/ha as per the land use zone management table. 1.1.3 Only support non-urban residential development and compatible hospitality uses e.g. guesthouses, conference and training facilities, nurseries, seed farming, hydroponics, estates, equestrian facilities outside the UDB 1.1.4 Support institutional and community facilities development.

Plan 39. Sub Area 8 – Glenferness & Kyalami A.H.

Plan 40. Witpoort Development Framework

SUB AREA 9 (MIDRIDGE PARK, HALFWAY HOUSE, GRAND CENTRAL AIRPORT)

MIDRIDGE PARK, HALFWAY HOUSE, RANDJIESPARK, GRAND CENTRAL AIRPORT AND ERAND A.H

The entire sub area constitutes the Midrand Metropolitan node. The Grand Central Airport, Gautrain Station, and the N1 highway are the key structuring elements within this sub area. The major challenges within this sub area include urban decay of the Midrand CBD, traffic congestion and the need to upgrade the road infrastructure. The Gautrain Station development and the Zonkizizwe Shopping Centre are two major future catalysts for development and urban regeneration. The N1 highway and the North-South Development Corridor bisect the sub area.

Development applications in this sub area are to be assessed in accordance with the Midrand Gautrain Urban Development Framework (2008), which should be read in conjunction with the Growth Management Strategy (GMS). According to the GMS the sub area is classified as a consolidation area. Unless the availability of infrastructure and other bulk services can be confirmed by the relevant MOEs and core departments, applications for densification, land use intensification and /or other uses will not be supported.

When assessing density applications, the guiding principles stipulated in the Nodal and Density Strategies (in particular the scaling-down and incremental processes), Sustainable Human Settlements indices and the Non- Motorised Transport Strategy shall apply.

DEVELOPMENT OBJECTIVE 1

To enhance existing public and private investment within the Sub Area.

Interventions	Guidelines
1.1 Promote development in the Metropolitan Node which is guided by principles of transit oriented development (in favour of public transport), including non motorised transport opportunities, and sustainable human settlements.	1.1.1 Development to be guided by the N1 Corridor Employment Framework, the Erand Precinct Plans and, Midrand Gautrain Urban Development Framework. 1.1.2 Support the integration of the Gautrain Station with the Zonk 'izizwe development. 1.1.3 Support residential densification in the node which supports transportation initiatives.
1.2 Promote protection of environmental sensitive areas and open spaces	1.2.1 Protect and enhance accessibility to the Erand Spruit conservation and recreational development area. 1.2.2 Support interface uses adjoining the Erand Spruit and in selected areas adjoining main roads within the precinct. 1.2.3 Support residential and related uses located between Lever Road and the western boundary of the Erand Spruit

Plan 41. Sub Area 9 - Midrand

Plan 42. Midrand Gautrain Development Framework

Plan 43. Midrand Metropolitan Node

Plan 44. Erand Precinct Plan

SUB AREA 10 (EBONY PARK, IVORY PARK, RABIE RIDGE AND KAALFONTEIN)

EBONY PARK, IVORY PARK, RABIE RIDGE AND KAALFONTEIN

Sub Area 10 comprises of marginalized areas. The sub area falls within the high priority areas of the Growth Management Strategy which will receive short term service upgrading and capital investment priority.

A number of key challenges have been identified in the sub area which includes poverty associated with high levels of unemployment, housing backlogs, the lack of social and economic opportunities and limited public transport. The haphazard proliferation of unregulated small businesses points to a need for business development in the sub area.

Development applications in this sub area are to be assessed in accordance with the Bambanani Industrial Node Urban Development Framework (2008) and the Swazi Inn Urban Development Framework (2008), which should be read in conjunction with the Growth Management Strategy (GMS).

**DEVELOPMENT OBJECTIVE 1
 To ensure the socio-economic integration, consolidation
 and long-term sustainability of this Sub Area.**

Interventions	Guidelines
1.1 Encourage social and institutional development.	1.1.1 Support development that encourages and supports community facilities such as nursery schools. Orphanage, clinics, medical consulting rooms, place of worship and other related uses.
1.2 Republic Road in Ivory Park has been identified as a Mobility Spine	1.2.1 Support high residential densities between 70 – 90 du/ha along the identified Mobility Spine 1.2.2 Taverns/Shebeens shall be permitted on merit and in line with the Liquor Act and Tavern/Shebeen guiding principles. 1.2.3 Applications shall be assessed on its individual merit and development control where applicable shall be granted based on suitability and on local authority's discretion in line with the mentioned policy. 1.2.4 Where an application is supported, the approval must contain strict measures/conditions to be complied with, to enable compliance and control of the small business uses in Greater Ivory.
1.3 Recognise major routes in Ivory Park as Activity streets: • Makhanya Drive	1.3.1 Support small home businesses such as hair salon; telephone containers and shops along Activity Streets and in

<ul style="list-style-type: none"> • Archerfish Drive • Twenty Second October Drive • Acacia Street 	<p>other strategic location such community facilities or open spaces .</p>
<p>1.4 Strengthen Ebony Park Mall neighbourhood node</p>	<p>1.4.1 Support mixed business uses such as offices, shops, medical consulting rooms, internet cafés, hair salons, restaurants, video rental stores, chemists, drycleaners, supermarkets and complementary land uses that have a distinct convenience function within the delineated boundaries of the Ebony Park Mall neighbourhood node.</p> <p>1.4.2 Support uses such as house shops, buy and braai facilities and guest house (i.e. home-based business within existing building structures) in the node's interface areas.</p> <p>1.4.3 Land uses within the Ebony Park Mall neighbourhood node to align to proposed land uses in the "mixed use precinct" of the Bambanani Industrial Node.</p> <p>1.4.4 Improve pedestrian access through sidewalk upgrading and the introduction of cycle lanes along a 2km radius from the node's core, in line with the NMT strategy.</p> <p>1.4.5 Allow for additional traffic calming mechanisms along Twenty Nine September Road and Acacia Road.</p>
<p>1.5 Support commercial and industrial uses</p>	<p>1.5.1 Support developments such as motor trade, and spray-painting, manufacturing and other related land uses in support of revitalization of Bambanani Industrial area. Development shall be in accordance with the Bambanani Industrial Node.</p>

Plan 45. Sub Area 10 – Ebony & Ivory Park

Plan 46. Bambanani Industrial Node Development Framework

Plan 47. Swazi Inn Urban Development Framework

SUB AREA 11 (BUCCLEUCH)

BUCCLEUCH

Sub Area 11 mainly includes urban residential uses. The sub area is well connected to the rest of the city via a well defined road network, however access and traffic congestion at the main entry points to Buccleuch are key issues that need immediate response. The challenge for this sub area is to strike the appropriate balance between strategic densification and the reduction in traffic congestion.

Development applications in this sub area are to be assessed in accordance with the Growth Management Strategy (GMS) and this area is classified as a consolidation area. Unless the availability of infrastructure and other bulk services can be confirmed by the relevant MOEs and core departments, applications for densification, land use intensification and /or other uses will not be supported.

DEVELOPMENT OBJECTIVE 1

To retain and contain this Sub Area as a viable and well functioning residential neighbourhood.

Interventions	Guidelines
1.1 Promote increased residential densities - Pretoria Main Road is a Mobility Spine and a proposed BRT route.	1.1.1 Base density: 20 dwelling units per hectare. 1.1.2 Manage densification in consideration of road infrastructure constraints. 1.1.3 Density Strategy to apply
1.2 Strengthen and direct non-residential uses to The Bridge neighbourhood node.	1.2.1 Maintain erf 257 Buccleuch as an active public open space that is directly accessible from The Bridge shopping centre and Buccleuch Drive 1.2.2 New developments must be integrated with established developments in the node by means of design, access points and functional pedestrian network. 1.2.3 Land uses not to disturb the existing residential character of the area. Permissible land uses include beauty salons, real estate agents' offices, doctor's rooms, chemist, drycleaners, crèches, supermarkets and all other uses that display a convenience factor and are of a local nature. 1.2.4 All development proposals within The Bridge nodal boundary are subject to access control management as determined by JRA and Transportation. 1.2.5 Improve pedestrian access through sidewalk upgrading and the

	introduction of cycle lanes along a 2km radius from the node's core, in line with the NMT strategy. Support cycle lanes on stands 5/80 and RE/2/79 and along a 2km stretch of Buccleuch Drive.
1.3 Develop existing Jukskei River Open Space System, catering for needs of the residential neighbourhoods	1.3.3 JMOSS and the IEMP guidelines.

Plan 48. Sub Area 11 - Buccleuch

SUB AREA 12 (GLEN AUSTIN, GLEN AUSTIN EXTENSION 1 AND RANDJIESFONTEIN)	
GLEN AUSTIN, GLEN AUSTIN EXTENSION 1 AND RANDJIESFONTEIN	
<p>This Sub Area is predominantly a low-density rural residential area with pressure to provide through routes from Ivory Park to Sub Area 9. There are major infrastructure constraints that exist in the area.</p> <p>This Sub Area is within the Urban Development Boundary, therefore infill development and densification can be encouraged. According to the Growth Management Strategy (GMS) the area is a consolidation area and for this reason adequate bulk services must be confirmed by the relevant MOEs and core departments prior to any developments.</p>	
DEVELOPMENT OBJECTIVE 1 To enhance accessibility and mobility within this area.	
Interventions	Guidelines
<p>1.1 Support the development of the Sub Area in terms of the guidelines as set in terms of the Glen Austin Development Plan with specific reference to:</p> <p>Controlled development along edges:</p> <ul style="list-style-type: none"> • Concentration of commercial development within the 65dB noise contour. • Limiting large-scale office development to even immediately abutting the existing and proposed K-routes. <p>Internal development along through routes:</p> <ul style="list-style-type: none"> • Concentration of non-residential limited to low density, low-rise office development along certain identified internal through routes. • Downscaling of development: • A concentration of low-density development inward from non-residential edge development. <p>Higher density residential areas:</p> <ul style="list-style-type: none"> • Focussed in the area west of Allan Road. • Retention of existing rights: • Focussed within the northern and eastern portion of the Glen Austin precinct in the form of lower density residential development and agricultural and rural residential purposes. <p>Establishment of Nodes:</p> <ul style="list-style-type: none"> • Nodal development should be focussed in three identified locations. • Environmental protection: • Presumption in favour of environmental protection on submission of development proposals. 	<p>1.1.1 Glen Austin Development Plan. (Subject to infrastructure capacity)</p>
<p>1.2 Preserve the non-urban residential and agricultural related uses within the Randjiesfontein area</p>	<p>1.2.1 Subdivisions to a minimum of 1 hectare.</p> <p>1.2.2 Restrict densities to two main</p>

	dwelling units per holding/subdivided portion. 1.2.3 Subdivision guided by infrastructure capacities and geo-technical conditions. 1.2.4 Support non-urban residential development such as compatible hospitality uses e.g. guesthouses, conference and training facilities, nurseries, seed farming, hydroponics, estates, equestrian facilities.
1.3 Support residential development on Portion 48 of the Farm Randjiesfontein (MO Africa Site).	1.3.1 Movement Strategy. 1.3.2 ITP and BRT guidelines.

Plan 49. Sub Area 12 – Glen Austin A.H

Plan 50. Glen Austin A.H. Development Plan

WATERVAL FARM COMPONENT	
To enhance the residential character and strengthen the environmental quality of the area	
INTERVENTIONS	GUIDELINES
1.1 Promote a mixed use nodal development along and to the south of Allandale Road between the N1 freeway and Maxwell Drive Extension	1.1.1 Nodal Strategy 1.1.2 1.1.2 Maximum mixed-use floor area of 400 000m ² . 1.1.3 Permissible uses to include offices, retail uses, high density residential, institutions, value retail, motor related uses. 1.1.4 1.1.4 Floor area of retail uses not to exceed 60 000m ² and to be totally integrated with office and/or residential uses e.g. Melrose Arch. 1.1.5 Medium density residential as an interface between nodal development and lower density residential developments. 1.1.6 No development within the 1:100 flood plain of the watercourse and on wetlands. 1.1.7 Development shall take cognizance of environmentally sensitive areas. 1.1.8 Pedestrian linkages to be provided between the nodal development and surrounding developments. 1.1.9 No noxious uses that may pollute the watercourses to be permitted.
1.2 Promote low intensity business uses along the western side of the N1 freeway.	1.2.1 Permissible uses to include offices, hotels, conference centers, training centers and limited commercial uses. 1.2.2 Permissible FAR: 0,4
1.3 Promote the development of the area between Maxwell Drive, Woodmead Drive, K60 and the N1 freeway for uses associated with the Islamic Institute.	1.3.1 Permissible land uses to include religious, educational and recreational uses and also offices at a FAR of 0,4 along the N1 freeway.
1.4 Retain the equestrian estate at a density of 2 units per hectare and develop housing in the area west of Woodmead Drive	1.4.1 Densities of 20 units per hectare will be supported on the remainder of land west of Woodmead Drive. 1.4.2 Retail and office uses for residents to be permitted at defined neighbourhood nodes.
1.5 Develop a range of housing typologies in the area east of Woodmead Drive, north of K60, west of the N1 freeway and south of Allandale Road.	1.5.1 Support average residential densities of 15 units per hectare. 1.5.2 Higher densities and minor support land uses will be considered along existing and proposed Mobility Roads and Spines. 1.5.3 Retail and office uses for residents to be permitted at defined neighbourhood nodes. 1.5.4 No development in the 1:100 floodline along the Jukskei River and its

	<p>tributaries.</p> <p>1.5.5 Development shall take cognizance of the environmentally sensitive areas.</p> <p>1.5.6 Open space linkages to the Jukskei River and nodal developments to be provided.</p> <p>1.5.7 Buffer zones to protect environmentally sensitive areas to be provided.</p> <p>1.5.8 Landscape Management Plan to accompany land use applications.</p> <p>1.5.9 Limited crossings of watercourses.</p> <p>1.5.10 The provision of parks and open spaces for new developments in terms of City Parks Guidelines.</p> <p>1.5.11 Steps shall be taken to cater for Red Data Species.</p> <p>1.5.12 No development shall take place on wetlands.</p> <p>1.5.13 No noxious uses that may pollute the watercourses shall be permitted.</p>
<p>1.6 Promote a neighbourhood node at the intersection of Woodmead Drive and Maxwell Drive.</p>	<p>1.6.1 Permitted uses include retail, office, higher density residential, hotel and gymnasium.</p> <p>1.6.2 Retail floor area not to exceed 10 000m².</p> <p>1.6.3 FAR of 0,4 for non-residential uses.</p>
<p>1.7 Allandale Road is a Mobility Spine.</p>	<p>1.7.1 Allandale Road is part of the proposed BRT System</p> <p>1.7.2 Densities of between 70-90du/ha can be supported on properties, or any portion of a property, within 200m from the Mobility Road.</p> <p>1.7.3 Mixed use developments can be supported, however, a residential must form part of the development proposal.</p>
<p>1.8 Develop Mobility Spines and Roads in order to facilitate development and to link the Sub Area with the rest of the city.</p>	<p>1.8.1 Construct K60 and the extension of Maxwell Drive and upgrade Allandale Road.</p>