

# uMHLATHUZE MUNICIPALITY



## SPATIAL DEVELOPMENT FRAMEWORK 2017/2018-2021/2022 SECOND REVIEW (MAY 2019)

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## **ANNEXURES**

<b>ANNEXURE 1</b>	<b>Outline of Projects from Service Providers</b>
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## DATA DISCLAIMER

- o *Post 2016, the uMhlathuze Municipality consists of 34 Wards and has increased in size by approximately 50% from 79 334 Ha to 123 325 Ha*
- o *Only official population data was available for the newly demarcated municipal area*
- o *All other analysis in respect of infrastructure and socio-economic issues had to be based on a combination of the pre 2016 LGE municipal ward data from the uMhlathuze and former Ntambanana Municipalities respectively*
- o *There are gaps in the spatial representation of data as there is no seamless alignment of 2011 and 2014 wards with the new municipal boundary of uMhlathuze*

## 1. INTRODUCTION

### 1.1 BACKGROUND

The preparation of the 2017/2018 2021/2022 Spatial Development Framework (SDF) for uMhlathuze was undertaken and adopted during May 2017. The document represents the second Review of the 2017/2018 2021/2022 SDF and aims to achieve the following:

- o Include any updated information available since the review of the preparation of the 2017/2018 2021/2022 SDF in 2017.
- o Further interrogate areas where strategic intervention is required and where strategic opportunities exist and provision of indicative mapping of such.
- o Update mapping given any new/updated information available.
- o Address comments received from the provincial Department of Cooperative Governance and Traditional Affairs (CoGTA) on the assessment of the 2017/2018 2021/2022 SDF as adopted in May 2018.
- o Consider alignment and cross border issues from the King Cetshwayo District family.
- o Provide any information from government departments and other service providers on projects, supplemented by internal projects for mapping and spatial presentation.

In addition to the above, work has been undertaken as part of the ICM Support Programme of the IUDF on the following core components of an SDF in terms of the Municipal Systems Act and the Spatial Planning and Land Use Management Act (SPLUMA) respectively:

1. Spatial Visioning
2. Compilation of a Capital Expenditure Framework (CEF)

### 1.2 PURPOSE OF AN SDF

Section 23 of the Municipal Systems Act, 2000 (Act 32 of 2000) requires that:

*Municipal planning to be developmentally oriented:*

- (1) *A municipality must undertake developmentally-oriented planning so as to ensure that it*
  - (a) *strives to achieve the objects of local government set out in section 152 of the Constitution;*
  - (b) *gives effect to its developmental duties as required by section 153 of the Constitution; and*
  - (c) *together with other organs of state contribute to the progressive realization of the fundamental rights contained in sections 24, 25, 26, 27 and 29 of the Constitution.*

Chapter 5 of the Municipal Systems Act (Act No. 32 of 2000) provides for the development of an Integrated Development Plan (IDP), i.e. a five-year strategic development plan. According to Section 26 of the Systems Act (MSA):

*An integrated development plan must reflect*

- (e) *a spatial development framework which must include the provision of basic guidelines for a land use management system for the municipality;*

In context of the above, the SDF can be considered as a visual presentation that seeks to guide the overall spatial distribution of current and desirable land uses within a municipality in order to give effect to the vision, goal and objectives of the municipal IDP, in keeping with the principles for land development. As such, it should guide spatial growth, conservation of the natural and built environment as well as the correction of past imbalances. It should also indicate areas where



strategic intervention is required and should act as a marketing tool to indicate where development could be promoted.

The MSA (Municipal Systems Act) Regulations (Act 32 of 2000) outlines the following specific objectives of an SDF:

- o Strategic guidance on the location and nature of development
- o Set out basic guidelines for land use management
- o Discourage low-density urban sprawl
- o Generate social and economic opportunities
- o Promote access to opportunities
- o Maximize resource efficiency by: (1) protecting sensitive environments, (2) protecting productive agricultural land and (3) enhancing the regional identity and character

Section 20 of the Spatial Planning and Land Use Management Act (Act No 16 of 2013) requires that:

*The Municipal Council of a municipality must by notice in the Provincial Gazette adopt a municipal spatial development framework for the municipality.*

- (2) *The municipal spatial development framework must be prepared as part of a municipality integrated development plan in accordance with the provisions of the Municipal Systems Act.*
- (3) *Before adopting the municipal spatial development framework contemplated in subsection (1) and any proposed amendments to the municipal spatial development framework, the Municipal Council must-*
  - (a) *give notice of the proposed municipal spatial development framework in the Gazette and the media;*
  - (b) *invite the public to submit written representations in respect of the proposed municipal spatial development framework to the Municipal Council within 60 days after the publication of the notice referred to in paragraph (a); and*
  - (c) *consider all representations received in respect of the proposed municipal spatial development framework.*

Section 21 of the Spatial Planning and Land Use Management Act (Act No 16 of 2013) requires that:

-

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

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

### **1.3 PREPARATION OF SECOND REVIEW OF 2017/2018 2021/2022 SDF METHODOLOGY AND APPROACH**

The methodology/approach that has been followed in this second review of the 2017/2018 2021/2022 SDF mainly focuses on attaining further compliance with the requirements of the Spatial Planning and Land Use Management Act (SPLUMA No. 16 of 2013).

Broadly, the approach used in this Review of the 2017/2018 SDF preparation is therefore as follows:

- o Include any updated information available since the review of the preparation of the 2017/2018 2021/2022 SDF in 2017.
- o Further interrogate areas where strategic intervention is required and where strategic opportunities exist and provision of indicative mapping of such.
- o Update mapping given any new/updated information available.
- o Address comments received from the provincial Department of Cooperative Governance and Traditional Affairs (CoGTA) on the assessment of the 2017/2018 2021/2022 SDF as adopted in May 2018.
- o Consider alignment and cross border issues from the King Cetshwayo District family.
- o Obtaining information from government departments and other service providers on projects, supplemented by internal projects for mapping and spatial presentation.

In addition to the above, work has been undertaken as part of the ICM Support Programme of the IUDF on the following core components of an SDF in terms of the Municipal Systems Act and the Spatial Planning and Land Use Management Act (SPLUMA) respectively:

- o Spatial Visioning
- o Compilation of a Capital Expenditure Framework (CEF)

### **1.4 COMMENTS FROM THE MEC**

The SDF submitted as adopted during May 2018 was assessed under the Cross Cutting KPA. The main comments from this MEC assessment of the uMhlathuze 2017/2018 2021/2022 Spatial Development Framework and responses thereto as part of this Second Review are summarized hereunder. Please note that no responses were received on the SDF following the submission of the draft Second Review during March 2019.

**Table 1: Summary of MEC Comments and Responses**

<b>CROSS CUTTING KPA</b>	
<b>MEC Comment</b>	<b>Intervention/ Improvement</b>
SDF to be aligned to SDF Guidelines 2017 by DRDLR	DRDLR guides the development of a SPLUMA compliant SDF and cognisance is taken thereof. Process of alignment and compliance with DRDLR guidelines is ongoing. Main elements being attended to as part of the SDF Review is the spatial visioning and CEF (Capital Expenditure Framework).
Review EMF for the IDZ	The King Cetshwayo District Municipality is undertaking an EMF and information is included into the uMhlathuze Local Municipality SDF as available.
Develop and Implement Disaster Management Plan	The Municipality is in a process of developing a new Disaster Management Plan. The Disaster Management Framework has been prepared and accordingly the plan will be prepared.
Disaster Risk Mapping in the SDF	Will be done when available from the Disaster Management Plan to be prepared and finalized.
Population growth estimates for the next five years depicted spatially	Any updated population data available sourced from the CEF process and estimates for the next five years to be included in the SDF Review.
Estimates of economic activity and employment trends	Information not readily available and will only be provided once sourced.
Identify, quantify and provide locational requirements of engineering infrastructure and service provision for existing and future development needs for the next five years	The Municipality has prepared its first 10 year Capital Expenditure Framework (CEF) that provides some information in this regard. Also, sector plans are in the process of being updated and some have been finalized and relevant information included where available.
<p>SDF Review to include:</p> <ul style="list-style-type: none"> <li>o Long term spatial vision</li> <li>o Development strategy</li> <li>o Capital Investment Framework (CIF)</li> <li>o Capital Expenditure Framework (CEF) for five years with</li> </ul> <p>Inclusion of projects from other sector departments, mapped with allocated budgets.</p>	<p>As part of the ICM Support Programme of the IUDF, work has been completed on the following core components of the SDF:</p> <ul style="list-style-type: none"> <li>o Spatial Visioning</li> <li>o Compilation of a Capital Expenditure Framework (CEF)</li> </ul> <p>The compilation of the first uMhlathuze CEF has been completed for submission to the Department of Cooperative Governance.</p>
Provide the spatial expression of the co-ordination alignment and integration of sectoral policies of all municipal departments	The Municipality has prepared its first 10 year Capital Expenditure Framework (CEF). The prioritisation mechanism of the CEF is anticipated will assist with the coordination, alignment and integration of sector plans/interventions within the Municipality until such time as an Integrated Infrastructure Plan is prepared.

## **1.5 REPORT STRUCTURE**

- o Section 1 Introduction
- o Section 2 Policy Context
- o Section 3 Spatial Development Vision
- o Section 4 Spatial Analysis
- o Section 5 Demographic and Socio-Economic Analysis
- o Section 6 Environmental Analysis
- o Section 7 Agricultural Review
- o Section 8 Land Reform
- o Section 9 Infrastructure Analysis
- o Section 10 Human Settlement Overview
- o Section 11 Disaster Management
- o Section 12 Spatial Development Framework
- o Section 13 Implementation of the Spatial Development Framework
- o Section 14 External Development Influences

An outline of projects available from service providers is provided as an Annexure to this report.

## **1.6 DATA SOURCES**

Amongst others, the following data sources have been consulted as part of the process:

- o uMhlathuze Spatial Development Framework 2017/2018 2021/2022
- o Ntambanana Spatial Development Framework 2009
- o STATSSA 2011 Census results
- o STATSSA 2016 Community Survey results
- o uMhlathuze IDP 2017/2018 2021/2022
- o Transnet Richards Bay Port Development Framework
- o Outcomes of the Transnet National Ports Authority Due Diligence Investigation for the Acquisition of land for Future Port Expansion: Port of Richards Bay
- o King Cetshwayo District Municipality IDP 2017/2018 2021/2022
- o King Cetshwayo District Municipality SDF 2017/2018 2021/2022
- o Various Municipal Sector Plans

## 2. POLICY CONTEXT

The principles underlying planning for efficient use of land and planning for choice and quality of life are detailed in this section. In addition, a summary is provided of the KZN PGDS principles that have been aligned with all relevant national (National Development Plan) and provincial legislation, policies and strategies.

### 2.1 UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Goals (SDGs) replaced the Millennium Development Goals (MDGs) which were in existence for 15 years. The Sustainable Development Goals is a universally shared common global vision of progress towards a safe, just and sustainable space for all human beings to thrive on the planet. 17 Sustainable Development Goals (SDGs) are intended to be -oriented, concise and easy to communicate, limited in number, aspirational, global in nature and **universally applicable to all countries**, while taking into **account** different national realities, capacities and levels of development and respecting national policies and priorities.

Figure 1: Application of SDGs to uMhlathuze

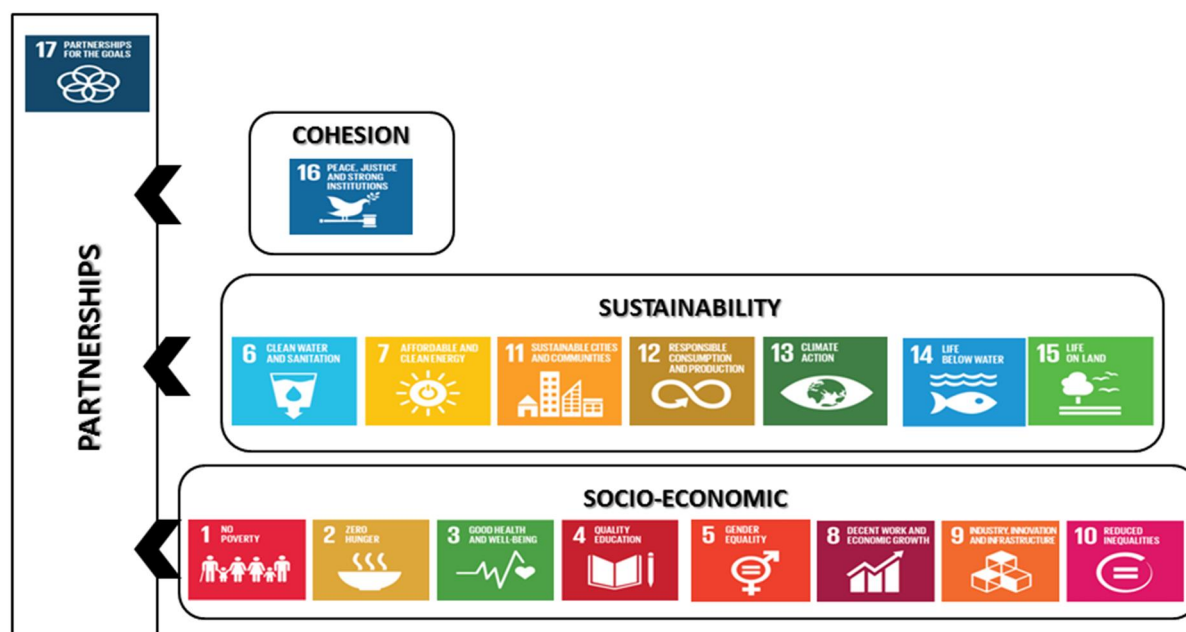


Table 2: Description of SDGs

Goal 1: No Poverty	End poverty in all its forms everywhere
Goal 2: Zero Hunger	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
Goal 3: Good Health and Well-Being for People	Ensure healthy lives and promote well-being for all at all ages
Goal 4: Quality Education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5: Gender Equality	Achieve gender equality and empower all women and girls

Goal 6: Clean Water and Sanitation	Ensure availability and sustainable management of water and sanitation for all
Goal 7: Affordable and Clean Energy	Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8: Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9: Industry, Innovation and Infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation
Goal 10: Reducing Inequalities	Reduce income inequality within and among countries
Goal 11: Sustainable Cities and Communities	Make cities and human settlements inclusive, safe, resilient, and sustainable
Goal 12: Responsible Consumption and Production	Ensure sustainable consumption and production patterns
Goal 13: Climate Action	Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy
Goal 14: Life Below Water	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Goal 15: Life on Land	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Goal 16: Peace, Justice and Strong Institutions	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17: Partnerships for the Goals	Strengthen the means of implementation and revitalize the global partnership for sustainable development

There is a very strong correlation between some of the activities being undertaken/pursued in the uMhlathuze Municipality and the SDGs. Some more detailed narrative is provided hereunder.

**Table 3: Application of SDGs to uMhlathuze**

SDG	Goal Description	Application to uMhlathuze
6	Ensure available and sustainable management of water and sanitation for all.	<ul style="list-style-type: none"> <li>o The uMhlathuze Municipality is a Water Services Authority (WSA) and the Water Service Provider (WSP).</li> <li>o The Municipality has prepared Water and Sewer Bulk Master Plans to inform water and sewer planning and investment. These plans are in the process of updating post the August 2016 Local Government Elections.</li> <li>o Backlog eradication is a priority. In context of the revised municipal boundaries, exact backlogs are being confirmed.</li> <li>o The municipality aims to achieve universal coverage of water and sanitation services over its whole area.</li> <li>o The municipality is undertaking a feasibility study for waste water re-use in the municipal area.</li> <li>o A desalination plant has also been developed in the municipal area.</li> </ul>
7	Ensure access to affordable, reliable, sustainable and modern energy for all	<ul style="list-style-type: none"> <li>o Investigations are underway in the uMhlathuze Municipality for gas to power energy solutions.</li> </ul>
9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.	<ul style="list-style-type: none"> <li>o The establishment of a Techno Hub in Richards Bay is being pursued, on a co-development principle, between the Richards Bay IDZ (Industrial Development Zone) and the uMhlathuze Municipality.</li> <li>o During 2002, the Downstream Aluminum Centre for Technology (DACT) was launched with support from the DTI. The Centre is an incubator that assists potential entrepreneurs from local and emerging communities.</li> </ul>
11	<p>Make cities and human settlements inclusive, safe, resilient and sustainable.</p> <p>Goal 11.1 access to adequate, safe and affordable housing and basic services, and upgrade slums.</p> <p>Goal 11.3 enhance inclusive and sustainable urbanization and capacities for participatory, integrated and sustainable human settlement planning and management ...</p> <p>Goal 11.a support positive economic, social and environmental links between urban, peri-urban and rural areas</p> <p>Goal 11.b requires that by 2020 all</p>	<ul style="list-style-type: none"> <li>o The uMhlathuze Municipality has resolved to establish Human Settlement Restructuring Zones. These restructuring zones are intended as an instrument (among others) to pursue restructuring of South African cities. This is essentially about integration: economic, racial and social. Restructuring is largely about moving away from housing interventions that entrench/enforce or in any way maintain the spatial status quo, which reinforces certain social and economic disparities.</li> <li>o In line with the above, three Human Settlement projects have been initiated within these identified restructuring zones namely the Aquadene Integrated Human Settlements Project (bulk services under construction), Empangeni Integrated Residential Project (services installation underway) and Phase 6 and 8 of the Dumisani Makhaya Village project.</li> </ul>

SDG	Goal Description	Application to uMhlathuze
	countries must increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters etc.	
13	Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy	<ul style="list-style-type: none"> <li>o The uMhlathuze Mayor signed the Covenant of Mayors on Climate Change and Energy.</li> <li>o Electricity is not the only sector contributing to GHG emissions. Waste; fuel consumption; transport planning and elements of spatial planning also contribute to GHGs.</li> <li>o The Energy Sector Plan is under review and, amongst others; the diversification of the energy mix is being investigated.</li> <li>o Apart from investigating gas to power solutions, the municipality is investigating in details waste water re-use as well.</li> <li>o Options for the diversion of municipal solid waste away from landfill sites is being finalized.</li> <li>o A desalination plant has also been developed in the municipal area.</li> <li>o During 2018, Council adopted a Climate Change Action Plan.</li> </ul>
17	Strengthen the means of implementation and revitalize the global partnership for sustainable development	The uMhlathuze Municipality is involved in partnerships with (1) ICLEI and the (2) International Water Stewardship Program to ensure the Municipality benefits from, amongst others, low emissions development programmes and efforts to ensure sustainability and water security within important catchments.

The goal to significantly access adequate, safe and affordable housing; support social, economic and environmental links as well as increasing human settlements which mitigate and adapt to climate is of particular relevance to the Municipality and is addressed in the National Housing Code; National Upgrading Support Programme; National Development Plan; Provincial Growth and Development Strategy and Outcome 8 strategic objectives.

uMhlathuze integrated planning and spatial development framework processes are based and influenced by policies and planning processes at international, national, provincial and district levels. It is the intention of uMhlathuze Municipality to contribute to growth and development within King Cetshwayo District, KwaZulu-Natal and to South Africa at large.

The uMhlathuze Municipality, through its Mission and Vision, intends to contribute to ensure that the objectives of the United Nations (UN) Sustainable Developments Goals (SDGs) are realised and implemented.



## **2.2 NATIONAL DEVELOPMENT PLAN**

### **2.2.1 SUMMARY OF THE NATIONAL DEVELOPMENT PLAN**

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

The plan has the following high-level objectives to be achieved by 2030:

- o Reduce the number of people who live in households with a monthly income below R419 per person (in 2009 prices) from 39% to zero.
- o Reduce inequality, as measured by the Gini coefficient, from 0.69 to 0.6.

Amongst others, the following enabling milestones are noted from the Plan:

- o Increase employment from 13 million in 2010 to 24 million in 2030.
- o Raise per capita income from R50 000 in 2010 to R120 000 by 2030.
- o Establish a competitive base of infrastructure, human resources and regulatory frameworks.
- o Ensure that skilled, technical, professional and managerial posts better reflect the country's racial, gender and disability makeup.
- o Broaden ownership of assets to historically disadvantaged groups.
- o Provide affordable access to quality health care while promoting health and wellbeing.
- o Establish effective, safe and affordable public transport.
- o Ensure that all South Africans have access to clean running water in their homes.
- o Make high-speed broadband internet universally available at competitive prices.
- o Ensure household food and nutrition security.
- o Broaden social cohesion and unity while redressing the inequities of the past.
- o Play a leading role in continental development, economic integration and human rights.

With specific reference to the youth of South Africa, the NDP notes that South Africa has an urbanising, youthful population. This presents an opportunity to boost economic growth, increase employment and reduce poverty.

It should also be noted that the National Development Plan makes a firm commitment to achieving a minimum standard of living. Income, through employment or social security, is critical to defining living standards, but human beings need more than income. They need adequate nutrition, they need transport to get to work, and they desire safe communities and clean neighbourhoods. These elements require action either from individuals, government, communities or the private sector.

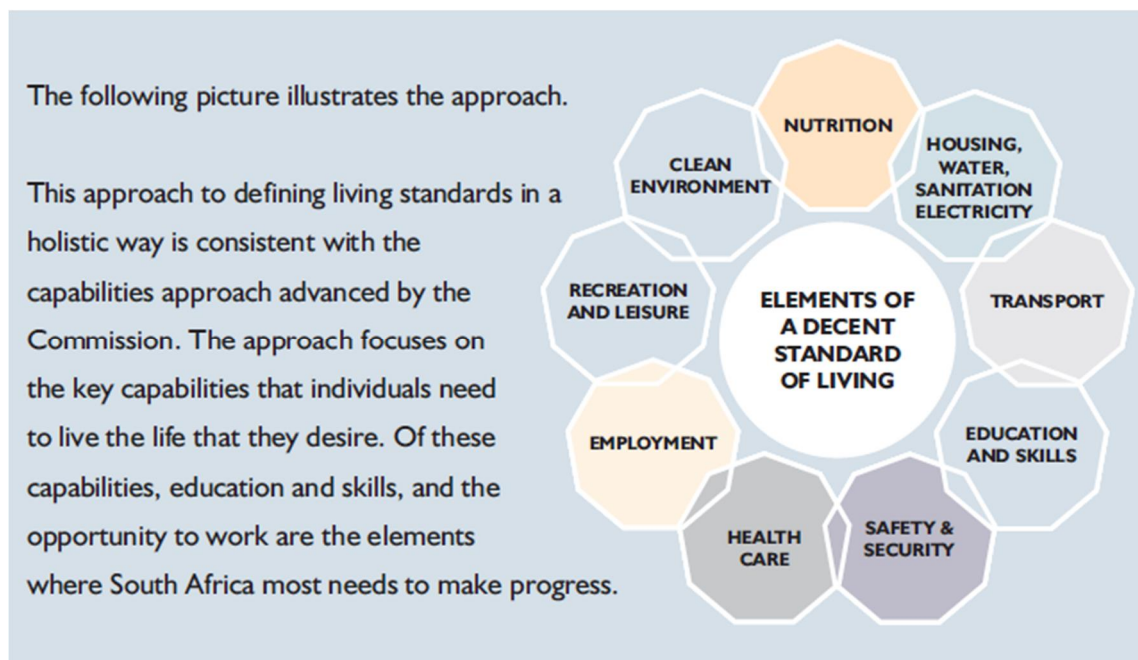
### **2.2.2 SPATIAL FOCUS AREAS OF THE NATIONAL DEVELOPMENT PLAN**

The following provides a summary of some of those aspects of the NDP that have a spatial implication or response.

- o Increase the quality of education so that all children have at least two years of preschool education and all children in grade 3 can read and write.
- o Provide affordable access to quality health care while promoting health and wellbeing.
- o Establish effective, safe and affordable public transport.
- o Produce sufficient energy to support industry at competitive prices, ensuring access for poor households, while reducing carbon emissions per unit of power by about one-third.
- o Ensure that all South Africans have access to clean running water in their homes.
- o A strategy to address poverty and its impacts by broadening access to employment, strengthening the social wage, improving public transport and raising rural incomes.
- o Boost private investment in labour-intensive areas, competitiveness and exports, with adjustments to lower the risk of hiring younger workers.

- o Interventions to ensure environmental sustainability and resilience to future shocks.
- o New spatial norms and standards densifying cities, improving transport, locating jobs where people live, upgrading informal settlements and fixing housing market gaps.
- o Develop community safety centres to prevent crime and include youth in these initiatives.

**Figure 2: Elements of a decent Standard of Living**



### 2.2.3 NATIONAL DEVELOPMENT PLAN PRIORITIES

The National Planning Plan priorities and it summarized in the table below:

Goals are

**Table 4: National Development Plan Priorities**

No. (in no specific order)	National Plan Priorities	uMhlathuze Alignment thereof
1	Create jobs	Goal 3: Viable Economic Growth and Development <ul style="list-style-type: none"> <li>o Objective 3.1.2 : Stimulate key sectors that promote economic growth and create jobs</li> </ul>
2	Expand infrastructure	Goal 2 : Integrated infrastructure and efficient services <ul style="list-style-type: none"> <li>o Objective 2.1.1: To expand and maintain infrastructure in order to improve access to basic service and promote local economic development</li> </ul>
3	Use resources properly	Goal 1 : Democratic, responsible, transparent, objective and equitable municipal governance <ul style="list-style-type: none"> <li>o Objective 1.1.1 : To ensure effective and efficient administration complying with its legal mandates</li> </ul>
4	Inclusive planning	Goal 1 : Democratic, responsible, transparent, objective and equitable municipal governance <ul style="list-style-type: none"> <li>o Objective 1.1.4: To promote a municipal governance system that enhances and embraces the system of participatory governance.</li> </ul>

<b>No. (in no specific order)</b>	<b>National Plan Priorities</b>	<b>uMhlathuze Alignment thereof</b>
5	Quality education	Municipal Mission o Improve Citizens skills levels and education
6	Quality healthcare	Goal 3.3 : Safe and healthy living environment
7	Build a capable state	Goal 1 : Democratic, responsible, transparent, objective and equitable municipal governance o Objective 1.1.1 : To ensure effective and efficient administration complying with its legal mandates
8	Fight corruption	Mission o Creation of Secure and Friendly City Through Fighting Crime
9	Unite the nation	Goal 3.4: Social Cohesion o Objective 3.4.1 : To promote Social Cohesion

## 2.3 INTEGRATED URBAN DEVELOPMENT FRAMEWORK (IUDF)

The Integrated Urban Development Framework (IUDF) is a policy framework guiding the reorganization of the urban system of South Africa so that cities and towns can become inclusive, resource efficient and adequate places to live, as per the vision outlined in the National Development Plan (NDP).

The overall outcome of the IUDF is spatial transformation. This new focus for South Africa steers urban growth towards a sustainable growth model of compact, connected and coordinated cities and towns. The IUDF implementation plan identifies a number of short term proposals to achieve spatial transformation.

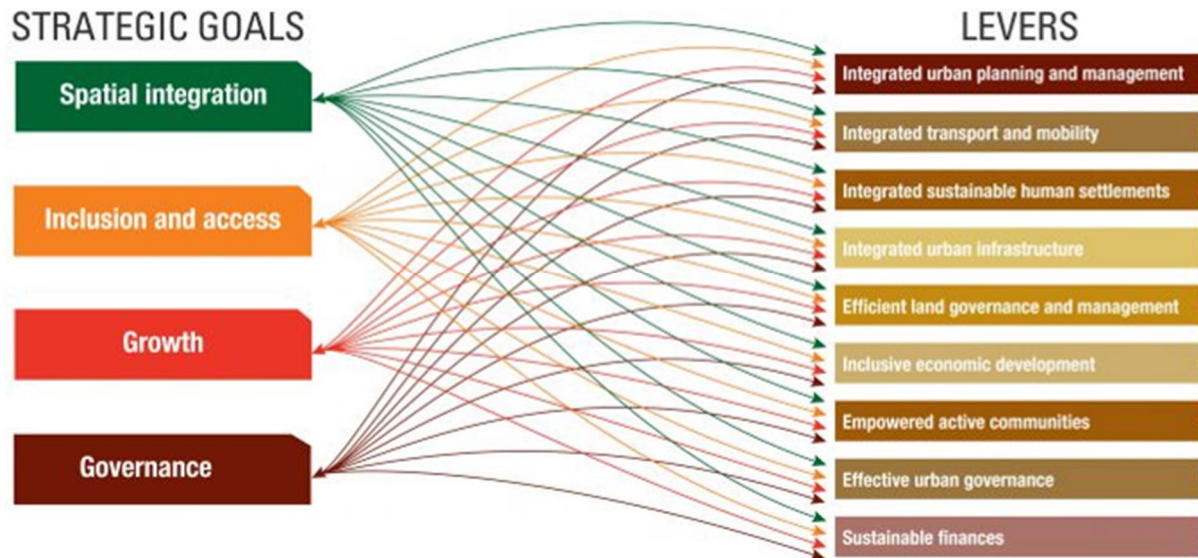
The overall objective of the IUDF is to transform urban spaces by:-

- o Reducing travel costs and distances
- o Aligning land use, transport planning and housing
- o Preventing development of housing in marginal areas
- o Increasing urban densities and reducing sprawl
- o Shifting jobs and investment toward dense peripheral townships
- o Improving public transport and the coordination between transport modes

The IUDF has its premise on the following nine levers:

1. Integrated Urban Planning and Maintenance
2. Integrated Transport and Mobility
3. Integrated and Sustainable Human Settlements
4. Integrated Urban Infrastructure
5. Efficient land governance and management
6. Inclusive economic development
7. Empowered active communities
8. Effective urban governance
9. Sustainable finances

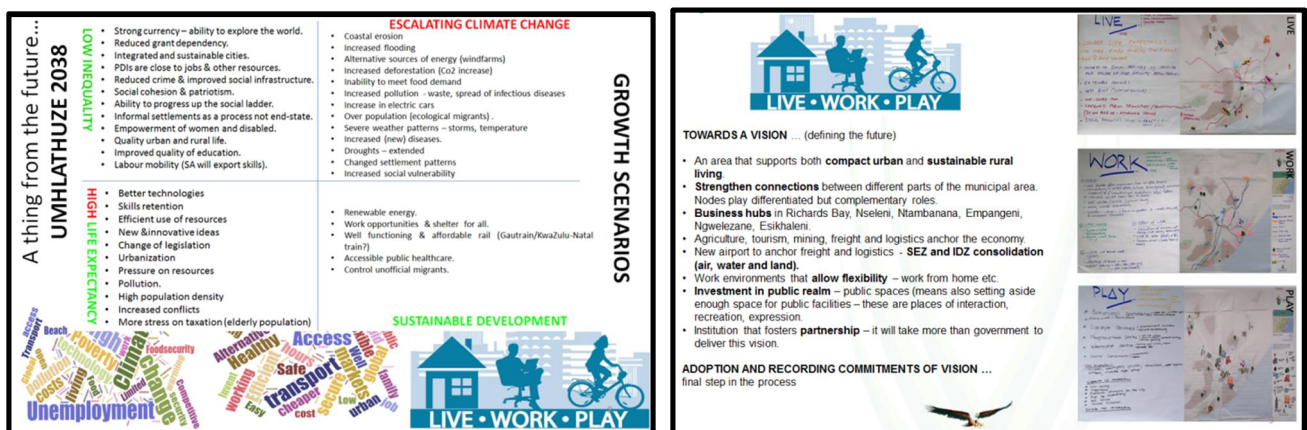
Figure 3: Strategic Goals and Levers of the IUSF



These listed levers relate very specifically to the pillar of **spatial transformation** and such is embraced by the Municipality. The Municipality is planning and implementing for improved public transport, investment is aimed at aiding the Township Economy and a number of processes are underway to establish integrated human settlements in the area. Specific projects are identified in the SDF Implementation Plan (Section 12) in support of spatial transformation and in line with the listed levers.

National CoGTA, through the ICM (Intermediate City Municipality) City Support Programme is supporting the uMhlathuze Municipality with the following components:

- o Spatial Visioning
- o Financial instruments (inclusive of Long Term Financial Planning LTFP, Infrastructure Asset Management, Procurement and Delivery)
- o Capital Expenditure Framework (CEF)



## 2.4 FOURTEEN (14) NATIONAL OUTCOMES

The 14 National Outcomes that all governments must align to are:

**Table 5: Fourteen National Outcomes**

No.	National Outcome	uMhlathuze Alignment thereof
1	Quality basic education	Mission : Improve Citizens Skills levels and Education
2	A long and healthy life for all South Africans	Mission : Improve Quality of Citizens health
3	All people in South Africa are and feel safe	Mission : Creation of Secure and Friendly City through Fighting Crime
4	Decent employment through inclusive economic growth	Mission : Job creation through Economic Growth
5	Skilled and capable workforce to support an inclusive growth path	Mission : Improve Citizens Skills levels and Education
6	An efficient, competitive and responsive infrastructure network	Goal 2 : Sustainable Infrastructure and Service Delivery
7	Vibrant, equitable, sustainable rural communities contributing towards food security for all	Mission: Planned Rural Development Interventions
8	Sustainable human settlements and improved quality of household life	Goal 2 : Sustainable Infrastructure and Service Delivery  Objective 2.3 : Integrated Urban and rural development
9	Responsive, accountable, effective and efficient local government system	Goal 1 : Good Governance  o Objective 1.1: Democratic, responsible, transparent, objective and equitable municipal governance o Objective 1.2 : Compliance with relevant legislation and policies o Objective 1.3 : Uninterrupted service delivery o Objective 1.4: Public Safety and Security and protection of Council property
10	Protect and enhance our environmental assets and natural resources	Goal 2 :- Sustainable Infrastructure and Service Delivery Objective 2. 5:Environmental Sustainability
11	Create a better South Africa, a better Africa, and a better world	Goal 3 : Social and Economic Development
12	An efficient, effective and development oriented public service and an empowered, fair and inclusive citizenship	Goal 1 : Good Governance Goal 2 :Sustainable Infrastructure and Service Delivery Goal 3: Social and Economic Development Goal 4 : Institutional Development Goal 5 : Sound Financial Management
13	Social Protection	Goal 3.2: Public Safety and Security  o Objective 3.2.1: Provision of efficient and effective security services o Objective 3.2.2: To ensure provision of fire and rescue services
14	Social Cohesion	Goal 3.4: Social Cohesion  o Objective 3.4.1.1: Development of sports and recreation programmes

No.	National Outcome	uMhlathuze Alignment thereof
		<ul style="list-style-type: none"> <li>o Objective 3.4.1.2: Development of community facilities</li> <li>o Objective 3.4.1.3: Development of Arts and Culture Strategy</li> </ul>

## 2.5 NATIONAL AND PROVINCIAL PRIORITIES

The five (5) National and six (6) Provincial Priorities, as well as their alignment to uMhlathuze Municipality goals and objectives include the following:

**Table 6: National and Provincial Priorities**

No.	Five National (Including 6 <sup>th</sup> Provincial) Priorities	uMhlathuze Alignment thereof
1	Job creation (Decent work and Economic growth)	Goal 3: Social and Economic Development <ul style="list-style-type: none"> <li>o Objective 3.3: create environment conducive for economic growth and development</li> </ul> Municipal Mission : Job Creation Through Economic Growth
2	Education	Municipal Mission <ul style="list-style-type: none"> <li>o Improve Citizens skills levels and education</li> </ul>
3	Health	Goal 3 : Social and Economic Development <ul style="list-style-type: none"> <li>o Objective 3.1 : Safe and Healthy Living Environment</li> </ul> Municipal Mission : Improve Quality of Citizens Health
4	Rural development, food security and land reform	Goal 2 :Sustainable Infrastructure and Service Delivery <ul style="list-style-type: none"> <li>o Objective 2.3 : Integrated urban and Rural development</li> </ul> Municipal Mission: Planned Rural Development Interventions
5	Fighting crime and corruption	Goal 1 : Good Governance <ul style="list-style-type: none"> <li>o Objective 1.1 : Democratic, responsible, transparent, objective and equitable municipal governance</li> </ul> Municipal Mission : Creation of Secure and Friendly City through Fighting crime
6	Nation-building and good governance	Goal 1 : Good Governance <ul style="list-style-type: none"> <li>o Objective 1.1 : Democratic, responsible, transparent, objective and equitable municipal governance</li> </ul> Goal 3 : Social and Economic Development <ul style="list-style-type: none"> <li>o Objective 3. 2 : Social Cohesion</li> </ul>

## 2.6 STRATEGIC INTEGRATED PROJECTS (SIPS)

The Presidential Infrastructure Coordinating Commission (PICC) identified 18 SIPS of which the following have direct relevance to the uMhlathuze Municipality:

**Table 7: Strategic Integrated Projects**

SIP 1 Unlocking the northern mineral belt with Primary Mineral Reserves with the Waterberg as the catalyst	The rail capacity between Mpumalanga and Richards Bay is relevant in this instance. The uMhlathuze Municipality has budgeted R100 million to spend on the electricity line to RBCT to avoid future failure of electricity supply to this large export facility. The Port expansion of Richards Bay is a permanent discussion item between the uMhlathuze Municipality and the Richards Bay Port (Transnet).
SIP 2 Durban-Free State-Gauteng logistics and industrial corridor	A logistics and industrial corridor is in place between Durban and Richards Bay. Issues relating to access to ports as well as the development of airport precincts are relevant in the context of uMhlathuze.
SIP 6 Integrated municipal infrastructure project	Although the uMhlathuze Municipality is not one of the 23 least resourced districts in the country, the principle of addressing maintenance backlogs and upgrades in water, electricity and sanitation bulk infrastructure applies to the uMhlathuze municipal area. Also, road maintenance is imperative to enhance service delivery.
SIP 8 Green energy in support of the South African economy	Numerous green economy initiatives are either being pursued or supported by the uMhlathuze Municipality in its area of jurisdiction.
SIP 18 Water and sanitation infrastructure	Universal backlog eradication in respect of water and sanitation. To achieve this, new infrastructure, rehabilitation as well as improved management of infrastructure is required.

## 2.7 STATE OF THE NATION ADDRESS (SONA)

The State of the Nation Address is important for all South Africans because it outlines government Programme of Action is government President Ramaphosa (SONA) to the joint sitting of the two houses of Parliament since his election on the 15<sup>th</sup> of February 2018. The theme for this year **up on our commitments: Making Your Future Work Better** The following is a summary of the country reas and action plan for the 2019/2020 which is also an election year: -

KEY POINT/ANNOUNCEMENT	ACTION PLAN
<b>Corruption</b>	<ul style="list-style-type: none"> <li>Government will enact accountability measures against those implicated in corruption.</li> <li>Directorate will bring together a range of investigatory and prosecutorial capacity from within government and in the private sector under an investigation director reporting to the NDPP</li> </ul>
<b>Economy</b>	<ul style="list-style-type: none"> <li>The goal in the next three years is to ensure that South Africa enters the Top 50 mark within the high performing countries</li> </ul>
<b>Foreign investment</b>	<ul style="list-style-type: none"> <li>Provincial governments to identify investable projects and ensure that they build investment books for each of the nine provinces to present to potential investors</li> <li>A team from the Presidency, Invest SA, National Treasury and the Department of Planning, Monitoring and Evaluation will address the policy, legal, regulatory and administrative barriers that frustrate investors</li> </ul>
<b>Eskom and SOEs</b>	<ul style="list-style-type: none"> <li>Government concede with the generous tariff increase for a set number of years.</li> <li>Eskom would receive the help it needs to get back on its feet, as it is regarded as the most critical structure to the stabilisation of the economy</li> <li>Government also plans to Generation, Transmission and Distribution under Eskom Holdings.</li> </ul>
<b>Youth unemployment</b>	<ul style="list-style-type: none"> <li>There is pleasing progress with an initiative which aims to create 250 000 jobs a year for the youth.</li> </ul>
<b>A requirement for work experience will be dropped in the public sector</b>	<ul style="list-style-type: none"> <li>Government would, therefore, do away with entry-level work experience requirement in the public sector</li> </ul>
<b>Release of state-owned land for human settlements</b>	<ul style="list-style-type: none"> <li>As part of accelerated land reform, the government identified land parcels owned by the state for redistribution</li> <li>Strategically located land will be released to address human settlements needs in urban and peri-urban areas</li> </ul>
<b>Introduction of eVisa regime</b>	<ul style="list-style-type: none"> <li>The South African government will introduce a local tourism sector</li> <li>The goal is to reach 21 million tourists by 2030, up from 10 million in 2018.</li> </ul>



KEY POINT/ANNOUNCEMENT	ACTION PLAN
<b>New gas and oil legislation after the Brulpadda boon</b>	<ul style="list-style-type: none"> <li>Government will develop legislation to ensure that the -class d at the Brulpadda field off the coast of South Africa, is properly regulated for the interests of all concerned</li> </ul>
<b>New infrastructure implementation model</b>	<ul style="list-style-type: none"> <li>Cabinet has adopted a new infrastructure implementation model to ensure projects are implemented</li> <li>Government has committed to contribute R100 billion into the Infrastructure Fund over a 10-year period and use this to leverage financing from the private sector and development finance institutions</li> </ul>
<b>Eradicate unsafe school toilets within 3 years</b>	<ul style="list-style-type: none"> <li>Government identified that nearly 4,000 schools require appropriate sanitation, and hopes to eradicate unsafe sanitation by 2022</li> </ul>
<b>Compulsory early development for all children</b>	<ul style="list-style-type: none"> <li>The responsibility of early childhood development centres are being migrated from the social development department to basic education</li> <li>During the migration the government will proceed with the process towards two years of compulsory early childhood development for all children before they enter grade 1</li> </ul>
<b>Access to a tablet for every pupil by 2025</b>	<ul style="list-style-type: none"> <li>Several new technology subjects and specialisations will be introduced into basic education such as technical mathematics and technical sciences, maritime sciences, aviation studies, mining sciences, and aquaponics.</li> <li>Transformation of Several "ordinary" state schools into technical high schools</li> </ul>
<b>A new bank for housing</b>	<ul style="list-style-type: none"> <li>A new human settlements development bank will be established to leverage both public and private sector financing to aid in housing delivery.</li> <li>500,000 housing units will be constructed in the next five years</li> </ul>
<b>No taverns, shebeens and liquor outlets near schools</b>	<ul style="list-style-type: none"> <li>Complete shutdown of all taverns, shebeens and liquor outlets near schools as the country deals with extremely high levels of substance abuse</li> </ul>
<b>A war room for public health</b>	<ul style="list-style-type: none"> <li>The National Health Insurance Bill will soon be submitted to Parliament</li> <li>'War Room' in the presidency has been established to improve public health.</li> </ul>

## 2.8 STATE OF THE PROVINCE ADDRESS (SOPA)

The State of the Province Address is a localised version of the State of the Nation Address where Premiers reflect on their achievements and communicate their programmes of action in respect of government - education, health, the fight against crime and corruption, rural development and land reform as well as jobs for the year ahead.

The Premier of KwaZulu-Natal, Premier Willie Mchunu delivered the State of the Province address on the 27<sup>th</sup> of February 2019, at the Pietermaritzburg Royal Sports grounds under the theme **towards even better and faster growth and development of our Province and its people**. The focus of this State of the Province Address Was mainly on providing an overview of how the Provincial legislature has moved the Province forward during its term, and what challenges were faced and what it is that the legislature will recommend to the new leadership that will be inaugurated after the National elections.

The table below indicates some of the highlights from the State of the Province address:

PGDP GOALS	PROGRESS AND INTERVENTIONS
<b>Growing a more inclusive economy</b>	<ul style="list-style-type: none"> <li>• 2.635 million people employed, compared to 2.536 million people at the same time last year</li> <li>• Adopted Operation Vula as a strategy aimed at utilising the public procurement process to address deep seated and persistent racial inequalities still prevalent in our economy</li> <li>• Six commodities/sectors, namely infrastructure development, agricultural produce, bakery, uniforms, furniture, and toilet papers are identified for targeted procurement</li> <li>• KwaZulu-Natal Bulk Buying and Warehousing Programme is an initiative aimed to transform and revitalize township and rural economies in order to foster inclusive growth</li> <li>• Strategic partnerships concluded with the Department of Trade Industry (DTI) focusing on promoting the Black Industrialists Programme</li> <li>• Expanding direct air access to Durban</li> <li>• Development of the Cato Ridge Intermodal Freight and Logistics Hub</li> <li>• National initiative to develop Black game farmers and to transform the wildlife industry</li> <li>• Linking the Dube and Richards Bay SEZ successes to regional industrial hubs remains a challenge</li> <li>• More than 722000 work opportunities have been created through Expanded Public Works Programme</li> </ul>
<b>Transform our rural areas</b>	<ul style="list-style-type: none"> <li>• Reduction of spatial inequalities and increased spatial access to goods and services remains a priority of the province</li> <li>• Inkululeko Development Programme at Ndumo concluded and Dukuduku Project progresses as part of an integrated and targeted service delivery model</li> <li>• Rehabilitated 52 Traditional Authorities Centres (TACs) in the last five years and the rehabilitation of a further 15 TACs</li> </ul>

PGDP GOALS	PROGRESS AND INTERVENTIONS
	<p>should be completed by the end of this financial year 2018/2019</p> <ul style="list-style-type: none"> <li>Supported all District Municipalities with the establishment of District Development Agencies(DDAs)</li> <li>Approximately 30000 jobs will be created by the uMhlabuyalingana Macadamia project</li> </ul>
<b>Ensure decent living conditions and sustainable human settlements</b>	<ul style="list-style-type: none"> <li>Provision of access to sanitation improved from 53% in 2011 to 61% in 2016</li> <li>Access to water decrease by 1% from 86% to 85% in 2016</li> <li>Access to electricity improved from 78% in 2011 to 89% in 2016</li> <li>Access to solid waste removal services increased from 78% in 2011 to 89% in 2016.</li> <li>R84.1 million spent for the construction of Municipal Disaster Management Centres</li> <li>Installed 2347 lightning conductors within the province</li> <li>114,803 quality houses with basic services have been built</li> <li>Mega or catalytic human settlement development projects to yield more than 125000 housing units in the next coming few years</li> </ul>
<b>Improve and expand education and training</b>	<ul style="list-style-type: none"> <li>Good progress has been made with the provision of access to Grade R at 74% in 2017</li> <li>6.5% improvement in National Senior Certificate results since 2014</li> <li>More than 47 000 learners in 320 schools from across the Province, benefitted from learner transport programme</li> <li>Awarded bursaries to more than 16 000 students between 2014 and 2018 at a total cost of R1.8 billion</li> </ul>
<b>Ensure quality healthcare for all</b>	<ul style="list-style-type: none"> <li>Life expectancy at birth increased over the last five years from 56.9 years in 2014 to 60.7 years in 2018;</li> <li>Successful implementation of the 90-90-90 Strategy</li> <li>Construction the Dr Pixley ka Isaka Seme Memorial Hospital as the first Regional Hospital to be constructed in the Province post 1994</li> </ul>
<b>expand Comprehensive Social Security</b>	<ul style="list-style-type: none"> <li>Established 44 Community Nutrition Development Centres across the Province</li> <li>Successful implementation of OSS</li> </ul>
<b>Fight Crime and Corruption</b>	<ul style="list-style-type: none"> <li>Ministerial Task Team deployed by President Ramaphosa, to assist us in addressing rampant scourge of political killings</li> <li>560 Community police forums, 42 Community safety forums and 298 Ward safety committees established in the Province</li> <li>Communities in Dialogue Programme(CiDP), successfully intervened to resolve conflicts within the taxi industry conflicts, farm conflicts and hostel conflicts</li> <li>Launched the Advance Social Justice in Farming Communities Programme to mediate conflict in farming communities</li> </ul>
<b>Build a United Nation and Promote Social Cohesion</b>	<ul style="list-style-type: none"> <li>Establishment of a Social Cohesion and Moral Regeneration Council for the Province</li> </ul>

## 2.9 PGDS SPATIAL PLANNING PRINCIPLES

The strategic and targeted nature of the Provincial Growth and Development Strategy implies that specific interventions will be undertaken within key geographical areas of Need and Potential.

The Principle of **Environmental Planning** (Bioregional Planning) refers to understanding and respecting the environmental character (potential and vulnerability) and distinctiveness of places and landscapes and promoting balanced development in such areas.

The Principle of **Economic Potential** aims to improving productivity and closing the economic performance gap between the various areas of KwaZulu-Natal towards economic excellence of all areas. Rapid economic growth that is sustained and inclusive is seen as a pre-requisite for the achievement of poverty alleviation.

The Principle of **Sustainable Communities** promotes the building of places where people want to live and work. Again the sense of Quality of Living refers to the balance between environmental quality, addressing social need and promoting economic activities within communities. Often communities within the rural context of KwaZulu-Natal are not located in the areas with perceived highest economic potential. Where low economic potential exists planning and investments should be directed at projects and programmes to address poverty and the provision of basic services in order to address past and current social inequalities towards building sustainable communities.

The Principle of **Local Self-Sufficiency** promotes locating development in a way that reduces the need to travel, especially by car and enables people as far as possible to meet their need locally.

The Principle of **Spatial Concentration** aims to build on existing concentrations of activities and infrastructure towards improved access of communities to social services and economic activities. In practical terms this promotes concentration along nodes and corridors with multi-sectoral investment i.e. roads, facilities, housing etc. This principle will further assist in overcoming the spatial distortions of the past. Future settlement and economic development opportunities should be channelled into activity corridors and nodes that are adjacent to or link the main growth centres in order for them to become regional gateways.

The Principle of **Sustainable Rural Livelihoods** considers rural areas in a way which is integrated with other decision making associated with the Sustainable Livelihoods framework. This principle requires that spatial planning consider the locality and impact of human, physical, natural, financial and social capitals of an area and spatially structures these in support of each other. Another aspect of this principle is promoting spatial planning in a continuum where rural areas are not addressed as completely separate entities to urban centres, but rather a gradual change in landscape with the potential progression of rural areas to more closely resemble the service standards and quality of living achieved in some urban contexts.

The Principle of **Balanced Development** promotes the linking of areas of economic opportunity with areas in greatest need of economic, social and physical restructuring and regeneration at all spatial scales. In practical terms the principles sought to find a balance between the potentially competing land uses by understanding the relationship and integration between major dimensions within the province and promoting a synergetic mixture of land uses in support of each other at various spatial scales.

The Principle of **Accessibility** simply promotes the highest level of accessibility to resources, services, opportunities and other communities. This is intrinsically linked to transportation planning and should consider localised needs for the transportation of people and goods by various modes of transport as guided by the scale and function of a region.

**LOCAL RELEVANCE:** The uMhlathuze Municipality abides by sound spatial planning principles as extracted hereunder:

1. Environmental awareness and sensitivity with due consideration to EMF and ESMP.
2. Promotion of sustainable communities and the realization of restructuring zones in respect of human settlement projects.
3. Urban integration and densification to decrease economic cost of travel specifically.
4. Introduction of urban development boundary as a measure to achieve spatial concentration.
5. Development of rural framework plans being initiated.

## **2.10 PROVINCIAL SPATIAL ECONOMIC DEVELOPMENT STRATEGY: CORRIDOR AND NODAL FRAMEWORK**

The 2007 PSEDS (Provincial Spatial Economic Development Strategy) has been updated to enhance the original nodes and corridors. In particular, the updated study needed to provide guidance on what types of interventions are needed and which localities. More specifically, it has a rural development focus to address poverty issues and represents a move away from a hierarchical tiered structure to a balanced and integrated network of towns and cities.

The PSEDS has been undertaken in line with the comparative advantage approach as summarized hereunder:

- o Focusing on what type of development should take place in different regions/districts helps to overcome some challenges of spatial prioritization.
- o Investment should occur in the sectors which provide the greatest socio-economic return to investment.
- o It is important to know what each district does best, specifically comparatively best.

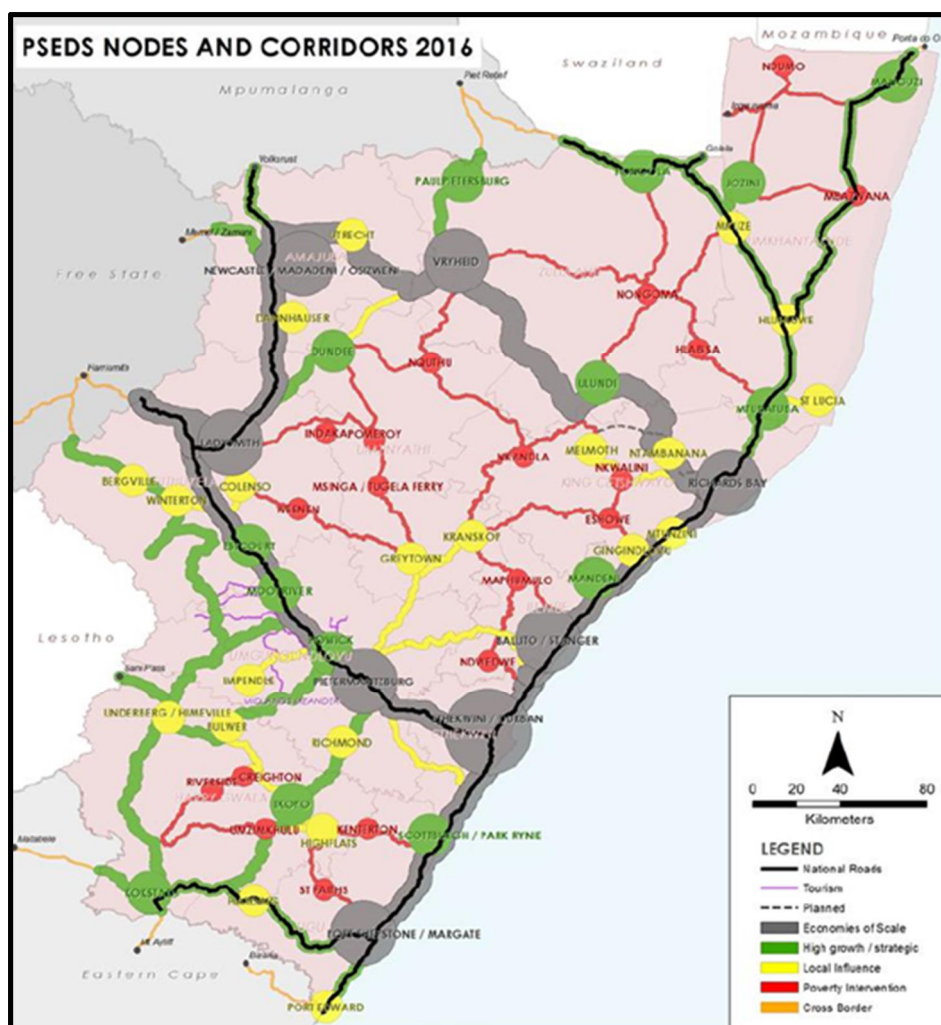
To this end, the following set of new criteria was applied for the identification of nodes:

1. Economies of Scale factors as informed by population density contribution to GDP and diverse services to international, national and provincial clients.
2. Strategic factors relating to medium population density areas with high economic growth or high potential for future economic growth.
3. Local influence factors such as centres that are significant as district and municipal centers providing services to the district and local municipality.
4. Poverty alleviation factors relating to high levels of poverty, low unemployment and spatial isolation.

In context of the above, the following set of provincial mapping has been prepared:



**Figure 5: Composite mapping of PSEDs Nodes and Corridors**



## 2.11 SPLUMA PRINCIPLES

The following provides a summary of the development principles contained in the SPLUMA (Spatial Planning and Land Use Management Act):

- (a) The principle of **spatial justice**, whereby
- i. past spatial and other development imbalances must be redressed through improved access to and use of land;
  - ii. spatial development frameworks and policies at all spheres of government must address the inclusion of persons and areas that were previously excluded, with an emphasis on informal settlements, former homeland areas and areas characterized by widespread poverty and deprivation;
  - iii. spatial planning mechanisms, including land use schemes, must incorporate provisions that enable redress in access to land by disadvantaged communities and persons;
  - iv. land use management systems must include all areas of a municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas, informal settlements and former homeland areas;
  - v. land development procedures must include provisions that accommodate access to secure tenure and the incremental upgrading of informal areas; and

- vi. a Municipal Planning Tribunal considering an application before it, may not be impeded or restricted in the exercise of its discretion solely on the ground that the value of land or property is affected by the outcome of the application.
- (b) The principle of **spatial sustainability** whereby spatial planning and land use management systems must
- i. promote land development that is within the fiscal, institutional and administrative means of the Republic;
  - ii. ensure that special consideration is given to the protection of prime and unique agricultural land;
  - iii. uphold consistency of land use measures in accordance with environmental management instruments;
  - iv. promote and stimulate the effective and equitable functioning of land markets;
  - v. consider all current and future costs to all parties for the provision of infrastructure and social services in land developments;
  - vi. promote land development in locations that are sustainable and limit urban sprawl; and
  - vii. result in communities that are viable.
- (c) the principle of **efficiency**, whereby
- i. land development optimises the use of existing resources and infrastructure;
  - ii. decision-making procedures are designed to minimise negative financial, social, economic or environmental impacts; and
  - iii. development application procedures are efficient and streamlined and timeframes are adhered to by all parties.
- (d) the principle of **spatial resilience**, whereby flexibility in spatial plans, policies and land use management systems are accommodated to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks.
- (e) the principle of **good administration**, whereby
- i. all spheres of government ensure an integrated approach to land use and land development that is guided by the spatial planning and land use management systems as embodied in this Act;
  - ii. all government departments must provide their sector inputs and comply with any other prescribed requirements during the preparation or amendment of spatial development frameworks;
  - iii. the requirements of any law relating to land development and land use are met timeously;
  - iv. the preparation and amendment of spatial plans, policies, land use schemes as well as procedures for development applications, include transparent processes of public participation that afford all parties the opportunity to provide inputs on matters affecting them; and
  - v. policies, legislation and procedures must be clearly set in order to inform and empower members of the public.

**LOCAL RELEVANCE:** The following actions by the uMhlathuze Municipality are of relevance with regard to the SPLUMA principles:

1. Efforts to densify, improve access to opportunities in non-core areas.
2. Focus on sustainability of natural resource based including protection of agricultural land resources.

The following is quoted from selected sections of SPLUMA with regard to the preparation of spatial development frameworks:

Section 12 (1) (a):  
government and competent authority



Section 12 (1) (h): rship, rural areas, informal settlements, slums and land holdings of state-owned enterprises and government agencies and address their inclusion and integration into spatial, economic, social and environmental objectives of relevant sphere

Section 12 (1) (i):

The Municipal SDF is a primary spatial response to the development context, needs and development vision of the municipality (long term development vision). It is a key land use management tool at a strategic level with an important role to play in guiding and managing Municipal decisions relating to the use, development and planning of land.

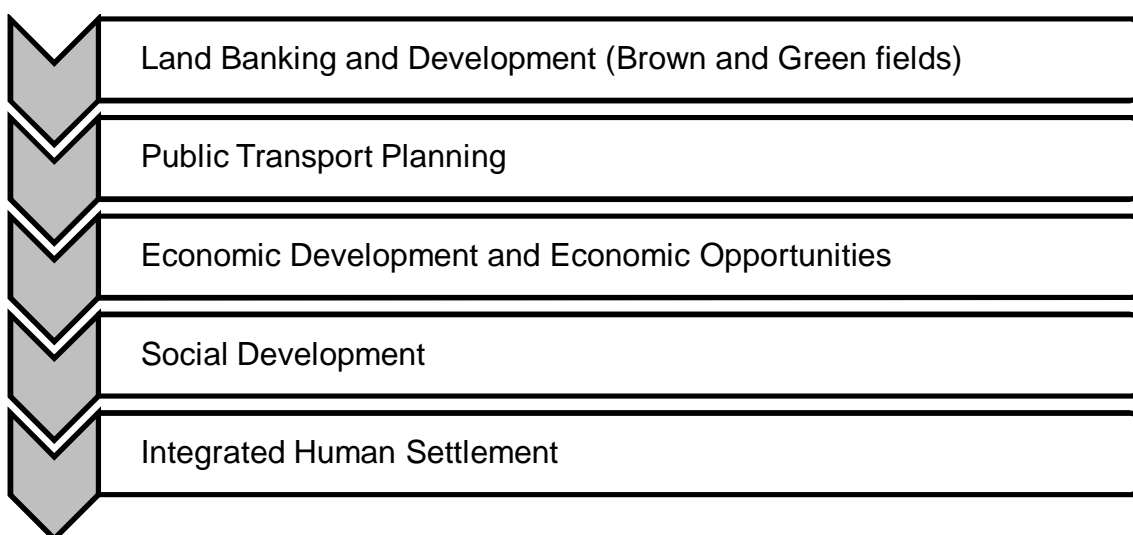
The Municipal SDF also guides the form and location of future spatial development in a manner that addresses the imbalances of the past i.e. spatial injustice. It enables the municipality to manage its land resources in a developmental and sustainable manner. It provides an analysis of the spatial problems and provides strategies and programs to address the challenges.

## 2.12 SPATIAL TRANSFORMATION

The concept of Transformation is always associated with social change in South Africa. The National Development Plan 2030 makes a strong statement about the need to apartheid geography ch is defined in terms of living, working and environmental sustainability. SPLUMA is identified as a tool to give effect to Spatial Transformation.

According to SACN (2013) in order to achieve spatial transformation in the cities, government have to rein in the real changes not only in the physical realm but also in the way we approach both the problems and the solutions. The uMhlathuze Municipality, like any other municipality in the country is required to undertake processes of spatial transformation in line with the National Development Plan, Provincial Growth and Development Strategy & Plan, Spatial Planning and Land Use Management Act. The uMhlathuze Municipal Spatial Transformation Concept is derived from five key Pillars:

**Figure 6: Pillars of Spatial Transformation of uMhlathuze**



The main objective of uMhlathuze Municipal Spatial Transformation Concept is to address the integrated development, city compacting, structural elements, equal access to land, create sustainable economic development and opportunities which will contribute to job opportunities.

It is also to prioritise development within and along Municipal Nodes and Corridor as well as developing a development partnership with neighbouring Municipalities.

## 2.13 UMHLATHUZE INTEGRATED DEVELOPMENT PLAN

The uMhlathuze Municipality has compiled its fourth generation IDP in context of the now expanded municipal area.

### 2.13.1 UMHLATHUZE VISION

The current long term vision of the Municipality is:

***sustainable development.***

The above municipal vision underpins the following mission elements:

- o Job Creation through Economic Development
- o Improving Citizens Skills Levels and Education
- o Improve Quality of Citizens Health
- o Creation of Secure and Friendly City through Fighting Crime
- o Planned Rural Development Interventions
- o Maintaining Consistent Spatial Development
- o Commitment to Sustainable Environmental Management

### 2.13.2 UMHLATHUZE GOALS AND OBJECTIVES

The following provides a summary of the amended goals and objectives of the Municipality:

**Figure 7: uMhlathuze IDP Goals and Objectives**

NATIONAL KPA 1 : GOOD GOVERNANCE AND PUBLIC PARTICIPATION		
GOALS	OBJECTIVES	STRATEGIES
1.1 Democratic, Responsible, Transparent, Objective And Equitable Municipal Governance	1.1.1 To ensure effective and efficient administration complying with its Legal Mandates	1.1.1.1 Provide administrative support for all Council Committees
		1.1.1.2 Strengthening Council Oversight through training on Legislation and Policies
		1.1.1.3 Development of a Corporate Strategy
		1.1.1.4 Development and review of policies that will lead to improved service delivery and legislative compliance
		1.1.1.5 Compliance with the Occupational Health and Safety Act and Compensation for occupational injuries and diseases
	1.1.2 To maintain an organizational performance management system as a tool to monitor progress of service delivery	1.1.2.1 Monitor evaluate measure and review the performance of the municipality against indicators and targets set in the IDP
	1.1.3 Ensure Institutionalisation of Batho Pele Culture	1.1.3.1 Implement a Service Charter
		1.1.3.2 Increase sensitivity of municipal stakeholders to the aspirations of citizens
	1.1.4 To promote a municipal governance system that enhances and embraces the system of participatory Governance	1.1.4.1 Facilitate the Functionality of Ward Committees through continuous capacitation
		1.1.4.2 Development of a Credible Integrated Development plan within

NATIONAL KPA 1 : GOOD GOVERNANCE AND PUBLIC PARTICIPATION		
GOALS	OBJECTIVES	STRATEGIES
		prescribed legislative guidelines
		1.1.4.3 Facilitation of Stakeholder and Community participation in policy making
		1.1.4.4 Implementation of communications strategy to help the organisation to communicate effectively
		1.1.4.5 Effective and efficient ICT Systems that enable Informed decision making and communication
	1.1.5 To promote Access to Information and Accountability	1.1.5.1 Ensure effective information and accountability prescripts
	1.1.6 To bring the organization to an enabled risk maturity level	1.1.6.1 Implement and maintenance of a sound enterprise risk management
		1.1.6.2 Implement and maintenance of a sound fraud risk management system
		1.1.6.3 Implement and maintenance of business continuity management
	1.1.7 Ensure reliability and maintain independence of internal audit activity	1.1.7.1 Effective Audit Committee
		1.1.7.2 Effective and value adding internal audit activity

NATIONAL KPA 2 : BASIC SERVICES AND INFRASTRUCTURE PROVISION		
GOALS	OBJECTIVES	STRATEGIES
2.1 Integrated infrastructure and efficient services	2.1.1 To expand and maintain infrastructure in order to improve access to basic services and promote local economic development	2.1.1.1 Eradicate water services backlogs through provision of basic water services
		2.1.1.2 Eradicate sanitation services backlogs through provision of basic sanitation services
		2.1.1.3 Eradicate electricity supply backlogs through provision of basic electricity supply services
		2.1.1.4 Provide a weekly domestic solid waste removal service to the community
		2.1.1.5 Provision of public transport infrastructure facilities
		2.1.1.6 Provision and Maintenance of storm water and coastal engineering infrastructure
		2.1.1.7 Strive to improve reliability and service life of Municipal infrastructure, facilities and assets

<b>NATIONAL KPA 2 : BASIC SERVICES AND INFRASTRUCTURE PROVISION</b>		
<b>GOALS</b>	<b>OBJECTIVES</b>	<b>STRATEGIES</b>
	2.1.2 To promote the achievement of a non-racial, integrated society, through the development of sustainable human settlements and quality housing	2.1.2.1 Improve community standard of living through accelerated development of Integrated Human settlement
	2.1.3 To ensure effective Fleet Management	2.1.3.1. Review and Implement Fleet management Plan

NATIONAL KPA 3 : LOCAL ECONOMIC DEVELOPMENT		
GOALS	OBJECTIVES	STRATEGIES
3.1 Viable Economic Growth And Development	3.1.1 To promote and facilitate investment	3.1.1.1 Develop investment promotion and facilitation plan
		3.1.1.2 Develop township economy
		3.1.1.3 Package council land to facilitate economic growth
	3.1.2 Stimulate key sectors that promote economic growth and create jobs	3.1.2.1 Provide support for prioritised sectors
		3.1.2.2 Developing and implement economic development sector plan
	3.1.3 To create enabling environment for the informal economy	3.1.3.1 Review and implement informal economy policy
	3.1.4 Clear City identity	3.1.4.1 To promote the city as destination of choice
	3.1.5 To implement and co-ordinate Expanded Public Works Programme (EPWP) in a manner that enhances skills development and optimizes decent employment and entrepreneurship	3.1.5.1 Promote economic growth by successful implementation of EPWP community based projects
3.1.5.2 Promoting economic growth by providing employment opportunities for Women and Youth		
3.1.5.3 Promoting economic growth by providing skills empowerment to the unemployed		
3.2 Public Safety and Security	3.2.1 Provision of efficient and effective security services	3.2.1.1 Review and implementation of crime prevention strategy
	3.2.2 To ensure Provision of fire and rescue services	3.2.2.1 Review and Implementation of a fire prevention strategy
3.3 Safe and Healthy Living Environment	3.3.1 Efficient an effective waste management services	3.3.1.1 Review and Implementation of Integrated Waste Management Plan
	3.3.2 To ensure air quality management	3.3.2.1 Implementation of Air Quality Management Strategy
	3.3.3 Cater for alternate future burial option	3.3.3.1 Provision of cemeteries
3.4 Social Cohesion	3.4.1 To promote social cohesion	3.4.1.1 Development of sports and recreation programmes
		3.4.1.2 Development of community facilities

NATIONAL KPA 3 : LOCAL ECONOMIC DEVELOPMENT		
GOALS	OBJECTIVES	STRATEGIES
		3.4.1.3 Development of Arts and Culture Strategy

NATIONAL KPA 4 : MUNICIPAL INSTITUTIONAL DEVELOPMENT AND TRANSFORMATION		
GOALS	OBJECTIVES	STRATEGIES
4.1 A Municipality that is Resourced and Committed to attaining the vision and mission of the organisation	4.1.1 To create an appropriate organisational climate that will attract and ensure retention of staff	4.1.1.1 Implement the talent management strategy
		4.1.1.2 Compliancy with Employment Equity Act
		4.1.1.3 Implement EAP programs that promote and support health and well-being of employees
		4.1.1.4 Improve Citizens Skills levels and Education
		4.1.1.5 Create and maintain sound Relationship between management and labour
		4.1.1.6 Maintenance of an organisational structure that in is line with organisational objectives and optimises service delivery

NATIONAL KPA 5 : MUNICIPAL FINANCIAL VIABILITY AND MANAGEMENT		
GOALS	OBJECTIVES	STRATEGIES
5.1 Sound Financial And Supply Chain Management	5.1.1 Compliance with financial legislation and policies	5.1.1.1 GRAP compliance
		5.1.1.2 mSCOA compliant
		5.1.1.3 Review of all financial related policies
		5.1.1.4 Compliance with all MFMA and related local government financial legislation
	5.2.1 Sustainable Financial and supply chain Management	5.2.1.1 Provide continuous Internal Communication on Budget and Financial Management matters
		5.2.1.2 Asset Accounting Management
		5.2.1.3 Accurate and timeous billing and receipting of revenue
		5.2.1.4 Apply Adequate Internal controls
		5.2.1.5 Demand and acquisition management
		5.2.1.6 Contracts and Logistics management
		5.2.1.7 Apply adequate financial management methodologies

NATIONAL KPA 6 : CROSS CUTTING		
GOALS	OBJECTIVES	STRATEGIES
6.1 Integrated Urban and Rural Development	6.1.1 To plan and manage existing and future	6.1.1.1 Review and Implement Spatial Development Plan

NATIONAL KPA 6 : CROSS CUTTING		
GOALS	OBJECTIVES	STRATEGIES
	development	6.1.1.2 Develop precinct framework plans
		6.1.1.3 Review of Human Settlement Sector Plan
		6.1.1.4 Incremental development of strategic environmental assessment for the entire municipal area
		6.1.1.5 Implementation of uMhlathuze Land Use Scheme
		6.1.1.6 Compliance with SPLUMA by-law and national building act.
		6.1.1.7 Efficient processing of development application and building plans
6.2 Immovable Property Management	6.2.1 To ensure fair valuation of properties	6.2.1.1 Development and maintenance of valuation roll in line with municipal property rates act.
	6.2.2 Effective Management of Council owned Immovable properties.	6.2.2.1 Update immovable asset register
6.3 Disaster Management	6.2.3 To prevent and mitigate disaster incidents	6.2.3.1 Review and Implement Disaster Management Plan

## 2.14 MUNICIPAL ECONOMIC DEVELOPMENT TRANSFORMATION ROADMAP

The Municipality embarked on a meticulous and comprehensive process to develop an all-embracing roadmap that will guide the City development, economic transformation and job creation. As a hub of industrial development and investment, the City must position itself as a strategic driver and champion of economic development for the benefit of local enterprises, job seekers, aspirant entrepreneurs and local economy.

The main objective of the roadmap is clarify the City economic transformation and job creation with a view to creating a conducive environment for job intensive and inclusive economic growth. More specifically, the following priority sectors have been identified:

- i. Manufacturing & logistics
- ii. Agriculture, Agro-processing and rural economy
- iii. Maritime & Blue Economy
- iv. Tourism
- v. Wholesale, retail, trade and services
- vi. Mining and beneficiation
- vii. Township economy
- viii. Construction & Built environment
- ix. Green Economy and Energy
- x. ICT & Innovation

## 2.15 UMHLATHUZE VISION 2030 STRATEGIC ROADMAP

During 2017, a Strategic Roadmap for the uMhlathuze Municipality was compiled with a special focus on the identification of critical levers to optimize growth and inclusive development opportunities in the Municipality. The key motivation was formulation of compelling yet practicable strategic goals capable of propelling the city to its next level.

The following strategic initiatives were agreed upon:

1. Improvement of Basic Services
2. Advancing Inclusive Economic Development and Private Sector Investment
3. Social Regeneration and Upliftment
4. Create Environmental Sustainable Development
5. Cross Cutting Initiatives

Hereunder a summary of the respective programmes identified under these strategic initiatives is provided:

**Table 8: Vision 2030 Strategic Roadmap Programmes**

<b>IMPROVEMENT OF BASIC SERVICES</b>	
Programme 1: Basic Services Monitoring and Tracking Programme (Service Delivery Nerve Centre)	To monitor effective delivery of basic services through a projects delivered to communities; in order to prevent duplications of effort and investment, as well as harmonise city
Programme 2: Spatial Transformation and Land Banking	The programme aims to advance spatial transformation goals (equity and access) and strategically forecast long term development goals in order to secure land provision for industrial growth and social purposes.
<b>ADVANCING INCLUSIVE ECONOMIC DEVELOPMENT AND PRIVATE SECTOR INVESTMENT</b>	
Programme 3: Investment Coordination, Monitoring and Alignment	To coordinate and track investment initiatives in the City in order to achieve multi-stakeholder alignment and synergies in the roll-out of private sector investment programmes.
Programme 4: Investment Promotion Initiative	To position the City as an investment and tourism destination of choice to local and international audiences
Programme 5: Logistics and Port-Based Initiatives	The programme aims to optimise the city position as a Port City and its strategic location along the main route connecting Durban and Mozambique, as well as rail line connecting with the hinterland.
Programme 6: Agricultural Development Initiative	The programme aims to promote and unlock agricultural sector as a feasible and sustainable contributor to economic development of the city.
Programme 7: City of uMhlathuze Knowledge Hub	To establish knowledge repository (virtual / face-to-face) to drive broader business and investor intelligence on the city, support innovation, capture economic and social research, profile trading partners, record project histories and learnings, as well as serve as a base for commissioning ongoing specialist studies relevant to city development
Programme 8: Investment and Development Funding	The purpose of the programme is to seek supplementary and alternative funding sources meant to activate investment and development in the City - noting the limitations in traditional sources of funding and pressing

	social provisioning needs.
<b>SOCIAL REGENERATION AND UPLIFTMENT</b>	
Programme 9: Strategic Learning and Growth Initiative	The purpose of the initiative is to: <ul style="list-style-type: none"> <li>o create interfaces between industry and educational institutions in order to determine skills supply and demand balances</li> <li>o reconcile learning content priorities between educational institutions and industry to engineer relevance and connectedness</li> <li>o forecast new skill requirements and facilitating expedited acquisition of such skills through defined partnership agreements and other means</li> <li>o mobilise and connect the youth of the city with industry and to drive learning, innovation and solutions in line with gainful opportunities</li> </ul>
Programme 10: uMhlathuze City Sports and Arts Initiative	To advance the brand stature, social balance and cohesion of the city through coordinated sports, arts and recreation strategic initiatives
Programme 11: Safety and Security Mobilisation Programme	The programme elevates the agenda of transforming the City of uMhlathuze into a safe and secure environment in which it is fitting to live, work and make business. The programme counteracts the negative insecurity trends and their effects on social well-being, business growth and investment.
Programme 12: Social Regeneration and Engagement Intervention	The programme is a deliberate and structured intervention to counteract moral and social decay within the jurisdiction of the municipality by driving social change programmes and messages through leadership and other community structures.
<b>CREATE ENVIRONMENTALLY SUSTAINABLE DEVELOPMENT</b>	
Programme 13: Climate Change Intervention Programme	The purpose of the programme is to introduce mitigation strategies and management of climate change factors impacting development and welfare of the citizenry in the City
<b>CROSS CUTTING INITIATIVES</b>	
Programme 14: Integrated and Strategic Infrastructure Investment	The purpose of the programme is to develop a long term integrated and strategic infrastructure investment roadmap that is aligned to the Spatial Development Framework and in line with the priorities of the City and investors. This includes infrastructure renewal, upgrade and development of new infrastructure (social and economic infrastructure).
Programme 15: Socio-Economic Transformation Programme	The purpose of the programme is to develop an integrated and focussed socio- economic transformation programme with specific packaged deliverables and interventions aimed at addressing the triple challenges of poverty, unemployment and inequality at local government level working with other spheres of government and social partners



### 3. SPATIAL DEVELOPMENT VISION

Visions are strategic planning instruments; they are establish policies. The Spatial Planning and Land Use Management Act (SPLUMA) requires of municipalities to have long term Spatial Development Frameworks (SDFs) that are reviewed annually and for these SDFs to have long term spatial visions.

A spatial vision for the City of uMhlathuze has been prepared by way of a consultative process that included the political leadership as well as internal and external stakeholders. The outcome is a coherent vision (minimum 20 years) for the economic and spatial integration and transformation of the municipal area. It is critical that this vision will inform/direct decision making in the municipality.

The following steps were followed in the preparation of the spatial vision:

Step 1:

- o Identification of Challenges and Opportunities.

Step 2:

- o Defining the Future

Step 3:

- o Adoption of Vision and Recording Commitments.

The following principles were identified during the engagements:

- o **Diversity:** Nurturing, encouraging and enabling diversity on all fronts, such as cultural, traditional, religious, gender, ability, etc.
- o **Sustainability:** Institutional, Ecological, social and financial.
- o **Choice:** An area where people are able to exercise free will and have access to choice and opportunity.
- o **Accessibility:** Enabling upward mobility.
- o **Quality of life:** Quality shared public spaces.
- o **Mobility:** Ability to progress and an adaptable environment.
- o **Affordability:** For all especially public services.
- o **Shared societal dividends:** Happiness, hope, health, safety and well being
- o **Equality:** An administration that regards ALL residents as equal.
- o **Equity:** An administration that seeks to improve equity. One that is fair and just.
- o **Inclusivity:** An administration that deliberates seeks to include the marginalized (gender, age, race, ability).
- o **Avant garde:** Taking a long term view, forward thinking and thinking outside the box.
- o **Democratic:** Meaningful consultative processes.
- o **Efficiency:** Judicious use of public resources

Key indicators that form the foundation of the vision:

- o An area that supports both **COMPACT URBAN** and **SUSTAINABLE RURAL LIVING**.
- o **STRENGTHEN CONNECTIONS** between different parts of the municipal area. Nodes play differentiated but complementary roles.
- o Business hubs in Richards Bay, Nseleni, Esikhaleni, Ntambanana, Empangeni, Ngwelezane.
- o Agriculture, tourism, mining, freight and logistics anchor the economy.
- o New airport to anchor freight and logistics **SEZ/IDZ CONSOLIDATION (AIR, WATER AND LAND)**
- o Work environments that **ALLOW FLEXIBILITY** work from home, pop ups, etc.
- o **INVESTMENT IN PUBLIC REALM** Public spaces are places of interaction, recreation, expression and enough space for public facilities to be set aside.
- o Institution that **FOSTERS PARTNERSHIP** it will take more than government to deliver this vision.



## 4. SPATIAL ANALYSIS

The uMhlathuze Local Municipality is located in the King Cetshwayo District Municipality in the North-Eastern part of KwaZulu-Natal. The uMhlathuze LM is bordered by the following Local Municipalities (LMs) within the King Cetshwayo District:

- o Mfolozi
- o Mthonjaneni
- o uMlalazi

Following the 2016 Local Government elections, the former Ntambanana Local Municipality was disestablished and a portion of its former area was included into the uMhlathuze Local Municipality. As a result, the uMhlathuze Municipality has an area of 123 325Ha and in 2016, the uMhlathuze population is estimated at to be in the region of 410 465 people.

Richards Bay and Empangeni are the most significant economic centres in the Local Municipality and in the District Municipality. Richards Bay, as a harbour and industrial town, attracts people from surrounding towns, rural settlements and from beyond the district. Empangeni mainly as a commercial and service centre to the settlements of Esikhaleni, Eshowe, Nkandla, Buchanana and other rural settlements attracts many people to the range of higher order services available in the town.

### 4.1 SPATIAL STRUCTURING ELEMENTS

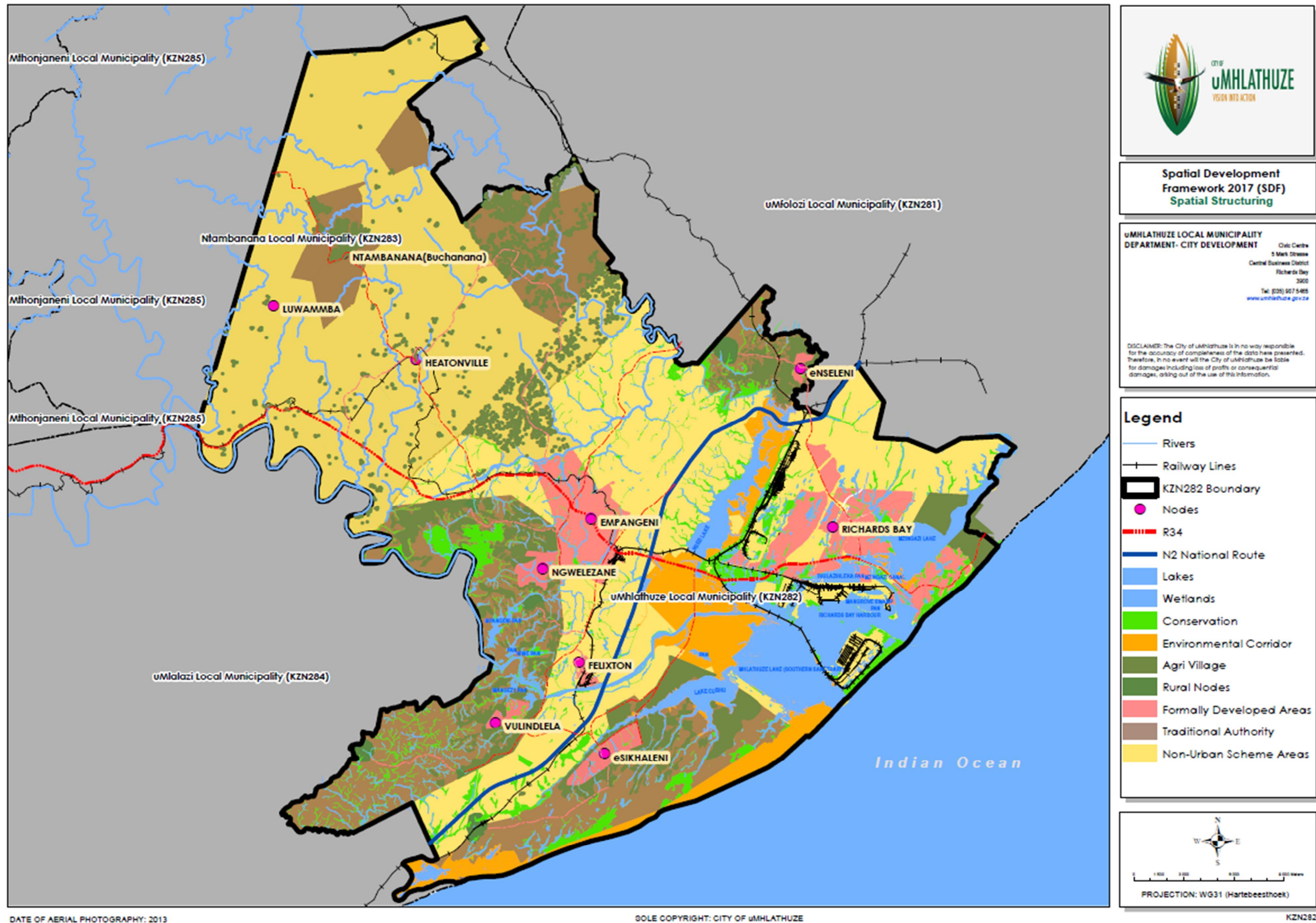
There are a number of existing natural and man-made phenomenon that have shaped and continue to shape the uMhlathuze Municipality spatial landscape. The area to the east of the Municipality is inundated with a system of wetlands and natural water features such as Lakes Cubhu, Mzingazi, Nsezi and Nhlabane. Major rivers include the Mhlathuze and Nsezi.

The main access into the municipal area is via the N2 in a north south direction and in an east west direction the R34. Other significant roads in the area include the MR431 (that provides a northerly entry into Richards Bay from the N2) as well as the Old Main Road that straddles the N2 on its inland. Railway lines are prevalent in the municipal area but do not provide a passenger service, only a commercial/industrial service is provided.

The municipality has the benefit of about 45km of coastline of which about 80% is in its natural state. Linked to its coastal locality is the Richards Bay deep-water port that has been instrumental in the spatial development of the area in the past and will definitely impact on the areas development. There is one airport and a couple of landing strips in the municipal area.



Map 1: Spatial Structuring Elements



The municipality has vast areas of commercial farmlands as well as a number of areas that are significant from an environmental perspective.

The municipal area includes the formal towns of Empangeni, Richards Bay, eSikhaleni, Ngwelezane, eNseleni, Vulindlela and Felixton. Rural settlements include Buchanana, Luwamba, Makwela, Mambuka, Hluma, Matshana and Mabuyela.

## 4.2 LAND OWNERSHIP

The following table provides a breakdown of the land ownership in terms of hectares (Ha) and percentages (%).

**Table 9: Land Ownership Breakdown**

Land Owners	Area(Hectares)	Percentage (%)
Province of KZN	14167	11.49
City of uMhlathuze	4259	3.45
Transnet	2989	2.42
IDZ	107	0.09
Ingonyama Trust Board	63795	51.73
Private	32467	26.33
Lakes	5541	4.49
Total	123325	100.00

The above table indicates that 26% of land within uMhlathuze Municipality is under private ownership and 51% under Ingonyama Trust Board which is normally administered by Traditional Authorities.

One of the biggest Municipal challenges in relation to land ownership is the distribution and allocation of land in the Ingonyama Trust Board land which is mainly administered by Traditional Authorities. Such distribution is common in the peri-urban and infill areas. This situation led to formation of unplanned settlements which put pressure on the Municipality from a services provision perspective.

The summary of challenges that are associated with settlements within Peri-Urban and Infill Areas (non-formalised settlements) can be further explained as follows:

- i. **Lack of proper planning:** Under ideal circumstances, settlement planning takes place prior to land allocation and development. The main objective of settlement planning is to ensure and promote sustainable communities and settlements taking into consideration environmental factors, climate change, geotechnical conditions, biodiversity, land legal and basic services issues. Non-planned settlements contribute to generally unsustainable communities and livelihood challenges.
- ii. **Limited basic services:** Unplanned settlements are always subjected to limited services, since planning in these areas always comes afterwards and inevitably creates challenges for the design and installation of infrastructure. The provision of services in such unplanned areas is treated as in-situ upgrades which is a reaction to community needs with limited resources.
- iii. Settlements are located in the **high risk areas** i.e. environmentally sensitive, flood-prone areas, wetlands and unstable soils, under power lines, on top of water pipes, sewer pipes etc.: Some structures within non-formalised settlements are located within environmentally sensitive areas and other high risk areas as listed where no formal planning and development would have taken place if planned.
- iv. **Undesirable Impact on food security:** Land allocation also takes place for residential purposes without assessment of the agricultural value of the land. Sometimes good agricultural land is transformed and used for residential/settlement purposes. The high

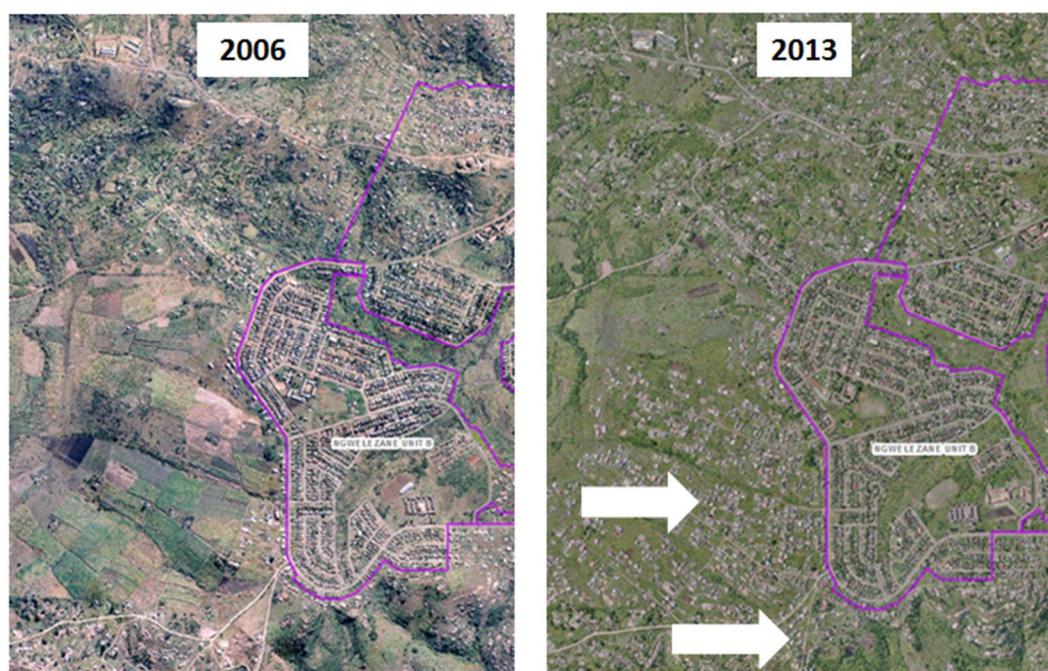


demand of residential land in the Traditional Council areas has led to a situation where residential development takes precedent in agricultural areas which has a significant impact to food security for humans.

- v. **Undesirable Impact on prime land for grazing:** The random allocation of land without proper guidelines and guiding development frameworks in the peri-urban/infill areas has also contributed to a shortage of grazing land. This has led to a situation where livestock associations from some of these areas are applying to the Municipality to lease land for grazing purposes.
- vi. **Insufficient land for future social and economic facilities due to random distribution of land:** The majority of land that is allocated for residential purposes has led to an increase in population density in these areas. This means that, the demand for land for educational, health and economic facilities also increases. However, the major challenge is that in most cases such needs cannot be accommodated in these areas due to insufficient land being reserved for such purposes.

The following inset provides images of the peri-urban settlement increase between 2006 and 2013 adjoining Ngwelezane and the Richards Bay Airport.

**Figure 8: Peri-urban Development adjoining Ngwelezane**



**Figure 9: Peri-urban Development adjoining the Richards Bay Airport**



It is presented that the above challenges are caused by the limited understanding by stakeholders of the legal mandate of the Municipality as a planning authority with regards to spatial planning, development control, environmental planning, settlement planning etc. - irrespective of land ownership. Traditional Councils are generally not consulting with the Municipality as planning authority on matters relating to settlement planning. As a result, the Municipality is compromised in its ability to efficiently deliver services and formalize development due to the challenges explained on the previous pages. The overall sustainability of settlements is compromised as a result.

In context of the above discussion, the following summary is provided of legislative functions of stakeholders:

#### **4.2.1 Functions of Cooperative Governance and Traditional Affairs**

In context of the above, some of the core functions of the Department of Cooperative Governance and Traditional Affairs is, amongst others:

- o to support and enhance the capacity of Traditional Councils
- o to ensure the recognition and transformation of Traditional Council areas
- o to create an enabling environment for the development of Traditional communities

#### **4.2.2 Objectives of Local Government**

Section 152 (1) of the Constitution of the Republic of South Africa (Act No. 106 of 1996) states that local government are:-

- a) to provide democratic and accountable government for local communities;
- b) to ensure the provision of services to communities in a sustainable manner;
- c) to promote social and economic development;
- d) to promote a safe and healthy environment; and
- e) to encourage the involvement of communities and community organisations in the matters of local government

A municipality has the functions and powers assigned to it in terms of Sections 156 and 229 of the Constitution. Chapter 5 of the Local Government: Municipal Structures Act, 117 of 1998 clearly defines those functions and powers vested in a local municipality.

In setting out the functions of a Local Municipality, the Municipal Systems Act indicates that the Minister responsible for Local Government may authorize a Local Municipality to perform the following functions of a District Municipality. As such, the uMhlathuze Municipality performs the following:

- i. Potable water supply systems
- ii. Bulk supply of electricity
- iii. Domestic waste-water systems
- iv. Sewage disposal systems
- v. Municipal Health Services

In addition, the objectives of local government are:-

- i. Air and Noise Pollution
- ii. Building, Trading Regulations, Liquor and Public, Nuisance Control
- iii. Fire Fighting Services
- iv. Pounds
- v. Public Places
- vi. Refuse Removal, Refuse Dumps and Solid Waste
- vii. Street Trading
- viii. Street Lighting
- ix. Traffic and Parks
- x. Electricity Reticulation
- xi. Cleansing and Trade Areas
- xii. Beaches and Amusement Facilities
- xiii. Billboards and Display of Advertisements in Public Places
- xiv. Cemeteries, Funeral Parlors and Crematoria
- xv. Licensing, Facilities for Accommodation, Care and Burial of Animals
- xvi. Fencing and Fences
- xvii. Local Amenities
- xviii. Local Tourism
- xix. Municipal Airports
- xx. Municipal Planning
- xxi. Municipal Public Transport
- xxii. Storm Water Management
- xxiii. Local Sport Facilities
- xxiv. Markets Stalls / Trade Areas
- xxv. Municipal Abattoirs
- xxvi. Municipal Parks and Recreation

In context of the above, the following is stated:

The **core function** of a municipality is service delivery and all other activities are seen to be supportive thereof albeit planning for development/service delivery, management of assets, management of land, income generation from leasing of Council assets etc. Care must therefore be taken to ensure that municipal activities work toward achieving sustainable service delivery.



### 4.2.3 Functions of the Ingonyama Trust

Section 2 (b) of the Ingonyama Trust Amendment Act (Act No. 9 of 1997) states that:

benefit, material welfare and social well-being of the members of the tribes and communities as contemplated in the KwaZulu Amakhosi and Iziphakanyiswa Act, 1990 (Act No. 9 of 1990)

The Ingonyama Trust Board is responsible for the administration of Ingonyama Trust land which is about 2.8 million hectares in extent spread throughout the province of KwaZulu-Natal. The core business of the Trust is to manage the land for the *-being of the individual members of the tribes*

### 4.2.4 Functions of Traditional Councils

Section 8(1) of the KwaZulu-Natal Traditional Leadership and Governance Act (Act No. 5 of 2005) provides for the functions of the Traditional Councils to inter alia include:-

- o administer the affairs of the traditional community in accordance with customs and tradition;
- o assist, support and guide traditional leaders in the performance of their functions;
- o work together with municipalities in the identification of community needs;
- o facilitate the involvement of the traditional community in the development or amendment of the integrated development plan of a municipality in whose areas that community resides;
- o recommend, after consultation with the relevant Local House and the Provincial House of Traditional Leaders, appropriate interventions to government that will contribute to development and service delivery within the area of jurisdiction of the traditional council;
- o participate in the development of policy and legislation at local level;
- o participate in the development programmes of municipalities and of the provincial and national spheres of government;
- o promote the ideals of co-operative governance, integrated development planning, sustainable development and service delivery;
- o promote indigenous knowledge systems for sustainable development and disaster management;
- o alert any relevant municipality to any hazard or calamity that threatens the area of jurisdiction of the traditional council in question, or the well-being of people living in such area of jurisdiction, and to contribute to disaster management in general;
- o share information and co-operate with other traditional councils;
- o perform the functions conferred by customary law, customs and statutory law consistent with the Constitution.
- o to uphold the values of the traditional community;
- o reject and proscribe such practices as the sowing of divisions based on tribalism;
- o promote peace and stability amongst members of traditional communities; and
- o promote social cohesion within the traditional community.

The detailed scrutiny of the Municipal, Ingonyama Trust Board and Traditional Councils objectives and functions, identified the following critical common objectives which need to be adhered to by all three stakeholders, however co-operation remains a challenge:

- i. Community social well-being
- ii. Encourage sustainable development and service delivery
- iii. Stakeholder involvement in the development planning and decision making

### 4.2.5 Land Allocation Guidelines on Communal Land under Traditional Councils

There are currently three interdependent levels of authority relevant for planning and land management in Traditional Council areas; namely

- o Traditional Councils;
- o Ingonyama Trust Board; and
- o Municipalities

Normally, the municipalities are not directly involved in the land allocation in traditional council areas. However, they are always required to provide services in these settlements.

During September 2010, the former KZN Provincial Planning and Development Commission prepared the land allocation guidelines on communal land under Traditional Council. The main objective of the guidelines was:

- o to promote efficient allocation of communal land by the traditional councils and to promote orderly development including human settlement;
- o promote sustainable rural development;
- o protection of cultural, agricultural and biodiversity resources; and
- o promote safety and security

The following general land allocation guidelines are meant to be followed by Traditional Councils when allocating land

- i. The allocation of land shall be made by a Traditional Council of the area concerned and such allocation shall be confirmed in writing.
- ii. The Traditional Council may only allocate land in an area defined as its area of jurisdiction.
- iii. In the performance of this function, the Traditional Council shall take into account similar developments existing in the area.
- iv. In allocating a site the traditional council shall be guided by the availability of appropriate services and infrastructure, including transportation in the area.
- v. The land allocated will be used or developed only in accordance with the land use plans of the area.
- vi. The Traditional Council should take into account disaster management issues.
- vii. The Traditional Council shall ensure the protection of the natural environmental and cultural resources of the area when allocating land. People may not be allocated sites on wetlands, protected forest, heritage sites, etc.
- viii. The Traditional Council shall ensure the preservation of prime agricultural land and allow a change in land use only in public interest.
- ix. Each household is entitled to one residential site.
- x. Subject to availability of unallocated land, each household is entitled to a portion of arable land.
- xi. An allotment once given remains in the possession of the family and their dependents in accordance with the laws of success, or/ and inheritance, in perpetuity.
- xii. All community members shall have equal access to grazing land unless the rules of the community concerned state otherwise.
- xiii. A person allocated a site may not transfer or sub-let or otherwise dispose his/her allocation without prior written consent of the Traditional Council of the area. The Traditional Council shall not refuse such consent unreasonably.
- xiv. Traditional Council shall make sure that the procedures for allocation, acquisition and termination of land rights are made known to the community.

The Ingonyama Trust Board usually requests municipalities to provide their comments/inputs on lease agreements. However, such requests are mainly for low impact residential development and in most cases some of them already exists and the application is usually submitted for formality purposes.

It happens that, some of the lease applications are not supported by the Municipality due to a number of reasons such as wetland, floodlines, topography, soil conditions etc. but the lease application may still be formalised without considering municipality

### 4.3 SETTLEMENT DENSITIES AND PATTERNS

Settlement densities are highest in the formal urban areas, i.e. Empangeni, Richards Bay, eSikhaleni, Ngwelezane, eNseleni, Vulindlela and Felixton. Historically, the areas directly adjacent to the above formal urban areas have also been experiencing increasing settlement densification, i.e. the conventional peri-urban areas.

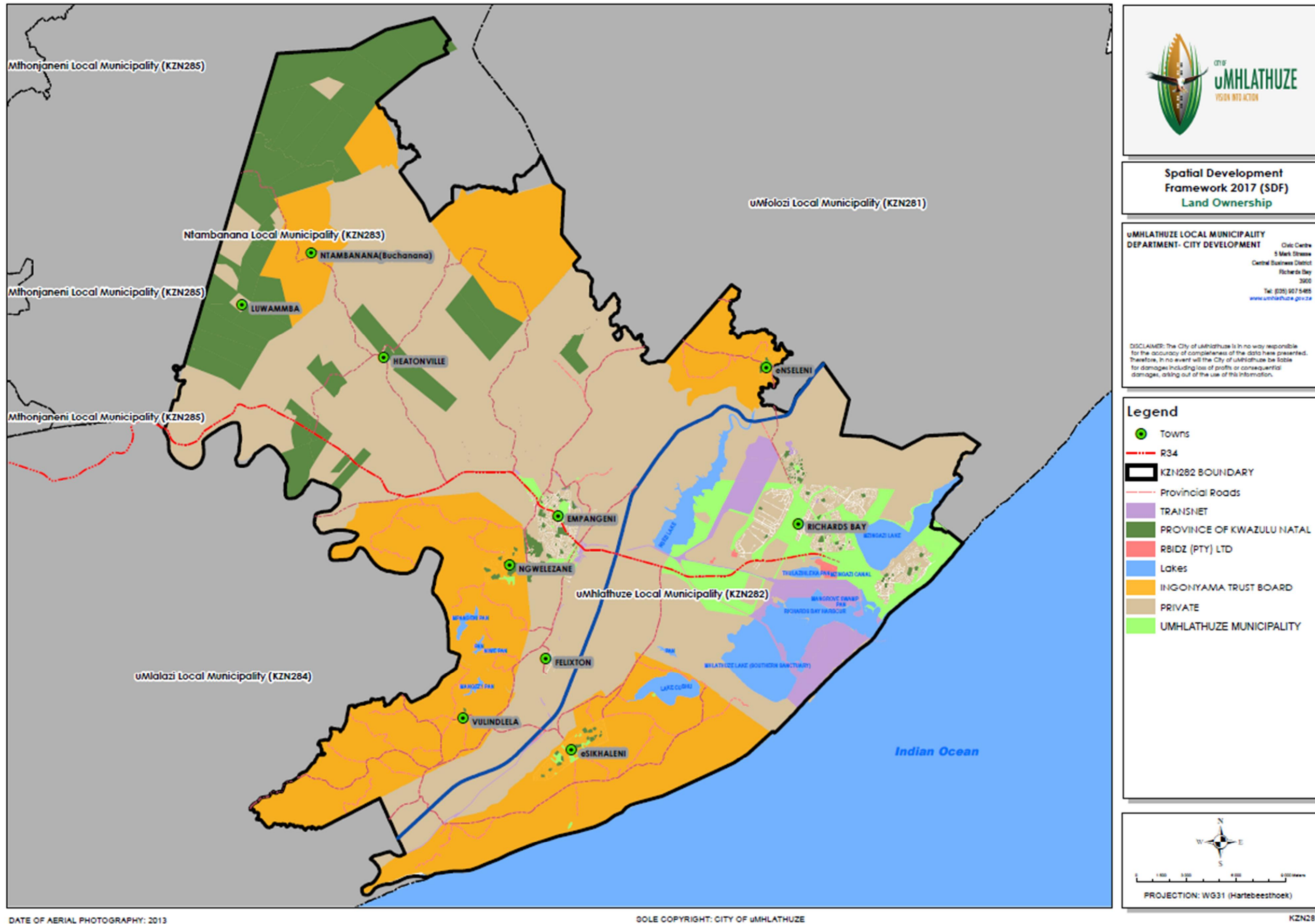
However, this trend has changed in the Traditional Council areas of the municipal area. Areas of denser settlement in the rural (Traditional Council) areas have developed at further distances from the formal urban areas as can be seen from the map inset.

In terms of the uMhlathuze LUS, areas of increasing settlement densification (in the Traditional Council areas) are referred to as (currently under review) notes the statement of intent to be as follow:

**Rapid Urbanization Management Zone:** Zones in the Traditional Authority Area that demarcate areas that have been informally settled adjacent to or near to formal urban areas, and may require interventions to address environmental impacts, upgrade services, and provide formal housing.

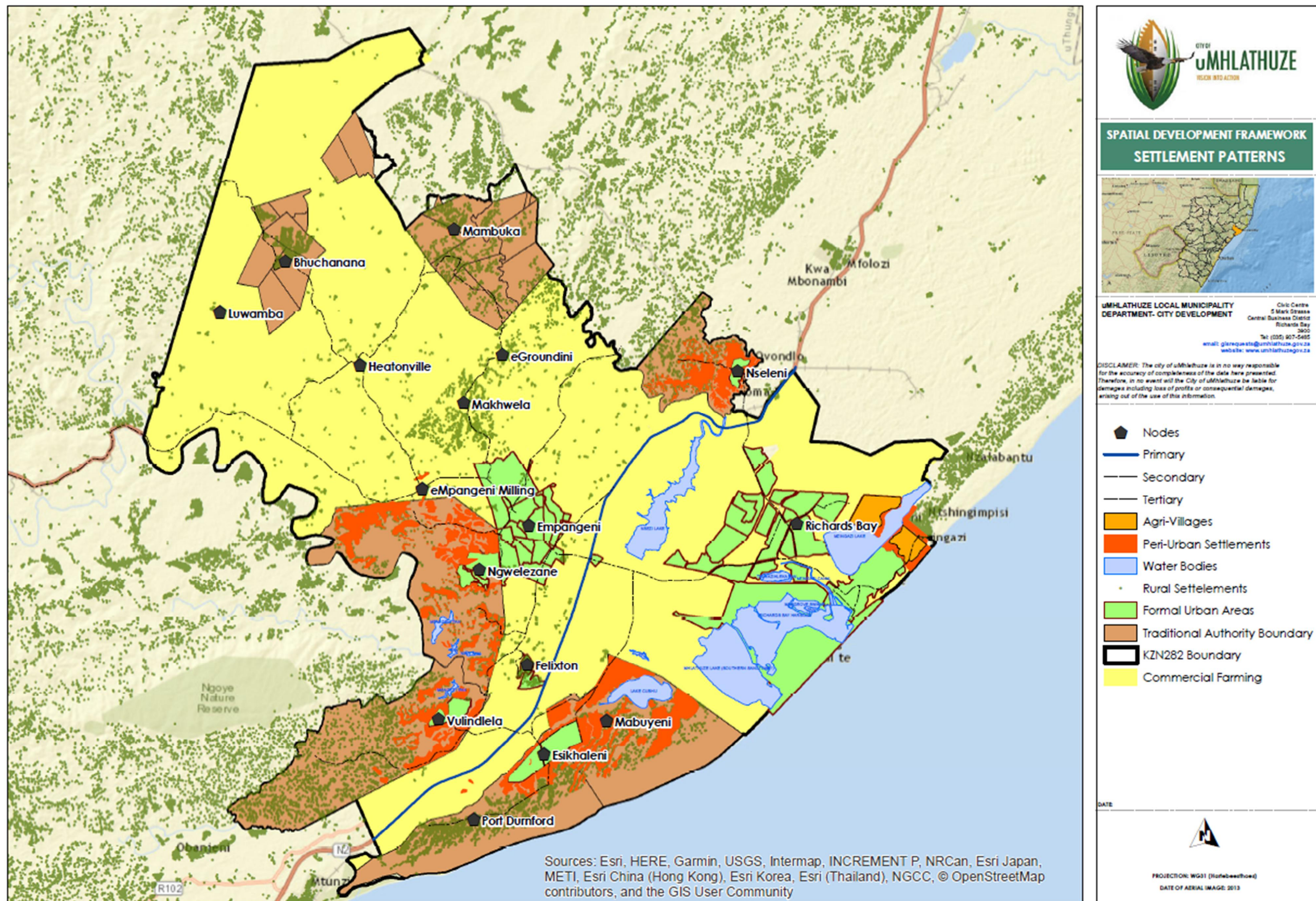
This settlement is seemingly happening on an ad hoc basis given land allocation in the rural areas without pre-planning, i.e. settlement planning. It is imperative to obtain the buy-in from the Ingonyama Trust Board to ensure settlement planning is undertaken in the rural areas to, amongst others, ensure more sustainable service provision the most efficient use of scarce productive agricultural lands.

Map 2: Land Ownership





Map 3: Settlement Patterns





### 4.3.1 Nodes: Local Context

The City of uMhlathuze has identified various nodes within its area of jurisdiction. These nodes were identified by their spatial characteristics, primary land use characteristics, roles as well as the functions of the node to the Municipality and the larger region.

The identified nodes are classified as Primary, Secondary, Tertiary, Opportunity and Rural nodes. Each identified node contains a number of opportunities for development and constraints to development.

### 4.3.2 Analysis of the uMhlathuze Municipal Nodal Areas

A more detailed analysis of the municipal nodes in uMhlathuze is provided herewith.

**Empangeni Node:** Empangeni is located approximately 160 kilometres north of Durban.

**Table 10: Analysis of Empangeni Node**

Role in the City	<ul style="list-style-type: none"> <li>It is regarded as the major service and retail centre of uMhlathuze Municipality.</li> <li>The CBD commercial floor space presently exceeds 7200 sq. metres.</li> <li>Centres of employment, industrial, residential, offices and commercial activity are provided.</li> </ul>
Role in the Region	<ul style="list-style-type: none"> <li>It functions as a major gateway to the world economy through the nearby Richards Bay Harbour.</li> <li>It plays a dominant role in KZN, especially within the commercial, industrial and agricultural support sectors.</li> <li>It plays a major role in the regional economy as a service centre (commercial, business, transportation, administrative and office core etc.)</li> </ul>
Movement System	<ul style="list-style-type: none"> <li>N2, P2-4, R102, P230, MR166, P425 John Ross Highway and MR496 are major access and linkage systems traversing the Empangeni Node.</li> <li>P166, Ngwelezane highway, Ngwelezane and Turner Road provide access and linkage within and between the other Municipal nodes.</li> </ul>
Current Urban Form & Land Uses	<p><b>Social Infrastructure:</b> Public &amp; private administration offices, recreation, medical facilities, residential, public transport facilities, educational facilities, social/welfare facilities, SAPS, churches, post office, library, cemeteries, entertainment, magistrate court, tourism and petrol filling stations .</p> <p><b>Commerce &amp; Industry:</b> manufacturing, hotel, restaurants, informal trading, retail, finance &amp; insurance, banking facilities, building supplies, furniture, motor showrooms, wholesalers</p> <p><b>Transportation:</b> Rail and Road.</p> <p><b>Rail:</b> Linked to the National System</p> <p><b>Road:</b> Highways- Public (Buses, minibuses, vans &amp; metred taxis) &amp; Private transportation.</p> <p><b>Residential:</b> Mixed used development (low to high density).</p>
Service Levels	<p><b>Physical Infrastructure:</b> Water supply, waterborne system, electrification, solid waste disposal, storm-water management and telecommunication services. Existing capacity will be upgraded to accommodate increased densities and expansion of urban residential areas as well as industrial areas.</p>
Open Space/Environment	<p><b>Open Space and Conservation:</b> Public parks, private open spaces and conservation areas.</p>

**Richards Bay Node:** Richards Bay is located approximately 180 kilometres north of Durban.

**Table 11: Analysis of Richards Bay Node**

Role in the City	<ul style="list-style-type: none"> <li>Prominent developing industrial centre of in South Africa.</li> <li>Centres of employment, industrial, residential, mining, offices, eco-tourism, nature reserve and commercial activity.</li> </ul>
Role in the Region	<ul style="list-style-type: none"> <li>It is well positioned to full advantage of the export of manufactured goods and raw materials &amp; minerals to Africa and the rest of the World.</li> <li>It functions as a major link to the world economy through the Richards Bay Harbour.</li> <li>It is regarded as the eco-tourism and nature reserve gateway.</li> <li>It plays a dominant role in KZN, especially within the commercial and Industrial Sector.</li> <li>It plays a major role in the regional economy as a service centre (Industrial, retail, commercial, business, transportation, administrative and office core etc.)</li> </ul>
Movement System	<ul style="list-style-type: none"> <li>N2, John Ross Highway, P231 and North Central Arterial are major access and linkage systems traversing the Richards Bay Node.</li> <li>West Central Arterial and East Central Arterial provide access and linkage within and between the other Municipal nodes.</li> </ul>
Current Urban Form & Land Uses	<p><b>Social Infrastructure:</b> Public &amp; private administration offices, recreation, medical facilities, residential, community halls, public transport facilities, educational facilities, social/welfare facilities, SAPS, tourism, churches, cemeteries, magistrate court and petrol filling stations.</p> <p><b>Commerce &amp; Industry:</b> Harbour, manufacturing, hotel, restaurants, informal trading, retail, finance &amp; insurance, banking facilities, building supplies, furniture, motor showroom and, wholesalers.</p> <p><b>Transportation:</b> Rail, Sea, Air and Road.</p> <p><b>Road:</b> Highways- Public (Buses, minibuses, vans &amp; metred taxis) &amp; Private transportation.</p> <p><b>Rail:</b> Linked to the National System</p> <p><b>SEA:</b> Linked to the World</p> <p><b>AIR:</b> Linked to the National System</p> <p><b>Residential:</b> Mixed used development (low-high density).</p>
Service Levels	<p><b>Physical Infrastructure:</b> Water supply, waterborne system, electrification, solid waste disposal, storm-water management and telecommunication services. Existing capacity will be upgraded to accommodate increased densities and expansion of urban residential areas as well as industrial areas.</p>
Open Space/Environment	<p><b>Open Space and Conservation:</b> Urban recreation (Public parks, private open spaces and conservation areas).</p>

**Esikhaleni Node:** Esikhaleni is classified as a Secondary Node based on the type of facilities and services it currently offers to the local people and the rest of uMhlathuze inhabitants. Although the node still functions primarily as a dormitory town it has the potential to develop into a primary node if the local economy becomes more sustainable, specifically in respect of growth and employment opportunities. It is located approximately 10 km from Vulindlela/Dlangenzwa and accessible via the N2. Esikhaleni is located approximately 15 km from Empangeni and 20 km from Richards Bay primary nodes.

**Table 12: Analysis of Esikhaleni Node**

Role in the City	<ul style="list-style-type: none"> <li>It offers a combination of mixed used development such as commercial, educational, mixed density and mixed income urban living.</li> <li>Opportunity to formalize better employment opportunities</li> <li>It is surrounded by dense peri-urban development</li> </ul>
Role in the Region	<ul style="list-style-type: none"> <li>It plays a dominant role in Region especially within the commercial, administration, transportation and social services.</li> <li>Opportunity to formalize better employment opportunities</li> <li>Opportunity to upgrade to the status of Primary Settlement due to population density, increasing commercial activity as well as proximity to future Port Development</li> </ul>
Movement System	<ul style="list-style-type: none"> <li>N2 and P535 are major access and linkage systems traversing the Esikhaleni Node.</li> <li>P106, Mdlebe Nstthona, Mdlebe Mpuma and Mthombothi Roads provide access and linkage within and between the other Municipal nodes.</li> </ul>
Current Urban Form & Land Uses	<p><b>Social Infrastructure:</b> Public &amp; private administration offices, recreation, medical facilities, residential, public transport facilities, educational facilities, social/welfare facilities, SAPS, churches, post office, library, cemeteries, entertainment, community halls, magistrate court and petrol filling station.</p> <p><b>Commerce &amp; Industry:</b> B&amp;B insurance, building supplies, banking facilities, furniture, butcheries, wholesalers, Supermarkets, bottle stores and car washers</p> <p>Transportation: Road.</p> <p><b>Road:</b> Highways &amp; Provincial- Public (Buses, minibuses, vans &amp; metred taxis) &amp; Private transportation.</p> <p><b>Residential:</b> Mixed used development (low-medium density).</p>
Service Levels	<p><b>Physical Infrastructure:</b> Water supply, waterborne system, electrification, solid waste disposal, storm-water management and telecommunication services. Existing capacity will be upgraded to accommodate increased densities and expansion of urban residential areas as well as commercial areas.</p>
Open Space/Environment	<p><b>Open Space and Conservation:</b> Urban recreation (Public parks, private open spaces and conservation areas).</p>

**Ngwelezane Node:** Ngwelezane is located approximately 10 km from Empangeni and 24 km from Richards Bay primary nodes.

**Table 13: Analysis of Ngwelezane Node**

Role in the City	<ul style="list-style-type: none"> <li>It offers a combination of mixed used development such as commercial, educational, mixed density and mixed income (urban and urban peri-urban living), small scale commercial facilities (supermarkets &amp; butchery).</li> <li>It is surrounded by dense peri-urban development</li> </ul>
Role in the Region	<ul style="list-style-type: none"> <li>It plays a dominant role in Region especially within administration, transportation and social services.</li> </ul>
Movement System	<p>R102, P230, MR166, and P425, Ngwelezane Highway and Ngwelezane Road are major access and linkage systems to the Ngwelezane Node and between other Municipal nodes.</p>
Current Urban Form & Land Uses	<p><b>Social Infrastructure:</b> Public &amp; private administration offices, recreation, medical facilities, residential, public transport facilities, educational facilities, social/welfare facilities, SAPS, churches, library, entertainment, magistrate court, community halls and petrol filling station.</p> <p><b>Commerce &amp; Industry:</b> B&amp;B insurance, building supplies, butcheries, bottle stores, Supermarkets and car washers.</p> <p>Transportation: Road.</p> <p><b>Road:</b> Provincial- Public (Buses, minibuses, vans &amp; metred taxis) &amp; Private transportation.</p> <p><b>Residential:</b> Mixed used development (low-medium density).</p>
Service Levels	<p><b>Physical Infrastructure:</b> Water supply, waterborne system, electrification, solid</p>



	waste disposal, storm-water management and telecommunication services. Existing capacity will be upgraded to accommodate increased densities and expansion of urban residential areas as well as commercial areas.
Open Space/Environment	<b>Open Space and Conservation:</b> Urban recreation (Public parks, private open spaces and conservation areas).

**Felixton Node:** Felixton is located approximately 15 km from Empangeni and 30 km from the Richards Bay node, 20 km from Esikhaleni and 10 km from the Vulindlela/Dlangezwa node.

**Table 14: Analysis of Felixton Node**

Role in the City	<ul style="list-style-type: none"> <li>It offers a combination of mixed used development such as manufacturing industry, educational, medium-high income residential (urban living)</li> </ul>
Role in the Region	<ul style="list-style-type: none"> <li>It plays a dominant role in Region especially within manufacturing and educational facilities.</li> </ul>
Movement System	N2, P2-4 and P343 are major access and linkage systems to the Felixton Node and between other Municipal nodes.
Current Urban Form & Land Uses	<p><b>Social Infrastructure:</b> Private administration offices, recreation, residential, public transport facilities, educational facilities, SAPS, churches, library, entertainment.</p> <p><b>Commerce &amp; Industry:</b> Manufacturing, B&amp;B</p> <p>Transportation: Road.</p> <p><b>Road:</b> Provincial- Public (Buses, minibuses &amp; metred taxis) &amp; Private transportation.</p> <p><b>Residential:</b> Mixed used development (medium-density).</p>
Service Levels	<p><b>Physical Infrastructure:</b> Water supply, waterborne system, electrification, solid waste disposal, storm-water management and telecommunication services. Existing capacity will be upgraded to accommodate increased densities and expansion of urban residential areas as well as commercial/industrial areas.</p>
Open Space/Environment	<b>Open Space and Conservation:</b> Urban recreation (Public parks, private open spaces and conservation areas).

**Vulindlela/Dlangezwa Node:** Located approximately 10 km from Esikhaleni and 20 km from Empangeni.

**Table 15: Analysis of Vulindlela/Dlangwezwa Node**

Role in the City	<ul style="list-style-type: none"> <li>It offers a combination of mixed used development such as educational, low medium income residential (urban &amp; peri-urban living), health facilities, small scale commercial facilities (supermarkets &amp; butchery)</li> </ul>
Role in the Region	<ul style="list-style-type: none"> <li>It plays a dominant role in Region and provides a tertiary education facility to the region, i.e. University of Zululand.</li> </ul>
Movement System	N2, P2-4 and P535 are major access and linkage systems to the Vulindlela/Dlangezwa Node and between other Municipal nodes.
Current Urban Form & Land Uses	<p><b>Social Infrastructure:</b> recreation, residential, public transport facilities, educational facilities, SAPS, churches, library, entertainment, community hall.</p> <p><b>Commerce &amp; Industry:</b> B&amp;B and car washers</p> <p>Transportation: Road.</p> <p><b>Road:</b> Provincial- Public (Buses, minibuses &amp; metred taxis) &amp; Private transportation.</p> <p><b>Residential:</b> Mixed used development (low-medium density).</p>
Service Levels	<p><b>Physical Infrastructure:</b> Water supply, waterborne system, electrification, solid waste disposal, storm-water management and telecommunication services. Existing capacity will be upgraded to accommodate increased densities and expansion of urban residential areas as well as commercial areas.</p>
Open Space/Environment	<b>Open Space and Conservation:</b> Recreation (Public parks and conservation areas).

**Nseleni Node:** Located approximately 15 km from Richards Bay and 15 km from Empangeni.

**Table 16: Analysis of Nseleni Node**

Role in the City	<ul style="list-style-type: none"> <li>It offers a combination of mixed used development such as educational, low income residential (urban &amp; peri-urban living), health facilities, small scale commercial facilities (supermarkets, bottle stores butchery)</li> </ul>
Role in the Region	<ul style="list-style-type: none"> <li>It plays a dominant role in Region especially within health facility (24 hours clinic).</li> </ul>
Movement System	N2, P517, P494 and P495 are major access and linkage systems to the Nseleni Node and between other Municipal nodes.
Current Urban Form & Land Uses	<p><b>Social Infrastructure:</b> recreation, residential, public transport facilities, educational facilities, SAPS, churches, library, entertainment, administration offices, limited health services community hall.</p> <p><b>Commerce &amp; Industry:</b> Supermarkets, bottle stores, informal trading and car washers</p> <p>Transportation: Road.</p> <p><b>Road:</b> Provincial- Public (Buses, minibuses, vans &amp; metred taxis) &amp; Private transportation.</p> <p><b>Residential:</b> Mixed used development (low-medium density).</p>
Service Levels	<p><b>Physical Infrastructure:</b> Water supply, waterborne system, electrification, solid waste disposal, storm-water management and telecommunication services. Existing capacity will be upgraded to accommodate increased densities and expansion of urban residential areas (de-densification) as well as commercial areas.</p>
Open Space/Environment	<b>Open Space and Conservation:</b> Recreation (Open spaces & conservation areas).

**Buchanana Node** is located in the former Ntambanan Municipal area.

**Table 17: Analysis of Buchanana Node**

Role in the City	It offers a combination of mixed used development such as educational, low income residential (deep rural living), health facilities, small scale commercial facilities (supermarkets, bottle stores butchery), Municipal Offices (former Ntambanana Municipal Office).
Role in the Region	It plays a role in Region especially within small scale subsistence agricultural activities (consist of livestock and gardening) and potential tourism (Thula Thula Game Reserve).
Movement System	N2, R34, P253, P700, D312, D2050 and L1424 are major access and linkage systems to the Buchanana Node and between other Municipal nodes.
Current Urban Form & Land Uses	<p><b>Social Infrastructure:</b> recreation, residential (homestead), public transport facilities, educational facilities, SAPS, churches, Municipal administration offices, limited health services, community hall.</p> <p><b>Commerce &amp; Industry:</b> Stores, bottle stores, informal trading</p> <p>Transportation: Road.</p> <p><b>Road:</b> Provincial- Public (Buses, minibuses, vans &amp; metred taxis) &amp; Private transportation.</p> <p><b>Residential:</b> Mixed used development (low-density Residential traditional settlement structures - homestead).</p>
Service Levels	<p><b>Physical Infrastructure:</b> Water supply community stand pipes, on-site individual homestead Pit latrines, electrification (Eskom), solid waste disposal (skips). Existing capacity will be upgraded to accommodate increased densities and expansion of rural residential areas (de-densification) as well as commercial areas.</p>
Open Space/Environment	<b>Open Space and Conservation:</b> Recreation (Open spaces & conservation areas).

**Rural/Neighbouring Nodes:** The main objective of these identified nodes is to provide both commercial, social facilities and infrastructure closer to the people. Specific planning and development interventions are required to identify community services that are to be encouraged at

these nodes. An analysis of some of these nodes is provided herewith. Additional assessments and planning on newly identified rural nodes is ongoing.

**Bhejane Node:** Bhejane is located in the outskirts of Nseleni Township (Tertiary Node), approximately 30km from Empangeni and 10 km from Richards Bay primary nodes.

**Table 18: Analysis of Bhejane Node**

Role in the City	<ul style="list-style-type: none"> <li>It currently offers a combination of mixed used development such as educational, low income residential (deep rural living), limited health facilities, limited public transport services, agricultural activities, small scale commercial facilities (supermarkets, bottle stores butchery)</li> </ul>
Role in the Region	<ul style="list-style-type: none"> <li>It plays a dominant role in Region especially within agricultural activities.</li> </ul>
Movement System	TBD after mapping
Current Rural Form & Land Uses	<p><b>Social Infrastructure:</b> recreation, rural residential, limited public transport facilities, educational facilities, SAPS, churches, community halls.</p> <p><b>Commerce &amp; Industry:</b> Supermarkets, bottle stores, informal trading and car washers</p> <p><b>Transportation:</b> Gravel Roads.</p> <p><b>Road:</b> Provincial &amp; District- Public (Buses, vans &amp; limited minibuses) &amp; Private transportation.</p> <p><b>Residential:</b> Rural (low-high density).</p>
Service Levels	<p><b>Physical Infrastructure:</b> Water supply, Pit latrines, electrification (Eskom), and telecommunication services. Existing capacity will be upgraded to meet the current demand and future increased densities and expansion of rural residential areas (de-densification) as well as commercial areas.</p>
Open Space/Environment	<p><b>Open Space and Conservation:</b> Recreation (Open spaces &amp; conservation areas).</p>

**Mkhwanazi (North & South Node): Mkhwanazi North Node** is located in the outskirts of Vulindlela Township (secondary node) approximately 20 km from Esikhaleni emerging primary node, 25 km from Felixton secondary node, 30 km from Empangeni and 38 km from Richards Bay primary nodes.

**Mkhwanazi South Node** is located in the outskirts of Esikhaleni Township (emerging primary node) approximately 20 km from Vulindlela, 30 km from Felixton secondary nodes; 45 km from Empangeni and 35 km from Richards Bay primary nodes.

**Table 19: Analysis of Mkhwanazi North & South Node**

Role in the City	<ul style="list-style-type: none"> <li>It currently offers a combination of mixed used development such as educational, low income residential (deep rural living), limited health facilities, agricultural activities, limited public transport services, small scale commercial facilities (supermarkets, bottle stores butchery).</li> <li>Opportunity for better employment through RBM Zulti South mining</li> </ul>
Role in the Region	<ul style="list-style-type: none"> <li>It plays a dominant role in Region especially within agricultural activities.</li> <li>Mkhwanazi South has tourism potential (Port Dunford).</li> <li>Opportunity for better employment through RBM Zulti South mining.</li> </ul>
Movement System	TBD after mapping
Current Rural Form & Land Uses	<p><b>Social Infrastructure:</b> recreation, rural residential, limited public transport facilities, educational facilities, SAPS, churches, community halls.</p> <p><b>Commerce &amp; Industry:</b> Supermarkets, bottle stores, informal trading and car washers.</p> <p><b>Transportation:</b> Gravel Roads.</p> <p><b>Road:</b> Provincial &amp; District- Public (Buses, vans &amp; limited minibuses) &amp; Private transportation.</p> <p><b>Residential:</b> Rural (low-high density).</p>
Service Levels	<p><b>Physical Infrastructure:</b> Water supply, Pit latrines, electrification (Eskom), and telecommunication services. Existing capacity will be upgraded to meet the current demand and future increased densities and expansion of rural residential areas (de-densification) as well as commercial areas.</p>

Open Space/Environment	<b>Open Space and Conservation:</b> Recreation (Open spaces & conservation areas).
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**Madlebe Node:** Madlebe is located in the outskirts of Ngwelezane Township (Secondary Node), approximately 20km from Empangeni and 40 km from Richards Bay primary nodes.

**Table 20: Analysis of Madlebe Node**

Role in the City	<ul style="list-style-type: none"> <li>It currently offers a combination of mixed used development such as educational, low income residential (deep rural living), limited health facilities, agricultural activities, limited public transport services, small scale commercial facilities (supermarkets, bottle stores butchery).</li> </ul>
Role in the Region	<ul style="list-style-type: none"> <li>It plays a dominant role in Region especially within agricultural activities.</li> </ul>
Movement System	TBD after mapping
Current Rural Form & Land Uses	<b>Social Infrastructure:</b> recreation, rural residential, limited public transport facilities, educational facilities, SAPS, churches, community halls. <b>Commerce &amp; Industry:</b> Supermarkets, bottle stores, informal trading and car washers <b>Transportation:</b> Gravel Roads. <b>Road:</b> Provincial & District- Public (Buses, vans & limited minibuses) & Private transportation. <b>Residential:</b> Rural (low-high density).
Service Levels	<b>Physical Infrastructure:</b> Water supply, Pit latrines, electrification (Eskom), and telecommunication services. Existing capacity will be upgraded to meet the current demand and future increased densities and expansion of rural residential areas (de-densification) as well as commercial areas.
Open Space/Environment	<b>Open Space and Conservation:</b> Recreation (Open spaces & conservation areas).

**Dube Node:** Dube is located in the outskirts of Esikhaleni Township, approximately 30 km from Empangeni, 20 km from Richards Bay primary nodes; 15 km from Vulindlela/Dlangezwa and 25 km from Felixton secondary nodes.

**Table 21: Analysis Dube Node**

Role in the City	<ul style="list-style-type: none"> <li>It currently offers a combination of mixed used development such as educational, low income residential (deep rural living), limited health facilities, agricultural activities, limited public transport services, small scale commercial facilities (supermarkets, bottle stores butchery).</li> <li>Opportunity for better employment through RBM Zulti South mining.</li> </ul>
Role in the Region	<ul style="list-style-type: none"> <li>Opportunity for better employment through RBM Zulti South mining.</li> <li>It plays a dominant role in Region especially within agricultural activities.</li> </ul>
Movement System	TBD after mapping
Current Rural Form & Land Uses	<b>Social Infrastructure:</b> recreation, rural residential, limited public transport facilities, educational facilities, SAPS, churches, community halls. <b>Commerce &amp; Industry:</b> Supermarkets, bottle stores, informal trading and car washers <b>Transportation:</b> Gravel Roads. <b>Road:</b> Provincial & District- Public (Buses, vans & limited minibuses) & Private transportation, <b>Residential:</b> Rural (low-high density).
Service Levels	<b>Physical Infrastructure:</b> Water supply, Pit latrines, electrification (Eskom), and telecommunication services. Existing capacity will be upgraded to meet the current demand and future increased densities and expansion of rural residential areas (de-densification) as well as commercial areas.
Open Space/Environment	<b>Open Space and Conservation:</b> Recreation (Open spaces & conservation areas).

### 4.3.3 Corridors: Local Context

Transport networks (corridors) are to be promoted as they are the catalyst in economic development. Areas that are highly accessible have better opportunities for economic growth by increasing their market threshold. Good transport systems ensure reliable transport of goods - increasing investor confidence. Diverse goods and services located along the transport network allows for the generation of income by taking advantage of passing traffic.

### 4.3.4 Primary Corridors

N2, John Ross Highway, P230 and MR496 are classified as **Primary Corridors** based on their strategic connectivity i.e. economic growth and development.

- o N2: Links UMhlathuze with Durban, Mtubatuba, Hluhluwe, Mkuze, Pongola and Mpumalanga Province.
- o John Ross Highway, P230 and MR496: Links UMhlathuze with Eshowe, Melmoth, Ulundi, Ntambana and Buchanana.

### 4.3.5 Secondary Corridors

- o SP231, MR166, P425, P2-4, P2-5, P535, P106, Part of John Ross Highway (from Mzingazi Canal to Meerensee Suburb sections), North Central Arterial and Anglers Rod are classified as Secondary Corridors as they provide access and linkages between the nodes the surroundings.
- o P231/ North Central Arterial/Part of John Ross Highway: From N2 and John Ross Highway it links Richards Bay with Nseleni, IDZ and Port of Richards Bay other areas around Richards Bay.
- o P425: Links Empangeni, Nseleni and surrounding traditional authority areas.
- o P2-4 & P2-5: Links Empangeni, Felixton, Esikhaleni and Vulindlela.
- o P535 & P106: Links Empangeni, Richards Bay, Vulindlela and Esikhaleni.
- o Anglers Rod: Links Richards Bay and its surrounding with Meerensee Suburb, beach front and harbour.

### 4.3.6 Tertiary Corridors

- o The P517, P343, Part of P2-4, Felixton High Street, East Central Arterial, West Central Arterial, Bayview Boulevard, Davidson lane, Krewelkring, Nkoninga and Fish Eagle Flight are classified as Tertiary Corridors as they provide access to a specify point of interest (POI).
- o P517: Provides access to access to Nseleni and its surroundings.
- o P343/Felixton High Street: Provides access to Felixton (Residential, Educational, Mond-industry/manufacturing).
- o Part of P2-4: Provides access to Vulindlela/Dlangezwa and the University of Zululand.
- o Nkoninga/Fish Eagle Flight: Provides access to the Richards Bay Airport and Birdwood residential suburb.
- o Davidson/Krewelkring: Provides access to Alkantstrand beach and Newark beach.
- o Bayview Boulevard: Provides access to Alkantstrand beach, Newark beach, recreational & Sport facilities.
- o West Central Arterial: Provides access to the Port of Richards Bay and the Richards Bay CBD.
- o East Central Arterial: Provides access to Richards Bay CBD.

From the following maps it can be seen that the two primary nodes on the municipal area are Richards Bay and Empangeni. The towns of Esikhaleni, Ngwelezane, Vulindlela and Felixton are secondary nodes while Nseleni and Buchanana have been classified as a tertiary node. These descriptions of the nodal areas have been based on the functionality of the respective nodes. A generally well defined corridor hierarchy exists in the municipal area. In most instances, nodal areas

have access via at least two major corridors but when the functionality of one of the main access corridors is hampered access is affected due the overall increase in road transport volumes.

With regard to the locality of rural settlements (nodes), these rural settlements are accessible locations for community services and infrastructure. Specific planning and development interventions are required (and underway) to identify community services that are to be encouraged at these nodes.

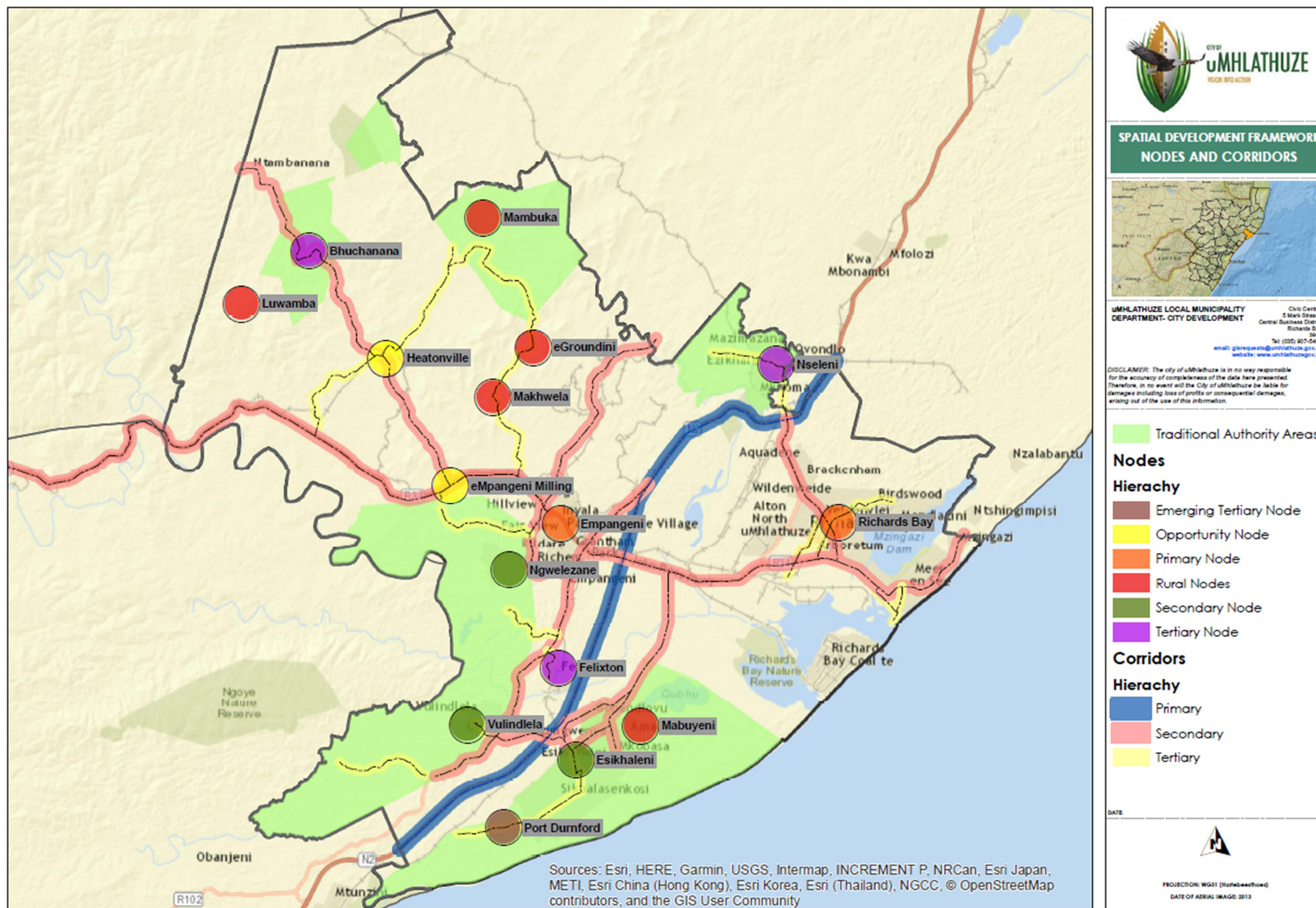
**Table 22: Summary of Interventions at Nodes**

<b>Typical Interventions: Nodes</b>	
Primary Node	Primary Nodes are centres of economic activity and provide employment, as well as range of social facilities to an extended hinterland. Continued economic growth to be ensured by ensuring maintenance, and upgrade, of critical infrastructure and, where required, urban regeneration studies. Primary nodes are inherently accessible locations and appropriate measures are needed to ensure convenient access to these areas.
Secondary Node	Important regional role, especially with regard to administration, transportation and social services. Generally offers a combination of mixed used development, i.e. educational and medium-lower income residential (urban & peri-urban living), health facilities, small-scale commercial facilities. Important to manage land use and development pressure to ensure sustainability and attraction of secondary nodes. Process to address informal settlement along periphery, i.e. NUSP, underway with support from National Human Settlements. Continual efforts to upgrade service provision to maintain attractiveness of nodes for more investment for future investment thereby ensuring the local economy becomes more sustainable.
Tertiary Node	It offers a combination of mixed used development such as educational, low income residential (urban & peri-urban living), health facilities, and small scale commercial facilities.
Rural Node	Rural settlements are accessible locations for community services and infrastructure. Specific planning and development interventions are required to identify community services that are to be encouraged at these nodes. To this end, Municipality has embarked on process of preparing Nodal Framework Plans.

Corridors provide access/connectivity to the various nodes or specific points of interest listed above. To this end, corridors as transport routes have to be maintained, and, interventions are needed to make them accessible as well. With the latter it is implied that routes, such as pedestrian routes, should be created and facilities provided, i.e. gathering points (public transport points) under cover. Importantly, the levels of interventions for corridors are informed by the function and status of the corridor.



Map 4: Nodes and Corridors



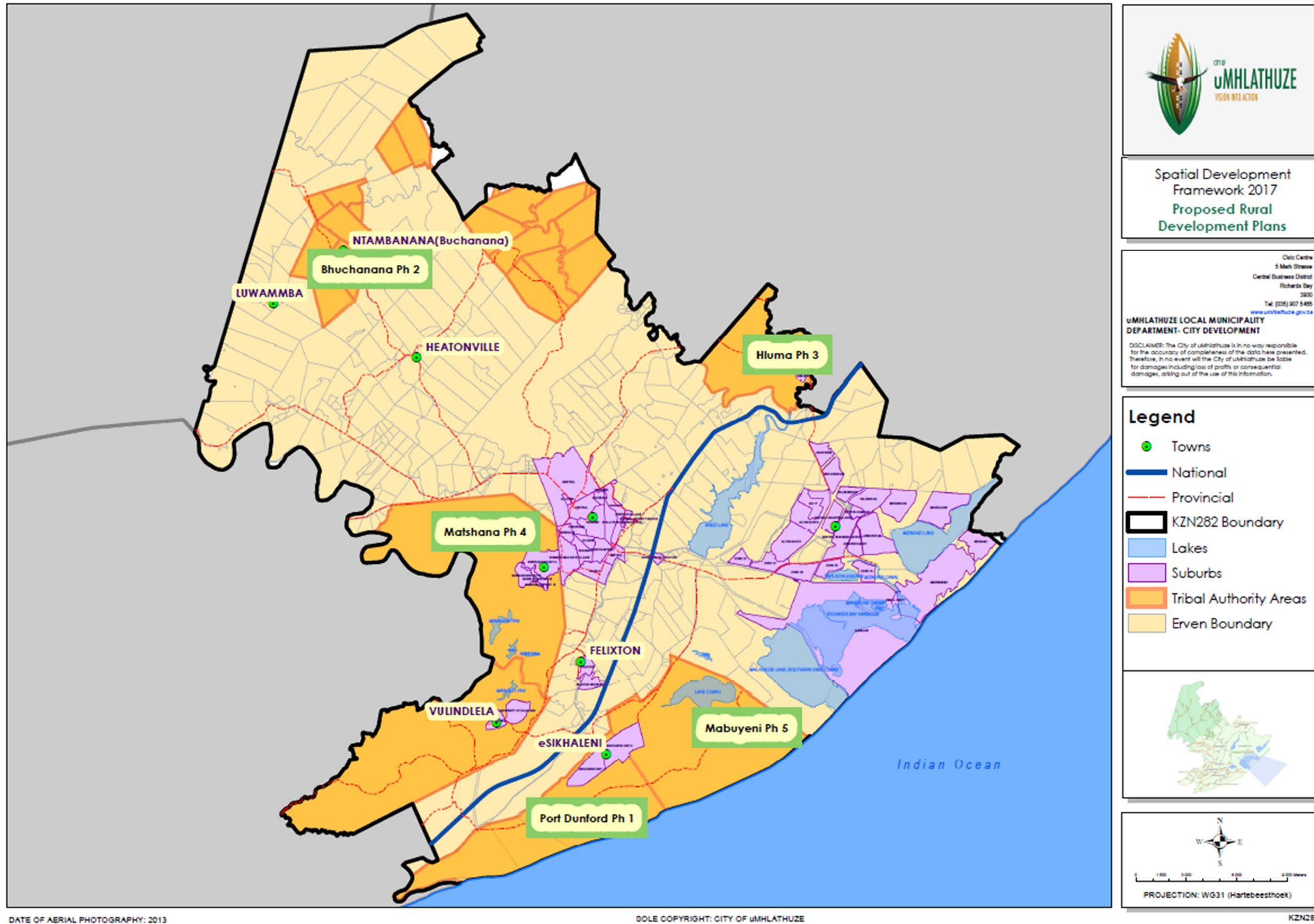
The Municipality is in the process of preparing Rural Development Framework Plans for 5 different rural nodes. This Rural Development Framework Plan project will be implemented in 5 different phases within 5 different financial years. The Table below illustrates the Project Implementation Phases and financial years:

**Table 23: Rural Settlement Plan Phases**

<b>No.</b>	<b>Project Name</b>	<b>Phase</b>	<b>Financial Year</b>
1	Port Dunford Rural Settlement Plan-Mkhwanazi Traditional Authority - Completed	1	2016/2017
2	Buchanana Rural Settlement Plan-Obuka Traditional Authority - Completed	2	2017/2018
3	Hluma Rural Settlement Plan-KwaBhejane Traditional Authority - Underway	3	2018/2019
4	Matshana Rural Settlement Plan-Madlebe Traditional Authority	4	2019/2020
5	Mabuyeni Rural Settlement Plan-Dube Traditional Authority	5	2020/2021



Map 5: Proposed Rural Settlements Plans



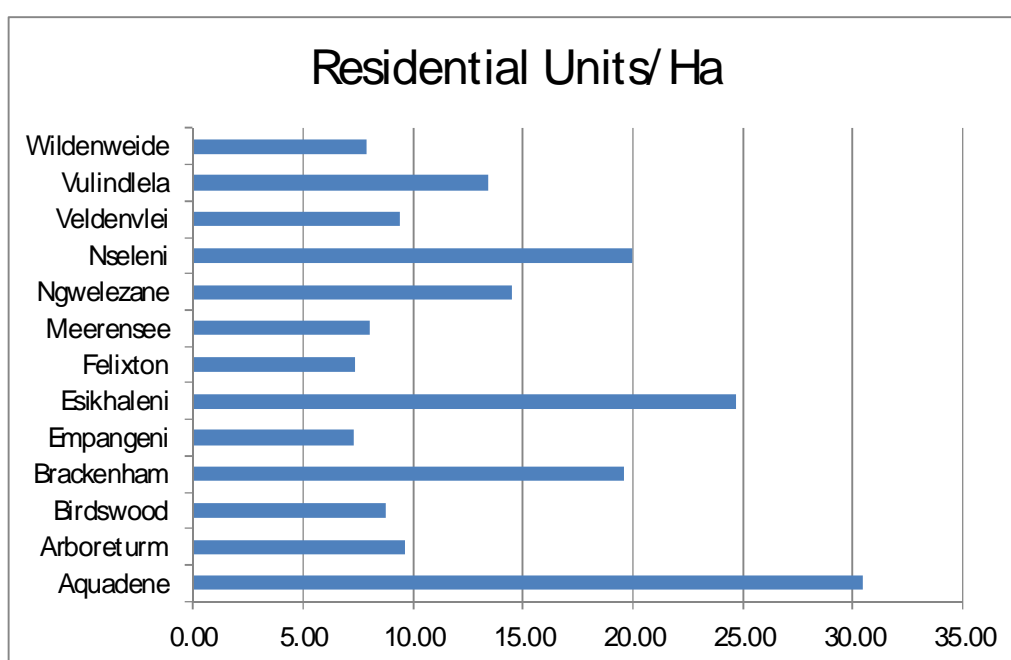
#### 4.4 URBAN LAND USE ANALYSIS

The formal urban areas of the municipality have been broken down into residential units or suburbs and an analysis of land uses has been undertaken for each of those.

In addition, a composite land use analysis has also been undertaken of the most prominent land uses in the whole municipal area, i.e. inclusive of the commercial and industrial related areas. The rationale for this analysis is to develop a benchmark for each of the main suburban areas relating to land use. The lack of commercial land uses in former R293 areas as opposed to other suburbs is an example of this.

As a first step, the comparative residential densities in units per hectare for the respective urban residential areas in the municipal area have been determined. The following is a graphic presentation of the outcome:

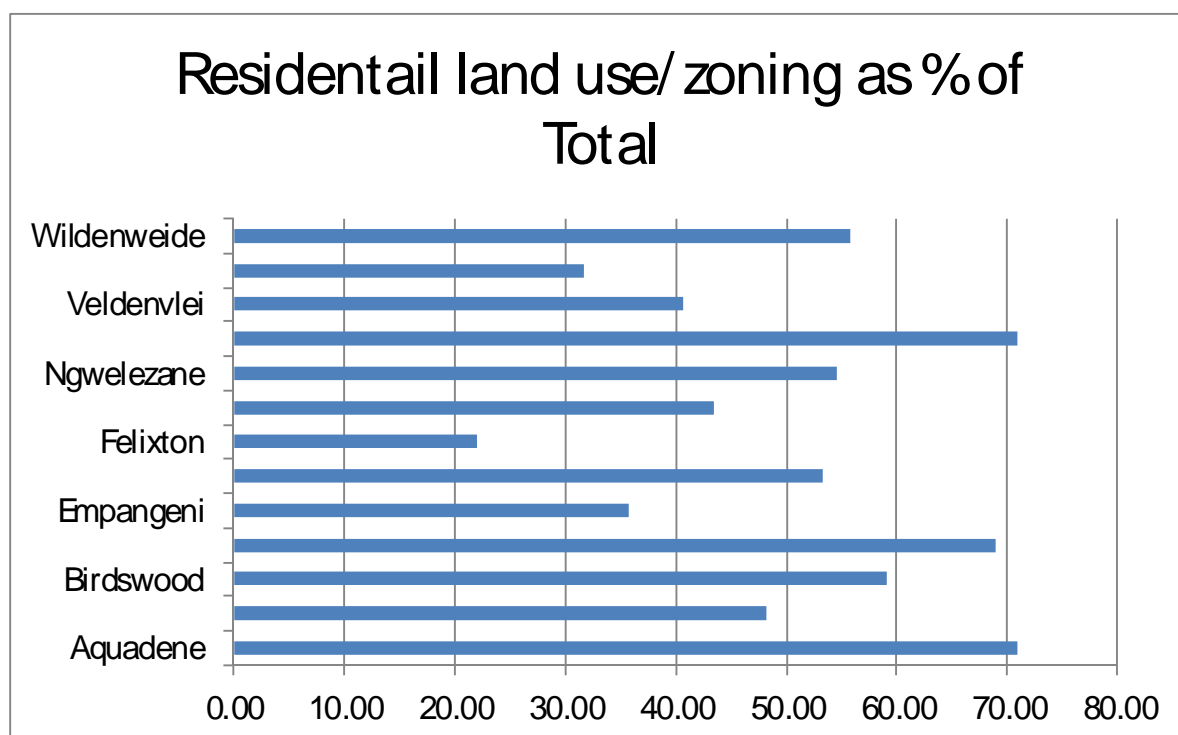
**Figure 10: Comparative Urban Residential Densities**



From the above table it is clear that Aquadene, Brackenhams, Esikhaleni and Nseleni have the highest residential densities in the municipal area.

The following figure indicates the comparative percentage (%) of total urban area that is used/zoned for residential purposes as an indication of the dormitory nature of the area.

**Table 24: Residential Land Use Types**



A further analysis of land use zonings/uses has been undertaken for the formal urban areas of the Municipality as per the following. The following information will guide future land use planning scenarios in the Municipality:

- o Currently about 7800 Ha of formal urban land is zoned.
- o The highest residential densities of single residential units are observed in Aquadene, Esikhaleni, Brackenhams and Nseleni.
- o The areas that have the highest percentage of land zoned for general residential purposes are Arboretum, Brackenhams, Empangeni, Esikhaleni, Meerensee, Veldenvlei and Wildenweide.
- o In the municipal area as a whole, special residential zoned land accounts for about 20% and Industrial for 21% of the total. Other zonings include land zoned for conservation, open spaces, municipal purposes and community type facilities or services. Commercial accounts for less than 2% of the zoned land.

## 4.5 SUMMARY OF KEY SPATIAL ISSUES

- i. uMhlathuze Municipality has an area of 123 325Ha.
- ii. 51% of the area is under the jurisdiction of the Ingonyama Trust Board.
- iii. Richards Bay and Empangeni are the most significant economic centres in the Local Municipality and in the District Municipality.
- iv. Esikhaleni has the potential to develop into a primary node if the local economy becomes more sustainable, specifically in respect of growth and employment opportunities.
- v. Aquadene, Brackenhams, Esikhaleni and Nseleni have the highest residential densities in the municipal area.
- vi. Existing bulk infrastructure capacities will have to be increased at all nodes to accommodate increased densities and expansion/development.
- vii. Vast peri-urban settlements have challenges and lack proper planning, limited basic services and is located in environmental high risk areas. The result is an undesirable impact on food security and prime grazing land. Insufficient land is available for future social and economic

- facilities due to random distribution of land - all resulting in the sustainability of settlements being compromised.
- viii. The area to the east of the Municipality is inundated with a system of wetlands and natural water features such as Lakes Cubhu, Mzingazi, Nsezi and Nhlabane. Major rivers include the Mhlathuze and Nsezi.
  - ix. The main access into the municipal area is via the N2 in a north south direction and in an east west direction the R34. Other significant roads in the area include the MR431 (that provides a northerly entry into Richards Bay from the N2) as well as the Old Main Road that straddles the N2 on its inland.
  - x. Railway lines are prevalent in the municipal area but do not provide a passenger service, only a commercial/industrial service is provided.
  - xi. The municipality has the benefit of about 45km of coastline of which about 80% is in its natural state.
  - xii. Linked to its coastal locality is the Richards Bay deep-water port that has been instrumental in the spatial development of the area in the past and will definitely impact on the areas spatial development. There is one airport and a couple of landing strips in the municipal area.

## 5. DEMOGRAPHIC AND SOCIO-ECONOMIC ANALYSIS

### 5.1 DEMOGRAPHIC INDICATORS

The population increase (as at 2016) in the King Cetshwayo District, broken down per municipality is indicated in the following table.

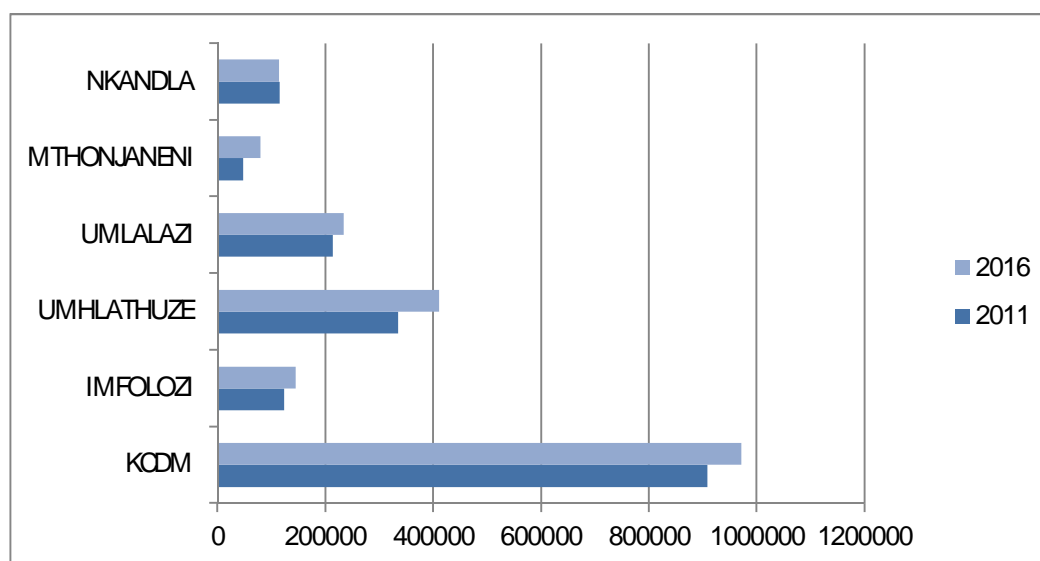
**Table 25: Population Numbers in KCDM**

	KCDM	IMFOLOZI	UMHLATHUZE	UMLALAZI	MTHONJANENI	NKANDLA
2011	907519	122889	334459	213601	47818	114416
2016	971135	144363	410465	233140	78883	114284
% Growth	7,01%	17,47%	22,73%	9,15%	64,97%	-0,12%

Source: Community Survey 2016

From the above it is noted that the uMhlathuze and Mthonjaneni Local Municipalities have experienced the largest population increase, mainly due to the dissemination and incorporation of the former Ntambanana Municipality into the two listed municipalities.

**Figure 11: Population Numbers in KCDM**

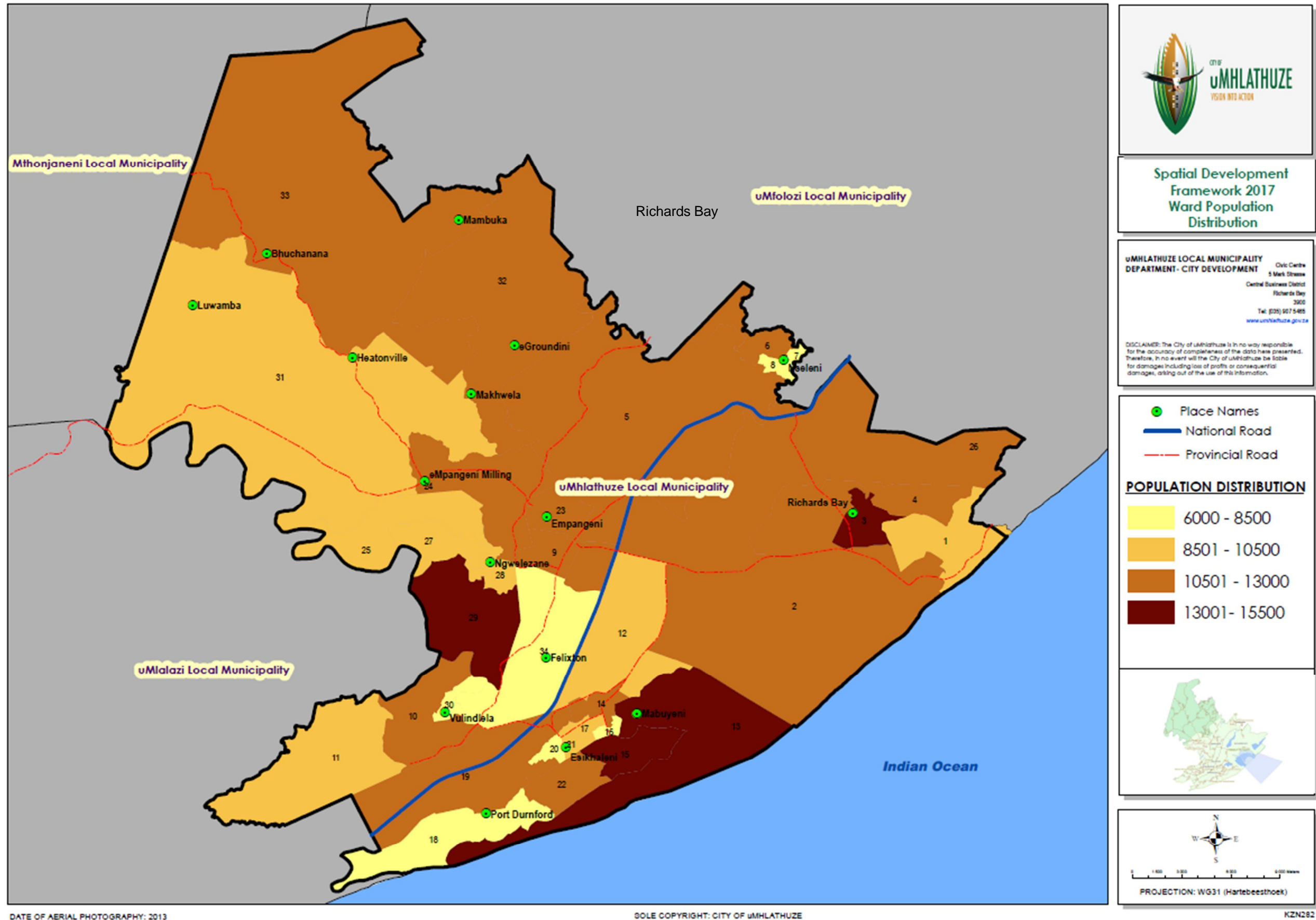


Source: Census 2011

The following map inset provides a visual representation of the population density distribution in the uMhlathuze Municipal area.



Map 6: Population Density



From the above inset the higher population densities in the formal urban, and surrounding areas, as well as Traditional Council areas can be observed. It is known that entrepreneurship development and sustainability efforts in former R293 towns have been hampered by a number of reasons including inequalities, level of education, and lack of adequate information. The uMhlathuze Municipality is actively engaging relevant role-players in the Township Economy to address these challenges.

In context of the above, it has to be borne in mind that a portion of the population increase is the result of an enlarged municipal area following the inclusion of 3 wards from the former Ntambanana post the 2016 Local Government Elections.

Population growth scenarios have been applied to the base figure from the 2016 Community Survey. Adequate data and research is not available at this time to apply an historic growth trend as the composition of the municipality, in terms of boundaries and wards, has changed post the Local Government Elections of 2016. The following base data has therefore been used:

- o A baseline population in the uMhlathuze Municipality of 410 465 people in 2016 as per the Community Survey
- o A calculated household size of 3.95 as derived from 2011 census data
- o A total number of 103 915 households in the municipal area derived from the above

Apart from indicating population growth scenarios, an indication is also provided on the estimated land required to accommodate the increase in households in the municipal area. In this regard, the following base data (assumptions) has been applied:

- o Household size of 3.95
- o Residential land utilization of 15 units/hectare or 25 units/hectare

The increase in the population from 1996 to 2011 has been just below 2% per annum in the uMhlathuze Municipality as indicated in the following table:

**Table 26: Population Growth Scenarios from 2016 to 2030**

	2 016	2 017	2 018	2 019	2 020	2 021	2 022	2 023	2 024	2 025	2 026	2 027	2 028	2 029	2 030
1.5% Increase	410 465	416 622	422 871	429 214	435 653	442 187	448 820	455 552	462 386	469 322	476 361	483 507	490 759	498 121	505 593
Households	103 915	105 474	107 056	108 662	110 292	111 946	113 625	115 330	117 060	118 816	120 598	122 407	124 243	126 107	127 998
2% Increase	410 465	418 674	427 048	435 589	444 301	453 187	462 250	471 495	480 925	490 544	500 355	510 362	520 569	530 980	541 600
Households	103 915	105 993	108 113	110 276	112 481	114 731	117 025	119 366	121 753	124 188	126 672	129 205	131 790	134 425	137 114
3% Increase	410 465	422 779	435 462	448 526	461 982	475 841	490 117	504 820	519 965	535 564	551 631	568 180	585 225	602 782	620 865
Households	103 915	107 033	110 244	113 551	116 957	120 466	124 080	127 803	131 637	135 586	139 653	143 843	148 158	152 603	157 181
4% Increase	410 465	426 884	443 959	461 717	480 186	499 393	519 369	540 144	561 750	584 220	607 588	631 892	657 168	683 454	710 793
Households	103 915	108 072	112 395	116 890	121 566	126 429	131 486	136 745	142 215	147 904	153 820	159 973	166 372	173 026	179 947
5% Increase	410 465	430 988	452 538	475 165	498 923	523 869	550 062	577 565	606 444	636 766	668 604	702 034	737 136	773 993	812 693
Households	103 915	109 111	114 566	120 295	126 310	132 625	139 256	146 219	153 530	161 207	169 267	177 730	186 617	195 948	205 745

From the above, the following is highlighted:

- o At a steady population increase of 1,5% per annum, the municipal population will surpass 500 000 people by 2030.
- o The municipality will reach a population of 500 000 before 2021 if a population growth rate of 5% takes place over the next few years.
- o At such a 5% per annum population growth rate the number of households in the municipality will double by 2030.



**Table 27: Corresponding Residential Land Requirements from 2016 to 2023**

	2 011	2 016	Increase	2 017	Increase	2 018	Increase	2 019	Increase	2 020	Increase	2 021	Increase	2 022	Increase	2 023
1.5% Increase	334 459	410 465	6 157	416 622	6 249	422 871	6 343	429 214	6 438	435 653	6 535	442 187	6 633	448 820	6 732	455 552
Households		103 915	1 559	105 474	1 582	107 056	1 606	108 662	1 630	110 292	1 654	111 946	1 679	113 625	1 704	115 330
Urban Residential Land @ 15 units/ha		6 928	104	7 032	105	7 137	107	7 244	109	7 353	110	7 463	112	7 575	114	7 689
Urban Residential Land @ 25 units/ha		4 157	62	4 219	63	4 282	64	4 346	65	4 412	66	4 478	67	4 545	68	4 613
2% Increase		410 465	8 209	418 674	8 373	427 048	8 541	435 589	8 712	444 301	8 886	453 187	9 064	462 250	9 245	471 495
Households		103 915	2 078	105 993	2 120	108 113	2 162	110 276	2 206	112 481	2 250	114 731	2 295	117 025	2 341	119 366
Urban Residential Land @ 15 units/ha		6 928	139	7 066	141	7 208	144	7 352	147	7 499	150	7 649	153	7 802	156	7 958
Urban Residential Land @ 25 units/ha		4 157	83	4 240	85	4 325	86	4 411	88	4 499	90	4 589	92	4 681	94	4 775
3% Increase		410 465	12 314	422 779	12 683	435 462	13 064	448 526	13 456	461 982	13 859	475 841	14 275	490 117	14 704	504 820
Households		103 915	3 117	107 033	3 211	110 244	3 307	113 551	3 407	116 957	3 509	120 466	3 614	124 080	3 722	127 803
Urban Residential Land @ 15 units/ha		6 928	208	7 136	214	7 350	220	7 570	227	7 797	234	8 031	241	8 272	248	8 520
Urban Residential Land @ 25 units/ha		4 157	125	4 281	128	4 410	132	4 542	136	4 678	140	4 819	145	4 963	149	5 112
4% Increase		410 465	16 419	426 884	17 075	443 959	17 758	461 717	18 469	480 186	19 207	499 393	19 976	519 369	20 775	540 144
Households		103 915	4 157	108 072	4 323	112 395	4 496	116 890	4 676	121 566	4 863	126 429	5 057	131 486	5 259	136 745
Urban Residential Land @ 15 units/ha		6 928	277	7 205	288	7 493	300	7 793	312	8 104	324	8 429	337	8 766	351	9 116
Urban Residential Land @ 25 units/ha		4 157	166	4 323	173	4 496	180	4 676	187	4 863	195	5 057	202	5 259	210	5 470
5% Increase		410 465	20 523	430 988	21 549	452 538	22 627	475 165	23 758	498 923	24 946	523 869	26 193	550 062	27 503	577 565
Households		103 915	5 196	109 111	5 456	114 566	5 728	120 295	6 015	126 310	6 315	132 625	6 631	139 256	6 963	146 219
Urban Residential Land @ 15 units/ha		6 928	346	7 274	364	7 638	382	8 020	401	8 421	421	8 842	442	9 284	464	9 748
Urban Residential Land @ 25 units/ha		4 157	208	4 364	218	4 583	229	4 812	241	5 052	253	5 305	265	5 570	279	5 849

From the above, the following is noted:

- o An estimated additional 1300 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 15 units per hectare.
- o An estimated additional 600 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 25 units per hectare

**Table 28: Corresponding Residential Land Requirements from 2023 to 2030**

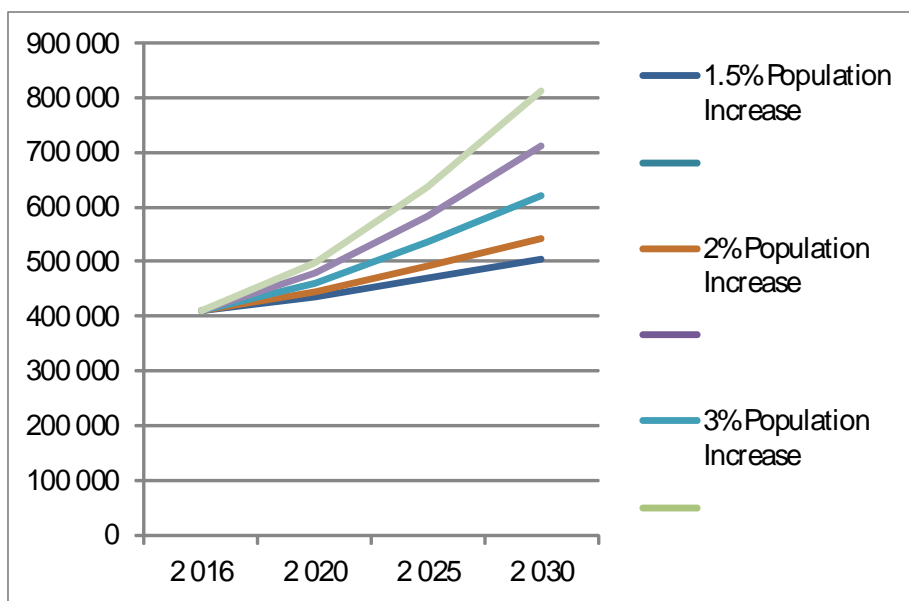
	2 023	Increase	2 024	Increase	2 025	Increase	2 026	Increase	2 027	Increase	2 028	Increase	2 029	Increase	2 030
1.5% Increase	455 552	6 833	462 386	6 936	469 322	7 040	476 361	7 145	483 507	7 253	490 759	7 361	498 121	7 472	505 593
Households	115 330	1 730	117 060	1 756	118 816	1 782	120 598	1 809	122 407	1 836	124 243	1 864	126 107	1 892	127 998
Urban Residential Land @ 15 units/ha	7 689	115	7 804	117	7 921	119	8 040	121	8 160	122	8 283	124	8 407	126	8 533
Urban Residential Land @ 25 units/ha	4 613	69	4 682	70	4 753	71	4 824	72	4 896	73	4 970	75	5 044	76	5 120
2% Increase	471 495	9 430	480 925	9 619	490 544	9 811	500 355	10 007	510 362	10 207	520 569	10 411	530 980	10 620	541 600
Households	119 366	2 387	121 753	2 435	124 188	2 484	126 672	2 533	129 205	2 584	131 790	2 636	134 425	2 689	137 114
Urban Residential Land @ 15 units/ha	7 958	159	8 117	162	8 279	166	8 445	169	8 614	172	8 786	176	8 962	179	9 141
Urban Residential Land @ 25 units/ha	4 775	95	4 870	97	4 968	99	5 067	101	5 168	103	5 272	105	5 377	108	5 485
3% Increase	504 820	15 145	519 965	15 599	535 564	16 067	551 631	16 549	568 180	17 045	585 225	17 557	602 782	18 083	620 865
Households	127 803	3 834	131 637	3 949	135 586	4 068	139 653	4 190	143 843	4 315	148 158	4 445	152 603	4 578	157 181
Urban Residential Land @ 15 units/ha	8 520	256	8 776	263	9 039	271	9 310	279	9 590	288	9 877	296	10 174	305	10 479
Urban Residential Land @ 25 units/ha	5 112	153	5 265	158	5 423	163	5 586	168	5 754	173	5 926	178	6 104	183	6 287
4% Increase	540 144	21 606	561 750	22 470	584 220	23 369	607 588	24 304	631 892	25 276	657 168	26 287	683 454	27 338	710 793
Households	136 745	5 470	142 215	5 689	147 904	5 916	153 820	6 153	159 973	6 399	166 372	6 655	173 026	6 921	179 947
Urban Residential Land @ 15 units/ha	9 116	365	9 481	379	9 860	394	10 255	410	10 665	427	11 091	444	11 535	461	11 996
Urban Residential Land @ 25 units/ha	5 470	219	5 689	228	5 916	237	6 153	246	6 399	256	6 655	266	6 921	277	7 198
5% Increase	577 565	28 878	606 444	30 322	636 766	31 838	668 604	33 430	702 034	35 102	737 136	36 857	773 993	38 700	812 693
Households	146 219	7 311	153 530	7 677	161 207	8 060	169 267	8 463	177 730	8 887	186 617	9 331	195 948	9 797	205 745
Urban Residential Land @ 15 units/ha	9 748	487	10 235	512	10 747	537	11 284	564	11 849	592	12 441	622	13 063	653	13 716
Urban Residential Land @ 25 units/ha	5 849	292	6 141	307	6 448	322	6 771	339	7 109	355	7 465	373	7 838	392	8 230

From the above, the following is noted:

- o An estimated additional 6800 ha of land may be needed from 2016 to 2030 to accommodate a 1,5% population increase at a development density of 15 units per hectare.
- o An estimated additional 4000 ha of land may be needed from 2016 to 2030 to accommodate a 1,5% population increase at a development density of 25 units per hectare

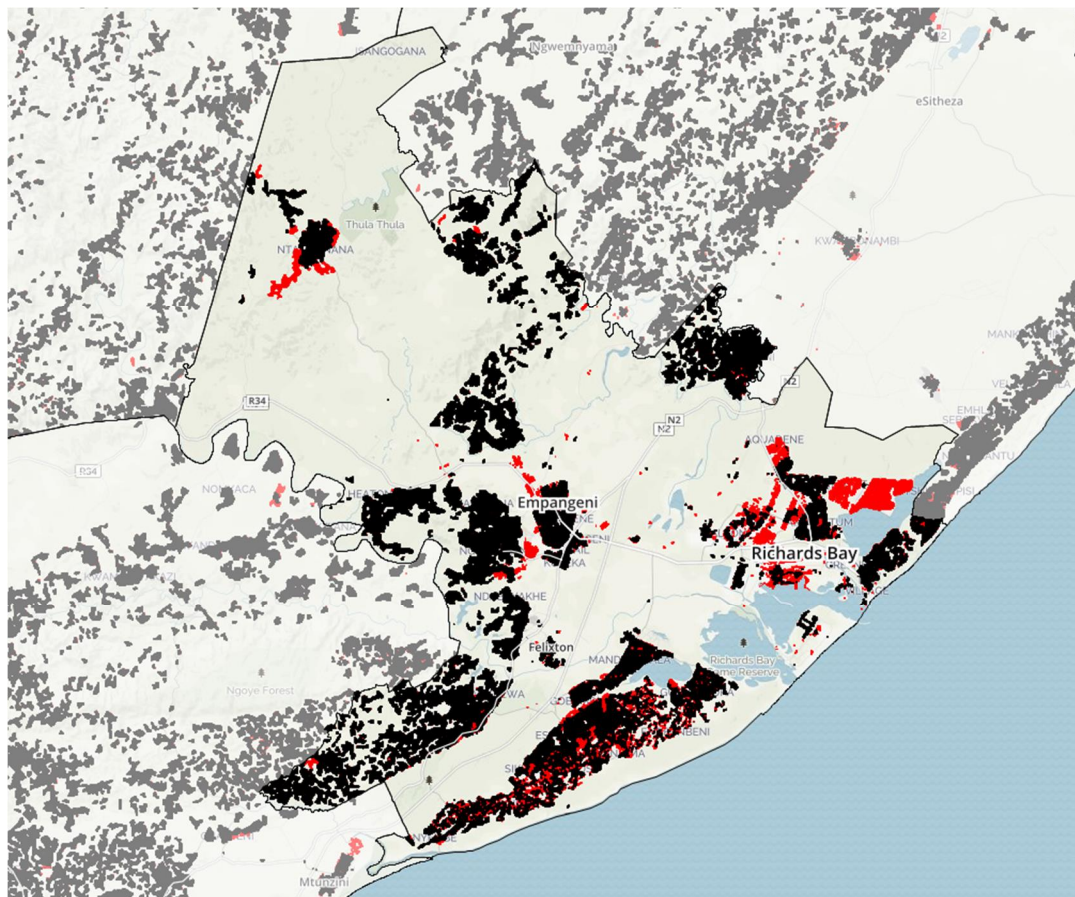
The following graph is a graphical illustration of the above tables indicating a 1.45%, 2%, 3%, and 5% annual population growth rate.

**Figure 12: Population Growth Projections to 2030**



The following inset provides an indication of the settlement footprint growth in uMhlathuze between 1990 and 2014.

**Figure 13: Settlement Footprint Growth 1990 to 2014**



The following tables provide more information on the urban and rural population split as well as percentage change over time for these areas.

**Table 29: Project Population Distribution**

Timeline	Urban	Rural	Tribal	Other	
2016	43.3%	16.7%	37.9%	2.1%	100.00%
2021	44.2%	15.7%	38.7%	1.4%	100.00%
2026	45.2%	14.7%	39.4%	0.7%	100.00%
2030	46.0%	13.9%	40.0%	0.1%	100.00%

**Table 30: Percentage Change Over Time**

	1990	2014	%Change
<b>Municipality</b>			
Area (ha)	123 578	123 578	
Population	222 746	388 280	74.3%
Density (people/ha)	1.8	3.1	
Urban Footprint (ha)	19 125	19 809	3.6%
<b>Urban Nodes</b>			
Area (ha)	15 811	15 811	
%of total municipal area	12.8%	12.8%	
Population	78 745	167 223	112.4%
Density	5.0	10.6	
Urban Footprint (ha)	4 067	5 207	28.0%
<b>Rural Nodes</b>			
Area (ha)	13 674	13 674	
%of total municipal area	11.1%	11.1%	
Population	52 335	66 717	27.5%
Density	3.8	4.9	
Urban Footprint (ha)	5 415	4 980	-8.0%
<b>Tribal Settlements</b>			
Area (ha)	21 021	21 021	
%of total municipal area	17.0%	17.0%	
Population	90 093	145 070	61.0%
Density	4.3	6.9	
Urban Footprint (ha)	9 370	9 348	-0.2%

## **5.2 SOCIO-ECONOMIC INDICATORS**

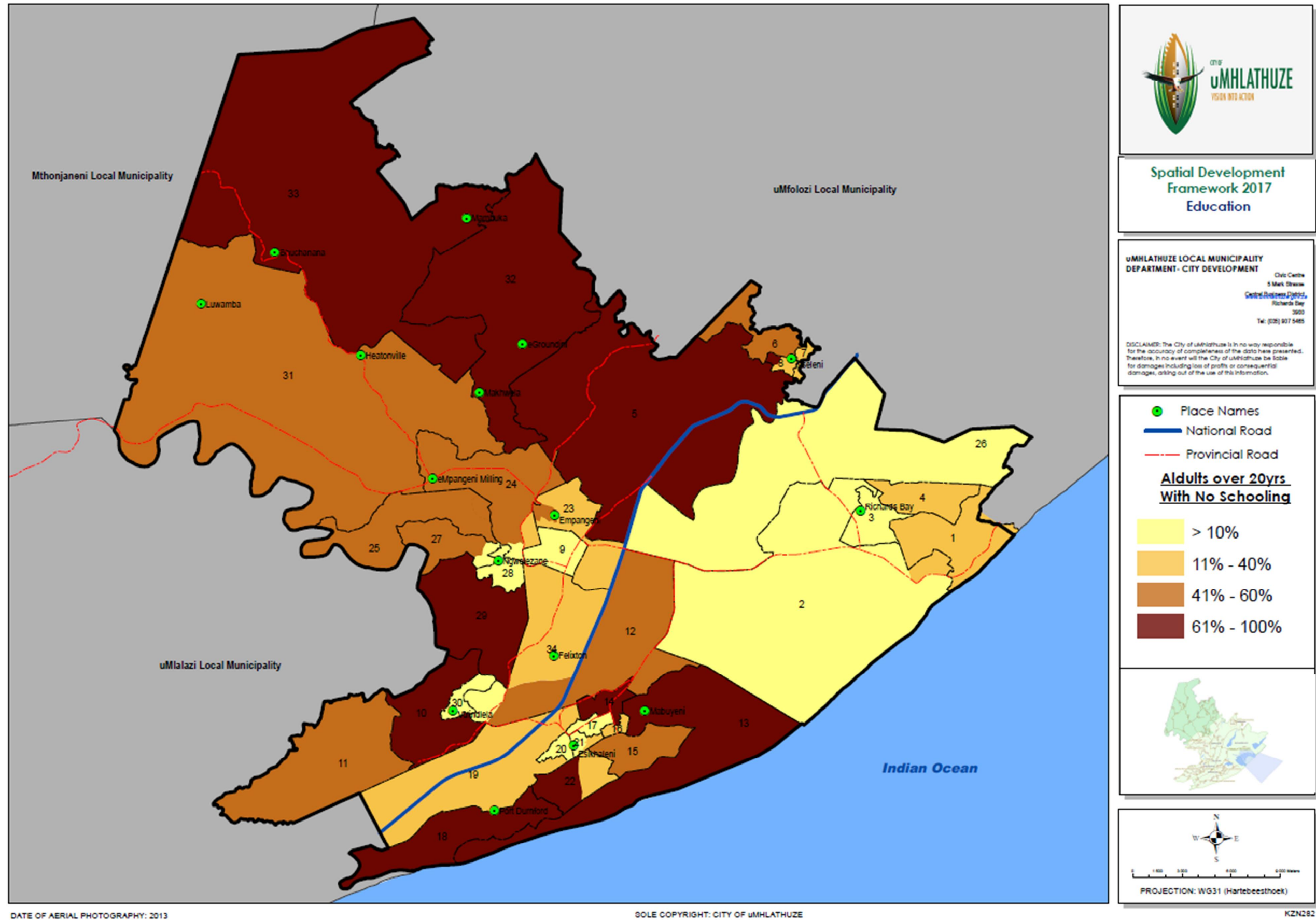
The following series of maps provides information pertaining to:

- o Adult education levels
- o Household income levels below R1600 per month
- o Unemployment levels
- o Households access to piped water
- o Household access to hygienic toilets

The following is summarised from the mapping provided:

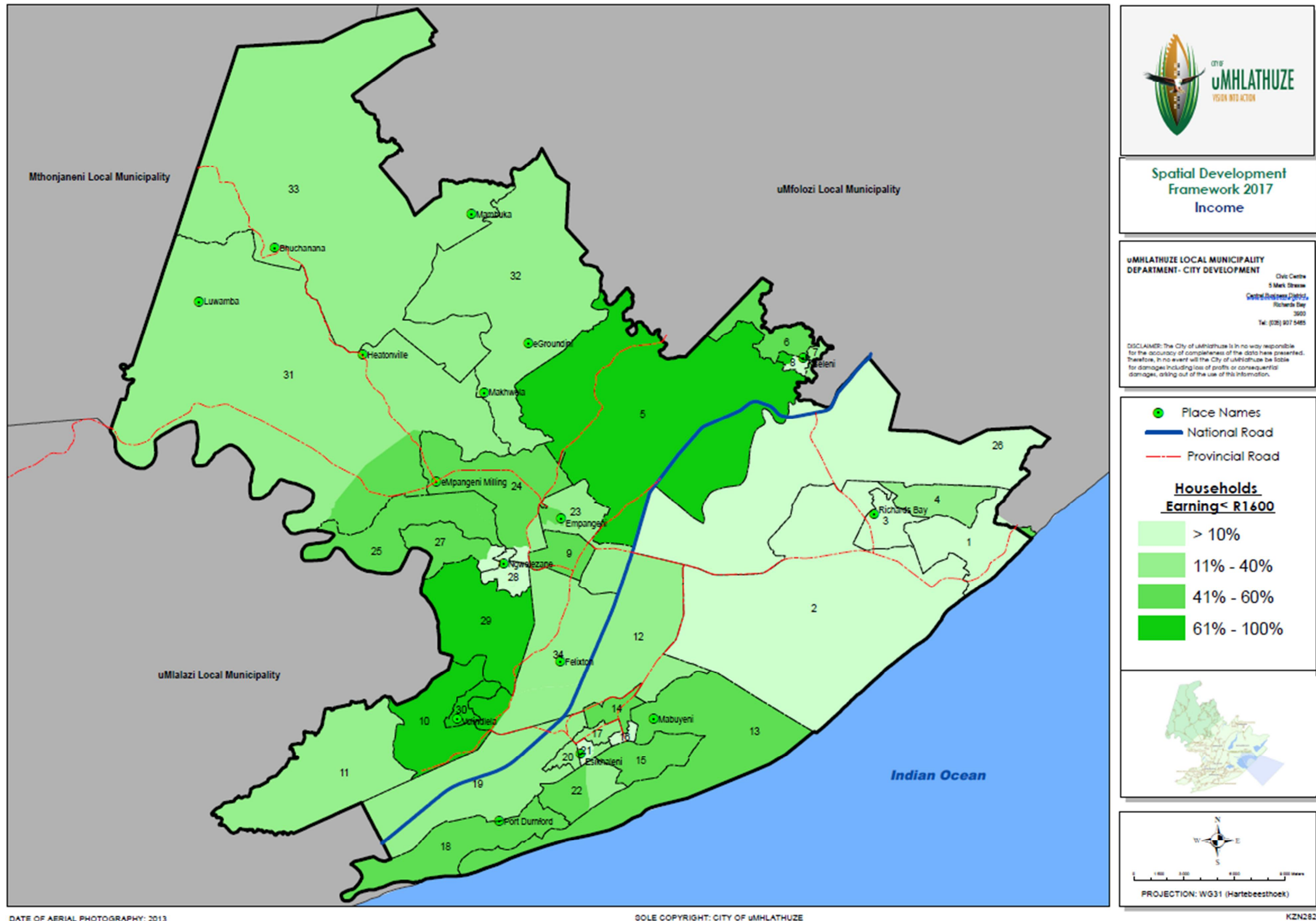
- o Regarding the comparative percentage of adults over the age of 20 years that do not have schooling, the incidence of this is highest (more than 61%) in Wards 5, 10, 13, 14, 18, 25, 32 and 33. This are largely coincides with Traditional Authority areas.
- o Regarding income levels as a percentage of households that earn less than R1600 per month it is noted that Wards 5, 10 and 29 are the most impoverished in this regard.
- o Regarding unemployment levels and the wards with the highest percentage of unemployed individuals are 4, 5, 12, 18, 24 and 28.

Map 7: Level of Education



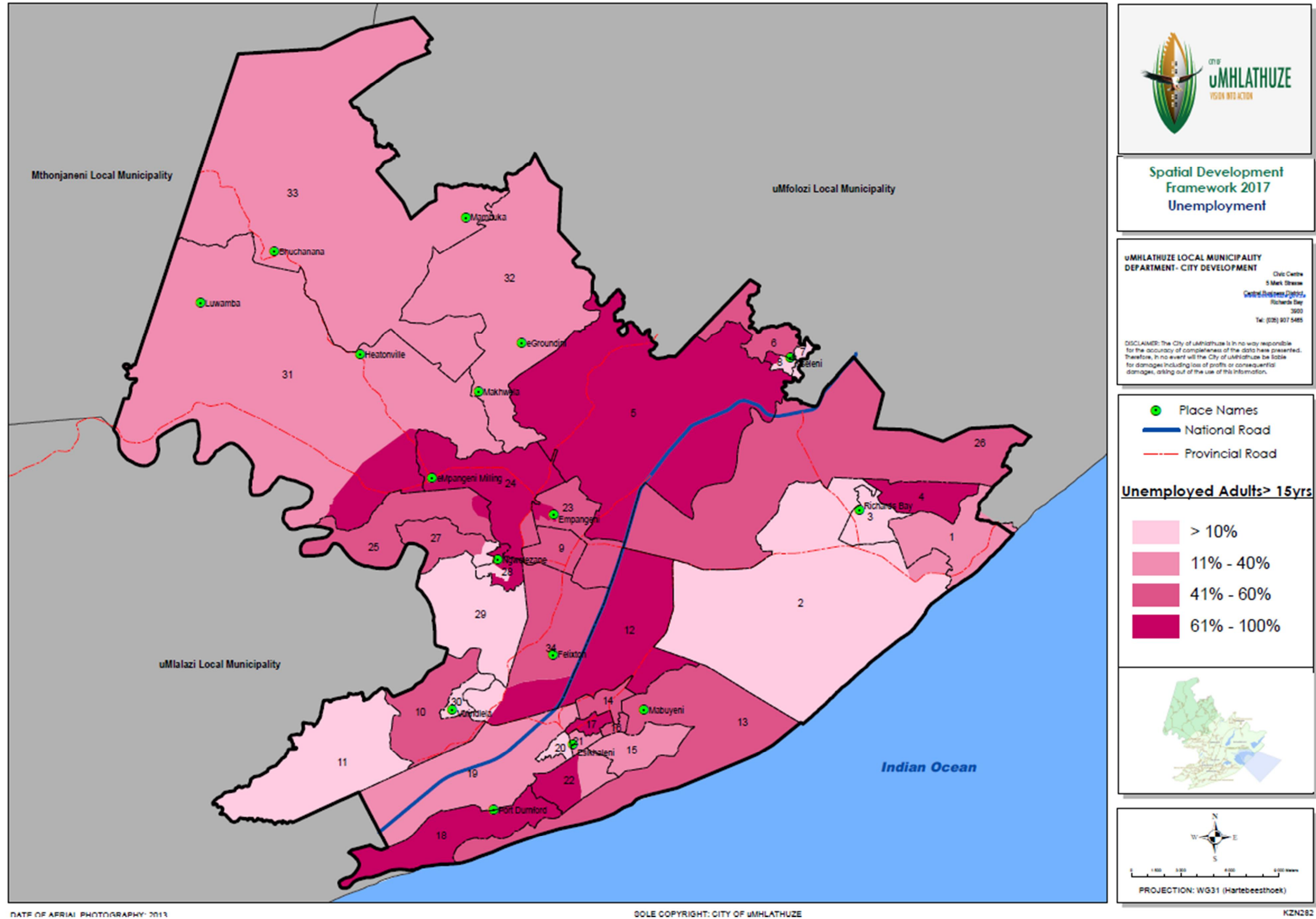


Map 8: Income Level below R1600 per month





Map 9: Unemployment Levels



### **5.3 SUMMARY OF KEY DEMOGRAPHIC AND SOCIO-ECONOMIC ISSUES**

- o In uMhlathuze, the highest population densities are found in the formal urban and surrounding areas, i.e. peri-urban areas.
- o According to the 2016 Community Survey, uMhlathuze had 410 465 people and 103 915 households at the time at an average households size of 3.95.
- o Population growth scenarios have been applied to the base figure from the 2016 Community Survey. Adequate data and research is not available at this time to apply an historic growth trend as the composition of the municipality, in terms of boundaries and wards, has changed post the Local Government Elections of 2016.
- o At a steady population increase of 1,5% per annum, the municipal population will surpass 500 000 people by 2030.
- o The municipality will reach a population of 500 000 before 2021 if a population growth rate of 5% takes place over the next few years. At such a 5% per annum population growth rate the number of households in the municipality will double by 2030.
- o An estimated additional 1300 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 15 units per hectare. An estimated additional 600 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 25 units per hectare.
- o An estimated additional 6800 ha of land may be needed from 2016 to 2030 to accommodate a 1,5% population increase at a development density of 15 units per hectare. An estimated additional 4000 ha of land may be needed from 2016 to 2030 to accommodate a 1,5% population increase at a development density of 25 units per hectare.
- o Regarding the comparative percentage of adults over the age of 20 years that do not have schooling, the incidence of this is highest (more than 61%) in Wards 5, 10, 13, 14, 18, 25, 32 and 33. This are largely coincides with Traditional Authority areas.
- o Regarding income levels as a percentage of households that earn less than R1600 per month it is noted that Wards 5, 10 and 29 are the most impoverished in this regard.
- o Regarding unemployment levels and the wards with the highest percentage of unemployed individuals are 4, 5, 12, 18, 24 and 28.
- o In the past, entrepreneurship development and sustainability efforts in townships have been hampered by a number of reasons including inequalities, level of education, and lack of adequate information.

## **6. ENVIRONMENTAL ANALYSIS**

### **6.1 GEOMORPHOLOGY**

The geomorphology of the landscape is generally described as a low-relief area that is bounded by a coastline and a high-relieve terrain on the landward side. Forming part of the Zululand Coastal Plain, the area indicates a history of erosion and sedimentation, and sea level fluctuations. Past geomorphologic processes have resulted in a unique landscape that supports complex hydrological systems, which in turn have resulted in high level of species diversity. The low level coastal floodplain is subject to natural flooding, climate change and sea level rise, and may increase flood risks over time. Landscape features are therefore important factors for decision-making and development planning.

### **6.2 GEOTECHNICAL CONDITIONS**

The uMhlathuze area is characterized by hydrological and geotechnical constraints. The following provided outlines the following categories:

- o Developable with minor constraints
- o Developable with more costly constraints
- o Developed
- o No Development recommended
- o No restriction on development

### **6.3 WATER RESOURCES**

The geology and geomorphology of the area controls the transport and storage of water and influences the hydraulic functions of the ground water system. Furthermore, the soils are very permeable and almost all the rainfall infiltrates into the groundwater, where it is temporarily stored before being discharged into the streams, lakes and wetlands. Consequently the streams are generally perennial and seldom stop flowing even in drought conditions. This also creates a large underground storage reservoir that consistently sustains the coastal lakes which form the main water supply resources for the municipality.

### **6.4 BIODIVERSITY**

The municipal area falls within the Maputaland-Pondoland-Albany Biodiversity hotspot which is recognized as the second richest floristic region in Africa: containing approximately 80 % of the of South Africa r significant flora and fauna species. The uMhlathuze Municipal Area supports a total of 174 Red Data species, which has been reported as amongst the highest in the country for an area of its size. This remarkable concentration of Red Data Species is one of the main reasons that the remaining percentage of its surface area under indigenous cover is considered largely irreplaceable by KZN Wildlife for meetings its conservation objectives in the province.

## 6.5 AIR QUALITY

In 2006, a study was initiated to assess air quality within the municipality and use this as one of the tools to inform their Spatial Development Framework and to ensure all environmental aspects were considered for current and future planning. This is in line with the City's vision and mission statements, which stress the improvement of quality of life through sustainable development.

In order to achieve the main objective of the study, the following steps were followed:

- o Determination of ambient air quality limits to be adopted as targets for areas within the City of uMhlathuze;
- o Determination of areas where local air quality limits are exceeded or are in danger of being exceeded;
- o Determination of buffer zones for existing industrial areas; and,
- o Identification of possible future industrial development areas that would not impact on the health and well-being of the residents in uMhlathuze or on the sensitive environment.

## 6.6 THE COAST

The uMhlathuze municipality is bordered by approximately 48 km of coastline, which presents a number of economic, conservation and recreational opportunities. The shoreline is characterized by sandy beaches, well established dune formations, estuarine environments, and hosts the country's largest deep water Port.

As is the case with most coastal municipalities in KwaZulu-Natal, the Municipality has encountered severe coastal erosion, which requires a management response that would prevent further loss of beaches, damage to property and infrastructure. Being predisposed to disruption of natural wave action because of the Port entrance, Alkantstrand beach at Richards Bay requires a reliable sand bypassing scheme. In the absence of sand budget on the Northern beaches, the municipality has to implement soft engineering techniques to mitigate against an eroding coastline. Any further development of the coast is furthermore required to take cognizance of the Coastal setback lines adopted by the municipality.

## 6.7 ENVIRONMENTAL ASSETS

**Economic Development:** Coastal Dunes contain heavy minerals that are sought after for mining, which is a key sector in the context of regional economic development and national plans.

**Tourism:** The beaches are significant tourism assets for the municipality, attracting an Annual Beach Festival a hosting beach events at Alkantstrand, and providing seasonal holiday destination and on-going recreational amenity. Other tourism assets worthy of preservation are the area forests, heritage sites, conservation areas around Mzingazi River, and the estuary found south of the Port. The proposed developments of the waterfront, has a strong tourism focus. Environmental assets and socio-economic indicators have therefore been considered in the conceptual plans for the Waterfront.

**Water Resources:** The coastal Lakes (Lake Mzingazi, Lake Cubhu and Lake Nseze) are important water resources for the municipality. The development of Richards Bay in particular, with its industrial development, has seen a significant increase in the abstraction rates of these lakes over the past 20 years.

**Ecological Features:** Water logged areas have been drained to accommodate development but has in the process, created important hydrological and ecological linkages. In certain instances, these artificial regimes, have resulted in the formation of valuable natural assets that support high levels of biodiversity and species endemism. An example of such is the Thulazihleka Pan system in Richards Bay.

## 6.8 THREATS TO ECOSYSTEM GOODS AND SERVICES

**Atmosphere:** Local ambient air quality conditions, particularly in industrial areas, indicate the inability for such areas to deal with any further emissions. This is because the quality of the air influences people -being and ecological integrity. It has been reported that there will be adverse risks to human health and to the environment, as well as exacerbating climate change, should current trends prevail.

**Hydrology and Water Resources:** The area is characterized by a complex hydrology and climate change would therefore have an impact on water resources in the area. At present, the availability and variability of water within the catchment is fully subscribed or allocated and there are predictions that the demand for water will grow. Against this backdrop, there are questions where future water will come from. Furthermore a decline in water quality in streams, lakes and rivers pose a risk for communities that extract water for subsistence, domestic or personal consumption

**Pollution:** Established developments, by virtue of specific land-uses, and growing population pressures, have resulted in intrinsic pressures on the environment. These manifest in the form of pollution which impact on the environment on various scales from localized illegal dumping to air and water pollution.

**Landscape:** Specific qualities of a landscape (natural vegetation, water bodies, landscaped parks etc.) provide aesthetically pleasing environments for the inhabitants of the area. The cumulative impact of development pressure and future planning scenarios however, pose a major threat to visual quality and a sense of place.

**Coastal Management:** Coastal Dune areas are sensitive to change and erosion remains a key concern along a coastline that is susceptible to the sea level rise.

**Biodiversity:** A large proportion of the Biodiversity Hotspot is being transformed and degraded by human activities, resulting in many vegetation types being vulnerable to further disturbances. These disturbances threaten species complexity and lead to imbalances within ecosystem.

## 6.9 ENVIRONMENTAL PRIORITIES AND OBJECTIVES

Having considered various sources of information, and given the current sphere of governance and accountability, the City of uMhlathuze has identified and prioritized the following as key to meeting its environmental targets and objectives:

- o To ensure legal compliance of environmental bylaws and legislative requirements by all (Council, Employees, Contractors)
- o To ensure sufficient suite of local environmental bylaws and effective enforcement thereof
- o Regulation of land use and enforcement of usage of land in terms of the land use management system
- o To minimize air pollution (prevention and reduction) in the City of uMhlathuze through efficient monitoring
- o To reduce overall water pollution within the municipality as a result of land use practices through monitoring hotspots and imposing stringent requirements during environmental authorisation and planning processes
- o To ensure management of all water resources in a sustainable manner by adhering to lake management plans and water services bylaws
- o To ensure the management of soil and land resources in a sustainable manner through environmental and land use planning
- o To ensure the protection of habitats and natural resources that would contribute to conservation targets of the province
- o To preserve heritage resources by preventing damage and loss through development planning processes and through the tourism sector
- o Complying with the provisions of the National Environmental Management: Integrated Coastal Management Act

- o Maintaining the biological diversity and productivity of coastal ecosystems through implementation of a coastal management programme and estuary management plans
- o To comply with the provisions of National Environmental Management: Waste Act
- o To improve energy efficiency of existing facilities and reducing demand and facilitating renewable energy/co-generation initiatives and projects
- o To be prepared and anticipate disaster management within the municipality
- o To ensure that the municipality maintains its environmental assets through environmental tools such as project specific EIA
- o To increase the knowledge and understanding, and prepare for vulnerability to environmental changes within the municipality

## 6.10 THE ENVIRONMENTAL SERVICES MANAGEMENT PLAN

The Municipality compiled an Environmental Services Management Plan (ESMP) as broader planning tool to guide spatial development. The ESMP outlines a number of goals for Environmental Services Management. Two critical goals are:

- o To define cohesive and functional spatial management units within the municipal area that needs to be managed in order to optimise the delivery of environment services.
- o To develop management plans for each management unit that identify the management activities required to secure environmental services supply.

The areas that provide environmental services to the City are spatially defined, and the following

- o **Nature Reserves (Level 1):** Included in the nature reserve zone are areas of high biodiversity and environmental significance that require a high level of legal protection. Included are unique habitats or areas that are considered important at International, National or Provincial level; estuaries, lakes, major wetlands, natural forests, coastal buffers and critically endangered habitats that are protected in terms of international or national legislation and/or treaties. It is recommended that these areas be proclaimed as nature reserves in terms of relevant legislation such as the National Environmental Management Protected Areas Act.
- o **Conservation Zone (Level 2):** Included in the conservation zone are areas of biodiversity / environmental significance, which are not viable for proclamation as nature reserves, but that require some form of legal protection. Included are unique or regionally important natural habitats; wetland and forest areas that are protected in terms of national legislation; and all areas that fall within the 1:100 year flood line. No transformation of the natural assets or the development of land for purposes other than conservation should be permitted in this zone. Sustainable use of renewable resources is permitted.
- o **Open Space Linkage Zone (Level 3):** Included in the open space linkage zone are areas that provide a natural buffer for Level 1 and 2 Zones, areas that provide a natural link between Level 1 and 2 Zones and areas that supply, or ensure the supply of, significant environmental services. Transformation of natural assets and the development of land in these zones should only be permitted under controlled conditions.
- o **Development Zone (Level 4):** Includes all areas that are not included in Level 1, 2 and 3 zones. Areas in this zone are either already developed or transformed and contain land and natural assets that are not critical for environmental service supply. However, it is recognised that the development of these zones can impact on environmental services supply. As such, they should be developed in a manner that supports, or at least does not adversely impact on, the sustainability of environmental service supply in Level 1, 2 and 3 zones.

## **6.11 THE ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF)**

An Environmental Management Framework was commissioned for the Richards Bay Port expansion area and the IDZ. The EMF was initiated by the Department of Agriculture and Environmental Affairs through the Danish Government funding agency (DANIDA), whilst the Municipality, Port and the IDZ were consulted extensively throughout the process. The study area was confined to the Port expansion and IDZ area owing to environmental sensitivity (mainly hydrological and ecological) versus enhancement of socio-economic incentives that such development would foster.

Key findings of the EMF are summarised hereunder:

### **6.11.1 Port Expansion**

- o The port and harbour area falls within environmental management zones of the EMF which both yield high levels of sensitivity in terms of biodiversity and geotechnical constraints.
- o The Transnet Due Diligence Investigation for the acquisition of land for the proposed port development framework has however identified areas that are potentially suitable for offsetting the above environmental risks. These areas would first have to be accepted either prior to, or in the process of the EIA, should Transnet be granted environmental authorization. It must be noted that in the absence of formal guidelines, there was reluctance on the part of the environmental authorities to pay attention to offset development in the EMF.
- o The EMF identified a number of existing activities that render further constraints to the proposed expansion of the port:
  - o The slimes dam from the mining operations at Hillendale (Exxarro) poses a risk to the hydrological and ecological integrity of the area. This is a concern in terms of this being a possible offset area should the Port proceed with its EIA application for the proposed Port expansion;
  - o The Foskor Gypsum Stack or slimes dam between Bayside and the Papyrus Swamp is a contaminated site with potential to severely constrain future port expansion;
  - o The location of Bayside Aluminium; and
  - o The potential conflict between conservation and port/harbour expansion that would require strict development control.

### **6.11.2 IDZ Development**

- o The EMF sensitivity analysis points to areas that are of great concern for the IDZ geotechnical constraints as well as the presence of Kwambonambi Grassland in certain areas, notably IDZ 1D and the IDZ 1C site.
- o There are also a number of significant environmental management issues that would require strict management measures in terms of air quality.

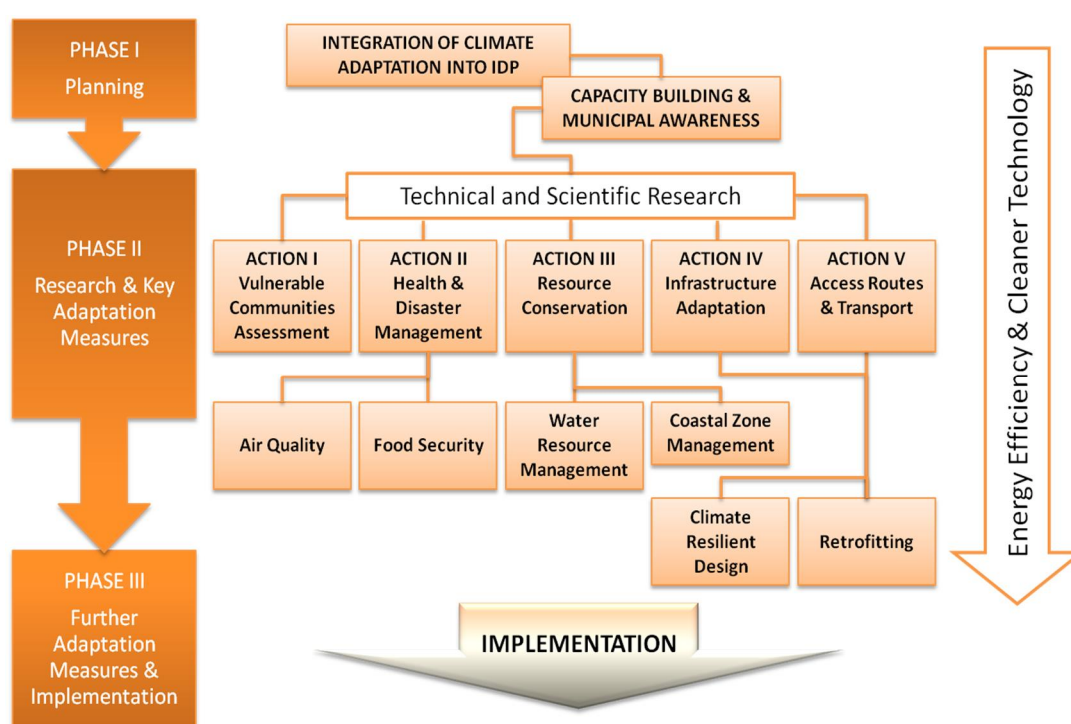


## 6.12 RESPONSE TO CLIMATE CHANGE

Regardless of the attempts to mitigate the impacts of climate change, it is widely accepted that many of the anticipated changes are destined to take place. The climate change strategy was therefore drafted on the basis of two fundamental principles, i.e. **mitigation** and **adaptation** through the implementation of the Climate Change Municipal Action Plan.

The Municipal Action plan adopts a phased approach to allow for a systematic and realistic response to potential climate impacts. Represented in the following figure, it is proposed that the plan be adopted over a 5-year period, coinciding with the rollout of the Municipality's Integrated Development Plan (IDP).

**Figure 14: Phased Approach to Municipal Action Plan for Climate Change**



During 2010, Council was proactive in adopting the Climate Change Strategy. Since 2010, the Climate Change Strategy was integrated into the Integrated Development Plan of the Municipality. The implementation and reporting thereof was admittedly not as vigorous as it should have been, with outputs coinciding with the various functions within the organization that deal with the Environment. These units include Waste Management, Air Quality Management, Biodiversity and Horticulture Management, Water Quality Management; Energy Management and Environmental Planning. Climate change related actions coincidentally dove-tailed with the operations of these units.

With a growing impetus to scale up on climate change responses for internal reporting requirements, and also reporting to organizations like the Global Compact of Mayors on Climate and Energy, it hence became imperative to improve certain institutional aspects on how the Municipality is currently dealing with Climate Change.

Two aspects needed addressing in this regard:

1. The Climate Change and Energy Strategies needed to be dissected into an implementable format; and
2. Roles and responsibilities for implementation and reporting needed to be clarified. The institutionalization of a dedicated working team is considered key to successfully implementing the Climate Change program. This could furthermore render a platform to collectively deal with broader environmental issues confronting the Municipality.

To this end, Council adopted a **Climate Change Action Plan in October 2018** that set out the following objectives:

1. An outline of the institutional framework for Climate Change linking global policy with national, provincial and local imperatives;
2. An overview of the uMhlathuze climate risk profile and associated vulnerability for the Municipality;
3. A presentation of the adopted Climate Change and Energy strategies as a basis for prioritising actions/projects for implementation of the Climate Change Action Plan;
4. Development of a Climate Change Action Plan which focuses on priority climate adaptation and mitigation interventions;
5. Strategic Partners and Global affiliations to scale up on climate actions; and
6. Institutional arrangements, which talks to the establishment of a formally constituted committee to implement and report on the climate change action plan.

#### **1. Institutional Framework for Climate Change**

Since 2010, when both strategies were formulated, there has been significant transformation in terms of policy and governance mechanisms on Climate Change. Whilst these have been mooted at a global scale, the institutional aspects responding to Climate Change have transcended to National; Province; and even a Local Government perspective. South Africa for example, has through the Conference of Parties (COP 23), signed the Paris agreement to reduce greenhouse gas emissions and ramp up adaptation efforts. These Nationally Determined Commitments in turn, has manifested itself in policies like the National Resource Plan which address issues of diversifying the country energy generation. Furthermore, the National Energy Regulator and Eskom have accordingly responded by developing policies to scale up on renewable energy development by 30% by 2030. It must be highlighted that South Africa is one of the worst performing emitters of Greenhouse Gases, ranking 14<sup>th</sup> globally.

Climate change is also a critical theme of United Nations Sustainable Development Goals and emerging policy frameworks; that stretch across from the implementation of the National Development Plan to the Integrated Urban Development Framework. It is thus imperative that such linkages be emphasized even with the Climate Change Action Plan.

#### **2. An overview of uMhlathuze climate risk profile**

uMhlathuze has not been exempt from the impacts of climate change. Specific impacts that stand out in recent years relate to:

- Prolonged drought from 2013-2017 which led to Level 4 water restrictions and in fact, our water situation still regarded as a scarce resource. Drought and supplies running dry render tremendous risk in the uMhlathuze context for Industry, communities, livestock and agriculture that are dependent on water;

- Intense sea swells and increased coastal storm events that have resulted in severe beach erosion, particularly on the northern shores of Richards Bay. The erosion has led to loss of coastal property; placing current and future coastal development at risk of slumping into the sea;
- Increased flood events, which has seen stormwater systems being tested in the urban centres. In the unplanned settlements, vulnerable communities living in flood prone areas are at risk of losing property and lives;
- Summer temperatures in particular will soar to extents where there will be higher dependency on cooling and air-conditioning, thus increasing energy costs. Alternatively productivity is lowered through unfavourable working conditions; and
- Increased wind activity, will be particularly problematic for uMhlathuze that is noted for poor air quality from industry stockpiles of commodities/materials.

### **3. The Climate Change and Energy Strategies**

The Climate Change strategy comprehensively addresses Council vulnerability profile and anticipated climate change scenarios. There are inextricable linkages made to the Energy Strategy, which are themes that will follow through in the Climate Change Action Plan. Importantly it must be highlighted that the adopted Energy Sector Plan and Strategy set targets of reducing electricity consumption by 20% by 2020. It is opportune to review such targets, factoring realities of revenue and readiness to diversify our energy mix.

### **4. The Climate Change Action Plan**

The Climate Change Action Plan is essentially the implementing arm of the Climate Change and Energy Strategies. The objective is to prioritize selected interventions in accordance with the following sectors:

- Coastal Management
- Water Resources Management
- Stormwater Management
- Open Space and Biodiversity Management
- Waste Management
- Energy Management
- Integrated Transport Planning
- Spatial Planning, Land Use and Designing for sustainability
- Human Settlement Planning
- Disaster Management Responses
- Air Quality Management

### **5. Global Affiliations and Strategic Partners**

Climate Change initiatives renders significant opportunities to engage with the global community. In fact, this is beneficial from not just a profiling perspective, but also in seeking climate finance and support from various international affiliations. It was therefore important to streamline some of these initiatives into the Climate Change Action Plan by way of outlining some of the cross-cutting programmes and partnerships that the municipality has already embarked on. These include

- The Low Emissions Development Strategy, through strategic partners ICLEI
- The uMhlathuze Water Stewardship Partnership climate interventions at uMzingwenya
- The Global Compact of Mayors on Climate Change and Energy

## 6. Institutional arrangements for implementing climate change actions

In the course of preparing the Climate Change Action Plan, it became quite apparent that the cross-cutting nature of the plan requires a formally constituted team to report on the various interventions. The City of uMhlathuze has, in other instances such the Greenest Municipality Competition, constituted a reference group dealing with environmental functions. It was therefore seen as appropriate to utilize the same committee referred to as the name climate change strategy and implementation plan, and report accordingly for purposes of good governance.

The Climate Change Action Plan projects a 5 year snapshot, and will remain a live document.

**Figure 15: Composition of the uMhlathuze Green Team**



### 6.13 COASTAL DEVELOPMENT SETBACK LINES

A service provider was commissioned to determine an updated development setback line for the beaches of Richards Bay, north of the existing harbour entrance, taking into account this long-term erosion trend. This line is to provide for a 100-year setback/buffer, which would provide the Municipality and proposed developers with long-term certainty regarding property safety. This could be termed an extreme setback, as development setback lines are generally determined for a 50-year period.

A numerical shoreline model was calibrated with 17 years of beach survey and bypassing data to an average accuracy of 11 m. It was found that the rate of beach nourishment, from sand bypassing at the port, plays a determining role in the location of the 100-year setback. Three scenarios of future sand bypassing were evaluated:

No bypassing from 2006 onwards Scenario 1 as the Worst Case Scenario:

*It was found that the magnitude of erosion predicted for Scenario 1 invalidated basic assumptions made in the study. The 100-year setback line could therefore not be determined for this scenario, and a 50-year setback line is presented instead. This lies up to 350 m landward of the present shoreline.*

**Continued bypassing at the average annual rate of the past 17 years (607 200 m<sup>3</sup>/yr) Scenario 2 as the Most Realistic Scenario:**

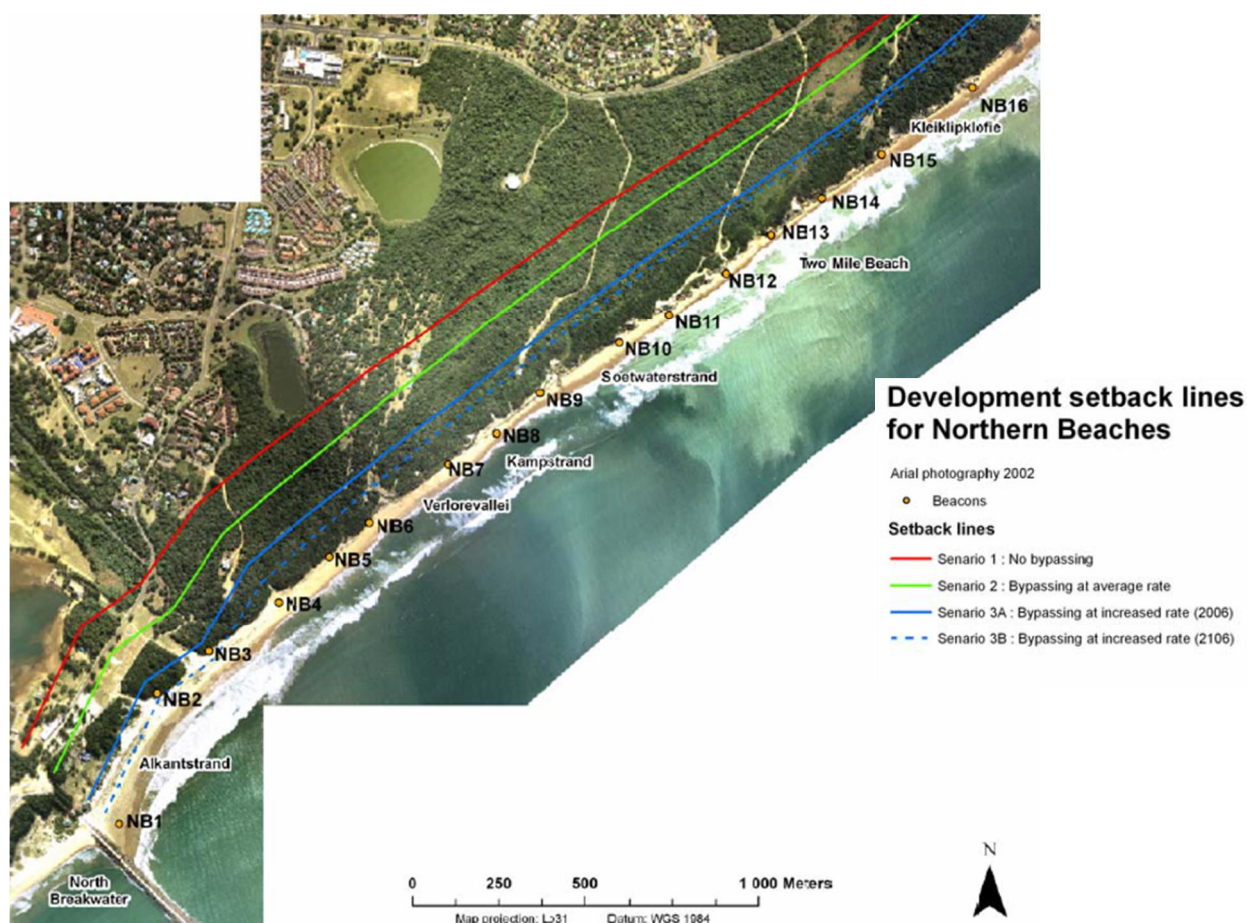
The setback line for Scenario 2, which is possibly the most realistic scenario, lies up to 250 m landward of the present shoreline. Some existing developments are located seaward of it, which could therefore be impacted in future due to beach erosion.

**Bypassing at an increased rate (950 000 m<sup>3</sup>/yr) Scenario 3 as the Best Case Scenario:**

Two setback lines are provided for Scenario 3, as the accretion of the beach that is predicted to occur during the course of the scenario effectively means that the line would shift seawards over time. Implementation of this setback line would require that the National Ports Authority agree to the increased sand bypassing and is subject to finding suitable material for bypassing.

The next most critical factor in determining the location of the setback line was found to be the occurrence of slip failures/dune slumps of the high dunes. An analysis of aerial photographs indicated that such slips could result in rapid coastal retreat in the order of 110 m. It is recommended that the geotechnical stability of the dunes be investigated in detail, if the retreat distances used in this study are to be refined. The following figures provide the setback line for the three scenarios explained above.

**Figure 16: Development Setback Lines along Northern Beaches**





**Figure 17: Coastal Erosion and Installed Defenses**



## 6.14 THE IMPACT OF BIODIVERSITY ON SPATIAL DEVELOPMENT

Please note that this impact has only been determined for the pre-2016 LGE portion of the municipality, and, as such, has to be expanded upon to include the whole post-2016 LGE municipal area.

This section attempts to assess the state and condition of biodiversity assets within the jurisdiction of the uMhlathuze Municipality and implications thereof in terms of future development potential. The Biodiversity assets are mapped out and represented by, amongst others, the vegetation types within catchments.

The assessment is based on the functionality of geographically defined units rather than on individual vegetation types because the former implicitly includes the importance of spatial patterning and inter-connectedness. Functionality is defined here as the perceived ability of a landscape unit to maintain biodiversity. This must not be confused with the commonly used notion of the role of diversity in ecosystem functioning (supply of goods and services), which is addressed in the Environmental Services Management Plan of the municipality (KZ 282).

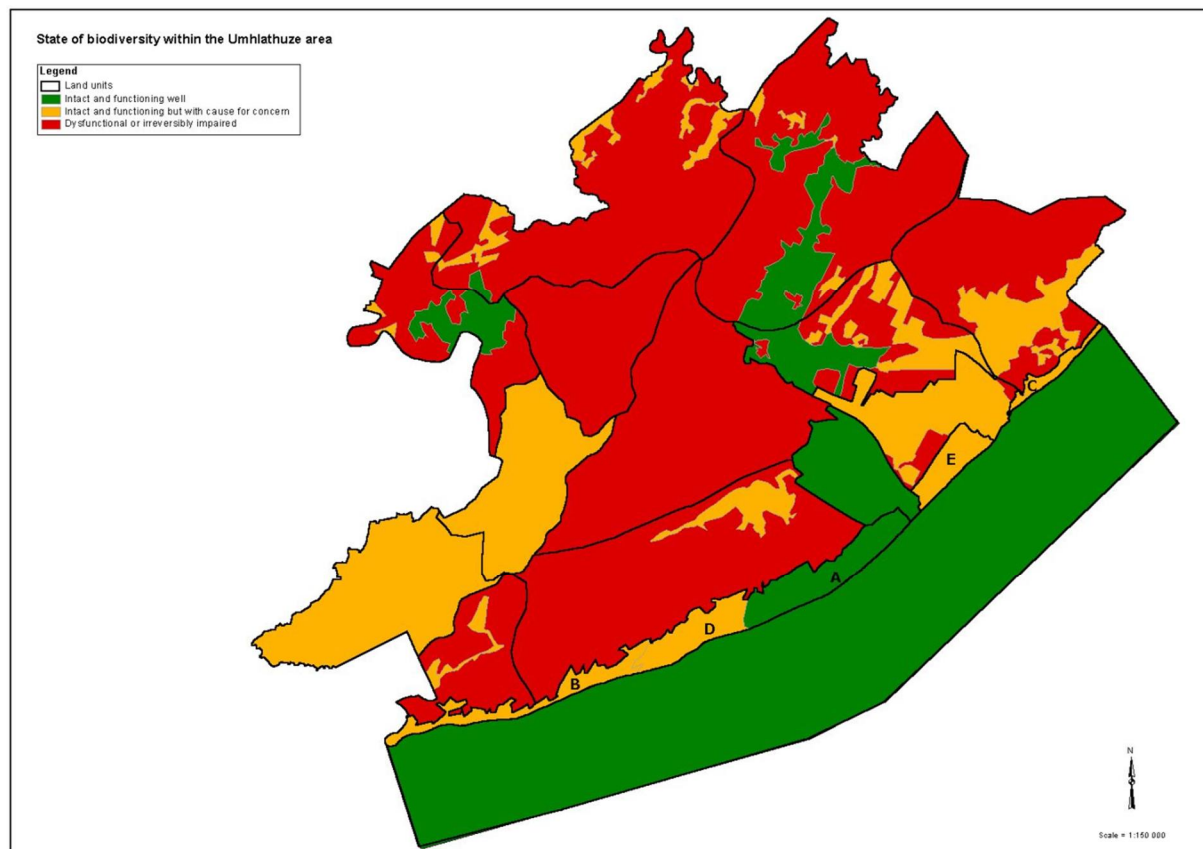
Other biodiversity assets of significance include the following:

- o Estuary (landscape 6) and Lake Cubhu
- o Nseleni valley (landscape 10), with fragmented extension into landscape 12 (upstream)
- o An east-west corridor within Richards Bay (landscape 9)
- o Grasslands, savanna and thicket of the upper
- o Portion of the Mhlathuze catchment within KZ282 (landscape 13)
- o Lake Mzingazi and environs (landscape 8)

The functionality assessment of biodiversity units is graphically summarized in the following figure, in which the ranks are simplified into a three colour code:

- o Green for intact and functioning well
- o Orange for intact and functioning but with cause for concern (e.g. Fragmentation is continuing apace or pronounced pollution inputs)
- o Red for dysfunctional or irreversibly impaired

**Map 10: State of Biodiversity Based on Functional Units**



The ranking of each landscape unit is provided in the following table, whilst the scale for ranking of functionality is as follows:

- |   |                        |
|---|------------------------|
| 1 | High functionality     |
| 2 | Moderate functionality |
| 3 | Low functionality      |
| 4 | Dysfunctional          |
| 5 | Irreversibly impaired  |



**Table 31: The Functionality of Landscape Units in Respect of Maintaining Biodiversity**

Landscape unit	Size	Condition	Landscape context	Functionality Rank
<b>1</b> Dune Forest (compartment 1 - South estuary)	Large and intact; stable	Good; edge: area low; little fragmentation. Advancing coastline has resulted in slumping in places. Will mostly be removed by dune mining.	Key north-south linkage along coast for dune forest biota (national importance). Well connected to interior through estuary and rivers. Key winter refuge for Afromontane (Ngoye) birds (national importance). Rainfall receiver (flood attenuation), hence key water source for Lake Cubhu and estuary (sanctuary).	1
<b>1</b> Dune Forest (compartment 2 - North Umlalazi)	Large but shrinking;	Moderate; high edge: area ratio; increasingly dissected by cultivation. Further threat of fragmentation from an advancing coastline that has resulted in slumping in places. Will mostly be removed by dune mining.	Key north-south linkage along coast for dune forest biota (national importance), southern peninsula especially important as a stepping stone. Integral component of Umlalazi Nature Reserve. Connected to interior through Umlalazi river. Key winter refuge for Afromontane (Ngoye) birds (national importance), with which it is connected via inland forest fragments (landscape 3). Rainfall receiver (flood attenuation), hence key water source for Umlalazi estuary (international importance because it never closes) and for Lake Cubhu and estuary (sanctuary). Umlalazi river and estuary is a regional fish nursery.	2
<b>1</b> Dune Forest (compartment 3 - North harbour mouth)	Moderate size, apparently stable	Moderate; insular with residential to west and mined area to north. Advancing coastline has resulted in slumping in places.	Key north-south linkage along coast for dune forest biota (nationally important). Main source of plant propagules and animal populations for recolonization of mined areas to the north. Connected to interior through corridors to Lake Mzingazi and beyond. Key winter refuge for Afromontane (Ngoye) birds (national importance). Rainfall receiver (flood attenuation). Key water source for Lake Mzingazi (national importance).	2

Landscape unit	Size	Condition	Landscape context	Functionality Rank
<b>1</b> Disturbed Dune Forest (compartment 5-between 1 and 2)	Small, increasing	Poor - mainly current or recently logged plantation. Secondary regrowth infested with alien plants. Western boundary dissected by cultivation. Further threat of fragmentation from an advancing coastline that has resulted in slumping in places.	Important for linkage between forest north and south of estuary, secondary growth functioning in a manner similar to an ecotone. Rainfall receiver (flood attenuation). Key water source for Lake Cubhu and estuary (sanctuary).	4
<b>1</b> Relict Dune Vegetation and Stabilized sands (compartment 4 - between estuary and harbour mouths)	Small, disappearing	Poor - much derived from redeposited area following harbour construction. Predominantly alien trees and scrub.	Important north-south linkage across the harbour and estuary, which is otherwise a big gap. Appropriate and important area for intervention. Rainfall receiver (flood attenuation).	4

Landscape unit	Size	Condition	Landscape context	Functionality Rank
<b>2</b> Lake Cubhu and catchment	Catchment transformed by cultivation and urbanisation	highly by and Remaining biodiversity assets: Coastal Forest patches within plantations; drainage lines fragmented by cultivation; mostly untransformable wetlands.	Lake Cubhu is a key natural feature of national importance, still intact but contained system). It is also a key water source because of its size. Lake Cubhu still clearly linked to the estuary (sanctuary), which is essential for crustacean migrations. Integrity of the connecting is essential. Swamps protecting key inlet points are critical buffers for maintaining water quality. Water quality threatened by organic inputs from Esikhawheni (organic soups in reedbeds). Drainage lines support very poor aquatic diversity. Poor water quality apparently reflected by water-borne diseases. Dune mining could threaten the hydrological dynamics maintaining Lake Cubhu. Forest patches are dysfunctional because of a high perimeter-to-edge ratio and heavy infestation with alien plants. Forest patches serve a key stepping-stone role for wintering birds from Ngoye Forest en route to the dune cordon. Drainage systems are becoming dysfunctional because of the extent of fragmentation by cultivation.	4
<b>3</b> Umlalazi catchment on Quaternary sands	Catchment transformed by commercial and communal agriculture	Remaining biodiversity assets: Coastal Forest patches within plantations along drainage lines whose condition is declining.	An important water source for the internationally important Umlalazi estuary but declining in delivery of water because of plantation forestry. Forest patches are moderately functional (better perimeter-to-edge ratio than those in landscape 2), but are infested with alien plants. Forest patches serve a key stepping-stone role for wintering birds from Ngoye Forest en route to the dune cordon.	4

Landscape unit	Size	Condition	Landscape context	Functionality Rank
<b>4</b> Umlalazi catchment within hills	Catchment transformed by mainly communal agriculture	Remaining biodiversity assets: drainage lines and associated fragments too steep for cultivation are all that remain.	Catchment still hydrologically sound, producing water for Mtunzini and a key source for the Umlalazi river and estuary. A degree of inter-connectivity remains for remnant biodiversity because of drainage lines, but overall it is too fragmented to function very effectively. Drainage lines offer a limited biodiversity corridor between Ngoye forest and the Umlalazi river.	5
<b>5</b> uMhlathuze river on Quaternary sands	Almost completely transformed, including drainage lines	Terrestrial systems and drainage lines have been irreversibly impaired. Umhlathuze river in poor condition for aquatic biota because of low flow resulting from abstraction and impoundments (eg Goudetrou Dam, Felixton) and a weir. Remnant floodplain vegetation and some swamp forest occurs along the river. Much of floodplain has been transformed to sugarcane.	Landscape unit constitutes a significant biodiversity barrier between the coast and hinterland. Umhlathuze river offers a dysfunctional linkage for aquatic and floodplain biota. Umhlathuze river is a key hydrological and sedimentation dynamics. Lake Nsezi was originally formed by backfill from flooding of the Umhlathuze.	5

Landscape unit	Size	Condition	Landscape context	Functionality Rank
<b>6</b> Estuary (sanctuary) complex	Large connected components of mangrove forest, salt marsh, mudflats and <i>Phragmites australis</i> marsh around the periphery of the open water	Good condition but experiencing increasing human impact - logging of mangrove trees and fish poaching.	Important estuary because of size, only estuaries of comparable size in SA are Knysna, Kosi and Durban. International bird refuge for palearctic migrants, especially small-bodied waders (more reliable than St Lucia). Important nursery for regional marine fisheries. One of the largest mangrove systems in southern Africa. Critical for the migration of crustaceans and other biota to Lake Cubhu. Supports an important prawn nursery. Functioning depends critically on inputs from the Umhlathuze river and from Lake Cubhu. Increased sedimentation from harbour construction and from deterioration of the catchment has resulted in a flood-tide delta developing rapidly that could alter functioning.	1
<b>7</b> Harbour estuary and associated shoreline	Water body is large and functional, shoreline fragmented.	Estuary was transformed from a shallow to a deep structure with harbour construction, and is in moderate condition. Shoreline development has resulted in reduced components of moderate size, becoming dysfunctional.	A deep water estuary that is dominated by marine components. International bird refuge for palearctic migrants, especially large-bodied waders. Supports a crustacean nursery (especially prawns and crabs) probably larger than that of the sanctuary. Has allowed significant quantities of alien marine species to establish and proliferate. Still supports some of the original pre-development mangroves. Maintains an active connection with Lake Mzingazi for crustacean and other aquatic biota. Complements the estuary of the sanctuary.	3

Landscape unit	Size	Condition	Landscape context	Functionality Rank
<b>8</b> Lake Mzingazi and catchment	Catchment extensively transformed by urbanization, plantation forestry and communal agriculture.	Much of the catchment has been irreversibly impaired by transformation. Remaining biodiversity asset includes dry forest, swamp forest and wetlands. Informal settlement has spread along much of the lake threatening water quality because there is no sewage system. Water quality is moderate. Forestry has reduced water inputs.	Lake Mzingazi is a freshwater body of national significance because of its size and location. Its functioning depends on the condition of the catchment. Important as a secondary nursery for crustacean species, including five prawn species, which require an open connection with the harbour be maintained. Lake Mzingazi once supported bird colonies, but no longer. Forests on the southwest bank support a notable bird diversity. An important source of water for Richards Bay.	3
<b>9</b> Richards Bay town and environs	Despite urbanization and industrial development, large, interconnected fragments remain.	Remaining biodiversity asset: Coastal Grassland, hygrophilous grassland, wetlands, dry forest and swamp forest. Varies from good or moderate condition to heavily impacted by alien plants or industry. Fluoride leakage into the environment may affect skeletal development of vertebrates.	Kwabonambi grasslands of national conservation significance. Most southerly remnants of Coastal Grassland, re-encountered only at St Lucia, of which large, functional portions remain. Diverse vegetation types maintain a key east-west biodiversity corridor between Lake Mzingazi and the Enseleni river (Landscape 10). Thulazihleka Pan is an important bird locality and feeding area.	3
<b>10</b> Nseleni river and immediate catchment	Most of the catchment has been transformed by commercial agriculture and forestry, but large, well connected portions remain along the river.	Remaining biodiversity asset: grasslands, dry forest, swamp forest, wetlands, occurring as a consolidated unit of good to moderate condition. Berm has transformed lower reaches of river into a lake. Water quality impacted by eutrophication (algal blooms)	The Nseleni valley provides a key link for biodiversity between coastal units and the interior. A key regional repository of biodiversity of both plants and the supported trophic web, especially of secretive species. One of the most intact remaining areas of biodiversity within KZ282. Contains the only formally conserved component in KZ282. This valley and the sanctuary meet RAMSAR criteria. Wetlands are critical for maintaining water quality and the quality of input into the sanctuary. Transformed local catchment has been irreversibly impaired.	1

Landscape unit	Size	Condition	Landscape context	Functionality Rank
<b>11</b> Upper Umhlathuze river: immediate catchment	Most terrestrial areas transformed, some discrete blocks remaining plus water bodies	Remaining biodiversity asset: large freshwater lakes and associated wetlands with contiguous remnant dry forest and grassland. Water bodies vulnerable to quality of water input; remaining terrestrial blocks in poor to moderate condition	Lakes are of national significance as they contain red data fish species. Lakes are off-channel (cut-off) lakes that therefore accumulate agro-chemicals and effluent. Their water quality is poor. Lakes and associated dryland vegetation connected to a degree via riverine stretches.	4
<b>12</b> Upper Enseleni Catchment	Mostly transformed with some sizeable remnant blocks of dryland vegetation	Remaining biodiversity asset: grassland, thicket, savanna, dry forest, swamp forest and wetlands associated with river. Remnant blocks in moderate to poor condition. Landscape in poor condition that would become dysfunctional with further fragmentation. Transformed areas are irreversibly impaired for biodiversity.	The remaining asset enjoys a degree of interconnectedness via riverine stretches to the intact landscape along the lower reaches of the Nseleni river.	4



Landscape unit	Size	Condition	Landscape context	Functionality Rank
<b>13</b> Upper Umhlathuze catchment	A large, well-integrated block of indigenous vegetation with satellites. Remainder of catchment transformed by communal and commercial agriculture. Umhlathuze affected by weir abstraction.	Remaining biodiversity asset: grassland, thicket, savanna and dry forest. Much of the remaining vegetation is heavily utilized by livestock and humans.	A core area of the little remaining inland grassland, savanna and thicket vegetation, covering the local altitudinal range. In the context of KZ282, an important representative of lowveld vegetation that is different to anything on the coast. Connected to some degree with remnants on landscape 12.	2
<b>14</b> Empangeni environs	Almost completely transformed by urbanization and agriculture.	Few remaining fragments, mostly in poor condition	Irreversibly impaired for maintaining biodiversity. Offers a significant barrier to flow and movement of biodiversity.	5
<b>15</b> Marine section	Narrow continental shelf; extensive sandy beaches and almost no rocky shelves (Port Durnford)	Large scale effluent discharge into the continental shelf by pipelines	Key interface between tropical and temperate marine biota in KZN. Key conduit for the movement of marine larvae, especially of prawns to the Tugela banks.	1

The greater uMhlathuze Municipal Area supports a total of 174 Red Data species, which according to the South African National Biodiversity Institute, ranks amongst the highest in the country for an area of its size. This remarkable concentration of Red Data Species is one of the main reasons that most of the remaining percentage of undeveloped, indigenous land cover, is considered irreplaceable by Ezemvelo KZN Wildlife for meeting its conservation objectives in the Province.

**Table 32: Red Data Species of Significance**

<b>Vegetation Type</b>	<b>Red Data Species (Significance)</b>	<b>Conservation Target</b>
Grasslands	124	100 % following a detailed survey. Conservation of a substantial portion of the remaining natural asset in the region is required if conservation objectives are to be pursued
Forests	90	
Nseleni River_Lake Nsezi System	70	
Large Wetlands	55	
Estaries	28	
Lakes	18	
Mhlathuze River System	11	
Swamp Forests	9	

All of the remaining ecosystem types are important for supporting Red Data Species, implying that there is a direct conflict with future development imperatives. The Spatial Development Framework has identified such development opportunities for the area. Port expansion with associated industrial development is the single most significant opportunity in the area with tremendous potential to grow the local, regional and national economy. Existing planning approaches in the area also present opportunities for to enhance conservation and hence tourism objectives. The limited space to accommodate the growth demand in the area reflects the realities of ecological risks that may arise and the anticipated conflict between conservation and development. The situation highlights the need for closer collaboration and coordinated planning between environmental stakeholders and prospective developers.

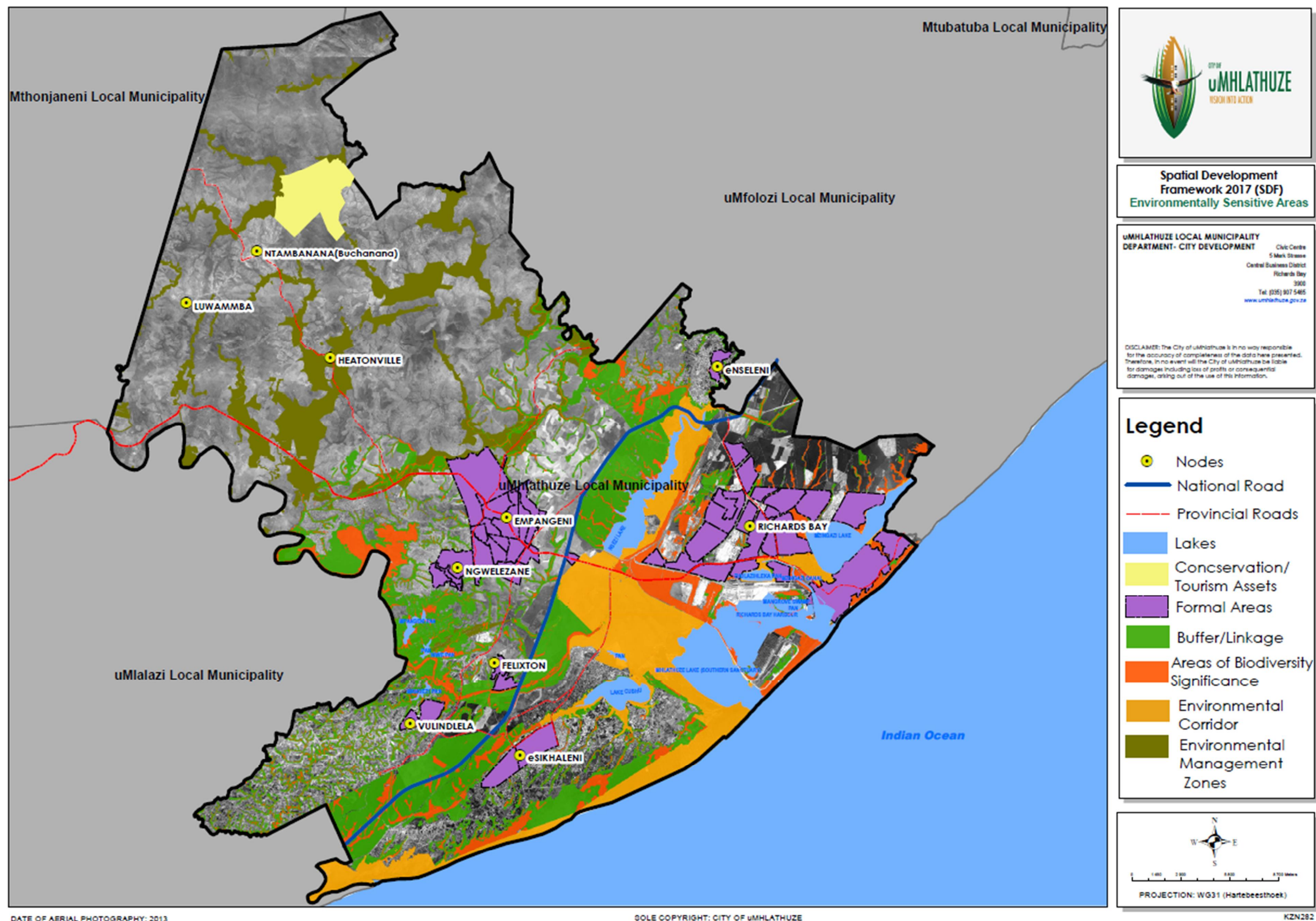
Irrespective of attempts by authorities to protect environmental assets in terms of land use limitations for the obvious reasons provided, a number of other factors are impeding attempts. There is a continuous encroachment of development (mainly unauthorised) into public open space areas and create ways need to be explored to manage these vast open areas.

A consolidated map has been prepared for the whole municipality on environmental sensitivities. A comparative level of information is not available for the whole municipal area and additional research is required to achieve such.

## **6.15 SUMMARY OF KEY ENVIRONMENTAL ISSUES**

- o The complex hydrology of the area, whilst attributing to unique natural features, poses challenges for development. This is particularly the case where logical spatial expansion need to take place.
- o The impacts of Climate Change are being experienced in a local scale in the following respects:
- o Abstraction of water from the various Coastal Lakes has reached ecological reserve limits during periods of extended drought. The long term ecological and aquatic impacts are unknown, particularly where these systems feed into estuarine systems
- o Severe flood events have yielded disaster implications for unplanned settlements with flood prone/ flood risk areas. Whilst this is the case, these are settlements that impact on environmental services by virtue of wetland degradation.
- o The Richards Bay northern beaches in particular have been confronted with severe erosion, with a result that emergency coastal defenses were required. It is also a fact that the Northern beaches are not being adequately replenished at the required rate of sand volumes from the Transnet sand bypassing scheme.
- o Environmental Offsets linked to the Port expansion render significant unknowns from an institutional/ governance perspective but equally from the perspective of physically transforming the affected environmental from current land use.
- o Further land development is likely to render biodiversity implications

Map 11: Environmental Sensitive Areas



## 7. AGRICULTURAL OVERVIEW

South African agricultural background can be best understood against the backdrop of the 1913 Natives Land Act which deprived black South Africans, especially Africans, any right to land ownership or lease in specified areas of the country.

The underlying principles to rural development and land reform are:

- Deracializing the rural economy;
- Democratic and equitable land allocation and use; and,
- Sustain production discipline for food security.

In 2009, the Cabinet adopted the Comprehensive Rural Development Programme (CRDP), which speaks to both land reform and rural development. The strategic thrust of the CRDP is agrarian transformation.

In 2010 government introduced fourteen (14) outcomes approach. The 14 outcomes are linked to a service delivery agreement between national Ministers and Members of Executive Committee. This approach has forged co-ordination amongst various line function departments and strengthened monitoring and evaluation.

Outcome 7 intends to address and promote sustainable rural communities; and, food security for all. The objectives of Outcome 7 will be achieved through the implementation of activities under the following five outputs:

- sustainable agrarian reform with a thriving small and large scale farming sector;
- improved access to affordable and diverse food
- improved rural services to support rural livelihood;
- job creation and promoting economic livelihoods; and
- an enabling institutional environment for sustainable and inclusive growth

### 7.1 THE ALIGNMENT OF COMPREHENSIVE RURAL DEVELOPMENT PROGRAMME AND NATIONAL DEVELOPMENT PLAN

Chapter six (6) of the National Development Plan focuses on an integrated and inclusive rural economy. It also states that by 2030, South Africa's rural communities must have better opportunities to participate fully in the economic, social and political life of the country. The 2030 vision also includes a better integration of the country infrastructure development, job creation and poverty alleviation.

The CRDP has three development deliverables:

- meeting basic human needs,
- rural enterprise development; and,
- rural industries sustained by credit facilities and markets.

The identified rural nodes within the uMhlathuze Municipality intend to address and fulfil the objectives of the Comprehensive Rural Development Programme and National Development Plan.

The Municipality has prepared draft area analysis for each identified node, and it will further survey when preparing the detailed Spatial Development Plans for each identified node.

The Municipality will also ensure that communities within the identified nodes will be consulted, in line with a bottom up community based approach.

The following table provides a breakdown of land potential/capability in terms of hectares and percentages.

**Table 33: Land Capability Breakdown**

Land Capability	Size (Hectares)	Percentage (%)
High Land Potential	11548	9.89
Good Land Potential	73062	62.55
Moderate Land Potential	21565	18.46
Restricted Land Potential	2258	1.93
Very Restricted Land Potential	6975	5.97
Waterbodies	1400	1.20
Sub-Total	116808	100.00

The need to compact and densify becomes apparent when considering the above. Limited high potential agricultural land is available and agriculture plays a critical role in the country, district and uMhlathuze Municipality in respect of employment, GDP and food security.

## 7.2 AGRICULTURAL SUPPORT PLAN

The uMhlathuze Municipality has recently compiled an Agricultural Support Plan. The preparation of the plan has been informed by the reality that small farmers struggle to survive and to participate in food value chains resulting in the exclusion from capital markets and a struggle for economic survival.

Agriculture is known to be central in the economic development of rural areas given proper infrastructure and proper planning. In addition, rural communities are particularly vulnerable to climate change and an agricultural support plan was identified as a mechanism to assist farmers to operate and contribute to improved food security. In essence, the plan has identified farmers, their specialization and support require for effective production.

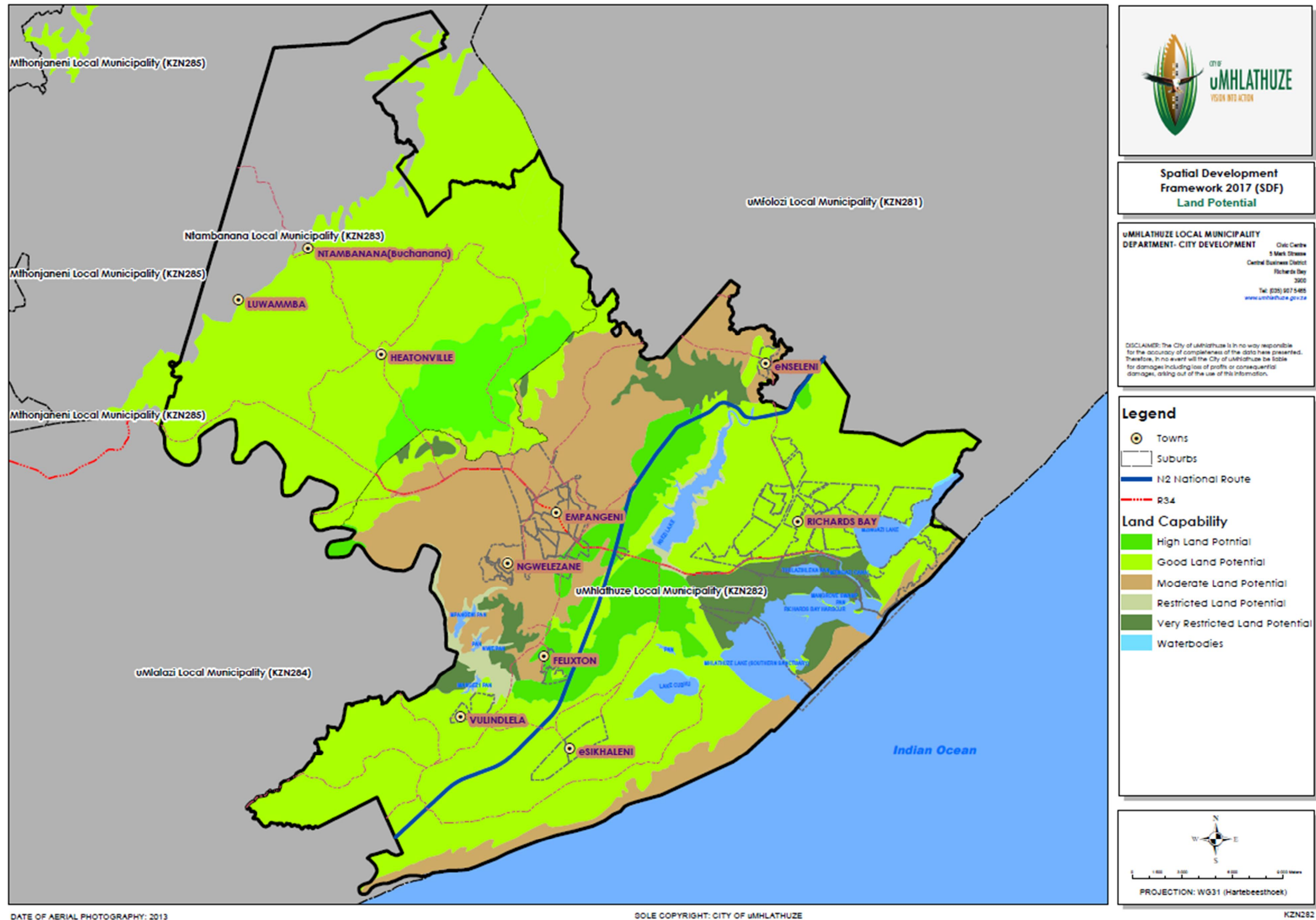
Amongst others, the plan has considered market demand, niche commodities and the natural resource base and has recommended a contract model.

At overleaf, the following mapping is provided:

- o Overall Land Potential for the Municipal Area as informed by Land Capability Classes.
- o Agricultural Potential for livestock and vegetation respectively as informed by the outcomes of the Agricultural Support Plan.
- o The distribution of Agricultural Projects per Ward noting the correlation with areas of low income (poverty), high unemployment and poor socio-economic conditions.

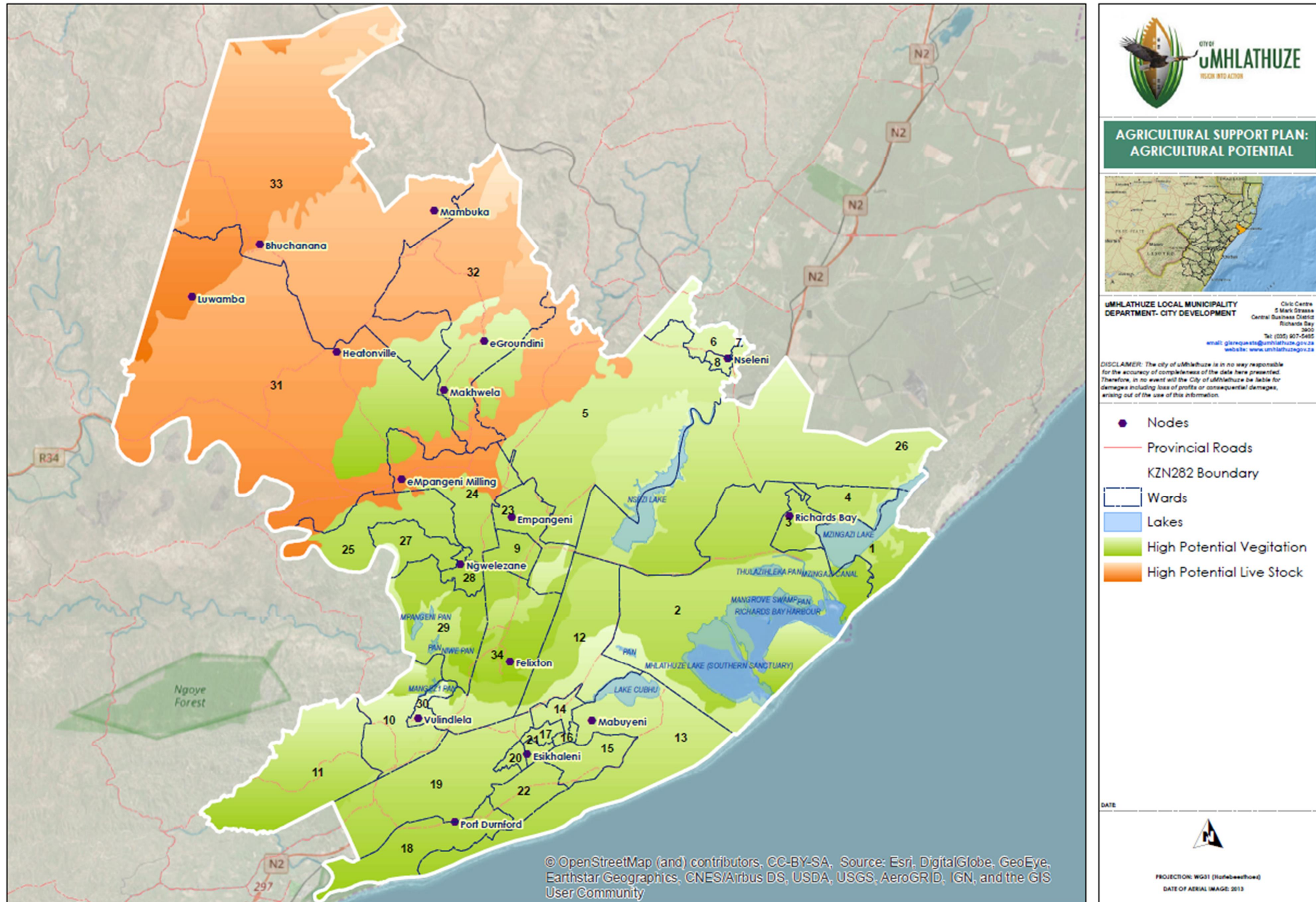


Map 12: Land Capability



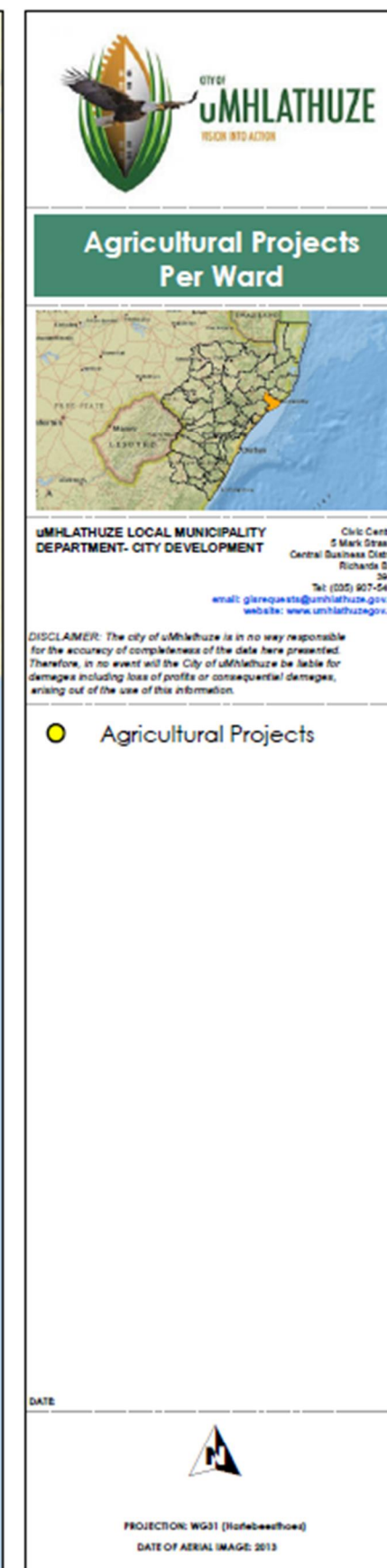
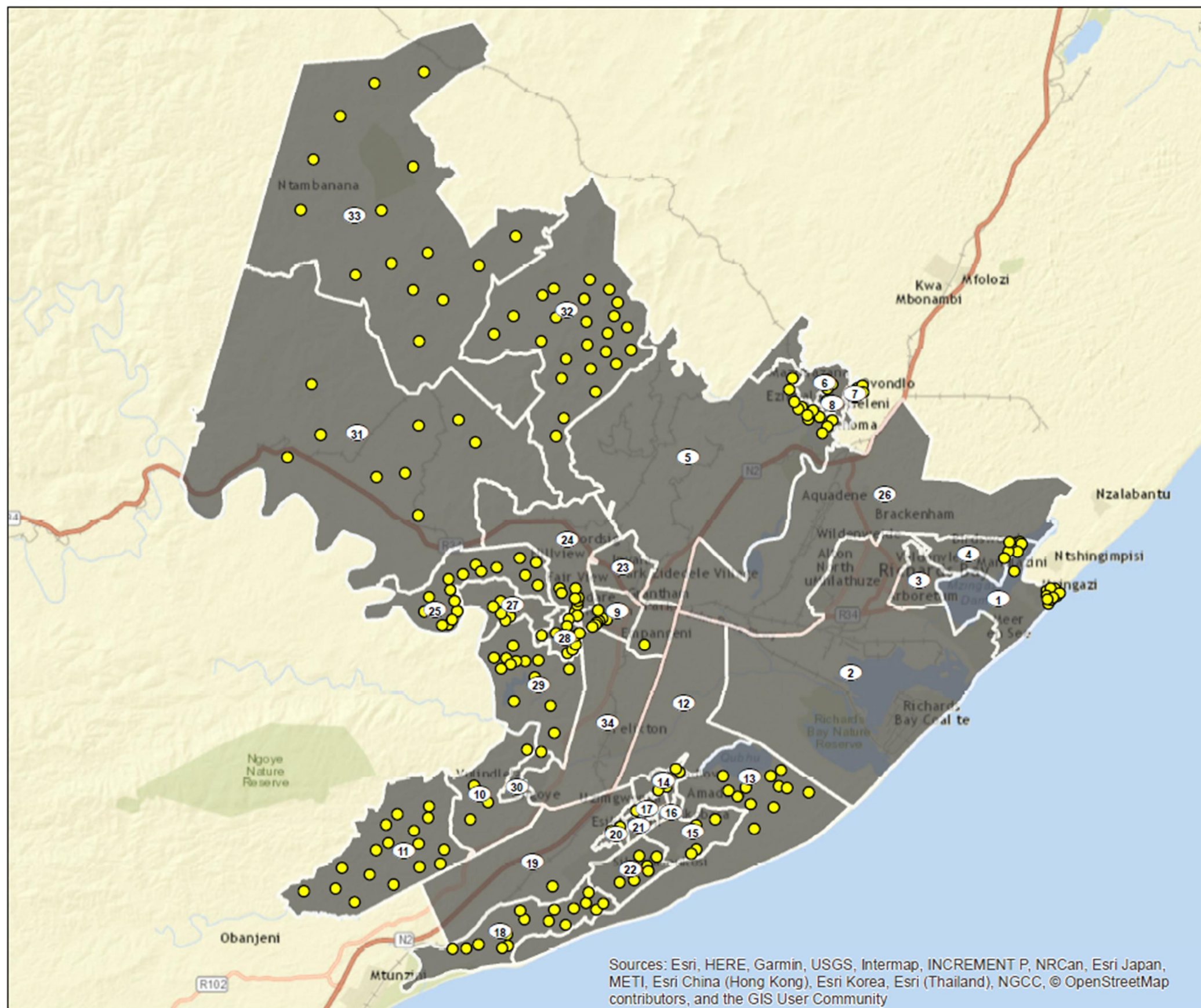


Map 13: Agricultural Potential





Map 14: Agricultural Projects per Ward



## 8. LAND REFORM

Land claims are made against the State in terms of the Restitution of Land Rights Act (No. 22 of 1994) and are resolved by way of physical land redistribution or other appropriate/practical means, e.g. financial compensation. Following the commencement of the Restitution of Land Rights Amendment Act (Act No. 15 of 2014), people who missed the 31 December 1998 deadline to lodge land claims now have an opportunity to lodge claims until 30 June 2019. It is important to note that the intention of land claims is **not** to stop development.

The Municipality is constantly engaging with the Land Claims Commission to attend to matters relating to land claims in the municipal area.

It has been determined that the following land claims in the municipality are being attended to:

1. Mandlazini / Mambuka Land Claim (Ref No Krn6/2/2/E/21/0/0/3)
2. Mambuka Amendment Claim (Amendment Notice 255 Of 2017)
3. Mbonambi Land Claim (Ref No Krn6/2/2/E/21/0/0/67)
4. Mndaba Group Land Claim (Ref No Krn6/2/2/E/21/0/0/53)

Mapping, based on information available, in respect of numbers 1, 2 and 3 above is provided. The relation of the Mambuka claim in relation to developments is also indicated.

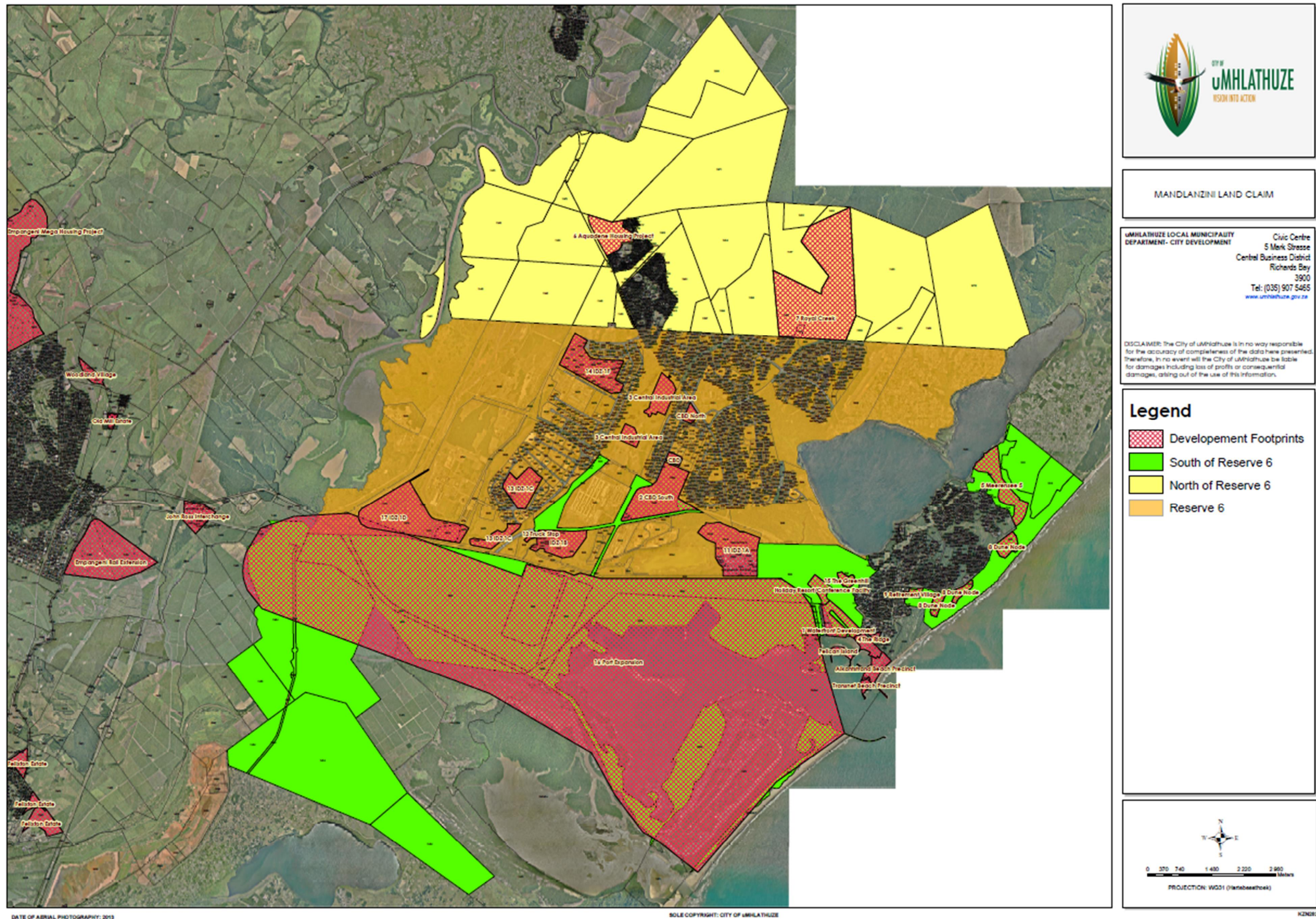
*In recent months, land claims in respect of Mkhwanazi and Obizo (Cebhekulu) have been finalised and, once detailed information is available, such will be included into this document.*

### 8.1 SUMMARY OF KEY LAND REFORM ISSUES

The opportunity to lodge land claims has been extended to 30 June 2019 and, to a degree, some developers feel uncertain about the prospects of pursuing a development on land that may be subject to claim in future. However, the Regional Land Claims Commission has made it clear that the intention of land claims is not to hinder development.



Map 15: Extent of Original and Extended Mambuka Land Claim





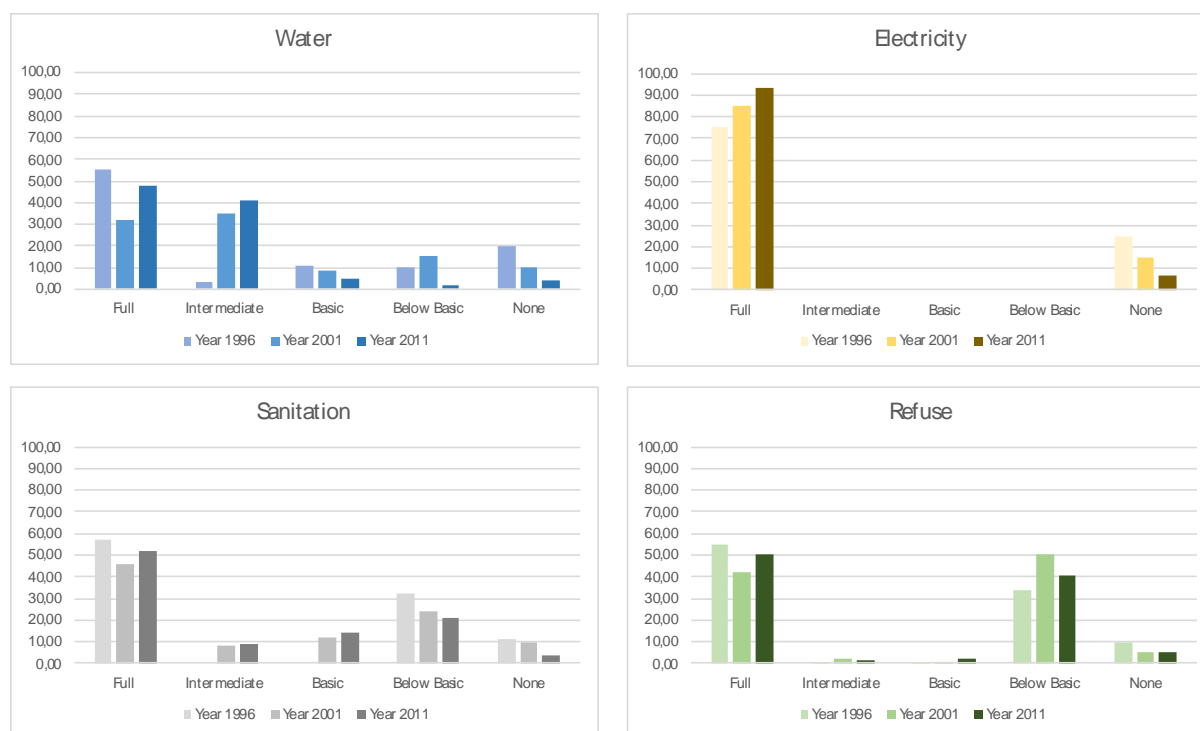
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## 9. INFRASTRUCTURE ANALYSIS

Infrastructure Master and Sector Plans are in the process of review and update given, amongst others, the extended municipal boundary. As and when new information becomes available, this document will be updated accordingly.

Access to services is indicated in the following four graphs, i.e. water, electricity, sanitation and refuse compared over the period 1996, 2001 and 2011.

**Figure 18: Access to Services**



The following maps are available at present:

- o Access to piped water mapping illustrates that wards 31 and 33 have high percentages of households more than 61% - that do not have access to piped water.
- o Access to hygienic toilets mapping indicates that wards 5 and 33 have more than 61% of their households without access to hygienic toilets.

### 9.1 BULK WATER MASTER PLAN

The Bulk Water Master Plan (BWMP) was finalised during 2014 with the following objectives in mind:

(The plan is currently under review and is anticipated to be adopted in due course)

- o Propose a rational bulk water supply scheme for the municipal area; and
- o Identify financing options.

For the purposes of the BWMP, the bulk water system has been taken as those components upstream of key supply reservoirs together with the reservoirs. Hydraulic modelling was undertaken. Default values for residential land uses were determined using the Guidelines for Human Settlement



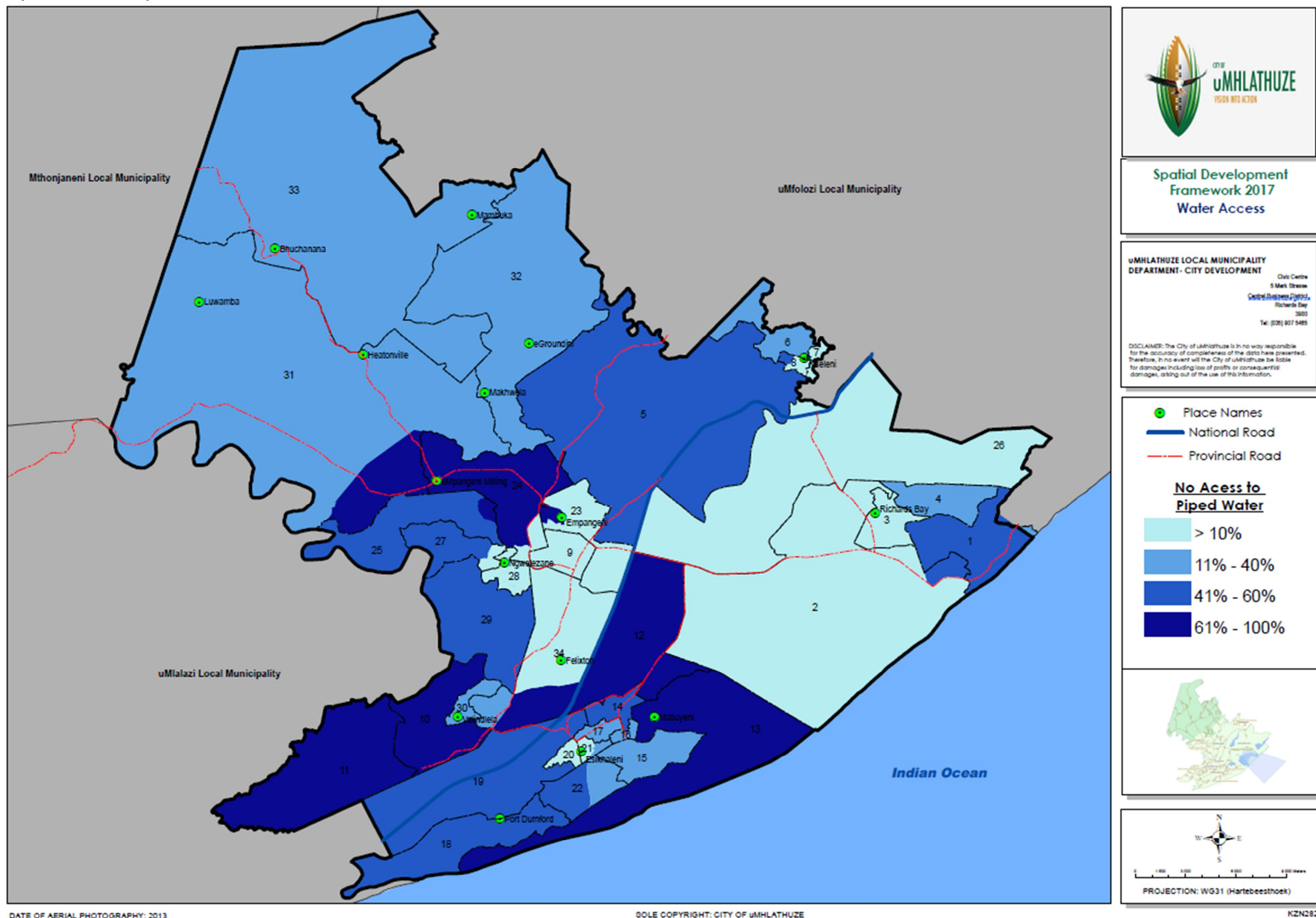
Planning and Design. The data from the City of uMhlathuze was used for non-residential land uses and major water consumers.

Proposals in the City of uMhlathuze

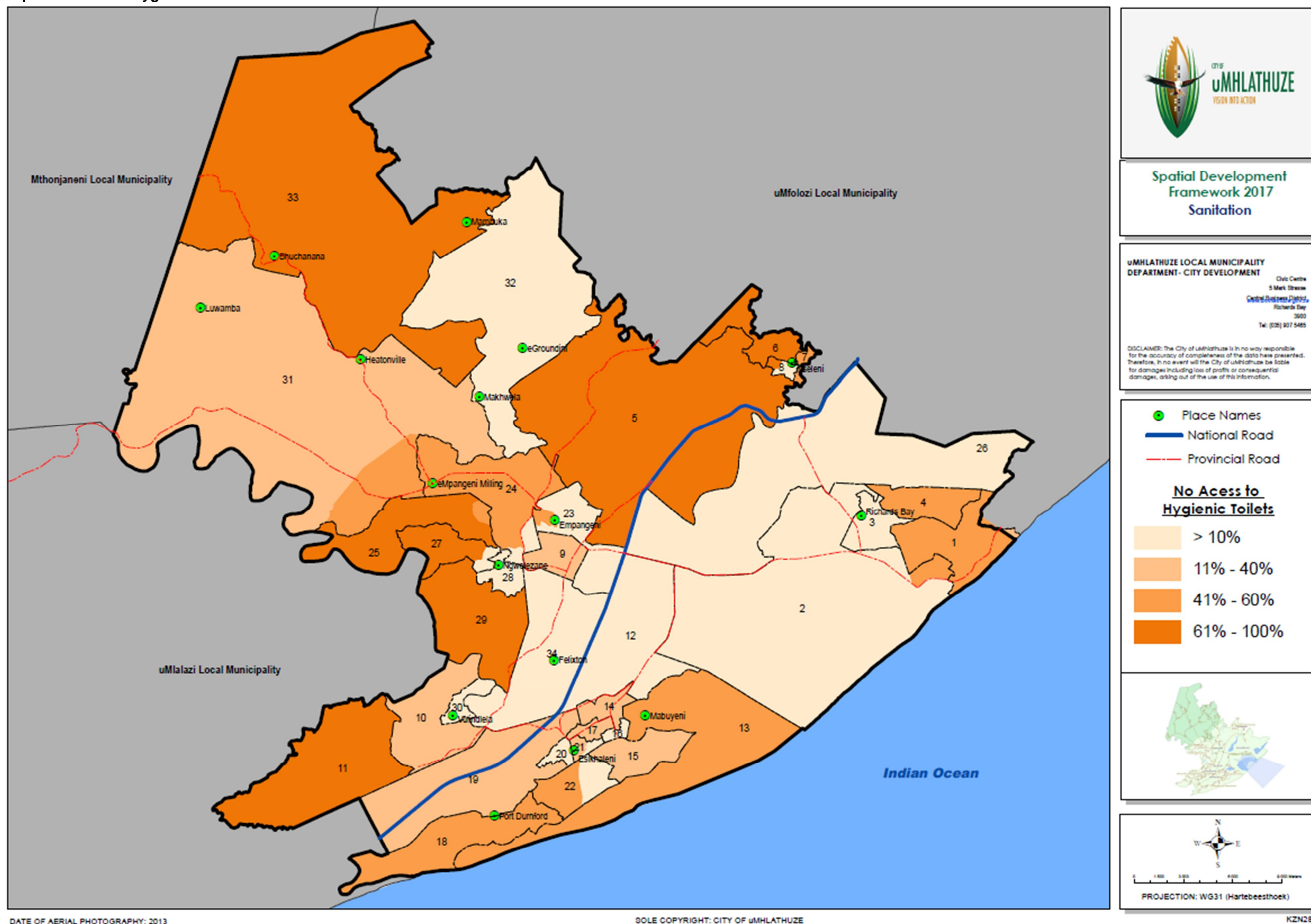
Framework (SDF) and the Human Settlements Plan were used as the main sources of information for future development. The planning of the bulk water system was based on the land use change proposals/applications that are identified in the IDP, SDF and the Human Settlements Plan as well as the development potential of expansion areas provided in the SDF.

Estimates of capital cost were determined using figures from other studies that have been undertaken for the City of uMhlathuze together with information from projects elsewhere.

Map 18: Access to Piped Water



Map 19: Access to Hygienic Toilets



The analysis throughout the BWMP takes into account three water requirement conditions, namely the:

- o Estimated water requirement for the existing development;
- o Estimated water requirement for the existing development together with the anticipated water requirement for the planned and approved developments; and
- o Estimated water requirement for the existing development, the anticipated water requirement for the planned and approved developments together with the anticipated water requirement for the remaining potential of expansion areas A to H.

For the purposes of this BWMP a population growth rate of 2% per annum was adopted and the following should be noted:

- o Expansion areas A to H are significant in size and, based on a mixed use concept, have the potential to accommodate 94 000 residential units accommodating between 230 000 and 420 000 people.
- o Proposed and approved developments together with an allowance for the development of Expansion Area C (east of Empangeni) contain some 27 500 residential units, many of which are in the other expansion areas. At an annual average population growth rate of 2%, the human settlements and private sector projects of some 27 500 new units would meet the requirements till around 2027.
- o The remaining development potential of the expansion areas is some 66 500 residential units, which should be adequate beyond 2040.
- o Plans have been presented or approved for some 550 ha of industrial and commercial development, most of which is in expansion areas C, E and F.

The estimated AADD potable water requirements can be summarised as follow:

**Table 34: Estimated AADD Potable water requirements**

Unit	Estimate existing requirement	Anticipated requirement for existing, planned and approved developments	Anticipated requirement for existing, planned and approved developments and the remaining potential of areas A to H
Litres/day	104 739 763	154 313 149	280 547 923
MI/Day	105	155	280

The estimated daily peak potable water requirements

**Table 35: Estimated Daily Peak water requirements**

Unit	Estimate existing requirement	Anticipated requirement for existing, planned and approved developments	Anticipated requirement for existing, planned and approved developments and the remaining potential of areas A to H
Litres/day	154 198 843	225 080 324	414 019 018
MI/Day	155	225	415

The existing reservoirs that have been taken as the bulk water system reservoirs are:

- o Mandlazini
- o Meerensee
- o Forest
- o Felixton
- o Pearce
- o Hillview

- o Nseleni
- o Ngwelezane

In order to serve the areas in which planned and approved developments are situated and to cater for the additional potential of expansion areas A to H, the following additional reservoir locations are proposed:

- o Hill Top
- o Perkins Estate
- o Pentlands
- o Beacon 157
- o Korhaan Hill
- o 12555

An indicative programme for the augmenting of the bulk water supply system has been derived and the following key points are noted with regard to water availability and water balance:

- o Present indications are that the City of uMhlathuze allocation from Mhlathuze Water would be adequate for the water requirements of the existing development together with the planned and approved developments in the city as a whole. However, an additional AADD allocation of some 10 MI/d would be necessary from Mhlathuze Water to augment the 37 MI/d available for the Nsezi/Ngwelezane (Empangeni) sub-system.
- o The existing development together with the planned and approved developments would be sufficient to meet the estimated population growth till around 2025. With the addition of a further AADD of 10 MI/d from Mhlathuze Water the medium term water requirements should be met.
- o In order to meet the AADD of the existing development, the anticipated water requirement of the planned and approved developments as well as the anticipated water requirement of the remaining development potential of the expansion areas, the City of uMhlathuze would need to look to Mhlathuze Water for a further allocation of some 16 MI/d for the Mzingazi/Nsezi (Richards Bay/eNseleni) sub-system and for a further allocation of some 97 MI/d for the Nsezi/Ngwelezane (Empangeni) sub-system.

In order to meet the estimated **daily peak water requirements** for the existing development together with the anticipated water requirement for the planned and approved developments the following is noted:

- o The City of uMhlathuze would need to look to Mhlathuze Water for 120 MI/d to 125 MI/d of potable water for the Mzingazi/Nsezi (Richards Bay/eNseleni) sub-system and for the Nsezi/Ngwelezane (Empangeni) sub-system.
- o In order to meet the estimated daily peak water requirement for the existing development, the anticipated water requirement for the planned and approved developments as well as the anticipated water requirement for the remaining potential of the expansion areas, the City of uMhlathuze would need to look to Mhlathuze Water for around 300 MI/d for the Mzingazi/Nsezi (Richards Bay/eNseleni) sub-system and the Nsezi/Ngwelezane (Empangeni) sub-system.
- o It is not envisaged that the capacity of the Mzingazi WTW would be augmented as the current capacity is adequate to attain full benefit from the City of uMhlathuze 59.62 MI/d on average. This would enable the full capacity of the existing WTW and pumping infrastructure to be utilized in the Mzingazi/Nsezi (Richards Bay/eNseleni) subsystem.
- o In order to take advantage of the infrastructure in the eSikhaleni sub-system it would be necessary to increase the capacity of the eSikhaleni WTW from 27 MI/d to 40 MI/d. This would be adequate to meet the anticipated daily peak water requirement of some 39 MI/d for the estimated water requirement for the existing development, the anticipated water requirement for the planned and approved developments together with the anticipated water requirement for expansion area A.

The City of uMhlathuze has five wastewater treatment works (WWTW) and a marine outfall and it is suggested that this wastewater should be suitable for **re-use** if adequately treated.

- o An investigation concluded that it should be realistic to re-use some 20 MI/d of the wastewater being discharged to sea through the Alton/Arboretum marine outfall a figure that could increase as a result of further developments.
- o The indirect re-use of treated wastewater (which could be around 20 MI/d) discharged from the City of uMhlathuze treatment works to the Nseleni River and the Mhlathuze River upstream of Mhlathuze Water Nsezi WTW could make up the possible shortfall of almost 10 MI/d for the Nsezi/Ngwelezane (Empangeni) sub-system.
- o The expected AADD water requirement for the existing, planned and approved developments as well as the remaining potential of the expansion areas could exceed the City of uMhlathuze use by almost 120 MI/d. By that time, potential wastewater for re-use could be some 100 MI/d.

The City of uMhlathuze is implementing a 5 year strategic management plan for **water conservation and water demand management**. The plan includes investigating areas for prioritisation, reducing water losses, to monitor the network and to evaluate performance. Inadequate human and financial resources are hampering the ongoing implementation of the required interventions. In the event of distribution losses being more than 12%, bulk water conveyance and storage capacity might be necessary earlier.

With regard to **refurbishment and replacement** of assets, it would be prudent for the water assets that are nearing the end of their less in the asset register to be investigated in order to ascertain the need for them to be refurbished or replaced. Same applies to troublesome assets.

The following indicative capital funding requirements are noted:

**Table 36: Indicative Capital funding requirements**

2015 - 2020	2021 - 2025	After 2025
R375 million	R390 million	R1 250 million

The post 2025 funding includes for a possible extension of the Nsezi WTW/Mandlazini Reservoir supply main, a possible third 47.5 MI reservoir at Mandlazini as well as for a WWTW at the head of the Alton/Arboretum marine outfall for the re-use of wastewater. This figure may be less following more detailed investigations in this regard.

In addition, an annual maintenance and refurbishment/replacement budget should be provided in addition to the budgets required for capital cost and recurrent expenses. Maintenance is estimated at 4% of the estimated capital cost of the infrastructure per annum; and refurbishment/replacement at 2% of the estimated capital cost of the infrastructure as follow:

**Table 37: Indicative maintenance and refurbishment funding requirements**

	2020	2025	+/- 2040
	Million Rand per annum	Million Rand per annum	Million Rand per annum
Maintenance	13	29	78
Refurbishment/replacement	7	15	39

## 9.2 DRAFT WATER SERVICES DEVELOPMENT PLAN

The review of the Water Services Development Plan, which was adopted in 2013, is underway. The review focusses on the following for the extended municipal area:

- o Summary of the water services status quo in terms of water services functional business elements;
- o Presents that status of and references the water services development plan;
- o An overview of the WSAs assessment and interpretation of its water services;
- o Outlines 5-year water services objectives and strategies;



- o Agreed water services projects; and
- o Presents the projects identified during the water services development planning process in order to meet the water services strategies of the water services authority.

### 9.3 BULK SEWERAGE MASTER PLAN

For the purposes of the BSMP, the bulk sewerage system has been taken as sewers 200 mm in diameter and larger, pump stations and pumping mains associated with such sewers and sewage/wastewater treatment facilities.

Land use information that is available is not at the level of detail that would be ideal for a BSMP. Consequently, proposals in the Integrated Development Plan (IDP), Spatial Development Framework (SDF), the Municipal Human Settlements Plan (the Human Settlements Plan) and township layout plans were used as the main sources of information for future development.

Bulk sewers were planned along watercourses above or at the level of the 1:100 year flood levels. The BWMP and the BSMP were both based on the premise that the City of uMhlathuze demand management (WDM) and water conservation (WC) interventions would be successful to the extent that the water use reduction would allow for increased household use in the existing built areas and that additional water would be required for future developments that have been identified in Richards Bay and Empangeni together with development in the expansion areas that the SDF and Human Settlements Plan have identified. Pump stations constitute weak points in sewerage systems and it is desirable to keep the number of pump stations to a minimum. Consequently, the proposals take a long-term perspective on the way in which development can be done over time to limit the need for pumping, even if additional WWTW may be required.

The planning has been done for the full development potential. Thereafter proposals were formulated for the progressive installation of the bulk sewerage infrastructure in line with the land use change proposals/applications that are identified in the IDP, SDF and the Human Settlements Plan. Subsequently, possible locations for additional sewers, pump stations, pumping main routes and WWTW were identified.

For the purposes of the BSMP a population growth rate of 2% per annum was adopted, which is the same as the average annual population growth rate adopted for the BWMP. The estimated increase in housing units, based on the above is reflected in the following table:

**Table 38: Estimated Increase in Housing Units**

Population change at an annual growth rate of 2.00% pa	Household size (persons/household)	Estimated new unit requirement			
		2015	2025	2030	2040
	2.5	10 200	42 200	62 200	102 200
	3.0	8 500	35 167	51 833	85 167
	3.9	6 538	27 051	39 872	65 513
	4.5	5 667	23 444	34 556	56 778

The IDP, SDF and Human Settlements Plan contain proposals for human settlement projects, private sector projects and expansion areas designated A to H.

**Expansion areas** A to H are significant and the initial concept is that they would contain mixed land uses. The potential would be some 102 000 residential units accommodating between 255 000 and 460 000 people.

**Proposed and approved developments** together with an allowance for the development of expansion area C (east of Empangeni) contain some 35 000 residential units. At an annual average population growth rate of 2.00%, the human settlements and private sector projects of some 35 000 new units would meet the requirements to some-time between 2025 and 2030.

The **expected combined sewage/wastewater flow** to the macerators and WWTW in the seven sewerage sub-systems is summarised herewith:

**Table 39: Expected combined sewage/wastewater flow**

Flow category	Unit	Estimated existing flow	Anticipated flow for existing, planned and approved developments	Anticipated flow for existing, planned and approved developments and the remaining potential of areas A to H
ADF	litres/day	35 096 000	74 901 532	168 604 718
	MI/d (rounded off)	35	75	170
PDWF	litres/second	813	1735	3 900
PWWF	litres/second	1 016	2 170	4880

In addition to the existing sewerage sub-systems, the topography upon which the City of uMhlathuze is situated lends itself to the establishment of two further sub-systems and possibly to a third new sub-system. The three potential additional sewerage sub-systems would cover:

- o Most of **expansion area A** (which could include Vulindlela), the eastern and south western part of expansion area B and expansion area C draining to what is referred to as the proposed Area ABC WWTW;
- o Most of **expansion areas D, E and H** draining to what is referred to as the proposed Area DEH WWTW; and
- o Possibly the eastern part of expansion area F draining to what is referred to as the possible **Area F WWTW**.

Some of the sewers and pumping mains require very significant augmentation. The development patterns and timing will influence when the additional sewer capacity will be required. In some cases it might be within a short time, while in others it might be several decades.

Currently the flow to the existing **macerators** and WWTW is some 35 MI/d. The required capacities for the anticipated flow for the existing, planned and approved developments are expected to be around 75 MI/d. The required capacities for the anticipated flow for the existing, planned and approved developments together with the remaining potential of expansion areas A to H are expected to be of the order of 185 MI/d.

Consideration was given in the modelling to the capacities of **existing pump** stations as well as to the need for further pump stations. Additional pump stations are proposed to deliver sewage/wastewater from expansion areas A to H to the designated macerator or WWTW.

The City of uMhlathuze has undertaken a study into the potential for the re-use of wastewater currently being discharged to the Alton/Arboretum marine outfall. The investigation concluded (subject to more detailed investigation) that it should be realistic to re-use some 15 MI/d of the wastewater being discharged to sea through the Alton/Arboretum marine outfall initially and that the volume could increase to some 30 MI/d after 2030.

Some 100 MI/d of treated wastewater is expected to be available for **re-use** from the existing, planned and approved developments together with the remaining potential of expansion areas A to H. This represents slightly more than half of the sewage/wastewater that is expected to be generated.

The City of uMhlathuze is implementing a water management programme through a five year strategic management plan for **water conservation and water demand management**.

The indicative programme and cost estimate for augmentation of the bulk sewerage system is shown in the table herewith:

**Table 40: Cost Estimate for Augmentation of Bulk Sewage System**

	2015-2020	2020-2025	After 2025
Component	Total (Rand)	Total (Rand)	Total (Rand)
Alton			
Total	95 000 000	2 000 000	148 000 000
Arboretum/Area F WWTW			
Total	87 000 000	183 000 000	257 000 000
Empangeni/Area DEH WWTW			
Total	112 000 000	2 000 000	849 000 000
eNseleni			
Total	-	-	-
eSikhaleni			
Total	-	-	-
Ngwelezane			
Total	-	-	-
Vulindlela			
Total	-	-	-
Area ABC WWTW			
Total	106 000 000	203 000 000	506 000 000
Total for all sub-systems	400 000 000	390 000 000	1 760 000 000

The indicative cost to refurbish or replace infrastructure is outlined herewith:

**Table 41: Indicative Refurbishment Cost**

	2015-2020
Component	Total (Rand)
Alton	
Total	27 075 000
Arboretum	
Total	125 550 000
Empangeni	
Total	49 164 000
eNseleni	
Total	-
eSikhaleni	
Total	8 350 000
Ngwelezane	
Total	3 500 000
Vulindlela	
Total	7 252 000
Total for all sub-systems	220 891 000

Particular attention should be given to the relationship between the Alton and Arboretum macerators and the manner in which they will be refurbished and augmented. Significant allowances have been made for them in both the indicative capital and refurbishment/replacement cost estimates.

An annual **maintenance and refurbishment/replacement budget** should be provided in addition to the budget required for recurrent expenses. The following proportion of the estimated capital cost of the additional infrastructure is proposed:

- o Maintenance at 4% of the estimated capital cost of the infrastructure per annum; and
- o Refurbishment/replacement at 2% of the estimated capital cost of the infrastructure.

**Table 42: Estimated Annual Maintenance and Refreshment Budget**

	2020	2025	+2040
	Million Rand per annum	Million Rand per annum	Million Rand per annum
Maintenance	16	32	100
Refurbishment/replacement	8	16	50

## 9.4 WASTE WATER RE-USE PROJECT

Water scarcity, changing climate patterns and urbanisation have had an enormous toll on the availability of adequate water to support communities. Water and wastewater treatment has become a key response to these challenges, helping to provide the necessary water to sustain communities, business and agriculture.

Waste water is discharged to the sea through marine outfalls, while there is increased pressure placed on potable water sources (boreholes, rivers, etc.) has raised a number of concerns. The business / commercial and industrial sector accounts for the bulk usage and further growth would increase the demand for potable water on the City. Reuse would be regarded as an alternative option to supplement this need and thus potable water for business / commercial and industrial sector.

The uMhlathuze Municipality appointed a Transaction Advisor (TA) during December 2016 in terms of the National Treasury PPP Municipal Project Cycle. The transaction advisor is required to produce a comprehensive feasibility study for the Project using a public sector comparator and PPP reference models. The outcomes should provide information in respect of:

- o full project cycle costs
- o affordability limits
- o risks and their costs
- o optimal value-for-money methods of delivery

The PPP project cycle will also allow for the following three regulatory tests of affordability, value for money and risk transfer to be applied at every stage of preparing for, procuring and managing a PPP agreement:

- o Can the municipality afford the deal?
- o Is it a value-for-money solution?
- o Is substantial technical, operational and financial risk transferred to the private party?

If, on the basis of the feasibility study, the PPP solution is decided on, the transaction advisor will provide the necessary technical, legal and financial advisory support for the procurement of a private partner. The feasibility study has been completed and consisted of the following 5 main stages:

- o Stage 1: Needs Analysis
- o Stage 2: Option Analysis
- o Stage 3: Service Deliver Options Analysis
- o Stage 4: Project Due Diligence
- o Stage 5: Value Assessment

## 9.5 ROADS AND PORTS

During 2009, the Municipality reviewed its **Arterial Road Framework Plan** that extends beyond the boundaries of the existing formal urban areas into the proposed expansion areas as provided. The plan proposes additional arterial routes to provide access to the main urban centre and it is now opportune to plan for the roll-out of such arterials. Furthermore, the plan needs to be updated given the new expanded municipal boundaries. A further study of the **Public Transport Amenities** in the municipal area has also been completed. As part of this study the following was completed:

- o Deliver a status quo analysis of public transport facilities in the City of uMhlathuze (bus/taxi stops, routes and ranks)
- o Analyze the need for and possible location of a truck stop facility
- o Develop concept layouts for all bus/taxi ranks within the City
- o Undertake a study to identify a site for a truck stop site

The uMhlathuze Municipality has also initiated the process of preparing a **Comprehensive Integrated Transport Plan (CITP)** with the assistance of the Department of Transport. The process has just recently started and, when complete, is envisaged to consist of the following chapters.

**Table 43: Chapters of the CITP**

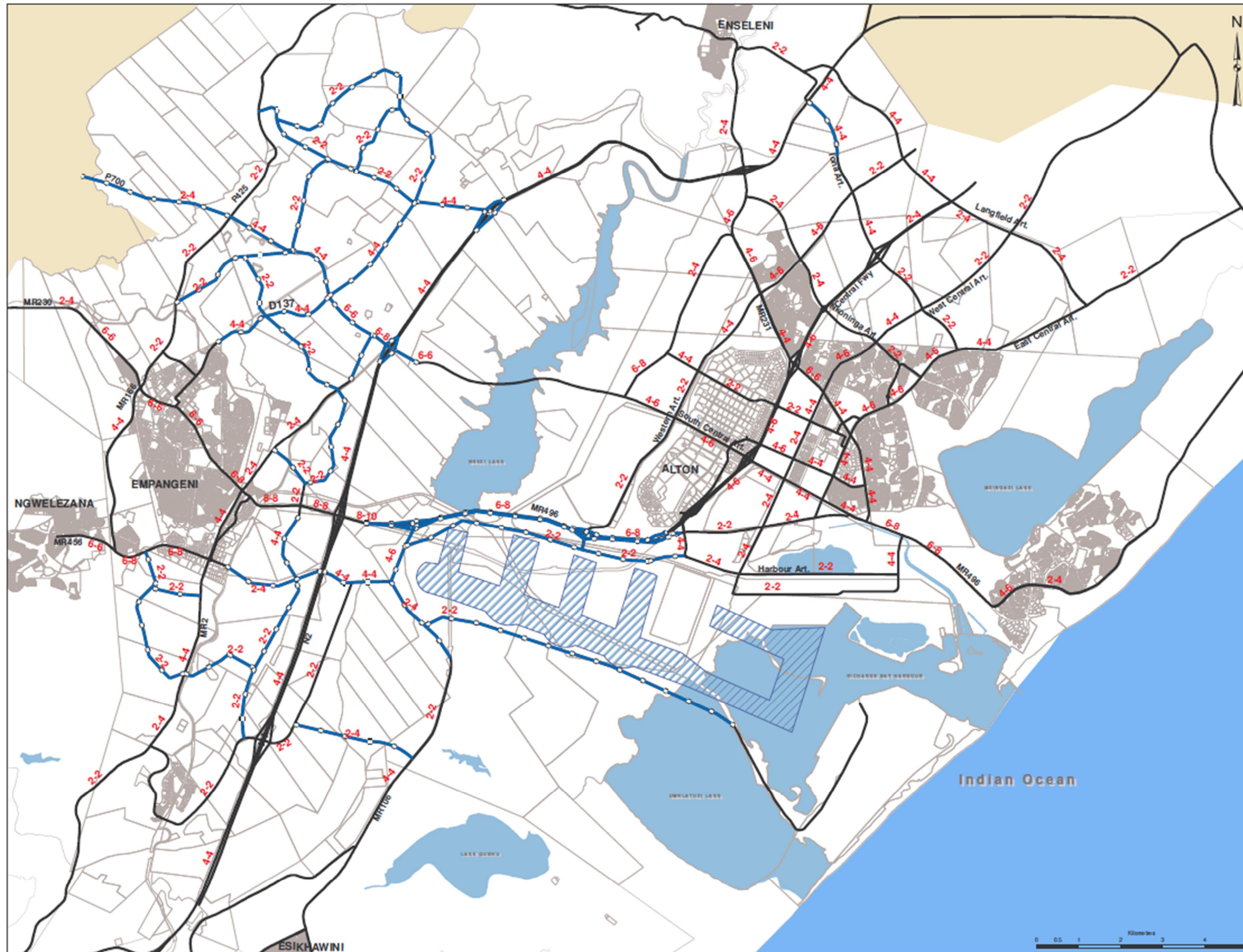
Chapter 1: Introduction	Organizational and institutional arrangements as well as coordination measures relating to the plan preparation.
Chapter 2: Transport Vision and Objectives	A concise statement, informed by a consultation process, on how the transport system in the Municipality should be shaped in the long term. Objectives that are related to the articulated as well.
Chapter 3: Transport Register or database	All data collection and information requirements to inform the plan preparation will be undertaken as part of this chapter. Typical types of information will include: <ul style="list-style-type: none"> <li>o Demographic</li> <li>o Transport supply and demand</li> <li>o Description of the public transport system</li> <li>o Description of public transport services including non-motorized transport and learner transport</li> <li>o Description of the institutional and organizational set-up of the public transport industry</li> <li>o Traffic demand and road infrastructure</li> <li>o Freight transport routes and movements</li> <li>o Financial information, specifically relating to the implementation of the plan</li> </ul>
Chapter 4: Spatial Development Framework	Consideration of nodes and corridors, infill development areas for densification etc.
Chapter 5: Transport Needs Assessment	Determination of the transport needs of the community by way of consultation, analysis, modelling, surveys etc.
<b>Chapter 6:</b> Public Transport Operational Strategy	To integrate public transport networks, services and modes so that passengers can move optimally with least cost and shortest time.
<b>Chapter 7:</b> Transport Infrastructure Strategy	To deal with development and maintenance of all transport infrastructure (road, rail, non-motorized and freight) both for public and private sector. Inputs into this phase from external sources as well as internal processes, such as the Pavement Management System.

<b>Chapter 8:</b> Travel Demand Management	Development of a system of actions aimed to maximize the capacity of the transport system for the movement of people and goods rather than vehicles. Refers to issues such as vehicle occupancy, prioritized public transport etc.
Chapter 9: Freight Logistics Strategy	Dealing with the location of depots/freight centres and consideration of the routes for moving of goods as well as regulatory and financial measures.
Chapter 10: Other Transport-related Strategies	At least a strategy for non-motorized transport as well as a safety and security strategy for public transport is required hereunder.
Chapter 11: Summary of LIPTs	Responsibility for such, i.e. district or local, to be confirmed.
Chapter 12: Funding Strategy	Includes a summary of proposals and programmes and details (1) priorities, (2) funding and (3) implementation programme.
Chapter 13: Stakeholder consultation	Range of stakeholders to be consulted during the process as advised.

Apart from road transport planning outlined above, planning for the future development of the Richards Bay Port has been undertaken by Transnet National Ports Authority. Matters relating to the Richards Bay Port and mooted expansion plans are discussed in another section of this report.



Map 20: Arterial Road Framework Plan

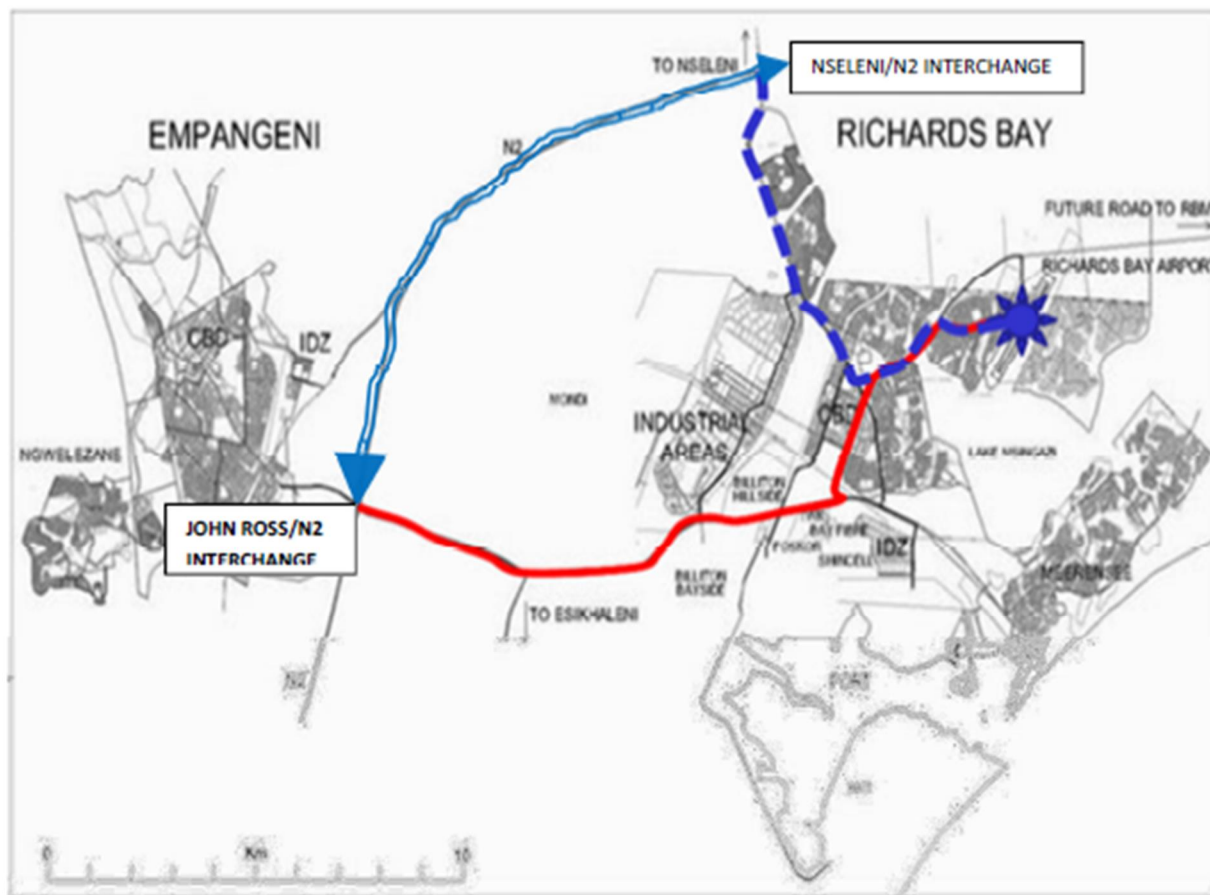




## 9.6 AIRPORT PLANNING

In 2010, an update of the Airport Master Plan was completed and the future footprint of the current Richards Bay Airport. The current Richards Bay Airport is nestled in the middle of residential areas, including Birdswood and Mandlazini Village. The current situation does potentially pose challenges in terms of airport operations.

**Figure 19: The location of the existing Richards Bay Airport**



The Spatial Development Framework (SDF) of the Municipality has identified, at a high level, a favourable corridor for an airport precinct which has been the focus on a study dealing with investigating the proposed site based on aviation criteria, the Aerotropolis concept, transportation planning as well as spatial and land use elements.

The potential airport relocation pre-feasibility study has provided guidance regarding the required statutory procedures and further studies that would need to be attended to in the near future. Noting that failure to attend to these statutory procedures and further studies timeously could create a project risk. Some of the specific statutory procedures relate to the release of land for non-agricultural use in terms of Act 70 of 1970, i.e. the Subdivision of Agricultural Land Act. A myriad of environmental related procedures will also be required.

The outcome of the pre-feasibility study warrants that the project now proceeds into the next stage, i.e. a fully-fledged feasibility investigation. To this, the project has been registered as a PPP and the appointment of a Transaction Advisor will comment in due course.

**Figure 20: Area investigated for Proposed Airport Relocation**



## 9.7 SUMMARY OF INFRASTRUCTURE ISSUES

- o Wards 31 and 33 have high percentages of households more than 61% - that do not have access to piped water.
- o Wards 5 and 33 have more than 61% of their households without access to hygienic toilets.
- o Bulk Water Master Plan requires to be updated given the extended municipal boundary post the 2016 Local Government Elections.
- o The estimated AADD potable water requirements inclusive of the existing planned and approved development as well as the development of Areas A to H is 280 MI/day. Estimated Daily Peak water requirements inclusive of the existing planned and approved development as well as the development of Areas A to H is 415 MI/day. At least six additional reservoirs are proposed in this regard.
- o The Municipality has five wastewater treatment works (WWTW) and a marine outfall and the option of wastewater re-use is being investigated.
- o The City of uMhlathuze is implementing a strategic management plan for water conservation and water demand management.
- o An annual maintenance and refurbishment/replacement budget should be provided in addition to the budgets required for capital cost and recurrent expenses. Maintenance is estimated at 4% of the estimated capital cost of the infrastructure per annum; and refurbishment/replacement at 2% of the estimated capital cost.
- o In addition to the existing sewerage sub-systems, the topography upon which the City of uMhlathuze is situated lends itself to the establishment of two further sub-systems and possibly to a third new sub-system within the identified SDF Expansion Areas.
- o Currently the flow to the existing macerators and WWTW is some 35 MI/d. The required capacities for the anticipated flow for the existing, planned and approved developments are

expected to be around 75 Ml/d. The required capacities for the anticipated flow for the existing, planned and approved developments together with the remaining potential of expansion areas A to H are expected to be of the order of 185 Ml/d.

- o An annual maintenance and refurbishment/replacement budget should be provided in addition to the budget required for recurrent expenses. Maintenance at 4% of the estimated capital cost of the infrastructure per annum; and Refurbishment/replacement at 2% of the estimated capital cost of the infrastructure.
- o The Municipality reviewed its Arterial Road Framework Plan during 2009. The plan proposes additional arterial routes to provide access to the main urban centre and it is now opportune to plan for the roll-out of such arterials. Furthermore, the plan needs to be updated given the new expanded municipal boundaries.
- o The uMhlathuze Municipality has also initiated the process of preparing a Comprehensive Integrated Transport Plan (CITP) with the assistance of the Department of Transport.
- o The location of the current Richards Bay airport poses challenges in terms of operations and future development. The Spatial Development Framework (SDF) of the Municipality has identified, at a high level, a favourable corridor for an airport precinct and a pre-feasibility study for the proposed relocation of the Richards Bay airport has been completed.

## **10. HUMAN SETTLEMENT OVERVIEW**

### **10.1 INFORMAL SETTLEMENT UPGRADE**

The Municipality will ensure that it fulfils the objectives of Outcome 8. The Municipality will also fulfil the requirements of the National Upgrading of Informal Settlements Programme (UISP) through National Upgrading Support Programme (NUSP). During March 2014 the National Department of Human Settlements appointed a service provider to undertake the preparation of UMhlathuze Municipality Informal Settlements Upgrade and Relocation Plan. The uMhlathuze Municipal Informal Settlement Upgrade and Relocation Plans for seven identified settlements was completed in August 2015.

The following informal settlements/slums clearance priorities are noted:

#### **10.1.1 uMzingwenya Informal Settlement and Slums Clearance**

Mzingwenya settlement situated within a flood risk zone between Mdlebe Ntshona Road and the Mzingwenya River. Attempts to manage or prevent the situation have proven to be rather complex in view of the fact that land ownership vests with two Traditional Authorities.

It is estimated that there are at least 1800 households living in this area within the 1:100 year floodline, therefore the informal settlement may well be regarded as the Municipalities largest disaster area with respect to the flood risks.

The Provincial Department of Human Settlements has given the Municipality approval to commence with the feasibility studies for uMzingwenya River Settlement. The feasibility study has commenced.

#### **10.1.2 Nseleni Informal Settlement and Slums Clearance**

The Nseleni informal settlement is situated on the outskirts of the Nseleni Township and a number of the structures are situated close to a 100 year floodline while others are built on steep areas. The land belongs to Khoza/Bhejane Traditional Authority which makes it challenging to the Municipality to control the allocation of land in unsuitable land.

#### **10.1.3 Mzingazi Informal Settlement and Slums Clearance (Infills)**

The Mzingazi Agri-Village has developed on land that is owned by uMhlathuze Municipality. During the early 1900 identified beneficiaries. At the time, the beneficiary list consisted of 201 families. This grew to 565 in the late 1990 Council

The uMhlathuze Council is currently installing waterborne sewerage system in the area and an EIA (Environmental Impact Assessment) has been approved. Recent indications are that the more than 300 families reside in the infill areas. It is essential that an appropriate sanitation solution is provided for the community of Mzingazi as the Village borders one of the main fresh water sources in the municipal area, Lake Mzingazi.

#### **10.1.4 Mandlazini-Airport Buffer Strip Informal Settlement and Slums Clearance**

The Mandlazini-Airport Buffer Strip measures approximately 65 hectares in extent and according to a November 2011 survey, there are approximately 500 residential structures in the buffer strip. Some of the structures are of an informal/temporary nature while other structures are built from brick and mortar. The land in question is owned by the uMhlathuze Municipality. There are two main concerns relating to the settlement in this buffer strip. In the first instance, some of the structures are believed to be located within a watercourse. In the second instance, this settlement is located within the predicted 55dBA noise contour as determined by the 2010 Update of the Richards Bay Airport Master Plan.

#### **10.1.5 Ngwelezane Informal Settlement**

Erf 1241 settlement is situated within Ngwelezane Hospital consisting of approximately 50 individual free standing structures and train type structures driven by private housing entrepreneurs as rental housing. The land belongs to the Department of Public Works.

#### **10.1.6 Vulindlela/University of Zululand Informal Settlement**

University of Zululand settlement is situated on the outskirt of Vulindlela Township. Some of the structures are built on a slightly steep area. The land belongs to Mkhwanazi Traditional Authority which made it difficult to the Municipality to control the allocation of land in unsuitable land. The settlement consists of train type structures driven by private housing entrepreneurs as rental housing mostly to the University of Zululand students.

#### **10.1.7 Mandlazini Agri-Village Infill Areas**

The provision of government housing subsidies in Mandlazini Village will be twofold as a result that the some 570 beneficiaries from Mandlazini Village benefited from government land reform programme. These beneficiaries are likely to benefit from consolidation subsidies subject to qualifying criteria being met. Some of the residents will be benefit from low income housing program.

The Municipality is currently installing waterborne sewerage system in the area and an EIA (Environmental Impact Assessment) has been approved. Recent indications are that the more than 300 families reside in the infill areas. It is essential that an appropriate sanitation solution is provided for the community of Mandlazini as the Village borders one of the main fresh water sources in the municipal area, Lake Mzingazi.



**Map 21: uMzingwenya Settlement**





**Map 22: Nseleni Peri-Urban Settlement**





**Map 23: Mzingazi Informal Settlement**





**Map 24: Mandlazini-Airport Buffer Strip Informal Settlement**



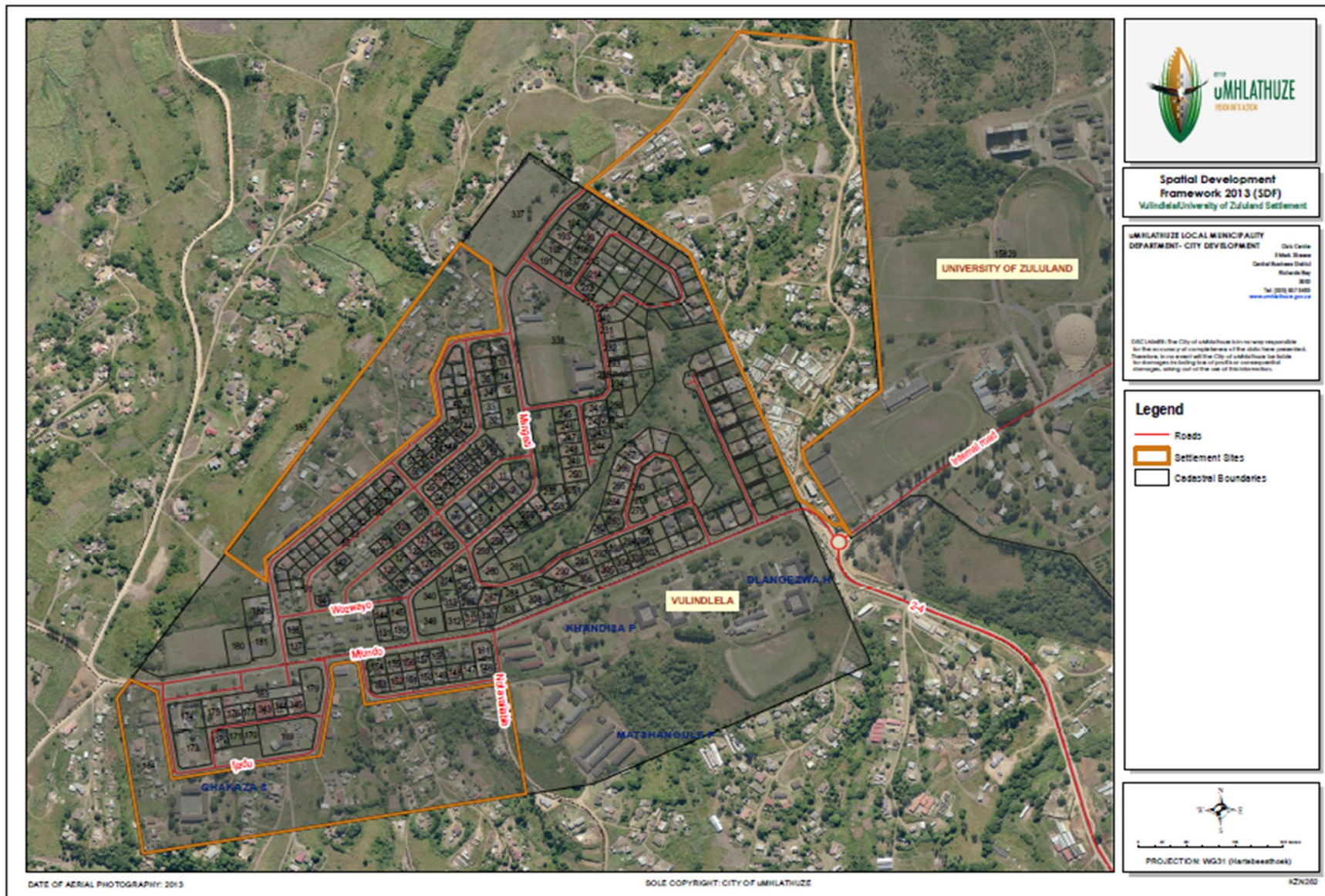


**Map 25: Ngwelezane Hospital Settlement**





**Map 26: Vulindlela/University of Zululand Settlement**





**Map 27: Mandlazini Village Infill Areas**



## 10.2 IDENTIFICATION OF LAND FOR HOUSING

One of the primary challenges facing the uMhlathuze Municipality is the identification of suitably located land for development. The Municipality has recognized this need through focusing much of its capacity to the investigation of land that is suitable for housing development. The identification of land is a priority of the Municipal IDP and SDF.

The following criteria were used in identification of land suitable of Housing Development:

- o Location;
- o Ownership;
- o Availability of bulk and/or connector services;
- o Accessibility in terms of transport and economic opportunities; and
- o Linkage to Spatial Development Framework.

**Table 44: Land Suitable for Housing Development - SDF Expansion Areas**

AREA	LOCATION	LAND OWNERSHIP	PROJECT TYPE	BULK INFRASTRUCTURE AVAILABILITY
Expansion Area A	ESikhaleni-Vulindlela Corridor	State	Mixed Residential	Yes
Expansion Area B	Felixton	Private	Mixed Residential	No
Expansion Area D	Empangeni	Private	High Residential	No
Expansion Area E	Empangeni	Private	Mixed Residential	No
Expansion Area F	Richards Bay-Birdswood-Mandlazini & Veldenvlei	State	Mixed Residential	No
Expansion Area G	Nseleli Interchange	Private	Mixed Residential and Industrial development	No
Expansion Area H	Empangeni (Empangeni Mega Housing)	Council	IRDP	Yes, surrounding

The table below indicated identified State owned land that is suitable for housing development:

**Table 45: State Owned Land Suitable for Housing Development**

Erf Number	Ownership	Hectares
11488	State	217
16833	State	920 (100 ha required)
Portion 1 of Erf11489	State	368
16715	State	537



### 10.3 RESTRUCTURING ZONES

Restructuring Zones is a mechanism used to open up areas which have major economic opportunities and for poor people who have been excluded or to protect poor people from being displaced from areas within economic opportunities. The uMhlathuze Municipality has previously identified **Aquadene**, **Empangeni** and **Expansion Area A** as its Restructuring zones.

The advantage of having an area declared as a restructuring zone is that it facilitates access to the restructuring or Institutional grant from the Department of Human Settlements to implement a social/rental housing project.

The Municipality has also considered declaring the Meerensee-Mzingazi Interface area (also known as Meerensee 5) as a restructuring zone. The locality of this area is as per the map inset hereunder:

**Map 28: Locality of proposed Meerensee Mzingazi Restructuring Zone**



The provision of infrastructure to the **Aquadene Superblock Housing project** is underway. The Municipality has a high demand for government related human settlements assistance. As such, the successful implementation of **uMhlathuze Village Phase 6** as the Community Residential Unit/Social will also reduce the housing demand in the uMhlathuze Municipality.

**Expansion area A** (Esikhaleni-Vulindlela Corridor) has been identified as priority number 1 for possible relocation of uMzingwenya settlement communities who are located in a 1:100 year floodline. The expansion Area A is currently subject to a commercial forestry lease with a small portion of the corridor having been developed as a municipal cemetery. The required 100 ha could alleviate housing development pressures in Esikhaleni (the uMzingwenya settlement as well as people from Vulindlela and Esikhaleni) and from other critical intervention areas in the municipality.

The **Empangeni Mega Housing Project** is located north of Empangeni and takes the form of a partnership between the Department of Human Settlements, uMhlathuze Council and the appointed

IA (Implementing Agent). The project has a planned yield of 10 000 units (coming from the range of subsidy mechanisms) and has been declared as a provincial catalytic project.

Two **rural projects** are located in the municipal area. 1000 units at Luwamba (Obuka Traditional Council) and 1500 units in Buchanana (Obuka Traditional Council).

The location of the municipal approved restructuring zones is provided on the following map. Details of current human settlements projects are also provided.

In addition, figures are provided that give an indication of the distance from current projects within restructuring zones to areas of urban opportunity.

## 10.4 PRIORITY HOUSING DEVELOPMENT AREAS

The uMhlathuze Municipality has identified three priority housing development areas (PHDAs) within its area of jurisdiction. The identification of these areas is the culmination of various studies and processes that have been undertaken over a number of years underpinning the notion of spatial transformation and restructuring of the current spatial form.

The uMhlathuze PHDAs are in the following areas:

- Empangeni
- Richards Bay
- Esikhaleni Vulindlela Corridor

More information relating to the rationale for identifying the above areas is provided herewith.

### 10.4.1 Empangeni

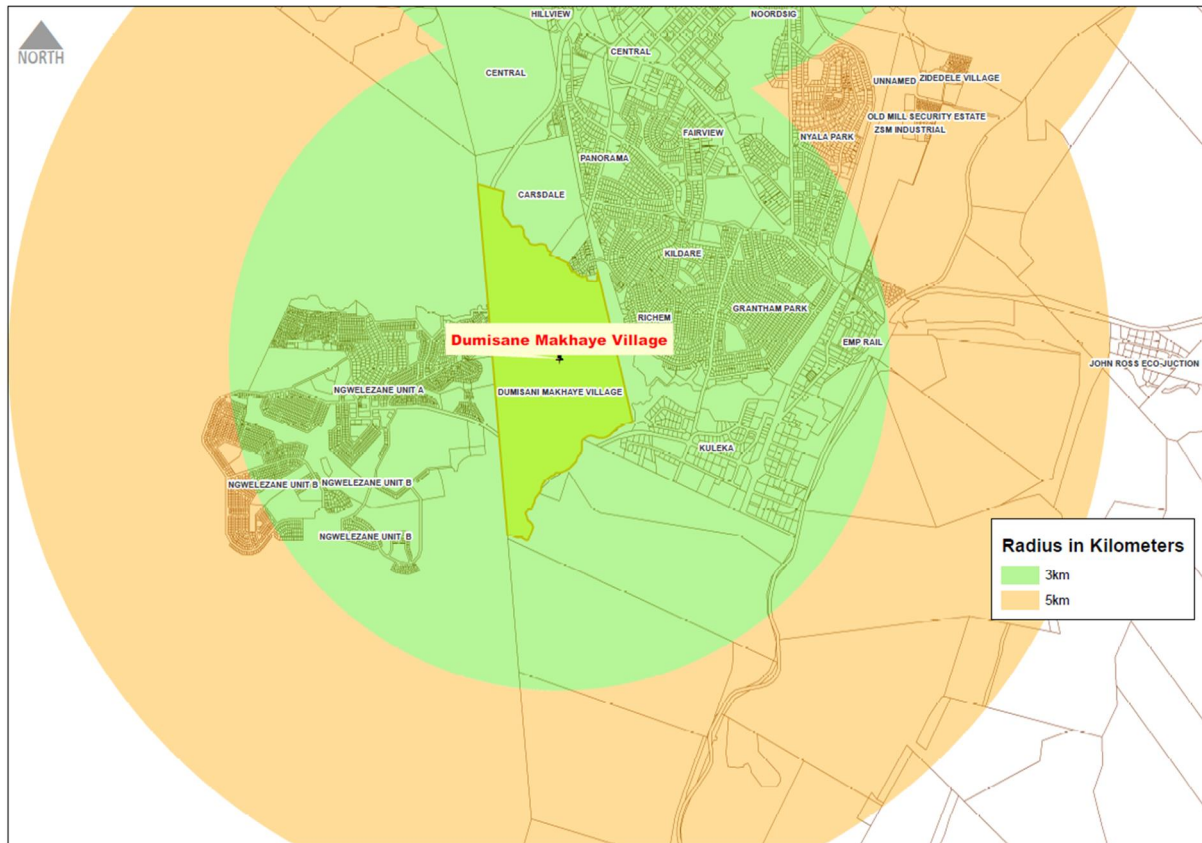
The Empangeni PHDA includes the towns of Empangeni, Ngwelezane, the Dumisani Makhaya Village Human Settlement project as well as the Empangeni Mega Housing project. Empangeni per se is a primary node in terms of the uMhlathuze Municipal SDF and it regarded as a major service and retail centre of uMhlathuze Municipality. It provides a centre of employment, industrial, residential, offices and commercial activity. Empangeni has a regional role and functions as a major gateway to the economy through the nearby Richards Bay Harbour. It plays a dominant role in KZN, especially within the commercial, industrial and agricultural support sectors and acts in the regional economy as a service centre.

At present, there are two human settlements underway in the area, notably **Dumisani Makhaya Village Phase 6 and 8** as well as Empangeni Mega Housing. Both these projects are now integrated residential projects (IRDPs) that offer a suite of opportunities to various income cohorts. The Dumisani Makhaya Village was historically an RDP project but the scope has widened to include social housing and also CRUs and the following is noted:

RDP Houses (Phase 8)	: 130
FLISP	: 82
Social Housing/CRU	: 1270

The Dumisani Makhaya can be considered as an infill project in its own right. The following plan indicates the proximity of the Dumisani Makhaya Housing Project to the Empangeni CBD by way of distance radii of 3km and 5km respectively.

**Figure 21: Radius around DMV Housing Project**



The **Empangeni Mega Housing** project has the following housing typologies:

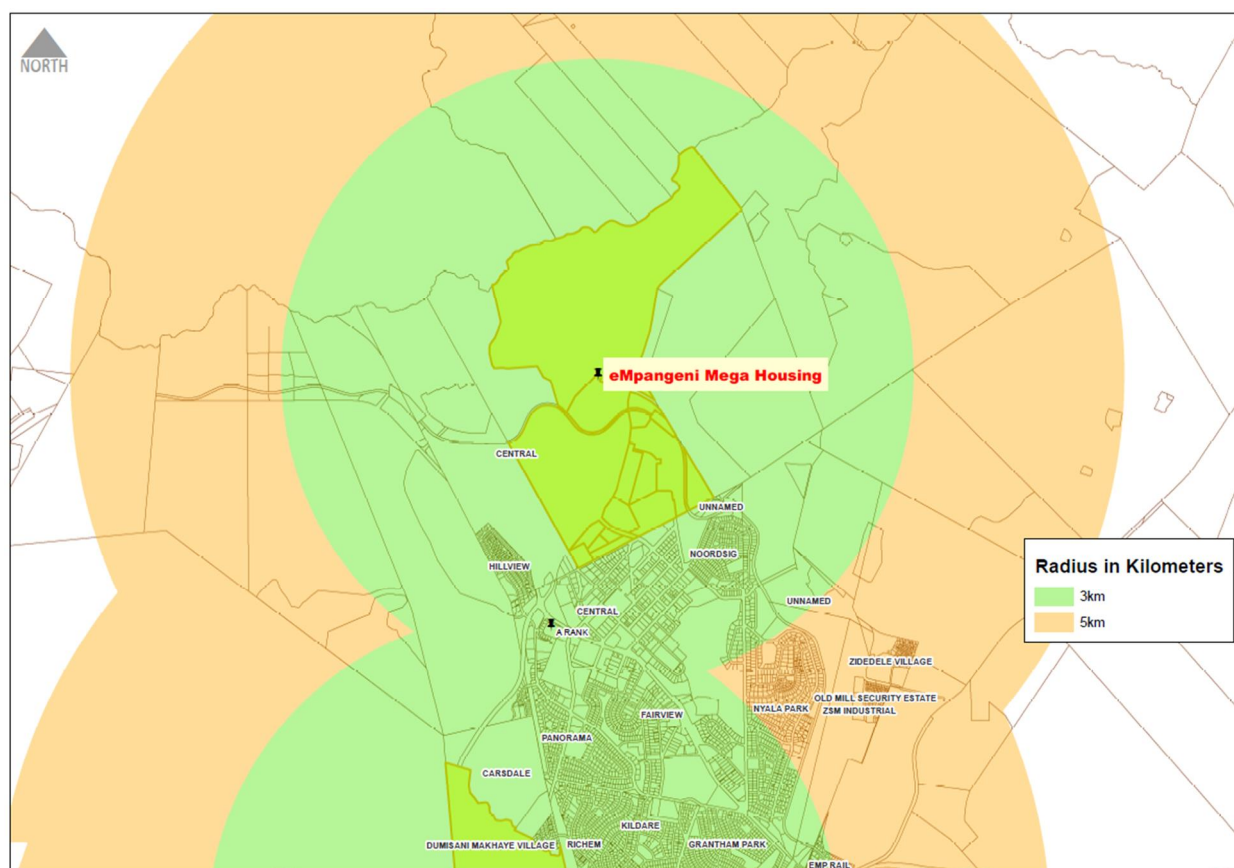
- o RDP & Finance Linked Individual Subsidy Programme: 2065
- o Social Housing: 1200
- o Bonded Houses: 5791
- o Serviced Sites: 578
- o Mixed Use Residential: 304
- o Medium Density Residential Cluster: 83

In addition, there is a proposal also to cater for student accommodation.

The following plan indicates the proximity of the Empangeni Mega Housing Project to the Empangeni CBD by way of distance radii of 3km and 5km respectively.



**Figure 22: Radius around Empangeni Mega Housing Project**



In recent years, an Informal Settlement Upgrade and Relocation Plan was prepared for a portion of **Ngwelezane** in terms of the NUSP (National Upgrading and Support Programme). This plan is addressing the urgent need for informal settlement upgrade (in-situ) within an urban area that has historically served as a dormitory suburb but its role as an economic service centre is increasing given efforts by the Municipality to foster the Township Economy.

Ngwelezane offers a combination of mixed used development such as commercial, medical, educational, mixed density and mixed income (urban and urban peri-urban living) and small scale commercial facilities. The area is surrounded by dense peri-urban development which in turn emphasizes the importance of the area as a suburb but also as a service centre to the surrounding community. Ngwelezane is well located to offer student accommodation given its accessibility and proximity to the University of Zululand main campus.

## 10.4.2 Richards Bay

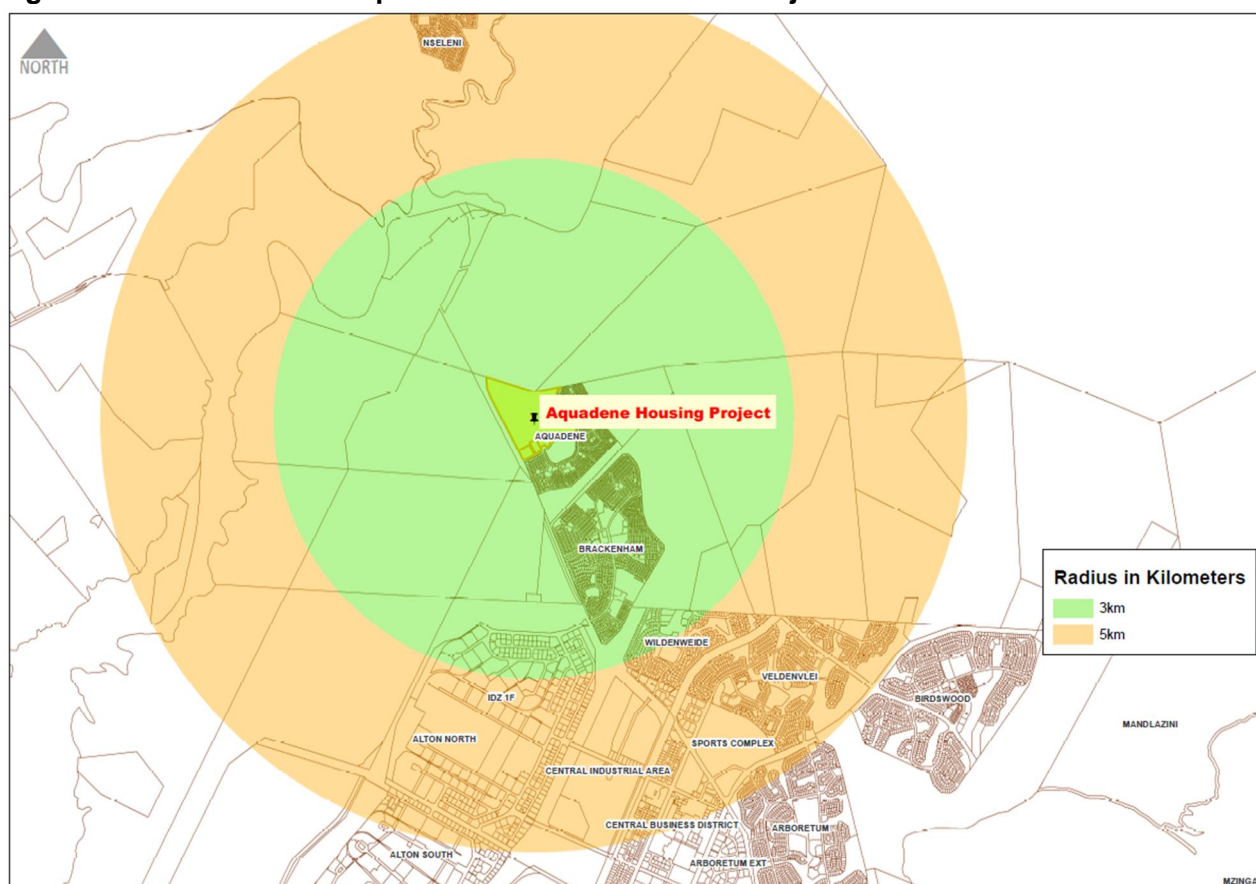
The Richards Bay PHDA includes the towns of Richards Bay, its suburbs, as well as Mandlazini and Mzingazi Agri-Villages. Richards Bay is a primary node in terms of the uMhlathuze Municipal SDF and is a prominent developing industrial centre of in South Africa that provides a centres of employment, industrial, residential, mining, offices, eco-tourism, nature reserve and commercial activity. The town is well positioned to take full advantage of the export of manufactured goods and raw materials by virtue of the Richards Bay Harbour. It is also regarded as a eco-tourism and nature reserve gateway and plays a dominant role in the provincial commercial and industrial sector.

At present, **Aquadene** is the main human settlement intervention in Richards Bay. The Aquadene project is also an IRDP. The projects provides for the following housing typologies:

RDP Houses	: 837
FLISP	: 130
Social houses/CRU	: 1579

The following plan indicates the proximity of the Aquadene Housing Project to the Empangeni CBD by way of distance radii of 3km and 5km respectively.

**Figure 23: Radius around Aquadene Human Settlement Project**



In recent years, an Informal Settlement Upgrade and Relocation Plan was prepared for both the **Mzingazi and Mandlazini Agri-Villages** in terms of the NUSP (National Upgrading and Support Programme). This plan is addressing the urgent need for informal settlement upgrade (in-situ) within these Agri-Villages that are located in close proximity to formal urban suburbs of Birdswood and Meerensee respectively. The said suburbs offer places of employment, commercial and social facilities and peri-urban development has also taken place along the periphery.

A further area that requires priority housing intervention is the area **between Mzingazi and Meerensee**. A project in this area would have a multi-purpose of being an infill project and a catalyst

to integrate the adjoining communities. Furthermore, the suitable development of this area could provide in much needed social and recreation facilities that are lacking in the Mzingazi area specifically. Apart from the above, the Richards Bay PHDA has a satellite campus of the University of Zululand as well as a uMfolozi TVET campus and the need for student accommodation is ever present.

### 10.4.3 Esikhaleni-Vulindlela Corridor

The Esikhaleni Vulindlela PHDA includes the towns of Esikhaleni and Vulindlela as well as the corridor in between. This area is a priority expansion area of the municipality in terms of the SDF.

**Esikhaleni** has historically been a dormitory suburb but is in the process of involving into a dominant node. At present it is a secondary node in the municipal area and offers a combination of mixed used development such as commercial, educational, mixed density and mixed income urban living. It is also surrounded by dense peri-urban development creating the need for in-situ upgrade. Furthermore, Esikhaleni plays a dominant role in region especially within the commercial, administration, transportation and social services. It also plays a dominant role in region and provides a tertiary education facility to the region with the location of the uMfolozi TVET College Esikhaleni campus on the periphery. The node has the potential to be considered as primary node in future.

In recent years, the hostel upgrading programme has been completed in Esikhaleni and 20 blocks were successfully upgraded. The main focus is now on the **uMzingwenya** settlement where more than 4000 households live on the urban periphery and more than half within flood prone areas. The Municipality has also prioritized the uMzingwenya Slums Clearance project and foresees at least partial resettlement of the affected community into the Esikhaleni Vulindlela Corridor.

The town of **Vulindlela** was also investigated and an Informal Settlement Upgrade and Relocation Plan was prepared for a portion thereof prepared in terms of the NUSP (National Upgrading and Support Programme). This plan is addressing the urgent need for informal settlement upgrade (in-situ) within an urban area that has historically served as a dormitory suburb but its role as an economic service centre is also increasing.

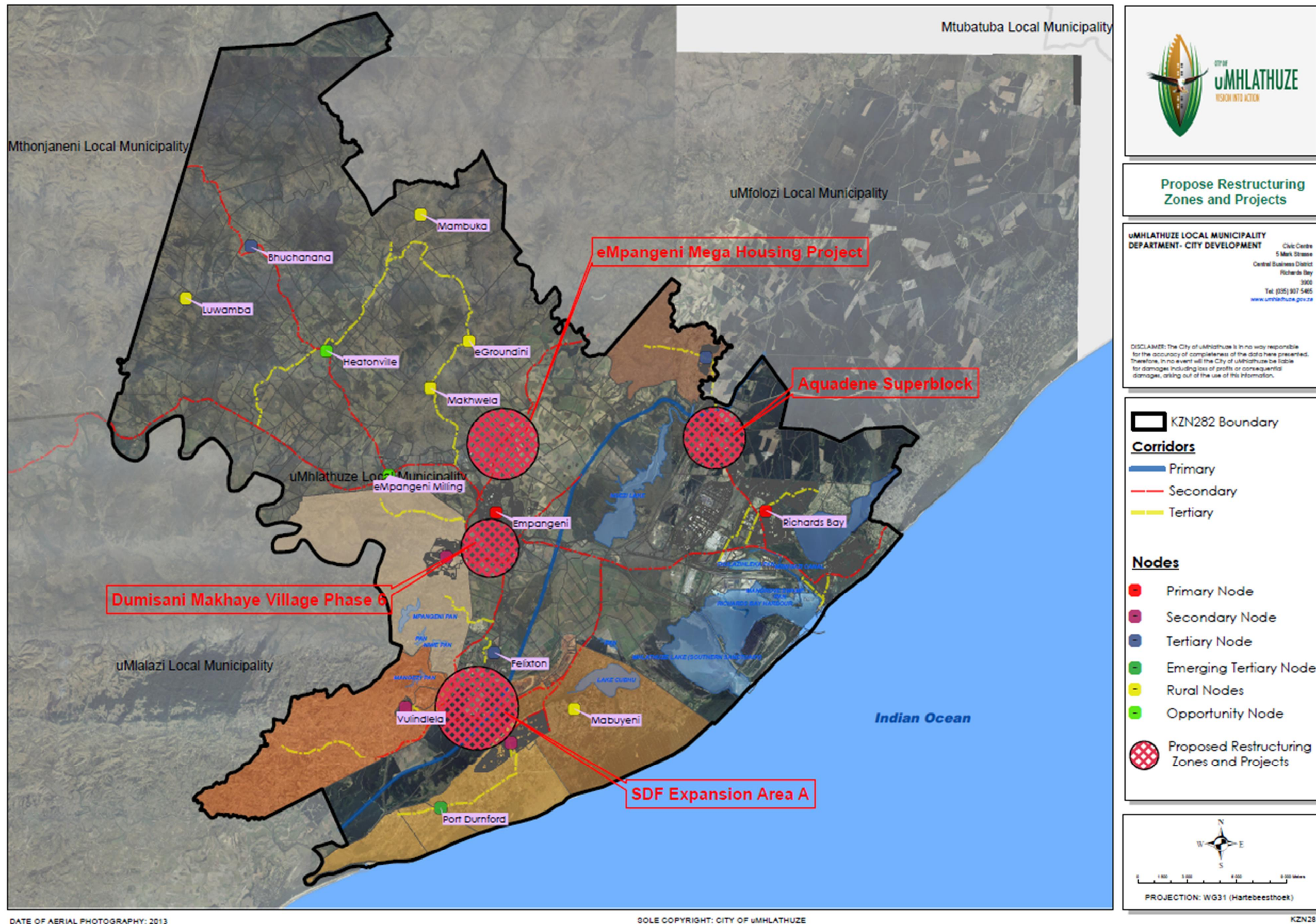
More specifically, Vulindlela offers a combination of mixed used development such as educational, low medium income residential (urban & peri-urban living), health facilities and small scale commercial facilities. It plays a dominant role in Region and provides a tertiary education facility to the region with the location of the University of Zululand main campus on the periphery. As a result, there is an increasing demand for student accommodation and to an extent, the already informally provided student accommodation has to be formalized.

The following plan provides an indication of the radii around the Esikhaleni and Vulindlela nodes and how any development within these radii will provide integration and improved access to the provided urban facilities.

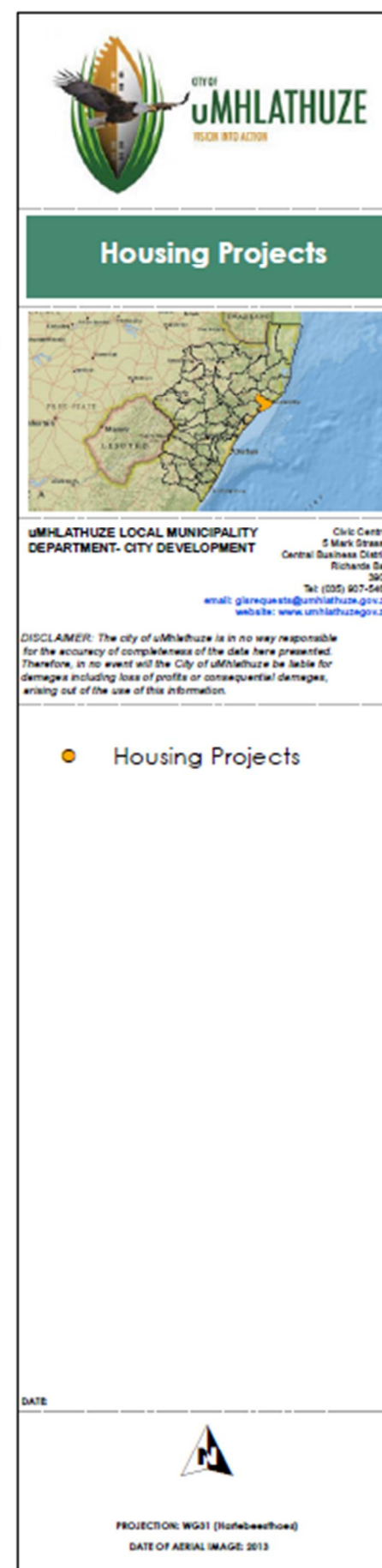




Map 29: Human Settlements Restructuring Zones







## 11. DISASTER MANAGEMENT

The Disaster Management Act (Act 57 of 2002) as well as the National Disaster Management Framework, requires that Municipalities conduct disaster risk assessments for their area of jurisdiction. The main objective of the Disaster Risk Assessment is to provide the City of uMhlathuze with relevant information to enable and support the required disaster risk reduction planning and activities to be undertaken by the Municipality. Given their spatial relevance, the issues of overall vulnerability and resilience are briefly expanded upon:

**Vulnerability** can be described as the degree to which an individual, a household, a community, an area or a development may be adversely affected by the impact of a hazard. Conditions of vulnerability and susceptibility to the impact of hazards are determined by physical, social, economic and environmental factors or processes. It is also important to remember that vulnerability is dynamic, not static, as the vulnerability of communities change due to improvements or degradation of social, environmental and economic conditions, as well as interventions specifically aimed at reducing vulnerability, such as disaster mitigating actions.

**Resilience** characteristics relate to the capacity within the uMhlathuze area to counter the effects of hazards and vulnerabilities. Resilience levels consist of Manageability and Capacity values. Manageability is defined as the combination of all the strengths and resources available within the government departments and line-functions that can reduce the level of risk or the effects of a disaster. This includes the level of staff or human resources, available expertise, suitable experience, available vehicles, equipment, funding or budget allocations, facilities and risk reduction and response plans. Capacity is defined as the combination of all the strengths and resources available within the community or society that can reduce the level of risk or the effects of a disaster.

The **existing uMhlathuze Disaster Management Plan** was prepared for the former area of uMhlathuze that excluded the newly incorporated wards post the 2016 Local Government Elections. The said plan contained the following conclusions and recommendations that have spatial relevance:

- a. **Human Disease and Health hazards** were identified as a very high risk within the City of uMhlathuze. The following recommendations are therefore made in this regard:
  - o An assessment should be conducted to identify specific and urgent needs related to areas where a lack of capacity, infrastructure and service delivery can lead to the outbreak or spread of diseases;
  - o This assessment can include aspects related to sanitation, provision of potable water, waste removal and access to medical facilities and services;
  - o Results of this assessment should be used to identify urgent development needs and prioritize infrastructure development projects;
  - o Such an assessment should not only focus on the development of new infrastructure, but should also identify needs, or challenges associated with the maintenance of existing infrastructure as well as low level of service delivery in already serviced areas;
  - o If not already implemented, a GIS based disease monitoring and surveillance system should be developed to record the occurrence of diseases within the City of uMhlathuze. Such a system should enable health officials to constantly monitor the outbreak and spread of diseases within the City of uMhlathuze;
  - o The required contingency plans with regard to the outbreak of diseases should also be developed. These plans should not only cover the response to known diseases such as cholera, but also allow for the response to diseases such as emergent influenza and pandemic-related diseases.
  - o Implemented and existing programmes related to the prevention and management of HIV/AIDS should be continued, and the impact of such programmes should be assessed in order to determine effectiveness of current programs.
- b. A detailed investigation of **Industrial Hazards** within the City of uMhlathuze was not included as part of this assessment. It is therefore recommended that a follow-up study be conducted. The aim of such a study would be to:

- o Identify and capture the location of all hazardous material installations, including pipelines, transportation routes, facilities and Major Hazardous Installations in a Geographical Information System;
  - o Conduct a detailed investigation with regard to the quantity and type of hazardous material, associated hazards, level of preparedness with regard to emergency response plans, equipment and resources, and contact details of key personnel at each facility;
  - o Conduct a detailed hazard and risk assessment associate with industrial hazards within the City of uMhlathuze;
  - o Current activities and forums to encourage and facilitate interaction between the Health and Safety departments in the City of uMhlathuze and industries, as well as between industries should be continued and intensified. This should be a shared initiative with responsibilities on both Industries and Government.
- c. **Hydro-meteorological and Climate change related hazards**, such as flooding, storms and storm surges, can pose a risk to the City of uMhlathuze. The impact of flooding can cause severe damage and disruption in highly populated areas and informal settlements. The following recommendations are therefore made:
- o Updated detailed flood lines should be developed for the watercourses throughout the City of uMhlathuze. Where applicable, a detailed flood hazard assessment should be conducted to identify where investment in storm water management infrastructure should be made.
  - o It is also recommended that a Flood Hazard Management System be implemented in the City of uMhlathuze, in order to ensure an effective flood risk reduction and response to flooding events by all relevant departments and role-players within the City of uMhlathuze.
  - o In addition to the flood-related assessments, it is recommended that a detailed assessment be conducted with regard to the impact of storm or tidal surge as well as sea level rise on the City of uMhlathuze.

The **King Cetshwayo District Disaster Management Plan** notes the following prioritizes risks for the uMhlathuze Municipality:

Red	<ul style="list-style-type: none"> <li>o Disease/Health: Human (HIV/AIDS &amp; TB)</li> <li>o Disease/Health: Human (Other disease)</li> <li>o Hydro-meteorological hazards: severe storms (wind, hail, snow, lighting, fog)</li> <li>o Civil unrest: Demonstrations/Riots</li> </ul>
Orange	<ul style="list-style-type: none"> <li>o Hazardous Material-Hazmat: Fire/Explosion (Storage &amp; transportation)</li> <li>o Hazardous Material-Hazmat: Spill/Release (Storage &amp; transportation)</li> <li>o Oceanographic Storm surge</li> <li>o Hydro-meteorological Hazards Floods (River, Urban&amp; Dam failure)</li> </ul>
Yellow	<ul style="list-style-type: none"> <li>o Civil Unrest Xenophobic attacks</li> <li>o Fire hazard Veld/Forest fires</li> </ul>

The **uMhlathuze Municipality recently has submitted a Framework** for the establishment of an Integrated Disaster Management Service in terms of Disaster Management Act 57 of 2002. The said Framework is inclusive of timelines and activities towards implementation of a fully flagged disaster management centre and well equipped team to implement the full cycle of disaster management.

It is anticipated that the Disaster Management Plan will be finalised during 2018/2019 after which, amongst others, disaster risk mapping will be included into the SDF.

### **11.1 SUMMARY OF DISASTER MANAGEMENT ISSUES**

- o The prioritized risks for uMhlathuze are noted to be human disease/health, hydro-meteorological hazards and civil unrest.
- o The existing uMhlathuze Disaster Management Plan was prepared for the former area of uMhlathuze that excluded the newly incorporated wards post the 2016 Local Government Elections. A framework for the establishment of an Integrated Disaster Management Service in terms of Disaster Management Act 57 of 2002 has been developed.

## 12. SPATIAL DEVELOPMENT FRAMEWORK

### 12.1 INFORMANTS OF SPATIAL DEVELOPMENT

The following table is a consolidation of the sectoral key development issues that have been extracted from the various chapters in this report.

**Table 46: Consolidation of Key Issues**

SPATIAL	DEMOGRAPHIC AND SOCIO-ECONOMIC
<ul style="list-style-type: none"> <li>o Municipality has an area of 123 325Ha</li> <li>o 51% of the area is under the jurisdiction of Ingonyama Trust Board</li> <li>o Richards Bay and Empangeni are the most significant economic centres in the Local and District Municipality</li> <li>o Esikhaleni has the potential to develop into a primary node if the local economy becomes more sustainable, specifically in respect of growth and employment opportunities</li> <li>o Aquadene, Brackenham, Esikhaleni and Nseleni have the highest residential densities in the municipal area</li> <li>o Existing bulk infrastructure capacities will have to be increased at all nodes to accommodate increased densities and expansion/development</li> <li>o Vast peri-urban settlements have challenges and lack proper planning, limited basic services and is located in environmental high risk areas compromising their sustainability.</li> <li>o The area to the east of the Municipality is inundated with a system of wetlands and natural water features such as Lakes Cubhu, Mzingazi, Nsezi and Nhlabane. Major rivers include the Mhlathuze and Nsezi.</li> <li>o The main access into the municipal area is via the N2 in a north south direction and in an east west direction the R34. Other significant roads in the area include the MR431 (that provides a northerly entry into Richards Bay from the N2) as well as the Old Main Road that straddles the N2 on its inland.</li> <li>o Railway lines are prevalent in the municipal area but do not provide a passenger service, only a commercial/industrial service is provided.</li> <li>o The municipality has the benefit of about 45km of coastline.</li> <li>o Linked to its coastal locality is the Richards Bay deep-water port that has been instrumental in the spatial development of the area.</li> </ul>	<ul style="list-style-type: none"> <li>o Highest population densities are found in the in the formal urban and surrounding areas, i.e. peri-urban areas.</li> <li>o According to the 2016 Community Survey, uMhlathuze had 410 465 people and 103 915 households with an average households size of 3.95.</li> <li>o At a steady population increase of 1,5% per annum, the municipal population will surpass 500 000 people by 2030.</li> <li>o The municipality will reach a population of 500 000 before 2021 if a population growth rate of 5% takes place over the next few years. At a 5% per annum population growth rate the number of households in the municipality will double by 2030.</li> <li>o An estimated additional 1300 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 15 units per hectare.</li> <li>o An estimated additional 600 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 25 units per hectare.</li> <li>o For the percentage of adults over the age of 20 years that do not have schooling, the incidence of this is highest (more than 61%) in Wards 5, 10, 13, 14, 18, 25, 32 and 33. This are largely coincides with Traditional Authority areas.</li> <li>o Regarding income levels as a percentage of households that earn less than R1600 per month it is noted that Wards 5, 10 and 29 are the most impoverished in this regard.</li> <li>o Regarding unemployment levels and the wards with the highest percentage of unemployed individuals are 4, 5, 12, 18, 24 and 28.</li> </ul>



## LAND REFORM

- o The opportunity to lodge land claims has been extended to 30 June 2019 and, to a degree, some developers feel uncertain about the prospects of pursuing a development on land that may be subject to claim in future.
- o The Regional Land Claims Commission has made it clear that the intention of land claims is not to hinder development.

## HUMAN SETTLEMENTS

- o Informal Settlement Upgrade and Relocation Plans for seven identified information settlements is in place, i.e. Mzingazi Infills, Mzingazi Informal Settlement, Mandlazini-Airport Buffer Strip, Mandlazini Infills, Umzingwenya, Vulindlela, Nseleni Peri-Urban Settlement and the Ngwelezane Hospital Settlement.
- o The uMhlathuze Municipality has three Restructuring zones, i.e. Aquadene, Empangeni and Expansion Area A.
- o Planning for Human Settlements requires coordination between various implementing departments and authorities, i.e. DWS, EDTEA, Municipal Infrastructure and Municipal Planning.

## INFRASTRUCTURE

- o Wards 31 and 33 have high percentages of households more than 61% - that do not have access to piped water.
- o Wards 5 and 33 have more than 61% of their households without access to hygienic toilets.
- o The estimated AADD potable water requirements inclusive of the existing planned and approved development as well as the development of Areas A to H is 280 Ml/day.
- o Estimated Daily Peak water requirements inclusive of the existing planned and approved development as well as the development of Areas A to H is 415 Ml/day. At least six additional reservoirs are proposed in this regard.
- o The Municipality has five wastewater treatment works (WWTW) and a marine outfall and the option of wastewater re-use is being investigated.
- o The City of uMhlathuze is implementing a strategic management plan for water conservation and water demand management.
- o An annual maintenance and refurbishment/replacement budget should be provided in addition to the budgets required for capital cost and recurrent expenses. Maintenance is estimated at 4% of the estimated capital cost of the infrastructure per annum; and refurbishment/replacement at 2% of the estimated capital cost.
- o In addition to the existing sewerage sub-systems, the topography upon which the City of uMhlathuze is situated lends itself to

## DISASTER MANAGEMENT

- o The prioritized risks for uMhlathuze are noted to be human disease/health, hydro-meteorological hazards and civil unrest.
- o The existing uMhlathuze Disaster Management Plan was prepared for the former area of uMhlathuze that excluded the newly incorporated wards post the 2016 Local Government Elections.
- o A framework for the establishment of an Integrated Disaster Management Service in terms of Disaster Management Act 57 of 2002 has been developed.

## ENVIRONMENTAL

- o The complex hydrology of the area, whilst attributing to unique natural features, poses challenges for development. This is particularly the case where logical spatial expansion need to take place.
- o The impacts of Climate Change are being experienced in a local scale in the following respects:
- o Abstraction of water from the various Coastal Lakes have reached ecological reserve limits during periods of extended drought. The long term ecological and aquatic impacts are unknown, particularly where these systems feed into estuarine systems
- o Severe flood events have yielded disaster implications for unplanned settlements with flood prone/ flood risk areas. Whilst this is the case, these are settlements that impact

<p>the establishment of two further sub-systems and possibly to a third new sub-system within the identified SDF Expansion Areas.</p> <ul style="list-style-type: none"> <li>o Currently the flow to the existing macerators and WWTW is some 35 Ml/d. The required capacities for the anticipated flow for the existing, planned and approved developments are expected to be around 75 Ml/d. The required capacities for the anticipated flow for the existing, planned and approved developments together with the remaining potential of expansion areas A to H are expected to be of the order of 185 Ml/d.</li> <li>o An annual maintenance and refurbishment/replacement budget should be provided in addition to the budget required for recurrent expenses. Maintenance at 4% of the estimated capital cost of the infrastructure per annum; and Refurbishment/replacement at 2% of the estimated capital cost of the infrastructure.</li> <li>o The Municipality reviewed its Arterial Road Framework Plan during 2009. The plan needs to be updated given the new expanded municipal boundaries.</li> <li>o The uMhlathuze Municipality has also initiated the process of preparing a Comprehensive Integrated Transport Plan (CITP) with the assistance of the Department of Transport.</li> <li>o The location of the current Richards Bay airport poses challenges in terms of operations and future development. The Spatial Development Framework (SDF) of the Municipality has identified, at a high level, a favourable corridor for an airport precinct and a pre-feasibility study for the proposed relocation of the Richards Bay airport has been completed.</li> </ul>	<ul style="list-style-type: none"> <li>o on environmental services by virtue of wetland degradation.</li> <li>o The Richards Bay northern beaches in particular have been confronted with severe erosion, with a result that emergency coastal defenses were required. It is also a fact that the Northern beaches are not being adequately replenished at the required rate of sand volumes from the Transnet sand bypassing scheme.</li> <li>o Environmental Offsets linked to the Port expansion render significant unknowns from an institutional/ governance perspective but equally from the perspective of physically transforming the affected environmental from current land use.</li> <li>o Further land development is likely to render biodiversity implications</li> </ul>
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The uMhlathuze SDF identifies a series of expansion areas for the municipal area that was informed by planning principles. In recent years, development proposals particularly from private land owners has aligned to the uMhlathuze SDF. Apart from the spatial development principles that were unpacked at the outset of the report, the following imperatives for the future spatial and economic development of the uMhlathuze Municipality are reiterated:

1. **Job Creation.** Due consideration has to be given to the protection of high potential agricultural land for productive agricultural purposes. However, land and opportunities have to be created to foster industrial development. It is very likely that a conflict will develop between the use of land for productive agriculture versus industrial related/supportive activities. To address this, consideration is given to spatial planning principles as contained in this report.
2. **Investment in human** and community development has to be informed by government principles, as typically contained in the NSDP, i.e. all have to be provided with basic services irrespectively of where they live and investment in human capital in areas that offer lesser economic opportunities. Planning for sustainable human settlements is contained in the Municipal Human Settlements Plan.

3. The spatial implication of the proposed Richard Bay **Port Expansion** has been deliberated by the Municipality and its implications are considered critical during all forward planning exercises. As such, the proposed port expansion and associated impacts on infrastructure and the receiving environment is given due consideration in the municipal SDF.
4. Regardless of the attempts to mitigate the impacts of **climate change**, it is widely accepted that many of the anticipated changes are destined to take place. The uMhlathuze climate change strategy was therefore drafted on the basis of two fundamental principles, i.e. **mitigation** and **adaptation** through the implementation of the Climate Change Municipal Action Plan.
5. **Spatial Equity** requires the promotion of spatial concentration as well as integrated land management and spatial planning. The principles upon which the uMhlathuze SDF has been derived are based on principles of integration, densification and efficient land use. To this end, the municipal Land Use System is being reviewed.

## 12.2 SPATIAL DEVELOPMENT VISION AND STRATEGIC APPROACH

The uMhlathuze Municipal Vision is:

*development and inclusive economic growth*

The Spatial Vision for the Municipality is as follow:

***compact growth, supported by appropriate ICT solutions***

In line with the Basic Service Delivery and Infrastructure Provision, and Local Economic Development and Cross Cutting Key Performance Areas (KPAs), the following goals that have a pertinent spatial implication are noted:

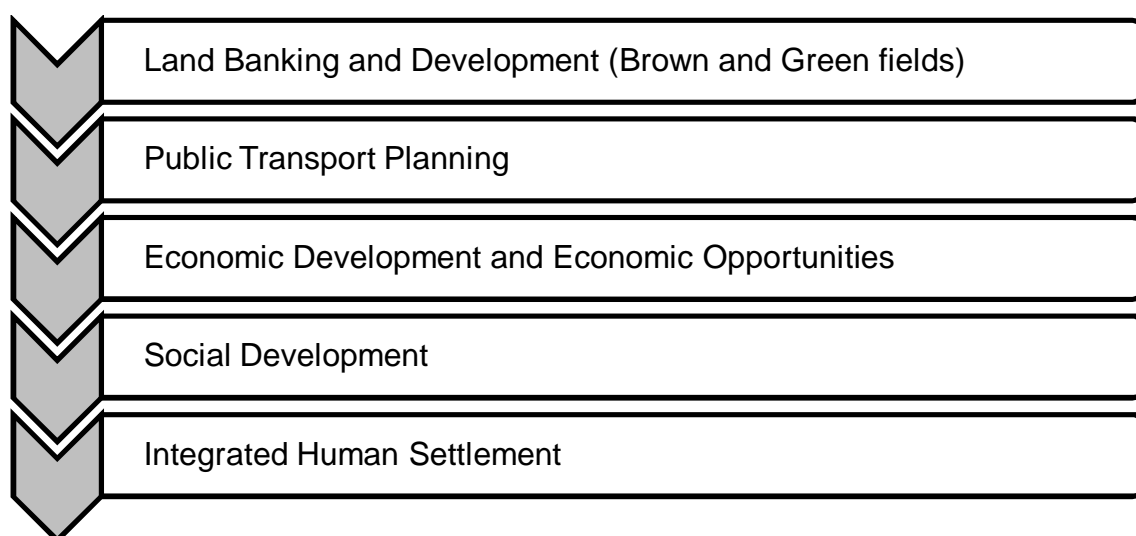
- o Integrated infrastructure and efficient services
- o Viable economic growth and development
- o Integrated urban and rural development

The above spatial vision is expanded upon hereunder. It be noted that it has been informed by policy guidelines provided from, amongst others, the National Development Plan, the Provincial Growth and Development Strategy as well as the SPLUMA (Spatial Planning and Land Use Management Act). The said guidelines are the foundation that gives direction to the envisaged future spatial outcomes in the uMhlathuze Municipal area.

The concept of **Transformation** is always associated with social change in South Africa. The National Development Plan 2030 makes a strong statement about the need to of apartheid geography ty. SPLUMA is identified as a tool to give effect to Spatial Transformation.

According to SACN (2013)

to rein in the real changes not only in the physical realm but also in the way we approach both the problems and the solutions. The uMhlathuze Municipality, like any other municipality in country is required to undertake processes of spatial transformation in line with the National Development Plan, Provincial Growth and Development Strategy & Plan, Spatial Planning and Land Use Management Act and the process is informed by the following five key Pillars:

**Figure 25: uMhlathuze Spatial Transformation Pillars**


The main objective of uMhlathuze Municipal Spatial Transformation Concept is to address the integrated development, city compacting, structural elements, equal access to land, create sustainable economic development and opportunities which will contribute to job opportunities. It is also to prioritise development within and along Municipal Nodes and Corridor as well as developing a development partnership with neighbouring Municipalities.

SPATIAL TRANSFORMATION PILLARS	MUNICIPAL SPATIAL TRANSFORMATION GOALS	SPLUMA PRINCIPLES
Land Banking and Development (Brown and Green fields)	<p>Optimise and maximise land distribution and development through:</p> <ul style="list-style-type: none"> <li>- Densification</li> <li>- Infill development</li> <li>- Promotion of environmental friendly and sustainable development</li> </ul> <p>Encourage equal access land distribution.</p> <p>The SDF and development plans is used as a catalyst to address sustainable land distribution.</p> <p>A clear urban edge and development guidelines and incremental approach for certain areas. Development of Rural Development Framework Plans.</p>	<ul style="list-style-type: none"> <li>- Spatial Justice</li> <li>- Spatial sustainability</li> <li>- Spatial efficiency</li> <li>- Spatial resilience</li> <li>- Good administration</li> </ul>
Public Transport and Facilities	Further development of Municipal Public Transport that will address the following:	<ul style="list-style-type: none"> <li>- Spatial sustainability</li> <li>- Spatial efficiency</li> <li>- Spatial resilience</li> </ul>

SPATIAL TRANSFORMATION PILLARS	MUNICIPAL SPATIAL TRANSFORMATION GOALS	SPLUMA PRINCIPLES
	<ul style="list-style-type: none"> <li>- Intermodal Public Transport System</li> <li>- Adequate Public Transport Facilities</li> <li>- Promote a good relationship with public transport stakeholders</li> <li>- Attract Investment</li> </ul>	<ul style="list-style-type: none"> <li>- Good administration</li> </ul>
Economic Development and Economic Opportunities	<p>Municipal Economic Development Roadmap that will address the following:</p> <ul style="list-style-type: none"> <li>- Encourage investment</li> <li>- Discourage new investment that will create exclusive enclaves for the rich</li> <li>- Promote equal access to economic development opportunities</li> <li>- Tourism investment enhancement</li> <li>- Port Development</li> <li>- Industrial Development and Special Economic Zone</li> <li>- Food security</li> </ul>	<ul style="list-style-type: none"> <li>- Spatial Justice</li> <li>- Spatial sustainability</li> <li>- Spatial efficiency</li> <li>- Spatial resilience</li> <li>- Good administration</li> </ul>
Social Development	<ul style="list-style-type: none"> <li>- Safety and Security</li> <li>- Health</li> <li>- Education</li> <li>- Job creation</li> <li>- Promote gender equity and equality</li> <li>- Food security</li> </ul>	<ul style="list-style-type: none"> <li>- Spatial Justice by addressing past spatial injustice i.e. access to land</li> <li>- Spatial sustainability by promoting land development that is within fiscal and institutional means</li> <li>- Spatial efficiency by optimizing the use of existing resources</li> <li>- Spatial resilience by flexible spatial plans, policies and land use management</li> <li>- Good administration to ensure all spheres of government have an integrated approach to land use and spatial development</li> </ul>



### 12.2.1 Municipal Spatial Transformation Strategy Nodal Focus Areas

NODAL FOCUS AREA	CLASSIFICATION	INTERVENTION
Richards Bay and Empangeni	Primary urban centre, with servicing capacity and opportunity for densification and can support thresholds for a range of services, industry and public transport	<ul style="list-style-type: none"> <li>- Development of Densification Guideline/Policy</li> <li>- Review of 2006 CBD Framework Plan for Richards Bay</li> <li>- Implementation of the CBD Revitalization Plan</li> <li>- Adopting of a safety non-motorized movement system</li> </ul>
Ngwelezane, Esikhaleni, Vulindlela Township	Secondary urban centre with limited servicing capacity and opportunities for economic development, employment, land use and densification enforcement	Development of Precinct Plan to provide development vision for the area and provide possible solutions to the development, densification, land use management and economic challenges. Interventions aimed at fostering the Township Economy and supporting the second economy.
Nseleni, Buchanana Township	Tertiary urban centre with limited servicing capacity and opportunities for economic development, employment, land use and densification enforcement	Development of Precinct Plan to provide development vision for the area and provide possible solutions to the development, densification, land use management and economic challenges. Interventions aimed at fostering the Township Economy and supporting the second economy.
Opportunity Node (Empangeni Milling Node and Heatonville)	Node with untapped potential to provide services and economic opportunities to the surrounding hinterland, mainly by virtue of its accessibility.	Development of Precinct Plan to provide development vision for the area and provide guidance for the development, land use management and economic growth.
Rural Nodes (Potential Investment Areas)	Rural Centres with limited servicing capacity and socio-economic opportunities.	Development of Development Framework Plan which will provide guidelines for translation of Spatial Development Intentions into Land Use, Transport, Environmental, Infrastructure developments

The Municipality has recently reviewed its Land Alienation Policy which aims at addressing the Municipal Spatial Transformation Interventions. Historic imbalances have propagated in the spatial form and functions of towns and suburbs. It is now imperative that local government takes decisive action to intervene and change the landscape that has evolved as a result of these imbalances.

1. A number of **push factors** out of the former R293 towns exist as well as pull factors toward the well-established and serviced urban areas. The combination of these push and pull factors have an undesirable effect on settlement pattern and distribution. Interestingly, the

R293 towns also have a pull effect on rural communities by virtue of the facilities/services available that exceed those available in rural areas.

2. **Transport** related imbalances need to be addressed, including the economic cost of travelling long distances between place of employment and place of employment. The historic lack of economic activity in R293 towns and rural areas have created dormitory suburbs that provide only in residential and basic ancillary needs such as schools, parks etc. A structured economy is lacking.
3. **R293 towns and remote suburbs** need to become sustainable, integrated communities that offer residents a suite of choices and opportunities. It should be the choice of a resident to obtain goods and services of a satisfactory quality locally or travel to a more established, higher order town, to obtain higher order goods and services from. More specifically, the Township Economy needs to be supported.
4. Land that is well located and suitable for economic activity needs to be accessible to **historically disenfranchised**.
5. Government funded interventions have to contribute to the **integration of communities** and not the further segregation of communities. To this end, the notion of **restructuring zones** is supported by the local municipality.
6. **Sense of place** and belonging to be created. Various urban design type interventions such as urban greening, waste management etc. have to be implemented to create such a sense of place and redress the feeling of remoteness.
7. Improved **access to social services** from all spheres of government. Interim arrangements of mobile services delivery points to be replaced with more permanent solutions.

Council is in the process of preparing a suite of plans to link the strategic SDF/IDP to the local implementation level of the Land Use Scheme. In order to redress spatial inequality, the following list of factors have been identified that will reduce the level of spatial inequality that exists in an area. Please note that the list is not exhaustive:

- Improved access to facilities and services
- Improve variety of facilities available
- Improve access to economic opportunities/access to land
- Overall improvement of the Township Economy
- Lessen transport cost/effort to reliable social and economic opportunities and places where goods/services are procured/received
- Spatial integration of developable areas
- Integrated human settlement
- Improved and appropriate management/development control of previously segregated areas
- Greening of suburbs and towns

## 12.3 PLANNING FOR FUTURE SPATIAL DEVELOPMENT

The Spatial Development Framework of uMhlathuze guides future development and the following components are expanded upon herewith:

- o Settlement and Corridor Hierarchy
- o Natural Features
- o Expansion areas
- o Infill and densification
- o Urban Development Boundary

### 12.3.1 UMHLATHUZE SETTLEMENT HIERARCHY

It is important to provide some description of what is considered section. Essentially urban and rural areas differ with regard to population densities, land use types and levels of services.

According to Wikipedia ([www.wikipedia.org](http://www.wikipedia.org)) it is important to note that definitions for urban (and rural) vary somewhat between nations.

- o In Europe, countries define urbanized areas on the basis of urban-type land use
- o In less developed countries, in addition to land use and density requirements, a requirement for urbanized is that a large majority of the population, typically 75%, is not engaged in agriculture and/or fishing.
- o In Australia, urban areas are referred to as "urban centres" and are defined as population clusters of 1000 or more people, with a density of at least 200/km<sup>2</sup>.

The following descriptions are proposed by the uMhlathuze Municipality in respect of urban, peri-urban, rural and traditional communities.

**Urban:** Townships that have been formalized in terms of relevant development planning legislation and where private individuals can obtain land. In urban areas a higher than basic level of services is generally provided and maintained.

**Peri-Urban:** Peri-urban areas often form as result of settlement on the boundary of formal urban areas but not necessarily enjoying the benefits/levels of services that are available in the adjoining urban areas. A further consideration would be that such areas have a higher population/household density than rural areas.

**Rural:** An area outside of an urban/an or peri-urban area that has a lower population/household density as well as a more basic level of services.

**Traditional Communities:** As recognized in terms of Section 2 of the KwaZulu-Natal Traditional Leadership and Governance Act, 2005 (No. 5 of 2005), and are found in both peri-urban and rural areas.

It has to be noted that a settlement hierarchy directs specific resource based responses in respect of spatial development and investment. The detailed Settlement Hierarchy proposed for the municipal area is shown herewith:

**Table 47: Summary of uMhlathuze Settlement Hierarchy**

<b>PRIMARY SETTLEMENTS</b>	<b>RICHARDS BAY AND EMPANGENI</b>
<ul style="list-style-type: none"> <li>o Centres of employment, industrial and commercial activity.</li> <li>o Continue to serve as main municipal administrative centres.</li> <li>o Main public transportation nodes (Richards Bay Taxi City and Empangeni A and B-Ranks).</li> <li>o A range of specialized services and facilities are available to a larger hinterland.</li> </ul>	
<b>SECONDARY AND TERTIARY SETTLEMENTS</b>	<b>ESIKHALENI, NSELENI, VULINDLELA, NGWELEZANE AND FELIXTON</b>
<ul style="list-style-type: none"> <li>o Formalized towns, mainly residential in nature.</li> <li>o Most community facilities are available at these locations, and therefore provide their resident communities with basic commercial and recreational facilities. More specialized services and facilities are obtained from the primary settlements.</li> <li>o Opportunity to formalize better employment opportunities at all secondary settlements.</li> </ul>	
<b>PERI-URBAN AREAS</b>	<b>UNFORMALIZED AREAS MAINLY ADJACENT TO THE FORMALIZED SECONDARY NODES OF ESIKHALENI, VULINDLELA, NSELENI AND INCLUDES MZINGAZI AND PORTIONS OF MANDLAZINI</b>
<ul style="list-style-type: none"> <li>o Characterized by dense population; small stands not necessarily able to support agricultural activities; Continuous infill-development takes place; pressure for connections to municipal infrastructure (individual connections) and possible health impacts as a result of over-crowding and lack of community services.</li> <li>o In-situ rural housing projects not necessarily viable as a result of high densities.</li> <li>o Opportunities for formalization for some of these areas.</li> <li>o Township establishment possible on municipal land but limitations exist on Ingonyama Trust Board (ITB) land.</li> </ul> <p>(Note: The Mandlazini and Mzingazi area, albeit considered part of the Richards Bay formal area, are in the process of formalization)</p>	
<b>OPPORTUNITY NODES</b>	<b>HIGHLY ACCESSIBLE AREAS WITH UNTAPPED POTENTIAL</b>
<ul style="list-style-type: none"> <li>o Characterized by good accessibility but very limited development economic opportunities.</li> <li>o Potential to provide services and economic opportunities to surrounding hinterland</li> </ul>	
<b>RURAL SETTLEMENTS</b>	<b>DENSER SETTLEMENTS WITHIN THE TRADITIONAL COUNCIL AREAS</b>
<ul style="list-style-type: none"> <li>o Identified in line with the uMhlathuze Rural Housing Projects.</li> <li>o Accessible locations for community services and infrastructure.</li> <li>o Specific planning and development interventions are required to identify community services that are to be encouraged at these nodes.</li> </ul>	
<b>SCATTERED SETTLEMENT</b>	
<ul style="list-style-type: none"> <li>o Remainder of the Municipal Area.</li> <li>o Potentially viable for in-situ rural housing projects if not too far removed from Secondary or Rural Settlements.</li> </ul>	

The following vision is envisaged for the listed nodal areas:

**Empangeni Node:** An urban centre poised for economic transformation and development initiatives that are innovative based on a new ethos which aims at creating a unique high performance unique sense of place and belonging live-i.e. work-play-trade environment.

**Richards Bay:** An urban centre poised for economic transformation and development opportunities based on a new ethos which aims at creating a unique high performance unique sense of place and belonging live, i.e. work-play-trade environment.

**Esikhaleni Node:** A socio-economic node that offers a range of sustainable mixed use development opportunities. Further economic/employment opportunities to be pursued.

**Felixton Node:** A socio-economic node that offers sustainable economic and social opportunities to its inhabitants and the larger surrounding area.

**Vulindlela/KwaDlangezwa Node:**

An institutional node that offers a sustainable mixed use development to the benefit of its inhabitants, visitors and the larger surrounding area.

**Ngwelezane Node:** A socio-economic node that offers sustainable mixed use development opportunities to its inhabitants and the larger surrounding area.

**Nseleni Node:** A socio-economic node that offers sustainable mixed use development opportunities based on a human scale principle to its inhabitants and the larger surrounding area.

**Bucanana Node:** A socio-economic node that offers sustainable mixed use development opportunities based on a human scale principle to its inhabitants and the larger surrounding area.

**Opportunity Node (Empangeni Milling Node and Heatonville):**

Socio-economic nodes that provides services and economic opportunities to the surrounding hinterland, mainly by virtue of its accessibility.

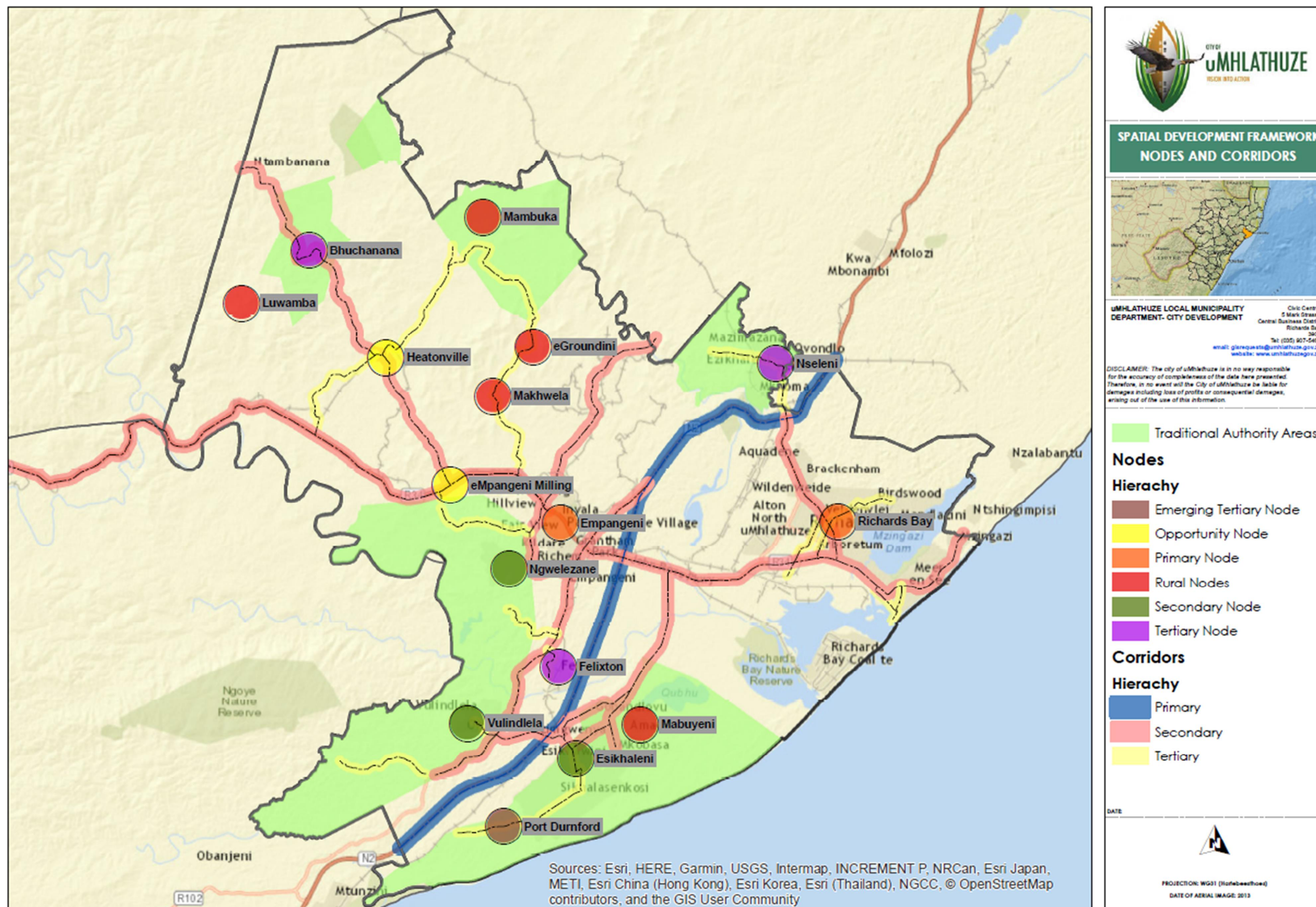
**Rural Nodes:** Socio-economic nodes that offer tailor made mixed use development opportunities closer to the people.

Apart from the above nodal areas that define the settlements, the linkages between settlements are further defined in terms of a corridor hierarchy. Volumes, speed and type of traffic as well as the reason for travel define corridors or transport routes as primary, secondary or tertiary.

The following map indicates the relation between the nodes in the uMhlathuze Municipality and the respective corridors that connect them.



Map 31: Nodes and Corridors in uMhlathuze



### 12.3.2 NATURAL FEATURES

In order to understand the extent of natural features in the municipal area, a series of factors have been investigated and subsequently considered in the future spatial development planning for the municipal area. These include:

- o Past **Geomorphologic** processes have resulted in a unique landscape that supports complex hydrological systems, which in turn have resulted in high level of species diversity
- o The municipal area falls within the Maputaland-Pondoland-Albany **Biodiversity** hotspot which is recognized as the second richest floristic region in Africa: containing approximately 80 % of the of South Africa flora and fauna species.
- o The geology and geomorphology of the area controls the transport and storage of water and influences the hydraulic functions of the **ground water** system. Streams are generally perennial and seldom stop flowing even in drought conditions that also creates a large underground storage reservoir that consistently sustains the coastal lakes which form the main water supply resources for the municipality.
- o The uMhlathuze area is characterized by hydrological and **geotechnical** constraints.

Apart from the above, environmental assets in the municipal area contribute to the functioning of the area in the following manner:

**Economic Development:** Coastal Dunes contain heavy minerals that are sought after for mining, which is a key sector in the context of regional economic development and national plans.

**Tourism:** The beaches are significant tourism assets for the municipality, attracting an Annual Beach Festival a hosting beach events at Alkanstrand, and providing seasonal holiday destination and on-going recreational amenity. Other tourism assets worthy of preservation are the area forests, heritage sites, conservation areas around Mzingazi River, and the estuary found south of the Port. The proposed developments of the waterfront, has a strong tourism focus. Environmental assets and socio-economic indicators have therefore been considered in the conceptual plans for the Waterfront.

**Water Resources:** The coastal Lakes (Lake Mzingazi, Lake Cubhu and Lake Nseze) are important water resources for the municipality. The development of Richards Bay in particular, with its industrial development, has seen a significant increase in the abstraction rates of these lakes over the past 20 years.

**Ecological Features:** Water logged areas have been drained to accommodate development but has in the process, created important hydrological and ecological linkages. In certain instances, these artificial regimes, have resulted in the formation of valuable natural assets that support high levels of biodiversity and species endemism. An example of such is the Thulazihleka Pan system in Richards Bay.

On the pro-active planning side, an **Environmental Management Framework (EMF)** for the Richards Bay Port expansion area and IDZ area has been prepared. Key findings of the EMF were:

- o The port and harbour area falls within environmental management zones of the EMF which both yield high levels of sensitivity in terms of biodiversity and geotechnical constraints.
- o The Transnet Due Diligence Investigation for the acquisition of land for the proposed port development framework has however identified areas that are potentially suitable for offsetting the above environmental risks.
- o The EMF identified a number of existing activities that render further constraints to the proposed expansion of the port, i.e. the slimes dam and the Foskor gypsum stack.
- o The EMF sensitivity analysis points to areas that are of great concern for the IDZ.
- o There are also a number of significant environmental management issues that would require management measures in terms of air quality.

Whilst the EMF is relatively limited in terms of scope of area, the Municipality adopted an **Environmental Services Management Plan (ESMP)** as broader planning tool to guide spatial development.

The areas that provide environmental services to the City are spatially defined, and the following

- o **Nature Reserves (Level 1):** Included in the nature reserve zone are areas of high biodiversity and environmental significance that require a high level of legal protection.
- o **Conservation Zone (Level 2):** Included in the conservation zone are areas of biodiversity / environmental significance, which are not viable for proclamation as nature reserves, but that require some form of legal protection. Included are unique or regionally important natural habitats; wetland and forest areas that are protected in terms of national legislation; and all areas that fall within the 1:100 year flood line. No transformation of the natural assets or the development of land for purposes other than conservation should be permitted in this zone. Sustainable use of renewable resources is permitted.
- o **Open Space Linkage Zone (Level 3):** Included in the open space linkage zone are areas that provide a natural buffer for Level 1 and 2 Zones, areas that provide a natural link between Level 1 and 2 Zones and areas that supply, or ensure the supply of, significant environmental services. Transformation of natural assets and the development of land in these zones should only be permitted under controlled conditions.
- o **Development Zone (Level 4):** Includes all areas that are not included in Level 1, 2 and 3 zones. Areas in this zone are either already developed or transformed and contain land and natural assets that are not critical for environmental service supply.

### 12.3.3 EXPANSION AREAS

A future development scenario has been quantified for the Municipality based on the following practical and realistic assumptions:

1. There will be an increase in economic activity
2. There will be population increase

To accommodate the anticipated growth, the following forms an integral part of the SDF:

1. The identification of land for expansion purposes
2. The identification of areas for densification and/or infill

Based on the various technical analysis and principles reported upon in this report, a number of expansion areas have been identified for the municipal area with the following size and developable characteristics as detailed herewith.

**Table 48: Extent of SDF Expansion Areas**

Expansion Area	Size (Ha)	Land Developable (Ha)
<b>A</b>	593	363
<b>B</b>	2 982	2 214
<b>C</b>	512	437
<b>D</b>	1 756	356
<b>E</b>	2 306	1 958
<b>F</b>	2 344	1 699
<b>G</b>	971	407
<b>H</b>	1 163	780
<b>TOTAL</b>	<b>12 629</b>	<b>8 214</b>



Scenarios for population increase in the uMhlathuze Municipal area are based on the 2016 Community Survey baseline figure of 410 465 extracted from the following table.

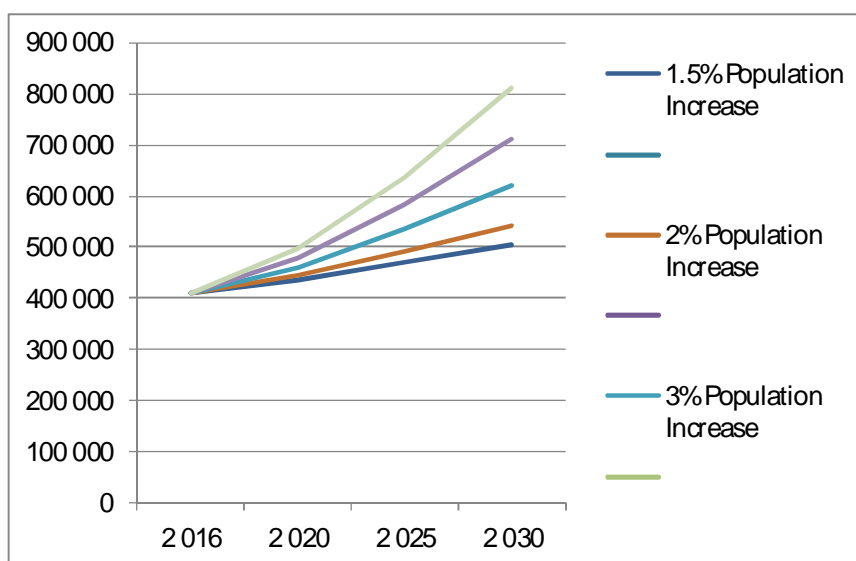
**Table 49: Population Numbers in KCDM**

	KCDM	IMFOLOZI	UMHLATH UZE	UMLALAZI	MTHONJA NENI	NKANDLA
<b>2011</b>	907519	122889	334459	213601	47818	114416
<b>2016</b>	971135	144363	410465	233140	78883	114284
<b>% Growth</b>	7,01%	17,47%	22,73%	9,15%	64,97%	-0,12%

Source: Community Survey 2016

The following graph is a graphical illustration of the above tables indicating a 1.45%, 2%, 3%, and 5% annual population growth rate for uMhlathuze.

**Figure 26: Population Growth Projections to 2030**



In context of the above, the following scenarios have been derived:

Population increase of 1,5% per annum

- o At a steady population increase of 1,5% per annum, the municipal population will surpass 500 000 people by 2030.
- o An estimated additional 1300 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 15 units per hectare.
- o An estimated additional 600 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 25 units per hectare.

Population increase of 5% per annum

- o The municipality will reach a population of 500 000 before 2021 if a population growth rate of 5% takes place over the next few years.
- o At such a 5% per annum population growth rate the number of households in the municipality will double by 2030.
- o An estimated 9700 ha of land may be needed from 2016 to 2023 to accommodate a 5% population increase at a development density of 15 units per hectare.
- o An estimated 5800 ha of land may be needed from 2016 to 2023 to accommodate a 5% population increase at a development density of 15 units per hectare.

The above clearly indicates the importance of **densification** to maximise the use of land for various purposes.

An urban land use analysis has been undertaken for the municipal area indicating the current **proportionate** land use zonings in the municipal area. The results of this analysis are indicated in the following table.

**Table 50: Current land use trend of zoned urban land**

Zoning	Ha	% Against Total
Commercial	114.02	1.46%
Industrial	1695	21.70%
General Residential	115.752	1.48
Special Residential	1496.475	19.16
Intermediate Residential	15.87	0.2
Public/Private Open Spaces	540	6.92
Transportation Infrastructure	28.4	0.4
Undetermined	16.686	0.21
Social	535.8	6.86
Other Zonings	3248.997	41.616
<b>Total</b>	<b>7807</b>	<b>100</b>

The application of the above proportionate percentages to the estimated area of 8214Ha for future development of the Expansion Areas results in the following.

**Table 51: Anticipated land usages in Expansion Areas**

Zoning	Ha
Commercial	120
Industrial	1783
General Residential	122
Special Residential	1574
Intermediate Residential	16
Public/Private Open Spaces	568
Transportation Infrastructure	33
Undetermined	17
Social	564
Other Zonings	3418
<b>Total</b>	<b>8214</b>

- o The findings in this table have informed the current WSDP/Water Master Plan preparation process for the Municipality.
- o An estimated 1 600 Ha of residential land in the proposed expansion areas could accommodate significant population growth beyond 2023 and 2030 depending on the growth rate and the development density.

More conceptual mapping of the proposed expansion areas is provided at overleaf. It is important to reiterate that the expansion areas were identified by applying spatial planning principles, i.e. integration and concentration together with a technical analysis of air quality, founding conditions, the environmental etc. The location of a possible development application in the expansion area does not provide adequate information for Council to support the proposed development in principle. Site specific specialist studies and development approvals that address environmental issues, land ownership and use issues etc. are still required. Council can only make an informed decision upon consideration of the specialist studies as part of the development application processes. In addition, environmental compliance/approval is also required.



Figure 27: Expansion Areas A, B, C and D

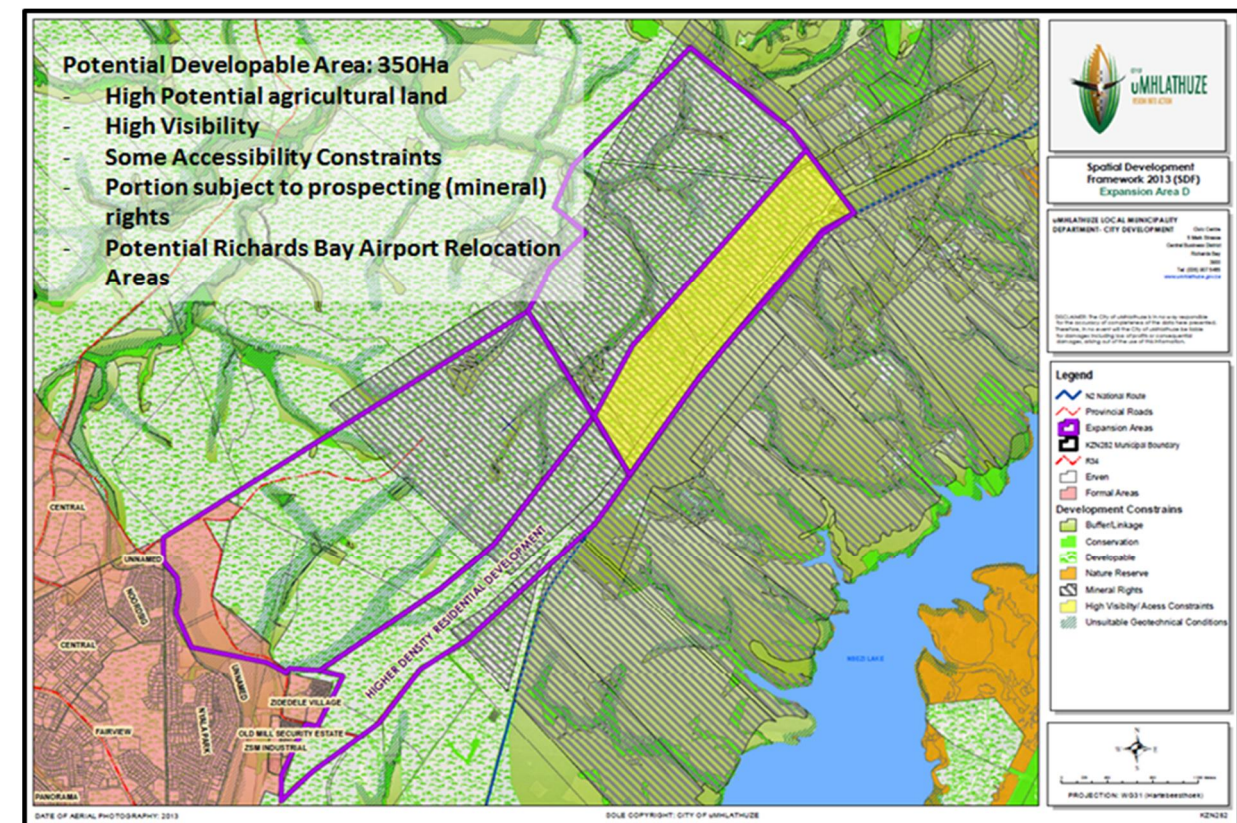
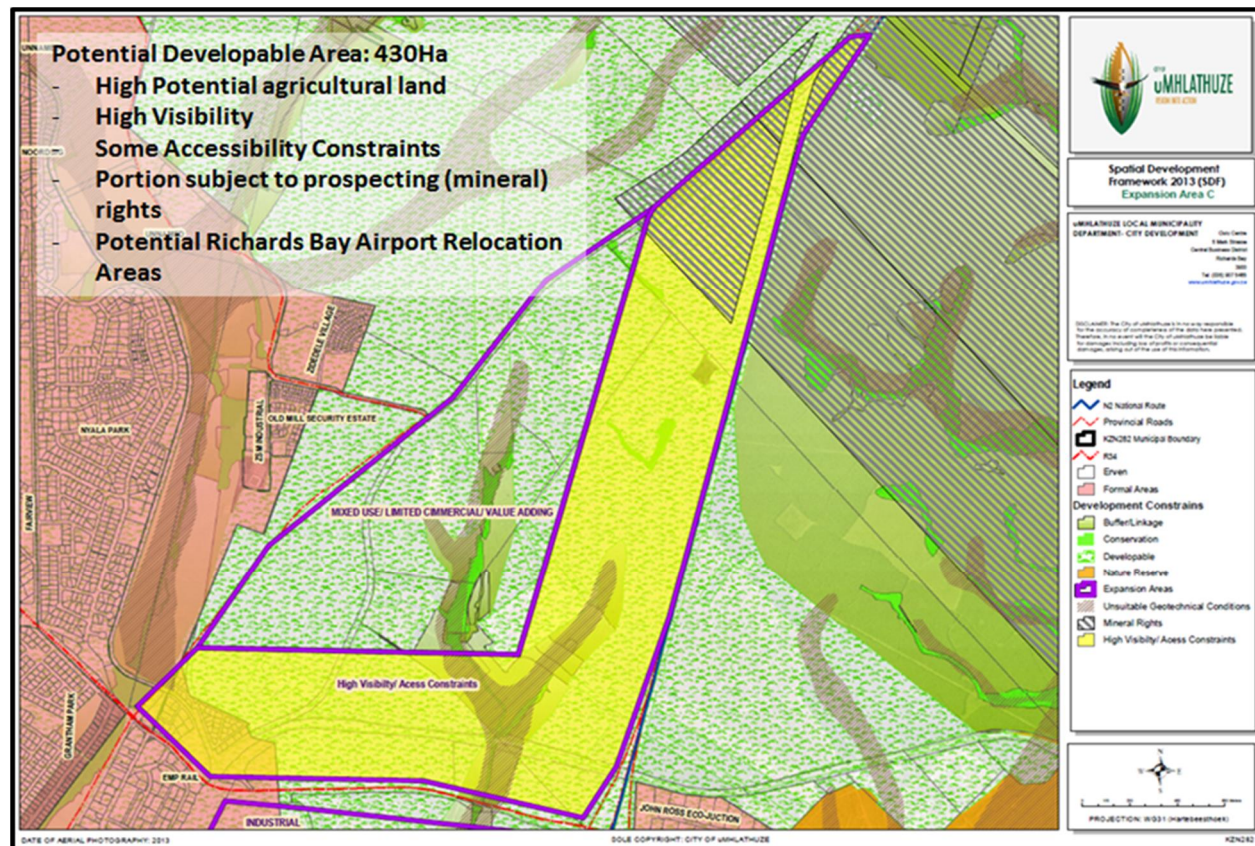
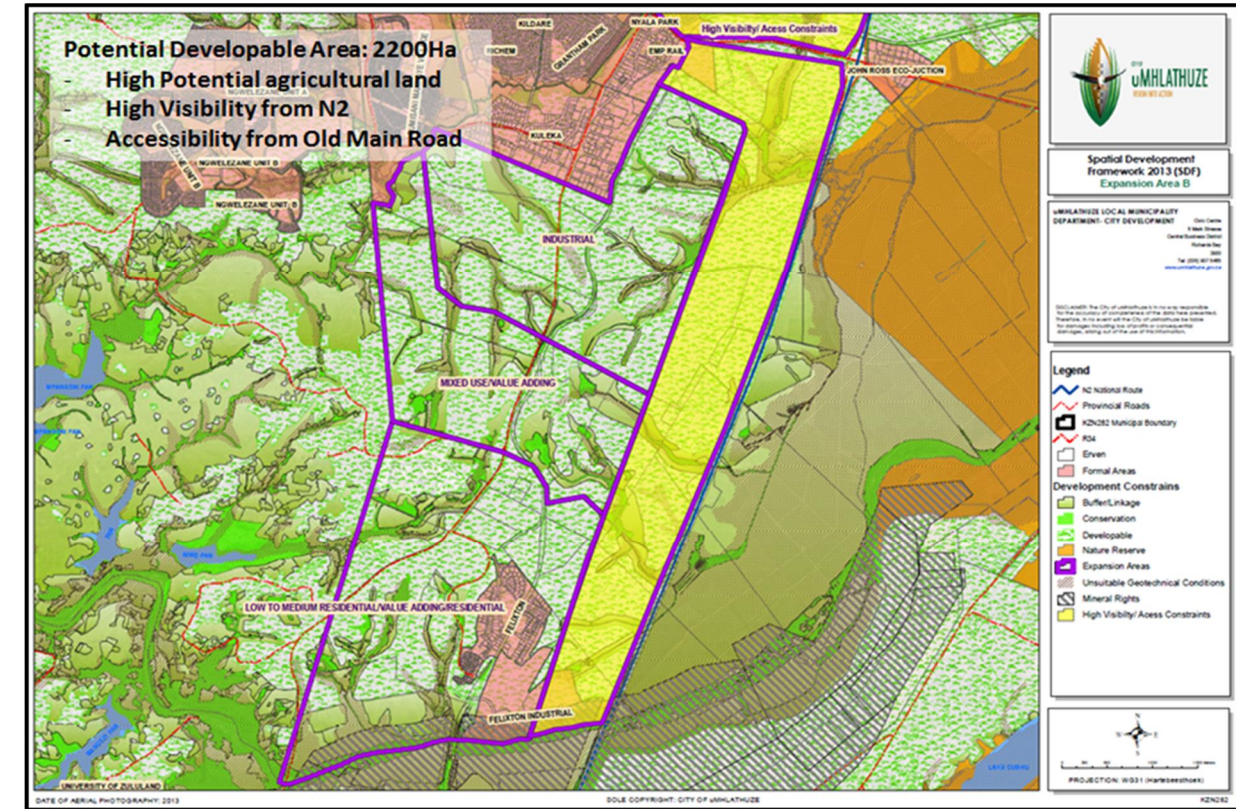
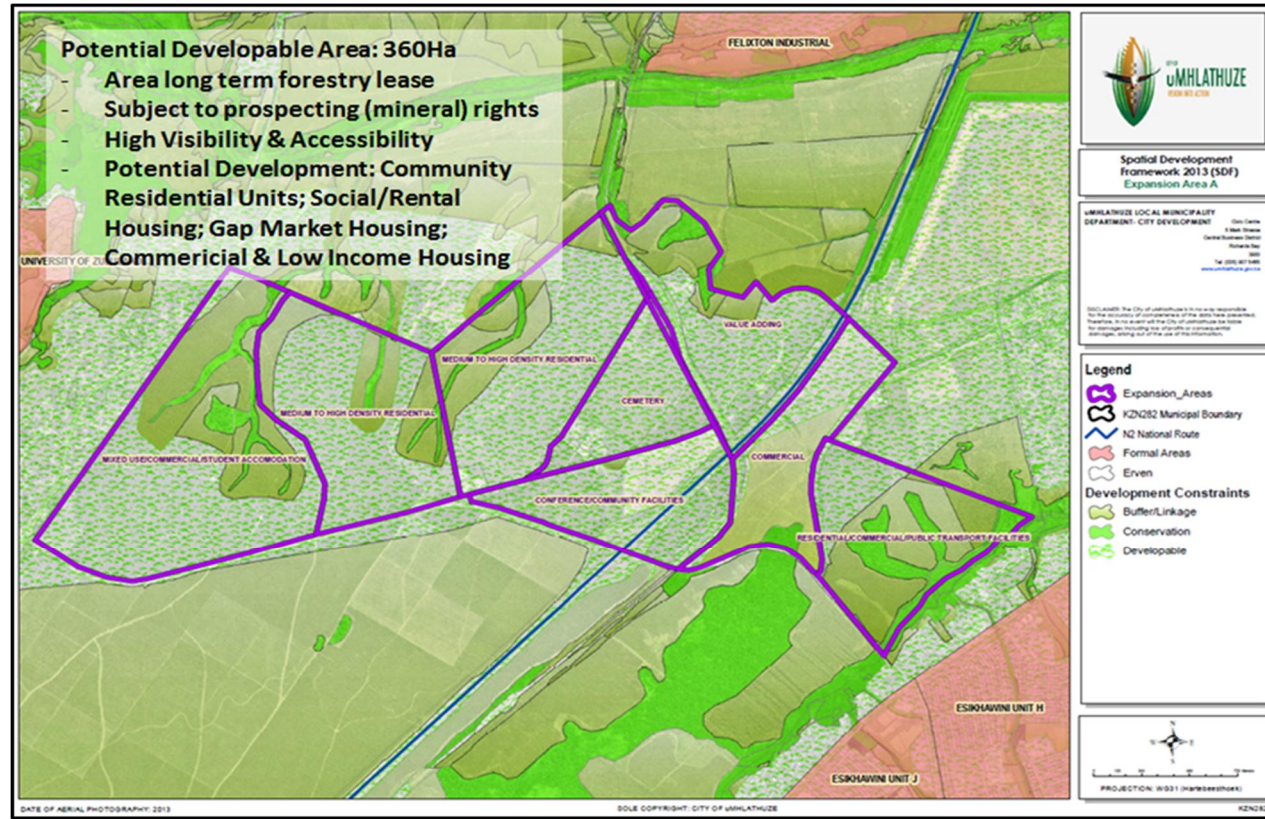
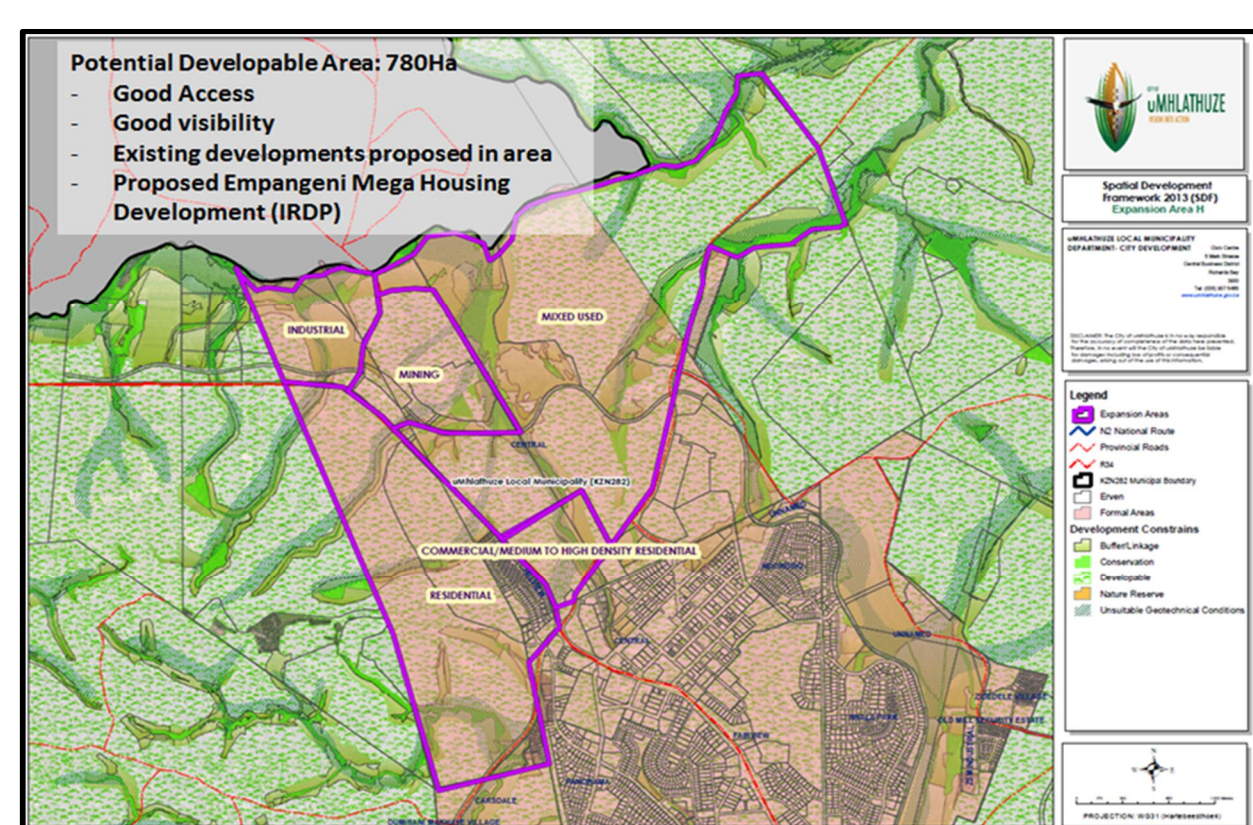
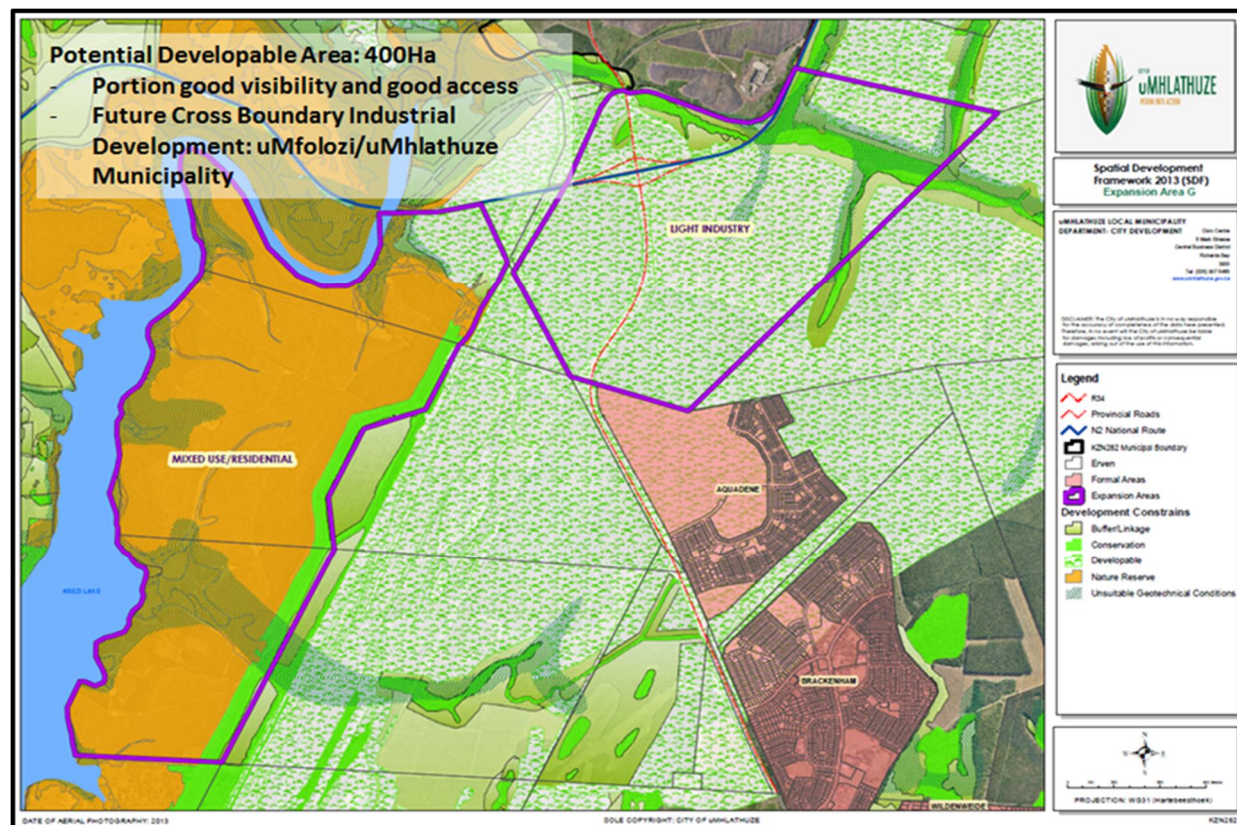
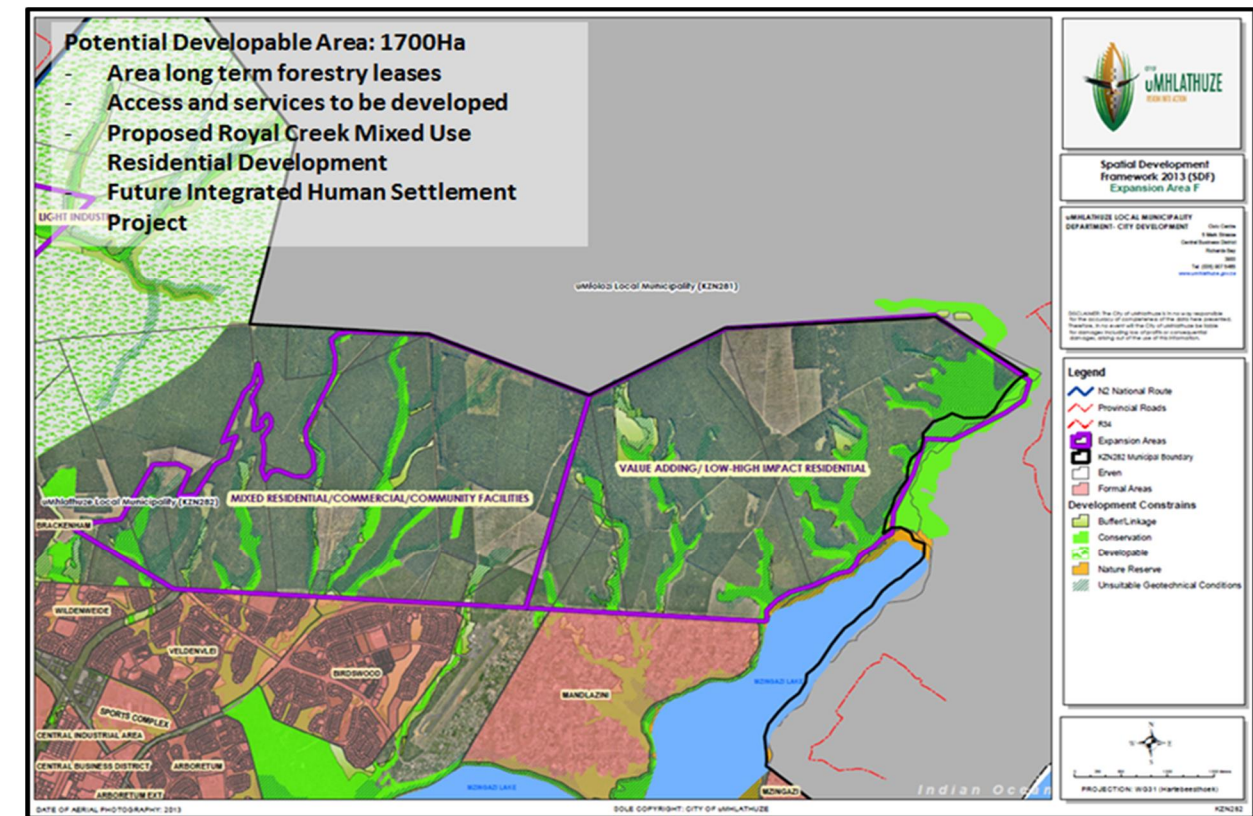
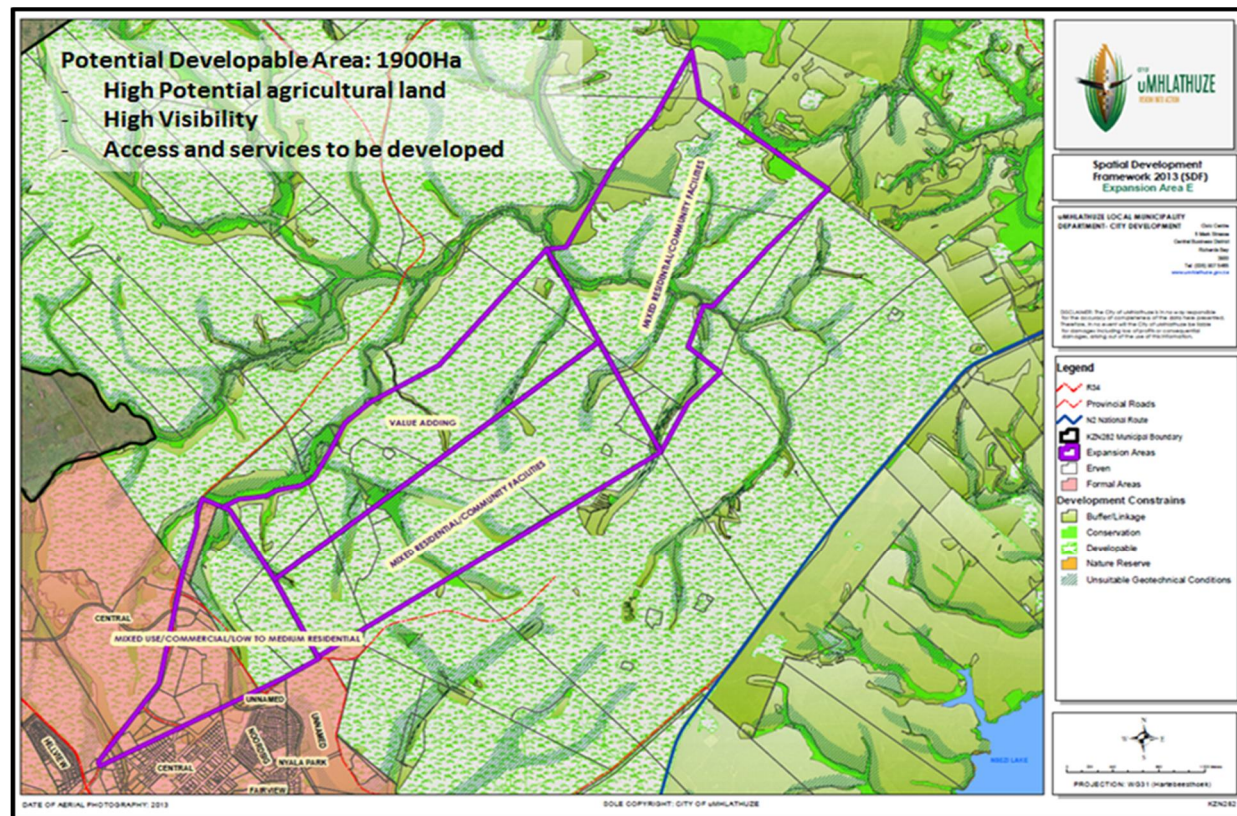




Figure 28: Expansion Areas E, F, G and H





### 12.3.4 INFILL AND DENSIFICATION

During 2007, the City of uMhlathuze identified opportunities for residential infill development in Richards Bay and Empangeni. Consideration was given to public open spaces and large undeveloped portions of land, mostly unconstrained by environmental factors. This Study needs to be updated and expanded to include the areas of Esikhaleni, Vulindlela, Nseleni and Ngwelezane.

The above investigation found that, at a development density of 20 units per hectare, more than 5000 units could be developed on all the pieces of land identified. It was noted that the above was based on the assumption that all the sites could be developed. Given certain limitations identified, the following more conservative estimate was provided for the residentially zoned (special and general) pieces of land:

**Table 52: Results from Infill Investigation in Empangeni and Richards Bay**

	Yield at 20 units/ha	Yield at 30 units/ha
<b>Birdswood</b>	614	921
<b>Arboretum</b>	1000	1500
<b>Wildenweide/Veldenvlei</b>	18	27
(SR 2)	190	285
(GR 2)	58	87
<b>Brackenham</b>	28	42
(GR 1)	26	39
<b>Meerensee</b>	392	588
(SR 2)	16	24
(GR 1)	28	42
<b>Empangeni</b>	276	414
(SR 1)	30	45
(SR 2)	20	30
(GR 2)	172	258
<b>Total</b>	<b>2868</b>	<b>4302</b>

In addition, the following densification options were also explored in the study:

1. Increases in F.A.R for selected land uses
2. Greater Flexibility in Subdivisions
3. Creation of a Panhandle between adjoining properties
4. Densification/Infill of Public Open Spaces
5. Assess Required Parking Ratios

### 12.3.5 URBAN DEVELOPMENT BOUNDARY

Essentially the formal settlements, notably the former TLC and former R293 town areas, are regarded as the urban areas. The remaining areas, i.e. peri-urban, rural settlements and scattered settlements are the municipal rural areas. Both the urban and the rural components of the settlement hierarchy have specific actions or interventions required.

The **urban areas** can be considered to delineate the current literature. However, the City of Umhlathuze has not opted for the use of the term rather guided by the concept of an urban development boundary (UDB).

An Urban Development Boundary (UDB) is one of the tools available to curb costly urban sprawl and to direct growth towards the presently serviced and future priority service areas of the City (both in terms of engineering and social services).

In essence, the urban development boundary for the uMhlathuze Municipality encompasses those areas where an urban service standard is to be applied or maintained. More specifically, the former TLC areas, the former R293 areas as well as the proposed expansion areas.

The implication of the above is as following:

- o In the existing urban areas being the primary and secondary settlements, densification should be promoted as well as infill development.
- o More detailed planning for areas A-H should be undertaken and investigations should focus on the availability of commercial, industrial, residential and other supporting uses, the timeframe in which the available land uses are to be developed (i.e. phasing) as well as an appropriate land release strategy.
- o The above phasing of areas A-H has to further inform the provision and roll-out of infrastructure to these areas.
- o In line with national and provincial policy, at least a basic (RDP) level of service delivery has to be attained in the rural areas of the municipality.
- o Following the formalization of peri-urban areas, and finding that the subsequent provision of an urban standard of services to such areas is both practical and sustainable, peri-urban areas can be included in the Urban Development Boundary (UDB) in future.

Land located beyond the City

land uses tend to be of a lower-intensity and density.

In some instances, development beyond the UDB has to be considered, i.e.:

1. Land uses normally associated or reasonably necessary in connection with agricultural purposes.
2. Areas designated for nature conservation, which may include tourism facilities (accommodation/restaurant) and recreational facilities directly related to the main use.
3. Tourism and recreational related facilities such as 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.
4. Social amenities that cannot be accommodated within the Urban Development, notably schools, clinics, cemeteries and other religious facilities.
5. Farm stalls.
6. Rural residential uses and agricultural holdings.
7. Any other related development or service, provided that the proposed development (1) serves primarily a local market and (2) is located at a service delivery centre or central place to the community.

Apart from the list of potential instances referred to above where development beyond the UDB can be considered, any proposed activity will also be evaluated in terms of the following:

1. Environmental listing notices in terms of the relevant NEMA Regulations at the time.
2. Bulk infrastructure capacity.
3. The development has to be in keeping with the character/ambience of the surrounds.

The UDB is not cast in stone and should be reviewed when the need arises or during the annual IDP/SDF Review. Proposals or motivations to amend the UDB should include:

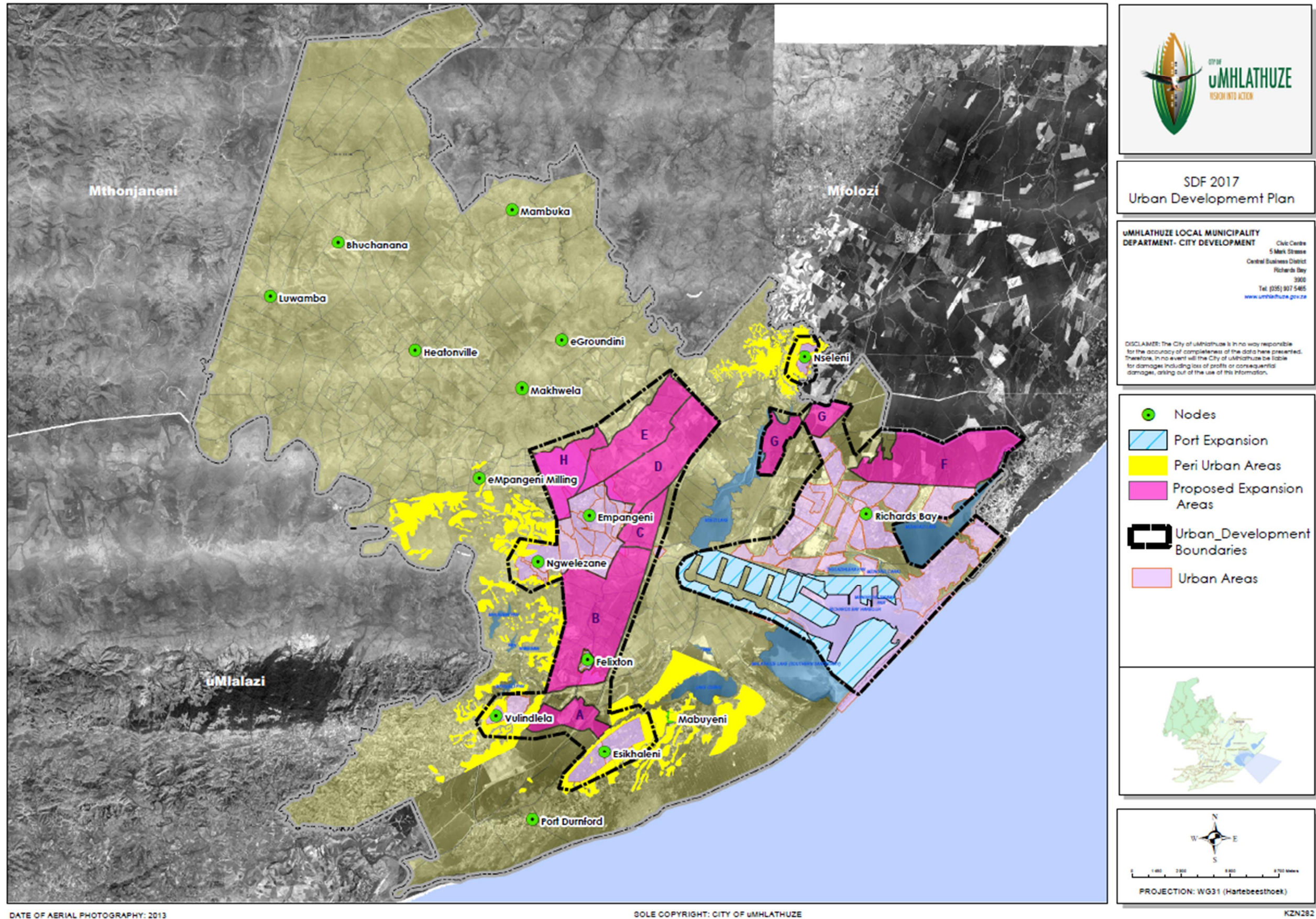
1. The need for the specific location of the proposed development outside the UDB as well as proof that a suitable property is not available within the UDB for the proposed activity or land use.
2. A comprehensive evaluation of alternative sites or uses for the subject property, i.e. the property outside the UDB that is being mooted for a proposed development.
3. Details on the provision of bulk services as well as the responsibility, and maintenance, of such.
4. The impact (capital and operations) of the proposed development on existing infrastructure including water, sewer, roads and public transport.

5. A preliminary indication of the impact of the development on the existing environment (in the absence of a formal Environmental Impact Assessment or scoping report).

The SDF expansion areas are located within the UDB of the uMhlathuze Municipality. Essentially, these expansion areas are the defined priority areas for development and capital investment in the City that require management to ensure controlled growth. To this end, an implementation strategy has to be derived for the future development of the SDF expansion areas.



Map 32: Urban Development Boundary





## **12.4 DEVELOPMENT OPPORTUNITIES**

This section of the report considers a number development opportunities and due consideration has been given to the spatial development strategic framework, conceptual framework as well as the analysis undertaken.

### **12.4.1 Opportunity for Residential Infill**

Research was undertaken aimed to identify opportunities for residential infill development in Richards Bay and Empangeni. The document identified various public open spaces and large undeveloped portions of land, which were mostly unconstrained by environmental factors (using the uMhlathuze Environmental Services Management Plan as guideline).

At present, the study does have two shortcomings:

1. Outdated information should be updated prior to implementation
2. The study did not include the areas of Esikhaleni, Vulindlela, Nseleni and Ngwelezane.

In context of the above, it is recommended that the properties identified for infill development be re-investigated and the information be updated to determine:

- o Current ownership
- o The need for community services in the area (additional schools, public transport amenities, etc.) that could be serviced by an open space listed
- o The role of the portion of land in terms of the wider area, i.e. does it form a core component of the Municipal Open Space System
- o Cost/benefit analysis often infill development is very costly, and may therefore not be financially viable in the short term
- o The areas of Esikhaleni, Vulindlela, Nseleni, Ngwelezane and Felixton be included in the above study

### **12.4.2 Opportunity for Agricultural Investment**

Very little of uMhlathuze  
of Agriculture

determining future development areas. To this end, the Municipality has to engage with the National Department of Agriculture to ascertain a way forward in determining land for agricultural protection as well as land available for future development.

Given the above, it is imperative that:

- o Conflict between the Municipality  
Agriculture  
of land reserved for agricultural protection as well as land that would be made available for future development.

Areas and projects that pose significant agricultural potential should be registered with the KZN RASET programme (RASET Radical Agrarian Socio-Economic Transformation).

### **12.4.3 Opportunity for Mining Investment**

The City of uMhlathuze is rich in mineral resources, including ilmenite, rutile, zircon and pig iron. The mining of these minerals meets all of South Africa almost all of the country

Large areas have been reserved as having mineral rights portions of these areas are in direct conflict with the Municipality

Provision is made in terms of Section 53 of the Mineral and Petroleum Resources Development Act (MPRD), Act No. 28 of 2002 in respect of the use of land surface rights that are contrary to the objects of the Act that an application to the Minister can be made.

### **12.4.4 Nodes and Corridors**

A number of factors that must be taken into consideration in terms of nodal and corridor planning and development, the most important being:

- o Future urban settlement should be located predominantly within the agreed growth areas and as far as possible, comply with planned phasing of the growth areas and be serviced by existing infrastructure networks.
- o Future development should not contribute to ribbon/strip development or impact on the safety and efficiency of the road system.
- o Commercial land (including office space) should be located in accordance with recognized guidelines so that it can be conveniently serviced, is accessible to, and is consistent in scale with the settlement it serves or is planned to serve. If commercial land expansion is not adjacent to, or adjoining, an existing centre then any new development should not undermine the existing centre(s) and should be at a scale and location only to serve the target neighbourhood/area.

A number of potential intersection nodes along the N2 have previously already been identified:

- o N2 and off-ramp to Esikhaleni/Vulindlela as this intersection forms an important gateway to Potential Expansion Area A.
- o N2 and R34 John Ross Highway where the John Ross Interchange Park (John Ross Eco Junction) development has already commenced.
- o N2 and the proposed future South Central Arterial (which would link up with P700). The construction of this intersection would unlock opportunities in terms of Potential Expansion Areas C and D, and would also present opportunity for development of the area west of Lake Nsese. Such development in the vicinity of the Lake would have to be carefully planned and executed, since Lake Nsese is an important source of fresh water for the area.
- o N2 and the MR231 intersection at Nseleni. The Council has previously considered a draft development proposal in this vicinity, which is subject to further refinement and consideration at an appropriate time.

In context of the above, the following is noted:

- o Further detailed planning of intersection nodes as defined above in terms of phasing and development guidelines.

### 12.4.5 Tourism and Areas of Natural Beauty

The following development principles would guide development applications in these areas. The most important development principles that should be noted include:

- o Future development should avoid, as far as possible, areas of environmental significance (Environmental Services Management Plan Level 1 and 2 areas), significant economic resources (such as agriculture or mining), potential environmental or community hazard/risk, high landscape or cultural heritage value, or potential increased risk associated with impacts of climate change. Should development be proposed within these areas, clear mitigation or offset measures should be applied.
- o Future development adjoining land with the above values should incorporate buffers as necessary to help protect those values and to avoid future land use conflict. In terms of environmental significance, these buffers have been identified in Council Services Management Plan Level 3 areas.
- o Future development outside agreed growth areas, but which aims to provide opportunities to enjoy and enhance areas of natural beauty, must be supported by a detailed need and desirability investigation, be located outside the Environmental Services Management Plan Level 1 and 2 areas, prove infrastructure efficiency and address any other requirements that Council may have.
- o Future development and planning should boost those economic sectors/activities that have the potential to grow and create employment and income. In this regard future tourism development and growth in tourism should not occur at the expense of local environmental, economic and social values and efficient provision of engineering infrastructure. It should also provide for a wide range of experience opportunities from the low cost family type tourism developments, such as in caravan parks and camping grounds, to large single destination development. It should aim to maintain public access.

## 12.5 INTERVENTION AREAS

### 12.5.1 INFORMALLY SETTLED AREAS

Spatial intervention areas refer to specific areas where deliberate actions from either the district/local municipality or any other tier of government can improve on a situation that prevails in the said area. Importantly, spatial intervention areas are identified and have to be benchmarked against an acceptable standard.

Also, a number of open spaces in the municipal area have been settled in an informal manner, i.e. without formal approval of building plans and appropriate zoning with the result that service provision to such areas has not been planned and a reactive response instead of a proactive planning approach is followed. Typical open spaces are school sites, sites for infrastructure such as substations as well as public open spaces.

The identification of spatial intervention areas can be considered as a step towards achieving a desired spatial pattern.

The following intervention areas are proposed in the uMhlathuze Municipality:

- a) As identified as part of the Nodal Hierarchy of the City of uMhlathuze, **peri-urban** areas are characterized by dense population, small stands not necessarily able to support agricultural activities, continuous infill-development, pressure for connection to municipal infrastructure (individual connections) and possible health impacts as a result of overcrowding. An opportunity therefore exists to improve the living conditions of these residents by formalizing, in some way, these densely populated areas. Such opportunity, however, needs to be carefully planned and workshopped with the landowner (Ingonyama Trust) and affected residents.

- b) In terms of planning for peri-urban nodes, the principle of *promoted*.
- c) Typical examples of such densely populated peri-urban areas are areas surround Esikhaleni, specifically the uMzingwenya area as well as peri-urban areas around the former R293 towns
- d) In view of the applicable environmental issues such as the high water table and potential pollution of the nearby Mzingazi Lake, special consideration has to be given to areas of **Mzingazi and Mandlazini** in respect of water borne sewer installation and discouraging communities from practicing yard burials.

To respond to the situation outlined, specialist studies to confirm environmental sensitivities, wetlands, floodlines etc. have to be initiated to inform future decisions about the formalization of such areas.

Seven informal settlements in the municipality have been investigated and planned for through the NUSP (National Upgrading and Support Programme). The phased implementation of the recommendations is now to commence and the uMzingwenya settlement has been initiated.

## 12.5.2 RURAL DEVELOPMENT FRAMEWORK PLANS

In order to facilitate feasible service provision, Rural Development Framework Plans for all rural areas have to be developed and adopted, and thus used as a guiding tool when land allocations are effected.

The municipality has five year plan for the preparation of Rural Development Framework Plans. Phase 2 of the project is underway. The following table illustrates the complete phasing approach for the preparation of the proposed Rural Development Framework Plans.

No.	Project Name	Phase	Financial Year
1	Port Dunford Rural Development Framework Plan-Mkhwanazi Traditional Authority - completed	1	2017/2018
2	Buchanana Rural Development Framework Plan-Obuka Traditional Authority - completed	2	2018/2019
3	Hluma Rural Development Framework Plan-KwaBhejane Traditional Authority - underway	3	2019/2020
4	Matshana Rural Development Framework Plan-Madlebe Traditional Authority	4	2020/2021
5	Mabuyeni Rural Development Framework Plan-Dube Traditional Authority	5	2021/2022



Mapping of some interventions areas is provided as per the detailed hereunder:

### **Basic Services Intervention Areas**

The portions of the municipality that have been identified as priority areas represent those wards in the municipality that have the highest need in terms of access to basic water and hygienic toilet facilities. The specific wards are 5, 6, 31 and 33

### **Areas of Economic Growth and Development**

The mapping provided illustrates areas where interventions in aid of economic growth and development should be focused. To this end the following is noted:

- o Interventions at the identified nodal areas
- o The need to consolidate all environmental studies undertaken independently for the respective former municipal areas that now have been consolidated into an enlarged municipal area.
- o The protection of strategic agricultural resources but also the initiation of interventions aimed at achieving maximum poverty alleviation and economic growth at areas that pose untapped agricultural resources.
- o Rural Framework Plans are being rolled out in the rural areas to guide land and decision making and thereby providing guidance and confidence to investors and residents.
- o Conservation/Tourism Assets are prevalent in the whole municipal area. There are formalized public nature reserves as well as a number of private game reserves notably, Mfuli, Nyala, Fundimvelo, Thula-Thula and Intabayengwe.
- o Interventions around densely settled peri-urban areas is of an incremental nature. As such, land use management responses in terms of guidelines are required. In addition, the implementation of the NUSP (National Upgrading and Support Programme) plans have to be undertaken.
- o A total of eight expansion areas have been identified to absorb growth and development in the municipality. Planning and budgeting for the provision of bulk infrastructure (roads, electricity, water and sewer) to these areas are required to that the development of these areas can be enabled.

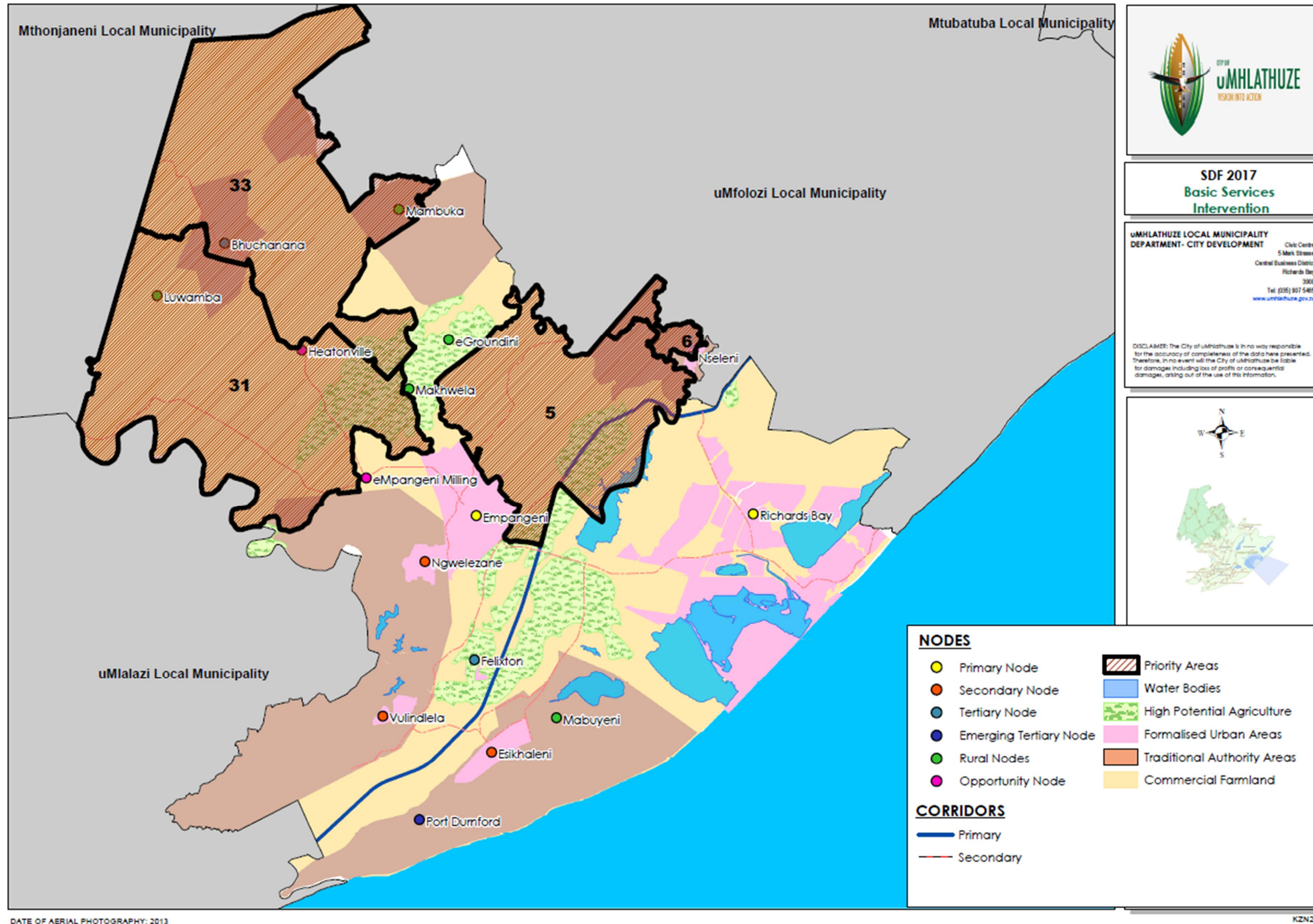
### **Settlement Intervention Areas**

Reference to be made to the nodal intervention proposals

### **Social Infrastructure Intervention**

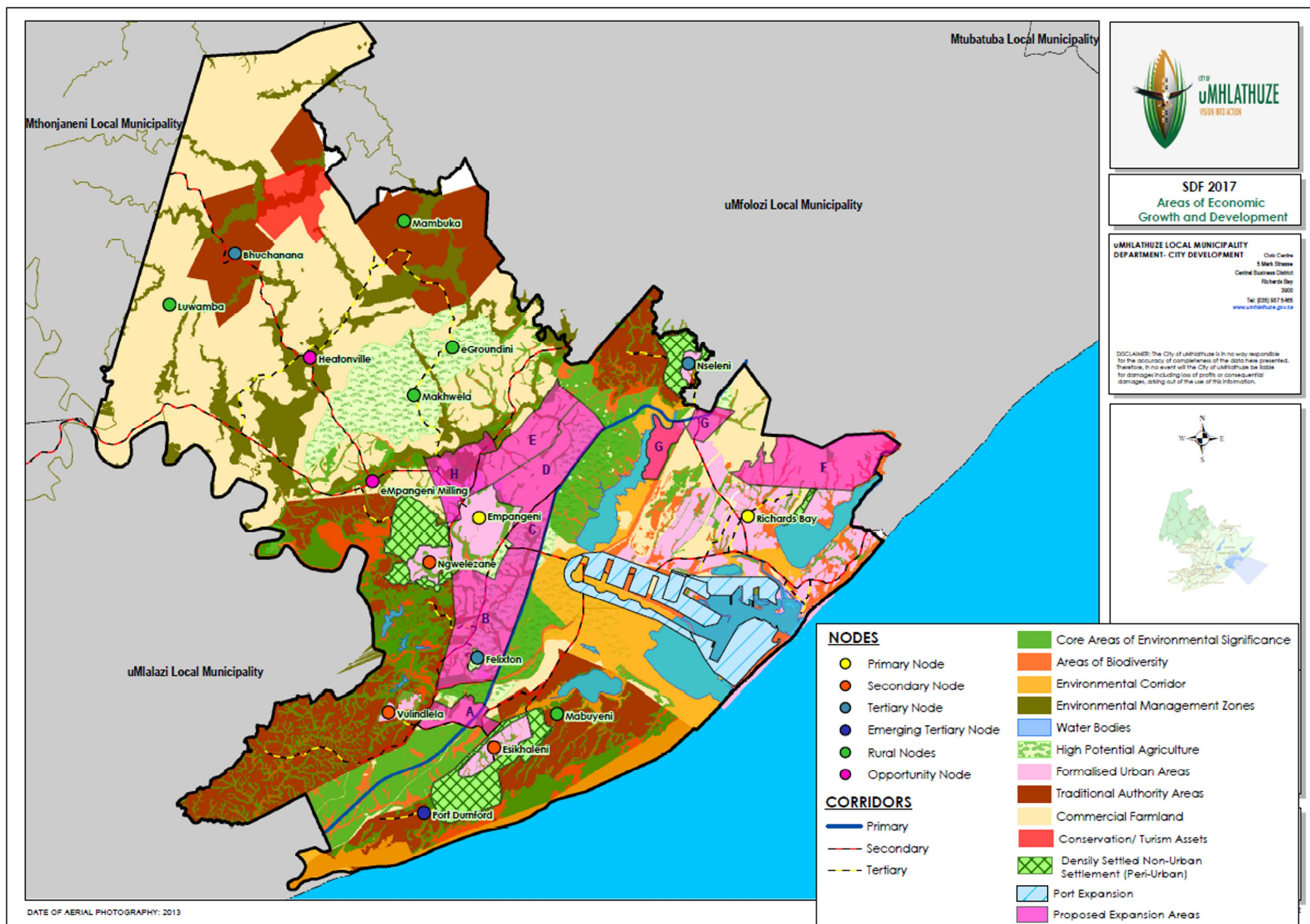
The portions of the municipality that have been identified as priority areas represent those wards in the municipality that have the highest need in terms of low education levels, high unemployment and low income levels. The specific wards are 5, 10, 13, 14, 18, 25, 32 and 33. Specific interventions in these areas will require a coordinated effort to address adult literacy, accessibility to social services such as pension and the overall investment in human capital.

Map 33: Basic Services Intervention Areas



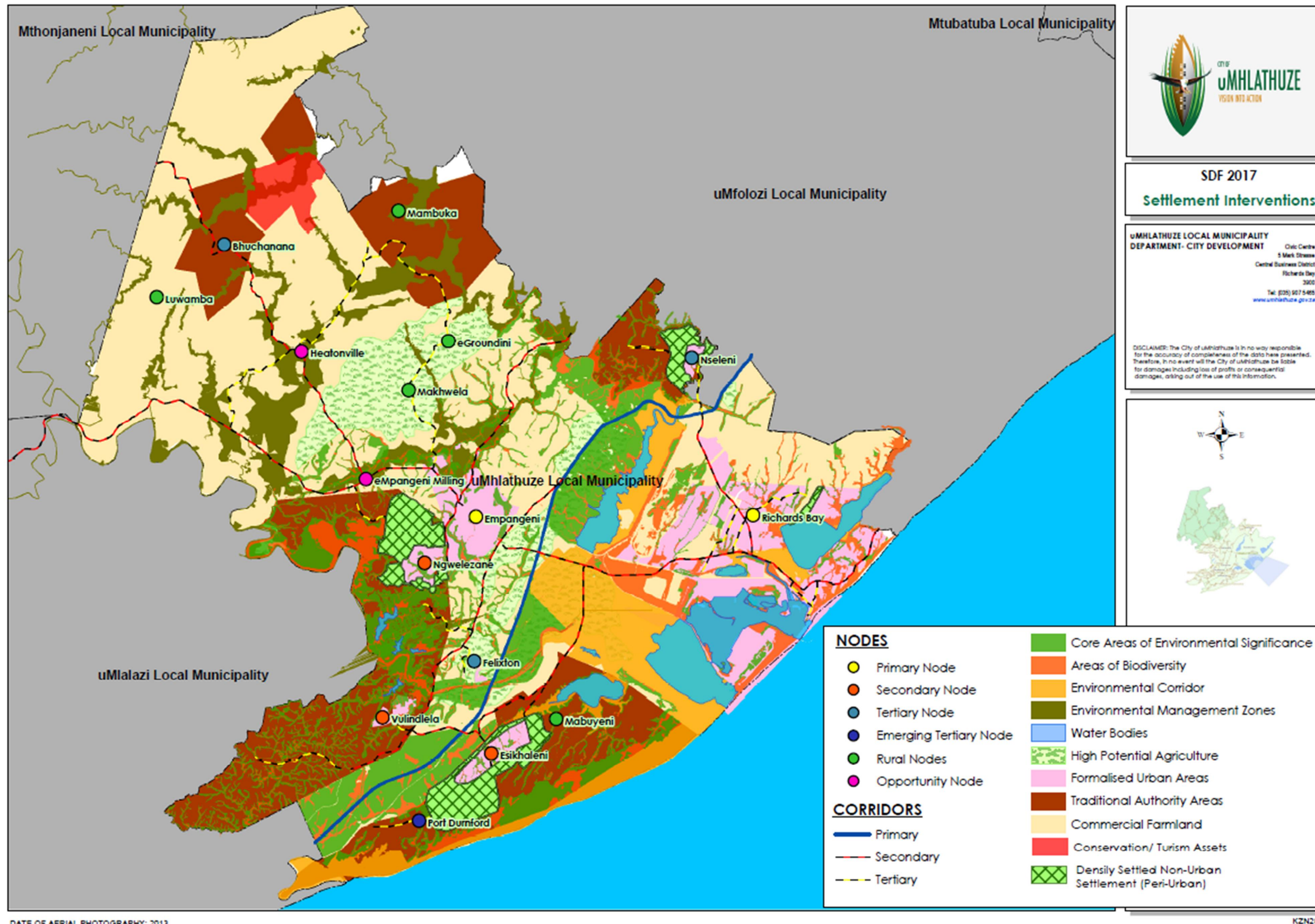


Map 34: Areas of Economic Growth and Development



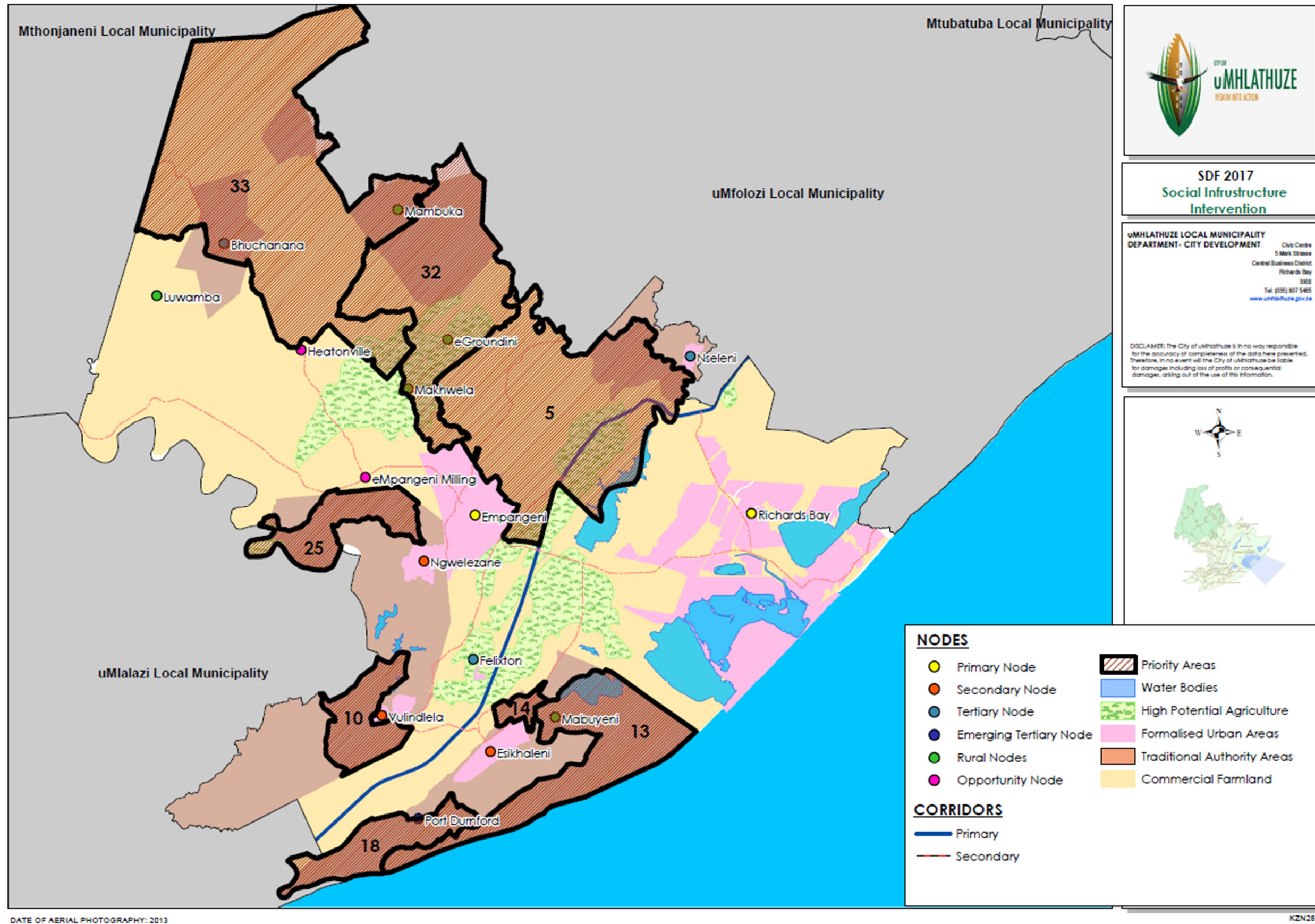


Map 35: Settlement Intervention Areas





Map 36: Social Infrastructure Intervention





## 12.6 DEVELOPMENT OF INGONYAMA TRUST BOARD LAND

It is a legislative requirement for all municipalities to prepare and enforce a wall-to-wall scheme within their area of jurisdiction. This means that every big developments will have to be compliant and approved by the local authority.

However, the process in terms of development in Ingonyama Trust Board (ITB) land remains challenging. In most cases the ITB does not approve land sales in their areas but they offer a long term lease, which sometimes is not supported by developers, as they believe in the outright purchase of land.

Both the affected Traditional Authority and the ITB have to agree on the proposed development prior and sign certain documents related to land release and availability prior to submission to the municipality.

The ITB land release issues not only affect business developers but also general public as sometimes the development cannot be implemented or fast tracked to due land availability. The provision of bulk infrastructure is sometimes also delayed or challenging.

The municipality has a licence to supply electricity to formalised areas and not Ingonyama Trust Land areas. Resistance to approve the formalisation of certain developments in ITB land areas sometimes causes delays in the service delivery and confusion to the community at large.

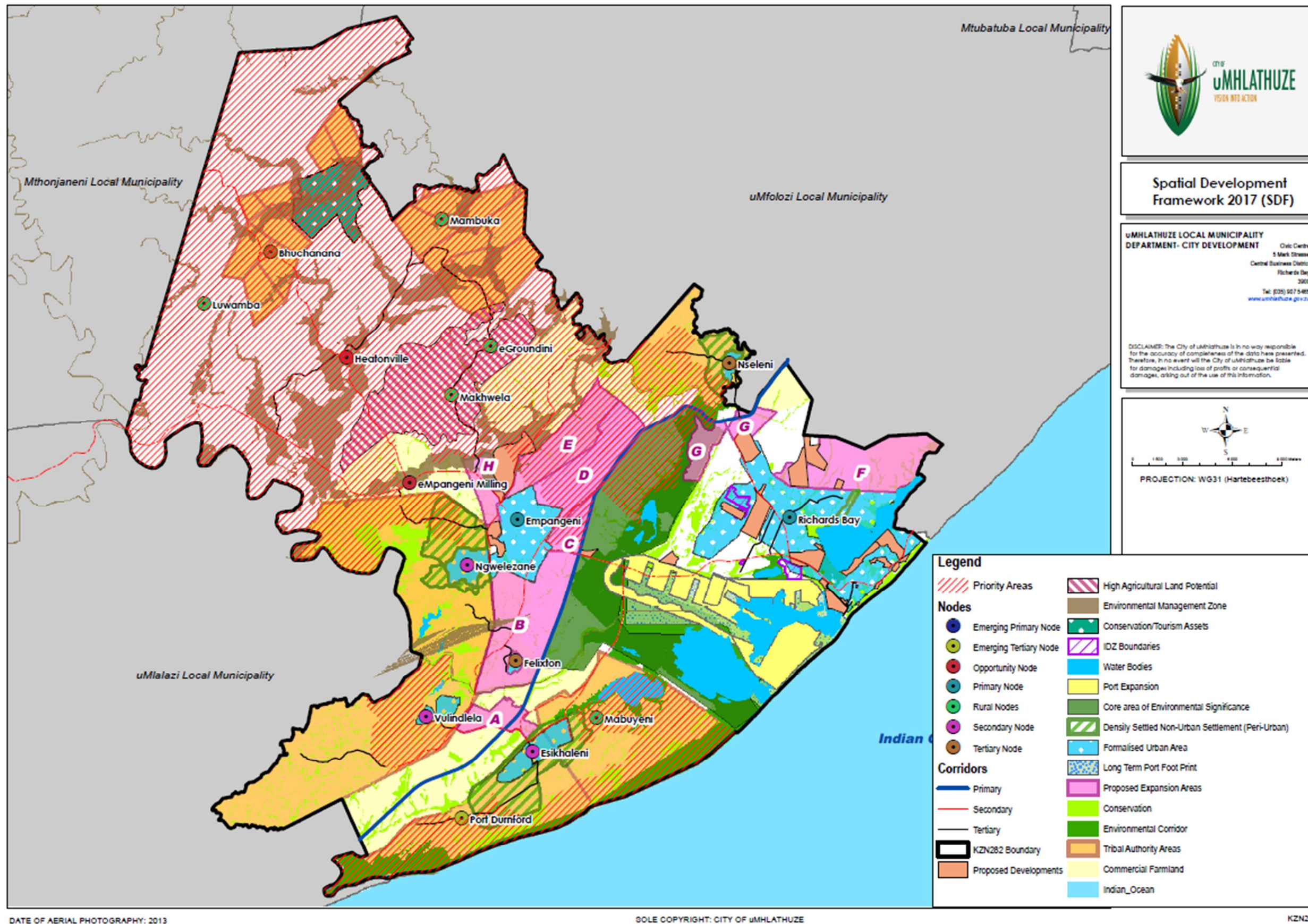
From the community residing within that proclaimed boundary would have to pay rates, and is something that they are not used to.

The Department of Cooperative Governance and Traditional Affairs (CoGTA) have prepared guidelines, which will assist in terms of land allocation in Ingonyama Trust Land. These guidelines have not yet been workshopped with Amakhosi and therefore they cannot be implemented or used at this stage.

The uMhlathuze Council has considered the implications of the above situation and the following requirements have been noted:

1. Council is in the process of obtaining updated aerial photography.
2. Obtain cadastral information of the affected area, suburb information, street names and street numbers, suburb information, servitudes, etc.
3. Create affected properties in GIS in order to start preparations for populating databases.
4. Obtain ownership information and add to GIS and Council financial system.
5. Prepare for the inclusion of these properties in the Municipal area in terms of property valuations and rates.
6. Determine the level and state of services in the affected area in order to eventually add these assets to Council set register, to determine areas that would require basic services, etc.
7. Assess what impact the change in municipal boundary would have on human and capital resources, i.e. does the Municipality require additional staff, equipment, vehicles, office space, satellite offices closer to the Ntambanana area, etc.
8. Assess legal aspects relating to the affected area, i.e. which legal agreements are in place with services providers in the Ntambanana area, term of contracts, etc.
9. Assess budget implications relating to the inclusion of the Ntambanana area.
10. Current and planned Human Settlements projects.
11. Updating of all relevant sector plans/master plans.

Map 37: Consolidated SDF



## **13. IMPLEMENTATION OF THE SDF**

The implementation of the uMhlathuze SDF, i.e. translating of the SDF vision into tangible initiatives and priorities is presented under the following headings in this chapter:

- The Land Use Framework that includes details of the municipal suite of plans and specific (incremental) land use scheme proposals. Extracts from some plans within the municipal suite of plans is also provided.
- The implementation of strategic and catalytic projects.
- Details of required interventions in investment, inclusive of the capital expenditure framework.

### **13.1 THE LAND USE FRAMEWORK**

In terms of Section 24 (1) of the Spatial Planning and Land Use Management Act it is required that:

ic consultation, adopt and approve a single land use scheme for its entire area within five years from the commencement of the Act

Legislation further requires, in terms of Section (24) (2) of the Spatial Planning and Land Use Management Act requires that:

include appropriate categories of land use zoning and regulations for the entire municipal area, including areas not previously subjected to a land use scheme

include provisions that permits the incremental introduction of land use management and regulations in the areas under traditional leadership, rural areas, informal settlements, slums and areas not previously subjected to a land use scheme

Section 32 (1) of the Spatial Planning and Land Use Management Act states that:

*In context of the above, the uMhlathuze Municipality has prepared, adopted and gazetted a consolidated single land use scheme for the new municipal area. The scheme is currently under review.*

#### **13.1.1 UMHLATHUZE SUITE OF PLANS**

In certain areas of the Municipality, land usage is more complex than in other area. As such, it is necessary to prepare a Land Use Framework (LUF) as a linkage detailed broad land use areas to inform the detailed formulation of zones. The LUF identifies appropriate Zones and Statements of Intent that are established for specific areas. The LUF therefore translates the SDF into a more detailed set of broad land use areas that directs the future development of areas and provides the basis for the formulation of detailed zones for the scheme.

The SDF provides the spatial translation of the municipal vision and goals. The Municipality is in the process of preparing a and the detailed land use scheme. The municipal suite of plans is indicated in the following diagram:

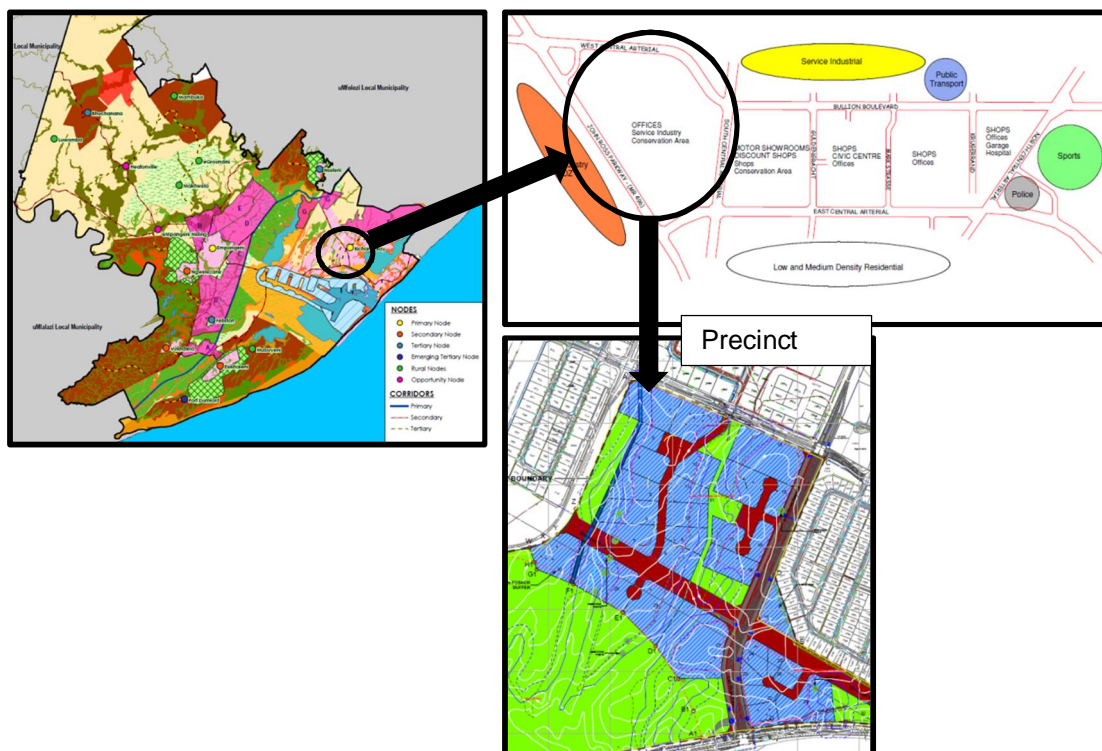




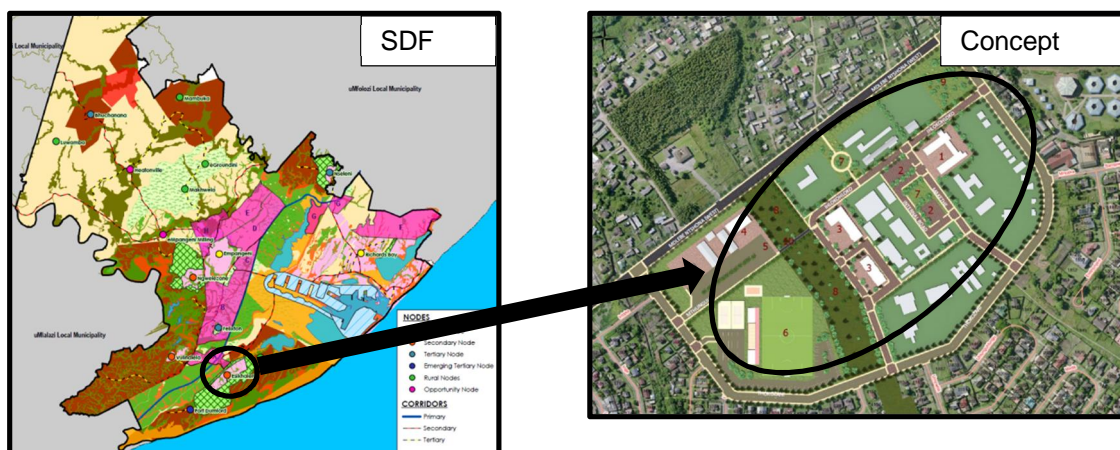


The following figures indicate the relationship between the SDF, LUF (linking elements) and the LUS (Land Use Scheme) in the case of the Precinct Planning that has been undertaken for the Richards Bay CBD South Extension.

**Figure 30: Linkage between SDF and LUF for Richards Bay CBD South Extension**



**Figure 31: Linkage between SDF and LUF for Esikhaleni Business Support Centre**



Concept and Precinct Plans are implementation tools that provide more detailed planning and land development guidelines that underpin spatial development principles but also guide the preparation of the Land Use Scheme.

### 13.1.2 INCREMENTAL APPROACH: DEVELOPMENT GUIDELINES FOR TOWNSHIPS

The uMhlathuze Municipality has four former R293 townships: Esikhaleni, Nseleni, Ngwelezane and Vulindlela, which house approximately a very large portion of the municipality the majority is reside in and around Esikhaleni.

The following are trends discovered in the KZN Urban Development Framework applicable to township areas in uMhlathuze specifically:

- o There are oscillating patterns of migration to and from rural areas, resulting in families being split.
- o The townships are densifying due to the relatively better accessibility to services (compared to the rural and peri-urban areas).
- o Densification occurs by means of illegal additional residences on formal residential properties.
- o Densification, often as a result of illegal settlement within servitudes, puts pressure on basic infrastructure.

Typical, and necessary municipal interventions required to such township areas include the following:

- o Activating the local economy i.e. Township economy.
- o A wider variety of services and facilities in acceptable places (e.g. recreation) in line with Municipal LUS.
- o Better integration of townships with primary nodes (Empangeni and Richards Bay).
- o Identification of areas where other land uses such as offices, commerce, service industries should be allowed.
- o Appropriate land use regulation i.e. development guidelines.
- o Development of service centres in townships where there are none.

It is proposed that a form of incremental land use management is provided in the following land use zones to former township areas in the context of the above. Examples of how this incremental approach can be achieved are indicated in the attached tables. These will be expanded upon during the imminent review of the uMhlathuze Land Use Scheme.

#### Medium Density Residential 1:

This zone is intended to promote the development of attached and detached dwelling units as part of a larger planned residential development. It creates opportunity for medium density residential development around central urban areas, along development corridors and to achieve densification of urban land.

Min	Max		BUILDING LINES	INTENSITY ERF SIZE	MINIMUM STREET FRONTAGE (M)	BUILDING LINES, SIDE AND REAR SPACES
3000m <sup>2</sup>	N/A	21m	7,5m along the external street frontage	Side and rear space requirements do not apply to dwelling unit curtilages, except along the side and rear boundaries of the Medium Density Housing site, where the minimum side and rear space shall be 4,5.		Development management guidelines to be incorporated into Municipal LUS

**Medium Density Residential 2:**

This zone is intended to promote the development of attached and detached dwelling units as part of a larger planned residential development. It creates opportunity for medium density residential development around urban areas, along development corridors and to achieve densification of urban land.

INTENSITY ERF SIZE		MINIMUM STREET FRONTAGE (M)	BUILDING LINES, SIDE AND REAR SPACES			ADDITIONAL REQUIREMENTS / COMMENTS
Min	Max		BUILDING LINES	SIDE SPACES	REAR SPACES	
1600m <sup>2</sup>	N/A	21m	7,5m along the external street frontage	Side and rear space requirements do not apply to dwelling unit curtilages, except along the side and rear boundaries of the Medium Density Housing site, where the minimum side and rear space shall be 4,5.		Development management guidelines to be incorporated into Municipal LUS

### 13.1.3 DEVELOPMENT GUIDELINES FOR RAPID URBANISATION MANAGEMENT ZONES

**Rapid Urbanisation Management Zone:**

Is a zone in the Traditional Authority Area that demarcates areas that have been informally settled adjacent to or near to formal urban areas (Peri-Urban Areas), and require interventions to address environmental impacts, upgrade of services and provide formal housing.

INTENSITY: ERF SIZE		MINIMUM STREET FRONTAGE (M)	BUILDING LINES, SIDE AND REAR SPACES			ADDITIONAL REQUIREMENTS & PROHIBITIONS
Min	Max		BUILDING LINES	SIDE SPACES	REAR SPACES	
150 m <sup>2</sup>	N/A	N/A	3m	2m	2m	Preparation and incremental implementation of settlements frameworks i.e. NUSP  Development management guidelines to be incorporated into Municipal LUS.  Development in the open spaces and areas not suitable for/or not earmarked for residential development

**Special Residential:**

This zone promotes the development of primarily detached dwelling units, but does permit multi-family dwellings; and where a limited number of compatible ancillary uses, which have a non-disruptive impact on a neighbourhood amenity, may be allowed.

INTENSITY ERF SIZE		MINIMUM STREET FRONTAGE (M)	BUILDING LINES, SIDE AND REAR SPACES			ADDITIONAL REQUIREMENTS	PROHIBITIONS
Min	Max		BUILDING LINES	SIDE SPACES	REAR SPACES		
200m <sup>2</sup>	400m <sup>2</sup>	N/A	3m	2m	2m	Preparation and incremental implementation of settlements frameworks i.e. NUSP  Development management guidelines to be incorporated into Municipal LUS	Development in the open spaces and areas not suitable for/or not earmarked for residential development

**13.1.4 DEVELOPMENT GUIDELINES FOR AGRI-VILLAGES**

The term agri-village was first introduced to farmers in Natal in 1992, where the Natal Agricultural Union defined it as a  
land  
-division of  
-  
villages are to be  
identified to have relevance in agri-villages.

**Special Residential:**

This zone promotes the development of primarily detached dwelling units, but does permit multi-family dwellings; and where a limited number of compatible ancillary uses, which have a non-disruptive impact on a neighbourhood amenity, may be allowed.

INTENSITY: ERF SIZE		MINIMUM STREET FRONTAGE (M)	BUILDING LINES, SIDE AND REAR SPACES			ADDITIONAL REQUIRE- MENTS	PROHIBITIONS
Min	Max		BUILDING LINES	SIDE SPACES	REAR SPACE S		
1000m <sup>2</sup>	4000m <sup>2</sup>	15m	3m	2m	2m	Preparation and incremental implementation of settlements frameworks i.e. NUSP  Development management guidelines to be incorporated into Municipal LUS	Development in the open spaces and areas not suitable for/or not earmarked for residential development



### 13.1.5 DEVELOPMENT GUIDELINES FOR RURAL AREAS

**Rural Node:** A node within a rural area identified in the Municipal Spatial Development Framework as a node that may include land uses which would support the community in their day-to-day needs such as commercial, educational, health facilities, petrol filling station, etc.

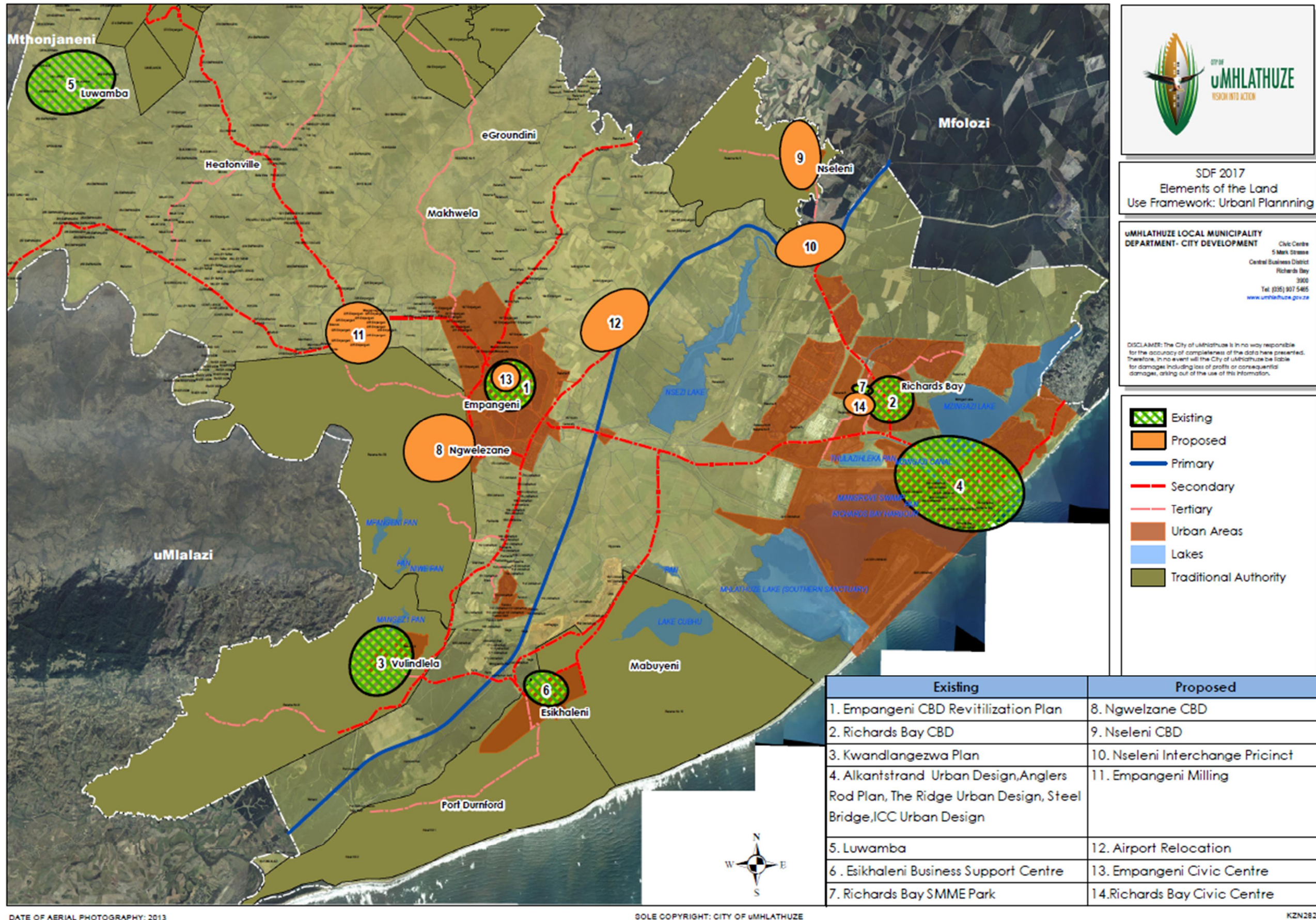
More specifically, free entry uses in this zone includes:

- o Agricultural Building
- o Agricultural Land
- o Arts and Crafts Workshop
- o Commercial Workshop
- o Community Garden
- o Educational Building
- o Heritage Purposes
- o Home Activity
- o Homestead
- o Industry Service
- o Informal Trade Area
- o Institution
- o Municipal Purposes
- o Place of Worship
- o Public Office
- o Public Recreational Use
- o Public Street
- o Office General
- o Recreational Building
- o Shop General

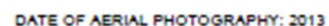
INTENSITY: ERF SIZE		MINIMUM STREET FRONTAGE (M)	BUILDING LINES, SIDE AND REAR SPACES			ADDITIONAL REQUIRE- MENTS	PROHIBITIONS
Min	Max		BUILD- ING LINES	SIDE SPACES	REAR SPACE S		
150m <sup>2</sup>	N/A	N/A	3m	2m	2m	Preparation and incremental implementation of settlements frameworks i.e. NUSP  Preparation of Rural Framework Plans  Development management guidelines to be incorporated into Municipal LUS	Development in the open spaces and areas not suitable for/or not earmarked for residential development



Map 38: Elements of the Land Use Framework - Urban









### 13.2 CONSOLIDATED IMPLEMENTATION ACTION PLAN

Although the uMhlathuze SDF has a longer term vision, the following short to medium term actions are required based on information contained in the previous sections.

NO.	DESCRIPTION	YEAR 0 CURRENT	YEAR 1 2020	YEAR 2 2021	YEAR 4+	BUDGET ESTIMATE	POTENTIAL FUNDING
<b>A. STRATEGIC PLANS/INITIATIVES</b>							
1	Extension of uMhlathuze Land Use Scheme to incorporate wards inherited from Ntambanana.					CoGTA support	CoGTA CoU
2	Identification of opportunities pertaining to areas of natural beauty and tourism to be investigated in more detail in order to provide more detailed planning guidelines.					R400 000	CoGTA CoU
3	Investigate future land requirements for provision of suite of municipal services (including recreational, municipal purposes, infrastructure etc.) to reserve land for such purposes.					R200 000	CoU
4	Agreement with National Department of Agriculture in respect of SDF Review proposed Expansion Areas development roll-out.					Operational	N/A
5	Agreement with Department of Minerals in respect of SDF Review proposed Expansion Areas development roll-out.					Operational	N/A
6	Integrated ground, surface and stormwater (catchment) management plan.					R10 500 000	CoU (MoU with external)
7	Biodiversity Plan for whole municipal area					R1 000 000	CoU (external)
8	Update/Review ESMP for whole municipal area					R500 000	CoU (external)
9	Review densification and residential infill study and expand current project scope of work to include all urban areas of the Municipality.					Operational	N/A



10	Prepare/Update community facilities plan					R500 000 (Operational)	CoU
11	Update/Review Arterial Framework Plan to also incorporate all wards					To be determined	CoU
12	Update of Rail Framework to also incorporate all wards					To be determined	CoU
13	Alternative and Renewable Energy Network Strategy/Plan					To be determined	CoU DoE
14	Intermodal Transportation Plan					R800 000	CoU DoT
15	Update/Review Disaster Management Plan for whole municipal area					R1000 000	CoU

NO.	DESCRIPTION	YEAR 0 CURRENT	YEAR 1 2020	YEAR 2 2021	YEAR 4+	BUDGET ESTIMATE	POTENTIAL FUNDING
<b>B. CATALYTIC PROJECTS</b>							
1	Detailed pre-feasibility / feasibility of relocating Richards Bay Airport and evaluation of site alternatives.					R3 500 000	EDTEA CoU
2	Implementation of Empangeni Mega Housing Project					To be determined	DHS CoU
3	Richards Bay Convention Centre Development (Tender in progress)					N/A	N/A
4	The Ridge Development (Tender in progress)					N/A	N/A
5	Green Hill Development (Tender in progress)					N/A	N/A
6	Richards Bay Waterfront Detailed Development Concept					R600 000	CoU CoGTA
7	Nseleni Precinct Plan					R300 000	CoU CoGTA
8	Richards Bay SMME Park Development					R3 000 000	CoU
9	Esikhaleni Business Support Centre					R21 000 000	CoU
10	Implementation of Empangeni CBD Revitalization Plan Implementation					To be determined	CoU CoGTA
11	Feasibility Study into wastewater and associated by-products re-use (PPP)	Project underway			To be determined		CoU NT GTAX
	CITP	Project underway			To be determined		CoU DoT

NO.	DESCRIPTION	YEAR 0 CURRENT	YEAR 1 2020	YEAR 2 2021	YEAR 4+	BUDGET ESTIMATE	POTENTIAL FUNDING
<b>C. SPATIAL TRANSFORMATION PROJECTS</b>							
1	Further detailed planning of intersection/opportunity nodes in terms of phasing and development guidelines. Includes: - Heatonville - Empangeni Milling					R300 000	CoU External
2	Preparation of Rural Settlement/Framework Plans for: - Port Durnford (complete) - Buchanana (underway) - Hluma - Matshana - Mabuyeni					R2 000 000	CoU DRDLR External
3	Traditional Council/Isigodi Plans					R2 000 000	CoU DRDLR External
4	Urban Regeneration projects for the commercial precincts: - Esikhaleni - Nseleni - Ngwelezane - Empangeni Rail					R1 200 000	CoU External
5	Implementation of NUSP project					Ongoing	DHS CoU
6	Implementation of Aquadene Housing Project					Ongoing	DHS CoU
7	Implementation of DMV (Phase 6 & 8) Housing Project					Ongoing	DHS CoU
8	Public Transport Planning and Implementation					Ongoing	CoU DoT

### 13.3 STRATEGIC AND CATALYTIC PROJECTS

A catalytic/strategic project promotes cross-cutting sustainability outcomes that mirror goals and targets to promote the overall sustainability of an area. The uMhlathuze Municipality is pursuing a number of catalytic projects/interventions are present as summarized hereunder.

**Table 53 : Strategic and Catalytic Projects**

PROJECT NAME	STATUS
1. Airport Relocation	The strategic positioning of uMhlathuze has necessitated long term plans to relocate/ upgrade the current airport. A pre-feasibility study for the relocation of the Richards Bay Airport has been finalised. The study investigated the various criteria for relocation including tenure, economic imperatives, spatial and land use considerations, environmental risks etc. The project has been registered as a PPP.
2. Richards Bay ICC	Council guidelines for the proposed Richards Bay International Convention Centre with ancillary land uses such as Hotel, residential, professional offices, retail and that will complement the envisaged development of waterfront development. City is not looking for a traditional International Convention Centre, but mixed use centre with conference facilities, retail, leisure and business offices etc. as mentioned above.
3. Steel Bridge	The concept design phase for the Richards Bay Waterfront Steel bridge recommended future phases for implementation. The feasibility study has been finalised and essentially included: <ul style="list-style-type: none"> <li>o Determine required statutory approvals (if any), including environmental and water use related and identify long lead items.</li> <li>o Undertaking a topographical survey and other specialist studies required to inform the processes identified.</li> <li>o Preparing preliminary designs to initiated the next phase of detail designs, execution, procurement and construction.</li> </ul> The next phase in the process is detailed design and implementation.
4. The Ridge	The proposed Ridge development is to accommodate a Hotel, High Density Residential units and ancillary land uses. The design reflects a that will take cognisance of the location of the area. Tender for the Ridge development has been awarded and project is at an advanced stage of detail planning.
5. Waterfront Development	The Municipality intends to develop the Waterfront Area that will deliver the following: A place for maritime industries, education and businesses, local and international port activities; <ul style="list-style-type: none"> <li>o A Public Waterfront: A place for local people and visitors;</li> <li>o A connected Waterfront: A place where people are highly connected locally and within the region, a place that is highly accessible and safe for pedestrians, cyclists, and passengers.</li> </ul>
6. Richards Bay SMME Park	SMME Park will cater for hairdressers, mechanics; car wash and SMME offices and has been constructed and being utilized by 20 mechanics.



7. Nseleni Neighbourhood Shopping Centre	The shopping centre is operational.
8. Empangeni CBD Revitalisation Plan	The Empangeni CBD Revitalisation Plan outlines the current status of the town. The project phases was finalised in July 2013. The plan outlined 25 key projects/interventions to be implemented by the municipality and external stakeholders. The Empangeni revitalisation plan is to be implemented in a quadrant approach and the Lot 63 refurbishment was considered a catalyst for the implementation of the plan and has been completed. The upgrading of Empangeni A Rank is the next stage.
9. Desalination Plant	Plant completed. Operational capacity of 10MI/day.
10. Feasibility Study into wastewater and associated by-products re-use	Appointed a Transaction Advisor, to conduct a Feasibility Study for wastewater and associated by-products re-use for the City of uMhlathuze. Process underway.
11. Green Hill	Greenhill is situated on a Portion of the Remainder of Erf 5333, Greenhill, and is 22 758 m <sup>2</sup> in extent. An EOI for the development of a mixed use development with a health care centre as an anchor awarded.
12. 132 kV	Replacement of two oil filled cables between CAPELLA and HYDRA substations feeding RBCT in progress.
13. CITP	Service Provider appointed to prepare Comprehensive Integrated Transport Plan (CITP) for whole municipal area.
14. Empangeni Mega Housing	Housing project of 10 000 units of an IRDP (Integrated Residential Development Programme) type. Installation of services has commenced.

The following tables relate the above listed strategic and catalytic projects to the following **spatial transformation elements** as alluded to throughout this report:

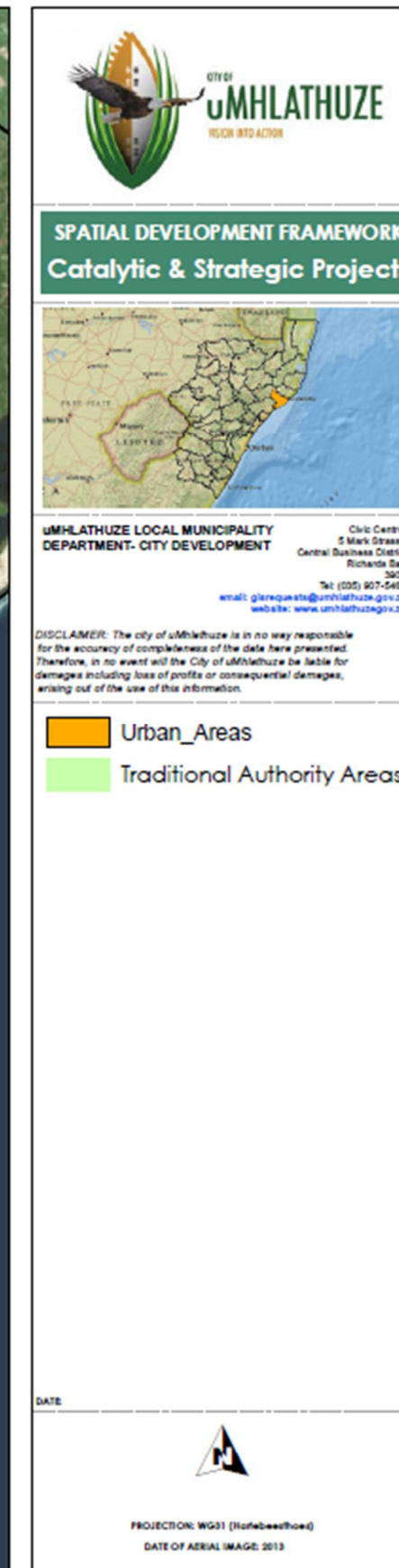
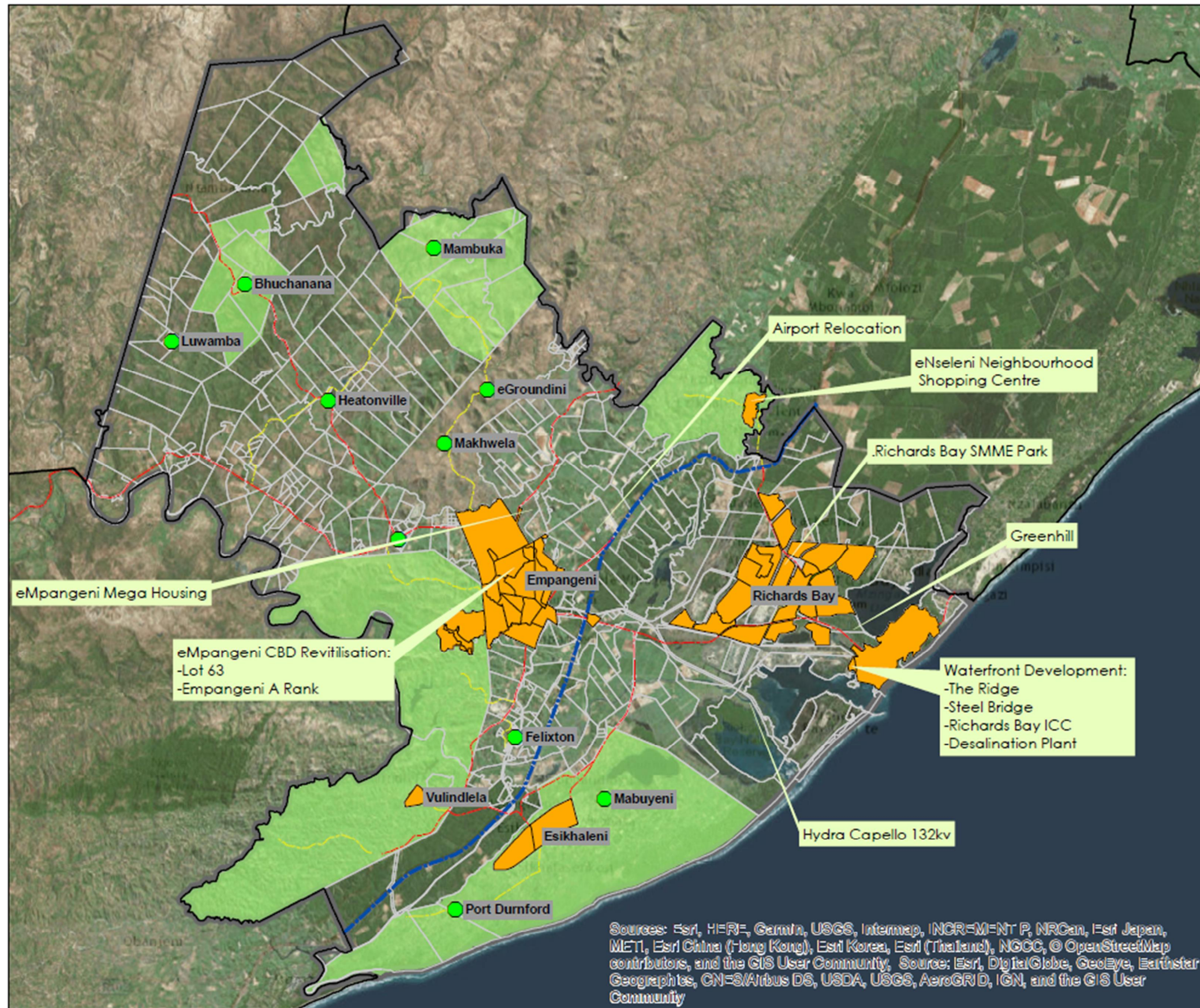
- o Employment
- o Sustainability
- o Township Economy
- o Promotion of Economy (Tourism, LED and Agriculture)
- o Social Investment
- o Mobility
- o Significant Capital Infrastructure Investment

**Table 54: Relevance of Spatial Transformation Elements to Catalytic Projects**

PROJECT NAME	Employment	Sustainability	Township Economy	Promotion of Economy (Tourism, LED, Agriculture)	Social Investment	Mobility	Significant Capital Infrastructure investment
1. Airport Relocation							
2. Richards Bay ICC							
3. Steel Bridge							
4. The Ridge							
5. Waterfront Development							
6. Richards Bay SMME Park (also Esikhaleni Business Park)							
7. Nseleni Neighbourhood Shopping Centre							
8. Empangeni CBD Revitalisation Plan							
9. Desalination Plant							
10. Feasibility Study into wastewater re-use							
11. Green Hill							
12. 132 kV							
13. CIP							
14. Empangeni Mega Housing							



Map 40: Location of Catalytic and Strategic Projects





## 13.4 CAPITAL EXPENDITURE FRAMEWORK

*A Capital Expenditure Framework is a consolidated, high-level view of infrastructure investment needs in a municipality over the long-term (10 years) that considers not only infrastructure needs but also how these needs can be financed and what impact the required investment in infrastructure will have on the financial viability of the municipality going forward.*

*Guide to preparing an Infrastructure Investment Framework, SALGA, 2017, page 2*

### 13.4.1 The role of the Capital Expenditure Framework (CEF) in relation to the IUDG

A review of Local Government Infrastructure Grants was initiated in October 2013, led by National Treasury together with the COGTA, the Financial and Fiscal Commission, the South African Local Government Association (SALGA), and the Department of Performance Monitoring and Evaluation. The review envisioned a grant system that should include:

- o Greater differentiation in the type of grants provided to different municipalities;
- o A move from focusing on rolling out new infrastructure to increased focus on the management, maintenance and renewal of existing infrastructure;
- o An approach to ensure greater value for money for the funds spent, and;
- o A framework to provide coherence and consistency in the management of the grant system.

The IUDF is consistent with, and reinforces the findings of the Review of Local Government Infrastructure Grants. As a result, the IUDG is slated to be introduced in the 2019/20 Division of Revenue Act (DORA) as a consolidated grant for Intermediate City Municipalities (ICMs). The aim of the IUDG is to support spatially aligned public infrastructure investment that will lead to functional and efficient urban spaces and to ultimately unlock urban growth. In terms of the IUDG description, the purpose of the grant is to:

Provide funding for public investment in infrastructure for the poor;  
Promote increased access to municipal owned sources of capital finance in order to increase funding for public investment in economic infrastructure;  
Ensure that public investments are spatially aligned with the local government development vision, and;  
Promote the sound management of the assets delivered.

According to the IUDG policy framework, a CEF is a comprehensive, high-level, long-term infrastructure plan that flows from a SDF, which estimates the level of affordable capital investment by the municipality over the long-term. The CEF is therefore the municipal instrument to realise the agenda of the IUDF.

A CEF (Capital Expenditure Framework) is also a core component of an SDF in terms of SPLUMA (Spatial Planning and Land Use Management Act).



The uMhlathuze Municipality has finalized its first CEF and a summary of the main components thereof is provided herewith as per the following:

- o Functional Areas & Priority Development Areas
- o Demand Quantification
- o Modelling Outcomes and Grant Impact Forecasts
- o Planned Capital Expenditure
- o Prioritisation Model and Budget Fit
- o Functional Area Budget Split
- o Poor versus Non-Poor Capital Expenditure Ratio
- o 2019/2020 MTREF Capital Budget by Discipline-Based Service
- o IUDG Funded Projects

*(It should be noted that the CEF itself is informed by contextual information, the spatial vision as well as the municipal development approach but these are not repeated here as they are detailed elsewhere in the SDF).*

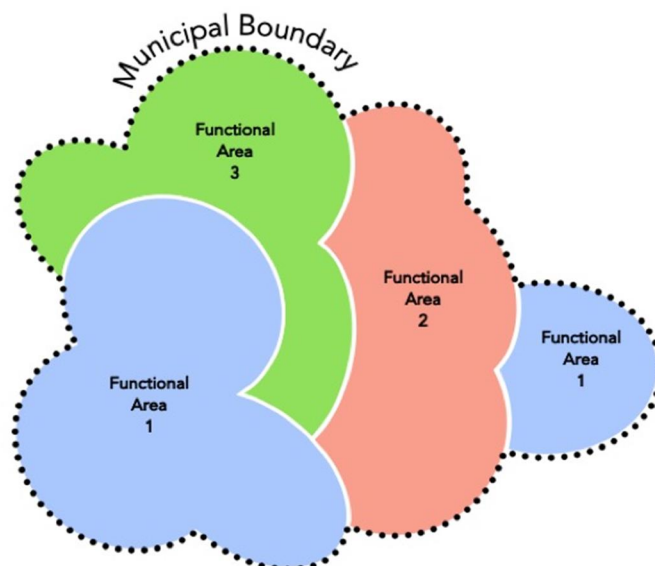
The CEF guidelines as drafted by COGTA, defines two main spatial structuring elements of a municipality, namely:

- o Functional Areas, and;
- o Priority Development Areas.

### 13.4.2 Functional Areas

Municipal boundaries describe the administrative jurisdiction area of a municipality, and Functional Areas (FAs) are the areas within the municipal boundary which exhibit homogenous function. A FA is a delineated area characterized by common (homogenic) geographical, spatial, developmental and service demand conditions, where the urban functioning is predominantly similar. Another method of identifying different FAs is to spatially delineate areas with similar developmental challenges.

**Figure 32: Conceptual representation of FAs within a municipal boundary**



A typical example is to demarcate the rural part of the municipality or the tribal land as a FA because it has more or less similar attributes (i.e. low density, lack of high order services, etc.) and it requires a specific development strategy that is unique to the development challenges of the area.

Given that each component of a municipal area cover the entire municipal area. As shown in **Error! Reference source not found.**the figure above, the sum of all delineated FAs is equal in coverage to that of the municipal jurisdiction boundary.

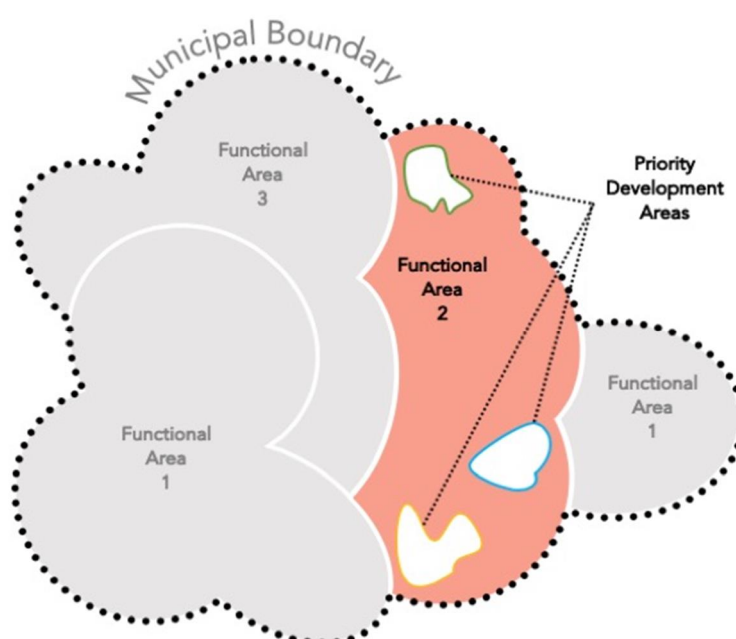
Therefore, when socio-economic and spatial profiling is undertaken per FA, the sum of the profile results (i.e. for population) will equal the profiling results for the municipal area.

FAs do not necessarily carry similar hierarchical importance. Therefore, given that the development challenges across the various municipal FAs may well differ, the capital investment priority associated with each FA may also differ. Allocating different hierarchical priority or importance to the different FAs in a municipality may be useful in the capital demand prioritisation model in subsequent sections of this report.

### 13.4.3 Priority Development Areas

In the same way as the FAs are defined within the municipal boundary, the PDAs are defined within the FA boundaries. However, there is one important distinction between FA and PDA delineation the sum of PDAs does not necessarily have to cover the extent of the FA.

**Figure 33: Conceptual representation of PDAs within a PA boundary**



PDAs are specifically delineated intervention areas or spatial targeting areas that can take the form of strategic areas, nodal areas, corridors, precincts etc. Each of these areas has a specific development intent which is expressly stated in the SDF, and the development intent will relate very specifically to the FA in which the PDA is contained.

For example, the development intent for a PDA within the primary urban FA will be distinctly different from a PDA within a tribal or traditional authority FA. As was the case with the FAs, the priority of each PDA within a FA may differ, and therefore it is of critical importance to provide some hierarchy importance to the PDAs to inform the capital demand prioritisation model during the budget scenario development process.

As noted, the CEF should relate to the SDF vision and spatial structuring rationale. This is required to enable infrastructure modelling based on population thresholds and levels of service choices. The four main FAs within the City of uMhlathuze are defined as follows:

- o **Urban core function:** The Urban Core Function is defined by the dominant urban characteristic of the area, boasting a variety of uses centred around the primary economic centres of the municipality.

The key areas contained within the Urban Core Function consists of primarily Richards Bay and Empangeni. Additionally, given the spatial vision of the municipality, the surrounding

development areas (Area A, B, C, D, E, and H) together with Esikhaleni, Vulindlela and Enseleni are also included as Urban Core Function areas.

- o **Secondary urban improvement function:** The Secondary Urban Improvement Function area is defined by a high population density, with the potential to facilitate urbanised growth with the need for investment towards infrastructure that will improve the quality of life.

The key areas defined as contributing to the Secondary Urban Improvement Function, are the area surrounding Esikhaleni limited by the N2 to the north, the coast to the south and the harbour to the east, and the area surrounding Vulindlela limited by the N2 to the South, the jurisdictional boundary to the north and west, the tribal boundary to the far north and the urban core function to the east.

- o **Rural sustainability function:** The Rural Sustainability Function is defined by the dominant presence of subsistence farm dwellings found within this area, which also incidentally relate strongly to the main economic function within this area.

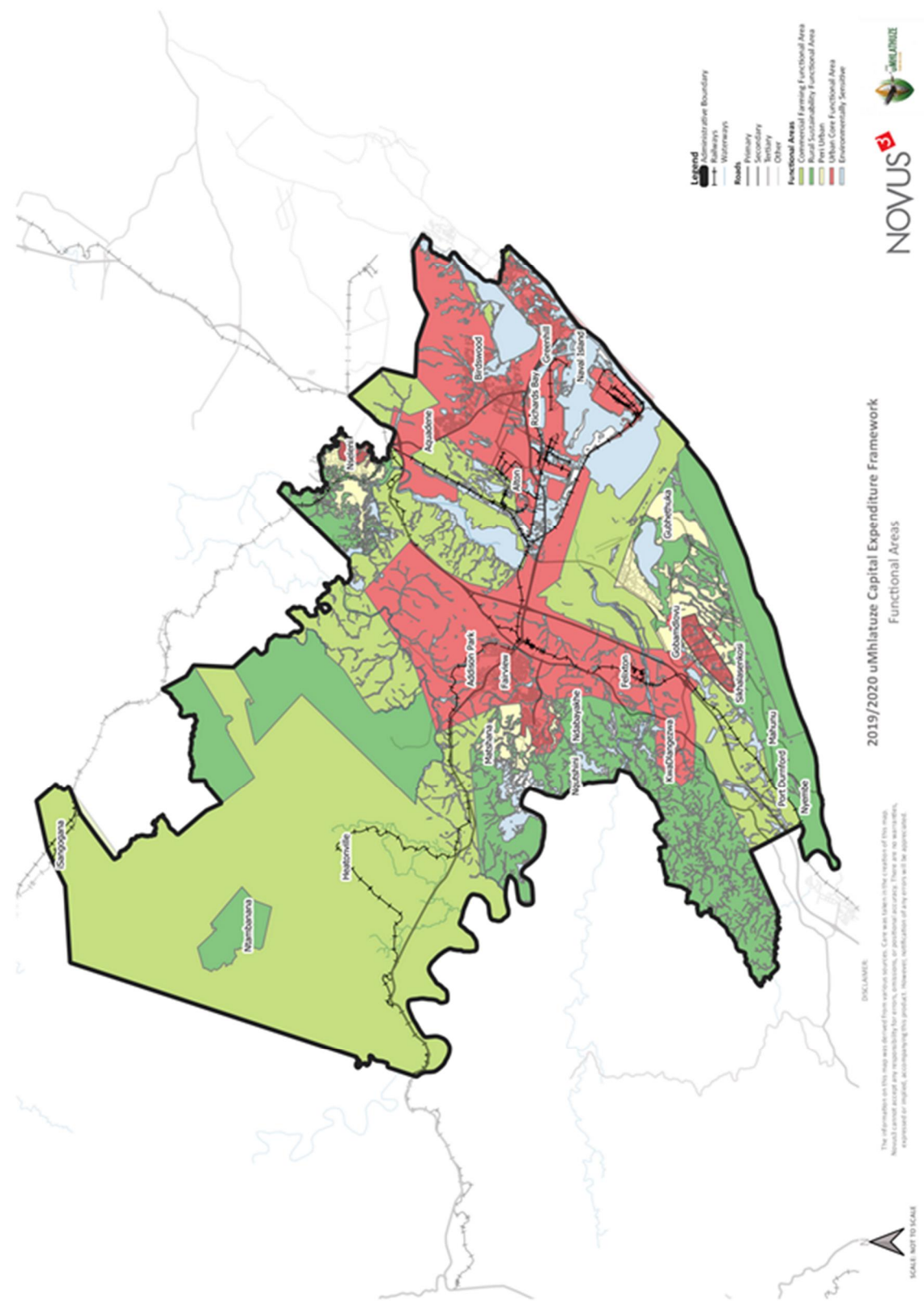
The key areas within this area includes Ntambanana, Mambuka, eGroundini and Makhwela.

- o **Commercial farming function:** Considering the dominant sugar-cane farming activity in the area, the remainder of the municipal area can be defined as contributing to the Commercial Farming Function.

Key areas includes Heatonville and Luwamba

The above Functional Areas are indicated in the map at overleaf.

**Map 41: Functional Areas of the City of uMhlathuze**





The uMhlathuze SDF contains various analysis themes towards describing and understanding the spatial dynamic within the municipality. This was done to cater for the variety of dynamics which makes each area unique and to identify the various areas of the municipality as a whole. In order to define the PDAs, a specific methodology was used, guided by the themes within the SDF.

The uMhlathuze SDF contains various analysis themes towards describing and understanding the spatial dynamic within the area and can be summarised as:

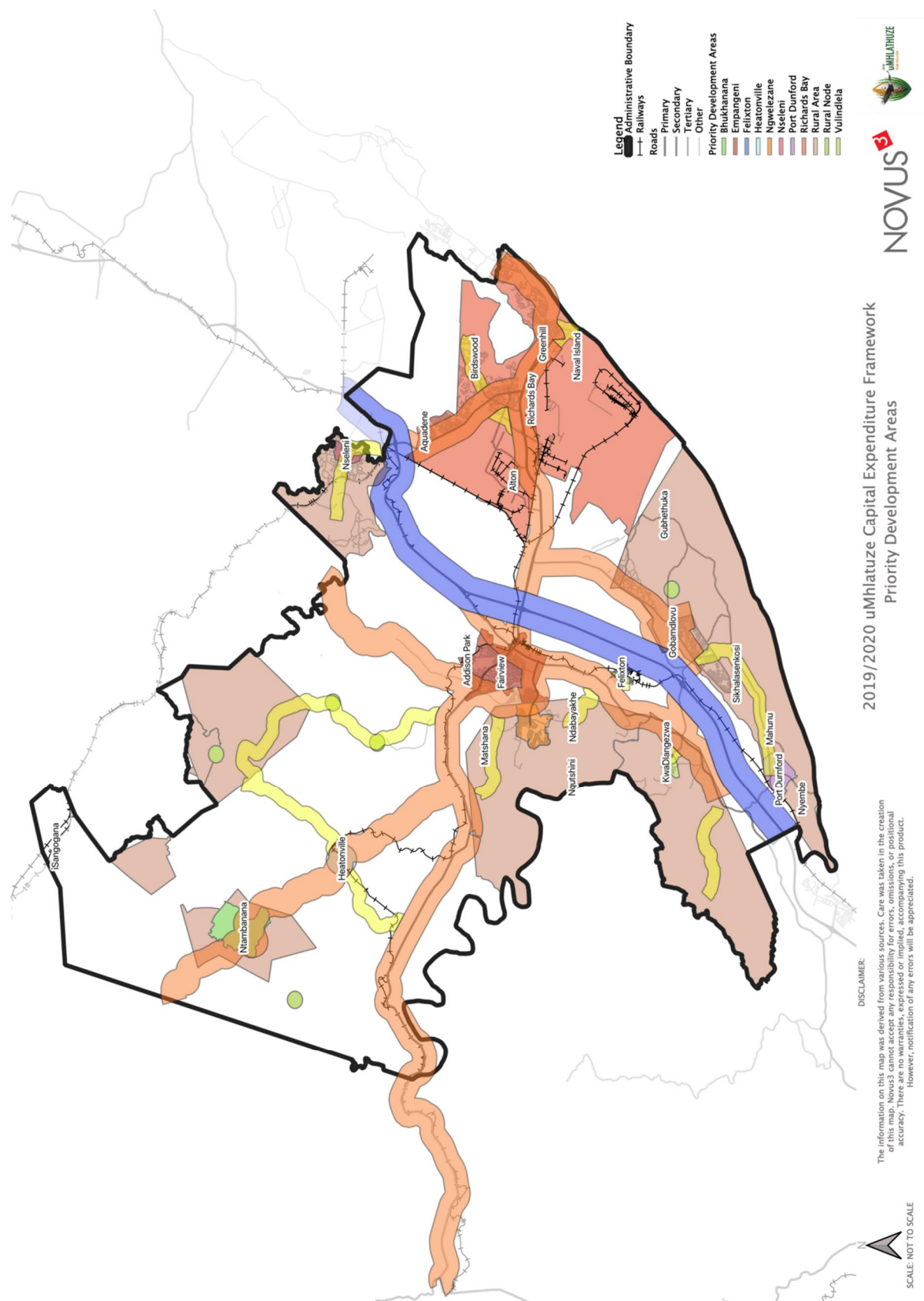
- o Theme 1: Settlement hierarchy
- o Theme 2: Natural features
- o Theme 3: Expansion areas
- o Theme 4: Infill and densification
- o Theme 5: Urban development boundary
- o Theme 6: Residential infill
- o Theme 7: Agricultural investment
- o Theme 8: Mining investment
- o Theme 9: Nodes
- o Theme 10: Corridors
- o Theme 11: Tourism
- o Theme 12: Informal settlement areas
- o Theme 13: Rural development plans
- o Theme 14: Strategic focus areas
- o Theme 15: Catalytic project areas

By grouping themes in terms of priority development focus areas, at the hand of the strategic vision of the municipality, it is possible to more effectively define PDAs. In order to identify PDAs, the municipality has grouped the above mentioned 15 themes to five (5) main priority themes, namely:

- o Urban structure enhancement areas
- o Residential improvement areas
- o Economic investment areas
- o Strategic focus areas
- o Maintenance areas

By referring to the PDAs in terms the priority development focus areas, it was possible to define a hierarchical priority or ranking for key areas with respect to each priority development focus area. The delineation of the PDAs of the City of uMhlathuze is shown in the map herewith.

**Map 42: Priority Development Areas of the City of uMhlathuze**



### 13.4.4 Demand quantification

The emphasis over the past two decades has largely been on extending services to poor households. This is done in an environment where major population shifts have occurred, through accelerated urbanization and decreased growth and even population declines in rural areas. However, extending access to services must be regarded as only one of three major investment areas that require attention in order to sustain or accelerate development in any municipality. In this dynamic process, three components contributing to the demand for investment are recognised:

- o The first investment challenge is existing households without access to services;
- o The second is investment required to renew (rehabilitate and maintain) existing infrastructure, and;
- o The third is the growth in households and the economy.

### 13.4.5 Modelling outcomes and growth impact forecasts

A development cost model was used to model and forecast long-term investment demand. The following factors provided input into this model:

#### Population growth as the basis for modelling investment demand

Overall population growth rates are declining and will continue to decline. This is particularly true of the farming areas but is in line with general trends in South Africa. The rural nodes are growing significantly slower, but indications are that traditional areas will grow strongly. It is expected that urban and traditional growth will be close in terms of actual number but the challenge is that growth in traditional areas are dispersed over vast areas at very low densities.

**Table 55: Change in population distribution from 1996 to 2030**

Timeline	Urban	Rural	Tribal	Farm	Total
1996	40.8%	21.1%	33.1%	5.0%	100%
2001	37.2%	19.0%	39.8%	4.1%	100%
2006	40.0%	18.4%	38.2%	3.5%	100%
2011	42.8%	17.9%	36.5%	2.8%	100%
2016	43.3%	16.7%	37.9%	2.1%	100%
2021	44.2%	15.7%	38.7%	1.4%	100%
2026	45.2%	14.7%	39.4%	0.7%	100%
2030	46.0%	13.9%	40.0%	0.1%	100%

It is important to note that the expectation is that, irrespective of growth numbers, the share of rural nodes will decrease while the population share of the urban nodes tribal areas will increase as farming populations decrease. The implication is that the demand for infrastructure and services will grow in the tribal areas at a higher rate and that these areas will become increasingly more important in the municipality

#### Scenario assessment

It is necessary to make some basic assumptions before the model was calibrated, notably housing variables as well as norms and standards for land use budgeting, service levels

#### Modelling Outcomes

The outcomes show incremental quantities, which includes all service elements and components. Currently, it is not possible to model the impact of major interventions such as building a new wastewater treatment work or big investment to reconfigure the management of solid waste. The

results link the demand to a specific year, it is still important to take note of budgeting processes and the extent of lead times before project implementation can commence.

The following table shows the summary of land use demand which is a result of the growth forecasts.

**Table 56: Land use demand for the programme period 2019 to 2028**

Land uses	No of units	% of the total land	No of stand required	The area included in the project
Totals	13 896	100.00%	9 461	2 088.08
Residential	13 896	70.30%	8 697	1 331.10
Low density rural settlement	2 843	37.54%	2 843	710.87
Single residential: Low Income	1 163	3.07%	1 163	58.13
Single residential: Med-high Income	3 924	17.62%	3 924	333.54
Medium Dens: Low Inc	630	1.66%	158	31.52
Medium Dens: Med Inc	1 046	2.76%	131	52.32
Medium Dens: High Inc	2 415	6.38%	402	120.74
High Dens: Low Inc	131	0.12%	11	2.18
High Dens: Med Inc	349	0.46%	22	8.72
High Dens: High Inc	523	0.69%	44	13.08
Backyard dwellings	872	0.00%	0	0.00
Business		3.01%	249	262.45
Local Activity Centre		1.35%	127	19.05
Neighbourhood Activity Centre		1.01%	76	22.80
Market/trading area		0.20%	0	0.00
Regional Activity Centre		0.59%	44	220.00
Garages & filling stations		0.05%	2	0.60
Industrial		6.46%	375	119.80
Light industrial		3.59%	339	67.80
Heavy industrial		1.79%	16	32.00
Storage and warehousing		1.08%	20	20.00
Public spaces: recreation		1.37%	53	33.00
Parks: public		0.54%	40	20.00
Sports fields		0.18%	3	3.00
Stadiums		0.11%	0	0.00
Community facilities: county		1.37%	16	19.95
Municipal office		0.01%	0	0.00
Community hall		0.03%	2	0.60
Local library		0.01%	1	0.15
Primary health clinic		0.02%	1	0.30
Fire station & Ambulance		0.03%	0	0.00
Ambulance station		0.01%	0	0.00
Cemeteries		0.98%	9	18.00
Public parking areas		0.05%	3	0.90
Taxi ranks		0.03%	0	0.00
Community facilities: other		4.31%	71	72.20
Post office		0.02%	2	0.30
Police station		0.02%	0	0.00
District hospital		0.04%	0	0.00
Community health centre		0.01%	0	0.00



Hospice		0.01%	1	0.20
Old age home		0.05%	1	1.00
Children's homes		0.01%	0	0.00
Place of worship		0.15%	13	2.60
Crèche		0.19%	18	3.60
Nursery school		0.16%	10	3.00
Primary school		1.81%	10	32.00
Secondary school		1.41%	5	22.50
After school centre		0.11%	10	2.00
Technical college		0.27%	1	5.00
Roads totals		13.18%	0	249.58

The following tables show the required capital expenditure incrementally per annum and cumulative per annum to accommodate the forecasted demand.

**Table 57: Incremental Capital Expenditure: All services (R**

Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Growth investments	135 539	140 742	142 155	122 169	124 448	121 092	122 762	122 581	99 226	99 562
Access backlogs	1 940	1 940	1 940	1 940	1 940	1 940	1 940	1 940	1 940	1 940
Renewals	227 788	230 812	233 948	237 131	239 858	242 631	245 338	248 074	250 812	253 008
Renewal backlog	100 183	100 183	100 183	100 183	100 183	100 183	100 183	100 183	100 183	100 183
Total (R'000)	465 451	473 678	478 226	461 424	466 430	465 847	470 223	472 779	452 161	454 694
<b>Water</b>										
Growth investments	24 841	25 885	26 098	22 454	23 065	22 042	22 778	22 496	18 372	18 180
Access backlogs	1 891	1 891	1 891	1 891	1 891	1 891	1 891	1 891	1 891	1 891
Renewals	22 338	22 673	23 022	23 374	23 677	23 988	24 285	24 592	24 896	25 144
Renewal backlog	8 283	8 283	8 283	8 283	8 283	8 283	8 283	8 283	8 283	8 283
Total	57 353	58 732	59 295	56 002	56 916	56 205	57 238	57 263	53 443	53 498
<b>Sanitation</b>										
Growth investments	23 591	24 168	24 018	20 934	21 162	20 721	21 002	21 084	16 794	16 893
Access backlogs	21	21	21	21	21	21	21	21	21	21
Renewals	21 212	21 994	22 794	23 589	24 282	24 983	25 670	26 365	27 063	27 619
Renewal backlog	6 405	6 405	6 405	6 405	6 405	6 405	6 405	6 405	6 405	6 405
Total	51 230	52 588	53 238	50 949	51 871	52 131	53 097	53 875	50 283	50 938
<b>Electricity</b>										
Growth investments	38 982	40 673	40 995	35 258	35 940	34 993	35 410	35 410	28 660	28 858
Access backlogs										
Renewals	77 250	78 006	78 794	79 589	80 272	80 969	81 648	82 334	83 021	83 576
Renewal backlog										
Total	116 232	118 679	119 789	114 847	116 213	115 962	117 057	117 744	111 680	112 435
<b>Roads &amp; Stormwater</b>										
Growth investments	45 948	47 752	48 383	41 455	42 197	41 248	41 525	41 512	33 985	33 823
Access backlogs										
Renewals	100 215	101 201	102 225	103 262	104 151	105 056	105 940	106 831	107 721	108 449
Renewal backlog	85 053	85 053	85 053	85 053	85 053	85 053	85 053	85 053	85 053	85 053
Total	231 217	234 006	235 661	229 770	231 401	231 357	232 518	233 396	226 759	227 326
<b>Refuse removal</b>										
Growth investments	2 177	2 264	2 661	2 068	2 084	2 087	2 047	2 080	1 415	1 808
Access backlogs	28	28	28	28	28	28	28	28	28	28
Renewals	6 772	6 939	7 113	7 317	7 475	7 635	7 795	7 952	8 111	8 220
Renewal backlog	442	442	442	442	442	442	442	442	442	442
Total	9 420	9 674	10 243	9 855	10 029	10 192	10 312	10 501	9 996	10 498

**Table 58: Capital Expenditure (all services (R**

Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Growth investments	135 539	276 281	418 436	540 606	665 054	786 146	908 908	1 031 489	1 130 714	1 230 277
Access backlogs	1 940	3 881	5 821	7 761	9 702	11 642	13 582	15 523	17 463	19 403
Renewals	227 788	252 025	233 948	237 131	239 858	242 631	245 338	248 074	250 812	253 008
Renewal backlog	100 183	200 366	300 549	400 732	500 916	601 099	701 282	801 465	901 648	1 001 831
Total (R'000)	465 451	732 553	958 754	1 186 231	1 415 529	1 641 518	1 869 109	2 096 551	2 300 637	2 504 519
<b>Water</b>										
Growth investments	24 841	50 725	76 823	99 277	122 342	144 385	167 163	189 659	208 031	226 211
Access backlogs	1 891	3 783	5 674	7 566	9 457	11 349	13 240	15 132	17 023	18 915
Renewals	22 338	22 673	23 022	23 374	23 677	23 988	24 285	24 592	24 896	25 144
Renewal backlog	8 283	16 566	24 849	33 132	41 414	49 697	57 980	66 263	74 546	82 829
Total	57 353	93 747	130 369	163 349	196 891	229 419	262 669	295 646	324 496	353 098
<b>Sanitation</b>										
Growth investments	23 591	47 759	71 777	92 711	113 874	134 595	155 597	176 681	193 474	210 367
Access backlogs	21	42	62	83	104	125	145	166	187	208
Renewals	21 212	43 206	22 794	23 589	24 282	24 983	25 670	26 365	27 063	27 619
Renewal backlog	6 405	12 811	19 216	25 622	32 027	38 433	44 838	51 243	57 649	64 054
Total	51 230	103 817	113 850	142 005	170 287	198 136	226 250	254 455	278 373	302 248
<b>Electricity</b>										
Growth investments	38 982	79 654	120 649	155 907	191 848	226 840	262 250	297 660	326 319	355 178
Access backlogs										
Renewals	77 250	78 006	78 794	79 589	80 272	80 969	81 648	82 334	83 021	83 576
Renewal backlog										
Total	116 232	157 660	199 443	235 496	272 120	307 810	343 898	379 994	409 340	438 754
<b>Roads &amp; Stormwater</b>										
Growth investments	45 948	93 701	142 084	183 539	225 736	266 984	308 509	350 021	384 006	417 829
Access backlogs										
Renewals	100 215	101 201	102 225	103 262	104 151	105 056	105 940	106 831	107 721	108 449
Renewal backlog	85 053	170 106	255 159	340 212	425 265	510 318	595 371	680 424	765 477	850 530
Total	231 217	365 007	499 468	627 013	755 152	882 358	1 009 820	1 137 276	1 257 204	1 376 809
<b>Refuse removal</b>										
Growth investments	2 177	4 442	7 102	9 171	11 254	13 342	15 389	17 468	18 883	20 691
Access backlogs	28	56	84	112	141	169	197	225	253	281
Renewals	6 772	6 939	7 113	7 317	7 475	7 635	7 795	7 952	8 111	8 220
Renewal backlog	442	884	1 325	1 767	2 209	2 651	3 092	3 534	3 976	4 418
Total	9 420	12 321	15 625	18 367	21 079	23 796	26 473	29 179	31 224	33 610

### 13.4.6 Planned Capital Expenditure

Amongst others, the following sector and master plans have informed the determination of planned capital expenditure:

- o Bulk Sewer Master Plan 2016
- o Bulk Water Master plan 2014
- o Electricity Network Master Plan 2015
- o Electricity and Energy 5-year budget Presentation
- o Human Settlements Programme IDP Input
- o Roads 20-year Master Plan (indicating period between 2013 2020)
- o Water Services Development Plan IDP Input
- o Sports and Recreation 10-year Plan project List
- o Solid Waste 10-year Plan project List

The current capital expenditure project pipeline of the municipality includes the current (FY 2019/2020) capital expenditure demand up to financial year 2028/2029.

The municipal capital expenditure process is based around a three year budget cycle as per the Medium Term Expenditure Framework (MTREF). This forced municipalities to plan in the same context. However with the CEF, the total capital expenditure view is based on a ten year horizon and in the long-term will result in a better understanding of capital expenditure.

There is a slight increase in Planned Capital Expenditure within the MTREF second and third year. The Planned Capital Expenditure drops in FY 2022/2023 then picks up again in FY 2024/2025, and this trend occurs again for the next three financial years. This is tabled in **Error! Reference source not found..** In total, the total planning capital expenditure amounts to R11 841 494 355.

**Table 59: 2019/2020 - 2028/2029 Total planned capital**

Year	Total Planned Capital	Total Planned Capital %
2019/2020	R1 823 196 907	15%
2020/2021	R1 224 439 065	10%
2021/2022	R2 465 662 841	21%
2022/2023	R818 262 746	7%
2023/2024	R638 957 000	5%
2024/2025	R1 309 178 225	11%
2025/2026	R68 100 000	1%
2026/2027	R74 300 000	1%
2027/2028	R3 419 397 570	29%
2028/2029	R-	0%
<b>Total</b>	<b>R11 841 494 355</b>	<b>100%</b>

The following map provides a spatial representation of the planned capital expenditure projects over a ten year horizon (FY 2019/2020 FY 2028/2029) within the municipality. The planned projects are noted to be clustered within the Richards Bay area and the majority of planned expenditure is within the infrastructure division of the municipality.





### **13.4.7 Prioritization Model and Budget Fit**

The Municipality has completed a Long Term Financial Plan (LTFP) that has provided critical input into the prioritization model and affordability envelope.

One of the key benefits of the prioritisation model is that it enables alphanumeric and spatial data analytics, which means that spatial inputs are used to prioritise projects. Spatial prioritisation and budget alignment is not only a prerequisite in terms of SPLUMA, but it is also a policy imperative for the IUDF therefore, spatially-based prioritisation enables true spatial targeting.

Considering the spatial parameters used in the prioritisation model, it is noted that projects within the FAs and PDAs scored higher than projects in the commercial farming areas. This is as a result of the increased emphasis and weighting on these criteria within the model.

#### **Affordability envelope**

The affordability envelope is the sustainable and financially tested total budget that can be sustainably maintained by the municipality over a given period of time. This figure is usually expressed as a total over the modelling period, as well as in annual budget increments. If the total capital budget exceeds this total, the municipality could encounter some unforeseen circumstances in future that will compromise its financial sustainability. The parameters of the affordability envelope determine the strategy used for budget preparation.

#### **Project score**

The purpose of a project score is to determine a relative ranking between all the projects with a capital demand. Projects with the highest score have the first opportunity to be allocated budget in the budget preparation process.

#### **Project status**

Within the budget preparation, projects can be allocated a specific status based on their publication in a previous MTREF IDP or related annexure. These statuses are:

##### **Committed**

Committed projects are those projects which formed part of either the approved IDP capital budget or the mid-year adjusted capital budget of the municipality for the previous financial year, and which are contractually committed as assets under construction. Termination of any committed projects will result in either legal or financial liability for the municipality. Given commitments made on these projects by the municipality, the budget preparation methodology regards these projects as non-negotiable, irrespective of their project score. Furthermore, projects that fall under this category will be fitted to the capital budget in the financial year in which they request capital (no delays may be applied) which means they may exceed the municipal, portfolio or departmental budget cap which has been applied in the budget template.

##### **Provisioned**

Provisioned projects are those projects which formed part of either the approved IDP capital budget or the mid-year adjusted capital budget of the municipality for the previous financial year, but which are not contractually committed as assets under construction. Termination of any provisioned projects will not result in either legal or financial liability for the municipality. The budget preparation methodology regards these projects as having a higher priority than normal prioritised projects in the list (given their status received during previous MTREF budget publications). However their implementation timeframes are negotiable to an extent. Projects that fall under this category will be fitted to the capital budget in the financial year in which they request money only if there is sufficient capital budget available in the capital budget template and they may not exceed the municipal, portfolio or departmental budget cap which has been applied in the budget template. If the capital budget requests exceed the municipal capital budget template either at a municipal, portfolio or departmental indicative

level, then provisioned projects may be fitted with delay to a financial year where there is sufficient municipal capital budget cap available.

## Budget Fit Parameters

The budget fit status of each project, after executing of the budget fit mechanism, is shown below the bar graph in colours. Each colour represents a different budget fit status, which includes:

### Committed:

IDP capital budget (Annexure A) or the mid-year adjusted capital budget (Annexure B) of the municipality for the previous financial year, and which are contractually committed as assets under construction. Termination of any committed projects will result in either legal or financial liability for the municipality.

### Provisioned-In:

which formed part of either the approved IDP capital budget (Annexure A) or the mid-year adjusted capital budget (Annexure B) of the municipality for the previous financial year, but which are not contractually committed as assets under construction. Termination of any provisioned projects will not result in either legal or financial liability for the municipality.

### Provisioned-in with delay:

which formed part of either the approved IDP capital budget (Annexure A) or the adjusted capital budget (Annexure B) of the municipality for the previous financial year, but which are not contractually committed as assets under construction. Termination of any provisioned projects will not result in either legal or financial liability for the municipality and are therefore delayed in the budget fit process. A project will then be delayed to a financial year where the budget cap total has not been exceeded.

### Fit:

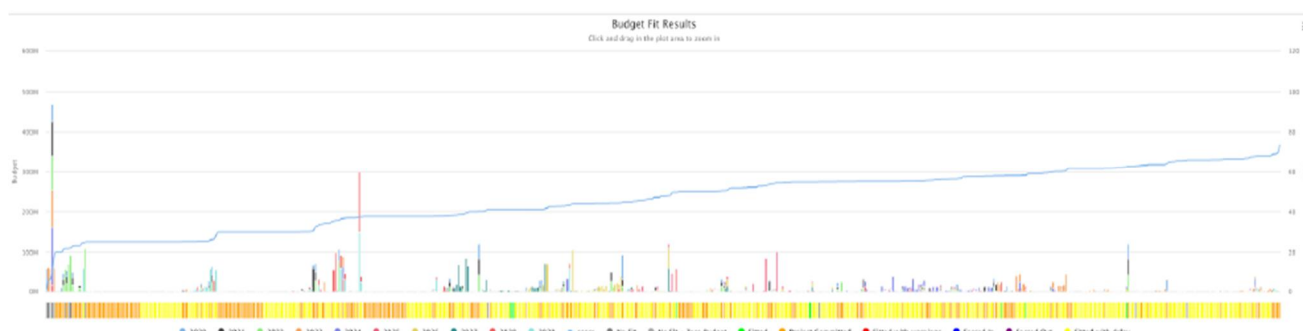
in relation to the remaining projects to be fitted, with the provision that the budget cap total has not been exceeded.

### Fit with Delay:

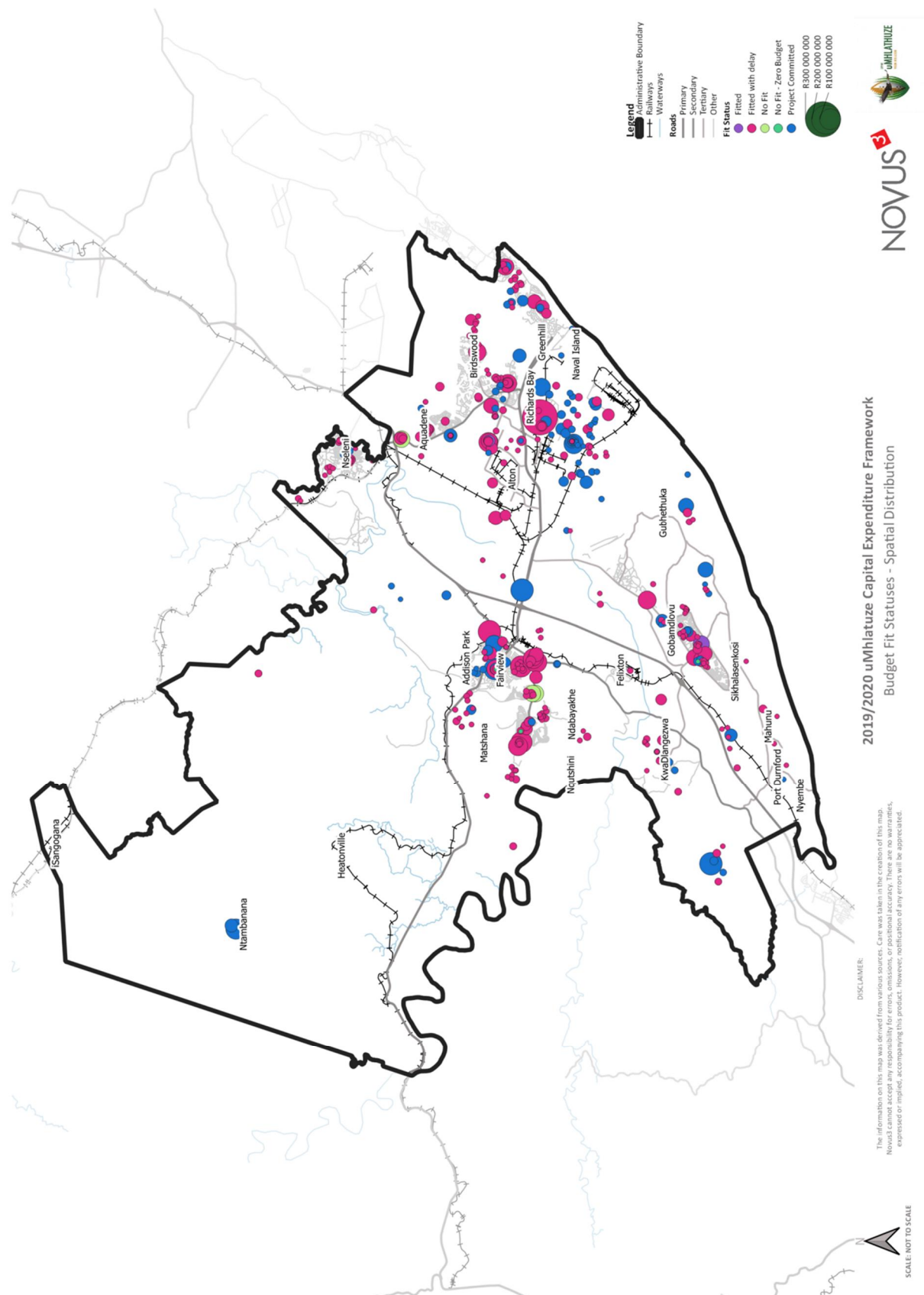
remaining projects to be fit, with the exception that the budget cap total for the year in which the project requests budget has been exceeded. A project will then be delayed to a financial year where the budget cap total has not been exceeded.

**No Fit:** This status is assigned to projects that were not able to qualify for budget based on their CPM score and / or budget template cap.

**No Fit Zero Budget:** This status is assigned to projects that do not request budget in the modelling period.

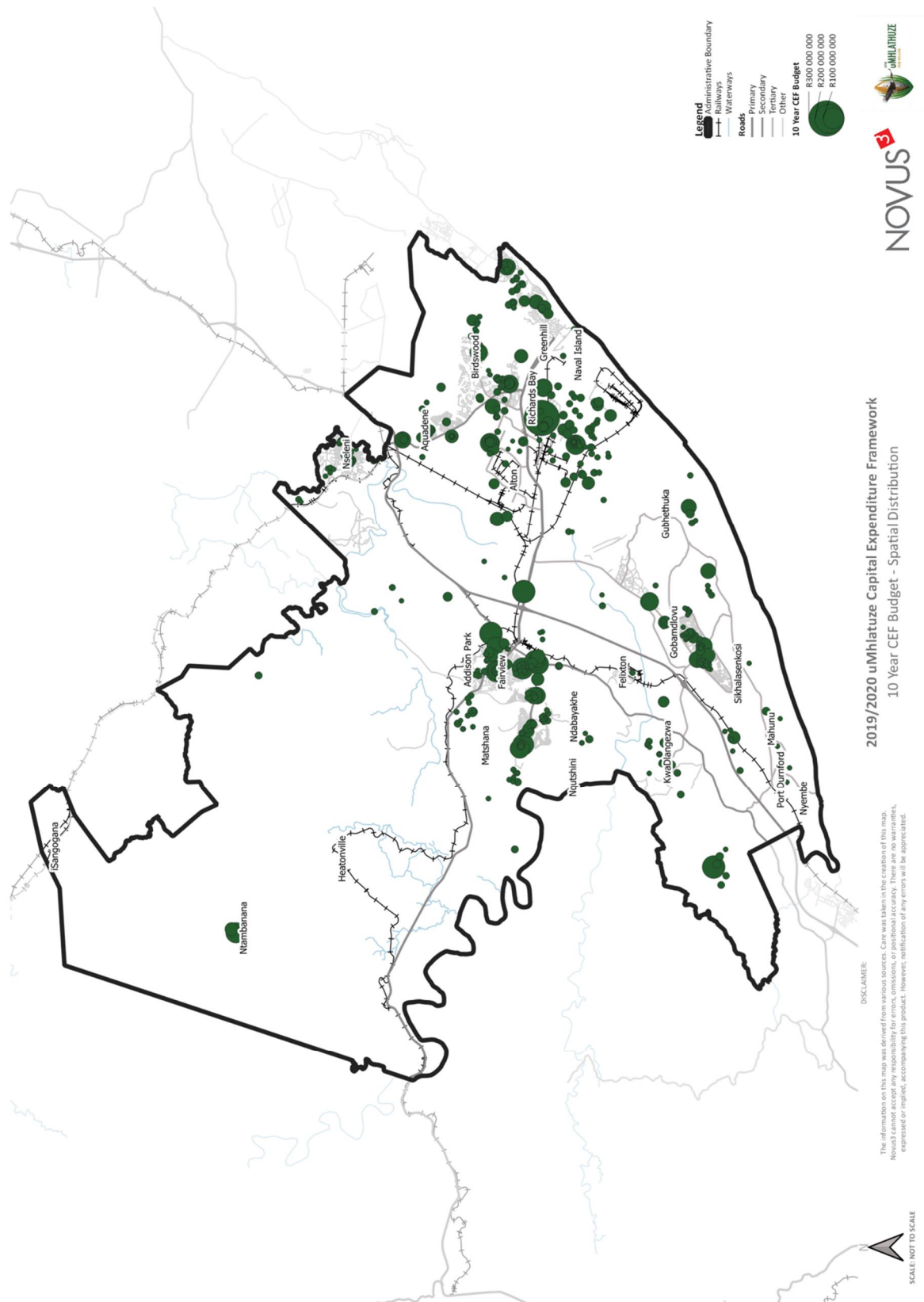


**Map 44: Fit Status: Spatial Distribution**





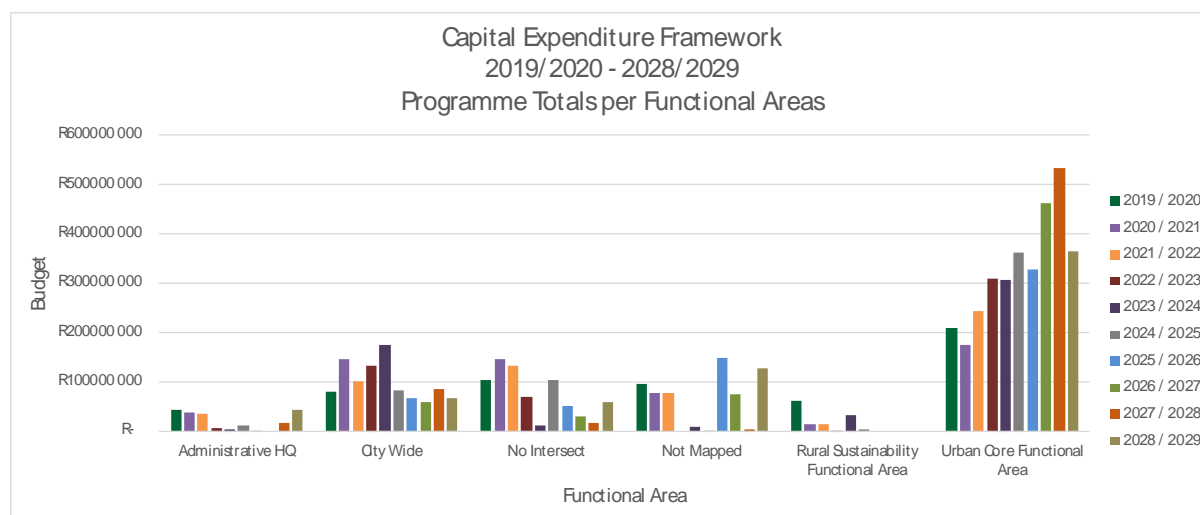
## Map 45: 10-year Capital Expenditure Framework



### 13.4.8 Functional Area Budget Split

Hereunder, the draft 2019/2020 2028/2029 capital budget has been expressed in terms of the Functional Areas:

**Figure 34: Programme Totals per Functional Area**



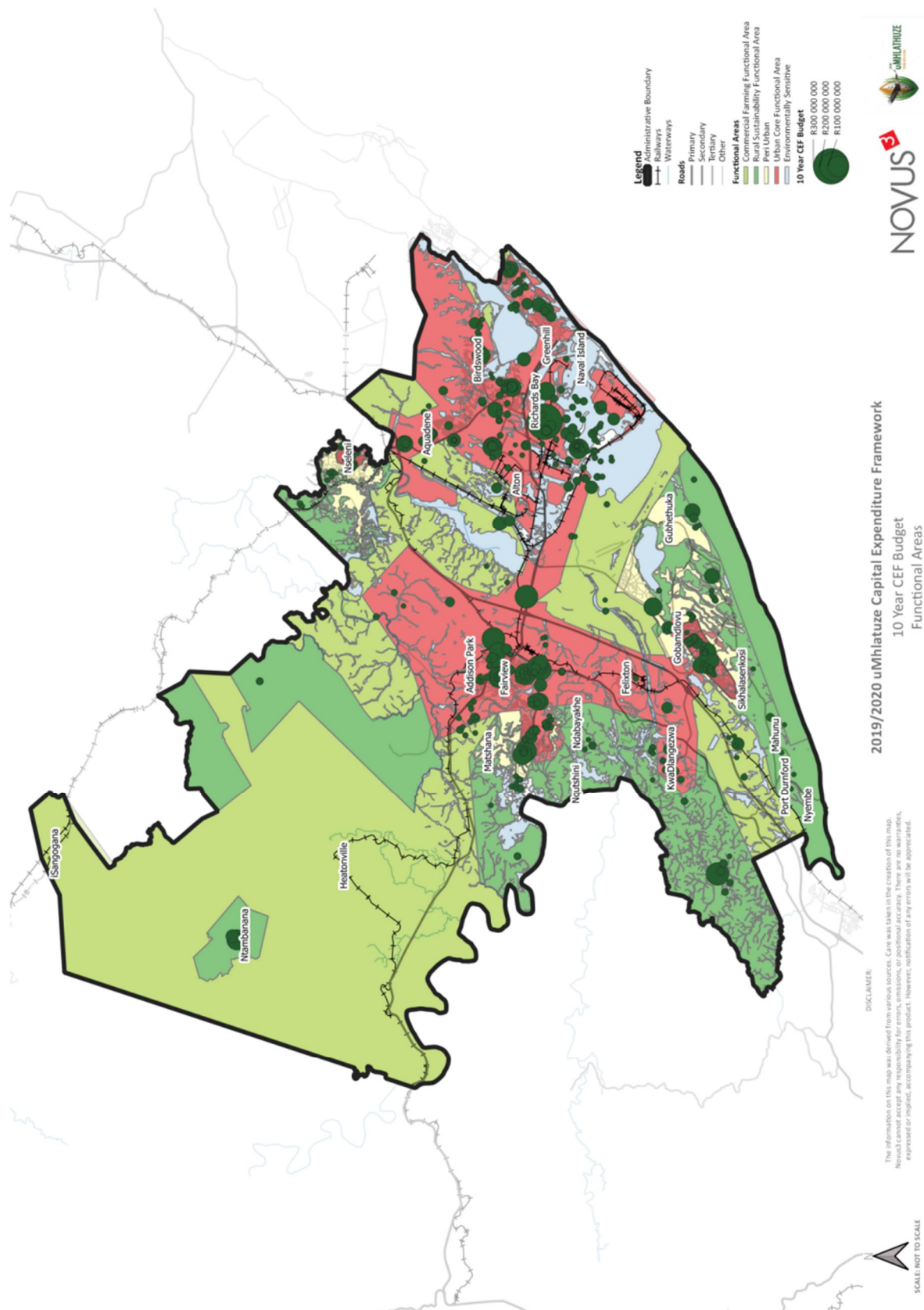
**Table 60: Programme Totals per Functional Area**

Year	Administrative HQ	City Wide	No Intersect	Not Mapped	Rural Sustainability Functional Area	Urban Core Functional Area
<b>2019/2020</b>	R44 502 300	R79 865 000	R103 252 247	R97 116 200	R63 000 000	R209 797 253
<b>2020/2021</b>	R38 498 400	R147 313 000	R146 301 774	R76 859 500	R15 000 000	R173 899 026
<b>2021/2022</b>	R36 791 700	R100 342 100	R132 663 612	R78 083 000	R15 000 000	R242 076 188
<b>2022/2023</b>	R6 053 000	R132 194 713	R68 704 098	R-	R839	R308 043 384
<b>2023/2024</b>	R4 518 300	R176 218 785	R11 177 482	R10 000 000	R33 000 000	R305 835 246
<b>2024/2025</b>	R13 019 300	R82 752 815	R103 038 909	R2 361 401	R4 726 067	R361 893 713
<b>2025/2026</b>	R30 000	R68 534 700	R50 733 924	R148 837 305	R-	R328 040 958
<b>2026/2027</b>	R-	R58 096 100	R31 472 447	R76 328 742	R-	R460 098 188
<b>2027/2028</b>	R16 435 000	R86 037 700	R18 142 314	R4 000 000	R-	R532 601 034
<b>2028/2029</b>	R44 218 200	R66 916 900	R59 650 000	R126 379 771	R-	R365 000 000
<b>Percentage</b>	<b>3%</b>	<b>17%</b>	<b>12%</b>	<b>10%</b>	<b>2%</b>	<b>55%</b>

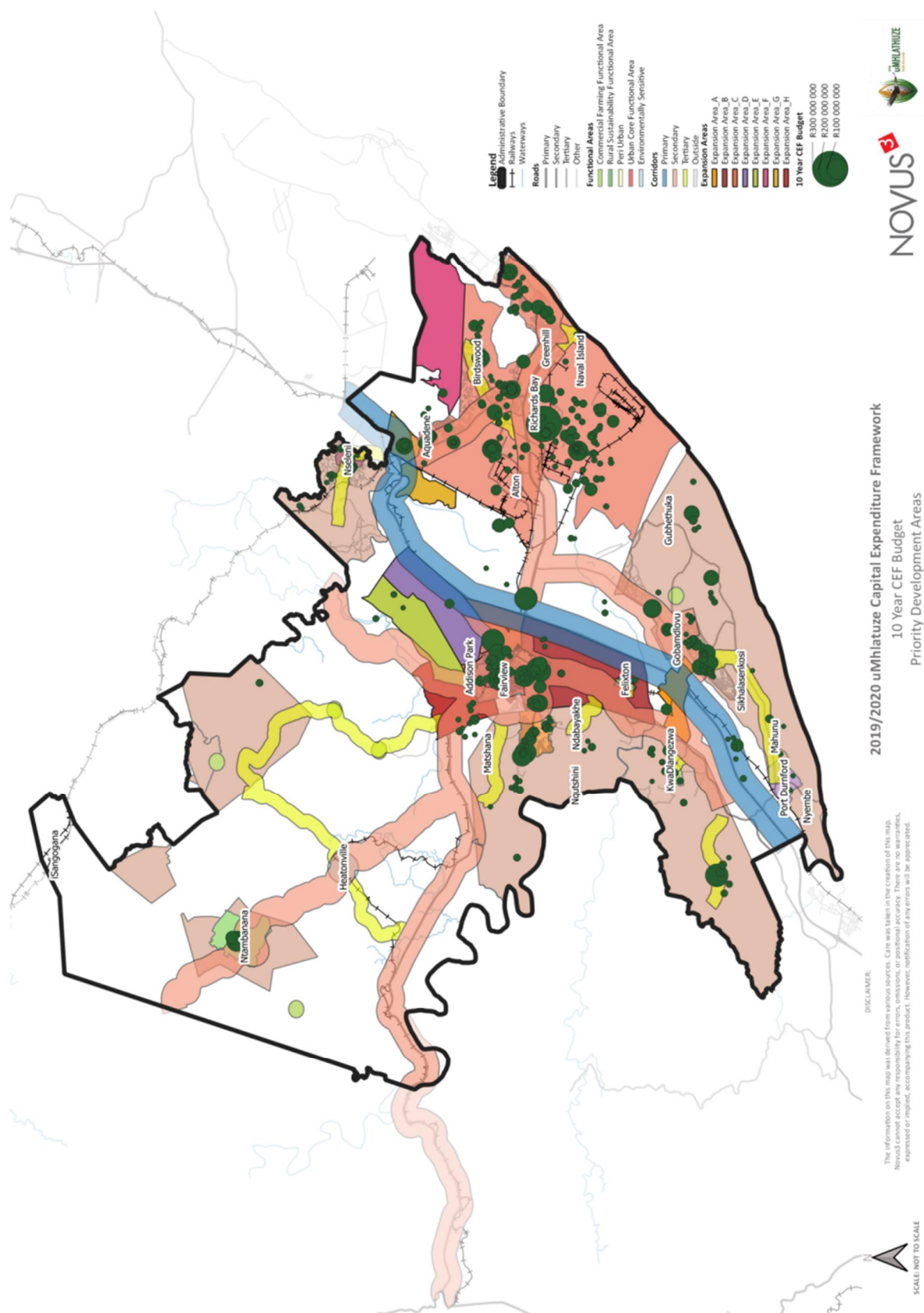
From the above it is noted that 55% of the draft capital budget over the 10-year horizon period is focused on the Urban Core Functional Areas, which are areas centred around the primary economic centres of the municipality.

The number of projects captured onto the model as City Wide amounts to 17%. The focus of capital planned expenditure on the urban core functional area will ensure upgrade to existing capacity in order to accommodate increased densities and expansion of urban residential areas as well as industrial areas. Rural sustainability Functional area includes the former Ntambanana area. Focus on the rural sustainability functional area will ensure that both commercial, social facilities and infrastructure are provided closer to the people.

## Map 46: 10 Year CEF Budget Functional Areas



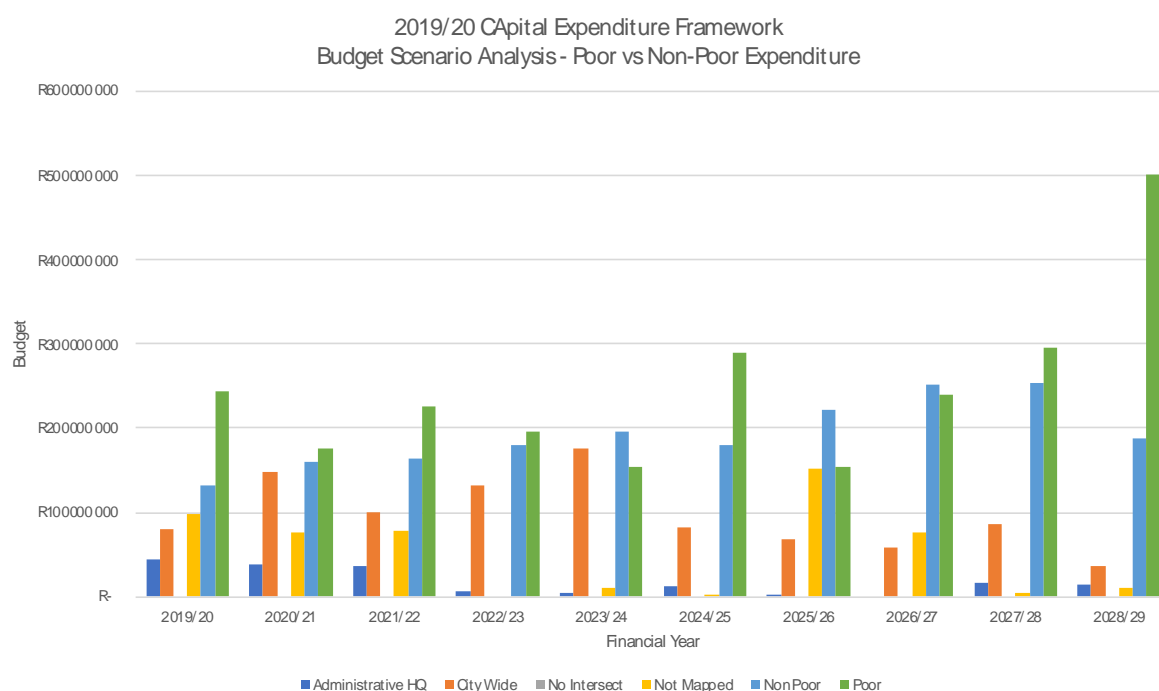
## Map 47: 10 Year CEF Budget Priority Development Areas





### 13.4.9 Poor vs Non-Poor Capital Expenditure Ratio

**Figure 35: Poor: Non Poor Capital Expenditure Ratio**



The Poor: Non Poor capital expenditure ratio is lower than 1 in year 5 and year 7, which means that in year 5 and 7 more money is spent on the poor population with respect to the current spatial population distribution and the capital expenditure spent in the municipality excluding capital expenditure allocated to City Wide, Administrative HQ areas and projects that are not mapped. The average ratio across the analysis timeframe is 1:1,3. This means that on average, for each Rand spent on the poor, 1,3 are spent on the non-poor.

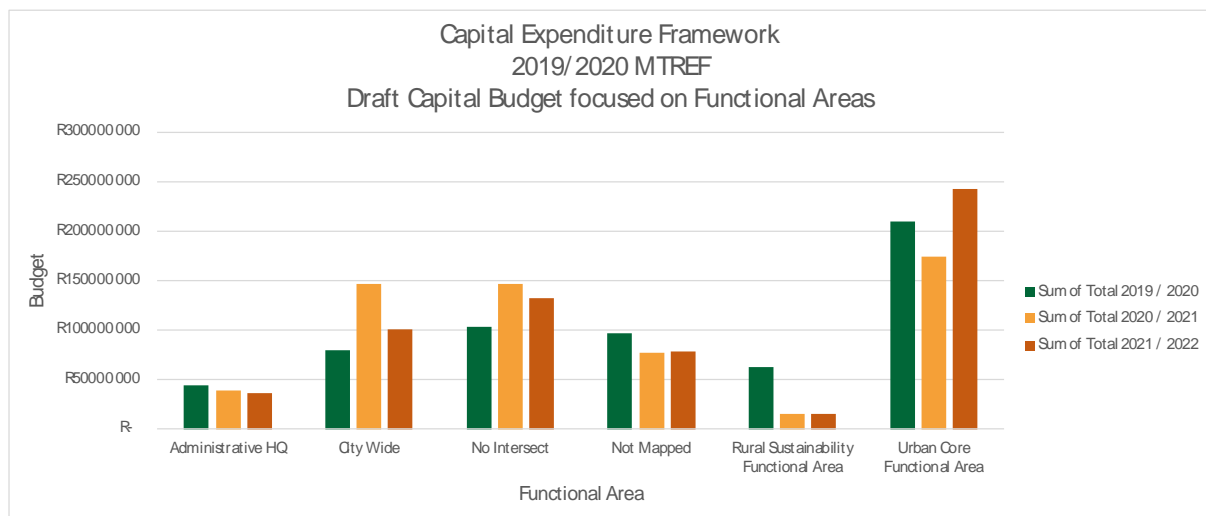
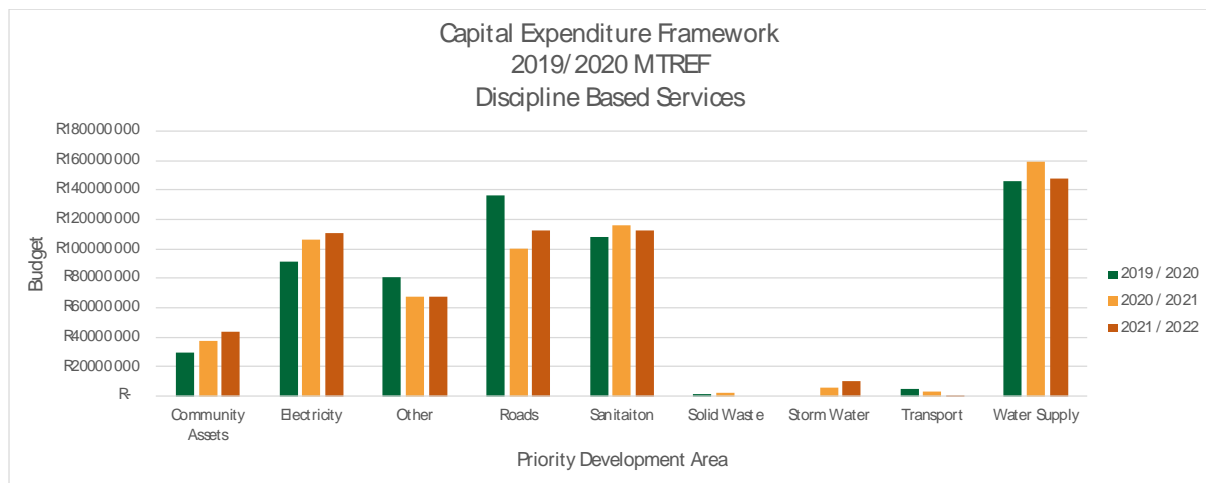
### 13.4.10 2019/2020 MTREF Capital Budget by Discipline-Based Services

The following table and figures provide the MTREF capital budget by discipline-based services

**Table 61: 2019/2020 MTREF Capital Budget by discipline-based services**

Discipline based services	2019 / 2020	2020 / 2021	2021 / 2022
Community Assets	R29 644 000	R37 756 000	R43 211 000
Electricity	R91 173 500	R106 432 200	R110 968 900
Other	R80 833 400	R67 190 500	R67 262 500
Roads	R136 008 000	R99 644 000	R112 569 000
Sanitation	R107 957 100	R115 877 100	R112 182 100
Solid Waste	R1 400 000	R2 600 000	R-
Storm Water	R-	R6 000 000	R10 000 000
Transport	R4 917 000	R3 007 000	R815 000
Water Supply	R145 600 000	R159 364 900	R147 948 100
<b>Total</b>	<b>R597 533 000</b>	<b>R597 871 700</b>	<b>R604 956 600</b>

Water Supply discipline represents a quarter of the Draft Capital Budget, followed by Sanitation and Roads with 19% then Electricity with 17%.



### **13.4.11 IUDG Funded Projects**

The IUDG funded projects are categorised according to two funding components, namely:

- o Planning grant component, and;
- o Grant Incentive.

#### **PLANNING GRANT COMPONENT**

The following projects have accordingly been provided for in the draft 2019/2020 2021/2022 MTREF, amounting to R3 205 000.

##### **Proposed Empangeni Business Hub**

At the Richards Bay main public transport facility, Taxi City, an SMME centre has been construction and is operational to provide a much needed facility for emerging entrepreneurs. Plans are at an advanced stage for a Business Support Centre in Esikhaleni to also provide a form of incubation. A similar approach is being pursued and plans are being prepared for a Business Hub in Empangeni and a portion of the IUDG planning grant will contribute to such.

##### **Waterfront detailed planning and engineering designs**

A Master Plan has been drafted for the Richards Bay Waterfront area and the next step toward implementation is detailed planning and engineering designs. A portion of the IUDG planning grant will contribute to such.

##### **Rural Framework Plan for Matshana**

In order to facilitate feasible service provision, Rural Development Framework Plans for all rural areas have to be developed and adopted, to provide a guiding tool for rural development. The municipality has five year plan for the preparation of Rural Development Framework Plans. The first two phases are complete, i.e. Port Dunford and Buchanana and Phase 3 for Hluma is underway. A portion of the IUDG planning grant will contribute to such.

##### **Alkantstrand detailed planning and engineering designs**

An Urban Design Concept has been prepared and adopted by Council and the next step toward implementation is detailed planning and engineering designs. A portion of the IUDG planning grant will contribute to such.

#### **GRANT INCENTIVE**

The following projects have accordingly been provided for in the draft 2019/2020 2021/2022 MTREF, amounting to R29 957 000.

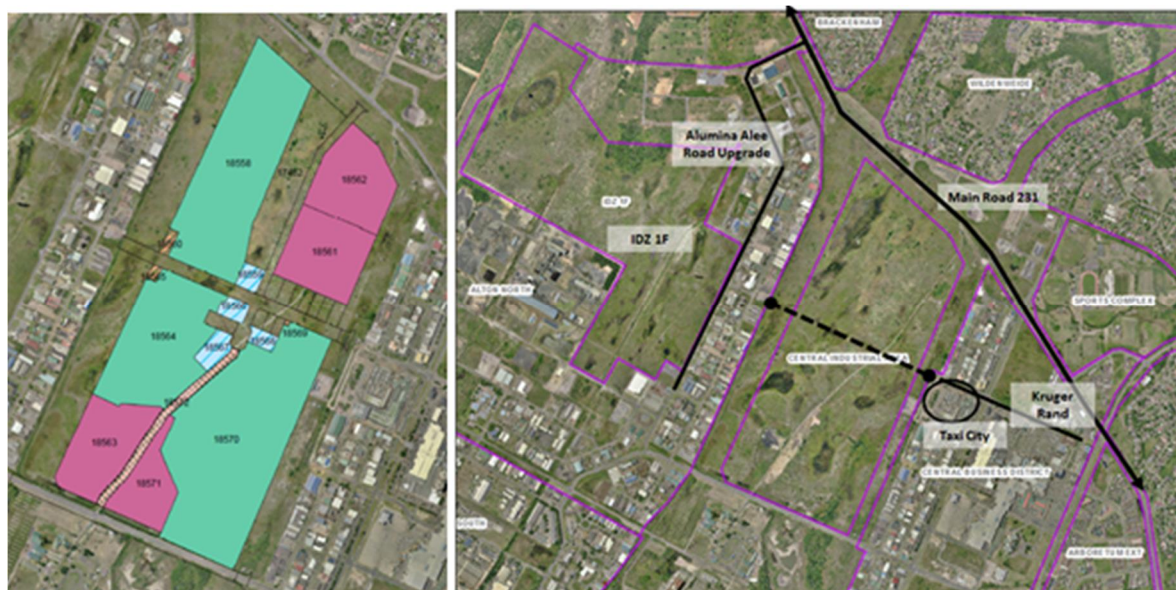
Detailed design and construction of *Central Industrial Area Link Road* from Kruger Rand Extension to Alton North. (Ward 2 of the Municipality) The development of the said road is in line with the IUDF objectives and the need to provide economic infrastructure that will unlock new land for development and provide a critical link from the main public transport facility in Richards Bay, i.e. Taxi City to Alton and IDZ 1F.

The Municipality is in the process of much needed upgrades of the said public transport facility. In recent years, a SMME Support Centre has also been constructed and is operational.

In addition, the IDZ has completed major upgrades of the Alumina Alee Road in Alton and the proposed development will show confidence in efforts by both CoU and IDZ to unlock the potential in Alton North.

The proposed road will also provide access to the sites created in the Central Industrial Area. An environmental authorization has been obtained for the development of the CIA and there is some design conditions for the link road that have to be taken into consideration during detailed design.

**Figure 36: IUDG Incentive Grant Project**





## **14. EXTERNAL DEVELOPMENT INFLUENCES**

Significant development impacts in the Municipality are anticipated with ongoing investment by, amongst others, Transnet into the Port of Richards Bay as well as the Richards Bay IDZ (Industrial Development Zone), as non-municipal entities. Also, development frameworks are prepared by other government entities, i.e. the district municipality, neighboring local municipalities as well as provincial planning authorities.

A synopsis of some of the major developments in the municipal area is herewith provided. Further note that such developments with a significant development footprint are indicated on the SDF mapping.

### **14.1 RICHARDS BAY PORT EXPANSION**

The Port of Richards Bay is currently the largest and busiest port on the South African coastline and may be set to enter a long-term expansion phase that will see a three-fold increase in surface area and five-fold extension of existing quay length. The total container capacity being planned for the Port of Richards Bay in phases 1 to 11 amounts to approximately 24 million TEUs pa over a period of approximately fifty years. In addition to the development of container handling facilities in phases 1 to 11, extensive port development is anticipated inside the existing port boundary.

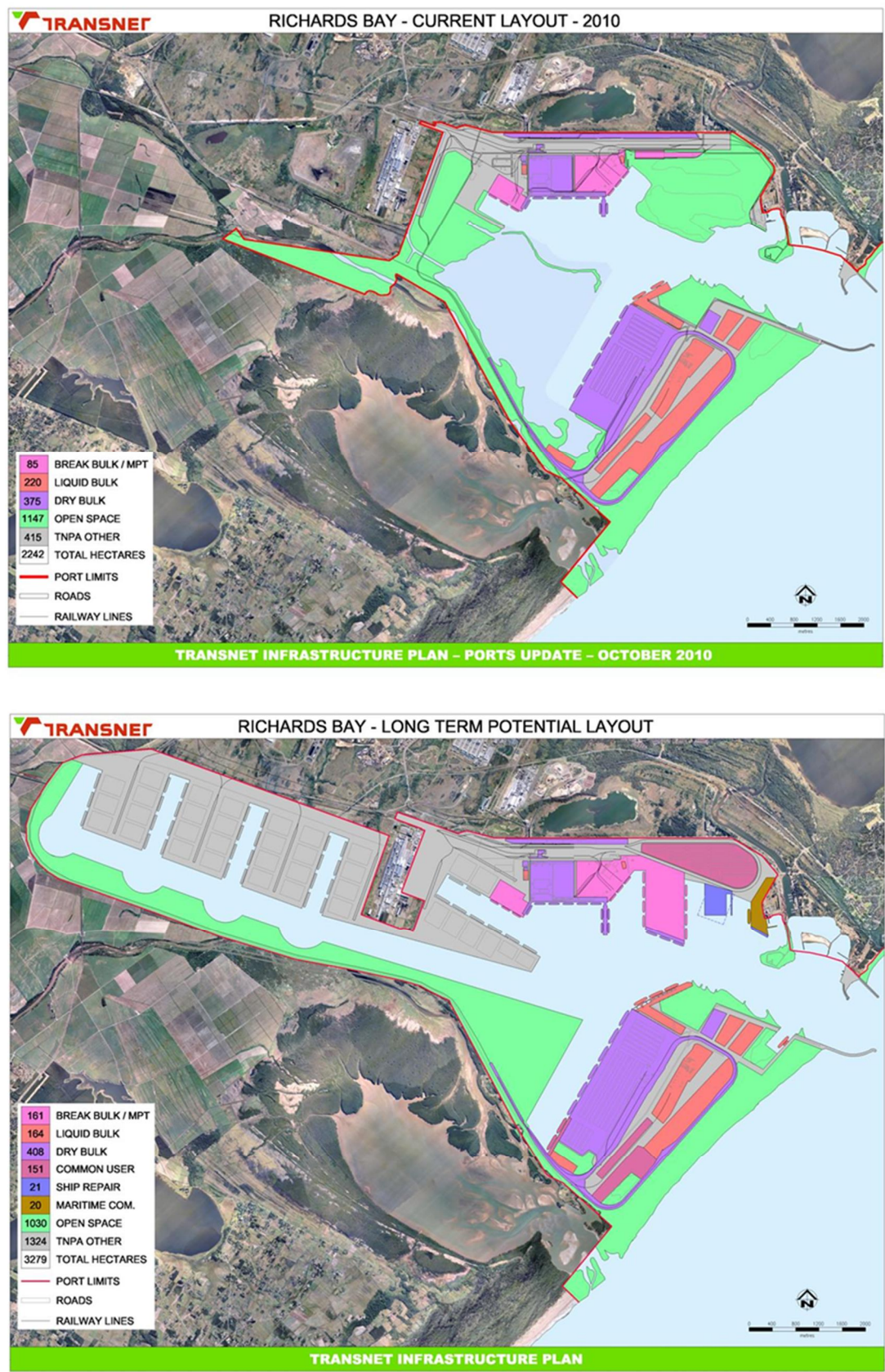
It is understood that it remains to be decided what role the Port of Richards Bay will fulfil regarding the establishment of future container handling facilities for the eastern seaboard of South Africa. Notwithstanding this, it is evident that this port has a significant role to play in expanding its cargo handling facilities over the coming decades and will continue to play an important role in the development of the country. This means that there will be a continuing demand for the port to expand in the future, albeit that the rate of expansion is not known, and hence it remains essential for Transnet to continue planning for the long term port expansion.

### **14.2 INDUSTRIAL DEVELOPMENT ZONE**

The history and potential of the Industrial Development Zone is key in considering the development of industry and manufacturing in uMhlathuze. Initially, Trade and Investment KwaZulu-Natal was the majority shareholder with the Municipality. The shares have been sold to the Department of Economic Development and Tourism making Provincial Government the single shareholder. The land within the IDZ has been subject to a number of agreements through which some of the ecologically sensitive land had been returned to the Municipality.

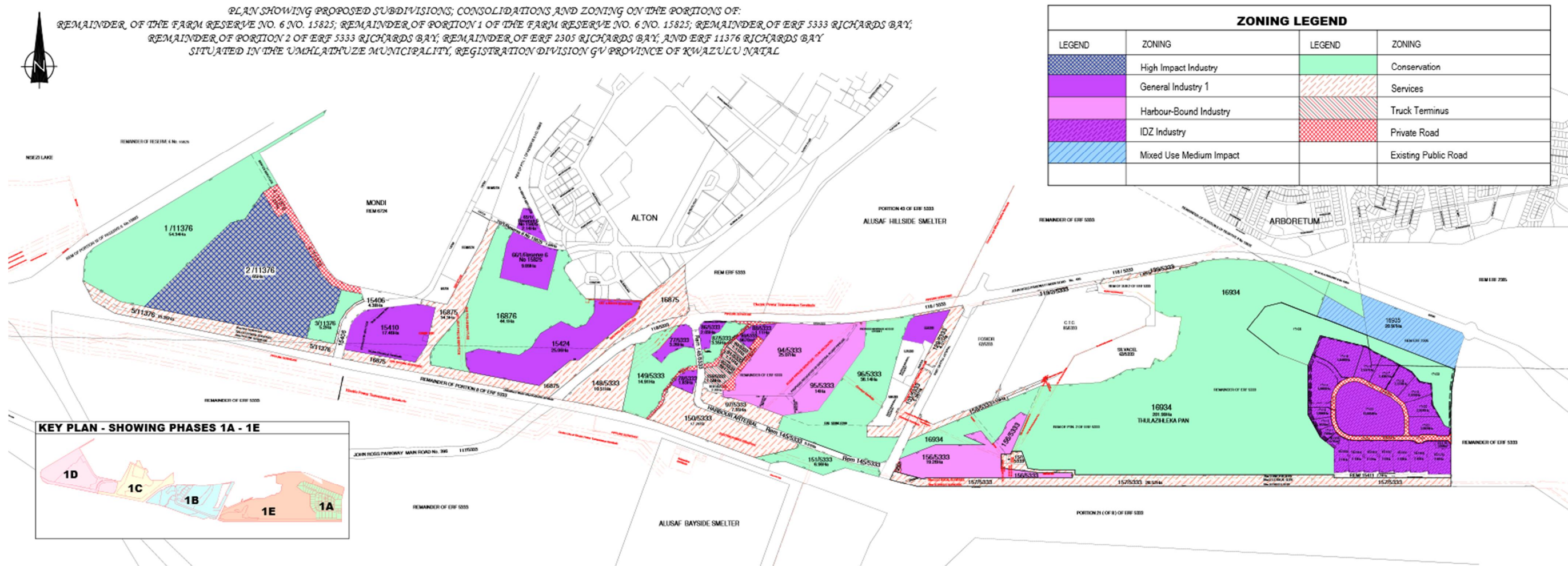
The footprint of the IDZ for Richards Bay as it was designed prior to the transfer of land back to the uMhlathuze Municipality is shown herewith.

Figure 37: Current and Long Term Port Layout





Map 48: IDZ Footprint



The benefits to industries located in the IDZ include:

- o Existing efficient deep-water port
- o Suited to export-orientated production
- o Customs controlled area
- o VAT and import duty exemption
- o Same time zone as Europe
- o Strategic location to access world markets
- o Allowance for 100% foreign ownership
- o Established local and service industries
- o Down-streaming opportunities with respect to: Aluminium, Heavy Metals, Chemicals, Wood, Paper, Pulp and various agricultural products

National government

provides for the following:

1. Unlike an IDZ, an SEZ may be established in any area. The area does not necessarily need to be adjacent to, or in proximity to a port or harbour or airport.
2. Secondly, in contrast to an IDZ, an SEZ is not required to focus on production for export, and may also provide services. As such, SEZ

The RBIDZ (Richards Bay Industrial Development Zone) have compiled a 50 Year Master Plan and 10 Year Business Plan:

The purpose of the above IDZ Master Plan is to be as follow:

- o A long term development strategy for the RBIDZ
- o The alignment of the RBIDZ to the SEZ (Special Economic Zone) Bill by becoming a Northern KwaZulu-Natal Special Economic Zone
- o Addressing the weaknesses of the current IDZ programme and introducing global best practices with respect of design, management, support systems and operational procedures
- o Development of a larger integrated land portfolio
- o Re-positioning of the RBIDZ/SEZ as a true global IDZ/SEZ

The commitment of the RBIDZ to become a key economic role players in the economy of northern KwaZulu-Natal, the province and nationally is apparent. All efforts therefore need to be combined to ensure that appropriate infrastructure and economic services are available to the RBIDZ to fulfil its economic and development role in the area.



The IDZ Master Plan identifies Phase 2A as their priority intervention area beyond their existing land portfolio. The location of Phase 2A is indicated on the inset herewith:

**Figure 38: IDZ 50 Year Master Plan Priority Areas**



### 14.3 MINING INVESTMENT

There are a number of projects being planned and implemented in the municipal area that are funded by non-public funding sources. Notably, in uMhlathuze many projects are underway as part of capital investments by corporates. The details of projects being planned and implemented by RBM are noted in this report and further details from other corporates will be included in the final IDP report.

**RBM Road:** The extension of the East Central Arterial in a northerly direction to provide an alternative access to and from the RBM northern mining areas and headquarters. The options being investigated by RBM are indicated in the following map inset.

**RBM Zulti South Mining and Resettlement Action Plan (RAP):** A number of households are located within the proposed mining area and/or within the exclusion zone and due to mining activities may face economic or physical displacement. As a result, RBM has appointed a service provider to prepare a Resettlement Action Plan (RAP) that aims to guide an internationally compliant resettlement process.

**RBM LED Projects:** A number of projects relating to LED and Infrastructure (roads etc.) are underway as part of the RBM current and future planned activities at Zulti-South.

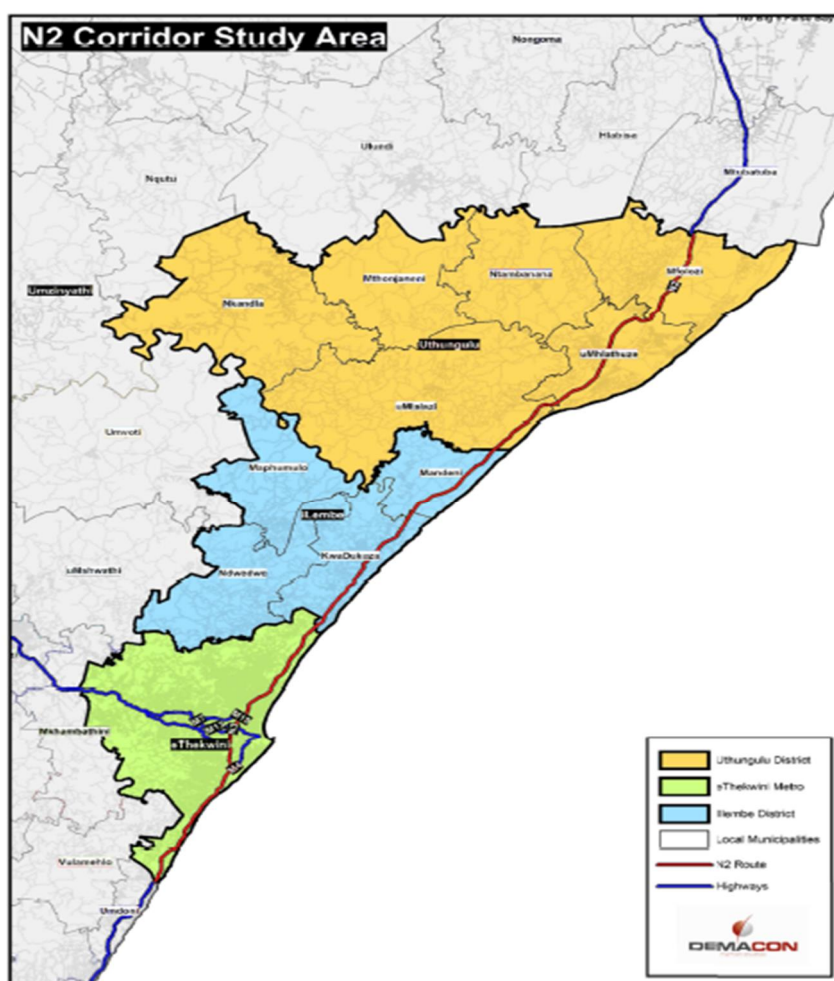
#### 14.4 STRATEGIC CORRIDOR DEVELOPMENT PLAN FOR THE N2 CORRIDOR FROM DURBAN TO RICHARDS BAY

The Presidential Infrastructure Commission launched a National Infrastructure Development Plan which consists of 18 Strategic Integrated Projects (SIPs). The Durban Free State Gauteng Logistics and Industrial Corridor is one of the identified projects and are referred to as SIP2.

KZN COGTA has embarked on a phased approach towards the development of Corridor Plans, with the first plan being the Development of a Strategic Corridor Plan for the SIP 2 (Durban Free State - Gauteng) Logistics and Industrial Corridor followed by the N2 Corridor Plan from Ethekwini to through Richards Bay to uMfolozi Municipality. A Strategic Corridor Development Plan is required for the Corridor - Richards Bay to Mbonambi) in order to provide a clear 25 year period strategic plan for the development, land usage and transport mobility of the affected area. The plan will be used to inform, integrate and coordinate strategic growth and development along the Corridor s. The main purpose of the plan is to guide industrial, retail, agricultural and logistics developments whilst integrating the movement of goods and people along the corridor thereby exploiting KZN's key competitive and comparative advantages.

The project area covers Ethekwini Metropolitan; Ilembe District Family of Municipalities Municipality and uThungulu District Family of Municipalities

**Map 49: N2 Corridor Study Area**



## 14.5 UMHLATHUZE-ULUNDI-VRYHEID SECONDARY CORRIDOR PLAN

UMhlathuze-Ulundi-Vryheid Secondary Corridor Plan is one of the KZN Department of Cooperative Governance and Traditional Affairs to address underdevelopment and deprived peri-urban and rural areas adjacent to the strategic corridors.

The Secondary Strategic Corridor (SC1) Plan was prepared in terms of the Spatial Planning and Land Use Management Act, 2013 (SPLUMA) which establishes what is referred to as a *Regional Spatial Development Framework (RSDF)*. An RSDF extends beyond Municipal boundaries and is informed by Provincial and Municipal Spatial Development Frameworks, relevant National and Provincial Sector Reports, Plans, Strategies and Census data.

Main objectives of the Plan

The main objective is to:

- o Develop a 25 year strategic framework that identifies spatial issues, opportunities and a vision for the Corridor.
- o Coordinate public sector resources to support the vision and create a framework for private investment that promotes economic growth and social well-being in an environmentally sustainable manner.

The project area consists of the following municipalities:

- o Abaqulusi LM
- o Hlabisa LM
- o Mthonjaneni LM
- o Mtubatuba LM
- o Nongoma LM
- o Ntambanana LM
- o Ulundi LM
- o Umfolozi LM
- o uMhlathuze LM
- o uMkhanyakude DM
- o uMlalazi LM
- o King Cetshwayo DM
- o Zululand DM





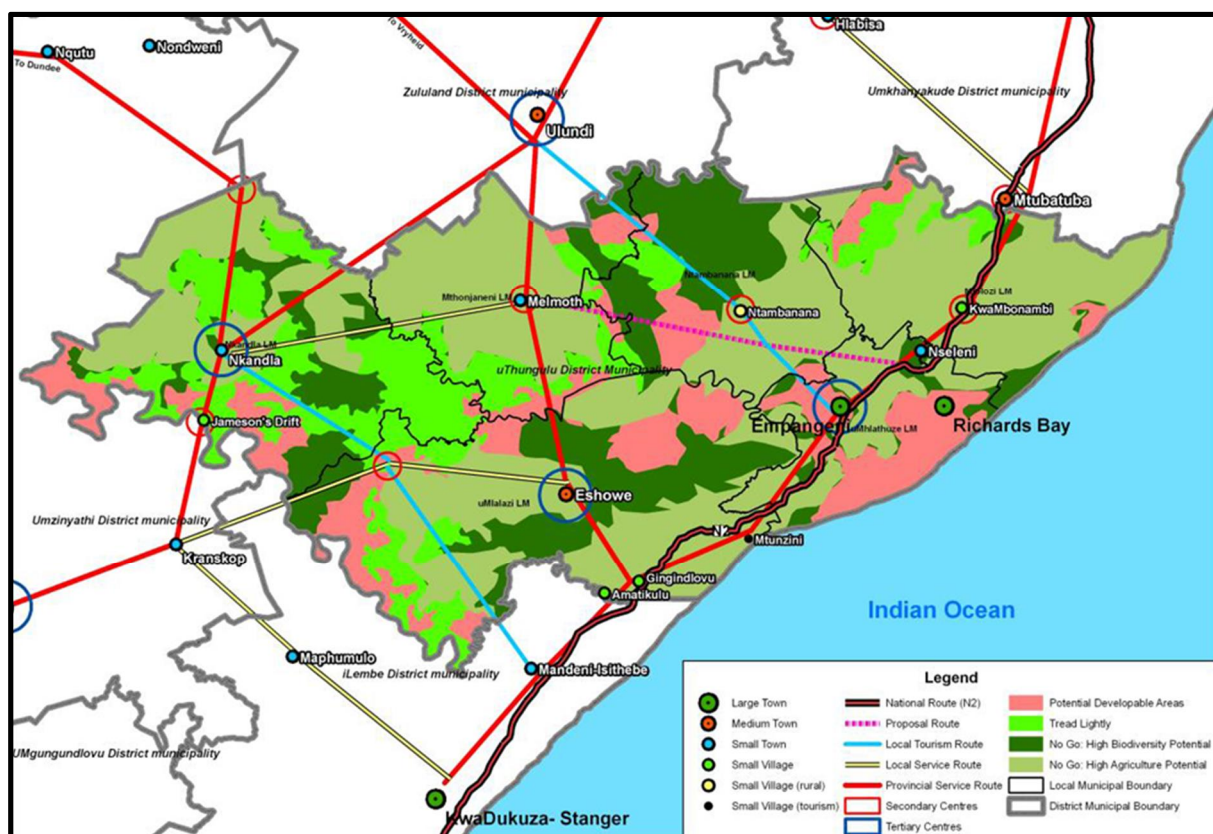
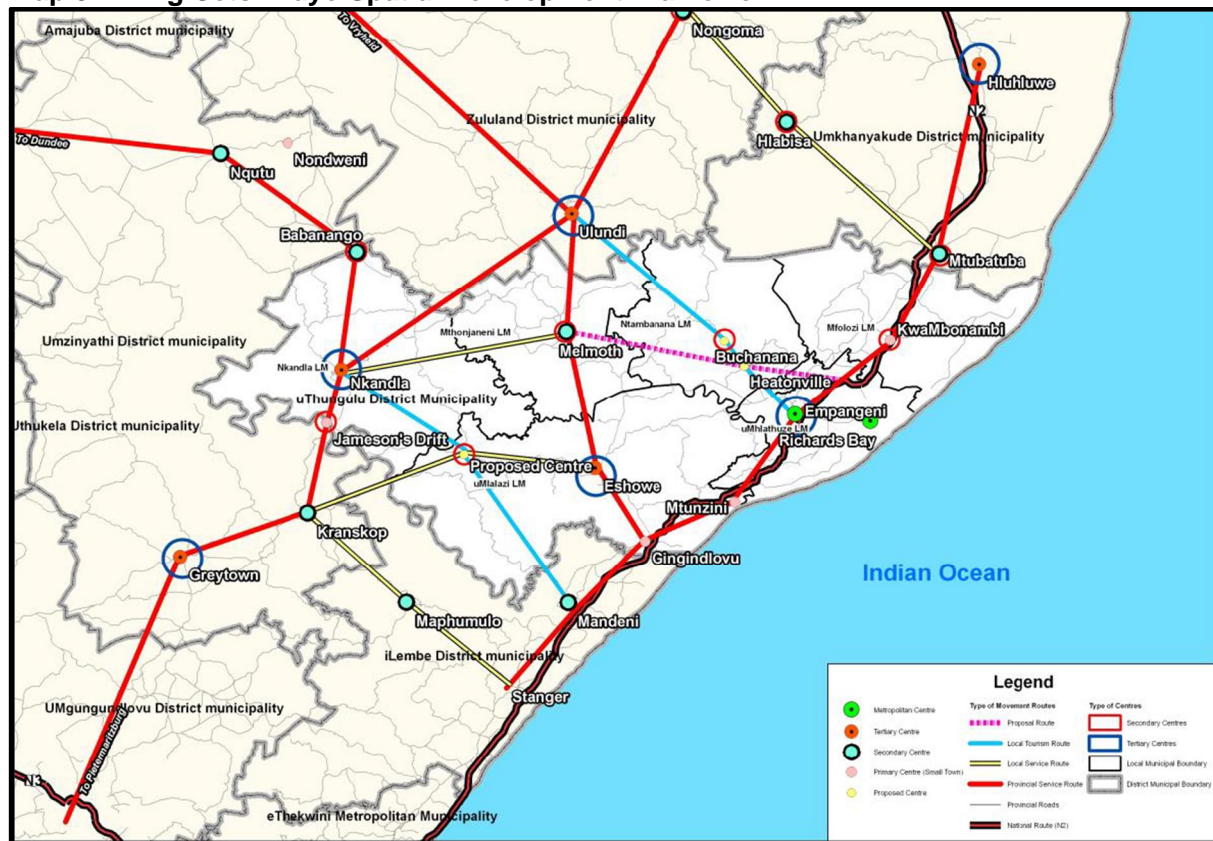
From a planning perspective, the spatial development frameworks of the Kind Cetshwayo District, as well as the neighbouring Local Municipalities have been interrogated. The district SDF is briefly summarised hereunder as it provides a global, comparable interpretation of nodes and routes.

The five proposed tertiary centres in this SDF, in and around the district are located at Greytown, Nkandla, Eshowe, Ulundi and Hluhluwe. Richards Bay-Empangeni has been classified as a metro level centre and therefore performs both the tertiary and higher level functions. Second order centres are located at Buchanana, Melmoth, the proposed new centre near Nkandla, Kranskop, Maphumulo, Mandeni and Mtubatuba.

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**Map 51: King Cetshwayo Spatial Development Framework**



The Kind Cetshwayo SDF mapping consists of the following:

- o No go areas for any further non-agricultural development in high value agricultural areas as well biodiversity sensitive areas.
- o Tread lightly for areas that are both environmentally and agriculturally sensitive.
- o Areas suited to development.

The conditions associated with land use in each of these broad land use categories is further summarised hereunder:

- (i) -go zone, it should not be used for any form of built environment development save for that relating to natural resources management or/and farming. There may be opportunities for limited hospitality facilities where it can be demonstrated that such development does not compromise the integrity of the agricultural or biodiversity resource in the area. In traditional areas where there are pressures for expanded residential development on identified biodiversity and agricultural resource areas, then these pressures should be diverted to identified urban areas.
- (ii) there are alternative sites in the region which demonstrate the same characteristics in terms of replaceability. If development is mooted in subject to identifying suitable offsets to ensure that the biodiversity in that area is not lost. Any development anticipated in the environmental and planning assessments to safeguard biodiversity.
- (iii) biodiversity or agricultural potential that remains to be protected and managed. Thus, potentially, land in this broad land use category could be considered available for different forms of development. However, owing to the fact that these areas have been identified at a regional scale verification at local level is essential as part of scheme preparation for land use management.

## **ANNEXURE 1: OUTLINE OF PROJECTS FROM SERVICE PROVIDERS**