

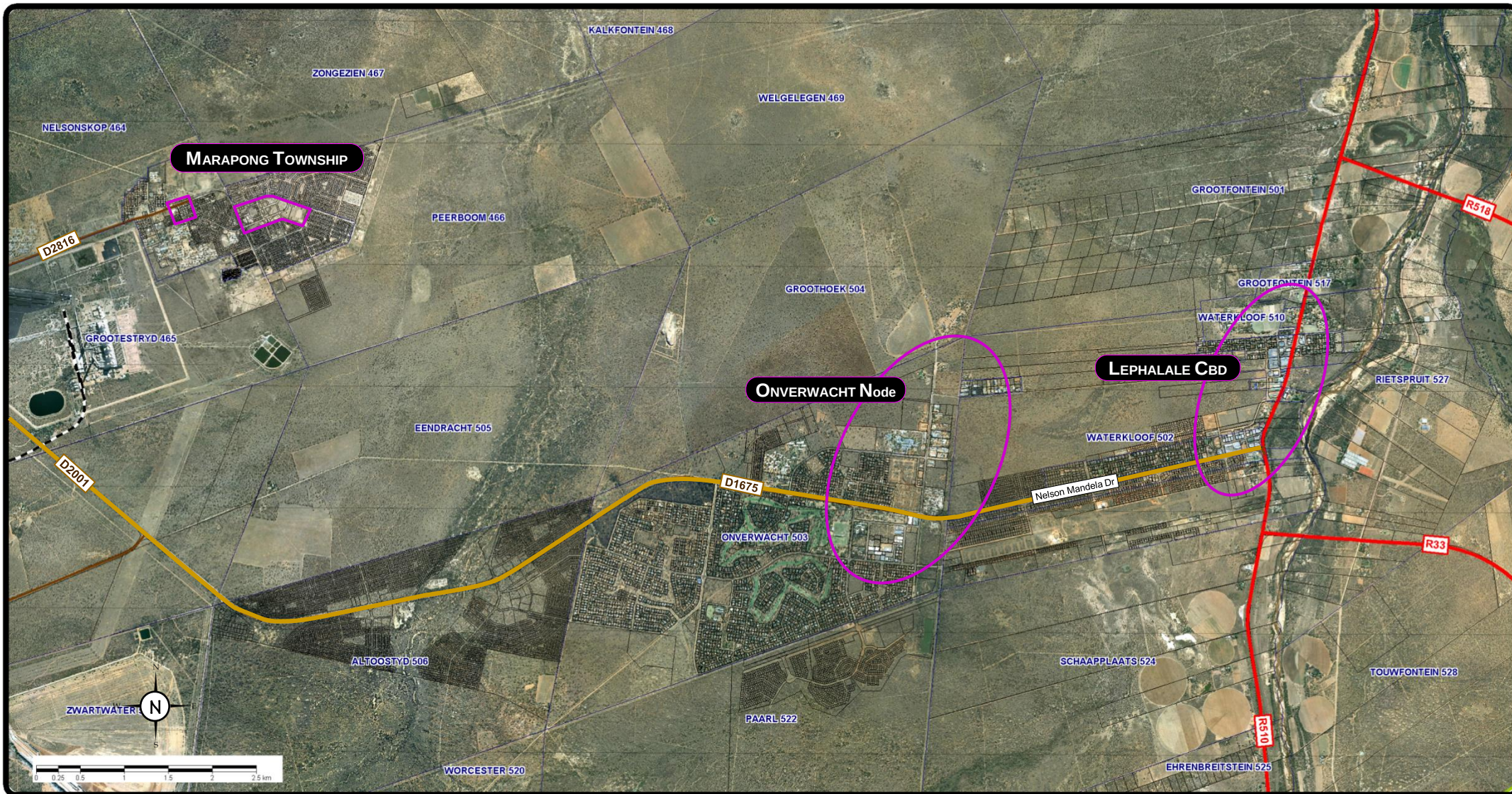


LEPHALALE CBD DEVELOPMENT PLAN



DRAFT REPORT

AUGUST 2013

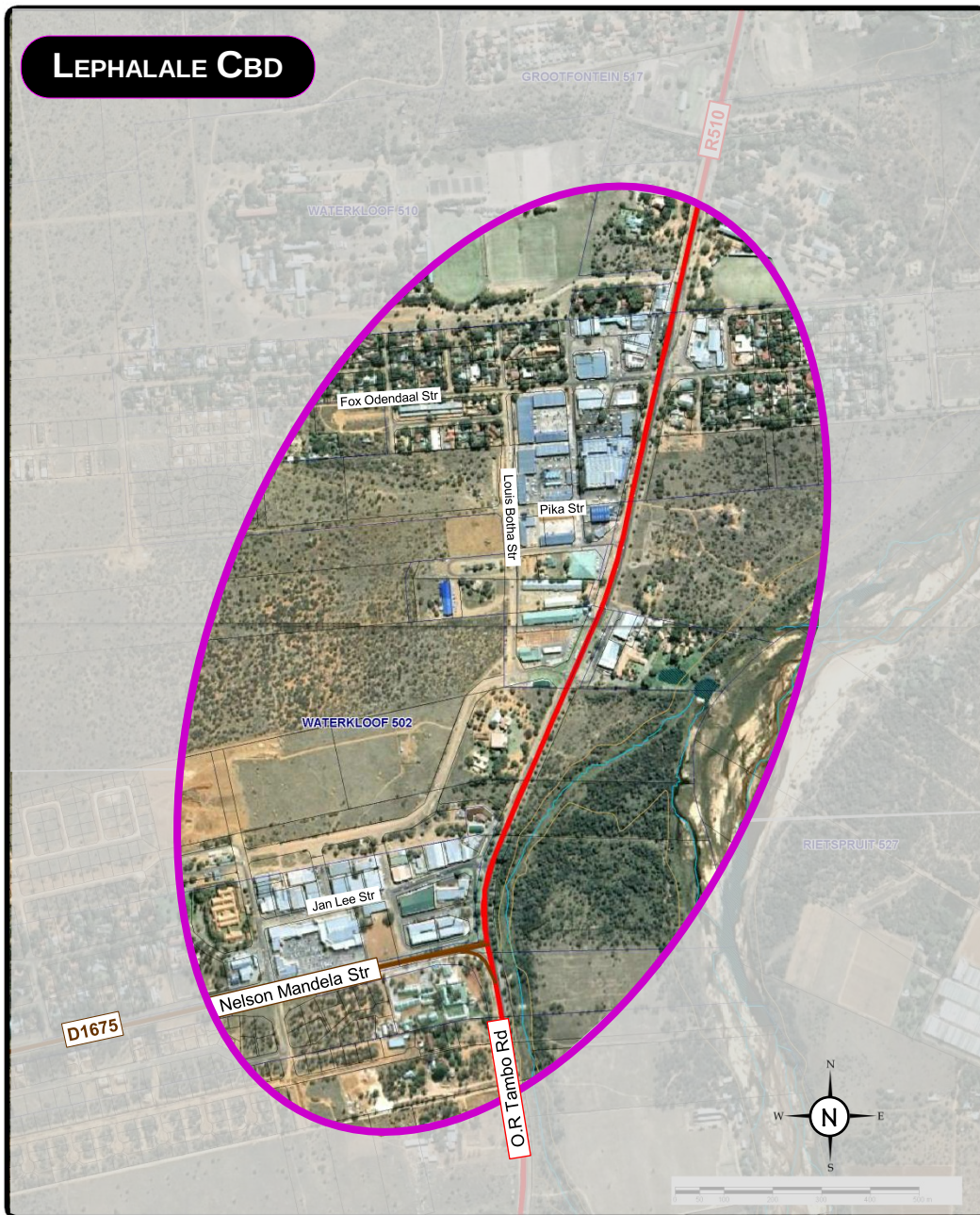


LEPHALALE CBD DEVELOPMENT PLAN

STUDY AREA

- Study Area
- Main Road
- Secondary Road
- Farm Portions

LEPHALALE CBD



LEPHALALE CBD DEVELOPMENT PLAN

- Study Area
- Main Road
- Secondary Road
- Farm Portions

2a

ONVERWACHT NODE



LEPHALALE CBD DEVELOPMENT PLAN

- Study Area
- Main Road
- Secondary Road
- Farm Portions

2b

MARAPONG TOWNSHIP

Moseetha Str
Mosewene Str
Mogodiri Str
Relebogile Str
Morokwane Str
Mofapo Str
Moretshe Str
Mokoao Str

0 50 100 150 m

6ROOTESTRYD 466

 $2c$

MARAPONG TOWNSHIP
(FUTURE ACTIVITY NODE)

ZONGEZIEN 467

PEERBOOM 466

Relebogile Str

Ramathodi Str

Chris Hani Str

Steve Biko Str

Phudufudu Str

Mohwili Str

Tswene Str

Tlou Str

Thuthe Crescent

Tshepe Str

Relebogile Str

GROOTESTRYD 465

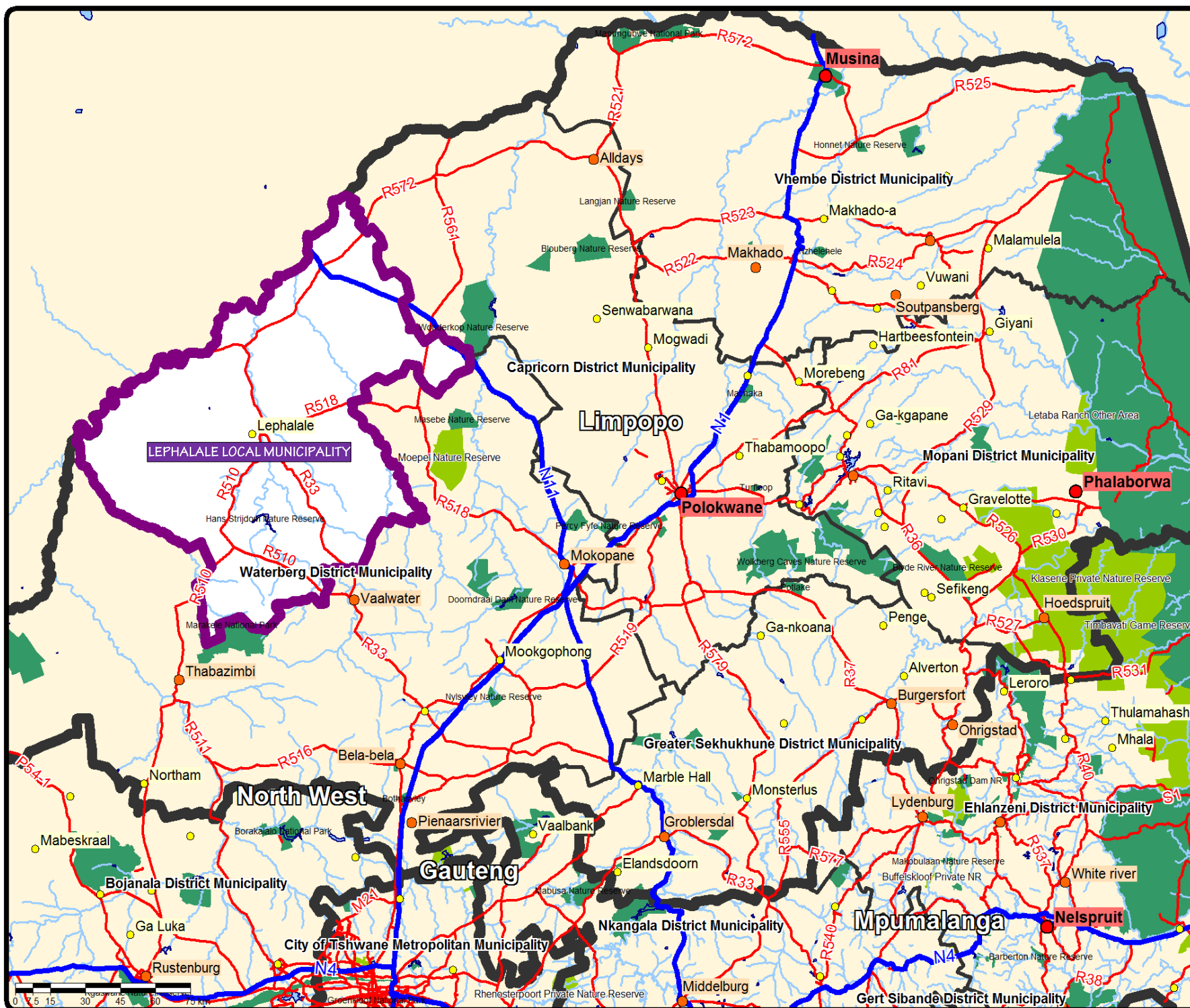
0 50 100 150 200 m

N
W E
S

2d

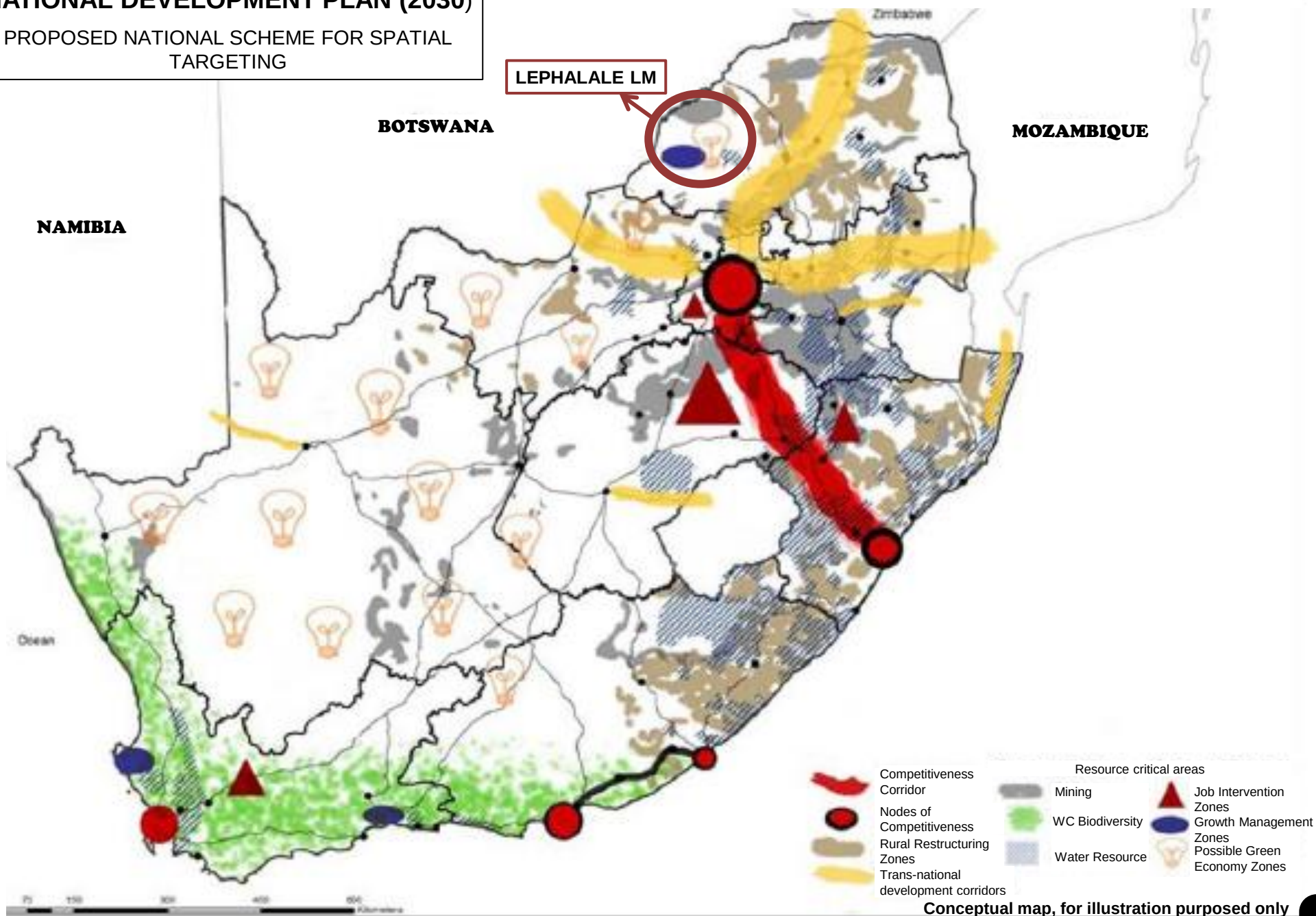
LEPHALALE CBD DEVELOPMENT PLAN REGIONAL CONTEXT

-  Lephalale Local Municipality
-  DM2011
-  Provincial Boundary
-  Main Roads
-  National Roads
-  Formal Protected Areas
-  Informal Protected Areas
-  Lephalale



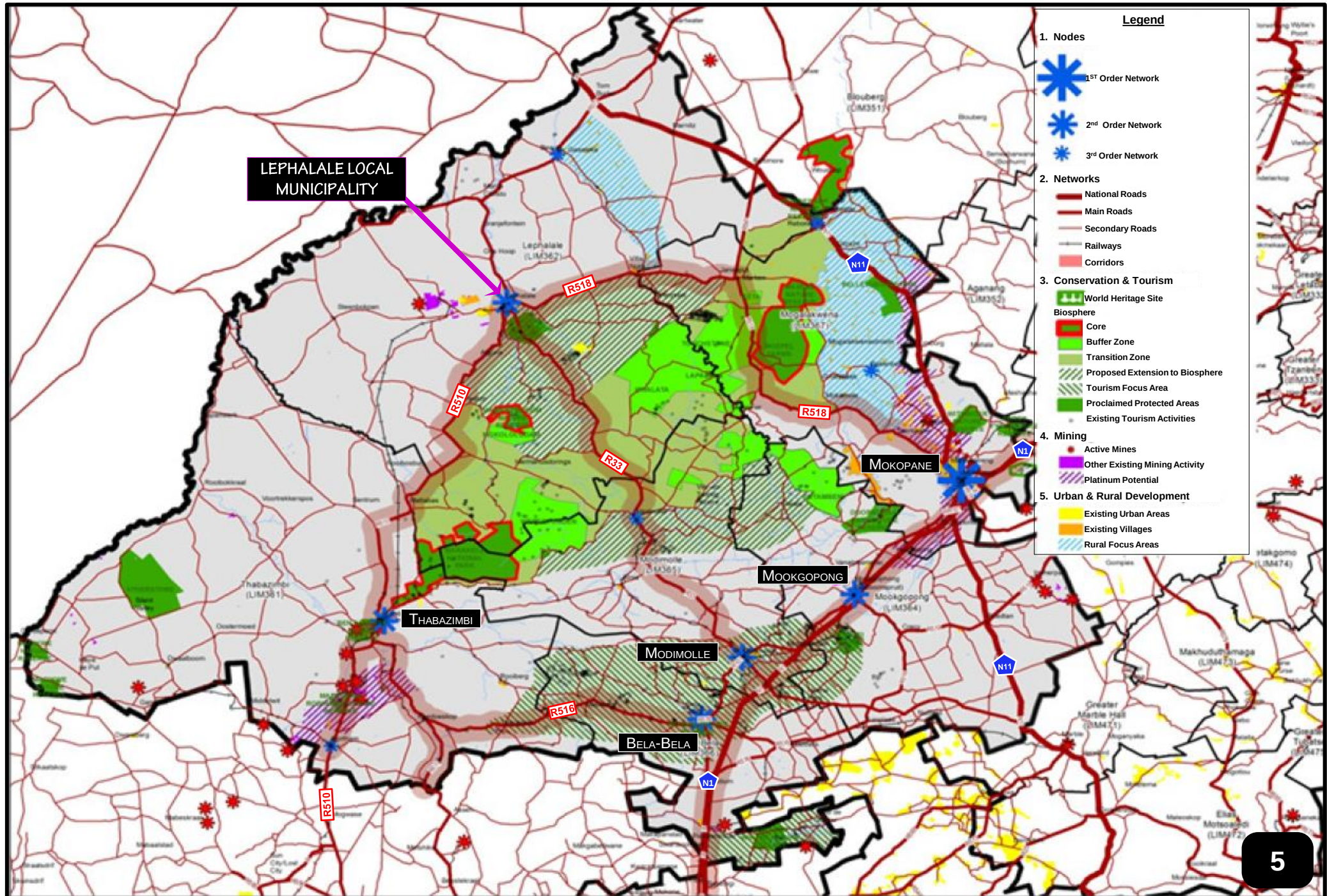
NATIONAL DEVELOPMENT PLAN (2030)

PROPOSED NATIONAL SCHEME FOR SPATIAL TARGETING



Source: National Development Plan, 2030

WATERBERG SPATIAL DEVELOPMENT FRAMEWORK (SDF), 2009



LEPHALALE

SPATIAL DEVELOPMENT FRAMEWORK
2012



LEPHALALE PGP

Key:

HUMAN SETTLEMENTS & SDA's

- Existing settlements (townships & villages)
- Development Edge
- Strategic Development Area (SDA)
- Immediate expansion direction (within developm. edge)

LONG TERM VISION iro EXPANSION

- Long term vision iro urban form
- Expansion direction (long term)

- Industrial Development Zone (IDZ)
- Aero Zone (AZ) - including Airport
- Mining Zone (MZ)

DEVELOPM. CORRIDORS & STRATEGIC LINKS

- Development Corridor (DC) 1
- Development Corridor (DC) 2
- Strategic Links (SL)
- Developm. Corridor Activity Zone (DCAZ)
- P1 Primary Activity Node (P1) - CBD

- Property boundaries (farm portions/erven)
- Provincial Roads
- District & local Roads
- Railway line

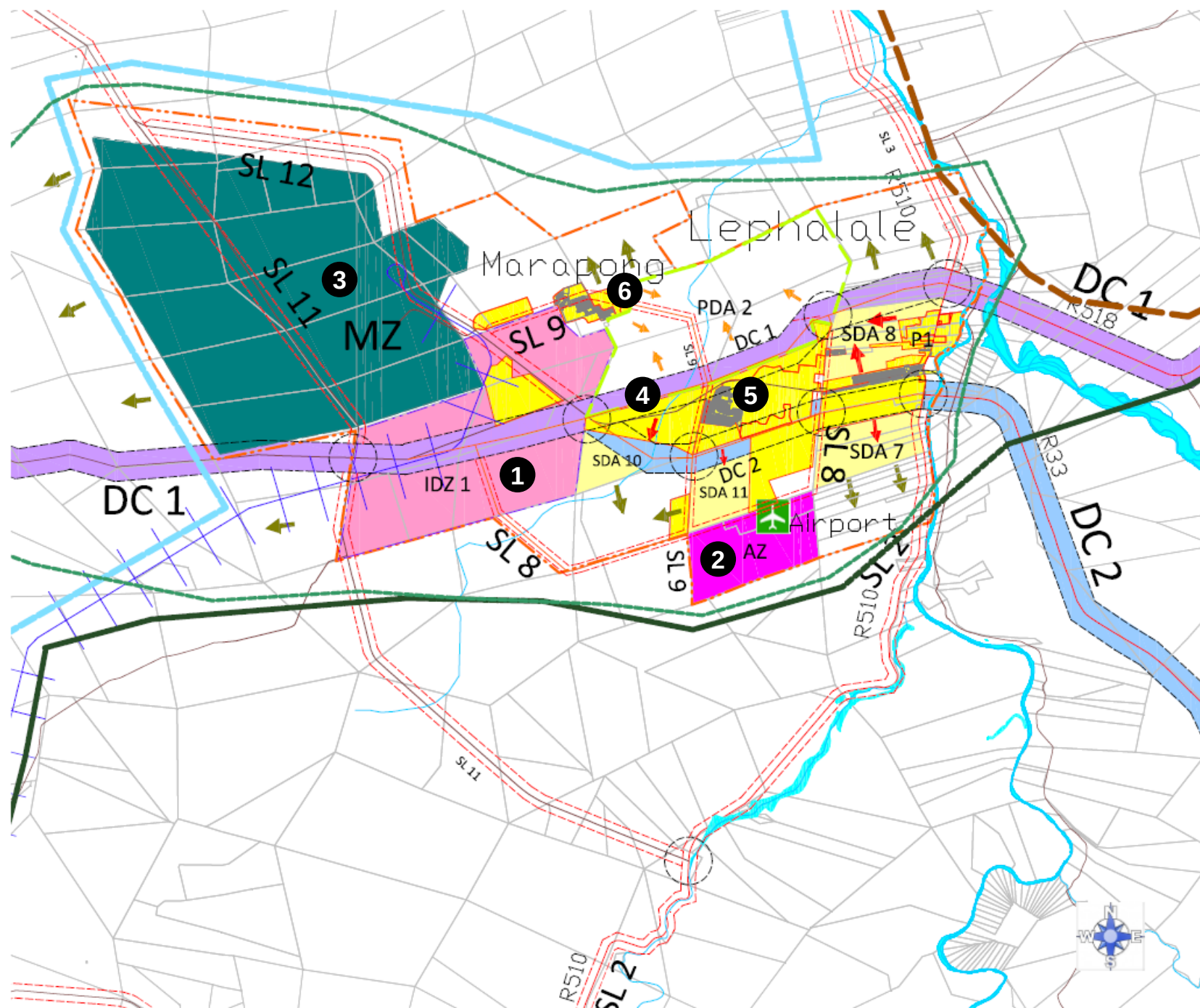
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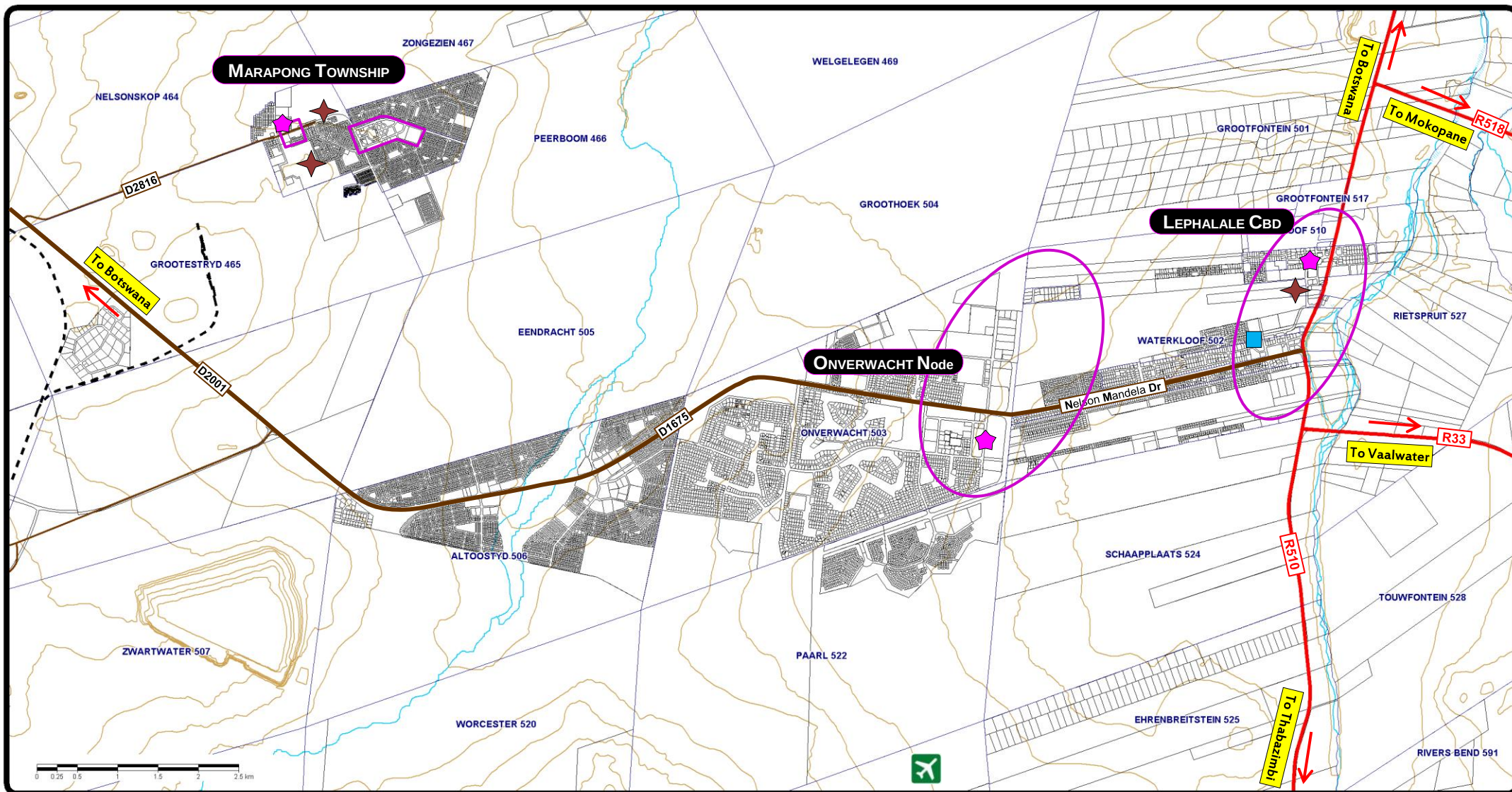


Davel Consulting (Pty) Ltd
100 Davel Ave, P.O. Box 11111
Boksburg, Gauteng 1461
Tel: 011 811 1111
Email: davel@consulting.co.za

Date: Nov. 2012

6b



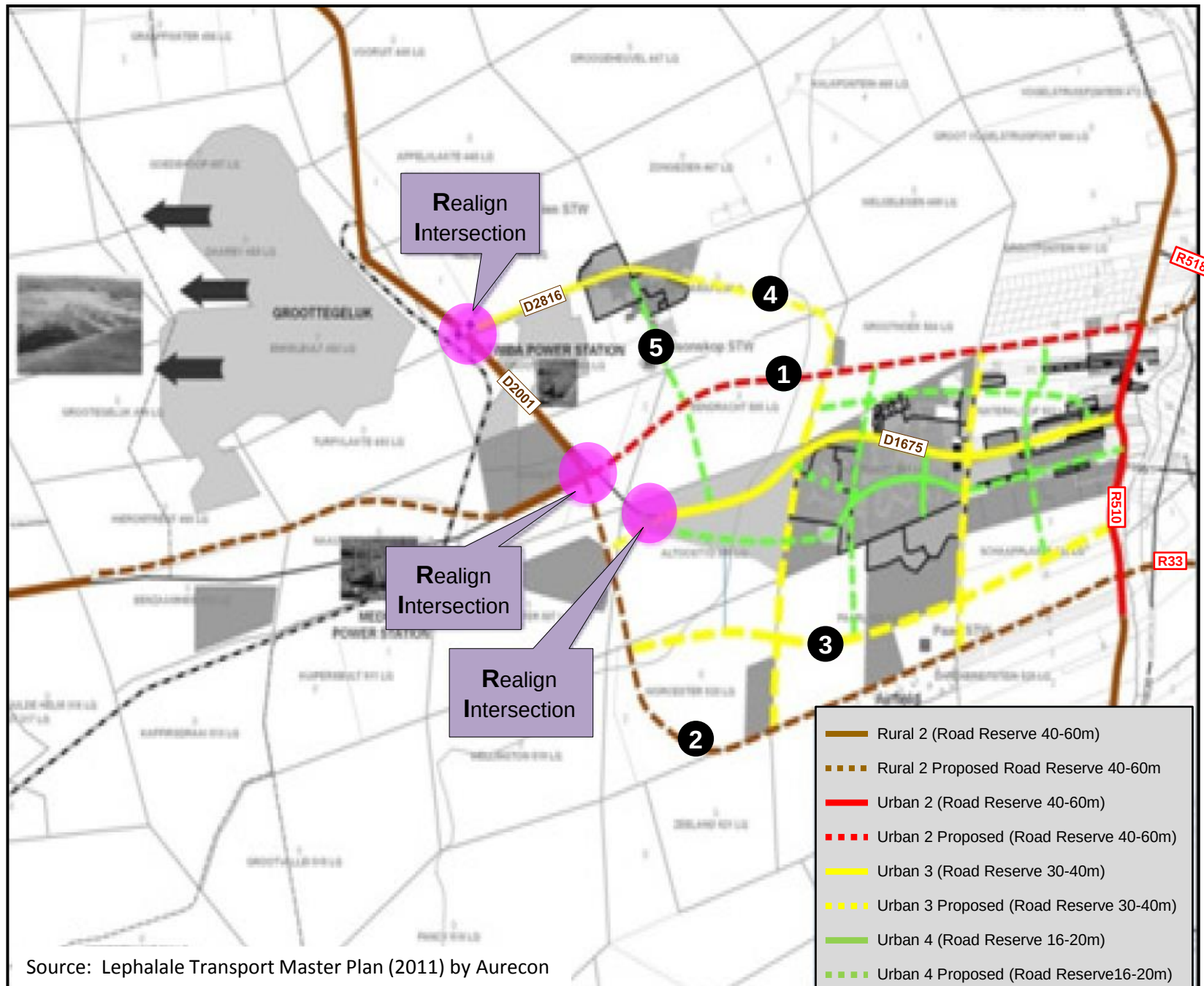


LEPHALALE CBD DEVELOPMENT PLAN

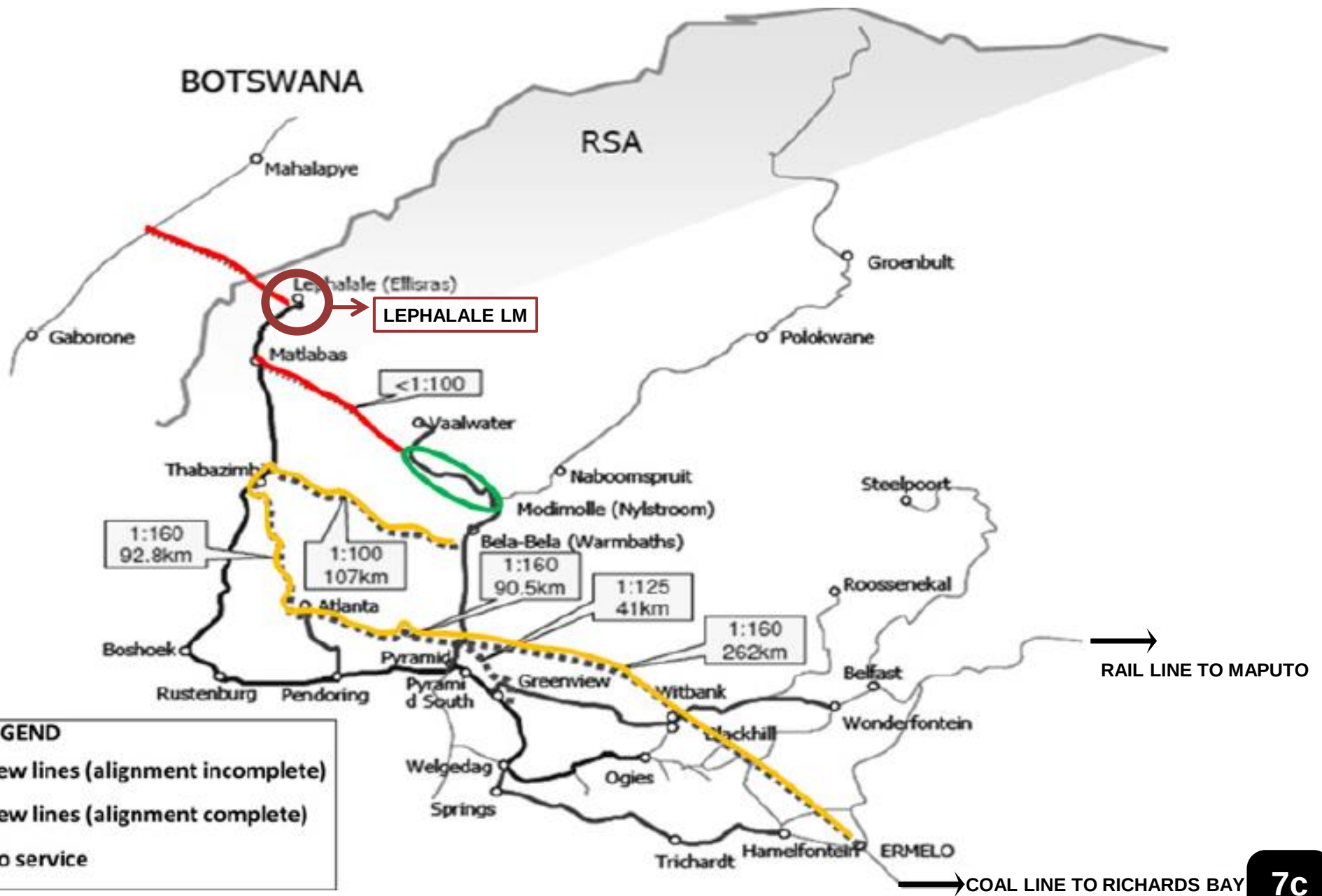
MOVEMENT NETWORK AND PUBLIC TRANSPORT INFRASTRUCTURE

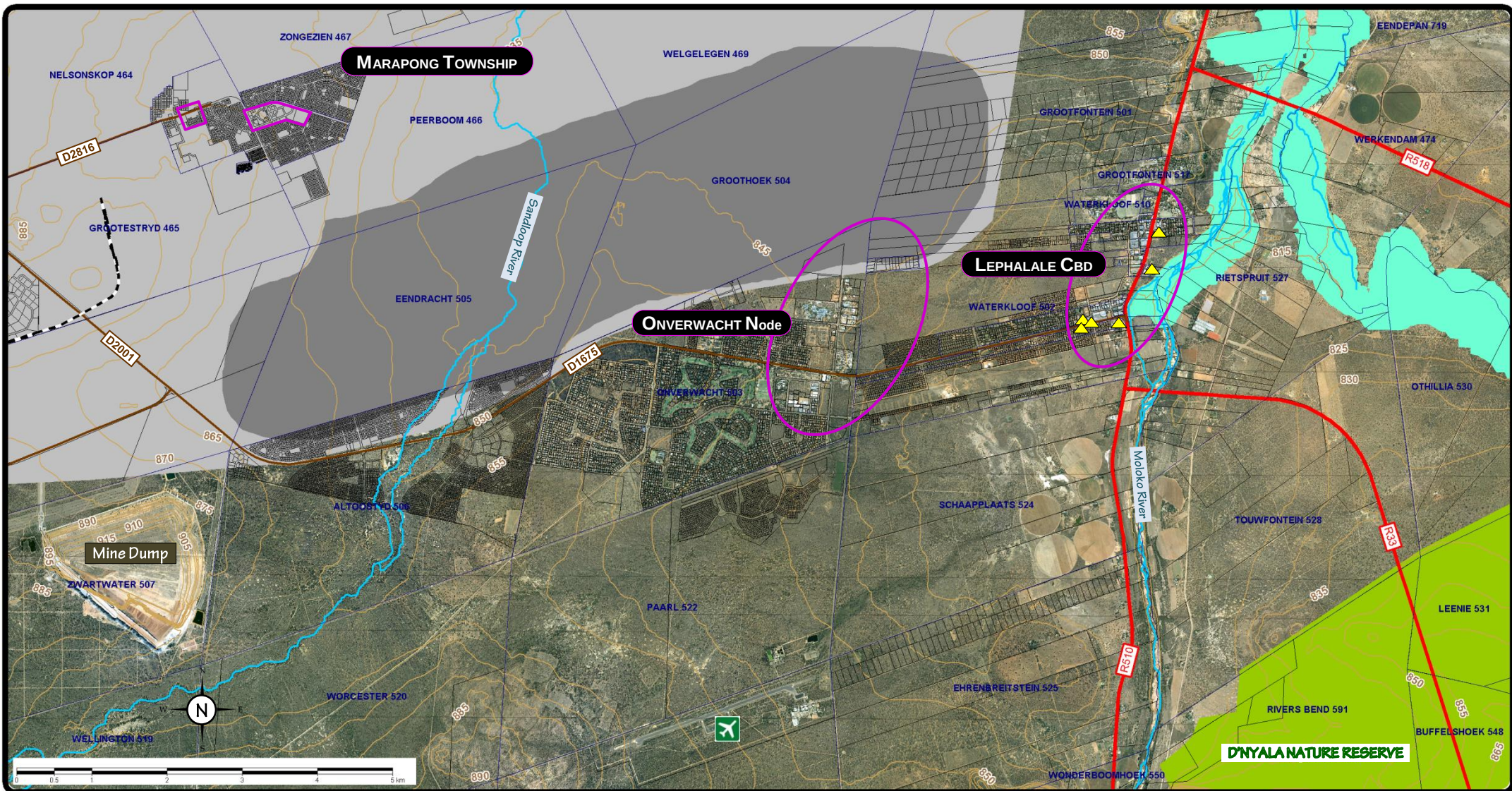
- Study Area
- Main Road
- Secondary Road
- Airfield
- Taxi Rank Facility
- Bus Rank Facility
- Bus and Taxi Rank (Combined Facilities)

PROPOSED CLASSIFICATION OF URBAN ROADS WITHIN LEPHALALE



DETAIL FREIGHT RAIL PLANNING WITH FOCUS ON WATERBERG REGION

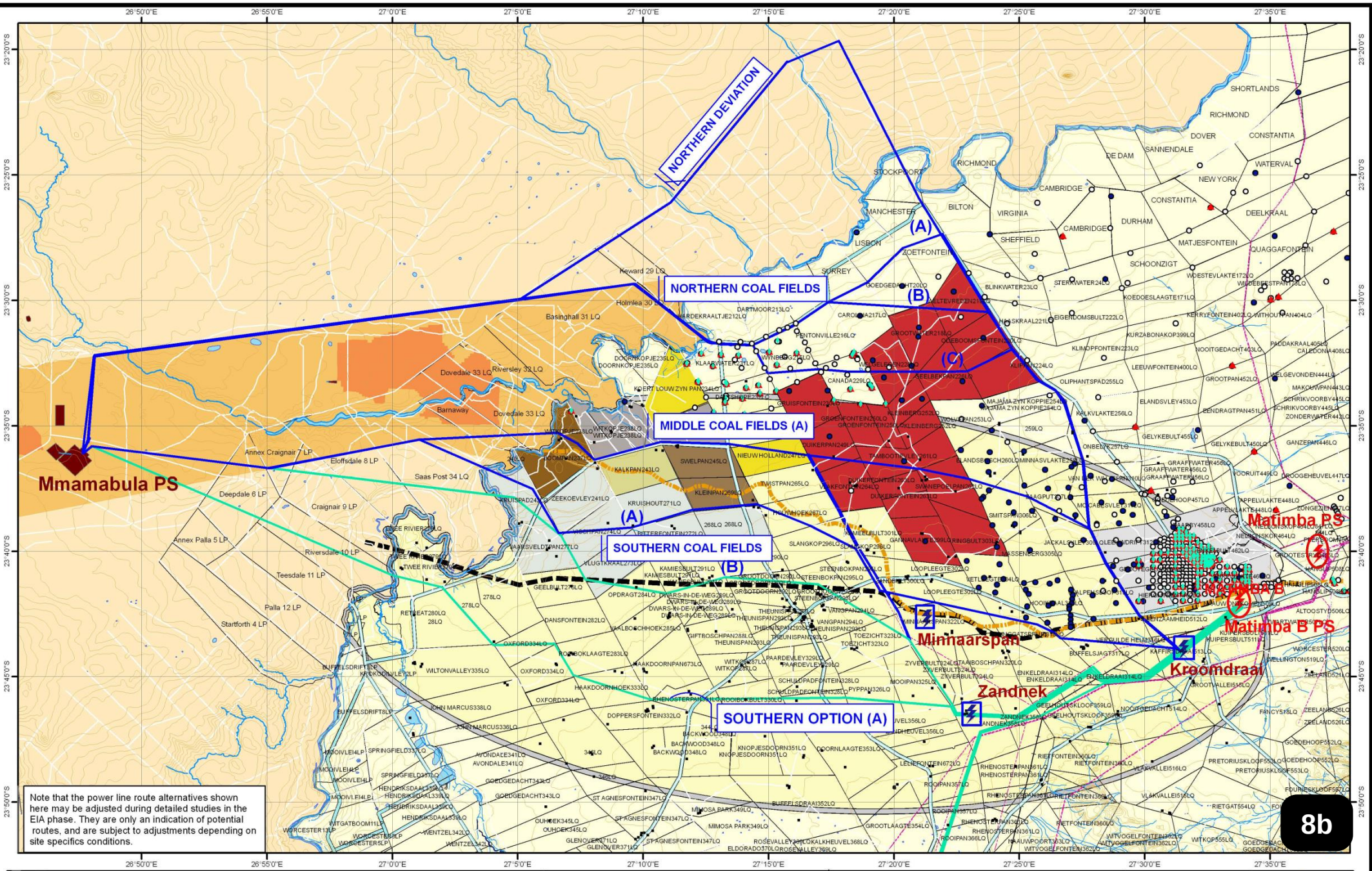




LEPHALALE CBD DEVELOPMENT PLAN

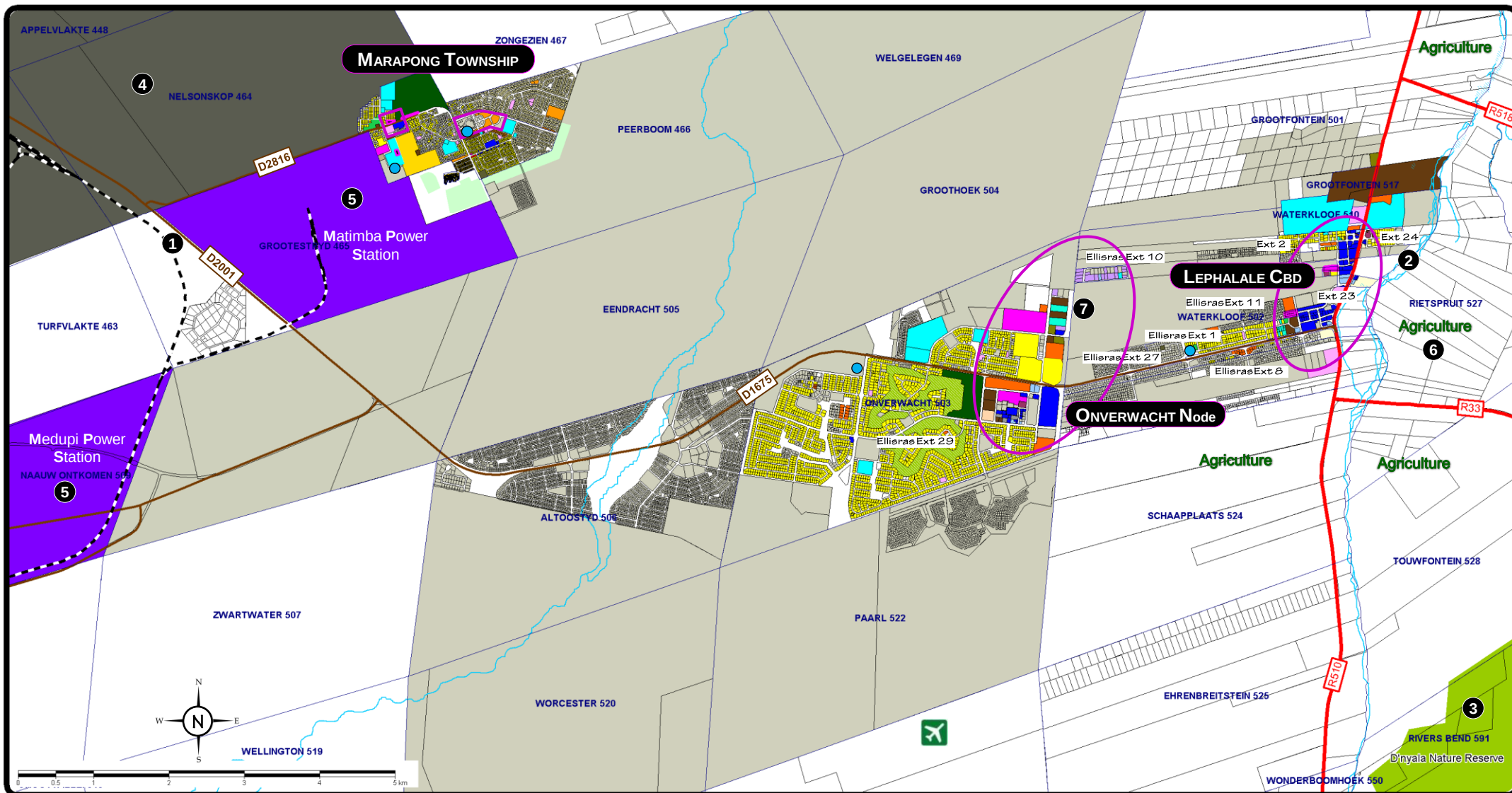
ENVIRONMENT AND TOURISM

- | | | |
|-------------------------------|-----------------------|---------------------|
| Study Area | River | Coal Reserve |
| Main Road | Formal Protected Area | Contours (5m & 20m) |
| Secondary Road | Wetland | Railway |
| Hotel/Overnight Accommodation | Coal Fields | Airfield |



8b

Figure A1
Mmamabula - Delta 400kV power line alternatives from South Africa to Botswana



LEPHALALE CBD DEVELOPMENT PLAN

SPATIAL STRUCTURE

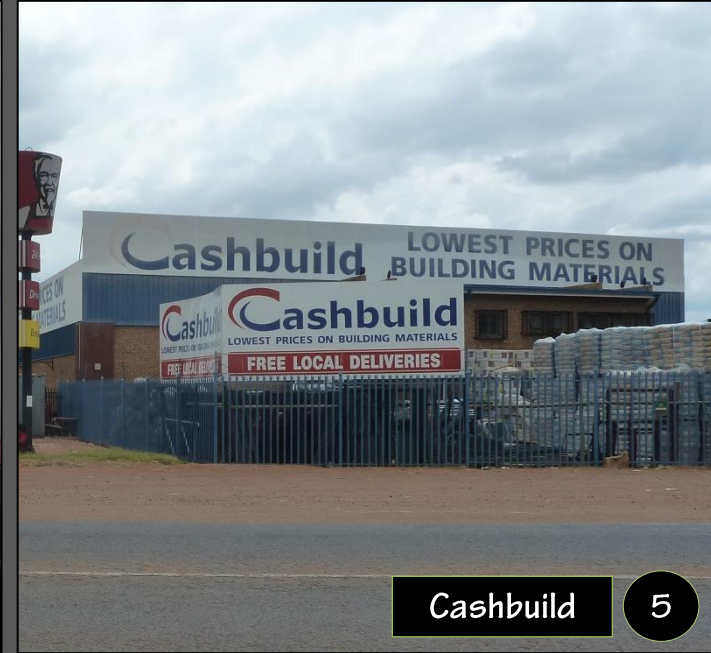
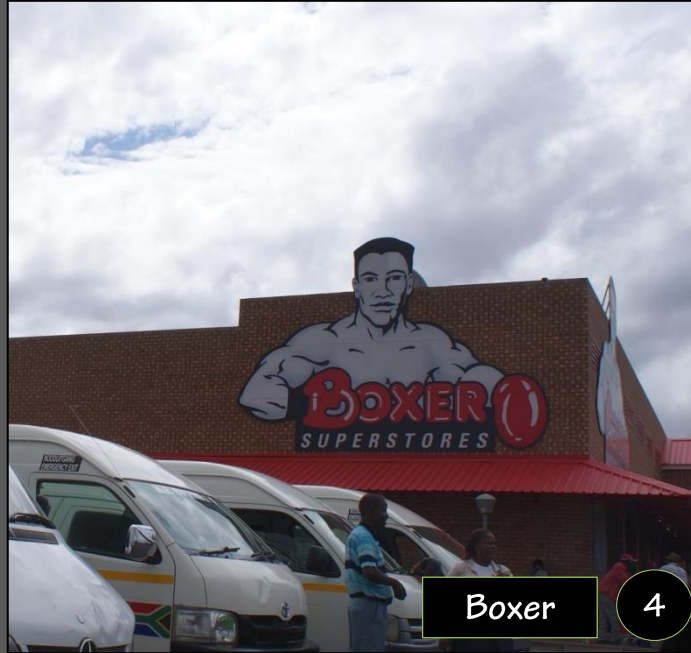
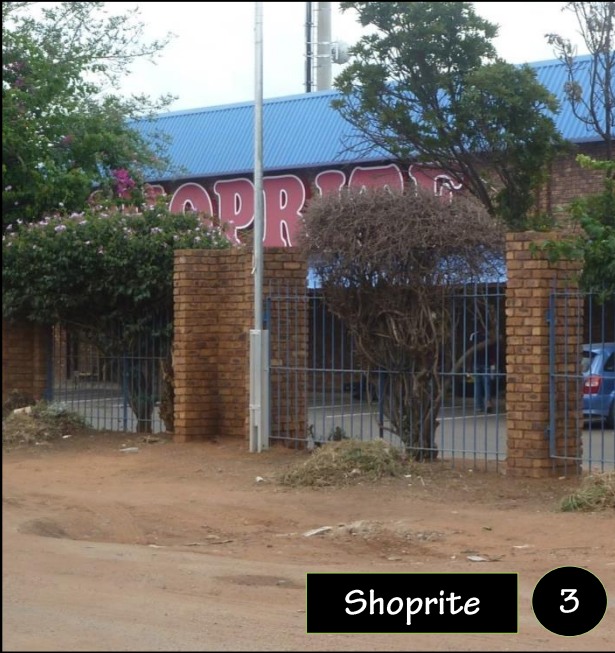
Formal Residential	Education	Wholesale / Hardware	Bus Depot	Sports Fields
Medium Density Residential	Medical	Motor Industry	Public Transport Services	Reservoir
Informal Dwellings	Place of Worship	Light Industrial	Cemetery	Airfield
Hostels / Single Quarters	Municipal	Heavy Industrial	Golf Course	Vacant
Hotel / Accommodation	Business	Mining	Public Open Space	River
Old Age Home				

LEPHALALE NODE

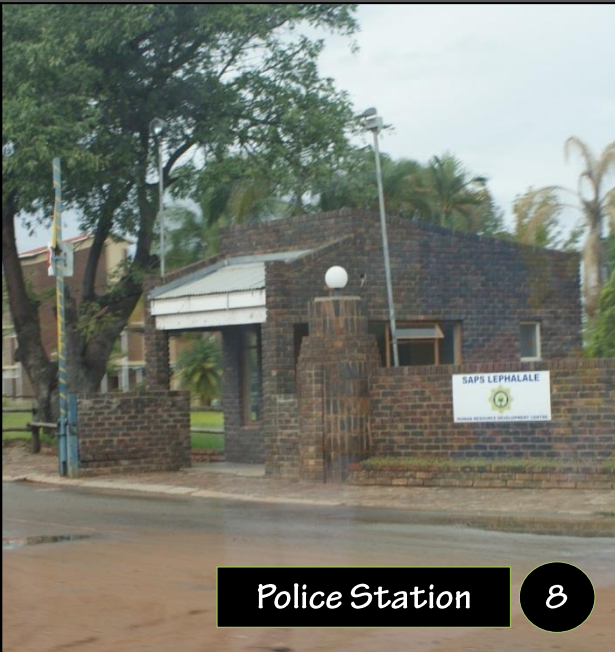
NORTH BUSINESS CLUSTER

LAND USE PICTURES- DIAGRAM 2a

BUSINESS ACTIVITY



COMMUNITY FACILITIES

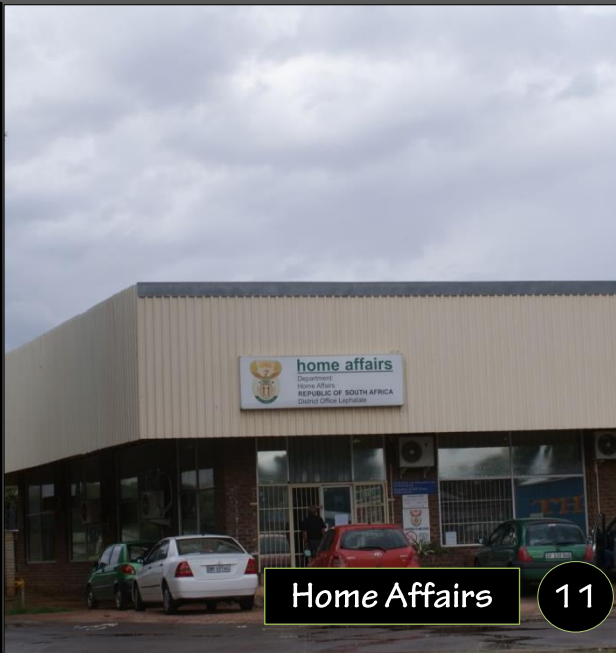


LEPHALALE NODE

NORTH BUSINESS CLUSTER

LAND USE PICTURES- DIAGRAM 2a

COMMUNITY FACILITIES



Home Affairs

11



Dep. of Labour

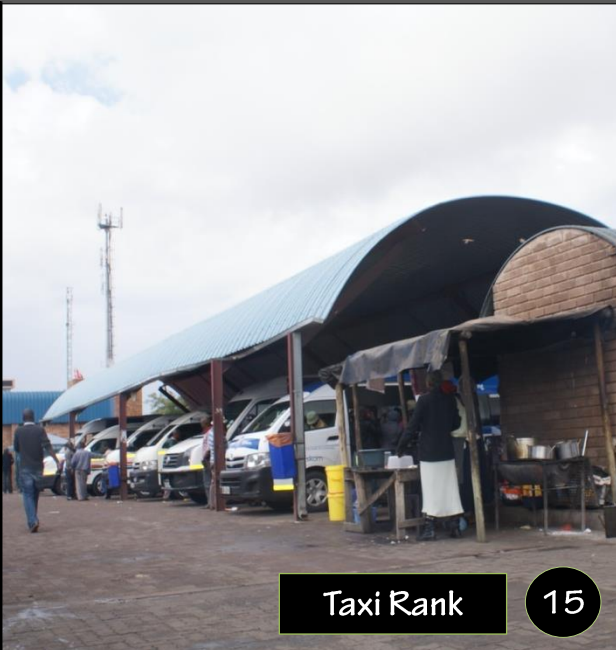
12



Ellisras Clinic

13

PUBLIC TRANSPORT



Taxi Rank

15



Bus Stop

16



Informal Trading

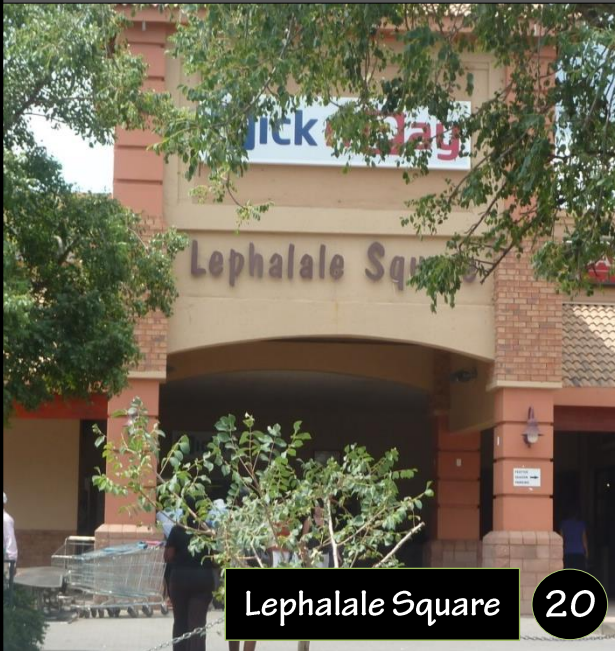
19

LEPHALALE NODE

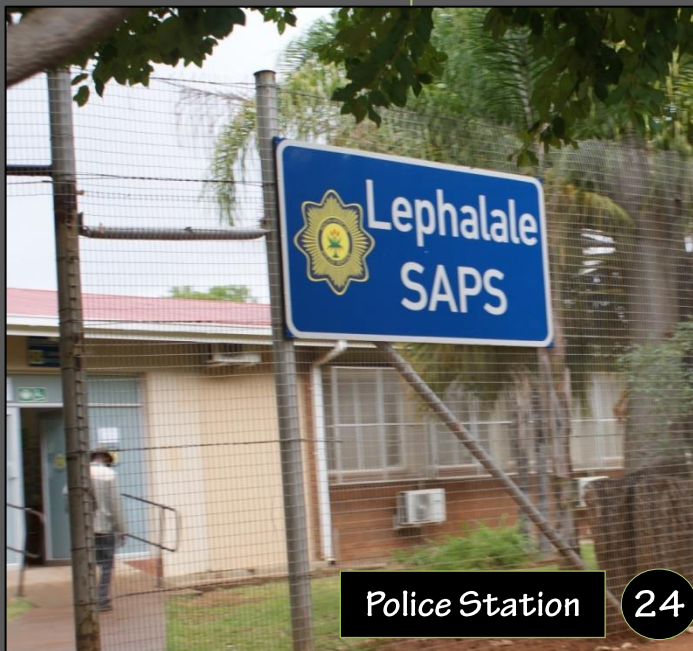
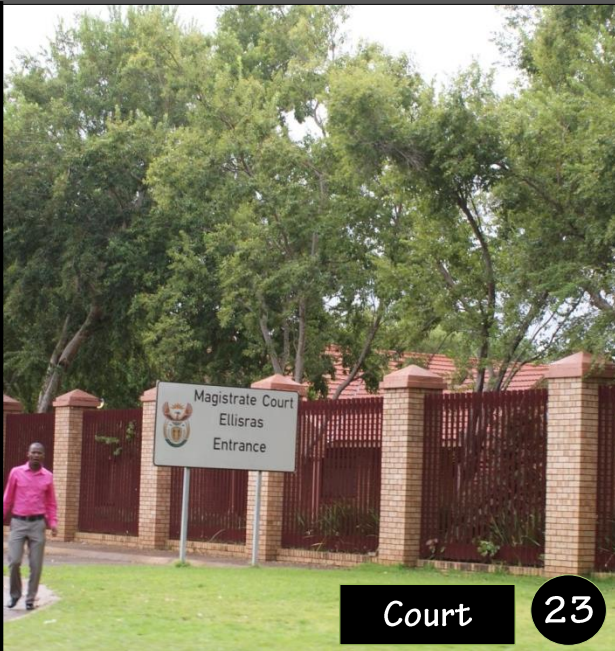
SOUTH BUSINESS CLUSTER

LAND USE PICTURES- DIAGRAM 2c

BUSINESS ACTIVITY



COMMUNITY FACILITIES



LEPHALALE NODE

HOTEL / GUEST HOUSE ACCOMMODATION



Palm Park Hotel

28

SOUTH BUSINESS CLUSTER

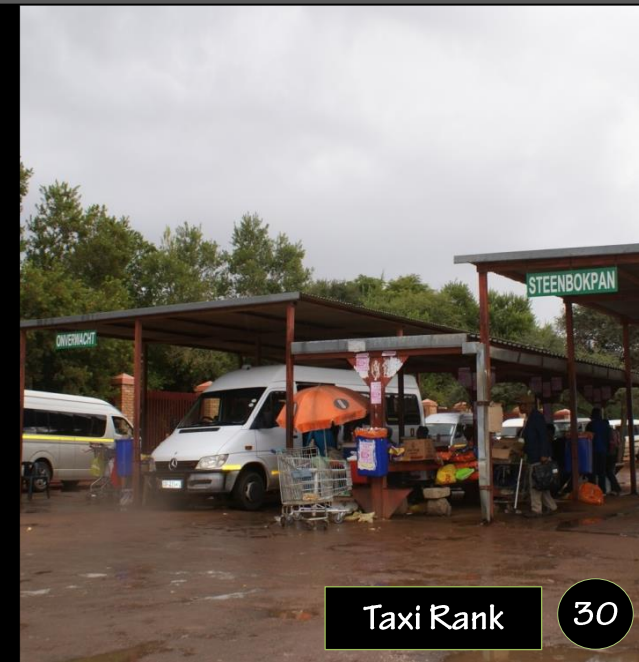


Guest House

29

LAND USE PICTURES- DIAGRAM 2d

PUBLIC TRANSPORT



Taxi Rank

30



Bus Stop

30



Informal Trading



Formal & Informal Trading

URBAN DESIGN ASPECTS

Urban Design Concept

Retail at Ground Floor



Situational Analysis

Retail & Office Mix-Use Building (Vertical)



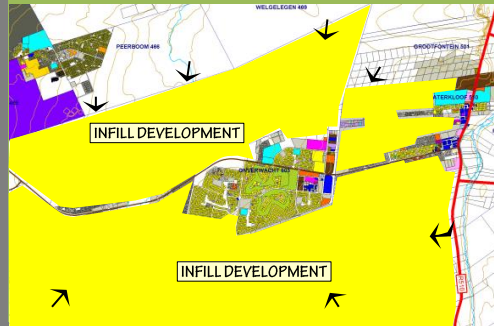
Situational Analysis

Retail & Office Mix-Use Building (Horizontal)



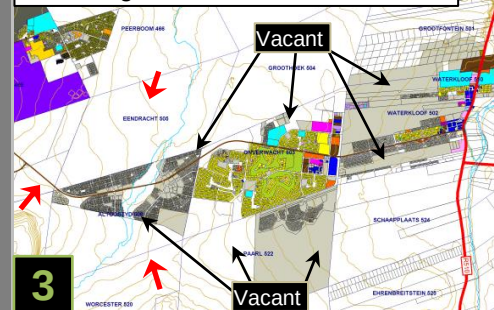
MIXED USE & DIVERSITY

Urban Design Concept



Situational Analysis

Disintegrated Settlement Patterns



Situational Analysis

Densification (through 3-storey Building)



PROMOTE COMPACTNESS & DENSIFICATION

LEPHALALE CBD

DIAGRAM 3a

Urban Design Concept

2-3 Storey Medium Density Development



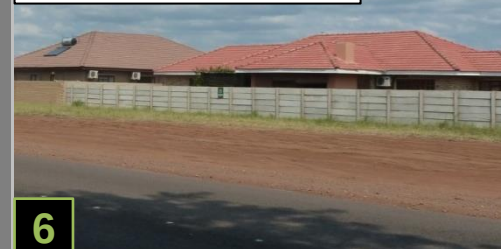
Situational Analysis

2-3 Storey Residential Development & there is still Undeveloped Land



Situational Analysis

Low Density Residential



HOUSING TYPOLOGY

Status Quo
Lephalale CBD Development Plan



URBAN DESIGN ASPECTS

LEPHALALE CBD

DIAGRAM 3b

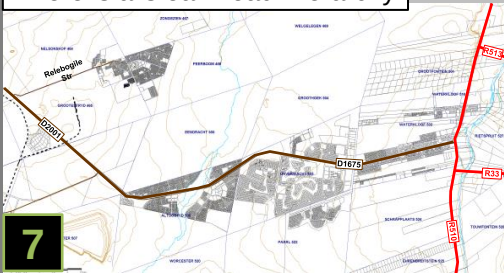
Urban Design Concept

Separate Pedestrian Movement from Vehicular Movement



Situational Analysis

There is a Clear Road Hierarchy



Situational Analysis

Defined Pedestrian Walkways along J Loui Botha Street



Urban Design Concept

Public Open Space close to Business, Community Facilities & Public Transport



Situational Analysis

Gateway Signage at the South Entrance to the Lephalale Town



Situational Analysis

Unattractive Environment around the Taxi Rank (close to Boxer Retail)



Urban Design Concept

Public Seating Area along Pedestrian Movement Network & close to Business Activity



Situational Analysis

Signage indicating Community Facilities, Street Names, Restaurants



Situational Analysis

No form of Public Open Space or Seating close to Business Activity and Taxi Rank



PROMOTE ACCESSIBILITY

INVEST IN THE PUBLIC REALM

QUALITY OF THE PUBLIC ENVIRONMENT

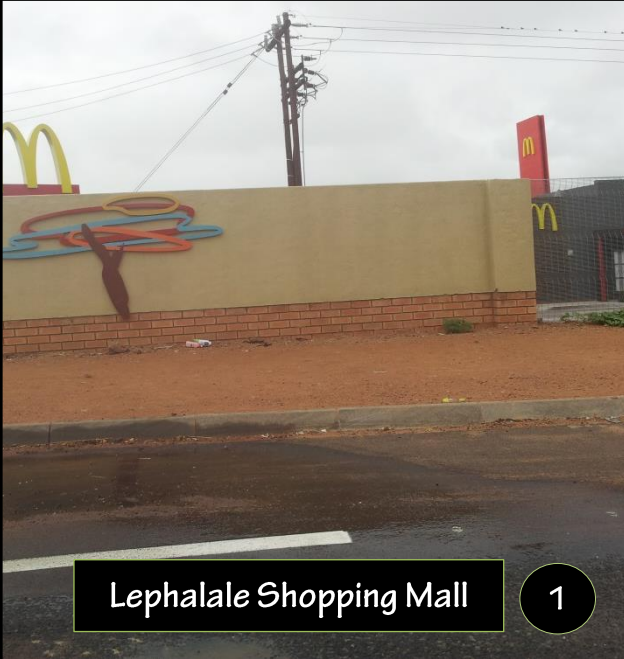
Status Quo
Lephalale CBD Development Plan



ONVERWACHT NODE

LAND USE PICTURES- DIAGRAM 4a

BUSINESS ACTIVITY



Lephalale Shopping Mall

1



Spar Complex

2



Marula Square

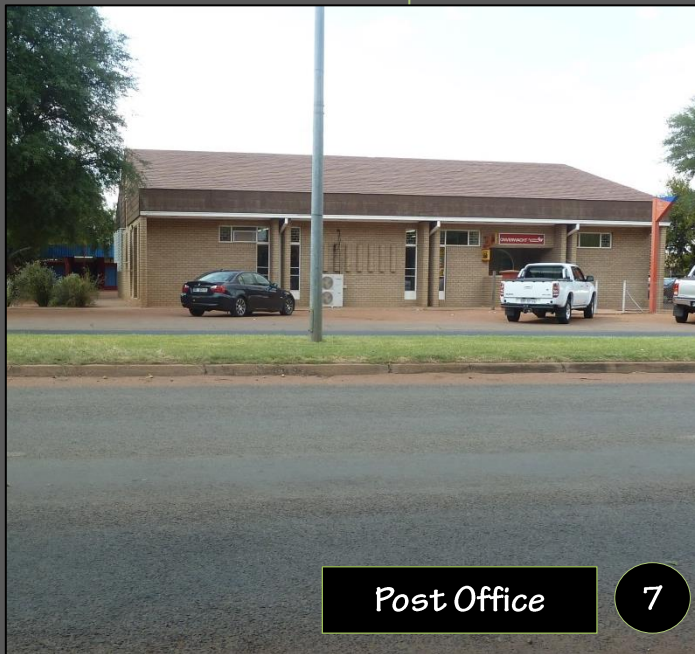
3

COMMUNITY FACILITIES



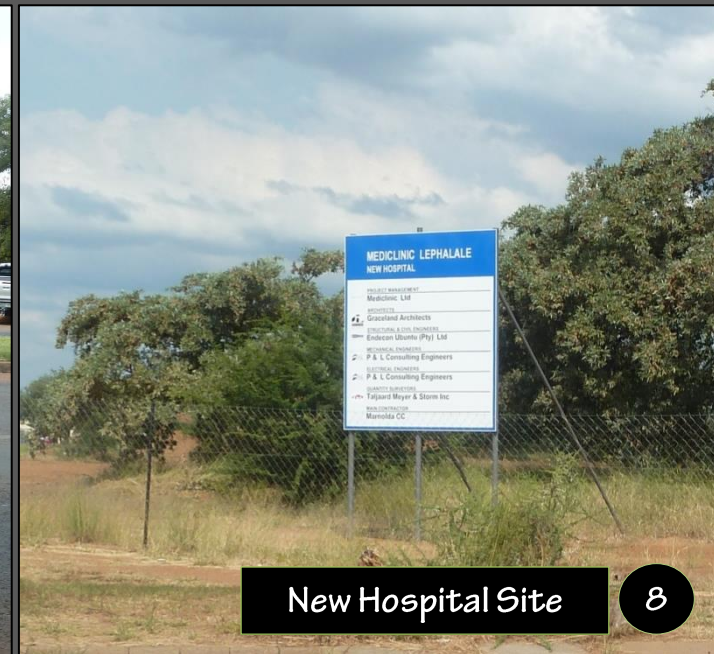
Municipal Offices

4



Post Office

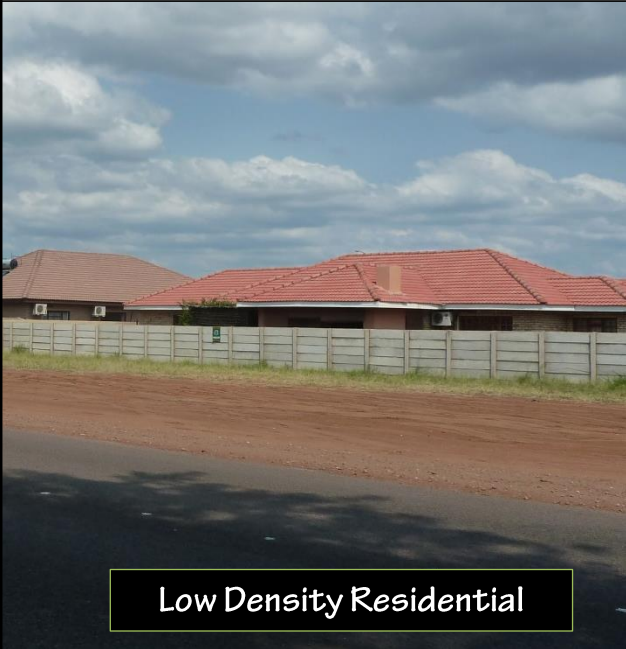
7



New Hospital Site

8

RESIDENTIAL DEVELOPMENT



Low Density Residential



Medium Density Residential

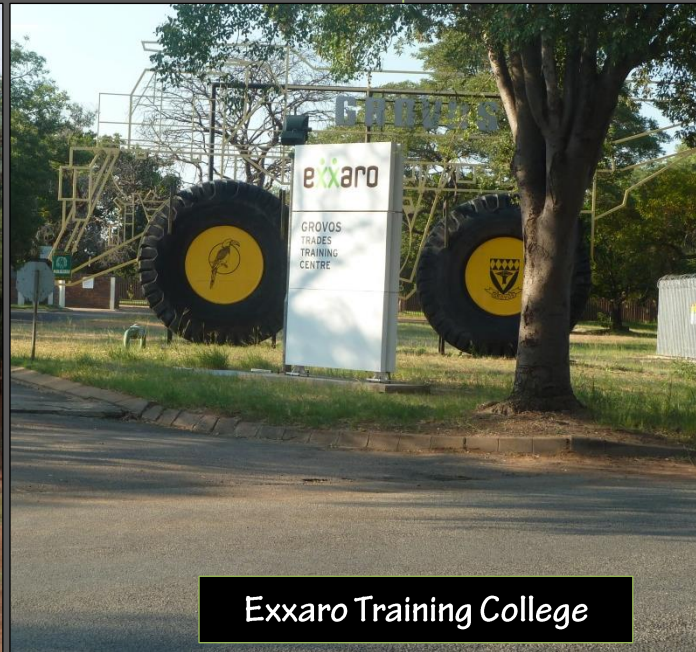


Medium Density Residential

EDUCATIONAL FACILITIES



Lephalale FET College



Exxaro Training College



Lephalale Primary School

LIGHT INDUSTRIAL NODE

LIGHT INDUSTRIAL ACTIVITY



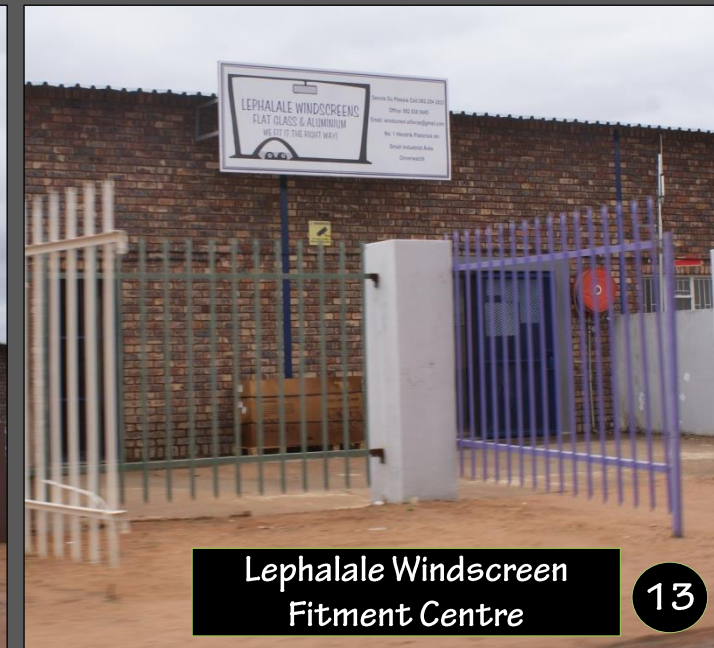
Sasko Ellisras Depot

11



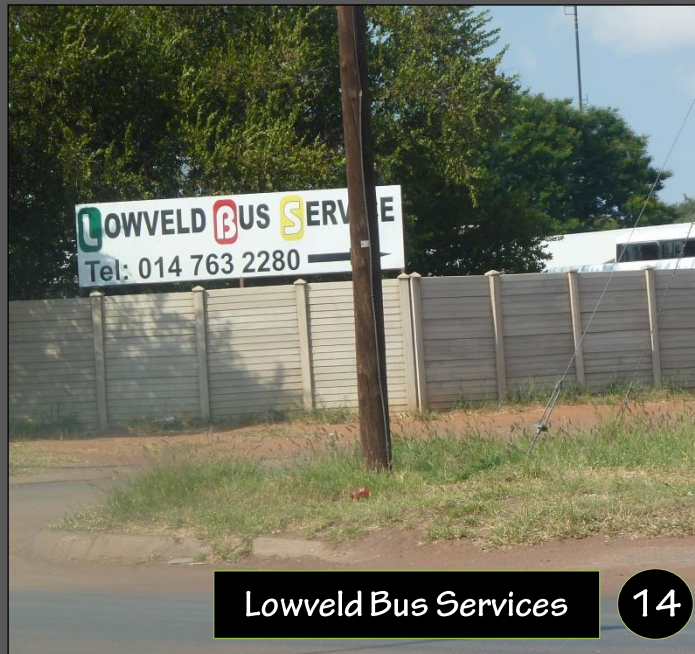
Wood Making Workshop

12



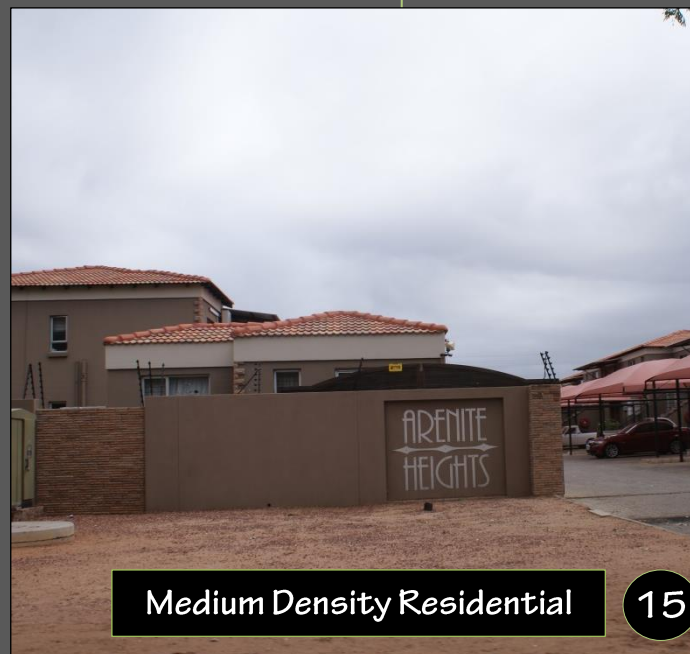
Lephalale Windscreen Fitment Centre

13



Lowveld Bus Services

14



Medium Density Residential

15



Ellisras Hospital

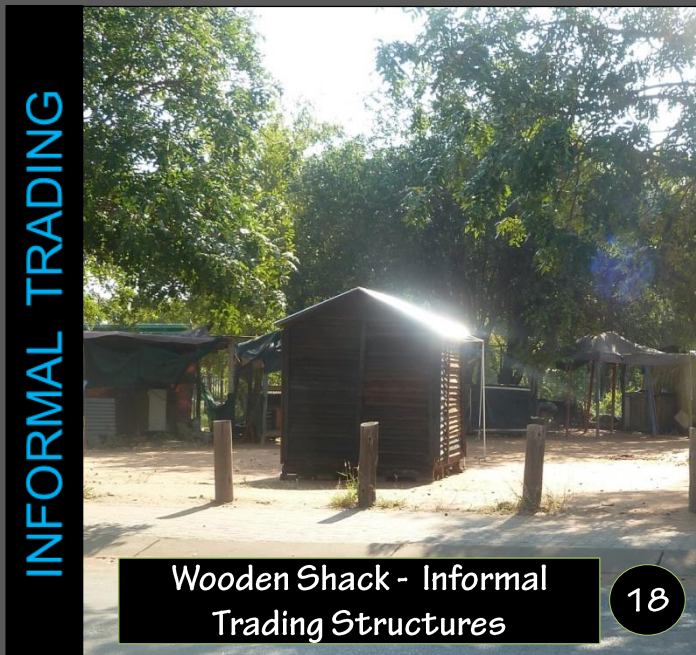
16

LAND USE PICTURES- DIAGRAM 4c

COMMUNITY FACILITIES

LIGHT INDUSTRIAL NODE

LAND USE PICTURES-DIAGRAM 4d



INFORMAL TRADING

URBAN DESIGN ASPECTS

Urban Design Concept

Retail at Ground Floor



Situational Analysis

Mixed-Use Development (Horizontal)



1

Situational Analysis

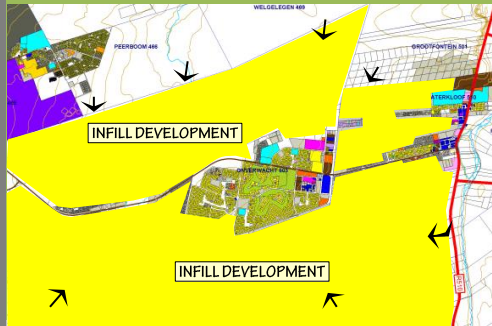
Few Vertical Development



2

MIXED USE & DIVERSITY

Urban Design Concept



Situational Analysis

Sold Vacant Site



3

Situational Analysis

Site Currently being Developed into a Private Hospital



4

PROMOTE COMPACTNESS & DENSIFICATION

ONVERWACHT
NODE

DIAGRAM 5

Urban Design Concept

2-3 Storey Medium Density Development



Situational Analysis

2- Storey Residential Walk-ups



5

Situational Analysis

3- Storey Residential Walk-ups



6

HOUSING TYPOLOGY

Lephalale CBD Development Plan

Status Quo



URBAN DESIGN ASPECTS

Urban Design Concept

Separate Pedestrian Movement from Vehicular Movement



Situational Analysis

Defined Pedestrian Movement along Joe Slovo Str



Situational Analysis

Lack of Pedestrian Walkways along the Nelson Mandela Dr



Urban Design Concept

Public Open Space close to Business, Community Facilities & Public Transport



Situational Analysis

Lack of a Public Open Space close to Community Facilities and Business Activity



Situational Analysis

Informal Taxi Rank, and Medians landscaped with Palms trees along Chris Hani Str.



ONVERWACHT

NODE

DIAGRAM 6

Urban Design Concept

Public Seating Area along Pedestrian Movement Network & close to Business Activity



Situational Analysis

Well Landscaped Medians with Aloe Plants and Rocks



Situational Analysis

Tree Art Feature at the Lephalale Mall



QUALITY OF THE PUBLIC ENVIRONMENT

Lephalale CBD Development Plan

Status Quo



PROMOTE ACCESSIBILITY

INVEST IN THE PUBLIC REALM

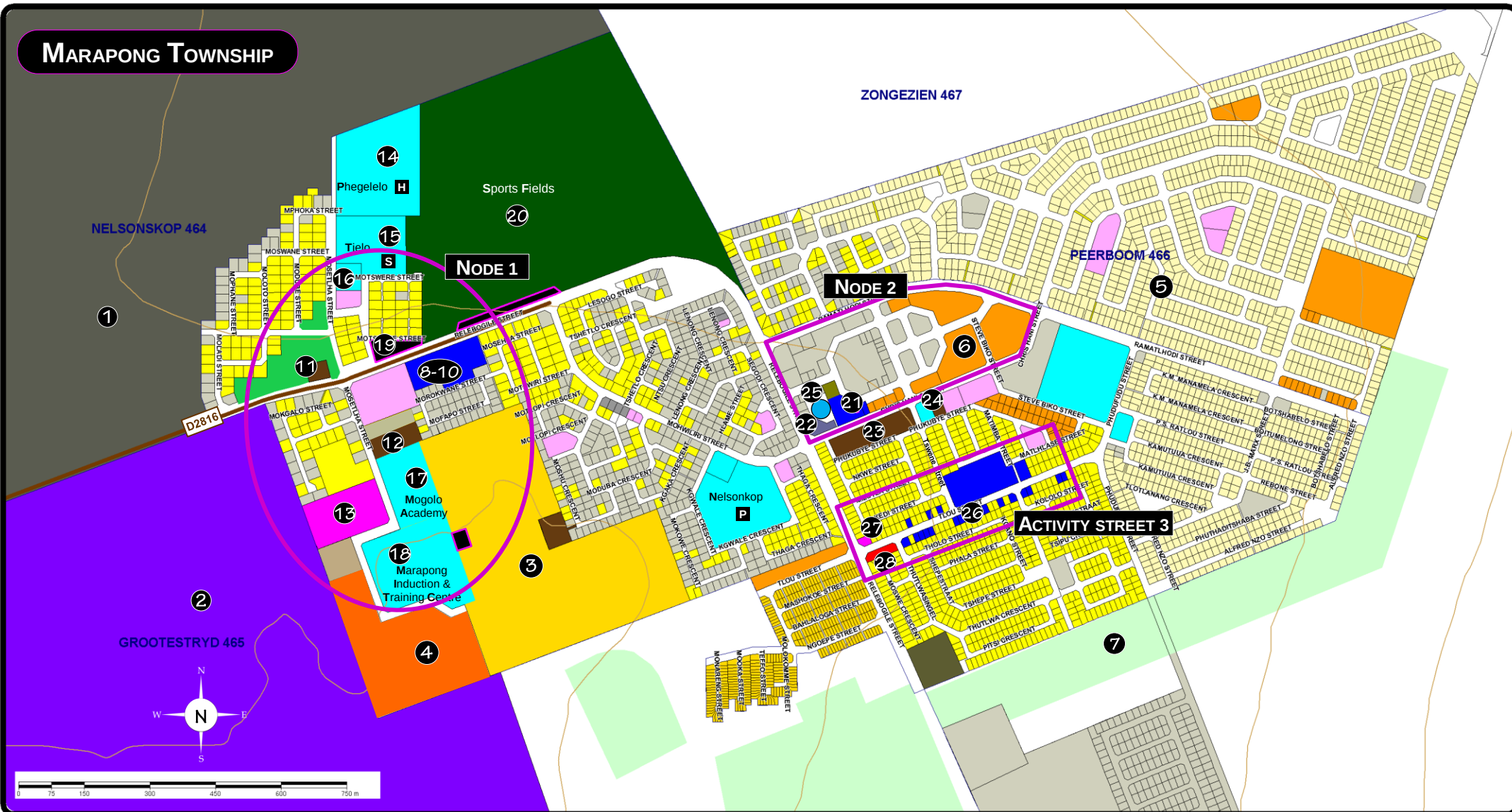
ALTOOSTYD NODE



LEPHALALE CBD DEVELOPMENT PLAN

-  Erf Boundary
-  River

MARAPONG TOWNSHIP



LEPHALALE CBD DEVELOPMENT PLAN

LAND USE COMPOSITION



SPAR BUSINESS AREA



Spar Complex

8



Lewis Furniture Shop

9



Post Office

10

COMMUNITY FACILITIES



Municipal Office

11



Police Station

12



Private Hospital

13

EDUCATIONAL INSTITUTIONS



Phegelelo High School 14



Tielelo Secondary School 15



Induction Training Centre 18

PUBLIC TRANSPORT



Informal Taxi & Bus Rank 19



Formal Bus-Stop, south of the Sports Fields



Bus Rank for Mine Employees

BUSINESS ACTIVITY



Spaza Shop

21



Panel Beaters



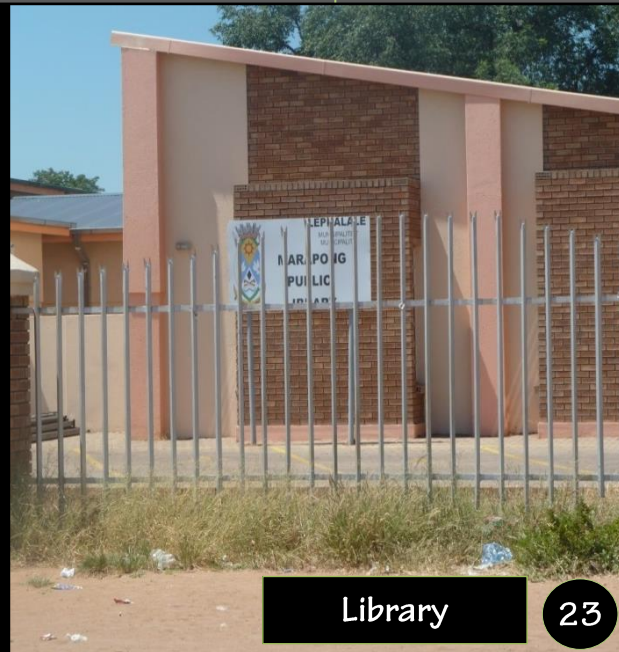
Hardware & Panel Beaters



Recycling Tin Material

22

COMMUNITY FACILITIES



Library

23



Marapong Community Centre

24



Local Supermarket

26



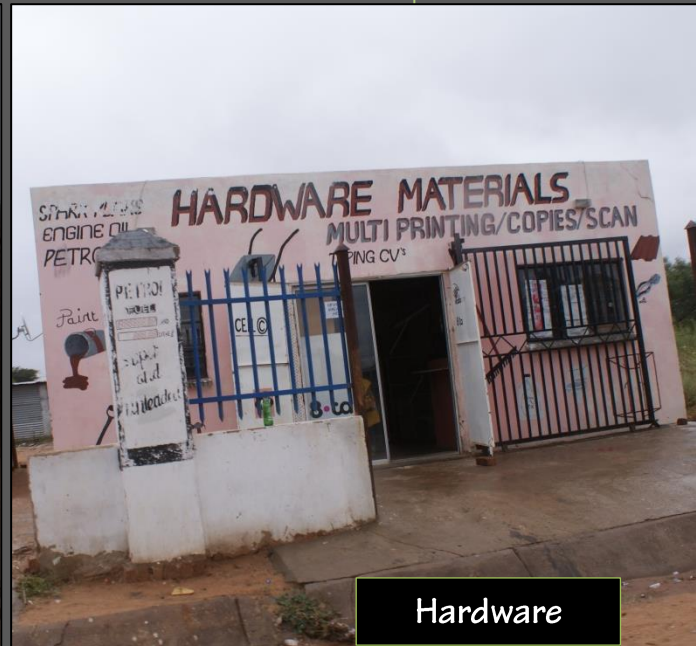
Hair Dressing



Fruits and Vegetable Market



Game Centre



Hardware



Informal Trading

29

URBAN DESIGN ASPECTS

Urban Design Concept

Retail at Ground Floor,
Residential on Upper Floors



Situational Analysis

Single Storey Business
Activity at the Spar Complex



Situational Analysis

Strip of Mixed Use Activity along Tlou Str



MIXED USE & DIVERSITY

Urban Design Concept



Situational Analysis

Demolished Building currently being Re-built



Situational Analysis

Informal Settlements along Chris Hani Str



PROMOTE COMPACTNESS & DENSIFICATION

MARAPONG TOWNSHIP

DIAGRAM 8

Urban Design Concept

2-3 Storey Medium Density Development



Situational Analysis

2 Storey Hostel Walk-Ups



Situational Analysis

RDP Housing



HOUSING TYPOLOGY

Lephalale CBD Development Plan

Status Quo



URBAN DESIGN ASPECTS

Urban Design Concept

Separate Pedestrian Movement from Vehicular Movement



Situational Analysis

Undefined Pedestrian Walkways in Marapong Township (Mosetha Str)



Situational Analysis

Undefined Pedestrian Walkways in Marapong Township (Relebogile Rd)



PROMOTE ACCESSIBILITY

Urban Design Concept

Public Open Space close to Business, Community Facilities & Public Transport



Situational Analysis

Entrance Signage along Relebogile Str



Situational Analysis

Informal Taxi and Bus Rank



INVEST IN THE PUBLIC REALM

MARAPONG TOWNSHIP

DIAGRAM 9

Urban Design Concept

Public Seating Area along Pedestrian Movement Network & close to Business Activity



Situational Analysis

High Mast Street Lighting



Situational Analysis

Lack of Seating and Public Sport Facilities



QUALITY OF THE PUBLIC ENVIRONMENT

Lephalale CBD Development Plan

Status Quo



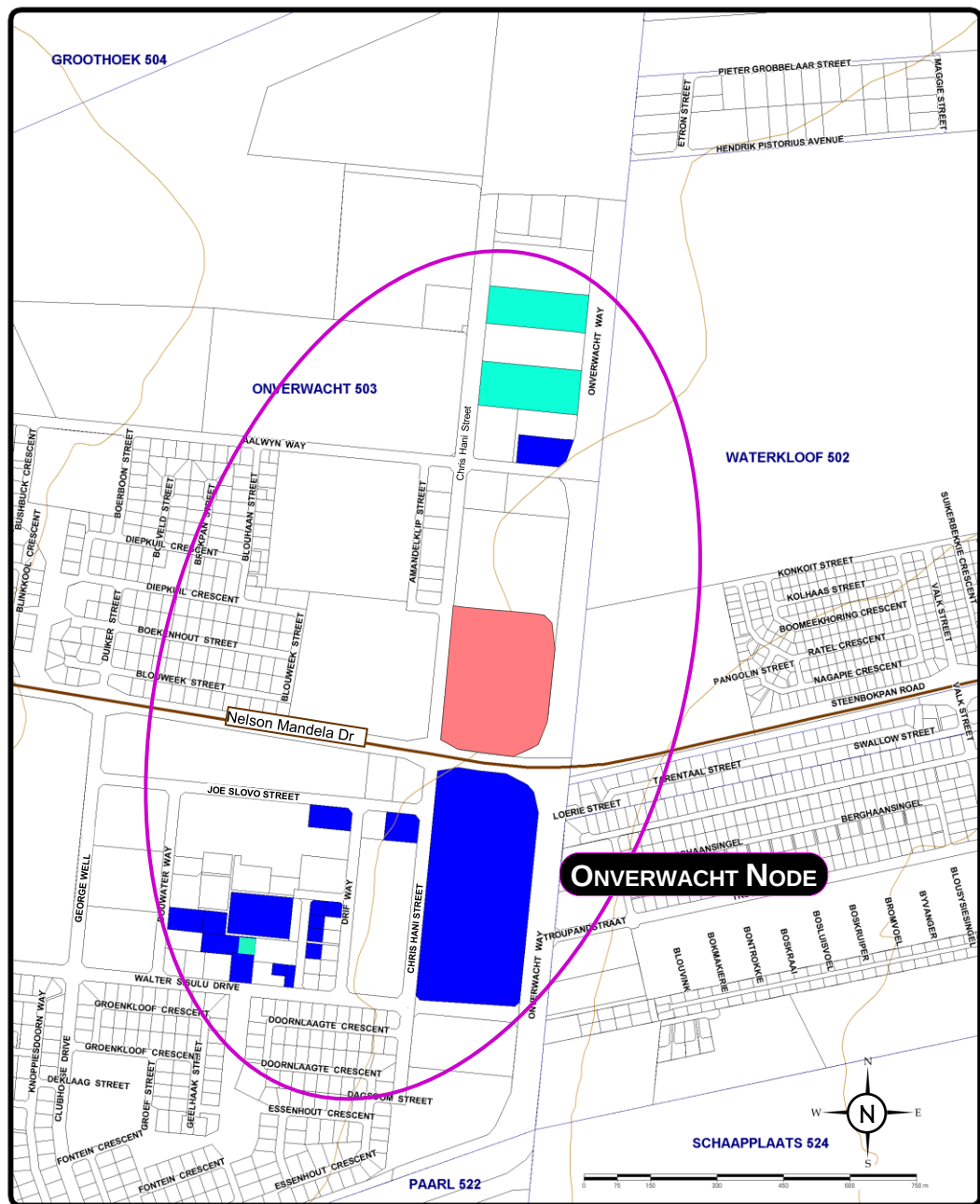


LEPHALALE CBD DEVELOPMENT PLAN

RETAIL AND OFFICE

- Retail
- Office
- Mixed Use Building (Business and Offices)
- Open Space System

13a



LEPHALALE CBD DEVELOPMENT PLAN

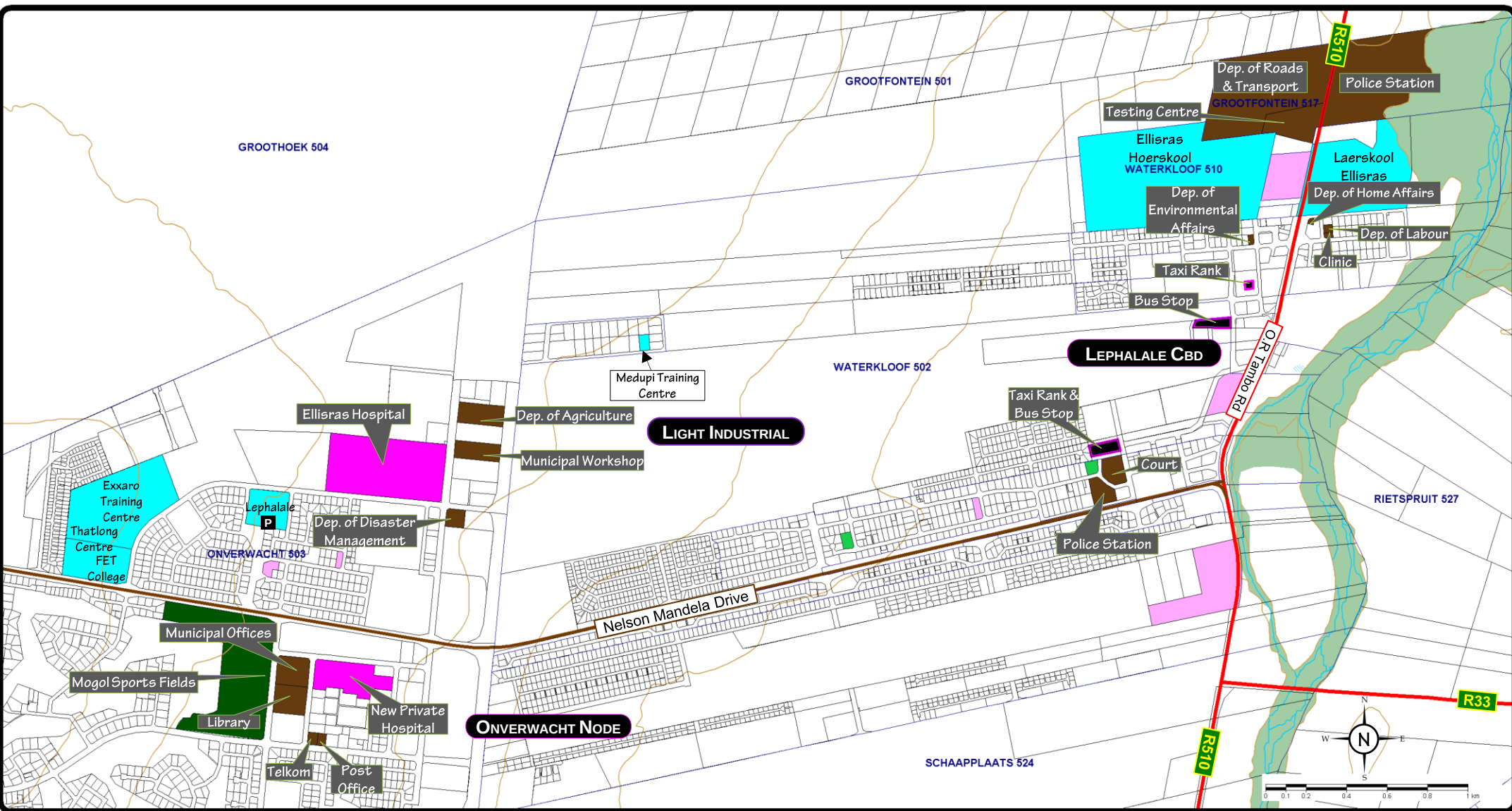
RETAIL AND OFFICE

- Retail
- Office
- Mixed Use Building (Residential and Offices)

13b



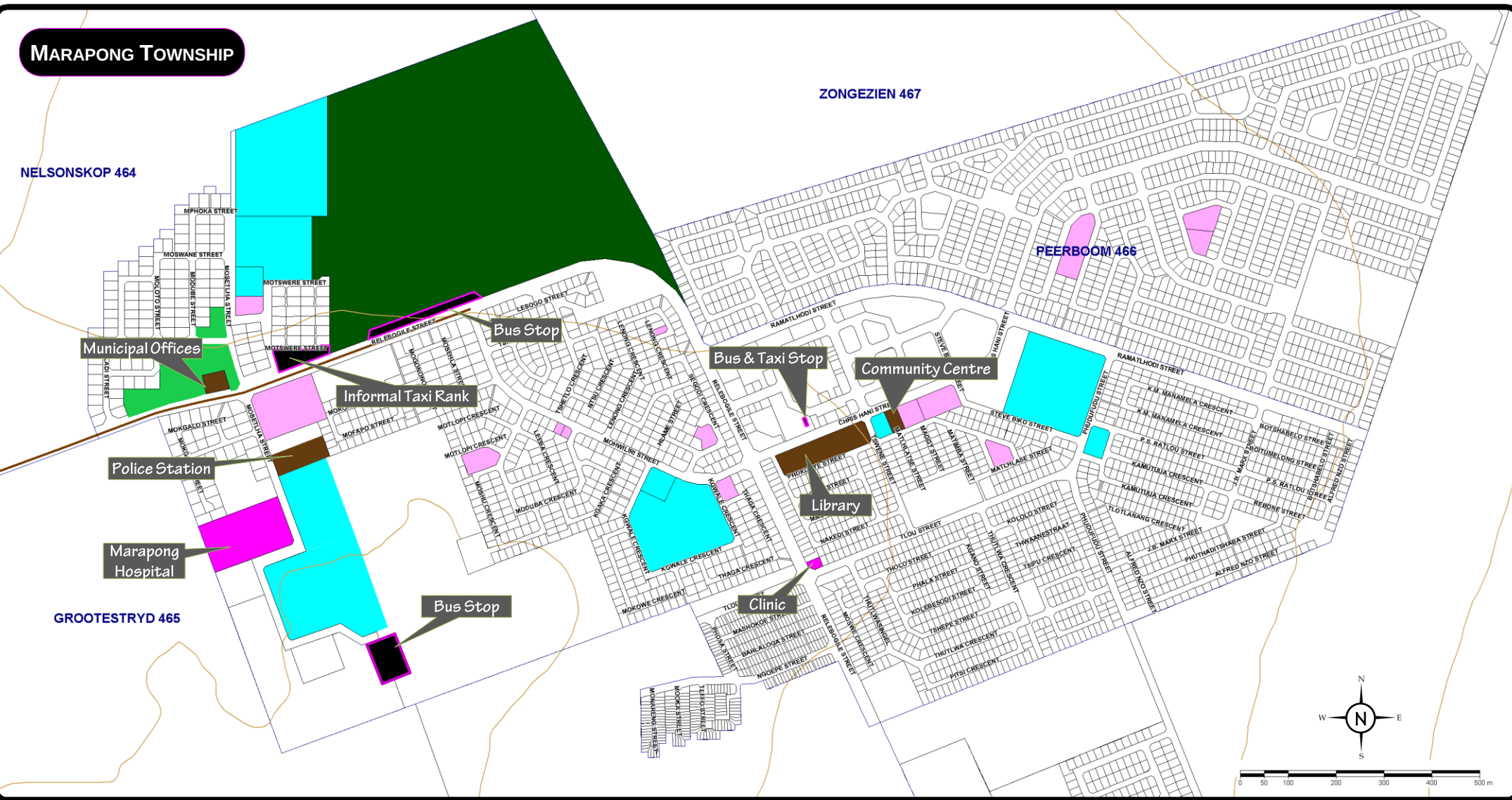
Retail
 Office
 Mixed Use Building (Business and Offices)



LEPHALALE CBD DEVELOPMENT PLAN COMMUNITY FACILITIES

- Municipal / Government
- Church
- Hospital
- Educational
- Public Open Space
- Sports Fields

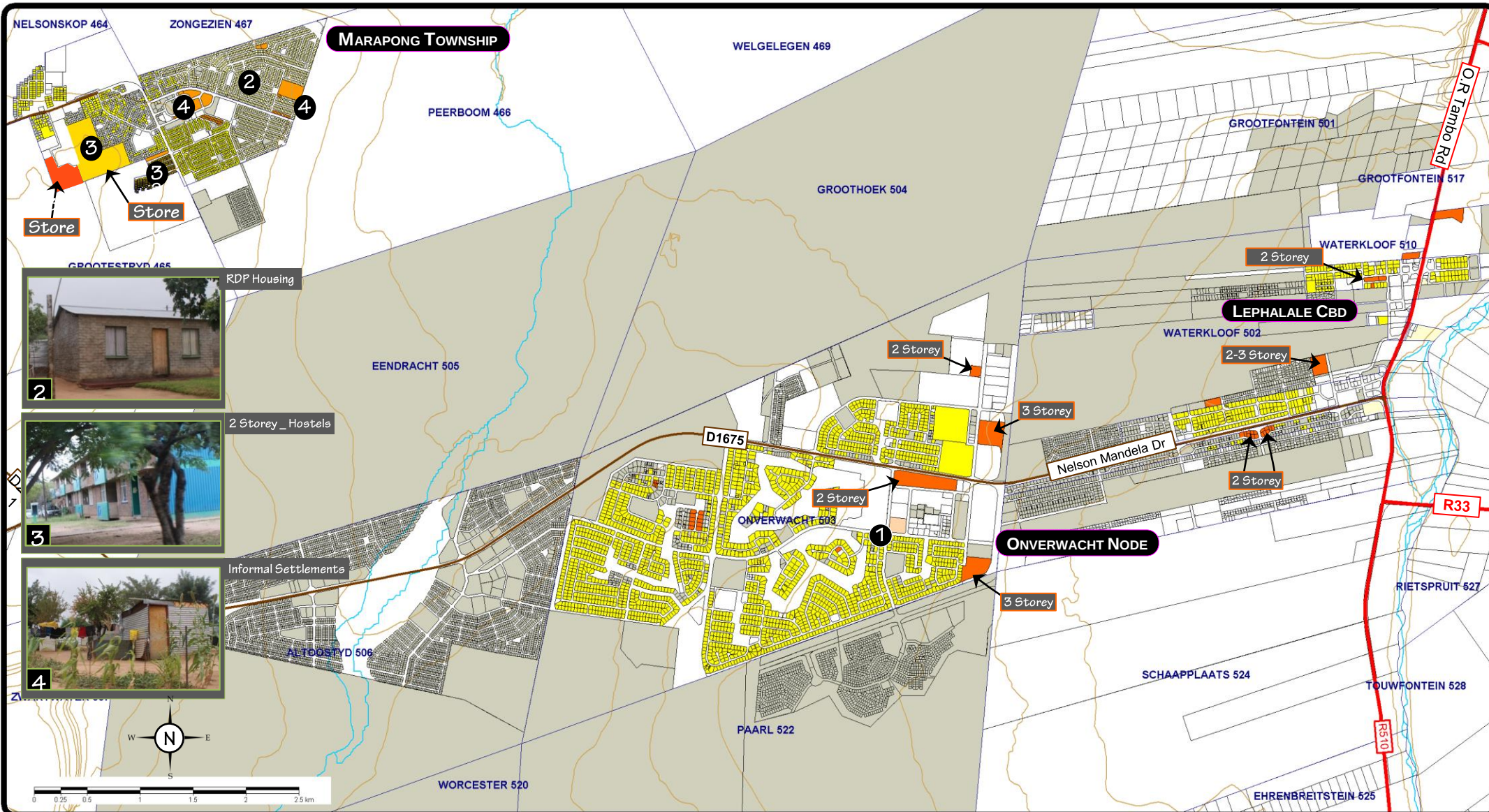
MARAPONG TOWNSHIP



LEPHALALE CBD DEVELOPMENT PLAN

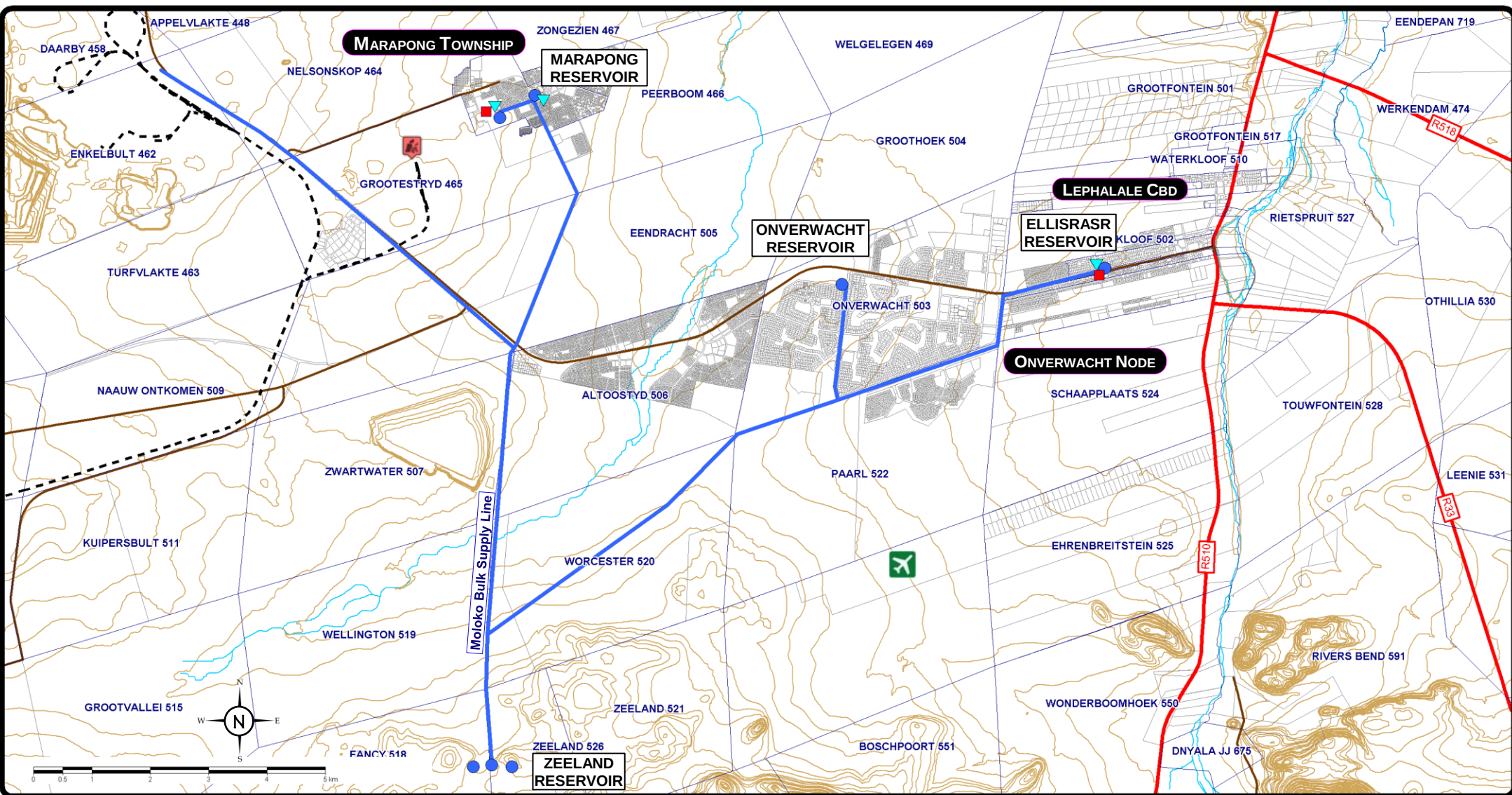
COMMUNITY FACILITIES

- Municipal / Government
- Church
- Medical
- Educational
- Public Open Space
- Sports Fields



LEPHALALE CBD DEVELOPMENT PLAN RESIDENTIAL DEVELOPMENT

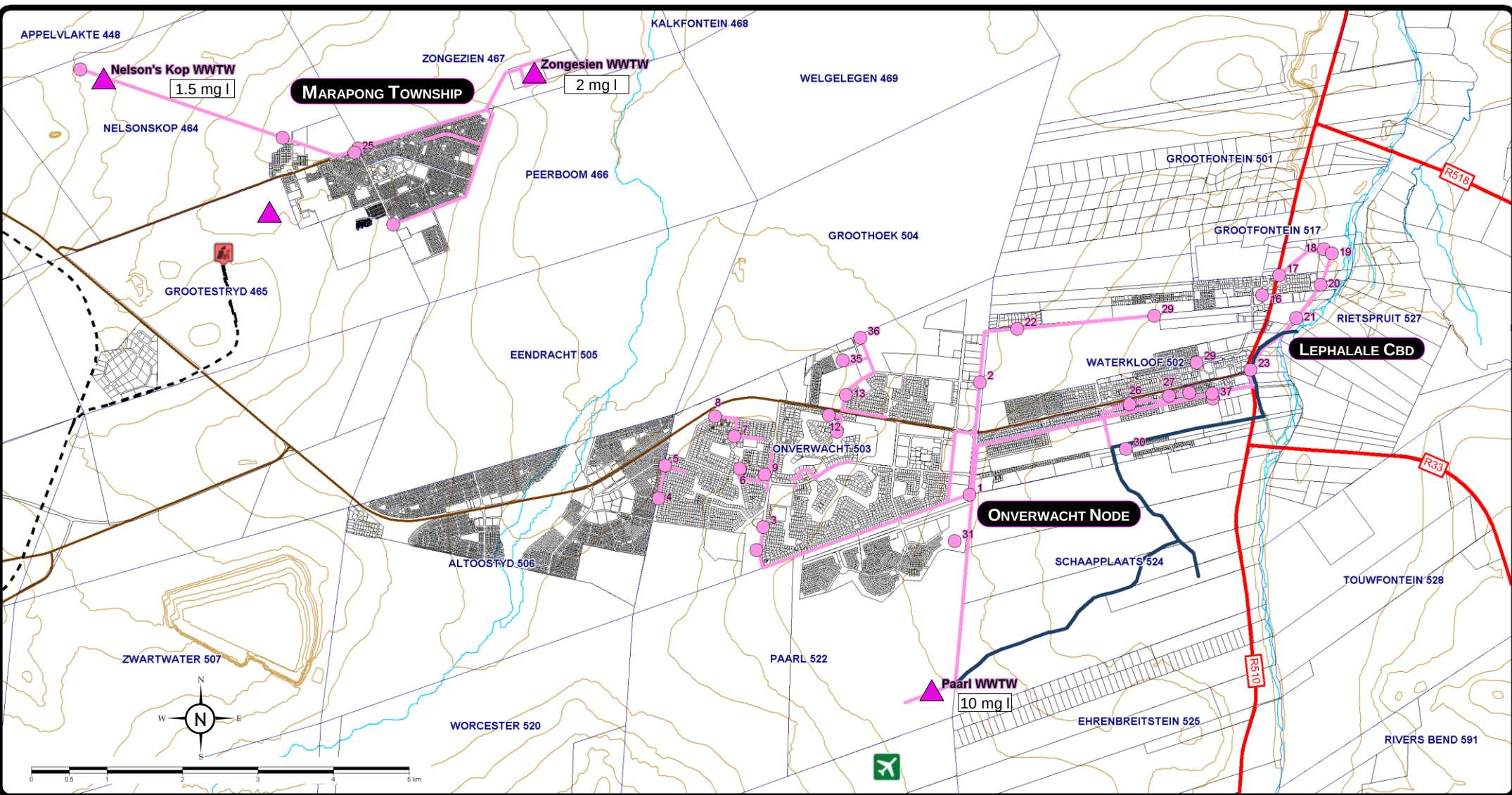
- Single Residential
- Multiple Residential
- RDP Housing
- Hostel
- Informal Dwelling
- Old Age
- Hotel / Accommodation
- Vacant Land



LEPHALALE CBD DEVELOPMENT PLAN

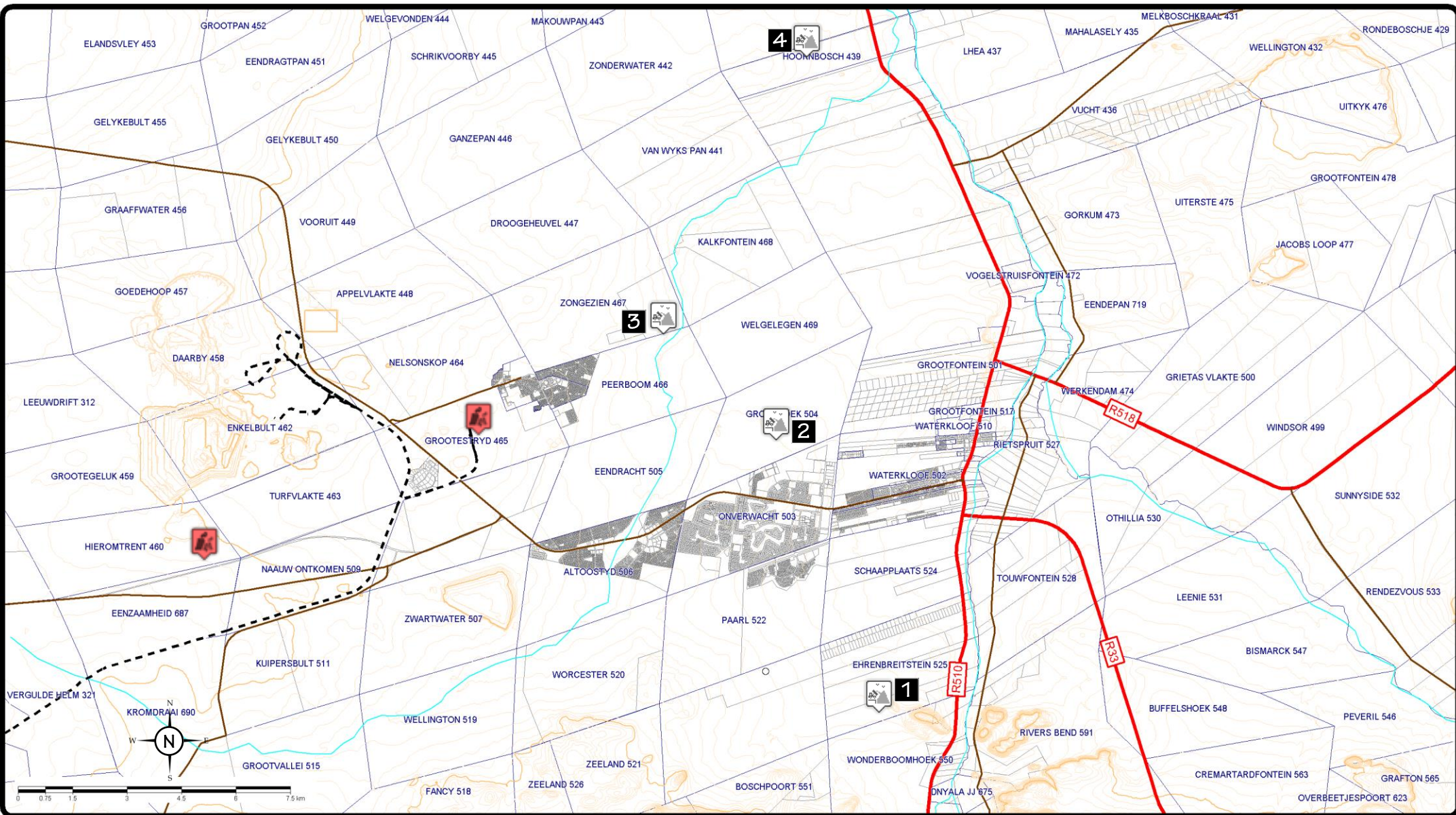
WATER SUPPLY

- Main Road
- Secondary Road
- Railway Line
- ✕ Airfield
- Contour
- River
- Reservoir
- ▲ Water Tower
- Pump Station



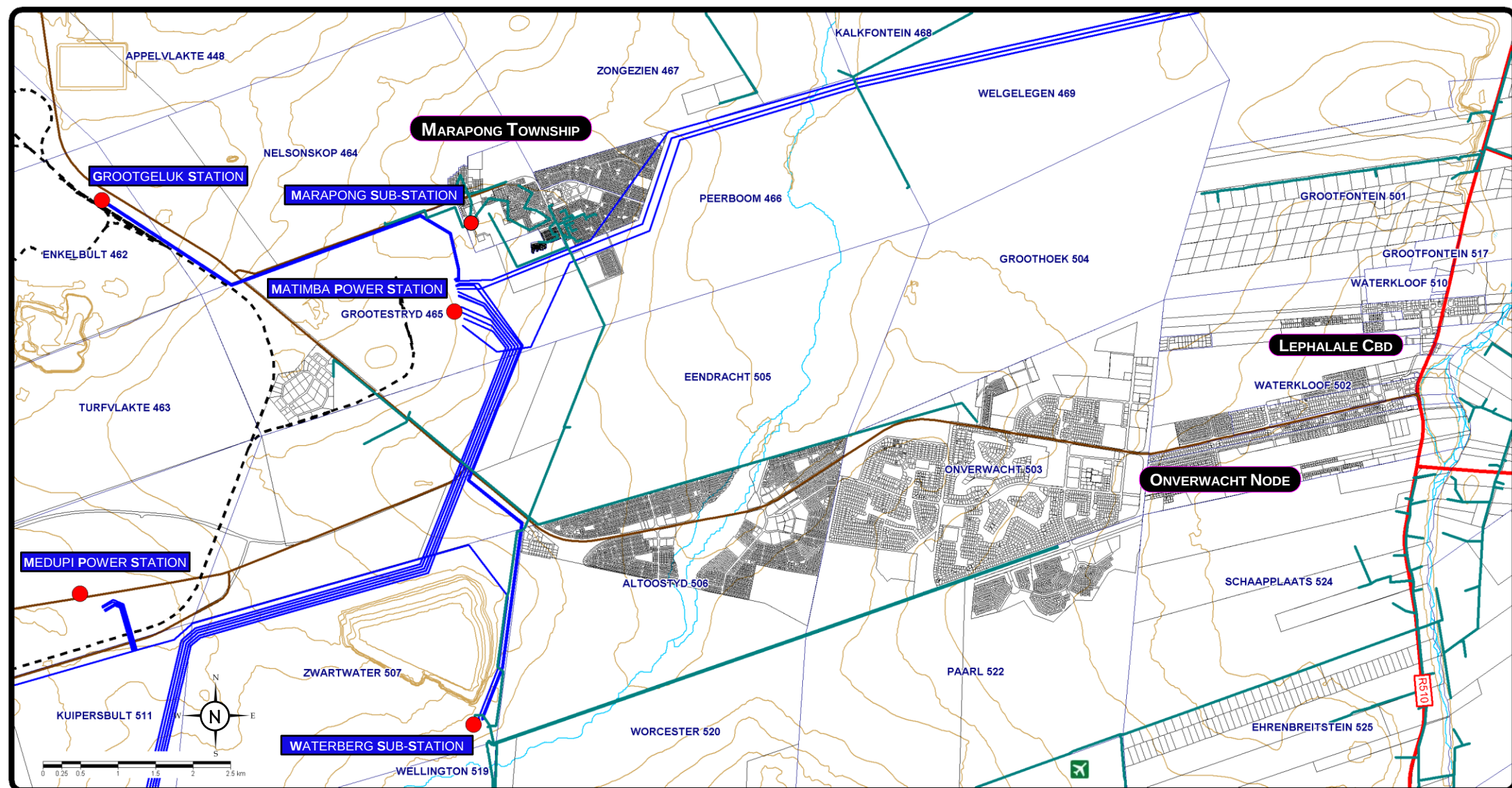
LEPHALALE CBD DEVELOPMENT PLAN SANITATION

- Main Road
- Secondary Road
- Railway Line
- Airfield
- Contour
- River
- Sewer Line
- Natural Final Flow
- Pump Stations
- WWTW
- Power Stations



LEPHALALE CBD DEVELOPMENT PLAN SOLID WASTE

- Main Road
- Secondary Road
- - - Railway Line
- ✈ Airfield
- Contours (5 – 100m)
- River
- ⚡ Power Station
- 🗑 Landfill Sites

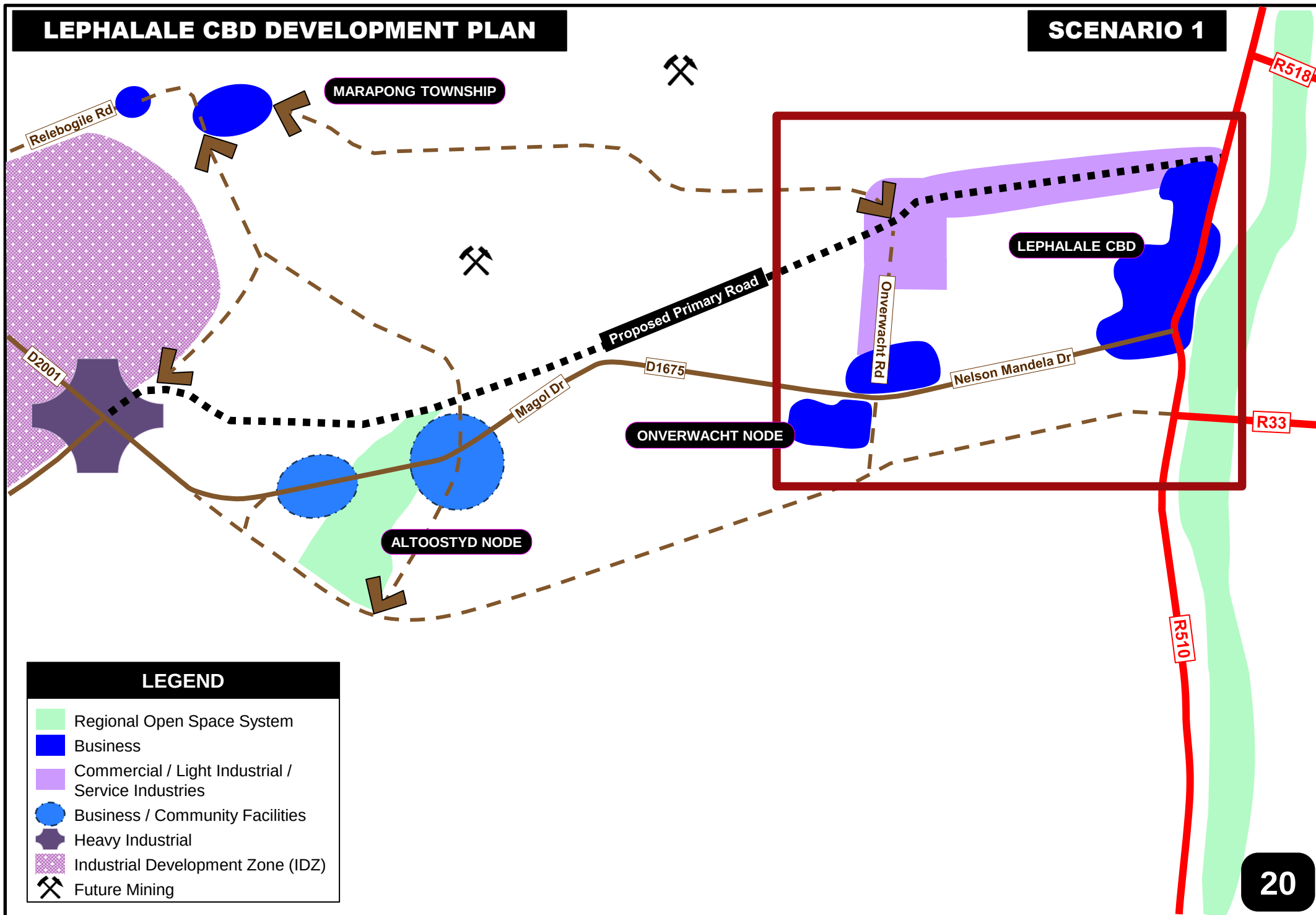


LEPHALALE CBD DEVELOPMENT PLAN ELECTRICITY

- Main Road
- Secondary Road
- - - Railway Line
- ✈ Airfield
- Contour
- River
- Contour (5-100m)
- River
- Bulk Supply Line
- Substation
- Distribution Line

LEPHALALE CBD DEVELOPMENT PLAN

SCENARIO 1

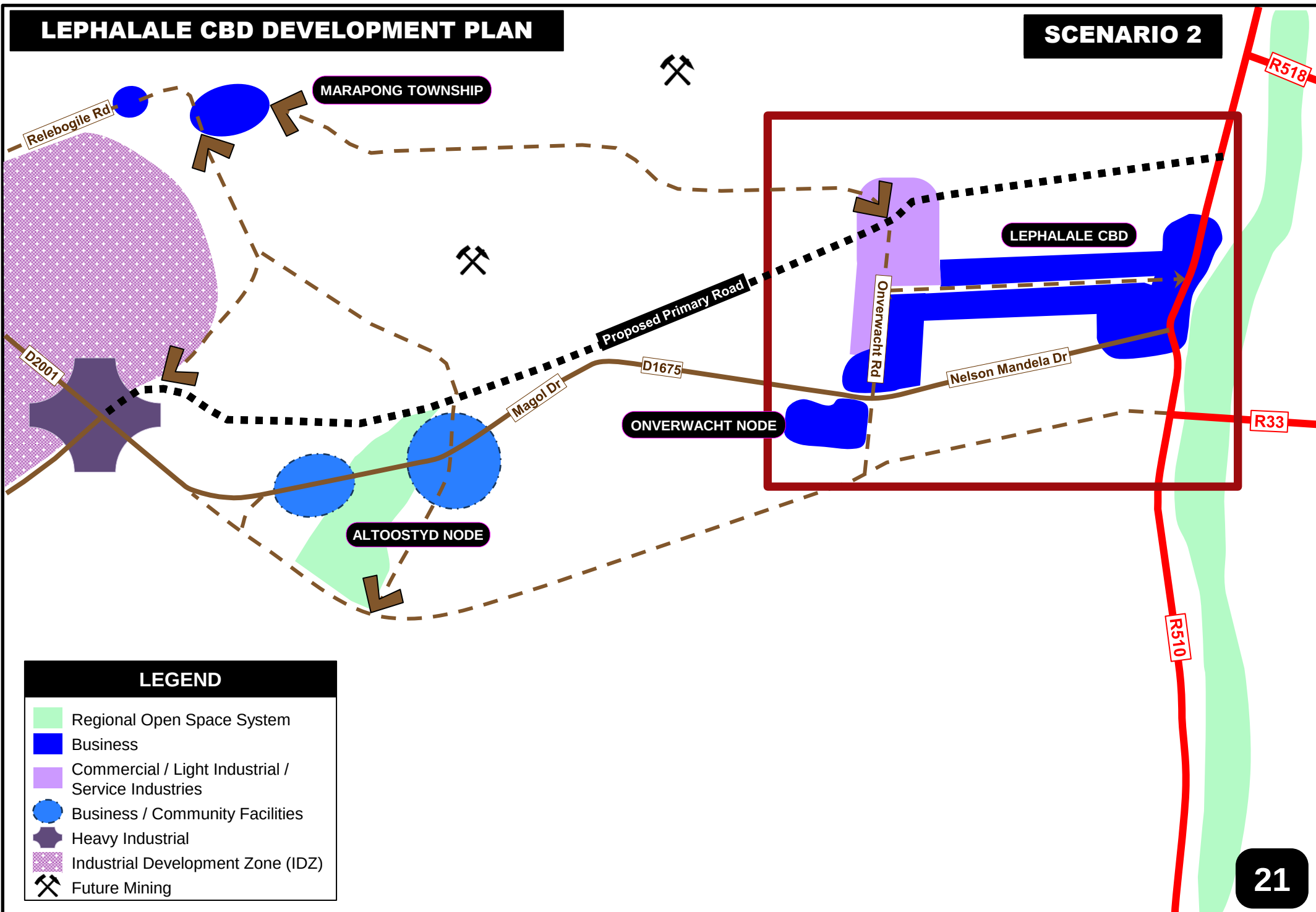


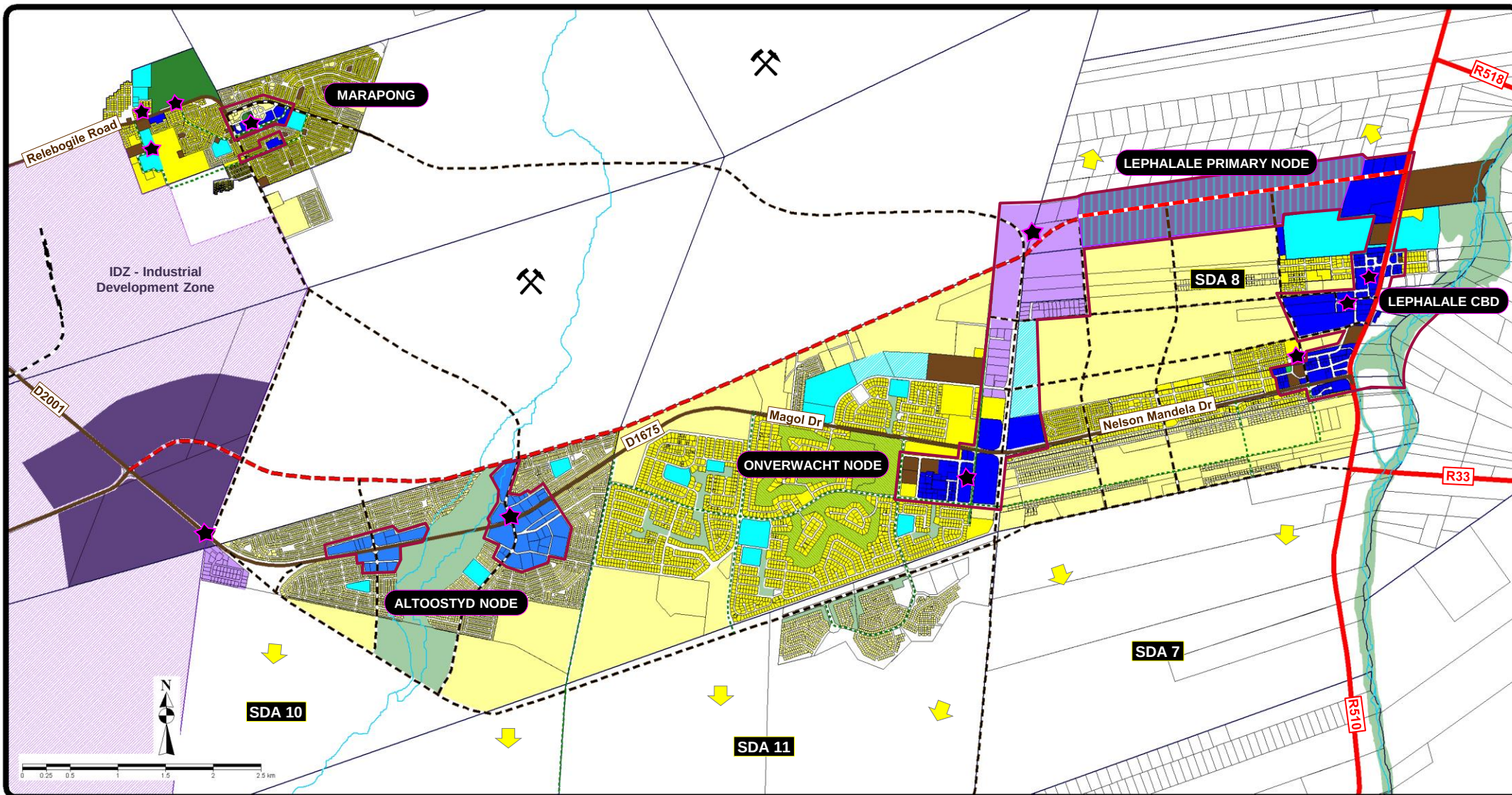
LEGEND

- Regional Open Space System
- Business
- Commercial / Light Industrial / Service Industries
- Business / Community Facilities
- Heavy Industrial
- Industrial Development Zone (IDZ)
- Future Mining

LEPHALALE CBD DEVELOPMENT PLAN

SCENARIO 2

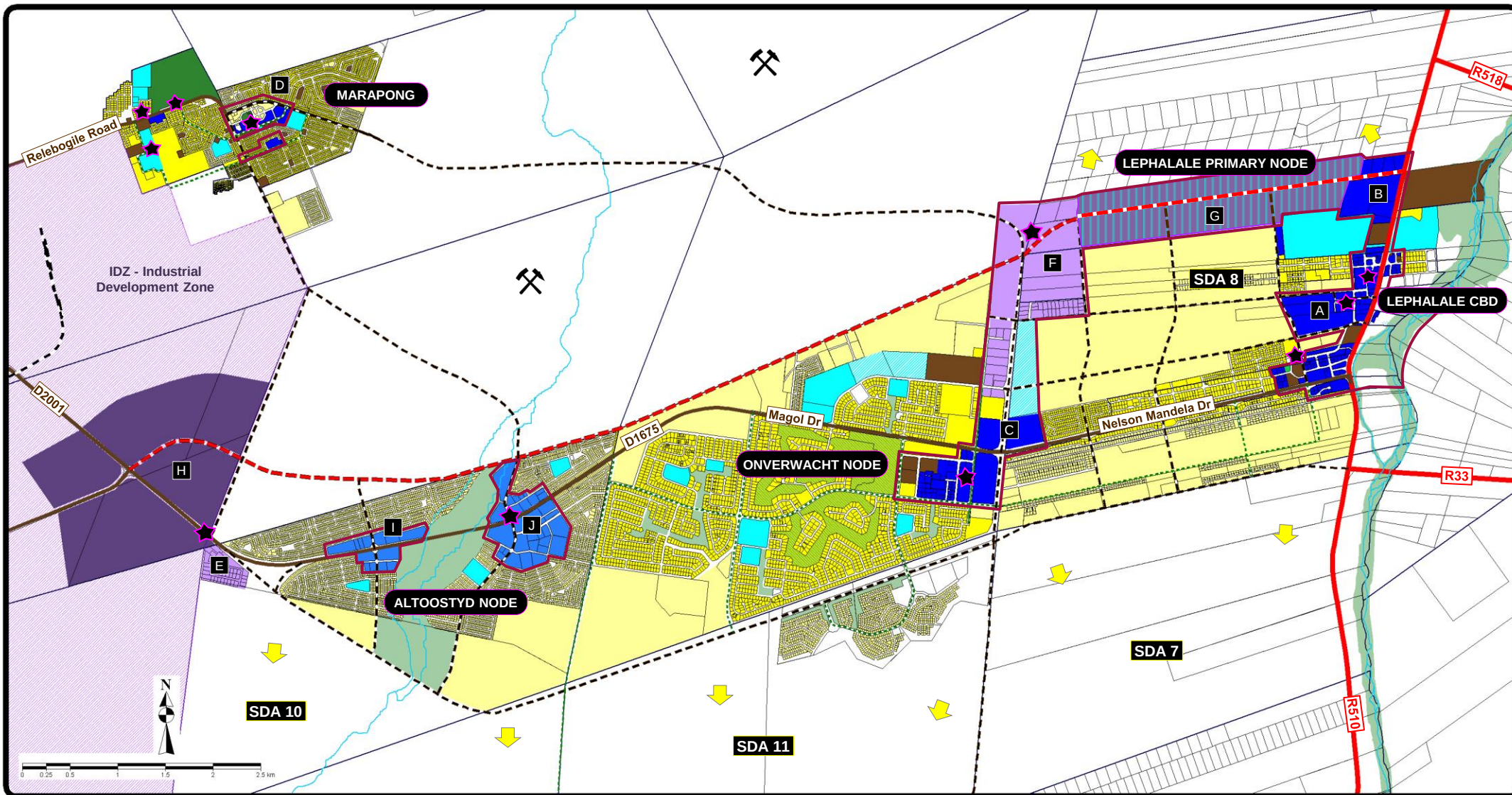




LEPHALALE CBD DEVELOPMENT FRAMEWORK

DEVELOPMENT FRAMEWORK

- | | | | |
|---|--|--|--|
| — Primary Road | Nodal Boundary | Regional Institutional and Training Facility | Commercial / Light Industrial / Service Industries |
| - - - Proposed Primary Road | Regional Open Space System | Community Facilities | Commercial / Service Industries / Business |
| — Secondary Road | Residential Infill I | ★ Public Transport | Heavy Industrial |
| - - - Proposed Secondary Road | ↘ Residential Expansion (Long Term) | Business | Industrial Development Zone (IDZ) |
| — Local Access Road | Church | Future Business / Community Facilities | ⚒ Mining |
| - - - Proposed Local Access Road | Education | | |



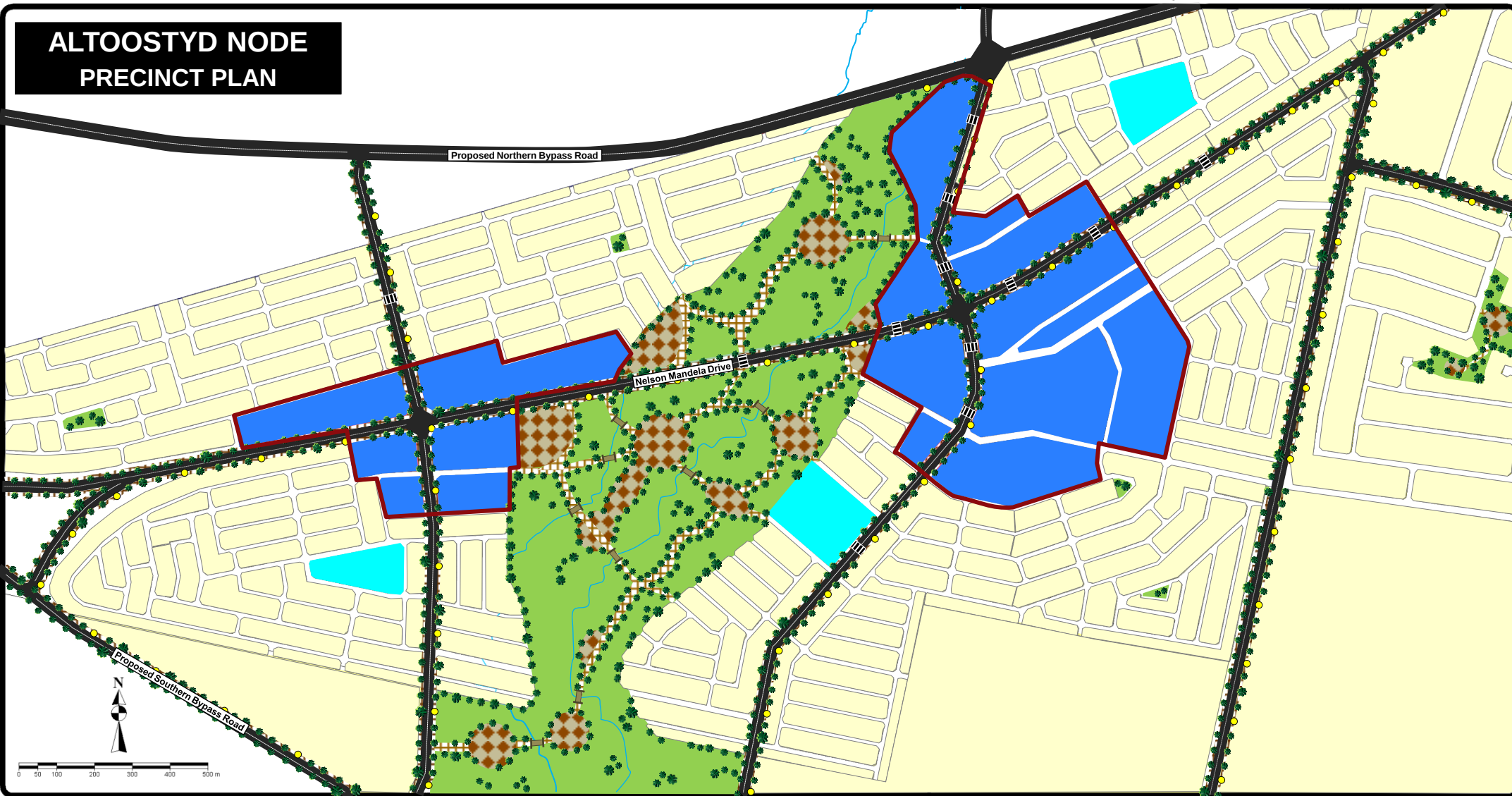
LEPHALALE CBD DEVELOPMENT FRAMEWORK

DEVELOPMENT FRAMEWORK

- Primary Road
- - - Proposed Primary Road
- Secondary Road
- - - Proposed Secondary Road
- Local Access Road
- - - Proposed Local Access Road
- Nodal Boundary
- Regional Open Space System
- Residential Infill I
- Residential Expansion (Long Term)
- Church
- Education
- Regional Institutional and Training Facility
- Community Facilities
- ★ Public Transport
- Business
- Future Business / Community Facilities
- Commercial / Light Industrial / Service Industries
- Commercial / Service Industries / Business
- Heavy Industrial
- Industrial Development Zone (IDZ)
- ⚒ Mining

Proposed Development per Area (ha)			
Retail / Office	Commercial / Light Industrial	Heavy Industrial	Business / Community Facilities
Lephalale CBD			
A - 21ha	E - 12ha		
B - 32ha	F - 95ha		
	G - 145ha		
Onverwacht Node			
C - 26ha			
Marapong			
D - 4ha			
Total 83ha	Total 252 ha	Total 303ha	Total 64ha

ALTOOSTYD NODE PRECINCT PLAN



LEPHALALE CBD DEVELOPMENT PLAN

- Nodal Boundary
- Single Residential Development
- Business / Community Facilities
- Regional Open Space System
- Educational
- Pedestrian Movement

MARAPONG TOWNSHIP PRECINCT PLAN



LEPHALALE CBD DEVELOPMENT PLAN

EXISTING

- Low Residential Development
- Medium Residential
- Hostel / Single Quarters
- Community Facilities
- Business
- Power Station
- Place of Worship
- Educational Facilities
- Public Transport
- Communal Vegetable Gardens
- Park
- Sport Facilities
- Reservoir

PROPOSED

- Infill Residential Development
- Medium Residential
- Community Facilities
- Business
- Park
- Sports Fields
- Informal Trading
- Pedestrian Walkway
- Traffic Circle
- Outdoor Art Feature
- Boulevard
- Civic/Public Square

FOCUS AREA &

Pedestrian Movement

Paved Pedestrian Walkways,
with Street Lighting



Public Seating with bollards



Tree Planting (Greenery) along
pedestrian walkways



Pedestrian Crossing



PURPOSE

- Connectivity and Convenience
- Safety
- Maximise Opportunities

TOOLS

- Provide Pedestrian Crossings at busy Intersections
- Provide Paved Pedestrian Walkways
- Provide Human-Scale Street lighting (1.37m)
- Provide Pedestrian short-cuts
- Provide Bollards/ Grade Separation along Busy Roads

MAIN CRITERIA

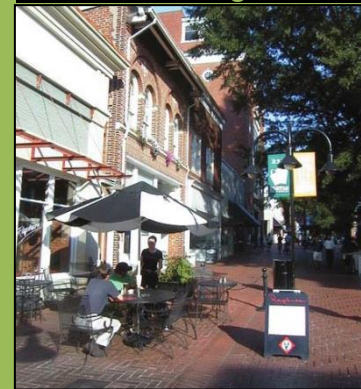
DIAGRAM 10

Streetscape

Active Street Frontages (Eye on the Street)



Outdoor Restaurant
Setting



Clean Public Environment



PURPOSE

- Variety
- Interesting/ Intriguing
- Safe for pedestrians

TOOLS

- Clean Public Environment
- 'Active' street frontages (eg, restaurants to have outside seating area)
- Visually and physically permeable 'edges' (eg use palisades instead of walls, bollards instead of fences)
- Increase densities and mix uses
- Provide retail activities at ground floor level

FOCUS AREA

&

Public Open Space

Public Open Space



Park Signage



Public Activity Square with Soft (grass/vegetation) and Hard Spaces



PURPOSE

- Social Interaction
- Well-located
- Flexible/ Robust
- User-friendly
- Safe
- Inviting
- Provide Hard (paved) & Soft (green) Public Open Spaces (paved surface)
- Provide relevant Street Furniture (seating, lighting, dustbins etc)
- Use Landscaping to indicate High Priority Roads, Public Open Spaces, etc.
- Provide Active (water fountain) and Passive Elements as Distinctive Features (statue) in Public Open Spaces
- Keep Clean and Well-Maintained

TOOLS

MAIN CRITERIA

DIAGRAM 11

Gateways and Place Making

Public Art Features



Street Signage



Community Facilities & Economic Surrounding Area - Signage



Tourism Signage



PURPOSE

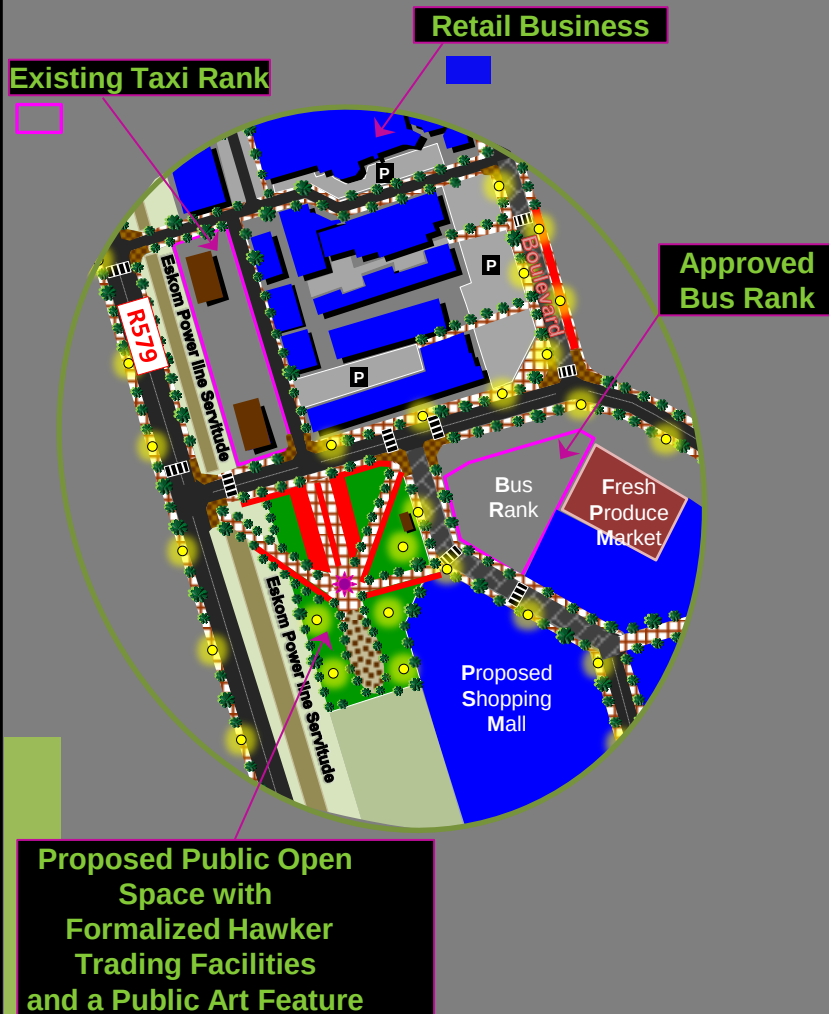
- Create Unique Identity
- Announce Entrances to Activity Nodes

TOOLS

- Provide landscaping at major intersections and entrances to activity nodes
- Erect signage to indicate activity nodes, major attractions and community facilities

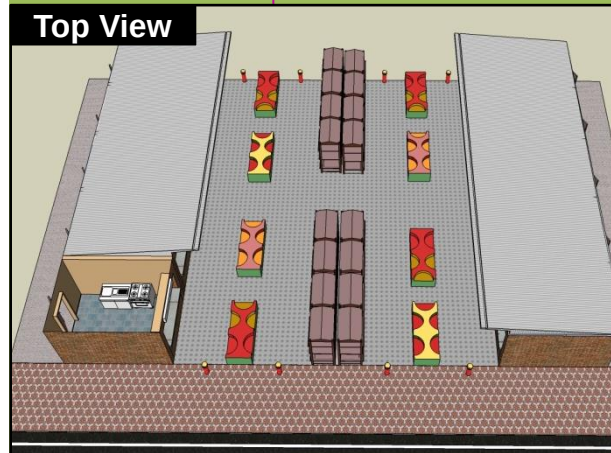
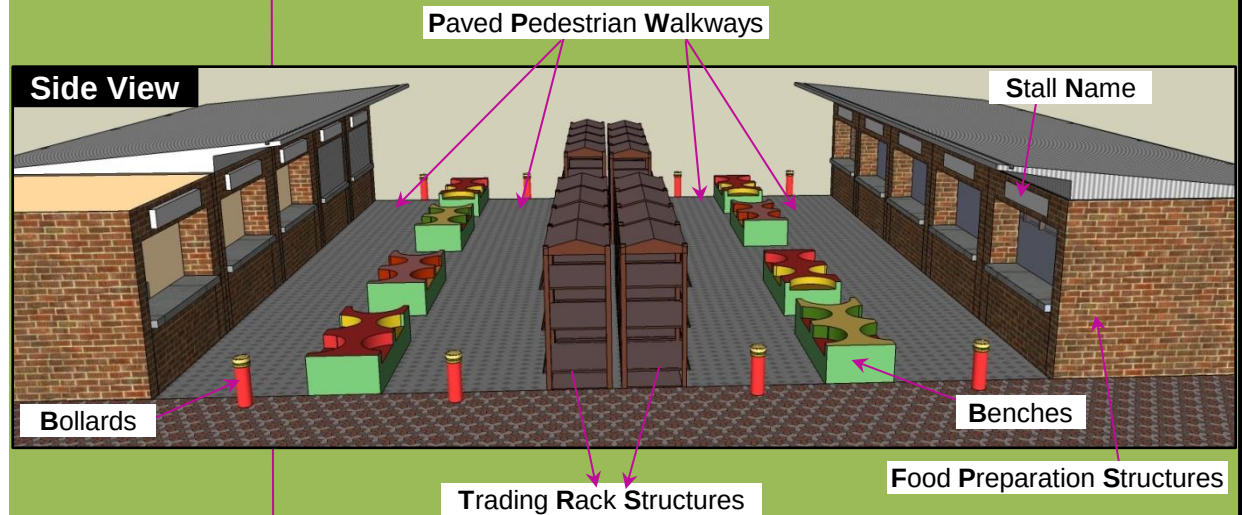
Public Transport,

Example of the Lebowakgomo Public Transport Facilities and Public Open Space



Public Open Space & Informal Trading

DIAGRAM 12



Examples of Formalized

DIAGRAM 13

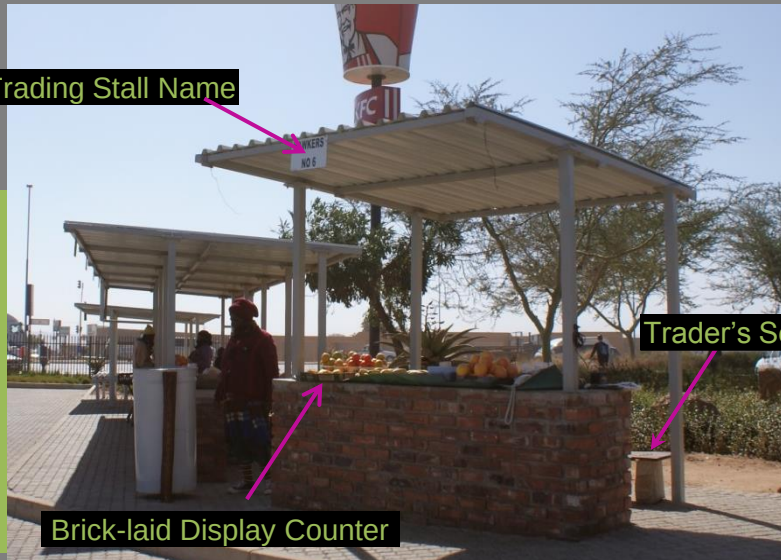
POLOKWANE - MANKWENG

Corrugated Iron Roof



Waste Disposal Container

Trading Stall Name



Trader's Seat

Brick-laid Display Counter

Informal Trading Structures

BRONKHORSRUIT CBD

Corrugated Iron Roof



Pedestrian walkway along main road

These linear and narrow trading structures are provided along a pedestrian walkway, and between popular retailers, being the Spar and Shoprite. The design of these structures has limited space on top of the racks and can only enable traders to trade in small quantity goods, such as fruits, vegetables and snacks.

The trading structures are low-cost to construct and maintain, and they are also considered as temporary trading structures as they can in future be removed and placed elsewhere.



Display Racks

Examples of Formalized

DIAGRAM 14

POLOKWANE - MANKWENG

Formalised Hawker Structures on either side



Every Unit has been provided with water and electricity services.

Pedestrian Walkway

These formal hawkers structures are situated between a taxi rank and the Mankweng Hospital. They are furthermore, positioned along a pedestrian desire lines, which makes the space easily accessible and effectively utilized.

Lock-Up Facilities for Over-Night Storage.

Formal Hawker Structures used for multi-purposes, eg: Food Preparations, Spaza Shops.



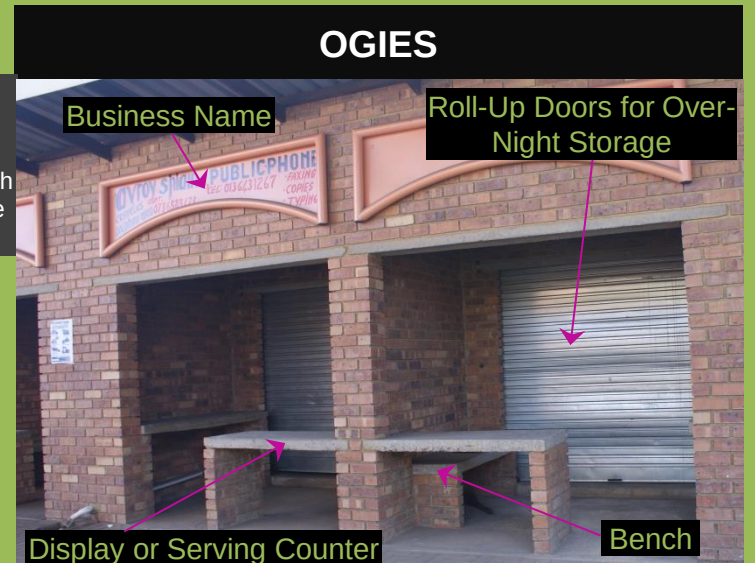
Those utilizing the structures for food preparations, have sufficient space to accommodate seating area in front of their businesses.

Informal Trading Structures

OGIES

Business Name

Roll-Up Doors for Over-Night Storage



Display or Serving Counter

Bench

Public Open Space

These Food Preparation Structures are constructed in a linear form and enclose a public open space in the centre of the trading premises.



Pedestrian Walkway

Stove

Food Preparing Area/Serving Counter

Washing Basin



Provided within each of the structures is water and electricity services.