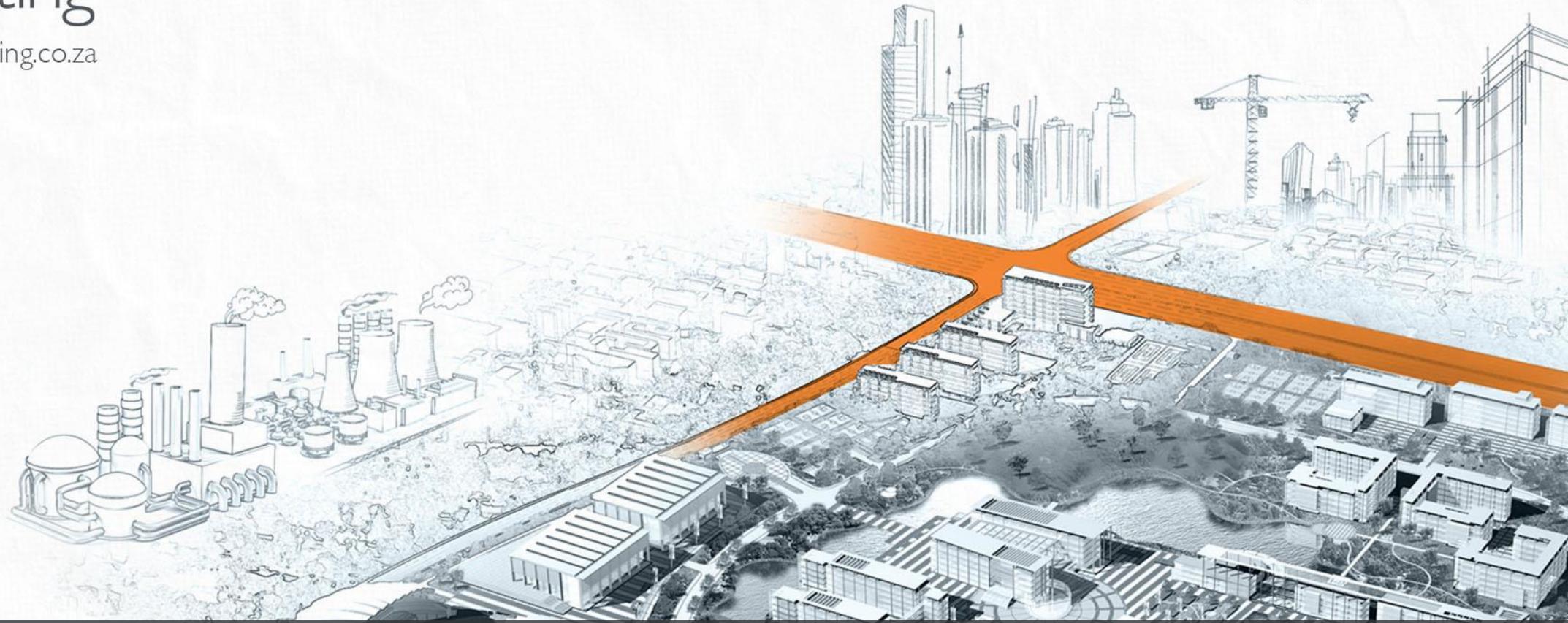


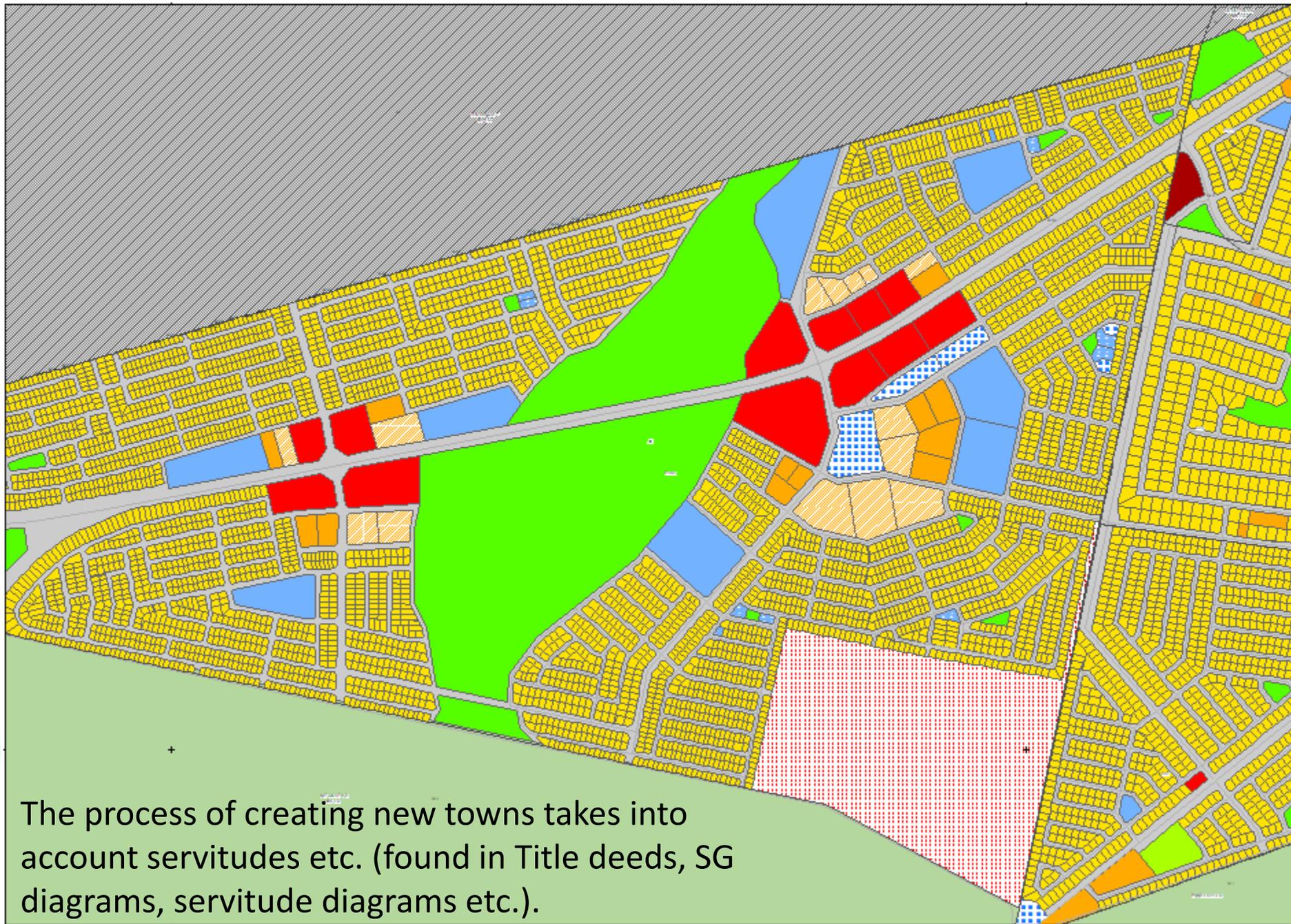


STRIVING TOWARDS SUSTAINABLE CITIES AND TOWNS

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The implications of SPLUMA on Municipalities and the impact thereof  
Werner Fourie



Scale 1:4 826 

-  Scheme boundary
-  Incremental management areas
-  Township / Parish/Farm
-  Major roads
-  Main roads
-  Other Roads
-  1 in 100 year Floodline

**DRAFT ZONINGS**

- Incremental Land Use Management Areas**
-  Agricultural Purposes
  -  Business Purposes
  -  Cemetery
  -  Community Purposes
  -  Industrial Purposes
  -  Government
  -  Open Space
  -  Residential Purposes
  -  Roads
  -  Educational Purposes
  -  Amusement Purposes
  -  Commercial
- General Land Use Management Areas**
- ZONINGS OUTSTANDING
-  Agricultural
  -  Business 1
  -  Business 2
  -  Business 3
  -  Business 4
  -  Commercial
  -  Educational
  -  Government
  -  Industrial 1
  -  Industrial 2
  -  Industrial 3
  -  Institutional
  -  Mining
  -  Municipal
  -  Protected areas
  -  Private Open Space
  -  Public Open Space
  -  Residential 1
  -  Residential 2
  -  Residential 3
  -  Residential 4
  -  Special
  -  Transport
  -  Undetermined

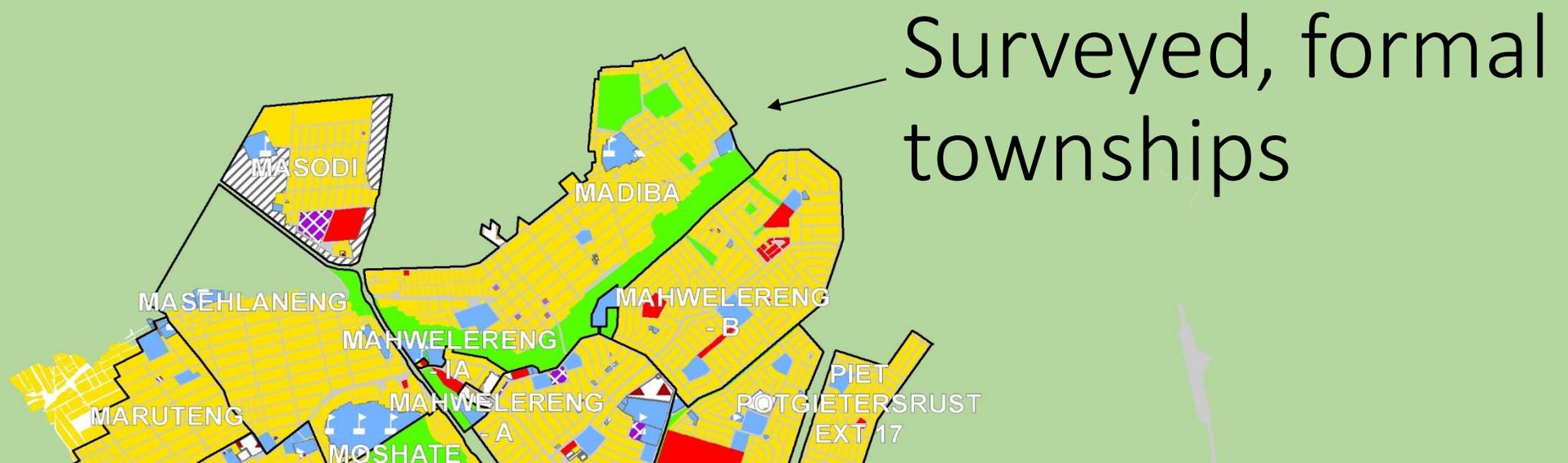
This zoning map is a component of the Lephale Local Municipality Land Use Scheme By-Law, promulgated as such in the Limpopo Government Gazette, note no. XXXXX



The process of creating new towns takes into account servitudes etc. (found in Title deeds, SG diagrams, servitude diagrams etc.).

# The problem

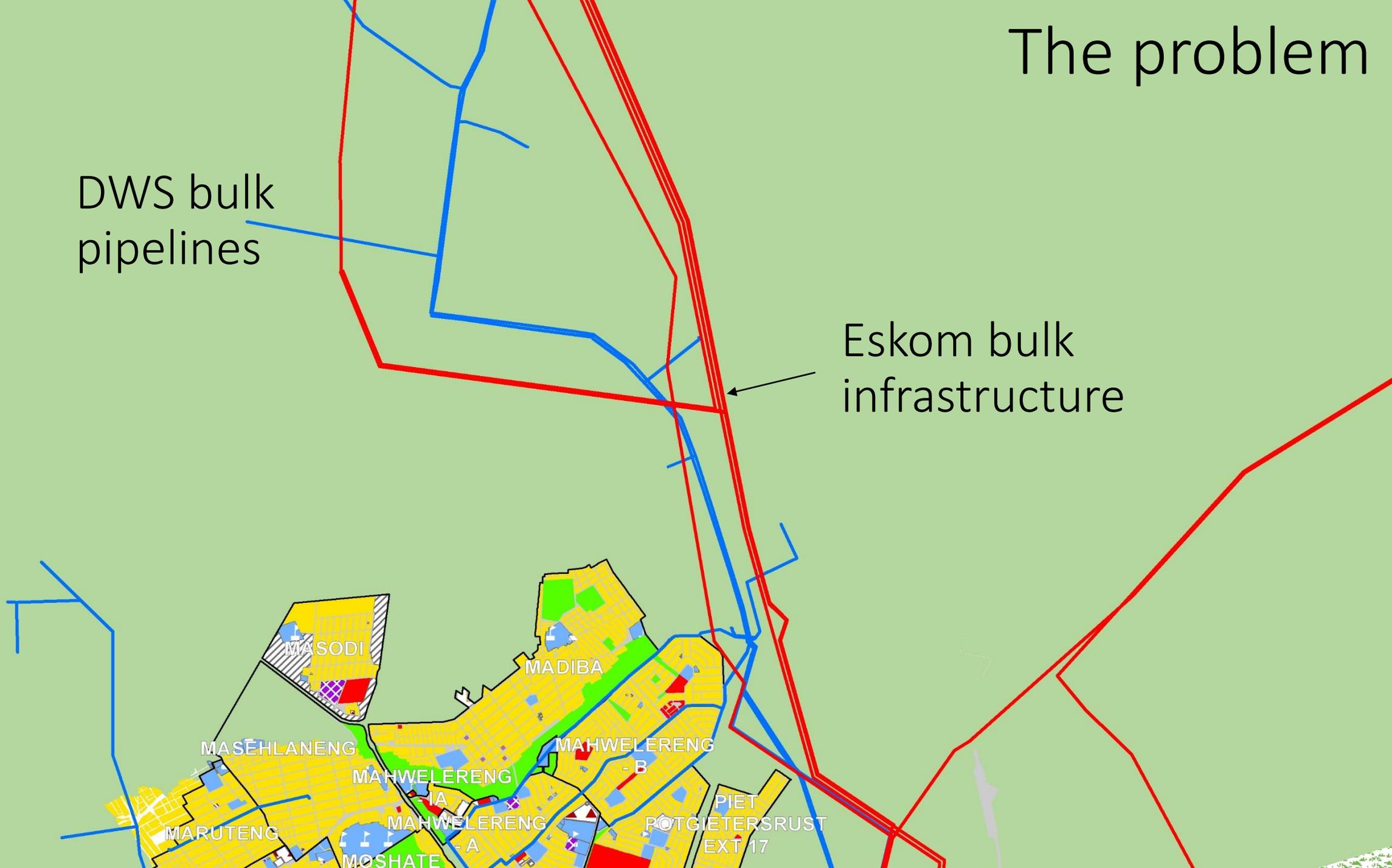
Rural space



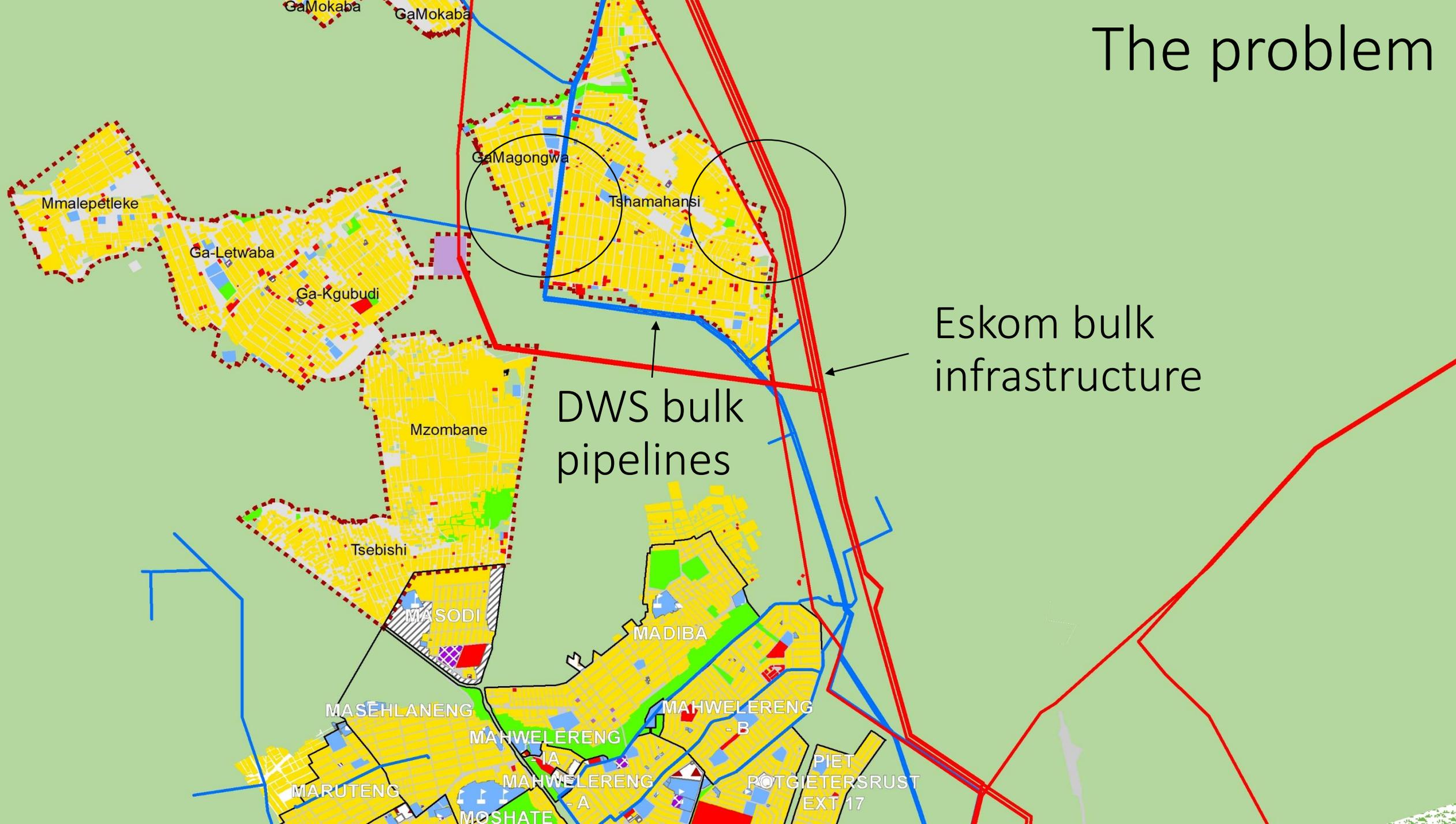
# The problem

DWS bulk pipelines

Eskom bulk infrastructure



# The problem



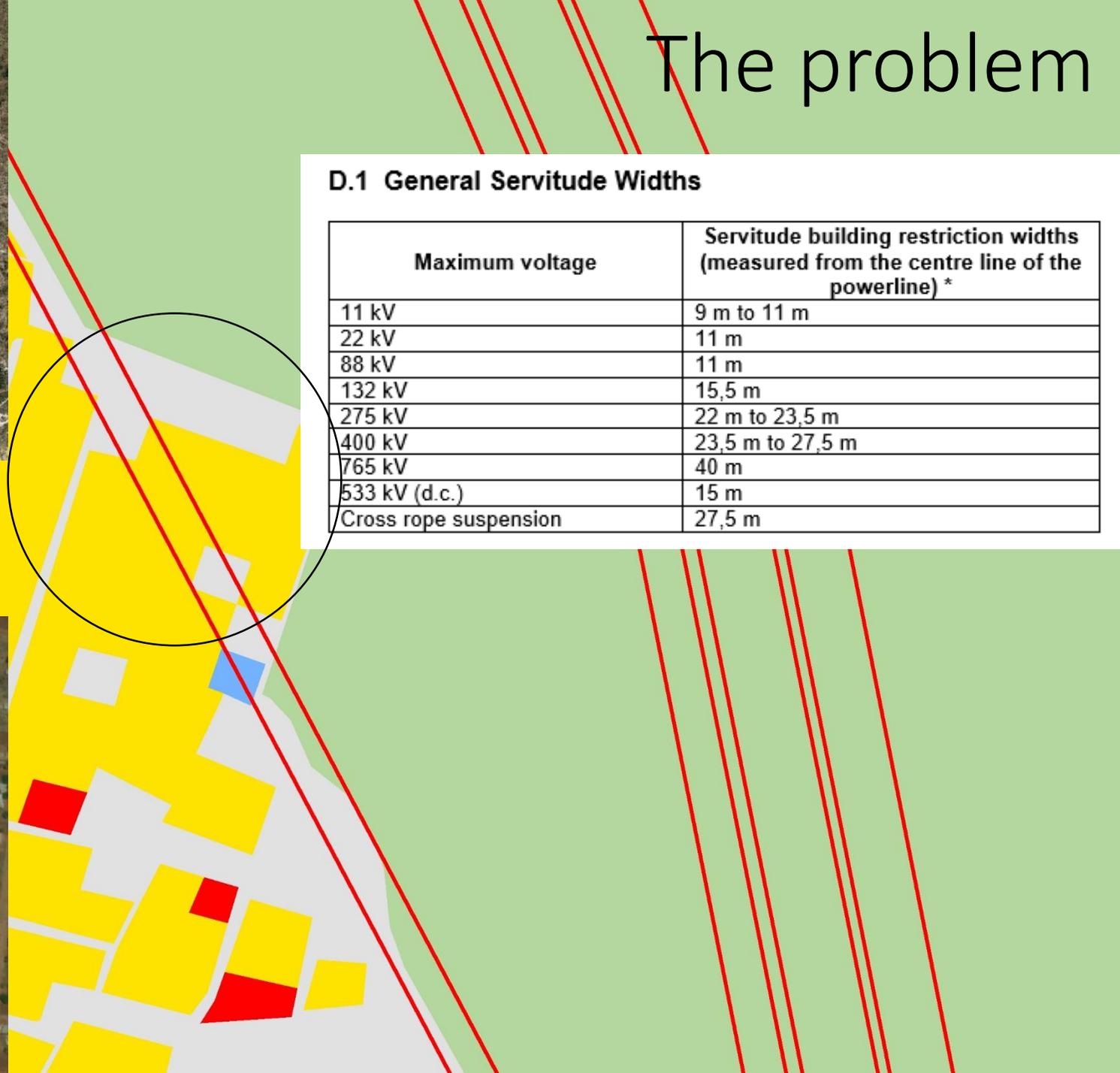
Eskom bulk infrastructure

DWS bulk pipelines

# The problem

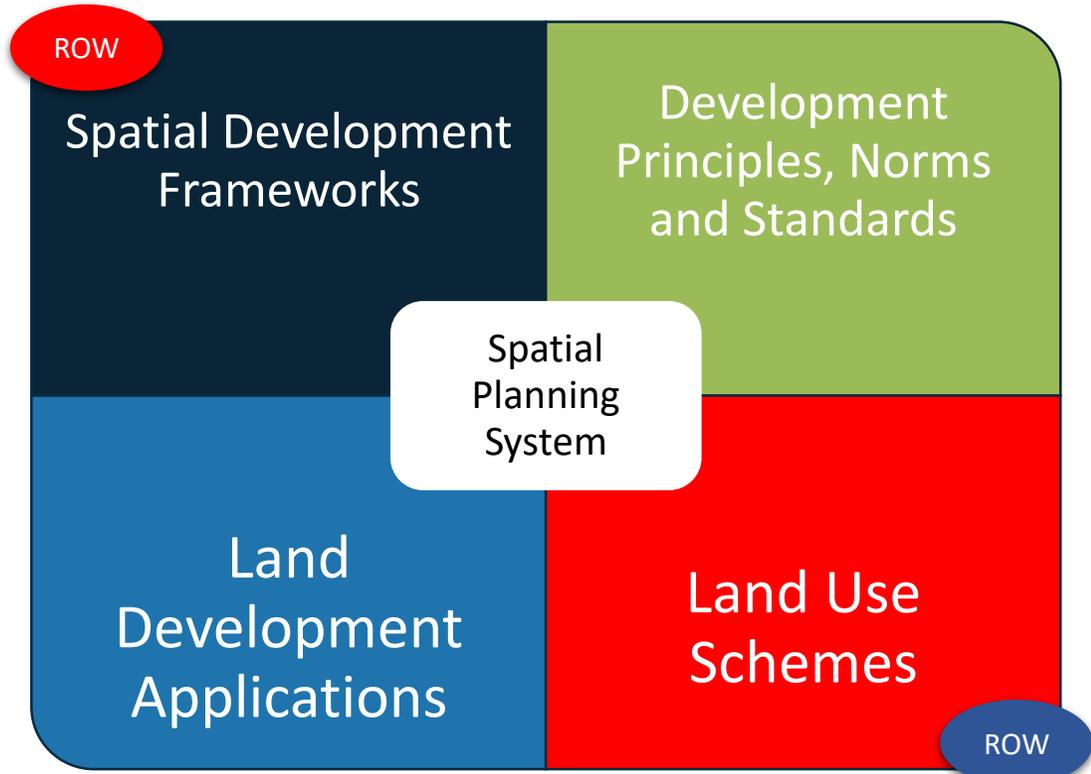
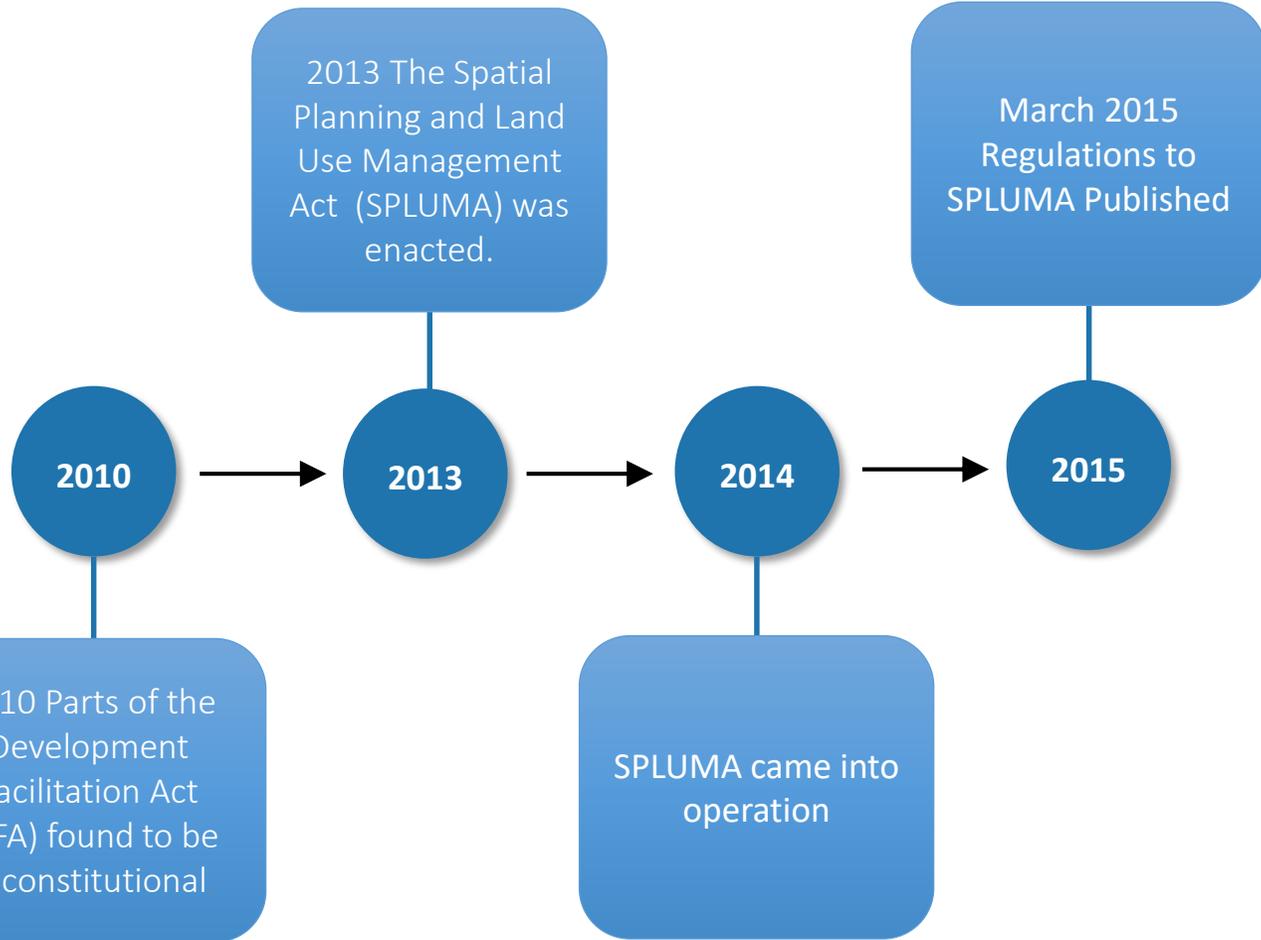
## D.1 General Servitude Widths

Maximum voltage	Servitude building restriction widths (measured from the centre line of the powerline) *
11 kV	9 m to 11 m
22 kV	11 m
88 kV	11 m
132 kV	15,5 m
275 kV	22 m to 23,5 m
400 kV	23,5 m to 27,5 m
765 kV	40 m
533 kV (d.c.)	15 m
Cross rope suspension	27,5 m



Source: ERM, Digital Globe, Google, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Source: ERM, Digital Globe, Google, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



BY MARCH 2020!!!!

## THE NOW

### LAND USE SCHEMES

Planning that seeks to manage the **legality of existing** land uses and buildings through tools such as land use schemes or zoning codes (also referred to as town planning schemes, zoning schemes). **Right of way, servitudes ?**

## FUTURE

### SPATIAL DEVELOPMENT FRAMEWORK

Planning that tends to look much more into the future, to the future shape of cities and towns and to what is necessary to achieve this future.

**“PROTECTING” SERVITUDES AND  
R.O.W. THROUGH THE  
MUNICIPAL LAND USE SCHEME**

# DEALING WITH THE “NOW”

- A land use scheme is a **planning tool** that **allows OR restricts** certain types of **land uses** to certain **geographic areas**. Typically one can find a spatial depiction of these geographic areas (typically called “zones “or “zonings”) as well as document (often called “scheme regulations”) that sets out all procedures and conditions associated with the use of land in any of these zones. There may also be procedures and conditions applicable to the use of land in ANY zone.

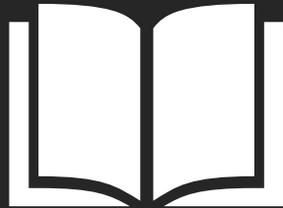


## SPLUMA on LAND USE SCHEMES

- A municipality **must**, after **public consultation**, adopt and approve a single land use scheme for its **entire area** within five years from the commencement of this Act (by March 2020)
- Such land use scheme **must** include provisions that permit the incremental introduction of land use management and regulation **in areas under traditional leadership**, rural areas ... etc.
- An adopted and approved land use scheme **has the force of law**
- Land **may be used only** for the purposes permitted by a **land use scheme**;

# Key components of a land use scheme

## SCHEME REGULATIONS



Setting out the procedures and conditions relating to the use and development of land in any zone

## MAP



indicating the zoning of the municipal area into land use zones

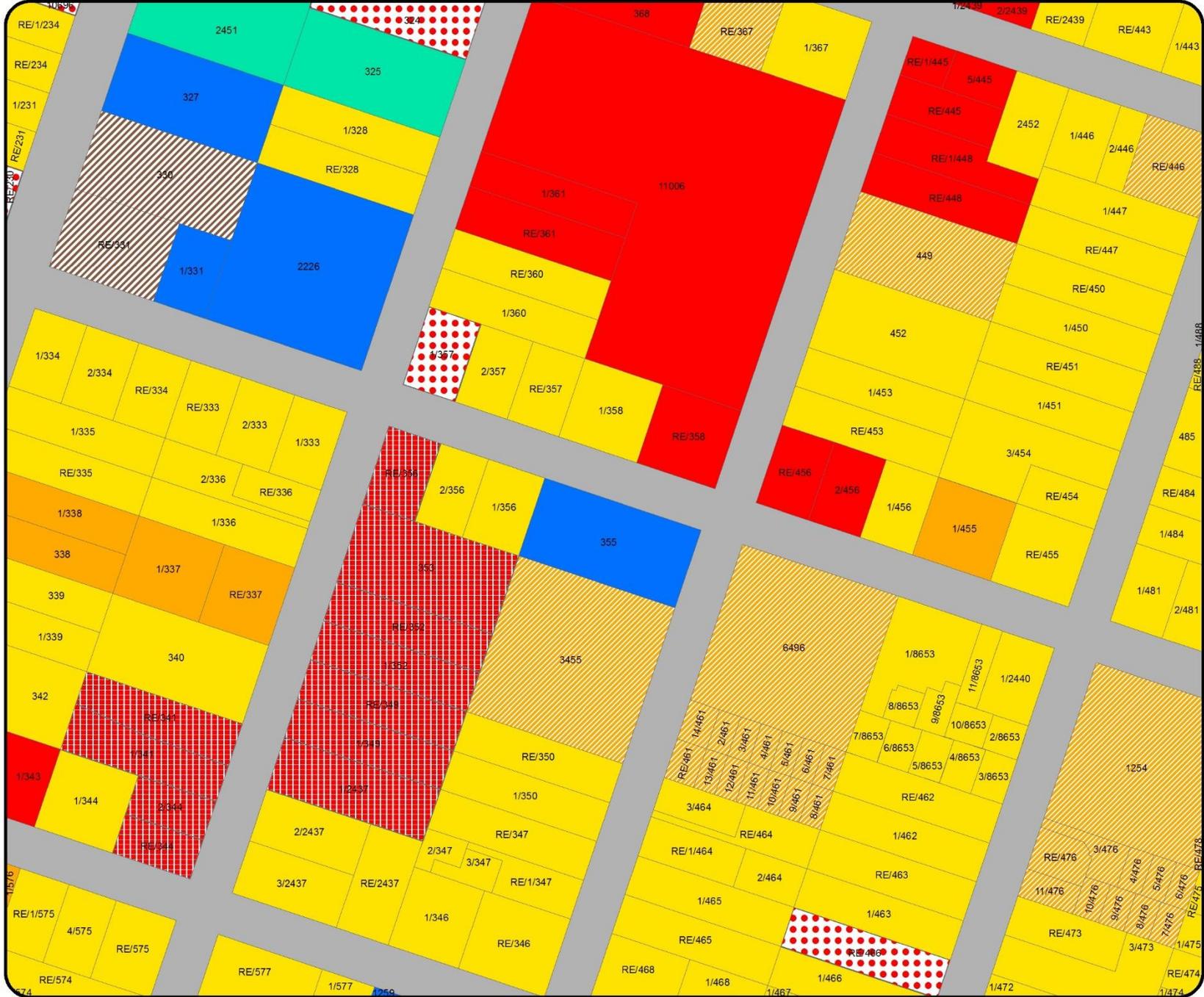
## REGISTER OF AMENDMENTS



A register of all amendments to such land use scheme.

ZONING MAPS

- N.B – the “Map” can (and should also include R.O.W).
- Typically quite difficult to source and map (unless obtained from custodian e.g. Eskom)



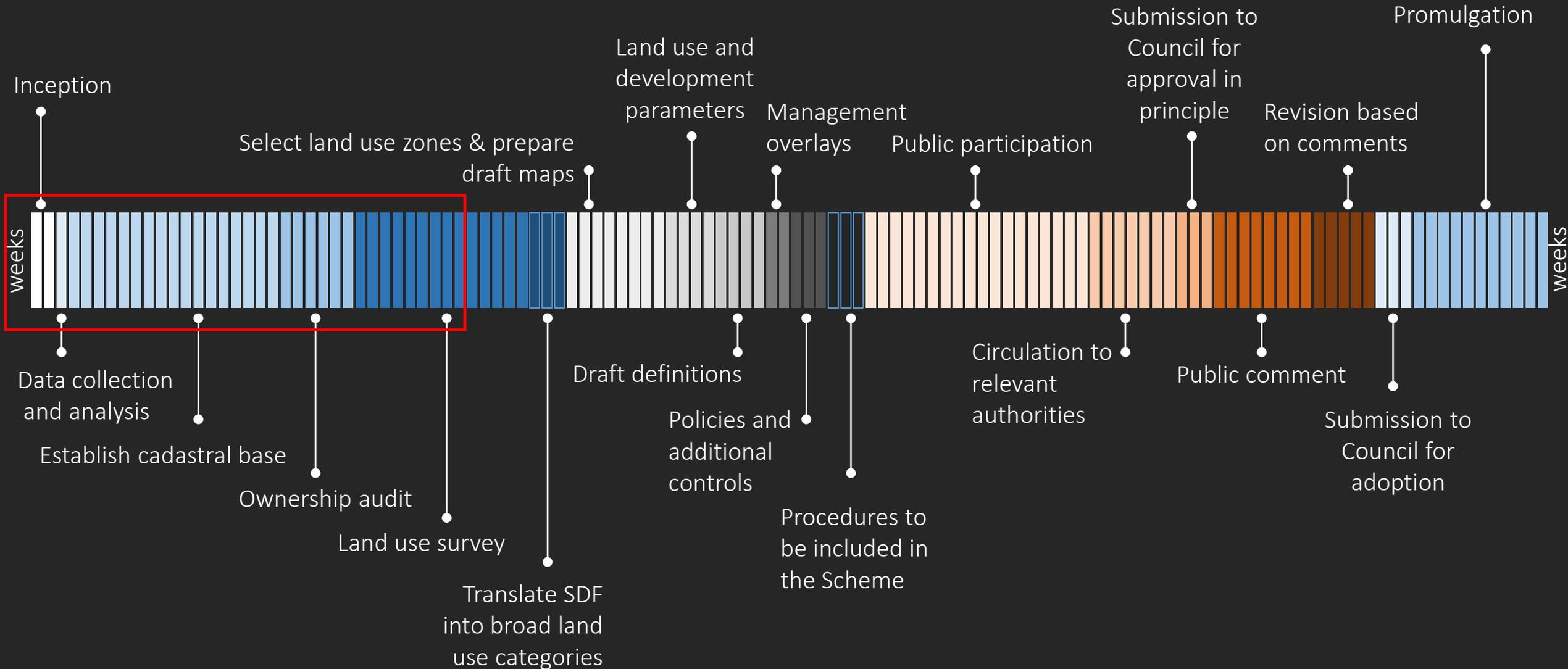
**Legend**

- Municipal Boundary
- Village Boundaries
- Existing Zoning**
- ZONING REQUIRED
- AGRICULTURE
- AMUSEMENT
- BUSINESS 1
- BUSINESS 2
- BUSINESS 3
- BUSINESS 4
- CEMETERIES
- EDUCATIONAL
- EXISTING PUBLIC ROAD
- GOVERNMENT
- INDUSTRIAL 1
- INDUSTRIAL 2
- INDUSTRIAL 3
- INSTITUTIONAL
- MUNICIPAL
- PARKING
- PRIVATE OPEN SPACE
- PUBLIC OPEN SPACE
- PROTECTED AREAS
- PUBLIC GARAGE
- RESIDENTIAL 1
- RESIDENTIAL 2
- RESIDENTIAL 3
- RESIDENTIAL 4
- S.A.R.
- SPECIAL
- UNDETERMINED



Use zone	Notation on map	TABLE "A"				TABLE "B" Parking spaces	TABLE "C"										
		Uses permitted (Primary Right)	Uses/rights permitted only with the special consent of the local municipality (Clause 21)	Uses/rights permitted only with the written consent of the local municipality (Clause 22)	Uses/rights not permitted		Density/number of dwelling units per erf, property or per netto ha			Maximum Height permitted as storey		Maximum coverage permitted as % of erf		Maximum F.A.R.			
							Primary right	Relaxation in terms of Clause 22	Relaxation in terms of Clause 21	Primary right	Relaxation in terms of Clause 22	Primary right	Relaxation in terms of Clause 22	Primary right	Relaxation in terms of Clause 21		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
1 Residential 1		Single Family Residence			Uses not under Columns 3,4 & 5.		1 detached d.u./erf	2 detached d.u./erf	30 detached or semi-det d.u./ha	2	3	50%	70%	1,0	1,2		
			Guest House			1 dust free per bedroom											
			Tea garden			Schedule 4.	6 per 100m <sup>2</sup> GLFA										
			Institution				8 per 100m <sup>2</sup> GLFA										
			Place of instruction				4 per 100m <sup>2</sup> GLFA and an additional drop-off zone as required by the municipality										
			Place of public worship				8 per 100m <sup>2</sup> GLFA										
			Tavern				3 per tavern										
							Service enterprise	4 per service enterprise									
							Household enterprise	3 per household enterprise									
				Crèche	2 per crèche and an additional drop-off zone as required by the municipality												
				Spaza/Kiosk	2 per spaza/kiosk												
				Special use	In accordance with the local municipality's policy												
2 Residential 2		Single Family Residence			Uses not under Columns 3,4 & 5.		31 detached or semi-det d.u./ha	-	44 detached or semi-det d.u./ha	2	3	60%	70%	1,2	1,4		
					Residential building	Schedule 4	1 dust free per bedroom	46 rms/ha		66 rms/ha							
			Conference facility				8 per 100m <sup>2</sup> GLFA										
							Service enterprise	4 per service enterprise									
							Household enterprise	3 per household enterprise									
			Institution				8 per 100m <sup>2</sup> GLFA										
			Place of instruction				4 per 100m <sup>2</sup> GLFA and an additional drop-off zone as required by the municipality										
							Creche	2 per crèche and an additional drop-off zone as required by the municipality									
			Place of public worship				8 per 100m <sup>2</sup> GLFA										
							Guest house	1 dust free per bedroom									
			Retirement village					1 dust free per dwelling unit									
			Tavern					3 per tavern									
				Spaza/kiosk	2 per spaza/kiosk												
				Special use	In accordance with the local municipality's policy												

# Preparing and administering a scheme



122 Weeks (2 Years 3 months)

# Towards a SPLUMA compliant land use scheme

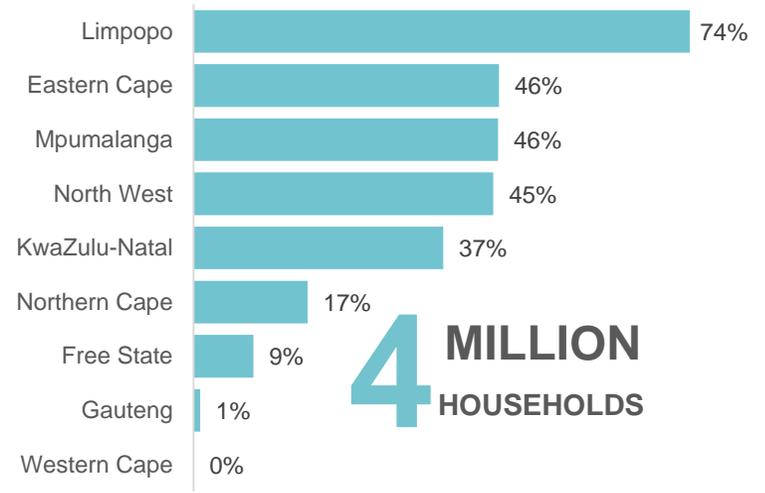
## SPLUMA Requirements

Elements required by SPLUMA that can typically be found in South African Schemes today	Elements required by SPLUMA that are new to South African Land Use Schemes
Appropriate categories of land use zoning and regulations.	One land use scheme for the entire municipal area.
Take cognisance of any environmental management instrument adopted by the relevant environmental management authority, and must comply with environmental legislation.	Include provisions that permit the incremental introduction of land use management and regulation in areas under traditional leadership, rural areas, informal settlements, slums and areas not previously subject to a land use Scheme.
Provisions relating to the use and development of land only with the written consent of the Municipality.	Include provisions to promote the inclusion of affordable housing in residential land development.
Scheme regulations setting out the procedures and conditions relating to the use and development of land in any zone.	Include land use and development incentives to promote the effective implementation of the spatial development framework and other development policies.
Map indicating the zoning of the municipal area into land use zones.	Include land use and development provisions specifically to promote the effective implementation of national and provincial policies.
A register of all amendments to such land use scheme.	Give effect to municipal spatial development frameworks and integrated development plans.
	Specific requirements regarding any special zones identified to address the development priorities of the municipality.

**88** munics are more than 50% TA

(based on no of households in traditional authority areas)

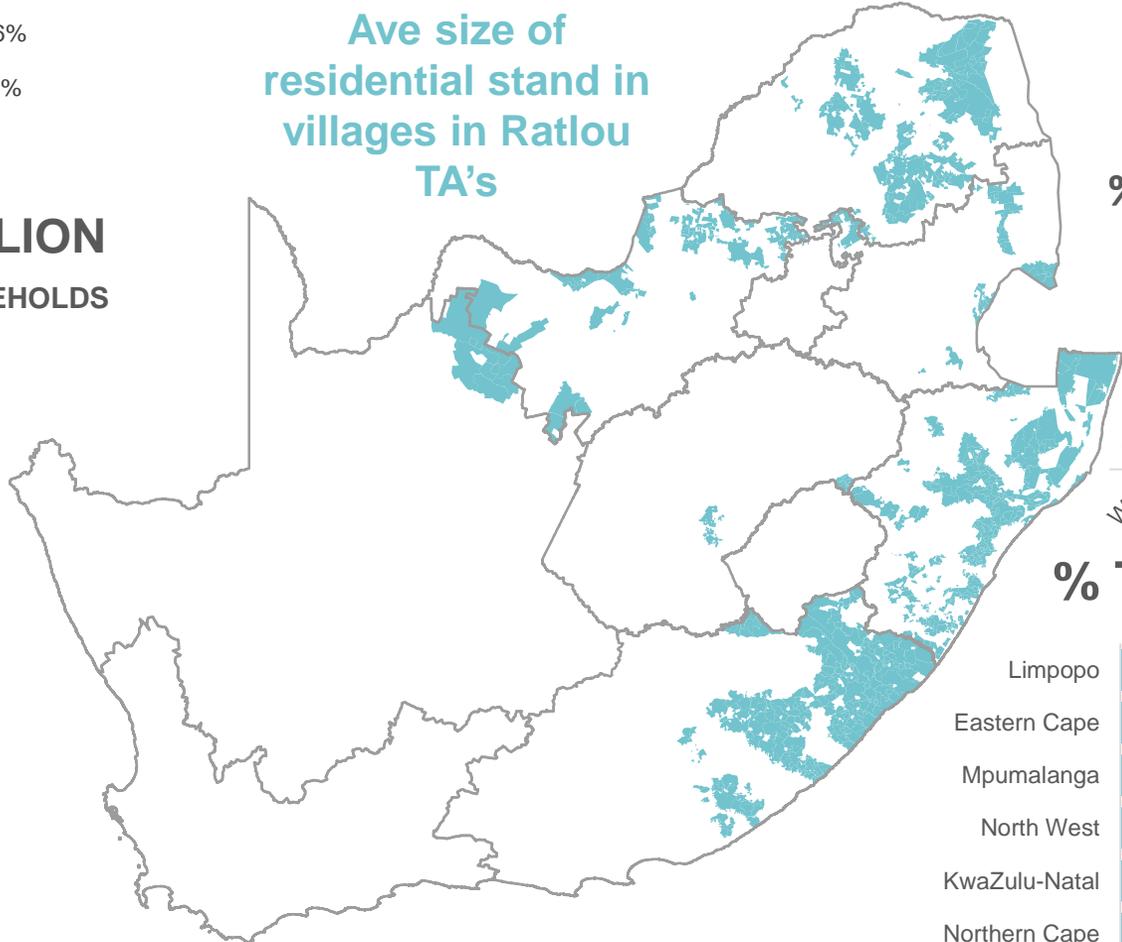
**% HOUSEHOLDS IN TA**



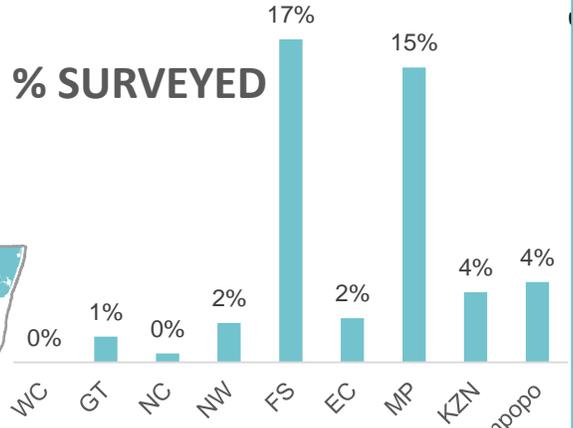
**4 MILLION** HOUSEHOLDS

**1600m<sup>2</sup>**

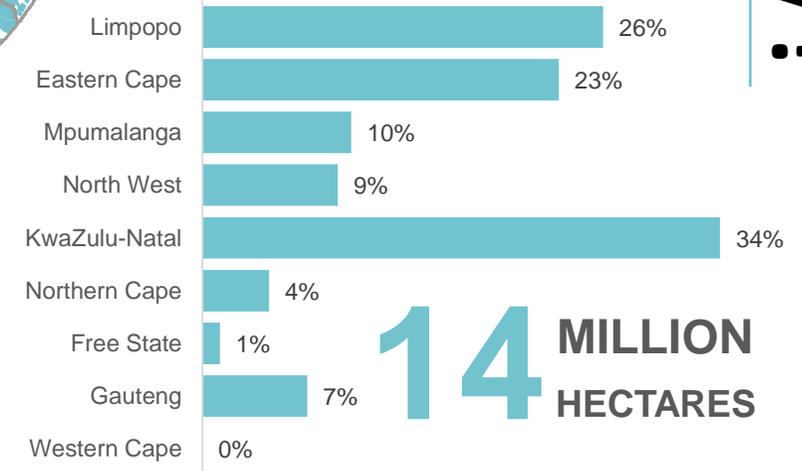
Ave size of residential stand in villages in Ratlou TA's



**% SURVEYED**



**% TRADITIONAL LAND**



**14 MILLION** HECTARES

**27%** Of all households in SA reside in traditional authority areas

**LANGUAGE**

IsiZulu **29%**  
IsiXhosa **20%**  
Sepedi **16%**

**5** municipalities have more than 20 TA,  
**21** municipalities more than 10

# Guidelines for land use schemes (RDLR)

## Land under traditional leadership

1

### Step 1. Start participation early

Purpose and benefit of a LUS, deal with questions about tenure emphasize the importance of partnership between Municipality and Traditional authority

2

### Step 2. It all starts with a land use map

The solution is to create a map based on the actual use of the land – whether it has been surveyed or not

3

### Step 3. Community participation – understanding land uses

Discuss each group of land uses, understand the land use and try and derive specific management characteristics. Derive development controls for land uses. Determine the growth direction of the village

4

### Step 4. Formulate Scheme Maps

Formulate **land use rules** and depict on scheme maps per village e.g:

- do not allocate residential or business land within the Public Open Space system;
- do not allocate land for tavern within a street block of community facilities;
- allocate land for business close to existing nodes in the area;
- Do not allocate land within a certain distance of infrastructure

# Guidelines for land use schemes (RDLR)

Land under traditional leadership

## Step 2. It all starts with a land use map



**Step 2.1.**  
Aerial photos  
or satellite  
imagery

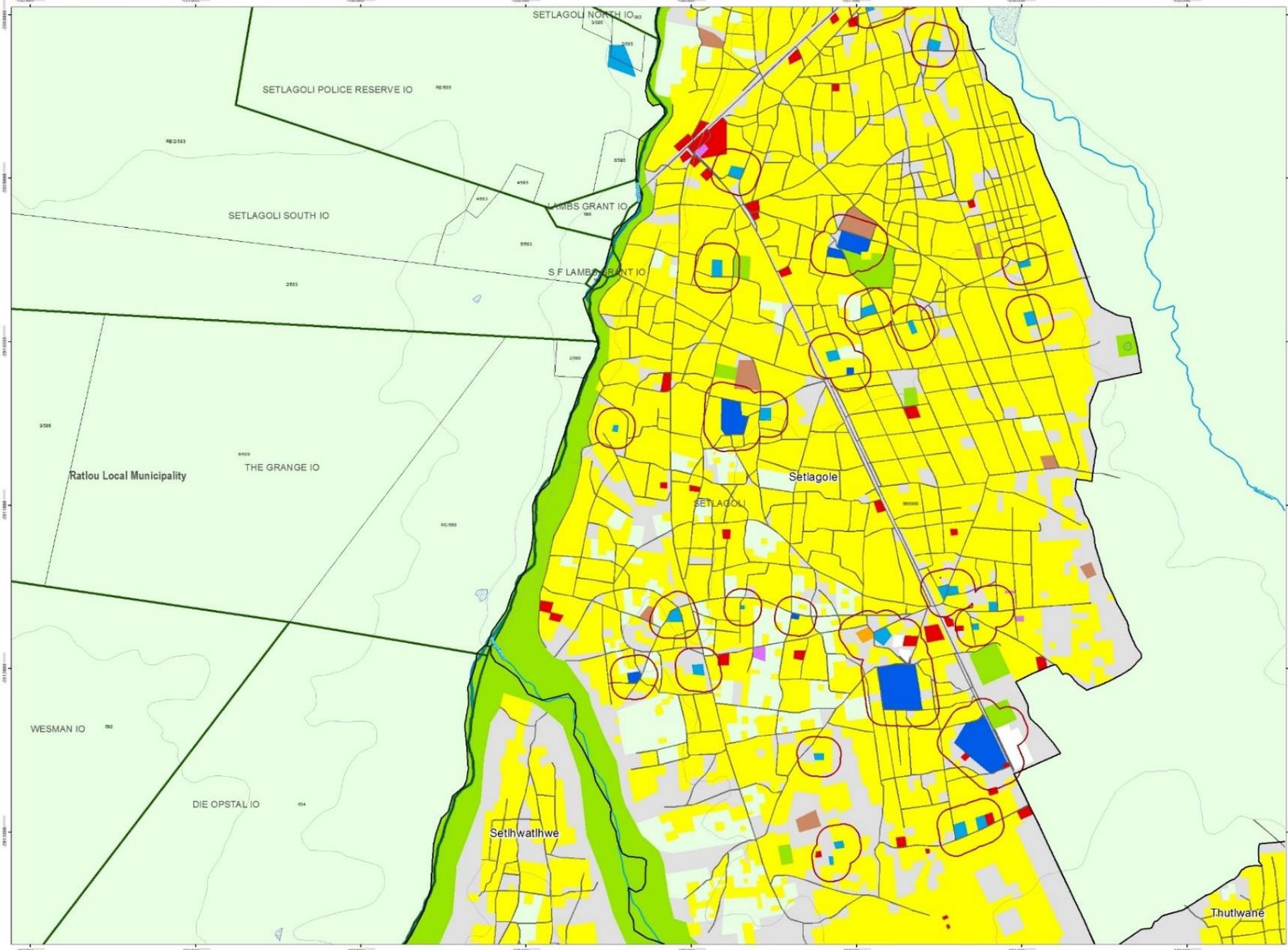
**Step 2.2.**  
Boundaries  
and names

**Step 2.3.**  
Incorporate  
linear data

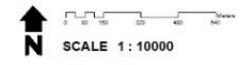
**Step 2.4.**  
Capture land  
uses

**Step 2.5. Deal  
with  
hydrology**

**Step 2.6.**  
Finalise land  
use map



**NOTE:**  
The position of all roads (both national and provincial roads) as well as railway lines outside proclaimed townships are approximate and not final.



- Boundaries**
- Land Use Scheme Boundary
  - Municipal Boundaries
  - Settlement Boundary
  - Parent Farm

- Land Use Zones**
- Agricultural Purposes
  - Commonage
  - Business Purposes
  - Community Purposes
  - Educational Purposes
  - Government Purposes
  - Industrial Purposes
  - Public Purposes
  - Residential Purposes
  - Institutional Purposes
  - Roads

- Controls**
- Protection Zone 100m
  - Inland Water
  - Rillways
  - Contours
- Rivers**
- Perennial
  - Non Perennial



MUNICIPAL MANAGER



- All municipalities in South Africa MUST establish a new land use scheme before 2020 – unique opportunity!!!!
- Find out when your municipalities will start the process.
- Get involved!
  - Municipalities typically do not have enough funding for land audits and detail investigations into servitudes etc.
  - Larger role-players (Eskom, DWS etc.), create datasets and rules that can assist municipal planners on how to deal with r.o.w.
  - Assist municipalities in creating rules (especially in traditional authority areas) to protect r.o.w.
- Remember the LUS has the effect of LAW – understand the enforcement clauses in schemes and what that implies.
- The importance of guidelines – possible role for SARWA to play?

**“PROTECTING” SERVITUDES AND  
R.O.W. THROUGH THE  
MUNICIPAL SPATIAL  
DEVELOPMENT FRAMEWORK**

## SPLUMA on SPATIAL DEVELOPMENT FRAMEWORKS

- Unlike the Land Use Scheme, the SDF does not confer rights.
- Before **adopting** the municipal spatial development framework, a municipality must **give notice**, invite the public to **submit** written **representations** and **consider** all representations received
- The SDF must include (among other)
  - a written and spatial representation of a **five-year spatial development plan** for the spatial form of the municipality
  - include a longer term spatial development vision statement for the municipal area which indicates a **desired spatial growth** and development pattern for the next 10 to 20 years;

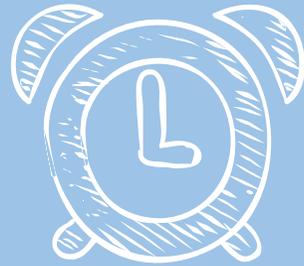
## What does SPLUMA require for Spatial Development Frameworks

### Who ?



- Population growth estimates.
- Demand for housing units.
- Estimates of economic activity and employment trends .
- Environmental pressures and opportunities

### When ?



- Spatial representation of a 5 year spatial development pattern.
- 10 to 20 years desired spatial growth pattern.
- current and future significant structuring and restructuring elements

### Where ?

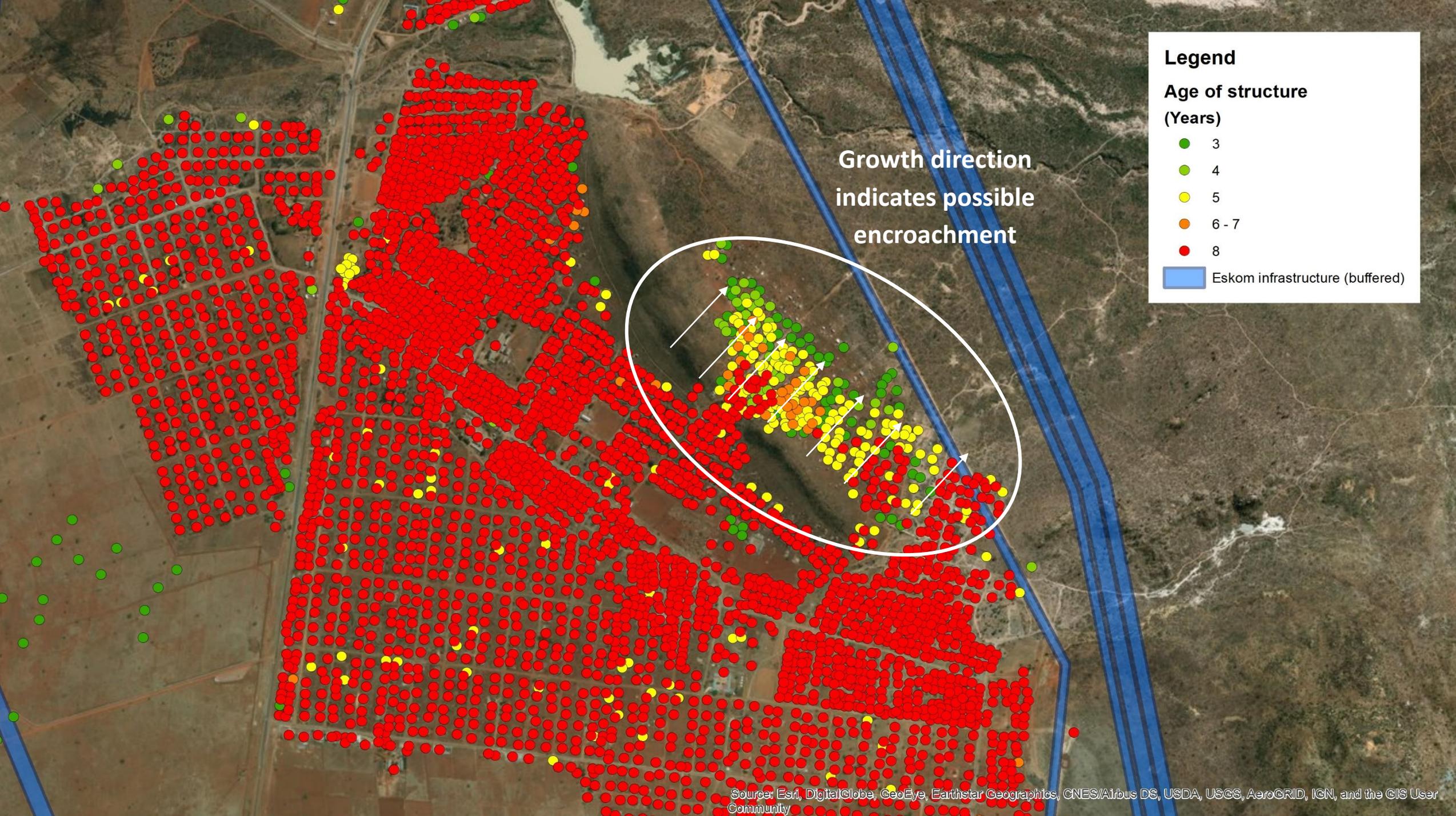


- Spatial form – nodes, corridors, spines etc.
- provide location requirements of engineering infrastructure
- capital expenditure framework, depicted spatially

### Implementation ?



- Sectoral requirements, including budgets and resources for implementation
- Institutional arrangements
- Implementation targets, including dates and monitoring indicators



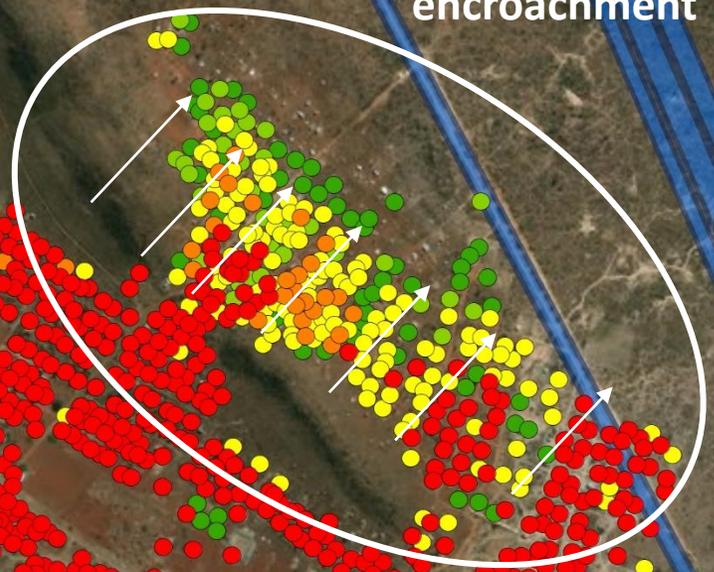
**Legend**

**Age of structure (Years)**

- 3
- 4
- 5
- 6 - 7
- 8

■ Eskom infrastructure (buffered)

Growth direction  
indicates possible  
encroachment



# WHAT ABOUT INFORMAL SETTLEMENTS??

## Recognizing informal settlements

- Will we truly ever “eradicate” informal settlements?
- Because we strive for eradication we often “ignore” informal settlements.
- It starts with “recognizing” informal settlements (NOTE – not formalizing them!)

This plan distinguishes between:

- ***“authorized informal settlement”*** means any informal settlement which is recognized by the Municipality as an authorized informal settlement and which is regarded as a transit camp to house landless people who will be ultimately relocated to a formally established township; and
- ***“unauthorized informal settlement”*** means any settlement which is not recognized by the Municipality as an authorized informal settlement which will be demolished and removed.

## Management and control of **authorised informal** settlements

### 1. Notification

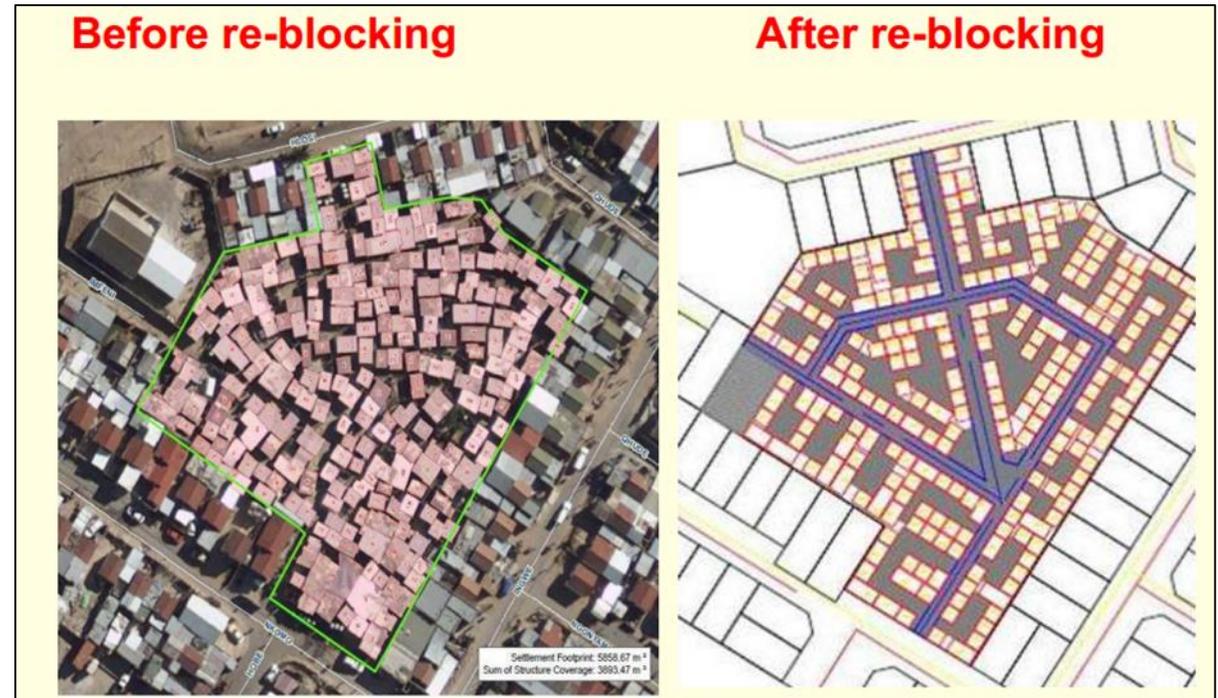
- Determine which settlement/s are authorized informal settlement/s
- Municipal Manager or her representative must visit the informal settlement and notify the residents of the status of the authorized informal settlement

### 2. Informal Settlement Register and Housing Demand Database

- An informal settlement register must be kept which acts as register of all residents that are entitled to reside in the authorized informal settlement
- Re-blocking of settlements to accommodate ROW, services etc.
- The Municipal Manager or his representative must ensure that the names, addresses and other relevant details of all residents living in an authorized informal settlement are registered in the Municipality's Housing Demand Data Base.
- Municipality should develop a Web based HDD where residents can confirm their details (also possible a smartphone APP)

## Re-blocking of settlements

- Re-blocking is a process based primarily on the spatial reconfiguration of shacks in informal settlements
- Shacks are rearranged and reconstructed to maximise open space in the settlement.
- Shacks are also often built on raised platforms and the settlements graded to prevent flooding.
- Re-blocking is considered an in-situ process due to its minimal disruption of resident’s lives throughout the duration of the project.
- Re-blocking is only made possible by the commitment and collaboration of the community members and multi-stakeholder partnerships.



## Management and control of **authorised informal** settlements

### 3. Residing in an authorised informal settlement

- The Municipal Manager allocate to each site or stand in an authorized informal settlement a unique number as the temporary address of the site or stand and must ensure that the number is legibly painted or inscribed in a prominent place on the site or stand.
- The Municipal Manager or his representative must ensure that no new unauthorised residents take up residence in the authorized informal settlement by implementing appropriate measure to manage, monitor and control the occupancy of residents in the authorized informal settlement in general. (Ward committees, satellite imagery etc.)
- The Municipality to provide emergency level of services regarding infrastructure.
- the Municipality's Finance Department institutes, operates and maintains an appropriate account for services rendered by the Municipality to each registered shack in the authorized informal settlement and for any charges levied for the right of occupation of a site or stand in the authorized informal settlement.
- Should any person or household previously not recorded on the informal settlement register wish to take up residence in an authorised informal settlement, application should be made to the Municipal Manage or his authorised representative.
- The municipal can allocate a portion of land to the new residents where they can be allowed to construct their shacks.

## Management and control of **Unauthorised informal** settlements

- As soon as a determination of the status of an unauthorised informal settlement has been made, the Municipal Manager or his representative must, personally or through any official designated:
  - Inform residents of a shack in the unauthorised informal settlement that their occupation of the shack and the site or stand on which it is situated is illegal; and
  - Request the Municipal Manager to assist him or her for that purpose, visit the informal settlement and notify the residents of the status of the unauthorised settlement by means of a written notice hand-delivered to each shack in the informal settlement.
- The written notice must notify the residents of the shack to vacate the shack and remove any building materials and other personal property from the unauthorised informal settlement within a period of 24 hours after receipt of the written notice.
- If the residents notified fail to cooperate and vacate their shacks and remove their building materials and other personal property from the site or stand in the unauthorised informal settlement, the Municipal Manager or his representative must immediately institute the necessary legal procedures to obtain an eviction order

- All municipalities in South Africa MUST review the SDF (and for the first time Land Use Schemes) at least every 5 years.
- Play a pro-active role, especially in areas where encroachment is a real problem.
- Larger role-players (Eskom, DWS etc.), create datasets and rules that can assist municipal planners on how to deal with r.o.w.
- Assist municipalities in creating rules (especially in traditional authority areas) to protect r.o.w.
- It starts with the SDF (identify) – recommendations can be included in the next review of the LUS, where it then becomes law and enforceable
- The importance of guidelines – possible role for SARWA to play? (Example of the KNP)



**THANKS!**

**Questions / Comments?**

**Werner Fourie**

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**0836399259**