

# Saldanha Bay Municipality

*Serve Grow and Succeed Together*



## GIS in Saldanha Bay Municipality



# Contents



- Introduction
- GIS at SBM
- Successes / Challenges
- Constraints / Lessons learned / Advice
- Service delivery and planning
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- Future Plans

# VISION, MISSION & VALUES



## VISION

***Serve, Grow & Succeed Together***

## MISSION

*We, the community of Saldanha Bay, want to make this the area of choice within which to live, do business and relax. We want to be:*

- A leading municipality;*
- Render quality service at a reasonable price;*
- Be a place in which all have access to developmental opportunities;*
- Utilise the riches of land and seas in a sustainable manner; and*
- Strive to achieve the three aims of sustainable development, namely human well-being, economic success and ecological responsibility.*

## VALUES

<b>Competence</b> (the ability and capacity to do the appointed job)	<b>Accountability</b> (we take responsibility for our actions and results)	<b>Integrity</b> (we are honest and do the right thing)
<b>Responsiveness</b> (we serve the needs of our citizens and employees)		<b>Caring</b> (we care for those we serve and work with)

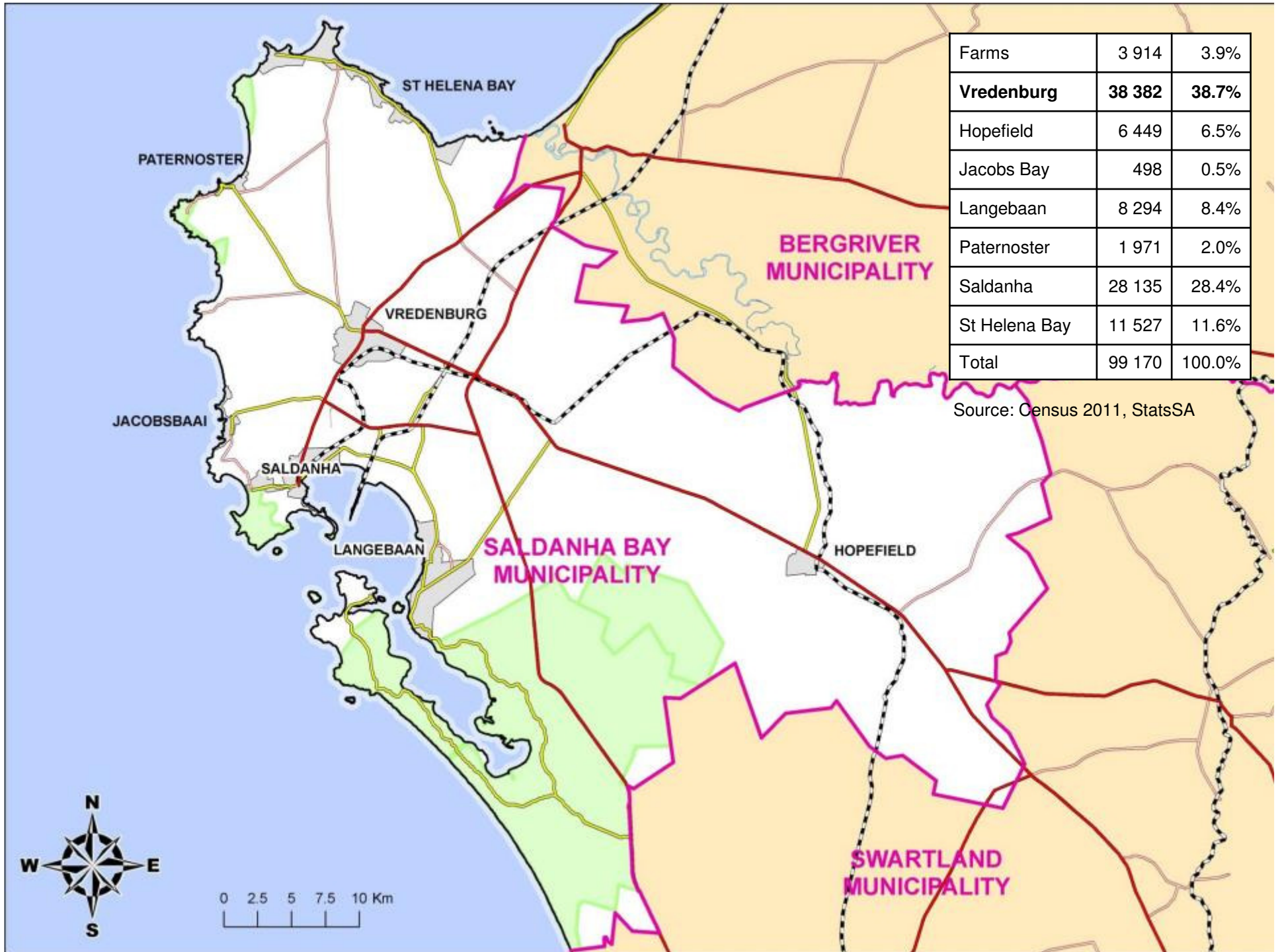
# STRATEGIC FOCUS AREAS & OBJECTIVES



SFA#	Strategic Focus Area / National Key Performance Area	SO#	Strategic Objective
SFA1	Local Economic Development	SO1	To diversify the economic base of the municipality through industrialisation, whilst at the same time nurturing traditional economic sectors
SFA2	Basic Service Delivery	SO2	To develop an integrated transport system to facilitate the seamless movement of goods and people within the municipal area and linkages with the rest of the district and the City of Cape Town.
		SO3	To develop safe, integrated and sustainable neighborhoods
		SO4	To maintain and expand basic infrastructure as a catalyst for economic development
SFA3	Municipal Transformation & Organisational Development	SO5	To be an innovative municipality on the cutting edge in respect of the use of technology and best practice
SFA4	Municipal Financial Viability & Transformation	SO6	An effective, efficient and sustainable developmental oriented municipal administration
SFA5	Good Governance & Public Participation	SO7	To develop and use a multi-platform communication system to ensure swift and accurate dissemination of information
		SO8	To provide ethical and effective leadership that engenders trust in the municipality amongst its stakeholders
		SO9	To ensure compliance with the tenets of good governance as prescribed by legislation and best practice







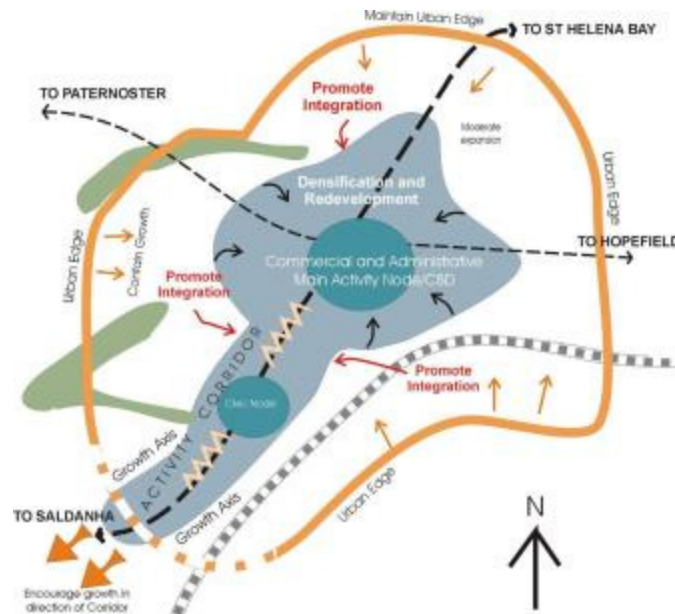
# Service Delivery



- Access to Basic Services
- National ranking (234 Municipalities)
  - Refuse Removal 1
  - Toilets 1
  - Electricity 2
  - Water 5

2011 Census

# KEY PROJECTS



SALDANHA BAY BROADBAND PROJECT

**SIP 5**  
SALDANHA – NORTHERN CAPE





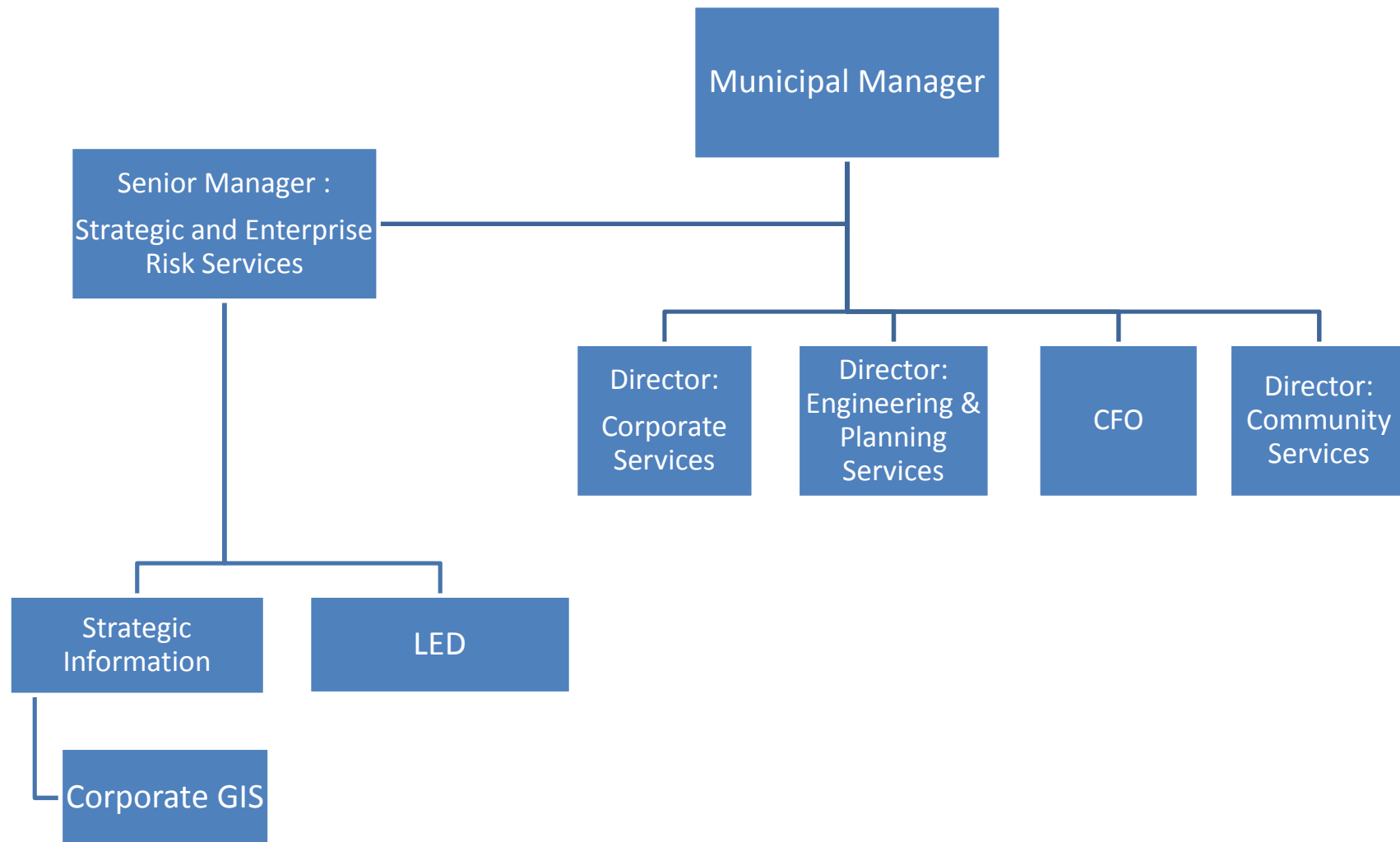
# GIS at SBM

# GIS at SBM



- Structure
- Software
- Systems
- Data

# Organisational Structure



# Corporate GIS



- GIS Strategy, User requirement studies
- GIS Standards, Database design and software maintenance
- Data capturing and warehousing
  - Manage GIS Server
  - GIS Viewer for all employees
- Map production
- GIS training, marketing and awareness



# Corporate GIS data



- Property Information
  - Ownership
  - Zoning & Land use
  - Street addresses
- Aerial Photography
- Road Centre Lines
- Administrative Boundaries
  - Wards, Protected Areas ect.
- Municipal / State Properties

# Departmental GIS



- Civil
  - Roads, Water, Sewer, Storm water
- Electrical
  - Electrical network
- Valuations
  - Usages
  - Sectional Titles
- Asset Management

# GIS Software



- ESRI

- ArcMap Server, SQL Server
- 2 x ArcEditor, 5 x ArcView, 1 x 3D Analyst
- Flex Viewer



- QGIS

- Other

- AutoCad
- GeoSmart
  - Interface with Samras and Aktex
- Wadiso
- SuperCross

# Cadastral Data Model



Surveyor General

Registered Layer

Deeds Office  
Billing System  
Valuation Roll

Council Approved

Town Planning

Map Production  
Streets Address  
Zoning / Landuse



# Mapping

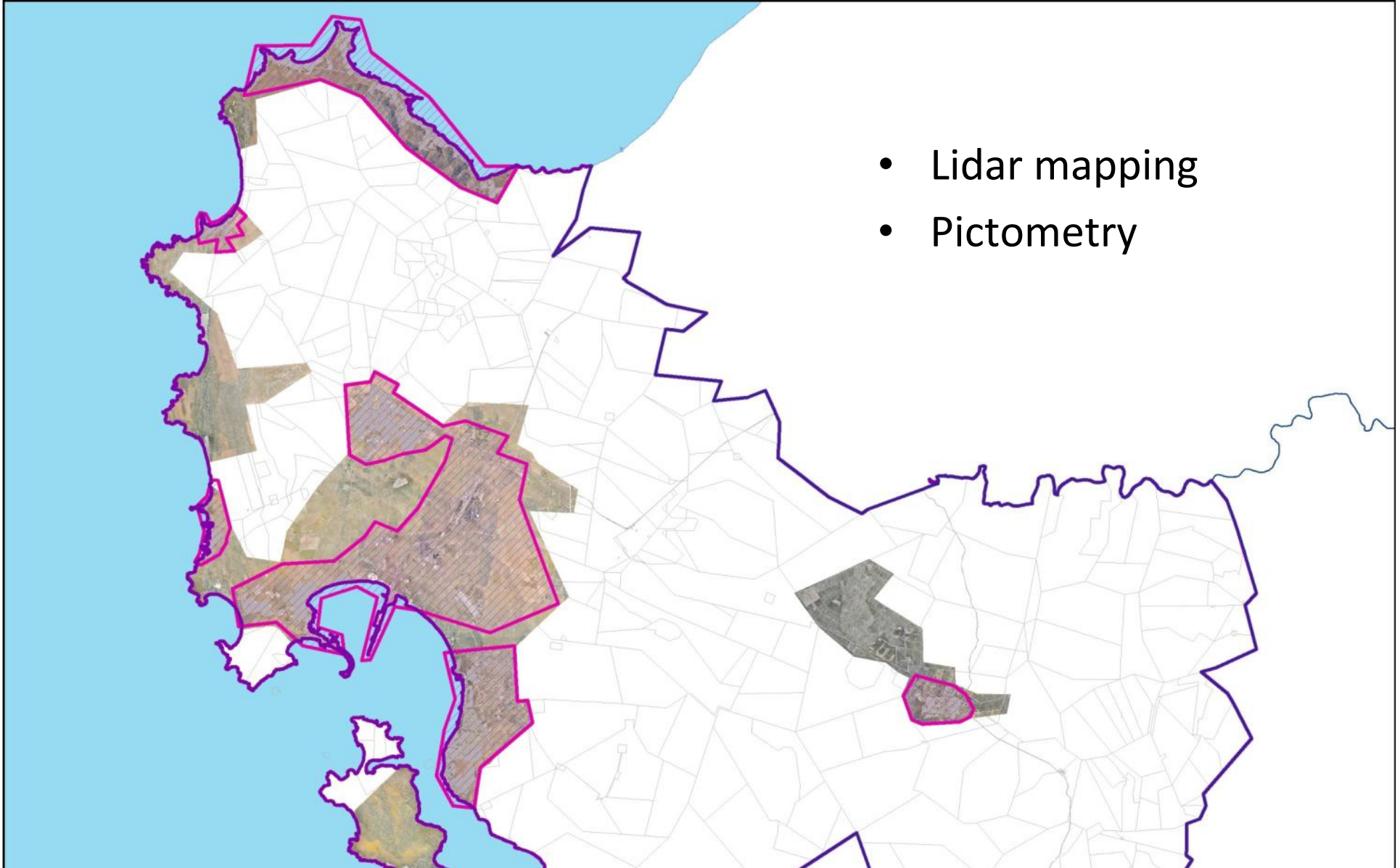


- Lidar mapping
- Pictometry
- 3D Mobile Mapping (Assetrix)

# Mapping



- Lidar mapping
- Pictometry





# Lidar mapping





# Lidar Mapping





# Pictometry



North View: ZASALD041020NeighObliq4734S\_130208.psi [ Feb 08, 2013 13:3...



Ortho View: ZASALD041020NeighOrtho5639X\_130208.pmi [ Feb 08, 2013 13:56 ]



South View: ZASALD041020NeighObliq6544N\_130208.psi [ Feb 08, 2013 14:...





# Pictometry



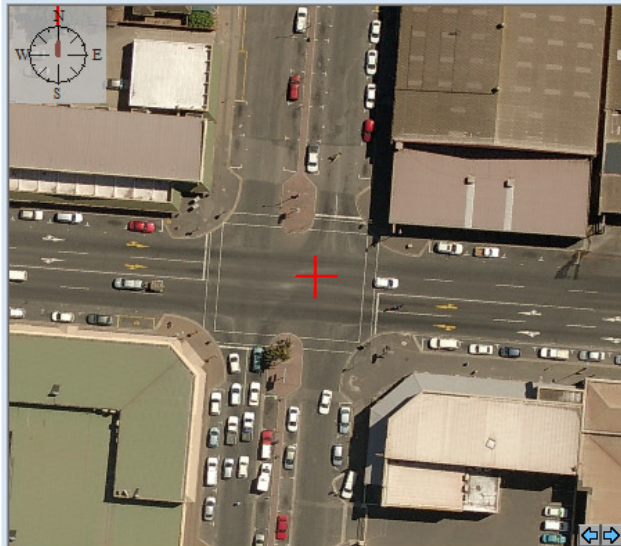
North View: ZASALD031020NeighObliq3230S\_130208.p... [Close]



South View: ZASALD031020NeighObliq5169N\_130208.psi [ Feb 08, 2013 11:11 ] [Close]



Ortho View: ZASALD031020NeighOrtho7061\_130208.p... [Close]





# 3D Mobile Mapping



# 3D Mobile Mapping

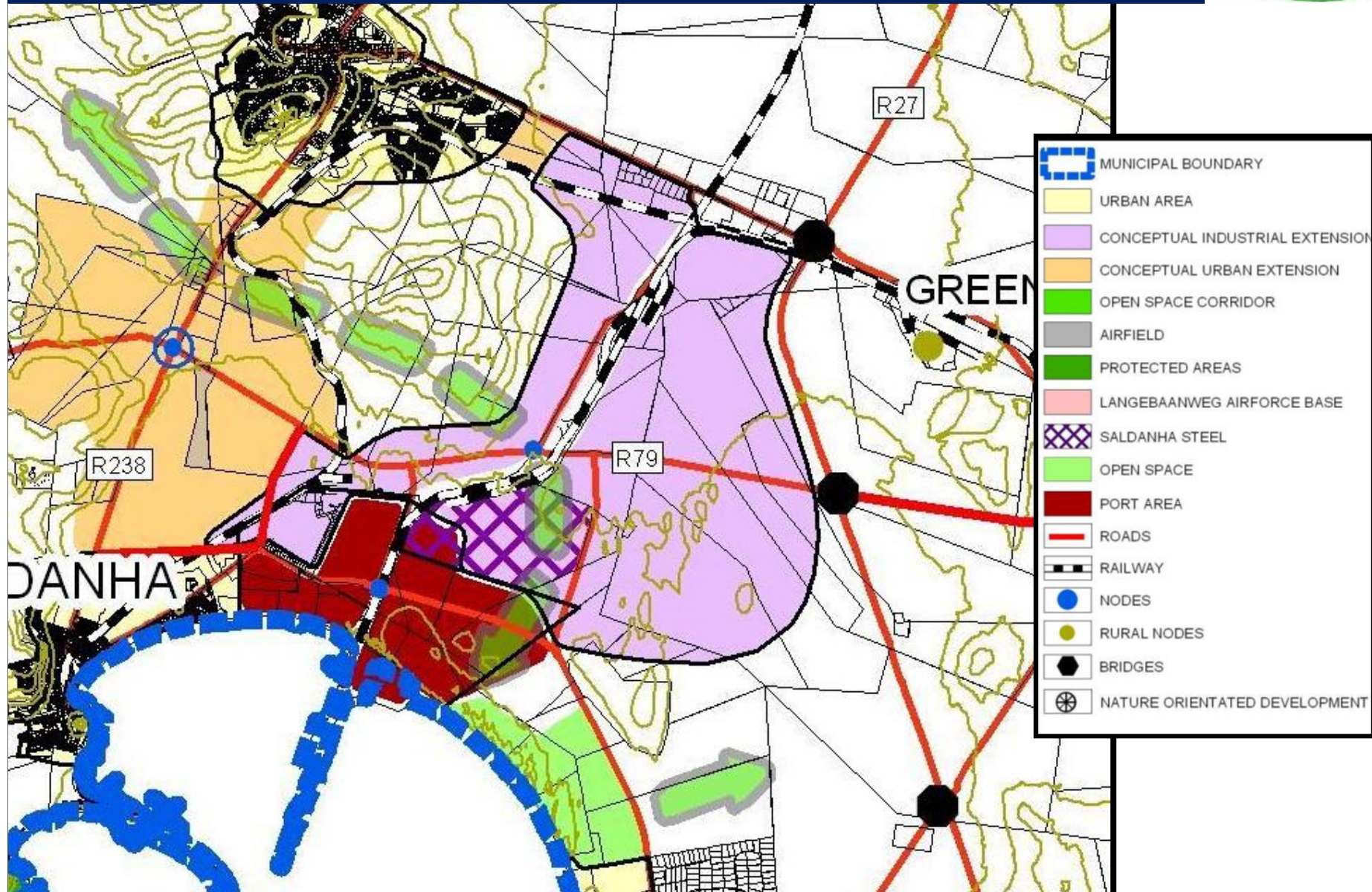




# Service Delivery & Planning



# Forward Planning



# SALDANHA BAY IDZ



STAATSKOERANT, 31 OKTOBER 2013 No. 36988 3

## GENERAL NOTICE

NOTICE 1081 OF 2013

DEPARTMENT OF TRADE AND INDUSTRY

I, Dr Rob Davies, Minister of Trade and Industry,

- (a) in terms of IDZ Regulation 3A, Cabinet ratified my decision to designate an IDZ at Saldanha Bay and the granting of an IDZ Operator Permit, and that the Ministries of Trade and Industry and of Economic Development collaborate to ensure that the IDZ at Saldanha Bay forms part of the Presidential Infrastructure Coordinating Commission (PICC) rollout programme,
- (b) promulgate the designation of an Industrial Development Zone at Saldanha Bay and the granting of the Operator Permit to the Saldanha Bay Industrial Development Zone Licensing Company (SBIDZ LiCo), by virtue of the powers vested in me in terms of Section 10 of the Manufacturing Development Act No. 187 of 1993.


The Saldanha Bay Industrial Development Zone (SBIDZ) is intended to be an oil and gas and marine repair engineering and logistics services complex, serving the needs of the upstream exploration and production service companies operating in the oil and gas fields in Sub Saharan Africa. The SBIDZ will include logistics, repairs and maintenance, as well as fabrication activities. The IDZ designation will also afford the SBIDZ the ability to offer a contiguous customs-free area. The SBIDZ LiCo is the implementing vehicle of the SBIDZ and will be responsible for the provision of infrastructure, promotion, management and marketing of the IDZ.

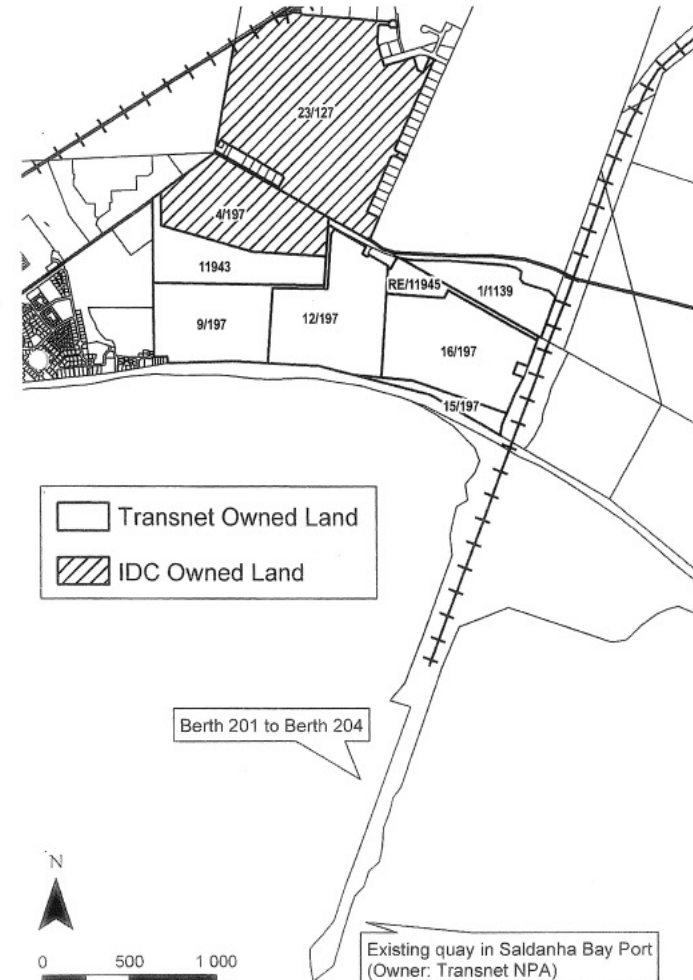
### LOCATION OF THE SALDANHA BAY INDUSTRIAL DEVELOPMENT ZONE (IDZ)

A total land area of approximately 330 ha has been identified as suitable for development as an IDZ, within the Saldanha Bay Municipality. One portion is owned by the Industrial Development Corporation (164ha), and will be used for the development of the first phase of the IDZ. The second portion of land is under the ownership of Transnet National Ports Authority (TNPA) (166ha) and is part of the Port of Saldanha. Negotiations are underway to secure the TNPA land for the second phase of the SBIDZ development, which will be jointly planned and implemented for the mutual benefit of all concerned parties as well as to accelerate industrial development and trade facilitation in the region. Annexure A attached, indicates the location of the proposed SBIDZ site.

For further information, interested parties may contact Mr Kaya Ngqaka as follows:

Department of Trade and Industry (the dti) Campus  
77 Meintjies Street,  
Sunnyside,  
Pretoria, 0002  
Tel: (012) 394 1978,  
Email: [KayaN@thedti.gov.za](mailto:KayaN@thedti.gov.za)

  
Dr Rob Davies, MP  
Minister of Trade & Industry  
Date: 23/10/13



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# IMPACT OF IDZ



## Employment from Construction

Table 1.3: Jobs due to Construction, average per annum, per scenario (#)

	Capex		
	Low	Base	High
Direct	1 030	1 970	2 790
Indirect	885	1 680	2 565
Induced	810	1 545	2 325
<b>Total</b>	<b>2 725</b>	<b>5 195</b>	<b>7 680</b>

## Employment during Operations

Table 1.4: Jobs due to Operations, average per annum, per scenario (#)

	Opex		
	Low	Base	High
Direct	2 730	3 655	5 700
Indirect	1 870	2 880	5 540
Induced	2 670	3 900	6 990
<b>Total</b>	<b>7 270</b>	<b>10 435</b>	<b>18 230</b>

Table 1.5: Jobs due to Operations, over 25 years, per scenario (#)

	Opex		
	Low	Base	High
Direct	4 240	6 670	8 930
<b>Total (incl. indirect &amp; induced)</b>	<b>11 975</b>	<b>20 090</b>	<b>29 020</b>
Total increase in jobs relative to current Saldanha Bay employment	16%	25%	34%

## Total average Employment created

Table 1.6: Total jobs created, average per annum, per scenario (#)

	Combined		
	Low	Base	High
Direct	3 760	5 625	8 490
Indirect	2 755	4 565	8 105
Induced	3 485	5 450	9 315
<b>Total</b>	<b>10 000</b>	<b>15 640</b>	<b>25 910</b>

<sup>9</sup> A job is defined in the above is one person working for one year.

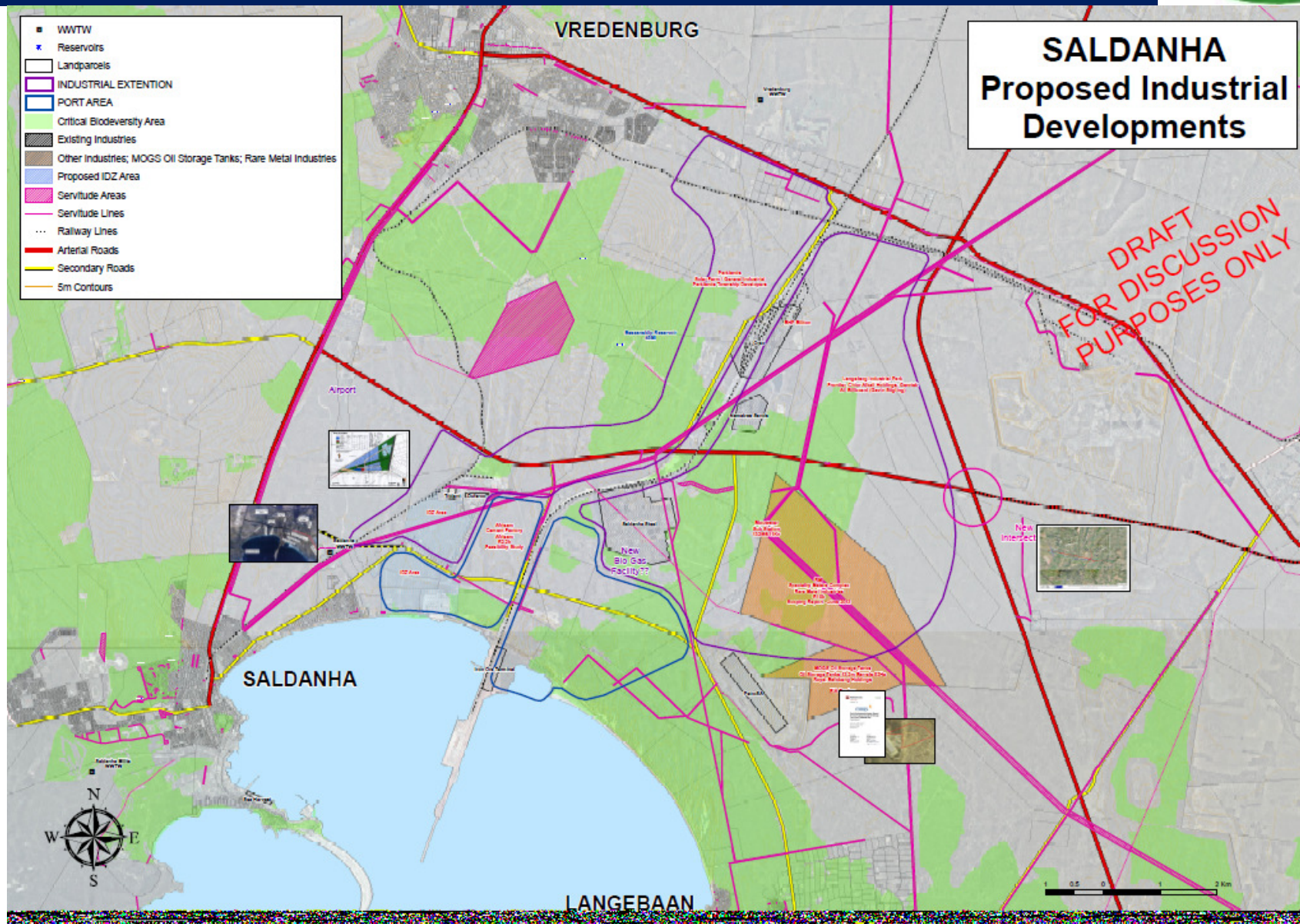


# Saldanha Bay IDZ





# “Activity Map”



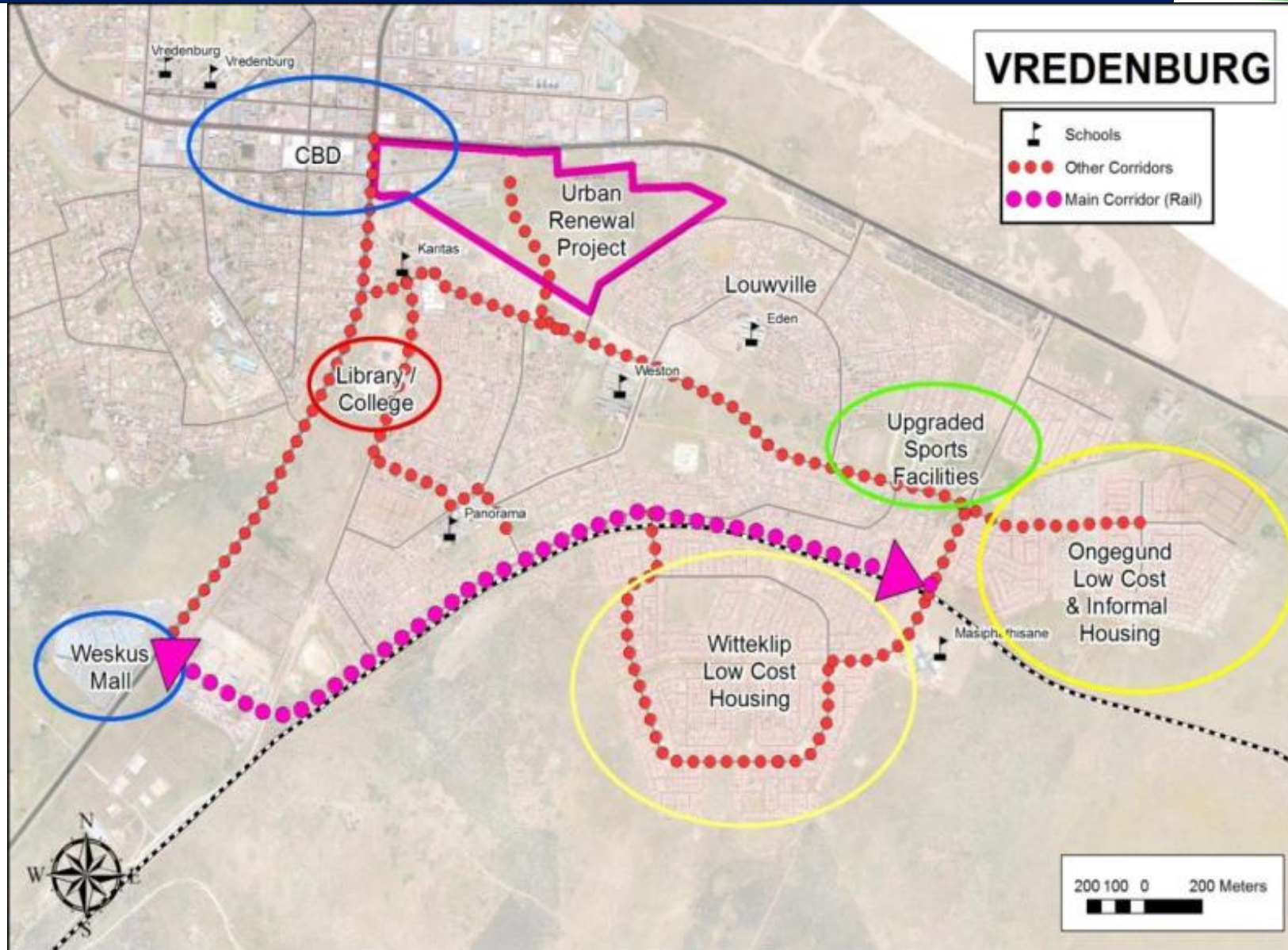


# Vredenburg Urban Renewal





# VPUU





# Informal Settlements



November 2012

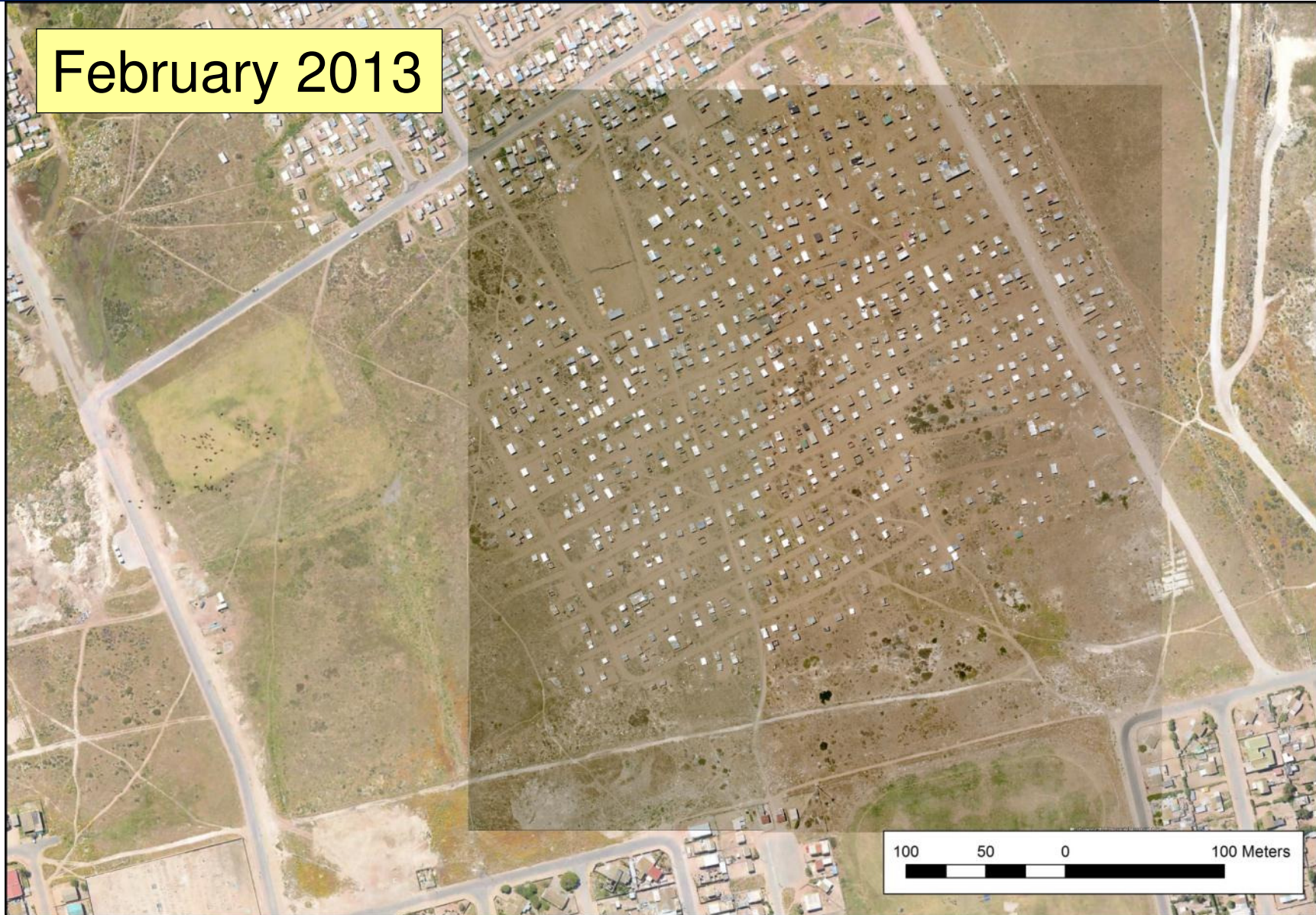




# Informal Settlements

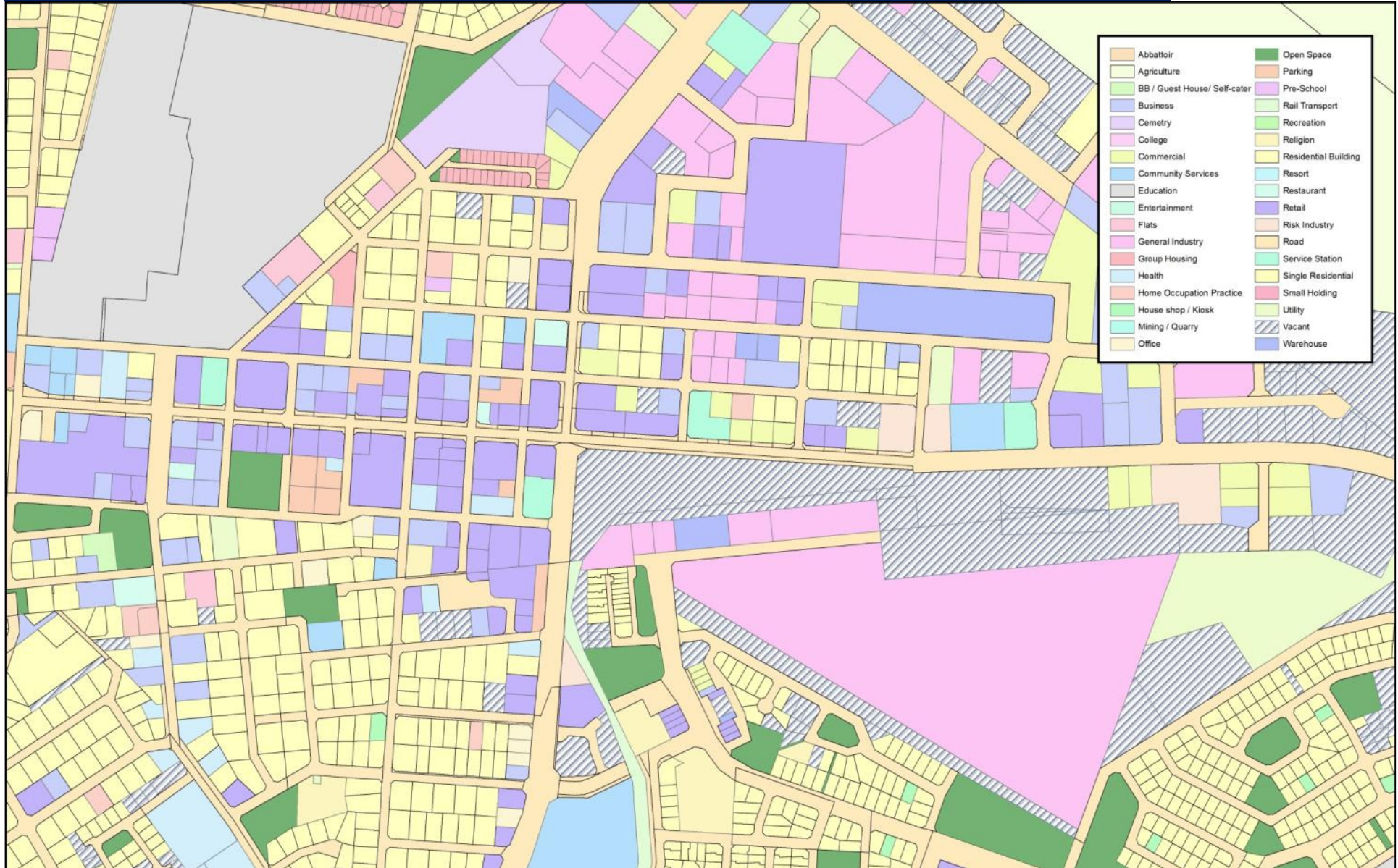


February 2013

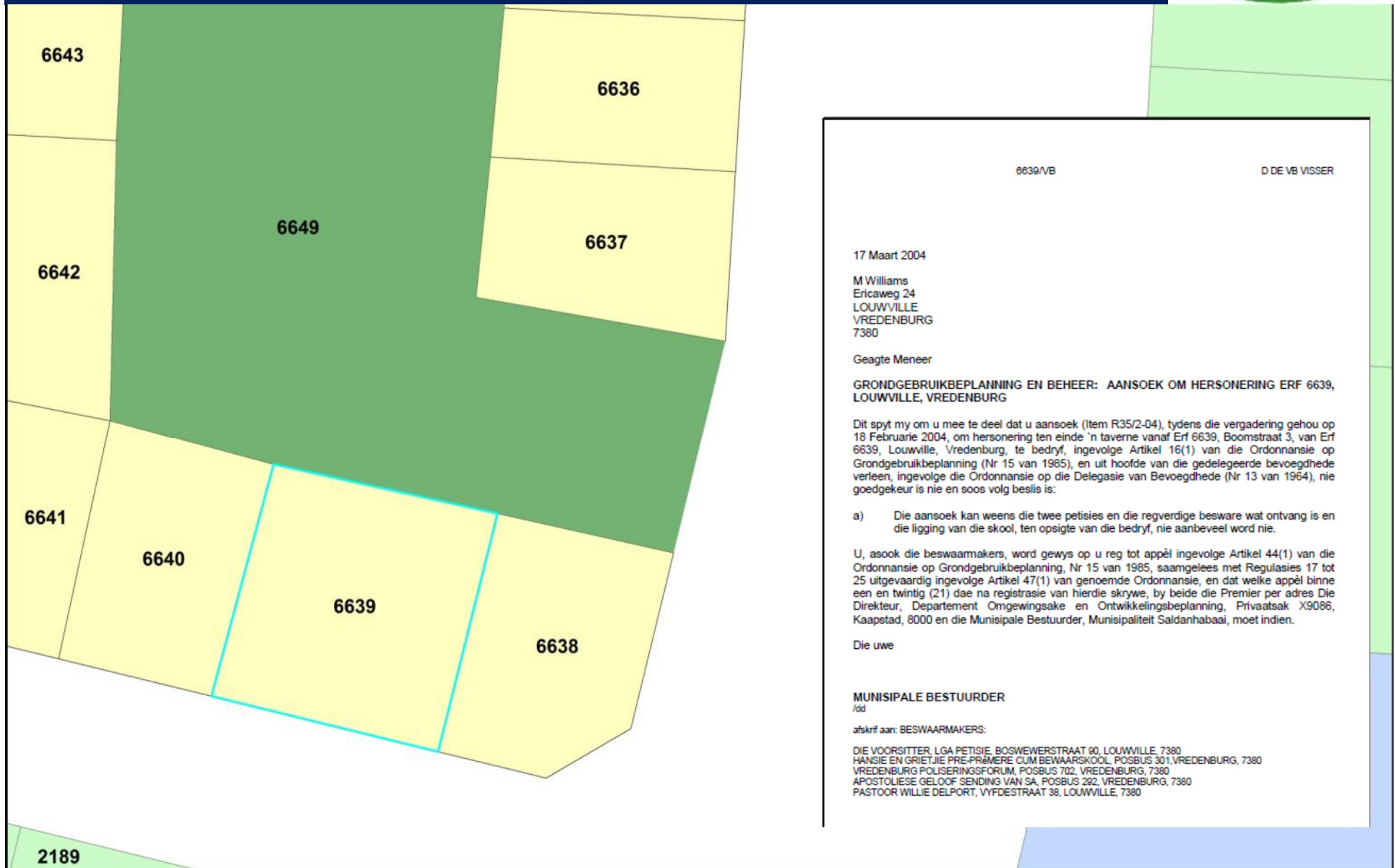




# Landuse study



# Zoning hyperlink





# Valuations





# Addresses



# Other



- Crime mapping
- Stats data
- Asset management
  - Council Properties
  - Asset register





# Flex Viewer

# Flex Viewer



http://sbm-arcgis/saldanhabay/index.swf - Windows Internet Explorer

http://sbm-arcgis/saldanhabay/index.swf

File Edit View Favorites Tools Help

Favorites Suggested Sites Get more Add-ons

http://sbm-arcgis/saldanhabay/index.swf

Saldanaha Bay Municipality GIS Viewer  
powered by ArcGIS Server

About

More...

A map of the Saldanha Bay area showing a network of roads in red, yellow, and blue. A prominent purple boundary line is overlaid on the map. Several roads are labeled with diamond-shaped markers: R399, R79, R45, and R27. The map is displayed in a web browser window with a navigation toolbar on the left and search tools at the bottom.

Erf Search 40 km Owner Search Address Sea...

-107490.03516998827 -3619988.276670574

Done

Local intranet 100%

The Esri logo, featuring a globe and the text "powered by esri".

# Flex Viewer



http://sbm-arcgis/saldanhabay/index.swf - Windows Internet Explorer

http://sbm-arcgis/saldanhabay/index.swf

File Edit View Favorites Tools Help

http://sbm-arcgis/saldanhabay/index.swf

Saldanha Bay Municipality GIS Viewer  
powered by ArcGIS Server

More...

Erf Search

Enter Erf Search Parameters

Choose Region

- All (\*)
- All (\*)
- MALMESBURY RD (C0460000)
- HOPEFIELD (C0460004)
- LANGEBAAAN (C0460007)
- SALDANHA (C0460012)
- ST HELENA BAY (C0460013)

Owner Search Address Sea...

-161007.03399765532 -3703036.3423212194 20 m

Local intranet 100%

The main content of the browser window is a GIS map of Saldanha Bay. The map shows a network of roads in various colors (red, yellow, blue, purple) and a light blue area representing water. Several road labels are visible, including R399, R79, R45, and R27. A search window titled "Erf Search" is open in the bottom-left corner, displaying a list of regions to choose from. The browser interface includes standard navigation buttons, a search bar, and a status bar at the bottom.



# Flex Viewer



http://sbm-arcgis/saldanhabay/index.swf - Windows Internet Explorer

http://sbm-arcgis/saldanhabay/index.swf

Saldanha Bay Municipality GIS Viewer  
powered by ArcGIS Server

1723

1731

1733

Blueberry

Owner Search

Address Sea...

93838.04741186067 -3624367.819676352

Local intranet

100%

Done

SGCode: C04600130000172100000  
Region: C0460013  
ParcelNo: 1721  
PortionNo: 0  
Layer: Erf  
Status: Registered  
Zoom to

Erf Search  
Features selected: 1  
SGCode: C04600130000172100000  
Region: C0460013  
ParcelNo: 1721  
PortionNo: 0  
Layer: Erf  
Status: Registered

Powered by esri



# Flex Viewer



http://sbm-arcgis/saldanhabay/index.swf - Windows Internet Explorer

http://sbm-arcgis/saldanhabay/index.swf

File Edit View Favorites Tools Help

http://sbm-arcgis/saldanhabay/index.swf

Saldanha Bay Municipality GIS Viewer  
powered by ArcGIS Server

More...

- Saldanha
  - State & Municipal Land
  - Valuation Usages
  - Cadastral
  - Transport
  - Topography
  - Administrative Boundaries

SGCode: C04600130000172100000  
Region: C0460013  
ParcelNo: 1721  
PortionNo: 0  
Layer: Erf  
Status: Registered  
Zoom to

Erf Search

Features selected: 1

SGCode: C04600130000172100000  
Region: C0460013  
ParcelNo: 1721  
PortionNo: 0  
Layer: Erf  
Status: Registered

Owner Search Address Sea...

9379551626778106 36243555348724835

Local intranet 100%



# Future Plans

# Future Plans



- New GIS Server
- IDP mapping
- GIS Tender
  - Cadastral data
  - Viewer development
  - System integration
- New GIS DVD for external users
  - Freeware software
- Map leased properties





# Successes / Challenges

# Successes



- GIS DVD for external users
  - Aerial photography
  - Ownership, Zoning, Roads ect.
  - R50
- Valuation records
- Flex viewer
- Zoning verification
- “Activity map”
- GIS support to Kannaland ??

# Challenges



- Other job functions
- Develop workflow
- System integration
- Cost of deeds data / software maintenance
- Dependence on consultants
- IT support
- Supply chain processes
- Metadata

# Lesson learned



- Keep it simple
- Papyrus
  - District wide project failure
- Pictometry integration
- Back up server





Thank you

for more info visit

[www.sbm.gov.za](http://www.sbm.gov.za)