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# Prologue

- During 2004 the Spatial Development Framework (SDF) for the City Council of Klerksdorp (Now Matlosana) was completed as an integrated part of the IDP process.
- Since 2004 a number of new policy directives, strategies and plans were completed as well as new development projects and spatial initiatives that justify the revision of the SDF. Some of these policy directives, strategies and plans refer to :
  - National Spatial Development Perspective (NSDP) 2006
  - Provincial Growth and Development Strategy (PGDS)
  - Strict Growth and Development Strategy (DGDS) and ASGISA
  - Revised North West Spatial Development Framework (NWSDF) 2008
  - Integrated Transportation Plan (ITP) for the Southern District Municipality (2007)
  - Apart from abovementioned it is also important to align the SDF with the current IDP (Integrated Development Plan) for City of Matlosana
- It was also found that the existing format in respect of the presentation of the Spatial proposals and guidelines resulted in misinterpretations during the consideration of land use applications.
- The revision of the SDF for City of Matlosana will therefore be based on abovementioned inputs and is structured as follows:
  - A synopsis of the socio-economic, land use and environmental analysis
  - Spatial issues
  - Vision, objectives and strategic principles
  - Spatial development proposals and guidelines
- The revised SDF will therefore aim at addressing all this new development initiatives and spatial directives that were not perceived during the initial 2004 SDF.



### 1. INTRODUCTION

### 1.1. Legal and Policy Framework

The compilation of a Spatial Development Framework (SDF) is a requirement as set out in terms of Section 2 (4) of the Local Government: Municipal Planning and Performance Management Regulations 2001 (Government Notice R796). The overall objective is to facilitate development in the entire area of City of Matlosana and at the same time achieve economic social and environmental sustainability. The spatial development framework should ultimately contribute to the improvement of the living conditions of inhabitants and consequently improve the quality of life of the population. The Municipal Spatial Development Framework should also give effect to the principles in Chapter 1 of the Development Facilitation Act (67 of 1993) as well as the relevant Sections of the Land Use Management Bill relating to:

- o Equality
- Good Governance
- o Sustainability
- o Efficiency
- o Integration

The SDF will form an integral part of the Integrated Development Plan (IDP) of the City of Matlosana. It should not only provide spatial guidelines with regard to projects, but also assist the Local Municipalities to prioritize their projects.

A Spatial Development Framework, reflecting the broad spatial policy of the municipality cannot allocate land use rights on land, but should be employed during decision making process as a spatial guideline. Applicant applying for land use rights must still provide proof of the desirability (merits) for a particular land use based on:

- Environmental Impact
- Social impact
- Traffic impact
- Provision of bulk and internal services

- Heritage impact
- Any other principles or additional information the municipality may require including the requirements of the Matlosana Land Use Management Scheme.

#### 2. BACKGROUND (Map 1 refers)

Matlosana Municipal area comprises a total area of 3162 km<sup>2</sup> and is located in the south-eastern part of the North West Province. The municipal area covers the central part of the Southern District municipal area and is bordered by Tlokwe (Potchefstroom) municipal area in the east; Maquassi Hills municipal area in the west; Ventersdorp Local Municipality in the North-East and the Free State Province in the South. Matlosana Municipal area is also situated on the N12 Treasure Corridor (SDI) linking the municipal area with Gauteng Province in the east and the Northern Cape in the south west.





#### 3. STATUS QUO

#### 3.1 Socio economic indicators

Although different estimates exist pertaining to the population size, statistics should not be used in exact terms but should only be used to determine trends of population growth and composition.

According to estimates based on STATS SA / GLOBAL INSIGHT the total population of Matlosana is estimated at 393 998 people of which 88,2% is urbanized and 11,8% rural.

The population growth rate in the City of Matlosana declined significantly from 1.1% in 1997 to 0.5% in 2006. A possible reason for this might be due to the increase in the HIV incidence rate in the area over the period as well as a result of inter-provincial migration. The average annual population growth rate in the City of Matlosana from 1997 to 2006 was 0.9%.

The population growth (urban and rural) is indicated in the following table as well as the expected population growth to 2013 (5 years) based on the current population growth rate of 0, 9% per year.

Matlosana – Population growth 2006 – 2013								
YEAR	TOTAL	URBAN	RURAL					
2006	387 001	341 335	45 666					
2007	390 484	344 407	46 077					
2008	393 998	347 507	46 491					
2009	397 544	350 634	46 910					
2010	401 122	353 790	47 332					
2011	404 732	356 974	47 758					
2012	408 375	360 186	48 189					
2013	412 050	363 428	48 622					

Source: Stats SA / Global Insight / own construction

The current and expected urban population distribution is indicated in the following table:

Matlosa	Matlosana Urban Population Distribution (2008 – 2013)											
Year	Klerksdorp	Stilfontein	Orkney	Hartbeesfontein	TOTAL							
2008	177 228	59 076	93 827	17 375	347 507							
2009	178 823	59 608	94 671	17 532	350 634							
2010	180 433	60 144	95 523	17 690	353 790							
2011	182 056	60 686	96 383	17 849	356 974							
2012	183 695	61 232	97 250	18 009	360 186							
2013	185 348	61 783	98 126	18 171	363 428							

Source: Own construction

## Percentage Urban & Rural Population

The percentage of people in the city of Matlosana in the urban area is 88.2% and in the rural area 11.8%. The largest concentration of people in the Southern District Municipality is situated in the City of Matlosana (44.1%).

<u>Literacy</u>

Literacy within the City of Matlosana is indicated in the following table:







## • Economic Growth (2004 data)

Between 1996 – 2004, the City of Matlosana's economy shrunk by an annual average of 0.39% per annum due to declining fortunes in gold mining. This growth is less than the Southern District Municipality as well as the National growth rate.



## Income Categories

In terms of the income distribution of these households, most of the growth has taken place in poor to middle income households, reflecting the increases in unemployment and poverty that had been the result of the negative growth that the city has experienced since 1996. The figure below and the related table depict the changes in the number of households per income category between 1996 and 2004.

Income Category	Number of Households in 1996	Number of Households in 2004	Average Annual Growth in Number
0-2400	1,366	4,082	24.85%
2400-6000	3,629	8,512	16.82%
6000-12000	16,917	14,724	-1.62%
12000-18000	15,646	17,323	1.34%
18000-30000	14,642	15,204	0.48%
30000-42000	6,883	10,171	5.97%
42000-54000	5,367	7,188	4.24%
54000-72000	5,922	6,787	1.83%
72000-96000	5,066	6,115	2.59%
96000-132000	4,385	5,725	3.82%
132000-192000	2,823	4,166	5.95%
192000-360000	1,660	2,826	8.78%
360000+	801	1,641	13.11%
Total	85,107	104,463	2.84%

### <u>Sectoral Distribution (2004 data)</u>

Sectoral contribution of the City of Matlosana within the Southern District Municipality-:

•	Agriculture	-	27%
•	Mining	-	64%
•	Manufacturing	-	39%
•	Trade	-	61%
•	Services	-	55%
•	Construction	-	75%
•	Transport	-	49%



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## Retail Sales and Consumer Expenditure in Klerksdorp

Retail sales in Klerksdorp increased from R 1.8 billion in 1996 to R \* 4.1 billion in 2004 (measured in current prices - i.e. not corrected for inflation). The table below use the commonly used broad retail product categories and indicates that the highest proportional

increases in retail sales in Klerksdorp were in inedible groceries, "Other" goods, books and stationary, domestic appliances and sport equipment. Jewellery and beverages experienced the relative slowest growth in nominal terms.

Retail Product Category	Retail Sales in Klerksdorp in 1996 (x R1000)	Retail Sales in Klerksdorp in 2004 (x R1000)	Average Annual Growth
Food	603,327	1,250,005	13.40%
Inedible groceries	55,383	315,428	58.69%
Beverages	66,837	117,655	9.50%
Tobacco	38,768	89,568	16.38%
Footwear	82,005	150,669	10.47%
Men's/boys clothing	100,563	194,157	11.63%
Ladies/girls and infants clothing	183,945	362,552	12.14%
Textiles	54,900	107,513	11.98%
Household furniture	105,817	208,470	12.13%
Domestic appliances & hardware	317,275	718,785	15.82%
Pharmaceuticals	100,877	218,655	14.59%
Books & stationary	29,289	99,815	30.10%
Sport equipment	50,525	114,083	15.72%
Jewellery	20,214	33,239	8.05%
Other	40,606	203,667	50.20%
Total	1,850,331	4,184,262	15.77%

### **3.2 LAND USE ANALYSIS**

### 3.2.1 MUNICIPAL LAND USE

The Municipal are of Matlosana covers an area of 3162 km<sup>2</sup> and consist of the following broad land use categories:- (Map 2 refers)

LAND USE	% COVERAGE
Commercial dry-land, commercial irrigated and	25,28
semi commercial substance dry-and	
Forest / woodland / plantations (degraded	2,58
included)	
Grassland	57,23
(improved, unimproved and degraded)	
Thicjet, bushland, scrubland and low fynbos	9.94
Urban / built-up land	2,52
(commercial, industrial, transport, residential	
and small holdings)	
Waterbodies / wetland	0.93
Mines / quarries	1,52

## 3.2.2 URBAN LAND USE

## 3.2.2.1 Existing Urban Land Use (Map 3 refers)



LAND USE	AREA
Residential 1	2058.7861 ha
Residential 2	73.4942 ha
Business 1	57.0290 ha
Business 2	30.7485 ha
Industrial 1	34.0380 ha
Industrial 2	316.7001 ha
Institutional	288.0385 ha
Municipal	280.9847 ha
Private Open Space	1.0627 ha
Public Open Space	286.8089 ha
Recreational	56.0166 ha
Special	81.4994 ha
Agricultural	439.1332 ha
Government	51.2877 ha
Total	4055.6276 ha

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## 3.2.2.2 New Township Establishments

						1	ownship E	stablishmen	ts - June 2	008 (ha)								
Name	Ambegeto Water Estate	Doring- kruin X1	Eagles Creek Golf/Nature Estate	Ellaton	Flamwood	Flimieda X2	Hartbees- fontein	Jouberton	Kanana X13	Klerks- dorp	Kruinsig Landgoed	N12 Develop- ment	Palmiet- fontein	Tigane	Vaal River Village	Wilke- Ville X3	Wil- koppies	ΤΟΤΑ
Number	3	1	1	2	24	1	3	2	1	2	13	1	1	2	1	1	25	
Residential 1	38.7256	7.7220	55.8400	12.3202	34.5870	5.0104	17.8884	80.4591	106.9986	1.3688	117.5908	194.1752		44.7593	77.5500	4.9247	52.7304	852.6
Residential 2		2.0024	3.2150		26.9967		2.1934				36.9771	104.1243	22.0000	0.9199	7.7200		2.9487	209.0
Business 1			3.6450					0.2772		1.7419		9.6430			16.2400			31.5
Business 2								1.6196	0.6006		0.6667			0.5083			1.7313	5.1
Industrial 1										34.5618					8.5800			43.1
Industrial 2																		0.0
Institutional								5.7996	16.1833			22.5822		4.1621	38.2200			86.9
Municipal	0.0784							3.1089		15.1037		2.1880		0.1800	1.2000			21.8
Private Open Space	16.0585		117.4400		0.1669												1.7537	135.4
Public Open Space					0.5048		3.5611	44.8922		11.3863	0.8346	59.2996		13.9885	52.5000		0.2926	187.2
Public Garage					0.0010		0.0011	11.0022		11.0000	0.0010	00.2000		0.5173	02.0000		0.2020	0.5
Recreational	2.8377			8.4335						0.7614	4.4147	36.7362		3.3522	95.7500		5.4650	157.7
Special		0.4174	53.3720		5.5201	0.5880	0.0322			0.7827	0.2853				77.4100		20.5329	158.9
Social Housing												9.2010						9.2
Mixed Land																		
Use												76.0135						76.0
Streets		2.0647		4.7332	7.4863		4.3636	33.8991	40.6922	2.4386	27.6171	50.3931		16.3624		1.4532	7.6335	199.1
Agricultural			213.57															213.5
Transportation															1.99			1.9
Government Agri /															0.15			0.1
Recreation			91.61															91.6
Total	57.8938	12.2000	548.7600	25.5355	75.3084	5.5984	28.0403	170.0557	164.6922	68.1452	141.8168	564.3561	131.2936	84.7702	377.3100	6.3779	91.9867	2554.1

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## 3.2.2.3 Housing Projects

## 3.2.2.3.1 Existing Projects

REPORT: 2007/2008 FINANCIAL YEAR									
PROJECT NAME	PROGRAMME	DEVELOPER	PROJECT STATUS	TOTAL NUMBER OF SUBSIDIES					
KHUMA EXT 6 *M	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	300					
KHUMA EXT 1,3,4 & 5	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	168					
KANANA EXT 6 [OAU]	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	2579					
KHUMA EXT 9	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	2054					
TIGANE EXT 1, 3 & PROPER	PROJECT LINKED	CITY OF MATLOSANA	COMPLETED	500					
JOUBERTON EXT 15	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	700					
KANANA EXT 12	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	764					
KANANA EXT 3 & 5	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	1250					
KANANA EXT 7&10	PROJECT LINKED	CITY OF MATLOSANA	COMPLETED	1500					
KANANA EXT 9 & 10	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	1000					
KHUMA EXT 1,3,4 & 5 (SEE B99090013 & B99030006	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	1720					
KHUMA/STILFONTEIN EXT 7 & 8	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	1877					
TIGANE EXT 4	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	1065					
JOUBERTON EXT 13	CONSOLID ATION	CITY OF MATLOSANA	COMPLETED	502					
JOUBERTON EXT 7	CONSOLID ATION	CITY OF MATLOSANA	COMPLETED	425					

REPORT:	2007/2008 FIN	ANCIAL YEAR	_	
PROJECT NAME	PROGRAMME	DEVELOPER	PROJECT STATUS	TOTAL NUMBER OF SUBSIDIES
KANANA EXT 4 CONSOLIDATION	CONSOLIDATION	CITY OF MATLOSANA	COMPLETED	926
TIGANE CONSOLIDATION	CONSOLIDATION	CITY OF MATLOSANA	UNDER CONSTRUCTION	402
JOUBERTON EXT 7 & 11	DDIS	CITY OF MATLOSANA	BLOCKED	98
JOUBERTON EXT 7 & 11 PHASE 2	DDIS	CITY OF MATLOSANA	UNDER CONSTRUCTION	201
KANANA EXT 3 & 5	INSTITUTIONAL	CITY OF MATLOSANA	UNDER CONSTRUCTION	250
KHUMA CONSOLIDATION	CONSOLIDATION	CITY OF MATLOSANA	BLOCKED	500
JOUBERTON 1 & 5	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	97
JOUBERTON EXT 10 (1 333 SUBSIDIES)	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	1333
ALABAMA EXT 2	PROJECT LINKED	CITY OF MATLOSANA	COMPLETED	330
KANANA EXT 7	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	124
JOUBERTON EXT 13	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	93
JOUBERTON EXT 3 LETSEMA	PROJECT LINKED	CITY OF MATLOSANA	COMPLETED	50
JOUBERTON EXT 9, 11, 12, 13 & 18	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	2651
KANANA EXT 2 & 4	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	349
KHUMA	PROJECT LINKED	CITY OF MATLOSANA	COMPLETED	477

REPORT: 2	007/2008 FI	INANCIAL YEAR		
PROJECT NAME	PROGRAMME	DEVELOPER	PROJECT STATUS	TOTAL NUMBER OF SUBSIDIES
JOUBERTON EXT 12 (1000 SUBSIDIES)	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	1000
KHUMA EXT 1,3,4, 5 & PROPER	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	168
ALABAMA EXT 3	PROJECT LINKED	CITY OF MATLOSANA	COMPLETED	507
JOUBERTON EXT 24	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	2084
KANANA EXT 14	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	2600
STILFONTEIN EXT 13 & 14 (1181 SUBSIDIES)	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	316
ALABAMA EXT 3 PHASE 2 (1578 SUBSIDIES)	PROJECT LINKED	CITY OF MATLOSANA	UNDER CONSTRUCTION	1578
JOUBERTON EXT 8 DDIS (150 SUBSIDIES)	DDIS	CITY OF MATLOSANA	BLOCKED	150
JOUBERTON EXT 16 DDIS (150 SUBSIDIES)	DDIS	CITY OF MATLOSANA	BLOCKED	150
JOUBERTON EXT 7 (70 SUBSIDIES)	DDIS	CITY OF MATLOSANA	BLOCKED	70
JOUBERTON EXT 3 LETSEMA (149 SUBS)	DDIS	CITY OF MATLOSANA	UNDER CONSTRUCTION	149
KANANA HOSTEL	HOSTEL	CITY OF MATLOSANA	UNDER CONSTRUCTION	86
KHUMA HOSTEL	HOSTEL	CITY OF MATLOSANA	PLANNING	
TIGANE EXT 3 HOUSING SUPPORT CENTER	PHP	CITY OF MATLOSANA	UNDER CONSTRUCTION	570
KHUMA HOUSING SUPPORT Center	PHP	CITY OF MATLOSANA	BLOCKED	300

## 3.2.2.3.2 New Projects

REPORT:	2007/2008 FIN/	ANCIAL YEAR		
PROJECT NAME	PROGRAMME	DEVELOPER	PROJECT STATUS	TOTAL NUMBER OF SUBSIDIES
KANANA EXT 10	PROJECT LINKED	CITY OF MATLOSANA	PLANNING	300
KHUMA EXT 6	PROJECT LINKED	CITY OF MATLOSANA	PLANNING	300
JOUBERTON EXT 6	PROJECT LINKED	CITY OF MATLOSANA	PLANNING	300
TIGANE PROPER	PROJECT LINKED	CITY OF MATLOSANA	PLANNING	300
JOUBERTON EXT 19	PROJECT LINKED	CITY OF MATLOSANA	PLANNING	700
JOUBERTON EXT 14	PROJECT LINKED	CITY OF MATLOSANA	PLANNING	500
JOUBERTON EXT 18	PROJECT LINKED	CITY OF MATLOSANA	PLANNING	100
MASIZAKHE WOMEN'S GROUP	РНР	CITY OF MATLOSANA	PLANNING	150

### 3.2.2.4 Infrastructure

	LA	ND / INFRASTRUCTURE /			AC	TIVITIE	S AND	INFRA	STRU	CTURE	COMP	LETED		
		HOUSING			ACTIV	ITIES A	ND IN	FRASTI	RUCTU	RE TO	BE CO	MPLE1	ΓED	
		PRIORITY AREA		1							1			
		RESIDENTIAL AREA	JOUBERTON EXT. 1	JOUBERTON EXT. 2	JOUBERTON EXT. 3	JOUBERTON EXT. 4	JOUBERTON EXT. 5	JOUBERTON EXT. 6	JOUBERTON EXT. 7	JOUBERTON EXT. 8	JOUBERTON EXT. 9	Jouberton Ext. 10	Jouberton EXT. 11	JOUBERTON EXT. 12
		NO. OF STANDS	2922	2484	404	112	96	1510	1904	186	374	1362	1015	1506
	1	LAND												
		AVAILABILITY												
		CONTOURS												
		GEOTECHNICAL												
		EIA												
		LAYOUT												
ГК		TOWNSHIP ESTABLISHMENT												
0		SURVEY												
e ≷		GENERAL PLAN												
E		TOWNSHIP REGISTER												
а а		PROCLAMATION												
- -	2	INFRASTRUCTURE												
-	2.1	BULK												
⊆		WATER												
ы Ш		SEWER												
u d		ELECTRICITY												
0		ROADS	15.6	14.15	2.27	0.84	2.24	14.0	4.05	1.16	0.93	2.47	3.4	3.94
- -		STORMWATER												
>	2.2	INTERNAL												
n B	2.2.1	WATER												
		STAND PIPES												
σ		UNMETERED ERVEN												
5		METERED ERVEN	2922	2484	404	112	96	1510	1904	186	374	1362	1015	1506
o A	2.2.2	SEWER												
0		BUCKET SYSTEM												
σ		WATERBORNE SEWER	2922	2484	404	112	96	1510	1904	186	374	1362	1015	1506
_	2.2.3	ELECTRICITY												
sa		NETWORK												
0	2.2.4	ROADS												
		GRAVEL	12.53	0	1.92		1.42		12.71	0.51	4.20	6.54	5.70	8.45
Ma		PAVED	1.42	1.10			0.59	0.6	0.94	0.87	0.47	0.77	0.67	1.64
<		TARRED	14.14	13.05	2.27	0.84	1.65	13.4	3.11	0.36	0.46	1.7	2.73	2.3
	2.2.5	SUBSIDY HOUSING									-			
		APPLICATIONS APPROVED		14	149		46		332	150				
		NUMBER OF APPLICATIONS COMPLETED		9	0		0		239	0				
		APPLICATION IN PROCESS OF COMPLETION		5	0		0		93	0				
		BUSINESS PLAN SUBMITTED			-		-			-				

LA	AND / INFRASTRUCTURE /			AC		es and	INFR/	STRU	CTURE	COMP	LETED	l.	
	HOUSING			ACTIV	ITIES A	ND IN	FRAST	RUCTU	RE TO	BE CC	MPLE	ΓED	
	PRIORITY AREA												
	RESIDENTIAL AREA	JOUBERTON EXT. 13	JOUBERTON EXT. 14	JOUBERTON EXT. 15	JOUBERTON EXT. 16	JOUBERTON EXT. 17	JOUBERTON EXT. 18	JOUBERTON EXT. 19	JOUBERTON EXT. 20	Jouberton EXT. 21	JOUBERTON EXT. 22	JOUBERTON EXT. 23	JOUBERTON EXT. 24
	NO. OF STANDS	1063	539	731	943	1000	191	1278	991	820	1346	2126	
1	LAND												
	AVAILABILITY												
	CONTOURS												
	GEOTECHNICAL												
	EIA												
	LAYOUT												
	TOWNSHIP ESTABLISHMENT												
	SURVEY												
	GENERAL PLAN												
	TOWNSHIP REGISTER												
	PROCLAMATION												
2	INFRASTRUCTURE												
2.1	BULK												
	WATER												
	SEWER												
	ELECTRICITY												
	ROADS	0.9	0.99	1.04	13.4	13.4	0.67	1.7	15	12.4	0.47	15.3	
	STORMWATER												
2.2	INTERNAL												
2.2.1	WATER												
	STAND PIPES												
	UNMETERED ERVEN												
	METERED ERVEN	1063	539	731	943	1000	191	1278	991	820	1346	2126	
2.2.2	SEWER												
	BUCKET SYSTEM										1326		
	WATERBORNE SEWER	1063	539	731	943	1000	191	1951	991	820	1346	2126	
2.2.3	ELECTRICITY												
	NETWORK		_										
2.2.4	ROADS												
	GRAVEL	8.65	7.02	7.22	13.33	12.63	1.38	14.07	15.09	12.35	17.22	13.34	
	PAVED											1.92	
	TARRED	0.9	0.99	1.04			0.67	1.7			0.47		
2.2.5	SUBSIDY HOUSING												
	APPLICATIONS APPROVED	559					187						
	NUMBER OF APPLICATIONS COMPLETED	548					184						
	APPLICATION IN PROCESS OF COMPLETION	11					3						
	BUSINESS PLAN SUBMITTED		400										

L	AND / INFRASTRUCTURE /			A	CTIVITI	es ani	) INFR/	ASTRU	CTURE	COMP	LETED	1		LA	ND / INFRASTRUCTURE /			A	CTIVIT	IES AN	id infr	ASTRU	ICTURI	e comi	PLETEI	)	
	HOUSING			ACTI	ITIES /	and in	FRAST	RUCTL	IRE TO	BE CO	MPLE	red			HOUSING			ACTI	VITIES	AND IN	VFRAS	TRUCT	URE TO	D BE C	OMPLE	TED	
	PRIORITY AREA			1	1	1		1							PRIORITY AREA									1			
	RESIDENTIAL AREA	ADAMAY- VIEW	CAMBELL TOWN	COLLER- VILLE	DAVANNA	DAWKINS- VILLE	DECLERO- VILLE	DORING- KRUIN	ELANDIA	ELANDS- HEUWEL	ELLATON	FLAMWOOD	FLIMIEDA		RESIDENTIAL AREA	FREEMAN- VILLE	KLERKS- DORP	LA HOFF	MANZIL- PARK	MEIRINGS- PARK	NESERHOF	NEW TOWN	OU DORP	PIEMAARS- DORP	RANDLES- PARK	ROOS- HEUWEL	SONGLOED
	NO. OF STANDS	378	43	77	383	176	215	867	222	37	989	1311	583	NO. OF STANDS		388	328	1138	684	787	468	42	284	77	908	401	221
1	LAND													1 LAND													
	AVAILABILITY														AVAILABILITY												
	CONTOURS														CONTOURS												
	GEOTECHNICAL														GEOTECHNICAL												
	EIA														EIA												
	LAYOUT														LAYOUT												
	TOWNSHIP ESTABLISHMENT														TOWNSHIP ESTABLISHMENT												
	SURVEY														SURVEY												
	GENERAL PLAN														GENERAL PLAN												
	TOWNSHIP REGISTER														TOWNSHIP REGISTER												
	PROCLAMATION														PROCLAMATION												
2	INFRASTRUCTURE													2	INFRASTRUCTURE												
2.1	BULK													2.1	BULK												
	WATER														WATER											1	
	SEWER														SEWER											1	
	ELECTRICITY														ELECTRICITY												
	ROADS		1.3	1.4		3.2	5.9	17.2	7.2	7	14.6	35.2	13.8		ROADS	15.2	17	28.6	8.3	23.3	14.8	17	7	3.4	10.9	12.6	8.7
	STORMWATER														STORMWATER												
2.2	INTERNAL													2.2	INTERNAL												
2.2.1	WATER													2.2.1	WATER												
	STAND PIPES														STAND PIPES												
-	UNMETERED ERVEN														UNMETERED ERVEN												
-	METERED ERVEN	378	43	77	383	176	215	867	222	37	989	1311	583		METERED ERVEN	388	328	1138	684	787	468	42	284	77	908	401	221
2.2.2	SEWER													2.2.2	SEWER												
	BUCKET SYSTEM			1											BUCKET SYSTEM												
	WATERBORNE SEWER	378	43	77	383	176	215	867	222	37	989	1311	583		WATERBORNE SEWER	388	328	1138	684	787	468	42	284	77	908	401	221
2.2.3	ELECTRICITY													2.2.3	ELECTRICITY												
2.2.5	NETWORK														NETWORK												
2.2.4	ROADS													2.2.4	ROADS												
2.2.1	GRAVEL							0.55	0.22	1.48	7.6				GRAVEL			0.44		0.09	0.19		0.48		1.19		
	PAVED		<u> </u>				-	3.90					0.1		PAVED												
	TARRED	12.2	1.29	1.44	1.08	3.2	5.85	17.22	7.22	6.98	14.58	35.18	13.47		TARRED	15.2	17.03	28.61	8.29	23.33	14.79	14.4	6.97	3.44	10.88	12.6	8.66
2.2.5	SUBSIDY HOUSING													2.2.5	SUBSIDY HOUSING												
2.2.3	APPLICATIONS APPROVED														APPLICATIONS APPROVED												]
	NUMBER OF APPLICATIONS	+		1	+	+	+	1	1	<u> </u>			1		NUMBER OF APPLICATIONS											$\rightarrow$	
	COMPLETED														COMPLETED												
	APPLICATION IN PROCESS OF COMPLETION														APPLICATION IN PROCESS OF COMPLETION												
	BUSINESS PLAN SUBMITTED														BUSINESS PLAN SUBMITTED												

Development Framework

Spatial

Matlosana

\_\_\_\_\_ 17 ]\_\_\_\_\_

L	AND / INFRASTRUCTURE /							ASTRU					
	HOUSING			ACTIV	ITIES A	AND IN	FRAST	RUCTL	IRE TO	BE CO	MPLE1	ED	
	PRIORITY AREA												
	RESIDENTIAL AREA	MILKEVILLE	WILKOPPIES	WILKOPPIES AH	ALABAMA PROPER	ALABAMA EXT. 1	ALABAMA EXT. 2	ALABAMA EXT. 3	HARTBEES- FONTEIN	TIGANE EXT. 1	TIGANE EXT. 3	TIGANE EXT. 4	TIGANE FXT.5
	NO. OF STANDS	187	1339	70	328	322	1194	2085	365	883	225	1065	181
1	LAND												
	AVAILABILITY												
	CONTOURS												
	GEOTECHNICAL												
	EIA												
	LAYOUT												
	TOWNSHIP ESTABLISHMENT												
	SURVEY												
	GENERAL PLAN												
	TOWNSHIP REGISTER												
	PROCLAMATION												
2	INFRASTRUCTURE												
2.1	BULK												
	WATER												
	SEWER												
	ELECTRICITY												
	ROADS	6.5	4	2.1		23.9		2.91	15.33	3.46	2.82	0.53	
	STORMWATER												
2.2	INTERNAL												
2.2.1	WATER	-	-			-							
	STAND PIPES												
	UNMETERED ERVEN												
	METERED ERVEN	187	1339	70	328	322	1194	2085	365	883	225	1065	181
2.2.2	SEWER	1	1	r	r	1			-				
	BUCKET SYSTEM												
	VACUUM TANKS								351				
	WATERBORNE SEWER	187	1339	70	328	322	1194	2085	14	883	225	1065	181
2.2.3	ELECTRICITY												
	NETWORK												
2.2.4	ROADS	<u> </u>	1.01	0.50	r –	<u> </u>	00.77	07.00	44.40	20.00		45.05	0.01
	GRAVEL		4.04 0.42	2.53			22.66	27.90	14.13	29.00 0.28		15.35 0.53	3.01
	PAVED	15		15 50	10.55	4.45		2.01	14.12		0.00	0.53	
	TARRED	6.5	41.65	15.59	13.55	4.15	5.27	2.91	14.61	3.18	0.88		
2.2.5	SUBSIDY HOUSING	1	1	-	-	<u> </u>			1				
	APPLICATIONS APPROVED						330			71	351	1043	
	NUMBER OF APPLICATIONS COMPLETED						301			70	346	337	
	APPLICATION IN PROCESS OF COMPLETION						29			15	5	706	
	BUSINESS PLAN SUBMITTED	I I	1	1	1	1	0	1	1	1	1	1	

L/	AND / INFRASTRUCTURE /			AC	TIVITI	es and	<b>INFR</b>	ASTRU(	CTURE	COMP	LETED		
	HOUSING			ACTIV	ITIES A	AND INF	RAST	RUCTU	IRE TO	BE CO	MPLET	ED	
	PRIORITY AREA												
	RESIDENTIAL AREA	TIGANE EXT. 6	TIGANE PROPER	LANDLESS COMMUNITY	AQUA PARK	CORONIA PARK	GOLF PARK	INDUSTRIA PARK	LOURENS PARK	LUCKHOFF PARK	ORKNEY PARK	REEF PARK	ROTARY PARK
	NO. OF STANDS	699	480		253	381	509	3	76	62	228	468	637
1	LAND												
	AVAILABILITY												
	CONTOURS												
	GEOTECHNICAL							A					
	EIA							IRIA					
	LAYOUT							ST ST					
_	TOWNSHIP ESTABLISHMENT							Š					
_	SURVEY							LSNON					
	GENERAL PLAN							-					
	TOWNSHIP REGISTER												
	PROCLAMATION												
2	INFRASTRUCTURE												
2.1	BULK												
	WATER												
	SEWER												
	ELECTRICITY												
	ROADS	-	2.37		6.91	8.68	17.04	4.39	1.54	2.04	4.44	9.94	17.86
	STORMWATER												
2.2	INTERNAL												
2.2.1	WATER												
	STAND PIPES												
	UNMETERED ERVEN												
	METERED ERVEN	699	480		253	381	509	3	76	62	228	468	637
2.2.2	SEWER												
	BUCKET SYSTEM			100									
	VACUUM TANKS												
	WATERBORNE SEWER	699	480		253	381	509	3	76	62	228	468	637
2.2.3	ELECTRICITY												
	NETWORK												
2.2.4	ROADS												
	GRAVEL	11.08	4.20		0.15							0.33	
	PAVED		0.87					1	1				
	TARRED		1.50		6.91	8.68	17.04	4.39	1.54	2.04	4.44	9.94	17.86
2.2.5	SUBSIDY HOUSING												
	APPLICATIONS APPROVED		221										
	NUMBER OF APPLICATIONS COMPLETED		200										
	APPLICATION IN PROCESS OF COMPLETION		21										
	BUSINESS PLAN SUBMITTED												
		L	L	<u> </u>	L	L	1	<u> </u>	l	I	<u> </u>	L	

L	8	

LAND	) / INFRASTRUCTURE /			AC	TIVITIE	S AND	INFRA	STRU	CTURE	COMP	LETED		
	HOUSING			ACTIV	ITIES A	ND INI	FRAST	RUCTU	IRE TO	BE CO	MPLE	ſED	
F	PRIORITY AREA			[					[		[	[	
RE	SIDENTIAL AREA	VAAL PARK	VICTORY PARK	KANANA PROPER	KANANA EXT. 1 & 3	KANANA EXT. 2	KANANA EXT. 4	KANANA EXT. 5	KANANA EXT. 6	KANANA EXT. 7	KANANA EXT. 8	KANANA EXT. 9	KANANA EVT 10
N	NO. OF STANDS	548	266	2007	1213	326	1315	2131	2716	1418	425	1463	1100
1 L	AND												
A	VAILABILITY												
C	CONTOURS												
G	GEOTECHNICAL												
E	IA												
L	AYOUT												
Т	OWNSHIP ESTABLISHMENT												
	SURVEY												
(	GENERAL PLAN												
	OWNSHIP REGISTER												
	PROCLAMATION												
	NFRASTRUCTURE												
-	BULK												
	VATER												
	GEWER												
	LECTRICITY												
	ROADS												
	STORMWATER	10.73	8.41	11.68	9.35	0.62	4.25	2.59	6.8			1.57	0.45
	NTERNAL												
			1	1					1	1	1	r	
-	STAND PIPES												
	JNMETERED ERVEN												
-	METERED ERVEN	548	266	2007	1213	326	1315	2131	2716	1418	425	1463	1100
2.2.2	SEWER				1	-	1		-	r		r	
	BUCKET SYSTEM												
	VATERBORNE SEWER	548	266	2007	1213	326	1315	2131	2716	1418	425	1463	1100
2.2.3 E	LECTRICITY												
Ν	IETWORK												
2.2.4 R	ROADS												
G	GRAVEL			13.03	7.47	2.86	12.00	23.94	30.88	20.21	5.68	10.48	10.20
P	PAVED			0.74			1.17	0.88				0.63	0.45
Т	ARRED	10.73	8.41	10.94	9.35	0.62	3.08	1.71	6.8			0.94	
2.2.5 S	SUBSIDY HOUSING												
	APPLICATIONS APPROVED						713	985	2651	1500	219	380	518
Ν	UMBER OF APPLICATIONS		İ	İ			9	345	1678	1500	219	0	0
	COMPLETED						Ä	545	10/8	1000	219	U	U
	APPLICATION IN PROCESS OF COMPLETION						704	640	973	0	-	0	0
В	BUSINESS PLAN SUBMITTED			469					-	-	181	-	-

LA	ND / INFRASTRUCTURE /			AC	TIVITIE	S AND	INFRA	STRU	CTURE	COMP	LETED		
	HOUSING			ACTIV	ITIES A	ND INF	RAST	RUCTU	RE TO	BE CO	MPLET	ED	
	PRIORITY AREA												
	RESIDENTIAL AREA	KANANA EXT. 11	KANANA EXT. 12	KANANA EXT. 13	KANANA EXT. 14	KHUMA PROPER	Khuma ext. 1	KHUMA EXT. 3	KHUMA EXT. 4	KHUMA EXT. 5	KHUMA EXT. 6	Khuma ext. 7	KHUMA EXT. 10
	NO. OF STANDS	846	764	2866	2604	434	385	797	413	1645	792	161	
1	LAND												
	AVAILABILITY												
	CONTOURS												
	GEOTECHNICAL												
	EIA												
	LAYOUT												
	TOWNSHIP ESTABLISHMENT												
	SURVEY												
	GENERAL PLAN												
	TOWNSHIP REGISTER												
	PROCLAMATION												
2	INFRASTRUCTURE												
2.1	BULK												
	WATER												
	SEWER												
	ELECTRICITY												
	ROADS	0.5		3.0	0.22	12.05		10.05	1.84	0.17	0.42	0.18	-
	STORMWATER												
2.2	INTERNAL												
2.2.1	WATER												
	STAND PIPES												
	UNMETERED ERVEN												
	METERED ERVEN	846	764	2866		2604	434	385	797	413	1645	792	161
2.2.2	SEWER												
	BUCKET SYSTEM				215	24							
	WATERBORNE SEWER	846	764	2866		2507	434	385	797	413	1333	792	161
2.2.3	ELECTRICITY												
	NETWORK												
2.2.4	ROADS												
	GRAVEL	7.68	9.28	31.00		11.53	6.97	3.93	11.28	4.43	19.25	8.35	2.10
	PAVED			3.00		1.42		0.52	0.93	0.17	0.42	0.18	
	TARRED	0.50				10.63		0.53	0.91				
2.2.5	SUBSIDY HOUSING												
	APPLICATIONS APPROVED	102	708			143	387	120	738	177	300	784	
	NUMBER OF APPLICATIONS COMPLETED	0	487			92	326	92	618	152	0	728	
	APPLICATION IN PROCESS OF COMPLETION	0	221			51	61	28	120	25	0	56	
	BUSINESS PLAN SUBMITTED					700					-		

L/	AND / INFRASTRUCTURE /		ACTIVITIES AND INFRASTRUCTURE COMPLETED										
	HOUSING			ACTIV	<b>ITIES</b> A	ND INF	FRAST	RUCTU	RE TO	BE CO	OMPLE <sup>-</sup>	TED	
	PRIORITY AREA												
	RESIDENTIAL AREA	Khuma EXT. 11	STILFON- TEIN EXT.8	STILFON- TEIN EXT.9	STILFON- TEIN EXT.10	STILFON- TEIN EXT.11	STILFON- TEIN	LANDLESS COMMUNITY					
	NO. OF STANDS		1078	2056	-	-	3593						
1													
	AVAILABILITY												
	CONTOURS					L							
	GEOTECHNICAL					<b>V</b>							
	EIA					Н							
	LAYOUT					ISTRIA							
	TOWNSHIP ESTABLISHMENT					ngn							
	SURVEY					IN							
	GENERAL PLAN												
	TOWNSHIP REGISTER												
	PROCLAMATION												
2	INFRASTRUCTURE												
2.1	BULK												
	WATER												
	SEWER												
	ELECTRICITY												
	ROADS						82.02						
	STORMWATER												
2.2	INTERNAL												
2.2.1	WATER												
	STAND PIPES												
	UNMETERED ERVEN												
	METERED ERVEN		1078	2056			3593						
2.2.2	SEWER												
	BUCKET SYSTEM	264											
	WATERBORNE SEWER		1078	2056			3593						
2.2.3	ELECTRICITY												
	NETWORK												
2.2.4	ROADS												
	GRAVEL		12.65	20.70	2.10	3.89	15.1						
	PAVED	1								1	1	1	1
	TARRED	1					82.02						ŀ
2.2.5	SUBSIDY HOUSING										1	1	ſ
0	APPLICATIONS APPROVED		1067										
	NUMBER OF APPLICATIONS	1	1001							1			F
	COMPLETED		1021										
	APPLICATION IN PROCESS OF COMPLETION		46										
	BUSINESS PLAN SUBMITTED				_						1	1	1





### 3.2.2.5 Social Facilities

The number of schools within the City of Matlosana is as follows: -

- Pre-School 9
  Primary School 55
- Secondary School 38
- Tertiary School / College 5
- Farm Schools 28

### 3.2.2.6 Rural Development

The following rural / agri villages exist in the municipal area:-

Name	Farm	Households	Status / Remarks
Erfdeel (Settlement / Production)	Erfdeel 274 – IP (155,34 ha)	31	(CPA) Complete
Oblate (Settlement / Production)	Syferlaagte 274 – IP (383,59 ha)	60	(CPA) Complete
Brakspruit (Settlement/ Production)	Mahemsvlei (404, 19 ha)	110	(CPA) Settlement planning and services in process
Nkagisang (Settlement Production)	Kafferskraal (193,o ha)	152	(CPA) Complete
Ikageng (Farming)	Syferlaagte (174,73 ha)	20	Implementation

Tshwaragang (Farming)	Kafferskraal 400-IP (167,53 ha)	31	(CPA) Complete
Flint (Farming)	Flint 411 –IP (62,77 ha)	10	Implementation (CPA)
Mvala (Farming)	Goedgenoeg 433-IP (99,32 ha)	8	Implementation (CPA)
Jacaranda (Settlement)	Re of Ptn 37, Kafferskraal (32,5 ha)	50	(CPA) Implementation
Maputle Ghaanakgomo (Settlement)	Kafferskraal (12,15 ha)	12	(Trust) Complete

### 3.3 Land Ownership

The current status of the land ownership is indicated on **Map 4.** Most of the land is privately owned, with a large number of municipal land on the southeastern side of Klerksdorp between Klerksdorp and Stilfontein, between Jouberton and Kanana and north westerly of Manzilpark. State land is situated on a small portion south of Stilfontein, south of Kanana as well as north of Khuma.

### **3.4 Housing Stock in Dormitory Townships**

A land use survey was conducted in June 2008 to obtain the current housing stock in dormitory townships. The outcome of the survey is indicated in the table below:



Informal Dwelling on stand	6657
Informal Dwelling not on	53
stand	449
Semi-Formal Dwelling	53
Rooms	
3.5 Backlog in Housing	

**Jouberton** 

Formal Dwelling

Formal & Informal Dwelling

Informals on stands	14099
Informals in backyards	17245
Informals not on stands	1280
Total	32624
Semi-formal houses	635
Informals on dumping site	(Between 100-200)
Rural villages	484 households





8177

6561

Framework		
Development		
Spatial		
Matlosana		

<u>Alabama</u>

stand

Tigane

stand

Kanana

stand

Rooms

Khuma

stand

Rooms

Formal Dwelling

**Formal Dwelling** 

Formal & Informal Dwelling

Informal Dwelling on stand

Informal Dwelling not on

Semi-Formal Dwelling

Informal Dwelling not on

Semi-Formal Dwelling

Informal Dwelling not on

Semi-Formal Dwelling

Formal Dwelling

Informal Dwelling not on

**Semi-Formal Dwelling** 

Formal Dwelling

3608

29

0

6

139

877

1504

247

452

12

8345

5416

5320

303

71

42

4827

3736

1873

333

97

### 3.6 Current IDP Projects (2008/2009)

#### • Department Civil Engineering

#### • Sewer

- o Upgrade Orkney Waste Water Treatment Plant
- Upgrade inlet works Klerksdorp Inlet Works
- o Increase Capacity Hartbeesfontein Waste Water Plant
- o Upgrading mechanical, electrical equipment and pumpstations
- Replace Sewer Pump line Kanana
- o Replace Pump line Khuma
- o VIP's for farms and farm settlement
- o Upgrade buildings Waste Treatment Plants KOSH Area
- o Enlarge Meiringspark outfall sewer line
- o Uraniaville outfall
- o Enlarge Adamayview outfall sewer line
- o Bulk Sewer line Stilfontein Adamayview
- o Reline sewers in Orkney
- o Increase capacity Hartbeesfontein Waste Water Treatment Plant
- o Replacement of problem lines on programmed annual cycle
- o Construction of toilets

nstr	uction of toilets		
•	Kanana Ext. 1-6	-	92 toilets
•	Kanana Ext. 9	-	917 toilets
•	Kanana Ext. 10	-	646 toilets
•	Kanana Ext. 11	-	1000 toilets
•	Kanana Ext. 13	-	2886 toilets
•	Tigane Ext. 1-4	-	107 toilets
•	Tigane Ext. 5	-	224 toilets
•	Tigane Ext. 6	-	715 toilets
•	Jouberton Ext. 1-18	-	282 toilets
•	Jouberton Ext. 19	-	951 toilets
•	Jouberton Ext. 20	-	991 toilets
•	Jouberton Ext. 21	-	820 toilets
•	Jouberton Ext. 22	-	1326 toilets
•	Jouberton Ext. 23	-	1026 toilets
•	Khuma Ext. 3-9	-	95 toilets
-	Kharan Fat C		1222 +- ! -+-

- Khuma Ext. 6 1333 toilets
- Khuma Ext. 10 157 toilets

- Jouberton Ext. 19 West
- Jouberton Ext. 22
- Kanana Ext 11
- Hartbeesfontein
- Kanana Ext 13

#### • Water

- o Upgrading mechanical, electrical equipment and pumpstations
- o Khuma Bulk Supply
- o Alabama Bulk Supply
- Upgrade water network Klerksdorp CBD
- o Water supply Midvaal Endpoint Reservoir to Muranti Reservoir
- o Main water supply to Jouberton Ext. 12, 13, 14 & 23
- Main water supply to Russel Street, Ext. West
- o Main water supply to Meiringspark
- o Main water supply to Kanana Ext. 13 and 14
- o Enlarge water main to Brady, Vlei
- Reline 375 pipe to Technican Site
- Klerksdorp to Orkney bulk water supply
- o Ellaton to Alabama water supply
- Water supply to Dawkinsville
- o Khuma 2MI pressure tower & Pump station
- o Khuma Proper network & meter replacement
- o Tigane Ext 5 & 6 water supply
- o Water supply to rural schools, clinincs etc
- o New 10 Ml reservoir for Hartbeesfontein
- o Annual replacement of old water meters
- Reline of water-line:
  - Dawkinsville
  - Reline Van Riebeeck Road water line
- o Water Meter replacement
- o Refurbishment of reservoirs, water towers
- o Water supply to Hartbeesfontein
- o IDP Pressure Management
- o Klerksdorp Rural water supply
- Jagspruit Pumpstation

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o Sewer Network

#### Roads

- Paving of Taxi Routes Jouberton
- Paving of Taxi Routes Kanana
- o Paving of Taxi Routes Khuma
- o Paving of Taxi Routes Tigane
- Development of Taxi Ranks Kanana
- o Development of Taxi Ranks (Khuma)
- Main Storm water drainage Jouberton
- Paving of sidewalks along Taxi Routes Kanana
- Paving of sidewalks along Taxi Routes Khuma
- Paving of sidewalks along Taxi Routes Tigane
- Paving of sidewalks along Taxi Routes Jouberton
- o Stone Pitching of Open Storm Water Channels Jouberton
- Stone Pitching of Open Storm Water Channels Kanana
- Stone Pitching of Open Strom Water Channels Khuma
- o Resealing of roads
- o Robot System Platan Street
- o Stormwater drainage master plan
- Upgrading of gravel roads & Storm water drainage Tigane Ward 2 & 3
- Provision of guidance signs (KOSH)
- Provision of Taxi Lay byes (KOSH)
- o Provision of shelters for taxi rank (Klerksdorp)
- o Provision of new taxi rank Hartbeesfontein
- Provision of Intermodal Transport (Klerksdorp)
- o Upgrading of Gravel Roads & Stormwater Drainage Jouberton
- Upgrading of Gravel Roads & Stormwater Drainage Kanana Ward 25 & 28
- Upgrading of Gravel Roads & Stormwater Drainage Alabama Ward 13
- Upgrading of Gravel Roads & Stormwater Drainage Khuma War 4, 5, 6, and 7
- Upgrading of Gravel Roads & Stormwater Drainage Tigane War 2 & 3
- o Upgrading of Main Taxi Rank in Jouberton at Hospital
- o Upgrading of Existing Taxi Rank in the Orkney CBD
- o Upgrading of Existing Taxi Rank in the Stilfontein

- Pedestrian Cycle lane between Jouberton and Klerksdorp along N12
- Pedestrian Cycle land between Jouberton and Klerksdorp Industrial area along Tirisano Road
- o Pedestrian Cycle lane between Orkney and Klerksdorp
- o Pedestrian Cycle lane between Jouberton and Mercury Lane
- o Pedestrian Cycle lane between Klerksdorp and Ian Road
- o Pedestrian Cycle lane along access road to Khuma
- o Pedestrian Cycle lane between Jouberton and Alabama
- Pedestrian and Cycle lane between Tigane and Hartbeesfontein
- Pedestrian Bridge over N12 between Alabama and Jouberton
- o Building of a new Taxi Rank in Tigane
- Upgrading of Taxi Rank in Alabama
- o Provisioning of Paved Areas and Lighting at Matlosana Stadium
- o Provisioning of Paved Areas and Lighting at Oppenheimer Stadium
- o Provisioning of Paved Areas and Lighting at Makotter Stadium
- o Provision of traffic calming measures:
  - Ward 2
  - Ward 17
  - Ward 15
  - Ward 19
  - Ward 21
- Construction of Streets
  - Ward 2
  - Ward 14
  - Ward 15
  - Ward 18
  - Ward 19
  - Ward 17
  - Ward 29
  - Ward 6
  - Ward 13
- Department Electrical Engineering
  - o Upgrading 11kV Distribution Network Northern Suburbs
  - o Frans Street Sub-station and Cabling
  - o Installation of high mast lights in:

- Tigane
- Khuma Ext. 8 & 9
- Stilfontein
- Alabama Ext. 3
- o Replace old streetlight fittings Orkney
- o Electrical bulk metering
- o Entrance Lights Jouberton
- o Road Crossing Lights N12 Alabama Ext. 3 & Jouberton
- o Khuma Street lighting
- o Kanana Street lighting
- o Electrification Jouberton Ext. 24

## Community Services

- o Refurbishment of Community Halls
  - Jouberton
  - Kanana
  - Khuma
  - Tigane
- o Beautification of cemeteries Aesthetical sections and entrances
- New cemetery or extension of the existing southern cemetery Jouberton
- o Multi Purpose Community Centre Jouberton
- o Development of new parks in KOSH area
- o Upgrade Community Facilities
- o Upgrading of existing sports facilities
- o Building of Community Library
- o Upgrading of Khuma Library
- o Removal of surplus game at Faan Meintjies Nature Reserve

## Economic Affairs & Corporate Communication & Services

- o Building of flea Market shelters for entrepreneurs Kanana
- o Upgrading of City Halls
- o Upgrading of Community Halls
  - Jouberton
  - Kanana
  - Khuma
  - Tigane
- o Upgrading Council Chamber

- Department Local Economic Development
  - o Hawker Shelters
  - o Emerging farmers project
  - Development of Taxi Ranks
  - Hosting of SMME Expo
  - Building of shelter for Informal Trades
  - Building of Taxi Ranks with accommodation for Business
  - Extension of Fresh Produce Market to cater for Informal Traders as well
  - Formation of Cooperatives
  - Re-establishment of financial institutions forums
  - Conversion of unproductive municipal buildings into Youth Advice Centres
  - Supporting of Jewellers making school and business
  - Support active engagement of mining houses
  - Support for small business in waste recycling
    - Building of modern industrial parks along N12
    - Installation of bulk infrastructure
    - Utilization of redundant mining facilities as Business
       Development Centre
  - Building of deboning factory adjacent to abattoir and skin processing factory
  - Setting up a sewing group factory
  - Support for entrepreneurs and offering them incentives.
    - Production of corrugated iron sheets and other metal products
    - Building of Multipurpose centers
    - Installation of Bulk Infrastructure
    - Beneficiation of agricultural products canning
    - Establishment of more sunflower planting
    - Forming of cooperatives
  - Building of Biodiesel Plant
  - Building hydroponics production

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- Plant taking advantage of shortage of roses
- Organic production of plants
- Implementation of medical cluster strategy
- Signage in all entrances to the City
- Airport and neighboring cities
- Maintaining and updating of website
- Production of Brochures and newsletters
- Training of Information centre officers and funding the offices
  - Conduct feasibility study
  - Extension of runway
  - Building of warehouses around airport
  - Engagement of car manufactures
  - Building of car assembly plant
  - Revision and updating of incentive schemes
- Creation of labour data bank in consultation with Department of Labour
  - Approval of strategy
  - Establishment of SPV for funding of strategy
  - Law enforcement
  - Training of Informal traders
  - Discouraging building of small shops
  - Building of shelter for informal traders
  - Building of recreation parks along Schoonspruit
  - Creation of resting places along the street
  - Upgrading of existing sports facilities
  - Training of tourism guides
  - Supporting of KCTA
- Promotion of Sporting
- Events
  - Watersports
  - Golf
  - Hockery
  - Soccer

- Tennis
- Aviation
- Building of Bishop Tutu Birth Place
- Upgrading of all Tourism attraction places
  - Goudkoppie
  - Museum
  - Transport Museum
  - Station
  - Concentration Camp Cemetery
  - Faan Meintjies etc.
  - Adoption of strategy
  - Building of hotel
- Funding of Business plan of KCTA to include Arts and Crafters
- Facilitate building of conference facilities
- Establishment of Matlosana 2010 Soccer World Cup Local Organizing Committee
  - Engage SAFA and 2010 LOC SWC
  - Decide on countries to be targeted
  - Training of tourism volunteers on language of team to be based here
  - Facilitate building of more hotels
  - Facilitate one stop shopping centre building
  - Facilitate one stop shopping centre building
  - Coordination of plans with surrounding hosting cities
  - Training of Civil servants, postmen petrol attendants, public transport drivers
  - Engaging financial institution on forex
  - Advertising of opportunities for 2010 eg. laundry, informal trading regulations
  - Entertainment when there are no practice matches
  - Tourism attractions game farms etc.
- Popularizing our stadium : hosting of games leading to 2010 including Trials runs
- Establishment of team

• Grading of Tourism establishment

### Town Planning

- o Scanning of building plans and linked to GIS
- Financial Services
  - Upgrade Pay points
  - o Building new pay points
- Public Safety
  - o Upgrading of Fire Station Orkney / Kanana
  - Upgrading of Fire Station Hartbeesfontein / Tigane
  - o Refurbish Court Building
  - o Camera's law enforcement
  - o CCTV Camera's
  - o Rendering of Security Services at City of Matlosana

### Department Community Services

- Building & Equipping Environmental Education Centre Faan Meintjies
- o Kanana Buy Back Centre

### Housing Projects

Kanana Ext. 10 300 0 Khuma Ext. 6 300 Ο Jouberton Ext. 14 500 Ο Jouberton Ext. 16 300 0 Jouberton Ext. 18 100 0 Jouberton Ext. 19 A 300 0 Jouberton Ext. 19 B 400 Ο Tigane Proper 300 Ο

## • Department of Health

- o Kanana Clinic
- o Klerksdorp Nursing College
- o Tshepong Hospital Forensic Mortuary
- Building of Primary Health Care clinic in Ext 13, Kanana
- Building of Primary Health Care clinic in Ext 13, Jouberton
- Building of Primary Health clinic in Ext 20, Jouberton
- 3 x Mobile clinics to visit points in Jouberton, Kanana and Khuma
- 2 x Clinics in rural area's

- 1 x Werda
- 1 x Dominionville
- 1 x Khuma (Botchabelo )
- Building of HIV/Aids orphanage
- o Construction of new offices or Renting of office accommodation

### • Department of Education

- o Atamela Primary School
- o Thea Morafe primary School

### • Department of Social Development

- o Triest Activity Centre (Disabled people)
- o Emmanual Day Care Centre (Disabled people)
- Secure Care Centre (Youth in conflict with the law)
- Klerksdorp Crisis Centre (victims of domestic violence and abuse)

## • Department of Agriculture, Conservation and Environment

- Stoebe Vulgaris Land Care Project
- Feranani co-operation (ltd) youth Crop & Livestock Project
- Baphuting farming enterprises (woman) Crop & Livestock Project
- o NEPRO Farming Group Crop & Livestock Project



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#### 4. INTEGRATED TRANSPORT PLAN FOR THE CITY OF MATLOSANA

#### 4.1 BACKGROUND

The Southern District Municipality compiled an Integrated Transport Plan (ITP) in July 2007. The data that is mentioned below is subtracted from the Southern District ITP Report.

The City of Matlosana requested certain initiatives and strategies to be addressed in the ITP, these are:

- 2010 projects for Matlosana in view of their bid to be a training camp for one of the soccer teams
- The Trade and Transport Hub, linked to the PC Pelser Airport
- Express passenger train service from Klerksdorp / Potchefstroom to Johannesburg.
- City of Matlosana is also in a process of compiling a Transport Plan for the Municipal area.

#### 4.1.1 <u>Goals & Objectives</u>

#### Goal:

• To introduce bus and train where they are more efficient than taxi and integrate the various modes

#### Objectives:

• To develop integrated multi-modal facilities at the main train stations of Klerksdorp, Potchefstroom and Carltonville;

#### Goal:

• To optimise the opportunities provided by the 2010 Soccer World Cup to leave a legacy for public and non-motorized transport in the District and the Matlosana and Potchefstroom areas

#### **Objectives:**

- To upgrade the main roads from Matlosana and Potchefstroom to Rustenburg and Johannesburg;
- To provide a dedicated inter-urban passenger rail service to Johannesburg;
- To upgrade main taxi ranks in Matlosana and Potchefstroom;

- To provide non-motorised facilities on main routes to the 2010 training stadia;
- To upgrade road directional signage to main destinations in Matlosana and Potchefstroom;
- To fully support provincial programmes and initiatives for 2010; and
- To upgrade the PC Pelser airport and provide a direct road link from the N12.

#### Goal:

- To optimise the utilisation of rail where it is most cost effective Objectives:
  - To investigate the feasibility of the Klerksdorp ring rail service as a commuter or tourist service

Goal:

• To upgrade and develop the metered taxi system as part of the formal and integrated public transport system in the main economic centres of Potchefstroom and Klerksdorp

### 4.1.2 Transport Infrastructure: Airports

#### PC Pelser Airport in Klerksdorp

The PC Pelser Airport in Klerksdorp is situated on the eastern side of Klerksdorp, halfway between Klerksdorp and Stilfontein and south of the N12 road to Potchefstroom. The Municipality is the designated Operating Agency and the airport falls under the Department of Community Services. The airport is situated on municipal land and sufficient land exist for the future expansion of this airport.

The airport is close to the N12 (1,7km) and rail line (0,6km) but access is only via a narrow road between Klerksdorp and Stilfontein. The distance to Klerksdorp is approximately 5 km and to Stilfontein 6 km.

The airport has 3 runways as follows:

Paved – 1500 m length
 Unpaved – 1000 m length
 Unpaved – 9000 m length

Other infrastructure, such as buildings, is very limited.

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#### 4.1.3 Transport Infrastructure: Rail

**Map 3.2** shows the rail network distinguishing between freight lines and mixed passenger and freight lines. There is one inter-provincial rail line crossing the Southern District boundary, running between Johannesburg and Cape Town, passing through Potchefstroom, Klerksdorp, Orkney, Leeudoringstad to Maquassi and then to Kimberley. Both long distance passenger and freight services are operated on this line. Passenger's use the stations at Potchefstroom and Klerksdorp to access the passenger services. Several other dedicated freight lines are also serving the district, between Johannesburg/West Rand, Merafong and Lichtenberg, also linking Merafong with Potchefstroom, and two lines running to the north from Klerksdorp and Maquassi. Despite the number of rail lines, there is an absence of commuter rail services. An obvious limitation of the rail network is the absence of a line linking Potchefstroom and Klerksdorp with Rustenburg and the N4 Platinum SDI.



### 4.1.4 <u>Transport Infrastructure: Road Based Public Transport Facilities &</u> <u>Network</u>

#### **Bus Facilities**

Bus transport operations are very limited in the district. There are not any subsidised bus services in the Southern District Municipality.

Private non-subsidised bus operators include: **Vaal Maseru**, which operates a long-distance service to Maseru from a terminus about half way between Klerksdorp and Orkney. **City-to-City**, which operates a long-distance service between Johannesburg and Kimberley with termini in Potchefstroom, Klerksdorp and Wolmaransstad.

#### 4.1.5 <u>Number of Taxi Ranks in Matlosana</u>

The table below indicates the number of taxi ranks in the Matlosana Local Municipal area.

	NUMBER OF RANKS 1997 - 2003								
City of Matlosana	Total 1997	Formal 2003	Informal 2003	Total 2003	Surveyed 2003				
Mutosulu	22	6	25	31	18				

Map 3.16 indicates the total daily passenger volumes of the taxi routes in the KOSH area. The table below gives the results of the 2006 rank cordon counts in Klerksdorp. Some 150 000 passengers move through these ranks on a daily basis. The Jazz Bar Rank is running at capacity, while the Price and Pride Rank is highly utilized and cannot accommodate much more growth.



RANK	DAILY TAXIS ENTERING AND			AM PEAK HOUR			A	M PEAK HO	UR	PEAK RANK UTILISATION			
NAME		LEAT	VING		TAXIS		G AND	TAXIS ENTERING AND					
					LEAVING			LEAVING					
	TAXIS	PAX	TAXIS	PAX	TAXIS	PAX	AVE%	TAXIS	PAX	AVE %	NUMBER	PEAK	% RANK
	IN	IN	OUT	OUT	IN	IN	ROUTE	OUT	OUT	ROUTE	OF	USAGE	unu-
							UTILI-			UTILI-	BAYS	OF BAYS	SATION
							SATION			SATION	VAILABLE		
Price and	1925	10040	1617	3344	233	1920	54.9	19.4	2536	87.1	237	189	80%
Pride													
Jazz Bar	480	2112	395	4752	69	272	26.3	69	904	87.3	81	79	98%
Shell	462	2208	659	6792	66	416	42.0	98	1176	80.0	231	101	44%
Garage													
Total	2867	14360	2671	14888	368	2608	47.2	361	4616	85.2	549	369	67%

#### 4.1.6 Road Safety Problems from interviews:

#### Matlosana:

• The car traffic safety is a huge problem on the N12 between Matlosana and Wolmaranstad. Only one lane per direction is available, but no median. A lot of serious accidents occur as a result of high speeds, overtaking and lack of road markings. • At the N12 directly west of Matlosana pedestrian safety is a huge problem at the crossing point between Jouberton and Alabama townships. As a result of the absence of crossing facilities the traffic situation for pedestrians is confusing.

Due to the recently introduced 80 km/h speed limit that is not supported by any change in the road design, high speeds are still common at this part of the N12.

## 4.1.7 <u>Needs Assessment</u>

The City of Matlosana identified the following needs in the area:

- Transport Forum
- Accessibility to the Oppenheimer Stadium as a Soccer World Cup training venue, from the N12
- Upgrading of the N12
- N12 portions through urban areas to be investigated. SANRAL budgeted R248 million for rural sections of N12 to be upgraded;
- There is a need for a District airport, preferably linked to the Trade and Transport Hub. The airport needs to be linked to the N12;
- Improved transport between Klerksdorp and Gauteng;
- Need cross border linkages to Gauteng, Rustenburg, and Motheo District;
- Non-motorised transport facilities;
- Road signs;
- Incident/Disaster Management Plan; and
- Dedicated loading points for taxis along road network.

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MATLOSANA ROAD PROJECTS MAP 7.9 INTEGRATED TRANSPORT PLAN FOR SOUTHERN DISTRICT MUNICIPALITY Central LEGEND VZ SANRAL Road Project Road Project/Rehabilitation of Paved Road noad Project.Roads o be Re-Graveled Paved Gravel Access Roods Roads to be Pe-Oraseled Poads to be Rehabilisted Informal Settlen Mining Betti Mining Belti Municipal Boundaria Provincial Boundaria P20 Rehabilitation Rd D1546 from Km 0.0 to Km 18 P44 Regraveling Rd D1327from Rd D577 to Dominionville only 12 Km DATA SOURCE: P45 Regraveling Rd D106 from Rd D1784 to Rd D654 only 6 Km Depriment of Transport RNMS: 2004 P24 Regravel Rd D860 Km 0.0 to Km 41.0 between Rd P3/4 and Rd P23/ CLIENTS: P39 Regravel Rd D1742 from Doringput to Hauptrus only 6 Km egravel Rd D1280 from Kaalspruit to Rd D156 only 13 Ki Ü escal & Patch Rd P137/1 from Orkney to Khum Reseal & Patch Rd P137/1 Km 0.0 to Km 31.1 Orkney to Rd D2541 P31 Development Rd D152 Km 0.0 to Km 20 between Elanton & Rd D680 1:500,000 **4**55I PREPARED BY: P9 Reseal & Patch Rd P23/2 Km 45 to Km 79 4 Rd hety S2 N.012-160-2006/1 MPRS1: Klerksdorp SANRAL 0 2.5 5 10

## Klerksdorp Checkers unused rank



Klerksdorp Main rank overcrowded

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Klerksdorp Station unused bus rank



#### **Klerksdorp Station**



#### 4.1.8 Soccer World Cup 2010 and Special Projects

Matlosana has been earmarked by the North West DOT (Department of Transport) at a recent provincial Transport Indaba to act as a training camp for one of the Soccer World Cup teams. Matlosana and Potchefstroom are also very accessible to Gauteng and Rustenburg and they provide a lot of tourist accommodation that can be used by visitors and spectators during the tournament. Transport to these 2010 match venues will therefore be important.

A summary of the 2010 SWC projects are:

- To upgrade the main roads from Matlosana and Potchefstroom to Rustenburg and Johannesburg;
- To provide a dedicated inter-urban passenger rail service to Johannesburg;
- To upgrade main taxi ranks in Matlosana and Potchefstroom;
- To provide non-motorised facilities on main routes to the 2010 training stadia;

- To upgrade road directional signage to main destinations in Matlosana and Potchefstroom;
- To upgrade the PC Pelser airport and provide a direct road link from the N12.

Roads of significance for the 2010 SWC includes

- N12 (P3/5 and P3/6) link between Klerksdorp, Potchefstroom and Gauteng and OR Tambo International Airport;
- R30 (P32/1, P32/2 and P20/3) link between Klerksdorp to Oppenheimer Stadium and Klerksdorp to Rustenburg. Oppenheimer Stadium will be most likely be used during the refurbishment of the stadiums in Gauteng before the 2010 SWC;
- R502 (P137/1) access road from the N12 to Oppenheimer Stadium.

#### 4.1.9 <u>Traffic Problems in Matlosana</u>

In Klerksdorp there are a number of problems relating to the peak-period movement of minibus-taxis and pedestrians through the centre of town. The problems appear to be with the boarding and alighting of minibus-taxi passengers in the peak period, illegal movements of taxis, which interferes with the general traffic, as well as hawkers blocking pavements and lines of sight of drivers and pedestrians.

#### 4.1.10 City of Matlosana Special Projects

The need for the following projects were identified whilst compiling the SD ITP Report:

- Upgrading of public transport facilities
  - Upgrading of various taxi ranks;
  - Provision of taxi lay-byes;
- Provision of guidance road signs;
- Provision of non-motorised transport facilities (NMT);
  - Provision of cycle ways and pedestrian walkways;
  - Provision of a pedestrian bridge across the N12.

### 4.1.11 Upgrading of Public Transport Facilities

The majority of commuters in the KOSH area make use of minibus-taxis due to the lack of subsidized bus services and commuter rail services. The main taxi rank in Klerksdorp, consisting of three ranks in close proximity, service 3,000 vehicles per day and 15,000 passengers per day (2006).

The existing three ranks are poorly paved, has ablution facilities, limited hawker facilities but requires shelters to protect passengers from the elements, as well as offices for the taxi associations. Similarly there is a need to upgrade various other taxi ranks within the City of Matlosana. The following taxi ranks were identified for upgrading:

- Upgrading of three taxi ranks in Klerksdorp CBD;
- Construction of an intermodal transfer facility/taxi rank next to the existing railway station in Klerksdorp;
- Upgrading of taxi rank in Jouberton;
- Upgrading of the existing taxi rank in the Orkney CBD;
- Upgrading of existing main taxi rank in Stilfontein;
- Upgrading of two taxi ranks in Khuma;
- Upgrading of three taxi ranks in Kanana;
- Upgrading of existing (and enforcing of use of) taxi rank in Alabama;
- Upgrading of taxi rank in Hartbeesfontein; and
- Upgrading of taxi rank in Tigane.



### 4.1.12 Upgrading of the existing main taxi rank in Klerksdorp

Klerksdorp has three taxi ranks in close proximity to each other next to the N12 within the CBD.

The Price and Pride taxi rank is the largest servicing 13,500 passengers and 3,600 vehicles daily. The rank has 237 bays and an utilization of 80%. The existing rank is a surfaced formal, off-street facility with gravel pedestrian walkways. It requires lighting, paved walkways, shelters and general maintenance.

The Shell garage taxi rank services 10,000 passengers and 1,100 vehicles daily. The rank has 231 bays and a utilization of 101%. The existing rank is a surfaced formal, off-street facility with unpaved pedestrian walkways. It requires lighting, hawker facilities, shelters, paved walkways and additional paving for loading bays.
The Jazz bar taxi rank services 7,000 passengers and 900 vehicles daily. The rank has 81 bays and a utilization of 79%. The existing rank is a surfaced formal, off-street facility with pedestrian walkways. It requires lighting, water connections, shelters and additional paving. A TA office should be constructed at one of the three ranks.

### 4.1.13 <u>Pedestrian Walkway and cycle lane between Orkney and</u> Klerksdorp

A dedicated walkway and cycle lane (2,25 m wide to accommodate a cyclist and a pedestrian) is recommended between Klerksdorp CBD and the Orkney CBD along the R30.

> Oppenheimer Stadium will be used as a practise field by some of the 2010 soccer world cup teams. It will also host matches during the renovation of the 2010 stadiums. The stadium has a capacity of 45,000 spectators and can also accommodate 40-50 VIP's.

### 4.1.14 <u>Pedestrian Walkway and cycle lane between Kanana and</u> <u>Oppenheimer Stadium</u>

A dedicated walkway and cycle lane (2,4 m wide to accommodate two direction cycles) is recommended between Kanana and the Oppenheimer Stadium via the Orkney CBD along the R30 and the R502.

### 4.1.15 Non- Motorized Transport (NMT) Facilities

The ITP identified the need for various cycle paths and walkways between the previously disadvantaged community residential areas, industrial areas, high employment density areas, CBD's and soccer stadiums. The following specific projects were identified:

• Pedestrian and cycle lane between Orkney and Klerksdorp;

- Pedestrian and cycle lane in Jouberton along Mercury Lane;
- Pedestrian and cycle lane in Klerksdorp along lan Road / Leemhuis Road;
- Pedestrian and cycle lane along access road to Khuma;
- Pedestrian and cycle lane along Tirasano Road between Jouberton and Klerksdorp industrial area;
- Pedestrian and cycle lane along Ariston Road between R30 and Shaft 4 mine;
- Pedestrian and cycle lane between Tigane and Hartbeesfontein;
- Pedestrian and cycle lane between Kanana and Oppenheimer stadium;
- Pedestrian and cycle lane between Jouberton and Alabama;
- Pedestrian and cycle lane between Jouberton and Klerksdorp along the N12;
- Pedestrian bridge over the N12 between Alabama and Jouberton;
- Provision of paved areas and lighting at the Oppenheimer stadium;
- Provision of paved areas and lighting at the Matlosana stadium; and
- Provision of paved areas and lighting at the Markotter stadium.

The NMT projects ties in with the NW Province plans to improve the province and make it a more NMT friendly province, based on the following principles:

- Preserve the environment :
  - Clean air, clean water;
  - Curb pollution; and
  - Provide a healthy, clean, attractive environment.

- Access for all:
  - Provide safe easy access;
  - Improve linkages between residential areas and working areas, and
  - Develop walkway and/or cycle routes along major routes.
- Safety and perception of safety :
  - Crime prevention;
  - Personal safety, and
  - Traffic safety.





### **5. ENVIRONMENTAL ANALYSIS**

### 5.1 CLIMATE

The climate in Klerksdorp can be described as temperate. Rainfall ranges from 400 to 600mm/an throughout most of the City of Matlosana increasing to between 800 and 1000mm/an in the extreme north. Temperatures vary by up to 15°C between summer and winter, with mean summer highs of approximately 32°C and mean winter lows of approximately 0°C. The predominant wind direction is northerly, with the windiest months being between August and November.

### 5.2 TOPOGRAPHY

The Matlosana municipal area has a slightly irregular undulating topography dictated by the Vredefort event, which brought about the Vredefort Dome near Parys. The height above sea level ranges between 1 300m and 1 600m, increasing in a general north-westerly direction.

The interaction between climate and topography has led to the evolution of a rich biodiversity. The ridges and hills of Klerksdorp have a characteristic range of different aspects, slopes, altitudes, soils and hydrological conditions conducive to heterogeneous abiotic conditions that provide a greater diversity of potential niches for plants and animals than homogeneous landscapes. As a result, many Red Data or threatened species of plants and animals inhabit ridges. In the North West Province, 65% of Red Data plant species have been recorded on ridges (PFAB, 2001). Besides representing habitats, the hills and ridges also serve as important wildlife corridors and provide for movement between defragmented surroundings (ROSENBERG *et al.*, 1997). It is for these reasons that a ridges policy like that which exists for Gauteng, has been recommended in the Provincial Strategic Development Framework (PSDF) for the North West Province (**Map 6 refers**).

### 5.3 GEOLOGY AND GEOMORPHOLOGY

Ancient igneous volcanic rock formation from the Ventersdorp, Transvaal, Rooiberg and Griqualand West stratigraphies as well as the Witwatersrand, Pongola and Dominion stratigraphies, all dating back as far as approximately 2 000 million years ago, dominate the area of Klerksdorp.

The Ventersdorp super group comprises a central core of gneiss granite surrounded by a rim of Witwatersrand, Transvaal or Ventersdorp rocks that contain shatter cones, indicative of a violent mechanical shock. The Ventersdorp formation is composed of volcanic andesitic lavas and related pyroclastics (metamorphic rock formed by extremely hot temperatures). The formation has a depth of 1800m, forming the undulating hills.

The Witwatersrand super group is in excess of 5km thick. The rocks are mainly comprised of quartz, shale and conglomerates, containing mainly gold and uranium deposits. Such is the case of the gold bearing reef around Klerksdorp. Further east towards Stilfontein under a layer of dolomite and lava lie further gold bearing conglomerates.

The Dominium Group is comprised of arenaceous sediments, conglomerates, grits, basic volcanics, tuffs, coarse pyroclastic rocks and quartzite. It is predominantly volcanic in origin, forming a series of hills to the west of Klerksdorp (in the vicinity of the old gold-mining town of Dominium Reefs). The thickness of the group is 2 250m in this area.

The Transvaal sequence represents a large component of the Province's geology and consists of two main sedimentary groups: the Pretoria-Griquatown group and the Olifants River-Campbell Rand group. Both groups occur discontinuously in the North West Province. Dolomite consists largely of calcium carbonate and is hence vulnerable to solution, especially by the carbonic acid found in rainwater percolating downwards. The dissolution of dolomite can lead to the formation of underground caverns and horizontal chambers, often filled with large volumes of groundwater. Malmane Dolomite appears to be one of the main elements of the Transvaal sequence.

### 5.4 HYDROLOGY

Water is one of the area's most critical and limiting natural resources. Klerksdorp falls entirely within the middle Vaal (W5) water management area and is divided into ten catchments. The Schoonspruit River and its tributaries as well as the Ysterspruit, Jagspruit and Kromdraaispruit rivers are the main rivers running through the Klerksdorp area (Map 6).

The North West Province is part of the Western Plateau of the Plateau Wetland Group, which has the greatest concentration of pans in the country (COWAN & VAN RIET, 1998). Wetlands play an important role in natural filtration and purification of water as well as providing habitat to waterfowl and breeding grounds for a number of migrant bird species. Thus, according to the PSDF, these wetlands should be conserved, including those that fall outside of protected areas.

The water from dolomitic features is typically alkaline (pH 7.5-9.3), having picked up magnesium and calcium carbonates through solution from the parent dolomite. By their very nature, such dolomitic features are partial to both factors affecting surface water and those affecting groundwater.

### 5.5 SOIL TYPES

With the low rainfall generally experienced in the municipal area, soils are deemed to be only slightly leached. With high evaporation rates, there is a predominance of upward movement of moisture in the soils. This often leads to high concentrations of salts, such as calcium and silica, in soils, which sometimes leads to the formation of hard pans or surface duricusts. As a result, high levels of salinity or alkalinity may develop in these areas.

### 5.6 HABITAT TYPES

The Klerksdorp area consists of four habitats, namely Andesite mountain bushveld, Eastern dry sandy grassland, Klerksdorp thornveld and Carletonville dolomite grassland. Three of the four habitat types are grassland types, predominantly Brakenveld (sparse, sour and strongly tufted veld) and Cymbopogon-Themeda veld grasses, while the Andesite mountain bushveld is characteristic of the mountain bushveld types.

The Carletonville dolomite grassland is found on the dolomitic plains in the eastern areas of Klerksdorp, at altitudes of 1350 to 1450m above sea level. There are no known red data species listed in this habitat type.

The Eastern dry sandy grassland dominates the Klerksdorp area in Aeolian and colluvial sands overlying sandstone, mudstone and shale. The vegetation is dry, short grass with a karroid element. There are no known red data species in this habitat type, and large parts of the vegetation have been ploughed.

The Klerksdorp thornveld consists of open to dense *Acacia Karroo* trees as bush clumps in dry grassland. The vegetation in this habitat type is confined to deep, clayey alluvial and colluvial soils on the footslopes of quartzite and chert ridges and floodplains. *Ceropegia stentiae* is the only known red data species that inhabits this habitat type. The Klerkdsdorp thornveld has a high grazing potential, which has lead to its over-utilisation and degradation. Subsequently the *Acacia Karroo* has become invasive in adjacent dry grasslands.

The Andesite mountain bushveld is restricted to the north-eastern area of Klerksdorp on the low and undulating andesitic hills and ridges. The vegetation is dense with medium to tall thorny bushveld in well-developed grasslands., The only known red data species to inhabit this habitat is the *Nuxia glomerata*.

### 5.7 VEGETATION TYPES

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The Klerksdorp area, falls within the grassland biome, comprising a wide range of grasses typical of arid areas. The grassland biome, which is second highest to the fynbos biome in species diversity, is regarded as one of the most critically threatened southern African ecosystems (RUTHERFORD & WESTFALL, 1994; SIEGFRIED, 1989). Most of this grassland has been cleared and cultivated with predominantly wheat and maize or is used for cattle and game farming and is disrupted by unnatural fire cycles (RUTHERFORD & WESTFALL, 1994). A study done by the North West University was done and the outcome is that they took into account the socio-economic value of the land for tourism and recreational use, educational value, medicinal use of plants and potential use of vegetation for food, firewood and crafts. Eleven plant communities and 6 sub-communities were recorded and substantiated by existing literature on wetland and ridge plant communities.

### 5.8 PLANT COMMUNITIES

The following plant communities were identified from the studies undertaken by Abendroth (2004) under the supervision of Dr S Cilliers of the University of the North West.

### 5.8.1 WOODLAND COMMUNITY - *NUXIA CONGESTA – ERAGROSTIS TRICHOPHORA* (ABENDROTH, 2004)

This community was situated on steep rocky slopes with a south-facing aspect. Trees and shrubs cover nearly 20% of the ground in this community. The sample plot, with a rockiness of 70%, was situated in Buisfontein, near Hartbeesfontein and forms part of the Klerksdorp Thornveld habitat type. The underlying rock type is conglomerate.

### 5.8.2 WOODLAND COMMUNITY - VANGUERIA INFAUSTA – TAPIPHYLLUM PARVIFOLIUM (ABENDROTH, 2004)

This community is strongly associated with hills and ridges formed by rock types like migmatide and arenite. Aspects vary from South West to North West, and the average slope was 30°. Most of the plots were situated in the city of Klerksdorp occurring on steep slopes or near the top of ridges. With an average number of 26 plant species per sample plot, this community is less species rich.

### 5.8.3 GRASSLAND COMMUNITY - JAMESBRITTENIA BURKEANA -DIHETEROPOGON AMPLECTENS (ABENDROTH, 2004)

This grassland community is dominated by *Diheteropogon amplectens, Brachiaria serrata* and *Vernonia galpinii*. Diagnostic species are *Dianthus mooiensis, Eragrostis nindensis, Jamesbrittenia burkeana* and *Schizachyrium sanguineum*. Associated with rocky migmatide, andesite and conglomerate ridges, the community provides abiotic habitat characteristics that can divide it into four sub-communities.

- 1. Selaginella dregie Mundulea sericea community
- 2. Mundulea sericea Rhus leptodyctia community
- 3. Leonotis ocymifolius Becium angustifolium community
- 4. Nodorella hottentottica Brachiaria serrata community

### 5.8.4 GRASSLAND COMMUNITY - ANTHEPHORA PUBESCENS – CYMBOPOGON PLURINODES (ABENDROTH, 2004)

Located in more plain and sandy areas, this community is part of the Eastern Dry Sandy Grassland and part of the Cartletonville Dolomite Grassland habitat. A correlation with underlying rock types shows a clear grouping of dolomitic grasslands. The dolomitic grasslands are characterized by open grasslands with occasional patches of trees.

### 5.8.4 GRASSLAND COMMUNITY - ARISTIDA CANESCENS – THEMEDA TRIANDRA (ABENDROTH, 2004)

Similar to community 4 above, these grasslands are also located in flat open areas belonging to the Eastern Dry Sandy Grassland habitat. Variations occur as a result of the underlying rock types: arenite, andesite, granite and quartz porphyr were dominant.

### 5.8.6 WOODLAND COMMUNITY - CROTON GRATISSIMUS – GREWIA OCCIDENTALIS (ABENDROTH, 2004)

This community is located on the Platberg, near Faan Meitjes Nature Reserve, and forms part of the Andesite Mountain Bushveld. It occurs on steep west-facing andesite slopes and is dominated by *Croton gratissimus*, which covers approximately 50% of the plot followed by *Grewia occidentalis* and *Gymnosporia buxifolia*.

### 5.8.7 WOODLAND COMMUNITY - EHRETIA RIGIDA – ACACIA CAFFRA (ABENDROTH, 2004)

This woodland community is predominantly associated with quartz porphyr rock types. Most sample plots were taken in the habitat type of Eastern Dry Sandy Grassland. This area was associated with slightly steep (about 20°), mainly south-facing aspects, and

trees reach an average height of 4 to 5m. Rockiness of sample plots differed from 5 to 80%. In the shade of bigger trees, the orchid *Bonatea speciosa,* a Red Data species, was encountered.

### 5.8.8 WOODLAND COMMUNITY - ERAGROSTIS CHLOROMELAS – ACACIA ERIOLOBA (ABENDROTH, 2004)

Also situated in the Eastern Dry Sandy Grassland habitat type, this community was found at the footslopes of rocky ridges. Underlying rock types were shale and conglomerate. Remnant patches, where there was no slope nor rocks, were dominated by *Acacia erioloba*.

### 5.8.9 WOODLAND COMMUNITY - ACACIA HEREROENSIS – CYNODON DACTYLON (ABENDROTH, 2004)

Shale, andesite and dolomite are rock types on which this plant community was situated. A slightly south-facing slope of 5° and an average rockiness of 15% were habitat characteristics of the *Acacia hereroensis – Cynodon dactylon* woodland community. about 50% of the sample area.

### 5.8.10 WOODLAND COMMUNITY - PANICUM COLORATUM – ACACIA KARROO (ABENDROTH, 2004)

Mostly underlain by Andesite rock types, this woodland community is dominated by *Acacia karroo, Panicum coloratum* and *Rhus pyroides*. The occurrence of *Acacia caffra* divides this woodland community into two sub-communities.

### Eragrostis lehmanniana – Acacia caffra sub-community

All sample plots belong to the Klerksdorp thornveld habitat type. The low slopes (4°) and percentage rockiness (3%) were characteristics of the sample plots. A high number of alien species also occurred as a result of using these areas for cattle grazing or agricultural fields. Alien species included *Atriplex spp., Gomphrena celosioides* and *Schkuhria pinnata.* 

### Cymbopogon plurinoides – Ziziphus zeyehriana sub- community

Dominant species in this sub-community are *Celtis africana, Grewia flava* and *Eragrostis lehmanniana.* Diagnostic species are *Ziziphus mucronata* and *Cymbopogon plurinoides.* 

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The following plant communities were associated with wetlands:

### 5.8.11 *PASPALUM DILATATUM – SCHOENOPLECTUS CORYMBOSUS C*OMMUNITY (ABENDROTH, 2004)

This wetland community, with just one sample plot, was located along a river and was dominated by *Paspalum dilatatum, Schoenoplectus corymbosum* and *Typha capensis.* Also common were *Cyperus diformis* and *Populus x canescens*, which is an invasive species and already covered big areas near the sample plot.

### 5.8.12 SETARIA SPHACELATA – THEMEDA TRIANDRA COMMUNITY (VAN WYK ET AL., 1999)

This transitional community covers large parts of flood plains and riverbanks of Schoonspruit. Diagnostic species are the grasses *Themeda triandra, Setaria sphacelata* and the forb *Berkheya radula*.

### 5.8.13 CHAMAESYCE INAQUILATERA – ERAGROSTIS TRICHOPHORA COMMUNITY (VAN WYK ET AL., 1999)

With a widespread distribution in the study area, this community occurs on clayey loam soil with sloping edges of depressions. Diagnostic species are *Eragrostis trichophora*, *Chamaesyce inaequilatera* and the sedge *Cyperus rupestris*. 20% of species are alien species.

### 5.8.14 PANICUM MAXIMUM – SALIX BABYLONICA COMMUNITY (VAN WYK ET AL., 1999)

The community is dominated by the exotic *Salix babylonica* and is well established mainly along watercourses. Covering a big area and providing shady microclimatic conditions under the trees, a number of additional species can establish. *Panicum maximum, Asparagus laricinus* and the alien species *Bidens bipinnata* was also common. An average number of 15 species, 48% of which were alien.

### 5.8.15 SIDA RHOMBIFOLIA – EUCALYPTUS CAMALDULENSIS COMMUNITY (VAN WYK ET AL, 1999)

Dense stands of planted *Eucalyptus* trees, which are characteristic for this habitat. Besides the dominant *Eucalyptus camaldulensis*, other common species were found, namely *Asparagus suaveolens*, *Ruta graveolens* and *Sida rhombifolia*. The old and established

woodlands may be the reason for a relatively high average number of species (22). As in previous communities, the percentage of alien species is about 20 or 38%.

### 5.8.16 TAGETES MINUTA – CYNODON DACTYLON COMMUNITY (VAN WYK ET AL., 1999)

Dominant species in this community are *Cynodon dactylon* and *Tagetes minuta*. Diagnostic species are *Gomphrena celesioides* and *Alternanthra pungens*. Woody species occur occasionally with trees, such as *Rhus lancea, Ziziphus mucronata* and *Diospyros lycioides ssp. lycioides*. The species composition, with 43% alien species, suggests several disturbances and changes from natural vegetation.

### 5.8.17 CYPERUS FASTIGATUS COMMUNITY (VAN WYK ET AL., 1999)

The distribution of this community is not related to a specific wetland habitat. It occurs in mosaic patterns along the riverbanks close to the edge of water as well as in shallow water. The dominant *Cyperus fastigatus* and its community are able to cover large areas in a short period of time. Diagnostic species are *Mariscus congestus* and the alien species *Sesbania punicea*. Two sub-communities have formed by the presence of *Paspalum distichum* on the one hand and by the presence of *Gleditsia triacanthos* on the other hand. Both sub-communities contain a high level of invasive species, such as *Verbena bonariensis* and *Chenopodium album*.

### 5.8.18 TYPHA CAPENSIS COMMUNITY (VAN WYK ET AL., 1999)

Typical for the community are dense stands of *Typha capensis* growing in standing water or in seasonally drier areas. Diagnostic species are *Stenotaphrum secundatum, Conyza bonariensis* and *Plantago lanceolata*.

### 5.8.19 PHRAGMITES AUSTRALIS COMMUNITY (VAN WYK ET AL., 1999)

Mainly found in pure stands of *Phragmites australis*, this species poor community establishes in standing water as well as in dry riverbanks. Exotic species like *Bidens bipinnata* and *Physalis viscosa* are diagnostic species. Water stagnation can cause deposition of sediments, which leads to the development of sand banks. Similar to other wetland communities, over 50% of recorded species were aliens.

### 5.8.20 SCHOENOPLECTUS CORYMBOSUS COMMUNITY (VAN WYK ET AL., 1999)

Pure stands of *Schoenoplectus corymbosus* were found in standing water. The grass *Paspalum distichum* and the alien *Chenopodium album* species occurred occasionally.

The following plant communities are associated with the ridges of Klerksdorp:

- 5.8.21 CYNODON DACTYLON OPUNTIA IMBRICATA COMMUNITY (VAN WYK ET AL., 1997)
- 5.8.22 *MUNDULEA SERICEA VANGUERIA INFAUSTA* COMMUNITY (VAN WYK *ET AL.*, 1997)
- 5.8.23 BRACHIARIA SERRATA ELIONURUS MUTICUS COMMUNITY (VAN WYK ET AL., 1997)

### 5.9 FAUNA

As a result of the limited budget available for this report, it was not feasible to undertake field surveys to identify the fauna in the Klerksdorp area. However, the North West Biodiversity Inventory and Database Development project completed in 2003, provides some indication of the fauna in the Klerksdorp area, albeit at a course scale. This study identified mammal, amphibian, reptile, avifaunal, lepidopteran, ichthyofauna, and macro-invertebrate biodiversity according to the habitat types they are likely to occur within.

Mammals have mostly a low to medium predicted biodiversity in Klerksdorp, with the extreme eastern area being medium (**Map 6**). The rivers, pans and dams are considered low for mammal species. As mammals often have a range of habitat types, without fieldwork, it is not feasible to determine which inhabit the habitats of the Klerksdorp area. The Andesite mountain bushveld is known to contain seven red data species and the Cartletonville dolomite grassland contains eight. The Klerksdorp thornveld contains six red data species, and the Eastern dry sandy grassland has four. No species names were provided for the red data species found in these habitats.

The frog species, however, have a relatively low species richness as a result of the generally dry conditions. *Pyxicephalas adspersus,* found in the eastern dry sandy grassland, is the only red data amphibian found in the habitats of the Klerksdorp area. *Homoroselaps dorsali* is the only red data reptile found in the habitats of the Klerksdorp area. Predicted amphibian biodiversity is predominantly low-medium in Klerksdorp with only the north-eastern area and that along the Vaal River having low predicted biodiversity - the rivers, pans and dams all have high predicted biodiversity ratings. The predicted reptile biodiversity shows a similar pattern, with most of Klerksdorp having a low to medium rating. The area around the Vaal River and the rivers and pans have a low predicted biodiversity.

Lepidoptera is an order of insects commonly known as moths and butterflies. The North West Province has 221 confirmed species sited within its boundaries. The Andesite mountain bushveld habitat found within Klerksdorp was identified as containing four red data species, namely *Lepidochrysops hypopolia, Lepidochrysops praeterita, Platyleshes dlomitica* and *Spialia paula.* However, the entire Klerksdorp area is classified as having a low predicted biodiversity.

Avifauna (all the bird species of a region or period) have a low to medium predicted biodiversity in Klerksdorp, except in the southern area, which is predicted to have low biodiversity. However, all four habitats found in the Klerksdorp area have been identified to contain red data species, although no list of these species is available.

Aquatic fauna is comprised of macro-invertebrates (aquatic invertebrates, e.g. worms, mayflies and crabs) and Ichthyofauna (the fish of a particular region, area or habitat).

The rivers of Klerksdorp are predicted to have high biodiversity for macro-invertebrates, while the dams and pans have medium to high ratings. The rivers, dams and pans of Klerksdorp have low to medium ratings for Ichthyofauna.

Although the species richness in KLM does not seem to be as high as in the remainder of the province, a number of red data species are found in the habitats of Klerksdorp. Therefore, it is important to preserve the natural habitats for these species and encourage species movement within and between their preferred habitat type/s.

### 5.10 ENVIRONMENTAL PROTECTION

A number of prominent environmental features and resources exist in the municipal area that must be protected against negative impacts of human related activities in order to ensure environmental sustainability.

These features and resources include:

- Existing protected areas
- Dolomite aquifers and dolomite eyes
- Hills and ridges
- Wetland areas (dam, river, streams and wetlands)
- High potential agricultural land
- Cultural heritage sites



### Existing protected areas

Faan Meintjies Nature Reserve – The Council is currently in a process of improving the facilities of this reserve.



### Faan Meintjies Nature Reserve

### Dolomite aquifers and dolomite eyes

Dolomite aquifers in the area are very important strategic water resources that require active management to ensure long-term sustainability of both quantity and quality. Areas where ground is already unstable and where water levels are allowed to fractuate regularly are particularly vulnerable to sinkhole development.

### Existing impacts:

- Lowering of water table due to extraction of ground water for agricultural, mining and urban activities.
- Potential ground water pollution due to wastewater from sanitation systems of the rural villages, mining activities, waste sites and pest control.

### Hills and Ridges

Hills and ridges generally have a rich biodiversity consisting of an important habitat for sensitive species as well as high plant diversity. These hills and ridges are also associated with areas classified as high biodiversity areas.

### Existing impacts:

- Bush encroachments
- Alien plan invaders
- Urban development

### Wetland Areas

Wetland areas include all rivers, streams, wetlands, pans and dams.

The most prominent wetland areas are:-

- Vaal River
- Schoonspruit
- Jagspruit
- Palmietspruit
- Koekemoerspruit
- Rietgatspruit
- Johan Neser Dam

All wetland areas are classified as high biodiversity areas that should be legally protected.



### Areas of high biodiversity

Areas of high biodiversity is classified as high and medium to high hyper diversity areas, important habitat types identified and areas with a high conservation status.

Areas with high biodiversity within the municipal area are indicated on **Map 6**. This includes all wetland areas (rivers, streams, dams and pans) as well as the hills and ridges and certain woodland areas in the central western areas, central eastern areas as well as The Vredefort Dome area.

Existing impacts:

- Competition with several other land uses such as agriculture and increasing fragmentation
- Bush encroachment
- Alien plant invasion
- Degradation of land and soil
- Urban development

Areas of high biodiversity should be employed to identify new formal or informal protected areas (conservancies) as well as integrated open space system.

Most of the habitat types predominant in the municipal area are not sufficiently protected. According to the IUCN, at least 10% of all habitat types in a region should be formally or informally protected.

### Agricultural land

Agricultural land is the most important natural resource within the municipal area. Most of the cultivated land within the municipal area is classified as 'prime agricultural land'.

Prime agricultural land is defined as the best available, primarily from the national perspective, but with allowance of provincial perspective, land best suited to and capable of consistently producing acceptable yields of a wide range of crops (food, feed, forage, fibre and oil seeds) with acceptable expenditure of energy and economic resources and minimum damage to the environment.

The rest of the municipal area is classified as areas with a high grazing capacity (5-10 Hec / LSA).

### Existing impacts:

- Subdivisions of farms (creating uneconomical units)
- Overstocking of grazing land
- Bush encroachment
- Soil and land degration
- Mining activities
- Uncontrolled rural settlements
- Urban development

### Cultural / Heritage Sites

A large variety of cultural heritage sites exist in Tlokwe that are mostly situated within the urban area as indicated in the following table:

Matlosana					
Cultural & Heritage Site	Historical	Eco-tourism	Archaeological	Educational	GPS No.
OLDEST TOWN IN THE OLD TRA	ANSVA	AL PRO	VINCE		
Station building and Flag room					342
Dwelling House known as Fountain villa					346
Dutch Reform Mother Church					
Railway station					344/345
Birth place of Bishop Desmond Tutu					
The "Oudorp"					346
Hendrik Potgieter Road					346
Palmietspruit Bridge					354/355
Rock Engravings					
Bosworth					
Scott house					356
Masureik Dwelling					353
J.A. Taylor Dwelling					353
Leask Dwelling					348
Stock Exchange Building					
H.L.M. Leibrandt Dwelling					353
Helm house					348
Tin Dwelling					349
Klerksdorp Museum					340/341
ANGLO-BOER \	NAR				
Goud koppie					343
Old Cemetery					352
Anglo-Boer War Monument					352
Blacks Monument					352
ANGLO-BOER \	VAR	1			252
Battle of Ysterspruit Memorial					352
British soldiers Monument					339
Wall of Remembrance Memorial					352
WORLD WAR 1 & WO		AR 2			220
Klerksdorp Citizen Memorial City Garden Memorial					339 339
HARTBEESFON	TEIN				334
Hartbeesfontein Natural Fountain					357
Second Freedom War Memorial					357
Pioneers Graves					359-360
Hartbeesfontein Museum					362
					302

6. ALIGNMENT OF THE SDF WITH NATIONAL, PROVINCIAL AND DISTRICT PLANNING

### 6.1 NATIONAL SPATIAL DEVELOPMENT PERSPECTIVE (NSDP)

### 6.1.1 NSDP Objective

Bringing about **coordinated government action** and **alignment** to meet social economic and environmental objectives.

- Maximising the overall social and economic impact of government development spending by interpreting the strategic direction, promoting policy coordination and fitting government actions into a coherent spatial terms of reference.
- Reconfigure apartheid spatial relations and to implement spatial priorities that meet the constitutional imperative of providing basic services to all.

According to the NSDP the Matlosana / Potchefstroom area is situated in a mass produced and specialized economy area with Matlosana urban area as a "Significant Economic Activity Area".



### 6.1.2 NSDP Value for Government:

Confronting three fundamental planning questions:

- > Where should government direct its investment?
- What kinds of spatial forms and arrangements are most conductive to the achievement of objectives?
- How can government as a whole capitalize on complementarities and facilitate consistent decision making.

### 6.1.3 <u>NSDP Principles</u>

The NSDP puts forward a set of five normative principles:

### -<u>Principle 1:</u>

Rapid economic growth that is sustained and inclusive is a pre-requisite for the achievement of other policy objectives, among which poverty alleviation is key.

### -<u>Principle 2:</u>

Government has a constitutional obligation to provide basic services to all citizens wherever they reside.

### -Principle 3:

Government spending on fixed investment should be focused on localities of economic growth and/or economic activities and to create long-term employment opportunities.

### -<u>Principle 4:</u>

Efforts to address past and current social inequalities should focus on people, not places. In localities where there are both high levels of poverty and demonstrated economic potential, this could include fixed capital investment beyond basic services to exploit the potential of those localities. In localities with low demonstrated economic potential, government should beyond the provision of basic services, concentrate primarily on human development.

### -<u>Principle 5:</u>

In order to overcome the spatial distortions of apartheid, future settlement and economic development opportunities should be channelled into activity corridors and nodes that are adjacent to or that link the main growth centres. Infrastructure investment should primarily support localities that will become major growth nodes in South Africa and the SADC region to create regional gateways to the global economy.

### 6.2 RATING OF SOUTHERN DISTRICT MUNICIPALITY

Southern District Municipality rates under the top 20 contributor with regard to:

- The national GVA of mass-produced labour intensive goods,
- The national GVA of (2004 data),
- > The national GVA of innovation and experimentation (2004 data),
- The national GVA of tourism (2004 data),
- Migration experiencing an in-migration of population between 2001 and 2006.
- > The national GVA of public services and administration (2004 data),
- The national GVA of services and retail (2004 data).

### 6.2.1 IMPACT ON SOUTHERN DISTRICT MUNICIPAL SDF

- To overcome metropolitan and town and city spatial distortions between where people live and where they work, greater emphasis should be given to medium density settlement closer to the workplace and to improved transportation networks.
- Facilitating greater access by the poor and intensifying growth in the core areas by enhancing the place based qualities of these areas in crucial.
- The core areas play an important role in integrating South Africa into the global and regional economy.
- In order to generate and sustain economic growth rates above 6%, this rate will have to be supported through appropriate investment in key infrastructure such as roads, railways, telecommunications and parts.

To embed the spatial vision, specific actions on the part of all three spheres of government are necessary:

For district and metro IDPs to become local expressions of the plans of all three spheres, deeper cooperation and collaboration will be required in planning for these spaces. Programmatic responses and investment decisions, be they in the area of skills development, grant allocation, housing provision or infrastructure investment, should be under pinned by the approach and principles of the NSDP.

In accordance with the NSDP-development approach and normative principles, and the 2004 Harmonization and Alignment proposals, spatial perspectives contextualising and NSDF, and communicating key spatial challenges and desired responses need to be developed at provincial and district/metro levels to informal PODS and municipal IDPs.

### 6.2.2 THE HARMONISATION AND ALIGNMENT PROPOSALS

- To ensure the maintenance and exploration of innovative ways to growing the areas of existing economic development potential together with the general management of these areas.
- To develop creative and appropriate responses to deal with economies in decline together with the two other spheres of government.
- To decisively deal with poverty, social and economic exclusions, and spatial fragmentation.
- To explore and address the implications of natural-resource potential and user for growing the economy and addressing poverty.
- To seek out new areas of comparative advantage, and identify and develop clusters of specialization in collaboration with especially the provincial and national departments of trade and industry, labour and economic affairs.

### 6.3 PROVINCIAL PERSPECTIVE

### 6.3.1 SPATIAL CHALLENGES

The North West Spatial Development Framework that is currently being reviewed identified the following spatial challenges:

### 6.3.1.1 *Scope*

- High, but unequal growth
- Environmental Degradation vs. Economic Growth
- Spatial fragmentation
- Alleviating Poverty
- Improved Global Impact and Investment,
- Uncoordinated Development Spending

- 6.3.1.2 Challenges
  - Spatial imbalances
    - To reduce the number of households living under unsustainable condition with 10% per annum
  - Land ownership
    - To increase private landownership with 5% per annum as part of land reform and rural development.
  - Linkages with Gauteng Province
    - Upgrading of the N12 Potchefstroom to a dual carriageway or at least with extended shoulders
  - Functional hierarchy of towns and cities
    - To enhance the development of primary nodes to develop into organised, well planned metropolitan areas.
    - To reduce the number of small unsustainable settlements with 50% over a period of between 20 and 30 years.
    - To enhance the development of regional service centres where centres of size are lacking (to be identified after determination of urban functional areas.
  - Development of rural settlements
    - To reduce the number of small unsustainable settlements with 50% over a period of between 20 and 30 years.
    - To formalize the hierarchical fashion of villages with potential for sustainable development in order to provide services more cost effectively and increase private landownership with 10% over the next decade
    - To establish centralized multi-purpose service centres in rural areas (farming areas).
  - Land use management
    - To introduce land use management schemes in all municipalities within the next 5 years in accordance with the Land Use Management Act.
    - To build the capacity for land use management on a District Municipal level in order to support local municipalities with the implementation of land use management.

- Guidelines for Spatial Development Frameworks
  - Local and district municipalities review their Spatial Development Frameworks in accordance with the set National and Provincial guidelines, implement a capacity building programme for municipalities

### 6.3.2 VISION

The overall Provincial Growth and Development vision is to build a society that:

- Jointly focus and deliver on key national and provincial priorities
- Deliver services and channel resources in the most effective, efficient and sustainable way
- Significantly reduce the dualistic nature of the Provincial economy into a single and integrated economy that benefits all.

In promoting this vision the Provincial government aims to:

- Develop economic sectors and spatial localities in accordance with people needs and potential;
- Deliver on the constitutional obligation to provide basic services to all citizens
- Promote job creation and skills training;
- Address past and current social inequalities by focusing on people and not places
- Support full participation and equal opportunities to all people.
- Offer the poor skills development and employment opportunities to exercise choices in improving their quality of life and work together towards a single and integrated economy in a dignified manner,
- Use the natural resource base of the province in sustainable manner.
- The overall aim of the provincial vision outlined above is to position the province to escape the "Poverty Trap" and promote a virtuous cycle of growth and development.

### 6.3.3 STRATEGIC THRUSTS AND PRINCIPLE LED RESPONSES (ASGISA)

Thrust One: Accelerate Growth and Development: People and the Economy:

- Economic Growth as a pre-requisite for Growth and Development and for the achievement of all other policy objectives
- Localities that historically indicate the highest levels of economic activity (GVA) have the most potential to continue this trend. As reflected in the PGDS, these areas will be the focus for Government to most guide and support economic growth and development through direct investment in capital infra-structure.
- Major Capex Infrastructure investment should be focused in economically sustainable areas.

Thrust Two: Share Growth and Development : Investing in people not places:

- Areas which indicates localities with limited economic potential will form part of Government's focus to improve / maintain the quality of life in these areas through investment in appropriate social infrastructure and programmes.
- Basic service delivery to eradicate backlogs and prepare the poor for future growth and development.

Thrust Three: Promote Sustainable Development:

 Ensure environmental and ecological integrity and sustainability (NBSAP).

### 6.3.4 DEVELOPMENT SCENARIOS

 Intervention Zone One : Economic Growth Areas for prioritized development spending

Zone One indicates areas that will be prioritized in terms development spending and investment. These are:

 Areas currently representing spatial concentrations of economic activity

- Areas showing future potential for development expansion in terms of economic growth
- Areas that play a supportive role to existing and future
- Intervention Zone Two : Social Inclusion Areas representing areas for investment in people rather than in places

Zone Two will promote the concept of social inclusion by promoting and strengthening overlaps in economic activity and poverty to address high levels of spatial fragmentation and exclusion. This can be achieved by:-

- Improving spatial accessibility profiles of poverty concentrations; or
- Applying the NSDP principle of "concentrating investment in people rather than places" in areas that is spatially fragmented in nature
- Intervention Zone Three : Stimulating and kick starting New Potential Growth Nodes

Zone Three will identify and focus on the emergence of potentially new spatial new spatial overlaps between areas of economic activity and areas of poverty can be stimulated. This can be achieved through focused investment in poverty concentrations that show potential for economic development in their spatial and socio-economic context

Intervention Zone Four : Environmentally Sensitive Areas

Development Zone Four will largely concentrate on future sustainable development approaches in terms of sustainable development spending. This will be achieved by focusing on rectifying development imbalances relating to equitable access to basic services, the protection of the natural and cultural resources and spatial form that promotes greater efficiencies in land use and service provision.

### NWSDF implication for Matlosana: -

- Matlosana (Klerksdorp) is classified as a first order centre as well as a primary development Node on the Treasure Corridor that must be reinforced in order to strengthen developments from Johannesburg (Gauteng) to Matlosana / Potchefstroom and further along the N12.
- In terms of the Conceptual Macro Framework of the NWSDF, Klerksdorp is also identified as one of the Priority / investment areas based on the Investment Matrix given the combination of high needs and high economic potential (Refer to Map of Overall PSDF).

### 6.3.5 DISTRICT SPATIAL DEVELOPMENT FRAMEWORK

### 6.3.5.1 Development Approach

"Transformation of the Treasure highway into an activity and mobility corridor with a multi-dimensional character that unlocks opportunities and generate synergy between spatial efficiency, economies and scale, private sector investment in high priority areas and overall employment creation that will benefit the local, provincial and national community."

The Treasure Corridor forms an integrated part of the Growth and Development Strategy (GDS) for the Southern District Council focusing specifically on the physical and spatial dimensions of concentrated development efforts within the region. The development concept that is formulated is based on certain key principles.

### 6.3.5.2 Key Principles

- The strengthening of the existing core areas in the development corridor, and
- The improvement of communication and transport network linking the core areas with each other
- The favourable locality of the intermediate region with regard to the diffusion of innovation processes

The potential of agricultural production based in economics of scale and the proximity to a large megapolitan market

The phenomenon of "environmentalism" implying that people / activities are willing to move to areas which are attractive socially, economically and environmentally.

- The potential of centres in the intermediate region to function as end stations in the "step-wise" migration process.
- Centres on the corridor and within the intermediate region are in direct competition with the Gauteng area in order to attract investment. Therefore a key principle for development on the corridor will have to be to provide attractive social as well as economic infrastructure at competitive cost for new developers. These include the availability of well located land for business, commercial, offices, industrial development and the enhancement of the absorptive capacity with regard to housing.

### 6.3.5.3 Objectives

- The identification of available land and infrastructure (social as well as infrastructure) to accommodate and enhance economic growth in the industrial, commercial and the business sector
- To identify opportunities in the adjacent rural area (agricultural, mining and tourism) which could be integrated with the economics along the corridor
- To identify the infrastructural backlog that should be addressed in order to unlock the inherent development potential along the Treasure Corridor
- To identify opportunities where the informal economies (and land reform projects) could be integrated into the formal economy of the region
- To encourage the establishment of an implementation agent which could co-ordinate development along the corridor and facilitate the development process and marketing of the area.
- To align the Treasure Corridor Strategy with adjacent regions such as Gauteng, Bophirima and Northern Free State in order to enhance co-ordination of development initiatives on a national level.

### 6.3.5.4 Spatial Development Proposals (Refer to Maps A & B)

- Emphasis should be placed on the successful integration of the Matlosana and Potchefstroom areas into a "system of cities" with Gauteng as the core development areas. This will enhance the possibilities of decentralization of economic activities more effectively towards Potchefstroom and Matlosana. The so-called phenomenon of "environmentalism" already started in this area implying that people and activities are willing to move these areas (especially Potchefstroom) which are more attractive socially, economically and environmentally.
- Top priority therefore be given to the upgrading of the communication network, especially the N12 (between Potchefstroom and Johannesburg) as well as the rail network.
- Emphasis should be placed in the development of the Primary Regional Nodes (Matlosana and Potchefstroom). These nodes are of such significance in terms of scale, location, impact, diversity and agglomeration of function (facilities, services and economic activities) that they impact on the region as a whole. The regeneration strategies that were compiled for the CBD areas within these nodes were specifically aimed at the revitalisation and upgrading of these centres as prominent regional nodes.
- In order to improve the living standards in the rural areas more emphasis must be placed in the improvement of social facilities and services on strategic localities within the district. The core function of these nodes should be in the form of multipurpose community development centres.
- Stimulation of tourism nodes along the Vaal River, Vredefort Dome, Highveld National Park and Boskop Dam Nature Reserve. The development of nodes adjacent to the Vaal River should be concentrated to a limited number of nodes in order to prevent the sprawling of uncoordinated development.

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- The comparative advantage the areas has to offer with regard to high potential agricultural land and high potential grazing areas should be well protected and managed in order to enhance sustainable development
- Land Reform to enhance the principle of concentrated development, land reform projects should be as close as possible to existing nodal development in order to improve the accessibility to higher order social and economic infrastructure. This principle is important to limit the number of small villages and the creation of "poverty pockets" in rural areas.

The principles of sustainability of Land Reform

Cognisance should be given to economic farm units and the number of people who can make a living from the farm in connection with Land Reform

- Land Reform projects could also support the principle of small scale farming in areas that is applicable as mentioned in the previous two sections.
- New industrial and commercial development should be situated near or adjacent to the N12 in order to ensure visibility and exposure –

The establishment of a dedicated trade and transport node (Export node) on the N12

These areas should be in the form of attractive industrial / commercial parks.

New residential development should complement the urban structure though adequate provision of social and economic land uses, concentrated at nodes along movement networks. New residential development and housing projects should also enhance the principle of integration of urban areas

- Sensitive environmental areas and features form a significant structuring element in the form and structure of future development in the region. On the one hand, it must be protected in order to ensure long term sustainability and on the other hand the functional, educational, recreational and tourism value of these assets must be enhanced. These areas include:-
  - Protected areas and conservancies
  - Dolomite aquifers
  - Hills and ridges
  - Wetland areas
  - Areas of high biodiversity
  - Cultural heritage sites







### 7. SPATIAL PLANNING PROPOSALS

### 7.1 Introduction

The municipal area of Matlosana can be subdivided into the following intervention zones: (Refer to Map 7)

### 7.1.1 <u>Urban Build-up area</u>

Defined as the current urban area (existing development area)

### 7.1.2 Urban Edge

This is a demarcated zone and interrelated policy that serves to manage direct and limit urban expansion. The main function of the urban edge is to restrict urban sprawl, promote densification of areas and the protection of agricultural and environmental resources.

This area includes the build-up areas as well as expected short and medium term developments, including the mining area between Klerksdorp, Stilfontein and Orkney.

### 7.1.3 Urban Fringe

Refers to the zone of transition in land use and socio-economic characteristics between the build-up areas/urban edge and the surrounding rural hinterland.

### 7.1.4 <u>Rural Hinterland</u>

These areas mainly consists of commercial farms and protected areas.

As far as development is concerned the following strategic interventions should be applicable within these zones:

### 7.1.5 Urban Build-up area

- Densification and integration

- Urban infill
- Upgrading and proper maintenance of infrastructure
- Urban renewal
- Protection of environmental sensitive areas as well as cultural heritage resources.

### 7.1.6 Urban Edge

- Planning and provision of bulk services for new development areas
- Planning and development of new township establishments/development projects in such a manner that it will enhance integration of areas.
- Integration of environmental sensitive areas within the municipal open space system
- Stimulation of local economic development projects
- Integration of the mining areas within the urban system.

### 7.1.7 <u>Urban Fringe (Transitional zone)</u>

- Protection of environmental sensitive areas as well as high potential agricultural land
- Stimulation of Urban Agricultural projects
- New township developments/development projects to be considered on merit provided that the municipality will not be responsible for the funding of bulk and external services.
- Proper land use management
- 7.1.8 <u>Rural Hinterland</u>
  - Protection an management of environmental sensitive areas
  - Protection of high potential agricultural land and the promotion of sustainable agricultural projects.



# 1:300,000 Map 7 Matlosana Spatial **Intervention Zones**

- Proper land use and environmental management relating to eco-estates, equestrian developments, country estates, business development and rural settlements.
- Provision of much needed social facilities to the rural population.

### 7.2 SPATIAL PLANNING FRAMEWORK

### 7.2.1 SPATIAL VISION

The Spatial Development Vision must be aligned with municipal's Agenda 16 (IDP) vision "City of Matlosana" is a well run City through Good Governance, where Economic Growth and Prosperity and Quality Municipal Service Delivery place it amongst the 5 leading municipalities in South Africa by 2016. In terms of this vision the strategic priorities of success rest upon the following pillars:

- Excellence and transformation
- Democratic Governance
- Quality of municipal services
- Infrastructure and utility needs
- Accelerated economic growth (Poverty relieve & job creation)
- Financial stability.

The spatial development vision must also align with the National Spatial Vision that states that economic growth and employment creation should focus in areas where it is most effective and sustainable, supporting restricting and by fostering development on the basis of local potential. In view of abovementioned the Matlosana Spatial Development Vision will be:

*"To strive to enhance integrated socio-, economical and physical development in a sustainable manner"* 

### 7.2.2 OBJECTIVES

The following spatial development objectives should be applicable:

- Give effect to the principles contained in Chapter 1 of the Development Facilitation Act, 1995 which include equity, efficiency, integration, sustainable development and fair and good governance.
- Capitalizing on the location of Matlosana on the N12 Treasure Corridor (SDI) of National and Provincial importance.
- Enhancement of Matlosana as prominent Primary Regional Node as well as a priority / investment area within the North West Province.
- Enhancement of sustainable development which involves:
  - The protection, sustainable use and proper management of the environment
  - Proper land use Management
  - Cost-effective provision of services.
- Improving the living standards of people within the dormitory townships as well as in the rural areas by providing much needed community facilities and business opportunities within accessible and centralized nodes.
- Alignment and identification of economic opportunities along major development corridors.
- Identification of sufficient land for urban development within a well demarcated urban edge, in such a manner that it will promote integration of areas.
- Address housing needs in an integrated manner based on the Breaking New Ground (BNG) principles.

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- Improve the competiveness of Matlosana by the proper maintenance of infrastructure and the provision of bulk infrastructure for new development areas.

### 7.3 SPATIAL PROPOSALS FOR THE URBAN AREAS (Map 8 & 9 refers)

### 7.3.1 DEVELOPMENT CORRIDORS

A development corridor is a linear zone of development flanking a public transport or main route. Public transport facilities mixed land uses and people are all focused here, hence a strong relationship exists between the transportation route and surrounding land uses. A corridor cannot exist and operate in the absence of nodes. The corridor not only forms the link between nodes, but also relies on nodes along its length to generate movement and activity. Nodes form the logical points at which to focus economic and social investment.

### CORRIDOR DEVELOPMENT



Development corridors can be classified as:

7.3.1.1 Activity Corridor

This forms the main development corridor where a variety of social and employment opportunities are integrated with high-density mixed land use developments.

### 7.3.1.2 Activity Spines

The activity spines are major routes on which most of the road based public transport services run and on which most of the activities are focused. Activity spines also connect the prominent development nodes and support access to most of the mixed land use developments and community activities within the corridor.

### 7.3.1.3 Activity Streets

Activity roads form the major linkages between the different sections of the urban area as well as the activity corridors and spines. These roads normally attract sufficient passing trade and provide important opportunities for the stimulation of business development and community facilities within neighborhood nodes.

The main development corridor is formed by the N12 (Treasure Corridor) which should serve as a concentration for appropriate new development initiatives such as industrial , commercial, nodal, residential, tourism and mixed land use development. Numerous new development initiatives are already focused on this corridor:

i.e.

- N12 West development comprising of residential development, retail nodes, mixed land use developments for light industrial and commercial development. This development is based on the BNG (Breaking New Ground) principles for sustainable human settlements.
- N12 East development comprising of a regional retail centre (node) as well as commercial, light industrial and residential development.
- Upgrading of the PC Pelser Airport.
- Goudkoppie Development (Tourism node)
- Extension of the Flamwood Walk Centre.



## Matlosana Spatial Development Framework

# Spatial Proposals

### MAP 8

SPATIAL DEVELOPMENT PROPOSALS
Urban Edge
Urban Fringe
<u>idors</u>
Activity Corridor
Activity Spine
Activity Streets
es (Existing Nodes)
Regional Node
Community Nodes
Neighbourhood Nodes
Local Nodes
Value Centre
cialised Nodes
S1 Entrepreneurial Centre
Goudkoppie Legacy Development Node
Sishop Tutu Birth Place
Recreational Node
Truck Inn
posals Residential Development
•
Industrial Development
Light Industrial / Commercial Development
Municipal Open Space System
Municipal Open Space System
ECO Development Corridor
Future Game Reserve (Anglo)
Cultural Heritage Sites
Kilometers 1.25 2.5 5 7.5 10
<sup>w</sup> Scale 1:65,000
DISCLAIMER: Whilst all possible care and attention has been taken in the production of this map, MAXIM cannot accept any liability what so ever for any perceived inaccuracies or misrepresentation of the information shown on this map. Map Compiled By: Pieter Kruger
e-mail: maxim@maximplanningsolutions.co.za Map Checked By: Charl Grobbelaar Drawing: S:\GIS\NW\.mxd











- N12 East development comprising of a regional retail centre (node) as well as commercial, light industrial and residential development.
- Upgrading of the PC Pelser Airport.
- Goudkoppie Development (Tourism node)
- Extension of the Flamwood Walk Centre.

In order to stimulate development of the N12 corridor, emphasis should be placed on the provision of bulk services. Provision of infrastructure is the main catalyst for development of the corridor. In order to enhance the N12 as a primary development corridor of local and regional significance, development adjacent to the N12 should complement its function and should therefore be seen as a "Special Development Zone". In terms of land use management adjacent to the N12 corridor development must be subject to the following special conditions:

- Special attention must be given to the aesthetic appearance of building structures, fencing and landscaping. Council must ensure that adequate provision has been made for the fore-mentioned measures in land use change applications as well as development plans/building plans.
- Restriction of heavy vehicle parking within the road reserve of the N12
- Proper management of hawkers/informal trading adjacent to the roads and intersections.
- Restrict commercial, light industries and business developments to nonnoxious activities (including panel beating and scrap yards)
- Proper management of the erection and maintenance of outdoor advertising signs.
- All parking must be provided on site.

- The second level of corridors refer to activity spines and include the main routes within the urban areas linking Matlosana with the Free-State (R30), Ventersdorp (R30); Mafikeng (R503); Ottosdal (R507); Leeudoringstad (R502); Potchefstroom (R502 – Orkney N12) and Potchefstroom (D856 – Buffeldoorn Avenue linking with N12). In conjunction with the N12, these corridors should be utilized to facilitate major new developments that are dependent on high levels of accessibility.
- Activity streets are urban level routes that form the main distribution network of local traffic within the urban areas and between the different urban areas. Supporting land use types based on mixed land uses and nodes should be focused along these routes.

### 7.3.2 DEVELOPMENT ACTIVITY CORRIDORS

### 7.3.2.1 NODAL CLASSIFICATION

The following classification for shopping centres (as part of an activity node), based on "Regional Retail Sector Investigation, Urban Econ 2005" is applicable.

### SHOPPING CENTRE CLASSIFICATION GUIDELINES\*

Regional		Community		Neighbourhood		Local		Value	
Provides durable and s goods. Have one or mo supermarkets.	•	Provides convenience goo services, clothing and app Anchor stores are normal departmental store and la supermarket	liances. ly a	Primarily convenience numerous personal se orientated shops. And usually a small superr	ervice chor store	Convenience and limited specialty shops. Usually contains a national franchise supermarket or regional supermarket.       Multi-tenant mix inclus specialized retailers pr products at competitiv Centre usually has basi in order to deliver lowe to consumer. Usually contained national franchise supermarket		providing itive prices. basic finishes ower prices y contains a upermarket	
Trade Area Population	4000- 20 000	Trade Area Population	30 000-60 000	Trade Area Population	10 000-30 000	Trade Area Population	4 000-20 000	Trade Area Population	4 000-20 000
Gross Leasable Area	30 000 – 75 000	Gross Leasable Area	15 000-23 000	Gross Leasable Area	5 000-15 000	Gross Leasable Area	2 000-10 000	Gross Leasable Area	2 000-10 000
Service Radius	3km+	Service Radius	2.5km	Service Radius	1.5Km	Service Radius	0.5Km	Service Radius	0.5Km
Number of Shops	75+	Number of Shops	50-75	Number of Shops	25-50	Number of Shops	10-25	Number of Shops	10-25
Size	20 Ha+	Size 6-12 Ha		Size	2-6 Ha	Size	1-4 Ha	Size	1-4 Ha

(Urban Econ, 2005)

The Spatial Proposals, Maps 8 and 8 (a) indicated existing Regional Community, Neighbourhood, Local and Value Centres. Based on the classification the Klerksdorp CBD can be classified as the regional centre, and the rest of the centres as follows:

### Community Centres

- Orkney CBD
- Stilfontein CBD
- Hartbeesfontein CBD
- Pick 'n Pay Centre Wilkoppies
- Flamwood Walk Centre N12

### **Neighbourhood Centres**

- Jouberton CBD area
- Kanana CBD area
- Khuma CBD area
- Tigane CBD area (underdeveloped)
- Vaal Reefs Village business area
- "MCC" business area (central avenue)
- Flimieda Centre

### Local Business Centres

A large number of neighbourhood and local nodes exist within the various urban areas where business activities are mostly aimed at providing basic shopping (convenience goods) for a neighbourhood or part of a neighbourhood (**Map 8 refers**). Most of these nodes are situated adjacent to or on the intersection of activity spines, activity streets and secondary collector roads.

### Value Business Nodes

The new business centre on the intersection of the N12, adjacent to the CBD area (specialized retailers)

### 7.3.2.2 SPATIAL STRATEGIES

### Klerksdorp CBD Area (Regional Node)

During 2006 a complete revitalization strategy was conducted for the CBD in order to create new opportunities as well as strategic interventions that are crucial in the redevelopment of the area. These strategic interventions include the following :

- Integration of the informal sector onto the CBD as well as a hawker's strategy
- Planning and design of boulevards, gateways and foyers in the CBD
- Public transport / traffic and pedestrian networks
- Improvement of the environmental quality of the area
- Safety and security
- Events centre / node





Based on his revitalization strategy the Council is currently in a process formulating an implementation strategy for the CBD area which will incluc business plans for the funding and implementation of strategic projects.

### **Community Centres**

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The Orkney, Stilfontein and Hartbeesfontein CBD's also function as seconda CBD for these urban areas. The attractiveness of these nodes should also k enhanced through the improvement of basic infrastructure (roads, pub transport facilities), improvement of the attractiveness and accommodation informal business in functional demarcated areas with public facilities.

Strategies are needed for the revitalization of these business areas in order enhance their service functions.

### Neighbourhood Nodes

In order to stimulate and accelerate investments in poor neighborhood National Treasury approved a Neighborhood Development Partnership Grant fitthe City of Matlosana. This grant will be implemented within certain precinc including neighborhood nodes in the dormitory townships consisting Jouberton, Khuma, Kanana, Tigane and Alabama, where 66 % of the populatic of Matlosana is situated. The main objective of this project will be:

- Improvement of the quality of life of the residents (recreation; social, commercial and transport)
- Improvement of the neighborhood appearance (physic appearance)
- Enhancement of economic development through the improvement of the appearance (infrastructure) and function commercial areas (formal and informal development) as well a creating linkages with the private sector.
- Improvement of public safety by improving physical condition that affect and promote crime prevention, pedestrian safety ar vehicular safety.
- Improvement neighborhood participation in urban renew activities.
- o Alignment with Matlosana IDP (2008 2011)

- o Development of taxi ranks
- Refurbish of community halls
- Provision of flea market and hawker shelters
- o Streetlights (safety and security)
- o Upgrading and provision of pay points
- o Paving of sidewalks (along main taxi routes)
- o Development of parks
- o Multipurpose (Centre (s)
- o Upgrading of community facilities

### 7.3.2.3 DEVELOPMENT PROPOSALS AND GUIDELINES FOR THE DEVELOPMENT OF NEW BUSINESS NODES:

Nodes are best located adjacent to or at the intersections of major transport routes (Corridors, spines and activity streets). Pedestrian access is crucial and is one of the most important elements in the design of development nodes. Increased residential densities in and around nodes will further support the urban structure and reduce the need for vehicle trips.

The Management of business nodes within the urban areas should be based on the following basic principles:

- Strengthening of existing nodes should be encouraged
- New development nodes in built-up areas (rezoning of residential stands surrounded by houses) should be discouraged. The forementioned exclude areas not currently adequately serviced by existing nodes.

The Spatial Development Framework should not be employed to discourage new development initiatives and does not imply that additional or new activity nodes cannot be developed in the urban areas of Matlosana.

New nodes may result as part of new development projects such as the N12-west and N12-east developments.

From a development point of view <u>accessibility and visibility</u> are regarded as the primary development considerations for the establishment of nodes.

Each development application should be evaluated in terms of the following criteria:

- Traffic Impact
- Environmental impact
- Social impact
- Infrastructure capacity
- Requirements of Matlosana Land Use Management Scheme

The following nodal assessment criteria can be employed:

Nodal Type	Area (ha)	Service Radius (km)	Accessibility	Functions	Residential	Retail *
CBD	35+	20	<ul> <li>Most accessible area in City Urban motorways</li> <li>High accessibility streets</li> <li>High level of public transport</li> </ul>	<ul> <li>Multiple diverse functions</li> </ul>	<ul> <li>Mix of Income groups</li> <li>Up to 200 du/ha</li> </ul>	<ul> <li>Regional</li> <li>Shops: 150+</li> <li>Leasable area: 175 000m<sup>2</sup>+</li> </ul>
Regional/District	20+	5	<ul> <li>Urban motorways</li> <li>Mobility spines</li> <li>Mobility Roads</li> </ul>	<ul> <li>Functions in addition to those found in Neighbourhood Nodes</li> </ul>	<ul> <li>Mix of Income groups</li> <li>Up to 150 du/ha</li> </ul>	<ul> <li>Regional</li> <li>Shops: 150+</li> <li>Leasable area: 30 - 175 000m<sup>2</sup></li> </ul>
Neighbourhood	2-6	2.5	<ul> <li>Mobility Roads or Activity Streets</li> <li>Intersections</li> <li>Pedestrian access</li> </ul>	<ul> <li>Service daily needs</li> <li>Convenience stores and services</li> <li>No cannibalization of CBD trade</li> <li>Compliance with Spatial Plan</li> </ul>	• Up to 80 du/ha	<ul> <li>Community</li> <li>Neighbourhood</li> <li>Shops: 25-75</li> <li>Leasable area: 5 000-23 000m<sup>2</sup></li> </ul>
Specialty	1-5	1.5	<ul> <li>Urban motorways</li> <li>High accessibility streets</li> </ul>	<ul> <li>Compliance with Spatial Plan</li> <li>Specific or specialized core functions</li> <li>No "cannibalization" of existing functions in trade catchment area</li> </ul>	• Up to 80 du/ha	<ul> <li>Local/Value</li> <li>Shops: 5-25</li> <li>Leasable area: 2 - 23 000m<sup>2</sup></li> </ul>

\* Refer also to Shopping Classification Guidelines

In terms of the existing distribution of especially community nodes, indications are that the western areas of Klerksdorp (Jouberton/Alabama/Meiringspark may warrant a proper community centre that is located centrally in this area.

Due to development pressures in respect of nodal development in the northern and north-eastern urban areas of Klerksdorp, it is proposed that a <u>Precinct Plan</u> be developed for this area in order to provide more detail guidelines for nodal development and to restrict further undesirable ribbon development of small retail development along corridors.

### 7.3.2.4 Specialized Nodes

7.3.2.4.1 Entrepreneurial Centre

The old Markotter show grounds is proposed as a specialized node for a community employment and entrepreneurial centre.

A Community and Entrepreneurial Centre is an incubator program that focuses specifically on previously disadvantaged communities. In such a program, small and micro business can receive support that accelerates their time to market, establish a sound operational foundation, increases their access to capital, and improves their opportunities for success. The main aim of Community Employment and Entrepreneurial Centre is to produce successful business that will leave the program financially viable and free-standing.

This is achieved through a sheltered business environment with access to mentorship, business support services and access to shared infrastructure where is tenant enterprises operate their entire range of business activities, while sharing the cost of shared amenities like administration services, meeting and conferencing facilities during the defined incubation period.

### 7.3.2.4.2 Goudkoppie Legacy Development Node

The Goudkoppie heritage site adjacent to the N12 is a significant area from a archeological, historical and geological point of view. Currently the area consist of a cultural village as well as certain historical features but can be developed as a prominent heritage site with tourism linked establishments.

### 7.3.2.4.3 Bishop Tutu Birth Place

Bishop Tutu birth place, situated in Neserhof, south of the CBD is also proposed as a heritage node with the following complementary facilities:

- Auditorium

- Skills centre

- Chapel
- Market area
- Lecture Hall
- Display area
- Museum
- Library / Book shop
- Tea garden

### 7.3.3 DEVELOPMENT ZONES

### 7.3.3.1 Mixed Land Use

Mixed land uses refer to the integration of suitable and compatible residential and non residential land uses within the same area and can include nonresidential land uses such as business, offices and commercial activities. As in the case with densification, the ideal of having mixed use development should not be taken as a blanket philosophy. Certain areas, adjacent to the development corridors, between nodes can be considered for mixed land uses.

Dedicated mixed land use zones have been identified adjacent to the N12 in Klerksdorp. A few dedicated mixed land use zones have been identified in the following areas:

- N 12 (eastern and western parts in the urban area
- Chris Hani Street (Klerksdorp)
- Buffeldoorn Avenue (Klerksdorp)
- Dr. Yussuf Dadoo Avenue (Klerksdorp)
- Central Avenue (Klerksdorp)
- Platan Avenue (Klerksdorp)
- Flecker Road (Orkney)
- Hartbeesfontein / Somerset Road (Stilfontein)

Care must however be taken not to encourage pedestrian orientated small retail in the mixed land use zones that will enhance ribbon development along major routes. Business activities in these zones must be restricted to office and office related developments as well as commercial services.

As far as land use management in concerned the infrastructure capacity, social impact and traffic impact should be considered with land use applications. Parking should be restricted to onsite parking.

### 7.3.3.2 Residential Development

### Future Residential

In order to promote a more compact city structure and to integrate the different urban areas, the following areas are earmarked for future development within the urban edge:

- Areas between Jouberton, Kanana and Klerksdorp South (private and municipal area)
- Areas between Meiringspark, Alabama/Manzilpark and Jouberton. This area also include the vacant areas between Uraniaville and Roosheuwel / Freemanville (private and municipal land)
- Area west of Alabama / Manzilpark (Municipal land)
- Areas between Meiringspark and Schoonspruit (private land)
- Areas west and north of La-Hoff, north of Wilkoppies and east of Flamwood (private land)
- Areas between Klerksdorp and Stilfontein (Private land)
- Areas south of Stilfontein and between Stilftontein and Khuma (Private land)
- Areas between Vaal River Complex and Orkney (proposals from Anglo Gold) – Mining land
- Area south of Randlespark (municipal land)

Abovementioned areas are situated on municipal, private, mining and state land and should be sufficient to address the short-medium term development needs of Matlosana for residential development.

Land ownership of areas earmarked for residential / complementary land uses:

Land Ownership	Area (ha)
Private land	± 4514
Municipal land	± 2443
Mining land	± 752
State land	± 119
TOTAL	± 7828

Based on an average density of 10 units per ha (including social facilities) abovementioned can cater for  $\pm$  78280 units.

Abovementioned include the current township establishment applications but exclude to proposed Golf Estate east of Stilfontein.

Due to capacity problems and budgetary constraints the provision of bulk services for the stimulation of integrated housing projects is a major constraint. One solution is to investigate the utilization of a "external service mechanism" as prescribed in the MMFA (This mechanism is currently being utilized by Johannesburg, Tswana and Rustenburg Cities.

As far as housing is concerned City of Matlosana is currently in a process of finalizing a Housing Sector Plan as part of the IDP. The spatial framework will provide the spatial directions / inputs for future housing development in terms of the Housing Sector Plan.

Housing development in the municipal area must be based on the Breaking New Ground (BNG) principles for Sustainable Human Settlements. Well-managed entities where economic growth and social development are in balance with the carrying capacity of the natural systems on which they depend for their existence and result in sustainable development, wealth creation, poverty alleviation and equity. The present and future inhabitants of sustainable human settlements located both in urban and rural areas, live in safe and secure environments, and have adequate access to economic opportunities, a mix of safe and secure housing and tenure types, reliable and affordable basic services, educational, entertainment and cultural activities and health, welfare and police services. Land utilization is well planned, managed and monitored to ensure the development of compact, mixed land use, diverse, life-enhancing environments with maximum possibilities for pedestrian movement and transit via safe and efficient public transport.

The proposed N12 west development is a typical example of a sustainable human settlement, this development will make provision for  $\pm$  2941 residential units. The conceptual planning is based on the following principles:

- To provide a mixture of residential densities for affordable and social housing
- To create development opportunities adjacent to the N12 for mixed land uses (commercial, business and light industrial)
- To provide a variety of community facilities to ensure a well balanced community
- To promote spatial / social integration of areas

### **Proposed Spatial Guidelines**

### Housing

From a spatial point of view housing development should be based on the following principles in order to ensure sustainable human settlements:

- Accelerate delivery of housing within the context of sustainable human settlements;
- Provision of housing within human settlements;
- Provide quality housing to turn homes into assets;
- Create single, efficient formal housing market; and
- Abolish apartheid spatial planning thereby restructuring and integrating human settlements
- Housing development shall be located closer to economic opportunities
- Housing development shall lead to the compactor of cities to avoid urban sprawl
- Densification and integration to preserve available land should be prioritized (mixed densities / mixed income groups)
- Densification / Integration

In order to adhere to the principles contained in the Development Facilitation Act (integration and densification), a more compact city needs to be developed. This can be achieved through:

- Allowing higher residential densities in current residential areas, especially within corridors or nodes.
- Promoting subdivision of large residential stands
- Making municipal land available to promote integrated housing development (mixed income / densities)
- Subsidised rental housing can be used as an instrument to promote social integration of communities and the densification of areas.

Notwithstanding this policy the following spatial guidelines should also be applicable n densification:

- Appropriately located higher densities need to be promoted in and around development nodes (regional economic nodes, district and neighborhood nodes), as well as the areas between nodes within activity corridors/roads (mixed land use densities)
- The bulk infrastructural capacity: the capacity of bulk infrastructure to accommodate the service demands of higher densities may be a restricting factor and must be taken into consideration.
- Traffic impact and circulation. The capacity of the area to accommodate heavier traffic flows also needs to be taken into consideration.
- Social impact. Impact of the proposed development on the surrounding area.
- Protection of cultural heritage resources (heritage impact assessment)

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# Matlosana Spatial Development Framework

# **Municipal Spatial** Proposals

### **MAP 9**

5	SPATIAL DEVELOPMENT PROPOSALS
	Municipal Boundary
⊢F	RailwayLine
- F	Roads
- F	Rivers & Streams
[	Dams & Pans
(	Cadastral
F	Rural Business
F	Rural Schools
F	Rural Village
F	Rural Development Nodes
lι	Jrban Edge
<b>]</b> ι	Jrban Fringe
- 1	N12 Treasure Corridor
_ /	Activity Spine
00	sals
	Existing Mining Activities
ŀ	lills & Ridges (Slope >5)
	Game Farm
F	Formal Protected Areas
H	High Potential Environmental Protected Zones
	Dolomite Aquifers
ŀ	High Potential Agricultural Land
E	ECO Development Corridor
	Kilometers
2	2 4 8 12 16
	N
	W S E Scale 1:105,000
	DISCLAIMER: Whilst all possible care and attention has been taken in the production of this map, MAXIM cannot accept any liability what so ever for any perceived inaccuracies or misrepresentation of the information shown on this map.
ORP 56	mail: maxim@maximplanningsolutions.co.za Map Compiled By: Pieter Kruger Map Checked By: Charl Grobbelaar Drawing: S:\GIS\NW\.mxd

7.3.3.3 Municipal Open Space Systems (MOSS)

The MOSS is a rationalized network of interconnected open space aimed at:

- Completing the built fabric by providing the urban environment with a variety character, a sense of visual relief, open space enjoyment, recreation and general amenity, and
- Protection of biodiversity in the urban and rural areas, providing animal and plant species with habitats.

Degradation of natural systems or open spaces must not be permitted as a motivation for urban development. These areas should be rehabilitated, thereby raising the quality and amenity value of the open space and contributing to the functioning of the system as a whole.

The municipal open space system is intended to function as a series of interconnected parks, open spaces and natural areas which collectively serve as recreation, environmental, functional and historical corridors and areas.

The open space system within the urban areas is mainly based on the most prominent environmental features such as:

- Rivers and streams
  - Vaal River
  - Schoonspruit
  - Jagspruit
  - Palmietspruit
  - Koekemoerspruit
  - Rietgatspruit
- Areas adjacent to Johan Neser Dam
- Wetland areas
- Hills and Ridges

Spatial guidelines for the protection of environmental sensitive areas:

- No development within 32 meters buffer zone from the edge of a riparian zone of a river, stream and wetland or the 1:100 year flood line. "Riperian habitat includes the physical structure and associated vegetation of the areas associated with a watercourse which are commonly characterized by alluvial soils (deposited by the current river system), and which are inundated or flooded to an extent and with a frequency sufficient to support vegetation of species with a composition and physical structure distinct from those of adjacent land areas" Definition of Riperian Zone: the outer zone of a wetland characterized by saturation within 50cm of the soil surface for less than three months of the year.
- No further developments shall be allowed on any property with a slope greater than 5° (this will also include the crest, plateaus and shallow valleys of a hill)
  - As far as land use applications are concerned, these areas should be zoned as "public" open spaces in order to ensure community ownership.

### 7.3.3.4 Industrial Commercial Development

### Spatial Strategy for industrial development:

- Stimulation of commercial and light industrial development adjacent to the N12 in order to strengthen the N12 Treasure Corridor.
- This can be in the form of more attractive industrial/commercial parks that can offer exposure and visibility.
- This strategy is already in a process of being implemented through the N12 Western and N12 Eastern Developments.
- Development of the eastern Townlands as well as the Ariston area as a centralised, sub-regional industrial area for more noxious industrial activities as well as food processing (regional abattoir)
- The old Stilfontein mining area of east of Stilfontein can also be utilised for industrial development due to the availability of redundant mining infrastructure (water / electricity)

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- The vacant land south-east of Uraniaville can be utilised for non-noxious industrial and commercial developments.
- The Growth and Development Strategy of the Southern District Municipality recognised the potential for a dedicated trade and transport node adjacent to the N12 that will also link with the airport. Development components:
  - ✓ an inter-model terminal at the airport location, linked to the main railway line and the N12
  - ✓ Cargo terminal at the airport
  - $\checkmark$  A commercial park adjacent to the airport

The proposed link road between the N12 and Vaal Reefs Village will form a crucial component for such a development.

### 7.3.3.5 Social Development

- Social services provided by Government, local municipality, agencies / institutions often resulting in fragmented and uncoordinated service delivery. Problems resulting from this are duplication of infrastructure in some areas and under-provision in others. A need for a more holistic and integrated approach to social delivery is evident to serve the needs of the community and contribute to social development.
- In support of the urban structure, social facilities and infrastructure should also be concentrated at nodes, or in the near vicinity of nodes to ensure high accessibility to these services. The concept of multipurpose community development centers are based on the concept of "one stop" centers for the provision of the full range of social services. These centers combine social and economic activities with higher density housing development can create vibrant District and Neighbourhood nodes.
- The upgrading and development of social facilities within the dormitory townships will also form an important component of the NDPG Project for Jouberton, Tigane, Kanana, Alabama and Khuma.

### 7.3.3.6 Transport

A quality road network that is well maintained is important for the sustainable development of Matlosana. From a spatial point of view, priority must be given to the proper maintenance and upgrading of all roads situated within the Activity Corridor (N12), Activity Spines (major routes) and Activity Roads (major

collector roads). These roads form the main movement network of the city for private and public transport as well as corridors for development. These corridors can also be used for the "greenification" of the road reserves as well as the upgrading of pedestrian ways. From a spatial point of view the following should be incorporated in the Transport Plan for Matlosana:

- Provision of a link road between N12, Airport and Vaal Reefs Village
- Provision of an intermodal transfer facility / taxi rank next to the railway station in the CBD (Feasibility)
- The upgrading of PC Pelser airport (current project)
- Provision of a much needed Truck Inn adjacent to the N12 (current project)
- Express train service between Matlosana / Tlokwe and Gauteng (Feasibility)

### 7.3.3.7 Urban Agriculture

Anglo Gold Ashanti is in a process of establishing an urban agricultural project on the mine land west of Kanana. This project will mainly consist of grazing.

### 7.4 <u>SPATIAL PROPOSALS FOR THE RURAL AREAS (MUNICIPAL WIDE –</u> <u>PROPOSALS)</u>

### 7.4.1 INTRODUCTION

The rural area includes all the areas of the municipal area outside the urban edge (urban area). The spatial development guidelines for the rural area are mainly based on the following issues:

- Protection of environmental sensitive areas
- Agricultural development and the protection of high potential agricultural land
- Rural settlement development
- Rural development nodes
- Country estates and eco-development

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### Protection of Environmental sensitive areas

- Environmental protected areas include all existing protected areas as well as potential protected areas such as sensitive ecological areas with a rich biodiversity as well as other natural features such as the dolomite aquifers and cultural heritage sites. As far as existing protected areas are concerned the council is currently in a process of formulating a business plan for the upgrading of the Faan Meintjies Nature Reserve.
- A number of zones within the non urban part of the municipality have been identified as potential protected areas based on their topography (hills and ridges), biodiversity, geological formations (dolomite areas) or flood plain proximity (rivers, streams and wetlands). These areas can be protected as formal of informal protected areas (conservancies) and can also be utilized as game farms of country estates. This areas does not include prime agricultural land and does not exclude farming activities – grazing.

(Refer also to the Matlosana Land Use Management Scheme for specific conditions pertaining to the protection of environmental sensitive areas).

### 7.4.2. AGRICULTURAL DEVELOPMENT

Agricultural development in the municipal area holds some real promise for expansion due to its favourable location with regard to local as well as national markets. Proximity to these markets makes economics of scale in farm production a reality that should be capitalized on

In order to protect the agricultural potential of the area the following principles should be applicable:

- Protect high potential agricultural land
- Maintain sustainable farming units
- The subdivision of agricultural land should not result in units smaller than:

□ A unit able to carry 60 livestock units as land used for grazing

- A unit of 100 ha. on land used for dry land crop production
- A unit of 20 ha. on irrigated land with the provision that of validated water rights from a recognizable source.

### 7.4.3 RURAL SETTLEMENT DEVELOPMENT

A sequential approach must be used to determine the optimal location of an agri- village – i.e. it must be demonstrated why farm worker housing cannot be provided in an urban area before an agri-village can be established outside of existing nodes

- Agri-villages should be located in areas where there is a high economic potential
- Agri-villages must be identified as a node
- Agri-villages should be within walking distance (less than 2 km of a public transport opportunity)
- Agri-villages should preferably not be established on existing agriculturalor environmental sensitive land)

As far as existing villages are concerned a settlement improvement programme must be implemented that include proper settlement planning, infrastructure and housing delivery. This programme must also include a proper service agreement between the Legal Entity and Municipality in order to ensure proper maintenance of services.

The village must also be integrated in the land use management scheme of the municipality in order to manage growth and development of the village in association with Legal Entity.

### 7.4.4 RURAL DEVELOPMENT NODES

- In order to improve the living standards to marginalised communities in the rural areas, more emphasis must be placed on the improvement of social facilities and services on strategic localities within the district. This implies the identification of focal points or nodes adjacent to dominant regional routes or intersection of regional routes in order to increase accessibility to social facilities effective public transport system within the rural areas.
- The core function of these nodes should be in the form of multipurpose community development centres that is based on the concept of a "one stop" centre providing for a full range of social services (pension pay point, municipal pay points, clinic, school, Telkom, Post Office, Police Station etc).

These centres can also be combined with business activities (business facilities, informal business etc) in order to create more vibrant nodes.

- Proper maintenance of especially the rural roads is crucial for the proper functioning of these nodes and to enhance public transport.
- As indicated on the map a number of potential rural development nodes have been identified due to their locality and existence of existing rural villages.

### 7.4.5 COUNTRY ESTATES, PUBLIC RESORTS AND PUBLIC RESORTS

The North West Province formulated a specific policy for the establishment of Country Estates, Private and Public Resorts.

- Number of units allowed: Maximum of 50 dwellings per 150 to 500 ha farm; maximum of 75 dwellings per 501 to 1 000 ha farm; and 150 units per 1 001 to 2 000 ha farm or more.
- *Coverage:* Residential development should be grouped and should only cover 10% of the total area of the farm.
- *Density:* Maximum of 1,3 dwellings per ha of the development within the 10% development area.

Potential areas for country estates private and public resorts include the Potential Environmental Protected areas, the dam as well as the Eco Corridor adjacent to the Vaal River.

### 7.5 LAND USE MANAGEMENT GUIDELINES

### 7.5.1 POINTS OF DEPARTURE

Land Use Management means the establishing or implementing of any measure to manage, restrict or regulate land within a municipal area.

A land use management system of the municipality consists of various mechanisms of which the Spatial Development Framework (SDF) as well as the Land Use Management Scheme (LUMS) forms the main or core components of a land use management system.

### 7.5.2 LAND MANAGEMENT HAS TWO KEY GOALS:-

- It must provide effective protection to both the natural environment and member of the public from negative impacts of land development and land use change.
- It must provide effective protection to both the natural environmental and members of the public and al spheres of government so that there is shared and consisting understanding of the scale, extent and nature of permissible land development.
- The North West Province is currently in a process of compiling a new Land Use Management Bill for the North West Province that will streamline, consolidate and integrate land use management in the Province.
- Although the Spatial Development Framework (SDF) will provide guidelines as well as land policy for the municipal area, a Land Use Management Scheme (LUMS) is crucial to regulate land development and land use change applications within the urban as well as rural areas.

The land use management systems of the municipality (SDF and LUMS) should be based on the following national principles:

### Equality

- Be treated equally by law
- Equal protection and benefit from the law
- No unfair discrimination

### Good Governance

- Lawful, reasonable and procedurally fair
- Just administrative action
- Promote understanding of affected persons
- Promote efficient administration (adequate notices, invitations, decision time, etc)

### <u>Sustainable</u>

- Land used only in accordance to law
- Account for disaster management
- Synergy between economic, social, environmental and political concerns

- Protect natural, environmental and cultural resources
- Preserve prime agricultural

### Efficiency

- Ensure best use of available resources
- Promote compact towns
- Secure proximity between residence and work places

### <u>Integrated</u>

- Promote efficient, functional and integrated settlements
- Be functionally, co-ordinated, aligned with account to be related policies
- Promote integration of communities from diverse backgrounds
- Facilitate appropriate mixed land use development

These Directive Principles that is also compatible with the DFA principles should form the basis for any land development decisions as well as land use change applications within the municipal area.

### 7.5.3 GENERAL PRINCIPLES

A Spatial Development Framework, reflecting the spatial policy of the municipality cannot allocate land use rights on land, but should be employed during decision making process as a spatial guideline. Applicants applying for land use rights must still provide proof of the desirability (merits) for a particular land use based on -:

- Environmental impact
- Social Impact
- Traffic Impact
- Provision of bulk and internal services
- Heritage impact

### BIBLIOGRAPHY

- National Spatial Development Perspective (NSDP),2006
- □ Provincial Growth & Development Strategy (PGDS),
- District Growth & Development Strategy (DGDS),
- Revised North West Spatial Development Framework (NWSDF), 2008
- □ Integrated Transport Plan (ITP) for the Southern District Municipality, 2007
- □ Matlosana Integrated Development Plan (IDP), 2008/2009
- Matlosana Spatial Development Framework (SDF), 2004
- □ Southern District Spatial Development Framework (SD SDF),
- □ Provincial Spatial Development Framework (PSDF),
- □ Statistics South Africa (STATS SA) Community Survey, 2007