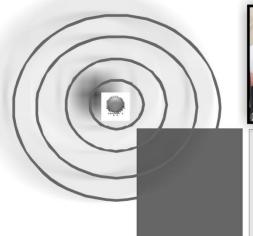
# **MEMORANDUM**

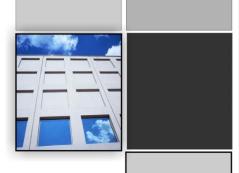




24 January 2018







**AMENDMENT OF GENERAL PLAN (SG No.** 3801/1998):

 Proposed re-layout of Erf 395, Glaudina Extension 1, **North West Province** 

- Spatial Planning
- Development Management
- **Economic Development**
- Admin & Finance

**UNIT 35 CORPUS NOVEM OFFICE PARK** 35 DR. YUSUF DADOO AVENUE **WILKOPPIES 2571** P.O. BOX 6848 **FLAMWOOD** 2572

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# MEMORANDUM AMENDMENT OF THE GENERAL PLAN (SG NO. 3801/1998): PROPOSED RE-LAYOUT OF ERF 395, GLAUDINA EXTENSION 1, NORTH WEST PROVINCE

# **CHAPTER 1: INTRODUCTION**

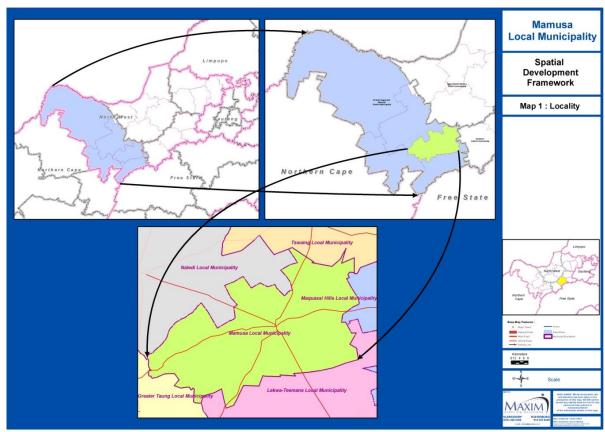
# 1.1 INTRODUCTION

Maxim Planning Solutions (Pty) Ltd (2002/017393/07), herein represented by Koot Raubenheimer (ID No. 700305 5192 08 9), was appointed by the Mamusa Local Municipality on 26 January 2017 to attend to the re-layout of Erf 395, Glaudina Extension 1 comprising a total of 96 erven to address the urgent short term need for low income residential erven experienced in the Glaudina urban complex to alleviate the plight of landless people currently residing on the site to which this application relates. Due to the non-availability of vacant residential erven for settlement purposes in the existing township area of Glaudina Extension 1, people started settling informally on a portion of the vacant land located west and south of the existing township area of Glaudina Extension 1 as well as on the vacant school erf (Erf 395, Glaudina Extension 1).

# 1.2 BACKGROUND OF MAMUSA LOCAL MUNICIPALITY

#### 1.2.1 REGIONAL LOCALITY

Mamusa municipal area comprises of a total area of 3615 km², located in the south-western part of the North West Province and south-eastern part of the District. The municipality consist of a vast rural/commercial farming area as well as the urban areas of Schweizer Reneke, Amalia, Glaudina and Migdol. The municipal area covers the central eastern part of the Dr. Ruth Segomotsi Mompati District Municipality and is bordered by Mamusa, Maquassi Hills, Greater Taung, Naledi and Tswaing Local municipalities (refer **Map 1** for locality plan).



Map 1: Locality of Mamusa Local Municipality in regional context

Mamusa has the status of a Local Municipality (NW393) in terms of the Municipal Demarcation Act of 1998, and is located in the Dr. Ruth Segomotsi Mompati District Municipality (DC39) of the North West Province.

#### 1.2.2 DEMOGRAPHICS

The demographic profile illustrates the trends in population and household growth as well as average income and the level of employment on a sub-place level within the local municipal area.

#### 1.2.2.1 Population & Household

**Table 1** below depicts the population size and population growth projections within the Mamusa Local Municipality, as extracted from the Mamusa Housing Sector Plan (2013).

Table 1: Population size and long term forecast for Mamusa Local Municipality

Mamusa Local Municipality: Population											
2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021								2021			
Amalia SH	229	223	216	210	203	197	192	186	180	229	170
Glaudina SP	2 398	2 327	2 258	2 192	2 127	2 064	2 003	1 944	1 887	2 398	1 777



Mamusa [Schweizer-Reneke] NU	7 850	7 619	7 394	7 175	6 964	6 758	6 558	6 365	6 177	7 850	5 818
Migdol SP	3 571	3 465	3 363	3 264	3 168	3 074	2 983	2 895	2 810	3 571	2 646
Molatswanene SP	5 322	5 165	5 012	4 864	4 721	4 581	4 446	4 315	4 187	5 322	3 944
Ipelegeng	9 733	9 446	9 167	8 896	8 634	8 379	8 131	7 891	7 658	9 733	7 213
Ipelegeng Ext 1	5 071	4 921	4 776	4 635	4 498	4 365	4 236	4 111	3 990	5 070	3 758
Ipelegeng Ext 2	6 470	6 279	6 094	5 914	5 739	5 570	5 405	5 246	5 091	6 470	4 795
Ipelegeng Ext 3	8 076	7 838	7 607	7 382	7 164	6 953	6 747	6 548	6 355	8 076	5 985
Ipelegeng Ext 4	6 593	6 398	6 209	6 026	5 848	5 675	5 508	5 345	5 187	6 593	4 886
Mamusa [Schweizer-Reneke]	2 406	2 335	2 266	2 199	2 134	2 071	2 010	1 950	1 893	2 406	1 783
Nivard SH	201	195	190	184	179	173	168	163	158	201	149
Sharon	3 197	3 103	3 011	2 922	2 836	2 752	2 671	2 592	2 516	3 197	2 369
TOTAL Population	61 117	59 312	57 561	55 862	54 213	52 612	51 059	49 552	48 089	61 117	45 291

Table 2: Household Total and Forecast for Mamusa Local Municipality

Mamusa Local Municipality: Households											
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Amalia SH	75	76	77	78	78	79	80	81	82	83	84
Glaudina SP	648	655	662	669	676	683	691	698	705	713	720
Mamusa [Schweizer-Reneke] NU	2 076	2 098	2 121	2 143	2 166	2 189	2 212	2 236	2 259	2 283	2 308
Migdol SP	822	831	840	848	857	867	876	885	894	904	914
Molatswanene SP	1 258	1 271	1 285	1 298	1 312	1 326	1 340	1 354	1 369	1 383	1 398
Ipelegeng	2 555	2 582	2 609	2 637	2 665	2 693	2 722	2 751	2 780	2 810	2 839
Ipelegeng Ext 1	1 127	1 139	1 151	1 163	1 175	1 188	1 200	1 213	1 226	1 239	1 252
Ipelegeng Ext 2	1 533	1 549	1 565	1 582	1 599	1 616	1 633	1 650	1 668	1 685	1 703
Ipelegeng Ext 3	1 718	1 736	1 754	1 773	1 792	1 811	1 830	1 850	1 869	1 889	1 909
Ipelegeng Ext 4	1 425	1 440	1 456	1 471	1 487	1 502	1 518	1 535	1 551	1 567	1 584
Mamusa [Schweizer-Reneke]	758	766	774	783	791	799	808	816	825	834	843
Nivard SH	66	67	67	68	69	69	70	71	72	72	73
Sharon	820	829	837	846	855	864	873	883	892	902	911
TOTAL Households	14 061	14 210	14 361	14 513	14 667	14 823	14 980	15 139	15 300	15 463	15 627

Based on data contained in **Table 1** above, extracted from the Mamusa Housing Sector Plan (2013), the population was estimated to actually decrease from 2258 in 2013 to 1944 in 2018 entailing a population decrease of 240 over the 5 year period. In considering the data contained in Table 2 above, it is evident that the growth in the number of households in the Glaudina urban area did not follow the anticipated growth pattern as determined in terms of the Mamusa Housing Sector Plan (2013), as the township area of Glaudina Extension 1 already comprises in excess of 450 residential erven with an additional ±400 informal dwelling units already occupying the land west and south of Glaudina Extension 1 and including Erf 395, Glaudina Extension 1. From the fore-mentioned it stands to reason





that the population size within the urban complex of Glaudina actually increased as opposed to the anticipated population decrease.

#### 1.2.2.2 Level of Employment

Based on the Mamusa Housing Sector Plan (2013), the unemployment rate in the Mamusa Local Municipality was estimated at 44,4%. It was also estimated that 35.6% of the economically active population is employed in the agriculture, hunting, forestry and fishing sector followed by 22.1% occupied in the community, social and personal services sector. The majority of economically active population is employed in elementary occupations (42.7%) and only 17.9% are employed in professional and related occupations.

#### 1.2.2.3 Household Income

**Figure 1** below reflects that the vast majority of the population of Mamusa falls within the lowest monthly income category and may qualify for subsidized housing. Average household income is a direct indicator of consumer demand for a broad spectrum of economic goods and services – such as housing and the quantity of additional floor space that could be sustained by a given consumer market. Average household income, to an extent, also reflects the living standard of a household, and influences aspects such as asset ownership. **Figure 2** below reflects the Living Standards Measurement Indicator as extracted from the Mamusa Housing Sector Plan (2013).

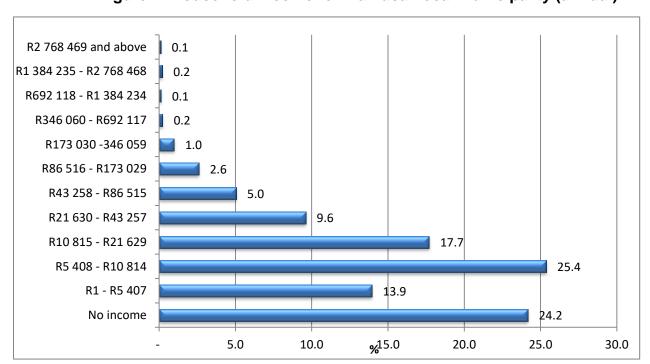


Figure 1: Household Income for Mamusa Local Municipality (annual)



**Figure 2: Living Standards Measurement Indicator** 

Income category (R/month)	LSM Status	Primary Area (% of households)
Super A income	LSM 10+	1.0
A Income	LSM 10	0.6
B Income	LSM 9	1.8
C Income high	LSM 8	0.8
C Income low	LSM 7	4.5
D Income	LSM 6	6.3
D lower top	LSM 4 to 5	10.9
D lower end	LSM < 3	74.1

The household income and living standards measurement for the Mamusa Local Municipality indicates the following:

- 24.2% of households in the market area have no household income and the majority of all households have a low household income.
- The LSM profile reflects the same tendency with 74.1% of households falling within the lower LSM 1 – 3 category with 25.9% within the LSM 4 – 10+.
- The income profiles for all households reflect an average annual income of R56 347 translating to R4 696 per month. The LSM category 4 – 10+ reflects an average annual income of R192 902 and an average monthly income of R16 075.
- Households in the Mamusa local municipality are predominantly lowincome households.

# 1.3 INTEGRATED HUMAN SETTLEMENT PLANNING

As integral part of the re-layout planning process, the following studies were conducted as part of the pre-planning activities:

- Detail survey of all informal housing structures and fences located on the subject erf:
- 1:100 year floodline determination conducted by CWT Water Technology;
- Phase 1 Heritage Resources Impact Assessment compiled by A Pelser Archaeological Consulting;
- Detail civil engineering services investigation conducted by NEP Consulting Engineers; and

The results of the studies referred to above will be addressed in the respective sections of this Memorandum.

In terms of the North West Provincial Spatial Development Framework (2017), one of the development guidelines set for the Mamusa Local Municipality is to "focus on **backlog** 



**eradication** in the smaller nodes, whilst creating **new affordable housing opportunities** in Schweizer-Reneke".

## 1.4 APPLICATION

Maxim Planning Solutions (Pty) Ltd (2002/017393/07), herein represented by Koot Raubenheimer (ID No. 700305 5192 08 9), is hereby applying on behalf of the Mamusa Local Municipality in terms of Section 69 of the Mamusa By-law on Spatial Planning and Land Use Management and Section 89(1) read together with Section 106(e) of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986) read together with Section 10(1)(a) and paragraphs g(ix) and (i) of Schedule 1 of the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) for the amendment of the General Plan (SG No. 3801/1998) of the township known as Glaudina Extension 1 by the relayout of Erf 395, Glaudina Extension 1 into ninety six (96) erven as well as 6 streets.

# 1.5 PUBLIC PARTICIPATION

The application in respect of the amendment of the General Plan of the township Glaudina Extension 1will be advertised in accordance with Section 89(3) read together with Section 106, Regulation 25(2) and Schedule 15 of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986) and Section 98(1)(c) of the Mamusa By-law on Spatial Planning and Land Use Management read together with paragraphs (f) and (I) of Schedule 1 of the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013), in the Stellalander on 24 and 31 January 2018 as well as in the North West Provincial Gazette on 23 and 30 January 2018. Objectors will be afforded a period of 30 days from 24 January 2018 to submit objections or comments in respect of the application for amendment of the General Plan to the Municipal Manager and the authorised agent.

The application will also, in accordance with the prescriptions of Section 99(1)(d) of the Mamusa By-law on Spatial Planning and Land Use Management be referred to the following external organizations / departments for comments or objections:

- Department of Public Works and Roads
- ☐ Openserve (Telkom SA Limited)
- □ Eskom
- Dr. Ruth Segomotsi Mompati District Municipality
- Department of Water and Sanitation
- Department of Local Government and Human Settlements
- Department of Education
- Department of Health
- □ South African Post Office
- South African Heritage Resources Agency (SAHRA)
- South African National Roads Agency Limited (SANRAL)





The fore-mentioned organizations / departments will be afforded a period of 60 days to comment in this matter.

In addition to the fore-mentioned notices, notices will also be served on all adjacent property owners in accordance with the prescriptions of Section 99(1)(c) of the Mamusa By-law on Spatial Planning and Land Use Management.

To ensure the greatest extent of public participation, notices will also be posted on the subject property in accordance with the prescriptions of Section 101(1)(c) and 101(1)(d) of the Mamusa By-law on Spatial Planning and Land Use Management.

# 1.6 STUDY AREA DELINEATION

The proposed development area comprises Erf 395, Glaudina Extension 1, North West Province as described in detail in section 2.1.

# 1.7 REPORT OUTLINE

The remainder of the report is structured in terms of the following main headings:

Chapter 2: Particulars of the development area

• Chapter 3: Physical aspects

• Chapter 4: Proposed development

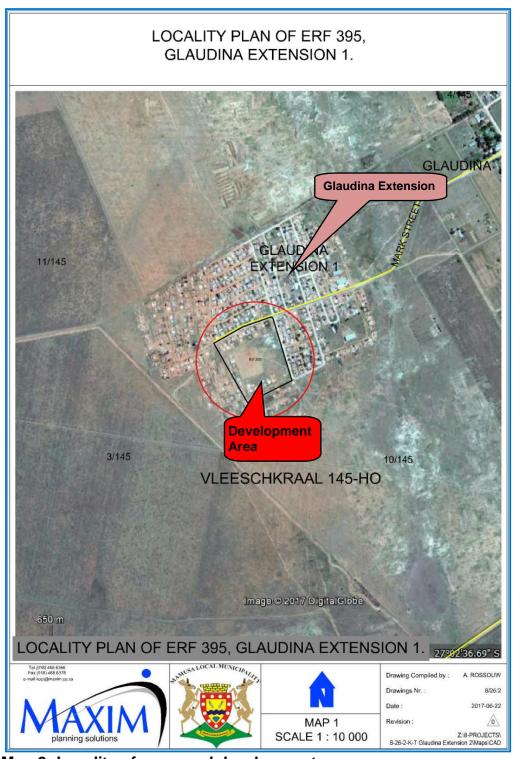
Chapter 5: Provision of Engineering Services

Chapter 6: Motivation

# **CHAPTER 2: PARTICULARS OF THE DEVELOPMENT AREAS**

# 2.1 LOCALITY

Erf 395, Glaudina Extension 1 is located in the south-western corner of the township area of Glaudina Extension 1 and is bordered to the north by the main access road through Glaudina Extension 1 linking this township with the township area of Glaudina.



Map 2: Locality of proposed development area





The proposed development area detailed above is located within the area of jurisdiction of the Mamusa Local Municipality which in turn falls within the area of jurisdiction of the Dr. Ruth Segomotsi Mompati District Municipality.

A locality plan of the proposed township area is attached to the application for township establishment as **Annexure D**.

# 2.2 **SG DIAGRAM**

Erf 395, Glaudina Extension 1 is reflected on General Plan SG No. 3801/1998 (attached as **Annexure E** to the application).

### 2.3 OWNER

Erf 395, Glaudina Extension 1 is currently still registered in the name of the Mamusa Local Municipality and is held by virtue of Certificate of Registered Title T69338/2000 (comprising the township title). The ownership status is reflected on the attached Aktex Deeds Office Enquiry (refer **Annexure F**) as well as on the relevant Certificate of Registered Title T69338/2000 (refer **Annexure G**).

Due to the fact that Erf 395, Glaudina Extension 1 is still registered in the name of the township applicant i.e. the Mamusa Local Municipality, the re-layout thereof is still possible.

The Special Power of Attorney signed by the Mamusa Local Municipality authorising Maxim Planning Solutions (Pty) Ltd (2002/017393/07) to apply for the amendment of the General Plan of the township area of Glaudina Extension 1 is attached as **Annexure A**.

# 2.4 **AREA**

Erf 395, Glaudina Extension 1 comprises a total area of 5,1589 hectares.

The erven to be created through this re-layout application will comprise the following areas:

•	Erf 895, Glaudina Extension 1:	478m²
•	Erf 896, Glaudina Extension 1:	378m²
•	Erf 897, Glaudina Extension 1:	372m²
•	Erf 898, Glaudina Extension 1:	389m²
•	Erf 899, Glaudina Extension 1:	442m²
•	Erf 900, Glaudina Extension 1:	342m²
•	Erf 901, Glaudina Extension 1:	437m²
•	Erf 902, Glaudina Extension 1:	352m²
•	Erf 903, Glaudina Extension 1:	331m <sup>2</sup>



	E ( 00 4 O)	000 0
•	Erf 904, Glaudina Extension 1:	220m <sup>2</sup>
•	Erf 905, Glaudina Extension 1:	315m <sup>2</sup>
•	Erf 906, Glaudina Extension 1:	278m <sup>2</sup>
•	Erf 907, Glaudina Extension 1:	266m²
•	Erf 908, Glaudina Extension 1:	271m²
•	Erf 909, Glaudina Extension 1:	389m²
•	Erf 910, Glaudina Extension 1:	286m²
•	Erf 911, Glaudina Extension 1:	286m²
•	Erf 912, Glaudina Extension 1:	286m²
•	Erf 913, Glaudina Extension 1:	286m²
•	Erf 914, Glaudina Extension 1:	286m²
•	Erf 915, Glaudina Extension 1:	286m²
•	Erf 916, Glaudina Extension 1:	286m²
•	Erf 917, Glaudina Extension 1:	286m²
•	Erf 918, Glaudina Extension 1:	286m²
•	Erf 919, Glaudina Extension 1:	286m²
•	Erf 920, Glaudina Extension 1:	286m²
•	Erf 921, Glaudina Extension 1:	307m²
•	Erf 922, Glaudina Extension 1:	291m²
•	Erf 923, Glaudina Extension 1:	286m²
•	Erf 924, Glaudina Extension 1:	286m²
•	Erf 925, Glaudina Extension 1:	286m²
•	Erf 926, Glaudina Extension 1:	286m²
•	Erf 927, Glaudina Extension 1:	286m²
•	Erf 928, Glaudina Extension 1:	286m²
•	Erf 929, Glaudina Extension 1:	286m²
•	Erf 930, Glaudina Extension 1:	286m²
•	Erf 931, Glaudina Extension 1:	286m²
•	Erf 932, Glaudina Extension 1:	286m²
•	Erf 933, Glaudina Extension 1:	286m²
•	Erf 934, Glaudina Extension 1:	290m²
•	Erf 935, Glaudina Extension 1:	290m²
•	Erf 936, Glaudina Extension 1:	290m²
•	Erf 937, Glaudina Extension 1:	290m²
•	Erf 938, Glaudina Extension 1:	290m²
•	Erf 939, Glaudina Extension 1:	290m²
•	Erf 940, Glaudina Extension 1:	290m²
•	Erf 941, Glaudina Extension 1:	290m²
•	Erf 942, Glaudina Extension 1:	290m²
•	Erf 943, Glaudina Extension 1:	290m <sup>2</sup>
•	Erf 944, Glaudina Extension 1:	290m²
•	Erf 945, Glaudina Extension 1:	290m <sup>2</sup>
-	o io, oladama Extendion i.	_55111



	Erf 0.40 Olavelina Estamaian 4	0003
•	Erf 946, Glaudina Extension 1:	309m <sup>2</sup>
•	Erf 947, Glaudina Extension 1:	293m²
•	Erf 948, Glaudina Extension 1:	290m²
•	Erf 949, Glaudina Extension 1:	290m²
•	Erf 950, Glaudina Extension 1:	290m²
•	Erf 951, Glaudina Extension 1:	290m²
•	Erf 952, Glaudina Extension 1:	290m²
•	Erf 953, Glaudina Extension 1:	290m²
•	Erf 954, Glaudina Extension 1:	290m²
•	Erf 955, Glaudina Extension 1:	290m²
•	Erf 956, Glaudina Extension 1:	290m²
•	Erf 957, Glaudina Extension 1:	290m²
•	Erf 958, Glaudina Extension 1:	294m²
•	Erf 959, Glaudina Extension 1:	293m²
•	Erf 960, Glaudina Extension 1:	293m²
•	Erf 961, Glaudina Extension 1:	293m²
•	Erf 962, Glaudina Extension 1:	293m²
•	Erf 963, Glaudina Extension 1:	293m²
•	Erf 964, Glaudina Extension 1:	293m²
•	Erf 965, Glaudina Extension 1:	293m²
•	Erf 966, Glaudina Extension 1:	293m²
•	Erf 967, Glaudina Extension 1:	293m²
•	Erf 968, Glaudina Extension 1:	293m²
•	Erf 969, Glaudina Extension 1:	293m²
•	Erf 970, Glaudina Extension 1:	311m <sup>2</sup>
•	Erf 971, Glaudina Extension 1:	295m²
•	Erf 972, Glaudina Extension 1:	293m²
•	Erf 973, Glaudina Extension 1:	293m²
•	Erf 974, Glaudina Extension 1:	293m²
•	Erf 975, Glaudina Extension 1:	293m²
•	Erf 976, Glaudina Extension 1:	293m²
•	Erf 977, Glaudina Extension 1:	293m²
•	Erf 978, Glaudina Extension 1:	293m²
•	Erf 979, Glaudina Extension 1:	293m²
•	Erf 980, Glaudina Extension 1:	293m²
•	Erf 981, Glaudina Extension 1:	293m²
•	Erf 982, Glaudina Extension 1:	259m²
•	Erf 983, Glaudina Extension 1:	250m <sup>2</sup>
•	Erf 984, Glaudina Extension 1:	250m <sup>2</sup>
•	Erf 985, Glaudina Extension 1:	250m <sup>2</sup>
•	Erf 986, Glaudina Extension 1:	250m <sup>2</sup>
•	Erf 987, Glaudina Extension 1:	250m <sup>2</sup>



Erf 988, Glaudina Extension 1: 249m²
Erf 989, Glaudina Extension 1: 2811m²
Erf 990, Glaudina Extension 1: 1,0498ha

## 2.5 EXISTING LAND USE AND ZONING

The proposed development area is currently occupied by approximately 50 informal residential structures (refer **Plates 1 and 2**).

Plate 1: View of informal housing structures



Plate 2: View of informal housing structures



The surrounding area is predominantly utilized for the following purposes:

The area directly north and east of the proposed township area comprises the existing residential township area of Glaudina Extension 1 whereas the area to the west and south comprises the proposed township area of Glaudina Extension 2. The area to the west and south of the development area is currenly occupied by informal residential structures.

In terms of the Schweizer Reneke Town Planning Scheme, 2000 the subject property is currently zoned as follows:

 Erf 395, Glaudina Extension 1, Province North West: "Institutional"
 (as depicted on the following zoning map extracted from the Schweizer Reneke Town Planning Scheme, 2000).



Map 3: Extract from the Schweizer Reneke Town Planning Scheme, 2000



Cognisance should be taken of the fact that the Mamusa Local Municipality is currently in the process of promulgating a new Land Use Scheme i.e. the Mamusa Land Use Scheme, 2018 and this development will be incorporated into the Mamusa Land Use Scheme, 2018 simultaneously with the promulgation of the re-layout application in the North West Provincial Gazette.

### 2.6 MINERAL RIGHTS

According to Certificate of Registered Title T69338/2000, the rights to minerals and precious stones in respect of the township area of Glaudina Extension 1 have been reserved in favour of Pieter Gideon van Zyl (junior) by virtue of Certificate of Mineral Rights No. 256/1939-S registered on 25 March 1939 (refer **Annexure G**).

In this regard cognisance should be taken of the fact that the mineral rights holder already consented to the establishment of the township area of Glaudina Extension 1 and further consent in respect of the re-layout of Erf 395 in the existing township area of Glaudina Extension 1 is therefore not required. In terms of the proclamation notices of the township area of Glaudina Extension 1, all erven in the township area will be subject to the reservation of rights to minerals, as detailed above (refer **Annexure H)**. This will also apply to the erven created through the re-layout of Erf 395, Glaudina Extension 1.

## 2.7 RESTRICTIVE TITLE CONDITIONS

According to Certificate of Registered Title T69338/2000 (refer **Annexure G**), the township area of Glaudina Extension 1 is subject to the following title conditions:

- Condition 1 relates to the reservation of rights to minerals and was already addressed in Section 2.6 supra.
- "2. Die voormalige Resterende gedeelte van die plaas "VLEESCHKRAAL No. (waarvan die Gedeelte hiermee getransporteer 'n deel uitmaak) is VERDER ONDERWORPE aan die volgende voorwaardes:-
  - (a) "THAT the present and future owners of the aforesaid former Remaining Extent (whereof Portion "G" hereby transferred forms a portion) shall be entitled to fetch firewood for their own use from portions A, B and C of the farm 'Doornhoek' No. 165, district Schweizer Reneke, measuring respectively 1537,0852 hectares, 1537,0638 hectares and 770,8802 hectares and the Remaining Extent of certain Portion of the said farm 'Doornhoek' measuring as such 1537,0424 hectares, transferred by Deeds of Transfer Nos. 4176/1908, 4172/1908 and 4178/1908".



(b) "HET Staat of zyn opvolgers in titel zal het volle, vrye en onbezwaarde recht van weg en toegang hebben van en naar gedeelte 'D' van genoemde plaats 'Vleeschkraal' NO. 145, groot 1,7131 hektaar en getransporteerd onder Acte van Transport No. 2612/1913, over het vroeger Resteerend Gedeelte der gemelde plaats groot als zulks 1513,5048 hektaar gehouden onder Acte van Transport No. 4175/1908 naar en van het naaste of gemakkelykste bereikbare publieke weg en zoodanig recht van weg naar en van het naaste of gemakkelykst bereikbare water op het gezegd Resterend Gedeelte en het recht om dat water te gebruiken".

In considering the applicability of the fore-mentioned title conditions on Erf 395, Glaudina Extension 1 and therefore possible applicability on the erven created as a result of the relayout of Erf 395, the proclamation notices of the township area of Glaudina Extension1 was consulted (refer **Annexure H**).

According to paragraph 3 of the proclamation notices of the township area of Glaudina Extension 1, published in the North West Provincial Gazette No. 5549 on 01 August 2000 by virtue of Official Notice 36 of 2000, the right to collect firewood contained in paragraph 2(a) of Certificate of Registered Title T69338/2000 shall not be passed on to the erven in the township area. This arrangement will also apply to the erven created through the relayout of Erf 395, Glaudina Extension 1. Paragraph 3 of the proclamation notices of the township Glaudina Extension 1 also stipulates that condition 2(b) of Certificate of Registered Title T69338/2000 does not affect the township area due to the location thereof and this condition shall therefore not be transferred to the erven in the township area of Glaudina Extension 1. This arrangement will also apply to the erven created through the re-layout of Erf 395, Glaudina Extension 1.

According to paragraph 1.(4) of the proclamation notices of the township area of Glaudina Extension 1, the following restriction was imposed in respect of the disposal of erven in the township area:

"The township applicant shall not offer for sale or alienate Erf 395 within a period of six (6) months after the erf becomes registrable to any person or body other than the State unless the Department of Education has indicated in writing that the Department does not wish to acquire the erf".

Erf 395, Glaudina Extension 1 already became registrable during 2000 and the 6 month period afforded the State to take transfer of the erf already lapsed during 2001. This restriction on the disposal of the concerned erf has therefore since expired.

#### 2.8 **SERVITUDES**

In terms of the proclamation notices of the township Glaudina Extension 1 (refer **Annexure H**), Erf 395, Glaudina Extension 1 is subject to the following omnibus servitudes:

- (i) The erf is subject to:
  - (aa) a servitude, 3 metres wide along the street boundary;
  - (bb) a servitude, 2 metres wide along the rear (mid block) boundary; and
  - (cc) servitude along the side boundary with an aggregate width of 3 metres and a minimum width of 1 metre,

in favour of the local authority for sewerage and other municipal purposes and, in the case of a panhandle erf, an additional servitude for municipal purposes 1 metre wide across the access portion of the erf, if and when required by the local authority: Provided that the local authority may relax or grant exemption from the required servitudes.

- (ii) No building or other structure shall be erected within the aforesaid servitude area and no large-rooted trees shall be planted within the area of such servitude or within 1 metre thereof.
- (iii) The local authority shall be entitled to deposit temporarily on the land adjoining the aforesaid servitude such material as may be excavated by it during the course of the construction, maintenance or removal of such sewerage mains and other works as it, in its discretion, may deem necessary and shall further be entitled to reasonable access to the said land for the aforesaid purpose, subject to any damage done during the process of the construction, maintenance or removal of such sewerage mains and other works being made good by the local authority.

In terms of the proclamation notices, these servitudes will apply to all erven in the proposed township area excluding Erven 479 and 480 (i.e. erven registered in the name of the Local Authority and also being the holder of the servitude). In this regard it is proposed that Erven 895 to 988 be made subject to the fore-mentioned servitudes but that Erven 989 and 990 be excluded from these servitudes as these erven will also vest in the local authority.

#### 2.9 **BONDHOLDER**

Erf 395, Glaudina Extension 1 has not been registered to date and currently still vest in the name of the township applicant. The subject property is therefore not subject to a bond (refer Aktex Deeds Office Enquiry – **Annexure F**)



# **CHAPTER 3: PHYSICAL ASPECTS**

### 3.1 TOPOGRAPHY

During the establishment of the township area of Glaudina Extension 1, a contour survey was conducted of the development area. In terms of the results of the contour survey, it was concluded that the development area is generally flat and drains in an easterly direction towards the drainage feature. No topographic features were encountered on site.

The proposed development area is located on a shallow slope towards the east and is located at between 1367.5 and 1366.25 mamsl.

# 3.2 CLIMATE

The region is characterized by summer rainfall with thunderstorms, with annual low rainfall figures of 583mm (Ottosdal) to 602 mm (Lichtenburg) recorded at the closest weather stations to the site. Winters are dry with frost common. The warmest months are normally December and January and the coldest months are June and July.

An analysis of the data confirms a Weinert's N-Value in the order of 7 for Glaudina. The mechanical disintegration of rocks will therefore be dominant over chemical decomposition, and shallow soil horizons will be expected in areas of poor drainage, underlain by igneous rocks.

Storm water drainage and road pavement design must incorporate the climatic extremes above.

# 3.3 FRESHWATER SYSTEM / DRAINAGE

Plate flow is the dominant drainage pattern on site. Drainage occurs in an easterly direction towards the drainage feature that traverses the area between Glaudina Township and Glaudina Extension 1, and then southwards towards the Harts River.

In terms of the Phase 1 geotechnical investigation conducted on the adjacent proposed township area of Glaudina Extension 1 it was indicated that seepage and the presence of perennial fluctuations of ground water were encountered on site, proving that a seasonal perched water table may exist. A ferruginised profile indicates that some perennial water level fluctuations occur.

The study also indicated that ground water in the form of seepage was not intersected in any test pits during the investigation, but some problems are foreseen and normal water tightening techniques such as damp course on foundation levels are required.



In order to establish the extent of the drainage feature that traverses the area between Glaudina and Glaudina Extension 1, CWT Water Technology was commissioned to calculate the 1:100 year floodline of this drainage feature (refer **Annexure J**). The extent of the 1:100 year floodline determination was employed to establish the limit of development along the eastern boundary of Erf 395, Glaudina Extension 1. The 1:100 year floodline only impacts on one (1) "Residential 1" erf in the township area whereas the remainder of the 1:100 year floodline was accommodated within two (2) "Public Open Space" on the re-layout plan. Development on the proposed Erf 902 should be such that all buildings and structures are located outside the area that is subject to the 1:100 year floodline.

# 3.4 WETLANDS AND PANS

As detailed in section 3.3 supra, the development area is only partially affected by the 1:100 year floodline of the drainage feature located east of the proposed development area and no wetlands or pans are present on site.

### 3.5 VEGETATION

The area is typically characterized by Pure Grassveld veld with Dry Cymbopogon – Themeda *veld type* (Acocks, 1988). The site itself is covered by sparse grasslands of which some was used as agriculture land in the past. Due to the presence of informal housing structures on site, the natural vegetation of the area has largely been disturbed.

### 3.6 GROUNDWATER

Due to the time that has passed since the initial geotechnical investigation was conducted in respect of the township area of Glaudina Extension 1, the results of the recent geotechnical investigation that was conducted in respect of the proposed township area of Glaudina Extension 2, which is located directly adjacent to Erf 395, is deemed appropriate to also reference. In terms of this study seepage and the presence of perennial fluctuations of ground water were encountered on site, proving that a seasonal perched water table may exist. A ferruginised profile indicates that some perennial water level fluctuations occur.

Ground water in the form of seepage was however not intersected in any test pits during the investigation, but some problems are foreseen and normal water tightening techniques such as damp course on foundation levels are required.

**3.7 GEOLOGY** (Extract from Geotechnical Report compiled by Geocapro Services attached as **Annexure K** to the application for township establishment)



The site is underlain by Andesitic lava of the Klipriviersberg Group from the Ventersdorp Supergroup. These lavas are very dense, massive highly competent rocks and are generally highly amygdaloidal at the top and bottom of the flows. The entire succession consists of numerous lava flows which vary in thisckness from one to over a hundred metres thick, all with the same characteristics as mentioned.

This lava is overlain by more recent alluvium over the entire area an no outcrops of lava occurs. The alluvium consists of gravel beds directly overlying the lava. The exact thickness of the gravel beds was not determined, as a backactor or boreholes will have to be implemented to determine the thickness of the gravels to the bedrock of lava. However it was established that the gravels are in excess of one metre thick over the entire area and thicker that 3m in parts.

No dolomite occurs in the area and no stability investigation is required.

In terms of the geotechnical report, it was concluded that the entire area is ideally suited for housing development.

Due to the proximity of this development area to the proposed township area of Glaudina Extension 2, the results of the geotechnical investigation conducted in respect of this development area is also regarded a applicable to the development on Erf 395 as the geotechnical investigation conducted in respect of Glaudina Extension 2 concluded that the area is characterised by homogenous geotechnical conditions. In the absence of recommendations in the geotechnical investigation conducted in respect of the township area of Glaudina Extension 1, the recommendations contained in the recent geotechnical study relating to Site Class C2H/2A2C is deemed of great value and are detailed below:

# • CONSOLIDATION OR COLLAPSE SETTLEMENT Site Class C (Estimated total Settlement of less than 5mm):

#### **Normal Construction:**

Minor collapse settlement requires normal construction (strip footing and slab on the ground) with compaction in foundation trenches and good site drainage.

# Site Class C1 (Estimated total Settlement of between 5 and 10mm): Modified normal construction:

Reinforced strip footing and slab on the ground.

Articulation joints at some internal and all external doors and openings.

Light reinforcement in masonry.

Site drainage and service/plumbing precautions recommended.

Foundation pressure not to exceed 50 kPa (single storey buildings).



#### Compaction of in situ soils below individual footings:

Remove in situ material below foundations to a depth and width of 1,5 times the foundation width or to a competent horizon and replace with material compacted to 93% MOD AASHTO density at -1% to +2% of optimum moisture content. Normal construction with light reinforcement in strip foundation and masonry.

#### **Deep strip foundations**

Normal construction with drainage precaution.

Founding on a competent horizon below problem horizon.

#### Soil Raft

Remove in situ material to 1,0m beyond perimeter of building to a depth and width of 1,5 times the widest foundation or to a competent horizon and replace with material compacted to 93% MOD AASHTO density at -1% to +2% of optimum moisture content.

Normal construction with lightly reinforced strip footings and masonry.

## Site Class C2 (Estimated total Settlement of more than 10mm): Stiffened strip footings, stiffened or cellular raft

Stiffened strip footings or stiffened or cellular raft with articulation joints or solid lightly reinforced masonry

Bearing pressure not to exceed 50 kPa.

Fabric pressure not to exceed 50 kPa.

Site drainage and service/plumbing precautions.

#### **Deep strip foundations**

See C1

#### Compaction of in situ soils below individual footings

See C1

#### Piled or pier foundations

Reinforced concrete ground beams or solid slabs on piled or pier foundations. Ground slabs with fabric reinforcement.

Good site drainage.

#### Soil Raft

See C1

#### EXPANSIVE SOIL

Site Class H (Estimated total heave of less than 7.5mm):

Soil tested as medium expansive with a clay layer thickness of up to 0,3m from surface

**Normal construction:** 



Minor heave requires normal construction (strip footing and slab on the ground) with site drainage and service/plumbing precautions recommended.

Site Class H1 (Estimated total heave of between 7.5 and 15mm):

Tested as medium expansive with a clay layer thickness of between 0,45 to 0,85m from surface,

or a highly expansive clay layer of between 0,3 and 0,4m in thickness from surface

or a clay layer with a very high expansive potential of up to 0.3m.

#### **Modified normal:**

Lightly reinforced strip footings.

Articulation joints at all internal/external doors and openings

Light reinforcement in masonry.

Site drainage and plumbing/service precautions.

#### Or soil raft:

Remove all or part of expansive horizon to 1,0m beyond the perimeter of the construction and replace with inert backfill compacted to 93% MOD AASHTO density at -1% to 2% of optimum moisture content.

Normal construction with lightly reinforced strip footings and masonry.

Site drainage and plumbing/service precautions.

Site Class H2 (Estimated total heave of between 15 and 30mm):

Tested as medium expansive with a clay layer thickness of between 0,85 to 2,0m,

or highly expansive of between 0,4 and 0,85m in thickness measured from surface,

or a clay layer with a very high expansive potential of between 0.3 and 0.4m. Soil raft:

See H1.

#### Stiffened or cellular raft:

Articulation joints or solid lightly reinforced masonry.

Site drainage and plumbing/service precautions.

#### Piled construction:

Piled foundation with suspended floor slabs with or without ground beams. Site drainage and plumbing/service precautions.

#### **Split construction:**

Combination of reinforced brickwork/blockwork and full movement joints.

Suspended floors or fabric reinforced ground slabs.

Site drainage and plumbing/service precautions.



#### 3.8 ENVIRONMENTAL IMPACT ASSESSMENT

The proposed re-layout of Erf 395, Glaudina Extension 1 is not listed in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) as the actual area where houses and streets are to be constructed is less than 5ha in size and the development will actually take place within a proclaimed township area. The development further does not entail the clearance of more than 1 hectare of indigenous vegetation due to the site already being occupied by informal residential structures.

# 3.9 CULTURAL HERITAGE AREAS

A Pelser Archaeological Consulting was commissioned to conduct a Cultural Heritage Resources Impact Assessment in respect of the proposed development area. The forementioned assessment contained the following results:

As part of the assessment of the area, a desktop study was undertaken to put the property and the general geographical area in a historical and archaeological context.

There are no known Iron Age sites close to the study area (Bergh 1999: 6-7), although this might just point to a lack of archaeological research in the region. No sites were found during the assessment as well. Based on Huffman's research the possibility of the presence of Iron Age sites in the larger geographical area cannot be excluded. His research, based on pottery, shows that the Olifantspoort facies of the Urewe Iron Age Tradition and dating to between AD 1500 & AD1700 and the Thabeng facies of the same tradition (AD1700-AD1840) could occur in the larger area (Huffman 2007: 191; 195).

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write. The earliest Europeans to travel through the larger area were the groups of Campbell in 1813; Broadbent & Hodgson in 1823, Hodgson & Archbell in 1826 and later that of Krebs in 1838 (Bergh 1999:12-13). They were closely followed by the Voortrekkers (p.14).

A foundation stone/plaque located at NG Church in Glaudina indicates that the foundation stone of the original church was laid in 1936 shortly after the establishment of the town in 1935. The only site of historical significance found during the assessment is the local municipal cemetery which is discussed below.

During the Heritage Resources Impact Assessment, a fairly large communal cemetery of recent historical age was identified. It should however be noted that this cemetery site is located outside the proposed development area following the reduction of the footprint area of the proposed township area of Glaudina Extension 2 as a result of the impact of the 1:100 year floodline on the area available for development. This cemetery site similarly does not impact on the proposed re-layout of Erf 395, Glaudina Extension 1 due to the location thereof in relation to the development area.



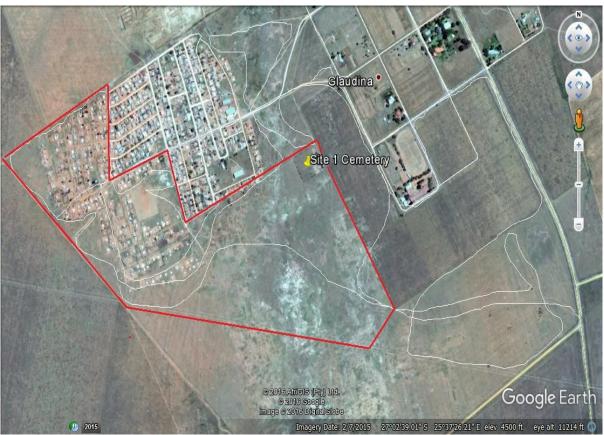


Fig.3: Aerial view of study area showing Site 1 Cemetery location & Track Paths followed during the assessment (Google Earth 2016).

A number of known cultural heritage sites (archaeological and/or historical) exist in the larger geographical area within which the study area falls. There are no known sites on the specific land parcel, although one (a recent historical cemetery) was identified in the vicinity of the development area during the physical assessment undertaken (located outside the proposed development area).

It should be noted that although all efforts were made to cover the total area and therefore to identify all possible sites or features of cultural (archaeological and/or historical) heritage origin and significance, that there is always the possibility of something being missed. The fairly dense grass cover also made visibility in some sections difficult. This aspect should be kept in mind when development work commences and if any sites (incl. graves) are identified then an expert should be called in to investigate and recommend on the best way forward.

The Heritage Resources Impact Assessment concluded as follows:

• "From a cultural heritage point of view the development can therefore continue, taking cognizance of the above recommendations"

(Refer **Annexure L** for comprehensive Archaeological Impact Assessment)



# **CHAPTER 4: PROPOSED DEVELOPMENT**

## 4.1 LAND USES

The primary aim of this application is to address the urgent need experience by the Mamusa Local Municipality in the Glaudina urban complex for vacant residential erven that can be utilized for low income / subsidized housing. Due to the non-availability of erven for residential settlement purposes, informal occupation of Erf 395, Glaudina Extension 1 as well as the land to the west and south of the existing township area of Glaudina Extension 1 occurred. This area is currently occupied by an estimated 350 – 400 informal dwelling units.

According to the terms of reference of this appointment, Maxim Planning Solutions (Pty) Ltd set out to accommodate the largest number of informal residential structures onto erven to limit the number of informal residential structures that need to be re-located. For this purpose a detail survey of all structures and fences on the development area was commissioned. The results of this survey are reflected in **Annexure M**.

In terms of the project appointment, it was indicated that the commission should also include the formalization of the informal settlement on the adjacent Remaining Extent of Portion 10 of the farm Vleeschkraal 145, Registration Division H.O., North West Province that will comprise the township area of Glaudina Extension 2. ON scrutinizing the results of the detail survey of the informal housing structures on Erf 395, Glaudina Extension 1, it was noted that the greater majority of the structures are located in such a manner that would entail that part of the erf that is provided for each of the informal residential structures will be located partially within Erf 395 and partially within the proposed township area of Glaudina Extension 2. As it is not possible to consolidate erven that are located in different township areas, it was recommended to the Mamusa Local Municipality that a proper re-layout plan be compiled in respect of the entire erf to utilize said erf to its fullest extent and to ensure that the greatest number of people residing in squalid conditions are afforded the opportunity to obtain a proper house with basic services.

In order not to negate our duty to restrict the number of informal dwelling units that need to be relocated, the re-layout plan was able to accommodate those structures located along the northern boundary of the erf on erven proposed in the re-layout plan.

The re-layout plan makes provision for the following land uses:



Table 3: Re-layout of Erf 395, Glaudina Extension 1 land uses

Use Zone	Proposed Land Use	Number	Area in	% of
		of erven	hectares	area
Residential 1	Dwelling house (average stand	93	2,7694	53.7%
	size 298m²)			
Business 1	Shops	1	0,0249	0,5%
Public Open Space	Parks	2	1,3309	25.8%
Existing public roads	Streets		1,0337	20.0%
Total		96	5,1589	100%

The following should be noted in respect of the land uses mentioned above:

#### Residential 1

The re-layout plan makes provision for 93 residential erven with an average stand size of 298m<sup>2</sup>. These erven will be alienated on a full title basis.

The proposed "Residential 1" erven will be subject to the following development restrictions as imposed in terms of the Mamusa Land Use Scheme, 2018:

Maximum Height: 2 storeys

Coverage: 50%

Building line: Street boundary – 3m

Other boundaries – 2m along any two boundaries if required

for the installation of services

#### Business 1

The re-layout plan incorporates one (1) erf that can be utilized for business purposes and same was positioned along one of the main access road to the proposed development to limit walking distances not only for the inhabitants of this development but also for the inhabitants of the proposed township area of Glaudina Extension 2.

The proposed "Business 1" erven will be subject to the following development restrictions as imposed in terms of the Mamusa Land Use Scheme, 2018:

Maximum Height: 2 storeys

Coverage: 70%

Building line: Street boundary – 0m

Other boundaries – 2m along any two boundaries if required

for the installation of services

#### Public Open Space

The two (2) public open space erf provided as part of this development will primarily accommodate an area within the eastern part of the development area that cannot be utilized for residential purposes.



### 4.2 FACTORS INFLUENCING THE RE-LAYOUT PLAN

The re-layout plan that was compiled in respect of Erf 395, Glaudina Extension 1 was influenced by the following factors:

- Accommodating a number of informal residential structures already present on the development area on erven within the proposed township area to limit the number of informal residential structures that will have to be relocated;
- \* Aligning the street network of the proposed township area with the street network in the existing township area of Glaudina Extension 1 as well as the proposed township area of Glaudina Extension 2:
- \* Accommodating the 1:100 year floodline applicable to the drainage feature and limiting development to the area outside the 1:100 year floodline;

## 4.3 ACCESS

Access to the proposed development on Erf 395, Glaudina Extension 1 will be provided from the existing street network of the adjacent township area of Glaudina Extension 1. The street network proposed for this development will also link onto the street network of the adjacent proposed township area of Glaudina Extension 2.

The street network adopted for the proposed township area comprises a network of 10m streets and were designed to ensure proper surface stormwater drainage.

# **CHAPTER 5: PROVISION OF ENGINEERING SERVICES**

#### 5.1 INTRODUCTION

NEP Consulting Engineers investigated and reported on the provision of civil engineering services to the proposed development area on Erf 395, Glaudina Extension 1 as well as the proposed township area of Glaudina Extension 2. The provision of services to these two development areas was addressed in one Engineering Services Report.

The provision of services to the proposed development areas will be addressed as follows:

Section 5.2: Water SupplySection 5.3: Sanitation

Section 5.4: Roads and Stormwater

Section 5.5: Solid Waste

# 5.2 WATER SUPPLY

#### **5.2.1 BULK WATER SUPPLY**

Potable water for the township of Glaudina is obtained from two existing boreholes located on the southern outskirts of Glaudina; connected to the existing 750kl elevated storage tank located within the development. These boreholes have a reliable yield of approximately 12% at recommended 12 hours delivery.

The existing Glaudina stands have a total theoretical required storage capacity of 210kl. Considering a total number of 500 residential stands of the proposed township and re-layout with a daily consumption of 80l/c/day, a total additional storage of 326kl is needed. The current total storage capacity of 750 kl is therefore adequate to serve the development of Glaudina Ext 2 including the proposed relayout of Erf 395 to provide for a 48hrs storage requirement. It is recommended that an additional borehole be established to augment the supply to 15l/s.

**Table 4: Water Demand** 

MAMUSA LOCAL MUNICIPALITY WATER DEMAND AND DESIGN CRITERIA CALCULATIONS -Glaudina Township					
Item	Item Description Unit Input Output				
1	Populations		New	Existing	
1.1	Year of Population Count	Year	2017	2017	
1.2	Number of Houses Counted	No	500	322	
1.3	House Occupancy	p/h	3.7	3.7	
1.4	Population Count - Year of Population Count	Total	1850	1191.4	
1.5	5 Year of Construction Year		2017	2017	
1.6	Year Difference - Population Count till Construction	Years	0	0	
1.7	Annual Population Growth	%	0	0	
1.8	Population at Construction Stage	Year	1850	1191	



2	Demand Calculations	Unit	Design	Horizon
2.1	Average Annual Daily Demand		2017	2017
	HLOS - 80 I/c/d	kl/d	148	95
2.2	Gross Average Annual Demand			
	Loss Factor	10%		
	HLOS - 80 I/c/d	kl/d	163	105
2.3	Summer Daily Demand			
	Summer Peak Factor	2.4		
2.3.2	HLOS - 80 I/c/d		="	
	SDDpu = SPF * GAADD : ( supply)	kl/d	391	252
2.4	Source Demand			
2.4.2	HLOS - 80 I/c/d			
	Based on SDDpu			
	Source demand for 12-hour pumping day	ℓ/s	9.04	5.82
	Source demand for 24-hour pumping day	ℓ/s	4.52	2.91
2.5	Storage Capacity			
2.5.1	Required Storage Capacity 48hours	kľ	325.60	209.69
2.5.2	Required Storage Capacity 24hours	kľ	162.80	104.84
2.5.3	Total required Storage Capacity 48hours	kľ	535.29	

#### **5.2.2 INTERNAL WATER RETICULATION**

The water reticulation for this proposed development will be supplied from the existing 750kl elevated tank. A ring feeder system with a 90-75mm diameter upvc pipe is suggested. The waterlines that connect the houses to the ring feeder line are 75mm diameter upvc pipe line. (Refer **Map 4**)



Map 4: Water layout plan for Glaudina Extension 2 and the re-layout Erf 395, Glaudina Extension 1



### 5.3 **SANITATION**

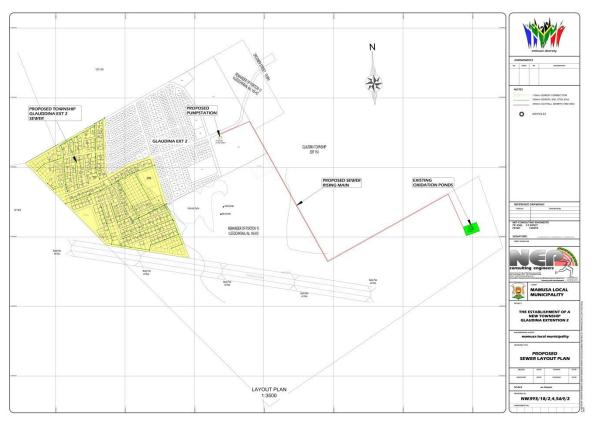
#### 5.3.1 BULK SEWER

Currently there are no bulk sewer services in Glaudina township. The town is being serviced by VIP toilets. However, it was indicated by Mamusa Local Municipality that an oxidation pond for the area is on construction phase with a capacity of 1.429ML/day south east of Glaudina.

As mentioned above, the new oxidation pond will afford the proposed development to be serviced by a full waterborne system. The sewer generated will gravitate towards the east of the town. The oxidation ponds are located southeast of Glaudina on high ground. Due to the topography of the area, a sewer pumpstation is needed to transport sewer to the oxidation ponds. The sewage pumpstation will be located east of Glaudina. A theoretical capacity of 0.6ML is needed to treat sewerage generated by the existing township as well as the proposed development of Glaudina Ext 2 and the re-layout of Erf 395, Glaudina Extension 1. Therefore, the capacity of the oxidation ponds is more than adequate to serve the proposed development as well as future developments (refer **Map 5**).

Table 5: Bulk sewer and Pumpstation design

Table J.	rable 5. Bulk sewer and Pumpstation design					
	<b>GLAUDINA NEW SEWA</b>	SE PUMP STA	TION		03 May	2017
POPULA	POPULATION AND SUMP STORAGE CAPACITY CALCULATION					
1.	Stands, population and hydra	<u>aulic load</u>				_
			<u>Glaudina</u>			
1.1	Number of stands @ 2017	each	822			
1.2	Persons per stand.	persons/ stand	4			
1.3	Number of persons.	each	3041			
1.4	Sewage per stand.	I/stand/ day	257.143			
	Sewage per capita.	I/person/ day	72.000	<b>.</b>		
1.5	Daily avg.hydraulic load.	m³/d	211.371	<u>.</u>		
		∉s	2.446			
1.6	Hydraulic peak.	-	2.063			
1.7	Emg. storage = 4 x Q <sub>avq</sub>	$m^3$	35.229			
Guideline	es for the provision of engineering	g services and ar	menities in t	ownship	developm	ent
1.7	Peak hydraulic load.	ℓ/s	5.046	$Q_{Peak}$		
1.8	% Infiltration.	%	20	$%_{Infil}$		
1.9	Maximum hydraulic load.	ℓ/s	6.055	$Q_{Max}$		
2.	<b>Sump Storage Capacities</b>		$V_1$	$V_2$	$V_3$	
2.1	Sump Storage Capacities	$\ell$	3490.0	0	0.000	
2.5	Total volume.	$\ell$			3490.0	$V_{Tot}$



Map 5: Sewer layout plan for Glaudina Extension 2 and the re-layout of Erf 395, Glaudina Extension 1

#### 5.3.2 CONNECTOR AND INTERNAL SEWER NETWORK

Sewer generated from the proposed development will gravitate towards the eastern corner of the proposed town to the sewage pump station. From there sewage will gravitated via a new 110mm diameter rising main towards the oxidation ponds. The following components are proposed for the development:

- Sewage pumpstation with a capacity of 6.055l/s
- 110 mm rising main.
- New internal sewer reticulation will be 160mm gravity sewerage system laid at a gradient of approximately 1:150 in the road reserve 1m from the stand boundary (refer Map 5)

# 5.4 ROADS AND STORMWATER

Glaudina is located to the north of the main road R504 between Schweizer-Reneke and Wolmaransstad. Primary access to the proposed development will be provided via the existing road network.

All internal road surfaces for the development will be constructed according to the proposed pavement design in **Table 6**. The majority of the residential development is proposed to drain towards and ultimately to discharge north east of the development to follow the natural water course



All stormwater in the areas have been allowed to run off surfaces and to drain of stormwater side channels. All storm water runoff from the roof gutters, uncovered driveways and hard paved areas on the site is considered to be "clean" water and must be diverted into proposed stormwater systems. It is proposed that an interlock paved road system, stormwater concrete channels and culverts will accommodate flows generated by land development. Refer to **Map 6** for typical roads and stormwater details.

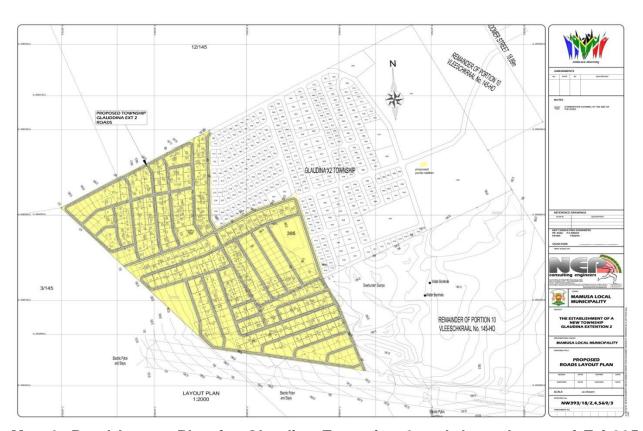
**Table 6: Pavement Design for Internal Roads** 

Design	Description	
Surfacing	60 mm Paving blocks	
Base C4	150mm thick stabilized gravel compacted to 97% of modified AASTHO density.	
	Minimum UCS>1000kPa at 97% of modified AASTHO density. GM>1.75, PI<4	
Subbase G5	150mm thick natural gravel compacted to 95% of modified AASTHO density. CBR>50 at	
	95% of modified AASTHO density. GM>1.5 (Min), PI<6	
Roadbed	150mm thick natural gravel compacted to 90% of modified AASTHO density. Minimum	
Preparation	CBR > 7 at 90% of modified AASTHO density.	

The design norms for the roads are given in **Tables 6** and **7**.

**Table 7: Geometric Design Standards for internal roads** 

Standards	
Design Speed	40km/h
Travel Width	7/6m
Crossfall	2%
Favoured maximum gradient	10%
Vertical Curve k-value: Crest	6
Sag	6



Map 6: Road Layout Plan for Glaudina Extension 2 and the re-layout of Erf 395, Glaudina Extension 1



# 5.5 SOLID WASTE

Solid waste removal is a function of the Mamusa Local Municipality.



#### **CHAPTER 6: MOTIVATION**

#### 6.1 INTRODUCTION

This need and desirability in respect of the application for township establishment will be motivated based on the following criteria:

- National Development Plan: Vision for 2030
- Constitution of the Republic of South Africa (Act 108 of 1996)
- National Housing Code, 2006
- A Comprehensive Plan for the Development of Sustainable Human Settlement (BNG)
- Urban (UDF) and Rural Development (RDF) Frameworks, 1997
- White Paper on Local Government, 1998
- Municipal Demarcation Act, 1998 (Act 27 of 1998)
- Municipal Systems Act, 2000 (Act 32 of 2000)
- National Housing Act, 1997 (Act 107 of 1997)
- White Paper on Wise Land Use, 2001
- Millennium Development Goals (MDG)
- National Spatial Development Perspective, 2006
- North West Provincial Spatial Development Framework, 2017
- Mamusa Spatial Development Framework, 2012
- Mamusa Housing Sector Plan, 2013
- Spatial Planning and Land Use Management Act Development Principles
- General

In terms of section 9(1) of the National Housing Act (107 of 1997), every municipality must, as part of the municipality's process of integrated development planning (IDP) take all reasonable and necessary steps to ensure that the inhabitants within its area of jurisdiction have access to adequate housing on a progressive basis by setting housing delivery goals, identifying suitable land for housing development and planning, facilitating, initiating and co-coordinating housing development in its area of jurisdiction.

Housing comprises a series of complex interrelationships between people, their needs and values and resources within a political and legal environment. This complexity requires a focused approach to efforts aimed at providing housing. National Government has started to respond by putting the necessary policy and legislative environment in place.

The following sections outline the roles and responsibilities of different spheres of government in relation to housing, as well as dealing with aspects relating to the design and content of housing policy and legislation. In the context of this framework the Mamusa Local Municipality is required to take all reasonable steps to ensure the provision of adequate housing to its residents.



The core legislation and policies guiding housing planning and development are set out in Sections 6.2 to 6.14 below.

# 6.2 CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA (ACT 108 OF 1996)

The Constitution of the Republic of South Africa (Act 108 of 1996) is the supreme law of the country. The sections/schedules of the Constitution that are relevant with respect of the delivery of housing are the following:

- Sections 26, 27 and 29 of Chapter 2 Bill of Rights states that everyone has the right to access to adequate housing, health care services, social security and education.
- Schedules 4 and 5, states that the Province has legislative competence in regard to (inter alia): Environment; Urban and Rural Development; Welfare; Housing; Health Services; Regional planning and development; (concurrent competence with national) and Provincial Planning and Provincial Roads and Traffic (exclusive competence)

In terms of the provisions (Schedule 4) of the Constitution, housing is a functional area of concurrent national and provincial competence. This provision of legislative and administrative powers necessitates alignment between all spheres of government in terms of the IDP process and especially the preparation of the SDF and thus the Housing Chapter.

#### 6.3 NATIONAL HOUSING CODE (2006)

The National Housing Code (2006) identified the primary role of the municipality as taking all reasonable and necessary steps, within the framework of national and provincial legislation and policy, to ensure that the inhabitants within its area of jurisdiction have access to adequate housing. This entails the following:

- Initiating, planning, facilitating and coordinating appropriate housing development.
- Promoting private sector development and playing the role of developer.
- Preparing a housing delivery strategy and setting up housing development goals.
- Setting aside, planning and managing land for housing.
- Creating a financially and socially viable environment for housing delivery.
- Facilitating the resolution of conflicts arising from housing delivery initiatives.
- Facilitating the provision of bulk services.
- Administrating national programmes.
- Exploring land for housing development.



## 6.4 <u>A COMPREHESIVE PLAN FOR THE DEVELOPMENT OF SUSTAINABLE HUMAN SETTLEMENT (BNG STRATEGY)</u>

The new "Human Settlements Plan" promotes the achievement of a non-racial, integrated society through the development of sustainable human settlements and quality housing. Housing is to be utilized for the development of sustainable human settlements in support of spatial restructuring.

The aim is to move beyond the provision of basic shelter towards achieving the broader vision of sustainable human settlements and more efficient towns, cities and regions. The following factors will be taken into consideration in order to achieve this vision:

- Progressive Informal Settlement Eradication: These settlements must be integrated into the broader urban setup so as to overcome spatial, social and economic exclusion. The plan encourages the eradication of informal settlements through in-situ upgrading in desired locations coupled with the relocation of households where development is not possible or desirable.
- Promoting Densification and Integration: The aim is to integrate previously excluded groups into the city so as to enable them to enjoy the benefits it offers and to create more integrated, functional and environmentally sustainable human settlements, towns and cities.
- Enhancing Spatial Planning: Greater co-ordination and alignment of various planning instruments and economic policies lies at the heart of sustainable human settlements.
  - This requires more than mere co-ordination between departments but there needs to be a single overarching planning authority and/or instrument to provide macrolevel guidance to support the development of sustainable human settlements.
- Enhancing the location of New Housing Projects: The location of past housing projects was said to reinforce apartheid spatial settlement patterns. Spatial restructuring aims to achieve a more decisive Intervention In land markets. The following interventions are envisaged viz. accessing well located state-owned and parastatal land: acquisition of well-located private land for housing development, funding for land acquisition and fiscal incentives.
- Enhancing the Housing Product: The aim is to develop more appropriate settlement layouts and housing products and to ensure appropriate housing quality.

#### 6.5 WHITE PAPER ON LOCAL GOVERNMENT (1998)

The White Paper on Local Government adopts development policy guidelines and principles and advocates the developmental role of local government.

The guidelines and principles can be summarized as follows:



- Orientation towards people's needs;
- Poverty alleviation with special consideration of marginalized and disadvantaged groups and gender equity;
- Environmentally sustainable development and a safe and healthy environment;
- Economic growth with creation of income and employment opportunities;
- Involvement of residents, communities and stakeholders;
- Sustainability of services, municipalities and settlements.

#### 6.6 MUNICIPAL DEMARCATION ACT, 1998 (ACT 27 OF 1998)

Demarcation objectives: The Demarcation Board determines a Municipal boundary with the objective that it must be able to enable the municipality for that area to fulfil its constitutional obligations in line with the provision of a democratic and accountable government for communities within a specific geographic area inclusive of:

- The provision of services to the communities in an equitable and sustainable manner.
- The promotion of social and economic development.
- The promotion of a safe and healthy environment.
- Enable effective local governance.
- Enable integrated development.
- Have a tax base as inclusive as possible for the user of municipal services in the municipality.

#### 6.7 MUNICIPAL SYSTEMS ACT, 2000 (ACT 32 OF 2000)

A municipality must undertake developmentally-orientated planning so as to ensure that it:

- Strives to achieve the objectives of local government set out in Section 152 of the Constitution;
- Gives effect to its development duties as required by section 153 of the Constitution; and
- Together with other organs of state contribute to the progressive realisation of the fundamental rights In respect of, among others, housing.

In the spirit of our democratic dispensation no development can take place without the effective participation of the communities it affects. Section 29(1) (b) of the local Government: Municipal Systems Act 32 of 2000 requires municipalities to follow certain procedures to consult with communities and procure their participation in the planning process. As these structures have to be in place, they will be available and should be used to involve the relevant communities in the process of upgrading of informal settlements.



#### 6.8 NATIONAL HOUSING ACT, 1997 (ACT 107 OF 1997)

The National Housing Act (NHA) sets out three general principles, namely: giving priority to the needs of the poor in respect of housing development; consultation with individuals and communities affected by housing development; and ensuring that housing development is economically, fiscally, socially and financially affordable and sustainable.

The NHA lays down general principles applicable to housing development in all spheres of government, defines the functions of national, provincial and local governments in respect of housing development, and promotes the role of the state as a facilitator of housing development.

National government must establish and facilitate a sustainable national housing development process, provincial government must do everything in its power to promote and facilitate the provision of adequate housing in its province within the framework of national housing policy, while municipalities must take reasonable and necessary steps within the framework of national and provincial housing legislation and policy to ensure that the right of access to adequate housing is realised on a progressive basis.

#### 6.9 MILLENNIUM DEVELOPMENT GOALS (MDG)

The MDG include the following: The eradication of informal settlements by 2014 as one of the policy imperatives of government (Goal 7, Target 11) implies that government and the private sector would have to implement the Social Contract (Social Contract for Rapid Housing Delivery, 2005) commitments to aid the removal of slums in South Africa.

The targets included in the Social Contract consist of:

- The removal or improvement of all slums in South Africa as rapidly as possible, but not later than 2014.
- The fast tracking of the provision of formal housing within human settlements for the poorest of the poor and those who are able to afford rent and/or mortgages.
- The creation of rental stock for a rapidly growing, mobile (migrant) and urban population within inner city and other locations close to employment opportunities.
- To remove administrative blockages that prevent speedy developments and to strive to reduce the time to grant various permissions relating to the built environment to 50% of the current time:
- To ensure consumer education and understanding in all housing development projects.



#### 6.10 NATIONAL SPATIAL DEVELOPMENT PERSPECTIVE (2006)

The NSDP consists of a set of five normative principles for development:

- <u>Principle 1</u>: Rapid economic growth that is sustained and inclusive is a prerequisite 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.
- <u>Principle 3</u>: Government spending on fixed investment should be focused on localities of economic growth and/or economic activities and to create long-term employment opportunities.
- Principle 4: 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.
- Principle 5: 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.

## 6.11 NORTH WEST PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK, 2017

- In terms of the development guidelines set forth in the North West Provincial Spatial
  Development Framework, 2017 in respect of the Mamusa urban area, it was stated that
  the focus should be on backlog eradication in the smaller nodes, whilst creating new
  affordable housing opportunities in Schweizer-Reneke as well as the crucial role of
  pproactive infrastructure development and planning in the upgrading of informal
  settlements and the creation of new settlements.
- In terms of development guidelines it was stated that the focus should be on the backlog eradication and providing access to basic services whilst also formalizing housing and ensuring land tenure security.

# 6.12 MAMUSA LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK, 2013

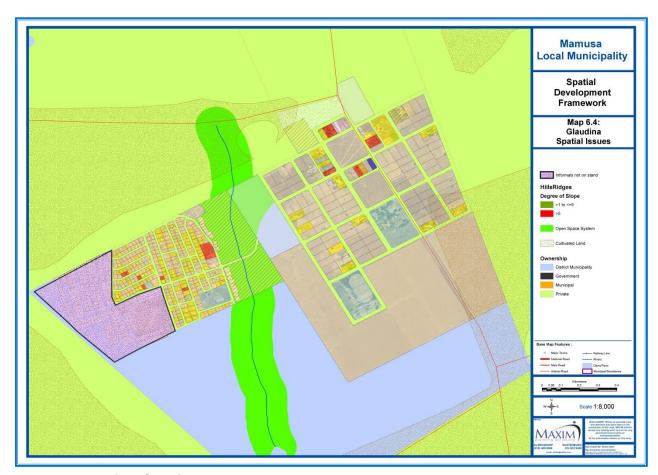
According to the Mamusa Local Municipality Spatial Development Framework, 2012, the 2012 land use survey indicated that there are a total of 192 informal houses on stands and 256 informal structures (squatters) not on stands, bringing the total housing backlog



in the Glaudina urban area to 448. At the time of the compilation of the SDF in 2012 there were 109 vacant stands in Glaudina and only 4 vacant stands in Glaudina Extension 1.

At the time of the compilation of the SDF in 2012, informal occupation of the development area had already occurred and this community has been living in squalid conditions in excess of 6 years.

In terms of the Spatial and Environmental Issues identified in the Mamusa Spatial Development Framework, 2012, the formalization of the 256 illegal informal structures located west of Glaudina Extension 1 was identified (refer **Map 7**).



Map 7: Glaudina Spatial Issues

In terms of the Spatial Development Proposals relating to the Glaudina area, it is proposed that the informal settlement west of the Glaudina township be formalized as a priority within the urban edge. This informal settlement comprises the proposed re-layout of Erf 395, Glaudina Extension 1 as well as the proposed township Glaudina Extension 2.

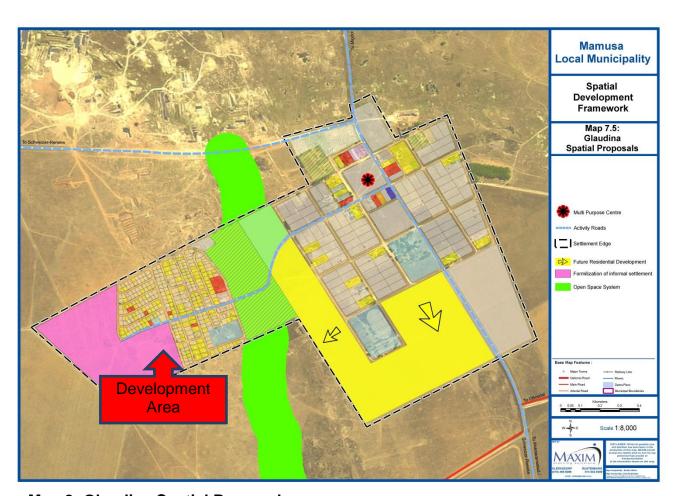
Although integration should be promoted, careful consideration should be taken of the development in this area because of the occurrence of a stream that runs through the town and also the un-rehabilitated mining diggings that surrounds the town especially the area south of the Glaudina township. Specific development conditions should be adhered to.



The 2012 physical land use survey indicated 158 formal houses including flat units and an immediate backlog of 448 informal structures for Glaudina area. Applying the long term growth rate forecast for the municipality, provision should be made for a total of 479 units up to 2017. The spatial needs amount to 32ha over the next five (5) years (at a density of 15 units/ha). However, this backlog could be provided through a process of settlement infilling. Future expansion is also possible to the south and west of Glaudina town.

The main focus of this area with regard to residential development should be settlement infilling and formalization of settlement.

The area to which this application relates, was earmarked for "formalization of informal settlement" in terms of the Spatial Proposals contained in the Mamusa Spatial Development Framework, 2012 (refer **Map 8**).



**Map 8: Glaudina Spatial Proposals** 

#### 6.13 NORTH WEST MULTI YEAR HOUSING DEVELOPMENT PLAN, 2014

In terms of the North West Multi Year Housing Development Plan, 2014, the housing demand in the Mamusa Local Municipality is estimated at 6318 units comprising a 5 year housing programme (for subsidized housing) of 3147 units and a backlog of 3171 units. It



is specifically due to this large demand and the non-availability of vacant erven for settlement purposes that illegal occupation of vacant land has occurred where people live in squalid conditions without basic services

#### 6.14 MAMUSA HOUSING SECTOR PLAN, 2013

In terms of the Housing Sector Plan of the Mamusa Local Municipality, the following housing demand was identified:

Table 8: Housing Demand in terms of the Mamusa Housing Sector Plan, 2013

	Schweizer / Ipelegeng	Amalia / Molatswaneng	Glaudina	Migdol	Total
Needs based on land use survey and outstanding projects					
Informal Structures on stands	1844	56	192	0	2092
Informal Structures in backyards & landless	1107	800	256	358	2521
Vacant Stands	435	135	113	0	683
Land needed for landless and backyard dwellings	92.25 ha	66.66 ha	21.33 ha	29.83 ha	210.07 ha
Additional Households, Planned projects and land needs					
Expected additional households 2013 – 2017	438	58	32	36	564
Expected land needs based on 5 year growth	36.5 ha	4.8 ha	2.7 ha	3 ha	47 ha

The re-layout of Erf 395, Glaudina Extension 1 and the establishment of the proposed township Glaudina Extension 2 specifically aims at providing the necessary residential erven to accommodate the informal structures in backyards and the landless community.

The development of the proposed new integrated human settlement of Glaudina Extension 2 will take place against the background of Outcome 8. Outcome 8 determines that human settlements in future in South Africa must at least consist of:

- The development of suitable located and affordable housing (shelter) and decent human settlements:
- An understanding that human settlements are no longer about building houses;
- Transforming our cities and towns (moving towards efficiency, inclusion and sustainability); and



• Building cohesive, sustainable and caring communities with improved access to work and social amenities, including sports and recreation facilities.

In terms of Outcome 8, sustainable human settlements and improved quality of household life are defined by:

- Access to adequate accommodation that is suitable, relevant, appropriately located, affordable and fiscally sustainable;
- Access to basic services (water, sanitation, refuse removal and electricity);
- Security of tenure irrespective of ownership or rental, formal or informal structures; and
- Access to social services and economic opportunity within reasonable distance.

This outcome is of critical importance as it is a requirement of the Constitution and Bill of Rights. It is secondly core to human dignity and social stability and is a key enabler of health, education and social cohesion outcomes. With good planning it can also serve as a catalyst for economic development and job creation.

# 6.15 <u>SPATIAL PLANNING AND LAND USE MANAGEMENT ACT, 2013</u> (SPLUMA) DEVELOPMENT PRINCIPLES

The act applies to spatial planning, land development and land use management. The following five (5) primary development principles referred to in SPLUMA and explained in SPLUMA: A Practical Guide compiled by Nic Laubscher, Lizette Hoffman, Ernst Drewes and Jan Nysschen, 2016, need to be taken into consideration:

#### "7. (a) the principle of spatial justice, whereby-

(i) past spatial and other development imbalances must be redressed through improved access to and use of land;

The focus of this principle would be on integration or development of rural and/or traditional settlements and urban integration strategies. This development will afford the landless community of Glaudina access to the land which they have to date occupied illegally. The re-layout planning process has as its ultimate goal to create full title residential erven that can be transferred to the various beneficiaries.

As mentioned in the preceding sections, cognisance should be taken of the fact that the development area has already been occupied by approximately 350-400 informal housing structures clearly highlighting the need for residential erven for the housing of the landless community of Glaudina. This development together with the development of the proposed township Glaudina Extension 2 will afford the landless community of Glaudina the opportunity to access land for formalized housing provision.



(ii) spatial development frameworks and policies at all spheres of government must address the inclusion of persons and areas that were previously excluded, with an emphasis on informal settlements, former homeland areas and areas characterised by widespread poverty and deprivation;

In terms of the Mamusa Spatial Development Framework, 2012, the area to which this application applies was already earmarked for residential development purposes. This was specifically done to limit further urban sprawl and to enhance integration. This development will specifically aim at addressing the squalid conditions in which the landless community of Glaudina has been living in in excess of 6 years. In this regard it is pertinent to note that the Department of Local Government and Human Settlements has already earmarked this development together with the Glaudina Extension 2 project as a subsidized housing project and in this regard they have even commissioned a contractor for the construction of houses pending the finalization of the statutory land development processes.

(iii) spatial planning mechanisms, including land use scheme, must incorporate provisions that enable redress in access to land by disadvantage communities and persons;

The local municipality identified this specific portion of land within the local municipal area, through the Spatial Development Framework, to redress access to land by previously disadvantaged people. This development together with the proposed development of Glaudina Extension 2 will focus on providing erven for subsidized housing.

 (iv) land use management systems must include all areas of a municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas, informal settlements and former homeland areas;

Land uses within the Mamusa Local Municipality municipal area are governed by a wall-to-wall land use management system. The proposed land uses in the re-layout of Erf 395, Glaudina Extension 1 will be regulated by the Mamusa Land Use Scheme, 2018. The opinion is held that the provisions of this scheme that will relate to this development will be totally appropriate for the management of the land uses to be provided within this development.

(v) land development procedures must include provisions that accommodate access to secure tenure and the incremental upgrading of informal areas; and

According to the Mamusa Housing Sector Plan the need for housing was estimated to total 448 housing units in 2013. This re-layout planning



process has at its core the intent to create additional residential erven that can, after completion of the prescribed statutory processes, be alienated to the beneficiaries thereof. This development will afford the community of Glaudina the opportunity to access land and secure tenure thereof.

(vi) A Municipal Planning Tribunal considering an application before it, may not be impeded or restricted in the exercise of its discretion solely on ground that the value of land or property is affected by the outcome of the application;

This project entails the development of land that has been vacant for a number of years with no economic or social advantage for the community.

### 7. (b) the principle of spatial sustainability, whereby spatial planning and land use management systems must –

The principle of spatial sustainability should allow for flexibility in dealing with applications and proposals, which may not have been anticipated.

### (i) promote land development that is within the fiscal, institutional and administrative means of the Republic;

In terms of the sub-principle, the opinion is held that the Mamusa Local Municipality has sufficient fiscal, institutional and administrative capacity and resources to administer the development. The Mamusa Local Municipality will ensure that the development complies with the requirements contained in the Mamusa Land Use Scheme, 2018 and the Mamusa Spatial Development Framework, 2012. In this regard it is pertinent to also note that the fiscal capacity of the Mamusa Local Municipality is also enhanced through the assistance of the Department of Local Government and Human Settlement who is currently funding this project and who will also be responsible for the construction of 500 subsidized housing units.

### (ii) ensure that special consideration is given to the protection of prime and unique agricultural land;

The area where the concerned property is situated is not regarded as prime or unique agricultural land, in terms of the Mamusa Land Use Management Scheme, 2018 and the Mamusa Local Municipality Spatial Development Framework, 2012 as it constitutes an erf earmarked for community facility purposes during the establishment of the township area of Glaudina Extension 1.

### (iii) uphold consistency of land use measures in accordance with environmental management instruments;

Environmental sustainability refers to the relationship between the settlement and the natural landscape.



The development is planned with a full level of infrastructure elements including sewer, water, electricity, access and refuse removal services, thereby reducing the effect that the development will have on the natural surrounding area. For an area to be environmentally sustainable, it should protect the unique amenity and character of the surrounding environment and also prevent degradation. The development will not be situated in an ecological sensitive area or in places of hazard or high risk, such as within the flood plain. The proposed development further excludes noxious activities.

In considering the environmental management instruments applicable to the proposed development, it is pertinent to note that the activity does not constitute a listed activity in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014.

### (iv) promote and stimulate the effective and equitable functioning of land markets;

The local municipality is in favour of on-going dialogue with private investors and relevant government departments, to promote integrated economic growth.

Principle 7 (b)(iv) recognizes the need for land development to be based on competition and the principle of a competitive economy. The development will contribute to the economic growth of the municipal area. The development represents a public sector initiative, planned and applied for in the context of open market competition. This development will further not be in competition with any other private sector development within the concerned area.

### (v) consider all current and future costs to all parties for the provision of infrastructure and social services in land developments;

The local municipality needs to comply with the guidelines for the provision of emergency-, social-, education- and engineering services, in terms of the provision of infrastructure and social services.

The development will contribute to a more efficient usage of the concerned property and will also ensure the effective usage of the existing infrastructure network available in the direct vicinity of the concerned property. The provision of services to the proposed development has been addressed in detail in Section 5 supra and it was indicated that the development can be provided with the necessary services. The infrastructure details set out in Section 5 also prove that the Mamusa



Local Municipality has sufficient capacity and resources to accommodate the development.

### (vi) promote land development in locations that are sustainable and limit urban sprawl; and

Erf 395, Glaudina Extension 1 and the area to the west and south of the existing township area of Glaudina Extension 1 were specifically earmarked for future residential development purposes in terms of the Mamusa Local Municipality Spatial Development Framework, 2012 to limit further urban sprawl of the built up urban area of Glaudina and due to the fact that this area can function in a sustainable manner due to the availability of services to this area.

This development intends to promote a more compact city and to prevent the expansive provision of social and engineering services. The Spatial Development Framework addresses the scale or urban growth through planned extensions, infill and redevelopment strategies. In this regard it should be noted that the proposed development is located within the demarcated urban edge as set out in the Mamusa Spatial Development Framework, 2012.

The planning practices of the past have resulted in sprawling urban areas that are un-economical. Today, planning policies transformed to mainly focus on infill development on vacant land within an urban environment, in order to combat urban sprawl. The principle also calls for a balance in land development processes. The development is in line with the sub-principle and will combat urban sprawl. The development will also ensure optimum utilization of the concerned property.

#### (vii) result in communities that are viable;

For any development to be sustainable and viable to the community, land development and planning should ensure that communities are located close to job opportunities, social facilities and basic services. This development aims specifically at providing residential development opportunities that are close to the existing social facilities and basic services already on offer in the existing township area of Glaudina Extension 1.

#### (c) the principle of efficiency, whereby -

### (i) land development optimizes the use of existing resources and infrastructure;

The granting of development permissions should be coupled with the provision of adequate infrastructure. The efficient usage of existing



resources can promote high density growth, alleviate urban sprawl and optimise the use of land.

The development will ensure the optimum utilization of one of the most valuable resources being land, if used to its full potential, and it was indicated in Section 5 that the development can be supplied with the full spectrum of infrastructure elements such as water, sewer, refuse removal, and access roads; thus reducing the effect of the development on the natural surrounding area.

### (ii) decision-making procedures are designed to minimize negative financial, social, economic or environmental impacts; and

The opinion is held that the development will not have a negative financial, social, economic or environmental impact on the surrounding properties, as this development will be of a formal and non-noxious nature fitting in with the land uses surrounding the proposed development area.

### (iii) development application procedures are efficient and streamlined and timeframes are adhered to by all parties;"

This application in respect of the amendment of the General Plan of the township area of Glaudina Extension 1 by the re-layout of Erf 395, Glaudina Extension 1 will be processed in accordance with both the prescriptions of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986) and the Mamusa By-law on Spatial Planning and Land Use Management which prescribes in detail the application and approval processes. The processes prescribed in terms of this legislation make provision for the necessary community involvement through a public participation process.

# (d) the principle of spatial resilience, whereby flexibility in spatial plans, policies and land use management systems are accommodated to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks; and -

Standards for the protection of natural resources, agricultural land, open spaces and ecosystems have been compiled on a national and regional level. The local municipality compiled a Spatial Development Framework to increase resilience for human settlements, focusing on vulnerable and informal areas. The Spatial Development Framework needs to be flexible to adapt to social, economic and technological trends. This development is specifically aimed at providing opportunities for people that are currently devoid of land for proper housing purposes. The provision of proper housing for the landless community of Glaudina will alleviate the plight of a community who is most vulnerable to suffer the impacts of environmental and economic shock.



- (e) principle of good administration, whereby-;
  - (i) all spheres of government ensure an integrated approach to land use and land development that is guided by the spatial planning and land use management systems as embodied in this Act;

The Mamusa Local Municipality has both a land use management scheme and a Spatial Development Framework as part of their land use management system. In terms of the Spatial Development Framework the area to which this development applies was specifically earmarked for residential development which renders this proposed development in line with the Spatial Development Framework. The development will also be incorporated into the Mamusa Land Use Scheme, 2018 in terms of applicable legislation as integral part of the completion of the statutory land development process. This land use management scheme will effectively regulate the land uses to be established within this development area as well as the extent of development.

(ii) all government departments must provide their sector inputs and comply with any other prescribed requirements during the preparation or amendment of spatial development frameworks;

Integration between the different levels of government assists to create complimentary and mutually reinforcing policies, while integration between the different sectors will result in positive benefits. Government departments have been consulted during the compilation of the Spatial Development Framework of the local municipality. In addition to the forementioned consultation, it should be noted that this application was also referred to the following government and non-government departments as integral part of the public participation process:

- Department of Public Works and Roads
- ☐ Openserve (former Telkom SA Limited)
- □ Eskom
- Dr. Ruth Segomotsi Mompati District Municipality
- Department of Water and Sanitation
- Department of Local Government and Human Settlements
- Department of Education
- Department of Health
- □ South African Post Office
- ☐ South African Heritage Resources Agency (SAHRA)
- ☐ South African National Roads Agency Limited (SANRAL)
- (iii) the requirements of any law relating to land development and land use are met timeously;

The Minister of Rural Development and Land Reform has prescribed timeframes to which land development applicants and decision makers



must adhere to. Following approval of the application in respect of the relayout of Erf 395, Glaudina Extension 1, the further processes in finalizing the land development process will be government by the timeframes set out in the Town Planning and Townships Ordinance, 1986 as well as the Mamusa By-Law on Spatial Planning and Land Use Management.

(iv) the preparation and amendment of spatial plans, policies, land use schemes as well as procedures for development applications, include transparent processes of public participation that afford all parties the opportunity to province inputs on matters affecting them; and;

Effective procedures for public participation are in place, to afford the residents and other parties the opportunity to provide inputs on development applications and other matters affecting them.

The public participation process undertaken as part of this application includes the following:

- The application in respect of the amendment of the General Plan of the township Glaudina Extension 1 will be advertised in accordance with Section 98(1)(c) of the Mamusa By-law on Spatial Planning and Land Use Management and Section 106, Regulation 25(2) and Schedule 15 of the Town Planning and Townships Ordinance, 1986 read with paragraph (f) and (I) of Schedule 1 of the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) in the Stellalander Newspaper on 24 and 30 January 2018 as well as in the North West Provincial Gazette on 23 and 30 January 2018. Objectors will be afforded a period of 30 days from 24 January 2018 to submit objections or comments in respect of the proposed development to the Municipal Manager and the authorised agent.
- The application will also, in accordance with the prescriptions of Section 99(1)(d) of the Mamusa By-Law on Spatial Planning and Land Use Management be referred to the following external organizations / departments for comments or objections:
  - Department of Public Works and Roads

  - □ Eskom
  - Dr. Ruth Segomotsi Mompati District Municipality
  - Department of Water and Sanitation
  - Department of Local Government and Human Settlements
  - Department of Education
  - Department of Health





- South African Post Office
- South African Heritage Resources Agency (SAHRA)
- South African National Roads Agency Limited (SANRAL)

The fore-mentioned organizations / departments will be afforded a period of 60 days to comment in this matter.

- In addition to the fore-mentioned notices, notices will also be served on all adjacent property owners in accordance with the prescriptions of Section 99(1)(c) of the Mamusa By-law on Spatial Planning and Land Use Management.
- To ensure the greatest extent of public participation, notices will also be posted on the subject property in accordance with the prescriptions of Section 101(1)(c) and 101(1)(d) of the Mamusa Bylaw on Spatial Planning and Land Use Management.

### (v) policies, legislation and procedures must be clearly set in order to inform and empower members of the public;

The procedures prescribed in terms of the Town Planning and Townships Ordinance, 1986 and the Mamusa By-Law on Spatial Planning and Land Use Management clearly sets out the process to be followed during the application for the amendment of the General Plan of an approved township area and said procedures afford members of the public the opportunity to not only participate in this process but also to scrutinize the documentation relating to the application. Members of the public will be afforded a period of 30 days to comment on or object to this development.

#### 6.16 **GENERAL**

From a land use and town planning point of view the proposed development areas are ideally suited for residential purposes due to the following:

- The purpose of this application is to provide sufficient erven within the Glaudina urban complex to address the urgent short term need for residential erven that can be utilized for low income / subsidized housing purposes.
- The proposed development area is located within existing township area of Glaudina Extension 1 and constitutes a logic re-configuration of an erf that has been vacant and undeveloped in excess of 17. This development also constitutes infill development.
- The proposed development area is easily accessible through numerous connector roads within the township area of Glaudina Extension 1.



- The proposed development on Erf 395, Glaudina Extension 1 will also be linked to the economic activities offered within the Glaudina urban area through the existing road network of Glaudina Extension 1.
- The layout plan that was compiled in respect of the re-layout of Erf 395, Glaudina Extension 1 comprehensively addresses the terms of reference of this project as well as the issues identified during the pre-planning studies relating inter alia to the following:
  - Topographical features encountered on site;
  - Incorporating the road network with that of the adjacent existing township areas as well as that of the proposed township Glaudina Extension 2;
  - o Incorporating the results of the geotechnical investigation which indicated that the development area is suitable for township establishment purposes;
  - o Engineering services can be provided to the proposed township area.

In view of the fore-mentioned, we trust that this application will be considered favourably.

K. RAUBENHEIMER Pr. Pin A/924/1996

