

# MEMORANDUM

17 November 2017

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**PROPOSED TOWNSHIP  
ESTABLISHMENT: LEBALENG  
EXTENSION 6 ON A PORTION  
OF THE REMAINING EXTENT  
OF PORTION 8 OF THE FARM  
OERSONSKRAAL 207,  
REGISTRATION DIVISION H.O.,  
PROVINCE NORTH WEST**

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- Development Management
- Economic Development
- Admin & Finance

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# MEMORANDUM

## PROPOSED TOWNSHIP ESTABLISHMENT: LEBALENG EXTENSION 6

ON  
A PORTION OF THE REMAINING EXTENT OF PORTION 8  
OF THE FARM OERSONSKRAAL 207, REGISTRATION  
DIVISION H.O., NORTH WEST PROVINCE

### CHAPTER 1: INTRODUCTION

#### 1.1 INTRODUCTION

Maxim Planning Solutions (Pty) Ltd (2002/017393/07) was appointed by the Maquassi Hills Local Municipality on 29 May 2017 to attend to the establishment of the proposed township Lebaleng Extension 6 comprising a total of 750 erven to address the short term need for residential erven experienced in this urban complex and to alleviate the plight of landless people currently residing on vacant municipal owned land.

This appointment stems from a Business Plan submitted by the Maquassi Hills Local Municipality to the Department of Local Government and Human Settlement for financial assistance in respect of the establishment of the proposed township Lebaleng Extension 6 for the purposes as detailed in the preceding paragraph.

#### 1.2 BACKGROUND OF MAQUASSI HILLS LOCAL MUNICIPALITY

##### 1.2.1 REGIONAL LOCALITY

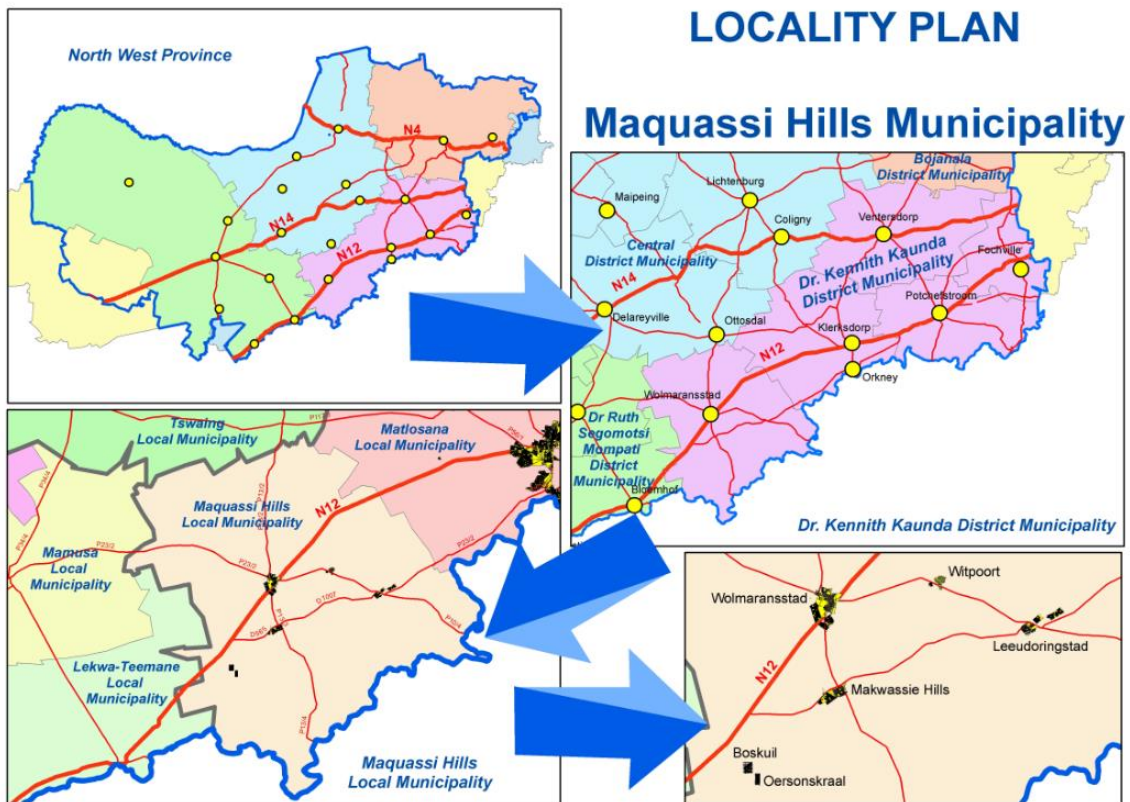
Maquassi Hills Local Municipality is situated in the western part of the Kenneth Kaunda District Municipality and covers an area of 4644km<sup>2</sup>. Maquassi Hills Local Municipality is home to between 70 000 and 90 000 people and consists of the urban areas of Wolmaransstad, Leeudoringstad, Makwassie and Witpoort as well as the rural villages of Boskuil, Oersonskraal and Kareepan. Of the total population 91,6% are urbanised, indicating that most of the people are staying within the urban areas.

According to the North West Spatial Development Framework (NWSDF), Wolmaransstad was identified as a District Development Node and Leeudoringstad, Makwassie and Witpoort as Local Development Nodes. The NWSDF states that the

attractiveness of Wolmaransstad should be enhanced through the improvement of basic infrastructure, the attractiveness of the area as well as the service function of the area to fulfil the basic needs of the urban and rural population within the municipal area whilst the local nodes should mainly concentrate on the local needs of the population within these nodes.

Maquassi Hills has the status of a Local Municipality (NW404) in terms of the Municipal Demarcation Act of 1998, and is located in the Dr. Kenneth Kaunda District Municipality (DC40) of the North West Province.

**Map 1: Locality of Maquassi Hills in regional context**



The Municipality forms the western portion of the Dr. Kenneth Kaunda District Municipality and consists of the disestablished municipalities of Wolmaransstad, Leeudoringstad, Makwassie and Witpoort.

The dominated urban form centres on several residential settlements that serve the local population and agricultural and mining sector. Linkages between the settlement nodes and the rural orientated hinterland exist.

**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

The Maquassi Hills Local Municipality has had positive population growth over the past decade. The 2001 and 2011 census data illustrate that the number of people in the municipal area increased by approximately 8 700 while the number of households increased by 3 200 over this period. This represents an annual population growth rate of 1.2% and a household growth rate of 1.7%. The 2011 population and household figures per sub-place as well as the 2015 and 2020 estimates are provided in the table below.

**Table 1: Population & Household Total**

	Population total (2011)	Household total (2011)	Household Size
Boskuil SP	1 199	316	3.8
Kgakala SP	8 335	2 398	3.5
Leeudoringstad SP1	1 278	509	2.5
Leeudoringstad SP2	3 778	1 031	3.7
<b>Lebaleng</b>	<b>12 433</b>	<b>2 887</b>	<b>4.3</b>
Makwassie SP1	919	269	3.4
Bloemhofdam Nature Reserve	-	-	-
Maquassi Hills NU	14 571	4 205	3.5
Wolwespruit Nature Reserve	19	13	1.5
Rulaganyang SP	1 510	473	3.2
Trotsville SP	12 626	3 245	3.9
Tswelelang SP	17 234	4 145	4.2
Witpoort SP1	-	-	-
Witpoort SP2	259	80	3.2
Wolmaranstad SP1	-	-	-
Wolmaranstad SP2	3 630	935	3.9
<b>Total 2011</b>	<b>77 791</b>	<b>20 506</b>	<b>3.8</b>
<b>2015 projection</b>	<b>81 598</b>	<b>21 948</b>	<b>3.7</b>
<b>2020 projection</b>	<b>86 621</b>	<b>23 893</b>	<b>3.6</b>

Source: Own estimates, Stats SA & Quantec, 2015

The population total for 2020 is estimated at 86 621 while the households is estimated to total 23 893. This represents an increase over the next 5 years of 5 022 people and 1 945 households.

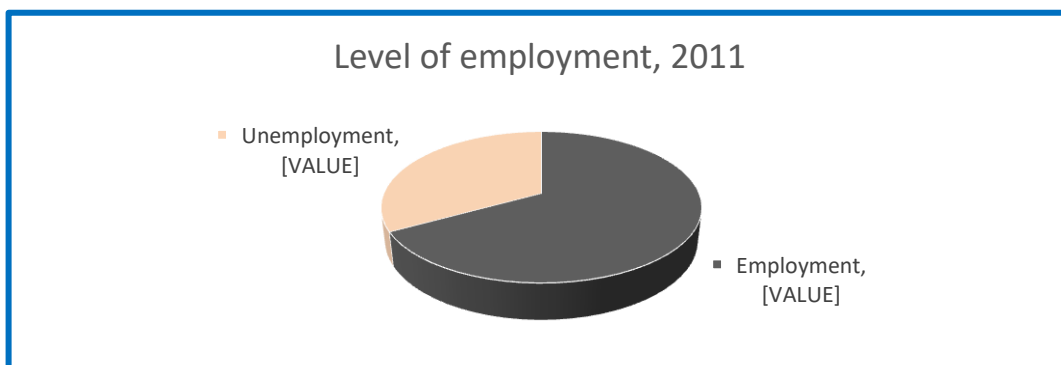
### 1.2.2.2 Level of Employment

The level of employment is an indication of employment and unemployment on a sub-place level within the municipal area.

The employment level within the municipal area is illustrated in **Figure 1**.



**Figure 1: Level of employment, 2011**



Source: Quantec, 2015

The municipal area has a higher unemployment level when compared to the national average (25%). Furthermore, the segment of economically active people amounts to only 48% of the workforce with 52% being not economically active (students, discouraged work seeker, etc.). **Table 2** shows the level of employment on a sub-place level.

The sub-places where employment levels are high include Witpoort SP1, Leeudoringstad SP1, Wolmaransstad SP1, Maquassi Hills NU and Makwassie SP1 are all above 90%. The sub places with low levels of employment include Tswelelang, Lebaleng, Trotsville SP, Boskuil SP, Leeudoringstad SP2 and Kgakala SP is below 65% employed.

**Table 2: Employment level per sub-place, 2011**

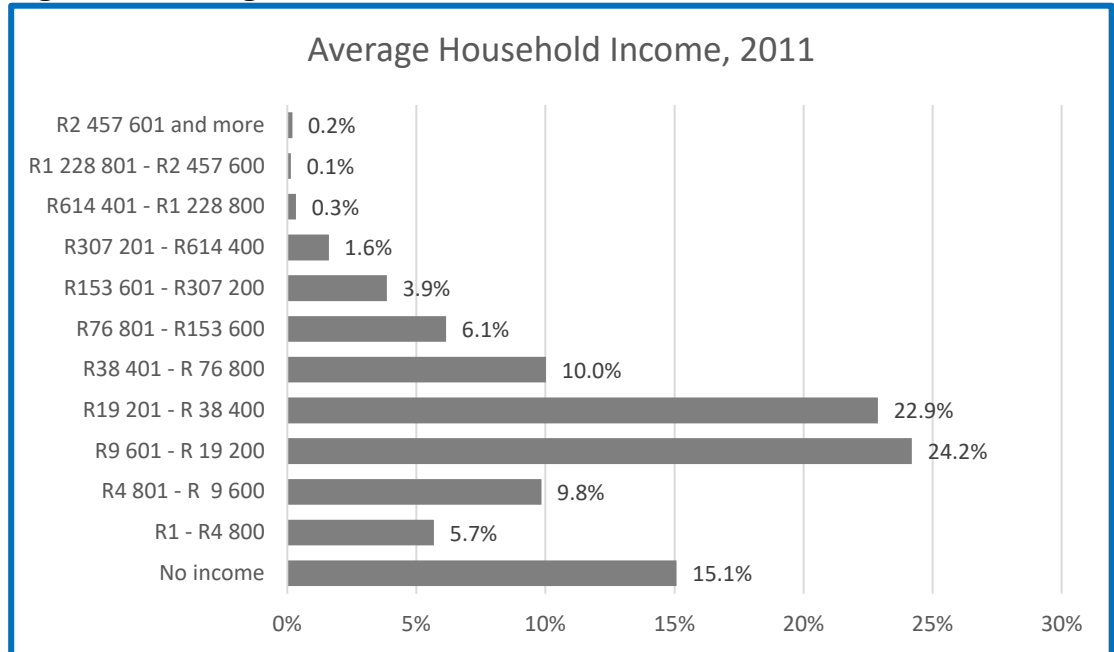
Sub-place	Employed	Unemployed
Boskuil SP	54%	46%
Kgakala SP	62%	38%
Leeudoringstad SP1	93%	7%
Leeudoringstad SP2	60%	40%
Lebaleng	50%	50%
Makwassie SP1	91%	9%
Bloemhofdam Nature Reserve	0%	0%
Maquassi Hills NU	91%	9%
Wolwespruit Nature Reserve	100%	0%
Rulaganyang SP	77%	23%
Trotsville SP	53%	47%
Tswelelang SP	47%	53%
Witpoort SP1	0%	0%
Witpoort SP2	95%	5%
Wolmaranstad SP1	0%	0%
Wolmaranstad SP2	92%	8%
<b>Total</b>	<b>67%</b>	<b>33%</b>

Source: Quantec, 2015

### 1.2.2.3 Household Income

The average annual household income for the municipal area is illustrated in Figure 2. The figure shows that the majority (47%) of households earn between R9 601 and R38 400 per annum.

**Figure 2: Average annual household income, 2011**



Source: Stats SA, Quantec, 2015

A large segment of the market earns no income at all, representing 15.1% of all households. The municipal area can be regarded as a low to middle income earning area with 88% of households earning less than R76 800 per annum or R6 400 per month.

- Average annual household income for the municipal area in **2011 was R52 988 per annum or R4 416 per month**
- Average annual household income for the municipal area in **2015 is R60 041 per annum or R5 003 per month**

**Table 3** shows the average annual household income per sub-place.

**Table 3: Average annual household income per sub-place**

Sub place	Weighted Average Household Income (2011)	Weighted Average Household Income (2015)
Wolmaranstad SP2	R195 137	R221 113
Wolwespruit Nature Reserve	R168 370	R190 783
Makwassie SP1	R136 577	R154 758
Leeudoringstad SP1	R100 253	R113 599
Witpoort SP2	R99 360	R112 587
Maquassi Hills NU	R69 727	R79 009
Tswelalang SP	R43 342	R49 112
<b>Lebaleng</b>	<b>R40 800</b>	<b>R46 231</b>

Sub place	Weighted Average Household Income (2011)	Weighted Average Household Income (2015)
Kgakala SP	R36 951	R41 870
Trotsville SP	R26 414	R29 930
Leeudoringstad SP2	R26 047	R29 514
Rulaganyang SP	R20 459	R23 182
Boskuil SP	R14 902	R16 885
Bloemhofdam Nature Reserve	n/a	n/a
Witpoort SP1	n/a	n/a
Wolmaranstad SP1	n/a	n/a

Source: Own calculations, Quantec, Stats SA, 2015

### 1.3.2.4 Summary

The Maquassi Hills Local Municipality area has an estimated population of 81 598 and household total of 21 948 in 2015. The number of people employed (67%) in the local economy is below the national average (75%) while only 48% of the workforce is economically active. This increases dependency on those with employment. The average household income indicates a low to middle income area with an average household income of R5 003 in 2015.

**Table 4** summarises the households that are within the following three income ranges;

- R0 – R3 500
- R3 500 – R7 500
- R7 500 and higher

**Table 4: Number of households per income segment**

Sub places	R0 – R3 500	R3 500 – R7 500	R7 500+
Boskuil SP	294	14	8
Kgakala SP	1 988	265	145
Leeudoringstad SP1	262	82	165
Leeudoringstad SP2	945	63	24
<b>Lebaleng</b>	<b>2 486</b>	<b>268</b>	<b>134</b>
Makwassie SP1	121	58	90
Bloemhofdam Nature Reserve	-	-	-
Maquassi Hills NU	3 294	364	547
Wolwespruit Nature Reserve	1	6	6
Rulaganyang SP	418	40	15
Trotsville SP	2 781	326	138
Tswelelang SP	3 256	500	389
Witpoort SP1	-	-	-
Witpoort SP2	42	16	23
Wolmaranstad SP1	-	-	-
Wolmaranstad SP2	249	163	523
<b>Total</b>	<b>16 136</b>	<b>2 165</b>	<b>2 206</b>

Source: Own calculations, Stat SA, 2015

### **1.3 INTEGRATED HUMAN SETTLEMENT PLANNING**

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

- Contour survey conducted by TMK Professional Land Surveyors;
- Geotechnical investigation of the development area conducted by Geoset CC;
- Phase 1 Heritage Impact Assessment conducted by A Pelsers Archaeological Consulting CC;
- Detail civil engineering services investigation initially conducted by NEP Consulting Engineers;
- Environmental Impact Assessment conducted by AB Enviro-Consult.

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

In terms of the Spatial Development Framework, the main development strategy for residential development should be based on the objectives of the Breaking New Ground Principles (BNG) for sustainable human settlements which can be summarised as follows:

- To ensure that sustainable housing development takes place.
- To integrate housing with other municipal services in order to establish sustainable human settlements, in support of spatial restructuring.
- To coordinate municipal departments in order to work together in planning and implementing.
- To promote middle and high income housing which will in turn generate resources to improve low income areas.
- To promote environmental and energy efficient housing.

### **1.4 APPLICATION**

Maxim Planning Solutions (Pty) Ltd is hereby applying on behalf of the Maquassi Hills Local Municipality for the establishment of the proposed township Lebaleng Extension 6 on a portion of the Remaining Extent of Portion 8 of the farm Oersonskraal 207, Registration Division H.O., North West Province in terms of the provisions of Section 53(1) of the Maquassi Hills Local Municipality Municipal By-Law on Spatial Planning and Land Use Management and Section 107(1) of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986) read together with Sections 41(1) and 42(1)(a) and paragraph (g) of Schedule 1 of the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013).

## 1.5 **PUBLIC PARTICIPATION**

The application in respect of the establishment of the proposed township Lebaleng Extension 6 will be advertised in accordance with Section 92(1)(a) of the Maquassi Hills Local Municipality Municipal By-Law on Spatial Planning and Land Use Management and Section 108(1)(a), Regulation 26(1) and Annexure 16 of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986) in the Overvaal Nuus on 10 and 17 November 2017 as well as in the North West Provincial Gazette on 14 and 21 November 2017. Objectors will be afforded a period of 30 days from 14 November 2017 to submit objections or comments in respect of the proposed township area to the Municipal Manager and the authorised agent.

The application will also, in accordance with the prescriptions of Section 93(1)(c) of the Maquassi Hills Local Municipality Municipal By-Law on Spatial Planning and Land Use Management read with Section 108(1)(b) of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986) be referred to the following external organizations / departments for comments or objections:

- ✘ Department of Public Works and Roads
- ✘ Openserve (Telkom SA Limited)
- ✘ Eskom
- ✘ Dr. Kenneth Kaunda District Municipality
- ✘ Department of Minerals Resources (DMR)
- ✘ Department of Agriculture, Forestry & Fisheries (DAFF)
- ✘ Department of Water and Sanitation
- ✘ Department of Local Government and Human Settlements
- ✘ Department of Education
- ✘ Department of Health
- ✘ South African Post Office
- ✘ Transnet Freight Rail
- ✘ South African Heritage Resources Agency (SAHRA)
- ✘ South African National Roads Agency Limited (SANRAL)
- ✘ Sedibeng Water
- ✘ Department Rural, Environment and Agricultural Development (READ)

The fore-mentioned organizations / departments will be afforded a period of 60 days to comment in this matter in accordance with the prescriptions of Section 108 (1) of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986) read with paragraph I of Schedule 1 of the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013).

In addition to the fore-mentioned notices, notices will also be served on all adjacent property owners in accordance with the prescriptions of Section 93(1)(c) of the Maquassi Hills Local Municipality Municipal 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 95(1)(a) of the Maquassi Hills Local Municipality Municipal By-law on Spatial Planning and Land Use Management.

## **1.6 STUDY AREA DELINEATION**

The proposed development area comprises a portion of the Remaining Extent of Portion 8 of the farm Oersonskraal 207, Registration Division H.O., 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:

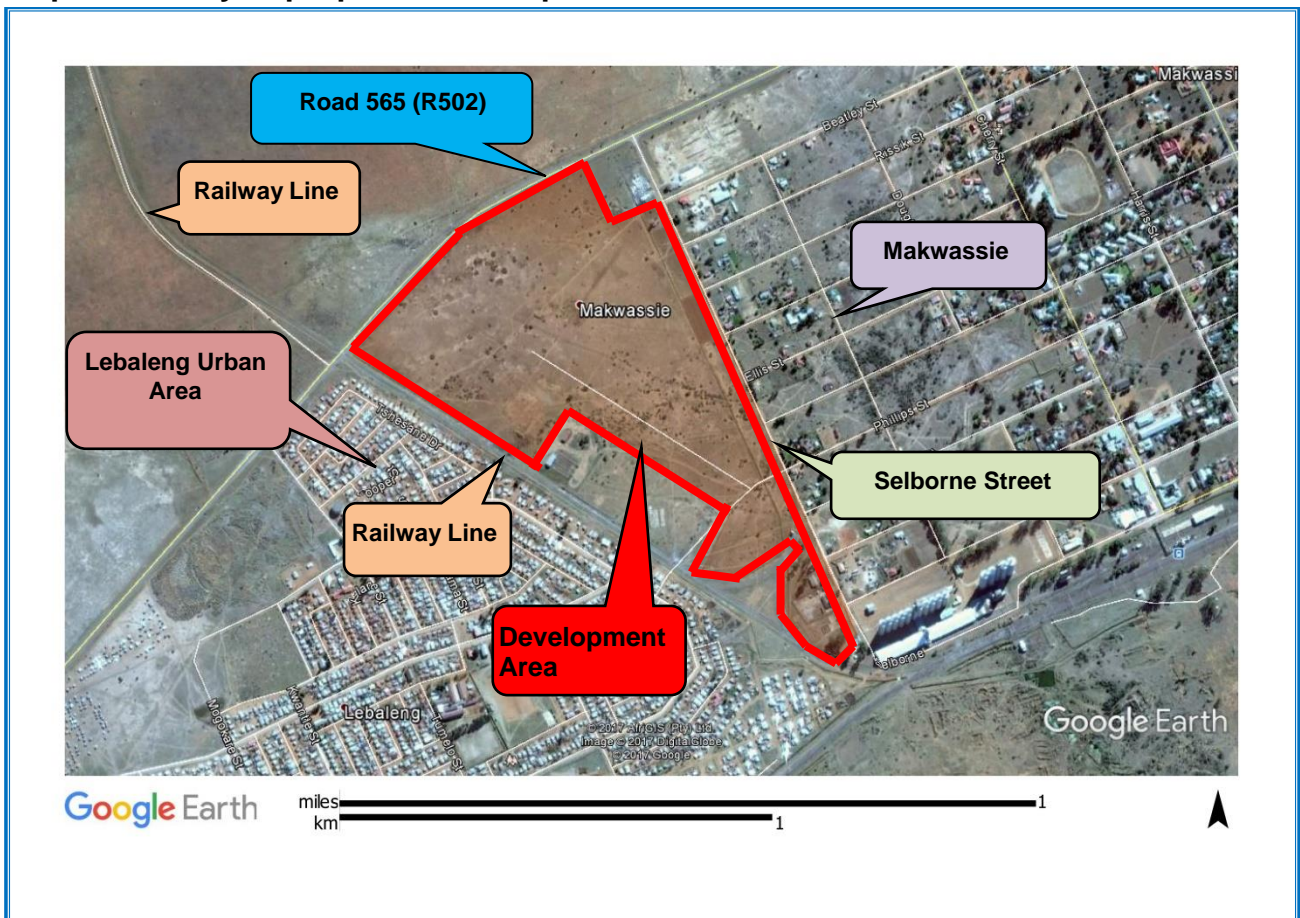
- Chapter 2: Particulars of the development area
- Chapter 3: Physical aspects
- Chapter 4: Proposed development
- Chapter 5: Provision of Engineering Services
- Chapter 6: Motivation

# CHAPTER 2: PARTICULARS OF THE DEVELOPMENT AREAS

## 2.1 LOCALITY

The proposed township is located directly west of the existing township area of Makwassie and north-east of the Lebaleng urban area and is bordered to the east by Selborne Street, to the north by Road 565 (R502) (Bloemhof – Makwassie road) and to the south-west by the railway line between Makwassie and Wolmaransstad.

**Map 2: Locality of proposed development area**



The proposed township Lebaleng Extension 6 is located on a portion of the Remaining Extent of Portion 8 of the farm Oersonskraal 207, Registration Division H.O., North West Province.

The proposed township area detailed above is located within the area of jurisdiction of the Maquassi Hills Local Municipality which in turn falls within the area of jurisdiction of the Dr. Kenneth Kaunda District Municipality.

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

## **2.2 SG DIAGRAM**

The Remaining Extent of Portion 8 of the farm Oersonskraal 207, Registration Division H.O., North West Province is reflected on SG Diagram No. A.925/1910 (attached as **Annexure F** to the application for township establishment).

## **2.3 OWNER**

The Remaining Extent of Portion 8 of the farm Oersonskraal 207, Registration Division H.O., North West Province is currently registered in the name of the Maquassi Hills Local Municipality by virtue of Crown Grant No. 57/1933 (refer **Annexure G** to the application for township establishment).

## **2.4 AREA**

The Remaining Extent of Portion 8 of the farm Oersonskraal 207, Registration Division H.O., North West Province comprises a total area of 374,3332 hectares. The proposed township area of Lebaleng Extension 6 will comprise a total area of ±45,1405 hectares.

## **2.5 EXISTING LAND USE AND ZONING**

The proposed development area is currently predominantly vacant (refer **Plates 1 and 2**) with the exception of some Sedibeng Water, Eskom and Telkom infrastructure traversing the development area as well as some building structures located in the southern portion of the development area that are utilized for the following purposes:

- Sedibeng Water reservoir (refer **Plate 3**)
- Eskom power line (2x) (refer **Plates 4 and 8**)
- Eskom substation (refer **Plate 5**);
- Storage facility of the Maquassi Hills Local Municipality (refer **Plate 6**)
- Buildings and infrastructure leased to the sheep shearers (refer **Plate 7**)







**Plate 7: Facilities leased to sheep shearers**



**Plate 8: Eskom powerline to Lebaleng**



**Plate 9: Railway line between Makwassie and Wolmaransstad**



**Plate 10: Shunting area of railway line**



**Plate 11: LED project**



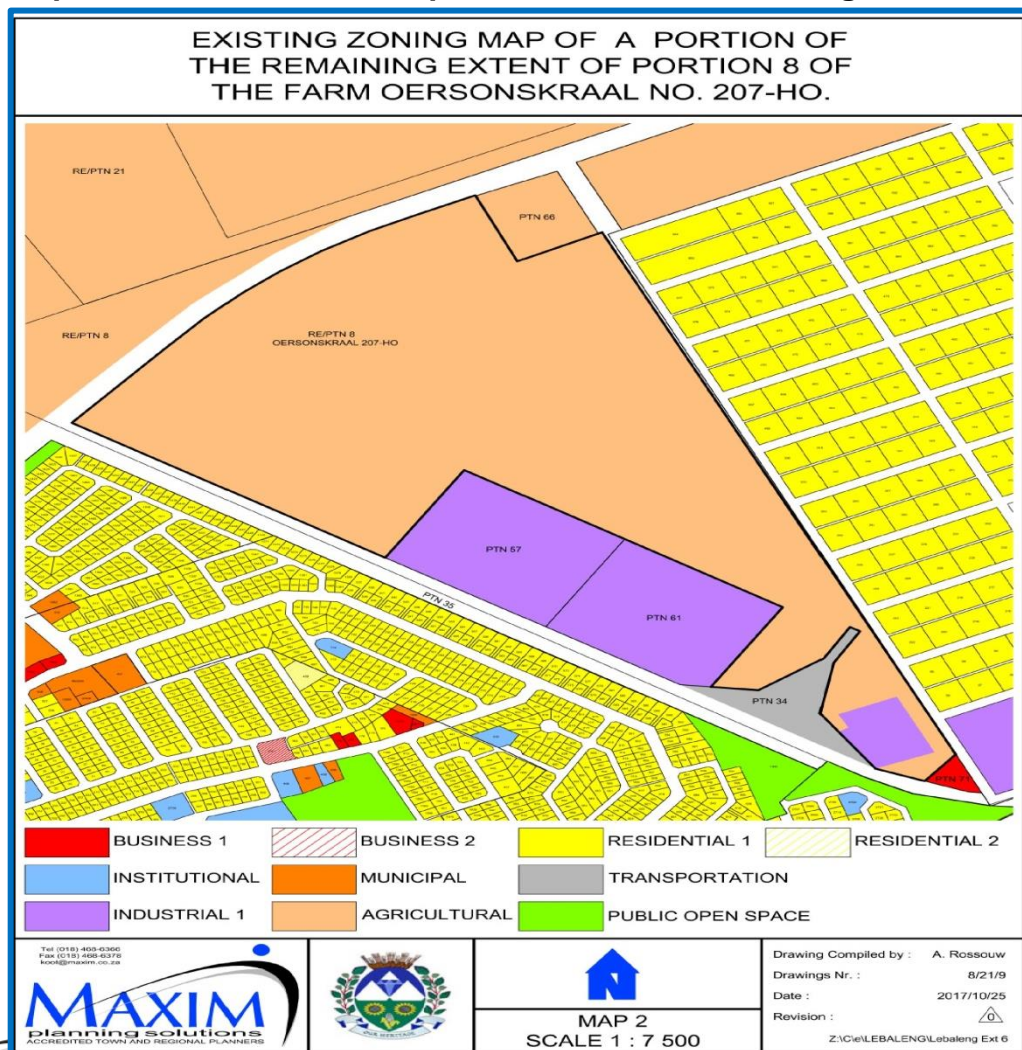
**Plate 12: Makwassie Boerevereniging auctioneering yard**

The surrounding area is predominately utilized for the following purposes:

The area directly east of the proposed township area comprises the townships area of Makwassie (established as Maquassi) comprising predominately of single dwelling units. The area directly adjacent to the south–western boundary of the development area comprises the railway line between Makwassie and Wolmaransstad (refer **Plate 9**) with the existing township areas of Lebaleng and its extensions located to the west of the railway line. The southern part of the proposed township area is also located adjacent to the shunting area of the railway line (refer **Plate 10**). The southern corner of the development area borders onto an existing LED project as well as the grain silos of Suidwes Landbou. The proposed township area is also bordered at the north-east by an existing recycling enterprise (refer **Plate 11**). The western part of the development area borders onto the Makwassie Boerevereniging auctioneering yard (refer **Plate 12**).

In terms of the Maquassi Hills Land Use Scheme, 2007 the subject property is currently zoned “Agricultural” (as depicted on the following zoning map extracted from the Maquassi Hills Land Use Scheme, 2007).

**Map 3: Extract from the Maquassi Hills Land Use Management Scheme, 2007**



## 2.6 MINERAL RIGHTS

According to Crown Grant No. 57/1933, the rights to minerals in respect of the Remaining Extent of Portion 8 of the farm Oersonskraal 207, Registration Division H.O., North West Province have not been separated from the property rights (refer **Annexure G** to the application for township establishment).

The reservation of rights to minerals is however subject to the provisions of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) that came into force on 01 May 2004. The application for township establishment will subsequently also be referred to the Department of Mineral Resources for its consent in respect of the proposed township.

## 2.7 RESTRICTIVE TITLE CONDITIONS

According to Crown Grant No. 57/1933, the Remaining Extent of Portion 8 of the farm Oersonskraal 207, Registration Division H.O., North West Province is subject to the following title conditions, which will be dealt with as indicated:

- ***“By Notarial Deed of Servitude No. 1148/1959S, the right has been granted to The Electricity Supply Commission to convey electricity over the property hereby conveyed together with ancillary rights, and subject to conditions, as will more fully appear on reference to said Notarial Deed and diagram, grosse whereof is hereunto annexed.”***

This servitude comprises the Wolmaransstad Munic / Makwassie 1 11kV feeder MV Overhead Line as reflected on Servitude Diagram SG No. A5758/1956 (refer **Annexure J**) and registered by virtue of Notarial Deed of Servitude K1148/1959S. This servitude is located along the eastern boundary of the development area and traverses the development area in a north-south direction (refer **Plates 4 and 5** above). On perusal of the relevant Notarial Deed of Servitude and Servitude Diagram it was noted that the servitude is not defined in terms of the width thereof. Based on the load of this power line, provision was made for a 9m building restriction on both sides of the power line. This building restriction area was accommodated in Park Erven 4282 to 4284, 4287 and 4288 in the proposed township area.

- ***“Kragtens Notariële Akte No. K1759/1988 gedateer 6 Junie 1988 is die hierinvermelde eiendom onderhewig aan ‘n ewigdurende serwituut van waterleiding ten gunste van die O.V.S. – Goudvelde-Waterraad soos meer volledig sal blyk uit gemelde Notariële Akte en kaart waarvan ‘n afskrif hieraan geheg is.”***

This servitude is located in the north-eastern corner of the development area and comprises the feeder lines to the Sedibeng Water reservoirs and is reflected on Servitude

Diagram SG No. A.37/1987 (refer **Annexure J**) and registered by virtue of Notarial Deed of Servitude K1759/1988. This servitude was accommodated in the street network of the township area and only affects Erf 4101 in the proposed township area. Erf 4101 was specifically created to accommodate the reservoir infrastructure of Sedibeng Water.

## 2.8 SERVITUDES

As alluded to in Section 2.7 supra, the Remaining Extent of Portion 8 of the farm Oersonskraal 207, Registration Division H.O., North West Province is subject to the following servitudes:

- Eskom power line servitude as indicated on Servitude Diagram SG No. A5758/1956 (refer **Annexure J**). The width of this servitude has not been determined and this power line is subsequently subject to a 9m building restriction on either side of the power line. This servitude affects the proposed township area and was accommodated in park erven.
- Water pipeline servitude in favour of O.V.S Goudveld Water Board (now Sedibeng Water) as indicated on servitude diagram SG No. A.37/1987 (refer **Annexure J**). This servitude does affect the proposed township area and was accommodated in the layout plan.

## 2.9 LAND CLAIMS

In order to ascertain whether a land claim has been registered in respect of the Remaining Extent of Portion 8 of the farm Oersonskraal 207, Registration Division H.O., North West Province, a request was submitted to the Commission on Restitution of Land Rights on 06 July 2017. In a response received from the Office of the Regional Land Claims Commissioner: North West dated 20 July 2017 (refer **Annexure H**), it was indicated as follows:

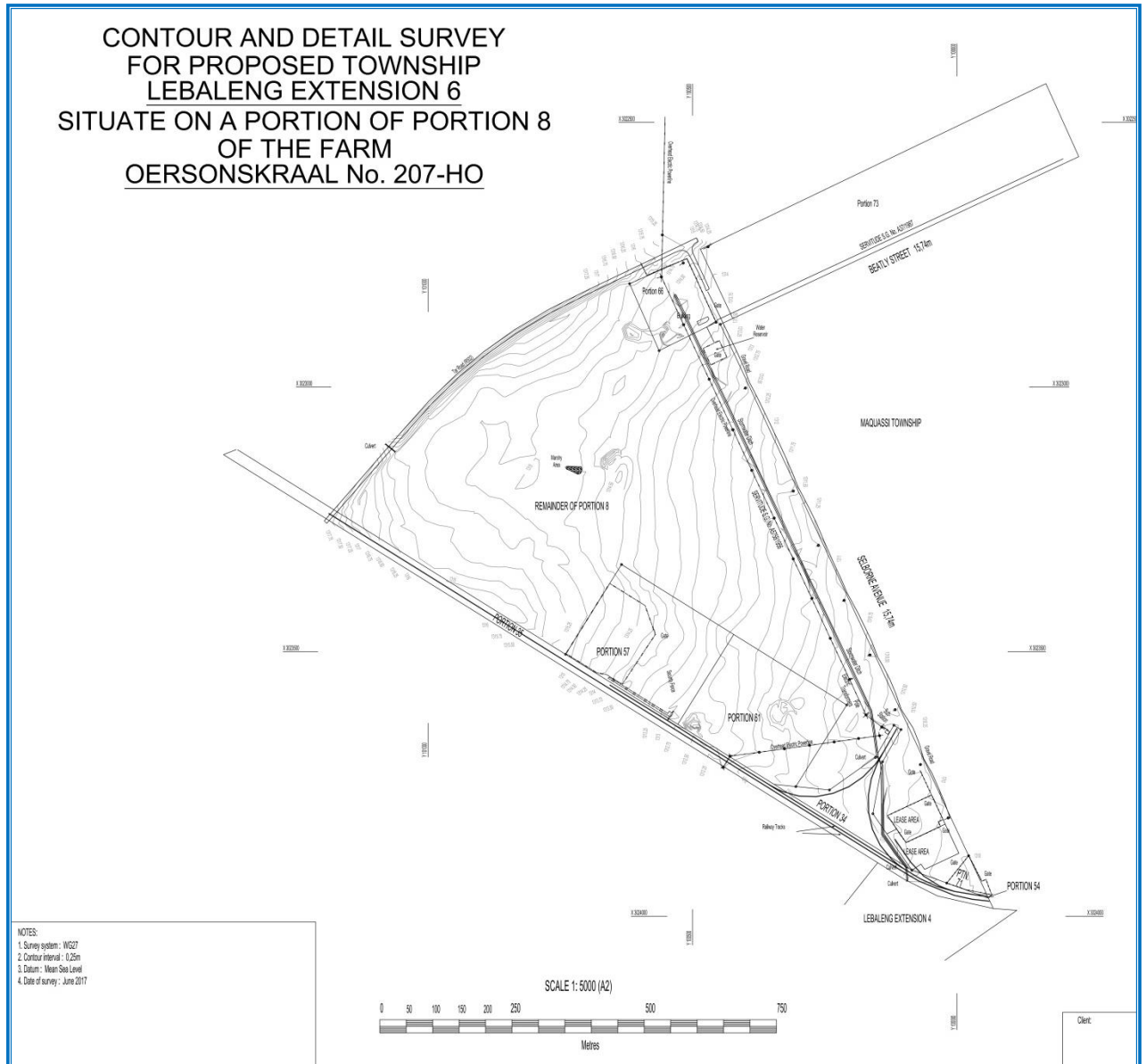
***“We confirm that as at the date of this letter no land claim appears on our database in respect of the property. This includes the database of claims lodged by 31 December 1998 and those lodged between 1 July 2014 and 27 July 2016 in terms of the Restitution of Land Rights Amendment Act, 2014”.***

# CHAPTER 3: PHYSICAL ASPECTS

## 3.1 TOPOGRAPHY

As part of the pre-planning studies that were conducted in respect of the development area, a contour survey of the study area was conducted by TMK Professional Land Surveyors (refer **Map 4**).

**Map 4: Results of contour survey of development area**



The proposed development area is located on a very shallow slope towards the south-east and is situated at between 1317,75 and 1310 metres above mean sea level. The proposed development area is further characterized by the following topographical features:

- Informal drainage feature located along the eastern boundary of the proposed township area and following to a large extent the route of the Eskom power line servitude;
- Area within the north-eastern corner of the development area and in close proximity to Road 565 (R502) that comprises a former quarry; and
- Centrally within the development area is an area with marshy conditions.

These topographic features were successfully incorporated and accommodated in the layout plan of the township area (as will be discussed in further detail in Section 4 below).

### **3.2 CLIMATE**

The region is characterized by summer rainfall with thunderstorms, with annual rainfall figures of 546 mm (Wolmaransstad - Agriculture) recorded at the closest weather station 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 5.5 for Wolmaransstad. The mechanical disintegration of rocks will therefore be slightly dominant over chemical decomposition, and deep 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**

The proposed development area is located within the Middle Vaal Water Management Area. Plate flow is the dominant drainage pattern on site and no drainage channel intersects the site. Drainage occurs in a southerly direction towards the Makwassie Spruit, a tributary to the Vaal River.

The proposed township area is not subject to the 1:100 year floodline of any river or stream.

The geotechnical investigation also identified a wet area towards the centre western portion as a flat area with higher clay content. This area also contains the drainage into a quarried area as verified by the contour survey and this area was incorporated into the layout of the town.

Stormwater diversion measures such as ponding pools are recommended to control peak flows during thunderstorms. All embankments must be adequately compacted and planted with grass to stop any excessive erosion and scouring of the landscape.

### 3.4 WETLANDS AND PANS

As detailed in section 3.3 supra, the development area is not affected by the 1:100 year floodline of any river or stream and no wetlands or pans are present on site.

### 3.5 VEGETATION

The area is typically characterized by Bankenveld False grassveld veld type (Acocks, 1988). The site itself is covered by sparse grasslands of which some was used as agriculture land, and no indigenous trees are present on site. (Refer **Plates 1, 2 and 13**).

**Plate 13: View of development area from Road 565 (R502) (direction south and east)**



### 3.6 GROUNDWATER

A slightly ferruginised profile indicates that some perennial water level fluctuations occur.

Although no ground water even in the form of seepage was intersected in any test pit during the geotechnical investigation, some minor problems are foreseen and normal water tightening techniques such as damp course on foundation levels are required due to the presence of the slightly ferruginised or moist profile.

### 3.7 GEOLOGY (Extract from Geotechnical Report compiled by Geoset attached as **Annexure L** to the application for township establishment)

The site is underlain by amygdaloidal lava, agglomerate and tuff of the Rietgat Formation, Platberg Group of the Ventersdorp Supergroup.

Deposits of quaternary age consist of soil cover as colluvium and alluvium covering the lithology.

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



### **3.7.1 SITE EVALUATION**

A wet area towards the centre western portion was identified as a flat area with higher clay content. This area also contains the drainage into a quarried area as verified by the contour survey and this should be incorporated into the layout of the town.

No seepage or the presence of perennial fluctuations of ground water was encountered on the rest of the site, but the presence of ferruginised soil indicates that a seasonal perched water table may exist. Special care must be taken to ensure adequate surface drainage to prevent the accumulation of water next to structures.

The site contains moderately compressible and medium to highly expansive soil, indicating the requirement of special foundations.

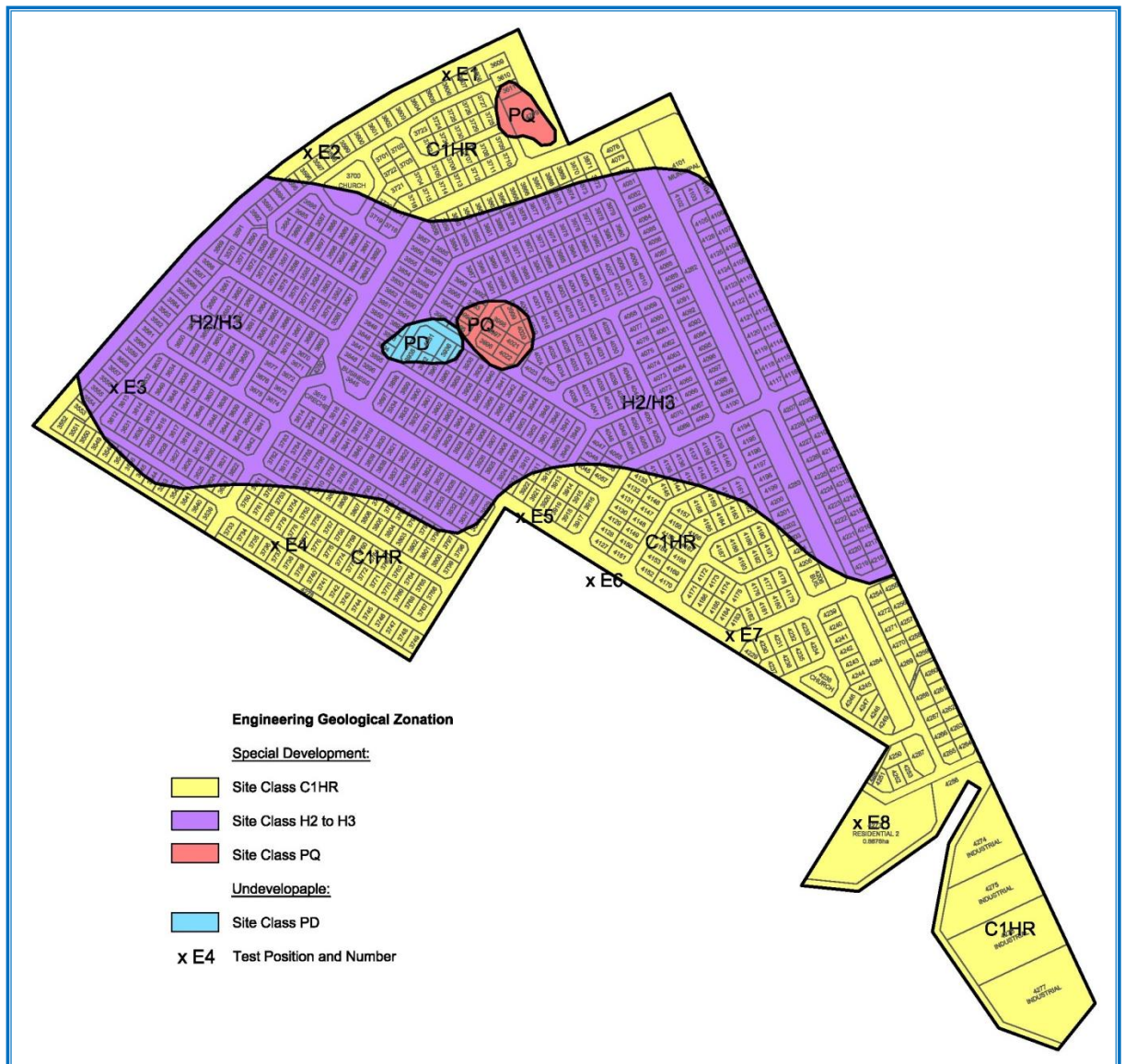
Some problems regarding excavatability can be expected on the site.

Retaining walls as well as slope stabilization measures are recommended on all constructed embankments exceeding 1,5m.

Storm water diversion measures such as ponding pools are recommended to control peak flows during thunderstorms. All embankments must be adequately compacted and planted with grass to stop any excessive erosion and scouring of the landscape.

### **3.7.2 SITE ZONATION**

In terms of the results of the geotechnical investigation, the development area was divided into the following geotechnical zones which are described in detail in this section and also reflected on **Map 5**:



**Map 5: Geotechnical Site Zonation**

**Special Development:**

**Site Class C1HR:**

This zone comprises of a layer of moderately collapsible and compressible soil underlain by lava, with estimated total movement of less than 10mm measured at surface. Modified normal and even special foundation techniques will be required to enable proper development. It was classified as C1HR in terms of the NHBRC. Reinforced strip footings with articulation joints at some internal and all external doors, light reinforcement in masonry (brickforce) with proper compaction within standard strip foundations and drainage provision will be required.

**Site Class H2 to H3:**

This zone is represented by medium to highly expansive soil or turf with estimated total heave of more than 30mm measured at surface. Special foundation techniques will be required to enable proper development. It was classified as H2

to H3 in terms of the NHBC. Split construction with suspended floors, piles with or without suspended floor slabs and ground beams, or even soil replacement with a soil raft, or stiffened or cellular rafts with articulation joints and reinforcement are required for residential development. Development must include site drainage and plumbing and service precautions.

**Site Class PQ:**

Quarried areas were identified and must be rehabilitated by a proper backfilling before any construction can be allowed.

**Undevelopable:**

Site Class PD: The 1:50 year flood line or wet areas will specify the allowable distance of development from the drainage features such as the flat areas in the area. It was classified as PD in terms of SAIEG and the NHBC.

The comprehensive Geotechnical Report is attached as **Annexure L** to the application for township establishment.

### **3.7.3 FOUNDATION RECOMMENDATIONS AND SOLUTIONS**

***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.

#### ***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 0,45m 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 0,3 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.

**Site Class H3 (Estimated total heave of more than 30mm):**

Soil tested as medium expansive with a clay layer thickness of more than 2,0m (>2,0m thick), or highly expansive of more than 0,85m (0,85m or more in thickness), or a clay layer with a very high expansive potential of more than 0.4m in thickness. Foundations require special design by structural engineer of the following:

Soil raft:

As for H1.

Stiffened or cellular raft:

As for H2.

Piled construction:

As for H2.

### **3.7.4 EXCAVATION CLASSIFICATION WITH RESPECT TO SERVICES**

Some problems regarding excavatability can be expected on the sites. The clay or turf is easily excavated by TLB, and it was classified as soft in restricted and non-restricted excavation (SANS 1200 D).

The excavation in ferricrete, calcrete or residual lava with possible core stones or boulders and shallow rock lava will increase the development cost and is classified as medium hard, and the excavation depth with a competent TLB is usually limited to less than 1,2m in medium hard rock lava.

To ensure the stability of excavations, it will need standard sidewall protection in excavations exceeding 1,5m

### **3.7.5 CONCLUSION**

- The site is underlain by amygdaloidal lava, agglomerate and tuff of the Rietgat Formation, Platberg Group of the Ventersdorp Supergroup.
- Some problems are foreseen regarding the excavatability to 1,5m depth on site.
- A wet area towards the centre western portion was identified as a flat area or with a higher clay content.
- Zoning of the site revealed zones with constraints regarding the **compressibility and expansive potential** of the soil, and an area possibly subjected to **drainage** problems.
- **Modified Normal and Special construction** includes the use of split construction, piles with suspended floor slabs and ground beams, or soil, cellular or stiffened rafts. It also requires the use of **compaction techniques and site drainage** as described.
- **This investigation was done to reveal the geotechnical properties on site with the techniques as described to form our opinion. Although every possible factor during the investigation was dealt with, it is possible to encounter variable local conditions. This will require the inspection of foundations by a competent person to verify expected problems.**

### **3.8 ENVIRONMENTAL IMPACT ASSESSMENT**

AB Enviro-Consult was appointed to conduct an Environmental Impact Assessment in terms of sections 24 and 24(D) of the National Environmental Management Act, 1998 (Act 107 of 1998). The activity is listed in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014.

The activity that forms the subject of this application is listed in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014. The proposed development triggers the following regulations:

**Table 5: Listing details in terms of the National Environmental Management Act, 1998**

Indicate the number and date of the relevant notice:	Activity No (s) (in terms of the relevant notice) :	Describe each listed activity as per project description <sup>1</sup> :
GN.R. 327, 7 April 2017	28	Residential, mixed, retail, commercial and institutional developments where such land was used for agriculture on and after 01 April 1998 and where such development: (i) will occur inside the urban area of Lebaleng, where the total land to be developed is 45,1405 hectares.
GN.R. 325, 7 April 2017	15	The clearance of 45,1405 hectares of indigenous vegetation, in order to establish a township on a Portion of the Remaining Extent of Portion 8 of the farm Oersonskraal No. 207-HO (To be known as Lebaleng Extension 6.), North West Province

The project was registered with the Department of Rural and Economic Development on 01 November 2017 by virtue of NWP/EIA/56/2017 and the Environmental Impact Assessment Report is currently in process of finalisation following the finalisation of the public participation process and the Environmental Impact Assessment will in due course be submitted to the Department Rural, Environment and Agricultural Development (READ) for consideration.

### **3.9 CULTURAL HERITAGE AREAS**

A Pelsers Archaeological Consulting was commissioned to conduct a Cultural Heritage Resources Impact Assessment in respect of the proposed development areas. The fore-mentioned assessment contained the following results:

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

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. A number of sites of recent age were identified and recorded in the study area. These are all related to earlier agricultural activities in the area, as well as the railway line. None of these are however of historical significance and although their ages are not known, it is unlikely that they are older than 60 years of age.

A number of sites of recent age were identified and recorded in the study area. These are all related to earlier agricultural activities in the area, as well as the railway line. None of these are however of historical significance and although their ages are not known, it is

unlikely that they are older than 60 years of age. The development can continue here and the structures can be demolished taking into consideration the recommendations at the end of the report.

- **Site 1 – Railway yard and related structures**

This site contains a number of structures and features, with some within a fenced yard. It is probably related to the railway line here and connected to the current grain silos located close by.

GPS Location: **S27 19 22.45 E25 59 20.05**

- **Site 2 – Old homestead ruins and water trough**

This site contains the remains of a cement and brick 2-roomed building and a water trough for animals. It is possibly related to earlier farming in the area, but seems to be less than 60 years of age. Although not significant from a cultural history point of view care should be taken when the structure is demolished as there is always a possibility of unmarked burials being close by or inside these homesteads, especially of still-born infants.

GPS Location: **S27 19 06.87 E25 59 09.09**

- **Site 3 – Water Tower & Reservoir**

This is also of recent age and of no historical significance. It will likely not be demolished and would likely be retained as part of the new township development.

GPS Location: **S27 18 53.38 E25 59 06.55**



**Plate 14: A view of a section of Site 1 yard.**



**Plate 15: Another view of Site 1 yard**





**Plate 16: Remains of structure on Site 1.**



**Plate 17: Site 2 structure remains**



**Plate 18: Site 2 water trough.**



**Plate 19: Site 3 Water Tower & Reservoir**



**Map 6: Aerial view of study area showing sites recorded (Google Earth 2017).**

The Phase 1 Heritage Resources Impact Assessment concluded that *“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. This aspect should be kept in mind when development work commences and if any sites (incl. low stone-packed or unmarked graves) are identified then an expert should be called in to investigate and recommend on the best way forward”*.

# CHAPTER 4: PROPOSED DEVELOPMENT

## 4.1 LAND USES

The intention of the township applicant i.e. the Maquassi Hills Local Municipality is to utilize the concerned property for the establishment of the proposed township area of Lebaleng Extension 6. The primary aim of the township area is to address the urgent need experience by the Maquassi Hills Local Municipality in the Lebaleng/Makwassie urban complex for vacant residential erven. This need has since given rise to illegal occupation of the vacant municipal land within the Lebaleng urban area as well as the land west of the existing Lebaleng Extension 5.



**Map 7: View of informal occupation on municipal land in Lebaleng Extension 3**

Cognisance should be taken of the fact that the establishment of the township area of Lebaleng Extension 6 is also one of the projects on the business plan of the Department of Local Government and Human Settlements and it is anticipated that this project will include the erection of subsidized housing units.

The layout plan of the proposed township Lebaleng Extension 6 makes provision for the following land uses:

Use Zone	Proposed Land Use	Number of erven	Area in hectares	% of area
Residential 1	Dwelling house (average stand size 369m <sup>2</sup> )	728	26,8818	59,55%
Residential 2	Dwelling units (CRU or Social Housing)	1	0,8677	1,92%
Business 1	Shops	2	0,1798	0,40%
Institutional	Crèche	1	0,0900	0,20%
	Church	2	0,3059	0,68%
Municipal	Reservoir site	1	0,3907	0,87%
Industrial 1	Industrial uses	4	2,5673	5,69%
Public Open Space	Parks	11	4,4543	9,87%
Existing public roads	Streets		9,4030	20,82%
<b>Total</b>		<b>750</b>	<b>45,1405</b>	<b>100%</b>

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

- Residential 1**

The layout plan makes provision for 728 residential erven with an average stand size of 369m<sup>2</sup>. These erven will be alienated on a full title basis. Even though the BNG principles call for the development of new residential areas that can cater for a variety of housing typologies (including bonded, FLISP and social housing), cognisance was taken during the preparation of the layout plan of the fact that the existing urban area of Makwassie currently still has a large number of vacant residential erven. In terms of the Maquassi Hills Spatial Development Framework, 2011, it was specifically indicated that these erven should be considered for densification and redevelopment through the possible subdivision thereof. It was specifically due to this anticipated areas that can be utilized for bonded / FLISP housing purposes that the layout plan of the proposed township area of Lebaleng Extension 6 does not make provision for erven for this purpose.
- Residential 2**

To allow for the development of Community Residential Units (CRU's) or Social Housing, the layout plan incorporates one "Residential 2" erf that can be developed at a density of 80 dwelling units per hectare and with a maximum height of 3 storeys.

- **Business 1**  
The layout plan incorporates two (2) erven that can be utilized for business purposes and same were positioned centrally within the development area and adjacent to the main collector roads to limit walking distances whilst also ensuring easy accessibility to these facilities.
- **Institutional**  
The erven provided for churches and a crèche were also positioned in such a manner to limit walking distance to these facilities.
- **Municipal**  
The layout plan incorporates one (1) “Municipal” erf and same is earmarked to accommodate the reservoir and pressure tower infrastructure of Sedibeng Water.
- **Industrial 1**  
As mentioned previously, the southern part of the development area currently houses infrastructure of the Maquassi Hills Local Municipality (municipal yard) as well as buildings leased to the sheep shearers. These facilities were accommodated on 5 “Industrial 1” erven that will not only accommodate these facilities over the short term, but these erven can in future also be alienated for industrial development purposes.
- **Public Open Space**  
The 11 public open space erven provided as part of this development will primarily accommodate the 16m building restriction applicable along Road 565 (R502) as well as the standard 8m building restriction applicable along the railway line. In addition the erven also accommodates the Eskom power line servitude area and the existing stormwater drainage channel located parallel to the Eskom power line servitude. Two (2) public open space erven were also provided to accommodate an existing quarry area and the marshy area that was identified during the contour survey and geotechnical investigation.

**Annexure V** to the application for township establishment contains a list of the erven in the proposed township area and the areas of each erf as contemplated in terms of paragraph 3(i) of Schedule 6 of the Maquassi Hills Local Municipality Municipal By-Law on Spatial Planning and Land Use Management.

## **4.2 FACTORS INFLUENCING THE LAYOUT PLAN**

The layout plan of the proposed township area of Lebaleng Extension 6 was influenced by the following factors:

- \* Accommodating the water pipeline servitude of Sedibeng Water, as reflected on Servitude diagram SG No. A37/1987 and registered by virtue of Notarial Deed of

Servitude K1759/1988S within the street network of the township (refer also to **Map 8**);

- ★ Accommodating the existing reservoir and pressure tower of Sedibeng Water located in the north-eastern corner of the development area within a Municipal erf (refer **Map 8**);
- ★ Accommodating the Eskom power line servitude, as reflected on Servitude diagram SG No. A5758/1956 and registered by virtue of Notarial Deed of Servitude 1148/1959S within five (5) public open space erven (refer **Map 8**);
- ★ Accommodating the Eskom power line to Lebaleng within the layout plan and providing a 18m building restriction (9m from centre line) along the route of this power line (refer **Map 8**).
- ★ An informal drainage feature is located along the eastern boundary of the development area and follows the route of the Eskom power line servitude (refer **Plates 20 and 21** below). This drainage feature was accommodated in the layout plan within five (5) public open space erven (refer **Map 8**);



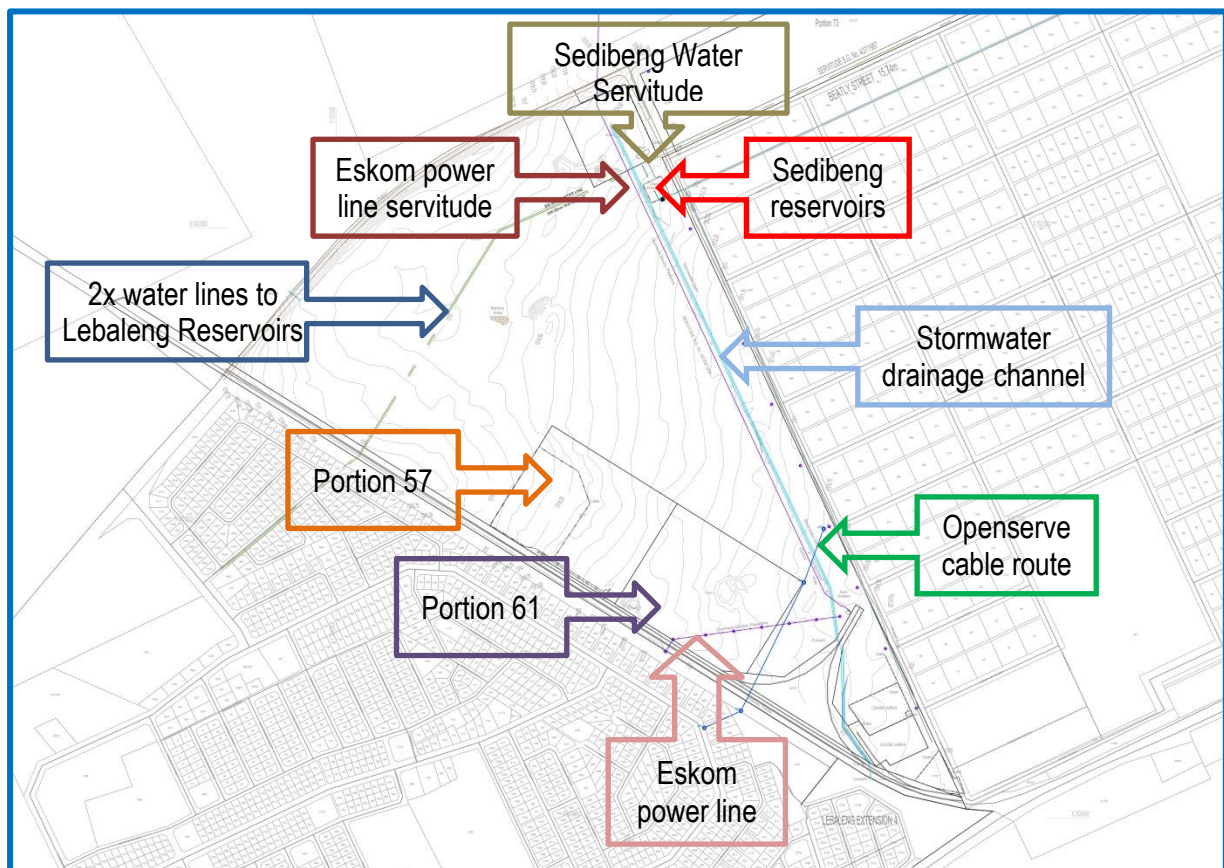
**Plate 20: View of informal drainage channel (direction south)**



**Plate 21: View of informal drainage channel (direction north)**

- ★ There are 2x600/0.4 cables feeding Lebaleng through SDC A8 from the Makwassie exchange (refer Map 8). This Openserve (former Telkom) infrastructure was discovered during the contour survey. In accordance with discussions with Open serve, provision was made for a 3m building restriction along the route of this cable line);
- ★ A rising main sewer line is located in the street reserve of Selborne Street. The manholes of this rising main were surveyed during the contour survey. The results of this survey indicated the line encroaches onto the development area (at the proposed Industrial erven). To protect this rising main, provision was made for a 5m building restriction along the eastern boundary of Erven 4274 to 4276 and along the eastern and southern boundaries of Erf 4277;

- ✱ Due to the presence of the railway line, provision was made for a 8m building restriction along the boundary of the railway line reserve;
- ✱ The reservoirs in Lebaleng are fed through two (2) 200mm water pipelines that traverses the northern part of the development area (refer **Map 8**). These two pipelines were accommodated in the street network of the township area as well as through one public open space erf. In this regard it is pertinent to note that the exact location of these pipelines could not to date be determined due to the fact that no evidence is visible on site in respect of the location of the pipelines. The route provided for these pipelines was determined based on the design drawings thereof. Prior to the township area being surveyed by the appointed land surveyor, it will be necessary to expose these pipelines to do a proper alignment thereof and accommodate the actual route on the layout plan of the township area;
- ✱ No direct access will be provided to the township area from Road 565 (R502) (Makwassie – Bloemhof road) and this road will be subject to a 16m building restriction as well as a line of no access;
- ✱ Provision was made for a road reserve width of 37,78m in respect of Road 565 (R502);
- ✱ Access to the township area will be provided from Selborne Street and the internal street network of the township area links onto the street network of the existing township area of Makwassie;
- ✱ In terms of the Spatial Development Framework of the Maquassi Hills Local Municipality, it was proposed that access to the Lebaleng urban area from Makwassie be enhanced through the introduction of a direct link road between these two urban areas. This road will inevitably have to cross the railway line through a level crossing. To allow for this possible future link between the two (2) urban areas, the layout plan incorporates two (2) streets that can be utilized for this purpose. These streets link onto Whalley Street and Beatley Street in the township area of Makwassie (established as Maquassi).
- ✱ The owner of the vacant adjacent Portion 61 of the farm Oersonskraal 207, Registration Division H.O., North West Province indicated that he will not be utilizing this property and offered same to the Maquassi Hills Local Municipality. As this matter has not been finalised to date and to allow for the integrated development of this entire area, the layout plan of the proposed township Lebaleng Extension 6 already accommodates this area for future development purposes (refer layout plan).
- ✱ The provision that was made for the possible future development of Portion 61 was also applied to the adjacent Portion 57 (that is currently utilized as an auctioneering yard). This property can in future be integrated into the layout of Lebaleng Extension 6 (as reflected on the layout plan).
- ✱ The topographic feature encountered on site were accommodated on the layout plan;
- ✱ The street network of the township was designed in such a manner to enhance stormwater drainage on this very flat development area;



**Map 8: Locality of physical features that affected the layout plan**

### 4.3 ACCESS

Access to the proposed township area of Lebaleng Extension 6 will primarily be provided from Selborne Street (refer **Plates 22 and 23**) in the existing township area of Makwassie (established as Maquassi) through the extension of the following streets:

- Smuts Street (refer **Plate 24**)
- Whalley Street (refer **Plate 25**)
- Call Street (refer **Plate 26**)
- Rissik Street; and (refer **Plate 27**)
- Beatley Street (refer **Plate 28**)





**Plate 22: View of Selborne Street (direction south)**



**Plate 23: View of Selborne /Road 565 intersection (direction south)**



**Plate 24: View of Smuts Street (direction east)**



**Plate 25: View of Whalley Street (direction east)**



**Plate 26: View of Call Street (direction east)**



**Plate 27: View of Rissik Street (direction east)**



**Plate 28: View of Beatley Street (direction east)**

In terms of the Spatial Development Framework of the Maquassi Hills Local Municipality, it was indicated that the connectivity between the two urban areas of Lebaleng and Makwassie must be enhanced through the introduction of a direct link road between the two urban areas that will in future cross the railway line. In terms of the layout plan of the proposed township area, provision has been made for the possible future linkage of Beatley Street and Whalley Street to link with the urban area of Lebaleng. The provision of the fore-mentioned linkages will however be subject to inter alia the successful acquisition of Portion 61 of the farm Oersonskraal 207, Registration Division H.O. as well as the acquisition of some developed erven in the township area of Lebaleng Extension 1 that will be traversed by the two link roads. These links can therefore only be created in future and with the necessary wayleave applications in respect of the crossing of the railway line.

The street network adopted for the proposed township area comprises a network of 16m, 13m and 10m streets and were designed to ensure proper surface stormwater drainage.

No access to Road 565 (R502) will be provided from or to the township area and this will be achieved through the introduction of a line-of-no-access.

## CHAPTER 5: PROVISION OF ENGINEERING SERVICES

### 5.1 INTRODUCTION

NEP Consulting Engineers (Pty) Ltd was appointed to investigate and report on the provision of civil engineering services to the proposed township area.

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

- Section 5.2: Water Supply
- Section 5.3: Sanitation
- Section 5.4: Roads and Stormwater
- Section 5.5: Solid Waste
- Section 5.6: Electricity

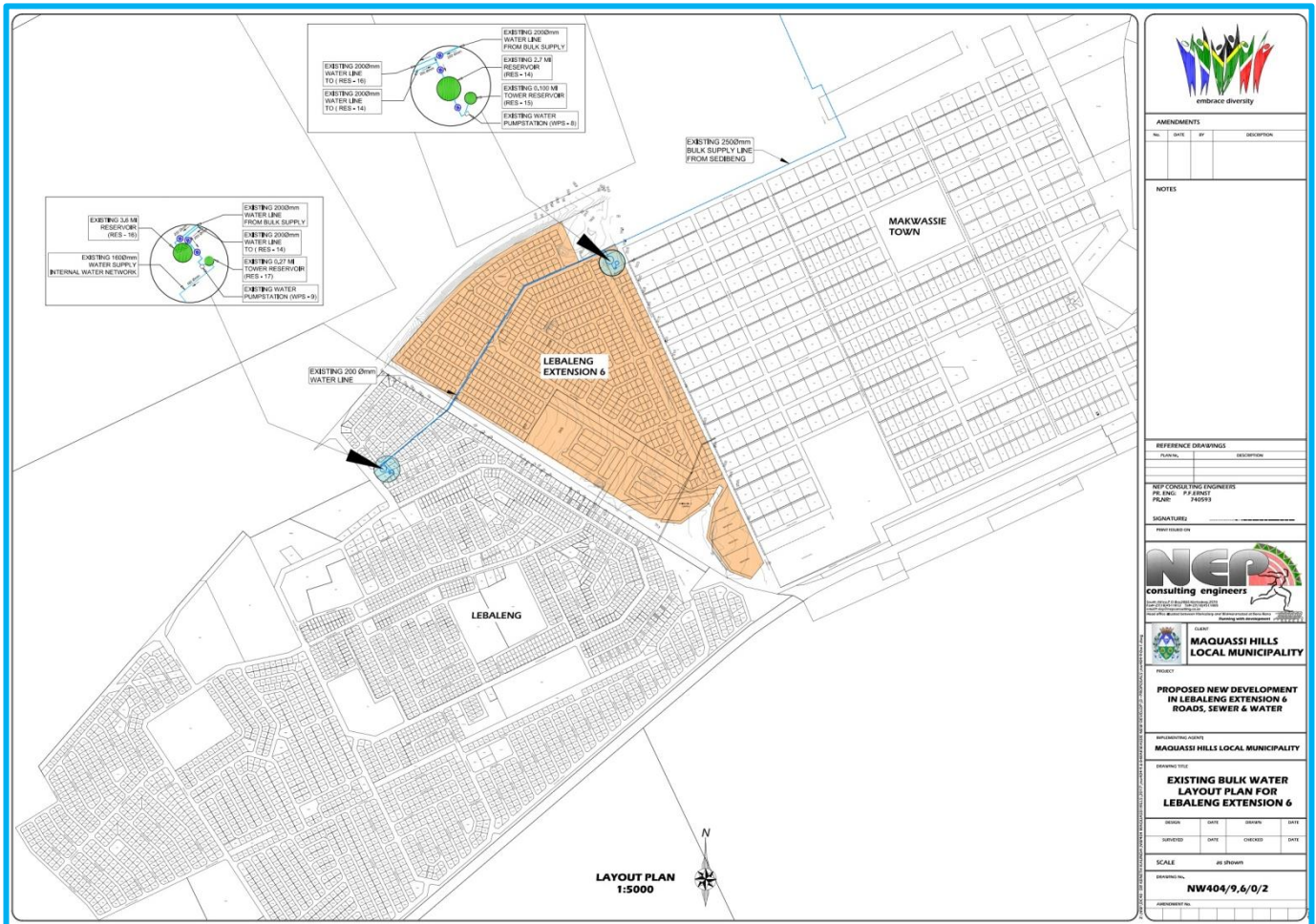
### 5.2 WATER SUPPLY

#### 5.2.1 BULK WATER SUPPLY

Bulk water is currently supplied to Makwassie by means of a bulk water supply line from Sedibeng Water Purification Works. Purified water is pumped from Balkfontein to Leeudoringstad reservoir through a 250mm $\Phi$  and 400 $\Phi$ mm pipes at a capacity of 16ML/day. A 2ML/day draw off is required to supply Leeudoringstad and surrounding areas; and another 2ML/day draw off for Witpoort and Rulaganyang.

The remaining 12ML/day is pumped through a 250 and 300 $\Phi$ mm pipes from Leeudoringstad reservoir to Buisfontein 5.6 ML reservoir.

Flow then gravitates through a 350mm $\Phi$  pipe from the Buisfontein Reservoir to Wolmaransstad and a 250mm $\Phi$  pipe supplies Makwassie. In Makwassie water enters the existing 2.7ML reservoir to supply Makwassie Town and bypasses to the 3.6ML Lebaleng reservoir. The existing 350mm $\Phi$  Bulk Supply line from Buisfontein to Wolmaransstad-Makwassie has insufficient capacity. The local municipality is unable to fill up the reservoirs in Wolmaransstad, Makwassie and Lebaleng. Hence plans by Sedibeng Water to upgrade the bulk pipeline and reservoirs. Construction of this pipe line has been halted for 18 months due to community issues. (Refer **Map 9**)



**Map 9: Existing bulk water layout plan for Lebaleng Extension 6**

Makwassie and Lebaleng have a total reservoir storage of 6.3ML excluding tower reservoirs.

The following are recommended for the Bulk Water Supply:

- The current calculated total theoretical 48 hour required storage capacity is 3.97ML including the new development. Therefore, the current total storage capacity of 6.3ML is adequate to serve the existing and new development of Lebaleng Ext 6 as well as future developments. See table 1 for demand calculations.
- The existing 250mmΦ supply line to Makwassie has adequate capacity to supply 74l/s of Instantaneous peak demand plus fire flow.

**Table 6: Water Demand**

No.	AREA	RESIDENTIAL				INDUSTRI. COMM.	INSTITUTIONS SCHOOLS HOSP ETC	AADD	MUNICIPAL LOSSES	GAADD
		Number	Persons/stand	Population	Ave Daily Consumption					
		Stands	number	capita	l/c/day					
1	Makwassie Town	260	3.8	988	250		247.00	10% 24.70	271.70	

1.1	Makw Industrial	3	8000m <sup>2</sup>	0.8lk per 100m <sup>2</sup>	64.00		64.00	6.40	70.40	
1.2	Makw Commercial	9	6000m <sup>2</sup>	0.3lk per 100m <sup>2</sup>		48.00	48.00	4.80	52.80	
2	Lebaleng	3627	3.8	13783	80		1102.61	110.26	1212.87	
3	Lebaleng Ext 6	797	3.8	3029	100		302.86	30.29	333.15	
<b>Grand Total</b>		<b>4696</b>		<b>17799</b>		<b>64.00</b>	<b>48.00</b>	<b>1764.47</b>	<b>176.45</b>	<b>1940.91</b>

		<b>m<sup>3</sup>/day</b>	<b>ℓ/s</b>
<b>SUMMER PEAK DEMAND = GAADD x 2.4</b>		4234.72	49.01
<b>INSTANTANEOUS PEAK DEMAND = AADD x 3.6</b>		6352.08	73.52
<b>INSTANTANEOUS PEAK DEMAND + FIRE FLOW for moderate Risk 4hrs @ 900ℓ/min</b>		6354.68	73.55
<b>RESERVOIR STORAGE = AADD + FIRE FLOW for 48HRS</b>		3528.94	23.02

The Demand predictions were done, based on the following assumptions:

- Demand figures are for current and proposed development.
- Persons per stand figures as per Stats SA 2001-2011.
- **Makwassie Town** is identified as a middle-income community, allowing for 250 l/c/day. As per Guidelines for Human Settlement and Planning Design
- **Lebaleng** is identified as a low-income community, allowing for 80 l/c/day. As per Guidelines for Human Settlement and Planning Design
- **Lebaleng Ext 6** is identified as a low-income community, allowing for 100 l/c/day. As per Guidelines for Human Settlement and Planning Design

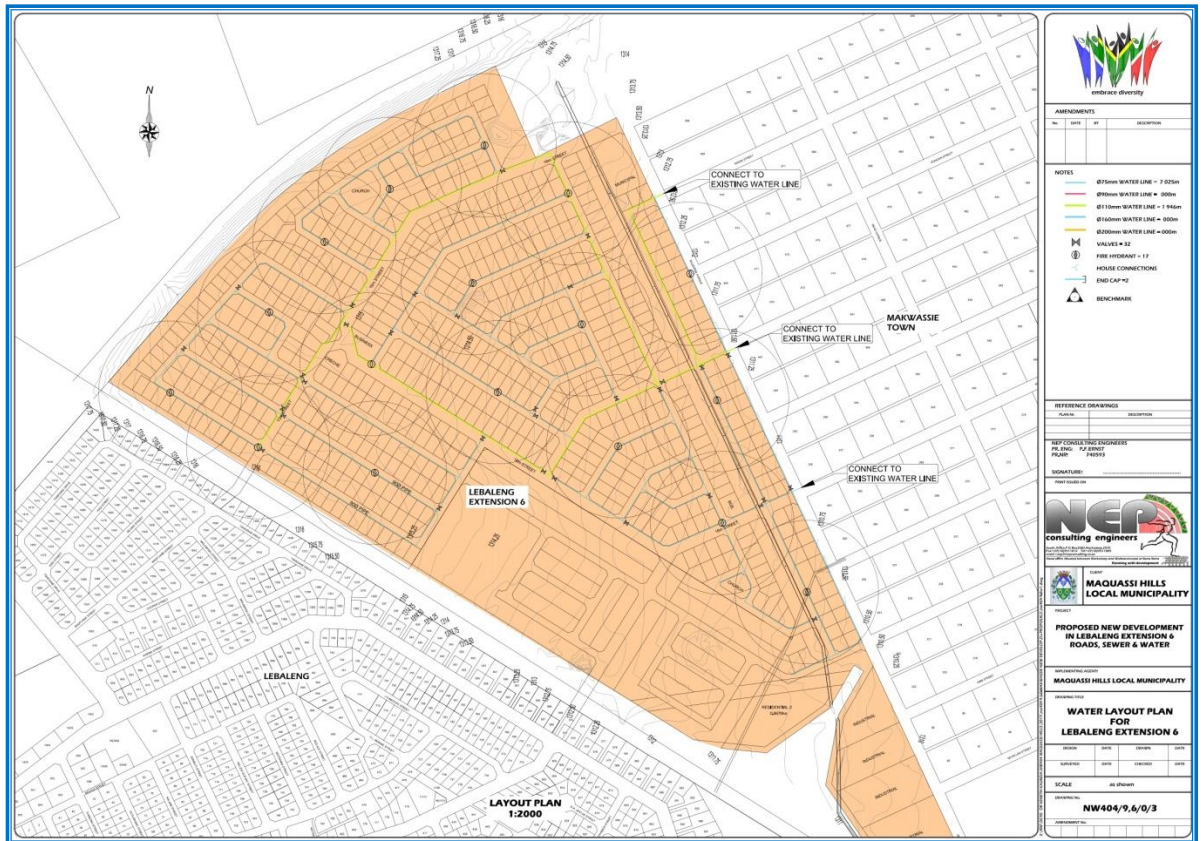
**Table 7** contains the design criteria used to analyze the water network

**Table 7: Design Criteria for Water Network**

Design Element	Criteria
Peak Daily Factor	2.4
Peak Hourly Factor	3.6
Maximum Static Head	90m (9 Bar)
Minimum Residual Head under conditions of domestic peak flows	20m (2 Bar)
Maximum Linear flow velocity under conditions of domestic peak flows	not to exceed 2 m/s or the specification of the pipe manufacturer
Pipe Type	Upvc and HDPE to SANS 966 Specifications
Minimum Pipe	Classes Class 12 (PN12)
Fire flow at any one hydrant under condition of domestic peak flows (one hydrant at a time)	15 l/s 100 l/s at 1.5 bar
Minimum residual head (fire plus domestic peak flow)	8 m (0.8 Bar)
Hydrant Spacing Category C	240 m Maximum
Cover to pipe (minimum)	Gravel Roads = 1000mm Tarred and Traffic Areas = 800mm Other Areas = 600mm
Minimum pipe diameter	75 mm – reticulation
All pipes, valves and related fittings to Maquassi Hills Local Municipality specifications/approval	

### 5.2.2 INTERNAL WATER RETICULATION

A ring feeder system with a 110mm diameter upvc pipe is suggested. The supply connection point will be from the existing pipe line along Selborne Street in Makwassie Town. The waterlines that connect the houses to the ring feeder line are 75mm diameter upvc pipe line. (Refer **Map 10**).



Map 10: Water layout plan for Lebaleng Extension 6

## 5.3 SANITATION

### 5.3.1 BULK SEWER

All sewerage generated in Lebaleng is from a full waterborne system, while the type of sanitation technology employed in Makwassie town is individual septic tanks which are an onsite sewage facility. Sewerage generated from Lebaleng is collected to the existing pump station south of Lebaleng and pumped through 2x250mmφ rising main to the existing Wolmaransstad 9.5ML WWTw. The WWTw is located 8.8km north east of Makwassie. Currently the Maquassi Hills local Municipality has undertaken a project for the construction of internal sewer network and Pump station for Makwassie Town. Sewerage from Makwassie town will be collected in the new transfer pump station located south east of Makwassie and pumped to Lebaleng pump station to ultimately be pumped to the existing WWTw. The project is on construction phase.



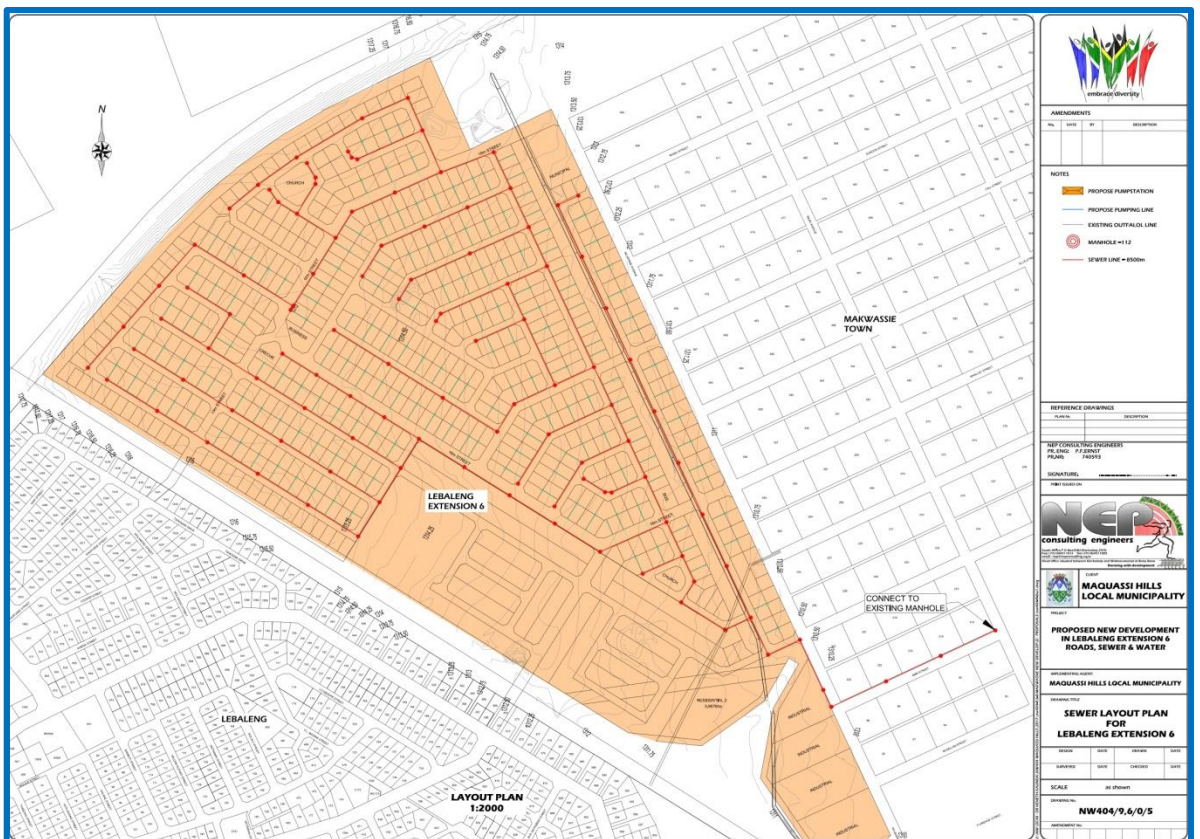
Peak Factor	2.5				
PWWF	ℓ/S	3.57	33.23	7.30	44.11
Infiltration	15%				
IPWWF	ℓ/S	4.11	38.22	8.40	50.73

The hydraulic load predictions were done based on the same assumptions detailed in respect of water supply.

**5.3.2 CONNECTOR AND INTERNAL SEWER NETWORK**

Sewer generated from the proposed development will gravitate towards the south-eastern corner of the proposed town to connect to a manhole along Amm Street in Makwassie. The new Makwassie sewage transfer pump station will pump sewage to Lebaleng pump station and ultimately to the existing treatment works. The following components are proposed for the development:

- 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 12**)



**Map 12: Sewer Layout Plan for Lebaleng Extension 6**



**Table 9: Design Criteria for Sewer Network**

DESIGN ELEMENT	CRITERIA
Average Annual Daily flow for residential erven	254 Kl/day
Peak Factor	2.5
Design Capacity of Sewer	80% Full
Sewer pipe and fittings	PVC to SANS 1601 for stiffness class 400 KPa
Normal Minimum Velocity Absolute Minimum under extraordinary circumstances	0.75 m/s 0.60 m/s
Manhole	Placement Intervals not more than 80 m Positions on steep grades (1:10 or steeper)
Allowance for Infiltration	15%
Manhole Material (including cover and frame)	Concrete
Minimum pipe diameter	160mm Mains 110mm House Connections
Minimum depth cover	1.5 m Traffic Areas From 0.6 m Other Areas

## 5.4 ROADS AND STORMWATER

The proposed town is located to the south of the main road R502. Primary access to the proposed development will be provided via the existing road network in Makwassie Town.

All internal roads surfaces for the development will be constructed according to the proposed pavement design in table 7. Most of the residential development is proposed to drain towards the east and ultimately to discharge south east of the development to follow the natural water course. Currently there is an existing stormwater channel running from north to south crossing the railway line.

Traditionally all stormwater in Maquassi Hills areas have been allowed to run off surfaces and to drain towards a stormwater side channel. 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 a combination of interlock paved road; stormwater concrete channels and culverts will accommodate flows generated by land development. Refer to **Map 13** for typical roads and stormwater details.



**Map 13: Road Layout Plan for Lebaleng Extension 6**

The vertical alignment is designed to address storm water drainage within the road reserve. Therefore the final surfaced level of the roads is as far as possible below natural ground level to ensure storm-water drainage at the most efficient way. The roads have a maximum cross-fall to one side of 2% and minimum longitudinal slope of 0.5%. The design norms for the roads are given in **Tables 10 and 11**.

**Table 10: Pavement Design for Internal Roads**

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

**Table 11: Geometric Design Standards for internal roads**

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

## 5.5 SOLID WASTE

Solid waste removal is a function of the Maquassi Hills Local Municipality.

## 5.6 ELECTRICITY

Electricity shall be supplied by ESKOM through a bulk meter and reticulated to individual units. Authorization from the relevant authorities is required

## 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)
- Rental Housing Act, 1999
- White Paper on Wise Land Use, 2001
- Millennium Development Goals (MDG)
- National Spatial Development Perspective, 2006
- North West Provincial Spatial Development Framework, 2017
- Maquassi Hills Spatial Development Framework, 2011
- Housing Needs
- 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.

This framework outlines 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 Maquassi Hills

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 6.15 below.

## **6.2 NATIONAL DEVELOPMENT PLAN: VISION 2030**

The National Planning Commission (NPC) (2011) published the NDP: Vision for 2030. Its contents will impact directly and indirectly on the provision of housing within the national spatial system.

Its core focuses include:

- The active efforts and participation of all South Africans in their own development
- Redressing the injustices of the past effectively
- Faster economic growth and higher investment and employment
- Rising standards of education, a healthy population and effective social protection
- Strengthening the links between economic and social strategies
- An effective and capable government
- Collaboration between the private and public sectors
- Leadership from all sectors in society.

## **6.3 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.

## **6.4 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.

## **6.5 A COMPREHESIVE PLAN FOR THE DEVELOPMENT OF SUSTAINABLE HUMAN SETTLEMENT (BNG STRATEGY)**

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 macro-level 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.
- Supporting Urban Renewal and Inner City Regeneration: Urban renewal and inner city regeneration often result in the current inhabitants being excluded as a result of the construction of dwelling units they cannot afford. Some municipalities are trying to avoid this by promoting affordable inner city housing. The "Human Settlements Plan" will support this by encouraging social housing.
- Developing Social and Economic Infrastructure: The need to move away from a housing-only approach towards a more holistic development of human settlements which includes the provision of social and economic infrastructure is emphasized.
- Enhancing the Housing Product: The aim is to develop more appropriate settlement layouts and housing products and to ensure appropriate housing quality.

## **6.6 URBAN (UDF) AND RURAL DEVELOPMENT (RDF) FRAMEWORKS (1997)**

The UDF aims to promote a consistent urban development policy approach for effective urban reconstruction and development, to guide development policies, strategies and actions of all stakeholders in the urban development process and to steer them towards the achievement of a common vision. The UDF is engaged in four key programmes, namely integrating the city, improving housing and infrastructure, building habitable and safe communities and promoting urban economic development.

The RDF co-ordinates integration of government programmes in rural areas and is aimed at: poverty alleviation through institutional development; investment in basic infrastructure and social service; improving income and employment opportunities; restoration of basic economic rights to marginalized rural areas; and finally justice, equity and security.

## **6.7 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.

## **6.8 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.

## **6.9 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.



## **6.10 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.

## **6.11 RENTAL HOUSING ACT, 1999**

The stated purpose of the RHA reveals that government regards rental housing as an available alternative to homeownership, especially for poor people and historically disadvantaged people.

## **6.12 WHITE PAPER ON WISE LAND USE (2001)**

This White Paper intends to show practical ways in which South Africa may move to this approach. The system should satisfy the following specific needs:

- The development of policies which will result in the best use and sustainable management of land.
- Improvement and strengthening planning, management, monitoring and evaluation.
- Strengthening institutions and coordinating mechanisms.
- Creation of mechanisms to facilitate satisfaction of the needs and objectives of communities and people at local level

Integrated planning for sustainable management of land resources should thus ensure:

- That development and developmental programmes are holistic and comprehensive so that all factors in relation to land resources and environmental conservation are addressed and included.

- In considering competing needs for land, and in selecting the "best" use for a given area of land, all possible land-use options must be considered.
- That all activities and inputs are integrated and coordinated with each other, combining the inputs of all disciplines and groups.
- That all actions are based on a clear understanding of the natural and legitimate objectives and needs of individual land users to obtain maximum consensus.
- That institutional structures are put in place to develop, debate and carry out proposals.

Of core importance in the planning and development of housing is the normative planning principles identified in the White Paper:

Principles. The basis of the system will be principles and norms aimed at achieving sustainability, equality, efficiency, fairness and good governance in spatial planning and land use management. The decisions of planning authorities, whether related to the formulation of plans such as IDPs or the consideration of land development applications such as rezoning, must all be consistent with these principles and norms. A failure by an authority to affect this enables the Minister to intervene in the decision, either to require that it is reconsidered or in extreme cases to take the decision him or herself.

### **6.13 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.

### **6.14 NATIONAL SPATIAL DEVELOPMENT PERSPECTIVE (2006)**

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

- Principle 1: Rapid economic growth that is sustained and inclusive is a pre-requisite for the achievement of other policy objectives, among which poverty alleviation is key.
- Principle 2: Government has a constitutional obligation to provide basic services to all citizens wherever they reside.
- Principle 3: Government spending on fixed investment should be focused on localities of economic growth and/or economic activities and to create long-term employment opportunities.
- 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.

## **6.15 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 Makwassie urban area, it was stated that investment in the Makwassie, Kgakala and other smaller nodes should be focussed on the provision of basic services and eradicating backlogs.

Another development guideline that will be addressed through this township establishment is the provision of land tenure security as the erven in the proposed township area will be alienated to the beneficiaries thereof.

## **6.16 MAQUASSI HILLS LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK, 2011**

According to the Maquassi Hills Local Municipality Spatial Development Framework, 2011, the population of Makwassie and Lebaleng was estimated at approximately 16298 inhabitants. At the time of the compilation of this SDF there were 2290 formal and 1253 informal residential units in the area which highlighted the immediate need for housing.

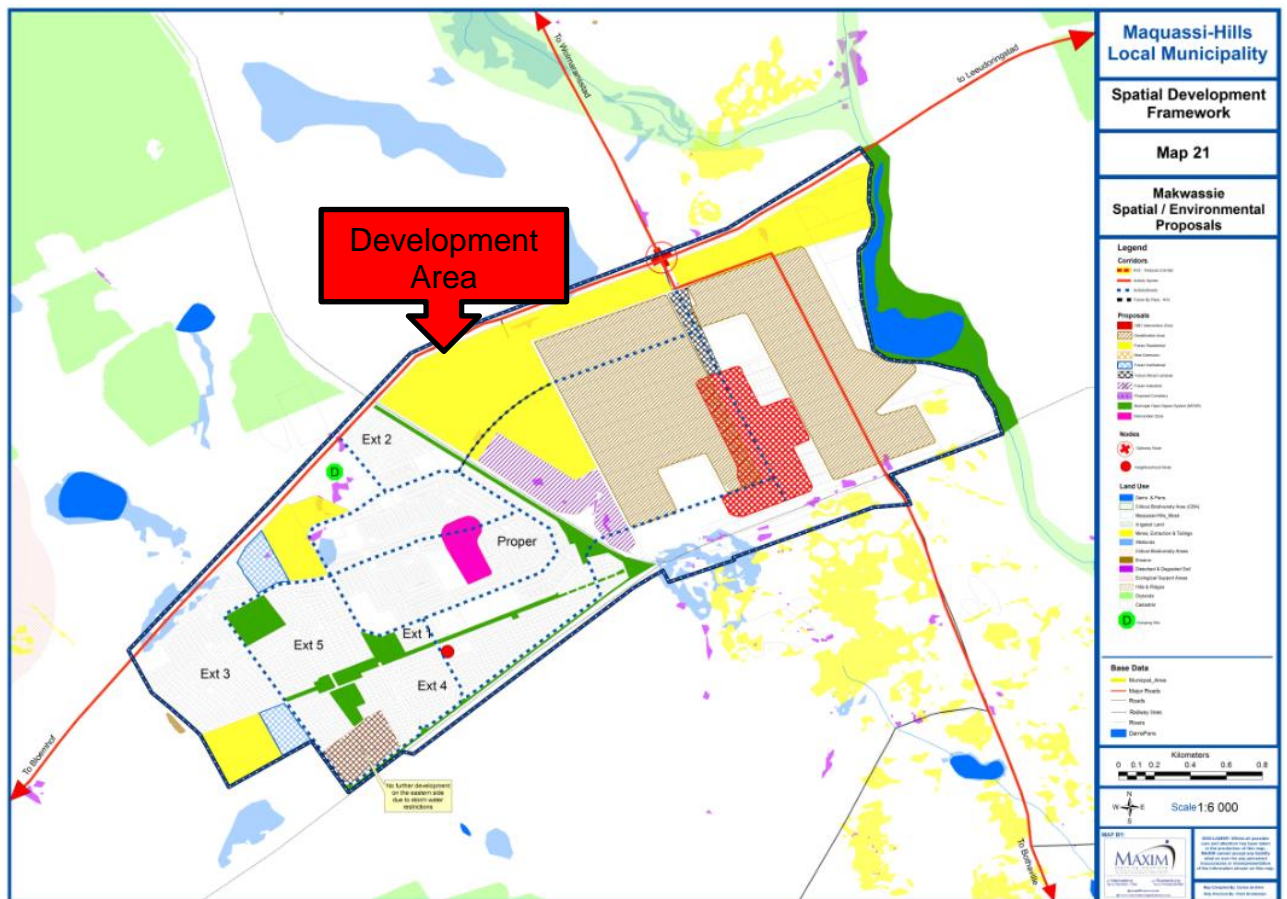
The SDF identified a large number of vacant residential stands within the township area of Makwassie (established as Maquassi) that can be utilized for future residential development. Another option is to densify the current residential stands through

subdivision in order to create a more compact town. The linkage between Makwassie and Lebaleng can be enhanced by the provision of link roads. No further development is proposed on the south-western side of Lebaleng Extension 5 due to storm water restrictions. The current informal houses (140) should be relocated to another area.

The areas that were identified for future residential development were the following:

- The area between Makwassie and Lebaleng (Municipal owned)
- The area north of Lebaleng X5 (Municipal owned)
- The area south of Lebaleng Ext 3

The areas earmarked for future residential development purposes are indicated in yellow on the Makwassie Spatial/ Environmental Proposals map as contained in the Maquassi Hills Local Municipality Spatial Development Framework, 2011 (refer **Map 14**).



**Map 14: Makwassie Spatial / Environmental Proposals**

The total residential needs based on income categories (2010 – 2020) were determined as follows:

**Table 12: Total Residential needs based on income categories (2010 – 2020)**

Housing Type	Categories	%	Makwassie
Subsidized stands	R0 – R3 500	32%	426
Institutional Housing	R3 501 – R7 500	24%	320
Bonded Housing	R7 501 +	44%	586
<b>TOTAL</b>			<b>1332</b>

The Maquassi Hills Local Municipality Spatial Development Framework, 2011 also addressed the issue of Community Residential Units (CRU).

It stated that as far as subsidized housing is concerned provision must also be made for Community Residential Units (CRU's – low cost rental units) for people that already qualified for subsidies in other municipalities or households that don't want to commit themselves to a subsidy now.

In terms of the Maquassi Hills Local Municipality Spatial Development Framework, it was indicated that there is sufficient land for industrial development in Makwassie but that the vacant land adjacent to the railway line will be earmarked for future expansion for industrial development.

The main aim of CRU's is to provide secure stable tenure for lower income persons (below R3500) who are not able to access the private rental and social rental market.

It is specifically for this purpose that the layout plan of the proposed township Lebaleng Extension 6 incorporates a "Residential 2 erf" that can be utilized for either CRU or social housing purposes.

## 6.17 HOUSING NEEDS

According to the North West – Multi Year Housing Development Plan (Review 2014), an estimated 34 803 new households will seek accommodation in the Dr. Kenneth Kaunda District Municipality area resulting in an annual growth in demand of approximately 6 961 units (across the full housing spectrum, including informal and subsidy). The MYHDP also states that under present market conditions, the finance-linked and bonded segment (35.9%) will yield a take-up rate of 2 496 units per annum.

**Table 13: Dr. Kenneth Kaunda District Municipality 5 year Demand**

Income bracket	Housing typology	Total demand (next 5 years)
R0 – R3 500	Subsidy	20 089
R800 – R3 500	CRU	2 232
R3 500 – R7 500	FLISP / GAP & Social	5 102
R7 500 – R15 000	FLISP / GAP & Affordable bonded	3 346
R15 000+	Bonded	4 034
<b>TOTAL</b>		<b>34 803</b>

Source: Table 2.55 – Status Quo Report – Multi Year Housing Development Plan (Review 2014)

The housing demand per housing typology, based on recent housing demand market analysis of the North West Multi Year Housing Development Plan, 2014 for the Dr. Kenneth Kaunda District Municipality, was calculated as follows:

**Table 14: Dr. Kenneth Kaunda District Municipality Spatial Allocation of housing demand**

Income bracket	Housing typology	Total demand (next 5 years)	% of NWP
R0 – R3 500	Subsidy	20 089	19.86
R800 – R3 500	CRU	2 232	19.86
R3 500 – R7 500	FLISP / GAP & Social	5 102	18.75
R7 500 – R15 000	FLISP / GAP & Affordable bonded	3 346	21.68
R15 000+	Bonded	4 034	25.20
<b>TOTAL</b>		<b>34 803</b>	

Source: Table 2.55 – Status Quo Report - Multi Year Housing Development Plan (Review 2014)

In terms of the Housing Sector Plans of the municipalities within the Dr. Kenneth Kaunda District Municipality, the following housing needs were identified:

**Table 15: Housing demand of Municipalities within the Dr. Kenneth Kaunda District Municipality according to Housing Sector Plans**

Municipalities	Number of People	Number of households	% of population in the NWP	5 year housing programme (for subsidised houses)	Backlog / Waiting List	Total of 5 year need & Backlog	% of each LM in the DM's
Maquassi Hills Local Municipality				12308	12782	25090	15.65 %
Matlosana Local Municipality				36595	55737	92332	57.60 %
Tlokwe Local Municipality				14500	14500	29000	18.09 %
Ventersdorp Local Municipality				10243	3636	13859	8.64%
<b>SUB TOTAL</b>	<b>731 555</b>	<b>220 108</b>	<b>19.82%</b>	<b>73646</b>	<b>86635</b>	<b>160281</b>	<b>100%</b>
<b>GRAND TOTAL FOR NORTH WEST PROVINCE</b>	<b>3 691 082</b>	<b>1 143 263</b>	<b>100%</b>	<b>242500</b>	<b>318605</b>	<b>561105</b>	<b>100%</b>

The housing status quo and needs within the primary human settlement nodes in the Maquassi Hills Local Municipality are reflected on the following table:

**Table 16: Housing needs within primary human settlement nodes**

Town	Housing Needs
Boskuil	330
Kgakala	1700
Lebaleng	1996
Leeudoringstad	1306
Makwassie	0
Oersonskraal	127
Rulaganyang	339
Trotsville	26
Tswelelang	3371
Witpoort	0
Wolmaransstad	3587
<b>Total</b>	<b>12782</b>

The estimated housing needs within Maquassi Hills Local Municipality are reflected in the following table:

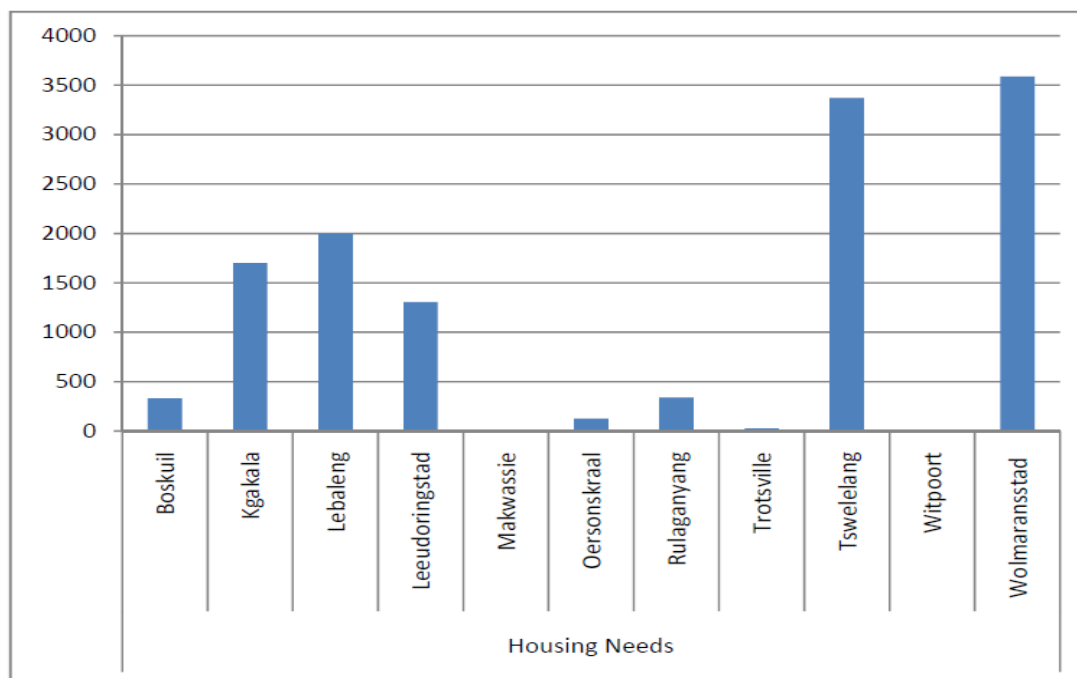
**Table 17: Housing needs according to Housing Sector Plan**

Municipality Maquassi Hills	Housing Needs	2012/13	2013/14	2014/15	2015/16	Total	Average growth %
Boskuil	330	8	8	8	8	362	2.3
Kgakala	1700	39	40	40	41	1860	2.3
Lebaleng	1996	46	47	48	49	2186	2.3
Leeudoringstad	1306	30	30	31	32	1429	2.3
Makwassie	0	0	0	0	0	0	2.3
Oersonskraal	127	2	2	3	3	137	2.3
Rulaganyang	339	8	8	8	8	371	2.3
Trotsville	26	.6	.6	.6	.6	28	2.3
Tswelelang	3371	76	79	81	82	3689	2.3
Witpoort	0	0	0	0	0	0	2.3
Wolmaransstad	3587	82	84	86	88	3927	2.3

From an assessment of the status quo housing provision position that was conducted as part of the Human Settlement Sector Plan (July 2012), some 16 598 housing units were classified as formal; 6 533 housing units as informal and 3 603 housing units as backyard informal. It was also indicated that an estimated 2 930 households resided in informal dwellings / shacks not in backyards e.g. in an informal settlement/squatter settlement.

The following graph illustrates the demand for housing in the various urban complexes.

**Figure 3: Demand for housing per urban complex**



Based on the information above, it is evident that the Maquassi Hills Local Municipality is faced with a vast problem in accommodating people currently residing within backyards or within informal settlements. These people reside in squalid conditions without access to basic services or proper shelter. The Makwassie/Lebaleng urban area is one of the urban areas that have a need for residential erven and where informal occupation of vacant municipal land has taken place due to the non-availability of vacant residential erven for settlement purposes.

In terms of the Human Settlement Sector Plan (2012) of the Maquassi Hills Local Municipality, the following goals and objectives for housing development within the Maquassi Hills Local Municipality were set:

**Table 18: Formulated goals and objectives for Housing**

Formulated goal	Objectives
Spatial integration and consolidation	<ul style="list-style-type: none"> <li>Housing development should be developed preferable in locations of settlements of higher order whilst development in lower order should be selective in order to address urgent needs</li> <li>Housing development should be used as an instrument to integrate the divided urban form.</li> <li>Preference should be given to infill development; development of existing vacant erven; consolidation and densification of urban form.</li> <li>Housing development should be based on integrated development planning.</li> <li>Promote higher density in respect of housing development to ensure the economical utilization of land and services</li> <li>Facilitate the active involvement of all relevant stakeholders in housing development.</li> </ul>
Development of partnerships	<ul style="list-style-type: none"> <li>Housing development should be implemented as a partnership between the local community; private sector; public sector and other stakeholders.</li> <li>Encourage and support individuals and community organizations to fulfill their housing needs.</li> </ul>
Economic development	<ul style="list-style-type: none"> <li>Housing should be provided in areas where the potential for job creation is the highest.</li> </ul>



Access to engineering services and infrastructure	<ul style="list-style-type: none"> <li>• Areas with access to engineering services (spare capacity in terms of bulk services) should be considered as a priority. Level of services being provided should ensure that limited internal services backlogs area being built into the design and service provision.</li> </ul>
Access to amenities and supporting services	<ul style="list-style-type: none"> <li>• The consolidated urban form should be supported by the provision of amenities and other community services such as schools, clinics, police stations, commercial facilities, sport fields, parks, community halls and churches.</li> <li>• Provide community and recreational facilities in residential areas</li> </ul>
Diversification in housing types	<ul style="list-style-type: none"> <li>• Housing provision should provide in line with the existing programmes with an applicable choice of type of housing, alternative building systems, location of new houses on an erf that future extensions will be able to be implemented.</li> </ul>
Special housing needs	<ul style="list-style-type: none"> <li>• Special housing needs such as for the disabled and HIV/AIDS victims should be addressed through integration within the current residential units/neighborhoods.</li> <li>• Houses should be designed in a manner that they could be enlarged.</li> </ul>
Promotion of mixed housing	<ul style="list-style-type: none"> <li>• Housing provision should make provision for optimal mixed development it terms of the existing housing programmes of the Government and high and medium income groups within the community.</li> <li>• Promote the establishment of socially and economically viable communities and safe and healthy conditions to ensure the elimination of slums.</li> </ul>
Protection of the environment	<ul style="list-style-type: none"> <li>• Protection of the environment should receive priority in all housing developments.</li> </ul>
Capacity building and empowerment	<ul style="list-style-type: none"> <li>• The role of woman in housing development should be recognized and promoted.</li> <li>• Promote education and consumer protection in respect of housing development</li> <li>•</li> </ul>
Economic, financial and sustainable development	<ul style="list-style-type: none"> <li>• Housing development should be economically, fiscally, socially and financially affordable and sustainable</li> <li>• Use public money available for housing development in a manner which stimulates private investment in, and the contribution of individuals to, housing development</li> <li>• Promote the effective functioning of the housing market</li> </ul>
Promotion of integrated development planning	<ul style="list-style-type: none"> <li>• Housing development should be based on integrated development planning</li> <li>• Promote racial, social, economic and physical integration in urban and rural areas</li> </ul>
Housing management and administration	<ul style="list-style-type: none"> <li>• Housing development should be administered in a transparent, accountable and equitable manner and uphold the practice of good governance.</li> </ul>

It is against the background of the fore-mentioned goals and objectives that the Maquassi Hills Local Municipality intends establishing a new sustainable human settlement within the Integrated Residential Development Programme (IRDP) and Upgrading of Informal Settlements (UIS) Programme. In order to ensure a proper integrated human settlement, it is imperative to also address the need for social and economic facilities within the new settlement area. For this purpose, consideration should also be given to the Provision of Social and Economic Facilities (PSEF) Programme. These housing programmes entail the following:

**Table 19: Housing Programmes**

Housing programme category	Description of the housing programme
<b>INTEGRATED RESIDENTIAL DEVELOPMENT PROGRAMME (IRDP)</b>	<p>One of the key lessons learnt in the review of the outcomes of housing programmes since 1994 is that, owing to a variety of reasons, low income settlements continued to be located on the urban periphery without the provision of social and economic amenities, as in the Apartheid era. Hence a new Programme has been introduced to facilitate the development of integrated human settlements in well-located areas that provide convenient access to urban amenities, including places of employment. The Programme also aims at creating social cohesion.</p> <p>The Integrated Residential Development Programme (IRDP) provides for the acquisition of land, servicing of stands for a variety of land uses including commercial, recreational, schools and clinics, as well as residential stands for low; middle and high income groups. The land use and income group mix will be based on local planning and needs assessment.</p> <p>The IRDP can be undertaken in phases or in a single phase. The first phase could provide serviced stands, whereas the second phase provides for housing construction for qualifying low income beneficiaries and the sale of stands to persons who for various reasons, don't qualify for subsidies, and for commercial uses.</p>

<p><b>UPGRADING OF INFORMAL SETTLEMENTS (UIS)</b></p>	<p>Informal Settlements are common to most developing countries which undergo a process of rapid urbanization and have limited resources to address the housing needs of all its citizens and in particular the poor, who flock to cities in search of a better life and future for their families.</p> <p>Hence the Informal Settlement Upgrading Programme is one of the most important programmes of government which seeks to upgrade the living conditions of millions of poor people by providing secure tenure and access to basic services and housing.</p> <p>Experience has shown that housing access to basic services, secure tenure and a house provides a springboard to households to improve their social and economic circumstances.</p> <p>To ensure that fragile community survival networks are not compromised and to empower communities to take charge of their own settlements, one of the basic tenets of the programme is that beneficiary communities must be involved throughout the project cycle. All members of the community, also those who do not qualify for subsidies, are included.</p> <p>The Programme therefore aims to bring about social cohesion, stability and security in integrated developments and to create jobs and economic well being for communities which did not previously have access to land and business services, formal housing and social and economic amenities.</p>
<p><b>PROVISION OF SOCIAL AND ECONOMIC FACILITIES (PSEF)</b></p>	<p>Owing to backlogs in existing settlements and the need to prioritize those, authorities responsible for the provision of social and economic facilities, such as schools, clinics, community halls, recreational facilities and trading facilities, have not been able to provide facilities in most new housing projects.</p> <p>In line with the policy to establish quality, sustainable human settlements, a programme has been introduced to fund primary social and economic amenities, where funding is not available from other Data Sources.</p>

The development of the proposed new integrated human settlement of Lebaleng Extension 6 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.

## **6.18 SPATIAL PLANNING AND LAND USE MANAGEMENT ACT, 2013 (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 the principle would be on integration or development of rural and/or traditional settlements and urban integration strategies. This development specifically aims at redressing past spatial imbalances in combatting the past planning principles of providing low income residential areas on the periphery of urban areas. This development specifically entails the integration of the urban areas of Makwassie and Lebaleng and addressing past spatial imbalances.
  - (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 Maquassi Hills Local Municipality Spatial Development Framework, 2011, 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 also have at its core the purpose of eradicating informal settlements that have taken place due to the non-availability of vacant residential erven for occupation purposes.
  - (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 portions of land within the local municipal area, through the Spatial Development Framework, that will redress access to land by previously disadvantaged people. The proposed development will not only avail land for residential development purposes but will also provide land for the necessary social facilities. It is envisaged that the residential development will predominantly focus on the lower income market segment and the alleviation of poverty through the provision of subsidized and social housing opportunities or community

residential units. These subsidized housing programmes are specifically aimed at redressing access to land by disadvantaged communities and persons.

- (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 Maquassi Hills Local Municipality municipal area are governed by a wall-to-wall land use management system. The proposed land uses in the township area of Lebaleng Extension 6 will be regulated by the Maquassi Hills Land Use Management Scheme, 2007. 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 Maquassi Hills Housing Sector Plan the need for housing was estimated to total 2186 housing units in 2016. The township establishment process has at its core the intent to create additional residential erven that can, after proclamation of the township area, be alienated to the respective beneficiaries thereof. This new township development will afford the landless community of Lebaleng the opportunity to access land and secure tenure thereof whilst similarly addressing the need for informal settlement eradication.

- (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 Maquassi Hills Local Municipality has sufficient fiscal, institutional and administrative

capacity and resources to administer the development. The Maquassi Hills Local Municipality will ensure that the development complies with the requirements contained in the Maquassi Hills Land Use Management Scheme, 2007 and the Maquassi Hills Local Municipality Spatial Development Framework, 2011. In this regard it is pertinent to also note that the fiscal capacity of the Maquassi Hills Local Municipality is also enhanced through the assistance of the Department of Local Government and Human Settlement who is currently funding this project

**(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 Maquassi Land Use Management Scheme, 2007 and the Maquassi Hills Local Municipality Spatial Development Framework, 2011. The agricultural value of the concerned portion is negligible specifically due to its size and location within an already existing urban area.

**(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 indeed 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.

The township applicant appointed a qualified independent Environmental Practitioner to conduct the necessary Environmental Impact Assessment and public participation process as prescribed in terms of the fore-mentioned Act and Regulations.

The development of this township area as well as the activities conducted from the erven in the township area during the operational phase will be subject to the conditions imposed by the Department and set out in the relevant Environmental Authorisation.

**(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 (subject to the stated upgrades required in respect of the bulk supply of water from the Sedibeng Water plant). The infrastructure details set out in Section 5 also prove that the Maquassi Hills 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**

The area between Makwassie and Lebaleng was specifically earmarked for future residential development purposes in terms of the Maquassi Hills Local Municipality Spatial Development Framework, 2011 to limit further urban sprawl of the built up urban area of Makwassie / Lebaleng 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 of urban growth through planned extensions, infill and redevelopment strategies. In this regard it should be noted that the proposed township area of Lebaleng Extension 6 is located within the demarcated urban edge as set out in the Maquassi Hills Local Municipality Spatial Development Framework, 2011. This township further entails the development of land between the urban areas of Lebaleng and Makwassie that has always been unutilized and serves no purpose for the local community. The local municipality is aware of the need to integrate urban settlements, with a view to reduce travel distances to the areas of employment opportunities.

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 maximum 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 closer to the economic activities of Makwassie.

The development of the proposed township Lebaleng Extension 6 will provide much needed housing opportunities to people currently residing in squalid conditions.

**(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,

electricity 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, but will actually address the social, economic and environmental impacts experienced in the area specifically by the occupation of vacant municipal land by the landless community of Lebaleng resulting in a large number of people residing in squalid conditions without access to basic services.

The opinion is held that the approval of this township establishment application by the Maquassi Hills Municipal Planning Tribunal will not give rise to any negative financial, social, economic or environmental impacts as a result of the development being authorised.

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

This township establishment application will be processed in accordance with both the prescriptions of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986) and the Maquassi Hills Local Municipality Municipal By-law on Spatial Planning and Land Use Management which prescribes in detail the township establishment 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 proper housing for the most vulnerable people i.e. people living in sub-standard housing and in squalid conditions without access to basic services.



- (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 Maquassi Hills 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 Maquassi Hills Land Use Management Scheme, 2007 in terms of applicable legislation following the opening of the required township register. This land use management scheme will effectively regulate the land uses to be established within this township 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 fore-mentioned consultation, it should be noted that this application for township establishment 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. Kenneth Kaunda District Municipality
  - ✧ Department of Minerals Resources
  - ✧ Department of Agriculture, Forestry & Fisheries (DAFF)
  - ✧ Department of Water and Sanitation
  - ✧ Department of Local Government and Human Settlements
  - ✧ Department of Education
  - ✧ Department of Health
  - ✧ South African Post Office
  - ✧ Transnet Freight Rail
  - ✧ South African Heritage Resources Agency (SAHRA)
  - ✧ South African National Roads Agency Limited (SANRAL)
  - ✧ Sedibeng Water

- ✧ Department Rural, Environment and Agricultural Development (READ)

**(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 for township establishment, the further processes in finalizing the township establishment process will be governed by the timeframes set out in the Town Planning and Townships Ordinance, 1986 as well as the Maquassi Hills Local Municipality Municipal 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 provide 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 township establishment application includes the following:

- The application in respect of the establishment of the proposed township Lebaleng Extension 6 will be advertised in accordance with Section 92(1)(a) of the Maquassi Hills Local Municipality Municipal By-Law on Spatial Planning and Land Use Management and Section 108(1)(a), Regulation 26(1) and Annexure 16 of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986) in the Overvaal Nuus on 10 and 17 November 2017 as well as in the North West Provincial Gazette on 14 and 21 November 2017. Objectors will be afforded a period of 30 days from 14 November 2017 to submit objections or comments in respect of the proposed township area to the Municipal Manager and the authorised agent.
- The application will also, in accordance with the prescriptions of Section 93(1)(c) of the Maquassi Hills Local Municipality Municipal By-Law on Spatial Planning and Land Use Management read with Section 108(1)(b) of the Town Planning and Townships Ordinance,

1986 (Ordinance 15 of 1986) be referred to the following external organizations / departments for comments or objections:

- ✘ Department of Public Works and Roads
- ✘ Openseve (Telkom SA Limited)
- ✘ Eskom
- ✘ Dr. Kenneth Kaunda District Municipality
- ✘ Department of Minerals Resources (DMR)
- ✘ Department of Agriculture, Forestry & Fisheries (DAFF)
- ✘ Department of Water and Sanitation
- ✘ Department of Local Government and Human Settlements
- ✘ Department of Education
- ✘ Department of Health
- ✘ South African Post Office
- ✘ Transnet Freight Rail
- ✘ South African Heritage Resources Agency (SAHRA)
- ✘ South African National Roads Agency Limited (SANRAL)
- ✘ Sedibeng Water
- ✘ Department Rural, Environment and Agricultural Development (READ)

The fore-mentioned organizations / departments will be afforded a period of 60 days to comment in this matter in accordance with the prescriptions of Section 108 (1) of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986) read with paragraph I of Schedule 1 of the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013).

- In addition to the fore-mentioned notices, notices will also be served on all adjacent property owners in accordance with the prescriptions of Section 93(1)(c) of the Maquassi Hills Local Municipality Municipal 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 95(1)(a) of the Maquassi Hills Local Municipality Municipal By-law 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 Maquassi Hills Local Municipality Municipal By-Law on Spatial Planning and Land Use Management clearly sets out the

process to be followed during the establishment of a 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 or object against this development.

## 6.19 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 the application for township establishment is to provide sufficient erven within the Makwassie / Lebaleng urban complex to address the short term need for residential erven in order to address existing informal settlement of land and avoid further informal settlement from taking place whilst similarly providing vacant erven to allow for orderly future settlement.
- The proposed development area is located directly adjacent to existing township areas and constitutes the logic extension of the existing built-up urban area of Makwassie and Lebaleng and constitutes infill development.
- The proposed township area is easily accessible due to its location adjacent to the existing township area of Makwassie with access to the township area being provided from Selborne Street which in turn links onto Road 565 (R502) and which renders the development area easily accessible.
- The proposed township area of Lebaleng Extension 6 will also be linked to the economic activities offered within the Makwassie urban area through the existing road network of Makwassie which links with the proposed road network of the proposed township area.
- The layout plan that was compiled in respect of the township area comprehensively addresses the issues identified during the pre-planning studies relating inter alia to the following:
  - Sedibeng Water pipeline servitude traversing the proposed development area is adequately protected;
  - Existing reservoir infrastructure of Sedibeng Water;
  - Existing power lines of Eskom;
  - Existing stormwater drainage channel that traverses the development area;
  - The existing infrastructure of Openserve (cable route between Lebaleng and Makwassie exchange);
  - Route of the water pipelines between the Sedibeng and Lebaleng reservoirs;
  - Geotechnical restrictions encountered on site;

- Topographical features encountered on site;
- Accommodating the existing infrastructure of the Maquassi Hills Local Municipality and the Sheep Shearers on proposed “Industrial 1” erven that can be further developed in future.
- Incorporating the road network with that of the adjacent township areas;
- Incorporating the prescribed lines of no access and building restriction areas;
- Incorporating the results of the geotechnical investigation which indicated that the development area is suitable for township establishment purposes;
- 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**