

# MOTIVATION REPORT

11 August 2021

Committed to  
**Maximum** Impact  
in finding  
**Planning & Development**

## PROPOSED SUBVISION, TOWNSHIP ESTABLISHMENT AND REMOVAL OF RESTRICTIVE TITLE CONDITION ON:

- A Portion of the Remaining  
Extent of Portion 98 of the farm  
Biesjesvallei 149, Registration  
Division I.O., North West  
Province

TO CREATE ITEKENG  
EXTENSION 3 COMPRISING  
ERVEN 937 TO 2349

- Spatial Planning
- Development Management
- Environmental Management

UNIT 35 CORPUS NOVEM OFFICE PARK  
35 DR. YUSUF DADOO AVENUE  
WILKOPPIES 2571  
P.O. BOX 6848  
FLAMWOOD  
2572  
TEL: (018) 468 6366  
FAX: (018) 468 6378

**MAXIM**  
planning solutions

Accredited Town and Regional Planners  
Reg no. 2002/017393/07

Directors: D.J. Bos (Prof.) (CEO), C. Grobbelaar, K. Raubenheimer (CFO / Company Secretary), J.G. Benadé,

# MOTIVATION REPORT

***PROPOSED SUBDIVISION, TOWNSHIP ESTABLISHMENT AND REMOVAL OF RESTRICTIVE TITLE CONDITION ON A PORTION OF THE REMAINING EXTENT OF PORTION 98 OF THE FARM BIESJESVALLEI 149, REGISTRATION DIVISION I.O., NORTH WEST PROVINCE, IN TERMS OF SECTIONS 71(2), 59(1) AND 67(2) RESPECTIVELY OF THE DITSOBOTLA BY-LAW ON SPATIAL PLANNING AND LAND USE MANAGEMENT (2017), READ WITH THE SPATIAL PLANNING AND LAND USE MANAGEMENT ACT, 2013 (ACT 16 OF 2013) TO CREATE ITEKENG EXTENSION 3 COMPRISING ERVEN 937 to 2349***

## Contents

.....	<b>1</b>
<b>List of Tables</b> .....	<b>4</b>
<b>List of Figures</b> .....	<b>4</b>
<b>List of Maps</b> .....	<b>4</b>
<b>List of Photos</b> .....	<b>5</b>
<b>CHAPTER 1: INTRODUCTION</b> .....	<b>6</b>
<b>1.1 INTRODUCTION</b> .....	<b>6</b>
<b>1.2 BACKGROUND OF DITSOBOTLA LOCAL MUNICIPALITY</b> .....	<b>8</b>
1.2.1 REGIONAL LOCALITY .....	8
1.2.2 DEMOGRAPHICS .....	8
<b>1.3 INTEGRATED HUMAN SETTLEMENT PLANNING</b> .....	<b>11</b>
<b>1.4 APPLICATION</b> .....	<b>13</b>
<b>1.5 PUBLIC PARTICIPATION</b> .....	<b>13</b>
<b>1.6 STUDY AREA DELINEATION</b> .....	<b>14</b>
<b>1.7 REPORT OUTLINE</b> .....	<b>15</b>
<b>CHAPTER 2: PARTICULARS OF THE DEVELOPMENT AREA</b> .....	<b>16</b>
<b>2.1 LOCALITY</b> .....	<b>16</b>
<b>2.2 SG DIAGRAM</b> .....	<b>16</b>
<b>2.3 OWNER</b> .....	<b>17</b>
<b>2.4 BONDHOLDER</b> .....	<b>17</b>
<b>2.5 AREA</b> .....	<b>17</b>
<b>2.6 EXISTING LAND USE AND ZONING</b> .....	<b>17</b>
2.6.1 CURRENT LAND USES .....	17
2.6.2 SURROUNDING LAND USES.....	19
2.6.3 CURRENT ZONING .....	19
<b>2.7 MINERAL RIGHTS</b> .....	<b>20</b>
<b>2.8 RESTRICTIVE TITLE CONDITIONS</b> .....	<b>20</b>
<b>2.9 SERVITUDES</b> .....	<b>22</b>
<b>CHAPTER 3: PHYSICAL ASPECTS</b> .....	<b>23</b>
<b>3.1 TOPOGRAPHY &amp; DRAINAGE</b> .....	<b>23</b>
<b>3.2 CLIMATE</b> .....	<b>25</b>
<b>3.3 GROUNDWATER SYSTEM / DRAINAGE</b> .....	<b>25</b>
<b>3.4 WETLANDS AND PANS</b> .....	<b>26</b>
<b>3.5 VEGETATION</b> .....	<b>26</b>
<b>3.6 CULTURAL AND HERITAGE FEATURES</b> .....	<b>26</b>
<b>3.7 GROUNDWATER</b> .....	<b>26</b>
<b>3.8 GEOLOGY</b> .....	<b>26</b>
3.8.1 LOCAL GEOLOGY .....	27
3.8.2 DRAINAGE.....	28
3.8.3 CONCLUSIONS .....	29
<b>3.9 ENVIRONMENTAL IMPACT ASSESSMENT</b> .....	<b>29</b>
<b>CHAPTER 4: PROPOSED DEVELOPMENT</b> .....	<b>31</b>
<b>4.1 LAND USES</b> .....	<b>31</b>

4.1.1	RESIDENTIAL 1A.....	33
4.1.2	BUSINESS 3.....	37
4.1.3	INSTITUTIONAL.....	38
4.1.4	EDUCATIONAL.....	40
4.1.5	MUNICIPAL.....	41
4.1.6	GOVERNMENT.....	42
4.1.7	PUBLIC OPEN SPACE.....	42
4.1.8	PUBLIC ROAD.....	43
4.2	FACTORS INFLUENCING THE LAYOUT PLAN.....	43
4.3	ACCESS.....	45
4.3.1	STUDY AREA.....	45
4.3.2	TRAFFIC FLOWS & TRIP GENERATION.....	46
4.3.3	CAPACITY ANALYSIS.....	47
4.3.4	CONCLUSION.....	48
<b>CHAPTER 5: PROVISION OF ENGINEERING SERVICES.....</b>		<b>49</b>
5.1	INTRODUCTION.....	49
5.2	CIVIL ENGINEERING SERVICES.....	49
5.2.1	WATER.....	49
5.2.2	SANITATION – STATUS QUO.....	52
5.2.3	STORMWATER.....	54
5.2.4	SOLID WASTE.....	54
5.3	ELECTRICAL ENGINEERING SERVICES.....	55
5.3.1	DEMAND ESTIMATION.....	55
5.3.2	BULK SUPPLY.....	56
<b>CHAPTER 6: MOTIVATION.....</b>		<b>57</b>
6.1	INTRODUCTION.....	57
6.2	NATIONAL DEVELOPMENT PLAN: VISION 2030.....	58
6.3	CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA (ACT 108 OF 1996).....	59
6.4	NATIONAL HOUSING CODE (2006).....	60
6.5	A COMPREHESIVE PLAN FOR THE DEVELOPMENT OF SUSTAINABLE HUMAN SETTLEMENT (BNG STRATEGY).....	60
6.6	URBAN (UDF) AND RURAL DEVELOPMENT (RDF) FRAMEWORKS (1997).....	62
6.7	WHITE PAPER ON LOCAL GOVERNMENT (1998).....	62
6.8	MUNICIPAL DEMARCATION ACT, 1998 (ACT 27 OF 1998).....	63
6.9	MUNICIPAL SYSTEMS ACT, 2000 (ACT 32 OF 2000).....	63
6.10	NATIONAL HOUSING ACT, 1997 (ACT 107 OF 1997).....	64
6.11	WHITE PAPER ON WISE LAND USE (2001).....	65
6.12	MILLENNIUM DEVELOPMENT GOALS (MDG).....	65
6.13	NATIONAL SPATIAL DEVELOPMENT PERSPECTIVE (2006).....	66
6.14	NORTH WEST PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK, 2016..	67
6.15	NGAKA MODIRI MOLEMA DISTRICT SPATIAL DEVELOPMENT FRAMEWORK, 2019 - 2024.....	68
6.16	DITSOBOTLA LOCAL MUNICIPALITY INTEGRATED DEVELOPMENT PLAN 2020-2021.....	69

<b>6.17</b>	<b>DITSOBOTLA LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK, 2020 - 2025 .....</b>	<b>69</b>
<b>6.18</b>	<b>OUTCOME 8 – 2014-2019 MEDIUM TERM STRATEGIC FRAMEWORK (MTSF) 70</b>	
<b>6.19</b>	<b>SPATIAL PLANNING AND LAND USE MANAGEMENT ACT, 2013 (SPLUMA) DEVELOPMENT PRINCIPLES .....</b>	<b>71</b>
<b>6.20</b>	<b>GENERAL.....</b>	<b>78</b>

**List of Tables**

TABLE 1: POPULATION GROWTH FOR TOWNS IN DITSOBOTLA LM.....	9
TABLE 2: HOUSING OVERVIEW - DITSOBOTLA LM.....	11
TABLE 3: OWNERSHIP DETAILS .....	17
TABLE 4: PROPOSED ZONINGS AND ERVENS – ITEKENG EXTENSION 3 .....	33
TABLE 5: "RESIDENTIAL 1A" DEVELOPMENT PARAMETERS .....	36
TABLE 6: "BUSINESS 3" DEVELOPMENT PARAMETERS .....	37
TABLE 7: CSIR GUIDELINE FOR PLACE OF WORSHIP.....	39
TABLE 8: "INSTITUTIONAL" DEVELOPMENT PARAMETERS .....	39
TABLE 9: CSIR GUIDELINE FOR PLACE OF WORSHIP.....	40
TABLE 10: "EDUCATIONAL" DEVELOPMENT PARAMETERS.....	41
TABLE 11: "GOVERNMENT" DEVELOPMENT PARAMETERS .....	42
TABLE 12: "PUBLIC OPEN SPACE" DEVELOPMENT PARAMETERS .....	42
TABLE 13: AM PEAK HOUR TRIP GENERATION .....	46
TABLE 14: PM PEAK HOUR TRIP GENERATION .....	46
TABLE 15: MODAL SPLIT AM & PM PEAK HOUR* .....	47
TABLE 16: WATER DEMAND (DEVELOPED AREAS) .....	50
TABLE 17: WATER DEMAND (DEVELOPING AREA).....	51
TABLE 18: STORAGE CALCULATION (SUITABLE OPTION TO BE DECIDED ON).....	52
TABLE 19: PEAK FLOWS - WATER .....	52
TABLE 20: SEWER DEMAND (DEVELOPED AREAS).....	53
TABLE 21: SEWER DEMAND (DEVELOPING AREA) .....	53
TABLE 22: PEAK FLOWS (SANITATION) .....	54
TABLE 23: PROJECTED VOLUME OF DOMESTIC WASTE .....	55
TABLE 24: MAXIMUM DEMAND ESTIMATION (ELECTRICAL).....	55

**List of Figures**

FIGURE 1: AVERAGE HOUSEHOLD INCOME PER ANNUM - DITSOBOTLA LM.....	9
FIGURE 2: UNEMPLOYMENT RATE - DITSOBOTLA LM .....	10
FIGURE 3: DWELLING TYPES - DITSOBOTLA LM.....	11
FIGURE 4: INCOME DIVIDE / NEED FOR ALTERNATIVE SOLUTIONS .....	35
FIGURE 5: SCHEMATIC PRESENTATION OF AFFORDABLE BONDED HOUSING .....	36
FIGURE 6: PROPOSED LAYOUT – INTERSECTION 2.....	47
FIGURE 7: EXISTING AND PROPOSED LAYOUT: INTERSECTION 3 .....	48

**List of Maps**

MAP 1: INITIAL DRAFT LAYOUT PLAN – ITEKENG EXTENSION 3 (COMPILED 2015).....	6
MAP 2: ORIENTATION MAP: ITEKENG EXTENSION 3 .....	8
MAP 3: LOCALITY MAP OF PARENT FARM AND APPLICATION SITE.....	15
MAP 4: LOCALITY MAP .....	16



MAP 5: EXISTING FORMAL AND INFORMAL DWELLING UNITS ON SITE ..... 18  
MAP 6: SURROUNDING LAND USES ..... 19  
MAP 7: LOCALITY OF PROPOSED SEWER LINE SERVITUDE ..... 22  
MAP 8: AERIAL PHOTOGRAPH OF APPLICATION SITE ..... 24  
MAP 9: TOPOGRAPHY AND DRAINAGE ..... 25  
MAP 10: ENGINEERING GEOLOGICAL ZONE MAP ..... 28  
MAP 11: ITEKENG EXTENSION 3 CONCEPTUAL LAYOUT PLAN ..... 32  
MAP 9: DITSOBOTLA LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK ITEKENG PROPOSALS MAP ..... 70

**List of Photos**

PHOTO 1: INFORMAL HOUSING ON SITE ..... 18  
PHOTO 2: PHOTO OF P52 ROAD ..... 45

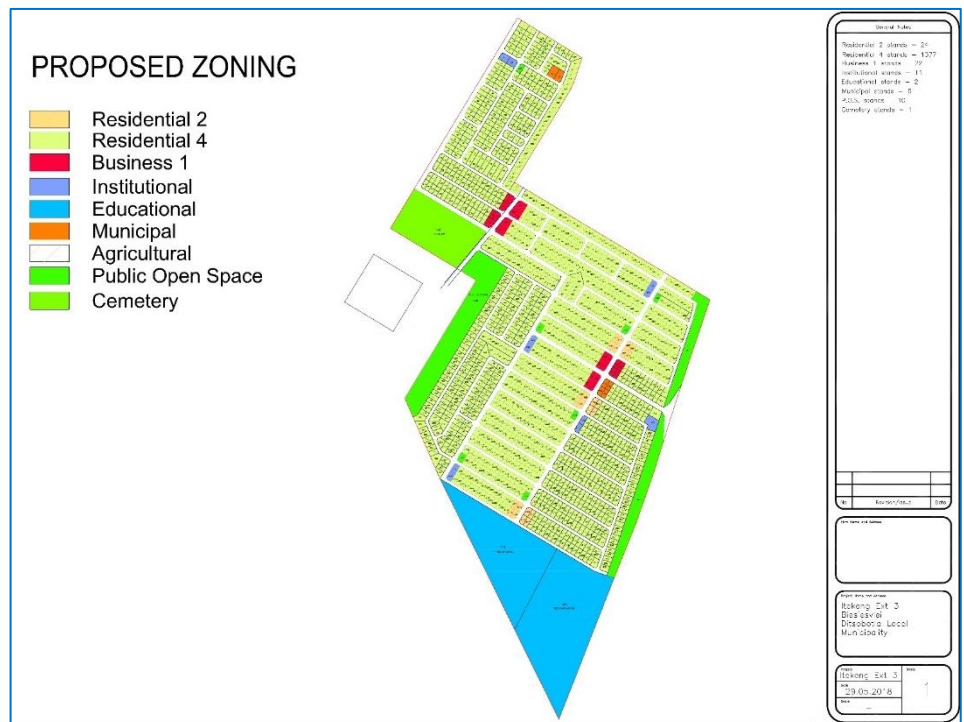


# CHAPTER 1: INTRODUCTION

## 1.1 INTRODUCTION

Koot Raubenheimer (ID No. 700305 5192 089) of the company Maxim Planning Solutions (Pty) Ltd (2002/017393/07) was appointed by the Ditsobotla Local Municipality (NW384) to attend to the establishment of the proposed township area of Itekeng Extension 3, comprising a total of 1 413 erven, on a portion of the Remaining Extent of Portion 98 of the farm Biesjesvallei 149, Registration Division I.O., North West Province. The project is two-fold in that it aims to formalise existing informal housing on the application site and establish new erven for future housing projects. The project constitutes a collaboration between the Department of Human Settlements, King and Associates (as Programme Management Unit (PMU) of the Department of Human Settlements) and the Ditsobotla Local Municipality to create a formal neighbourhood through a proper township establishment process to allow for the co-ordinated installation of services and the transfer of erven to the beneficiaries thereof.

The process in respect of the establishment of the proposed township area of Itekeng Extension 3 already commenced during 2015 when the Itekeng urban area was faced with civil unrest resulting from the lack of vacant erven to accommodate the landless community of Itekeng. In an attempt to calm the civil unrest and as an emergency measure to address the plight of the landless community of Itekeng, the Ditsobotla Local Municipality compiled a layout plan in respect of the area located south of the existing urban area of Itekeng and subsequently commissioned the services of a land surveyor to commence with the pegging of the erven. The draft layout plan compiled in respect of the proposed development area by the Ditsobotla Local Municipality made provision for 1453 erven.



Map 1: Initial draft layout plan – Itekeng Extension 3 (compiled 2015)

The land surveyor pegged 1053 erven but could not survey the remaining 400 erven due to financial constraints. The process of establishing the proposed township area of Itekeng Extension 3 was however limited to the layout planning and pegging of the erven as well as the authorisation of the proposed development in terms of the National Environmental Management Act, 1998 (Act 107 of 1998). Maxim Planning Solutions (Pty) Ltd was subsequently commissioned by the Department Human Settlements through its Programme Management Unit (PMU) to assist the Ditsobotla Local Municipality (NW384) with the statutory township establishment processes to allow for the proclamation of the township area of Itekeng Extension 3 as well as the ultimate transfer of the erven to the beneficiaries thereof.

As integral part of the formal establishment of the township area of Itekeng Extension 3, Maxim Planning Solutions (Pty) Ltd, in consultation with the Project Steering Committee and Technical Committee established to oversee the township establishment process, attended to the amendment of the initial layout plan to address issues relating to the establishment of a proper “buffer” area between the development and the existing sewer oxidation ponds located directly west of the proposed development area. The limited “buffer” area provided on the initial layout plan had to be addressed and resulted in the “loss” of some of the previously surveyed residential erven as same were deemed not suitable for residential occupation purposes.

The proposed township will form an extension of the existing urban area of Itekeng and will be located south and west of the township area of Itekeng Extension 2 and will integrate well with the surrounding land uses.

The proposed township is residential in nature in order to provide decent housing opportunities for the existing informal dwellers on site. Upon completion, the proposed township will integrate well with the existing urban area of Itekeng located to the north of the development area and will function as an integrated human settlement.

Upon completion, the township will comprise of Erven 937 to 2349 that will be zoned as follows:

- 1391 erven zoned “Residential 1A”;
- 5 erven zoned “Business 3”;
- 1 erf zoned “Business 3” (including a taxi facility as well as other uses as approved by the Local Authority);
- 4 erven zoned “Educational”;
- 3 erven zoned “Institutional”;
- 1 erf zoned “Municipal”;
- 2 erven zoned “Government”;
- 6 erven zoned “Public Open Space”; and
- streets to be zoned “Public Road”.

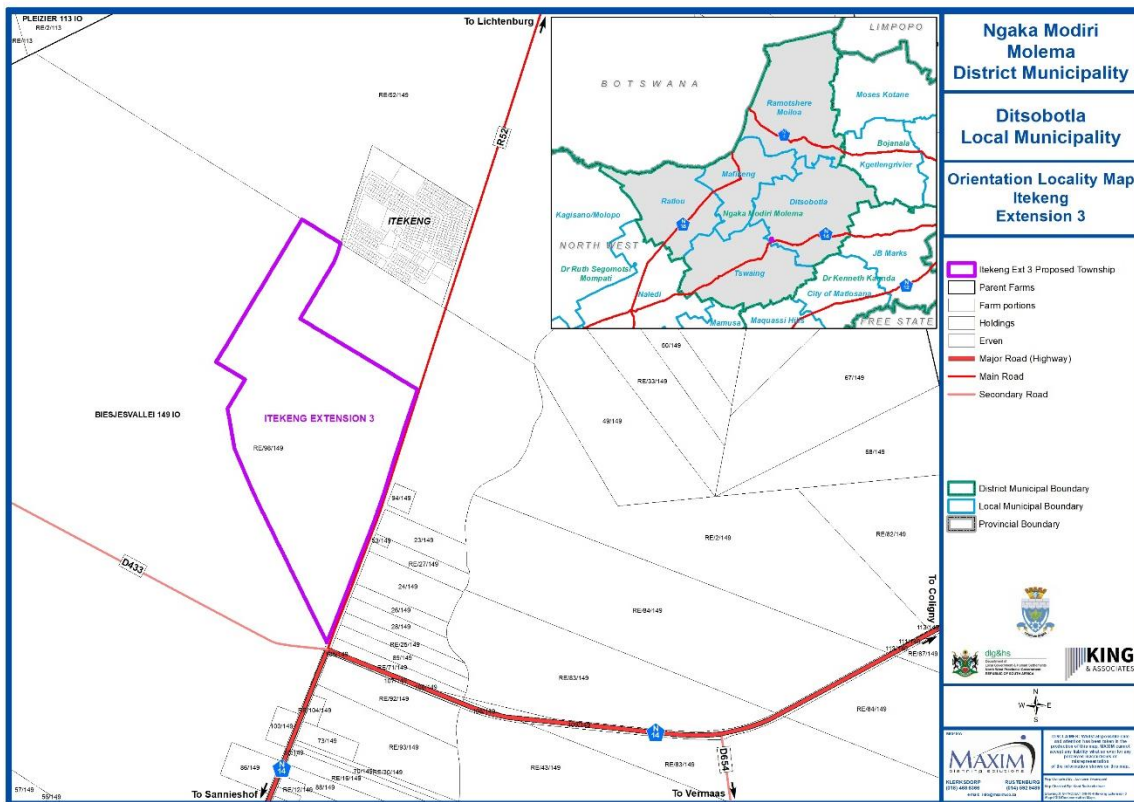


## 1.2 BACKGROUND OF DITSOBOTLA LOCAL MUNICIPALITY

### 1.2.1 REGIONAL LOCALITY

The Ditsobotla Local Municipality (NW 384) is in the North West Province of South Africa. The municipality forms part of the Ngaka Modiri Molema District. As one of the five local municipalities in this district, it has three major towns namely Biesiesvlei, Coligny and Lichtenburg. The Ditsobotla Local Municipality is centrally located within the province and is strategic in that it is transversed by the N14 and R503 which connects to Mahikeng. The municipality is made up of numerous small towns and rural settlements, mainly located in the southern half of the municipality and along the N14. The municipality is largely rural in nature, but also features strong small towns. The municipality comprises a total area of 6465km<sup>2</sup>.

Map 2: Orientation Map: Itekeng Extension 3



### 1.2.2 DEMOGRAPHICS

#### 1.2.2.1 Population Figures

Ditsobotla LM is home to approximately 181 865 people. The total population of Itekeng is estimated at 5 626 people (StatsSA 2011 Census information) with the number of households estimated at 1367. The average household size is 4.1 people.

According to the latest Ditsobotla Local Municipality Spatial Development Framework, 2020 – 2025, the estimated population growth for the main towns in the Municipality is as follows:

**Table 1: Population growth for towns in Ditsobotla LM**

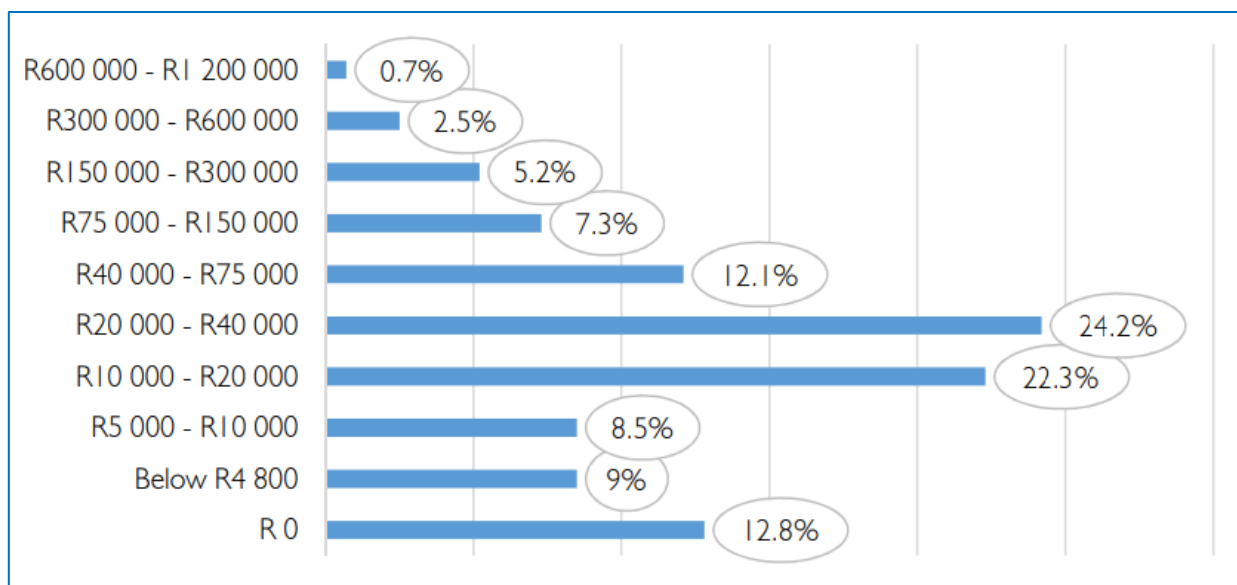
Town	Pressure	2011	2025	2030	2050
Itekeng	High	5 651	7 018	7 506	8 838
Coligny	High	17 635	23 262	25 271	30 566
Lichtenburg	Extreme	46 229	66 838	74 198	94 179
Itsoseng	Extreme	24 051	37 145	41 821	54 585

From the table above it is clear that Itekeng experiences High population growth and that the population is expected to grow from approximately 7 018 people in 2025 to approximately 8 838 people in 2050.

The population is regarded as youthful with 73% of the municipal population falling within the working group population (aged 15 – 64). According to the Community Survey 2016, the gender structure in Ditsobotla is male dominated with the male/female ratio of 51:49. The male population is 93 421 compared to the female figure of 88 444 people. This figure is similar to that of the North West Province but slightly different from that of Ngaka Modiri Molema district area, which reveals a male/female ration of 49:51.

### 1.2.2.2 Economic Overview

As seen in the figure below, approximately 13% of the households in Ditsobotla LM have no income. The majority of households earn in the range of R10 000 – R20 000 and R20 000 - R40 000 per annum.



**Figure 1: Average household income per annum - Ditsobotla LM**

In terms of housing provision, the following three monthly income ranges are used:

- R0 – R3 500 (qualify for government subsidy and CRU units)
- R3 500 – R7 500 (qualify for social housing)
- R7 500 and higher (qualify for bonded houses)

Given the information provided in Figure 1, approximately 77% of the population qualify for government subsidised housing. Available statistics indicate that Ngaka Modiri Molema District and Ditsobotla Municipality have employment rates of 62% and 72% of the economically active population being employed respectively, while 38% and 28% of the economic active population is respectively unemployed (Global Insight 2013).

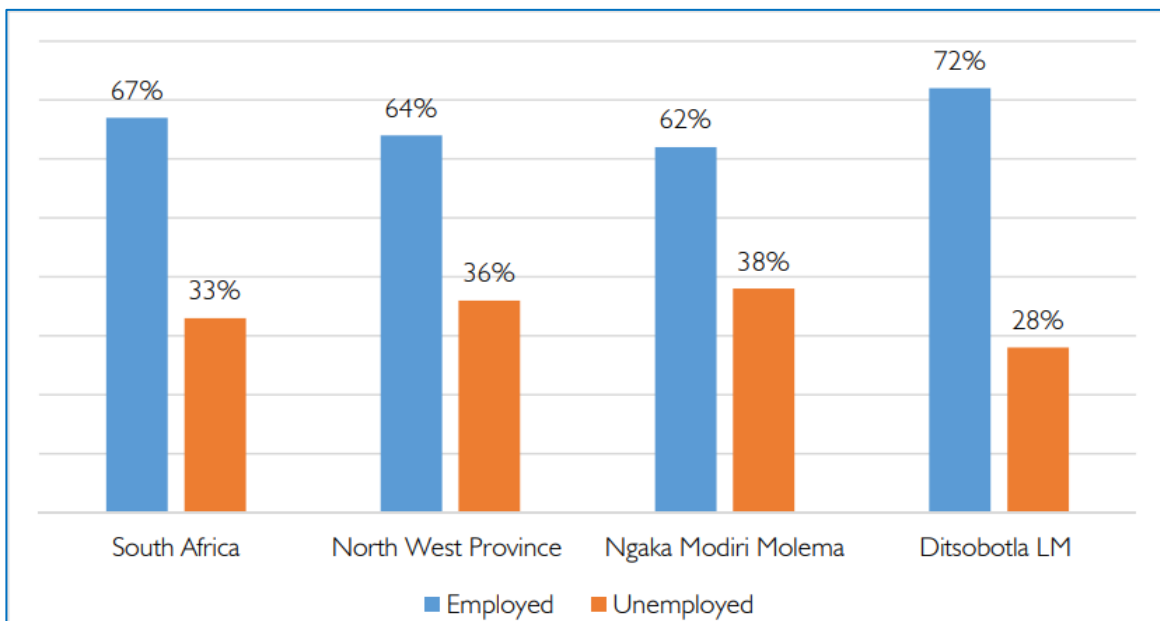


Figure 2: Unemployment rate - Ditsobotla LM

### 1.2.2.3 Housing Profile

Between the period 2011 and 2016, the number of people with access to formal housing has increased remarkably, partly due to intensive rollout of government’s low cost housing programme for the poor. The formal dwellings increased from 33 025 to 43 577 and traditional structures from 3 548 to 4 266 during this period, as can be seen overleaf:

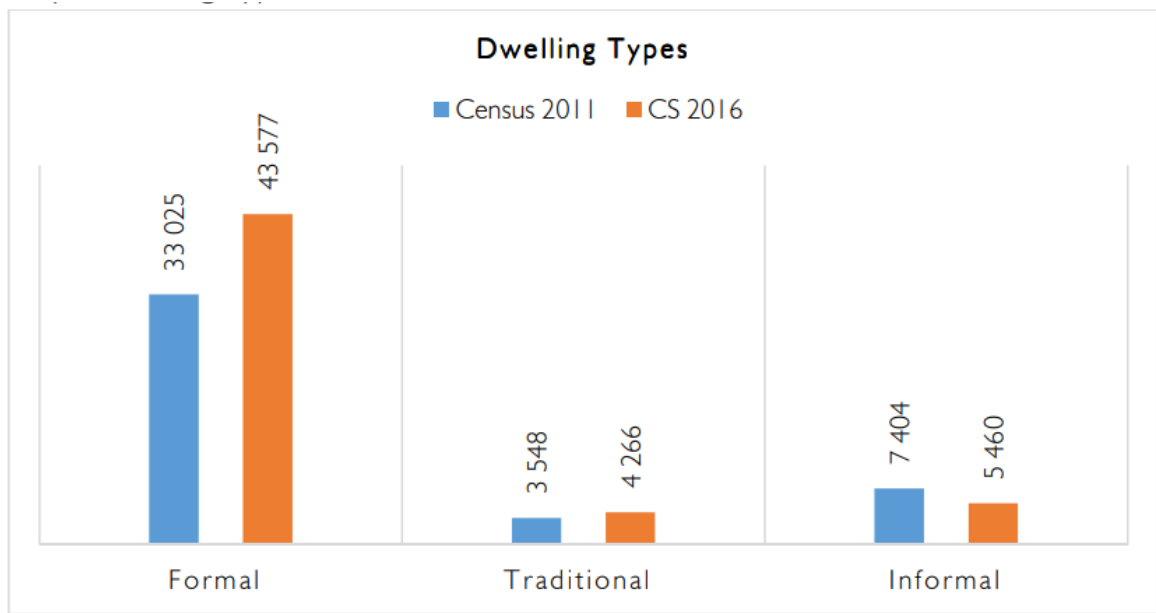


Figure 3: Dwelling types - Ditsobotla LM

The housing need for Itekeng is estimated at 1 500 units, according to the local IDP. These figures are seen in Table 2 below:

Table 2: Housing overview - Ditsobotla LM

SETTLEMENT	HOUSING NEEDS TYPOLOGY				TOTAL HOUSING NEEDS
	INFORMAL HOUSING	BACKYARD SHACKS	RURAL DEMAND	OTHER	
Lichtenburg and Boikhutso	2 967	449	Unknown	Unknown	3 939
Itso seng	975	376	Unknown	Unknown	3 922
Bodibe	283	106	Unknown	Unknown	1 094
Coligny and Tlhabologang	2 498	245	Unknown	Unknown	2 097
Itekeng	728	148	Unknown	Unknown	1 500
Ga-Motlatla	42	3	Unknown	Unknown	210
Bakerville	1060	0	Unknown	Unknown	1 797
Rural	1 674	0	2 734	Unknown	1 955
Total	10 227	1 327	2 734	Unknown	16 514

It is evident from the above figures that the municipality is experiencing a severe housing backlog, especially when viewed in conjunction with the unemployment rate and low annual earnings. This application serves to partially address this need through providing adequate residential properties in close proximity to existing neighbourhoods and with the necessary basic services.

### 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:

- Aerial survey of the development area conducted by Calogero Surveyors;
- Generation of contours based on aerial survey conducted by Calogero Surveyors;
- Engineering Geological Investigation conducted by Geoset CC (September 2020);
- Phase 1 Heritage Impact Assessment conducted by A Pelsers Archaeological Consulting CC;
- Detail civil engineering services investigation conducted by FHP Consulting Engineers;
- Detail electrical engineering services investigation conducted by Motla Consulting Engineers;
- Traffic Impact Study conducted by Route<sup>2</sup> Transport Strategies.

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

In terms of current policy directives, 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.

The approach to ensuring that sustainable human settlements are achieved should include:

- Spatial transformation and economic integration
- Viable infrastructure provisioning and life-cycle management
- Functional, responsive and innovative design
- Easy and close access to a range of services and amenities
- Affordable urban living
- Financial viability
- Effective urban management and municipal financial sustainability
- Environmental sustainability
- Local job creation and empowerment



## 1.4 APPLICATION

Koot Raubenheimer (ID No. 700305 5192 089) of the company Maxim Planning Solutions (Pty) Ltd (2002/017393/07), being the authorised agent of the Ditsobotla Local Municipality (NW384), is hereby applying to the Ditsobotla Local Municipality in terms of:

- (i) Section 71(2) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017) for the subdivision of the Remaining Extent of Portion 98 of the farm Biesjesvallei 149, Registration Division I.O., North West Province into one (1) portion together with a remainder;
- (ii) Section 59(1) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017) for the establishment of the proposed township Itekeng Extension 3 on a portion of the Remaining Extent of Portion 98 of the farm Biesjesvallei 149, Registration Division I.O., North West Province comprising 1391 erven zoned “Residential 1A”, five (5) erven zoned “Business 3”, one (1) erf zoned “Business 3” (including a taxi facility as well as other uses as approved by the Local Authority), four (4) erven zoned “Educational”, three (3) erven zoned “Institutional”, one (1) erf zoned “Municipal”, two (2) erven zoned “Government”, six (6) erven zoned “Public Open Space” and streets to be zoned “Public Road”;
- (iii) Section 67(2) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017) for the removal of condition A. in Certificate of Consolidated Title T3396/1970 in respect of the Remaining Extent of Portion 98 of the farm Biesjesvallei 149, Registration Division I.O., North West Province and for this condition not to be transferred to the Certificate of Registered Title to be registered in respect of the proposed township area of Itekeng Extension 3.

## 1.5 PUBLIC PARTICIPATION

The proposed township establishment application will be advertised in terms of Section 98(1)(a) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017). The public participation process will include the following:

- Publishing notices of the application (as set out in **Annexure C1** of the comprehensive Land Development Application) in a local newspaper in Afrikaans & English as contemplated in Section 98(2)(a) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017);
- Appending notices of the application (as set out in **Annexure C2** of the comprehensive Land Development Application) on the notice board situated at the library as contemplated in Section 98(2)(b) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017);
- Displaying a notice (as set out in **Annexure C3** of the Comprehensive Land Development Application) in a conspicuous place on the land to which the application applies as contemplated in Section 101(2) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017);
- Notices to adjacent property owners (as set out in **Annexure C5** of the comprehensive Land Development Application) as contemplated in Section



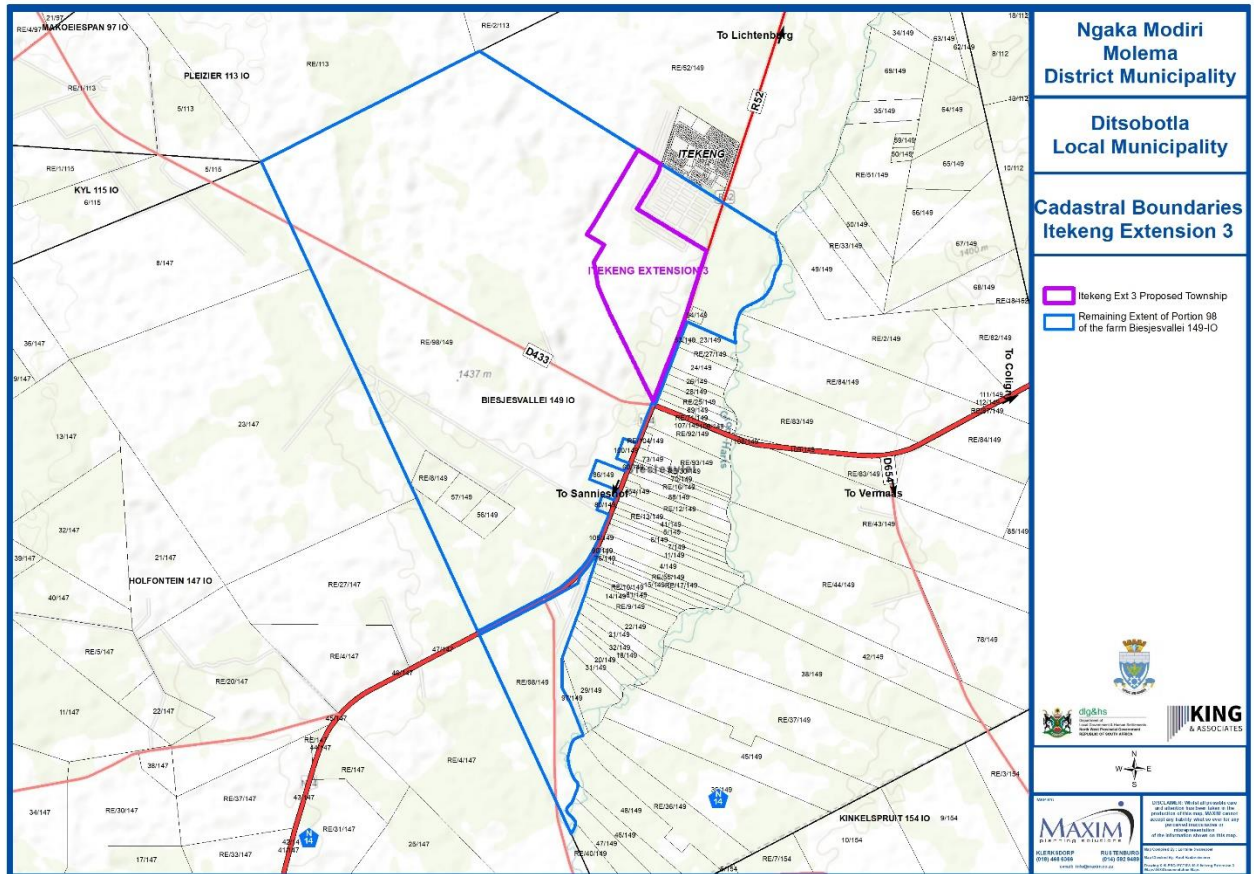
- 99(1)(c) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017).
- Notices to the following external departments / organizations (as set out in **Annexure C4** of the comprehensive Land Development Application) in order to obtain letters of consent / objection as contemplated in Section 102(e) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017):
    - Department of Public Works and Roads
    - Openserve (Telkom SA Limited)
    - Eskom
    - Ngaka Modiri Molema District Municipality (NMMDM)
    - Department of Minerals Resources (DMR)
    - Department of Agriculture, Forestry & Fisheries (DAFF)
    - Department of Water and Sanitation (DWS)
    - Department of Co-operative Governance and Traditional Affairs (COGTA)
    - North West Department of Education
    - Department of Health
    - South African Post Office (SAPO)
    - Transnet Freight Rail
    - South African Heritage Resources Agency (SAHRA)
    - South African National Roads Agency Limited (SANRAL)
    - Sedibeng Water
    - Department Economic Development, Environment, Conservation and Tourism (DEDECT)

The public will be afforded a period of 30 days to comment in this matter whereas the external organisations / departments that will be approached for comments will be afforded a period of 60 days to furnish us with their comments in respect of the application. Following receipt of the said comments we will forward same to your Municipality for your further attention and record purposes.

## 1.6 STUDY AREA DELINEATION

The proposed development area comprises a portion of the Remaining Extent of Portion 98 of the farm Biesjesvallei 149, Registration Division I.O., North West Province. The locality of the parent farm and specific application site is reflected on **Map 3** overleaf:

Map 3: Locality Map of Parent Farm and Application Site



## 1.7 REPORT OUTLINE

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

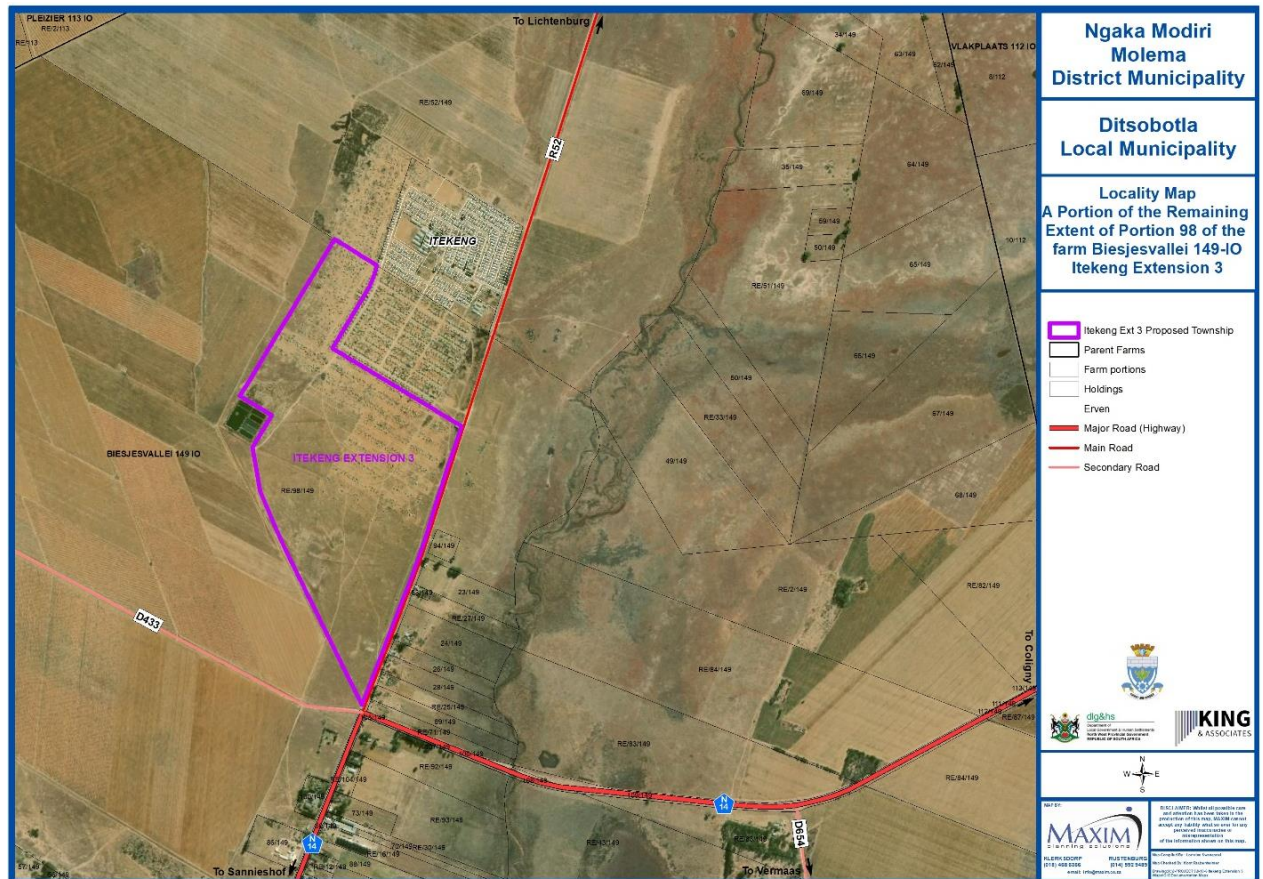
- Chapter 2: Particulars of the development area
- Chapter 3: Physical aspects
- Chapter 4: Proposed development
- Chapter 5: Provision of Engineering Services
- Chapter 6: Motivation

## CHAPTER 2: PARTICULARS OF THE DEVELOPMENT AREA

### 2.1 LOCALITY

The application site is located adjacent (south and west of) the existing Itekeng Extension 2 and adjacent and west of Provincial Road P34-3 (R52) linking Lichtenburg to Sannieshof (**Map 4** below);

Map 4: Locality Map



An orientation locality plan of the proposed township/development area is attached to the comprehensive Land Development Application as **Annexure H1 – H4**.

### 2.2 SG DIAGRAM

The Remaining Extent of Portion 98 of the farm Biesjesvallei 149, Registration Division I.O., North West Province is reflected on diagram SG No. A7169/1968, together with the deduction sheets attached thereto (attached as **Annexure F1** to the comprehensive Land Development Application).



## 2.3 OWNER

The application site is currently registered as follows:

Table 3: Ownership details

Property Description	Registered Owner	Deed of Consolidated Title Number
Remaining Extent of Portion 98 of the Farm Biesjesvallei 149, Registration Division I.O., North West Province	Ditsobotla Local Municipality	T3396/1970

(Refer **Annexure E1** of the comprehensive Land Development Application for copies of the Aktex Deed Office Enquiry conducted in respect of the above-mentioned property as well as **Annexure E2** for the relevant Certificate of Consolidated Title).

## 2.4 BONDHOLDER

The application property is not currently subject to any bond (refer **Annexures E1** of the comprehensive Land Development Application for Aktex Deed Office Enquiry that confirms the absence of any bonds as well as **Annexure K** for the Conveyancer Certificate to the same effect).

## 2.5 AREA

As discussed, the application only applies to a portion of the parent farm portion. Approximately 124.7796ha of the Remaining Extent of Portion 98 of the farm Biesjesvallei 149, Registration Division I.O., North West Province will be utilised for the proposed township area, as seen in the subdivision map attached as **Annexure M** to the Comprehensive Land Development Application.

As integral part of the township establishment application, application is also being made for the subdivision of the Remaining Extent of Portion 98 of the farm Biesjesvallei 149, Registration Division I.O., North West Province into a proposed portion A and the Remainder, as per the subdivision map referenced above. This portion will serve as the outside figure for the development and demarcates the application site.

## 2.6 EXISTING LAND USE AND ZONING

### 2.6.1 CURRENT LAND USES

A site visit was conducted by Maxim Planning Solutions on 16 March 2021, where several land uses were found on site. In the northern portions of the application site (adjacent to the existing Itekeng Extension 2) formal housing is found, albeit not on registered stands. Informal housing also occurs on site and the southern portions of the application site are

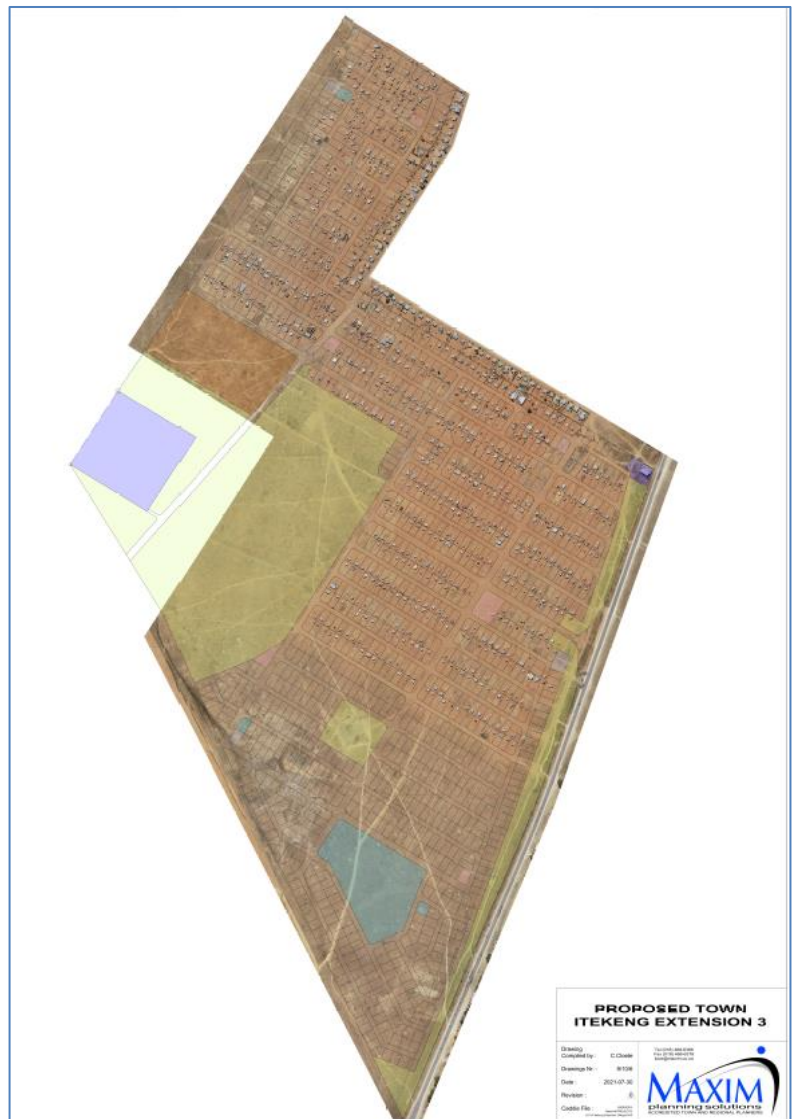
vacant at present. Excavations are present on the southern portion of the application site. These were also identified and referenced in the geotechnical investigation and accommodated accordingly in the proposed layout plan. There are also sewer oxidation ponds present in the western corner of the development. These have been included in the proposed layout plan and a buffer area around the ponds has been incorporated.



Photo 1: Informal housing on site

Map 5: Existing formal and informal dwelling units on site

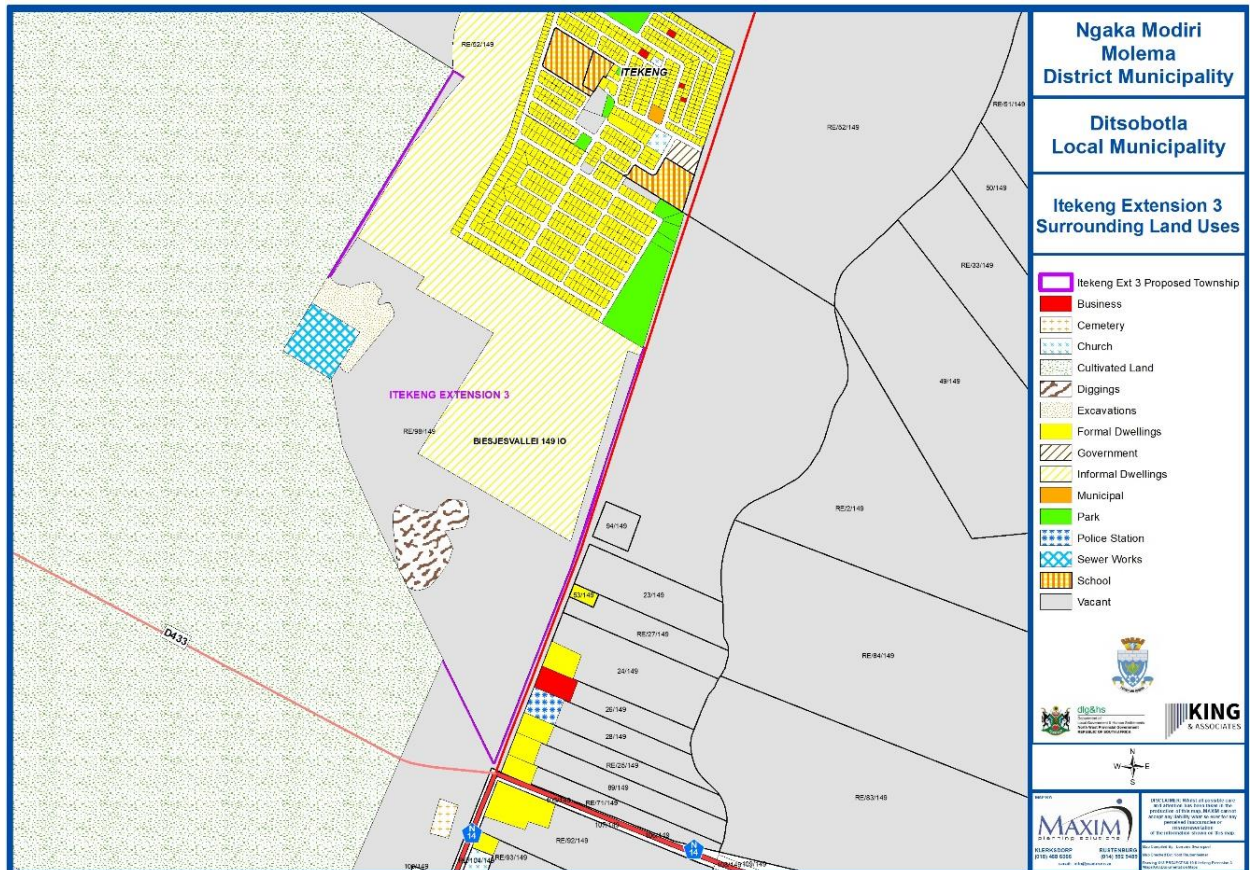
As mentioned in Section 1.1, a draft layout plan in respect of the proposed township area was compiled by the Ditsobotla Local Municipality during 2015 and 1305 of the erven were subsequently surveyed. This resulted in informal housing structures, and later on formal housing structures, being erected on the surveyed erven. There are however structures that will require re-location based on the final layout plan. The existing informal and formal dwelling houses located on the development area are shown on **Map 5**.





## 2.6.2 SURROUNDING LAND USES

As indicated on the Map below, the application site is situated south of the residential area of Itekeng and its extensions. The land uses to the north of the application site are therefore primarily residential in nature. Land uses to the east, along the R52 include several small holdings and agricultural uses. The land directly south and west of the application site is still undeveloped and used for agricultural purposes.



Map 6: Surrounding Land Uses

The proposed development will integrate with the surrounding land uses. The residential nature of the proposed township is well suited to the surrounding townships.

## 2.6.3 CURRENT ZONING

The property to which the land development application applies is currently zoned “Agricultural” in terms of the Ditsobotla Land Use Scheme, 2020.

(Refer to Zoning certificate attached as **Annexure N** of the comprehensive Land Development Application).



## 2.7 MINERAL RIGHTS

The following condition is contained in Certificate of Consolidated Title T3396/1970 in respect of the Remaining Extent of Portion 98 of the Farm Biesjesvallei 149, Registration Division I.O., North West Province:

- **Condition B on page 3 and continued on page 4 of Certificate of Consolidated Title T3396/1970)**

*“B. DAARDIE Gedeelte van die eiendom hierkragtens gehou en verteenwoordig deur die figuur geletter ABC´ middel van rivier D´EFG´ middel van rivier H´JKLMNQPX´ middel van rivier S´TUVWTA uitsluitende figure abcd, efgh, jklm en nopq op die hieraangehegte Kaart L.G. Nr. A.7169/68 is –*

*ONDERWORPE AAN die voorwaarde dat, behoudens die bepalinge van die Wet op die Ontginning van Voorbehouden Mineralen, 1926 en die Wet op Edelgesteentes 1927, soos van tyd tot tyd gewysig, alle regte op minerale, mineraalprodukte, mineraalolies, metale en edelgesteentes op of onder die grond aan die Staat voorbehou word; welke voorbehoud gemaak its ten aansien van die Resterende Gedeelte van genoemde plaas BIESJESVALLEI, groot as sodanig 1383.1515 Hektaar ten aansien van welke regte Sertifikaat van Minerale Regte No. 240/52 R.M. geregistreer is op 29 Mei 1952.”*

The condition relates to the reservation of rights to minerals and will not be brought forward in the Certificate of Registered Title to be registered in respect of the land on which the township is to be established.

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 land development application will subsequently also be referred to the Department of Mineral Resources for its consent in terms of Section 53 of the fore-mentioned Act in respect of the proposed development.

## 2.8 RESTRICTIVE TITLE CONDITIONS

According to the Conveyancer Certificate compiled by Coetzer & Steyn Attorneys (attached as **Annexure K** to the comprehensive Land Development Application), the following restrictive title condition is contained in Certificate of Consolidated Title T3396/1970 that will inhibit the proposed development on a portion of the Remaining Extent of Portion 98 of the farm Biesjesvallei 149, Registration Division I.O., North West Province:

○ **Condition A on page 3 of Certificate of Consolidated Title T3396/1970**

“A. *DIE RESTERENEDE GEDEELTE van die genoemde plaas BIESJESVALLEI, groot as sodanig 1391.7168 Hektaar (waarvan Gedeelte van die eiendom hieronder gehou en verteenwoordig deur die figuur geletter ABC’ middel van rivier D’EFG’ middel van rivier H’JKLMNOPQX’ middel van rivier S’TUVWTA uitsluitende figure abcd, efgh, jklm en nopq, op die hieraangehegte Kaart L.G. Nr. A. 7169/68, ‘n Gedeelte uitmaak) is ONDERHEWIG AAN die volgende voorwaarde:*

*“the servitude of right of grazing and watering cattle and constructing dams and water-furrows as granted to the owners of portions Nos. 2 to 27 inclusive of the said farm.”*

In terms of the Conveyancer Certificate compiled by Coetzer & Steyn Attorneys (attached as **Annexure K** to the comprehensive Land Development Application), the exercising of this right to grazing and watering of cattle is not reconcilable with the use of the land for township establishment purposes as it will be impossible to exercise such grazing and watering rights. As such, application is made in terms of Section 67(2) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017) for the removal of condition A. in Certificate of Consolidated Title T3396/1970 in respect of the Remaining Extent of Portion 98 of the farm Biesjesvallei 149, Registration Division I.O., North West Province and for this condition not to be transferred to the Certificate of Registered Title to be registered in respect of the proposed township area of Itekeng Extension 3.

In addition to the condition detailed above, the Remaining Extent of Portion 98 of the farm Biesjesvallei 149, Registration Division I.O., North West Province is also subject to the following title conditions that will be addressed as follows (as determined in terms of the Conveyancer Certificate:

○ **Condition C on page 3 of Certificate of Consolidated Title T3396/1970**

“C. *GEDEELTE 19 van die genoemde plaas BIESJESVALLEI (waarvan Gedeelte van die eiendom hieronder gehou en verteenwoordig deur die figuur geletter QR’ middel van Hartsrivier X’ op die hieraangehegte Kaart L.G. No. A. 7169/68 ‘n Gedeelte uitmaak) is ONDERHEWIG AAN die volgende voorwaarde:-*

*“De eigenaar van de grond hiermede getransporteerd heft het recht van vrye weiding en zuiping voor zyn vee gezamentlik met het vee van de eigenaren van gedeelten Nos. 2 tot en met 20 en Nos. 22 to en met 27 van gezegde plaats BIESJESVALLEI, over het resterend gedeelte van gezegde plaats, groot als zodanig 1391.7168 Hektaar, zoals gehouden onder AKte van Transport No. 8074/1903, gedateerd 14de September, 1903.”*

This condition relates to the right to grazing and watering of livestock granted to the owners of certain portions of the farm Biesjesvallei 149, Registration Division I.O., North West Province over the former Portion 95 (a portion of Portion 19) of the farm Biesjesvallei 149, Registration Division I.O., North West Province. This condition does not affect the proposed township area due to the locality thereof in relation to the proposed township area and should not be passed on to the erven in the proposed township area.

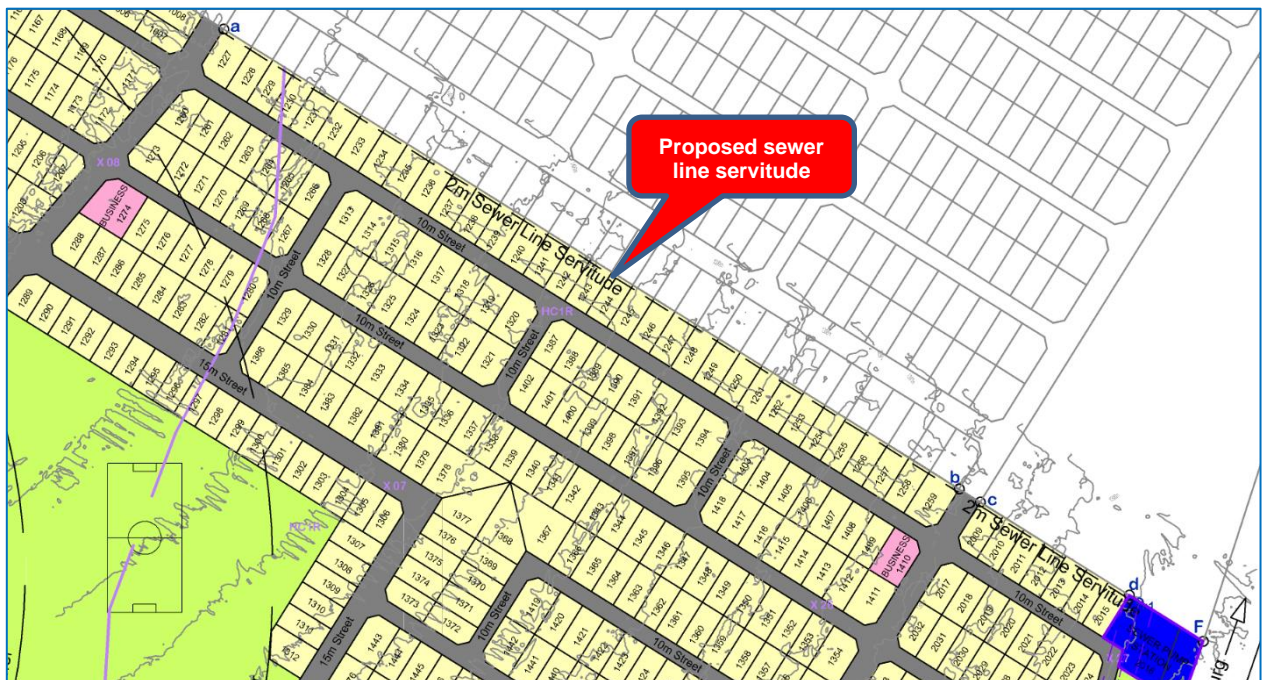
- **Condition D on page 5 of Certificate of Consolidated Title T3396/1970**

*“D. ONDERWORPE AAN ‘n Serwituut van Uitspanning groot 1/75ste van 1391,7168 Hektaar, ten bate van die reisende publiek.”*

This condition relates to an outspan servitude and will not be brought forward into the Certificate of Registered Title to be registered in respect of the proposed township area as outspans have lapsed through repeal in terms of Section 53 of the Road Ordinance, 1957 (Ordinance 22 of 1957).

## 2.9 SERVITUDES

The application site is not affected by existing servitudes. A new servitude of 2m will be registered along the lines ab and cd as indicated on the proposed layout. This servitude will accommodate the existing rising main sewer line located along the boundary between Itekeng Extension 2 and Itekeng Extension 3 . This servitude will be created on the General Plan and will be in favour of the Local Authority.



Map 7: Locality of proposed sewer line servitude

## CHAPTER 3: PHYSICAL ASPECTS

### 3.1 TOPOGRAPHY & DRAINAGE

As part of the pre-planning studies that were conducted in respect of the development area, an aerial survey was conducted by Calogero Surveyors. This aerial survey included:

- High resolution aerial photography and the creation of digital aerial photo images (**Map 8 refers**) (refer also to **Annexure G1** of the comprehensive Land Development Application)
- Fieldwork and ground control points
- Line mapping (**Map 9 refers**):
  - Cadastral information
  - Contour mapping (0,5m contour intervals)  
(refer also to **Annexure G2** of the comprehensive Land Development Application).

The results of the aerial survey and the subsequent line mapping are reflected on **Map 8**.



Map 8: Aerial photograph of application site



### 3.2 CLIMATE

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

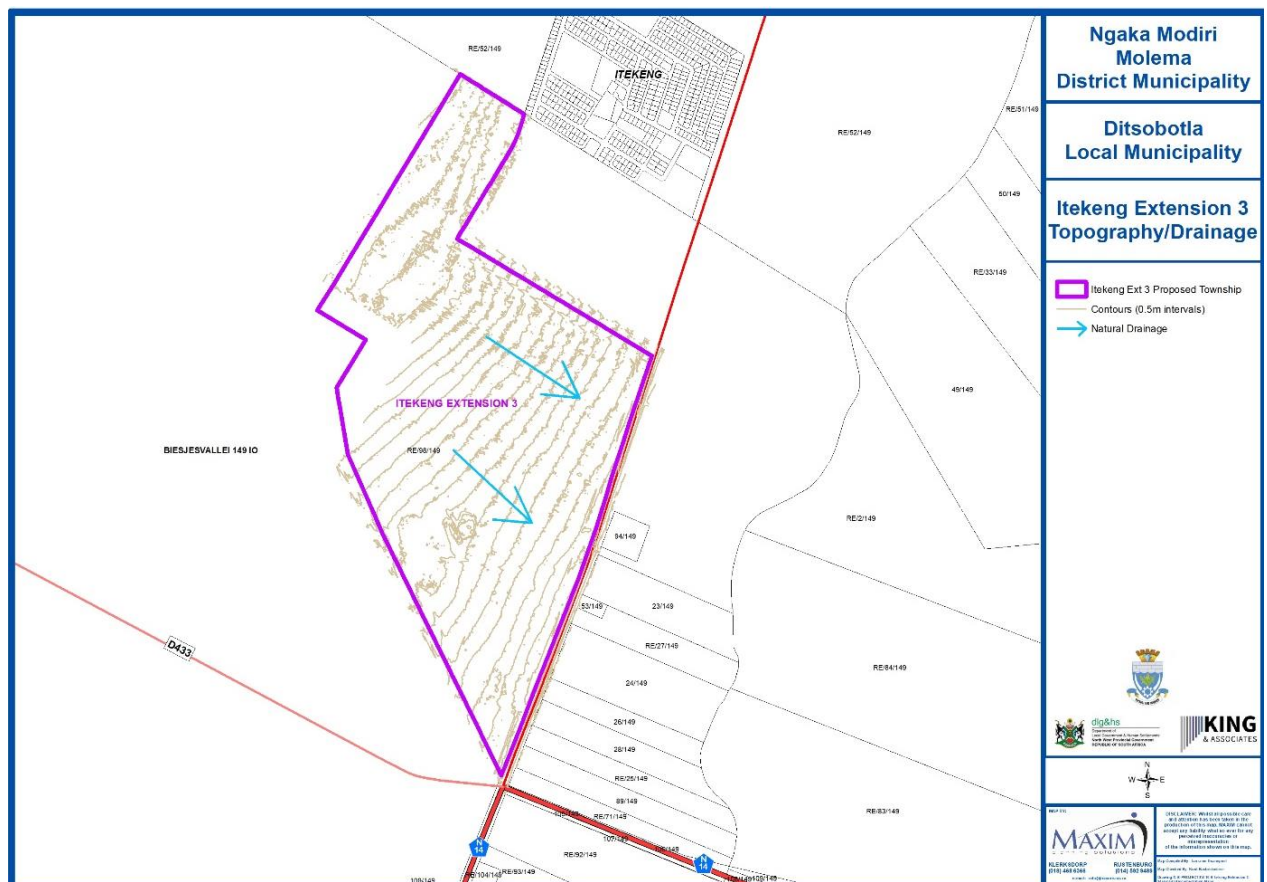
An analysis of the data confirms a Weinert’s N-Value in the order of 7 for Barberspan, Delareyville. The mechanical disintegration of rocks will therefore be dominant over chemical decomposition, and shallow soil horizons will be expected in areas of poor drainage, underlain by igneous rocks.

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

### 3.3 GROUNDWATER SYSTEM / DRAINAGE

Plate flow is the dominant drainage pattern on site, and no prominent drainage channel intersects the site. Drainage occurs in a southeastern direction towards the Great Harts River, and then later southwards into the Vaal River.

Map 9: Topography and Drainage



The site is located on a shallow southeastern slope at 1394 to 1410 masl.



### 3.4 WETLANDS AND PANS

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 Pure Grassveld veld with Dry Cymbopogon – Themeda *veld type* (Acocks, 1988). The site itself is covered by sparse grasslands of which some was used as agriculture land, and some indigenous trees (such as Soetdoring: Acacia Karroo) are present on site.

### 3.6 CULTURAL AND HERITAGE FEATURES

To establish the possibility of culturally significant features on site, a Phase 1 Heritage Impact Assessment was conducted by A Pelsers Archaeological Consulting (refer to **Annexure O** of the comprehensive Land Development Application). 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, and no sites were identified in the study area during the assessment.

**Should any previously unknown or invisible sites, features or material be uncovered during any development actions then an expert should be contacted to investigate and provide recommendations on the way forward.**

From a cultural heritage point of view the proposed Itekeng Extension 3 Township Development should therefore be allowed continue, taking cognizance of the above recommendations.

### 3.7 GROUNDWATER

The permanent or perched water table on site is deeper than 1,5m below ground surface. Slow percolation of water within the clay is expected.

### 3.8 GEOLOGY

(Extract from Engineering Geological Investigation Report compiled by Geoset attached as **Annexure R** to the comprehensive Land Development Application)

### 3.8.1 LOCAL GEOLOGY

The site is underlain by basaltic lava (Rk) of the Klipriviersberg Group, Ventersdorp Supergroup. Locally the lithology is covered by hillwash comprising clayey sand with quartz and ferricrete gravel.

No dolomite occurs on site and no stability investigation is required.

**On account of the field observations, laboratory results, previous experience and engineering properties of the soil, it is zoned as follows:**

#### **Modified Normal to Special Development:**

##### **Site Class HC1R/2A2C1D:**

This area is characterized by dark reddish to orange brown silty clayey sand that represents a loose to stiff slightly to moderately compressible and collapsible soil with low expansive properties, and an expected range of up to 10 mm of total soil movement measured at surface, with limited excavation depths of less than 1,5m with refusal on ferricrete gravel or hard pan ferricrete or lava adding the additional R class designation. Foundations will require special foundation techniques such as the use of stiffened or cellular rafts with articulation joints at all external and internal doors and openings with reinforced masonry, split construction with suspended floors, soil replacement with a soil raft comprising G5 material or better or even piled foundations with suspended floor slabs. Site drainage and plumbing and service precautions are recommended. It is classified as HC1 in terms of the SAIEG & NHBRC guidelines (1995) or the SAICE Code of practice (1995), and 2A2C1D according to the classification for urban development (Partridge, Wood & Brink).

##### **Site Class H1C1R/2A2C2D:**

The area is characterized by dark reddish to orange brown silty clayey sand that represents a loose to stiff slightly to moderately compressible and collapsible soil with medium expansive properties, and an expected range of up to 15 mm of total soil movement measured at surface, with limited excavation depths of less than 1,5m with refusal on ferricrete gravel or hard pan ferricrete or lava adding the additional R class designation. Foundations will require special foundation techniques such as the use of stiffened or cellular rafts with articulation joints at all external and internal doors and openings with reinforced masonry, split construction with suspended floors, soil replacement with a soil raft comprising G5 material or better or even piled foundations with suspended floor slabs. Site drainage and plumbing and service precautions are recommended. It is classified as H1C1R in terms of the SAIEG & NHBRC guidelines (1995) or the SAICE Code of practice (1995), and 2A2C2D according to the classification for urban development (Partridge, Wood & Brink).

##### **Site Class H3:**

Highly expansive clay was identified in an area where flooding from constant leakage of the sewage works for a long period possibly chemically weathered the soil possibly

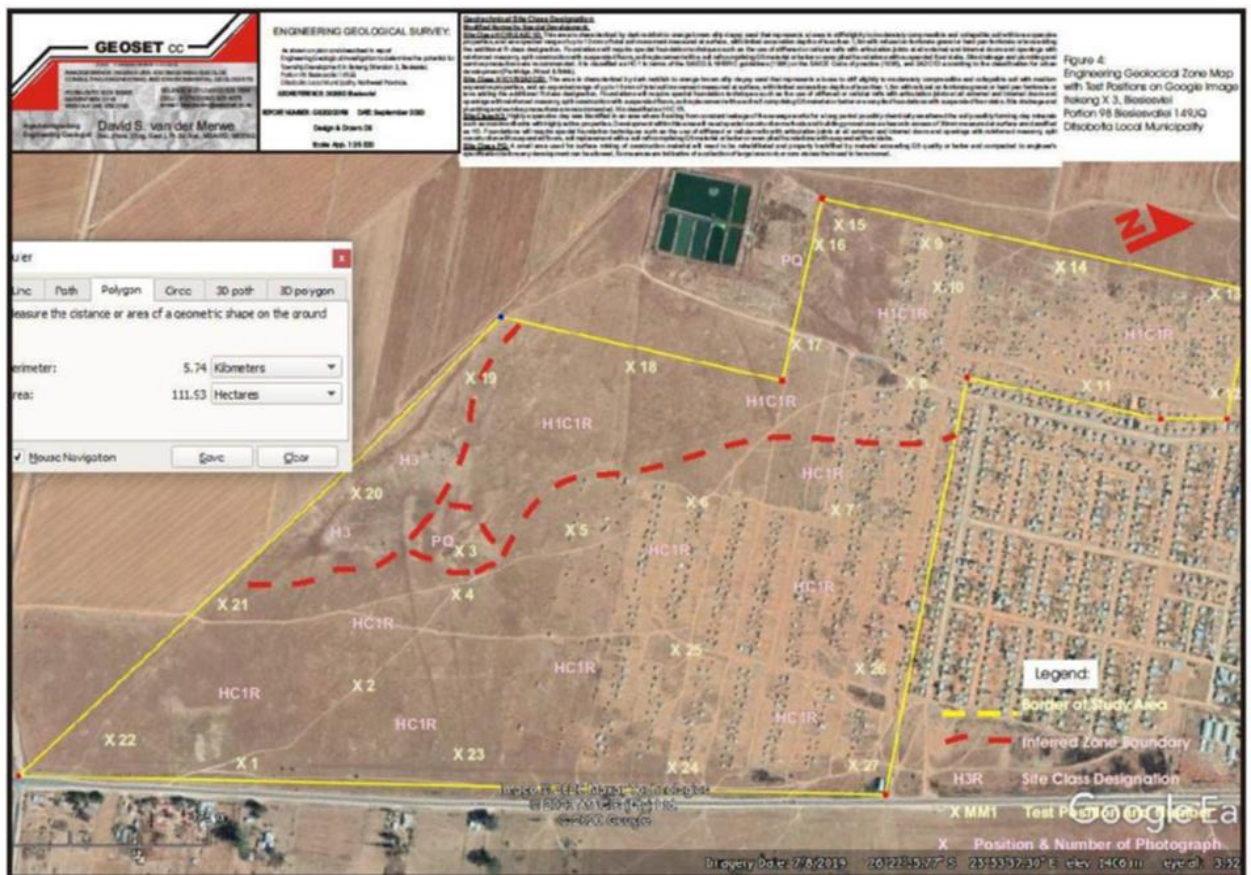
forming clay minerals such as montmorillonite with highly active properties. Development within this area will need special construction methods and building procedures as heave in excess of 30mm measured at surface are classified as H3 in terms of the SAIEG & NHBRC guidelines (1995) or the SAICE Code of practice (1995), and 3C according to the classification for urban development (Partridge, Wood & Brink). Foundations will require special foundation techniques such as the use of stiffened or cellular rafts with articulation joints at all external and internal doors and openings with reinforced masonry, split construction with suspended floors, soil replacement with a soil raft comprising G5 material or better or even piled foundations with suspended floor slabs.

**Site Class PQ:**

A small area used for surface mining of construction material will need to be rehabilitated and properly backfilled by material exceeding G5 quality or better and compacted to engineer’s specification before any development can be allowed. Some areas are indicative of a collection of large lava rock or core stones that need to be removed.

The zones listed above are illustrated on Map 10 below:

**Map 10: Engineering Geological Zone Map**



**3.8.2 DRAINAGE**

- The site is located on a shallow slope towards the southeast.

- Plate flow is the dominant drainage pattern on site, and no prominent drainage channel intersects the site.
- Drainage occurs in a southeastern direction towards the Great Harts River, and then later southwards into the Vaal River.
- Seepage and the presence of perennial fluctuations of ground water were encountered on site, proving that a seasonal perched water table may exist. A ferruginised profile indicates that some perennial water level fluctuations occur.
- Ground water in the form of seepage was not intersected in any test pits during the investigation, but some problems are foreseen and normal water tightening techniques such as damp course on foundation levels are required.
- The expected high permeability of the silty sand may lead to leachate from sanitation systems to reach the ground water, and a closed water borne sewage system is recommended.
- Special care must be taken to ensure adequate surface drainage to prevent the accumulation of water next to structures.
- Storm water diversion measures such as ponding pools are recommended to control peak flows during thunderstorms.

### 3.8.3 CONCLUSIONS

The report concluded as follows:

- The site is underlain by basaltic lava (Rk) of the Klipriviersberg Group, Ventersdorp Supergroup. Locally the lithology is covered by hillwash.
- Some problems are foreseen regarding the excavatability to 1,5m depth on site, and shallow rock or hard pan ferricrete were identified on site, with some lava core stones that are expected in some excavations on site.
- Zoning of the site revealed zones with moderate constraints regarding the **compressibility** and the **collapse potential, as well as the expansive properties** of the soil.
- **Modified normal and special construction techniques** will be required to enable proper development. This includes 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.**

### 3.9 ENVIRONMENTAL IMPACT ASSESSMENT

The establishment of the township area of Itekeng Extension 3 does indeed constitute a listed activity in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) , as amended, and the Environmental Impact Assessment Regulations, 2014. The Department of Human Settlements through its Programme Management Unit appointed



a consultant to attend to the establishment of the adjacent township area of Itekeng Extension 2. The Environmental Consultant appointed for the Environmental Impact Assessment in respect of the township area of Itekeng Extension 2 in consultation with the Case Officer from the Department of Economic Development, Environment, Conservation and Tourism (DEDECT) agreed to include the proposed township area of Itekeng Extension 3 into the Environmental Impact Assessment process undertaken in respect of the township area of Itekeng Extension 2.

As the Environmental Authorisation in respect of the proposed township Itekeng Extension 3 is being attended to by the Environmental Impact Assessment Practitioner appointed for Itekeng Extension 2, this activity is excluded from the commission held by Maxim Planning Solutions (Pty) Ltd. The authorisation of the project in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) however forms an integral part of the township establishment process and this process will be actively monitored and pursued.

The combined Environmental Authorisation issued in respect of the proposed township areas of Itekeng Extensions 2 and 3 will be forwarded to your Municipality immediately on receipt thereof.



## CHAPTER 4: PROPOSED DEVELOPMENT

### 4.1 LAND USES

The intention of the township applicant is to utilize the application site for a residential development that can partially address the housing backlog faced in the Ditsobotla Local Municipality, and specifically the Itekeng urban area. The need for formal housing in the area is evident in both the municipal planning documents (Integrated Development Plan) and the current informal housing development on site.

The integrated layout plan compiled in respect of the proposed development area makes provision for 1391 “Residential 1A” stands, averaging 470m<sup>2</sup> in size. The proposed layout plan was designed to integrate with the adjacent Itekeng Extension 2 township area, and erf sizes were kept similar in order for the two townships to integrate seamlessly. Although the township is designed with government subsidised housing in mind (based on the socio economic factors previously discussed), the erf sizes are large enough to accommodate other residential typologies, such as rented or bonded housing. In this regard the Ditsobotla Local Municipality indicated its intent to reserve the residential erven located in the southern portion of the development area for rented or bonded housing purposes where residential erven will be made available to potential purchasers thereof.

In terms of establishing a truly integrated human settlement, the layout plan compiled in respect of the development area also makes provision for the required non-residential-, social, educational, institutional and business facilities. As alluded to in Section 1.1, the planning of the proposed integrated human settlement area, was conducted in an integrated manner. This integrated planning yielded a township area comprising 1 391 residential erven together with an additional 22 erven earmarked for non-residential support functions (exclusive of streets). The conceptual layout plan of the proposed township areas is reflected on **Map 11** below.



Map 11: Itsekeng Extension 3 Conceptual Layout Plan



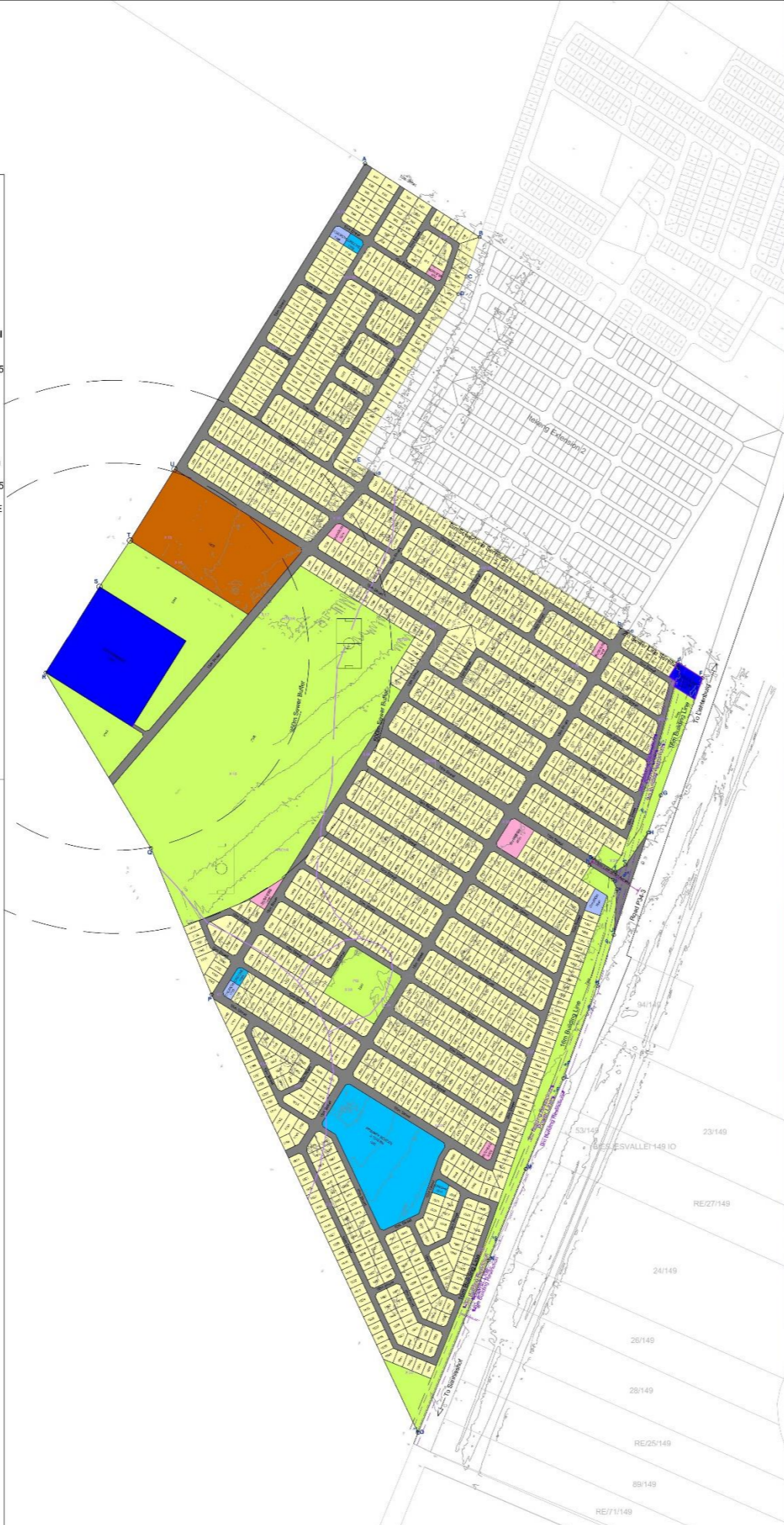
**GEOTECHNICAL REPORT**  
 Compiled by : GEOSSET cc  
 Consulting Environmental and Engineering Geologists  
 David S van der Merwe : Cel: (082) 925 4075  
 Date : September 2020  
 Engineering Geological Zonation

**Modified Normal to Special Development:**  
 Site Class HC1R/2A2C1D:  
 This area is characterized by dark reddish to orange brown silty clayey sand that represents a loose to stiff slightly to moderately compressible and collapsible soil with low expansive properties, and an expected range of up to 10 mm of total soil movement measured at surface, with limited excavation depths of less than 1,5m with refusal on ferricrete gravel or hard pan ferricrete or lava adding the additional R class designation. Foundations will require special foundation techniques such as the use of stiffened or cellular rafts with articulation joints at all external and internal doors and openings with reinforced masonry, split construction with suspended floors, soil replacement with a soil raft comprising G5 material or better or even piled foundations with suspended floor slabs. Site drainage and plumbing and service precautions are recommended. It is classified as HC1 in terms of the SAIEG & NHBRC guidelines (1995) or the SAICE Code of practice (1995), and 2A2C1D according to the classification for urban development (Partridge, Wood & Brink).  
 Site Class H1C1R/2A2C2D:  
 The area is characterized by dark reddish to orange brown silty clayey sand that represents a loose to stiff slightly to moderately compressible and collapsible soil with medium expansive properties, and an expected range of up to 15 mm of total soil movement measured at surface, with limited excavation depths of less than 1,5m with refusal on ferricrete gravel or hard pan ferricrete or lava adding the additional R class designation. Foundations will require special foundation techniques such as the use of stiffened or cellular rafts with articulation joints at all external and internal doors and openings with reinforced masonry, split construction with suspended floors, soil replacement with a soil raft comprising G5 material or better or even piled foundations with suspended floor slabs. Site drainage and plumbing and service precautions are recommended. It is classified as H1C1R in terms of the SAIEG & NHBRC guidelines (1995) or the SAICE Code of practice (1995), and 2A2C2D according to the classification for urban development (Partridge, Wood & Brink).  
 Site Class H3:  
 Highly expansive clay was identified in an area where flooding from constant leakage of the sewage works for a long period possibly chemically weathered the soil possibly forming clay minerals such as montmorillonite with highly active properties. Development within this area will need special construction methods and building procedures as heave in excess of 30mm measured at surface are classified as H3 in terms of the SAIEG & NHBRC guidelines (1995) or the SAICE Code of practice (1995), and 3C according to the classification for urban development (Partridge, Wood & Brink). Foundations will require special foundation techniques such as the use of stiffened or cellular rafts with articulation joints at all external and internal doors and openings with reinforced masonry, split construction with suspended floors, soil replacement with a soil raft comprising G5 material or better or even piled foundations with suspended floor slabs.  
 Site Class PQ:  
 A small area used for surface mining of construction material will need to be rehabilitated and properly backfilled by material exceeding G5 quality or better and compacted to engineer's specification before any development can be allowed. Some areas are indicative of a collection of large lava rock or core stones that need to be removed.

--- Inferred Zone Boundary  
 HC1R/2A2C1D Site Class Designation  
 X01 Test Position and Number

**GEOTECHNICAL ZONATION**  
 Scale 1 : 10 000

- Site Class HC1R
- Site Class PQ
- Site Class H1C1R
- Site Class H3



**LEGEND**

Proposed Zoning	Number of Erven	Erf Number	Area in Ha	% of Area
Residential 1A	1391	937-969; 971-1107; 1110-1224; 1227-1273; 1275-1619; 1411-1690; 1662-1745; 1747-1778; 1780-1891; 1893-1913; 1915-1988; 1990-1996; 2001-2015; 2017-2324; 2326-2343	64.8126ha	51.95%
Business 3 (including a taxi facility as well as other uses as approved by the Local Authority)	1	2000	0.2753ha	0.23%
Business 3	5	970; 1274; 1410; 1661; 2325	0.3723ha	0.29%
Educational	4	1109; 1746; 1892; 2314	3.2984ha	2.65%
Institutional	3	1108; 1779; 1989	0.2482ha	0.19%
Municipal	1	1225	4.0203ha	3.23%
Government	2	1226; 2016	3.3928ha	2.71%
Public Open Space	6	2344 - 2349	28.2129ha	22.61%
Public Road			20.1465ha	16.14%
<b>TOTAL</b>	<b>1413</b>		<b>124.7796ha</b>	<b>100%</b>

**STREETS**

Reserve Width	Length in Metre	%
6 metre	34m	0.19%
10 metre	12 839m	72.07%
15 metre	4 941m	27.74%
<b>TOTAL</b>	<b>17 814m</b>	<b>100%</b>

**NOTES:**  
 \*The figure A-B-C-D-E-F-G-H-J-K-L-M-N-O-P-Q-R-S-T-U-A represents the Proposed Township Itsekeng Extension 3.  
 \*16m Restriction along the line(s) lettered F-G-H-e & k-J-K-L-M-N-O as indicated on the layout plan.  
 \*No ingress or egress along the line(s) lettered F-G-H-e-f-g and h-j-k-J-K-L-M-N-O as indicated on the layout plan.  
 \*9m Building Restriction on both sides of the line(s) lettered a1-b1-c1-d1-e1-f1-g1-h1-i1-j1-k1 as indicated on layout plan.

**SERVITUDE NOTES:**  
 2m Municipal Servitude for sewer purposes along the line(s) lettered a-b and c-d as indicated on the layout plan.

**STREETS:**  
 Maximum slope 1: 100  
 Minimum slope 1: 40

**DESIGN OF TOWN LAYOUT**  
 Maxim Planning Solutions (Pty) Ltd  
 K. Raubenheimer Pr. Pln A/924/1996  
 Tel. (018) 468 6366

**CONTOURS**  
 The contour survey is in accordance with the standards laid down by the Regulations relating to Township Establishment and Land Use.

**PR ENGINEER**  
 It is hereby certified that the town layout complies with the conditions and recommendations as stated in the Geological Report.

**PR ENGINEER**  
 Date of Photography: 29 August 2020  
 System: WG25 Central Meridian: Lo27

**PROPOSED TOWN  
 ITEKENG EXTENSION 3**

300m 200m 100m 50m 0m 200m  
 1cm = 100m  
 SCALE 1 : 10 000

THE PROPOSED TOWN IS SITUATED ON A PORTION OF THE REMAINING  
 EXTENT OF PORTION 98 OF THE FARM BIESJESVALLEI 149 - IO.

DITSOBOTLA LOCAL MUNICIPALITY NORTH WEST PROVINCE

Drawn by : C.Cloete  
 Compiled by : C.Cloete  
 Drawings Nr. : 8/10/6  
 Date : 2021-04-22  
 Revision :  
 Caddie File :

Tel (018) 468-6366  
 Fax (018) 468-6376  
 koont@maxim.co.za

ACCREDITED TOWN AND REGIONAL PLANNERS



The layout plan makes provision for the following erven/land uses:

**Table 4: Proposed zonings and ervens – Itekeng Extension 3**

Proposed Zoning	Number of Erven	Erf Number	Area in Ha	% of Area
Residential 1A	1391	937-969; 971-1107; 1110-1224; 1227-1273; 1275-1409; 1411-1680; 1682-1745; 1747-1778; 1780-1891; 1893-1913; 1915-1988; 1990-1999; 2001-2015; 2017-2324; 2326-2343	64.8126ha	51.95%
Business 3 (including a taxi facility as well as other uses as approved by the Local Authority)	1	2000	0.2753ha	0.23%
Business 3	5	970; 1274; 1410; 1681; 2325	0.3723ha	0.29%
Educational	4	1109; 1746; 1892; 1914	3,2984ha	2.65%
Institutional	3	1108; 1779; 1989	0.2482ha	0.19%
Municipal	1	1225	4.0203ha	3.23%
Government	2	1226; 2016	3.3928ha	2.71%
Public Open Space	6	2344 - 2349	28.2129ha	22.61%
Public Road			20.1465ha	16.14%
<b>TOTAL</b>	<b>1413</b>		<b>124.7796ha</b>	<b>100%</b>

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

#### 4.1.1 Residential 1A

The layout plan of the proposed township area makes provision for 1 391 “Residential 1A” erven, averaging 470m<sup>2</sup> in size. These properties are well suited to government housing schemes, and will integrate well with the existing subsidy scheme in Itekeng Extension 2. A housing subsidy is a grant by government to qualifying beneficiaries for housing purposes. This is one of the Department of Human Settlement’s areas of responsibility in the delivery of human settlements to the bottom-most end of the market, where it provides housing subsidies to the poor. This is where the bulk of the housing backlog exists, affecting mainly those who earn below R3500 a month. The following subsidy programmes are available from the Department of Human Settlements:

❖ **Integrated Residential Development Programme**

The Integrated Residential Development Programme replaced the Project Linked Subsidy Programme. The programme provides for planning and development of integrated housing projects. Projects can be planned and developed in phases and provides for holistic development orientation:

- Phase 1: Land, Services and Township Proclamation
- Phase 2: Housing Construction (this also includes the sale of stands to non-qualifying beneficiaries and to commercial interests)

❖ **Individual Subsidy**

This programme provides access to state assistance where qualifying households wish to acquire an existing house or a vacant serviced residential stand, linked to a house construction contract through an approved mortgage loan. These properties are available in the normal secondary housing market or have been developed as part of a project not financed through one of the National Housing Programmes

❖ **Enhanced People’s Housing Process**

The Enhanced People’s Housing Process aims to support households who wish to enhance their housing subsidies by funding their own homes. The Enhanced People’s Housing process can be accessed through the Integrated Residential Development Programme, Project Linked Consolidation or Institutional Subsidies.

❖ **People’s Housing Process**

This subsidy is given to people who want to build or manage the building of their own homes. Unlike the Project Linked Subsidy where a contractor builds houses for a number of people, the People’s Housing Process allows people or beneficiaries to build or organize the building of their homes.

However, the proposed erven are also well suited to residential houses aimed at the middle to higher income groups, should the need arise in future. Housing the poor was an ingredient of the Department of Human Settlement’s three-part response to the State’s Vision 2030 Strategy. “Gap housing” is a term that describes the shortfall or gap in the market between units supplied by the State and houses delivered by the private sector. The gap housing market comprises people who typically earn between R3500 and R15000 per month, which is too little to enable them to participate in the private property market, yet too much for state assistance. Gap housing is a policy that addresses the housing aspirations of people such as nurses, fire-fighters, teachers, SAPS members and members of the armed forces who earn between R3500 and R15000 per month and therefore do not qualify for RDP houses and do not earn enough to obtain home loans.

The following figure illustrates the income divide / need for alternative solutions.



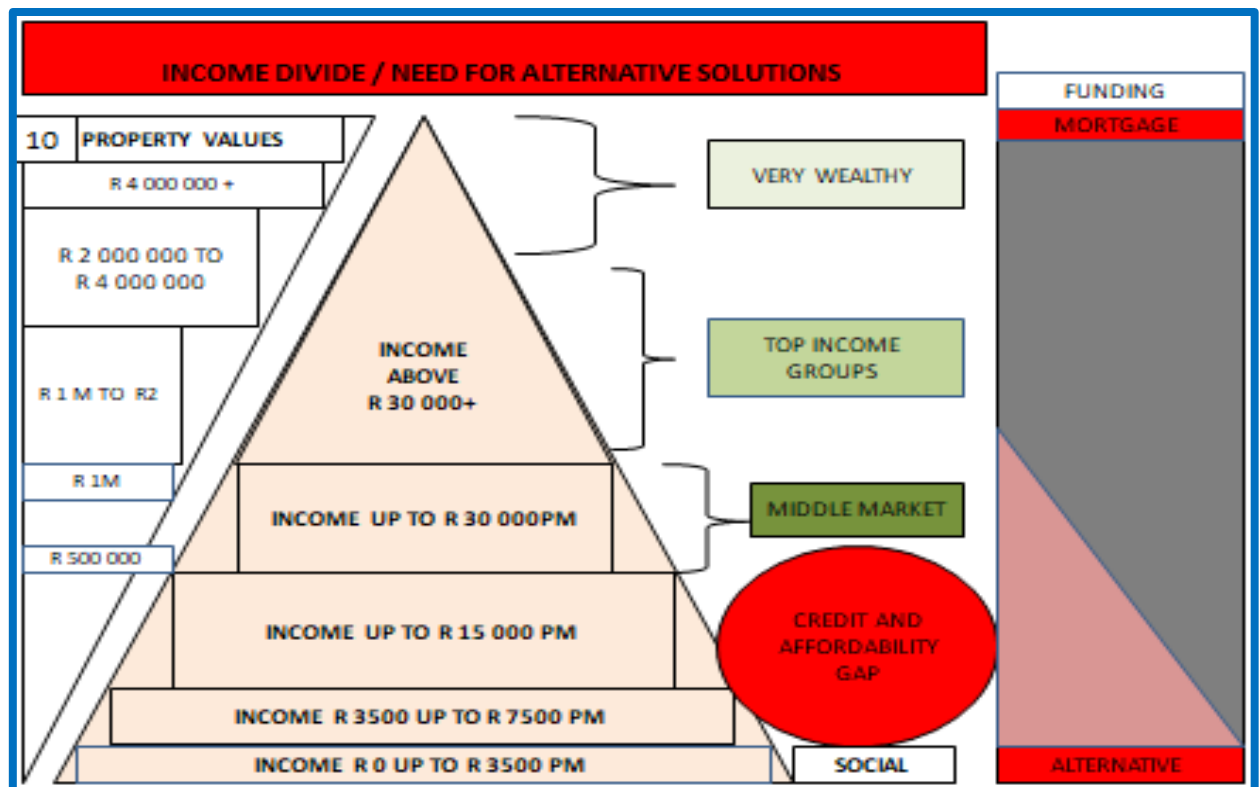


Figure 4: Income Divide / Need for alternative solutions

One of the subsidy programmes further available from the Department of Human Settlements includes the Finance Linked Individual Subsidy Programme (FLISP).

FLISP was developed to enable first time home-ownership to households in the “affordable or gap” market, that is, people earning between R3501 and R15000 per month. Individuals in these salary bands generally find it hard to qualify for housing finance; their income is regarded as low for mortgage finance, but too high to qualify for the government subsidy scheme available to households earning less than R3500 per month. Depending on the applicant’s gross monthly income, their once-off FLISP subsidy qualifying amount may vary between R20 000 and R87 000, as defined in the FLISP Subsidy Quantum. Any residential property acquired with the FLISP subsidy may not exceed the R300 000 price margin. FLISP assists qualifying beneficiaries who wish to obtain mortgage finance from a lender to:

- Acquire ownership of an existing residential property
- Obtain vacant serviced residential stands which are linked to house building contracts with the home builders registered with the National Home Builders Registration Council (NHBRC); or
- Build a new house with the assistance of a home builder registered with the National Home Builders Registration Council (NHBRC) on serviced residential stand that is already owned by the beneficiary.

The objective of the programme is to reduce the initial mortgage loan amount to render the monthly loan repayment instalments affordable over the loan payment term.



Figure 5: Schematic presentation of affordable bonded housing

The proposed “Residential 1A” even will be subject to the following development parameters imposed in terms of the Ditsobotla Local Municipality Land Use Scheme, 2020:

Table 5: "Residential 1A" development parameters

Development parameter	Development Parameter Detail
Primary Use	Dwelling House defined as <i>A lone standing or semi-detached dwelling unit together with such outbuildings as are ordinarily used therewith. For this purpose a kitchenette used exclusively with a recreation area shall not be construed to be a kitchen</i> Day Care Facility
Consent Uses	Additional Dwelling Unit Bed and Breakfast Boarding house Confectioner Early Childhood Development Centre Guest house Home occupation Place of instruction Place of worship Social Hall Special Usage Tavern Tuck Shop
Density	1 unit per stand
Coverage	Maximum 50%
F.A.R	0.7
Height	Maximum 2 storeys
Building lines	≤ 500m <sup>2</sup> = 5m street, 2m rear

	<p>≥ 500m<sup>2</sup> = 3m street, 2m rear</p> <p>Side boundary:      single storey = 2m                                  multiple storey = 3m</p>
--	--

### 4.1.2 Business 3

To ensure that a proper integrated human settlement is established, it is imperative that adequate provision also be made for commercial activities that will address the daily needs of the concerned community whilst similarly providing opportunities for job creation. The proposed layout makes provision for two (6) properties zoned for “Business 3”. These properties will serve as local business centres to the surrounding neighbourhood. As such, they are dispersed throughout the proposed layout plan to limit walking distances and increase accessibility.

It will be noted that the largest of the three properties is situated along the proposed access route linking to the R52 in the east. This property will serve as a mixed land use entrance node in the neighbourhood. During the pre-planning meetings held with officials and other role-players, the need for such a property was identified. Amongst other functions, it is envisaged that a taxi rank will establish on this property due to the high accessibility and central location. Other uses will be determined by the Local Authority.

The proposed “Business 3” erven will be subject to the following development parameters imposed in terms of the Ditsobotla Local Municipality Land Use Scheme, 2020:

Table 6: "Business 3" development parameters

Development parameter	Development Parameter Detail
Primary Use	<p>Shop defined as</p> <p><i>A site or portion of a building or structure used for the purpose of carrying on a retail concern and the necessary accompanying storage and package) and includes a café and supermarket and also includes a use on the same site which is ordinarily incidental to the conduct of the retail trade ,restaurant, a laundrette, dry cleaners or a retail where goods are manufactured or repaired; provided that the floor area relating to such manufacture or repair, comprises not more than one third of the floor area of the shop (and provided further that such accompanying storage, packaging and other accompanying use shall not give rise to any disturbance or</i></p>

	<p><i>nuisance.); “shop” does not include an industry, filling station, bottle-store or adult entertainment. The following uses shall not be considered as incidental to a “Shop”: A noxious industry, drive-in restaurant, restaurant, scrap yard, commercial use, warehouse, filling station, parking garage, place of amusement, motor dealer and a fish fryer.</i></p> <p>Canteen Car wash Clinic Confectioner Conference facility Medical consulting rooms Office Place of instruction Place of worship Private road Residential building Restaurant Spa/hydro &amp; wellness centre Telecommunication infrastructure Tuck shop</p>
Consent Uses	Boarding house, Bottle store, Commercial use, Day care facility, Dwelling unit, Early childhood development centre, Flats, Guesthouse/lodge, Renewable energy structure, Special usage, Tavern, Warehouse, Workshop
Coverage	Maximum 50%
F.A.R	1.0
Height	Maximum 2 storeys
Building lines	5m street, 2m rear Side boundary:      single storey = 2m multiple storey = 3m

#### 4.1.3 Institutional

The layout plan of the proposed township area makes provision for three (3) erven to be zoned as “Institutional”. For this development area to function as a proper integrated human settlement, it is of critical importance to also address the needs of the community for religious activities in the form of public places of worship.



In terms of the CSIR Guidelines for the Provision of Social Facilities in South African Settlements, the following norm is proposed in respect of social facilities:

**Table 7: CSIR Guideline for place of worship**

Proposed facility	CSIR Guideline	Number of erven required	Number of erven provided
Place of Worship	1 per 3000 – 6000 inhabitants	1	3

(Based on estimated 1 391 households, 4.1 average household size and total estimated inhabitants of 5 703.1)

The proposed “Institutional” erven will be subject to the following development parameters imposed in terms of the Ditsobotla Local Municipality Land Use Scheme, 2020:

**Table 8: "Institutional" development parameters**

Development parameter	Development Parameter Detail
Primary Use	<p><b>Place of worship</b> defined as <i>church, synagogue, mosque, temple, chapel or any other building intended to be used for practicing of religion and includes any building or residential unit ancillary thereto (and includes a building such as a Sunday school, rectory and a institute or social hall on the same site as, and associated with, any of the foregoing buildings), or parsonage but does not include a funeral parlour (which shall be deemed a “Special Use”).</i></p> <p>Clinic                      Day care facility                      Dwelling house                      Early childhood development centre                      Gymnasium                      Hospital                      Institution                      Office                      Private road                      Residential building                      Retirement village                      Social hall                      Sport &amp; recreation ground</p>

Consent Uses	Boarding house, Conference facility, Dwelling unit, Equestrian facility, Place of instruction, Special usage, Telecommunication infrastructure
Coverage	Maximum 50%
F.A.R	0.7
Height	Maximum 3 storeys
Building lines	5m street, 2m rear, 2m side

#### 4.1.4 Educational

The layout plan of the proposed township area makes provision for four (4) erven to be zoned as “Educational”:

For this development area to function as a proper integrated human settlement, it is of critical importance to also address the needs of the community for education facilities in the form of creches/schools.

In terms of the CSIR Guidelines for the Provision of Social Facilities in South African Settlements, the following norm is proposed in respect of social facilities:

**Table 9: CSIR Guideline for place of worship**

Proposed facility	CSIR Guideline	Number of erven required	Number of erven provided
Small Crèche / Early childhood development centre	1 per 2400 – 3000 inhabitants	2	3
Primary School	1 per 7000 inhabitants	0	1

(Based on estimated 1 391 households, 4.1 average household size and total estimated inhabitants of 5 703.1)

The erf earmarked for the use as a primary school was positioned in the southern portion of the application site in order to service stands furthest away from the services offered in Itekeng. The location of the proposed school will also service future neighbourhoods to the south. The location of the proposed primary school erf was determined in collaboration with the Department of Education.

The proposed “Educational” erven will be subject to the following development parameters imposed in terms of the Ditsobotla Local Municipality Land Use Scheme, 2020:

Table 10: "Educational" development parameters

Development parameter	Development Parameter Detail
Primary Use	<p><b>Place of instruction</b> defined as  <i>Land used or a building designed or used as school, college, technical institute, lecture hall, institute or other educational centres and includes a crèche, a convent or monastery, a public library, art gallery, museum and gymnasium, but does not include a building designed for use wholly or principally as a reformatory or industrial school.</i></p> <p><b>Day care facility</b> defined as:  <i>A building or portion of a building used by the owner or occupant, to provide day care for young children (or for children before school age) in the absence of their parents and includes a play group or after school services.</i></p> <p>Dwelling unit                      Office                      Place of worship                      Private road                      Residential building                      Social hall                      Sport &amp; recreation ground</p>
Consent Uses	Conference facility, Institution, Retirement village, Special usage
Coverage	Maximum 50%
F.A.R	1.0
Height	Maximum 2 storeys
Building lines	As approved by Council

#### 4.1.5 Municipal

The layout plan of the proposed township area makes provision for one (1) erf to be zoned as “Municipal”. The property will be used as a cemetery, defined as: “*Land or premises earmarked exclusively for the burial or depositing of human remains or a crematorium and may include buildings that are necessary for administration and clerical uses associated therewith, as well as a chapel, memorial wall for keeping of human ashes, whether for public or private utilisation*” in the Ditsobotla Local Municipality Land Use Scheme, 2020.

#### 4.1.6 Government

The layout plans of the proposed township areas make provision for two (2) erven to be zoned as “Government”. These properties will accommodate utility services already present on site. The smaller of the two stands, located in the eastern corner of the proposed layout accommodates the existing sewer pump station on site and the larger of the two in the western corner accommodates the existing sewer oxidation dams.

The proposed “Government” erven will be subject to the following development parameters imposed in terms of the Ditsobotla Local Municipality Land Use Scheme, 2020:

Table 11: "Government" development parameters

Development parameter	Development Parameter Detail
Coverage	Maximum 70%
F.A.R	1.0
Height	Maximum 3 storeys
Building lines	As approved by Council

#### 4.1.7 Public Open Space

The proposed layout makes provision for six (6) erven to be zoned as “Public Open Space”: These properties coincide with the areas not suitable for development due to

- Building line restrictions alongside Provincial Road P34-3 (R52)
- 500m buffer allocated downwind of the existing sewage treatment works
- Unsuitable geotechnical conditions due to a previous quarry (classified as zone PQ)

The proposed “Public Open Space” erven will be subject to the following development parameters imposed in terms of the Ditsobotla Local Municipality Land Use Scheme, 2020:

Table 12: "Public Open Space" development parameters

Development parameter	Development Parameter Detail
Primary Use	Public open spaces defined as <i>Land which falls under, or is intended to come under, the ownership of the Council, which is not leased or intended to be leased on a long-term basis and which is utilised or will be utilised as an open space, park, garden, picnic area, playground or square, and includes a public place.</i>



	Conservation usage Nature reserve Equestrian facility Social hall Sport & recreation ground
Consent Use	Resort Special Usage
All further development parameters to be approved by Council	

#### 4.1.8 Public Road

Erven in the township will be accessed through “Public Roads” that make up the road network. “Public Road” is defined as follows in the Ditsobotla Local Municipality Land Use Scheme, 2020:

*“Any road or street for public use or any land intended for such purposes”.*

## 4.2 FACTORS INFLUENCING THE LAYOUT PLAN

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

- ★ The Provincial Road P34-3 (R52) that runs along the eastern boundary of the application site. The layout plan incorporates the prescribed 16m building restriction area applicable along this road as well as the prescribed line of no access applicable along the boundary of the township bordering onto Provincial Road P34-3 as well as for a distance of 100m along the proposed access road to the township area from Provincial Road P34-3;
- ★ The proposed development area is affected by the existing Sannieshof Munic / Makoeispan 11kV Feeder MV overhead line. This powerline has been accommodated within one of the public open space erven and provision has also been made for an 18m wide building line restriction (measured 9m from the centre line of the powerline) along the eastern boundary of the application site to accommodate this existing powerline. The powerline was accommodated on the layout plan in consultation with Eskom;
- ★ A 2m wide municipal servitude is proposed along the lines lettered a-b and c-d on the attached layout map (**Annexure L** in the Comprehensive Land Development Application) to accommodate the existing sewer rising main that transports sewer effluent from the sewer pumpstation (located in the north-eastern corner of the proposed township area and adjacent to Provincial Road P34-3) to the sewer oxidation ponds located in the south-western corner of the proposed township area. This sewer rising main is located 1m south of the northern boundary of the proposed township area and will be accommodated in a 2m servitude area;
- ★ With regards to Provincial Road P34-3 (R52), a new access road is proposed to service the proposed township area. This access was assessed in the Traffic Impact Study. Adequate spacing between the proposed access and the existing access to

- Itekeng was incorporated. A 100m line of no access has also been imposed along the access road, measured from the centre line of Provincial Road P34-3 (R52);
- ★ Residential stand sizes were aligned with those of the adjacent Itekeng Extension 2 (approximately 470m<sup>2</sup>). These stand sizes will promote a vibrant and sustainable township in future by accommodating either subsidised housing or gap/bonded housing, based on the needs of the community;
  - ★ Additional erven were provided that serve the socio-economic needs of the community and include educational and institutional facilities, business properties and authority uses;
  - ★ In particular, existing municipal land uses such as the oxidation ponds in the western corner of the application site and the sewer pump station in the eastern corner of the application site were accommodated accordingly on “Government” zoned erven;
  - ★ A suitable buffer zone was introduced around the existing oxidation ponds. Residential erven downwind of the ponds are located at least 500m away from the oxidation ponds. A 350m buffer zone was incorporated on the layout plan in respect of the residential erven located north of the oxidation ponds. This was not only done due to the presence of existing brick-built formal housing structures already having been erected on the residential erven located north of the oxidation ponds but also due to the fact that the prevailing wind direction within the Biesiesvlei area, being northerly, north-westerly and north-easterly will pose a very limited impact on the proposed residential erven located north and north-east of the oxidation ponds as they are located upwind from the oxidation ponds. This buffer area around the sewer oxidation dams were imposed in consultation with the Ngaka Modiri Molema District Municipality;
  - ★ Inputs from the local municipal officials regarding lands uses and property sizes were used to guide the layout plan and land use matrix;
  - ★ Unsuitable geotechnical conditions (due to previous surface mining) was accommodated accordingly as a “Public Open Space” erf;
  - ★ Providing access to possible future development to the south and north;
  - ★ Internal access roads to the development were aligned with the existing road network of Itekeng Extension 2;
  - ★ The existing sewer pumpstation, located in the north-eastern corner of the development area, was accommodated on an erf in the proposed township area;
  - ★ The existing sewer oxidation ponds located in the south-western corner of the development area was accommodated on an erf in the proposed township area;
  - ★ The final layout plan of the proposed township area was to a large extent dictated by the initial layout plan which had previously already been partially surveyed and the erven occupied by informal and formal residential structures; and
  - ★ The layout plan was designed to ensure proper surface stormwater drainage.

### 4.3 ACCESS

The street layout used in the proposed township layout plan aims to create a functional road network that can accommodate public / private transport as well as pedestrian movement. The street layout connects to Itekeng Extension 2 in the north, and makes provision for future expansions to the south in order to promote accessibility. The R52 which runs along the eastern boundary of the application site is a Provincial Class 2 road linking the N14 in Biesiesvlei with Lichtenburg to the north. A new 15m wide access road is proposed off this road into Itekeng Ext 3.



Photo 2: Photo of P52 road

The main road network in the township area will consist of 15m collector roads and 10m internal roads, which will provide access to all erven in the township area.

In order to assess the impact of the proposed township area on the surrounding road network, Route<sup>2</sup> Transport Strategies CC was commissioned to conduct a Traffic Impact Study in respect of the proposed township area.

The results of the Traffic Impact Study can be summarized as follows:

#### 4.3.1 STUDY AREA

The extent of the study area is driven by an estimation of the traffic generated by the proposed development of Itekeng Ext 3 and the intersections likely to be affected by the additional traffic.

This study therefore assesses the worst-case scenario which will be the full extent of the Development. All other land uses and subservient uses will have internal traffic generation.

The study includes the following external intersections which is in line with the 1,5km study area as defined in the COTO Manual TMH16 and the study area for Itekeng Ext 3:

1. ***R52 and Itekeng Access Road – priority controlled.***
2. ***R52 and New Access Road to Itekeng Ext 3 – proposed priority controlled.***
3. ***R52, N14 and Nooitgedacht Road – priority controlled.***

## 4.3.2 TRAFFIC FLOWS & TRIP GENERATION

### 4.3.2.1 Trip Generation (Private Trips)

The COTO Trip Generation Manual (September 2012 TMH 17 Volume 1) recommends a peak hour trip rate of 1,0 trips per unit for Residential 1 which is the primary land use although the following trip rates as per the EMM for low-cost housing and what SANRAL allows countrywide was used:

- Public primary school: 0,072 and 0,026 trip / student during the AM and PM peak period respectively.
- Public secondary school: 0,034 and 0,021 trip / student during the AM and PM peak period respectively.
- Shopping centre: 0,451 and 2,558 trips /100m<sup>2</sup> for AM and PM peak periods respectively. (these are base rates for formula as per COTO manual)
- Residential 1: 0,306 trips /unit for both AM and PM peak periods.
- Residential 4: 0, 251 trips / units for both AM and PM peak periods.

The predicted peak hour traffic to and from the site is summarised in the tables below:

**Table 13: AM Peak Hour Trip Generation**

Land use	Extend	Units	Trip Rate	Split		Trips		External Total in & out
				In	Out	In	Out	
Residential 1	1 391	Stands	0.31	25%	75%	108	324	432
Shopping Centre	500	m <sup>2</sup>	0.45	65%	35%	9	9	18
Primary School	500	Students	0.07	50%	50%	18	18	36
Secondary School	500	Students	0.03	50%	50%	8	8	16
Pre-school	500	Student	0.07	50%	50%	18	18	36
						<b>161</b>	<b>377</b>	<b>538</b>

**Table 14: PM Peak Hour Trip Generation**

Land use	Extend	Units	Trip Rate	Split		Trips		External Total in & out
				In	Out	In	Out	
Residential 1	1 391	Stands	0.31	70%	30%	303	129	432
Shopping Centre	500	m <sup>2</sup>	2.56	50%	50%	40	40	80
Primary School	500	Students	0.03	50%	50%	8	8	16
Secondary School	500	Students	0.02	50%	50%	5	5	10
Pre-school	500	Student	0.07	50%	50%	18	18	36
						<b>374</b>	<b>200</b>	<b>574</b>



### 4.3.2.2 Trip Generation (Public Transport Trips)

The expected number of vehicles per public transport and non-motorised transport modes to and from the development during the peak hours has been calculated and is presented in Table 15 below:

Table 15: Modal Split AM & PM Peak Hour\*

Mode AM Peak	Modal Split	Occupancy	Number of Vehicle Trips
Minibus-taxi	50%	13	17
Bus	5%	48	1
Cycling & Walking	10%	N/A	N/A
Mode PM Peak	Modal Split	Occupancy	Number of Vehicle Trips
Minibus-taxi	50%	13	17
Bus	5%	48	1
Cycling & Walking	10%	N/A	N/A

\* It should be noted that the trip generation as used in the analysis should still be seen as the worst-case scenario.

### 4.3.3 CAPACITY ANALYSIS

For the purpose of the capacity analysis, the following intersections were assessed in terms of current and future traffic operations and capacity (the 2020 traffic volumes were grown with a compound of 5% per annum to calculate the future traffic demand).

- **R52 and Access Road to Itekeng (Intersection No: 1)**
  - For all the scenarios the intersection operates at acceptable LOS with ample spare capacity.
- **R52 and New Access Road to Itekeng Ext 3 (Intersection No: 2)**
  - For all scenarios the proposed intersection will operate sufficiently.

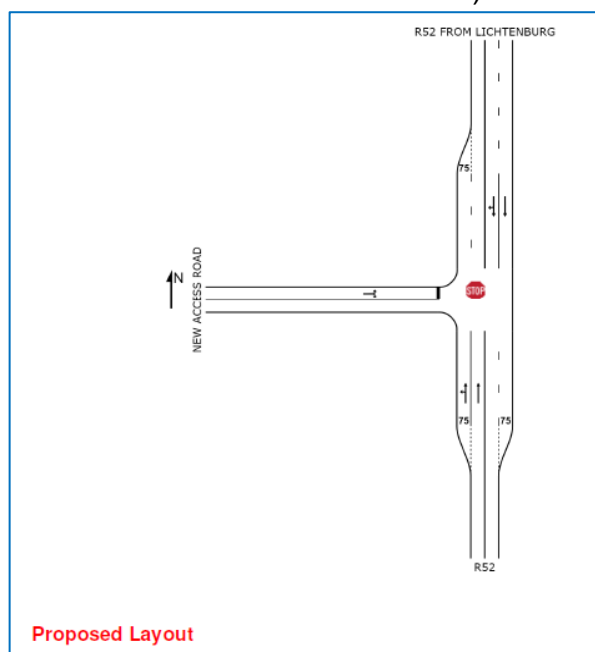


Figure 6: Proposed layout – Intersection 2

- **N14, R52 and Nooitgedacht Road (Intersection No: 3)**
  - With including the development traffic, the intersection operation during the AM and PM peak hours will deteriorate further, although there will be capacity left during the AM peak hour. To mitigate this, a roundabout is proposed as shown below by 2025 which will improve not only the operation but also the safety at the intersection.

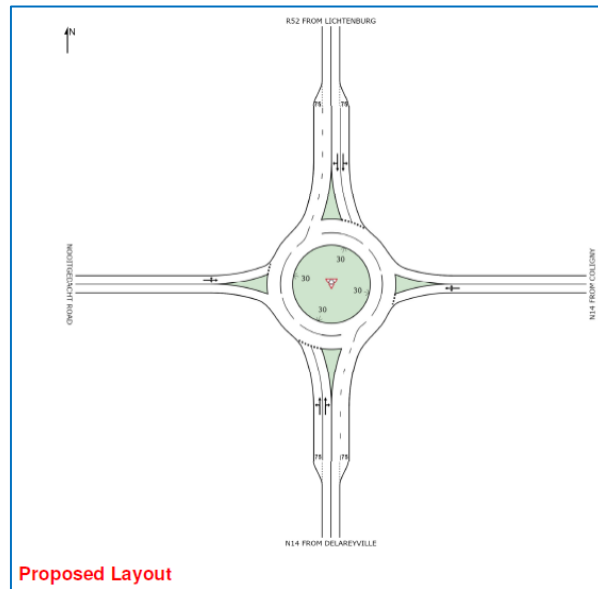
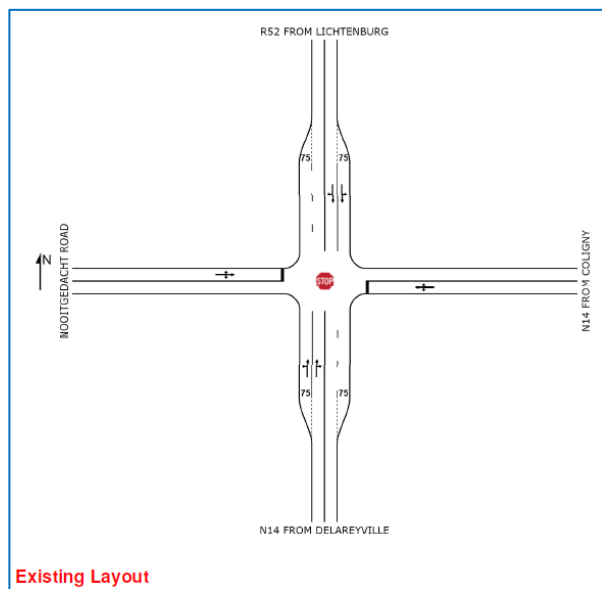


Figure 7: Existing and Proposed layout: Intersection 3

#### 4.3.4 CONCLUSION

In addition to the conclusions drawn in sections 4.3.1 to 4.3.3 above, the Traffic Impact Assessment concluded as follows:

Based on our site observations, the existing and base traffic volumes shown in the figures, as well as the capacity analysis, it is concluded that the proposed development will have some impact on the external road network

It is proposed and can be concluded:

- **Upgrading of the N14, R52 and Nooitgedacht Road intersection by 2025 into a roundabout if and when Warranted.**
- **Provision of the required turning lanes and pass-by lanes at the proposed New Access Road intersection along the R52.**
- **It is recommended that provision is made for sidewalks along the school site frontages.**
- **It is recommended that provision is made for traffic calming along the school site frontages.**
- **Furthermore, with regards to the school site**
  - **All parking and drop-off should occur on the site.**
  - **Pedestrian sidewalks should be provided along the school frontages.**
  - **Separate pedestrian gates to be provided at the school.**

## CHAPTER 5: PROVISION OF ENGINEERING SERVICES

### 5.1 INTRODUCTION

FHP Consulting Engineers was appointed to investigate and report on the provision of civil services and Motla Consulting Engineers was appointed to investigate and report on the provision of electrical engineering services to the proposed township area, respectively.

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

- Section 5.2: Civil Engineering Services
- Section 5.3: Electrical Engineering Services

### 5.2 CIVIL ENGINEERING SERVICES

**(Extract from the civil engineering services report compiled by FHP Consulting Engineers (attached as Annexure P1 to the comprehensive land development application))**

#### 5.2.1 WATER

Current indications are that the bulk infrastructure (supply and storage) is managed by the District municipality and the reticulation, by the Local Municipality. The developer will be responsible for the design and construction of the water supply network to the requirements of the relevant Authority. On completion, the infrastructure will be managed and maintained by the operating authority and will form part of the municipal asset register.

The current water supply to Itekeng is from boreholes only. Reference is made to the following report: **“Technical Report 2019/06/01, Ngaka Modiri Molema Drought Relief Geohydrological Assessment: Groundwater Development at Itekeng in the Ditsobotla Local Municipality, September 2019 by AGES” (attached as Annexure P2 to the comprehensive Land Development Application)**

Borehole yields from the existing operational boreholes are indicated as:

- BH03 – 2.5 l/sec
- BH04 – 8 l/sec
- BH05 – 3 l/sec

The study by AGES investigated additional boreholes and identified two additional usable boreholes (one existing and one newly drilled) with a combined yield of 6 l/s (BH06 = 4 l/sec and BH07 = 2 l/sec). These should be equipped and linked to the existing system to provide a combined yield of 19.5 l/sec or a daily yield of approximately **1100m<sup>3</sup>** based on

a 16-hour duty cycle. The existing boreholes can supply **777 m<sup>3</sup>** based on a 16-hour duty cycle.

Two (2) elevated steel panel tanks were witnessed on site. Based on visual estimation, the height of the tanks are estimated to be between 12m and 15m. The sizes are as follows:

- 10 x 10 x 3 panels (approximately 440 kℓ)
- 6 x 5 x 3 panels (approximately 130 kℓ)

This indicates a total current storage volume of 570 kℓ.

The estimated water consumption for the planned Itekeng Extension 3 development is indicated in the Table below, assuming full level of service. The difference between water demands in developed and developing areas should be noted and a balance should be determined:

**Table 16: Water demand (developed areas)**

Description	Unit demand	Units / Area	Water Demand (AADD- ℓ/day )	Assumptions / Design source
Residential 1a	450 ℓ / unit	1393	626,850	Red book table 9.14
Business 1	400 ℓ / 100m <sup>2</sup>	6,027 m <sup>2</sup>	12,504	Red book table 9.14 – assume 50% coverage
Institutional	400 ℓ / 100m <sup>2</sup>	4,424 m <sup>2</sup>	8,848	Red book table 9.14 – assume 50% coverage
Educational	15 ℓ / pupil	1,500	22,500	Red book table 9.12 – assume 1500 pupils for the two school stands
Agriculture	N/A	N/A	N/A	Alternative water source for irrigation proposed
Public open space	N/A	N/A	N/A	Alternative water source for irrigation proposed
Cemeteries	5 ℓ / visitor	50	250	Red book table 9.12 – assume 50 visits per day average
<b>TOTAL</b>			<b>670,952</b>	

AADD = Average Annual Daily Demand

The calculations in Table 16 is based on water demands typical for developed areas. We used this basis as a worst-case calculation, assuming that the area will grow / develop into a “developed” area as defined in the “Red book”. Studies on water demand show there can be a large degree of variance between the water demands for example in rural / developing areas and adjustments to these figures are allowed to take local conditions into consideration.

When Table 16 is compared to water demands typical for “Developing” areas as defined in the “Red book”, large variations are witnessed. Based on the population of Itekeng (not just Extension 3) obtained from the Statistics SA database, the 2011 census indicate a



population of 5,626 people with an expected population growth of 1,35%. This implies a current population of approximately 6,350 in 2020 and a projected population of approximately 8,300 in 2040.

The typical water demand for developing areas with house connections and moderate to moderately high development level is approximately 80 - 130 ℓ / person / day. The water demand for the current (2020) and 20-year life (2040) population can be estimated as follows:

**Table 17: Water demand (developing area)**

Population	Unit demand	Water Demand (AADD- ℓ/day )
6,350 (2020)	100 ℓ / person / day	635,000
8,300 (2040)	100 ℓ / person / day	830,000

Based on the above comparative calculation, the **current storage is not sufficient** to service the planned development and additional storage is recommended. Reference is made to Table 18 below, summarizing the water requirement options.

Bulk storage is a function of the combined required domestic and fire storage required and need to be sized to service the total reservoir supply zone. For domestic use total storage of 48 hours is recommended. The result is approximately 1,600kℓ for domestic storage, should the 20 year design life and population growth be considered.

Should the Fire-risk categories as stipulated in the “Red Book” be used, it is expected to have a Moderate Risk areas as a worst case scenario. This entails fire flow of 6,000 ℓ/ minute for a 4 hour duration. This require an additional 1,440 kℓ water storage. Should a lower risk category be accepted for this development, only 900ℓ /minute for a 2 hour duration may be suitable only requiring 108kℓ water storage. This need to be investigated further during the design stages.

Total storage for the Itekeng area is recommended between 1,700 kℓ (Low Risk Group 1 Fire category) and 3,000 kℓ (Moderate Fire-risk category). This includes 48 hour storage for domestic water (approximately 1,600kℓ)

Peak flow for the development can be summarised in Table 18. The peak flow is based on the water demand of 670,952 l/day as shown in Table 16.

**Although the “Red Book” recommend 48 hours storage, it mentions that 24 hour storage may suffice in certain situations, for example areas with a very reliable water source**

**Table 18: Storage calculation (suitable option to be decided on)**

Option	Storage recommended	Current available storage	Additional required storage
OPTION 1 - Provision of 24 hour storage for Developing (rural) area without any fire storage allowance	830 kℓ (refer to table 2)	570 kℓ.	260 kℓ.
OPTION 2 - Provision of 48 hour storage for developing (rural) area without any fire storage allowance	1,660 kℓ (refer to table 2)	570 kℓ	1,090 kℓ

The civil engineering services report recommended that option 1 should be seen as the minimum required storage and should only be considered as an interim solution. Its recommendation with the information currently available, is to supply minimum 48hour storage with planning to incorporate fire water in accordance with the fire risk category.

**Table 19: Peak Flows - Water**

Description	Classification	Flow
Peak factor	4x (developed area)	31.06 ℓ/sec
Fire flow	Moderate Risk Category	100 ℓ/sec
TOTAL		132.47 ℓ/sec

## 5.2.2 SANITATION – STATUS QUO

The relevant operating Authority will be responsible for the bulk sanitation infrastructure include outfall sewers and treatment facilities. Current indications are that the bulk infrastructure is managed by the District Municipality and the reticulation, by the Local Municipality. The developer will be responsible for the design and construction of the sanitation pipe network to the requirements and standards of the Local Authority. After completion, the infrastructure will be managed and maintained by the operating authorities and will form part of the municipal asset register.

Existing infrastructure include the following:

- Sewer reticulation system in the established Itekeng area
- Sewer pump station with rising main to the treatment ponds as per the image below. Capacity of this pump station could not be verified and need to be investigated as part of the design phase. As-built information was requested from the District Municipality
- Treatment ponds assumed to be Anaerobic-Aerobic Ponds with an estimated capacity of between 400 kℓ / day and 600 kℓ / day, located close to the south-

western boundary of the development. As-built information was requested from the District Municipality

All new internal pipelines will be provided with manholes and individual erf connections designed to effectively drain any sanitation infrastructure on individual stands. The designed and constructed to the specification and design standards of the relevant authority.

The maximum projected total average daily sewer effluent flow is as follows:

When Table 20 is compared to sewer demands typical for “Developing” areas as defined in the “Red book” Table C.1, some variations are witnessed. Based on the population of Itekeng (not just Extension 3) obtained from the Statistics SA database, the 2011 census indicate a population of 5,626 people with an expected population growth of 1,35%. This implies a current population of approximately 6,350 in 2020 and a projected population of approximately 8,300 in 2040. The difference in calculations between developed and developing areas is shown in the tables below:

**Table 20: Sewer demand (developed areas)**

Description	Unit demand	Units / Area	Sewer Demand (ADWF- ℓ/day )	Assumptions / Design source
Residential 4	360ℓ / unit	1,393	501,480	80% of water demand
Business 1	320 ℓ / 100m <sup>2</sup>	6,027 m <sup>2</sup>	10,003	80% of water demand
Institutional	320 ℓ / 100m <sup>2</sup>	4,424m <sup>2</sup>	7,078	80% of water demand
Educational	12 ℓ / pupil	1500	18,000	80% of water demand
Agriculture	N/A	N/A	N/A	N/A
Public open space	N/A	N/A	N/A	N/A
Cemeteries	4 ℓ / visitor	50	200	80% of water demand
<b>TOTAL</b>			<b>536,761</b>	

The typical sewer demands for developing areas with water borne sanitation and house connections for water supply is approximately 500 ℓ / unit / day for 7 persons per unit (This computes to 72ℓ / person / day. The sewer demand for the current (2020) and 20 year life (2040) population can be estimated as follows:

**Table 21: Sewer demand (developing area)**

Population	Unit demand	Water Demand (ADWF- ℓ/day )
6,350 (2020)	72 ℓ / person / day	457,200
8,300 (2040)	72 ℓ / person / day	597,600

Based on the above calculations, our recommendation is to provide a waste water treatment plant capable of handling approximately 600 m<sup>3</sup>/day. This should cater for the existing and future growth of the Itekeng area. The estimated capacity of the existing

ponds is very close to the required capacity. During the design phase it will be necessary to evaluate the existing ponds system to confirm any required upgrades and maintenance.

Peak flows for Itekeng Extension 3 can be summarised in Table 22 below and is based on the 536,761 l/day as calculated in Table 20 and include a 15% storm water infiltration rate.

**Table 22: Peak Flows (Sanitation)**

Description	Classification	Flow
Peak factor	2.5x (developed area)	15.53 l/sec
Storm water infiltration	15%	2.33 l/sec
TOTAL (PWWF)		17.86 l/sec

ADWF = Average Dry Weather Flow

PWWF = Peak Wet Weather Flow

### 5.2.3 STORMWATER

The site is relatively flat with natural drainage in an eastern direction, towards the R52 Provincial road. There is a natural drainage corridor (non-perennial stream) to the east of the R52 provincial road, draining in a southern direction. Based on a visual investigation, this development should not be influenced by the 1:100 year flood line.

There is limited storm water infrastructure in Itekeng and is mostly concentrated next to the R52. There is an existing storm water culvert crossing under the R52, comprising of 8 concrete box culverts. The images below show the R52 crossing and some existing infrastructure close to this low-point. The capacity needs to be confirmed during the design stage.

The civil engineering services investigation recommended to manage storm water drainage by means of surface runoff (open canals and within the road prism) where possible, with piped systems inside the development only where required. Road geometric design is an important factor in storm water management and master planning is a very important requirement.

The developer will be responsible for the cost of construction of the storm water system inside the development to the specification and design standards of the Local Authority.

### 5.2.4 SOLID WASTE

It is vital that the local municipality be familiar with all the legislation regarding waste management. This necessary to ensure that, regardless of level of service implemented, an affordable and environmentally acceptable standard is achieved. Waste for residential



units are estimated at 85 ℓ/unit/week and is assumed to be transported to the municipal landfill site.

The projected volume of normal domestic waste is as follows:

Table 23: Projected volume of domestic waste

Description	Unit demand per week	Units	Waste Volume (m <sup>3</sup> ) / week
Residential 2	85 ℓ / unit	24	2.04
Residential 4	85 ℓ / unit	1377	117.05
Business 1	240 ℓ / unit	22	5.28
Institutional	240 ℓ / unit	11	2.64
Educational	1.2 m <sup>3</sup> / unit	2	2.4
Municipal	240 ℓ / unit	6	1.44
Agriculture	N/A		
Public open space	N/A		
Cemeteries	85 ℓ / unit	1	0.085
<b>TOTAL</b>			<b>131 m<sup>3</sup></b>

### 5.3 ELECTRICAL ENGINEERING SERVICES

(Extract from the electrical engineering services report compiled by Motla Consulting Engineers (attached as Annexure P3 to the comprehensive Land Development Application)

#### 5.3.1 DEMAND ESTIMATION

The maximum demand for the proposed development is based on the draft layout plan and calculated in accordance with the requirements set out in SANS 204 and SANS 10142-1.

Table 24: Maximum Demand Estimation (electrical)

MAXIMUM DEMAND ESTIMATION FOR ITEKENG EXT 3					
Item	Zoning	Land Use	Qty	kVA / Qty	MD (kVA)
1	Residential 1A	Dwelling Unit (450m <sup>2</sup> )	1393	2,4	3343
2	Business 3	Taxi Facility, ext..	10	14,4	144
3	Educational	Primary School	1	50	50
4		Creche	3	75	225
5	Institutional	Church	3	75,0	225
6	Municipal	Cemetery	1	14,4	14,4
7	Public Open Space	Parks	5	14,4	72
8	Public Road	Street	2	7	14
9	<b>Total</b>				<b>4088</b>

## 5.3.2 BULK SUPPLY

### 5.3.2.1 General

Bulk electricity supply to Itekeng is currently from Eskom's Sannieshof substation which is approximately 22km from Biesiesvlei. Eskom is responsible for operations and maintenance of the electrical network inside Biesiesvlei and Itekeng and receives electricity supply from the Sannieshof Leeupan (SM) 22kV Feeder.

A detail Service Agreement with all relevant information for the proposed township establishment need to be compiled and submitted to the relevant supply authority for approval.

### 5.3.2.2 Existing Network Analysis

An existing 22kV overhead network feeding from Eskom's Sannieshof Substation currently supplies electricity to Itekeng at SM-292-38.

An internal overhead electrical network inside Itekeng supplies electricity to various Pole Mounted Transformers which supply electricity via Bundle Conductors to various Households equipped with a Pre-paid metering system.

The Pre-paid metering system is connected to the electricity network via overhead concentric cables from Pole Top Boxes.

### 5.3.2.4 Bulk Supply Proposal

It is proposed to extend the existing SM overhead network after Pole SM-192-38 to create a new feeder to supply Itekeng Extension 3 with electricity.

The following electrical services are proposed:

- a) **Bulk Supply:** As per bulk supply proposal.
- b) **MV Reticulation:** Capacity will be created by way of an overhead MV network and various Pole Mounted Transformers to create capacity.
- c) **LV Reticulation:** Electricity will be distributed throughout the development by way of overhead ABC conductors.
- d) **LV Connections:** LV connections (10mm<sup>2</sup> Airdac SNE + 2 Comms) will be provided for each residential stand.
- e) **Metering:** 20 Amp Split Meters will be installed.
- f) **Street & Area Lighting:** Street and Area Lighting are optional and can be included on recommendation of the Developer or requirement from the Local Municipality.
- g) **The detail of the above will be determined during the detail design phase of the project and will be dependent on the final SDP's to be submitted for review and approval to the relevant supply authorities.**

## CHAPTER 6: MOTIVATION

### 6.1 INTRODUCTION

This need and desirability in respect of the proposed township establishment on a portion of the Remaining Extent of Portion 98 of the Farm Biesjesvallei 149, Registration Division I.O., North West Province will, in addition to the motivational statements already discussed in Sections 1 to 5 above, be motivated based on the following criteria:

- National Development Plan: Vision for 2030
- Constitution of the Republic of South Africa (Act 108 of 1996)
- National Housing Code, 2006
- A Comprehensive Plan for the Development of Sustainable Human Settlement (BNG)
- Urban (UDF) and Rural Development (RDF) Frameworks, 1997
- White Paper on Local Government, 1998
- Municipal Demarcation Act, 1998 (Act 27 of 1998)
- Municipal Systems Act, 2000 (Act 32 of 2000)
- National Housing Act, 1997 (Act 107 of 1997)
- White Paper on Wise Land Use, 2001
- Millennium Development Goals (MDG)
- National Spatial Development Perspective, 2006
- North West Province Spatial Development Framework, 2016
- Ngaka Modiri Molema District Spatial Development Framework, 2019 - 2024
- Ditsobotla Local Municipality Integrated Development Plan, 2020-2021
- Ditsobotla Local Municipality Spatial Development Framework, 2020 - 2025
- Outcome 8 - 2014-2019 Medium Term Strategic Framework (MTSF)
- Spatial Planning and Land Use Management Act Development Principles, 2013
- 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 Ditsobotla 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 6.20 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.

Where we live and work matters. Apartheid planning consigned the majority of South Africans to places far away from work, where services could not be sustained, and where it was difficult to access the benefits of society and participate in the economy.

The physical and social environment in which we are born and grow up is one of the most important determinants of every person's wellbeing and life chances.

This environment has a bearing on access to opportunities, good schools, useful social networks, public services and safe environments. Separation between social groups, long distances between jobs and housing, and poor public services exacerbate poverty and inequality. Location affects communities, local economies, labour markets and infrastructure networks. Businesses are also affected by where they are situated. Access to markets and suppliers determines their survival and profitability. This is hugely significant for South Africa's society, economy and environment.

To fundamentally reshape human settlements by 2050 (with significant progress by 2030), South Africa needs:



- To address inequities in the land market that makes it difficult for the poor to access the benefits of life in towns and cities.
- Stronger measures to reconfigure towns and cities towards more efficient and equitable urban forms.
- Housing and land policies that accommodate diverse household types and circumstances.
- Municipalities that put economic development and jobs at the heart of what they do and how they function.

The establishment of the proposed township specifically aims at redressing the injustices of the past by ensuring proper integrated planning in respect of the location of new residential developments in well-located places that are conducive to the health and wellbeing of the community. Varying stand sizes in the proposed township offers opportunities for partnerships between the private and public sector to develop a range of housing typologies. In addition to the residential facilities that will be provided in the respective township areas, provision has also been made for properties that will stimulate economic growth and broaden the economic base of the area whilst similarly addressing the need for accelerated job creation. The proposed layout also makes the necessary provision for supporting land uses (such as institutional and educational sites) that will service the community needs of the residents.

### **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.

The development of the proposed township constitutes a collaboration between the local authority and private developers to provide access to adequate housing, health care services, social security and education for the inhabitants of this community. It is further the objective of this project to provide opportunities for people to access proper housing either through one of Government's subsidized housing programmes, by accessing bond finance or through the utilization of own funding. The proposed township area makes provision for a multitude of erven to allow for the provision of the full spectrum of social, educational and health facilities that may be required by the concerned community. As will be alluded to in further sections below, the main objectives of this project are specifically to address the need for proper housing.

#### **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.

The project under discussion specifically aims at providing access to housing for the inhabitants of the Ditsobotla Local Municipality. Through the provision of adequately sized erven, provision is not only made for the sector of the community who cannot access adequate housing due to financial circumstances coupled with the lack of serviced erven to accommodate said individuals but also for inhabitants requiring other forms of tenure e.g. bonded housing. One of the objectives of the National housing Code is for national and provincial legislation and policy to initiate, plan, facilitate and coordinate appropriate housing development. The proposed development directly aims at addressing this objective.

#### **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.

This project from the onset aimed at providing a proper integrated human settlement that ascribes to the BNG Principles set out above. This was achieved as follows:

- This project makes provision for a variety of erven that can be utilized for various housing typologies. The largest proportion of the township areas will however be

aimed at the subsidized housing sector through the implementation of one of Government's subsidized housing programmes as well as the need that exists for people that do not qualify for a Government subsidy, due to either already owning other property or earning in excess of the threshold household income prescribed in respect of the various housing subsidy programmes, but who still wishes to acquire an affordable stand where they can construct their own home.

- As detailed in previous sections, the proposed development focusses on promoting densification through the creation of smaller economical erven to optimise the provision of services to this area. Due to the locality of this development, integration with the existing Itekeng extensions to the north will also be achieved.
- The proposed township also provides social, educational and commercial support facilities and infrastructure in close proximity to the inhabitants to create a vibrant, sustainable settlement.

## **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.



The development of the proposed integrated human settlement addresses the majority of the guidelines and principles set forth in the White Paper on Local Government (1998) as:

- The proposed development is specifically aimed at addressing the needs of the people of Ditsobotla Local Municipality and specifically the most vulnerable of the community;
- In addition to addressing the safety concerns of the community through the provision of proper durable housing structures, this project will also ensure a sustainable healthy environment for the inhabitants through the provision and availability of proper engineering services offering safe drinking water, proper sanitary infrastructure and facilities and a safer environment to live in.
- This development will also give rise to economic growth through the creation of income and employment opportunities. This will not only be attained as a result of the provision of business stands but also through the provision of erven that can be utilized for social- and educational purposes. These facilities also require staff to function properly and will lead to additional jobs being created.
- The application will be advertised to the local community through the publication of notices in a local newspaper and the North West Gazette, the posting of site notices on the subject properties, the notification of all adjacent property owners of the development as well as the involvement of a number of external organizations and departments as integral part of the township establishment process. Concerns raised by the community and stakeholders as part of the public participation process will be considered and addressed.

## **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)**

Chapter 5 of the Local Government Municipal Systems Act, 2000 calls upon municipalities to 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.

## **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.

This project will at its core aim at addressing the needs of the poor in respect of the provision of housing. The development of the proposed township area will however not be focussed solely on the needs of the poor but will also address the needs of people that do not qualify to participate in one of the government subsidy programmes or those that wish to construct their own home or wishes to explore other housing options such as rental housing or social housing. This will ensure that the right of access to adequate housing is realised on a progressive basis.

## 6.11 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:

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.

## 6.12 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.

This project has at its core the provision of formal housing through the establishment of an integrated human settlement.

### **6.13 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.



## **6.14 NORTH WEST PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK, 2016**

The North West Provincial Spatial Development Framework provides guidance for provincial development. **Providing for the integration of the objectives of sustainable housing** is listed as the 7<sup>th</sup> policy objective of the NWSDF. Specifically the NWSDF states the following with regards to housing:

*“The strong urbanisation trend causing an influx of people into towns and dense human settlements puts pressure on housing delivery. All municipalities already experience housing backlogs, which exacerbate the already dismal housing situation. This large demand for housing resulted in the development of informal housing areas on the periphery of existing towns and settlements adding pressure on the existing dysfunctional engineering and social infrastructure and roads. The timely provision of housing is of cardinal importance to the general well-being of urban areas and its people.*

*The provision of housing needs to consider a variety of housing choices involving high, medium and low-density developments to provide in the housing typology needs of all individuals. Sustainable neighbourhoods require the integration of all social and economic facilities to serve the daily needs of its people”.*

There is therefore a strong emphasis on sustainable housing provision across the province. The provincial scale of the Framework means that site specific recommendations cannot be provided. However, development guidelines for the Ditsobotla Local Municipality include the following:

- **Provide affordable housing opportunities for the expanding urban population**
  - The application serves to create a residential township, well suited to either government subsidised housing or gap housing, based on the specific needs of the community.
- **Provide access to basic services**
  - Included in the development is the provision of basic services for all proposed erven in the township, as discussed in the detailed engineering services reports attached in Annexure P of the Comprehensive Land Development Application.
- **Upgrade informal settlements**
  - As already indicated, the northern portions of the application site have developed informally, with several structures present on site. The proposed development will create formal stands to house the existing community on site. The project aims to formalise the existing informal settlement on site.

It is clear from the above that the proposed development is aligned with the development principles contained in the NWSDF.

## **6.15 NGAKA MODIRI MOLEMA DISTRICT SPATIAL DEVELOPMENT FRAMEWORK, 2019 - 2024**

Spatial Development Frameworks (SDFs) are public policy statements that seek to influence the overall spatial distribution of current and future land use within a municipality or other described region to give effect to the vision, goals and objectives of the municipal Integrated Development Plan (IDP) or related business plans of government. The (MSDF) covers the jurisdictional area of the municipality.

Future growth, expansion and innovation cannot be allowed to unfold in haphazard ways as this is likely to result in expensive outward low density sprawl of housing and commercial areas and the related destruction of valuable ecosystem and agricultural resources. The NMMDM SDF aims to:

- Enable a vision for the future of the municipal area based on evidence, local distinctiveness, and community derived objectives.
- Translate this vision into a set of policies, priorities, programmes, and land allocations together with the public sector resources to deliver them.
- Create a framework for private investment and regeneration that promotes economic, environmental, and social well-being.
- Coordinate and deliver the public-sector components of this vision with other agencies and processes to ensure implementation.

With regards to settlement development in the Ditsobotla Municipal area the NMMDM SDF states:

- Focus investment on Lichtenburg to strengthen the economic core of the municipality.
- **Upgrade informal settlements.**
- Concentrate community facilities and social services in Lichtenburg.
- CBD revitalisation and upgrading of the road infrastructure will help to attract development to the area.
- **Provide affordable housing opportunities for the expanding urban population.**
- **Provide access to basic services.**
- **Upgrade infrastructure such as roads, water and sanitation.**
- **Focus on upgrading Social Services.**

The proposed development adheres to the above mentioned principles by upgrading the existing informal settlement at Itekeng Extension 3 through creating a formal township with registered stands and access to basic services. The proposed residential erven will be suited to either government subsidized housing provision or gap housing, based on the needs of the community. The proposed development is not only residential in nature

but will include complementary social services such as schools, clinics and businesses to serve the surrounding local community.

## **6.16 DITSOBOTLA LOCAL MUNICIPALITY INTEGRATED DEVELOPMENT PLAN 2020-2021**

The Local IDP recognises the settlement pattern across the municipality. It is noted that there are approximately 2000 informal households located in Itekeng at present. In order to alleviate this housing backlog, township establishment at Itekeng Extension 3 is listed as a project for the 2020/2021 financial year under the strategic objective “Promote Spatial Planning and Proper Land Use Management”.

## **6.17 DITSOBOTLA LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK, 2020 - 2025**

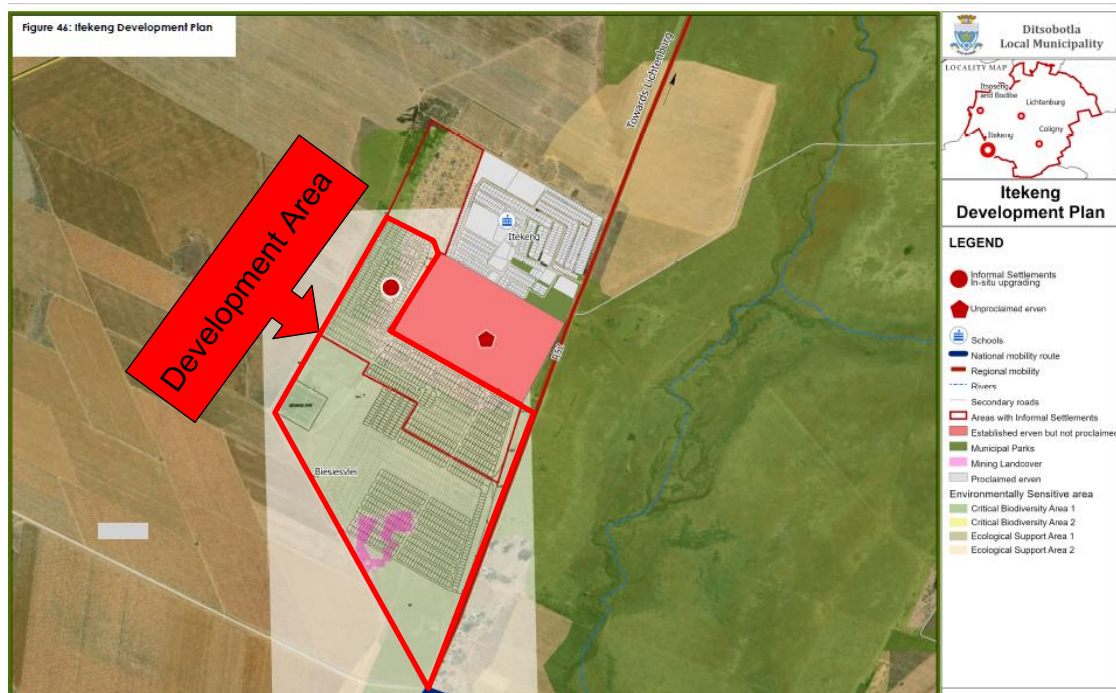
In terms of the Spatial Development Framework of Ditsbotla Local Municipality, the first structuring element (nodes and centres) in Itekeng is at a focused local or neighbourhood level and includes:

Human settlements:

- In situ upgrading;
  - *The application site is earmarked for in-situ upgrading, as can be seen in the development map taken from the SDF below.*
- Proposed relocation;
  - *The proposed layout plan was designed with the current structures on site kept in mind. Where possible, relocation has been avoided but in some individual cases people may be required to move to fall within a formalized stand.*
- Infill development;
  - *The proposed development is aimed at formalizing the existing informal settlement on site. Provision has also been made for residential stands south of the existing informal settlement in order to accommodate future growth and limit urban sprawl.*
- Unproclaimed erven; and
  - *Following the approval of the township establishment application all erven will be proclaimed and formal ownership will be made available to beneficiaries of the erven.*
- Settlement expansion.
  - *The proposed layout plan makes provision for future expansion to the south, should the need arise in future.*

It is clear from the above that the proposed development is in line with the strategic proposals for Itekeng, contained in the local SDF. The map below indicates the extent of the existing informal settlement on site, earmarked for in-situ upgrading in the SDF.

Map 12: Ditsobotla Local Municipality Spatial Development Framework Itekeng Proposals map



## 6.18 OUTCOME 8 – 2014-2019 MEDIUM TERM STRATEGIC FRAMEWORK (MTSF)

Outcome 8 (sustainable human settlements and improved quality of household life) of government’s 2014-2019 Medium Term Strategic Framework (MTSF) guides the Department of Human Settlement’s work over the medium term towards ensuring that poor households have access to adequate housing in better living environments, and that institutional capacity and coordination is improved.

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.

## **6.19 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 the Spatial Planning and Land Use management Act, 2013 (Act 16 of 2013) (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 will provide residents access to land and the use of such land to better their living conditions whilst similarly providing the necessary security of tenure. This project aims at providing 1391 residential erven with the necessary complementary land uses.

#### **(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 Ditsobotla Local Municipality Spatial Development Framework, the area to which this application applies is earmarked for in-situ upgrading due to the presence of the informal settlement on site. The formalisation of the area will directly benefit the poor community by improving access to basic services and providing secure tenure to beneficiaries.

- (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 whilst also providing housing opportunities for people that wish to acquire land to build their own home or those that do not qualify to participate in the subsidized housing programmes of government but still require proper housing (e.g. rental housing / social housing). The proposed development provides residential erven that are large enough to accommodate either government subsidised housing or gap housing in future.

- (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 Ditsobotla Local Municipality municipal area are governed by a functional land use management system. The proposed land uses in the proposed township area will be regulated by the Ditsobotla Land Use Scheme, 2020. The opinion is held that the provisions of this scheme that 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**

This project has at its core the provision of adequately zoned properties for future expansion of Itekeng to formalize the existing informal settlement. This township establishment process will afford inhabitants of this area the opportunity to obtain access to secure tenure on the development area. The township establishment process aims to create residential erven that can, after proclamation of the township area, be alienated to the beneficiaries thereof. This new township development will afford the community of Itekeng the opportunity to access land and secure tenure thereof.

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

The proposed development will positively affect not only the value of this property but also those of the surrounding areas.

**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 Ditsobotla Local Municipality has sufficient fiscal, institutional and administrative capacity and resources to administer the development. The Ditsobotla Local Municipality will ensure that the development complies with the requirements contained in the Ditsobotla Land Use Scheme, 2020 and the Ditsobotla Local Municipality Spatial Development Framework.

**(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.

**(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.

**(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 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 bulk infrastructure upgrades proposed.

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

The proposed development will take place in an area earmarked for in-situ upgrading in the Ditsobotla Local Municipality Spatial Development Framework. This development will serve as an extension of Itekeng and extensions to the north and will be well integrated, sustainable and will limit further urban sprawl.

**(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. The proposed development includes various complementary land uses to serve the local community. The proposed township is also well linked to Lichtenburg via the R52 to the east.

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

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

The granting of development permissions should be coupled with the provision of adequate infrastructure. The efficient usage of existing resources can promote high density growth, alleviate urban sprawl and optimise the use of land.

The development will ensure the optimum utilization of one of the most valuable resources being land, if used to its full potential, and it was indicated in Section 5 that the development can be supplied with the full spectrum of infrastructure elements such as water, sewer, refuse removal,



and access roads; thus reducing the effect of the development on the natural surrounding area.

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

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

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

This land development application in respect of the establishment of the proposed township will be processed in accordance with the prescriptions of the Ditsobotla By-law of Spatial Planning and Land Use Management (2017). The processes prescribed in terms of this legislation make provision for the necessary community involvement through a public participation process.

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

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

**(e) principle of good administration, whereby-;**

**(i) all spheres of government ensure an integrated approach to land use and land development that is guided by the spatial planning and land use management systems as embodied in this Act;**

The Ditsobotla Local Municipality has a Spatial Development Framework and uses the Ditsobotla Land Use Scheme, 2020 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 in-

situ upgrading which renders this proposed development in line with the Spatial Development Framework. The Ditsobotla Land Use Scheme, 2020, will effectively regulate the land uses to be established within the township.

**(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 complementary 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 will also be referred to the following government and non-government departments as integral part of the public participation process:

- Department of Agriculture, Forestry and Fisheries (DAFF)
- Transnet
- South African Heritage Resources Agency (SAHRA)
- Eskom
- Department of Public Works and Roads
- Department Water and Sanitation
- Openserve (former Telkom SA Limited)
- SA Post Office Limited (SAPO)
- Ngaka Modiri Molema District Municipality (NMMDM)
- South African National Roads Agency Limited (SANRAL)
- Department of Mineral Resources (DMR)
- North West Department of Education
- Department of Health
- Department of Co-operative Governance and Traditional Affairs (COGTA)
- Sedibeng Water
- Department Economic Development, Environment, Conservation and Tourism (DEDECT)

**(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.

**(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:

- Publishing notices of the application (as set out in **Annexure C1** of the comprehensive Land Development Application) in a local newspaper in Afrikaans & English as contemplated in Section 98(2)(a) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017);
- Appending notices of the application (as set out in **Annexure C2** of the comprehensive Land Development Application) on the notice board situated at the library as contemplated in Section 98(2)(b) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017);
- Displaying a notice (as set out in **Annexure C3** of the Comprehensive Land Development Application) in a conspicuous place on the land to which the application applies as contemplated in Section 101(2) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017);
- Notices to adjacent property owners (as set out in **Annexure C5** of the comprehensive Land Development Application) as contemplated in Section 99(1)(c) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017).
- Notices to the following external departments / organizations (as set out in **Annexure C4** of the comprehensive Land Development Application) in order to obtain letters of consent / objection as contemplated in Section 102(e) of the Ditsobotla By-Law on Spatial Planning and Land Use Management (2017):
  - Department of Public Works and Roads
  - Openserve (Telkom SA Limited)
  - Eskom
  - Ngaka Modiri Molema District Municipality (NMMDM)
  - Department of Minerals Resources (DMR)
  - Department of Agriculture, Forestry & Fisheries (DAFF)
  - Department of Water and Sanitation (DWS)
  - Department of Co-operative Governance and Traditional Affairs (COGTA)

- North West Department of Education
- Department of Health
- South African Post Office (SAPO)
- Transnet Freight Rail
- South African Heritage Resources Agency (SAHRA)
- South African National Roads Agency Limited (SANRAL)
- Sedibeng Water
- Department Economic Development, Environment, Conservation and Tourism (DEDECT)

The fore-mentioned organizations / departments will be afforded a period of sixty (60) days to comment in this matter. The adjacent property owners and the general public will be afforded a period of thirty (30) days to lodge comments or objections in this matter.

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

The procedures set out in the Ditsobotla By-law on Spatial Planning and Land Use Management (2017) 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.

## 6.20 GENERAL

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

- The purpose of this land development application is to provide for the establishment of a proper integrated human settlement that will not only address the short-term need for residential erven to address the immediate housing backlog, but to also provide a sustainable, vibrant development going forward. Although primarily aimed at government subsidised housing, provision has been made for stand sizes that will easily accommodate gap housing, should the need arise in future.
- The proposed development area is located adjacent to Itekeng 2, in an area earmarked for in-situ upgrading. The proposed township constitutes the logical extension of the existing built-up urban area of Itekeng. The layout plan has been designed in a manner to link seamlessly to the existing township establishments in the north and also makes provision for future expansion to the south.



- The proposed township area is easily accessible due to its locality directly adjacent to the R52, a provincial road (P34-3) linking to Lichtenburg in the north. As indicated above, the township is also accessible via roads linking to Itekeng Extension 2.
- 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:
  - Providing adequate spacing and limiting the number of direct accesses to the proposed township area from the R52;
  - Provision has been made for building line restrictions along the R52 and accommodates an existing powerline along the eastern boundary of the property;
  - Integrating the proposed road network with that of Itekeng Extension 2 in the north;
  - Providing for the development of complementary land uses on site to provide essential business and social services to the community. In particular, provision was made for a larger “Business 3” stand that will accommodate a taxi facility and other uses deemed necessary by the Local Authority. The erf will serve as a local node within the neighbourhood and is located along the entrance road from the R52 to improve accessibility.
  - Provision is made for a new servitude along the northern boundary of the application site (adjacent to Itekeng Extension 2) to accommodate a rising main sewer line;
  - Engineering services can be provided to the proposed township area.
  - Traffic generated by the development can be accommodated within the existing road network subject to the necessary road and intersections upgrades proposed in terms of the Traffic Impact Study.

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

**K. RAUBENHEIMER**  
**Pr. PIn A/924/1996**