

SASOLBURG EXTENSIONS 74, 75, 77, 78 AND 79

**Application for the simultaneous removal of
restrictions, amendment of the approved
layout plans and Conditions of Establishment,
consolidation and re-subdivision of the
underlying land portions, as well as
amendment of the Sasolburg Town Planning
Scheme, 1993**

NATIONAL INTEGRATED HUMAN SETTLEMENT PROJECT

FACILITATED BY:



human settlements
Department of
Human Settlements
FREE STATE PROVINCE

MOTIVATIONAL MEMORANDUM

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ABBREVIATIONS

FSHS	-	Free State Department of Human Settlements
HDA	-	Housing Development Agency
IDP	-	Integrated Development Plan
SDF	-	Spatial Development Framework
SLM	-	Sasolburg Local Municipality
UDF	-	Urban Design Framework
COGTA	-	Free State Department of Cooperative Governance and Traditional Affairs
S.G.	-	Surveyor General
SPLUMA	-	Spatial Planning and Land Use Management Act, No. 16 of 2013
MLUPB	-	Municipal Land Use Planning By-Law.
DESTEA	-	Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs

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- Plan 7** Consolidation Plan
- Plan 8** Subdivision Diagram

1. INTRODUCTION

In South Africa, the provision of housing and the improvement of livelihoods is a national priority given that a large share of the population lacks basic service provision and access to decent housing. The Government is aware of the challenges faced by its citizens and is therefore aspired to enable and create sustainable human settlements. In such settlements residents not only live in appropriate housing and are not only provided with basic services, but are also introduced to a range of social amenities such as educational and health facilities and areas where cultural activities can be practiced; and to economic prospects such as ease of access to job opportunities and exposure to consumer markets. To meet its objective of **sustainable human settlements** the National Department of Human Settlements has identified the following focus areas:

- Upgrading informal settlements;
- Accelerated delivery of housing opportunities;
- Access to basic services;
- More efficient land use; and
- An improved property market.

Local Government has a huge responsibility to realise and give effect to these development focus areas. The Constitution of the Republic of South Africa (Sections 152 and 153) outlines the responsibility of local government, namely to take charge of the development and planning processes within its area of jurisdiction. The Sasolburg Local Municipality (**SLM**) has acted on their responsibilities and consequently identified several land portions for the future development of sustainable human settlements.

About 10 years ago, the owners of five land portions located directly to the north of Sasolburg, joined forces, and agreed to develop their land as a residential township targeted for middle to high-income groups. Consequently, applications were previously lodged for five different townships, namely **Sasolburg Extensions 74, 75, 77, 78, and 79**. These township extensions are located on several portions of the farms Rietfontein No. 251, Boschbank No. 12, and Wonderfontein No. 350, and measure approximately 467 hectares in total. All the Township Extensions have been approved as formal townships between July 2014 to September 2014. Although the Townships were surveyed, the respective General Plans were not approved because the land under discussion has, at the time, been identified by the

Municipality as an ideal location for realizing the objectives of Government by implementing an integrated human settlement project of scale.

The Free State Provincial Department of Human Settlements (**FSHS**) has since joined in the vision of the SLM and has identified the Project Area as one of their key catalytic projects. The Housing Development Agency (**HDA**) has furthermore been requested by the Department of Human Settlements to act as implementing agent for the identified project. Since it is the HDA's mandate to develop sustainable human settlements, they have formulated a new Urban Design Framework (**UDF**) for the entire Project area. This new UDF, which has since been approved by the SLM and the Executive Committee of the Free State Legislature, requires a revision of the urban layouts for all the township extensions.

In order to facilitate such a revision, Urban Dynamics has been appointed by the HDA to assist with all urban planning and related matters concerning all five township extensions. More specifically, the scope of work entails the amendment of the township layout plans, and conditions of establishment, as well as overseeing the formal processes and legal procedures to ensure the required amendments – hence, this Memorandum, which must be read in conjunction with various **Annexures** and **Maps** attached hereto.

2. TOWNSHIP STATUS AND APPLICATION OUTLINE

2.1 Status of the Townships

2.1.1 Overall Status

Previous applications for Township Establishment were submitted by Vaalplan Town and Regional Planners on behalf of the individual landowners at the time, and were furthermore approved by the Free State Provincial Department of Cooperative Governance and Traditional Affairs (COGTA), in terms of Section 10(1) of the Free State Townships Ordinance No. 9 of 1969.

A summary of the five township extensions, making provision for a total of **2858 Erven** and Streets, are set out in the table below,

Table 1 Status of Township Extensions

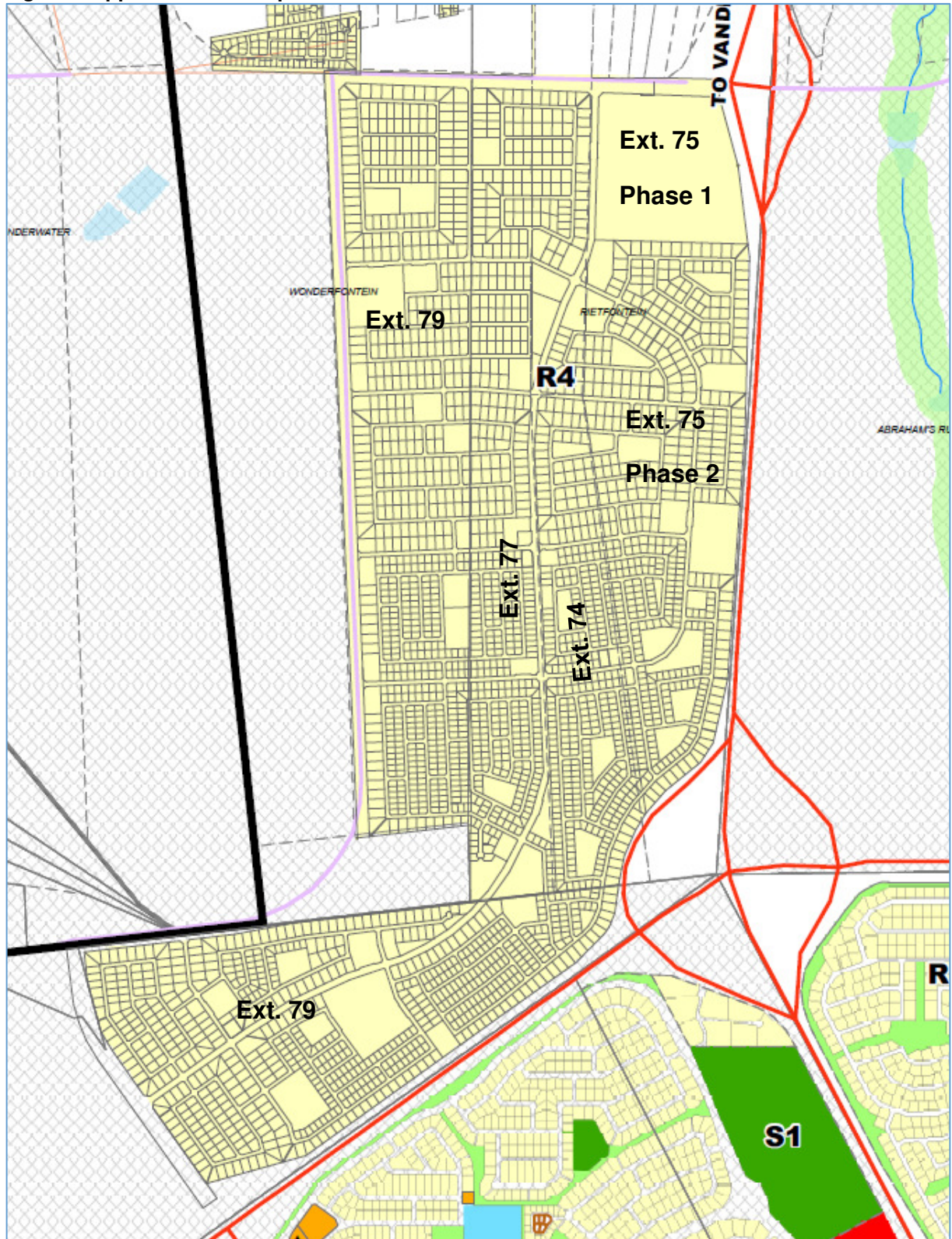
	Township Extension and (underlying land portions)	Total No. of Erven	Numbered Erven	Numbered Streets	Date of Initial Approval
1.	Sasolburg Extension 74 (Ptn. 2 & 5 of Rietfontein No. 251)	488	29159 - 29630	29631 - 29646	7 July 2014
2.	Sasolburg Extension 75 (Ptn. 8 of Rietfontein No. 251)	2	26877	27286	7 July 2014 & 9 Dec 15
		508	26789 – 26876; 26878 – 27285	27287 - 27298	
3.	Sasolburg Extension 77 (Ptn. 10 of Rietfontein No. 251)	461	27299 - 27744	27745 – 27759	28 Aug 2014
4.	Sasolburg Extension 78 (Rem. of Boschbank No. 12)	711	27760 - 28448	28449 – 28470	16 Sept 2014
5.	Sasolburg Extension 79 (Ptn. 2 of Wonderfontein No. 350)	688	28471 - 29135	29136 – 29158	7 July 2014

The Township Approvals Letters, together with the relevant supporting documentation, are attached to this application as **Annexures A1 to A5** respectively.

2.1.2 Subdivision of land portions

The individual townships and underlying land portions (referred to in the table above), have already been surveyed and were further subdivided into new land portions (with different property descriptions), all of which have been transferred to the Metsimaholo Local Municipality between 2014 and 2016. (Refer to **Paragraph 3.2** of this Memorandum for new property descriptions and title deed information).

Figure 1 Approved Township Extensions



2.1.3 Division of Sasolburg Extension 75

It is important to note from the above table that **Sasolburg Extension 75** was further split into **two phases**, which approval had been granted on the 9th December 2015. (Said approval letter for the phasing of Extension 75 is also attached as part of **Annexure A2**). Following this division of the Township, the land has consequently also been split into two portions, as set out below;

- **Phase 1** (one) consisting of 1 (one) erf and a street, numbered 26877 and 27286, is now located on **Portion 47 (of 8) of the farm Rietfontein No. 251**; and
- **Phase 2** (two) consisting of 508 erven and streets, is now located on **Portion 48 (of 8) of the farm Rietfontein No. 251**.

It is furthermore important to note that **Phase 1 of Sasolburg Extension 75 does not form part of this land development application**, whilst **Phase 2 is indeed included**. The Township Extension Number (No.75) will be reserved for Phase 1, whilst the erven of Phase 2 will be integrated to form part of the remaining extensions No's. 74, 77, 78, and 79.

2.1.4 Condonation of approvals

Although the respective Townships were approved during 2014, COGTA has since condoned its decision by issuing a letter, granting an extension of time until December 2021 to comply with the requirements of the Townships Ordinance, 1969. The Township Approvals are thus still valid, as confirmed by the relevant letter(s) from COGTA dated 18 August 2016, and attached hereto as **Annexure B**.

The required interventions to amend the Township Layout Plans to support the envisaged integrated Human Settlement Project are further outlined below.

2.2 Application Outline

This Memorandum serves as a guideline document and motivational report for a land development application in accordance with of the Spatial Planning and Land Use Management Act (SPLUMA), 2013 (Act No. 16 of 2013), which is being made to the Sasolburg Local Municipality (DLM) in terms of Sections 16(2)(a) and (3) of the Sasolburg Municipal Land Use Planning By-Law, 2015 (MLUPB), simultaneously for the following;

- (a) **Removal of restrictive title conditions** contained in the title deed of Portion 10 of the Farm Rietfontein No. 251;

- (b) **consolidation** of several land (farm) portions on which the previous townships were established, in order to create a new property to facilitate the revised integrated land development application;
- (c) **amendment**, in whole, of the **Township Layout Plans** and **Conditions of Establishment** of Sasolburg Extension 74, Phase 2 of Extension 75, as well as Extensions 77, 78 and 79, in order to create new erven and streets;
- (d) **subdivision** of the new consolidated property into 4 (four) different land portions in order to divide the Township into four separate phases (extensions); and
- (e) **Amendment of the Sasolburg Town Planning Scheme**, 1993, by the inclusion of the land development area into the Scheme, as well as zoning of the respective erven in accordance with the land use categories determined by the Scheme.

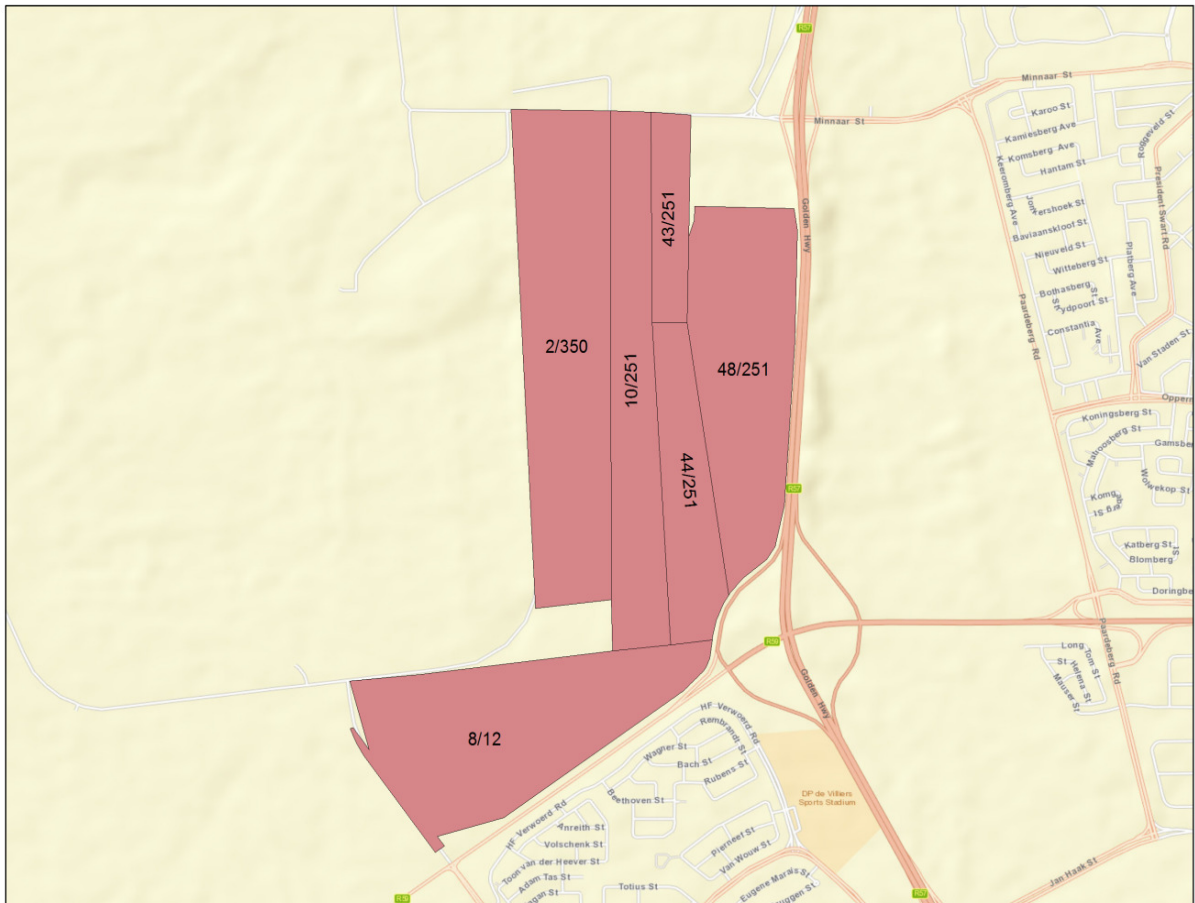
These applications are discussed in more detail in **Section 5** of this Memorandum.

3. GENERAL INFORMATION

3.1 Locality

The Project Area is located to the north of Sasolburg Town, directly to the north of Provincial Road P10/1 (R59) and directly west of Provincial Road P9/5 (R57), which forms a link between Sasolburg and Vanderbijlpark. The Project Area is furthermore bordered by Minnaar Street (Road S1608) to the North and West, as well as DF Malan Street (Road S1080) to the south-west.

Figure 2 Locality Map



The Vaal River, forming the boundary between the Free State Province and Gauteng, is located a mere 1 km to the north of the Project Area, Vaal Park is located 1,4 km to the east.

The Project Area comprises six different properties (farm portions), as indicated in **Figure 2** above. All these farm portions form separate township extensions, but have all been transferred to the Metsimaholo Local Municipality. The Subject Properties measure approximately 467 hectares all together.

More detail in respect of each property is depicted in **Table 2** below.

3.2 Property Description, Size and Ownership

The status of the subject properties are summarized in Table 2 below:

Table 2 Status of Land

	Property Description	Size (ha)	Ext. No.	Title Deed Numbers	SG Diagram Numbers	Included as Annexure
1.	Portion 43 (of 2) of the Farm Rietfontein No. 251	22.3817	Ext. 74	T14649/2014	SG1217/2014	C1
2.	Portion 44 (of 5) of the Farm Rietfontein No. 251	45.0598			SG1218/2014	
3.	Portion 48 (of 8) of the Farm Rietfontein No. 251	92.9204	<u>Phase 2</u> Ext. 75	T8452/2016	SG500/2016	C2
4.	Portion 10 of the Farm Rietfontein No. 251	69.9054	Ext. 77	T14648/2014	SG629/1987	C3
5.	Portion 8 of the Farm Boschbank No. 12	112.7927	Ext. 78	T2472/2015	SG1216/2014	C4
6.	Portion 2 of the Farm Wonderfontein No. 350	123.8464	Ext. 79	T4547/2015	SG 153/1967	C5
	Total Size	466.9064				

All the above properties are registered in the name of the **Metsimaholo Local Municipality**. The relevant Title Deeds and SG Diagrams are attached hereto as **Annexures C1 to C5** respectively. The Special Power of attorney and delegation of powers letter is attached hereto as **Annexure D**.

3.3 Mortgage Bond

None of the above properties are encumbered by a mortgage bond.

3.4 Restrictive Title Conditions

The relevant properties are subject to conditions as set out below;

3.4.1 Portion 43 (of 2) and Portion 44 (of 5) of the Farm Rietfontein No. 251

The property is subject to an endorsement in favour of the Free State Department of Human Settlements that reads;

"The PROPERTY may not be sold or alienated without prior the written consent of the Head of department of the Free State Department of Human Settlements, which consent shall not be unreasonably withheld."

This condition will not affect the proposed township negatively.

3.4.2 Portion 48 (of 8) of the Farm Rietfontein No. 251

The property is subject to three servitudes that were carried forward from previous title deeds, but which do not affect the proposed township. These include the following;

- (a) A pipeline servitude in favour of YSKOR, as described in Notarial Deed of servitude No. K145/1974S (not attached hereto).
- (b) A servitude area for sewer purposes as described in Notarial Deed of servitude No 1112/1997S (not attached hereto).
- (c) Servitude 6, 00 metres wide over the original Portion 8 Rietfontein 251, in favour of Sasol Gas Limited, as described in Notarial Deed of servitude No. **K574/2015S** (not attached hereto), and indicated on servitude diagram No. **SG-365/2012**, attached hereto as **Annexure E**. According to the said diagram, the servitude is situated approximately 1,2 km to the north-east of the Project Area. The Proposed development is therefore not affected by the servitude.

The relevant information in relation to the above servitudes is not included in this Memorandum, but can be made available on request.

3.4.3 Portion 10 of the Farm Rietfontein No. 251

This property is subject to only one condition that reads as follow;

"(a) Geen gebou mag nader as 95 meter vanaf die middellyn van die sekondere pad S 1080 opgerig word nie."

Since the secondary road will become an internal street within the Township, this restrictive condition will no longer apply, and can be removed.

3.4.4 Portion 8 of the Farm Boschbank No. 12

The property is subject to an endorsement in favour of the Free State Department of Human Settlements that reads;

"The PROPERTY may not be sold or alienated without prior the written consent of the Head of department of the Free State Department of Human Settlements, which consent shall not be unreasonably withheld."

This condition will not affect the proposed township negatively.

3.4.5 Portion 2 of the Farm Wonderfontein No. 350

The following condition is registered against the title deed of this property;

"Geen gebou mag op die eiendom opgerig word nie voordat die Randwaterraad 'n Sertifikaat aan of die Administrateur of die Plaaslike Bestuur wat vir die gebied ingestel is verskaf het dat bevredigende reëlins vir die beskikking van huishoudelike vullis en rioolvuil getref is, soos meer ten volle sal blyk uit gesegde Akte van Oplegging van Voorwaardes."

This Condition does not affect the proposed township establishment process and can be carried forward.

3.5 Mining Activities and Mineral Rights

Mineral rights have not been severed from the ownership for any one of the subject properties and therefore vests with the State (as per the Mineral and Petroleum Resources Development Act No. 28 of 2002 that came into effect on 1st May 2004). As far as could be ascertained, there are no mining activities present on the project area.

It is standing procedure that the application be forwarded to the Department of Minerals and Energy, who will provide their comments to the Free State Department of Cooperative Governance and Traditional Affairs, Directorate Land use Administration.

3.6 Controlling Authority

The **project area** is situated within the municipal area of the Sasolburg Local Municipality and land use in this area is controlled by means of the Sasolburg Town Planning Scheme, 1993.

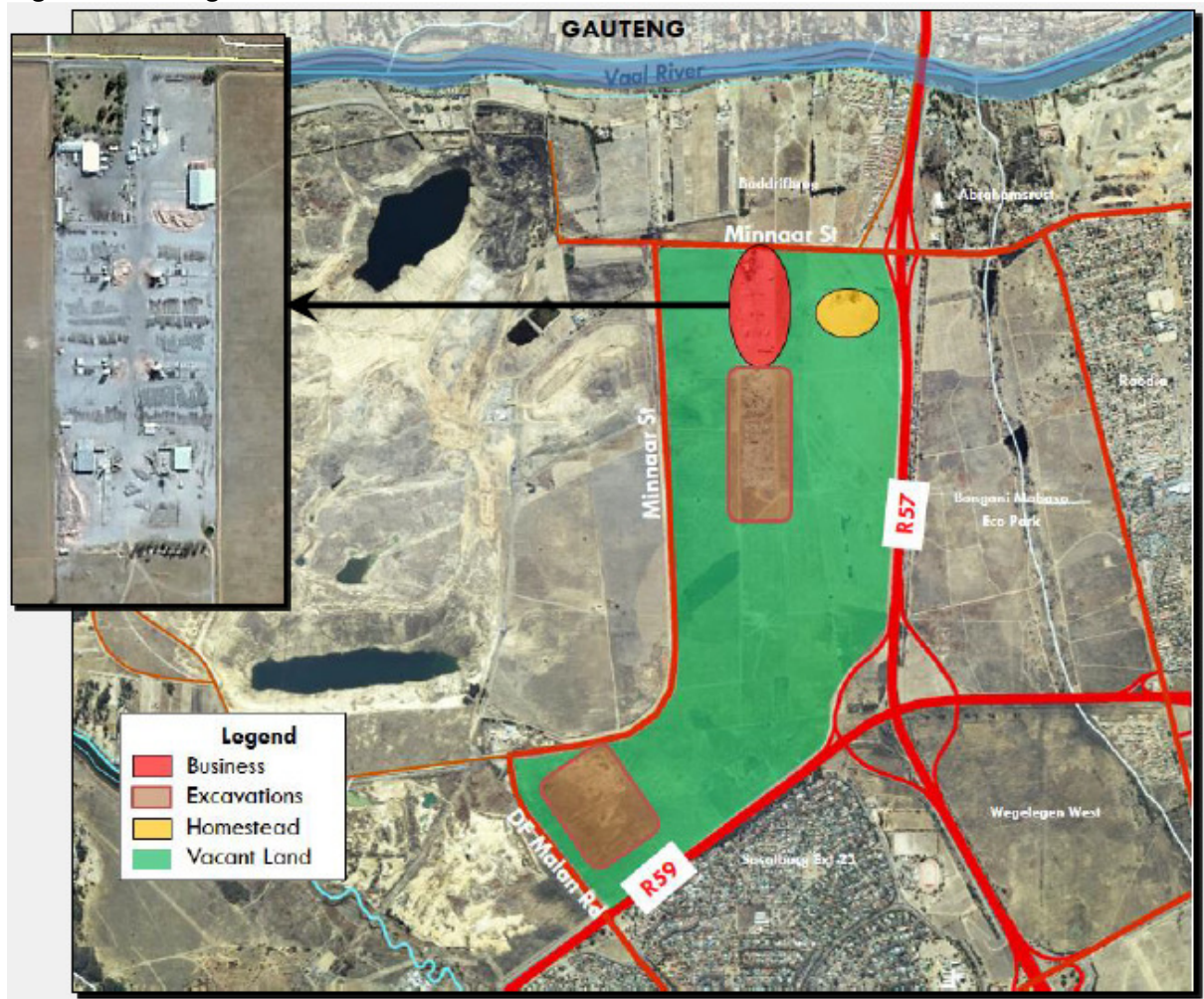
3.7 Existing and Surrounding Zonings

Neither the Project area nor any of the properties directly adjacent currently form part of any Town Planning Scheme. The properties to the south of the Project Area are mostly zoned for residential

3.8 Existing and surrounding Land Use

The Project Area is mostly vacant and is being used for grazing. However, a concrete building block and brick factory (JJ Bricks), with offices, stores, workshops, etc. and very large block-paved open storage (stockpiling) areas exists in the centre of the northern portion of the Site. Large areas further to the south of this operation have been used, and are currently still being used, for the dumping of broken and reject bricks. Although most of the existing building structures have been accommodated within the proposed township layout, the current operation is a serious concern for future development. Firstly, the large paved areas are difficult to survey (placing of pegs), whilst the areas currently are, being used for dumping of damaged bricks will have to be rehabilitated.

Figure 3 Existing Land Use



According to a geotechnical investigation on the site (2008), some gravel quarrying has taken place in the south-eastern corner along the boundary of the site. Heaps of cleared topsoil and a certain amount of spoilt materials are noticeable. Surface sand mining also occurred in the sandy areas.

Apart from the above, a small portion of land in the centre of the southern parts of the site is currently being used for the flying of model aircraft. The facilities comprise a runway measuring approximately 180 meters, as well as a clubhouse. These facilities will have to be relocated.

Finally, parts of the Project Area showed evidence of gravel quarrying in the south-eastern corner along the boundary of the site. With heaps of cleared topsoil and a certain amount of spoil material particularly noticeable. These areas need to be properly rehabilitated prior to any development commencing.

The project area is surrounded by diverse land uses, as indicated in the picture below;

Figure 4 Surrounding Land Uses



(a) North:

The Project Area is bordered by Minnaar street to the north, as well as several small established residential developments further north towards the Vaal River. Vanderbijlpark (Gauteng Province), is located further to the north of the Vaal River.

A small farmstead with stables and other farming related structures exist towards the north-east of the Project Area. This property formed part of the formerly approved Township Sasolburg Extension 75, but which has now been excluded.

(b) East:

The Project Area is bordered by Provincial Road P9/5 (R57) to the east. The Farm Abrahamsrust No. 329 (Bongani Mabaso Eco Park), is located directly to the east of the said Provincial Road, whilst Vaalpark and Roodia are located approximately 1,4 km further to the east,

(c) South:

The Project Area is bordered by Provincial Road P10/1 (R59) to the south. Sasolburg Town is located directly south of the R59.

(d) West:

Minnaar Street (S1608) and DF Malan Street (S1080), border the Subject Properties to the West. To the immediate west lies the now discontinued opencast coal mining operation of SASOL's Sigma mine. There are also some excavations and some industrial type businesses.

Although the site is in close proximity to residential areas, it cannot link to them and integrate with the existing urban fabric due to barriers created by freeways and green spaces (Bongani Mabaso Eco Park in between the study area and Roodia/Vaalpark).
purposes (Special and General).

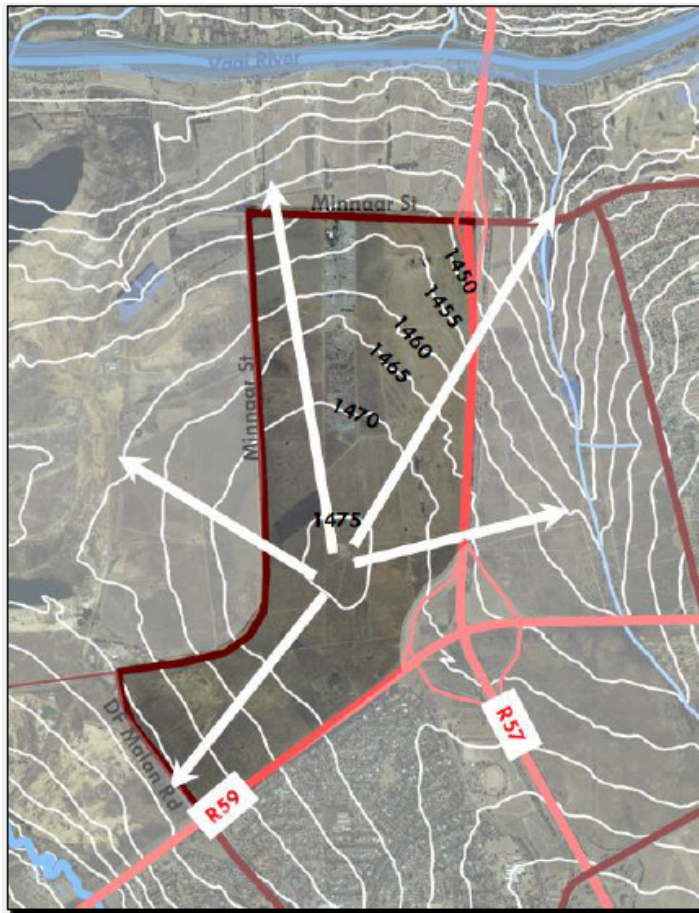
3.9 Physical Restrictions

Apart from the land uses already discussed, there are no other physical restrictions present on any of the properties that may prevent the establishment of a township.

4. PHYSICAL ENVIRONMENT

4.1 Topography

Figure 5 Natural features of the site.



The Project Area can be classified as dome-shaped with a very gently and evenly sloping topography in all directions. From the highest point of the dome, the southern part of the project area has a slope of 1:75 and drains in a general south-east and south-west direction towards the Leeuwspruit.

The Northern section of the Site has a slope of 1:70 and drains generally in a north and north-east direction towards the Vaal River and the spruit at Abrahamsrust.

The contours with 1m (one metre) intervals, as indicated on the Township Layout Plan, have been supplied by Messrs. Joynt Land Surveyors and have been determined by means of conventional field survey methods.

4.2 Vegetation

The Project area is mostly covered with medium dense savannah type natural grasses and some small patches of indigenous acacias and exotic trees. Although intensive ploughing for maize crop occurred in the past, very little evidence of this is left and the largest part of the Project Area is being used for cattle grazing.

Parts of the Project area are, however, severely disturbed, as described in more detail under **Paragraph 3.8.**

4.3 Flood Line

Due to the dome-shape of the Project Area, the Site has no adjacent higher-lying stormwater catchment. There are no clearly defined or identifiable watercourses present on any of the subject properties. Consequently, the area is not affected by any flood line, as set out in terms of the specifications laid down in Section 144 of the National Water Act, 1998 (Act 36 of 1998). This has been certified on the respective layout plans.

4.4 Geology and Climate

The Project Area is underlain by rocks consisting of sandstone, shale and coal beds of the formation Vryheid, group Eccu, sequence Karoo.

Weinert's climatological N-value for the area is approximately 2,5, indicating that weathering is partly physical and partly chemical in nature.

4.5 Geotechnical Conditions

A Geotechnical Investigation for the larger **Project Area** had been conducted during 2008 by **Messrs. LAMÉ & VAN BLERK ASSOCIATES** Consulting Civil and Structural Engineers. According to this report, the land could be classified broadly into two distinctly different zones, namely **Non-Expansive Areas** and **Expansive Clay Areas**.

The characteristics and foundation requirements for the two zones are set out in the relevant Geotechnical Report No. 24401 from Messrs. LAMÉ & VAN BLERK ASSOCIATES dated 16 June 2008, and attached hereto as **Annexure G**. Kindly note that, due to the fact that Township approval has already been granted in respect of the subject properties, only the report is included and not the results of individual test pits. These results can, however, be made available on request.

The report concludes that the entire project area is suitable for Township development, subject to the recommendation of certain precautionary measures. In order to ensure compliance with these recommendations, a special condition has been incorporated into the conditions (**Condition A7**) of the proposed Conditions of Establishment and of Title (**Annexures H1 – H4**).

5. APPLICATION

Application is herewith made to the Sasolburg Local Municipality (SLM), in accordance with the Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013), and in terms of Sections 16(2)(a) and (3) of the Sasolburg Municipal Land Use Planning By-Law, 2015, simultaneously for the following;

- A. Application in terms of **Section 16(3)(e)** for the **removal of a restrictive title condition** contained in the title deed of Portion 10 of the Farm Rietfontein No. 251;
- B. Application in terms of **Section 16(3)(d)** for the **consolidation** of the subject properties referred to below, in order to create a new property to facilitate the revised integrated land development application;
 - (i) Portion 43 (of 2) of the Farm Rietfontein No. 251
 - (ii) Portion 44 (of 5) of the Farm Rietfontein No. 251
 - (iii) Portion 48 (of 8) of the Farm Rietfontein No. 251
 - (iv) Portion 10 of the Farm Rietfontein No. 251
 - (v) Portion 8 of the Farm Boschbank No. 12
- C. Application in terms of **Section 16(3)(g)** for;
 - (i) **amendment**, in whole, of the **Township Layout Plans** of Sasolburg Extension 74, Phase 2 of Extension 75, as well as Extensions 77, 78 and 79, in order to create new erven and streets, and
 - (ii) **amendment**, in whole, of the **conditions of establishment** of Sasolburg Extension 74, Phase 2 of Extension 75, as well as Extensions 77, 78 and 79, in order to reflect the changes in accordance with the new amended Township Layout Plan;
- D. Application in terms of **Section 16(3)(c)** for the **subdivision** of the new consolidated property into 4 (four) different land portions in order to divide the Township into four separate phases (extensions);
- E. Application in terms of **Section 16(3)(l)** for the **amendment of the Sasolburg Town Planning Scheme**, 1993, by the inclusion of the land development area into the Scheme, as well as zoning of the respective erven in accordance with the land use categories determined by the Scheme.

The applications are discussed in more detail in the following sections.

5.1 Removal of restrictive condition

As set out earlier in this report, the Title deed of Portion 10 of the Farm Rietfontein No. 251 contains a restrictive condition that reads as follow;

"A. (a) Geen gebou mag nader as 95 meter vanaf die middellyn van die sekondere pad S 1080 opgerig word nie."

Since Road S 1080 will be included as a Municipal Street within the Township, building restriction areas will be controlled by the Town Planning Scheme. The restrictive title condition A.(a), as set out on page 2 of Title Deed No T14648/2014, can therefore be removed.

5.2 Consolidation

The current township extensions are all located on existing properties and follow the exact boundaries of the respective properties. These boundaries are, however, obstructive to facilitating an integrated design approach and most certainly not conducive to the installation of services Infrastructure. Consequently, it is necessary to consolidate all properties into a single property that can be designed as a single integrated township.

The proposed Consolidation Diagram is attached hereto as **Plan 7**.

5.3 Amendment of Township Layout and Conditions of Establishment

As set out earlier in this report, the existing approved township layouts were designed in accordance with conventional design principles, making provision for large erven, targeted at the high-end of the market spectrum.

The proposed new development, which is supported by an approved Urban Design Framework, is aimed at introducing a new era in housing development, and at creating an integrated human settlement. Consequently, it is necessary to amend the approved township layout plans by designing a new township conforming to the Urban Design Framework and in accordance with national densification principles. The proposed amended township layout plan (consolidated layout) is attached hereto as **Plan 2**, whilst the plans for the individual extensions are numbered from **Plan 3** to **Plan 6**.

The Conditions of Establishment relates directly to the Township Layout plan, and since application is made to change the Layout Plan for the Township, the Conditions of Establishment needs to be amended as well. The proposed division of the Township into four

separate phases furthermore requires that four sets of Conditions be drafted. The draft conditions of establishment and of title for the individual extensions are attached as **Annexures H1 – H4** respectively.

The design rationale of the amended layout plan is discussed in more detail in **Paragraph 7**.

5.4 Subdivision

Since it is intended to divide the Township into four phases (four separate extensions), the new consolidated land portion (as explained in par. 4.2 above), needs to be divided into four separate land portions as well. The Proposed subdivision diagram is attached to this Memorandum as **Plan 8**.

5.5 Amendment of the Town Planning Scheme

The Sasolburg Town Planning Scheme, 1993, is the official mechanism to manage land uses in the area. In order to regulate the proposed new land uses by means of the development parameters contained in the Scheme, it will firstly be necessary to incorporate the proposed township within the Scheme boundaries, and secondly to zone the land in accordance with the specified categories.

The Scheme Schedules for the different extensions are attached hereto as **Annexure J1 to J4** respectively.

6 PROPOSED DEVELOPMENT FRAMEWORK

6.1 Project Aim

The intended land development project is one of the key catalytic projects for the Free State Province and should set the tone for future integrated residential developments. Planning of the intended development is guided by an Urban Design Framework that was formulated during 2017. This design framework supports the overall urban design principles set by National Government and is therefore unique and different in its approach. An extract of the Urban Design Framework is attached hereto as **Annexure K**.

The aim of the **Urban Design Framework** (UDF) was to produce a development concept that differs from the norm. The concept underlines the fact that development should be about more than just housing, it should be about creating a special place, it should be an integrated environment, and finally, it should address livelihoods and provide pride and dignity to its residents. **The UDF was approved by the Metsimaholo Local Municipality on the 31st of March 2017, and is briefly outlined in the following paragraphs.**

6.2 Development Vision and Principles

Current housing development projects are still characterised by impoverished, uninspiring living environments that offer residents limited choice and opportunity. It creates an environment characterised by rows upon rows of matchbox houses with low quality public spaces, reminiscent of apartheid townships. Properties reserved for social facilities remain vacant and parks undeveloped. Little or no provision is made for public transport or cyclists and pedestrians. It is still only about providing housing, despite all policy directives.

The reasons for this is that housing projects consist of layouts based on standard practices driven more by engineering demands than sense of place. Street widths, access points and curvilinear street networks, designed solely for vehicles, predominate. Erf sizes are standard and only one housing typology is provided, as if the needs of all households are the same. Social facilities and open spaces are provided according to the minimum standard and scattered randomly through the neighbourhood thus not creating neighbourhood gathering places. The focus is on saving costs, rather than the creation of a long-term sustainable and liveable neighbourhood.

Most of these developments look the same and most are equally forgettable. Very few provide their residents with a sense of pride and dignity. The lack of integration and alignment between the different sectors result in housing developments devoid of any services and facilities and that are not supportive of livelihood strategies or social and economic development. Households settling in these developments are sometimes worse off and even further marginalised.

In line with the overall Vision of the Municipality, the intended development aims to achieve the following;

- Sasolburg Extension, despite its peripheral locality, starts to form a link between Vanderbijlpark and Sasolburg. It will thus be treated as infill development.
- It is segregated from surrounding development by main roads and the urban edge. It should thus be able to function as a 'stand-alone' entity and provide its residents with the full complement of services and facilities. However, all possibilities to link it to its surroundings should be explored.
- Its locality adjacent to the Vaal River should be capitalised on, as well as the proposed Minnaar Street-Vaal River Corridor.
- The new settlement should reflect the character of the rest of Sasolburg.

The Urban Design Proposal suggests several important principles as imperatives for good urban design that needs to be applied to the intended development. These decisions need to be based upon certain principles to ensure consistency, quality, integrity, coherence, and be in line with the vision, determining the optimal design solution. The following principles are imperatives for good urban design and are applied to the site.

(a) A Sense of Place

A sense of place deals with those characteristics that make a place special or unique, as well as those that foster a sense of authentic human attachment and belonging.

(b) Permeability / Connectivity

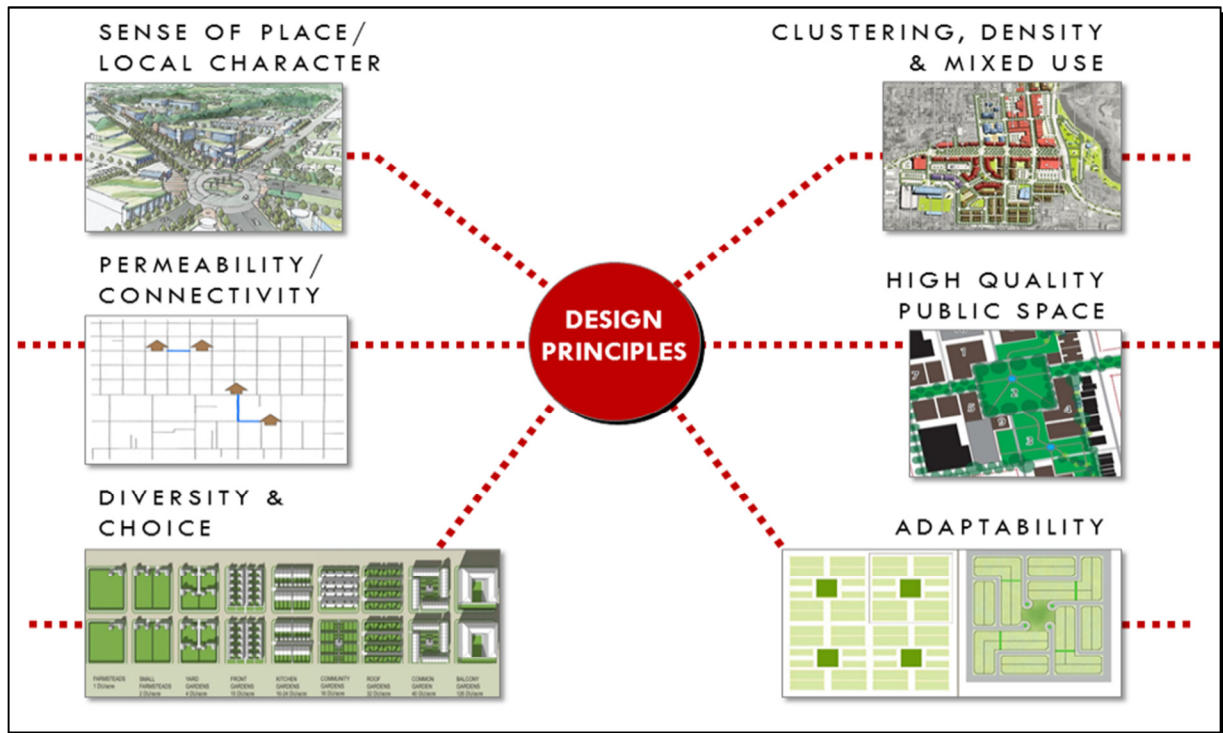
Permeability refers to the directness of links of a street network and the number of connections of people to their destinations and requires that a layout should be biased towards pedestrians and cyclists rather than vehicles through its structure and its layout.

(c) Diversity and Choice

Diversity of space and function provides the community with a range of experiences and choice, which is achieved through providing for variety of functions and land

uses, multi-functionality of buildings and spaces, diversity in built form and development character, different housing typologies and delivery systems, as well as a clear distinction between private and public spaces.

Figure 6: Principles for good urban design.



(d) Clustering, Density & Mixed Use

A clustering of facilities in central places ensures optimal access for all. Central places should have the highest density of residential units and the greatest mix of land uses.

(e) High Quality Public Place

Great public spaces are the living room of a neighbourhood - the places where people come together and where activities happen. For the design of high quality, public spaces the following are important:

- The creation of a human scale through the dimension of the space and surrounding buildings;
- integration and linkages between the different spaces;
- a hierarchy of spaces from the scale of the settlement to the neighbourhood;
- a recognition of the natural context and the functional requirements of the community;

- multi-functionality of use;
- a feeling of safety and security;
- spaces that are uncluttered, easily maintained, and detailed with public art and functional elements; and
- places suited to the needs of everyone, including disabled and elderly people.

(f) Adaptability

Lifestyles and community needs change over time, and the built environment should be able to accommodate these changes. In order to achieve this, a settlement (streets, public spaces, buildings, and houses) must be adaptable, robust, and resilient.

6.3 Design Concept

The overall design concept forms the basis for the proposed township layout, and is based on the vision for the site and the urban design principles discussed earlier in the Memorandum.

6.3.1 Access Points and Internal Links

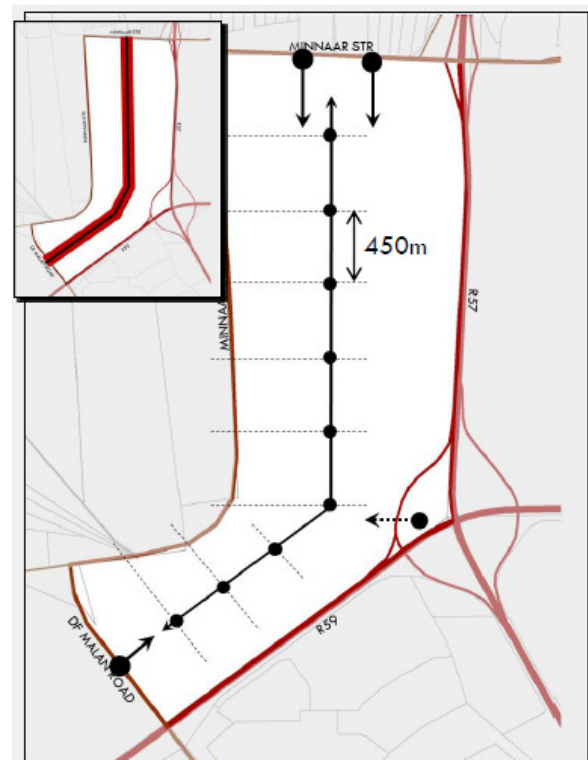
No direct access can be obtained from the R59 or the R57.

Two access points can be provided on the northern edge of the site, along Minnaar Street and one access point can be obtained on the south-western edge of the site from DF Malan Road.

The north-south link from Minnaar Street to DF Malan Road will become the main road that provides internal access to the settlement.

Access from this main link will be at 450m intervals.

Figure 7 Access Points and Internal streets



6.3.2 Nodes

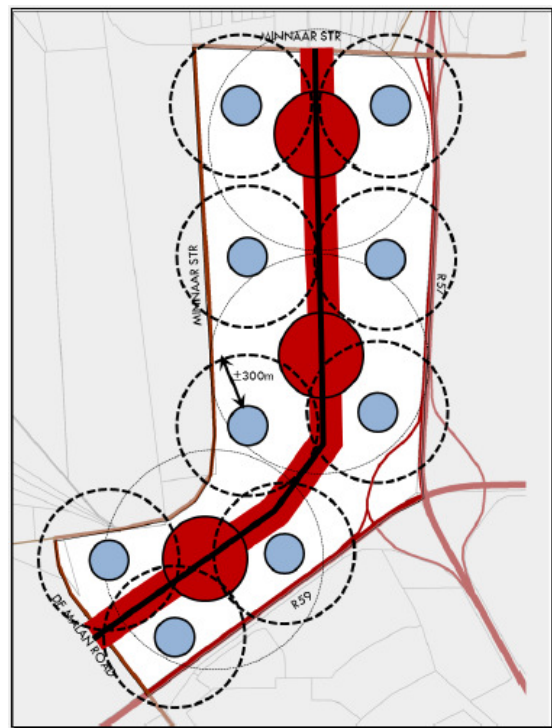
Figure 8 Higher Order Nodes



Three **high order nodes** are created along the main spine. Commercial development, higher order social facilities and higher density residential development will be concentrated at these nodes. Facilities include shops, educational facilities, clinics, library and sports fields.

Three higher order nodes are spaced in such a way that residents are within approximately 700m from a node. This allows for easy access for residents on foot.

Figure 9 Local Community Nodes



Lower order **community nodes** are spaced so that residents are approximately 300m from such nodes.

Community nodes will accommodate lower order social facilities, such as a community hall, a park, a crèche, and a church.

The exact composition of land uses within both higher order and community nodes will depend on demand and community needs.

6.3.3 Primary and Local Road Networks

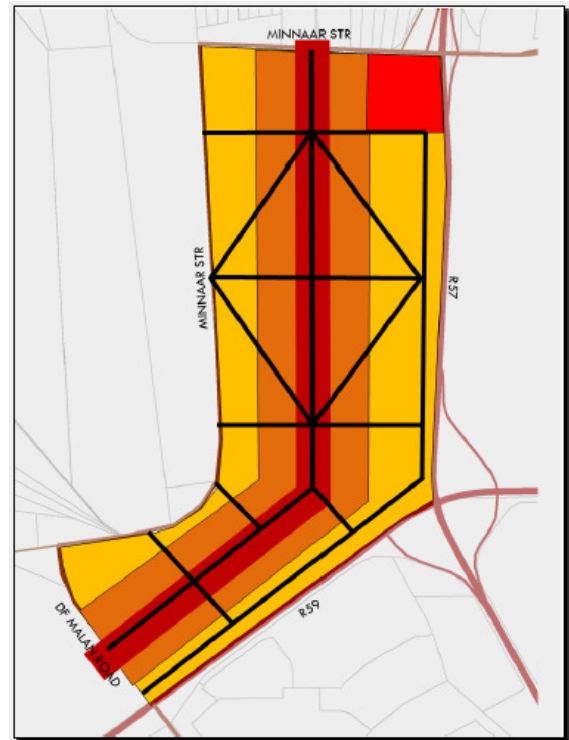
A primary road network is created by roads connecting with the main north-south route. Diagonal roads focus specifically on the higher order and community nodes. This result in vistas that helps orientate the user and create a sense of place as important buildings or

public art can be placed at the termination points of diagonals. Circles are placed at important intersections along the main north-south road. This links with the character of Sasolburg, where traffic circles are placed at intersections. This ensures integration and a sense of place.

Figure 10 Road Networks

The local network forms a grid of 100m to 200m to allow for pedestrian permeability.

In terms of residential density, emphasis is placed on level of accessibility, providing the higher density residential development closest to main public transport routes. Density is proximity for the cost of the residential development, with higher density (smaller erven) normally earmarked for lower income households. This means that walk-up flats are located adjacent to the main road, on both sides of the walk-ups are smaller erven and on

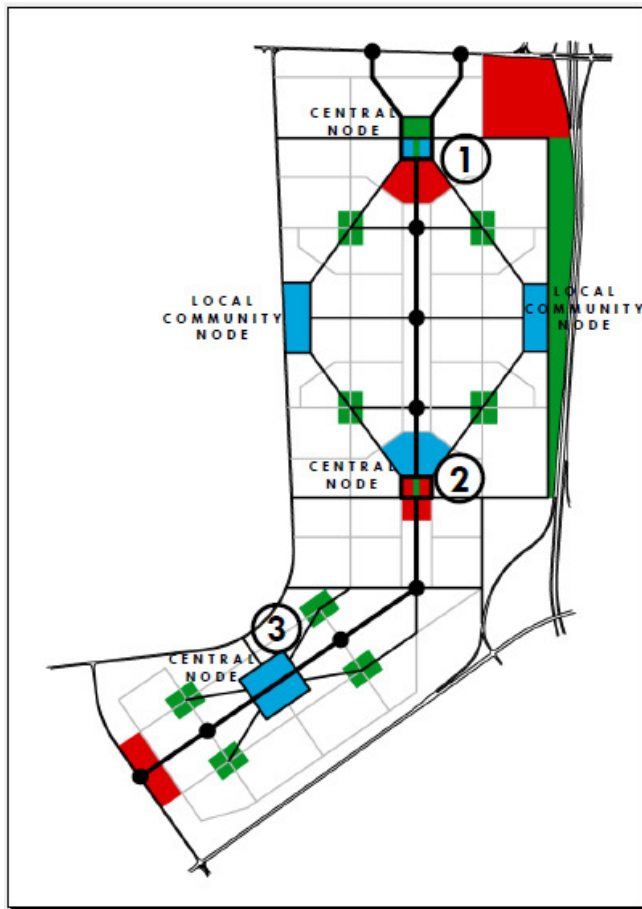


6.4 Development Framework

The conceptual design ideas discussed above were applied to the site specifics in order to create the desired framework and proposed urban design.

6.4.1 Refining Nodes

Figure 11 Development Nodes



Nodes are situated at the entrances to the site (on the R57 and R59) or on high order intersections for increased accessibility. This creates vistas along the roads to the central and local community nodes, adding to the visual splendour of the development. Social nodes are provided within the residential areas to address the needs of the resident community. The nodes consist of public squares or parks, small shops, community halls, training centre, crèches, local clinics and schools. Social facilities are clustered within these nodes to allow for sharing of facilities and ease of access. Facilities differ in size to address the needs of both the larger community and smaller cells.

6.4.2 Residential Densities and Housing Typologies

In order to achieve an integrated development and address the needs of a variety of income groups and family composition, the following housing types are proposed: walk-ups, sectional title housing, bonded housing, and subsidised housing.

(a) Walk-ups

Walk-ups are proposed next to the main spine road to define the street space with shops on the ground floor. The proposed density is 50du/ha with a height of between 2 and 3 storeys. This residential typology will accommodate bonded, market rental, affordable rental, social housing, and Community Residential Units (CRUs).

(b) Sectional Title

The sectional title residential typology is proposed south of Minnaar Street in the northern area of the site. This forms a transition zone from the proposed development to the small holdings on the northern boundary of the site, next to the Vaal River. The proposed density is 80du/ha with buildings between 1 and 2 Storeys. This will provide in bonded housing.

(c) Subsidised Housing

The proposed subsidised housing will provide in the housing need and backlog. The erven will be approximately 350m² in size to accommodate the subsidised houses. The placement of the houses should create a 'circle' around the central open space, provided in the street space. This open space will supplement the smaller erf size and extend the living space of residents. The street space will form a communal space that is pedestrian-orientated.

(d) Bonded Housing

The bonded housing component of the proposed development will provide in the need for bonded and FLISP housing. The erven will be approximately 450m² with a residential density of 22 du/ha. The bonded housing is situated on the eastern and western edges of the proposed development. These dwellings will have a community focus around neighbourhood clusters with pedestrian-friendly streets. The design is adaptable to accommodate the communities' needs.

6.4.3 Development Pattern

A walkable settlement is created with the movement network. In line with the principle of clustering of facilities and services and walking distances, three nodes are placed on the main route and two on the edges. These contain educational facilities (2 Primary Schools with shared facilities, 1 High School, and one Combined School, the spectrum of social facilities (clinic, library, community hall, crèche, church etc.), a small retail facilities and a training facility/ small business development centre. A shopping centre is placed in the north eastern corner at the entrance to the site adjacent to the R57, in order to serve a larger area than just the proposed development and to benefit from passing traffic.

Residential densities and typologies are linked to points of highest access, in order to place as many people as possible in close proximity to facilities. Medium densities (2-3 storey walk-ups) are located adjacent the main street and at the central nodes and the lower densities further from the activity spine created by the main axis.

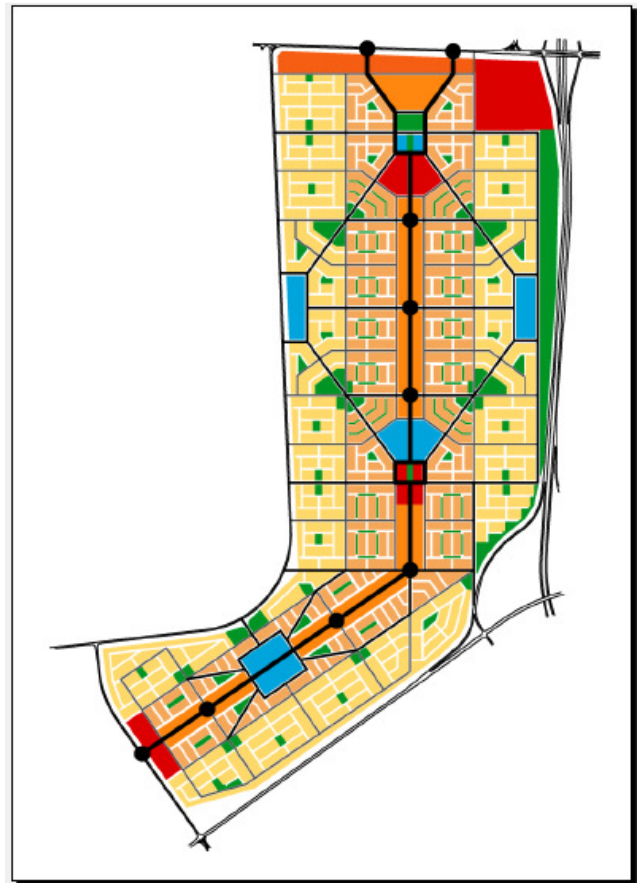
Erven of approximately 350m² (subsidised housing) are situated on both sides of the medium densities and form half of the development. The lower density, erven of approximately 450m² (bonded housing) are placed on the eastern and western sides of the settlement. To the north of the development Sectional Title, developments will serve as a transition area from the holdings next to the river to the higher density subsidised housing.

Figure 12 Development Pattern

A series of adaptable grids are created to accommodate the different densities and housing typologies.

The grid for 350m² erven is formed by blocks of 40m by approximately 100m in the subsidised housing area, where erven will be $\pm 350\text{m}^2$ in size (17m x 20m). The road is widened to the middle of the grid to create a small park to accommodate community activities.

The grid for 450 m² erven is formed by blocks of 50m by approximately 140m in the bonded housing area, where erven will be $\pm 450\text{m}^2$ in size (18m x 25m). A central park within each residential grid is provided to accommodate community activities.



A network of local parks is distributed throughout the development, especially in higher density areas, to ensure enough play areas and recreational spaces. These serve as small scale parks to be used by the adjacent residents. The parks can also accommodate small social facilities, such as a crèche, a community hall, or a church. The open spaces are surrounded by low order roads with traffic calming measures.

The parks are linked with walkways and cycle routes to further enhance the accessibility of the different parts of the proposed development. Main streets also accommodate wide sidewalks and cycle lanes and ensure comfort for pedestrians and cyclists, connecting public amenities, social facilities, and job opportunities in the nodes.

7 PROPOSED TOWNSHIP LAYOUT

7.1 Design Rationale

Considering the guiding principles from the Urban Design Framework discussed in the previous section, the proposed township layout plan was compiled with the following objectives in mind;

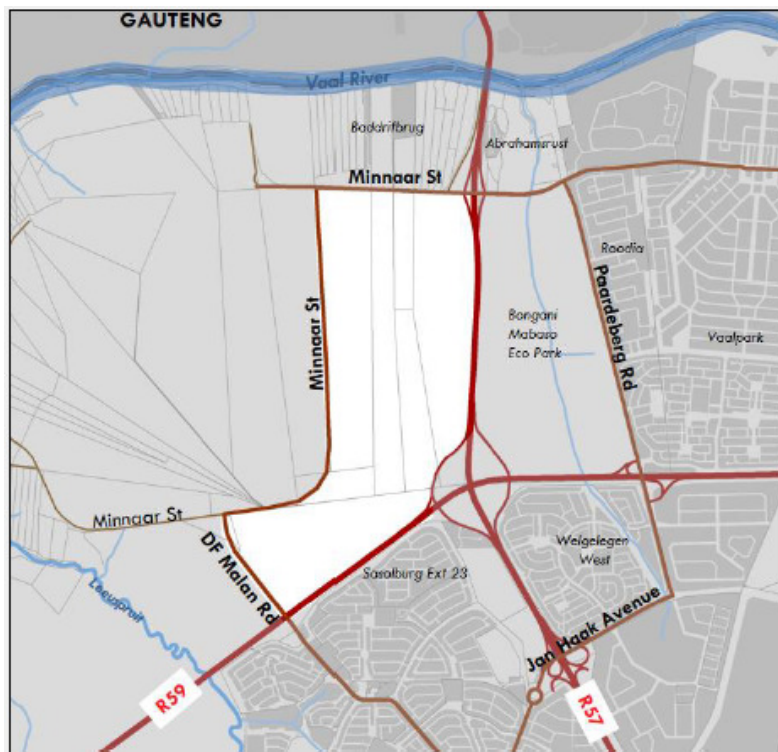
- Creation of a distinctive character based on the interaction of many factors, including built form, people, activity and history, as well as the respect and support of local character.
- Reinforcing a sense of identity and ownership among residents, thereby enhancing civic pride, a sense of community, and encouraging greater participation and involvement of residents to help actively manage their neighbourhood.
- Offering residents meaningful choices between distinctive places and a variety of different living and working environments in close proximity to each other in order to improve convenience, choice, opportunity, and equity.
- Increasing the viability of local shops and facilities and enhancing urban economic performance by attracting more people and activities, concentrating the population and activity, and increasing the diversity of uses and users in a public space, and the length of time it is used.
- Encouraging more walking and cycling, leading to health benefits, thereby reducing the costs associated with travelling long distances and the need to own a car.
- Enhancing people's safety and security by encouraging informal surveillance.
- Promoting social connectedness and enhancing social equity.
- Potentially increasing the value of housing and land values through the creation of a high quality environment.

7.2 Linkages and Road Network

The Project Area is highly accessible on a regional scale and is within close proximity to the CBD of Sasolburg and the industrial area. It is also directly linked to Vanderbijlpark and Vereeniging, despite the provincial border that separates them.

More specifically, the Project Area is bounded by the R59 freeway (P10-1, Vereeniging to Parys Provincial main road) to the south, the R57 freeway (P9/5, Sasolburg to Vanderbijlpark Provincial main road) to the east, the S1080 (Minnaar Street) Wonderfontein Provincial secondary road to the north and the west and DF Malan Road to the south-west. The site is thus bordered by roads on all sides, which implicates that, although regional access to the site is excellent, local access to the surroundings will be severely limited.

Figure 13: Access to the site.



Minnaar Street connects the site with Vaalpark, a residential area to the east of the site. There is an existing interchange between the R57 and Minnaar Street. Minnaar Street links to Paardeberg Street, which is the main north-south road in Vaalpark. To the west, Minnaar Street continues and forms a link parallel to the Vaal River, providing access to the waterfront properties. DF Malan Road has an existing intersection with the R59, where a major interchange is planned. DF Malan Road is one of the main links from the freeway to the Sasolburg CBD.

7.3 Access and hierarchy of streets

Provincial Roads S1080 (DF Malan Street extension) and S1608 (Minnaar Street), located to the North and West of the proposed development will be incorporated as Municipal streets within the development. This decision has already been taken by the Metsimaholo Local Municipality during the previous Township Establishment process, as confirmed by a letter

from the Municipality dated 1 November 2012. (Refer to **Annexure L**). These streets will have a road reserve of approximately 44 metres and will provide direct access to the intended development. All the existing access points, as per the previous township layout, were kept, but with minor adjustments to ensure better spacing between entrances.

A class 3 distributor 'spine' road, running north-south through the development, is proposed. This road will be divided into a dual carriageway in a road reserve of 32m, with no access to individual erven. The Spine road forms a link with DF Malan street in the south, as well as with Minnaar street (two separate links) in the north.

Internal Streets are made up by 16m distribution and collector roads, running parallel with the internal spine road, as well as forming links with Minnaar street to the west of the development. Branching off from the main collector roads, as series of 16m, 13m and 12m residential loops are provided, giving access to individual erven.

7.4 The layout plan

The proposed amended layout plan is presented in a series of plans. A consolidated plan showing the entire development (all four phases), is attached hereto as Plan 2, whilst the layout plans for individual extensions are attached as Plans 3 to 6 respectively.

The table on the following page provides a summary of the consolidated layout plan, reflecting (per phase), the various zoning categories, intended land uses, number of erven, number of units and respective sizes of land uses.

The Individual land uses for the entire consolidated development is discussed in more detail below.

Table 3 Land Use Table for entire development

Zonings Category	Proposed Land Use	Phase 1			Phase 2			Phase 3			Phase 4			Total all phases			
		No. Erven	No. Units	Area (ha)	No. Erven	No. Units	Area (ha)	No. Erven	No. Units	Area (ha)	No. Erven	No. Units	Area (ha)	No. Erven	No. Units	Area (ha)	% of Area
Residential: Special	Single Dwelling (450 m²)	613	613	30.22	752	752	37.17	557	557	27.39	777	777	37.98	2699	2699	132.76	28.43%
Residential: Special	Single Dwelling (350 m²)	318	318	10.88	620	620	21.5	579	579	20.04	659	659	23.1	2176	2176	75.52	16.17%
Residential: General	Medium-density (50 u/ha)	6	735	14.71	6	678	13.57	5	620	12.41	2	75	1.5	19	2108	42.19	9.04%
Residential: General	High-density (80 u/ha)										5	1056	13.2	5	1056	13.2	2.83%
Business: General	Corner Shops	3		0.28	5		0.65	5		0.67	9		0.94	22		2.54	0.54%
Business: General	Filling Station										1		1.14	1		1.14	0.24%
Business: Type B	Neighbourhood Centre	2		2.68	1		1.01	1		1.01	3		5.84	7		10.54	2.26%
Special Business 3	Place of amusement										1		1.39	1		1.39	0.30%
Special Business 14	Conference Facility										1		1.39	1		1.39	0.30%
Special Business (Mixed)	Offices				1		0.65	1		0.65				2		1.3	0.28%
Institution (Child Care)	Crèche	2		0.25	2		0.4	2		0.46	2		0.3	8		1.41	0.30%
Government Purposes	Police Station and Fire Brigade										1		1.81	1		1.81	0.39%
Municipal purposes	Municipal Services	2		0.82	1		0.06	1		0.6	2		1.31	6		2.79	0.60%
Educational Facility	Primary School	1		4.36				1		2.81	1		3.18	3		10.35	2.22%
Educational Facility	Secondary School	1		4.3	1		4.8							2		9.1	1.95%
Religious purposes	Church	4		0.64	3		0.56	2		0.33	3		0.59	12		2.12	0.45%
Community Purposes	Community Centre (Hall)							1		1.39	1		0.72	2		2.11	0.45%
Community Purposes	Health Care Centre (Clinic)				1		1.39				1		0.91	2		2.3	0.49%
Special Buildings and Special Use	Transport Facility										1		1.08	1		1.08	0.23%
Not yet determined	Undetermined	2		0.67										2		0.67	0.14%
Recreation	Public Open Space	16		1.84	21		4.36	20		5.17	20		3.71	77		15.08	3.23%
Roads	Streets	1		29	1		30.22	1		31.88	1		45.02	4		136.12	29.15%
TOTAL		971	1666	100.65	1415	2050	116.34	1176	1756	104.81	1491	2567	145.11	5053	8039	466.91	100%

7.4.1 Single Residential Erven

A total of 4 875 single residential erven are planned. The average size of erven varies and provision is made for smaller and larger erven. The smaller erven (subsidised housing) measure approximately 350m² in size, whilst the majority of the larger erven (bonded housing) measure between 450m² and 500m² in size.

The proposed Township has been designed in such a way that the larger erven are positioned on the peripheral areas, with the smaller erven in between the large erven and high density housing.

All single residential erven will be allocated the use "**Residential: Special**" in terms of the Town Planning Scheme. The following restrictions will be applicable to the erven;

- Density: One dwelling per erf
- Coverage: 50%;
- Building Lines: 2m from the street or rear boundary.

7.4.2 General Residential Erven

A number of higher density erven have been planned along the 32m Spine Road , as well as around the Village Squares and Transport facility. These erven will be utilised for the provision of rental accommodation in the form of 3 storey Flats (Walk-ups), and at a density of between 50 to 80 units per hectare.

A total of 24 General Residential erven are proposed, measuring 55.39 ha all together, and which have a total development potential of **3164 housing units**.

All the General Residential erven will be allocated the use "**Residential General**" in terms of the Town Planning Scheme. The following development parameters are proposed for these erven.

- Density: 50 and 80 du/ha, as set out in the conditions of establishment
- Coverage: 33%;
- Bulk factor: 0.75;
- Building Lines: 3m from any boundary of the site;
- Height: 11m.

7.4.3 Business

Several types of business erven are being proposed and are positioned at strategic locations throughout the entire development.

The highest order of business erven will be neighbourhood centres positioned at the development entrances and along the 32m Spine Road creating a town square within the development nodes. A total of 7 such business sites are provided throughout the development and which will be zoned "**Business: Type B**" in terms of the Town Planning Scheme.

A number of smaller business sites (corner shops), have also been provided centrally within the residential areas to provide in the everyday needs of the community. A total of 22 corner shops have been provided and will be zoned "**Business General**".

In addition to the above, provision has also been made for two Special types of businesses, namely a conference facility and a place of amusement. Both these land uses are located in Phase 4 and will be zoned "**Special Business (3)**" and "**Special Business (14)**" respectively.

Finally, two erven have been reserved for offices in phases 2 and 3 respectively, which will be zoned as "**Special Business (mixed)**", whilst a filling station (zoned as "**Business: General**"), has been proposed at the north-west entrance to the township.

7.4.4 Community Facilities

Due to the size of the proposed township, provision has been made for a variety of community facilities. Amongst these are 8 Crèches (zoned as "**Institution (Child Care)**"), and 12 churches (zoned as "**Religious purposes**").

Additional community facilities include two community centres (halls) and two health care centres (clinics). A transport facility (taxi drop-off), has also been provided close to the two northern entrances, close to the town square. The Transport facility will be zoned "**Special Buildings and Special Use**".

7.4.5 Education Facilities

The Urban Design Framework prepared for the intended development makes provision for two primary and two secondary schools. These were planned in proposed phase 1, 2 and 3. However, subsequent to a meeting with the Provincial Department of Education on 22 May 2018, an additional primary school was requested in Phase 4 as well. The proposed layout therefore makes provision for a total of three primary and two secondary schools, measuring 19,45 hectares all together.

7.4.6 Government and Municipal

A number of erven were provided for Government and Municipal purposes, which will be zoned as such in accordance with the Town Planning Scheme. These erven are discussed briefly below;

(a) Government purposes

Provision has been made for an erf in the northernmost part of the layout for emergency and security services. This erf is located centrally and is extremely accessible from all directions. It is also located close to a community health centre and will thus provide in all the security, health, and emergency needs of the community.

(b) Municipal purposes

Several erven are planned for Municipal purposes with the view to accommodating municipal services infrastructure. A large site has been reserved for construction of a new 88/11kV substation at the north-eastern entrance to the Township. Likewise, a similar property has also been provided close to the southernmost entrance to the Township. Three smaller erven were also provided for the construction of future mini-substations within individual township extensions.

Apart from this, another erf has been planned centrally and on the highest point of the dome, which is reserved for future water storage within the Township.

7.4.7 Not Yet Determined

Two erven located in Phase 1 of the intended development were allocated the zoning "**Not yet determined**". This is due to the fact that a certain portion of land (Remainder of the Farm Wonderfontein no. 350), located directly north of Phase 1 (and directly south of Phase 3),

could not be incorporated within the layout, as the land is privately owned. Although a possible future layout has been proposed for this portion of land, it was not possible to achieve a functional layout along certain common boundaries between properties. The two erven can therefore be regarded as "*fall-out*" land that will become functional in future when the Remainder of the Farm Wonderfontein 350 is developed.

7.4.8 Public Open Space

The proposed layout plan makes provision for a large number of recreation areas. Special care was taken to provide each residential cell with a small park, which is usually located centrally within the cell. Recreation areas were also planned as vistas and walkways to link together a series of community facilities and activity nodes. A total of 77 individual parks, measuring 15 hectares all together, were provided throughout the entire layout.

8 MOTIVATION

When deciding on a land development application, the Municipal Planning Tribunal must evaluate the need and desirability of the application in terms of the criteria contained in **Section 71** of the Sasolburg Municipal Planning By-Law. This criteria is supported by guidelines contained in national legislation such as the Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013), the National Environmental Management Act, 1998 (No. 107 of 1998), the Housing Act, 1997 (Act 107 of 1997), the National Development Plan (2013), but to name a few. Compliance with planning legislation ensures that land development is orderly, is sustainable, and to the best interest of the general public.

The proposed township establishment was evaluated in terms of the criteria of Section 71 of the Sasolburg Municipal Planning By-Law. This evaluation is contained in the paragraphs below.

8.1 Local Need and Development Trends

The Social Economic conditions of the sub-region are addressed in several documents, including the Metsimaholo IDP, The Urban Design Framework, as well as the recent Integrated Human Settlement Plan(ISHSP). Urban Dynamics compiled a Socio Economic Report based on the findings of these documents, and by investigating the trends recorded by STATS SA. The Socio Economic Report is attached hereto as **Annexure M**, whilst the most significant findings are summarised further below.

(a) Population growth and influx

- Metsimaholo has experienced the highest population growth in the Free State over the past 10 years(28,6%)
- The growth rate can be linked to economic conditions, which create expectations and manifests in the influx of people seeking employment.
- The Project area has a large population catchment including the entire Felize Dabi area, but more specifically the areas of Sasolburg, Vanderbijlpark, Vereeniging and Meyerton, which have a very diverse population distribution and densities.

(b) Economic Conditions

- Metsimaholo is considered as one of the priority investment areas for investment in the Free State (FSHS, 2014p.22)
- As a result, the SDF earmarks Metsimaholo as a development node with a large influence, stretching across provincial boundaries.
- The household income within the district is below the poverty line with many household earning no income per month. The majority of these people are living in the Northern parts of Vanderbijlpark, as well as in Zamdela and surroundings.
- Despite the large number of poor people, the ISHSP has found that there was a significant decline amongst households with no income (from 66% to 14%), as well as amongst households earning below R10,000 per month.

(c) Residential Development

- The project area is located centrally within two large urban conglomerates and will play a large inter provincial role in providing housing within the sub-region.
- The UDF has found that there is currently still a significant housing backlog (8881 units) in the sub-region and a total of 17,4 % of all houses are informal.
- Analysing the need for affordable housing, it is expected that 7200 serviced erven will be required for low cost (subsidised) housing, 1500 units for middle income housing and about 300 units for the top end of the market.
- The Municipal SDF has set the target on the provision of 25% of affordable (subsidised) housing and 25% of rental options for all developments taking place within the sub region.
- According to the ISHSP, a total of 5900 families are in need of affordable rental units and that just more than 2000 serviced erven are required over the short to medium term, in order to provide in the housing needs of the sub-region.

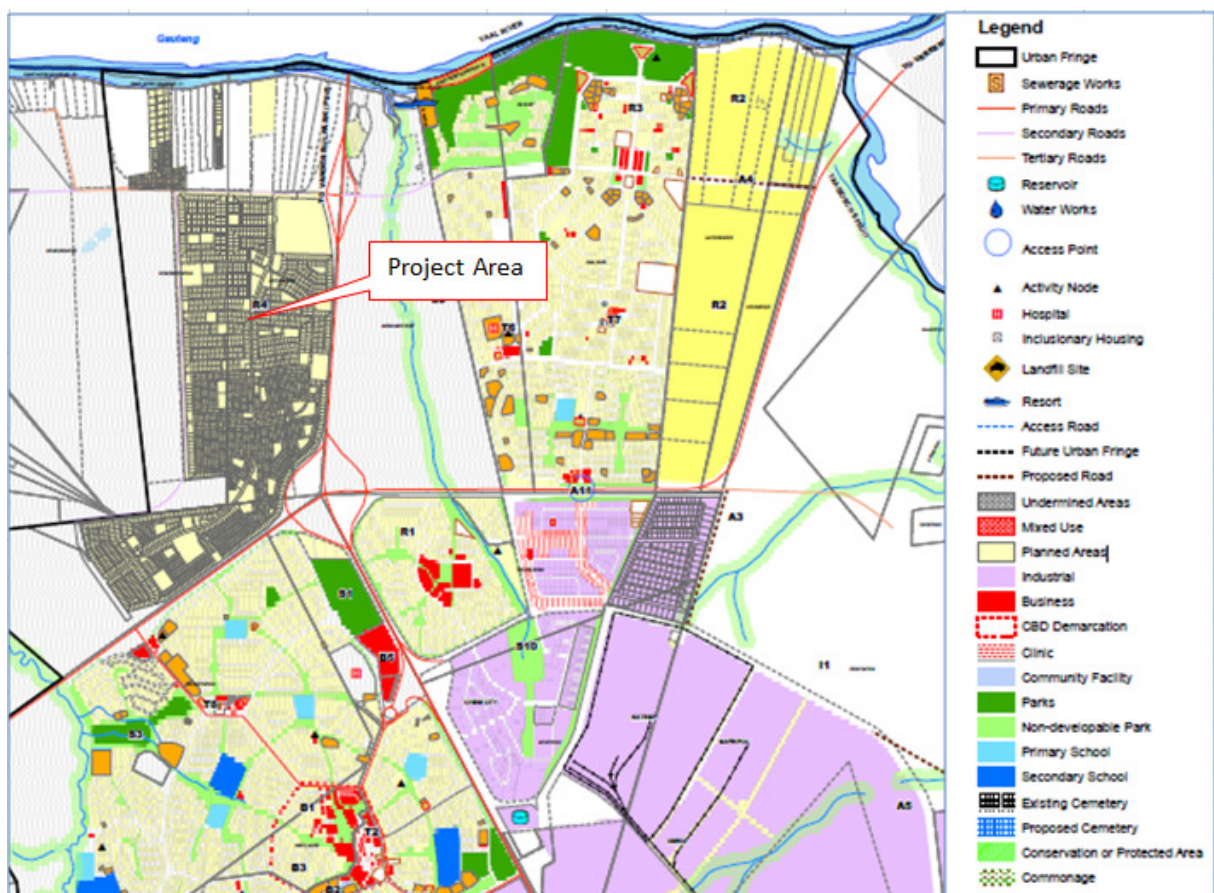
Considering the above facts, it can be concluded that the Project Area and the proposed land development is of significant importance in order to provide enhanced sustainable and resilient opportunities for the population living in the Metsimaholo and surrounding areas, creating better living circumstances, secure shelter and access to employment opportunities. The Project area is located in an area that will trigger definite growth of both commercial and residential neighbourhoods. The proposed development will address the local development need to a certain extent, as it makes provision for residential and commercial uses.

8.2 Desirability in terms of the IDP and SDF

According to the **Sasolburg Integrated Development Plan (IDP)** of 2016/2017, the Project Area has been identified as a priority area for future neighbourhood development. The SDF for Metsimaholo Local Municipality indicates 'Existing Development Areas, Industrial Areas, and an Urban Fringe'. The Existing Development Areas cover Sasolburg CBD, Zamdela, Harry Gwala, Welgelegen and Vaalpark. These areas are located around the Sasolburg Business Centre and the Industrial Areas (Industrial Zone 2, Naledi Industrial park, etc.). This largely retains the status quo of the town.

The Project Area is located on the north-western edge of Sasolburg just within the Urban Fringe boundary. Expansion to its north is still possible, but no expansion to the west is proposed, possibly due to mining activities. More specifically, the SDF earmarks the site for **"planned areas"**, together with the land to the north up to the Vaal River. (see SDF extract below).

Figure 14: Extract From Sasolburg SDF.



Although The existing approved "low density" township appears within the above extract, the SDF expresses itself clearly in terms of future urban development, in that "Housing

developments must ensure differentiation & provide for densification and infill planning." (p200).

The Project Area also of a prominent development corridor, namely the "Vaal River - Minnaar Street" Corridor. This corridor is identified as the planned and unplanned land between Minnaar Street (from its intersection with Road P83/1 to its intersection with Road P9/5) and the Vaal River where it flows through the Greater Sasolburg urban area.

Hence, it is apparent that the Metsimaholo IDP and SDF desires township establishment on the subject properties. The Proposed Application is therefore consistent with the Municipal IDP and SDF.

8.3 State and Effect on Engineering Services

The state of the surrounding infrastructure networks and the effect that the proposed development will have on the surrounding infrastructure networks is outlined below. Since the proposed township forms part of the identified Catalytic Projects of the Free State Province, the provision of services will be funded by the Free State Department of Human Settlements.

8.3.1 Civil Services Infrastructure

A civil services investigation was conducted by **Messrs Ingcali Consulting Engineers** in order to determine the proposed water, stormwater, and sanitation impacts that will arise from the proposed township establishment. The Civil Services Report (attached hereto as **Annexure N**), concluded the following:

(a) Water

Bulk water to the greater Sasolburg area is sufficient and is supplied by Rand Water via two supply pipes, namely;

- A pumping main from Vereeniging Works, delivering water to a 100ML Rand Water Reservoir; and
- A pumping main from the Suikerbosch Works (Lethabo line), delivering water to the Sasolburg reservoirs.

Distribution takes place to two zones, namely a Water Tower Zone, and a Reservoir Zone, where 60% of the proposed development falls within the Water Tower Zone

(central Part of the development), and 40% within the Reservoir Zone (northern and southern parts of the development). The Water Tower Zone has a capacity of 1 600 kl and a TWL of 1534.6 masl. The southern Reservoir Zone is located on the Western side of Town and is supplied by an existing 600mm dia pipe some 3,4km from the proposed development, whilst the northern Reservoir zone can be fed via a new 300mm dia water line connecting to a 600mm Reservoir Zone pipe located in Vaal Park.

The current distribution networks are not sufficient and additional networks need to be installed in order to provide sufficient water to the development. These include the provision of new connections over a distance of 2,5km (Tower Zone) and 3,5km (Reservoir Zone), respectively. In addition to this, water supply to the northern parts of the Site will have to be augmented, as the existing new 300mm line has insufficient capacity.

Finally, it has been recommended that additional storage capacity be created on-site to reduce the impact on existing infrastructure. In this regard, provision has been made for a large site for Municipal purposes in order to construct such storage facility if the need arises.

(b) Sanitation

The existing Waste Water Treatment Works (WWTW) with a capacity of 25ML/day is located to the south of Sasolburg, although this facility has no spare capacity to accommodate the proposed new development.

The proposed new development can be served by two different collection systems, namely the Vaalpark System (northern parts) and the Sasolburg Leeuwspruit system (southern parts). The Vaalpark system comprises several pump stations, outfall sewers, and rising mains, some of which need to be upgraded, whilst others can still accommodate new development towards the north, east, and west of Vaalpark. The Leeuwspruit pumpstation and rising main have been designed to accommodate new development west of the R57, but not to the extent of the proposed development. From a sewage point of view, each individual drainage area can be developed independent of the other, from the heads of the respective fallout sewers situated at their lowest points.

The Civil Services report concluded the following In terms of the anticipated impact on sanitation;

- The **southern portion** of the development can drain to Leeuwspruit pumpstation, but the pumpstation rising main and outfall sewers will have to be upgraded / augmented.
- The **northern portion** can drain to the Baddrif pumpstation, but the outfall sewers, pumpstations, and rising mains will have to be upgraded. Rand Water has indicated that this is acceptable provided that the upgrading is done. Flow measurements at Baddrif and Welgelegen pumpstations indicated substantial spare capacity, especially if balancing is provided.
- The WWTW will have to be extended to cater for the additional sewerage. Sasol Industries is the owner of the facility and responsible to provide the additional capacity, subject to the applicable services agreements and funding.
- Provision of a new treatment facility to the West of the development within the decommissioned mine area may be considered.

(c) Streets

The internal streets will consist of 32m, 16m, 13m, and 12m streets. It is proposed that all main streets should be paved. The proposed paved widths are:

- 12m road reserve: 5m paved width
- 13m road reserve: 6m paved width
- 16m road reserve: 6m paved width
- 32m road reserve: 8m paved width per direction

All intersections must be designed properly by a qualified Traffic Engineer to ensure safe travel conditions and minimum traffic disturbance.

(d) Stormwater

The topography of the Project Area forms a dome with drainage in all directions. Stormwater from adjacent properties should therefore not enter the site. There are no flood lines applicable. As the site is bordered by existing roads and stormwater infrastructure, stormwater designs should allow retention to equalise pre- and post-development run-off.

8.3.2 Electrical Services Infrastructure

Electricity to the proposed township will be supplied by the Metsimaholo Local Municipality. Electricity will be obtained as an extension of the present Metsimaholo LM's High Voltage bulk

electricity supply system into the area by way of extending overhead lines and underground cables.

An Electrical services investigation was conducted by **Messrs Ingcali Consulting Engineers**) in order to determine the electrical demand and estimated electrical load for the development. According to Messrs Ingcali Consulting Engineers (refer to their letter dated 16 May 2018, attached hereto as **Annexure O**), the estimated electrical load has been calculated at 20.5 MVA, with an allowance of 40A single phase connections for residential units and 60A three phase connections for non-residential land uses. Existing Bulk supply is not sufficient to provide electricity to the entire township right away, but additional capacity will be created by the Municipality through the construction of a new 88/11kV substation in the northern part of the township.

It is furthermore possible to provide all proposed development phases with electricity by means of an underground Medium Voltage Network and Mini-substations located within each phase.

Finally it is concluded that it will be possible to successfully provide electricity to the entire development, although it will be required to create additional capacity by the construction of a new 88/11kV substation in the northern parts of the Township at a cost of approximately R60 million.

8.3.3 Phasing of the Development

The topography of the site lends itself to developing limited size precincts without problems, because of gravity service demands. Non-gravity dominated services exist in reasonably close proximity to the site from all directions. Phasing can therefore take place freely without undue effects on servicing costs

8.3.4 Traffic Impact

A Traffic Impact Study (TIS) has been conducted by **Messrs KMA Consulting Engineers**, which is attached hereto as **Annexure P**.

The findings from the Report is summarised below;

- (a) The different phases of the development are expected to generate the following peak hour trips:

Table 4 Trip Generation

Phase	AM Peak			PM Peak		
	AM Trips	In	Out	PM Trips	In	Out
Phase 1	1183	462	721	1451	846	605
Phase 2	1141	420	721	1114	680	434
Phase 3	933	331	602	898	561	337
Phase 4	1530	654	876	1912	1040	871
Total	4787	1867	2920	5374	3126	2248

(b) Significant road improvements are required including the following:

- The construction of an interchange at the S1080 / P59 / DF Malan Road intersection;
- Changing the S1080 and S1608 to a street standard;
- Widening the S1080 to a four lane street;
- Developing the different accesses with proper auxiliary lanes that will allow possible signalisation when warranted.
- Although all accesses could possibly in future warrant signalisation, Accesses 1, 7 and 8 are the most likely to be signalised.
- Probable future upgrading and signalisation of the interchange and intersections in Minnaar Street.

(c) The layout plan can be described as somewhat unconventional and does not in all instances comply with standard geometric principles. In some instances, traffic calming such as speed humps will have to be employed to ensure safe traffic operations.

Based on the findings of the study the development can be approved from a traffic point of view.

8.4 Desirability in terms of SPLUMA

The Spatial Planning and Land Use Management Act (SPLUMA), (Act No. 16 of 2013) contains various development principles which must be considered when development is proposed. The proposed development will adhere to the following development principles:

- Section 7(a)(i) The principle of Spatial Justice where “*past spatial and other development imbalances must be redressed through improved access to and use of land*”. Given that, the proposed development will consist of low-cost housing persons

with minimum income, will be able to have access to land and will be able to benefit from the housing market.

- Section 7(d) The principle of Spatial Resilience, whereby *"flexibility in ... land use management systems are accommodated to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks"*. This principle is applicable given the variety of land uses that will be accommodated in the proposed development. When different land uses are provided for, sustainable livelihoods are enabled since easy access to economic opportunities, social facilities and recreation facilities is provided.

8.5 Desirability in terms of NEMA

According to the National Environmental Management Act, 1998 (No. 107 of 1998) sustainable development requires *"the integration of social, economic and environmental factors in the planning, implementation and evaluation of decisions to ensure that development serves present and future generations."* As is clear the previous section of this report, the proposed development will integrate social, economic, and environmental factors since provision will be made for the following facilities and amenities:

A Record of Decision (ROD) was issued on 3 June 2009 by the Free State Dept. of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEa) in respect of all the subject properties, which authorised Activity 2 under GN R.387 (2006 EIA Regulations). Thus, the Department already evaluated the impacts of township establishment in terms of the environment, and were satisfied that the anticipated impacts were not detrimental, rather, it will promote the natural, social, and economic environment. A copy of the ROD is attached hereto as **Annexure R**.

Although the ROD was issued some time back, it did not expire / lapse, as the activity commenced in the form of surveying of the previous townships, whilst the land has also physically been subdivided and marked, within the period of validity of the RoD. This was confirmed by DESTEa at a meeting on 24 April 2018, and furthermore, that the proposed amendment of the township layouts would not result in the change of the scope of the Environmental Authorisation, nor increase in the level or nature of the impact.

In light of the above, the DESTEa has agreed to a **Part 1 amendment application** in terms of Regulation 29 of the 2017 EIA Regulations, to make provision for the change of the holder of the RoD and the change of the layout plans of the previous township extensions. Agreement

to this process by DESTEA is confirmed in an email dated 25 April 2018, attached hereto as **Annexure S1**. The Part 1 amendment application was submitted to the DESTEA on **25 May 2018**, as per the attached acknowledgement of receipt, attached hereto as **Annexure S2**.

8.6 Consistency in terms of the Housing Act

In terms of Section 9(1) of the Housing Act, (No. 107 of 1997), every municipality must, as part of their integrated development planning process, 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 coordinating housing development in its area of jurisdiction. The proposed township establishment will contribute to housing provision in Metsimaholo and are therefore consistent with the Housing Act.

8.7 Desirability in terms of the NDP

According to the National Development Plan (NDP) of 2013, development in South Africa must not only focus on housing provision but must enable and create sustainable human settlements. To allow for such development a holistic approach to low-cost housing developments which include local recreational facilities, retail opportunities, as well as community and social facilities is required (p. 203). As can be seen on the Land Use Table of the proposed Township Layout Plans, all these facilities will be incorporated in the proposed development. Hence, in terms of the NDP development on the subject properties is desired.

8.8 Public Interest

The intended developments will be in the general interest of the public due to the urban progress and general growth of the town. Not only will the development improve the livelihoods of families through the provision of housing and employment opportunities, but it will also lead to the strengthening of the urban fabric by means of proper infrastructure and coordinated service delivery.

A formalised urban environment leads to higher levels of payment, securing a higher income for the municipality, thus ensuring a more sustainable and efficient organization.

8.9 Rights of Affected Parties

The public will be notified of the proposed township establishment by means of a public participation process. Notices will be placed in the Free State Provincial Gazette, the and two local Newspapers distributed in the Area. The draft notice inform the public where they can view the application, and invite them to submit written representations, comments, or objections regarding the application, is attached hereto as **Annexure T**, whilst the list of surrounding owners is attached as **Annexure U**. A list of external role-players is attached as **Annexure V**.

Thus, the rights and interest of the public will be protected through the above procedure.

9 CONCLUSION

Urban Dynamics Free State has been appointed by the HDA to oversee all town planning related matters for the revision of the layout plans and relating to Sasolburg Extensions 74, 77, 78, and 79. This Memorandum serves as a formal revision application, but also makes provision for other related applications namely;

- Removal of restrictive condition;
- Consolidation of underlying land portions;
- Amendment of township layouts and conditions of establishment;
- Subdivision of the consolidated land in phases; and
- Amendment of the Town Planning scheme by incorporating the land development area into the scheme area, as well as to properly zone the land in accordance with the scheme.

The Project Area is highly accessible on a regional scale and is within close proximity to the CBD of Sasolburg and the industrial area.

The proposed development supports both National- and Local Government policies through the provision of sustainable human settlements and improved quality of household life. It is furthermore a direct result of the municipality's commitment to addressing the housing backlog in Sasolburg and is supported by the municipal IDP and SDF.

The proposed development was tested according to the need and desirability of the specific development, as well as the manner in which the development adheres to planning principles of orderly planning, public interest and integrated land development, as set out in the Spatial Planning and Land Use Management Act, 2013. Considering the fact that the intended development will be a catalyst for creating an enabling environment on all levels of social, cultural and economic considerations, the relevant principles were easily met.

Finally, the proposed development will have a positive effect on the upliftment of the community and its surrounding areas, while addressing an urgent need, not only for housing, but also for much needed community facilities in this area. The general layout of the proposed township is in accordance with modern town planning standards and accommodates surrounding impacts. The proposed development can be regarded as a continuation of existing township developments and thus congruent in the total urban structure.

The conclusion can be drawn that the application addresses all the requirements of the relevant legislation and we trust that you will consider it in a positive light.



LW EHLERS Pr. Plan (A/727/1993)

MANAGING DIRECTOR

URBAN DYNAMICS (FREE STATE) INC

DATE