

**SCOPING REPORT FOR
PROPOSED RESIDENTIAL DEVELOPMENT
ON PORTION 73 OF THE FARM
WATERKLOOF 305 JQ, RUSTENBURG,
NORTH WEST PROVINCE**

REF: NWP/EIA/27/2013

SEPTEMBER 2013



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LIST OF DEFINITIONS, ABBREVIATIONS AND ACRONYMS

BID	Background Information Document
BPDM	Bojanala Platinum District Municipality
CBD	Central Business District
CARA	Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983)
DAFF	Department of Agriculture, Forestry & Fisheries
DEA	Department of Environmental Affairs
DPWRT	Department of Public Works, Roads & Transport
DWA	Department of Water Affairs
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EIR	Environmental Impact Report
EMF	Environmental Management Framework
EMP	Environmental Management Programme
GDP	Gross Domestic Product
GNR	Government Notice Regulation
GPS	Global Positioning System
I&AP	Interested and Affected Party
LUMS	Rustenburg Land Use Management Scheme
Mamsl	metres above mean sea level
MAP	Mean Annual Precipitation
MAR	Mean Annual Runoff
MPE	Magaliesberg Protected Environment
NEMA	National Environmental Management Act, 1998 (Act 107 of 1998) as amended
NEMBA	National Environmental Management Biodiversity Act, 2004 (Act 10 of 2004)
NHRA	National Heritage Resources Act, 1999 (Act 25 of 1999)
NWA	National Water Act, 1998 (Act 36 of 1998)
NW DEDECT	North West Department of Economic Development, Environment, Conservation and Tourism
PPP	Public Participation Process
RLM	Rustenburg Local Municipality
ROCLA	Rustenburg Olifantsnek Corridor Landowners Association
SANBI	South African National Biodiversity Institute
SDF	Spatial Development Framework
SEA	Strategic Environmental Assessment
SAHRA	South African National Heritage Resources Act, 1999 (Act 25 of 1999)
WMA	Water Management Area

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1 INTRODUCTION

1.1 Background

HydroScience cc, an independent Environmental Assessment Practitioner (EAP), has been appointed by Christo Weyer Familie Trust, to undertake a full Environmental Impact Assessment (EIA) and submit a Scoping Report as well as an Environmental Impact Report (EIR) to the relevant authority to apply for environmental authorisation for the proposed residential development on Portion 73 of the farm Waterkloof 305 JQ, Rustenburg, in the North West Province.

As part of the EIA process (Figure 1-1), an application, in terms of the National Environmental Management Act (NEMA), 1998 (Act 107 of 1998), as amended, and associated EIA Regulations of 2010, has been submitted to the North West Department of Economic Development, Environment, Conservation and Tourism (NW DEDECT). On the 1st of August 2013, acknowledgement of receipt (including reference number) was received from NW DEDECT and the Public Participation Process (PPP) subsequently commenced.

This Scoping Report contains the relevant and applicable information required for a comprehensive understanding of the project and nature of issues identified during the Scoping Phase of an EIA.

1.2 Details of EAP

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The EAPs who compiled this Scoping Report include Ms Paulette Jacobs (Director, HydroScience) and Ms Louise van Wyk (Senior Environmental Scientist, HydroScience) both of whom have undertaken many EIAs for similar activities, projects and developments. The Curriculum Vitae of the aforementioned professionals, as well as project lists and company profile indicating previous experience in similar projects are included in Appendix A.

1.3 Property Details

Province:	North West Province
District municipality:	Bojanala Platinum District Municipality (BPDM)
Local municipality:	Rustenburg Local Municipality (RLM)
Farm:	Waterkloof 305JQ

Farm portions: 73

Surveyor General (SG) code: T0JQ00000000030500073

Title Deed: T15010/1997 (Appendix B)

Registration date: 1997/02/21

Size: 41.65 Ha

Owner: Christo Weyer Familie Trust

Registration number: 1317/94

Director/person: Christo Weyer

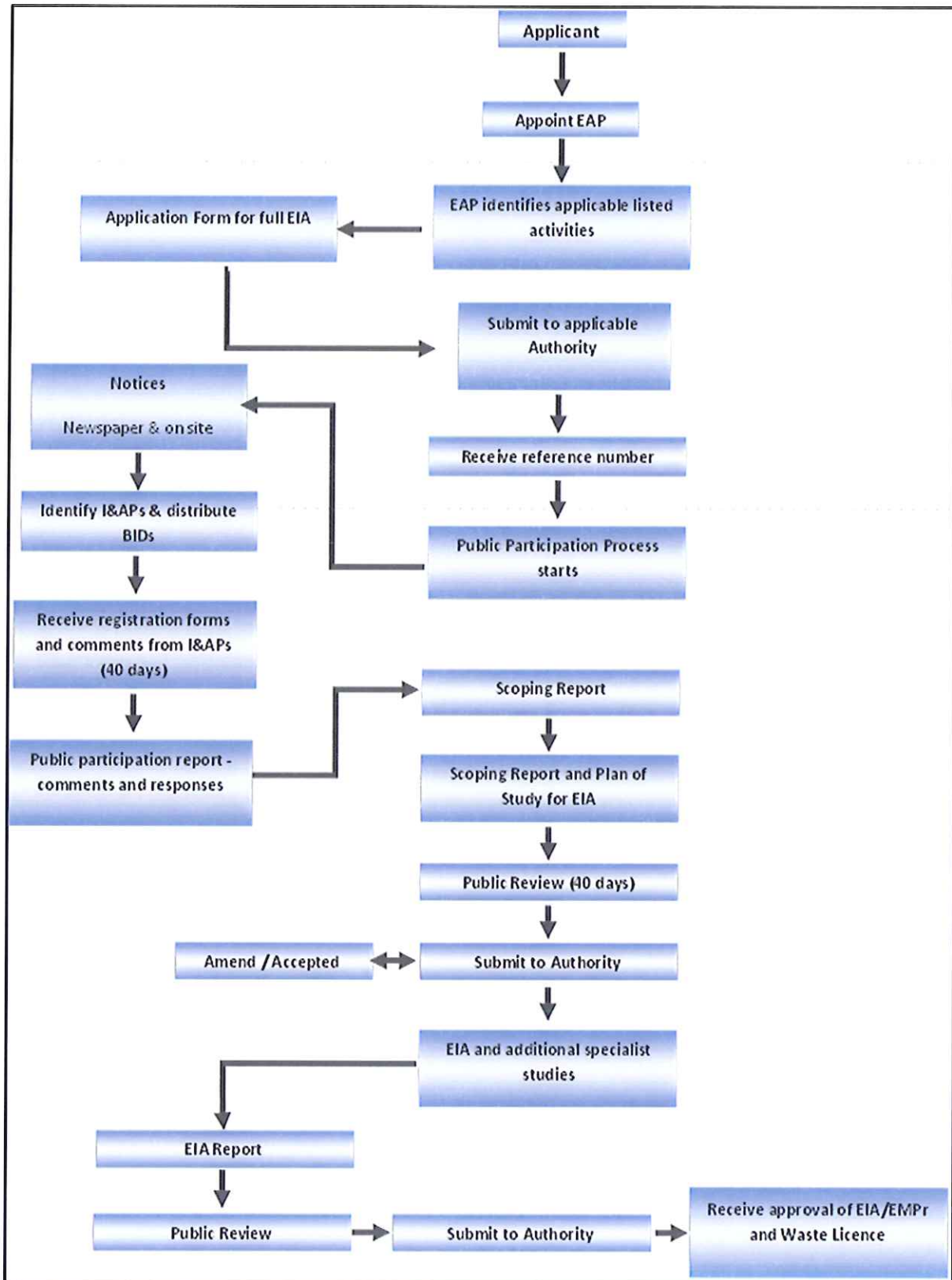


Figure 1-1: Simplified diagram explaining the EIA process

2 DESCRIPTION OF THE ACTIVITY

2.1 Nature

Portion 73 of the farm Waterkloof 305 JQ, is 41ha in size and is currently largely undeveloped but disturbed due to agricultural practises. In the process of developing the site into a residential township, the following main activities will take place:

- Vegetation will be cleared during earth works and construction phase;
- Bulk services (sewage, electricity, water supply and roads) will be installed; and
- Structures (residential units) will be built during the construction phase.

The planned infrastructure will include:

- Residential units (836 units);
- Access and internal roads; and
- Infrastructure for bulk services (water supply and sewage).

The layout of the residential development can be seen in Figure 2-1. This may be adjusted based on specialist findings in the EIA phase.

2.2 Motivation

Objective: The main objective of the project is to establish a residential development that will contribute to the development and growth of Rustenburg, consequently adding to the Gross Domestic Product (GDP) of the city as a whole.

Need: According to the Rustenburg Spatial Development Framework (SDF, 2010), the total population of Rustenburg has increased from 395 000 in 2001 to nearly 450 000 in 2007. This represents an increase of 13.6% over this period and thus implies an annual growth rate of approximately 2.3%. A notable feature is that the growth in the number of households (25.6%) was nearly double that of the population figures, translating into a household growth rate of 4.3% per annum. Approximately 84% of the Rustenburg Municipal Area population can be classified as urbanized, residing in either urban or rural settlements. Only 10% of the total population lives on farms. Furthermore, the agricultural sector only accounted for 3.4% of the employed population in 2007, this slightly decreased from 4.1% in 2001. A low percentage of the male population (2.6%) is involved in the agricultural sector.

The Rustenburg Housing Sector Plan analysed the total overall municipal housing need, as well as the spatial disaggregation housing need per settlement cluster. According to these figures, the total backlog (which comprises of informal structures in informal settlements, informal structures in backyards, traditional houses constructed of traditional materials and other informal categories), is estimated to be approximately 58 600 units. This backlog is mostly concentrated in the Boitekong/Kanana Cluster ($\pm 14\ 000$), the Thekwane-Mfidikoe-Photsaneng Cluster ($\pm 12\ 000$) and the Rustenburg/Thlabane cluster ($\pm 6\ 000$) (SDF, 2010).

The potential future growth of the municipality, resulting from both natural growth, as well as immigration to the area due to its high economic growth rate, will result in an additional demand for housing up to 2015. The total additional demand over this period is estimated to be approximately 57 000 units. This figure includes both affordable housing units to be provided through the public sector, as well as bonded houses to be provided through the private sector (SDF, 2010).

Benefit: A socio-economic benefit to the Rustenburg area and to surrounding landowners to the project site (increase in property value).

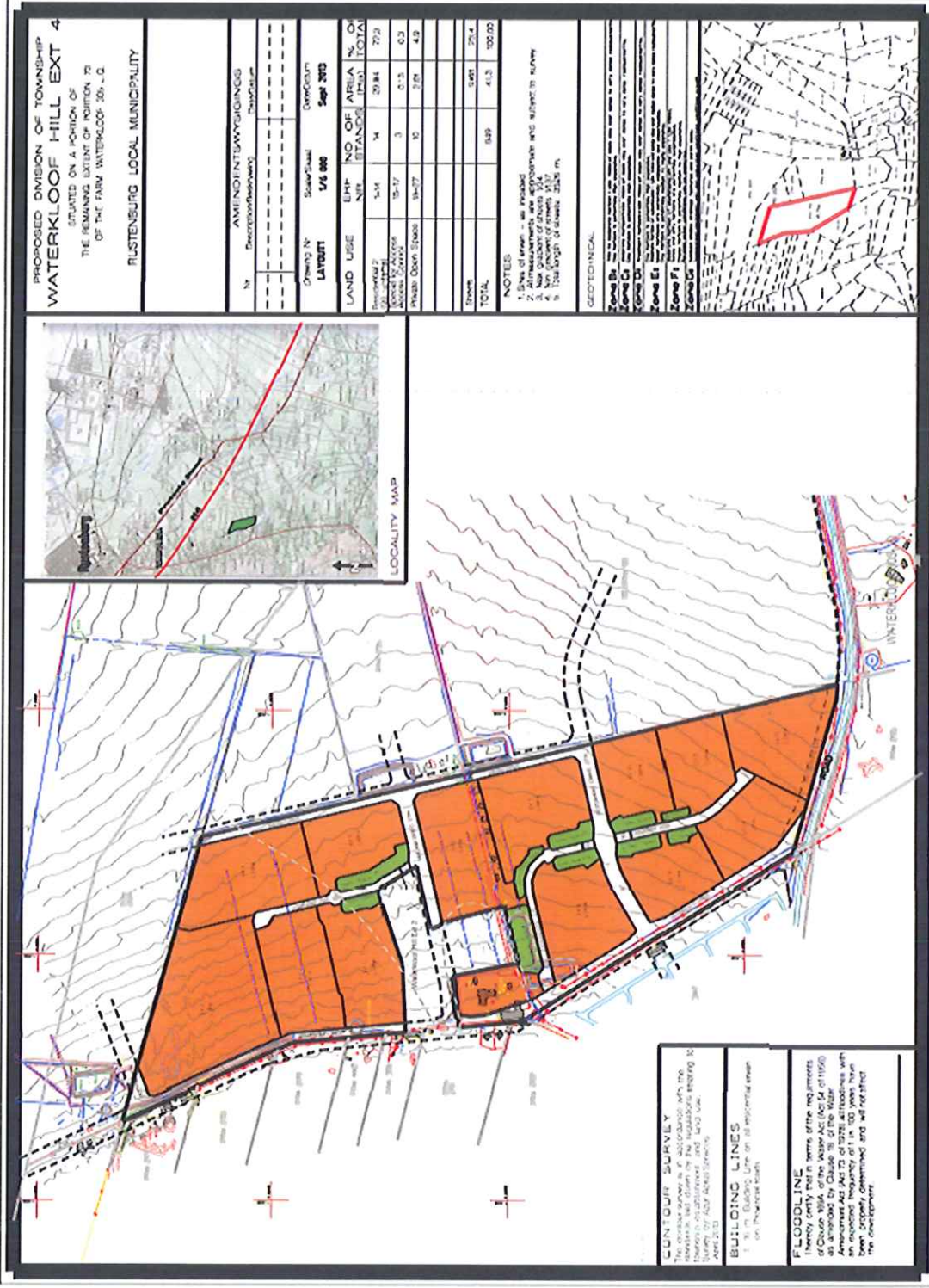


Figure 2-1: The proposed layout for the project area

3 LEGAL REQUIREMENTS AND GUIDELINES

3.1 Constitution of South Africa, 1996 (Act 108 of 1996)

The Constitution of South Africa, 1996 (Act 108 of 1996) also places a duty on the State to protect the environment. Section 24 states that:

“Everyone has the right

- a. to an environment that is not harmful to their health or well-being; and
- b. to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that
 - i. prevent pollution and ecological degradation;
 - ii. promote conservation; and
 - iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”

Section 26 also states that:

- Everyone has the right to have access to adequate housing.
- The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of this right.

3.2 National Environmental Management Act (NEMA), 1998 (Act 107 of 1998) as amended, and associated Regulations of 2010

The principles underpinning environmental management contained in the NEMA must be taken into account by any organ of state in the exercise of any power that may impact on the environment. Section 2 (4a) states that sustainable development requires the consideration of all relevant factors including the following:

- That the disturbance of ecosystems and loss of biological diversity are avoided, or where they cannot be altogether avoided, are minimised and remedied;
- That pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied;
- That the development, use and exploitation of renewable resources and the ecosystems of which they are a part do not exceed the level beyond which their integrity is jeopardised;
- That negative impacts on the environment and on people’s environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.

Government Notice Regulations (GNR) 543, 544, 545 and 546 of 18 June 2010 contain the regulations pertaining to EIA under sections 24(5), 24M and 44 of the NEMA. The project falls under the listed activities of GNR 545 (Listing Notice 2, 18 June 2010) for which a full EIA is required according to legislation:

Activity 15: Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use, where the total area to be transformed is 20 hectares or more.

GNR 543 stipulates requirements in terms of processes to be followed and information to be included in documentation. The Public Participation Process (PPP) was carried out in accordance with Chapter 6 of NEMA as amended and in support of the EIA Regulations, 2010 (GNR 543 section 54 – 57) and associated guidelines.

3.3 Conservation of Agricultural Resources Act (CARA), 1983 (Act 43 of 1983)

The aim of the Act is to provide for control over the utilization of the natural agricultural resources of the Republic in order to promote the conservation of the soil, the water sources and the vegetation and the combating of weeds and invader plants; and for matters connected therewith.

To achieve this aim, the following objectives are included:

- To provide for the conservation of the natural agricultural resources of the Republic by the maintenance of the production potential of land;
- The combating and prevention of erosion and weakening or destruction of the water sources, and
- The protection of the vegetation and the combating of weeds and invader plants.

3.4 National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act 10 of 2004)

Although South Africa became a signatory to the Convention of Biological Diversity in 1998, the more recent enactment of national legislation has affirmed our country's commitment to biodiversity and conservation. NEMBA has been promulgated by the South African President and was published in the Government Gazette in June 2004 (Volume 467; No. 26426). One of the objectives of this Act is to provide for the management and conservation of South Africa's biodiversity within the framework of the NEMA and to ensure the sustainable use of indigenous biological resources.

Threatened and Protected Species Regulations: Part 2 of NEMBA provides for listing of species that are threatened or in need of protection to ensure their survival in the wild, while regulating the activities, including trade, which may involve such listed threatened or protected species and activities which may have a potential impact on their long-term survival. In February 2007, this was achieved as the Minister of Environmental Affairs and Tourism published a list of Critically Rare, Endangered, Vulnerable and Protected Species, according to Section 56(1) of the Act.

The project area is located on and outside of the MPE buffer zone; therefore legislation regarding protected environments is not applicable.

3.5 National Forests Act, 1998 (Act 84 of 1998)

Natural forests and woodlands form an important part of the environment and need to be conserved and developed according to the principles of sustainable management. They also have an impact on the environment and need to be managed appropriately, this includes invaders like Eucalyptus or Pinus species encroaching the riparian vegetation that impact on indigenous flora and river flows. The purpose of this Act is to:

- Promote the sustainable management and development of forests for the benefit of all;
- Create the conditions necessary to restructure forestry;
- Provide special measures for the protection of certain forests and trees;
- Promote the sustainable use of forests for environmental, economic, educational, recreational, cultural, health and spiritual purposes;
- Promote community forestry; and
- Promote greater participation in all aspects of forestry and the forest products industry by persons disadvantaged or by unfair discrimination.

In this proposed project, it is specifically with reference to Protected Tree species.

3.6 National Heritage Resources Act (NHRA), 1999 (Act 25 of 1999)

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the NHRA and the NEMA.

According to the NHRA, the following is protected as cultural heritage resources:

- a. Archaeological artefacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The national estate includes the following:

- a. Places, buildings, structures and equipment of cultural significance
- b. Places to which oral traditions are attached or which are associated with living heritage
- c. Historical settlements and townscapes
- d. Landscapes and features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Archaeological and paleontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, paleontological, meteorites, geological specimens, military, ethnographic, books etc.)

3.7 Sustainable Development

The principle of Sustainable Development has been established in the Constitution of the Republic of South Africa (108 of 1996) and given effect by NEMA and the ECA. Section 1(29) of NEMA states that sustainable development means the integration of social, economic and environmental factors into the planning, implementation and decision-making process so as to ensure that development serves present and future generations. Thus, Sustainable Development requires that:

- The disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied;
- That pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied;
- That the disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and remedied;
- That waste is avoided, or where it cannot be altogether avoided, minimised and re-used or recycled where possible and otherwise disposed of in a responsible manner;
- That a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions;
- Negative impacts on the environment, on people's environmental rights be anticipated; and, prevented, and where they cannot altogether be prevented, are minimised and remedied

3.8 Other supporting documentation

The guidelines considered during the EIA process include:

- Rustenburg Spatial Development Framework (SDF), North West, 2010.
- Rustenburg Strategic Environmental Assessment (SEA), 2003. Eco Assessments ecological and environmental consultants in association with African EPA, Motso planning and development consultants, MetroGIS. September 2003.
- Rustenburg Land Use Management Scheme (LUMS), 2005.
- Magaliesberg Protected Environment (MPE) Environmental Management Framework (EMF) and Plan. Draft. October 2007.

The development of this property was previously approved as part of a golf estate on 14 July 2008 (Ref: NWP/EIA/145/2006) (Appendix B).

4 THE ENVIRONMENTAL CONTEXT OF PROPOSED PROJECT

4.1 Site Description

The proposed residential development will be established on Portion 73 of the farm Waterkloof 305 JQ, Rustenburg, North West Province. The proposed portion of land is situated approximately 6.4 km south of the Rustenburg Central Business District (CBD) on the D1641. The site can be accessed via a gravel road from the R24 to the western boundary of the site or the D1641 on the southern boundary of the site. Global Positioning System (GPS) coordinates are 25° 43' 40" South and 27° 16' 19" East (please refer to the locality map, Figure 4-1 and Figure 4-2). The farm is bordered by agricultural land and farmsteads on the western, northern and eastern boundary of the site. South west of the site is another residential development (Savannah Falls) already established. Directly south of the site is the D1641, with a disturbed natural site further south. An illustration of the surrounding land use can be seen in Figure 4-3. Photos indicating the surrounding land use can be seen in Appendix C.

The project area is currently mostly undeveloped, excluding a farmstead and small accommodation units for workers. The remainder of the site has been disturbed by agricultural activities. The Rustenburg SEA identified the current land use as mixed land use, predominantly agriculture and the proposed (future) land use for the project area is identified as agriculture. According to the Rustenburg SDF (2010), the proposed/planned project area zoning is "Single Residential", and therefore this project is in line with the SDF. Other land uses within the vicinity include guest houses (Bambalela, Pine Inn Lodge), Car sales and other small businesses, Churches (Vantage Point, Waterval Gemeente) and a nursery school (Klein Hoewe). Regionally, the property falls within the Rustenburg Local Municipality (RLM), which, in turn, forms part of the Bojanala Platinum District Municipality (BPDM).

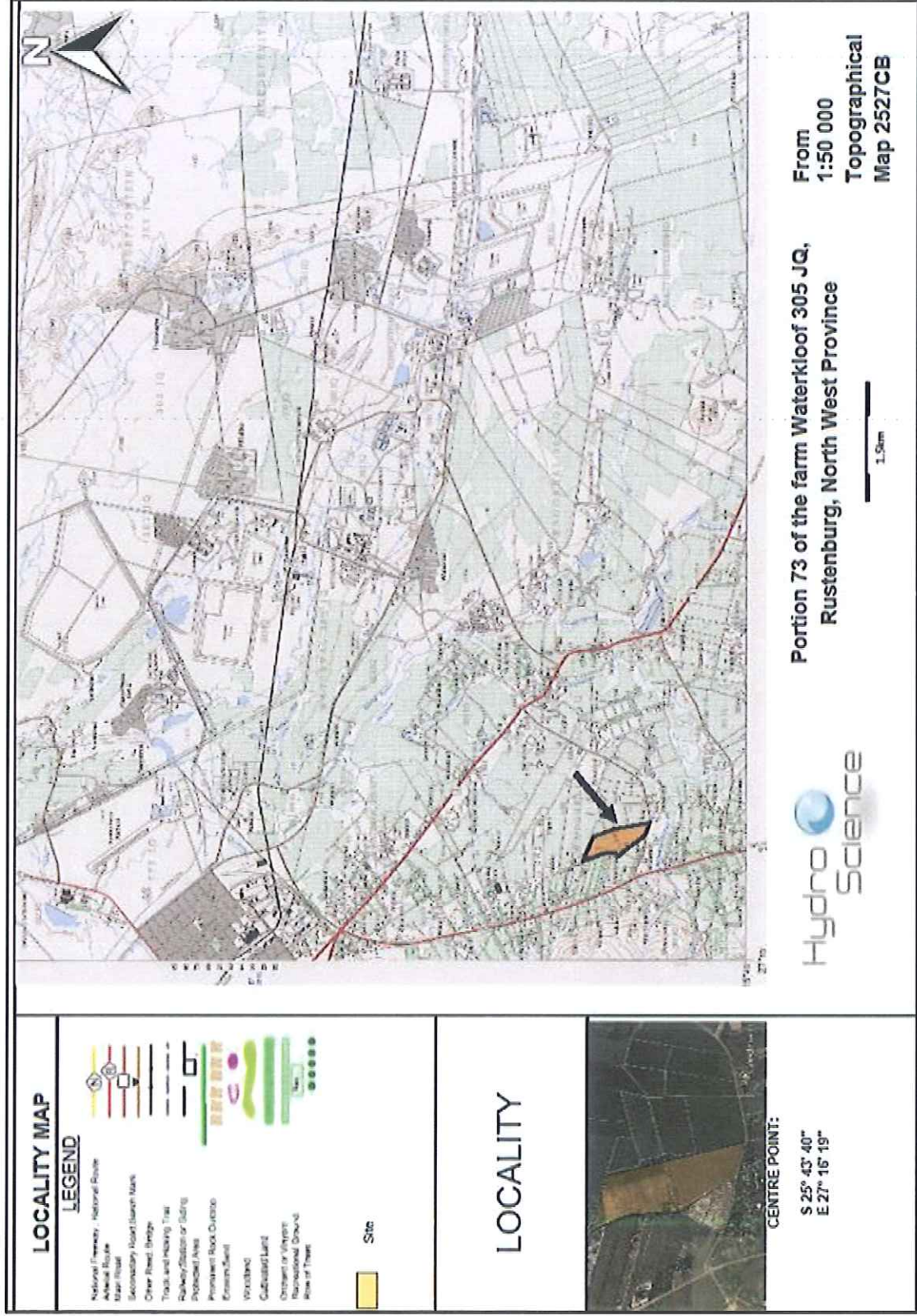


Figure 4-1: The locality of the proposed project area in Rustenburg, North West Province



Figure 4-2: Google™ locality map of Portion 73 on the farm Waterkloof 305 JQ

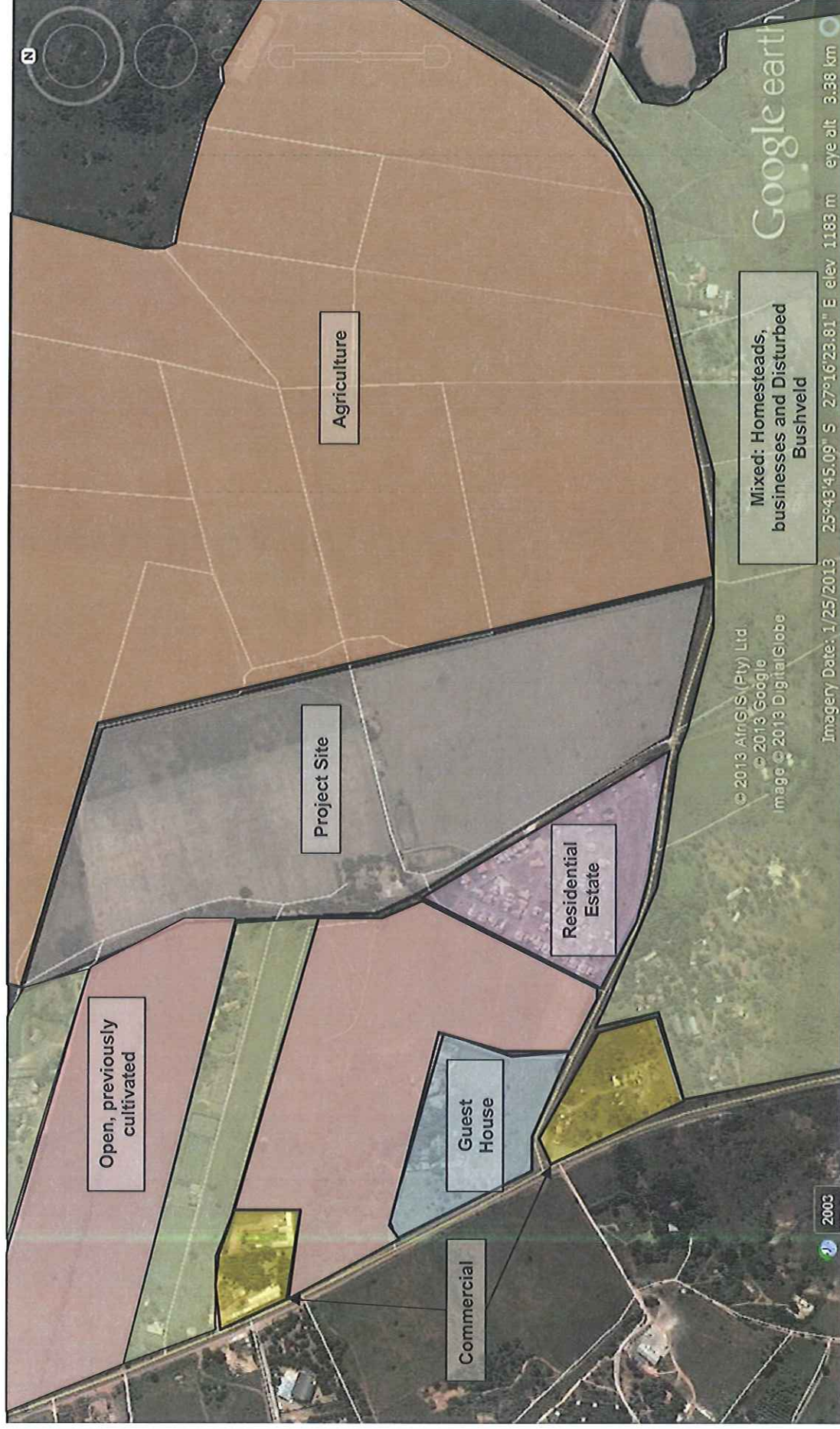


Figure 4-3: Google™ image showing current surrounding land use

4.2 Physical Environment

The physical environment includes biotic factors such as fauna and flora as well as abiotic factors such as temperature, wind, precipitation (rainfall), evaporation, air quality, topography, geology and the soil type that is characteristic of this site/area. The information in this section (Section 4.2 and 4.3) was pre-dominantly adapted from the Rustenburg SEA (2003), Rustenburg SDF (2010), DEA Draft Macroscale Siting Report (2012), MPE EMF (2007) were applicable and the SANBI (South African National Biodiversity Institute) BGIS system.

4.2.1 Climate

Rustenburg falls within the Summer Rainfall Climatic Zone. The area is characteristically warm to hot with rainfall that is erratic and extremely variable, ranging from 450 to 750mm per year.

The mean circulation of the atmosphere is predominantly anti-cyclonic throughout the year, except near the surface where meso-scale circulations prevail (Matrix Environmental Consultants, 2001). Fine conditions with little or no rainfall, and light variable winds with a northerly component occur over the region. Elevated inversions, which occur as a result of the anticyclonic subsidence, suppress the diffusion and vertical dispersion of pollutants by reducing the depth of the mixing layer.

Seasonal variations in the position and the intensity of the high pressure cells determine the extent to which the tropical easterly circulation and the circumpolar westerlies are able to impact on the atmosphere over the region. The tropical easterlies, and the occurrence of easterly waves and flows, affect the region throughout the year resulting in airflow with a north-easterly to north-westerly component, but their influence is generally weaker during the winter months.

The winter weather is dominated by perturbations in the westerly circulation as a result of the succession of cold fronts moving over the region. The passage of a cold front is characterised by pronounced variations in wind direction, wind speed, temperature, humidity and surface pressure. Airflow ahead of the cold front has a distinct north-north-westerly to north-easterly component. Following the cold front, the northerly wind is replaced by winds with a distinct southerly component.

During the summer months, the anti-cyclonic belt weakens and shifts southwards, allowing the tropical easterly flow to resume its influence over the region.

Temperature

Temperatures typically range between 16°C and 31°C during the summer months, with daily averages in the order of 26.5°C. During the winter months, the temperature typically ranges between 3°C and 24°C, with an average temperature of 10.9°C. The average annual temperature for Rustenburg is 18.7°C (refer to Table 4-1). Extreme upper and lower ends of the temperature scale have been recorded at 39.1°C and 2.8°C, respectively (Rustenburg SEA, 2003).

Table 4-1: Average monthly temperatures recorded over a 29 year period (Rustenburg weather station no. 05115234)

Month	Average of Daily Temperature (°C)		
	Maximum	Minimum	Mean
January	30.3	17.2	23.8
February	29.4	16.8	23.1
March	28.3	15.0	21.7
April	25.5	11.2	18.3
May	23.3	6.5	14.9
June	20.4	3.2	11.8
July	20.9	2.8	11.8
August	23.7	5.1	14.4
September	27.3	9.6	18.5
October	28.7	12.9	20.8
November	29.4	14.9	22.1
December	30.1	16.1	23.1
Year	26.5	10.9	18.7

Precipitation and Evaporation

The mean annual precipitation (MAP) for Rustenburg (as recorded at Weather Station No. 05115234 at a height of 1 157 metres above mean sea level (mamsl) is given as 650mm. January commonly has the highest precipitation (mean of 134 mm) whereas the month of July has the lowest precipitation (mean of 2 mm). The distribution of rainfall through the remainder of the year is illustrated in Figure 4-4. More than 70% of the annual rainfall occurs between the months of October to February.

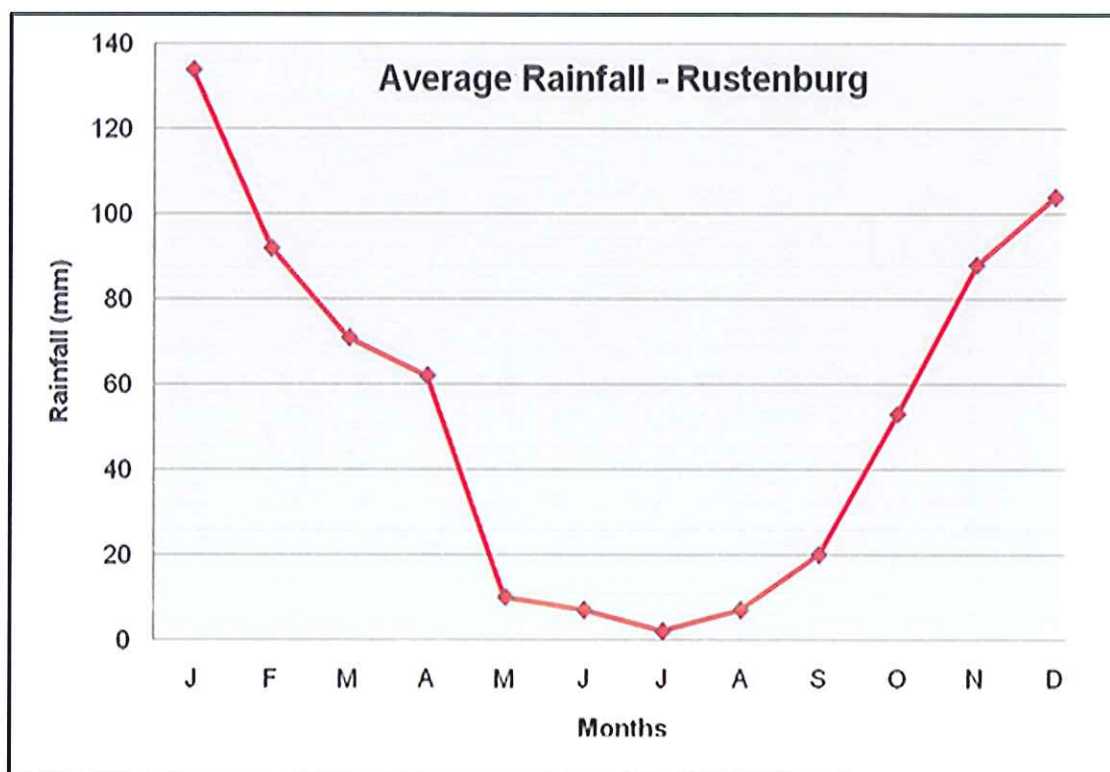


Figure 4-4: Graph indicating the mean monthly rainfall for Rustenburg over a 29 year period

Wind

Winds are heavily influenced by the underlying topography of the region. Rustenburg town is to the south of the Pilanesberg and experiences moderate northerly winds. Another station in Rustenburg experiences frequent south-westerly winds, and strong north-easterly winds. This station is influenced by the Magaliesberg mountain range. A spatial and temporal variability exists in the wind field of the Rustenburg region between day and night.

A clear distinction can be made between the day and night-time wind conditions. Night-times are characterised by an increase in the number of calms as is typical of the night-time flow regime in most regions, and by the predominance of low velocity wind (generally below 3 m/s) from the south-westerly, southern and south-easterly sectors. Calm wind conditions occur nearly twice as much during the night than daytime hours. Furthermore, the winds during the day are mainly from the north-western, northern and north-eastern sectors.

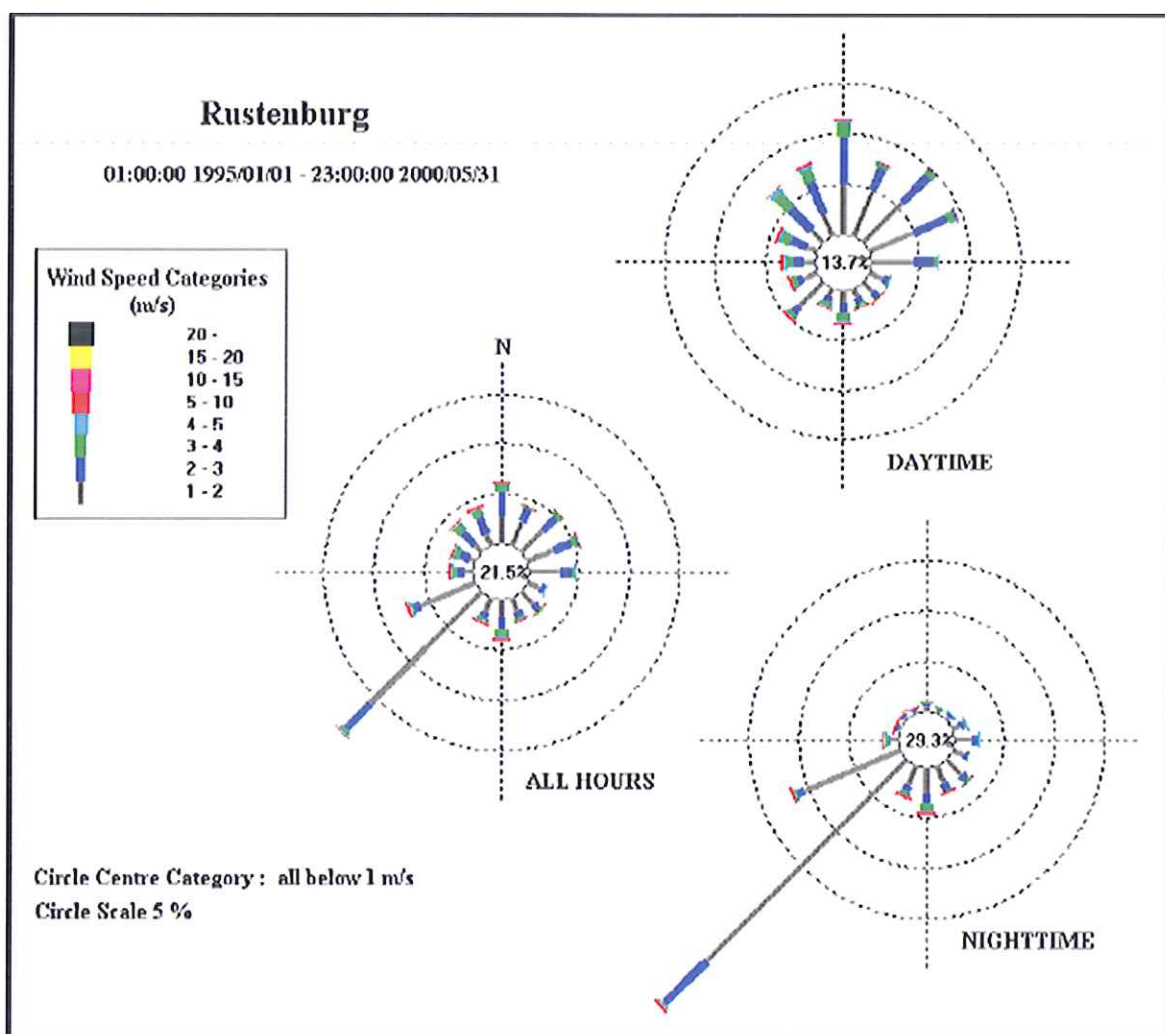


Figure 4-5: Wind patterns recorded at the Rustenburg weather station

4.2.2 Air Quality

The prominent economic activities within the BPDM are mining and tourism. Large Platinum mines are located in the District, predominantly in the Rustenburg area. The mines are located in a band along the Merensky Reef which stretches west from the Pilansberg towards Marikana and Brits in the east. Although the area is currently not regarded as an air

pollution 'hot spot,' it has been declared a priority area anticipating the future developments in the area, which could result in the area experiencing severe air pollution problems as are seen in the Vaal and Highveld priority areas.

In the BPDM, the area around Rustenburg has the largest potential for future mining activities due to the position of the Merensky Reef (BPDM AQMP, 2010). The National Framework for Air Quality Management in South Africa has identified the Bojanala Platinum District as having poor air quality due to emissions from mining (National Framework for AQM, 2007). Mining, particularly opencast mining, generates dust emissions as a result of quarrying, mining, materials handling, vehicle entrainment from haul roads, wind erosion from open areas, drilling and blasting.

Domestic fuel burning is also a concern in BPDM, with many households not electrified. Domestic fuel burning is of particular significance during winter when more fuel is burnt for warmth and the high pressure system over the region prevents the dissipation of pollution. Transportation is also a source of emissions in the BPDM, with private and commercial vehicle emissions as an overall contributor. Agriculture, biomass burning and waste management are all lesser contributors to overall atmospheric emissions.

An emissions inventory for BPDM was compiled as part of the Air Quality Management Plan for the District. The main sources of air pollution were identified as:

- Industrial operations,
- Mining activities,
- Agricultural activities,
- Biomass burning (veld fires),
- Domestic fuel burning (particularly, coal),
- Vehicle tailpipe emissions,
- Waste treatment and disposal (landfills and incineration),
- Vehicle entrainment of dust from paved and unpaved roads,
- Other fugitive dust sources such as wind erosion of exposed areas.

Pollutants that are of particular concern for BPDM are SO₂, NO₂ and PM₁₀. Rustenburg and Madibeng Local Municipalities also have the highest contribution of industrial emissions.

4.2.3 Topography

The Rustenburg area is typically a combination of slightly undulating plains where more than 80% of the area has slopes of less than 5%, and lowlands, hills and mountains with moderate to high relief (i.e. 50 – 80% of the area has a slope less than 5%).

The site for the proposed residential development is located on a relatively flat piece of land that imperceptibly slopes downwards to the south from 1 183 to 1 1181 mamsl. This is expected as the Waterkloofspruit runs further south from the site.

4.2.4 Geology and Geohydrology

It is evident that the site is underlain by norite and gabbro of the Main zone of the Rustenburg Layered Suite, Bushveld Igneous Complex. Typically these rocks decompose in-situ forming a surface horizon of black, highly expansive clay known colloquially as "black turf", while this residual material may often be covered in a horizon of transported fine colluvial sand.

As a result of deep and extensive chemical weathering, the rockmass has been reduced to residual silty sand and gravels at depth and active clayey soils close to the surface. The

depth of this material varies considerably and is usually underlain by residual gabbro, at depths that vary from approximately 1.0m to greater than 5m.

The 1:250 000 Geological Series 2526 Rustenburg indicate that the proposed project area is situated on Pyroxenite, Dunite and Harzburgite. Norite, Diabase and Quartzite are to be found to the west of the development area. Peroxenite, Norite and Anorthosite are to be found to the north east of the project area. The Pyroxenite and Harzburgite do have early Transmissivity values ranging from 28 to 152m²/d and late Transmissivity values of 12.7 to 36.7m², indicative of a medium to high yielding aquifer.

4.2.5 Soil

Two general soil types are identified to occur within the project area (Figure 4-6).

The north-western section of the site as can be seen in Figure 4-6 is identified to have red, yellow or greyish soils with a high base status. The soil class associated and identified within this region include freely drained, structureless soils. These soils, which are favourable for physical development such as this project, may have a restricted soil depth, excessive drainage, high erodibility and low natural fertility. The south-eastern section of the site has strongly structured cracking soils, mainly dark coloured and dominated by swelling clays (vertic soils). They may occur associated with one or more of melanic and red structured soils. The soil class associated with this area and general soil description is swelling clays which are high in natural fertility, a high swell shrink potential and are very plastic and sticky.

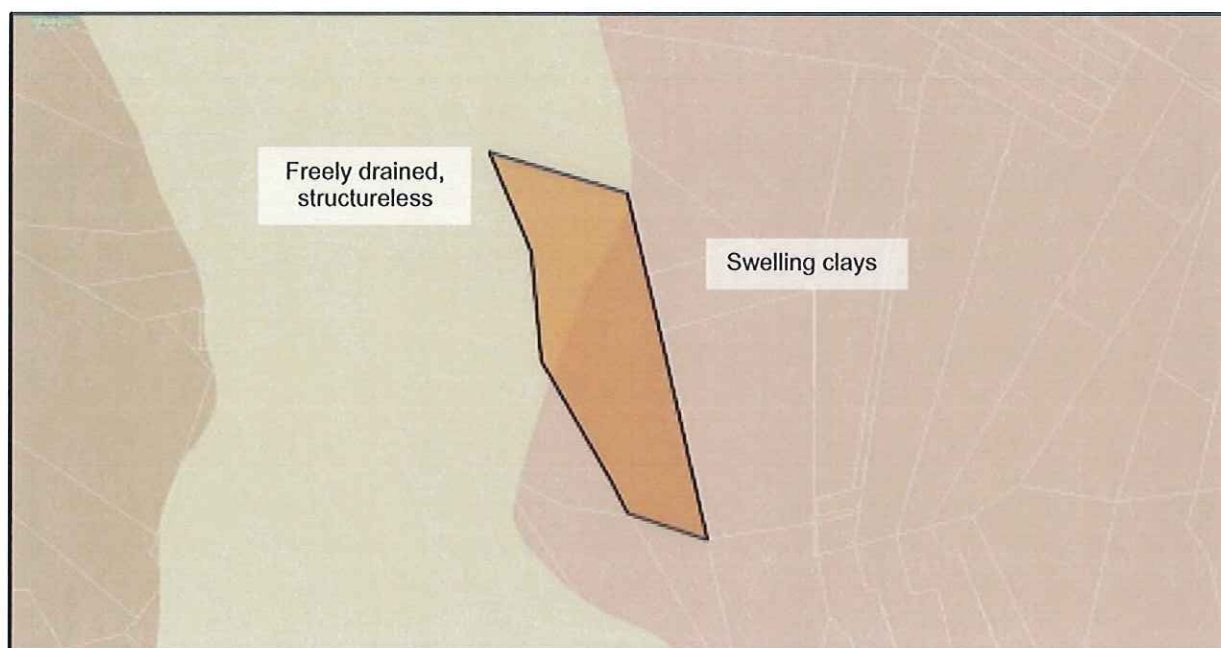


Figure 4-6: Soil classes identified for the project area

4.2.6 Surface Water

The study area falls within the Crocodile (West) Marico Water Management Area (WMA) and within the A22H quaternary catchment. The surface water information available is as follows:

Water Management Area (WMA):	Crocodile (West) Marico
Catchment Area:	4.26028 km ²
Mean Annual Runoff (MAR):	23.7 mm

Mean Annual Precipitation (MAP):	657.65 mm
Quaternary Catchment:	A22H
Closest water course:	Waterkloofspruit 300m south of the project area
Water authority:	DWA Hartbeespoort Regional Office
DWA monitoring:	A2H038 Lower Waterkloofspruit at Rietvallei

4.3 Biotic Environment

The Bojanala District falls within a high biodiversity area of the Province and some significant faunal and floral species may be present in and around the project area.

Although the site predominantly consists of agricultural land, the occurrence of Red Data or protected species is not eliminated. Furthermore, small mammal species, reptiles, birds and arthropods of concern also have a possibility of occurrence.

4.3.1 Fauna

Fauna species of concern identified to occur within the Rustenburg area can be seen in Table 4-2 to 4-5. The probability of occurrence of these species, and the actual species composition specific to the project area will be determined during the fauna and flora specialist study.

Table 4-2: Red Data mammals that are likely to occur within the Rustenburg region

Scientific Name	Common Name	Status
<i>Atelerix frontalis</i>	Hedgehog	Rare
<i>Civettictis civetta</i>	African Civet	Rare
<i>Cleotis percivali</i>	Short-eared Trident Bat	Indeterminate
<i>Crocidura maquassiensis</i>	Maquassi Musk Shrew	Indeterminate
<i>Graphiurus ocellatus</i>	Spectacled Dormouse	Rare
<i>Manis temminckii</i>	Pangolin	Vulnerable
<i>Mellivora capensis</i>	Honey Badger	Vulnerable
<i>Mystromys albicaudatus</i>	White-tailed Mouse	Vulnerable
<i>Orycteropus afer</i>	Aardvark	Vulnerable
<i>Pipistrellus kuhlii</i>	Kuhl's Bat	Indeterminate
<i>Poecilogale a. albinucha</i>	African Striped Weasel	Rare
<i>Proteles cristatus</i>	Aardwolf	Rare
<i>Rhinolophus denti</i>	Dent's Horseshoe Bat	Indeterminate
<i>Suncus infinitesimus</i>	Lesser Dwarf Shrew	Indeterminate
<i>Suncus lixus</i>	Greater Dwarf Shrew	Indeterminate
<i>Zelotomys woosnami</i>	Woosnam's Desert Rat	Rare

Table 4-3: Red Data bird species that are likely to occur within the Rustenburg region

Scientific Name	Common Name	Status
<i>Anthus brachyurus</i>	Short-tailed Pipit	Rare
<i>Apus bradfieldi</i>	Bradfield's Swift	Indeterminate
<i>Ardeotis kori</i>	Kori Bustard	Vulnerable
<i>Botaurus stellaris</i>	Bittern	Vulnerable

<i>Falco peregrinus</i>	Peregrine Falcon	Rare
<i>Glareola pratincola</i>	Red-winged Pratincole	Rare
<i>Gypaetus barbatus</i>	Bearded Vulture	Rare
<i>Gypohierax angolensis</i>	Palmnut Vulture	Rare
<i>Gyps coprotheres</i>	Cape Vulture	Vulnerable
<i>Ixobrychus sturmii</i>	Dwarf Bittern	Indeterminate
<i>Mirafraga chuana</i>	Short-clawed Lark	Indeterminate
<i>Neophron percnopterus</i>	Egyptian Vulture	Endangered
<i>Neotis ludwigii</i>	Ludwig's Bustard	Vulnerable
<i>Polemaetus bellicosus</i>	Martial Eagle	Vulnerable
<i>Porzana pusilla</i>	Baillon's Crake	Indeterminate
<i>Pterocles gutturalis</i>	Yellow-throated Sandgrouse	Indeterminate
<i>Terathopius ecaudatus</i>	Bateleur	Vulnerable
<i>Torgos tracheliotus</i>	Lappet-faced Vulture	Vulnerable
<i>Tyto capensis</i>	Grass Owl	Vulnerable

Table 4-4: Red Data herpetofauna species likely to occur within the Rustenburg region

Scientific Name	Common Name	Status
<i>Dalophia pistillum</i>	Blunt-tailed Worm-lizard	Peripheral
<i>Homoroselaps dorsalis</i>	Striped Harlequin Snake	Rare
<i>Python sebae natalensis</i>	African Rock Python	Vulnerable

Table 4-5: Red Data arthropod species likely to occur within the Rustenburg region

Scientific Name	Habitat	Status
<i>Acraea machequena</i>	Bushveld	Red Data
<i>Andronymus neander neander</i>	Wetlands/forests	Red Data
<i>Metisella meninx</i>	Wet areas/wetlands	Red Data
<i>Neita neita</i>	Bushveld/Hillsides	Red Data
<i>Spialia paula</i>	Bushveld	Red Data

4.3.2 Flora

Two vegetation types are identified to occur on the proposed project area, Marikana Thornveld and Moot Plains Bushveld (Mucina and Rutherford, 2006). Although large sections of the natural vegetation around the proposed site have been altered by agricultural activities, some Red Data floral species may still occur in the area. Red Data species that might occur within the project grid square 2527CB as listed by the South African National Biodiversity Institute (SANBI) can be seen in Table 4-6.

Table 4-6: Red data plant species that might occur within the project area (SANBI, 2012)

Family	Scientific Name	Common Name	Status
ASPHODELACEAE	<i>Aloe peglerae</i>	Vuurpylaalwyn	Endangered
MESEMBRYANTHEMACEAE	<i>Frithia pulchra</i>	Fairy Elephant's Feet	Rare

Endemic species, meaning species that only occur within South Africa or specific regions of South Africa were also taken into account. Endemic species listed by SANBI to possibly occur within the project area can be seen in Table 4-7. Exotic/invasive species that were also listed within the grid square of the project area can be seen in Table 4-8, however it is speculated that due to the disturbed nature of the site, more exotic/invasive species will be identified during the flora specialist survey.

Table 4-7: Endemic plant species that might occur within the project area (SANBI, 2012)

Family	Species Name
ANACARDIACEAE	<i>Searsia rigida</i>
APOCYNACEAE	<i>Aspidoglossum glabrescens</i>
APOCYNACEAE	<i>Huernia transvaalensis</i>
ARALIACEAE	<i>Cussonia transvaalensis</i>
ASTERACEAE	<i>Vernonia staehelinoides</i>
ASTERACEAE	<i>Berkheya carlinopsis subsp. magalismontana</i>
ASTERACEAE	<i>Berkheya seminivea</i>
ASTERACEAE	<i>Vernonia staehelinoides</i>
CAMPANULACEAE	<i>Wahlenbergia magaliesbergensis</i>
CELASTRACEAE	<i>Gymnosporia polyacanthus subsp. vacciniifolia</i>
CELASTRACEAE	<i>Gymnosporia polyacanthus subsp. vacciniifolia</i>
CRASSULACEAE	<i>Adromischus umbraticola</i>
EUPHORBIACEAE	<i>Euphorbia clavarioides var. truncata</i>
FABACEAE	<i>Indigastrum burkeanum</i>
MALPIGHIACEAE	<i>Triaspis glaucophylla</i>
MALVACEAE	<i>Hermannia grisea</i>
MALVACEAE	<i>Hibiscus marlothianus</i>
MALVACEAE	<i>Hermannia lancifolia</i>
MALVACEAE	<i>Triumfetta sonderi</i>
POACEAE	<i>Sporobolus pectinatus</i>
PORTULACACEAE	<i>Portulaca grandiflora</i>
RHAMNACEAE	<i>Phyllica paniculata</i>
SCROPHULARIACEAE	<i>Craterostigma wilmsii</i>
VITACEAE	<i>Cyphostemma sulcatum</i>

Table 4-8: Exotic/invasive plant species that might occur within the project area (SANBI, 2012)

Family	Species Name
ASTERACEAE	<i>Sonchus maritimus</i>
ASTERACEAE	<i>Tagetes minuta</i>
MOLLUGINACEAE	<i>Mollugo nudicaulis</i>
PORTULACACEAE	<i>Portulaca oleracea</i>
FABACEAE	<i>Senna occidentalis</i>

4.4 Socio-Economic Environment

The total population have increased from 395 000 in 2001 to nearly 450 000 in 2007. This represents an increase of 13.6% over this period and thus implies an annual growth rate of approximately 2.3%. A notable feature is that the growth in the number of households (25.6%) was nearly double that of the population figures, translating into a household growth rate of 4.3% per annum. This figure may imply that many extended households who have possibly lived in single dwellings have established themselves as separate households over this period, hence the large growth in households. Approximately 84% of the Rustenburg Municipal Area population can be classified as urbanized, residing in either urban or rural settlements. Only 10% of the total population lives on farms.

The age structure of the population indicates that the population profile is dominated by people in the young economically active age category from 21 to 35. Nearly 33% of the total population falls within this age category, a figure substantially higher than the comparative District figures. This pattern may be the result of the high concentration of economic activities and hence employment opportunities in the Rustenburg area, thus attracting a significant proportion of the population in the economically active age categories. The comparative figures for 2001 and 2007 also indicate that the section of the population in the age category between 21 and 35 has further increased. The proportion of the population between 41 and 55 years of age have also increased notably over the same period.

The gender structure is male dominated with approximately 57% of the total population represented by males. This is probably associated with the economic characteristics of the area which is dominated by the mining sector.

It is generally recognized that the skills profile of a particular area has a significant influence on the economic performance and growth of that region. This information indicates that, although significant progress has been made with the eradication of adult illiteracy (decreasing from proximately 12% to 6.7%), the majority of the adult population have only completed some form of secondary education as highest qualification (representing just over 40% of the total adult population). Although some progress has been made with the percentage of adults who have completed a certificate or diploma (6% by 2007) and those with degrees (2.2% of the 2007 population) this still represents a very low percentage of the adult municipal population. There are no significant differences between the education profiles, although a slightly higher percentage of the male population has only completed primary education compared to the female population. In both categories, the percentage of the adult population with some form of tertiary qualification remains very low.

The estimated unemployment rates in the RLM have decreased from 31.8% in 2001 to 28.2% in 2007. These figures are substantially lower than the comparative district unemployment rate which decreased from 40.8% to 33.7% over the same period. A further notable feature is the significant differences between the levels of unemployment between the male and female population. The unemployment rate of the male population in 2007 was 18.1%, compared to the 46.3% of the female population.

More than 50% of the employed economically active population were involved in the mining sector by 2007. The total number of people employed in this sector has also increased from 57212 in 2001 to 64861 by 2007 and again decreased in 2012-2013. The most notable other sectors is the wholesale and retail trade sector which by 2007 accounted for 10.8% of the employed population (13962 people) and the community, social and personal services sector representing 12% of the employed population (15490 people). This information also indicates that the proportional contribution of the various economic sectors to employment have not dramatically changed between 2001 and 2007. A further important aspect to note is

that, despite the large rural areas in the RLM, the agricultural sector only accounted for 3.4% of the employed population by 2007. It also slightly decreased from 4.1% in 2001.

4.4.1 Housing Demand

According to the official census statistics, the proportion of households living in formal houses on separate stands in proportional terms declined somewhat from 47.4% in 2001 to 42% in 2007. This does not imply that the actual number of households residing in formal structures on separate stands have declined (actual number increased from 55146 in 2001 to 61477 in 2007). It does, however, mean that other categories have increased at a faster rate than formal housing in formal settlements, hence the resulting proportional decrease. A further notable feature is the large proportional increase in the number of households residing in informal structures in backyards that increased from 13.4% in 2001 to 21% in 2007. According to the Statistics SA data, the total number of households residing in informal structures in backyards has doubled between 2001 and 2007 (15540 to 30685). A positive feature is the decrease in number of households residing in informal structures in informal settlements that have declined from 30094 in 2001 to 23922 by 2007. This also represents a proportional decrease from 25.9% in 2001 to 16.3% in 2007.

The Rustenburg Housing Sector Plan analysed the total overall municipal housing need, as well as the spatial disaggregation housing need per settlement cluster. The data used for this purpose is based on the information contained in the Rustenburg Housing Strategy and was updated with the results of the backlog study for Local Municipalities completed by the BPDM. In some clusters, the estimated housing backlogs in the district backlog study were higher than the estimates contained in the Rustenburg Housing Strategy. The approach adopted in the Housing Sector Plan was to use the higher of the two estimates (aggregated to cluster level) to provide the most realistic backlog figure. According to these figures, the total backlog (which comprises informal structures in informal settlements, informal structures in backyards, traditional houses constructed of traditional materials and other informal categories) is estimated to be approximately 58 600 units. This backlog is mostly concentrated in the Boitekong/Kanana Cluster ($\pm 14\ 000$), the Thekwane-Mfidikoe-Photsaneng Cluster ($\pm 12\ 000$) and the Rustenburg/Thlabane cluster ($\pm 6\ 000$). The potential future growth of the municipality, resulting from both natural growth, as well as immigration to the area due to its high economic growth rate will result in an additional demand for housing over the period up to 2015. The total additional demand over this period is estimated to be approximately 57 000 units. This figure includes both affordable housing units to be provided through the public sector, as well as bonded houses to be provided through the private sector. Based on the socio-economic and affordability characteristics of the Rustenburg population, the Housing Sector Plan estimates that approximately 18% of this future demand will be provided through the private sector in the form of bonded housing and the remainder through the public sector (in the Rustenburg/Thlabane Cluster it was assumed that approximately 80% of the additional demand would be in the form of medium to high income bonded housing). It was further also assumed that approximately 75% of this potential future affordable housing demand would potentially qualify for government assistance in the form of subsidies.

4.4.2 Need for Services

In and around the project area, the local community have no direct access to municipal water and is not linked to the municipal sewage management system. Groundwater is used, via boreholes, as water supply source. Municipal electricity is currently supplied to the site. It is anticipated that the RLM will in the near future extend services to this area as the project area is within the urban edge.

5 PROJECT ALTERNATIVES

5.1 Site Alternatives

The applicant, Christo Weyer Familie Trust, has not considered an alternative site as the proposed site is owned by the applicant (Title deed: T15010/1997 in Appendix B). Therefore, it is the only available option for the applicant to develop on.

5.2 Activity Alternatives

5.2.1 Alternatives in terms of water supply:

- **RLM:** The RLM provides the infrastructure necessary to unlock the potential for development of the area in terms of the SDF and the water master plan. The developers in the area will contribute pro-rata towards the provision of the bulk service and a service agreement will be entered into with RLM during the Township Establishment. *This is the preferred option.*
- **Rand Water:** Another water providing authority (Magalies Water or Rand Water) provides the bulk service on behalf of RLM. No contribution towards bulk service will be payable to the RLM and these water providing authorities will only provide services if RLM cannot do so.
- **Developer:** The developer provides a dedicated bulk line from Waterberg Street to the development for exclusive use.
- **Groundwater:** A large development such as this will place tremendous strain on limited groundwater resources if boreholes are used as a water supply source.

5.2.2 Alternatives in terms of sewage management:

- **RLM:** All internal sewers will gravitate via a conventional sewer system to a pump station situated at the lowest point of the proposed development. The pump station, at full development, will be equipped with two electric pumps. Pump control will be by means of pressure switches and flow meters. The sump volume will be determined to minimise motor starts to 10-15 starts per hour. Screens and a grid chamber will be used on the pump station to limit blockages in the pumps. The sewage will be pumped to the new bulk sewer system installed by the RLM from the proposed development. *This is currently the preferred option.*
- **On-site system:** SPUD (Solar-powered dehydration) system considers the scarcity of water resources (aerobic dry system, 100% waterless), the lack of bulk infrastructure in most municipal areas (municipal backlogs), the cost of establishing wastewater treatment works and environmental impact (solar powered, ventilation powered through a wind driven extractor, no need for off-site removal and disposal – self-contained, 100% chemical free).
- **Decentralised model:** According to Water and Sanitation Africa, September/October 2012, “Africa will break away from the centralised model of sewage treatment and adopt a decentralised approach that can be deployed rapidly, independent of access to capital, and with low operating and maintenance cost” (Loyiso Jiya, Bannow Africa). A number of package plant options exist - Blivet package plant (rotating biological contractor); Green Sanitation (Anaerobic bacteria generator and nano filter) etc. These can function independently and can be used in the interim until a larger system is in place to link to.

5.3 No-go Alternative

If the proposed project and township establishment is not approved:

- Due to the fact that the site falls within the urban edge, it is anticipated that the project area is proposed for urban developments to expand on the RLM infrastructure, service and population growth. If the project should not continue, the land can perhaps be used for agricultural activities for a short period after which the land will remain vacant in-between other residential developments that have started or are in the process of being approved.
- Vacant land in turn poses security risks to surrounding neighbours/residential developments within vicinity of the project area. Risks can be linked to vagrants that may inhabit the open land; fire hazards etc.
- The already high demand for housing in the Rustenburg area will remain and not be addressed to any extent, resulting in unchanged social-economic conditions.

6 POTENTIAL ENVIRONMENTAL IMPACTS

As part of the Scoping Phase, potential environmental and socio-economic impacts that may occur as a result of the proposed residential development have been identified in this section. The criterion defined in Table 8.1 will be used to assess the significance of the impacts identified during the Scoping phase. The final decision regarding the significance of any impacts, as well as remedial or mitigation or management measures thereof will be assessed during the EIA phase.

6.1 Land Use

Currently the site is zoned as agricultural; however according to the SDF (2010) the proposed/planned project area zoning is “Single Residential”. Therefore, the proposed project is in-line with the SDF of RLM, although currently used for agricultural purposes. This is expected as the site is situated within the urban edge and therefore the anticipated impact on the land use is negligible.

6.2 Visual Aspects

Currently, although predominantly zoned agricultural, the landscape in the area also consists of a fair amount of residential/farmsteads, guest houses and other business establishments. The landscape will be locally transformed into a residential development of approximately 41 ha and will consist of different types of residential properties. Other residential estates already border the proposed project area.

6.3 Flora and Fauna

The site is predominantly disturbed and therefore the natural vegetation is expected to be of a low ecological integrity. However, this does not eliminate the possible presence of Red Data/protected species, or important ecological systems/cycles. A terrestrial ecological specialist study (sourced from studies previously done) will need to determine:

- The vegetation communities of the project area;
- The species composition of the vegetation communities;
- Fauna species and habitat possibilities;
- The presence of species of concern or the determination of the probability of occurrence; and
- The identification of sensitive areas or areas of conservation importance.

6.4 Noise and Air

During the construction phase, construction vehicles and equipment will definitely disturb the ambient environment of the surrounding farmsteads, businesses and residential units. During the operational phase, a local increase in the number of residents, once the development is completed, will increase the noise levels in the area due to a concentrated influx of people. Aside from vehicular traffic increasing, ambient noise levels will also most probably increase due to people talking, shouting, children playing, dogs barking, music playing etc. However, this is expected for any residential area.

Currently, the sources of air pollution in and around the project site include vehicular exhaust emissions, emissions from fires used by the local community for heating and cooking purposes, dust from travel on gravel roads and more significantly, mining activities. During the construction phase, dust will probably increase with the removal of vegetation and movement of construction vehicles on the bare soil (clearance and earth works), as well as the environmental factors that can contribute, wind and limited precipitation during the dry

season. A local increase in the number of residents during the operational phase will increase the levels of vehicular related emissions.

6.5 Traffic

Traffic volumes will most definitely increase in and around the project area, especially on the D1641. This road, between the R24 and N4 (Kroondal), is already frequently used. A traffic impact study would be done to comprehensively assess the potential impacts and provide possible mitigation.

6.6 Surface water

There are no natural surface water resources such as streams/rivers/wetlands on the proposed project area. There is an old dam, constructed for recreational/irrigation purposes only (see Appendix C). The dam will be maintained for recreational purposes and aesthetic value in a park area for the residential development. Therefore there will be no impact on this artificial surface water feature.

During the construction phase, concern can arise from:

- Contamination of surface water runoff through improper waste handling; and
- Improper storm water and sewage management, which is also applicable during the operational phase.

Mitigation and management measures must be put in place for these potential occurrences as part of a comprehensive EMP.

6.7 Groundwater

There is no intended use of groundwater for the residential development because water from the municipal supply or Rand Water pipeline will be utilised. Therefore, the impacts on the groundwater are related to that of the surface water impacts.

During the project phases, the following can impact groundwater quality:

- Contamination of groundwater through improper waste disposal including sewage disposal and treatment.

6.8 Socio-Economic

The provision of formal housing for the local people in the area will be a positive impact. Schools, churches and shops are located within 1 km of the proposed development. Other facilities and amenities (police, hospitals etc.) are located around the CBD. The establishment of a housing development in this area is in line with the RLM SDF as the project area is located within the urban edge. Other residential developments are established or are planned within vicinity of the proposed project area.

During the construction phase, workers should be sourced locally where adequate skills are available. This will assist in local skills development, alternative job opportunities and ensuring local economic growth.

6.9 Heritage

A heritage specialist study will be conducted (or existing studies used) to identify objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the property. Appropriate mitigation will be applied if such sites are identified.

6.10 Cumulative Impacts

Holistically, the establishment of a residential development in the project area will uplift not only the local area, but the Province as a whole. The development of this property may lead to further developments in this area which has a high probability as the project area is located within the urban edge and other residential establishments already exist adjacent to the proposed project area. This could place pressure on service provision (sewage, waste and storm water). However, RLM will be required to expand services within the urban edge. Any environmental impacts identified during the Scoping or EIA phases must be sufficiently and effectively mitigated in order to reduce the probability of cumulative impacts that may occur as a result of the proposed development.

7 PUBLIC PARTICIPATION

7.1 Introduction

The Public Participation Process (PPP) forms an integral part of the EIA process and it is one of the important aspects of the process to obtain environmental authorisation. Its aim is to provide all interested and affected parties (I&APs) with clear, accurate and comprehensible information about the proposed project, its alternatives, the possible environmental impacts and the management thereof. In addition, the process seeks to provide I&APs with the opportunity to indicate their viewpoints on issues and concerns regarding the proposed project, alternatives and / or decisions.

This process therefore enhances transparency and accountability in decision making as it allows all I&APs to suggest ways of avoiding, reducing or mitigating potential negative impacts of the proposed project and enhance positive impacts. All inputs from the I&APs are considered in the planning of the project and consequently clear recording of all issues and concerns raised was maintained in a comments and response register. This register is updated when new issues or concerns are raised.

This section of the report provides a methodical description of the PPP followed. It also contains a complete record of any public notices, details of all registered I&APs and all communications to and from I&APs pertaining to the application.

7.2 Approach

The aim of the PPP is not only to adhere to the required legislation, but also to give as many stakeholders and I&APs as possible an opportunity to be actively involved in this process.

The PPP has been carried out in accordance with Chapter 6 of the NEMA as amended and in support of the EIA Regulations, 2010. Based on these Regulations published in terms of Sections 54 to 57 of GNR 543 of NEMA, the following steps were undertaken:

- Potential I&APs were identified through conducting a site visit, previous work in the area and having discussions with the local community, through Windeed searches conducted on neighbouring properties and their owners, through notices placed on site (Figure 7-1 and Plate 7-1) and through placing a notice in the local newspaper, the Rustenburg Herald (8/9 August 2013; see Appendix D);
- Further notice of the application was given to the identified I&APs (see Table 7-1) through the distribution of written notices, in the form of Background Information Documents (BIDs), via e-mail, post and hand delivery (Appendix D);
- A stakeholder register of I&APs was compiled in terms of Regulation 57 that includes national, provincial and local authorities, government departments, organisations and neighbours that may have an interest in the proposed project. BIDs were distributed to all these stakeholders (Table 7-1);
- I&APs were given at least 40 days (8 August to 20 September 2013) to comment on the proposed application or register as I&APs. Any concerns that have been raised by I&APs were acknowledged, noted and addressed (Table 7-2) by the EAP;
- Furthermore, all registered I&APs were given 40 days (20 September – 29 October 2013) to comment, in writing, on the Scoping Report - prior to submission to the competent authority, the NW DEDECT in November 2013;
- I&APs will be allocated another 40 days to comment on the Draft Full EIA report once completed (January 2014) and inclusive of all the specialist studies conducted; and
- A recorded summary of concerns raised by I&APs, as well as the responses from the EAP, will be kept throughout the entire process.

7.3 Public Awareness

7.3.1 Site Notices

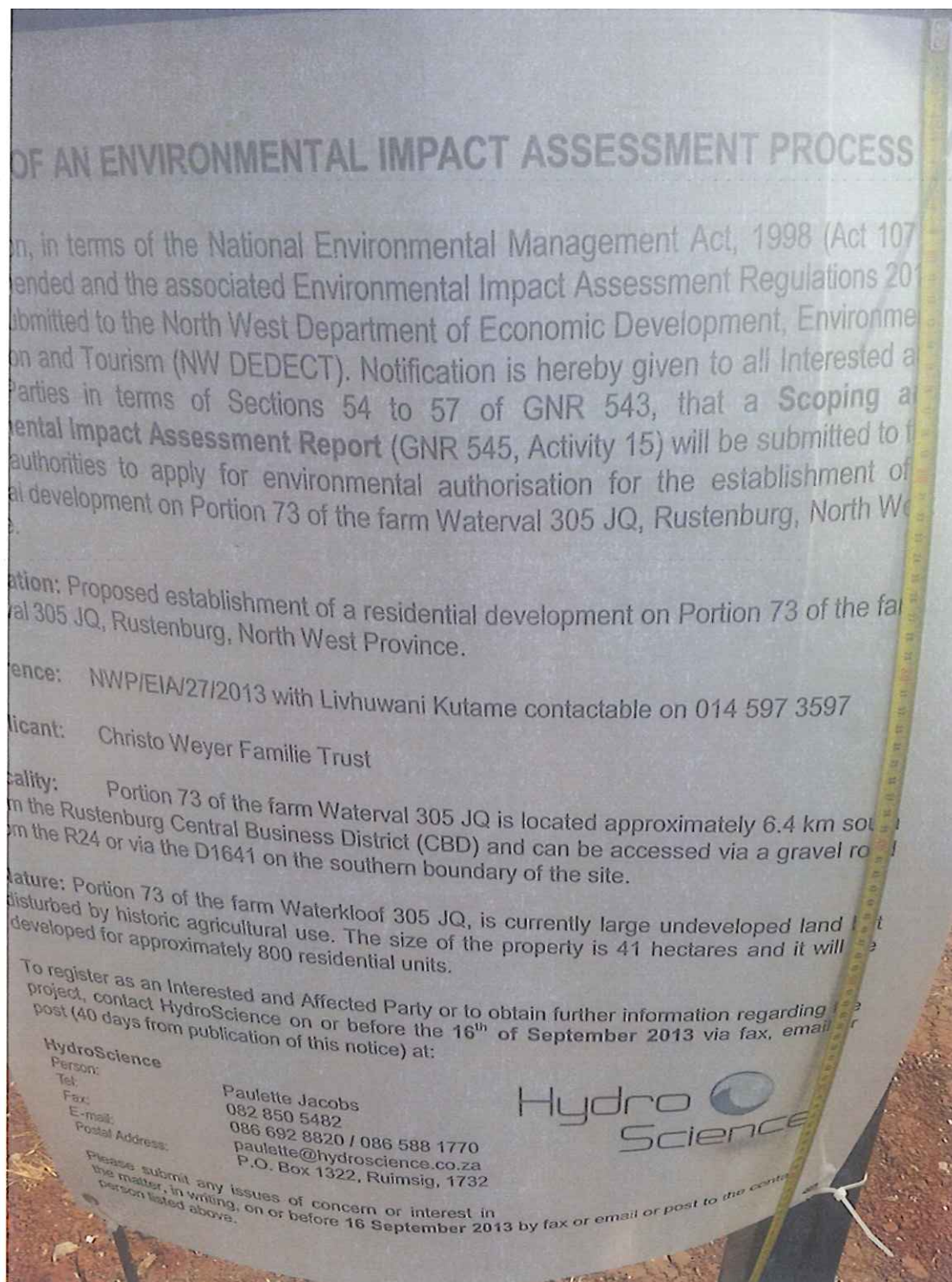
Two (2) notices (measuring 800mm x 600mm) were placed at the site on 8 August 2013 at locations where they would be most visible to the public concerned. This included, on the corner of D1641 and an entrance road on the southern boundary of the project area (Site Notice 2), as well as on a gravel road that can be accessed via the D1641 entrance road or via a gravel road from the R24 on the western boundary of the site (Site Notice 1). Each notice contained details regarding the applicant (Christo Weyer Familie Trust), the nature of the activity to take place (Residential development), the locality of the project (Portion 73 of the farm Waterkloof 305 JQ, Rustenburg) and the contact details of the EAP (see Plate 7-1). The placement of the site notices were recorded by taking photographs of the placed notices on site as well as by recording the GPS coordinates of these positions (Plate 7-1). These notices will remain on the site for the duration of the process. Figure 7-1 indicates the notices placed on site from an aerial view.



Site notice 1 on the gravel entrance road on the western boundary of the site
 25° 43' 47.46" South, 27° 16' 14.84" East



Site notice 2 on the corner of the gravel entrance road and the D1641, southern boundary of the site
 25° 43' 59.60" South, 27° 16' 22.71" East



Size and wording of the site notices
Plate 7-1: Notices placed on site as part of the Public Participation Process



Figure 7-1: Location of site notices - Google™

7.3.2 Newspaper Advertisement

A newspaper advertisement regarding the project was placed in the Rustenburg Herald, page 18, published on the 8th of August 2013 (Appendix D). The aim of placing an advertisement in the local newspaper was to create a greater awareness of the project and to invite a broader spectrum of I&APs to register and be part of the process.

The Rustenburg Herald distributes newspapers throughout Rustenburg including Brits, Buffelspoort, Groot-Marico, Hartbeespoort, Koster, Kroondal, Lichtenburg, Marikana, Mooniooi, Sun City, Swartuggens and Zeerust. Around 32 000 copies are distributed weekly.

7.3.3 Background Information Document

BIDs, containing information regarding the proposed project, were distributed to adjacent land owners as well as all other I&APs (Table 7-1) via e-mail, post, fax or hand-delivery as part of the notification process. Furthermore, BIDs were also distributed to local, provincial as well as national authorities, applicable government departments (such as the Department of Water Affairs, Department of Environmental Affairs and Department of Agriculture), and the Ward Councillor for the area. The BIDs were distributed between 8 and 9 August 2013 and it included a locality map, as well as the registration/response form. After distribution of the BIDs, I&APs were given at least 40 days (8 August – 20 September 2013) to register as an I&AP and to be included in future communication and the process for the project. The responses/comments received thus far can be seen in Table 7-2.

7.4 Comments and Response Register

Any concerns that were raised by I&APs during the process so far were recorded and addressed by the EAP where possible at this stage of the project (see Table 7.2). All proof of communication can be seen in Appendix D.

Furthermore, all registered I&APs were given an opportunity to comment, in writing, on the Scoping Report before its submission to the competent authority, NW DEDECT.

Table 7-1: Registered I&APs for the proposed project

NEIGHBOURING LAND OWNERS, RESIDENTS AND BUSINESSES						
Name & surname	Company / Department / Organisation	Tel	Email	Cell	Address	Interaction
Fatima Dudhia	Portion 209	014 538 1766			P O BOX 50014 ZINNIIVILLE 0302	Posted BID via Registered mail: RD654806745 2013-08-08
FANIE WISSEKERKE FAMILIE MPY PTY LTD	Portion 277		cashanehotel@telkoms a.net		P O BOX 1487 RUSTENBURG 0300	Posted BID via Registered mail: RD654806737 2013-08-08
Pieter Wissekerke WISSEKERKE & SON PTY LTD	Portion 278, 279	014 592 8541			P O BOX 1487 RUSTENBURG 0300	Registered via mail 2013-09-02
Maria Hendrina Reyneke	Portion 390	014 593 4599	danette.reyneke@gmail .com	082 961 8424	P O BOX 7581 RUSTENBURG 0300	Emailed BID: 2013-08-08 Registered 2013-08-12
Johannes Jordaan (DONCARE PTY LTD)	Portion 391	014 537 2730			P O BOX 5000 RUSTENBURG 0300	Posted BID via Registered mail: RD654806723 2013-08-08
William Sheehan Grant (SHALOM AFSLAERS CC) (ROCLA)	Portion 281	014 597 2543	shalom@mweb.co.za	082 652 1890	P O BOX 1318 RUSTENBURG 0300	Emailed BID: 2013-08-08 Registered 2013-08-09
Willem Wybrand Nezar LIMOSA INV 240 PTY LTD	Portion 282,345	014 594 0261	w@catax.co.za		P O BOX 6629 RUNSTENBURG 0300	Emailed BID: 2013-08-08 Registered 2013-08-10

No information (complex built see Von Wielligh)	Portion 347								
Daniel Johannes Pretorius (FRANNESA PROP INV 202 CC)	Portion 348	014 594 1524 014 569 7314							Posted BID via Registered mail: RD654806710 2013-08-08
Carel Heyneke	Voltex Pty Ltd	014 597 1311	carl20@voltex.co.za	0832524099					Registered through newspaper notice 2013-08-12
Frederick Wilhelm Christiaan Weyer (APPLICANT)	Portion 73, 295	014 537 2497	weyerplant@mweb.co. za	082 455 5911					Emailed BID: 2013-08-08
George Paul Wenhold	Portion 300	014 537 2424	gpwen@absamail.co.z a	082 773 0434					Emailed BID: 2013-08-08
Hermann Rudolf Penzhorn	Portion 98, 236, 284	014 537 2437	apenzhorn@mweb.co.z a	083 565 5845					Emailed BID: 2013-08-08
Von Wielligh Management	Complex management west of project area	014 592 5919	adriaan.spm@telkomsa .net						Emailed BID: 2013-08-08
Jeffrey Hall	Concerned business		jhallsheq@gmail.com	084 538 6502					Registered through newspaper notice 2013-08-16
Nolte Ekkerd (TOWN PLANNER FOR PROJECT)	NE Town Planning & Development Consultants:	014 592 2777	nekkerd@mweb.co.za						Emailed BID: 2013-08-08

Chris de Bruyn	North West Environmental Forum (NWEF)	014 537 3400	lti31424@mweb.co.za	082 823 3815	Emailed BID: 2013-08-08
Jemile Bolt	Rustenburg Olifantsnek Corridor Landowners Association (ROCLA)	014 537 2244	sylviab456@gmail.com	079 967 4248	Emailed BID: 2013-08-08

AUTHORITIES						
Local Municipality: Rustenburg Local Municipality (RLM)						
Name	Company / Department	Tel	Fax	Cell	E-mail	Interaction
Mr Thato Molwantwa	RLM: Town planning				tmolwantwa@rustenburg.gov.za	Emailed BID: 2013-08-08
Ms Tsibi Ruele	RLM: Town planning (assistant to Mr Molwantwa)				truele@rustenburg.gov.za	Emailed BID: 2013-08-08
Ms Ronette Barnard	RLM: Town planning				rbarnard@rustenburg.gov.za	Emailed BID: 2013-08-08
Ms Mpho Haoli	RLM: Town planning				mhaoli@rustenburg.gov.za	Emailed BID: 2013-08-08
Mr Walter Senne	RLM: Waste management	014 590 3101			wsenne@rustenburg.gov.za	Emailed BID: 2013-08-08
Ms Kelebogile Mekgoe	RLM: Environmental management	014 590 3075	014 590 3070	072 585 9460	kmekegoe@rustenburg.gov.za P.O. Box 16, Rustenburg, 0300	Emailed BID: 2013-08-08
Mr Tshepo Lenake		014 590 3085		083 961 0591	flenake@rustenburg.gov.za	Emailed BID: 2013-08-08
Ms Ziyanda Mateta	RLM: Water & sanitation	014 590 3530		082 813 3358	zmateta@rustenburg.gov.za	Emailed BID: 2013-08-08
Office of the Speaker	RLM: Ward councillor				speaker@rustenburg.gov.za	Emailed BID: 2013-08-08
Ms Ala Malan	Ward Councillor		086 212 5022		alamalan@telkomsa.net	Emailed BID: 2013-08-08
District Municipality: Bojanala Platinum District Municipality						
Name	Company / Department	Tel	Fax	Cell	E-mail	Interaction
Mrs Lynette	Bojanala Platinum District Municipality: Environmental	014 594 2332			lynettel@bojanala.gov.za	Emailed BID: 2013-08-08

Provincial Government: North West Department of Economic Development, Environment, Conservation and Tourism (NW DEDECT)

Name	Company/ Department	Tel	Fax	Cell	E-mail	Interaction
Mr Livhuwani Kutame	NW DEDECT Rustenburg: Environmental Officer on project	014 597 3597	014 597 3553		lekutame@nwpg.gov.za	Emailed BID: 2013-08-08
Ms Motshabi Mohlasi	NW DEDECT Rustenburg: EIA Manager	014 597 3597	014 597 3553		mmohlalasi@nwpg.gov.za	Emailed BID: 2013-08-08
Mr Steven Mukhola	NW DEDECT Mahikeng Head Office	018 389 5959			smukhola@nwpg.gov.za	Emailed BID: 2013-08-08

Department of Environmental Affairs (National)

Name	Company/ Department	Tel	Fax	Cell	E-mail	Interaction
Mr Albi Modise	National Department of Environment	012 310 3132			amodise@environment.gov.za	Emailed BID: 2013-08-08

Department of Agriculture, Forestry and Fisheries (DAFF)

Name	Company/ Department	Tel	Fax	Cell	E-mail	Interaction
Mr. B. Msoni	DAFF				CDESRRM@nda.agric.za CDESRRM@daff.gov.za	Emailed BID: 2013-08-08
Mr Lufuno Nevhufumba	National Department of Agriculture	018 381 3423	086 580 1640	082 907 6118	NevhufumbaL@nda.agric.za Private Bag X05, Mmabatho, 2735	Emailed BID: 2013-08-08
Mr Piet Theron					PietT@daff.gov.za	Emailed BID: 2013-08-08
Mr David Kleyn			012 319 7484			davidkl@nda.agric.za

Department of Water Affairs (DWA)						
Name	Company/ Department	Tel	Fax	Cell	E-mail	Interaction
Ms Letabo Ramashala	DWA: Hartbeespoort regional office	012 253 1026	086 548 3057	082 885 9581	Ramashala@dwa.gov.za P/Bag X357, Hartbeespoort, 0216	Emailed BID: 2013-08-08
Mr Justice Maluleka	DWA – Regional Office in Pretoria	012 392 1355			JusticeM@dwa.gov.za	Emailed BID: 2013-08-08
Ms C. Theunissen	DWA - Hartbeespoort Dam Office				TheunissenC@dwaf.gov.za	Emailed BID: 2013-08-08
Department of Public Works, Roads and Transport (DPWRT)						
Name	Company/ Department	Tel	Fax	Cell	E-mail	Interaction
Mr Lobakeng	NW DPWRT				lobakengk@nwppg.gov.za	Emailed BID: 2013-08-08
Department of Housing (MEC Support; communication; development & planning)						
Name	Company/ Department	Tel	Fax	Cell	E-mail	Interaction
Mr Kelepile Thaganyane	NW Department of Housing	018 387 3689			kthaganyane@nwppg.gov.za	Emailed BID: 2013-08-08
Mr S.P. Ramagaga		018 387 5303			sramagaga@nwppg.gov.za	Emailed BID: 2013-08-08
Ms Kelebogile Tshenkeng		018 388 2391			ktshenkeng@nwppg.gov.za	Emailed BID: 2013-08-08
South African Heritage Resources Agency (SAHRA)						
Name	Company/ Department	Tel	Fax	Cell	E-mail	Interaction
Ms Colette Scheermeyer	SAHRA	021 462 4502			cscheermeyer@sahra.org.za	Emailed BID: 2013-08-08

ESKOM

Name	Company/ Department	Tel	Fax	Cell	E-mail	Interaction
Mr Kobus Vorster	Eskom	014 565 1122	014 565 1191	083 255 2341	VorsteK@eskom.co.za	Emailed BID: 2013-08-08 Registered 2013-08-13

Table 7-2: Comments and Response Register

Comment received from:	Date received and date responded:	Comment / concern:	Response:
Danette Reyneke (Neighbour Portion 390)	2013-08-12 2013-08-12	<ul style="list-style-type: none"> In full support of the project 	<ul style="list-style-type: none"> Noted
Jeffrey Hall	2012-08-16 2012-08-16	<ul style="list-style-type: none"> Rustenburg area has no sustainable development. As required by law local enterprises and companies must be used. This is not the case. Sustainable Development is not employing local labour, 80% of all funds go back to the cities where the contractors are. This has been the case with Supergroup, New Platinum Checkers and currently the development across the Square Spar. No issue with agricultural land, however 1800 houses is not required in Rustenburg due to all the mines retrenching. Agricultural land is not disturbed land as it is agricultural land. The application of excavation, foundations, planning for water runoff is an illustration of what disturbed land is and what Agricultural void in that area or in Rustenburg? 	<ul style="list-style-type: none"> Contracting of construction and other services consider many aspects such as cost and service levels when appointments are made. This aspect also does not form part of the EAP process (it happens at a much later stage) and therefore cannot be determined what contract services will be employed as business is business, where completion of the best service for the best price remains a mandate. Furthermore in some cases such as in this one, the applicant is a local construction company in its own right, therefore they will use their own services to save costs. As with most construction projects, the opportunity will go out on tender for all interested local companies to participate in. Even if the construction company and contractors are not be located in Rustenburg, it still has a positive socio-economic impact as the construction crew will support the commercial/retail and tourism sectors by supporting local accommodation facilities and shops for food. Agricultural land is scientifically regarded as disturbed land, as it is no longer in its natural bushveld state. In many cases agricultural activities will require the use of chemicals (pesticides, herbicides) that are toxic and further impact the natural environment. Although retrenchment of mining employees have occurred, the application of new mines opening or expanding continues, which again will create job opportunities. Throughout time this will remain a fluctuating

Comment received from:	Date received and date responded:	Comment / concern:	Response:
		<ul style="list-style-type: none"> • How will it be ensured that local companies benefit? • How will it be ensured to be sustainability? • With all the retrrenchments how would the EAP as non-local company pull those skills into the construction. • What is the construction Rehabilitation plan? • Can the services take so many apartments or accommodate for them? • What is the Environmental action plan before clearing? During and construction and after completion? • What studies have been done on both EMP's regarding heritage sites graves...? • Accommodation for all employees? This is to ensure no employees that live far have to walk or it might create an informal settlement. • What is the estimated yearly impact on the waste sites? • Impact on water usage? • Fauna and flora impact? 	<p>market, however as confirmed by the Rustenburg Spatial Development Framework (2010), there is a backlog in available accommodation which this project aims to mitigate.</p> <ul style="list-style-type: none"> • As mentioned above, local companies will benefit as a result of the development, the socio-economic structure of Rustenburg as a whole will benefit. • The whole environmental process (conducted by HydroScience) is to ensure sustainability. A Environment Management Programme (EMP) will be compiled as part of the second phase (EIA phase) of the project to ensure all phases of the project are sustainable by adhering to the mitigation as set out in the programme. This EMP is legally binding to the applicant if the project should be approved. • HydroScience is only the environmental consultant and can therefore not "pull those skills into the construction." The EMP will however recommend that where possible local labour should be used but appointments would probably still be made through a tender process. HydroScience is not involved in the construction, it is only handling the environmental studies and authorisations. • Rehabilitation plan usually refers to the restoration of the natural environment during the decommissioning/closure phase of the project. Due to the fact that the complete site will be developed there will be no rehabilitation plan during the construction phase, furthermore the project is permanent and will not have a decommissioning phase. There will be mitigation as part of the EMP for the construction phase and this will include the re-vegetation of the areas between residential units – this can be seen as rehabilitation as alien/invasive species will be removed and the planting of indigenous vegetation will be encouraged/recommended. • The proposed project is located within the urban edge, therefore RLM service are available. The pressure on services should then be accommodated. RLM has applied for municipal infrastructure grants to extend and improve service delivery. • 9. – 17 Will be included in the EIA phase that will be made available for public review..

8 PLAN OF STUDY FOR EIA

This section sets out the proposed approach to the EIA phase of the project. The main activities that will take place during the EIA phase include the undertaking of specialist studies (Section 8.1); assessing the significance of identified potential impacts (Section 8.2) and compilation of an Environmental Management Programme/Plan (EMP) for the construction and operational phases of the project (Section 8.3). Stakeholder engagement as anticipated during the EIA phase is also discussed (Section 8.4). The EIA report will contain details of the EAP who compiled the report and a brief description of their expertise relevant to the project. It is anticipated that the same project team who compiled this Scoping Report will compile the EIA.

8.1 Proposed Specialist Studies

Specialist studies will be required to determine the full impact that the proposed project may have on the receiving environment. Specialist studies recommended to be undertaken during the EIA phase include a specialist investigation into geotechnical aspects; specialist fauna and flora investigation; traffic study; and a heritage impact assessment. The aims of the proposed specialist studies are briefly outlined in this section. The findings and recommendations made in the specialist studies will be integrated into the EIA report and the specialist reports will be included as appendices to the EIA report. It must be noted however that a full EIA was previously completed for a residential estate the included the proposed project area (NWP/EIA/145/2006) and was approved on 14 July 2008. Therefore many specialist studies have already been completed on the project area, which are still applicable (fauna and flora, heritage, geotechnical etc.) and will be used as part of this project.

8.1.1 Geotechnical

The scoping phase identified that a geotechnical study is required to determine the underlying geology and soil type of the site. This information is necessary for construction specifications, for example how drainage on the site will be established and how the foundations of the structures must be constructed. From the specialist study, the following needs to be determined:

- Geological material, soil types, earth structures and foundations required;
- Development specifications according to these findings; and
- Impacts and mitigations measures needed, if any.

8.1.2 Fauna and Flora

The construction phase will have an impact on the vegetation located on the site and this will consequently have an impact on the fauna of the area. Removal of the vegetation will definitely occur in the area where the township is to be developed. Therefore, the following aspects will be determined through a flora and fauna survey:

- List of plant and faunal species that occur on the site as well as vegetation communities identified;
- Any Red Data/protected/endemic species that occur on the site or calculation on the probability of occurrence based on site conditions and habitat;
- Sensitive areas that need to be avoided;
- Identification of impacts on all species; and
- Mitigation and management measures on how the impacts can be reduced.

8.1.3 Traffic

A traffic impact study will be considered or existing information for the area will be used. Currently, the only access road to the proposed development is on the D1641, which is already used by many local residents, especially those travelling back and forth from the nearby community of Kroondal (N4) and the R24. Access to the development will be discussed with the DPWRT, however an entrance road has already been constructed for the adjacent residential estate, therefore sufficient access to the site for the occupants already exists.

8.1.4 Services

A technical report will be developed on the provision of civil engineering services. Within the report recommendations will be made on the alternatives available for these service and will include the following needs:

- water supply;
- sewage reticulation; and
- a stormwater system.

8.1.5 Heritage

A heritage study was conducted to:

- Identify objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the property;
- Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value;
- Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions;
- Recommend suitable mitigation measures to minimize possible negative impacts on the cultural resources by the proposed development; and
- Review applicable legislative requirements.

The findings will be included in the EIR.

8.2 Impact Assessment Methodology

The criteria defined in Table 8-1 will be used to assess the significance of the impacts identified in this study. The final decision regarding the significance of an impact will take the following aspects into account:

- Intensity/severity of an aspect;
- Timing of an aspect;
- Probability of occurrence of the impacts;
- Duration of an impact; and
- Extent of an impact.

Table 8-1: Criteria for assessing significance of impacts

DURATION (D)		
Immediate	Less than 1 month	1
Short term	6 months	2
Construction	36 months	3
Life of project	Operational phase	4

Post closure	Time of rehabilitation and for re-establishment of natural systems	5
Residual	A permanent impact (100 years or more)	6
EXTENT (E)		
Site specific	Site of the proposed development	1
Local	Farm/site and surrounding farms/site	2
District	Rustenburg Local Municipality	3
Regional	Bojanala District Municipality	4
Provincial	North West Province	5
National	Republic of South Africa	6
PROBABILITY (P)		
Rare	<5% probability of occurrence – may occur in exceptional circumstances	1
Unlikely	15% - 6% probability of occurrence – could occur at some time	2
Possible	45% - 16% chance of occurrence – might occur at some time	3
Likely	65% - 46% probability of occurrence – will probably occur in most circumstances	4
Almost Certain	90% - 66% probability of occurrence – is expected to occur	5
Definite	100%- will occur	6
SEVERITY (S)		
Catastrophic (critical)	Total change in area of direct impact, relocation not an option, death, toxic release off-site with detrimental effects, irreversible loss, huge financial loss	6
Significant (High)	> 70% change in area of direct impact due to loss of significant aspect, extensive injuries, long term loss in capabilities, off-site release to high extent, major financial implications	5
Serious	50 – 70% long term loss, extensive rehabilitation / restoration / treatment required, high financial impact, still restricted in extent	4
Moderate (medium)	20 – 49% change, medium term loss in capabilities, rehabilitation / restoration / treatment required, on-site release with outside assistance, medium financial impact	3
Minor	10 – 19% change, short term impact that can be absorbed, on-site release, immediate containment, low financial implications	2
Insignificant (low)	< 10 % change in the area of impact, no financial implications, localised impact, a small percentage of population	1

[Duration (D) + Extent (E) + Severity (S)] x Probability (P) = Impact Significance (IS)

IMPACT SIGNIFICANCE (IS)		
Impact Significance	IS score range	Description
Low (L)	<15	The impact is minor or insubstantial; it is of little importance to any stakeholder and can easily be rectified.
Moderate Low (ML)	16 - 45	The impact is limited in extent, even if the intensity is major; the probability will only be likely, the impact will not have a significant impact considered in relation to the bigger picture; no major material effect on decisions and will require only small scale management intervention bearing moderate costs.
Moderate high (MH)	46 - 70	The impact is significant to one or more stakeholders, and its intensity will be medium or high; therefore, the impact

		may materially affect the decision, and management intervention will be required.
High (H)	71 <	The impact could render development options controversial or the entire project unacceptable if it cannot be reduced to acceptable levels; and/or the cost of management intervention will be a significant factor in project decision-making.

The impacts that may result from the development of the site or the significance of these impacts can be minimised/reduced if mitigation or management measures are put in place. These mitigation/management measures should ensure that the development takes into consideration the environment and the impacts that are predicted so that development can co-exist with the environment as a basis for planning.

8.3 Draft Environmental Management Plan/Programme (EMP)

Impacts that may occur as a result of the proposed project will be mitigated through management measures that aim to minimise potential negative impacts or minimise their significance. Such measures will be summarised in a draft EMP for the authority's consideration. The EMP is legally binding to the applicant and must be adhered to, to ensure the project is to its potential environmentally sustainable.

8.4 Consultation with I&APs

Extensive public consultation has been undertaken during the Scoping Phase of the project and therefore, certain aspects such as press advertising; distribution of a background information document (BID); and on-site notices, which have already been undertaken, will not be repeated during the EIA phase.

The relevant authorities have been informed (see Table 7-1) and will be kept up to date with regards to the progress of the project. No further meetings with authorities have been planned but will take place if required and/or requested. If any of the regulatory authorities require a meeting, such a meeting can be arranged at the earliest convenience of all parties. NW DEDECT will be taken on a site visit after submission of the Scoping Report.

The following tasks will be undertaken as part of the public consultation process during the EIA phase of the project:

- **Authority comments:** Further efforts will be made to obtain comments from the authorities who have as yet not provided comments.
- **I&AP comments:** Further efforts will be made to obtain comments from I&APs who have as yet not responded.
- **Infrastructure:** Feedback from infrastructure and services organizations such as Telkom, Eskom, RLM, Rand Water and the DPWRT will be requested.
- **Notice:** The on-site notices will remain for the duration of the EIA process.
- **Stakeholder register:** The existing stakeholder register will be revised and updated – this is an on-going process and will continue for the duration of the project.
- **Formal consultation:** On-going stakeholder consultation with interested and affected individuals where appropriate and those that registered. A focus group meeting may be held if required.
- **Addressing concerns:** Address the concerns raised by I&APs in terms of assessing their impacts.

- **Comment/issues and response table:** The table (Table 7-2) summarising the issues of concern raised by I&APs as well as the response of the EAP will be updated as new issues, comments or concerns are received and will be kept updated throughout the entire process and will form part of the EIA report.
- **EIA report review:** I&APs will be notified that the EIA report is available for comment once the specialist studies have been completed and the findings collated into a report. I&APs will be invited to review the report and submit any comments they may have prior to the report being submitted to the authorities for consideration.

9 CONCLUSION

This Scoping Report includes, in accordance with Regulation 29:

- Details of the EAP (Paulette Jacobs and Louise van Wyk, HydroScience cc) who prepared the report as well as expertise of EAP to carry out scoping procedures – see Section 1 as well as Appendix A for company profile and Curriculum Vitae.
- A description of the proposed activity (Section 2) and any feasible and reasonable alternatives that have been identified (Section 5).
- A description of the property on which the activity is to be undertaken and the location of the activity on the property (Section 4.1).
- A description of the environment that may be affected by the proposed activity and the manner in which the physical (Section 4.2), biological (Section 4.3), social, economic and cultural aspects (Section 4.4) of the environment may be affected by the proposed activity (Section 4).
- Identification of all relevant legislation and guidelines that was considered during the Scoping Report (Section 3).
- A description of environmental issues and potential impacts, including cumulative impacts, which have been identified (Section 6).
- Details of the Public Consultation Process that was conducted (Section 7).
- A plan of study for EIA (Section 8) which sets out the approach to the EIA phase of the application, including tasks to be undertaken, the methodology that will be followed for the mentioned tasks, specialist investigations (Section 8.1), consultation with authority planned, methodology for assessing environmental issues and alternatives (including no-go option) (Section 8.2), planned public participation process (Section 8.4).

The report has been made available for public review (20 September – 29 October 2013), according to Regulation 58, prior to submission to NW DEDECT for consideration.

The report therefore meets the requirements of the relevant EIA regulations under NEMA.