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DRAFT SCOPING REPORT FOR CARLETONVILLE TOWNSHIP ESTABLISHMENT ON PORTION 36 OF THE FARM VARKENSLAAGTE 119 IQ

REF NO: GAUT: 002/14-15/0069

MERAFONG LOCAL MUNICIPALITY, GAUTENG PROVINCE

kimopax (Pty)Ltd

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DRAFT SCOPING REPORT FOR CARLETONVILLE TOWNSHIP ESTABLISHMENT ON PORTION 36 OF THE FARM VARKENSLAAGTE 119 IQ

MERAFONG LOCAL MUNICIPALITY

GAUTENG PROVINCE

22 September 2014

Conducted on behalf of:

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DRAFT SCOPING REPORT FOR THE PROPOSED HOUSING ESTABLISHMENT ON PORTION 36 OF THE FARM VARKENSLAAGTE 119 IQ IN CARLETONVILLE, GAUTENG PROVINCE.

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TITLE PAGE

Project name:	***Proposed Environmental Impact Assessment for a Township Establishment, on portion 36 of the farm Varkenslaagte 119 IQ in Carletonville, Gauteng Province.***
Report Title:	***Draft Scoping Report for the Proposed Township Establishment, Gauteng***
Author:	***Mpho Morotoba***
Reviewer:	***Charles Chigurah***
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LIST OF ACRONYMS

BID	Background Information Document
CA	Competent Authority
C-Plan	Conservation Planning System
°C	Degrees Celsius
DWA	Department of Water Affairs
DSR	Draft Scoping Report
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EIR	Environmental Impact Report
EMP	Environmental Management Plan
GDARD	Gauteng Department of Agriculture and Rural Development
GIS	Geographical Information System
HIA	Heritage Impact Assessment
Ha	Hectare
I & AP	Interested and Affected Party
IRR	Issues and Response Report
MCLM	Merafong City Local Municipality
NEMA	National Environmental Management Act (No. 107 of 1998)
NEMBA	National Environmental Management Biodiversity Act (Act 10 of 2004)
NHRA	National Heritage Resource Act (Act 25 of 1999)
NWA	National Water Act (Act No. 36 of 1998)
SAHRA	South African Heritage Resources Agency
SANBI	South African National Biodiversity Institute
S& EIR	Scoping and Environmental Impact Assessment Report
SR	Scoping Report
WMA	Water Management Area
PPP	Public Participation Process
PoS- EIR	Plan of Study for Environmental Impact Report

DEFINITION OF TERMS

Affected Environment: The affected environment refers to those parts of the socio-economic and biophysical environment impacted on by the development.

Environment: The surroundings within which humans exist and that are made up of (i) the land, water and atmosphere of the earth; (ii) micro-organisms, plant and animal life; (iii) any part or combination of (i) and (ii) and the interrelationships among and between them; and the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being. This includes the economic, cultural, historical, and political circumstances, conditions and objects that affect the existence and development of an individual, organism or group.

Environmental Impact Assessment: A planning and management tool for sustainable development, aimed at providing decision-makers with information on the likely consequences of their actions.

Environmental Impact: The positive or negative effects on human well-being and/or on the environment.

Interested and affected parties: Individuals, communities or groups, other than the proponent or the authorities, whose interests may be positively or negatively affected by a proposal or activity and/or who are concerned with a proposal or activity and its consequences. These may include local communities, investors, business associations, trade unions, customers, consumers and environmental interest groups. The principle that environmental consultants and stakeholder engagement practitioners should be independent and unbiased excludes these groups from being considered stakeholders.

Mitigate: The implementation of practical measures to reduce adverse impacts.

Public Participation Process: A process in which potential interested and affected parties are given an opportunity to comment on, or raise issues relevant to the proposed development.

Proponent: Any individual, government department, authority, industry or association proposing an activity (e.g. project, programme or policy). In this project, Merafong City Local Municipality is the proponent.

Scoping: The process of determining the spatial and temporal boundaries (i.e. extent) and key issues to be addressed in an environmental assessment process. The main purpose of scoping is to focus the

environmental assessment on a manageable number of important questions. Scoping should also ensure that only significant issues and reasonable alternatives are examined.

Study Area: The area that will be covered by the EIA process within which possible study corridors will be investigated.

Stakeholders: A sub-group of the public whose interests may be positively or negatively affected by a proposal or activity and/or who are concerned with a proposal or activity and its consequences. The term therefore includes the proponent, authorities (both the lead authority and other authorities) and all interested and affected parties (I&APs). The principle that environmental consultants and stakeholder engagement practitioners should be independent and unbiased excludes these groups from being considered stakeholders.

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INTRODUCTION

1.1 Background

Kimopax Pty Ltd was appointed by Marbombo Project cc hereafter referred to as the Proponent, as the independent environmental assessment practitioner to apply for the Environmental Authorization for the proposed Carletonville Township Establishment. It is the intent of the proponent to establish a rural residential township of approximately 5451 units to accommodate the community in the surrounding region, as well as erven for schools, business, municipal, community facilities and open space. The farm (Portion 36 of the Farm Varkenslaagte 119 IQ), has been procured by Marbombo Project cc for this purpose.

Kimopax Pty Ltd are applying for the development of a township in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) as amended and the Environmental Impact Assessment Regulations 30 July 2010. Authorization by the Gauteng Department of Agriculture and Rural Development (GDARD) shall give way to Marbombo Project cc to proceed with the establishment of the proposed township development

1.2 Purpose of the Environmental Impact Assessment study

An Environmental Impact Assessment (EIA) is a planning and management tool for sustainable development, aimed at providing decision-makers with information on the likely consequences of their actions. The EIA defines and assesses the potential physical, biological, socio-economic and health effects of the proposed project in a manner that allows for a logical and rational decision to be made about the proposed project. It will therefore assist the environmental authorities as well as the proponent, in making decisions regarding the proposed project.

The proposed Carletonville Township Development will activate activities under Listing Notice 1 (GN No. R544), Listing Notice 2 (GN No R545) and Listing Notice 3 (GN No R546), and the process to be followed will therefore be an Environmental Impact Assessment process. The activities being included as part of the environmental authorization are:

Table 1: Listed activities that is going to be triggered as a result of the proposed township establishment

Relevant Government Notice	Activity	Description	Applicability to Project
GN No. R544 of 18 June 2010	9	The Construction of facilities or infrastructure exceeding 1000 metres in length for the bulk transportation of water, sewage or storm water- i. With an internal diameter of 0,36 metres or more; or ii. With a peak throughput of 120 litres per second or more Excluding where: a. Such facilities or infrastructure are for bulk transportation of water, sewage or storm water drainage inside a road reserve; or b. Where such construction will occur within urban areas but further than 32 meters from a watercourse, measured from the edge of the watercourse.	The proposed housing development will entail the construction of pipelines for the provision of potable water and will also include the associated storm water and sewer infrastructure.
GN No. R544 of 18 June 2010	22	The construction of a road outside urban areas, i. With a reserve wider than 13,5 metres, or ii. Where no reserve exists where the road is wider than 8 metres, or iii. For which an environmental	The new development will also entail the construction of new access roads.

		authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Notice 545 of 2010.	
GN No.545	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; Except where such physical alteration takes place for: i. Linear development activities; or ii. Agriculture or afforestation where activity 16 in this schedule will apply.	The size of the land which is being assessed is approximately 395.0961 hectares.
GN No 546	4	The construction of a road wider than 4 metres with a reserve less than 13, 5 metres.	The new development will also entail the construction of new access roads.

1.3 Purpose of Scoping Report

The purpose for the scoping report is to outline the Township Establishment, identify key environmental and social issues associated with the project, identify all applicable legislation and guidelines, as well as to describe how the identified potential environmental and social benefits and impacts will be addressed during the Environmental Impact Assessment (EIA) Phase of the project. The scoping report is intended to facilitate consultation and wider stakeholder engagement in the EIA phase.

The scoping report also aims to:

- Identify all environmental impacts of the proposed project.
- Identify and address concern raised by Interested and Affected Parties (I&AP's) and stakeholders.
- Identify potential alternatives of the proposed project.
- Focus on significant environmental impacts for further study in the Environmental Impact Report
- Highlight means of mitigation of each potential impact.

1.4 Terms of reference

The scoping phase was undertaken in accordance with the National Environmental Management Act, 1998 (Act 107 of 1998) as amended and the Environmental Impact Assessment Regulations, 2010.

The Draft Scoping Report (this report), contains the information as outlined in accordance with Section 28 of the Act. To meet these requirements, the draft Scoping Report has included the following:

- The details and expertise of the Environmental Assessment Practitioner (EAP) who prepared the report, as well as the project team members who are part of the project ;
- A detailed description of the proposed project;
- A description of the location and the proposed route of the project;
- A description of the affected environment;
- All legislation and guidelines that have been considered in the preparation of the scoping report;
- A description of the feasible and reasonable alternatives that have been identified;
- A description of the public participation process;
- A summary of the findings of the specialist studies undertaken;
- A description of environmental issues and potential impacts;
- The scope of the specialists studies to be commissioned during the Impact Assessment phase of the project;
- A plan of study for EIA and a description of the assessment process that will be used in the Impact Assessment phase.

1.5 Environmental Impact Assessment Process

Environmental assessment procedure followed so far, according to the National Environmental Management Act, 1998 (Act 107 of 1998) as amended and the Environmental Impact Assessment Regulations, 2010, are:

- Submission of application form on 01 July 2014 to GDARD
- Amended application was submitted on 25 July 2014.
- Statutory advertising on site, 26 August 2014.
- Advertising in local newspaper. The advertisement was placed in the following newspapers:
  - Carletonville Herald – 29 August 2014
  - The Citizen - 28 August 2014
- Public notification which include:
  - Inform all relevant I & APs, Stakeholders and State Departments by means of a Notice / Letter and the Background Information Document.
- Circulation of the draft Scoping Report to all registered I&APs
- Submission of the draft Scoping Report to GDARD

1.6 Need and Desirability

One of the biggest housing concerns within the Merafong City Local Municipality is the establishment of informal settlements in the rural / farming areas of the region. These informal settlements are usually established in areas with no basic services and therefore people live and stay in terrible conditions. These informal settlements are also usually far from other services such as shopping centers, clinics, schools and other community facilities. It is for this reason that Marbombo Project cc, are proposing the construction of a proper residential development which will cater for most of the informal settlements within the direct area. There will therefore be proper houses, infrastructure, community facilities, educational and institutional facilities as well as business opportunities.

In terms of Regulation 28(1)i, of National Environmental Management Act, 1998 (Act no. 107 of 1998) Environmental Impact Assessment Regulations, this section discusses the need and desirability of the project. In order to address the need and desirability of the project, the questions raised in the Guideline on Need and Desirability (DEA&DP, 2009) are answered in the table to follow.

Table 2: Need and Desirability of the project

NO	QUESTIONS	RESPONSE
NEED ('timing')		
1.	Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved Spatial Development Framework (SDF) agreed to by the relevant environmental authority? (I.e. is the proposed development in line with the projects and programmes identified as priorities within the IDP).	Yes, this area falls within the urban core of the City of Johannesburg MSDF.
2.	Should development, or if applicable, expansion of the town/area concerned in terms of this land use (associated with the activity being applied for) occur here at this point in time?	The township establishment application form submitted on 01 July 2014. The amended township establishment application was submitted to GDARD on 25 July 2014.The City and various departments commented on the application.
3.	Does the community/area need the activity and the associated land use concerned (is it a societal priority)? This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate)	Yes, there is an urgent need for formal housing and is therefore this project is a societal priority.
4.	Is this project part of a national programme to address an issue of national concern or importance?	Yes, there is an urgent need to address housing and provide basic services to communities around South Africa.
DESIRABILITY ('placing')		
5.	Is the development the best practicable environmental option (BPEO) for this land/site?	Yes
6.	Would the approval of this application	No

	compromise the integrity of the existing approved municipal IDP and SDF as agreed to by the relevant authorities?	
7.	Would the approval of this application compromise the integrity of the existing environmental management priorities for the area (e.g. as defined in Environmental Management Frameworks), and if so, can it be justified in terms of sustainability considerations?	No. This site is located within the urban core according to the MSDF.
8.	Do location factors favour this land use (associated with the activity applied for) at this place? (this relates to the contextualisation of the proposed land use on this site within its broader context).	Yes, the site is surrounded by residential properties to the east and north, this development will extend the residential boundary.
9.	How will the activity or the land use associated with the activity applied for, impact on sensitive natural and cultural areas (built and rural/natural environment)?	There will be an impact on the open space areas in terms of fauna and flora. The relevant specialist studies will be undertaken to determine what the potential impacts are. This will be included in the EIR for review.
10.	How will the development impact on people's health and wellbeing (e.g. noise, odours, visual character and sense of place, etc.)?	Potential impacts during construction phase to be managed through EMPr.
11.	Will the proposed activity or the land use associated with the activity applied for, result in unacceptable opportunity costs?	No
12.	Will the proposed land use result in unacceptable cumulative impacts?	No

The proposed project is to address and urgent need for housing and the provision of basic services in and around Carletonville area.

2. PROJECT TEAM

2.1 The Environmental Assessment Practitioner (EAP)

Kimopax Pty Ltd was appointed by Marbombo Project cc as the independent Environmental Assessment Practitioner (EAP) to undertake the environmental authorisation process for the proposed Township Establishment. In accordance with Regulation 28 (1) a (i) and (ii) of National Environmental Management Act, 1998 (Act no. 107 of 1998) Environmental Impact Assessment Regulations. This section provides an overview of Kimopax Pty Ltd and the company's experience with EIAs, as well as the details and experience of the EAPs that form part of the Scoping and EIA team.

Kimopax Pty Ltd is an independent, environmental assessment, mining geology, geohydrology, geotechnical services, exploration project management and Occupational Health and Safety (OHS) consultancy, which was founded in September 2010. The company is directed by a team of experienced and capable Environmental Scientists, Geotechnicians, Geohydrologist, GIS technician, and Exploration Geologist. The company has offices in Midrand (Gauteng), Ventersdorp (North West Province), and East London (Eastern Cape).

The Environmental Assessment Practitioners consulting in an environmental capacity on the Carletonville Township Development is Mpho Morotoba and Charles Chigurah. Charles is the Senior Environmental Scientist and has had seven (7) years' experience in working as an EAP. His list of experiences can be seen in the attached CV. Mpho is the Junior Environmental Scientist and has two (2) years' experience in working as an EAP and her list of experiences can also be seen in the attached CV in Appendix 1.

Team members of Kimopax Pty Ltd that are involved with this Scoping and EIA process are captured in Table 3 below.

Table 3: Team members involved in the project

Name	Qualifications	Experience	Duties
Mpho Morotoba	Bachelor of Environmental Science Honors in Environmental Management	2yrs	EAP
Charles Chigurah	Bsc Hons in Environmental Management, Post graduate	7 years	Quality Reviewer

	Diploma in Water Supply and Sanitation		

The EAP's can be contacted with the details below. Email is preferable, in order to keep legitimate record of any correspondence.

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2.2 The Proponent

The proponent in this case is Marbombo Project cc

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3. LEGISLATION, POLICIES AND GUIDELINES CONSIDERED

Environmental Impact Assessment process, which includes a Scoping study, is required by legislation. The process ensures that all relevant information is presented in order to facilitate good management decision-making. The legislations that require development projects to undergo through the Scoping Process are:

3.1 The Constitution of the Republic of South Africa, 1996 (Act no 108 of 1996)

The Constitution is the most important piece of legislation that provides a framework for environmental management in South Africa. There are various sections that have implications for environmental management, hence for sustainable development. Section 24(b) (i) encourages prevention of pollution and ecological degradation. Section 24(b)(iii) promotes ecologically sustainable development.

According to chapter 2 of the Bill of rights, section 24 says:

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.

3.2. National Environmental Management Act (Act 107 of 1998) (as Amended)

The National Environmental Management Act (Act 107 of 1998) generally known as “NEMA” is South Africa’s overarching framework for environmental legislation. The NEMA Act sets out the principles of Integrated Environmental Management (IEM). NEMA aims to promote sustainable development, with wide-ranging implications for national, provincial, and local government. Included amongst the key principles is that all development must be environmentally, economically and socially sustainable and that environmental management must place people and their needs at the forefront, and equitably serve their physical, developmental, psychological, cultural and social interest. Section 2 of NEMA, sets out a range of environmental principles that are to be applied by all organs of state when taking decisions that may significantly affect the environment. Section 24, as amended, states that the activities that may significantly

affect the environment and require authorization or permission by law must be investigated and assessed prior to approval. These activities are listed in Government Notice R544, R545 and R546, 02 August 2010.

3.2.1 Environmental Impact Assessment Regulations, 2010

The Environmental Impact Assessment (EIA) Regulations, 2010, promulgated in terms of Section 24(5) of the National Environmental Management Act ([NEMA], Act 107 of 1998) are divided into three Schedules, R 544, R 545 and R 546. Schedule R544 defines activities which will trigger the need for a Basic Assessment and R 545 defines activities which trigger an Environmental Impact Assessment (EIA) process. If activities from both schedules are triggered, then an EIA process will be required. Regulation 546 defines certain additional listed activities per province for which a Basic Assessment would be required.

3.3 Environment Conservation Act (Act 73 of 1989)

The purpose of this Act is to provide for the effective protection and controlled utilisation of the environment and for matters incidental thereto. The following relevant Sections of this Act are relevant:

- Sections 2-3 (Part I): Policy for Environmental Conservation;
- Sections 16-18 (Part III): Protection of Natural Environment;
- Sections 19-20 (Part IV): Control of Environmental Pollution; and
- Section 21-23 (Part V): Control of Activities which may have a Detrimental Effect on the Environment

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

The National Environmental Management: Biodiversity Act (NEMBA) provides for the management and conservation of South Africa's biodiversity within the framework of the National Environmental Management Act, 1998; and provides for and includes:

- The protection of species and ecosystems that warrant national protection;
- The sustainable use of indigenous biological resources;
- The fair and equitable sharing of benefits arising from bio-prospecting involving indigenous biological resources;
- The establishment and functions of a South African National Biodiversity Institute; and for matters

connected therewith.

3.5 National Heritage Resources Act

In terms of Section 38 (1) (c) i, ii, iii, iv (d) (e) of the Heritage Resources Act (Act No 25 of 1999), a Heritage Impact Assessment has to be undertaken for the following developments:

- Any development or other activity which will change the character of a site
  - Exceeding 5 000 m2 in extent; or
  - Involving three or more existing erven or subdivisions thereof; or
  - Involving three or more erven or divisions thereof which have been consolidated within the past five years; or
  - The costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
- The re-zoning of a site exceeding 10 000 m2 in extent; or
- Any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Section 34, no person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the relevant provincial heritage resources authority (SAHRA).

3.6 National Water Act (Act 36 of 1998)

The National Water Act ([NWA] Act 36, 1998) identifies 11 consumptive and non-consumptive water uses which must be authorised under a tiered authorisation system. Section 27 of the NWA specifies that the following factors regarding water use authorisation must be taken into consideration:

- The efficient and beneficial use of water in the public interest;
- The socio-economic impact of the decision whether or not to issue a licence;
- Alignment with the catchment management strategy;
- The impact of the water use, resource directed measures; and
- Investments made by the applicant in respect of the water use in question.

Section 21 of the National Water Act identifies listed activities for which a Water use License should be obtained. The Section 21 listed activities include:

(a) Taking water from a water resource;

(b) Storing water;

(c) Impeding or diverting the flow of water in a water course;

(d) Engaging in a stream flow reduction activity contemplated in Section 36;

(e) Engaging in a controlled activity identified as such in section 37(1) or declared under Section 38(1);

(f) Discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit;

(g) Disposing of waste in a manner which may detrimentally impact on a water resource;

(h) Disposing in any manner which contains waste from, or which has been heated in any industrial or power generation process;

(i) Altering the bed, banks, course or characteristics of a watercourse;

(j) Removing, discharging, or disposing of waste found underground if it is necessary for the efficient continuation of an activity or for the safety of people; and

(k) Using waste for recreational purposes.

3.7 National Environmental Management: Air Quality Act (Act No 39 of 2004)

The National Air Quality Act 39 of 2004 was promulgated but only enacted in September 2005. However, some sections of the Atmospheric Pollution Prevention Act (APPA) of 1965 are still valid and implemented and enforced by DEA and more specifically, the Chief Air Pollution Control Officer or CAPCO.

3.8 The National Environmental Management: Waste Act (Act 59 of 2008)

The National Environmental Management: Waste Act, 2008 (Act No. 58 of 2008) (the Waste Act), came into operation on the 1st of July 2009. The Waste Act repealed Section 20 of the Environment Conservation Act, 1989 (Act No. 73 of 1989) (ECA) and introduced new provisions regarding the licensing of waste management activities. In terms of the Waste Act the Minister may publish a list of waste management activities that have, or are likely to have, a detrimental effect on the environment.

In terms of the Waste Act no person may commence, undertake or conduct a waste management activity except in accordance with:

- The requirements or standards determined in terms of the Waste Act for that activity; and
- A waste management license issued in respect of that activity, if a license is required.

A list of waste management activities was published on the 3rd of July 2009. This list of activities identifies activities that may not be commenced, undertaken or conducted by any person unless a waste management licence is issued in respect of that activity. The list of activities is divided into two Categories.

A person who wished to commence, undertake or conduct, an activity listed under Category A, must conduct a Basic Assessment process, and a person who wished to commence, undertake or conduct an activity listed under Category B, must conduct a Scoping and EIA process, as stipulated in the EIA Regulations made under NEMA, as part of a waste management licence application in terms of the Waste Act.

3.9 Conservation of Agricultural Resources Act (Act No 43 of 1983)

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

3.10 Policies and guidelines consulted

From the NEMA Environmental Impact Assessment Regulations Guideline and Information Document Series the following guidelines were used:

- Guideline on Public Participation in the Environmental Impact Assessment Process (October 2012)
- Draft Guideline on Need and Desirability in Terms of the Environmental Impact Assessment (EIA) Regulations, 2010 (October 2012)
- Guideline on Alternatives (August 2010)
- Merafong City Local Municipality Spatial Development Framework

4 ENVIRONMNETAL IMPACT ASSESSMENT PROCESS

Environmental Impact Assessment (EIA) process that has been undertaken for Carletonville Township Establishment consists of three main phases:

- Application and Authorization Phase
- Scoping Phase
- EIA Phase.

4.1 Application and Authorization

Kimopax Pty Ltd submitted a Scoping / EIA application to The Department of Agriculture and Rural Development (GDARD) on 01 July 2014. The authorization to proceed with the Scoping process was received on 29 August 2014 and the following reference number was assigned to the project: GAUT: 002/14-15/0069.

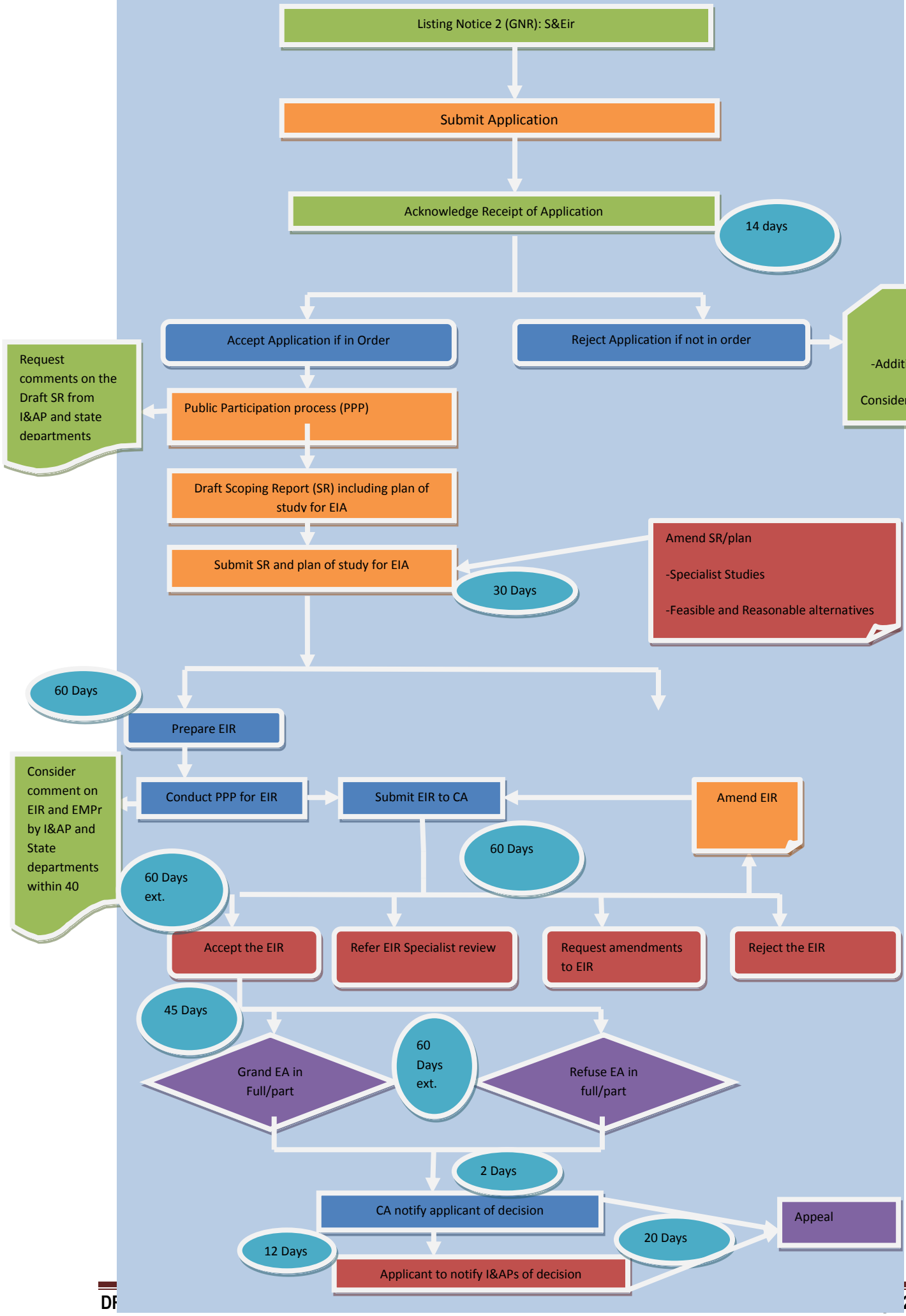
4.2 Scoping Phase

The Scoping study is a requirement by EIA legislation in applying for authorization with GDARD. The study involves public consultation, gathering of information to identify potential impacts to the environment and possible alternatives to the development and compiling of a plan for EIA.

4.3 EIA Phase

The EIA Phase will include the integration of the findings by specialists and the outcome of the Scoping process in order to enable documentation of one report. During this phase the concerns from the I&APs will be addressed and all issues and mitigation measures will be discussed. A detailed Environmental Impact Assessment will be done to determine the extent of the impacts the development might have on the environment and the surrounding community. A detailed Environmental Management Plan will also be included in this phase.

An outline of Scoping and EIA Process for the proposed housing development is provided below:


Listing Notice 2 (GNR): S&Eir
Submit Application
Acknowledge Receipt of Application
14 days
Accept Application if in Order
Reject Application if not in order
Request
-Additional informatio
Consideration of guideli
Request comments on the Draft SR from I&AP and state departments
Public Participation process (PPP)
Draft Scoping Report (SR) including plan of study for EIA
Submit SR and plan of study for EIA
30 Days
Amend SR/plan
-Specialist Studies
-Feasible and Reasonable alternatives
60 Days
Prepare EIR
Consider comment on EIR and EMPr by I&AP and State departments within 40
Conduct PPP for EIR
Submit EIR to CA
Amend EIR
60 Days
60 Days ext.
Accept the EIR
Refer EIR Specialist review
Request amendments to EIR
Reject the EIR
45 Days
Grand EA in Full/part
60 Days ext.
Refuse EA in full/part
2 Days
CA notify applicant of decision
Appeal
20 Days
12 Days
Applicant to notify I&APs of decision

5 DESCRIPTION OF THE RECEIVING ENVIRONMENT

5.1 Project Details

5.1.1 Project Description

The proposed project site is approximately 395.0961 hectares in extent. The project will include the following activities:

- 1644 Residential
- 3479 Residential
- 8 Business
- 2 Municipal
- 6 School
- 5 Church
- 4 Creche
- 1 Clinic
- 27 Public open space.
- Services: Water and sewer pipeline
  Internal roads
  Storm-water systems
  Electricity

5.1.2 Project Location

The proposed development is located in approximately 15 km from Carletonville within the City of Merafong City Local Municipality in Gauteng, along the R501 road. The site is located within the property described as portion 36 of the farm Varkenslaagte 119 IQ at the following co- ordinates: -26.38299 S and 027.29938 E.

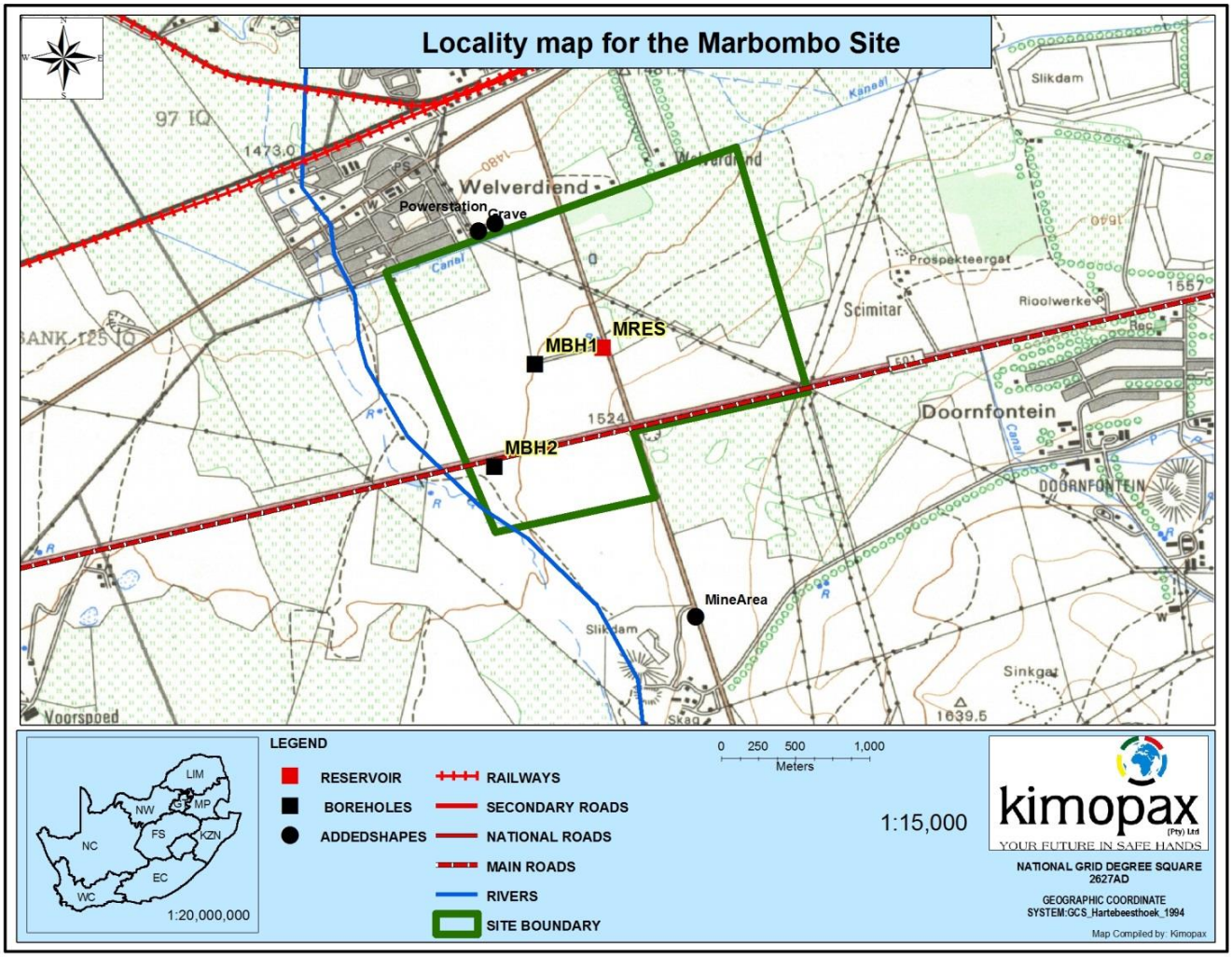


Figure 1: Locality map showing the location of the proposed township development

Figure 2: Google earth map showing the location of the proposed township development

5.1.3 Surrounding Land Uses/ Adjacent Properties

The proposed site is surrounded mainly by residential properties and vast open space areas within a 500m radius. The Welverdiend Township is located approximately 50 m to the South of the site. There is mining property located to the north and north east of the site from approximately 150 m extending northwards. Informal settlements were identified approximately 100 m south east of the site. Refer to attached Figure 2 for Local Setting of the project site.

5.1.4 Current land use

A portion of the site is currently occupied by farm workers who stay in mud houses and the remaining portion is open space which is used for grazing.

5.2 Description of biophysical environment likely to be affected

5.2.1 Climate and Temperature

Description

Gauteng enjoys a mild climate, characterised by warm, moist summers and cool dry winters. Most rainfall occurs from October to March, with a mean annual precipitation of 668mm (Dent *et al*., 1989). This varies from 900mm in the central higher lying areas to 556mm in the lower lying northern and southern areas of the province. Mean annual temperature varies from approximately 19.3°C in the north of the province to 16.0°C in the south. The eastern and central areas, however, experience a lower mean annual temperature of around 15.0°C. There is large variation between summer and winter temperatures, with Gauteng experiencing a daily mean temperature in January and July of 21.2°C and 9.8°C, respectively (Schulze, 1997).

Due to the long clear nights, little wind and dry air in Gauteng in winter, the occurrence of frost is common in the province. Gauteng experiences on average 30 days of frost per year (Schulze, 1997). Winter atmospheric conditions cause's temperature inversions, which have the effect of keeping polluted air close to the surface, so that winter air quality over the Highveld is generally poor.

Environmental Issues

There are no issues to report on with regards to climate. The proposed housing development will not have an impact on climate in the area, and the climatological conditions in the area will not have an impact on the proposed housing development.

Potential Impacts

The proposed housing project is anticipated to have minimal impact on climate in terms of the release of emissions from construction vehicles.

Cumulative Impacts

The proposed project could contribute to CO2 being released into the atmosphere which could contribute to global warming.

Specialist Studies Required

No specialist studies are required for the. The release of emissions from the construction will be addressed in the EMPr.

5.2.2 Geology

Description

The geology in Carletonville is mostly dolomites and chert of the Malmani Subgroup (Mucina and Rutherford, 2006).

Environmental Issues

The geology which underlies the study sites as mentioned in Section 5.2.2 above is considered to be stable and therefore no significant environmental issues with regards to geology occur within the study area.

Potential Impacts

During the construction phase blasting and earthmoving may be required. Blasting may lead to severe disturbance of the geological substrate, however, the geology in the study area is considered to be stable and impact could be minimal.

There is also potential for contamination to occur through:

- Inadequate management of waste water
- Inadequate waste disposal
- Incorrect storage of materials
- Fuel storage and refueling spillages
- Chemical, oil and paint spillages

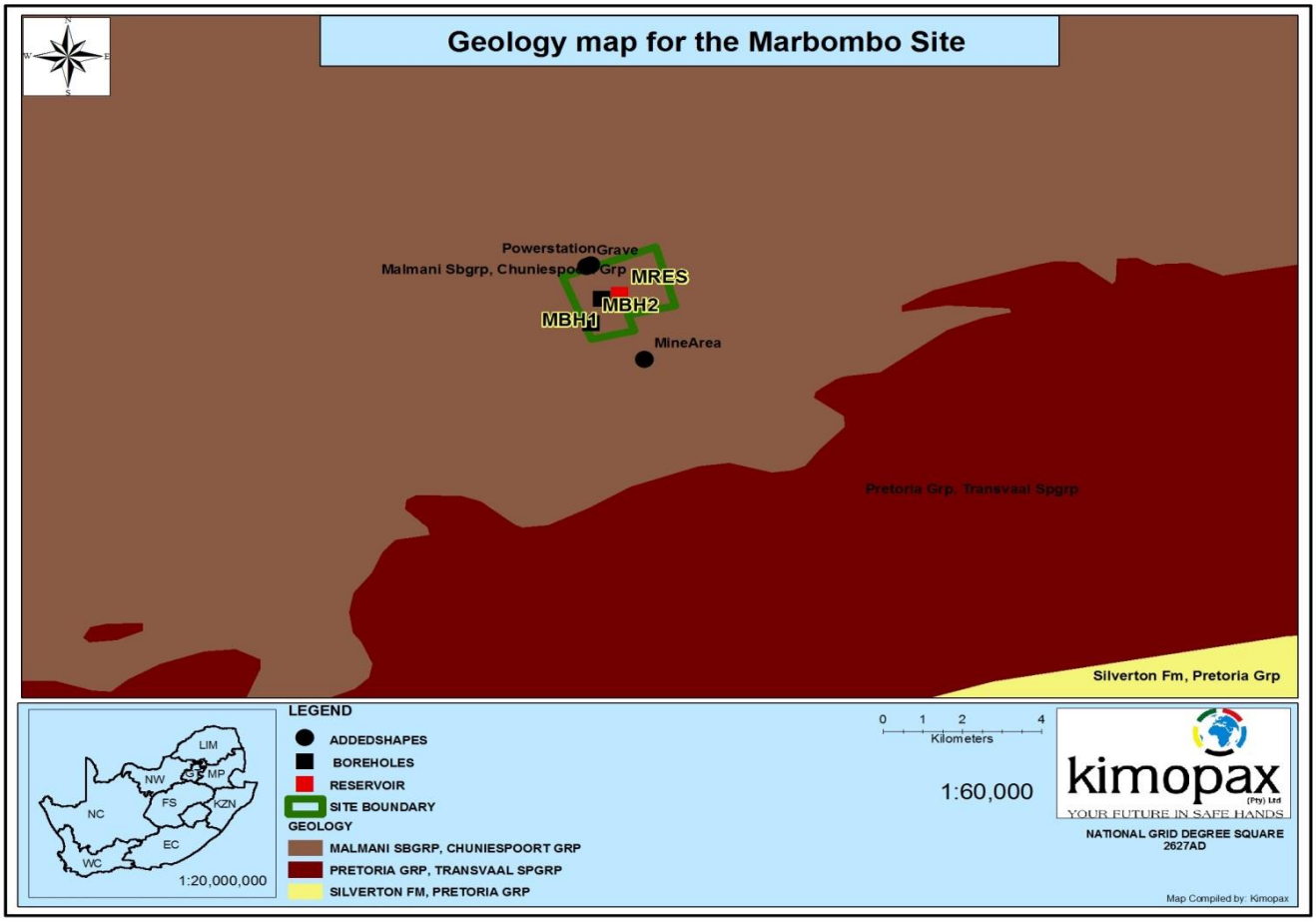
Furthermore, construction activities on steeper areas may result in erosion and instability.

Cumulative Impacts

None expected, but will be investigated during the EIA phase.

Specialist Studies Required

Geological and Geotechnical Studies will be undertaken during the EIA phase for this proposed project, and the findings of this Report will be incorporated into the Draft and Final EIA Reports.



5.2.3 Topography and Watercourses

Description

Two important river systems intersect the MLM: the Wonderfonteinspruit (now called the Mooirivierloop) and the Loopspruit. The Mooirivierloop river passes through the site project. The geology of large parts of the WRDM is characterised by dolomitic compartments. Dolomites act as a groundwater aquifer storing considerable amounts of water. The dolomites are often intruded by dolerite dykes, which are impermeable and prevent the horizontal flow of groundwater through the earth. These dolerite dykes form the underground compartments. Where the flow of groundwater is obstructed by the dolerite dykes, the water usually flows to the surface through 'eyes' (DEAT, 2005).

Domestic water in residential areas is provided by Rand Water, which abstracts water from outside of the relevant catchments in the MLM. The current availability of water within the catchments in the MLM is not known (Merafong Local Municipality, 2010).

During the site visit two boreholes were observed on the south and north of the project area. A reservoir was also found in the proposed project area which is used for to pump the water that is used by neighbouring residential areas. A canal without water was also observed at the project area.

Environmental Issues

The topography of the site will change with the proposed development; a storm water management plan must be prepared and included in the EIR for review. According to the Ridges Policy: Development must adhere to the restrictions that are present in the Policy and that development must not occur on slopes of
5°.

Potential Impacts

The construction of the proposed development, as well as the construction of access roads will result in the alteration of surface topography and drainage patterns. During the construction phase impacts to surface topography and drainage will be caused by the excavation and stockpiling of in situ soils on surface. During the operational phase surface infrastructure will result in the alteration of surface topographic flow patterns as well as the concentration of surface water flow over hard surfaces such as roofs and tarred or concrete surfaces.

Cumulative Impacts

There will be no substantive increase to topographic impacts when compared to the existing level of impact in the surrounding area, and therefore no cumulative impact is expected.

Specialist Studies Required

A Storm water Management Plan will be compiled as part of the engineering services which will provide amongst others, specifications for the channelling of storm water during the construction and operational phases of the proposed housing development. No further specialist studies are recommended at this stage.

5.2.4 Soils and land capability

Description

According to Environmental Management Framework of Merafong Local Municipality Gauteng is the most urbanised province in SA, with 17 % of its land area classified as being in 'urban' land uses. Surveys and analyses of the remaining areas indicate complex soil and land capability patterns, due to the complex geology. The deep, well drained, apedal soils of the Hutton type give rise to the 23.1 % of the province with arable potential. Another 25.3% is deemed "marginally" arable, with the remainder suitable for grazing and wildlife.

The soils of the province are dominated by plinthic, duplex and hydromorphic soils, which all carry limitations for agricultural crop production. Further analysis of the potential for irrigation-fed crop production reveals that over 50 % of the province is not suitable for irrigated crops, but the analysis yields a map of areas to be protected for agricultural use, areas which comprise 19% of the land area of the province (GPG, 2002).

The large blocks of good potential agricultural land lie in the south-west, between Carletonville and Magaliesburg, in the south-east, around Heidelberg, and in the north-west of the province, south of Bronkhorstspruit (Source: National Landcover 2000 (CSIR and ARC).

Environmental Issues

The proposed development site is surrounded by existing residential developments and as such it is suitable for the proposed housing development and will alleviate the demand for housing in the area.

Potential Impacts

Clearance of vegetation for construction, excavations for foundations and access road construction will leave the soil bare and exposed to wind and water erosion. During the construction phase, activities such as topsoil stripping, removal and stockpiling of subsoil, and soil compaction will impact negatively on soils and will consequently impact on the land capability of the study area. Materials lay down areas as well as heavy vehicle and construction vehicle traffic on site will contribute to soil compaction. Areas compacted will lose their soil structure and fertility permanently. Furthermore, there is a risk of pollution by hydrocarbon spillages,

Cumulative Impacts

There are no cumulative impacts

Specialist Studies Required

No Specialist studies are required.

5.2.5 Land use

Regional Description

Portion 36 of the Farm Varkenslaagte 119 IQ is currently zoned 'Agricultural'. The site will need to be rezoned to "Residential" in order to accommodate the proposed development and will include both high and low densities as well as a school.

Environmental Issues

The land use in the study area is characterised by open, undeveloped land. The proposed housing development on the property will impact on current and future land uses.

Potential Impacts

There will be a change in the land use from open space tor residential. There will be a loss of open space locally. There is also a potential visual impact, as the property will now consist of a built environment. The change in the land use will result in an increase in traffic as a result of the new residents as well as a greater demand on the existing services.

Cumulative Impacts

The proposed project will utilise open space and contribute to the overall loss of open space in the region.

Specialist Studies Required

No specialist study is required.

5.2.6 Flora

Description

Carletonville Dolomite Grassland

The Carletonville Dolomite Grassland is in North-West and Gauteng Provinces. The landscape is characterised by slightly undulating plains and is dissected by rocky chert ridges. The geology is mostly dolomites and chert of the Malmani Subgroup (Mucina & Rutherford, 2006). According to Mucina and Rutherford (2006), the conservation status of this veld type is Vulnerable. Very little of the conservation target of 24% is statutorily conserved in South Africa (Mucina & Rutherford, 2006). The Merafong Local Municipality incorporates a total of 668 km2 of Carletonville Dolomite Grassland, of which 41 km2 is protected within the

Abe Bailey Provincial Nature Reserve. The nature reserve contributes to the protection of Carletonville Dolomite Grasslands by incorporating 6% of the total area within the Merafong Local Municipality. The Municipality incorporates six vegetation types classified by Mucina and Rutherford (2006). According to the South African National Biodiversity Institute (SANBI) the properties earmarked for development fall within the Carletonville Dolomite Grassland.

This is a species-rich mosaic of plant community types occurring on undulating plains dissected by rocky chert ridges. It is a vegetation type that is characterized by the presence of the species, Aristida congesta, Brachiaria serrata, Cynodon dactylon, Digitaria tricholaenoides, Diheteropogon amplectens, Eragrostis chloromelas, Eragrostis racemosa, Heteropogon contortus, Loudetia simplex, Schizachyrium sanguineum, Setaria sphacelata, Themeda triandra, and a wide variety of herbaceous forbs and other grasses. This vegetation type is considered to be Vulnerable (Driver et al., 2005 and Mucina et al., 2006), and whilst the conservation target is 24%, only a small extent is currently protected and 23% is considered to be transformed, mostly by cultivation (17%), urbanization (4%), forestry (1%) and mining (1%) (Mucina et al. 2006).

Soweto Highveld Grassland

The Soweto Highveld Grassland supports short to medium-high, dense, tufted grassland dominated by Themeda triandra. Other grass species include Elionurus muticus, Eragrostis racemosa, Heteropogon contortus and Tristachya leucothrix. This vegetation type is considered to be Endangered (Driver et al., 2005 and Mucina et al., 2006), and whilst the conservation target is 24%, only a small extent is currently protected and 23% is considered to be transformed with 0.2% conserved of a target of 24% and approximately 47% transformed, mainly by cultivation, urban sprawl, mining and building of road infrastructure (Mucina et al. 2006). The Merafong Local Municipality incorporates a total of 65.5 km2 of Soweto Highveld Grassland, none of which is protected.

The flora assessment for the study area was largely based on the Conservation-Plan data developed by GDACE, SANBI - The Vegetation of South Africa, Lesotho and Swaziland, Mucina L. and Rutheford M.C. (Editors) and the site investigation performed during the site visit.

During the site visit it was observed that the vegetation had been heavily impacted upon by human activities. No rare or endangered species were identified during the site visit. Due to the significant disturbance of vegetation in the study area by the adjacent existing housing development it is considered that the impact of the proposed development will be of relatively minor nature.

Environmental Issues

The proposed development will negatively affect the biodiversity in the area.

Potential Impacts

Potential impacts to vegetation during the construction phase include the following:

- Clearing of vegetation from the site;
- Potential loss of rare, endangered or protected vegetation species due to habitat destruction;
- Loss of topsoil due to soil stripping, wind and water erosion;
- Damage to vegetation cover due to construction vehicle traffic as well as material lay down areas;
- Damage to vegetation due to accidental hydrocarbon spillages;
- Disturbance of natural vegetation along access or construction roads through trampling and construction vehicle traffic; and
- Establishment and spread of declared weeds and alien invader plants from disturbed areas, which can lead to the eventual replacement of indigenous vegetation.

Potential impacts to vegetation during the operational phase:

- Damage to vegetation due to movement of maintenance vehicles on vegetated areas;
- Establishment and spread of declared weeds and alien invader plants from disturbed areas, which can lead to the eventual replacement of indigenous vegetation; and
- Incorrect management of vegetation within the servitude.

Cumulative Impacts

None expected, but will be investigated during the EIA Phase.

Specialist Studies Required

A Vegetation Assessment will be undertaken during the EIA Phase.

5.2.7 Fauna

Description

According to the Conservation-Plan data developed by GDACE there are no protected areas, no irreplaceable areas and no reserved areas on site or in the immediate vicinity of the site. No evidence of faunal species was observed during the site visit. It is expected that there is a very low probability of finding any red-data species on the site as the adjacent sites are already occupied by the existing housing and the proposed site is located in a high density urban area.

Environmental Issues

Red Data Faunal, Herpetofaunal and Avifaunal species could occur within the study area and the construction of the substation will have a negative impact of the habitats of these species.

Potential Impacts

Potential impacts which could occur during the construction phase include the following:

- Habitat loss due to vegetation clearing within the proposed site;
- Disturbance to fauna during the construction phase.

Potential impacts which could occur during the operational phase:

- Damage to habitat due to movement of vehicles on vegetated areas.

Cumulative Impacts

None expected but will be investigated during the EIA Phase.

Specialist Studies Required

A Faunal, Herpetofaunal and Avifaunal Assessment will be undertaken during the EIA Phase.

5.2.8 Air Quality

Description

Land uses in the study area are comprised of open space areas and residential areas. Emissions from vehicular emissions are anticipated to affect the status of air quality in the study area.

Environmental Issues

There are no significant issues to Report on.

Potential Impacts

Dust generation from stockpiles and soil stripping and vegetation clearing from the site during the construction phase, as well as vehicle traffic on dirt roads and construction vehicle fumes will have an impact on air quality.

Cumulative Impacts

The potential air quality impacts which could result from activities undertaken during the construction phase of the proposed project will not be significantly different to the air quality impacts already occurring in the study area, and is not expected to have a significant increase to overall impact already occurring in the area.

Specialist Studies Required

No specialist studies recommended.

5.2.9 Noise

Description

As mentioned previously, land uses in the study area are comprised of open space areas and residential areas. Noise levels in the study area are currently generated by vehicles traffic.

Environmental Issues

Noise impact may result during the construction phases of the proposed development.

Potential Impacts

During the construction phase, the operation of machinery and equipment, as well as the construction vehicle traffic will create a noise impact.

Cumulative Impacts

The construction and operational phases of the proposed development is expected to have a low cumulative impact on the noise levels in the study area.

Specialist Studies Required

No specialist studies are required

5.2.10 Visual

Area/Site Description

The site is currently vacant. The aesthetics will not be negatively impacted by the proposed development as the site does not have any scenic resources on or near the study area. The proposed development may improve the appearance of the area which will become more visually appealing.

Environmental Issues

Visual impact may result during the construction and operational phases of the proposed project.

Potential Impacts

During the construction phase, the inadequate storage of material, equipment and waste may result a potential visual impact. During the operational phase, there is a potential for improved aesthetic appeal by providing new and good quality housing

Cumulative Impacts

None expected.

Specialist Studies Required

None

5.2.11 Infrastructure and services

Description

The Carletonville proposed housing development is situated in close proximity to and readily accessible via R501 Road.

As Carletonville is an existing township with an established road network the proposed development site is easily accessible. The new internal roadways and accesses for the different developmental sites have been planned in accordance with the Merafong Local Municipality and other standards and specifications. The site is surrounded by residential areas to the south of the site, where services such as the provision of potable water and electricity refuse collection, storm water and waste water services are provided by the municipality.

Environmental Issues

No substantial issues to report on.

Potential Impacts

During the construction phase, construction vehicles will travel to and from the site delivering construction materials, which will have an impact on traffic volumes in the area. During the operational phase residential vehicle and public transport vehicles will utilise the roads. The potential impact is anticipated to be minimal. During the construction phase, there is a potential for the existing service infrastructure to be damaged, and during the operational phase, there will be a potential increase on the services i.e. electricity, water, waste water etc.

Cumulative Impacts

During the construction phase construction vehicles will result in additional vehicle traffic in the study area. This impact will however only occur during the construction phase.

5.2.12 Socio- economic environment

Description

The study area falls within the Merafong City Local Municipality, Gauteng Province. The study area is located in an existing urban residential area. Residential uses and open spaces / vacant land are the main land uses in the study area.

There is an increasing need for housing in the study area and the proposed development will contribute to the development in the region. The proposed housing development will increase the local community's living standards, will provide access to economic opportunities within the region and will uplift the sustainability of the region.

Social Issues

There could be an influx of job seekers and workers during the construction phase. The provision of housing and basic services will be a positive impact during the operational phase.

Potential Impacts

Potential job opportunities could be created during the construction phases and the operational phase, basic services and housing will be provided which is positive impact.

Cumulative Impacts

This project will provide housing and basic services and contribute towards alleviating this problem in the province.

Specialist Studies Required

None will be required.

5.2.13 Archaeology and Cultural Historical

Description

During site visit a grave like structure was identified in the project area and it will be assessed further during the EIA phase. There are no known significant archaeological or cultural elements that are within close

proximity of the project area. According to the Conservation-Plan data developed by GDACE there are no protected areas and no irreplaceable areas on site or in the immediate vicinity of the site.

Environmental Issues

A Heritage Impact Assessment will be undertaken during the EIA Phase to determine whether any features or artefacts of historical or cultural importance occur within the study area. Impacts will be determined\ based on the outcome of the findings of the Heritage Impact Assessment Report and will be addressed in the EIA Report.

Potential Impacts

A Heritage Impact Assessment will be undertaken during the EIA Phase to determine whether any features or artefacts of historical or cultural importance occur within the study area. Impacts will be determined\ based on the outcome of the findings of the Heritage Impact Assessment Report and will be addressed in the EIA Report.

Cumulative Impacts

A Heritage Impact Assessment will be undertaken during the EIA Phase to determine whether any features or artefacts of historical or cultural importance occur within the study area. Impacts will be determined\ based on the outcome of the findings of the Heritage Impact Assessment Report and will be addressed in the EIA Report.

Specialist Studies Required

In terms of Section 38 of the National Heritage Resources Act (Act 25 of 1999), a Heritage Impact Assessment should be undertaken for the proposed project to determine whether any artefacts of cultural or historical importance occur on site.

RIDGES

Percentage of ridges and wetlands under formal conservation Ridges are known for the high biodiversity they support due to their high spatial heterogeneity and they often provide important migratory corridors along which animal and plant species can migrate. Based on the GDACE ridges data (Version 4), ridges in Merafong Local Municipality are mostly found within the Gauteng Shale Mountain Bushveld. In the Merafong Local Municipality, 24.5 km2 has been classified as a ridge, varying from the most natural (Class 1–10 km2) to the most transformed (Class 4-0.2 km2) (Map 4). None of the ridges in the Merafong Local Municipality fall within the protected areas.

6. PROJECT ALTERNATIVES

CONSIDERATION OF ALTERNATIVES

In terms of both the National Environmental Impact Assessment (EIA) Regulations and the National Environmental Management Act (Act No. 107 of 1998), the applicant is required to demonstrate that alternatives have been discussed during the Scoping and the EIA Phase of the project.

The alternatives that are being considered in this Scoping Study are as follows:

1. 'No Go' or No Development Alternative
2. Layout

6.1 "No - Go" or No Development Alternative

The no-go option will be the option not to proceed with the activity, implying a continuation of the current situation/ status quo. The no-go option is basically a reflection and the continuation of the current situation, which might have a negative impact on the environment if there is no environmental management plan for the area.

The proposed site for the development of Carletonville Residential is currently occupied by farm workers who stay in mud houses, which has no services on the site. The proposed site is disturbed as a result of the lack of basic services thus leading to a degraded environment. Should the No-Go alternative be preferred by the decision makers would mean that the proposed Carletonville low-cost housing development would not be constructed at the proposed site and the land would remain vacant. Vacant land may result in informal settlement development; illegal dumping; vegetation clearing for firewood; and alien plant invasion. The site will remain undeveloped. The need for formalized housing in the Carletonville area will not be addressed. There is a potential risk that the site will be inundated with informal settlements.

6.2 Layout Alternative

Two layouts are available as alternatives for the proposed development.

The preferred alternative which will consist of the construction of 300m RDP houses with 1644 stands for the low income groups, and 500m single residential housing units with 3479 free standing housing units for the

middle income groups. In addition, the development will consist of 27 open space areas for recreational use, 8 business stands, 2 municipal, 8 stands allocated for Social Housing, Institutional (4 crèche, 1 clinic and 5 church), as well as a site dedicated to educational purposes.

The layout alternative which consist of 3752 of 300m RDP houses with 2 stands allocated for Social Hosing, 7 Business area, 3 creche, 3 church, 3 primary school, 1 secondary school, 1 technical college, 2 Municipal.

If other alternatives are mentioned during the Scoping Phase or should I&APs suggest alternatives it will be discussed in detail during the EIA Phase of the project.

7. PUBLIC PARTICIPATION PROCESS

Public Participation Process (PPP) is regarded as an integral part of an EIA process. It allows the public to have access to all information regarding the proposed development in hand through transparency and provision of sufficient and accessible information about the development. Public participation plays an important role in the compilation of a Scoping Report as well as the planning, design and implementation of the project. Public participation is a process leading to informed decision - making, through a joint effort. The PPP for this project will satisfy the requirements stipulated in Chapter 6, Sections 54, 55, 56 and 57 of the NEMA EIA Regulations in terms of the National Environmental Management Act, Act 107 of 1998.

The Methodology that was adopted to ensure a highly consultative and interactive public participation process is outlined below.

7.1 Announcement of the proposed project

The EIA guideline document stipulates that notices informing the public of the proposed development be placed on site and the project should be advertised in a local newspaper.

7.1.1 Media Announcements

Newspaper Advertisements (in English) informing stakeholders about the proposed project and inviting them to participate and register as interested and affected parties were compiled and placed in the following Newspapers:

- Carletonville Herald
- The Citizen

7.1.2 Site notices and notice boards

Site notices (English) were fixed at a place conspicuous to the public, i.e. within the study area. Refer to Appendix 3 – Proof of site adverts for the placement as well as the photos of the site adverts.

7.1.3 Background Information Document (BID)

Background Information Document (BID) was prepared as a basis for discussion with stakeholders and I&APs about the project. The BID introduced the project to the I& APs, provided the rationale for the project, the EIA and public participation processes to be followed in the project, proposed project timeframes, etc. The BID included a registration/comment sheet which was available in English. A letter of invitation addressed to the I& APs captured on the database, accompanied the BID and a registration/comment sheet The BID was distributed by electronic mail to stakeholders and I&APs.

7.2 Identification of Interested and Affected Parties

7.2.1 Consultation with the Municipality

Municipalities are the sphere of government closest to the people and their mandate or responsibility is to ensure that there is service delivery to ensure the sustainability of human settlements.

7.2.2 Consultation with surrounding land owners and community

Surrounding land owners and communities that were identified will be consulted throughout the duration of the project to ensure their full participation in the process.

A list of the I& APs identified during the Scoping Phase of the project are tabulated in Table below.

Table 4: Interested and affected parties identified during the Scoping Phase

CONTACT PERSON	ORGANISATION
Environmental Non-Governmental Organisations (NGO's)	
WESSA	Rudzani Nemukula
National/ Provincial Government	
Ms Faith Mlambo	Gauteng Department of Agriculture and Rural Development
Ms Flora Mamabolo	Department of Water Affairs & Sanitation
Ms Millicent Solomon	Department of Environmental Affairs
Clinton Jackson	SAHRA
Andre Van Der Walt	Department of Housing
Ms Jennifer Moeti	Department of Rural and Land Reform
Local Authorities	
Ms Rosemary Molapo	West Rand District Municipality
Mulalo Rakhuwadzi	Merafong Local Municipality
Gerhard Aucamp	Merafong Local Municipality
Ms Telile	Welverdiend Ward Councillor 12
Ms Nonzima Kasibi	Ward Councillor 2
	Merafong Local Municipality
Service Providers	
	ESKOM
Neighbours in 100m zone	
I Germishuizen	ABM (neighbouring gravel mine)
Adjacent residential area	
Andre Plaatjie	Farm Worker
Rosinah Ramokwazi	Welverdiend Resident
Leoner de Jesus	Welverdiend Resident
Jane Moshabe	Welverdiend Resident
Elize Beeslaar	Welverdiend Resident
Anna Roets	Welverdiend Resident
Rika Swarts	Welverdiend Resident
M.J Letsholo	Welverdiend Resident
S Groenewald	Welverdiend Resident
J Hyde	Welverdiend Resident

AM Phelelo	Welverdiend Resident
Nozipho Mduda	Welverdiend Resident
Maria Makaudi	Welverdiend Resident
William Lion	Welverdiend Resident
Joyce Sefuti	Welverdiend Resident
Papi Kgakatsi	Welverdiend Resident
Dora Kgakatsi	Welverdiend Resident
Library's	
R Labuschagne	Merafong library
Queen Dube	Welverdiend library
Directly affected Land owners	
Mr Pieter Jacobus and Mrs Hester Marie Greyling	

7.3 Public and Focus Group Meetings

Public Meetings will be held with representatives and I&APs of the various sectors in the study area. These meetings will serve to inform I& APs of the proposed project and the engagement process, to explain technical concepts in order to build capacity and gather issues of concern. Critical requirements which will be attended in striving for successful and useful meetings are as follows:

- Clear definition of the aims and objectives of the meeting and the sharing of these with stakeholders in advance of the meetings and/or workshops.
- Advance notification, i.e. two weeks (14 days).
- Formal advance registration procedures, including acknowledgement to stakeholders that they are registered to attend, although provision will be made to accommodate stakeholders who do not follow the recommended procedures.
- Advance provision of meeting materials (reports, documents, etc) to those stakeholders that have indicated they will attend.

7.4 Circulation of the draft Scoping Report

The draft Scoping Report will be circulated as part of the notification period for the Environmental Process. The draft Scoping Report will be circulated to relevant stakeholders and state departments. All I& APs,

stakeholders and state departments will be given 40 days to submit their comments / concerns or recommendations.

7.5 Registered Interested and Affected Parties

A register will be kept in order to register all I&APs that are interested in the project. This register will be updated regularly to insure that I&APs that attended public meetings, workshops or whom have registered during the Scoping or Environmental Impact Assessment Phase is included as part of the public participation process for the project. Refer to Appendix 3 below for a list of the I& APs that registered during the Scoping Phase.

7.6 Stakeholder feedback

Registered I&APs will be informed of the progress made at every milestone. This will be done in the form of a feedback letter. These will be distributed to registered I& APs to report on progress to date, to thank those who have commented, and to confirm the way forward in the EIA process.

8. PLAN OF STUDY FOR EIA

8.1 Introduction to EIA

The plan for EIA for this project will be prepared in accordance with Section 31 of R543 of NEMA EIA Regulations.

The aim of the EIA Phase is to address the significant issues highlighted in the Scoping Phase through specialist investigation and detailed assessment of the biophysical and social (including heritage) environments affected by the proposed project. Also, assess the study area in terms of environmental criteria, identify and recommend appropriate mitigation measures for potentially significant environmental impacts and undertake a fully inclusive public participation process to ensure that issues and concerns as raised by the public are recorded and addressed.

8.2 Specialist Studies

During this phase specialists will be appointed to address key issues and impacts that require further investigation, as identified during the Scoping study. Specialists will gather data that is relevant to identifying and assessing environmental impacts that may occur as a result of the proposed project. These impacts would further be assessed according to the Environmental Impact Assessment criteria, Specialists would also enhance potential benefits or recommend appropriate mitigation or control measures to minimize potential negative impacts. The specialist information which would address the key issues and impacts identified during the EIA process, and other relevant information will be integrated into the EIA Report.

The following biodiversity studies were requested by GDARD:

Other specialist studies that will be completed for the project include:

- Heritage Impact Assessment
- Geotechnical Investigation
- Geohydrological Investigation
- Traffic Impact Study
- Social Impact assessment

8.3 Criteria for specialist assessment of impacts

As a means of determining the significance of the various impacts that can or may be associated with the proposed project, a series of assessment criteria will be used for each impact. All possible impacts need to the assessed – the direct, in-direct as well as cumulative impacts. The following criteria will be used to evaluate significance:

During the EIA Phase impacts will be ranked according to the methodology described below. Where possible, mitigation measures will be provided to manage impacts. In order to ensure uniformity, a standard impact assessment methodology has been utilised so that a wide range of impacts can be compared. The impact assessment methodology makes provision for the assessment of impacts against the following criteria:

Nature: The nature of the impact should be classified as positive or negative, and direct or indirect.

Extent and location: Magnitude of the impact and is classified as Local: the impacted area is only at the site – the actual extent of the activity; Regional: the impacted area extends to the surrounding, the immediate and the neighbouring properties or National: the impact can be considered to be of national importance.

Duration: This measures the lifetime of the impact, and is classified as: Short term (0 – 3 years); Medium term: 3 - 10years); Long term: more 10 years or permanent.

Intensity: This is the degree to which the project affects or changes the environment, and is classified as: Low: the change is slight and often not noticeable, and the natural functioning of the environment is not affected; Medium: The environment is remarkably altered, but still functions in a modified way or High: Functioning of the affected environment is disturbed and can cease.

Probability: This is the likelihood or the chances that the impact will occur, and is classified as: Low: during the normal operation of the project, no impacts are expected; Medium: the impact is likely to occur if extra care is not taken to mitigate them or High: the environment will be affected irrespectively; in some cases such impact can be reduced.

Confidence: This is the level knowledge/information, the environmental impact practitioner or a specialist had in his/her judgment, and is rated as: Low: the judgment is based on intuition and not on knowledge or information; Medium: common sense and general knowledge informs the decision or High: Scientific and or proven information has been used to give such a judgment.

Significance: Based on the above criteria the significance of issues will be determined. This is the importance of the impact in terms of physical extent and time scale, and is rated as: Low: the impacts are less important, but may require some mitigation action; Medium: the impacts are important and require attention; mitigation is required to reduce the negative impacts or High: the impacts are of great importance. Mitigation is therefore crucial.

Mitigation: Mitigation for significant issues will be incorporated into the EMP for construction.

Cumulative Impacts: It is important to assess the natural environment using a systems approach that will consider the cumulative impact of various actions. Cumulative impact refers to the impact on the environment, which results from the incremental impact of the actions when added to other past, present and reasonably foreseeable future actions regardless of what agencies or persons undertake such actions. Cumulative impacts can result from individually minor but collectively significant actions or activities taking place over a

period of time. Cumulative effects can take place so frequently in time that the effects cannot be assimilated by the environment.

8.4 EIA Report

The draft EIR and EMP will be made available to all stakeholders so that they can be given an opportunity to review and provide input on the findings of the EIA phase. The public review period will be announced in advance by way of a progress feedback letter that will be distributed to all registered I&APs and newspaper advert. The letter will indicate that the report is available for public review, where it can be accessed and in which ways I&APs may comment on the report. Meetings will be organised if necessary to present and discuss the findings.

All issues raised and comments received and recorded will be recorded in an Issues and Response Report (IRR) and will be incorporated into the revised EIR prior to submission to GDARD. The comments and decision received from GDARD on the EIA Report will be circulated to all registered I&APs.

8.5 Environmental Management Plan (EMP)

A draft EMP will be compiled according to the National Environmental Management Act, 1998 (Act 107 of 1998) as amended and the Environmental Impact Assessment Regulations, 2010. This plan will allow for detailed planning of the project in terms of environmental standards of construction. It will be used as a guide in the monitoring of the project from the construction of the proposed infrastructure through to the operational phase.

9 CONCLUSIONS

The Scoping Report (SR) and the Plan of Study for EIA have been prepared in accordance with the NEMA EIA Regulations. The Environmental Scoping Study has outlined the proposed project, identified key environmental and social issues associated with the proposed project, and described how the identified potential environmental and social benefits and impacts will be addressed during the Environmental Impact Assessment (EIA) Phase of the project. It is believed that the methodology that is being used to assess the current state of the environment will be sufficient to identify potential impacts. The data will assist in the compilation of the Environmental Impact Assessment as an instrument in the decision making process.

Mitigation measures for the impacts identified in this Scoping Report will be described in detail in the Environmental Impact Assessment and in the Environmental Management Plan.

APPENDIX 1: EAP CV

APPENDIX 2: TOPOGRAPHICAL MAP AND SITE LAYOUT

APPENDIX 3: PUBLIC PARTICIPATION REPORT

PROOF OF NOTIFICATION OF I& AP's

COPY OF SITE NOTICE

ADVERT AND PROOF OF PLACEMENT OF ADVERT

BACKGROUND INFORMATION DOCUMENT

REGISTER OF I& AP's

DISTRIBUTION OF DRAFT SCOPING REPORT

COMMENTS AND RESPONSE REPORT