Date: June 2011

Scoping Report

The proposed Soutpan Low Cost Housing Development Project

Situated on portion1 of the Farm Tswaing 149 JR in Soutpan under the jurisdiction of City of Tshwane Metropolitan Municipality, Gauteng Province

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ABBREVIATIONS

EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
GDARD	Gauteng Department of Agriculture and Rural Development
I&APs	Interested and Affected Parties
NEMA	National Environmental Management Act
NEM:WA	National Environmental Management Waste Act
NHRA	National Heritage Resource Act
NWA	National Water Act
SAHRA	South African Heritage Resources Agency
SDF	Spatial Development Framework
UDF	Urban Development Framework

1. INTRODUCTION

1.1. Introduction

Phunga Consulting Services was appointed by MDP Consulting CC on behalf of Gauteng Department of Housing to conduct an environmental assessment for the proposed establishment of Soutpan Low Cost Housing Development on part of portion 1 of the farm Tswaing 149 JR, City of Tshwane Metropolitan Municipality, Gauteng Province.

Gauteng Department of Housing is applying for the establishment of low cost housing development of approximately 75 hectares in terms of the National Environmental Management Act,1998 (Act 107 of 1998) as amended and the Environmental Impact Assessment Regulations, 18 June 2010. Authorisation by the Gauteng Department of Agriculture and Rural Development (GDARD) shall give way to Gauteng Department of Housing to proceed with establishment of the proposed development.

The proposed activities to be undertaken are listed activities in terms of Government Notice R545 of 18 June 2010 and thus requires environmental authorisation. The following Activity has been applied for:

Government Notice No. R545:

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

The methodology used for the assessment was to investigate all environmental issues associated with the project. This scoping report addresses these environmental issues.

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, 18 June 2010 are:

- Submission of application form on 30 March 2011.
- Statutory advertising on site, 13 April 2011.
- Advertising in local newspaper. The advertisement was placed in The Star on 13 April 2011.
- Circulation of the Draft Scoping Report to all registered I&APs
- Submission of the Scoping Report to GDARD.

1.2. 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, 18 June 2010.

1.3. Purpose of Scoping Report

The purpose of the Scoping Report is to determine and confirm issues from the general public in respect of the activity for which authorisation is being applied for. The emphasis during scoping is to identify issues, potential impacts and potential alternatives.

2. LEGISLATION

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:

2.1. National Environmental Management Act (act 107 of 1998) as amended: This Act requires that the report concerning the impact of the proposed development on the environment be prepared. There are certain activities that are listed as activities that require EIA process. These activities are listed in Government Notice R544 and R545, 18 June 2010 (NEMA)

2.2. National Environmental management Waste Act (Act no 59 of 2008) (NEM:WA)

2.3. Constitution of the Republic of South Africa (Act 108 of 1996): Section 24(b)(i) encourages prevention of pollution and ecological degradation. Section 24(b)(iii) promotes ecologically sustainable development.

2.4. National Heritage Resource Act of 1999 (Act 25 of 1999) (NHRA): 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).

2.5. The National Water Act (Act No 36 of 1998) (NWA)

The following policies and guidelines were consulted:

From the NEMA Environmental Impact Assessment Regulations Guideline and Information Document Series.

- Guideline on the Interpretation of the Listed Activities (June 2010)
- Guideline on Public Participation Process (June 2010)
- Guideline on Alternatives (June 2010)

GDARD requirements for Biodiversity Assessments.

3. ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

Environmental Impact Assessment (EIA) process that was undertaken for Soutpan Low Cost Housing Development consists of three main phases. The phases of this process are the Application and Authorization Phase, Scoping Phase and EIA phase.

3.1. Application and Authorization

Phunga Consulting Services submitted a Scoping/EIA application to the Gauteng Department of Agriculture and Rural Development (GDARD) on 30 March 2011 after which authorization was received from the Department to proceed with the Scoping process (7 April 2011), GAUT ref: 002/10-11/E0211.

3.2. Scoping Phase

The Scoping study is a requirement by EIA legislation in applying for authorization with the Department of Agriculture and Rural Development (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.

3.3. 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 Interested and Affected Parties 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 will also be included in this phase.

4. DESCRIPTION OF PROJECT

4.1. Locality

The proposed development is situated in Soutpan in portion 1 of the farm Tswaing 149JR under the jurisdiction of City of Tshwane Metropolitan Municipality. The site is located in the northern side of Soshanguve Block V, (M35) road between Soutpan Nature Reserve. Refer to Figure 1 or Appendix A for the Locality Map.

4.2. Present use of land

The proposed property comprises of part of portion 1 of the farm Tswaing 149JR. The property already has building structures mainly categorised as informal settlements. These informal settlements are currently used as homes for the community of Soutpan.

4.3. Surrounding land use

The land uses are characteristic to the surrounding area are indicated in Table 1.1 and Figure 2.

Table 1.1: Surrounding land uses in the study area

Land use category	Description
Proposed Soutpan Development Project	The proposed development of Soutpan Low Cost Housing
Nature Reserve	Tswaing Nature Reserve (Crater site)
Vacant land	Unoccupied land on portion1 of the farm Tswaing 149 JR
Residential	Nuwe Eersterus township establishment
Residential	Vezubuhle township

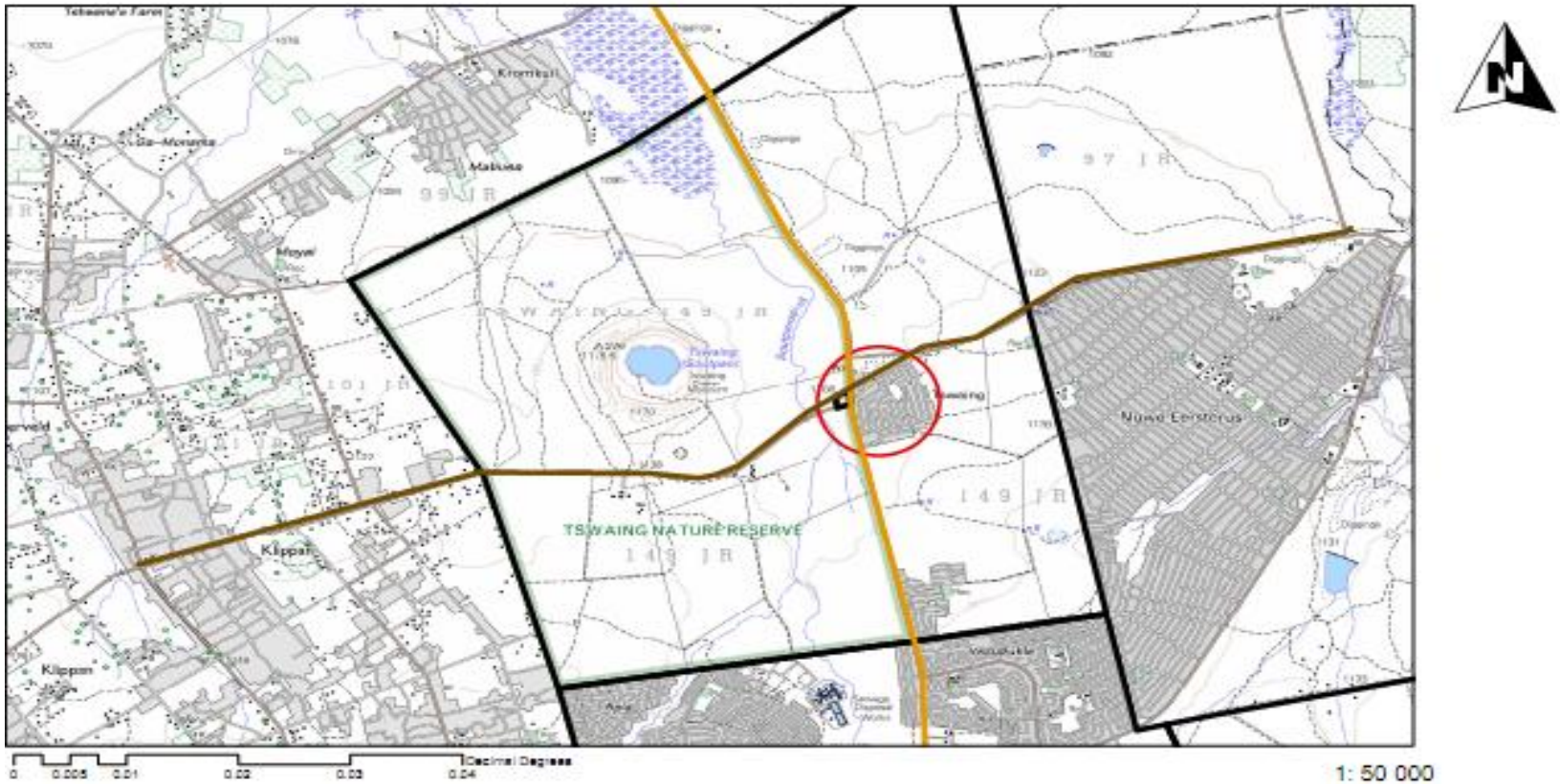

Figure 1: Site locality

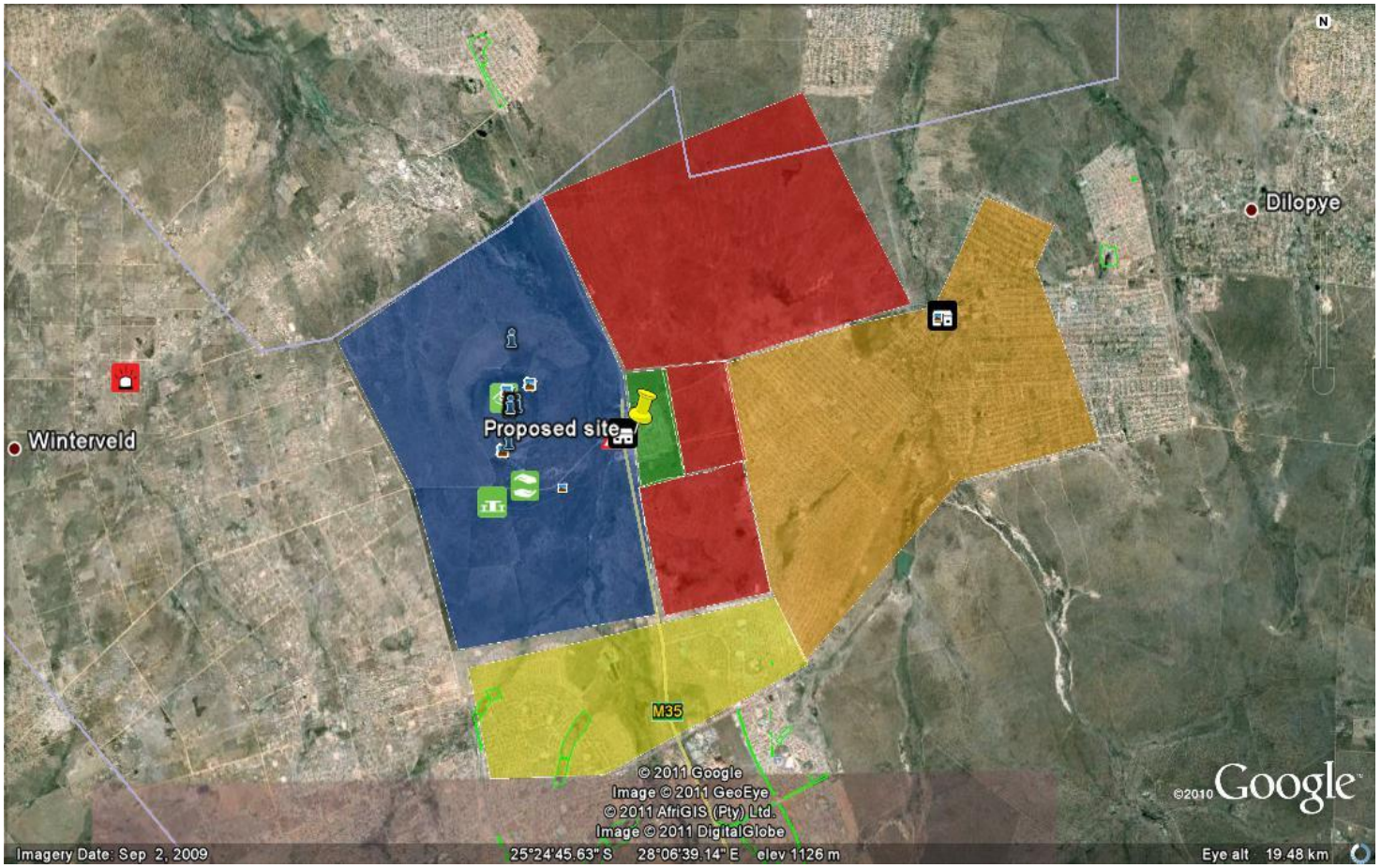

Figure 2: Land Use

4.4. Property description

As previously mentioned the proposed site is been used as an informal settlement for the Soutpan community.

Photo 1: Existing Housing structures in Soutpan

Photo 2: Existing services in Soutpan (Electricity and water)

4.5. Project description

The project involves the rezoning of 'Agricultural land' to:

Land use	No. Of Erven	Area in ha
Residential	1011	39.15
Business 1	1	1.34
Business 2	1	0.49
Business 3	3	0.35
Institutional: Church	5	0.59
Institutional: Community facility	4	0.79
Education: Primary School	1	2.50
Education: Secondary School	1	3.78
Public Open Space	2	1.72
Agricultural	2	8.14
Special: Parking site, Drive in restaurant	1	0.15
Street		16.10
TOTAL	1033	76.10

Please refer to Appendix B for the layout plan of the proposed development.

4.6. Town Planning

The proposed site is zoned "Agricultural Land" in terms of the Peri-urban Town Planning Scheme, 1975. The proposed development aims for the rezoning of this land into "residential 1", "residential 3", "business" and "public open space" and "special". MDP Consulting cc has appointed SJJ Town and Regional Planners to conduct Town Planning for the proposed development. The town planning will provide for:

1. Residential
2. Business
3. Public Open Space
4. Institutional
5. Special

4.6.1. Residential Erven

Provision has been made for approximately 1011 residential erven with a ruling size of approximately 250m^2 to 500m^2 and to be zoned "Residential 1".

4.6.2 Business sites

Business sites planned for the proposed development are zoned as “Business 1”, “Business 2” and three sites zoned as “Business 3” covering areas of 1.34ha, 0.49ha and 0.35ha respectively to serve the community of Soutpan.

4.6.3 Public Open Space

Provision has been made for two small parks and one sporting facility, Erf to be zoned “Public Open Space” and totalling approximately 1.72ha in extent. The sports field will be located in the centre of the developmental area compromising.

4.6.4 School

A site of approximately 2.50 ha in extent has been set aside for Primary school and 3.78 ha for Secondary school.

4.7. Engineering Services

4.7.1 Access and road network

At present, the following roads surround the property:

K95 Route (M35)

K95 is located between the proposed development and Tswaing Nature Reserve. In the vicinity of the site, K95 is a two-lane road with turning lanes provided at various intersections.

K 224 Route

K224 intersects with k95 route on the northern side of the proposed development providing access to the back of the development site.

4.7.2 Water

The Tshwane Metropolitan Municipality is the Water Service Authority for the proposed development in terms of the Water Services Act (Act No. 108 of 1997). The development area will be connected to the existing water network. The Engineering Report that will cover these aspects will be conducted during EIA phase and attached to the Final Environmental Impact Assessment Report.

4.7.3 Sewer

The development is located within the Soshanguve sewer basin, which drains to the Northern Waste Treatment Works.

4.7.4 Electricity

The proposed development area already has electricity connected. Modifications of the electricity connection will be included in the Engineering report if needed.

4.8. Description of Biophysical environment likely to be affected

This section provides a brief description of the existing biophysical and built/social environments. It draws on information from site visits, the study team and member's experience, background literature as well as maps, 1: 50 000, and photographs. In doing so, it presents a background against which the positive and negative impacts of the proposed options can be assessed.

4.8.1. Climate

Regionally, the site lies within the dry subtropical climate in the mid latitude of the world climate classification. The area receives most of its rainfall in summer with rainfall between 650 to 750 mm per year. Temperatures vary between 7ºC and 35ºC for the summer and –5ºC to 24ºC for the winter months.

4.8.2. Vegetation

The VEGMAP database indicates that the study area is located in the Highveld Grasslands of the Moist Cool Highveld Grassland biome. The Moist Cool Highveld Grassland biome accounts for approximately 55% of the Tshwane Metro's surface area. The conservation status of this biome is described as "very poor" with approximately 72% transformed by cultivation and intensive grazing while only 0.29% is conserved.

Moist Cool Highveld Grassland, in pristine condition, is dominated entirely by *Themeda triandra*, and few other species occur, particularly dicotyledonous forbs. Other grasses often encountered include *Triraphis andropognoides, Eragrostis superba, Brachiaria serrata, Elionurus muticus, Heteropogon contortus, Cymbopogon plurinodis and Setaria sphacelata*. Common forbs include *Tephrosia semiglabra*, Ipom*oea obscura, Sutera atropurpurea, Deverra burchellii, Helichrysum rugulosum, H. caespititium, dregeanum, Crabbea acaulis,*

Hermannia depressa and Rhynchosia totta. Forbs that indicate poor quality vegetation include *Chamaesyce prostrata, Hibiscus trionum* and *Blepharis integrifolia.*

4.8.3. Hydrology

During the site visit no drainage line, flood line, wetland or stream were identified. There is also no indication on the 1:50 000 topographical maps of any stream within this specific site.

4.8.4. Sensitive areas

According to the GDARD C-Plan 2 the area is seen as an “Important area”. There are however no important wetlands, streams or other drainage lines. The grassland area can be seen as an important ecological habitat. Specialists will be appointed to establish what the ecological importance of the area is and to determine what species occur on site. This will be discussed in detail in the EIA report.

4.8.5. Site geology and soils

The site is underlined by the Halfway House Granite Dome with typical gravel sandy soils. The Geo-Technical assessment will be conducted during the EIA phase.

4.9. Socio-economic environment

4.9.1. Land ownership

The landowner of the proposed development area is the City of Tshwane Metropolitan Municipality.

4.9.2. Social Environment

The surrounding social environment is a mixture of high income, low density residential areas with a good social infrastructure and a low income, high density township with a poor social infrastructure.

The closest shopping centre or commercial area is approximately 9km from Soutpan. There are also not enough schools, sport fields and other community facilities within the area.

There is a lack of health care within the area. There is no provision for primary health care like clinics within the area.

Although there is a lack of proper social infrastructure it should also be kept in mind that there are planned future developments within the area which could contribute to a better social infrastructure for the overall area.

The proposed Soutpan Low Cost Housing Development will also contribute to the social infrastructure in the area as schools, open spaces and other community facilities will contribute to a better infrastructure. The Social Impact study will be included in the EIA Report.

4.9.3. Economic Environment

There are currently not enough job opportunities within the area as most of the business nodes are located closer to Soshanguve and Pretoria CBD areas. There are one or two businesses within the area but it does not create enough working opportunities. There are also not enough commercial areas within the proposed study area.

There is thus a great need for social and commercial/ business facilities.

4.9.4. Agricultural Potential

According to the GDARD C-Plan 2, the entire area has a very low Agricultural potential.

4.9.5. Transport and Roads network

The site for development is situated along M35 Road.

Transport is a big problem in this area as the roads are not designed to carry the amount of traffic, people need to travel far to get a job and there are not really any other way of transport except for the taxi's in the area.

5. ALTERNATIVES

In terms of both the National Environmental Impact Assessment (EIA) Regulations (GNR543, 18 June 2011) and the National Environmental Management Act (Act No. 107 of 1998), the applicant is required to demonstrate that alternatives have been discussed in detail.

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

5.1. Site Alternatives

No location alternatives have been identified since the applicant is exercising the right to investigate the option of developing the land. The position of the proposed site within the Tshwane Spatial Development Framework indicates it to be favourable for strategic residential growth. Site alternatives are therefore not considered to be feasible in this context.

5.2. Layout Alternatives

Layout alternatives refer to the urban design layout or footprint of the site primarily in relation to the scoped site sensitivities. Open spaces, community facilities and commercial areas in relation to the residential component should be integrated to conform to the environmental aspects. As a rule the proposed development will remain outside of calculated flood lines.

It is recommended that the layout alternatives incorporate buffer zones or green belts to conserve this habitat and the associated migration or ecological functions. Further layout alternatives are subject to the outcome of the findings of the specialist studies.

5.3. Land use Alternatives

The proposed development site could not potentially be utilised for alternative land uses other than residential purposes.

5.4. Design Alternatives

Design alternatives in this scenario refer to the design of the housing units. Trends in the recent past have been towards sustainable house design through the application of design

criteria that result in a more energy efficient buildings. In some cases, these structures are more capital intensive which has an effect on the pricing of the housing units to be sold. Design alternatives will therefore have to be considered relative to the capital expenditure of these alternatives relative to the target market for the housing.

Gauteng Department of Housing has formulated the following development objectives in terms of the Soutpan Development Framework to ensure that the development is sustainable over its lifetime:

- Create a coherent, holistic vision, with easily understood principles which can guide the development over its lifespan;
- Establish a clear understanding of what the public environment looks like and how it can be translated into a sense of identity for the site;
- Establish appropriate linkages to the greater region around the development area;
- Establish a legible and integrated internal street network;
- Create an environment that promotes ease of movement and access for both vehicular and pedestrian traffic;
- To ensure development flexibility ensuring a structure that can respond to changing market requirements;
- Maximise opportunities offered by the site topography, and
- Provide an implementation strategy to assist the City Of Tshwane Metropolitan Municipality in achieving their own housing goals and development targets.

5.5. "No Go" Alternative

The 'No Go' alternative will mean that the site will stay exactly as it is and no development will take place. As mentioned in the report there is existing building structures on site which are used as informal settlement for the Soutpan community. The rest of the proposed site is vacant.

If the current situation will proceed it will mean that the community will continue living in deprived conditions.

6. PUBLIC PARTICIPATION PROCESS

Public Participation process is one of the most important aspects in the Scoping/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 joint effort.

6.1. Advertisement according to EIA Regulations

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. On the 13th of April 2011, five (5) site notices were placed in various places around the proposed development site as well as on the site and the project was advertised in The Star. The public was given 40 days to comment on the proposed development. Refer to **Appendix D** for the photographic record of site adverts and the newspaper advert.

6.2. Interested and Affected Parties

Identified relevant authorities, adjacent landowners and other stakeholders also known as Interested and Affected Parties (I & AP's) were informed about the development and given an opportunity (40 days) to comment and/or object in the proposed development. Below is a list of stakeholders identified, a list of the neighbouring residents as well as a list of all registered interested and/or affected parties as well as the comments that were raised.

Table 2: Adjacent Landowners & Home Owner Associations and other I&APs

INTERESTED PARTIES, ADJACENT LANDOWNERS & HOME OWNER ASSOCIATIONS						
Name	**Cell**	**Tel**	**Fax**	**Email**	**Address**	**Notification**
Julia Barnes **(Tswaing Meteorite Crater)**	076 945 5911		086 210 4947	Barnes@distong.org.za		Email
Mr Louis Robinsons **Tshwane Municipality**		012 358 7670	012 358 8082	LouisRO2@tshwane.gov.za		Email
Mr. Dennis Madomu **Tshwane Municipality**		012 358 7670	012 358 8082	DennisMa@tshwane.gov.za		Email
Mr. Ashok Shudu **Tshwane Municipality**		012 358 7670	012 358 8082	AshokSh@tshwane.gov.za		Email

6.3 Public Meeting

No public meeting was facilitated during the Scoping process. It is anticipated that a public meeting will be held during the EIA phase of the application once a detailed layout plan has been provided for the proposed development.

6.4 Circulation of the Scoping Report

The draft Scoping Report was circulated to all registered I & APs via email, mail or hand delivery of the Scoping Report. Registered I & APs were given 40 days to comment.

7. METHODOLOGY FOR ASSESSING THE ENVIRONMENTAL IMPACTS

The overall aim of an ecologically sound development project is to minimise the negative impacts of the project on the environment, thus limiting the ecological footprint of the project while moving towards greater sustainability over the longer term. Using an Assessment Criteria for the Environmental Impacts as well as conducting Specialist Studies will assess the environmental impacts.

7.1 Assessment Criteria for Environmental Impacts

7.1.1 Cumulative Effects

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.

An assessment of the impact that the proposed development may have on the environment includes evaluating the impact according to a series of assessment criteria. This will be undertaken by considering the effects that may result should the impact occur.

7.1.2 Impact Assessment

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. These criteria include an examination of the:

Nature of Impact

Extent of Impact

Duration of Impact

short term (0 - 5 years),

medium term (5 - 15

years), long term (16 - 30

years),
permanent,

discontinuous or intermittent

Intensity

Low

Medium

High

Probability of occurrence

Improbable

Probable

Highly probable

Definite

Determination of significance

No significance Low

significance Medium

significance High

significance

Confidence

Low

Medium

High

Legal requirements

Status of Impact

Risk or likelihood of irreversible or irreplaceable loss of natural capital

Effects on valued ecosystem services

7.2 Specialists Studies

The following specialist surveys will be conducted:

Biodiversity studies:

- Birds, with specific reference to African Grass Owl.
- Reptiles, with specific reference to Striped Harlequin Snake.
- Vegetation.

Ecological and Agricultural Potential Study

Wetland Delineation Study

Heritage Impact Assessment (as requested by SAHRA)

Traffic Impact Study.

Geo-Technical Study

Geo-Hydrological Study

Social Impact Study

Socio-Economic Study

Engineering Study

7.3. Description of the Environmental Issues and Potential Impacts identified.

7.3.1. Biological Impacts

7.3.1.1. Impact on floral abundance and diversity

As previously mentioned the proposed site falls within the Egoli Granite Grassland area as classified by Mucina & Rutherford (2006). A section of the proposed site is natural grassland which is fenced off to the East and has a wall to the West of the site. The natural grass is not linked with the adjacent properties and forms an isolated area. There are one or two footpaths that run through this area. Littering is also evident in this area.

During the construction phase most of the vegetation will be removed. In the Environmental Management Plan it will be suggested that the indigenous vegetation be removed and used in the new residential development. It will also be suggested that indigenous trees should be planted along the sidewalks and in the park. It can also be suggested that trees be planted at the shopping centre parking area.

As most of the vegetation will be removed during the construction phase there will be a lot of exposed soil and erosion control measures should be implemented.

The vegetation will however be replaced after the construction of the development as indigenous trees and other vegetation will be planted.

7.3.1.2. Impact on fauna abundance and diversity

During the construction phase most of the vegetation will be removed. This will result in the loss of habitat which will mean that fauna will move to another habitat. Unfortunately this is unavoidable but with the correct mitigation measures and educational awareness during the construction
phase, it is anticipated that fauna species will not be harmed.

7.3.2. Physical Impacts

7.3.2.1. Surface water

There is no river, stream or wetland within the proposed site. During construction there will be bare soil as the vegetation will be removed. This could result in erosion impacts during the rainy season. After construction there will be an increase in the impervious surfaces which will result in a higher surface water runoff.

7.3.2.2. Ground water

Washing and cleaning of any chemical compounds, paint, petrol, oil and other chemicals on exposed soil may result in contaminants infiltrating the ground water. Spillages of fuels from temporary storages may also infiltrate the ground contaminating both the soil and ground water and must be contained as per EMP that will be provided as part of the EIA Report.

7.3.2.3. Geology

The site is underlined by the Halfway House Granite Dome with typical gravel soils which developed on top. The possible impact may occur during excavations for services, cutting for construction of roads and creating platforms for houses.

7.3.2.4. Topography

There are no anticipated negative impacts of the development on the topography of the area.

7.3.2.5. Soil

Construction will have definite impact on the local soils. Topsoil will be affected most as compared to other soil horizons. Subsoil will only be affected by foundation and roads construction.

7.3.2.6. Air quality

The main impact on air quality during construction will be through dust. Construction vehicles on dirt roads together with earthworks can blow the dust to the atmosphere. Heavy duty construction

vehicle emissions can also contribute to air pollution.

7.3.3. Socio Economic impacts

Socio-economic of the development to human health/life, economy safety and security of local community are anticipated.

7.3.3.1. Health impacts

During the construction phase the proposed development will have a negative impact on the local community. Dust from construction site will affect the properties and community within and around the area as well as construction workers.

7.3.3.2. Noise

There will be an increase in ambient noise levels during the construction phase. This will be due to the sound of construction vehicles and their reverse hooters. There is also a possibility that there might be an increase in noise within the area as it comprises a lower density equestrian/residential area.

7.3.3.3. Impact on cultural resources

Cultural resources are finite and non-renewable. Any destruction to available cultural resources may mean their total disappearance from the area of occurrence. Modern development has been a major factor in destruction of these heritage resources. No archaeological artefacts were found in the area earmarked for development and it was also confirmed by the owner that the buildings in site don't have any heritage value.

8. PLAN OF STUDY FOR ENVIRONMENTAL IMPACT ASSESSMENT

8.1 Activities to be undertaken during the EIA Process

8.1.1 Public Participation Process

The Public Participation Process will include the following processes:

All I & APs will be notified of the comments raised by GDARD regarding the Scoping Report.

A register will be kept of all the I & APs that register as concerned parties.

All new comments received by I & APs as well as the previous comments by the I & APs will be addressed in detail and mitigation measures will be discussed.

Meetings will be organized with the registered I & APs if it is necessary

Registered I & APS will be kept up to date on the EIA Progress and comments received from GDARD

The EIA Report will be circulated to all Registered I & APs

The comments received from GDARD on the EIA Report will be circulated to all registered I & APs

8.1.2 Specialists Studies

Specialist studies will be conducted and submitted to GDARD together with the Environmental

Impact Assessment Report. The following studies will be conducted:

Biodiversity studies:

- Birds, with specific reference to African Grass Owl.
- Reptiles, with specific reference to Striped Harlequin Snake.
- Vegetation.

Ecological and Agricultural Potential Study

Wetland Delineation Study

Heritage Impact Assessment (as requested by SAHRA)

Traffic Management Plan.

Geo-Technical Study

Geo-Hydrological Study

Social Impact Study

Socio-Economic Study

Engineering Study

Theses specialists studies together with the criteria used to assess the environmental impacts will be used to describe the overall impacts the development might have on the environment, what mitigation measures should be used to decrease the environmental impacts and to discuss any alternatives.

8.1.3 Assessment of Environmental Issues and Alternatives

The competent authority will be consulted during the following stages of the study:

1. Site visit (if requested)
2. During the I & AP notification process
3. All comments received by I & APs will be forwarded to the authorities.
4. Meetings with I & APs
5. Before submission of the Final EIA Report
6. During all correspondence with GDARD
7. When the Environmental Authorisation is received.

8.1.5 Project motivation

The project motivation will include a description of the need and desirability of the proposed activities and alternatives. The motivation will include advantages and disadvantages of the activities and alternatives on the environment and the community. The EAP will also give an opinion on whether the activity should or should not be authorised and if the activity is authorised the conditions in respect with the authorisation will be given.

8.1.6 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, 2006.

9. REFERENCES

City of Johannesburg. 2008. Draft Spatial Development Framework 2008/2009. http://www.joburg.org.za/content/view/2383/114/

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