

# **ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED ACTIVITY IN WINDHOEK**

*Subdivision of Portion 2 of Farm  
Monte Christo No 46 and  
Registration of 13 meter Right of  
Way Servitude.*

**List of triggered activities identified  
in the EIA Regulations which apply to  
the proposed project.**

**Activity 10.1 (b) Infrastructure**  
The construction of public roads.

**Activity 10.2 (a) Infrastructure**  
The route determination of roads and  
design of associated physical  
infrastructure where it is a public  
road.

## **BACKGROUND INFORMATION DOCUMENT**

### **1 PURPOSE OF THIS DOCUMENT**

The purpose of this Background Information Document (BID) is to brief Interested & Affected Parties (I&AP's) about the Environmental Impact Assessment (EIA) being undertaken for the proposed development activities in Windhoek.

The BID also provides an opportunity for I&APs to register for the EIA process and to submit any initial comments or issues regarding the proposed project.

### **2 BACKGROUND INFORMATION**

Mr. Helmut Röthel hereinafter referred to as the proponent intends to undertake the following activities:

- a) Subdivision of the Portion 2 of Farm Monte Christo No 46 into 9 Portions and Remainder.**
- b) Registration of a 13 meter Right of Way Servitude over Portions A to I of the Remaining Extent of Farm Monte Christo No 46 in favour of the Remainder of Farm Monte Christo No 46.**

In terms of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment

Regulations (Government Notice No. 30 of 2012), the listed activities indicated above were triggered by the proposed project.

The proponent commissioned this EIA and appointed Stubenrauch Planning Consultants (SPC) to undertake the necessary activities to enable an application for an Environmental Clearance with the Environmental Commissioner as prescribed by the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012). In line with Regulation 21(2) of the mentioned EIA Regulations, this BID is distributed to potential I&APs as part of the public consultation process for this EIA.

This Environmental Assessment will therefore be undertaken to determine the potential environmental and socio-economic impacts associated with the proposed development activity.

## 3 DEVELOPMENT DESCRIPTION

### 3.1 Locality

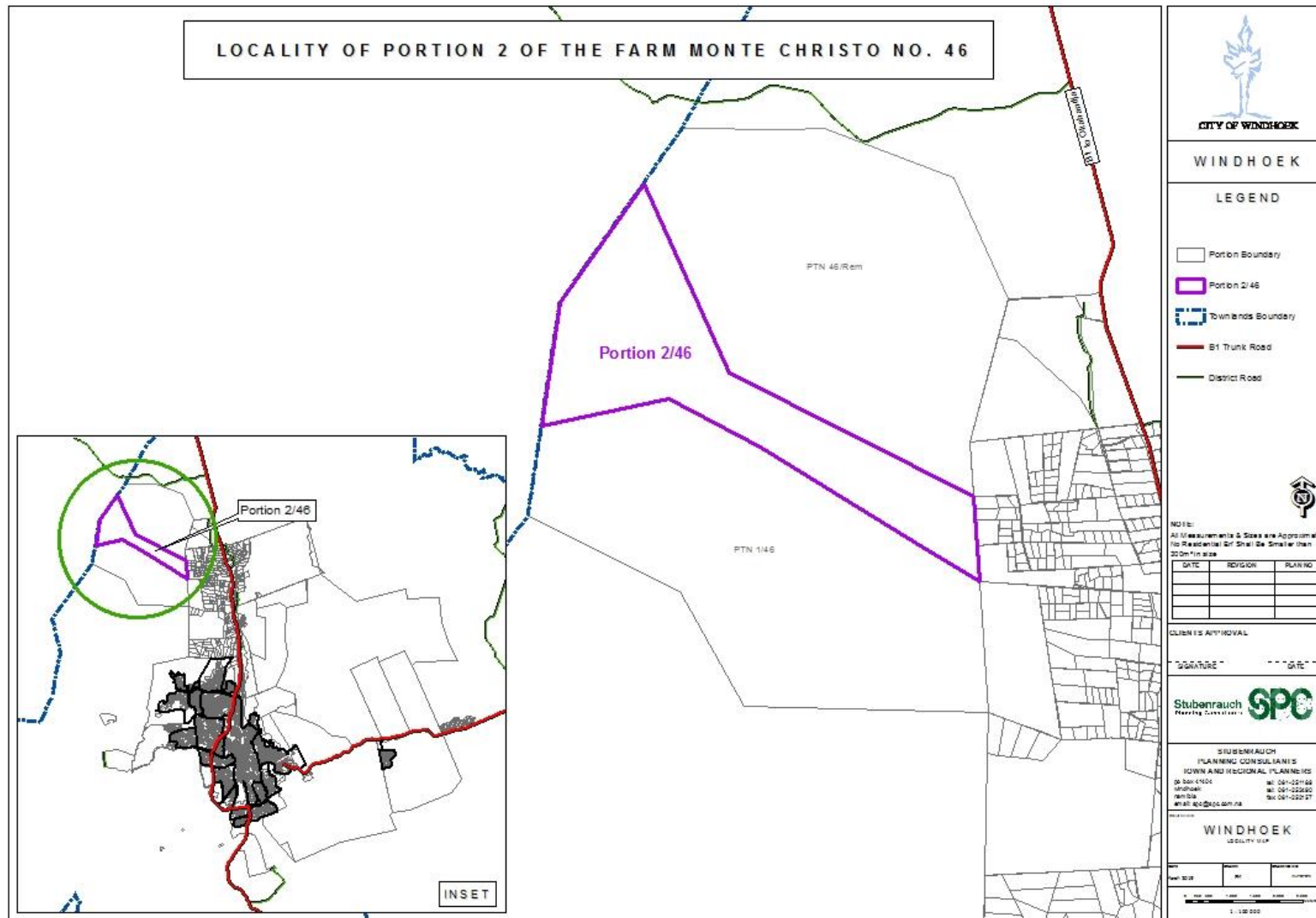
Portion 2 of Farm Monte Christo No 46 is located north of Windhoek on the western side of the B1 national road as depicted in **Figure 1** below. The subject portion measures  $\pm 2000,3329$  Ha in extent.

### 3.2 Zoning

The subject portion falls within the Local Authority Boundary of the City of Windhoek as per the Government Gazette dated 30 September 2011 outlining the Alteration of Boundaries of the Local Authority Area of Windhoek.

### 3.3 Ownership

Ownership Portion 2 of Farm Monte Christo No 46 vests with Mr. Helmut Röthel. Currently no restrictive conditions or servitudes registered against this title deed prohibiting the proposed development.



**FIGURE 1: LOCALITY MAP OF PORTION 2 OF FARM MONTE CHRISTO NO 46**

### 3.4 Proposed Development

The proponent intends to subdivide Portion 2 of Farm Monte Christo No 46 into 9 Portions and the Remainder. The subject portion is currently too large for the owner to utilize it to its full potential and thus it is the proponent proposes to subdivide the portion into smaller more manageable land parcels.

The proposed portion falls just outside the Brakwater Policy Area. Thus, the proposed subdivision is in line with the development within the adjacent Brakwater Area where so many large plots are being subdivided into smaller ones.

The following steps is to be completed:

- a) **Subdivision of Portion 2 of Farm Monte Christo No 46 into 9 Portions and Remainder.**
- b) **Registration of a 13 meter Right of Way Servitude over Portions A to I of the Remaining Extent of Farm Monte Christo No 46 in favour of the Remainder of Farm Monte Christo No 46.**

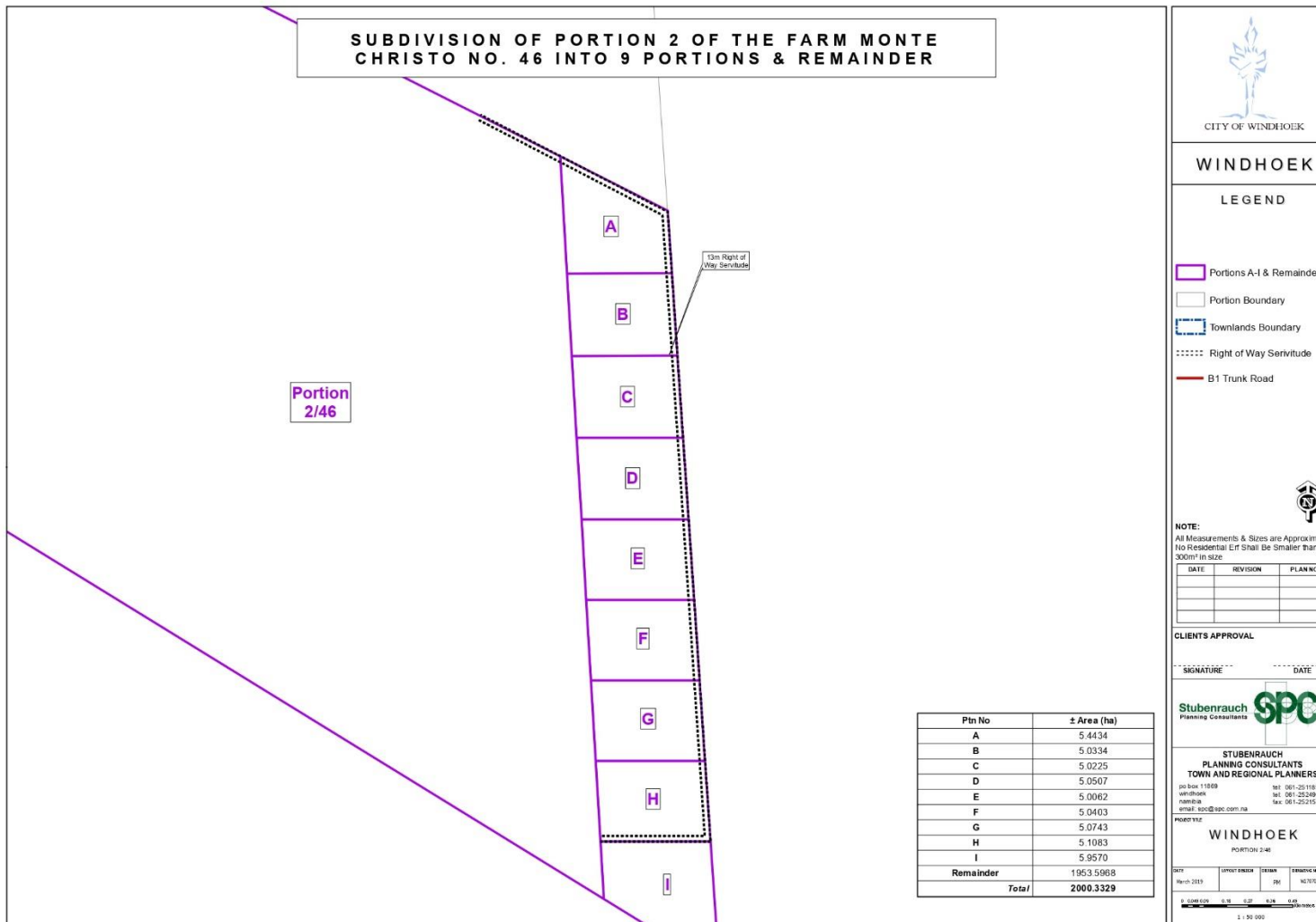
The proponent proposes for the subdivision of Portion 2 of Farm Monte Christo No 46 into 9 Portions and Remainder as seen in **Figure 2**. The proposed subdivision will enable the owner to increase the development potential of the existing portion and additionally enable the owner to sell the newly created portions to prospective buyers and investors.

The proponent further intends to register a 13 meter Right of Way Servitude over Portions A to I of the Remaining Extent of Farm Monte Christo No 46 in favour of the Remainder of Farm Monte Christo No 46.

The proposed 13-meter-wide Right of Way is intended to provide access to the newly created portions generated in the subdivision, as shown in **Figure 2**. Below is the land utilisation table, depicting the apportionment of the land on Portion 2 of Farm Monte Christo No 46 for the proposed subdivision.

**Table 1:** Subdivision of the remaining extent of farm Monte Christo no 46

Ptn No	± Area (ha)
A	5.4434
B	5.0334
C	5.0225
D	5.0507
E	5.0062
F	5.0403
G	5.0743
H	5.1083
I	5.9570
Remainder	1953.5968
<b>Total</b>	<b>2000.3329</b>



**Figure 1:** Proposed Subdivision of Portion 2 of Farm Monte Christo No 46 into 9 Portions and Remainder.

### 3.5 Engineering Services

#### Water, Electricity, and Sewer

Portion 2 of Farm Monte Christo No 46 is not connected to the Municipal Reticulation System. Water would be supplied to the portion via boreholes.

The applicant is to appoint a professional consultant to propose an acceptable wastewater disposal method.

#### 3.5.1 Access Provision

Access to the newly created erven in the proposed subdivision is to be obtained via a 10 meter right of way servitude to be created over Portions A to I of Portion 2 of Farm Monte Christo No 46.

## 4 ENVIRONMENTAL BASELINE INFORMATION

### 4.1 Overview

The environmental and social setting of the proposed project area is briefly described in this section. The detailed description of these environmental features will be fully presented in the environmental scoping report.

### 4.2 Biophysical Environment

#### 4.2.1 Climate

No specific climate data is available for Farm Monte Christo No 46, however Windhoek and surroundings in general are characterized with a semi-arid highland savannah climate typified as very hot in summer and moderate dry in winter. The highest temperatures are measured in December with an average daily temperature of maximum 31°C and a minimum of 18°C. The coldest temperatures, conversely, are measured in July with an average daily maximum of 20°C and minimum 3°C (Weather - the Climate in Namibia, 1998 – 2012). The area therefore has low frost potential.

Rainfall in the form of thunderstorms is experienced in the area during the summer months between October and April. The annual average rainfall for the area is 350mm to 400mm however the average evaporation rate is 3 400mm a year (Weather - the Climate in Namibia, 1998 – 2012). Over 70% of the

## ENVIRONMENTAL ASSESSMENT PROCESS

- Establishing environmental risks of the intended project
- Establishing mitigation protocol
- Preparing the draft Environmental Assessment Report (EAR) and Environmental Management Plan (EMP)
- Public reviewing of Draft EAR and EMP
- Preparing the final EAR & EMP and submitting to MEFT
- Awaiting decision from Authorities
- Communicating decision to Interested & Affected Parties
- Availing opportunities to Appeal.

rainfall occurs in the summer months' period between November and March. Rainfall in the area is typically sporadic and unpredictable however the average highest rainfall months are January to March.

The predominant wind in the region is easterly with westerly winds from September to December (Weather - the Climate in Namibia, 1998 – 2012). Extreme winds are experienced in the months of August and September and thus significant wind erosion on disturbed areas is visible.

#### 4.2.2 Topography, Soils and Geology

The Region is located in the central highlands of the country and is bordered by the Erongo region to the west and the northwest and by the Otjozondjupa region to the north and Omaheke region to the east and Hardap region to the south. The landscape in the Khomas Region is classified as being in the Khomas Hochland, high Plateau, which is characterized by rolling hills and many valleys.

The Khomas Hochland is a deeply dissected mountain land of intermediate elevation, where the geomorphology is closely related to the underlying geology (Christelis and Struckmeier, 2001). The soil cover in the study area is the lithic leptosols referring to shallow soil cover over hard rocks. The main rock type is identified as biotite schist, but with minor strata of micaceous quartzite, feldspathic schist and amphibole schist (Labuschagne, 2004, and Mendelsohn, et al, 2002).

#### 4.2.3 Hydrology and Hydrogeology

Water is a scarce and valuable resource in Namibia and the extreme variability in seasonal rainfall makes water an extremely vulnerable resource. Rainfall events are typically thunderstorms with heavy rainfall that can occur in short periods of time (cloud bursts). A number of north-southerly striking faults and joints found in Windhoek form the major underground water conduits of the Windhoek Aquifer and hence determine the conditions of the aquifer. Secondary porosity giving rise to high aquifer transmissivity is best developed in faults with post-hydrothermal alteration brecciation in quartzitic environments. Moreover, the host rock fracturing along fault planes results in better development of secondary porosity in quartzite compared to schistose terrain such that the aquifer reaches its maximum potential in this type of setting.

Groundwater flow is northwards towards the Swakop River, in a similar direction to the surface water flow. Taking a range of hydraulic conductivity values for igneous and metamorphic rocks from literature and groundwater levels from the DWA database, approximate range of groundwater flow rates have been calculated from the project area to the Swakop River. The groundwater flow time for this distance (approximately 40kms) through the Kuiseb schist is large - in the order of several hundred years to thousand years. Flow through fractured schist and in the alluvial sediments is likely to be more rapid.

The surface run-off in the Brakwater area flows mainly from the south to the north over the site due to higher mountainous areas occurring in the southern and eastern regions of Brakwater. The general topography of the land, with the City of Windhoek falling within a valley, forms a natural catchment

basin where all the water is collected and from which it is transported to the north (City of Windhoek, 2006).

According to the Brakwater Bulk Services Master Plan, 2010 the Klein Windhoek River alluvium was found to contain saline groundwater in past studies by the CoW and is also confirmed by water quality information in the DWAF borehole records. There are few drilling records or water chemistry data of the alluvial deposits to assess the distribution or origin of the saline water.

#### 4.2.4 Fauna and Flora

Potential flora associated with the general area commonly referred to as the Thornbush Savannah – Tree and Shrub Savannah – (Giess 1971) or Thornbush Shrubland (Mendelsohn et al. 2002). This is the dominant vegetation type in Namibia and although varies the typical form is grassveld interspersed with trees and large shrubs (Giess 1971).

According to Lawrence (1971), the vegetation of the region is classified as highland savanna and comprises several Acacia species and numerous species of perennial thorn trees in the valleys and shrubs and grass on the steep slopes.

## 5 POTENTIAL IMPACTS

The following potential impacts have been identified so far:

- **Traffic Impacts:** During construction the movement of construction material to and from site may cause additional traffic. Traffic may also be increased in the area once the areas are fully developed.
- **Disturbance:** During construction the surrounding property owners and community members may be disturbed by the construction activities.
- **Waste:** During construction and operation, waste may be generated on site which would have to be disposed of at an approved landfill site.
- **Ground and surface water impacts:** may be experienced during construction due to the use of machinery and chemicals to construct the roads and services infrastructure as well as during operational activities.
- **Dust and noise** may be generated during construction activities.
- **Visual Impact:** The area is currently mostly undeveloped as such there may thus be a change in visual characteristics of the site once it becomes developed.
- **Employment Creation:** During construction temporary jobs may be created for the construction of the associated services.

More potential impacts of the proposed activity will be identified upon consultations with the public and further research on the area.



## 6 PUBLIC CONSULTATION

The Environmental Impact Assessment process involves interaction with people who are interested in, or who could be affected by the proposed development and/or operational activities of the proposed Windhoek development. As part of this process communication will be sent out to various potential I&APs and Line Ministries in addition to the public notices to be placed in the newspapers, on the site and around the subject area to obtain comments on the proposed developments.

## 7 ALL STAKEHOLDER/INTERESTED & AFFECTED PARTIES (I&AP)

***Public participation process gives you the opportunity to:***

- Obtain information about the proposed project.
- Raise any environmental issues relating to the project.

***How can you be involved?***

- By responding to the invitation advertised in the newspapers
- By registering as an I&AP, for your name to be added to our register list.
- Submitting your comments or requests in writing.

We are inviting the public to participate by contributing issues and suggestions regarding the proposed projects on or before **01 September 2023**. For further information, or concerns, I&APs can complete the register below:

## 8 REGISTRATION AND COMMENTS

<b>Participant Name:</b>	<b>Organization/Affiliations:</b>
<b>Position:</b>	<b>Telephone:</b>
<b>Fax:</b>	<b>E-Mail:</b>

<b>Postal Address:</b>
<b>Comments/Suggestions and Questions:</b>

Please fill in particulars and return completed document to be registered as an Interested & Affected Parties (I&AP) to:

<b>Stubenrauch Planning Consultants (SPC)</b> <b>Tel: 061 25 11 89</b> <b>E-Mail: <a href="mailto:bronwynn@spc.com.na">bronwynn@spc.com.na</a></b>
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