

# **BACKGROUND INFORMATION DOCUMENT** **AND INVITATION TO REGISTER**

**A component of the Environmental Impact Assessment for the proposed development of Ntunjambili Bulk Water Supply Scheme in Ward 1 and 2 of Maphumulo Local Municipality in Ilembe District Municipality.**

**MARCH 2018**

## TABLE OF CONTENTS

1. PURPOSE OF THIS DOCUMENT
2. BACKGROUND INFORMATION
3. PROJECT SITE DESCRIPTION
4. DEVELOPMENT PROPOSAL
5. ENVIRONMENTAL AUTHORISATION PROCESS
6. KEY IMPACTS
7. INTERESTED AND AFFECTED PARTIES REGISTRATION

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

KwaMawewe Development Consultants have been appointed by Ilembe District Municipality to conduct engineering services for the implementation of Ntunjambili Bulk Water Supply Scheme. Black Cubans Consulting has been appointed by Kamawewe to undertake the Environmental Impact Assessment and wetland studies for the project. The proposed Ntunjambili Bulk Water Supply Scheme project is subject to the provisions of the National Environmental Management Act, 1998 (Act No. 108 of 1998). The purpose of this document is to provide background information on the proposed Ntunjambili Bulk Water Supply Scheme in Ward 1 and 2 of Maphumulo Local Municipality within Ilembe District Municipality. The aforementioned basic information entails a description of the key characteristics of the biophysical and socio-economic environment through which the proposed Ntunjambili Water Pipeline would pass. The description of the affected environment is based on relevant information contained in the applicable legislation and policies, scientific literature, and site visits. This document provides Interested and Affected Parties (I&APs) with a brief overview of the scope, nature and location of the proposed development as well the Basic Environmental Impact Assessment (EIA) process being undertaken. Additionally, the purpose of this document is to allow the Interested and Affected Parties (I&APs) an opportunity to register as stakeholders in the public participation process and make initial comments on the proposed development.

### **2. BACKGROUND INFORMATION**

Ilembe District Municipality proposes the implementation of 350mm Ø Steel Bulk Pipeline from Ngcebo Waterworks (WTW) to Ntunjambili Command Reservoir, Reticulation and 5 pump stations in Ward 1 and 2 of Maphumulo Local Municipality. The communities of Ward 1 who will benefit from project include; Etsheni, Epower, EGroundini, KwaShane, Emission (A+B), EBusisizwe, ERingini, ESeminary, Esikhaleni and Ekujezeni. Communities of Ward 2 who will benefit from project include; Mambulo, Ikhatha, Esese, Thethandaba, Nokubusa and Mandlathi. Drawing from views obtained during consultation with Inkosi Ngcolosi, Cllr Nzuza and PR Cllr Sithole, the project will make provision for returning pipes that will connect community of Ntunjambili including the neighbouring communities of Khatha, Wosi, Bothani and Vumba that are settled along the proposed bulk pipeline route from the Ngcebo Water Treatment Works, prior to piping the water to KwaSizabantu. A reason for the aforementioned provision is that currently there are no existing pipes for these neighbouring communities and thus no water reticulation nor provision is taking place. The objective for the project is to provide potable water to the communities affected.

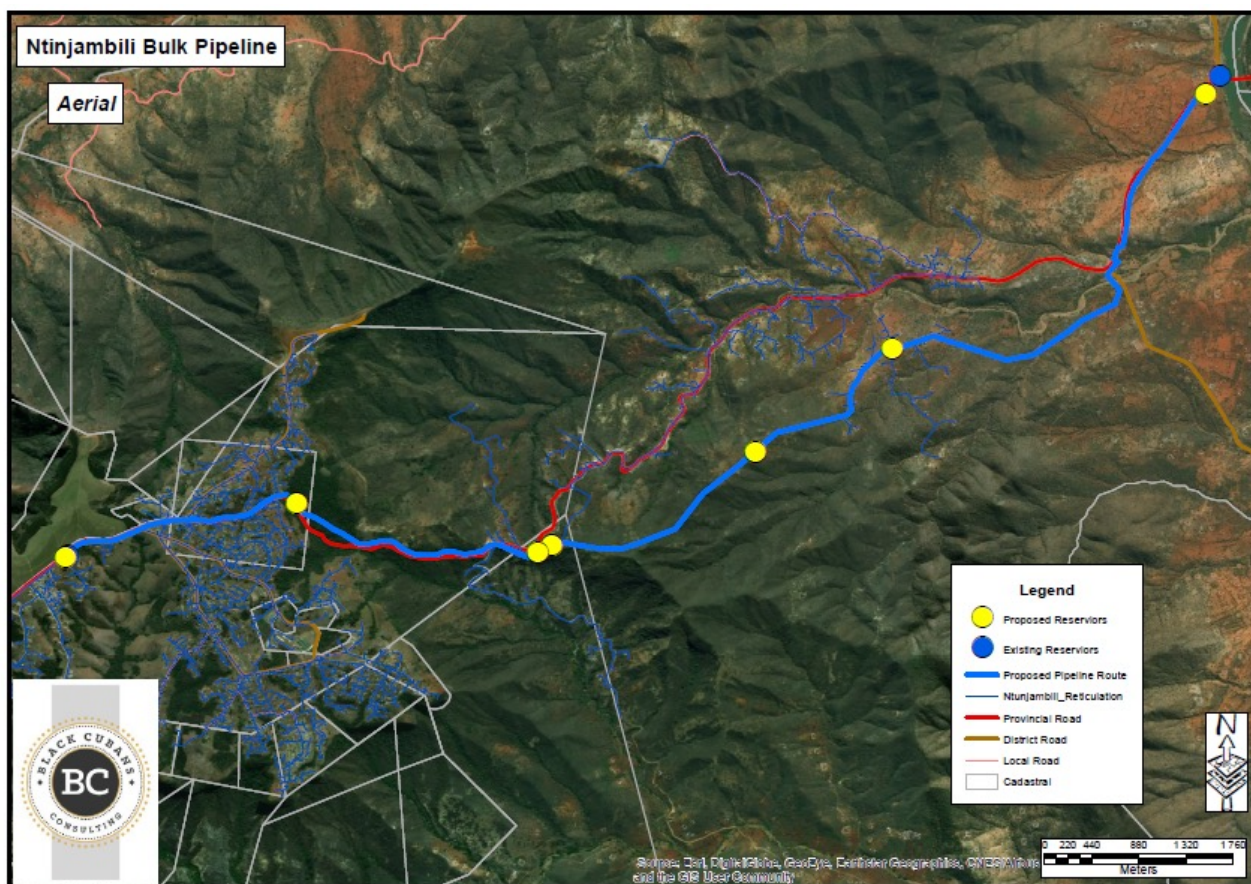
Evidently, there is a growing need and urgency to provide adequate potable water to these communities that do not have access to the life sustaining resource. The proposed construction of the Ntunjambili Bulk Water pipeline will assist in addressing the challenges associated with inaccessibility to and poor supply of reticulated potable water within Ntunjambili.

### 3. PROJECT SITE DESCRIPTION

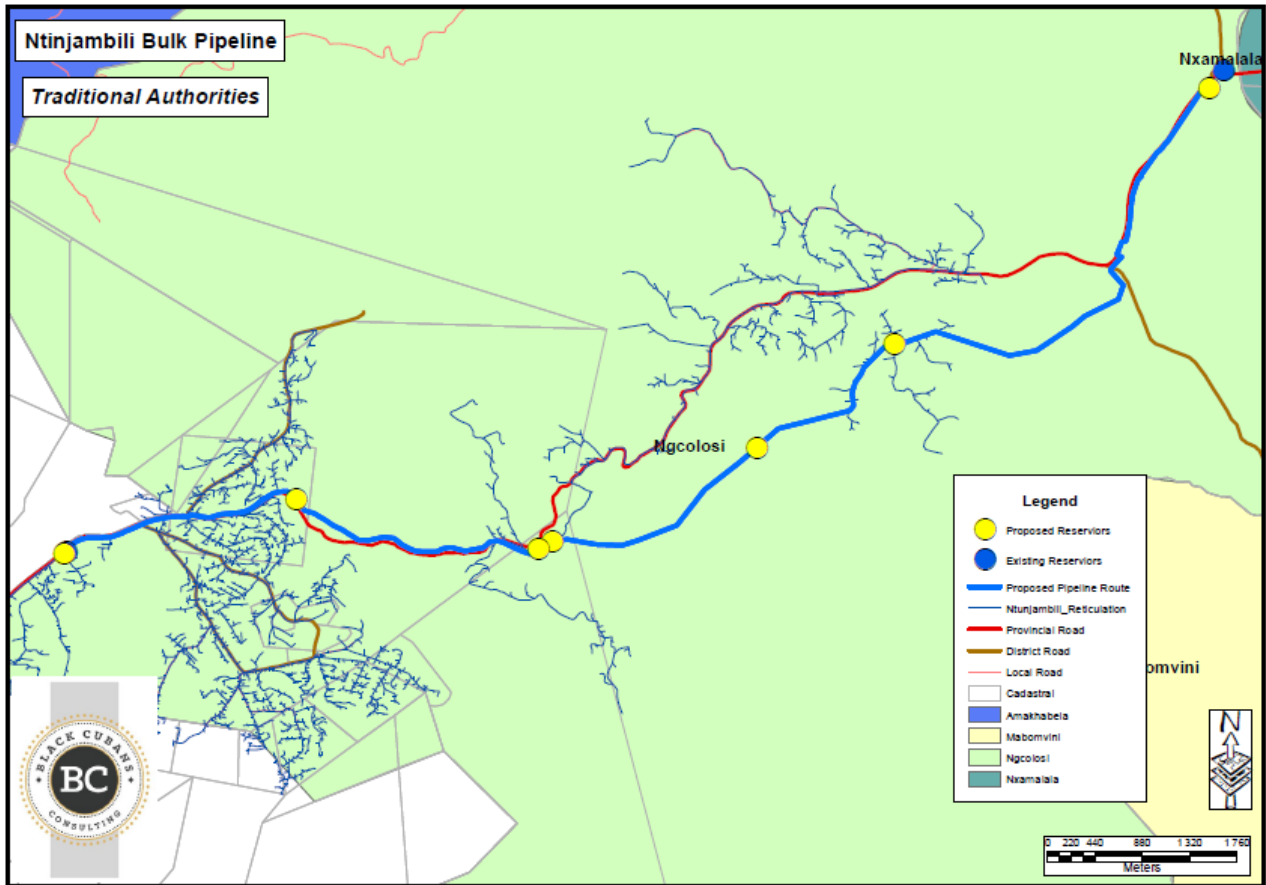
#### Location and Land Use

The Ntunjambili project is located on the plateau above the Tugela valley in Ward 1 of Maphumulo Local Municipality, approximately 8km south east of Kranskop town along route P15-1, on the boundary of Umvoti Local Municipality. There are additional communities of Khatha, Wosi, Bothani and Vumba residing along the route of the proposed main pipeline from Ngcebo Water Supply Scheme. Furthermore, communities to the south and south east of Ntunjambili include Thafamafi and Blacome (KwaSizabantu). Part of the development site is under the Traditional Council of Inkosi Ngcolosi and the other part is privately owned. There are approximately 1,533 households in Ntunjambili with about 12,264 people that stand to benefit from this project.

Figure 1 & 2: Location of Proposed Development and Land Ownership



Source: Black Cubans Consulting (2017)

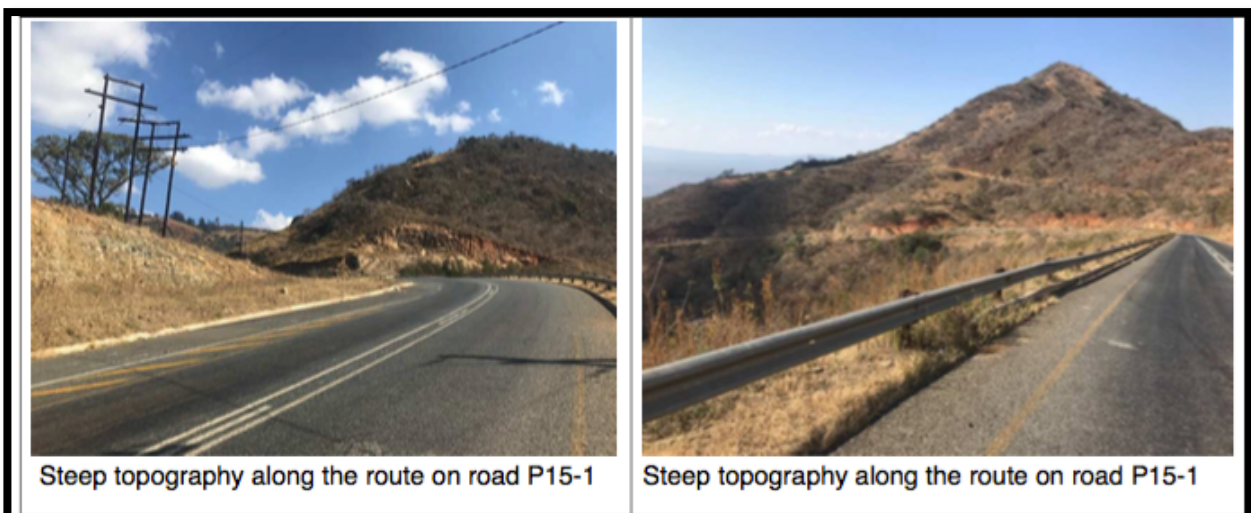


Source: Black Cubans Consulting (2017)

### Site physical attributes

- a) Non- perennial and/or perennial rivers and streams
- b) Rural Settlements
- c) Agricultural lands
- d) Indigenous Forests
- e) Steep Gradient (Mountainous)

**Figure 2: Steep slope**



### Vegetation

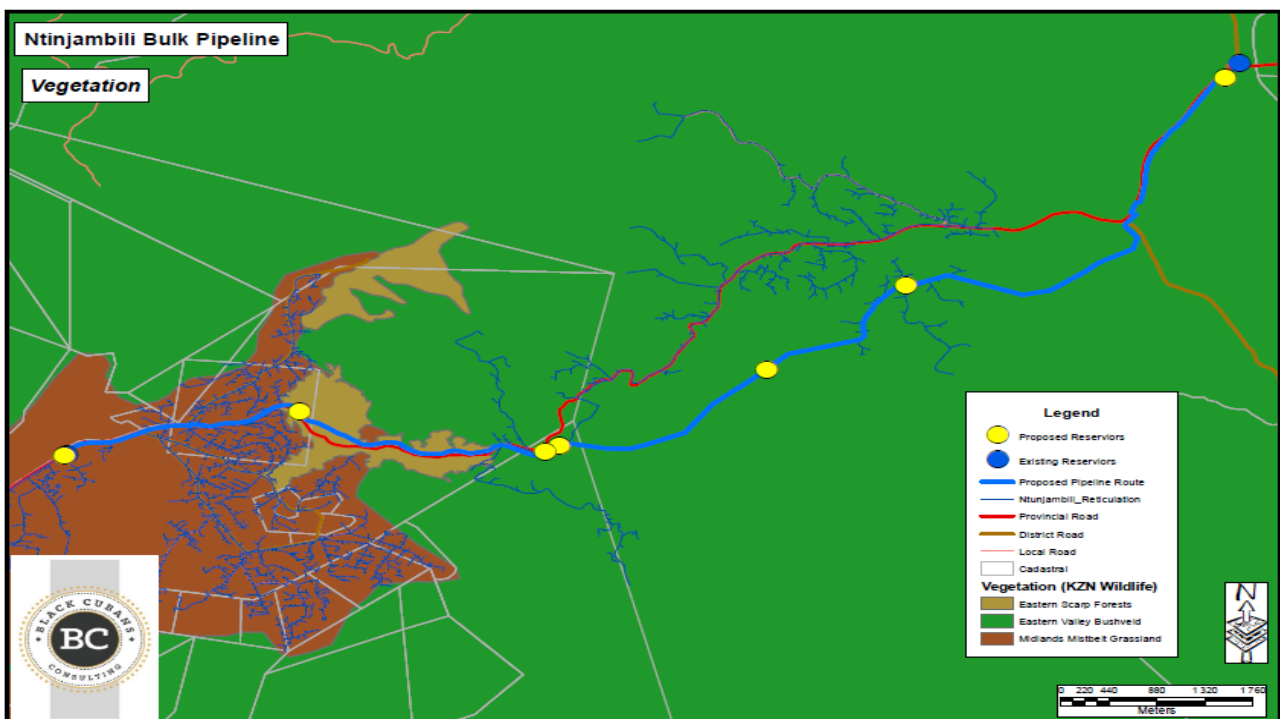
The site contains the Eastern Scarp Forests, Midlands Mistbelt Grassland, Eastern Valley Bushveld and KwaZulu-Natal Sandstone vegetation types. Eastern Scarp Forests have been declared as natural forest types in terms of the National Forest Act 84 of 1998 (NFA).

- ❖ **Eastern Scarp Forests** also known as Afromontane Forests among many names are tall (15-25m) and species-rich forests found mainly, but not exclusively, on sandstone outcrops (some forests on syenitic granite) along the coastal scarp. They are often associated with hilly topography (and/or coastal gorges). This type of indigenous forest is structurally diverse with multiple strata; usually an obvious high canopy and understorey tree stratum, but a poorly developed herb layer and buttressed stems are common. Eastern Scarp Forests are “hotspots” of species richness and are extremely important in terms of biodiversity (Environmental CSIR, 2003).
- ❖ **Midlands Mistbelt Grasslands** according to BirdLife SA, are noted for their diversity of flowering plants and high level of endemism. It's a critically endangered grassland type with just a fifth of its original extent remaining, much of it is highly fragmented.
- ❖ **Eastern Valley Bushveld** also known as Valley Thicket is described by Mucina & Rutherford (2006) sited in Cook (2012) as being semi- deciduous savanna woodlands with pockets of thickets in a mosaic pattern, often succulent and dominated by Euphorbia and Aloes. It occurs in KwaZulu-Natal and Eastern Cape Provinces, in deeply incised valleys of rivers including the lower reaches of the Thukela, Mvoti, Mgeni, Mlazi, Mkhomazi, Mzimkulu, Mzimkulwana, Mtamvuna, Mtentu, Msikaba, Mzimvubu (and its several tributaries), Mthatha, Mbhashe, Shixini, Qhorha and Great Kei.
- ❖ **KwaZulu-Natal Sandstone** grassland is highly endemic and species-rich, and it is critically endangered and poorly conserved. Ecological threats to this grassland ecosystem are exacerbated by encroachment of woody plants, with severe negative environmental and economic consequences.

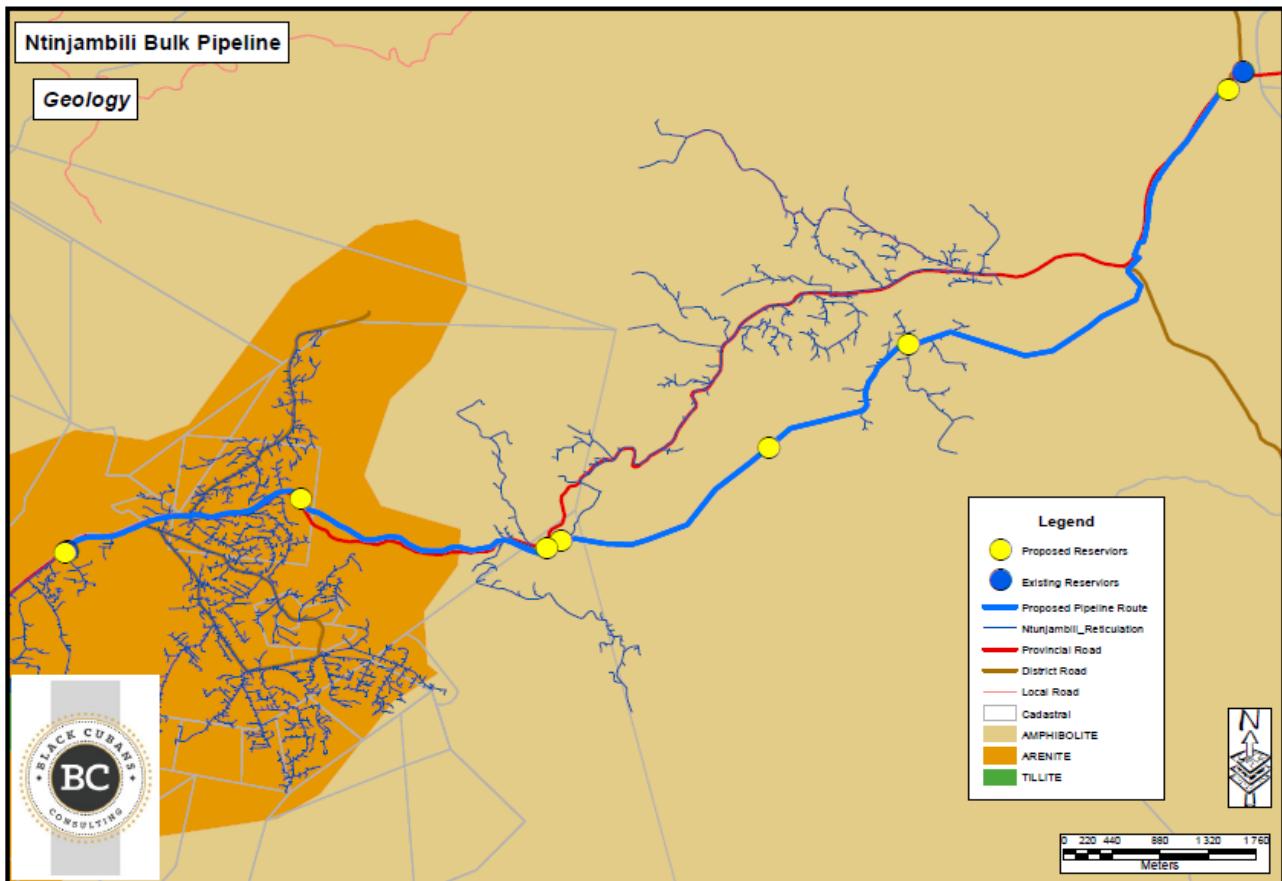
### Topography and Geology

The topography of the site is largely steep and hilly with mountainous characteristics. Geology underlying the site area are amphibolites, arenite and tillite that forms part of the sedimentary rock category, also known as Shale. The rock is made up of thin layers and splits into pieces along lamination.

Figure 3 & 4: Site Vegetation & Site Geology



Source: Black Cubans Consulting (2017)



Source: Black Cubans Consulting (2017)

#### 4. DEVELOPMENT PROPOSAL

The proposed development is primarily that of the construction of a bulk water pipeline which will include water tanks/reservoirs and other related infrastructure.

The following informants were considered upon formulation of the development proposal: aerial photographs; topographical, hydrological and geotechnical opportunities and constraints (slope); existing infrastructure; and adjacent development.

#### 5. ENVIRONMENTAL AUTHORISATION PROCESS

In terms of the National Environmental Management Act, 1998 (No.107 of 1998) [NEMA] and associated EIA Regulations published on 07 April 2017, an Environmental Authorisation must be obtained from the relevant authority which is the KZN Department of Economic Development, Tourism and Environmental Affairs (EDTEA) prior to the commencement of certain listed activities that may result in potential negative impacts on the environment. The proposed project involves, inter alia, the following listed activity, as per Government Notice No. 985 of listing notice 3 of NEMA. The activity to be undertaken in terms of the 985 Notice is:

LISTING NOTICE 3- GOVERNMENT NOTICE NO. 985– 07 APRIL 2017

Relevant Notice	Activity No.	Description
No. 324, 07 April 2017	9	The development of facilities or infrastructure exceeding 1000m in length for the bulk transportation of water, sewage to storm water with an internal diameter of 0.36m or more.
No. 324, 07 April 2017	19	The infilling or depositing of any material of more than 5 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from a watercourse.

### Legal Requirements

#### National Water Act (Act No. 36 of 1998)

This development triggers activity 9 and 19 of Listing Notice 19 of the EIA Regulations and Black Cubans Consulting will conduct a Scoping and Environmental Impact Assessment (S/EIA) process as per The National Environmental Management Act (NEMA) EIA Regulations, 2014. A Water Use Authorisation is required for the proposed development of Ntunjambili Bulk Water pipeline. A Water Use Authorisation is a legal process governed by the Department of Water & Sanitation (DWS) requiring the authorisation of all water uses defined in section 21 of the National Water Act (Act No 36 of 1998) [NWA]. The above mentioned project requires Section 21 (a), (b) and (c) water uses. The NWA defines a Section 21 (c) and (i) water uses as: Section 21 (a)- taking water from a water resource; Section 21 (b)- Storing water and Section 21 (c) – Impeding and diverting the flow of water in a watercourse.

#### National Forest Act

In terms of section 7(1) of the NFA, no person may:

- (a) Cut, disturb, damage or destroy any indigenous tree in a natural forest, except in terms of:
  - (i) a license issued under the NFA: or
  - (ii) an exemption from the provisions of this subsection published by the Minister in the Gazette on the advice of the Council.

Therefore, with the prevalence of Eastern Scarp Forests within the site of the development, a licence must be obtained. Also, prior to disturbing any of these trees on site, it must be ensured that a licence is obtained.

## 6. KEY IMPACTS

### Potential Biophysical Issues:

- a. Possible topsoil removal during construction
- b. Some of the natural vegetation may be disturbed during construction of the pipeline
- c. Disturbance of stream flow direction, surface water sources or discharge areas
- d. Atmospheric environment: Air quality can be affected by dust during construction and by air contaminants emitted by the combustion of fossil fuels used for construction equipment and pumping stations.
- e. Geology and terrain: Possible alterations of geology and terrain due to cut and fill to accommodate pipeline.

### Potential Construction related impacts:

- a. Noise will be increased relative to background noise by construction activities and the operation of pumping stations.
- b. Visual & Aesthetic due to removal, infilling and depositing of material.
- c. Impacts on the social environment: the construction and operation of the pipeline and water tower may result in some local job opportunities, skills transfer and capacity building, thus increasing job creation potential.
- d. Vibrations

## 7. INTERESTED AND AFFECTED PARTIES REGISTRATION

Should you wish to register as an Interested and Affected Party, or simply to receive any future reports and correspondence, please do not hesitate to contact the Environmental Consultants, Black Cubans Consulting (Pty) Ltd or Ilembe District Municipality at the contact details below.

<p><b>Consultants: Black Cubans Consulting (PTY) Ltd</b></p> <p><b>Mark Faku</b> Suite 4 The Quay Walk Building Tuzi Gazi Waterfront Richards Bay 3900 P.O. Box 150 Empangeni 3880 Tel: 035 788 0088 E-mail: mark@blackcubans.co.za</p> 	<p><b>Developer: Ilembe District Municipality</b></p> <p>Mr G Khumalo Acting Municipal Manager P.O. Box 1788 KwaDukuza Durban KwaZulu-Natal 4450 South Africa Tel: 032 437 9300 Fax: 032 437 9585 <a href="http://www.ilembe.gov.za">http://www.ilembe.gov.za</a></p> 
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