BACKGROUND INFORMATION DOCUMENT as part of the BASIC ASSESSMENT PROCESS for the PROPOSED INHLANGANO ACCESS ROAD UPGRADE, WARD 4, NDWEDWE LOCAL MUNICIPALITY, ILEMBE DISTRICT MUNICIPALITY

1. Introduction

The Ndwedwe Municipality has proposed the upgrade of Inhlangano Access Road, located in Ward 4 of the Ndwedwe Local Municipality, Ilembe District Municipality. The road upgrade aims to allow local residents to have improved, formalised access to their homes, schools, shops and the extended road network. The project is located in Ward 4 of the Ndwedwe Local Municipality.

Before construction of the road upgrade may commence, an environmental authorisation is required from the Department of Agriculture and Environmental Affairs (DAEA), in compliance with the Environmental Impact Assessment Regulations of 2010. In order to obtain this authorisation a Basic Assessment is currently being undertaken by Enviroedge cc.

2. The Project

The project involves the upgrade and construction of Inhlangano Access Road in Ward 4. The project involves the construction of an improved and upgraded road with culverts over existing drainage lines and bridge crossing over a watercourse and it has been designed to align with the existing road tracks. The proposed road upgrade, culverts and bridge will provide an improved and more reliable link road for the local residents and surrounding areas. The road upgrade aims to allow local residents to have improved, formalised access to their homes, and the extended road network. The proposed road upgrade will include 4 non perennial watercourse crossings of the Umvoti River and 1 perennial crossing of the Nsuze River system.

The proposed road upgrade and extension is 4.5km in length and at a width of 5m. The starting point is at: 29°18'50.9"S; 31°00'50.9"E, and end point is at: 29°17'49.3"S; 31°00'16.2"E. The road start point is located 1.3km south-east of Ezimpangeleni. Please refer to Map 1: Inhlangano Access Road Site Plan.



Figure 1. Image showing study area of proposed Inhlangano Access Road Upgrade. (Source, Google Earth).

3. Environmental and Social Description

<u>**Climate</u>**: Rainfall in the study area occurs predominantly during the summer months, with some rain in the winter, and frost infrequent. The annual precipitation ranges from 550mm -1 000mm with an average annual temperature of 17.9°C.</u>

Topography and Drainage: The southern half of the study area is located along the north-easterly ridge of two hills, with a valley and KwaQwabe located to the south-east and small tributaries flowing to the Nsuze River to the north. There is a high point of Misi 501m in the northern section of this ridgeline, the central study area and the Dabango River is situated to the south-east/east and feeds into the Mvoti River to the north. Misi high point is the major hill feature of the study area, around which the proposed road upgrade wraps, along with two rivers, the Nsuze and Mvoti in the northern half of the study area. The Nsuze feeds into the main Mvoti River which forms large meanders through the northern portion of the study area from west to north-east, creating the northern boundary of the study area. The Mvoti continues east to feed into the Indian Ocean.

The central section of the study area, at the approximate half way point (2km) of the road, where it forms a tight bend to the north-west, lies below the Misi hill ridge line and down the hill slope, and from this point, the proposed second road portion follows a narrow track, as it gradually drops down toward the Nsuze River which it crosses to the north-west. The Nsuze River lies to the west of the study area and flows east/north-east into the Umvoti River. The proposed Nsuze crossing point is slightly upstream of the Nsuze/Umvoti confluence point. In this north-eastern section and end point of the study area, there is a high point of 356m and there are also numerous small drainage line crossings in this section. To the north-east of the study area, there is a high point of 350m.

The proposed Inhlangano Road Upgrade includes the upgrade of the existing gravel road and dirt tracks with culverts over existing drainage lines and bridge crossing over a watercourse and it has been designed to align with the existing road tracks. The proposed road upgrade will include 4 non-perennial watercourse crossings and 1 perennial crossing which form part of the Nsuze River system. Please see topographical map attached.

<u>Geology and Soils</u>: The area is underlain by the sediments of the Karoo Supergroup with the mudstones and lesser sandstones of the Adelaide and Tarkastad Subgroups (Beaufort Group) dominant, and some Ecca Group shale.

Vegetation: The local vegetation is defined predominantly as Eastern Valley Bushveld (SVs 6), (Mucina and Rutherford, 2006). Semi-deciduous savannah woodlands are found in a mosaic with thickets, often succulent and dominated by species of *Euphorbia* and *Aloe*. The ecological sensitivity of the local vegetation is likely to be high-moderate, as for the most part the vegetation edging the road is very dense, close to the road edge and predominantly indigenous for the majority of the road length, however, there is also existing habitation along the route, and some clearing activities and a recent underground pipeline installation that were noted. The first portion of the road, in the south-west section, at the start point, follows an existing track, along the ridge of a hill, in a generally north-easterly direction, then passing between two hills and gradually descending down toward the approximate half way point (2km). The road then forms a tight bend to the north-west, and from this point, the second portion follows a narrow track, as it gradually drops down further toward a tributary of the Nsuze River which it crosses. Hygrophilous plant material including *Typha sp.* was noted in this stream.

The EKZNW Terrestrial Systematic Conservation Plan, TSCP (2010) indicates two Biodiversity Priority Areas 3 located to the north-west and west of the study area respectively, however, the study area itself does not fall within an identified Biodiversity Priority Area. Alien invasive species including *Lantana camara* (Lantana), *Solanum mauritianum* (Bugweed), *Senna didymobotrya* (Peanut Butter bush) *and Psidium sp.* (Guava) were noted on site. Indigenous trees noted include: *Euphorbia sp., Erythrina sp., Acacia sp., and Sclerocarya birrea* (Marula tree) – a protected tree. *Plumbago auriculata, Tecomaria capensis* and *Hisbiscus sp.* were also noted.

<u>Culture and Heritage</u>: The presence of features of cultural or historical importance is currently unknown.

National and District Roads: The proposed road upgrade links into the existing A 2827 gravel road which in turn links into the A 2826 and the A 2825 respectively. It is not likely to impact any provincial or national road.

<u>Utilities</u>: A new water pipeline servitude was noted in the north-western section of the study area, along the side of the dirt track, all relevant government departments or parastatals will be consulted as part of the Public Participation Process.

4. Public Consultation

Members of the public have the right to be consulted during the Public Participation Process. If you would like to be part of this process please register with the environmental consultant using the contacts below.

Consultants: Enviroedge cc. Contact: Karin Samouilhan PO BOX 1009, Kloof, 3640 Tel: 031 764 2569; Fax: 031 764 2569 E-mail: info@enviroedge.co.za





Figure 2. Locality Plan