



ZN Geo Services

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# BACKGROUND INFORMATION DOCUMENT

**BASIC ASSESSMENT PROCESS FOR AN APPLICATION FOR ENVIRONMENTAL AUTHORISATION FOR WATER TREATMENT WORKS UPGRADE IN COLENZO (WATER SUPPLY SCHEME), ALFRED DUMA & INKOSI LANGALIBALELE LOCAL MUNICIPALITIES IN THE KWAZULU-NATAL PROVINCE**

The purpose of the Background Information Document (BID) is to provide information to assist stakeholders participating in the Basic Assessment process for the proposed project. This BID has been developed to:

- Share information about the proposed project;
- Present the Environmental Impact Assessment (EIA) process that will be followed to obtain an Environmental Authorisation (EA) according to the NEMA
- Provide more details about the Public Participation Process (PPP) which will be followed.

## Project Description

The Colenso Water Treatment Works (WTW) are located within the Alfred Duma Local Municipality (ADLM), and uThukela District Municipality (UDM) of KwaZulu-Natal. The scheme currently abstracts raw water from the uThukela River which is then pumped to the Colenso Water Treatment Works (WTW). Treated drinking water is pumped from the Colenso WTW to a set of command reservoirs before being distributed throughout the town and the various township communities.

The project entails the refurbishment and upgrading of the existing Esikebheni WTW to 3.2ML/day and to construct a bulk supply rising main with a booster pumps station to supply Roosboom and surrounding settlements with bulk treated water. This includes the construction of a new rising main line pumping to a new command reservoir situated on a hill north of Colenso town. It also includes gravity main lines to Colenso East, Inkanyezi, Tugela Valley, Ntokozweni, Ekuthuleni and Colenso South as well as a main bulk line to Chieveley (Table 1 & Figure 1).

The project also includes the installation of new bulk supply lines, the refurbishment of reticulation at Colenso Town (CBD and New Town), the refurbishment of existing reservoirs and infrastructure and the construction of a

new reservoir and reticulation at New Town settlement. This background information document relates to the environmental authorisation application to be lodged with the KwaZulu-Natal Department of Economic Development, Tourism & Environmental Affairs (DEDTEA).

## Infrastructure Requirements

### *Power (Electricity) Requirements*

The water treatment works are already operational and will thus continue on the current power supply.

### *Domestic Water Requirements*

Domestic water is already available at the site. A domestic water supply is to be provided directly from the clearwater rising main (bulk water pipeline) to provide for the communities.

### *Surface Infrastructure*

The surface infrastructure of the WTW include the following:

The Colenso WTW is comprised of the following elements:

- » Raw water supply (raw water pump station and rising main).
- » Header tank, grit channels and flocculation channel (where flocculation / coagulation dosing take place).
- » Sedimentation tanks.
- » Auto-backwash gravity filters.

- » Clearwater reservoir (where disinfection takes place using chlorine).
- » Clearwater pump station.

### **Needs and Desirability for the Proposed Development**

The existing capacity of the WTW (approximately 2.65 ML/day) is insufficient to provide for the future water demand requirements of Colenso and surrounding areas and a major upgrade of the works is therefore required. The existing water supply to Colenso town is sporadic and the network consists mainly of Asbestos pipes which has reached the end of its lifespan and needs to be refurbished, including the existing Water Treatment Works (WTW). Further to this, several of settlements surrounding Colenso do not have any formalised water supply. The capacity of the bulk main line (200mm diameter uPVC) from Ladysmith is too small to supply the Rosboom community, which has expanded at an alarming rate. There is therefore an urgent need to find an alternative water supply to Rosboom, which can be sourced from Colenso. Four new housing developments is planned for Colenso, as well as one for Roosboom. The existing infrastructure and water treatment works at Colenso or Ladysmith will not be able to supply these developments with treated water. The United Nation's sustainable development goals (goal 6) relates to the need to ensure access to water. South Africa's National Development Plan (NDP) also stresses the need for "decent standard of living" and outlines water as a core element.

### **Potential Environmental Impacts associated with the Proposed Project**

Potential impacts relate to:

- » **Traffic** - movement of vehicles during construction phase.
- » **Noise** –Noise associated with the movement of light delivery vehicles and/or hauling trucks during construction is also anticipated.

- » **Soil and groundwater pollution** - soil and groundwater pollution may occur due to oil leaks from site operation equipment. Potential for the exposed soil to be susceptible to erosion. Drying beds if not maintained properly could result in ground pollution.
- » **Socio-economic impacts** – the water provision may result in positive socio-economic aspects in terms of improving e quality of life as a result of the improved access to clean drinking water. This could in turn encourage further investments into the town as developments may be attracted due to the increased drinking water supply. During the construction phase of the WTW, employment opportunities will become available.

### **Environmental Impact Assessment Process**

The WTW upgrade application, itself, triggers listed activities within the ambit of GNR. 327 Listing Notice 1 and as such requires that a Basic Assessment ("BA") process to be undertaken in terms of GNR. 327 - the EIA Regulations, 2014 (amended 2017) (see Figure 2 for the basic assessment process diagram).

ZN Geo Services (Pty) Ltd, an independent environmental consultant, has been appointed to undertake the above authorisation process on behalf of Uthukela District Municipality. For this proposed project, the competent authority is the Department of Economic Development, Tourism & Environmental Affairs (DEDTEA). Uthukela District Municipality can only commence with this intended WTW upgrade once an environmental authorisation (EA) has been granted by the DEDTEA. and water use license (WUL) has been granted by the Department of Water and Sanitation (DWS).

### **Public Participation Process**

The aim of the Public Participation Process ("PPP") is to allow interested and affected parties ("I&APs") the opportunity to gain an understanding of the project and consider all facets of the proposed activities. The PPP will:

- » Provide I&APs with information about the proposed mining activities and associated potential impacts;
- » Allow I&APs the opportunity to provide input, such as concerns or queries, on the proposed project; and
- » Incorporate the input raised by I&APs in the study and ultimate decision-making process.

The following activities will take place during the public participation process:

- » Advertising the EIA Process (in local press): (i) an advertisement will be placed in a local newspaper and (ii surrounds;) site notices placed at the project site and
- » Registering I&APs and key stakeholders on the database. A call for stakeholders to register on the project database will be made through the advertisement and site notices, as well as through letters of notification.
- » This Background Information Document (“BID”) will be distributed to I&APs (by-hand and/or via e-mail, or post/fax where necessary) informing stakeholders of the EA and water use license application being applied for by Uthukela District Municipality and other pertinent information as detailed herewith.
- » The Draft Basic Assessment Report (“BAR”), Environmental Management Programme (“EMPR”) and specialist study reports will be made available for a 30-day public and authority review period. Stakeholders will be informed of the availability of the draft BAR, EMPR and specialist studies through the advertisement and letters of notification.
- » Recording all comments, issues and concerns raised by I&APs and preparation of a PPP report and Comments & Responses Report (“CRR”).
- » Updating of the BAR, EMPR and specialist studies taking into consideration all comments received; and
- » Submission of the Final BAR, EMPR and specialist studies to the DEDTEA so the

competent authority can make a decision on whether or not to grant the EA.

### **Getting Involved**

Surrounding communities, government and other stakeholders such as traditional authorities, community leaders, Non-Governmental Organisations (NGOs) and others are invited to register as I&APs.

Stakeholders are encouraged to provide written comment on the draft reports as it is made available, and these comments will be incorporated into the final reports submitted to the DEDTEA. Attached herewith is a Comments and Registration form, and you as a stakeholder are welcome to complete the form and return it to ZN Geo Services. Registration on the project database also means that your details may be shared in the public domain as our reports will contain a project I&AP database and the CRR which records written comments received from stakeholders.

As a registered stakeholder, you will also be notified about the project milestones; up to and including when a decision has been made by the DEDTEA on the EA.

### **Commenting Period**

- » The draft BAR, EMPR and specialist studies will be made available at the Colenso Public Library and online (via this Dropbox link): [https://www.dropbox.com/sh/l41uo9um6kd630/AACzQGtcHsw-Y1G\\_CWcYGV8sa?dl=0](https://www.dropbox.com/sh/l41uo9um6kd630/AACzQGtcHsw-Y1G_CWcYGV8sa?dl=0)
- » Alternatively, you can contact ZN Geo Services for a copy of the draft BAR and EMPR.
- » The commenting and registration period is between 15 May 2023 and 14 June 2023.

### **How to get involved?**

All persons who wish to take part in the Public Participation Process by commenting on or raising any concerns regarding the development are invited to do so through the following means:

1. Registering as an Interested and Affected Party (in writing at the details provided below);
2. Submit any comments in writing on the response sheet attached to this document if you have any (and return to us within timeframes provided; and
3. Review the Draft Basic Assessment Report, when it becomes available, and raise any concerns or comments in writing within the timeframes provided.

### **Contact Details for Registering as an I&AP and commenting on the proposed project**

Contact: Hloniphile Dlamini (Environmental Assessment Practitioner)  
E-mail: [projects@znggeo.co.za](mailto:projects@znggeo.co.za)  
Cell/ Mobile: 073 470 2961 / 083 467 3532  
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SG CODE	DESCRIPTION	FARM NAME	DESCRIPTION	FARM NAME
NOGS0000000092900007	Portion 7 of Farm 929 GS	RAMA 929 GS	Portion 3 of Farm 2094 GS	CHIEVELEY 2095 GS
NOGS0000000092900028	Portion 28 of Farm 929 GS		Portion 6 of Farm 2094 GS	
NOGS00000000113800000	Remainder of Farm 1138 GS	VARKENS FONTEIN 1138 GS	Portion 12 of Farm 2094 GS	
NOGS00000000113800003	Remainder of Portion 3 of the Farm 1138 GS		Remainder of Portion 4 of Farm	
NOGS00000000113800008	Remainder of Portion 8 of the Farm 1138 GS		Portion 13 of Farm 2094 GS	
NOGS00000000113800033	Portion 33 of the Farm 1138 GS		Portion 7 of Farm 12771 GS	
NOGS00000000113800034	Portion 34 of Farm 1138 GS		Remainder of Farm 1062 GS	TUGELA DRIFT 1062
NOGS00000000114600005	Remainder of Portion 5 of Farm 1146 GS	CROMLEYBANK 1146 GS	Portion 7 of Farm 1062 GS	
NOGS00000000122900000	Remainder of Farm 1229 GS	LABUSCAGNES KRAAL 1229 GS	Portion 6 of Farm 1062 GS	VERTREK 1091
NOGS00000000122900001	Remainder of Portion 1 of Farm 1229 GS		Portion 4 of Farm 1091 GS	
NOGS00000000122900010	Portion 10 of Farm 1229 GS		Portion 1 of Farm 1091 GS	
NOGS00000000205600003	Portion 3 of Farm 2056 GS	HILLGROVE 2056 GS	<b>ERVEN</b>	
NOGS00000000205600005	Portion 5 of Farm 2056 GS		Erf 152	
NOGS00000000205600000	Remainder of Farm 2056 GS		Portion 1 of Erf 152	
NOGS00000000205600002	Portion 2 of Farm 2056 GS		Erf 153	
NOGS00000000205600004	Portion 4 of Farm 2056 GS		Erf 154	
			Erf 379	
			Remainder of Erf 952	

**Table 1: Study area properties**

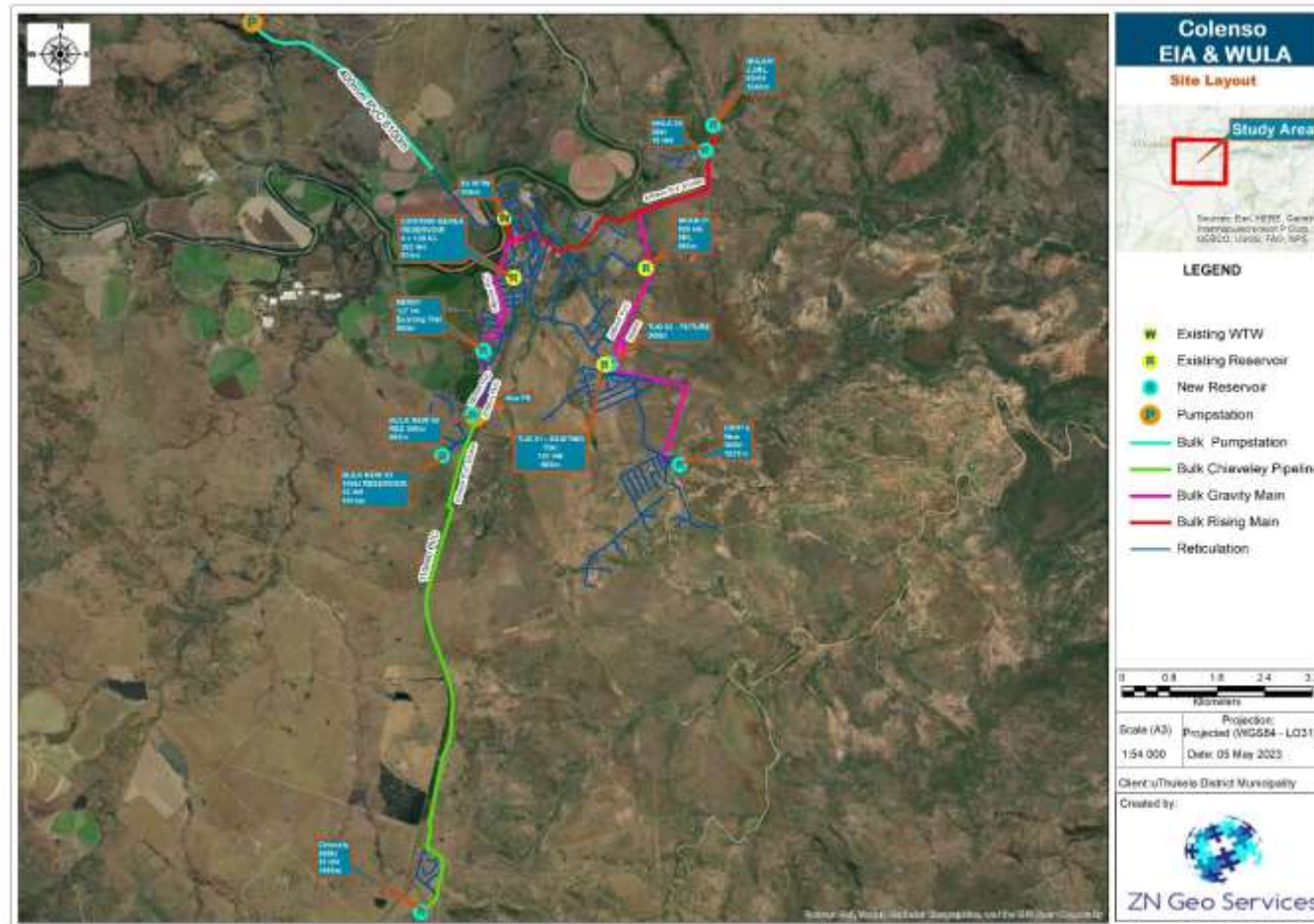


Figure 1: Site Layout Map

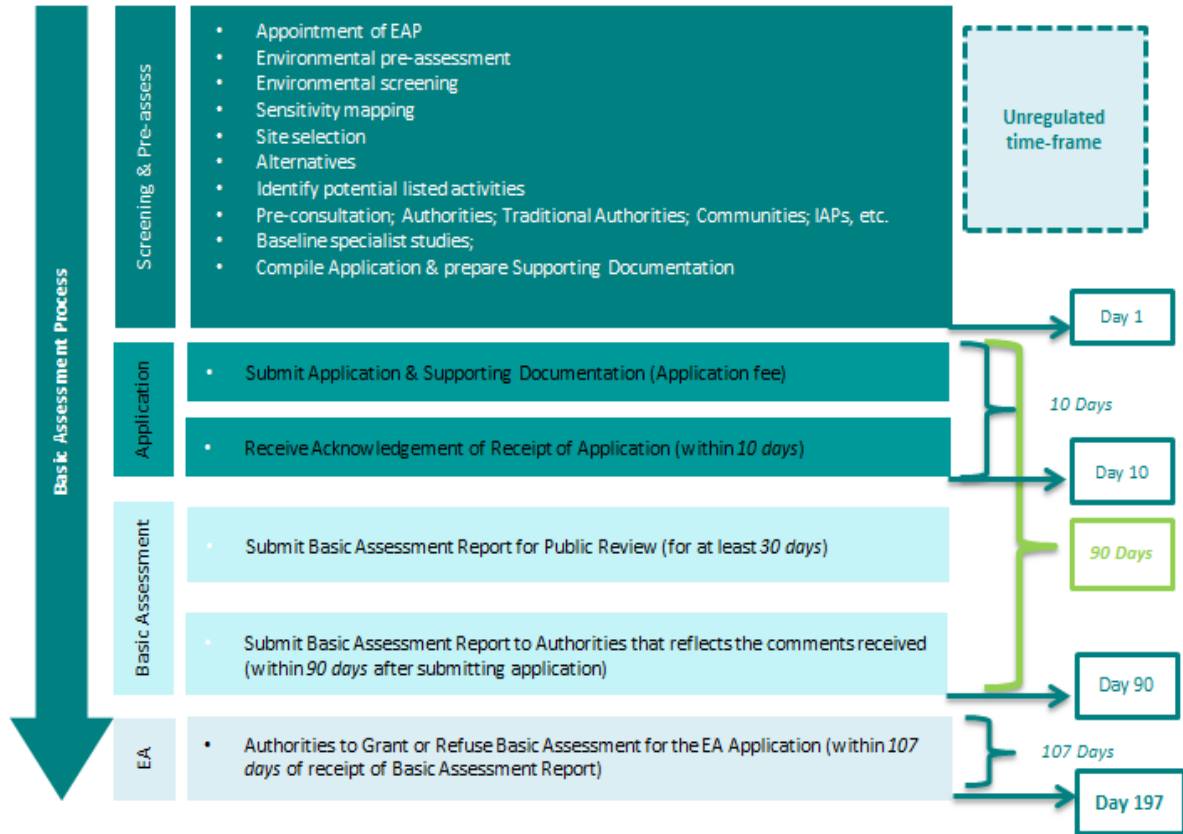


Figure 2: Basic Assessment Process

## COMMENTS AND REGISTRATION FORM

Please provide your complete contact details:

Name and Surname:	
Organisation and Designation:	
Physical Address:	
Postal Address (if different to the Physical Address):	
Contact Number (Landline and/or Mobile/Cell):	
E-mail Address:	

Would you like to register as an interested and affected party (I&AP)?	<b>YES</b>		<b>NO</b>	
Do you consent to your comments/responses and details being included in the public domain?	<b>YES</b>		<b>NO</b>	

Please state your interest in the Proposed Project (insert additional pages if necessary):

Please list your questions, views or concerns regarding the Proposed Project (insert additional pages if necessary):

Please provide contact details of other persons who you may regard as a potential I&AP:  
*(Include Name & surname, contact number, email, etc.)*

**Contact Details for Registering as an I&AP and commenting on the proposed project**  
 Hloniphile Dlamini (Environmental Assessment Practitioner)  
 E-mail: [projects@zngco.co.za](mailto:projects@zngco.co.za)  
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