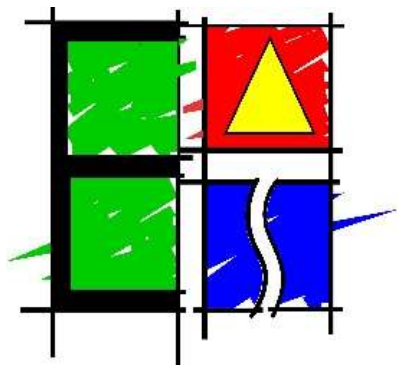




BACKGROUND INFORMATION DOCUMENT AND INVITATION TO COMMENT

Proposed Upgrading of Bulk Water and Sewer Infrastructure in Green Valley, within Bitou Local Municipality, Western Cape

Introduction

Engineering Advice & Services (Pty) Ltd has been appointed to apply for Environmental Authorisation (EA) for the proposed *Upgrading of Bulk Water and Sewer Infrastructure in Green Valley, within the Bitou Local Municipality of the Western Cape Province*. In addition, a parallel application will be undertaken for a Water Use Licence (WULA) which will be necessary due to wetlands, riparian and river features noted to be present along the extent of the pipeline and associated activities.

Project Role-Players

The following are the relevant role-players in the Applications:

Applicant:	Bitou Local Municipality
Environmental Assessment Practitioner (EAP):	Engineering Advice & Services (Pty) Ltd (EAS)
Competent Authority – Application for EA:	Western Cape Department of Environmental Affairs & Development Planning and the Department (DEA&DP)
Competent Authority – WULA:	Department of Water and Sanitation (DWS)

Project Description

a) Water infrastructure

This water infrastructure component of the project involves upgrading the bulk water pipeline from the N2 towards the Green Valley and Wittedrift communities, approximately 15km from Plettenberg Bay, as well as the construction of new water infrastructure facilities (i.e. reservoirs). Kindly refer to enclosed locality map. The water infrastructure component will include, in more detail, the following:

- Bulk Water Main
 - The proposed pipeline will have a total length of approximately 7 km, a diameter of 250 mm (uPVC Class 16) and a preliminary peak flow of 25 l/s.
 - The first 4.9 km of the pipeline will be installed within the R340 road reserve. The next section will be installed in the road reserve of Hoof/Main Road, and thereafter in Heuvel Street in Wittedrift. Where the proposed pipeline will cross the Bitou River, it will be attached to the existing bridge along Hoof/Main Road.
 - The last section will be installed in the middle of the gravel road leading up to the existing Wittedrift Reservoir, where it will connect to the existing reservoir infrastructure.
- Reservoir infrastructure
 - Existing Wittedrift Reservoir & Pump Station: The existing Wittedrift Pump Station structure will be replaced with a new top structure to house the existing pumps and controls. It will also be equipped with a new pumping component that will transfer water via a new rising main to the proposed reservoir.
 - New Green Valley Command Reservoir: A new water storage reservoir at Green Valley will be constructed at the highest point in the area, and will serve as the primary storage facility for the Green Valley and Wittedrift supply zones. The reservoir site will have a footprint of approximately 3 600m², while the reservoir alone will have a footprint of approximately 36m in diameter (~1 000m²) and a preliminary capacity of approximately 3.5 - 4 Mℓ.
 - Existing Green Valley Reservoirs: The existing Green Valley Reservoirs will remain operational but will be re-purposed as secondary supply reservoirs.

- Rising Main
 - A 200 mm Ø rising main of approximately 725 m will be installed from the Wittedrift Reservoir to the proposed Green Valley Reservoir. The peak flow in the rising main will be approximately 25 l/s. The rising main will be installed through steep and bushy terrain containing Garden Route Shale Fynbos.
- Gravity pipelines linking the Green Valley and Wittedrift systems
 - A 200 mm Ø gravity main, approximately 790 m in length, from the proposed Green Valley Reservoir to the Wittedrift Reservoir
 - A 90 mm Ø gravity main, approximately 310 m long, from the proposed Green Valley Reservoir to the existing Green Valley reservoirs
 - The peak flow in the gravity lines will be approximately 12 l/s and will be laid mainly within existing road reserves

b) Sewer infrastructure

The sewer infrastructure component of the project entails the upgrade and expansion of the existing bulk sewer network serving the Green Valley and Wittedrift areas, which will connect to the Aventura Pump Station and ultimately end at the Gansevallei Waste Water Treatment Works within the Bitou Local Municipality. The sewer infrastructure component will include, in more detail, the following:

- A new pumpstation in Green Valley with a capacity of 30l/s.
- A 200 mm diameter UPVC class 16 pipeline, approximately 2.5 km long, will convey effluent from the Green Valley to the Wittedrift Pumpstation.
- The Wittedrift Pumpstation will be upgraded to accommodate the increased flow. This will involve upgrading to a future capacity of 50l/s and increasing emergency storage.
- The existing 125 mm diameter rising main, extending from the Wittedrift Pump Station to the Aventura Pump Station, will need to be upgraded to a 250 mm diameter UPVC class 16 pipe, spanning approximately 7 km along Hoof/Main Road and the R340 and other minor roads.

Legislative Requirements

a) National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA): Environmental Impact Assessment Regulations (EIA), 2014 (as amended)

The proposed upgrading triggers activities contained in the NEMA: EIA Regulations, 2014 (as amended), and published in **Listing Notice 1** and **Listing Notice 3**, thus requiring EA from the DEA&DP subject to a **Basic Assessment** process. The applicable Listed Activities are set out below.

*Summary of **Listed Activities** contained in **Listing Notice 1** triggered by the proposed upgrading*

Activity No.	Activity Description	Discussion in terms of Applicability
12	<i>The development of—</i> <i>(ii) infrastructure or structures with a physical footprint of 100 square metres or more;</i> <i>where such development occurs—</i> <i>(a) within a watercourse;</i> <i>(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; —</i> <i>excluding—</i> <i>(dd) where such development occurs within an urban area;</i> <i>(ee) where such development occurs within existing roads, road reserves or railway line reserves;</i>	Where the proposed bulk water and sewer pipeline routes fall outside the urban edge as per the Bitou Municipality's Spatial Development Framework (SDF) and where the alignment occurs outside existing road reserves, the bulk water and bulk sewer pipelines might cross watercourses (drainage lines). As such, the upgrading might exceed a footprint of 100m ² where it will occur within and within 32m of watercourses outside an urban area and outside road reserves.
17	<i>Development-</i> <i>(i) in an estuary;</i> <i>(ii) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater;</i>	The majority of the pipelines fall outside the urban area within the Keurbooms Estuarine Functional Zone and within 100m inland of it. As such, the upgrading works might exceed a footprint of 50m ² where it will occur within and within 100m of the estuary outside an urban area.

	<i>in respect of-</i> <i>(e) infrastructure or structures with a development footprint of 50 square metres or more-</i> <i>but excluding-</i> <i>(dd) where such development occurs within an urban area.</i>	
19	<i>The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, grit, pebbles or rock or more than 10 cubic metres from a watercourse;</i>	As the installation of the bulk water and sewer infrastructure will occur within watercourses (drainage lines), it will involve the excavation, removal and/or moving of material of a cumulative volume of more than 10m ³ from these watercourses.
19A	<i>The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from-</i> <i>(ii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater;</i>	As the installation of the bulk water and sewer pipeline will occur within the Keurbooms Estuarine Functional Zone and within 100m inland of it, it will involve the excavation, removal and/or moving of material of a cumulative volume of more than 5m ³ from the estuary.

Summary of Listed Activities contained in Listing Notice 3 triggered by the proposed upgrading

Activity No.	Activity Description	Discussion in terms of Applicability
2	<i>The development of reservoirs, excluding dams, with a capacity of more than 250 cubic metres</i> (i) Western Cape <i>(i) A protected area identified in terms of NEMPAA, excluding conservancies;</i> <i>(ii) In areas containing indigenous vegetation; or (iii) Inside urban areas:</i> <i>(aa) Areas zoned for use as public open space; or</i> <i>(bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose.</i>	The proposed Green Valley Command Reservoir will have a capacity of 4 Mℓ (4 000m³). Although the proposed reservoir is located inside the urban area (of Green Valley) as per the Bitou Municipality's Spatial Development Framework (SDF), the location is fairly close to the edge of the urban area of which DEA&DP might not deem this to conform to the definition of an 'urban area' as included in the regulations. This Listed Activity might therefore trigger due to the new reservoir's locality possibly falling outside an urban area in an area containing indigenous vegetation. Confirmation on the applicability of this Listed Activity will be sought from the DEA&DP.
12	<i>The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</i> (i) Western Cape <i>(i) Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</i> <i>(iii) Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas;</i> <i>(iv) On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or</i>	According to the National Vegetation Map (2018), the proposed water and sewer infrastructure fall within the Garden Route Shale Fynbos and Cape Lowland Alluvial vegetation types. Both vegetation types are classified as Endangered ecosystems. It is likely that more than 300m² of indigenous vegetation will be cleared where the infrastructure occurs within these endangered ecosystems. Also, the clearance of indigenous vegetation might exceed an area of 300m² where the majority of the pipelines fall outside the urban area within the Keurbooms Estuarine Functional Zone. The clearance of indigenous vegetation might also exceed an area of 300m² where the pipelines fall within protected areas (land zoned as conservation) in terms of the National Environmental Management Protected Areas Act (NEMPAA - 2003), i.e. Wadri Private Nature Reserve and Bobbejaansklou Private Nature Reserve.

14	<i>The development of -</i> <i>(ii) infrastructure or structures with a physical footprint of 10 square metres or more;</i> <i>where such development occurs -</i> <i>(a) within a watercourse;</i> <i>(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</i> (i) Western Cape <i>(i) Outside urban areas:</i> <i>(aa) A protected area identified in terms of NEMPAA, excluding conservancies;</i> <i>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i> <i>(gg) Core areas in biosphere reserves; or</i> <i>(hh) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined</i>	Where the proposed bulk water and sewer pipeline routes fall outside the urban edge as per the Bitou Municipality's Spatial Development Framework (SDF), the bulk water and bulk sewer pipelines will cross watercourses (drainage lines). As such, the upgrading works is likely to exceed a footprint of 10m² where it will occur within and within 32m of watercourses outside an urban area. Furthermore, a protected area (Keurbooms River Nature Reserve) in terms of NEMPAA (2003), Critical Biodiversity Areas (CBAs) in terms of the Western Cape Biodiversity Spatial Plan (2023), core area in the Garden Route Biosphere Reserve as well as the Keurbooms Estuarine Functional Zone (National Wetland Map, 2018) are all located within this affected footprint.
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b) National Water Act (Act 36 of 1998)

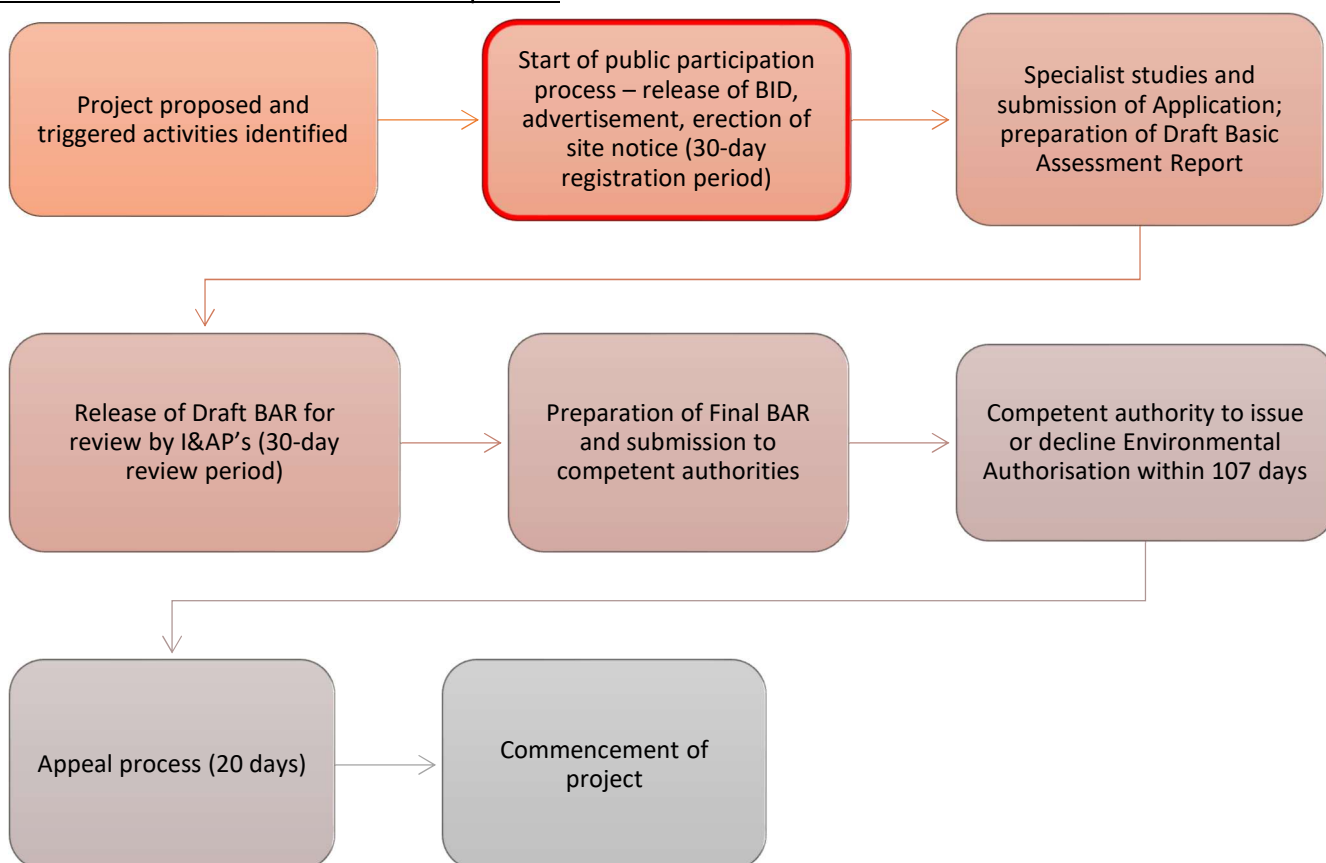
A Water Use Authorisation (WUA) is required for any construction activity within the extent of a watercourse (i.e., riparian and instream habitat, or within 100m of a watercourse or drainage line or the 1:100-year floodline; whichever is the greatest) or within 500m of a wetland, in terms of the following Section 21 (c) and/or (i) water uses of the National Water Act (Act 36 of 1998):

- *Section 21 (c) - impeding or diverting the flow of water in a watercourse;*
- *Section 21 (i) - altering the bed, banks, course, or characteristics of a watercourse.*

The installation of the bulk water and sewer pipelines will occur within and within 100m of watercourses (drainage lines), while both water and sewer pipelines and their associated infrastructure falls within and within close proximity to seep wetlands (National Wetland Map, 2018). It should, however, be noted that any water uses in terms of Section 21(c) or (i) of the NWA associated with the construction, installation and/or maintenance of any sewerage pipelines or pipelines carrying hazardous materials to and from the raw water and wastewater treatment works, are excluded from General Authorisation, as stipulated in Section 3 (e) of Government Notice 509 of 2016, and will thus require a full Water Use Licence (WUL).

Such licence will be obtained from the DWS via the electronic Water Use Licence Application and Authorisation System (e-WULAAS) prior to commencement of construction of those infrastructure components occurring within and within close proximity to surface water features. The WULA will be made in accordance with the provisions of Sections 40 and 41 of the Act and will run concurrently with the Basic Assessment process.

Where we are in the Basic Assessment process



Public Consultation

The aim of this Background Information Document (BID) is to provide stakeholders with information about this project, the process being followed and to provide for an opportunity to be involved in the Environmental Assessment process. Interested and Affected Parties (I&APs) may raise issues of concern or support. Results of the Environmental Assessment process will be submitted to the DEA&DP and the DWS to assist the competent authorities in making an informed decision regarding the EA and WULA. Additional project Information and documentation is available on the following website: www.easpe.co.za

Get involved as an I&AP

To register, please complete the attached I&AP Registration form and to the contact details below.

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**APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND WATER USE LICENCE:
PROPOSED UPGRADING OF BULK WATER AND SEWER INFRASTRUCTURE IN GREEN VALLEY, BITOU LOCAL
MUNICIPALITY, WESTERN CAPE**

INTERESTED & AFFECTED PARTIES REGISTRATION AND COMMENT FORM

PLEASE NOTE:

Registration as an Interested & Affected Party (I&AP) is required in order to receive further correspondence regarding the Environmental Authorisation Process

PERSONAL DETAILS

Date:	Preferred method of communication (email / SMS / fax / post):		
Can you communicate reliably via email?			
Title:	First Name:	Surname:	
Email:			
Telephone:		Fax:	
Organisation & Capacity (If Applicable):			
Physical Address:			
Town:		Code:	
Postal Address:			
Town:		Code:	
1. What is your primary area of interest with regards to the proposed project?			
2. Do you have any comments with regards to the proposed project?			
3. Are there any additional stakeholders who you think should be contacted regarding this project?			
If "YES", please list their names and contact details below:			

PLEASE ADD MORE PAGES IF NECESSARY

Please note that contact details for I&APs are not reflected in the I&AP database in any of our public documents, due to the Protection of Personal Information Act, (No. 2 of 2013) as gazetted on 1 July 2021. This information is available on request from the EAP or the relevant authorities, with a motivation for the need to gain access to such information and will not be distributed in the public domain or to any third party. Such a request will be dealt with on a case-to-case basis and consent for distribution will be obtained from the relevant party whose details have been requested. As a registered I&AP, all personal information is strictly for record keeping purposes and will be retained for the duration of the project.

I hereby give consent to the above processing of my personal information:

YES

NO

PLEASE DETACH AND RETURN TO:

EAP: Mr Kurt Wicht

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