



KWAZULU-NATAL PROVINCE
AGRICULTURE AND RURAL DEVELOPMENT
 REPUBLIC OF SOUTH AFRICA

INVITATION OF QUOTATION

THIS FORM SHOULD BE COMPLETED IN DETAIL AND SHOULD BE ACCOMPANIED BY A **VALID TAX COMPLIANCE STATUS PIN AND VALID BBBEE VERIFICATION CERTIFICATE/AFFIDAVIT**

QUOTATION NUMBER: R/S/2223/68	VALIDITY PERIOD OF QUOTATION..... Days (To be completed by the Supplier)
CLOSING DATE: 29/04/2022	CLOSING TIME: 11:00
DESCRIPTION(SPECIFICATION/S) OF ITEMS/ SERVICE REQUIRED: Appointment of a Specialist Engineer to Design a weir and Environmental Consultant to undertake Environmental Impact assessment for a weir to be Up-Graded at Ndumo-A	COMPANY NAME: TEL NO: FAX NO: CONTACT PERSON: CSD REG NUMBER MAAA.....
SITE BRIEFING DETAILS: DATE: 26/04/2022 VENUE: NDUMO VILLAGE, AT THE LIBRARY TIME: 11:00 AM	
DOES OFFER COMPLY WITH SPECIFICATION?	YES/NO (DELETE WHICH EVER IS NOT APPLICABLE)
DOES ARTICLE COMPLY WITH SABS SPECIFICATION? HAS IT BEEN INSPECTED BY SABS?	YES/NO YES/NO (DELETE WHICH EVER IS NOT APPLICABLE)
DELIVERY PERIOD AFTER INITIAL ORDER?	
IS THE PRICE FIRM	
WHERE ARE THE STOCK HELD? (PHYSICAL ADDRESS , PLEASE)	
QUOTATION PRICE INCLUDING VAT (VAT TO BE ADDED BY REGISTERED VAT VENDORS ONLY)	TOTAL: R
COMPANY OFFICIAL STAMP (COMPULSORY) SIGNATURE OF BIDDER DATE
Number of pages faxed back to the Department(Supplier to complete)
Quotation to be returned to: Department of Agriculture and Rural Development 1 Cedara Road, Cedara Supply Chain Management – Tender Box Tel. No: 033 343 8111	
NUMBER OF PAGES FAXED BACK TO THE DEPARTMENT BY THE SUPPLIER (Supplier to complete)
NB: ATTACHED SBD FORMS MUST BE COMPLETED IN FULL THIS QUOTATION COVER PAGE MUST BE COMPLETED AND RETURNED WITH ALL YOUR QUOTATION DOCUMENTS.	

COMPANY NAME : _____
 ADDRESS : _____
 CONTACT PERSON : _____
 CONTACT NUMBER : _____

LINE NO.	DESCRIPTION OR SPECIFICATION OF ITEM (Please be very specific and clear)	REQUIRED QUANTITY	UNIT PRICE EXCL. VAT		TOTAL PRICE	
			R	C	R	C
1.	Appointment of a consultant to design a weir, secure EIA and water use license	01				
* LABOUR (IF APPLICABLE)						
*DELIVERY (IF APPLICABLE)						
TOTAL						
*ONLY APPLICABLE TO VAT REGISTERED SUPPLIERS 15% VAT						
TOTAL PRICE						
CIDB Grading (if applicable)					N/A	

For Enquiry only


END-USER NAME : Teklit Onkay
 TELEPHONE NUMBER : 082 330 3647
 E-MAIL ADDRESS : teklit.onkay@kzndard.gov.za

PROPOSED DELIVERY DATE : 01/06/2022
 DELIVERY ADDRESS : Ndumo A
 LOCAL MUNICIPALITY : Jozini Municipality
 DISTRICT : Umkhanyakude District

*VAT Registration No. (Supplier) -----

Mark one Box (X)

COMPANY STAMP PRICES ARE VALID FOR 30 60 90 DAYS



SIGNATURE.....

DATE.....

**agriculture
& rural development**Department:
agriculture
& rural development
PROVINCE OF KWAZULU-NATAL

TERMS OF REFERENCE

Appointment of a Specialist Engineer to Design a weir and Environmental Consultant to undertake Environmental Impact assessment for a weir to be Up-Graded at Ndumo-A

1. BACKGROUND

The Ndum-A Irrigation Scheme, situated just outside Ndumo town came into operation in 1961. Water supply to the scheme was designed to abstract water from the Ingwavuma river. An earth off channel canal diverts water from the river to a balancing dam with in the scheme. The water level in igwavuma river diminished over the years as a result of new irrigation developments in Swaziland. The balancing dam constructed out of a concrete weir as the main structure is not functioning at this stage. The plan is to increase the concrete wall to at least 2m high concrete dam wall. The basin is flat and the through back up-stream will be ± 5 Kms.

In a wet season when the proposed dam is at its full capacity; about 120ha area will be underwater. The services of an environmental consultant would be required to undertake the required environmental investigations and secure an Environmental authorization for the construction to commence.

2. SPECIFIC OBJECTIVES

The objective of this appointment is to secure the services of a specialist service provider (SSP) (Civil Engineering Firm with a registered dam designer):

The appointed SSP is required to do the following

- Design upgrade of an existing concrete weir structure from 1m to 2m high.
- Solicit services of an Environmental Assessment Practitioner (EAP) who would Provide environmental studies, compile reports and secure environmental authorization;
- Apply for water use license on behalf of the communities/beneficiaries.

The appointment will be for a period of 3 Months.



3. IMPLEMENTATION PROPOSAL

In order to be considered as a SSP for this appointment the bidders will have to submit a **proposal**, providing details on, among others, the following:

- Type and number of specialists to be required, with qualifications (List of team members with a CV)
- Workload: List of sub tasks, with duration in hours, required for the Engineer and Environmental assessment practitioner.
- Resources allocation detailing who does what, when and at what hourly fee.
- Separate hourly fee for travelling (% of the professional hourly fee)
- The bidder would also need to provide a sound implementation plan with detailed methodology on reporting structures and decision taking models they would be using.
- Demonstration of competency to render the required service by providing individual or corporate registration certificates.
- Registration of the SSP Company with CESA and Registration of the EAP with the statutory or professional body governing Environmental Practitioners.

4. KEY FOCUS AREAS

4.1. STUDIES AND REQUIRED INVESTIGATIONS

- 4.1. Design Weir up-grade
 - The Dam is classified a category-2 dam.
 - Presence of a major road 300m below the weir make the dam to be classified as category-2. Services of a specialist dam designer is required.
 - The existing weir is 70m long X 1m high X 0.8m wide at the crest.
 - The proposed up-grade would be to increase the weir height to 2m.
 - The designer would also have to re-configure the wing walls, stealing basin e.t.c
 - Detailed survey of the weir and the earth embankment (±3kms) would be required to ascertain the effect of raising the dam wall.
 - Present a Detailed drawings, specification and bill of quantities in a form of a tender document to the Department.
- 4.2. Environmental Impact assessment
 - Biodiversity studies;
 - Institutional cooperative governance training;
 - Consultations with entity who runs the scheme;

NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) shall be adhered before any infrastructure construction commence.

According to the National listing of activities, which require Environmental Impact Assessment (EIA). Weir construction is a listed activity under Notice 2 and the process is described in regulations 26-35 of NEMA act 107 of 1998. The



responsible authority would be KZN Department of Economic Development, tourism and Environmental Affairs and Tourism (EDTEA).

The purpose of this Notice is to identify activities that would require an environmental authorisation prior to the commencement of that activity and to identify competent authorities in terms of sections 24(2) and 24D of the National Environmental Management Act, 1998.

The investigation, assessment and communication of the potential impact of activities must follow the procedure as prescribed in regulations 26 to 35 of the Environmental Impact Assessment Regulations

Activity 19: The construction of a dam, where the highest part of the dam wall, as measured from the outside toe of the wall to the highest part of the wall, is 5 metres or higher or where the high-water mark of the dam covers an area of 10 hectares or more

- 4.3. Application of a water use license on behalf of the beneficiaries
 - o Undertake a water license application for Ndumo-A irrigation scheme as a new or change of abstraction point for the existing license.
 - o Engage continuously with stakeholders beneficiaries and Departmental Engineer responsible for the scheme.
 - o Provide regular feedback with regards to the status of the respective application, as well as the likelihood of its success;
- 4.4. General.
 - o Where additional costs may be incurred over and above those included in the successful bid, to advise timeously and substantively of these costs associated with the respective activity before these costs are incurred;
 - o Ensure the Department is notified of any issues or problems with regards to either activity, what has caused it and what is required to remedy it;
 - o Present the completed process or application in a formal report to the Department.

5. KEY PROJECT TEAM (Specialist Service Provider Team)

- 5.1. Civil / Agricultural Engineer (Specialist Dam designer)
- 5.2. Environmental Assessment Practitioner (EAP)



6. SCOPE OF SERVICES

This appointment will cover but not limited to the following:

6.1. Civil / Agricultural Engineer (Dam Designer)

6.1.1. Perform the required studies and investigations.

- Visits project as per his/her proposal to do the required investigation
- The investigations would include: Position of the weir, catchment area and an off channel earth canal)
- Survey the infrastructure (weir, balancing dam and the embankment/road)
- Procure the Services of an Environmental Assessment Practitioner

6.1.2. Design work.

- Provide different options as preliminary design; indicating cost and capacity of the dam.
- Detailed Design work
- Compile detailed bill of quantities and provide cost estimates
- Compile drawings, specification and Tender Document.
- Provide water holding capacity of the dam before and after upgrade of the weir height.

6.2. Environmental Assessment Practitioner

6.2.1. Perform the required studies and secure Environmental authorization.

- Visits project as per his/her proposal to do the required investigation/environmental studies.
- Attends Project steering committee meetings once every 6 weeks
- Provides coordinating role.
- Compile Reports to be submitted to KZN DARD
- Apply EIA with Department of Environmental affairs with the relevant reports.

6.2.2. Apply for water use license on be-half of the beneficiaries and secure the required license.

- Compile the relevant forms to apply for water use license through Department of water and Sanitation.



7. COMPETENCY AND EXPERIENCE

7.1. Civil / Agricultural Engineer (Dam Designer)

The SSP should have ample experience with:

- Dam design (Flood calculations, spillway options, concrete works e.t.c)
- Hydrology
- The proposed weir is Category-2 dam, experience and expertise of Category-2 dam designer is required.
- The consulting Engineer should be a registered Professional Engineer with the Engineering Council of South Africa (ECSA)

7.2. Environmental assessment Practitioner (EAP)

The SSP should have ample experience with:

- Environmental investigations
- Biodiversity
- Public Participation (Consulting the public who are residing in the area)
- The EAP should be registered with the Environmental assessment practitioners of South Africa (EAPSA).

8. PROFESSIONAL FEES

8.1 Workload

The estimated **workload** required for the anticipated professional fees provided under table-1 below serves as a guideline for bidding purposes. Only actual hours made can be billed. The rates quoted for professional fees may be used if the appointment were to be extended due to additional work after the estimated completion date. No escalation clause will be applied. Only actual hours worked can be billed. Detailed invoices to be submitted indicating such hours. The weighting of the various work elements is as follows:



TABLE 1: ESTIMATED WORKLOAD			
No.	Work element	Hours	TOTAL
1	Dam Designer specialist team (surveyor) Surveyor <ul style="list-style-type: none"> Survey of the weir, roads and the dam basin. 	10 hrs	
2	Dam Designer specialist team (Engineer) Engineer <ul style="list-style-type: none"> Provider Preliminary design options and Cost estimates Present preliminary design to Departmental Engineers. 	10hrs	
3	Dam Designer specialist team (Engineer) Engineer <ul style="list-style-type: none"> Detailed design work Compile drawings, BOQ and tender Documents 	100hrs	
4	Environmental assessment Practitioner (EAP) <ul style="list-style-type: none"> Detailed investigation of ±150 ha area Compiling List of indigenous plants Endangered animal species Wet lands and water bodies 	120 hrs	
5	EAP <ul style="list-style-type: none"> Stakeholder Consultations Houses to house awareness engagements. 	10hrs	
6	EAP <ul style="list-style-type: none"> Compile detailed reports Reporting to the relevant Departments Apply and Secure Environmental authorizations Apply and Secure water use license 	50hrs	

8.2. Disbursements

Accommodation, if required, shall be of 3 Star or equivalent rating. Claims must be supported by an invoice provided by the establishment providing the accommodation. Other disbursements such as telephone, stationery etc. to be claimed at cost. Provide for an amount of R 20,000 (including a 10% handling fee) for this item in your quote. All quotations and claims must include VAT. The Bidders main quote table is presented on page 8.



8.3 Ancillary services, materials and equipment

A fixed amount of R 150,000 has been set aside for Ancillary studies: unforeseen additional expenditure not covered in the original contract due to circumstances that have occurred after commencement of the works. Any expenditure against this item must be agreed upon in advance by the Department. Payment will be on the basis of proven cost plus mark up. Service provider to submit his/her mark-up % under item 5 of the main bid table (see next page).

8.4 Travelling

Use rates published by the Department of Transport for June 2022 as a guideline for quotation purposes.

TABLE 2: CALCULATION TABLE FOR TRAVELING COMPONENT (ITEM 2 ON MAIN BID TABLE).
Transfer totals to Table 3 (Main bid table) on page 8.

Vehicle No.	Staff category	Mileage ¹ (km)	Rates (R/km)	TOTAL (transfer to bid table page 8)
Vehicle 1	Design Engineer (3 Trips at 1000Kms)	3000	R	R
Vehicle 2	Surveyor (3 trips at 1000km)	3000	R	R
Vehicle 3	Environmental Assessment practitioner (5 trips at 1000km)	5000	R	R
TOTAL		9000 km		R
<i>1 NO ceiling will be applied to the individual mileages during implementation as long as the total expenditure does not exceed the total bid amount for Traveling.</i>				

Note that the above travelling provision is an estimate for quotation purposes and that claims will be paid based on actual km's travelled and must be supported with copies of the vehicles logbook. Specialists are supposed to share vehicles wherever possible. The claimed mileage may exceed the amount provided for within reason after prior approval by the Department's engineer.

**TABLE 3: MAIN BID TABLE**

ITEM			VALUE (ex VAT)
1) Disbursements	Quantity	Rates	R 50,000
2) Travelling			
<u>Vehicle 1: Design Engineer</u>	Veh1Kms	R/Kms.....	R.....
<u>Vehicle 2: Surveyor</u>	Veh 2.....Kms	R/kms.....	R.....
<u>Vehicle 3: Environmental Assessment Practitioner</u>	Veh3.....Kms	R/Kms.....	R.....
			Total travelling cost: R.....
3) Professional fees:			
1) Design Engineer	Hrs.....	R/hr.....	R.....
4) Professional fees:			
1) Surveyor	Hrs.....	R/hr.....	R.....
Mark up on item 4.....% >>>		%	R.....
5) Professional fees:			
1) Environmental Assessment Practitioner	Hrs.....	R/hr.....	R.....
Mark up on item 5.....% >>>		%	R.....
6) Ancillary services, materials & equipment			R 150,000
Mark up on item 6.....% >>>		%	R.....
TOTAL EXCLUDING VAT			R.....
VAT			R.....
TOTAL			R.....

Note that all items must be reflected in your quote. Changes to the format or amounts specified will invalidate your bid