



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

**KWAZULU-NATAL DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT**

**QUOTATION No: R/N/2223/126**

**DESCRIPTION OF SERVICE:**

**SITING, DRILLING AND EQUIPPING WINDMILL POWERED BOREHOLE AT VELANHLANHLA PROJECT IN UMZINYATHI DISTRICT MUNICIPALITY**

**NAME OF BIDDER:** \_\_\_\_\_

**Mandatory Requirements**

1. The service provider to submit a Valid proof of registration with the South African Council for Natural Scientific Professions (SACNASP), or confirmation letter from registered consultant/ organization to be used on the project.
2. Only local content produced or manufactured steel products and components for construction (100%) will be accepted.
3. CIDB grading 1CE/ PE.

**Compulsory briefing session**

Venue	Department of Agriculture and Rural Development Nquthu Local Office.
Date	11-05-2022
Time	10:00

**Return of Bid:**

Bids must be deposited in the bid box situated at Department of Agriculture and Rural Development, Supply Chain Management, 1 Cedara Road, Cedara, 3200 or send by post to The Director: Supply Chain Management, Private Bag X9059, Pietermaritzburg, 3200.

Tel: (033) 355 9369 before 11:00 am on the closing date: **20 May 2022**

**Issued by:**

The Department of Agriculture and Rural Development

1 Cedara Road

Cedara

3200

## PART A INVITATION TO BID

<b>YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/PUBLIC ENTITY)</b>					
BID NUMBER:	R/S/2223/126	CLOSING DATE:	20/05/2022	CLOSING TIME:	11:00 AM
DESCRIPTION	Siting, drilling and equipping windmill powered borehole at Velanhlanhla project in UMzinyathi District Municipality				
<b>BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)</b>					
Bid must be deposited in the bid box situated at Department of Agriculture and Rural Development					
Supply Chain Management					
1 Cedara Road					
Cedara, 3200					
<b>BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO</b>			<b>TECHNICAL ENQUIRIES MAY BE DIRECTED TO:</b>		
CONTACT PERSON	Ms Nompumelelo Dladla		CONTACT PERSON	Mr T.K Onkay	
TELEPHONE NUMBER	033 - 355 9369		TELEPHONE NUMBER	0823303647	
FACSIMILE NUMBER	n/a		FACSIMILE NUMBER	n/a	
E-MAIL ADDRESS	Nompumelelo.dladla@kzndard.gov.za		E-MAIL ADDRESS	Teklit.onkay@kzndard.gov.za	
<b>SUPPLIER INFORMATION</b>					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER THE QUESTIONNAIRE BELOW ]	
<b>QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS</b>					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE A BRANCH IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.					

**PART B**  
**TERMS AND CONDITIONS FOR BIDDING**

<b>1. BID SUBMISSION:</b>
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).
<b>2. TAX COMPLIANCE REQUIREMENTS</b>
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

**NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.**

SIGNATURE OF BIDDER: .....

CAPACITY UNDER WHICH THIS BID IS SIGNED: .....  
(Proof of authority must be submitted e.g. company resolution)

DATE: .....

**BIDDER'S DISCLOSURE**

**1. PURPOSE OF THE FORM**

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

**2. Bidder's declaration**

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest<sup>1</sup> in the enterprise, employed by the state? **YES/NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:  
.....  
.....

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:  
.....  
.....

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<sup>1</sup> the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

**3 DECLARATION**

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium<sup>2</sup> will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF

PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND

COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS

DECLARATION PROVE TO BE FALSE.

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of bid

<sup>2</sup> Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

## DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This Standard Bidding Document (SBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

### 1. General Conditions

- 1.1. Preferential Procurement Regulations, 2017 (Regulation 8) make provision for the promotion of local production and content.
- 1.2. Regulation 8. (2) prescribes that in the case of designated sectors, organs of state must advertise such tenders with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for tenders referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

x is the imported content in Rand

y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) on the date of advertisement of the bid as indicated in paragraph 3.1 below.

**The SABS approved technical specification number SATS 1286:2011 is accessible on [http://www.thedti.gov.za/industrial development/ip.jsp](http://www.thedti.gov.za/industrial%20development/ip.jsp) at no cost.**

- 1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation;

2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
_____	_____ %
_____	_____ %
_____	_____ %

3. Does any portion of the goods or services offered have any imported content?  
(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
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- 3.1. If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on [www.resbank.co.za](http://www.resbank.co.za)

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

<b>Currency</b>	<b>Rates of exchange</b>
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

4. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the AO/AA provide directives in this regard.

**LOCAL CONTENT DECLARATION**  
**(REFER TO ANNEX B OF SATS 1286:2011)**

**LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)**

**IN RESPECT OF BID NO. ....**

**ISSUED BY: (Procurement Authority / Name of Institution):**  
 .....

**NB**

- 1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- 2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on [http://www.thedti.gov.za/industrial\\_development/ip.jsp](http://www.thedti.gov.za/industrial_development/ip.jsp). Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, ..... (full names),  
 do hereby declare, in my capacity as .....  
 of .....(name of bidder entity), the following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that:
  - (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (c) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

**If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above.**

**The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E.**

- (d) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not



verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Policy Framework Act (PPFA), 2000 (Act No. 5 of 2000).

**SIGNATURE:** \_\_\_\_\_

**WITNESS No. 1** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**WITNESS No. 2** \_\_\_\_\_

**DATE:** \_\_\_\_\_

SATS 1286.2011

Annex C

Local Content Declaration - Summary Schedule

(C1) Tender No. \_\_\_\_\_  
 (C2) Tender description: \_\_\_\_\_  
 (C3) Designated product(s) \_\_\_\_\_  
 (C4) Tender Authority: \_\_\_\_\_  
 (C5) Tendering Entity name: \_\_\_\_\_  
 (C6) Tender Exchange Rate: Pula  EU  GBP   
 (C7) Specified local content % \_\_\_\_\_

**(Notes: VAT to be excluded from all calculations)**

Tender item no's	List of Items	Calculation of local content						Tender summary			
		Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)

Signature of tenderer from Annex B: \_\_\_\_\_  
 Date: \_\_\_\_\_  
**(C20) Total tender value** \_\_\_\_\_  
**(C21) Total Exempt imported content** \_\_\_\_\_  
**(C22) Total Tender value net of exempt imported content** \_\_\_\_\_  
**(C23) Total imported content** \_\_\_\_\_  
**(C24) Total local content** \_\_\_\_\_  
**(C25) Average local content % of tender** \_\_\_\_\_

**Annex D**

**Imported Content Declaration - Supporting Schedule to Annex C**

(D1) Tender No.	
(D2) Tender description:	
(D3) Designated Products:	
(D4) Tender Authority:	
(D5) Tendering Entity name:	
(D6) Tender Exchange Rate:	Pula

**Note: VAT to be excluded from all calculations**

EU R 9.00      GBP R 12.00

**A. Exempted imported content**

Calculation of imported content										Summary	
Tender item no's	Description of Imported content	Local supplier	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Exchange Rate	Local value of Imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Exempted Imported value
(D7)	(D8)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)
<b>(D19) Total exempt imported value</b>											

This total must correspond with Annex C - C.21

**B. Imported directly by the Tenderer**

Calculation of imported content										Summary	
Tender item no's	Description of Imported content	Unit of measure	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of Imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Total Imported value
(D20)	(D21)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)
<b>(D32) Total Imported value by tenderer</b>											

(D32) Total Imported value by tenderer

**C. Imported by a 3rd party and supplied to the Tenderer**

Calculation of imported content										Summary	
Description of Imported content	Unit of measure	Local supplier	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of Imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Quantity Imported	Total Imported value
(D33)	(D34)	(D35)	(D36)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
<b>(D45) Total Imported value by 3rd party</b>											

(D45) Total Imported value by 3rd party

**D. Other foreign currency payments**

Calculation of foreign currency payments					Summary of payments	
Type of payment	Local supplier making the payment	Overseas beneficiary	Foreign currency value paid	Tender Rate of Exchange	Local value of payments	(D51)
(D46)	(D47)	(D48)	(D49)	(D50)		
<b>(D52) Total of foreign currency payments declared by tenderer and/or 3rd party</b>						

(D52) Total of foreign currency payments declared by tenderer and/or 3rd party

Signature of tenderer from Annex B

Date: \_\_\_\_\_

(D53) Total of imported content & foreign currency payments - (D32), (D45) & (D52) above

This total must correspond with Annex C - C.23

# Annex E

SATS 1286.2011

## Local Content Declaration - Supporting Schedule to Annex C

<b>(E1)</b>	<b>Tender No.</b>	<input type="text"/>
<b>(E2)</b>	<b>Tender description:</b>	<input type="text"/>
<b>(E3)</b>	<b>Designated products:</b>	<input type="text"/>
<b>(E4)</b>	<b>Tender Authority:</b>	<input type="text"/>
<b>(E5)</b>	<b>Tendering Entity name:</b>	<input type="text"/>

**Note: VAT to be excluded from all calculations**

Local Products (Goods, Services and Works)	Description of items purchased	Local suppliers	Value
	(E6)	(E7)	(E8)
<b>(E9) Total local products (Goods, Services and Works)</b>			

<b>(E10)</b>	<b>Manpower costs</b>	(Tenderer's manpower cost)	<input type="text"/>
<b>(E11)</b>	<b>Factory overheads</b>	(Rental, depreciation & amortisation, utility costs, consumables etc.)	<input type="text"/>
<b>(E12)</b>	<b>Administration overheads and mark-up</b>	(Marketing, insurance, financing, interest etc.)	<input type="text"/>
<b>(E13) Total local content</b>			<input type="text"/>

This total must correspond with Annex C - C24

Signature of tenderer from Annex B

Date: \_\_\_\_\_

CONTRACT FORM - PURCHASE OF GOODS/WORKS

THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SUCCESSFUL BIDDER (PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SUCCESSFUL BIDDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.

PART 1 (TO BE FILLED IN BY THE BIDDER)

1. I hereby undertake to supply all or any of the goods and/or works described in the attached bidding documents to (name of institution)..... in accordance with the requirements and specifications stipulated in bid number..... at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the purchaser during the validity period indicated and calculated from the closing time of bid.
2. The following documents shall be deemed to form and be read and construed as part of this agreement:
  - (i) Bidding documents, viz
    - Invitation to bid;
    - Tax clearance certificate;
    - Pricing schedule(s);
    - Technical Specification(s);
    - Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2011;
    - Declaration of interest;
    - Declaration of bidder's past SCM practices;
    - Certificate of Independent Bid Determination
    - Special Conditions of Contract;
  - (ii) General Conditions of Contract; and
  - (iii) Other (specify)
3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the goods and/or works specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.
4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfillment of this contract.
5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.
6. I confirm that I am duly authorised to sign this contract.

NAME (PRINT) .....

CAPACITY .....

SIGNATURE .....

NAME OF FIRM .....

DATE .....

<b>WITNESSES</b>	
1	.....
2.	.....
---	---

CONTRACT FORM - PURCHASE OF GOODS/WORKS

PART 2 (TO BE FILLED IN BY THE PURCHASER)

- 1. I..... in my capacity as..... accept your bid under reference number .....dated.....for the supply of goods/works indicated hereunder and/or further specified in the annexure(s).
- 2. An official order indicating delivery instructions is forthcoming.
- 3. I undertake to make payment for the goods/works delivered in accordance with the terms and conditions of the contract, within 30 (thirty) days after receipt of an invoice accompanied by the delivery note.

ITEM NO.	PRICE (ALL APPLICABLE TAXES INCLUDED)	BRAND	DELIVERY PERIOD	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)

4. I confirm that I am duly authorised to sign this contract.

SIGNED AT .....ON.....

NAME (PRINT) .....

SIGNATURE .....

OFFICIAL STAMP

**WITNESSES**

1. ....

2. ....

DATE .....



# SITING, DRILLING, TESTING, EQUIPPING OF A BOREHOLE – WITH WINDMILL

Dec 2021

**DISTRICT**

uMzinyathi

**NAME OF BOREHOLE**

Velanhlanhla

**CO – ORDINATES**

28°11'40" S

30°42'32" E

*This document contains:*

<b>No.</b>	<b>Section</b>	<b>Pages</b>
1	A - Project Particulars	2
2	B – General Conditions of Contract	3-6
3	C - Project Technical Specifications	7-10
4	Bill of Quantities	11
5	ANNEXURE A: Work Phase Schedule	
6	ANNEXURE B : Additional Information	

## A - PROJECT PARTICULARS

### 1) PROJECT DESCRIPTION / BACKGROUND

The project covers the siting, drilling and equipping of ...1... Boreholes

### 2) LOCATION

#	NAME OF PROJECT	DISTRICT	PROJECT DISTANCE (Km's) FROM NEAREST TOWN	NAME OF NEAREST TOWN	PROJECT CO_ORDINATES (if available)
2	Velanhlanhla	uMzinyathi	53Kms	Dundee	28°11'40" S & 30°42'32" E

For exact location, see attached map(s) or directions to be provided at site briefing.

### 3) GENERAL SCOPE OF WORKS

The contract covers the supply of all professional services, drilling, testing and equipping of borehole. The following scope of works for the drilling and equipping of **boreholes** is applicable with the expected deliverables and must be in accordance with "MINIMUM STANDARDS AND GUIDELINES FOR GROUNDWATER RESOURCE DEVELOPMENT FOR THE COMMUNITY WATER SUPPLY AND SANITATION PROGRAMME, DWAF, 1997": Details of these works are specified in *Section C: Project Technical Specifications*.

- **Desktop Assessment:** The co-ordinates of the boreholes must be plotted on GIS map coverage and assessed for the probability of ground water. Geology, hydrogeology and existing borehole information needs to be presented.
- **Geophysical Assessment:** The physical site must be surveyed with a Magnetometer and other survey equipment to determine the apparent conductivity of the subsurface. The geophysical data must provide a clear indication of groundwater potential. For production borehole siting, an alternate target must be provided.
- **Drilling:** The appropriate drilling must be done according to the ground conditions and to the appropriate depth based on the geophysical method employed and the geology intercepted during the drilling. The Drilling method must be suited to the geological environment i.e. Air Percussion, Mud Rotary Percussion, Symetrix, Odex
- **Yield Testing and Determination of Sustainable Yield:** Boreholes yielding > 0.3 L/s must be subjected to a SDT (4 steps of 1 hr duration and maximum of 4 hours recovery or 95% recovered) and a CDT (24 hr constant test and maximum of 24 hr recovery or 95% recovered). The determination of the sustainable yield must be calculated with scientific methods that are proven in industry.
- **Sampling and water quality analysis:** It will be acceptable to collect a water sample during the CDT discharge test when the borehole is adequately purged, with sample bottles supplied by an accredited laboratory. The water sample will be analysed for SANS 241 (2015) Drinking Water Standards (Abbreviated Analysis), which includes bacteriological analysis. This means that water samples will need to be received by the laboratory within 24 hrs of collection.
- **Equipping** - The borehole is to be equipped with a quality SABS approved pumps carrying a minimum of a 12 month quality guarantee. The pump specifications will be guided by the sustainable yield, hydraulic head conditions and the water requirements at the site.



- **Reporting** - All technical information and results obtained and derived during the course of the investigation needs to be compiled into a comprehensive scientific report.
- **Strength of concrete** - 20MPa for the tank stand footings, concrete bases.
- **Tank Stand** - Galvanised 3m tank stand to carry a 5000L JoJo Water Tank.
- **Water supply** - Tap stand with stand encased in concrete and pvc piping, secured to concrete block 1.2m X 1m X 200mm with adequate gradient to allow for runoff away from the water collection point.
- **Windmill** - borehole to be powered by a wind mill which includes: erecting the windmill tower, pipes, shaft, socket, wheels, brake cables, turbex rods, rod protectors clinders, wheels, gearbox, Mono pump e.t.c

### 1) COMPETENCY

#### COMPETENCY OF THE CONSULTANT / ORGANIZATION

The Contractor is expected to acquire the services of geohydrological consultant / organization which must conform to the standards detailed in the "Minimum Standards and Guidelines for Groundwater Resource Development for the Community Water Supply and Sanitation Programme" by the Department of Water Affairs and Forestry, 1997. The consultant / organization must be registered and recognized for their proficiency in hydro-geological services. The following must be submitted with the tender submission:

- *Valid proof of registration with the South African Council for Natural Scientific Professions (SACNASP) must be attached.*
- *Registered and paid up members of the Ground-water Association of Kwa-Zulu Natal must supply a copy of their membership details.*
- *If the contractor is not in position to submit the above compulsory registration documents with the tender, must submit confirmation letter from registered consultant / organization to be used on the project. The letter should be on the letter head of the consultant / organization. It will be expected that the contractor must submit compulsory registration documents before work can commence.*

The consultant / organization competence and reliability will be evaluated according to the proof of previous works indicated in Annexure B.

#### COMPETENCY OF THE CONTRACTOR

### 2) CONTRACTOR TO PROVIDE EVERYTHING NECESSARY

The Contractor shall provide everything necessary for the proper execution of the Works according to the true intent and meaning of the Drawings and Specification taken together. The Contractor shall provide without extra charge all assistance and everything reasonably necessary for proving the quality of work done as may be required by the Engineer.

### 3) SUB-CONTRACTED WORK

The Appointed Contractor shall **not sub-contract the whole** of the contract. In case the Contractor decides to subcontract part of the work he shall obtain written consent of the Engineer. Any such consent shall not relieve the Contractor from any liability or obligation under the contract and he shall be fully liable for the acts, defaults and neglects of any sub-contractor, his agent or employees. The Contractor remains fully responsible and accountable for all aspects of the work (quality, timelines and budget).

It is recommended that the appointed contractor sub-contract part of the job to local sub-contractors. The following shall be considered for sub-contracting in all the boreholes.

- Supply of Jojo tanks
- Supply of 3m tank stands and installation of the tank stands according to the supplier's recommendation. Certificate of compliance or design of the tank stands would be required.
- Concrete works (concrete footing for the tank stands and tap base)
- Supply and install 32mm pipe lines

#### 4) VARIATIONS / 'AS BUILT' DETAILS

No variations or alterations may be made without the prior approval of the Regional Engineer. As the work progresses, the Contractor shall keep full records of all amendments to and deviations from the specifications as issued to the Contractor at the start of the contract. These details will, where appropriate, be noted on the specification. All alterations will be deemed to have a zero additional cost implication. If any additional works are required that have an additional cost implication then these must first be authorized in writing by the Regional Engineer. Refer to Clause 41: Ancillary Materials, Services And Equipment.

#### 5) VERIFICATION OF EXPERIENCE

The Bidder will be required to produce adequate and sufficient references to enable the Department to inspect previously completed projects and assess the capacity of the Bidder. The Bidder shall provide such information in **Annexure B - Additional Information**.

#### **PRICING AND PAYMENT STRUCTURES**

#### 6) FIXED RATE CONTRACT

The contract shall **not** be subject to contract rate (unit price) adjustment. Bidders must therefore allow for increased cost for the contract duration, including possible delays in awarding the Bid in accordance with the validity period. The tendered rates will be applied for calculating the payment value by using the actual quantities as measured and certified by the engineer at completion of the work.

#### 7) PRICING

The Bidders will be required to Bid for **all** services, products and commissioning as specified in this document and associated plans. Partial bids will not be accepted. **If a Bidder does not Bid on all items, his/her Bid may be rejected.**

All prices tendered are to be in South African currency. All prices must **exclude** Vat. Vat of 15% must be added in the pricing summary.

- All items as described in the project specification are to be priced in full.
- Prices to exclude VAT.
- ***The costs for travel, accommodation, all associated disbursements and labour must be included in the rates/amounts tendered for the all the works required.***
- Transport/Delivery costs must be included in the pricing. It must not be a separate item.
- VAT must be filled in as the sub total followed by the complete price for the entire project.
- ***The tendered price must have your company stamp, date and be signed by an authorised person.***

#### 8) QUANTITIES OF WORK

The Contractor shall receive payment only for the works actually executed and approved by the Engineer. No claim for an extra or for any addition, or for any variation shall be entertained unless such extra, addition or variation was ordered in writing by the Head of Department.

#### 9) PROGRESS PAYMENTS

- .1 The contractor may submit claims for progress payments only on completion of the hereunder listed levels. Payment shall only be paid for claims, which are commensurate with the works actually executed and complete. NOTE: Payment will only be made against the construction progress as pertaining to built items. Movable items and materials on site are excluded from progress payments until they have been fully installed, fitted or built up.
- .2 If any item or part of an item in an invoice is disputed by the Engineer, the Engineer shall give notice of such with reasons.

- .3 The contractor shall be paid in monthly instalments up to a maximum of five (5). Refer to **ANNEXURE B: Work Phase Schedule for Drilling and Equipping of a Borehole** for the values of each phase. Please note these values are primarily estimates of what part the work phase constitutes of the entire project, and do NOT reflect the exact amounts paid per payment. Usually payment certificates reflect work done in several work phases, which have not necessarily all been completed. Verification of the % complete will be at the sole discretion of the Engineer.
- .4 ANNEXURE F presents a **pro forma payment certificate**. This will be used in conjunction with ANNEXURE B (Work phase schedule). The latter provides an approximate maximum to prevent over-payment of items that have been clearly over-priced.
- .5 Part payments will be made after the Department has approved the completion of each construction phase.

#### 10) DEFECT LIABILITY PERIOD

The contractor shall unconditionally guarantee all materials, workmanship related to the works for a minimum period of twelve (12) months. The guarantee shall cover any defects due to inferior materials and/or workmanship of the Contractor, or any of his sub-contractors, fair wear and tear excepted. The Contractor shall repair, remedy or replace any such defects, part or complete works without delay and at his own cost.

If any defects are not remedied within the period specified by the Head of Department, then the Head of Department shall have such defect repaired, at the risk and cost to the appointed Contractor, by another Contractor whom the Head of Department deems to be proficient in the work without prejudice to any rights the Head of Department has against the defaulting contractor. The Head of Department will give written notice to the Contractor of such instances where he appoints another Contractor to remedy defects in the works.

#### 11) SERVICE LEVEL AGREEMENT

The successful Bidder and the Department will sign a Service Level Agreement prior to commencement of works. A proposed schedule of work must be provided by the contractor for the approval of the Engineer within 2 (two) weeks of receiving notification of a successful bid.

#### 12) COMMENCEMENT OF THE WORKS

The Department will organize a site hand-over to the contractor and consultant who will then be introduced to the project stakeholders and participants. The site shall only be accessible to consultant, contractor staff and Departmental representatives while work is in progress. If this contract entails the siting, drilling, testing and equipping of more than one borehole, work on more than one site should commence simultaneously. The site(s) will be handed back after practical completion. Site establishment must start **within one week**, and the actual works **within one week** after hand-over of the site, provided that an official order has been issued and that no exceptional circumstances such as inclement weather or other outside the control of either party to the contract prevail. In the case the work has not commenced within three weeks of the hand-over and no extenuating circumstances for the delay can be provided, the Department reserves itself the right to cancel the contract and appoint one of the other contractors that have bid for the works.

#### 13) COMPLETION OF THE WORKS

The project is to be completed **within 3 months of award of Bid**, provided that the order was received within two weeks after award of the Bid. In case of the drilling and equipping of more than one borehole, an extended period should be agreed upon, which will be part of the Implementation plan/Work schedule as drawn up by the contractor before commencement of the works and included in the Service Level Agreements.

#### 14) RATE OF PROGRESS

The Works shall be completed within the time period indicated on the official order form.

If the Works are delayed by cessation of work by any workmen, inclement weather, or by any omissions, additions, substitutions or variations of the Works, or of any items of work, labour or material, or other causes beyond the Contractor's control then the Contractor shall have the right within twenty-one days of any such cause of delay arising, to apply in writing to the Department to extend the date of completion, stating the cause of delay and period of extension applied for. The Department upon receipt of such written application may by order in writing extend such date of completion by a period to be determined, or may refuse to extend such date of completion, or may postpone giving a decision upon such application until completion of the Contract period set out in sub-clause (a) of this clause. The date of completion will be extended only to the extent approved by the Department.

Should the Contractor fail to apply in writing for an extension within the time set out above, or should the Department refuse to grant any extension in writing, then the Contract period provided by sub-clause (a) of this clause shall not be exceeded.

When the Works are completed the Department will give a completion certificate and the date of such certificate shall be the date of commencement of the guarantee period.

## **15) TIME TO BE OF THE ESSENCE**

Time shall be considered as the essence of the Contract. If, therefore, the Contractor fails to commence work or the Works or to proceed with and complete the Works in compliance with the projected timeframes, then the Head of Department shall have the right in his/her absolute discretion to adopt and exercise all or any of the following courses wholly or partly, viz: -

- To direct the Contractor, in writing, on any day named therein to suspend and discontinue the execution of the Works, and to withdraw himself and his workmen from the said Site or Sites, and thereupon: -
- To make any Contract or Contracts by calling for Bids or otherwise with any other Contractor or Contractors for the completion of the Works, or any part thereof, at such times and upon such terms as to the Department shall deem best.
- To provide such number of men, or purchase such materials, or both provide the men and purchase the materials as to him shall seem fit and proceed with and complete the said Works.

In relation to the foregoing provisions the Department shall charge any sums of money which may be paid by the Department for completing the said Contract against the Contractor and if such amount shall exceed this Contract, then the Department shall have the right to recover such excess or any balance thereof from the Contractor by legal proceedings.

## **16) WORK SCHEDULE & PROGRESS PAYMENTS**

The contractor is to supply a Gantt chart with the proposed times of completion of each phase. The progress payments suggested in **ANNEXURE B** serve as a guideline for part payments. However, the contractor, in consultation with the Engineer, may deviate from this as long as the claim does not exceed the actual progress made.

## **17) CIDB Registration**

It is a minimum requirement that all tenderers shall be registered with the Construction Industry Development Board in a designation of higher, or equal, to Class of Construction Work grading of 1CE or 1PE.

All Tenderers must attach proof CIDB in order to be evaluated for this requirement.

## C) PROJECT TECHNICAL SPECIFICATIONS

### 1) SPECIFIC SCOPE OF WORKS

To Facilitate the Siting, Drilling, Testing and Equipping of boreholes as indicated in Section A: Project Particulars, clause 1.

a. Geohydrological Desktop study, Geophysical survey (instruments) and selection of drilling target.

- Geohydrological services are to conform to the standards detailed in the “Minimum Standards and Guidelines for Groundwater Development for the Community Water Supply and Sanitation Programme” by the Department of Water Affairs and Forestry 1997. The consultant / organization must be recognized for their proficiency in hydro-geological services.
- Study and interpretation of published geological and hydro-geological maps, aerial photography and ortho-photos (if available)
- Interrogation of available existing databases - National Groundwater Archive (NGA) and the Groundwater Resource Information Project (GRIP) and WARMS
- The siting of a potential groundwater borehole position must be preceded by the pre-feasibility desktop study to maximise the success rate within the most cost effective and productive manner. Drilling targets need to be identified based on scientific methods and offering the greatest potential success in terms of yield and access.
- Geophysical borehole siting is to be conducted utilizing a minimum of two methods by an experienced hydro-geological consultant / team Geophysical techniques include but are not limited to:
  - Magnetic surveys
  - Frequency domain electromagnetic surveys
  - Gravimetric surveys
  - Electrical resistivity surveys
  - Seismic refraction surveys
- More than one potential position is required per project, based on whether or not the geophysical results show good potential for ground-water. The minimum requirements are as follows:
  - Production application: a minimum of two (2) potential positions (pegs) required per project.

Geophysical techniques include but are not limited to:

b. Drilling of boreholes.

- The drilling contractor will function under the direct and full-time on-site supervision of the hydro-geological consultant (unless otherwise specified). The hydro-geological consultant will be responsible for the borehole construction for all aspects of that construction, inclusive of technical and management aspects. The hydro-geological consultant will be required to verify and document the construction parameters of the borehole as well as to log the geological formation encountered in that borehole.

- Service provider will be paid per m of drilling as per quotation. If no water is found (dry hole). Then the contract will be cancelled and the contractor will be paid for sitting and drilling only.

<b>Drilling method</b>	<b>Geological formation for drilling method used</b>
Rotary air percussion	All consolidated rock formations (with limited overburden)
ODEX / Symetrix	In all formation
Rotary mud flush	In extensive unconsolidated soil formation

c. Pump Test Water Sampling and laboratory water analysis.

- The test pumping contractor will function under the direct supervision of the hydro-geological consultant (unless otherwise specified). The hydro-geological consultant will be responsible for the required instruction and on site supervision of the testing of the borehole and for all aspects of the testing of that borehole, inclusive of technical and management aspects. The hydro-geological consultant will be required to verify, document and interpret test results and make borehole utilisation and pumping recommendations. Payment shall be made according to the type of test performed and per borehole tested. Test pumping will typically be as follows:
  - Step test ( 4 x 1 hr duration and 4 hrs maximum recovery or 95% recovered, 24 hour constant discharge test (CDT) and associated recovery (of maximum 24 hrs of 95% recovered)
- Groundwater sampling during the CDT with laboratory supplied containers and submission within 24 hrs for a SANS 241: 2015 Drinking Water Standards Abbreviated Analysis.

d. Equipping of boreholes.

- The hydro-geological consultant will be required to verify, document and interpret test results and make pump and pumping recommendations. The pump specifications will be guided by the sustainable yield, hydraulic head conditions and the water requirements at the site.
- The borehole will be equipped with the recommended mono pump powered by windmill.
- Windmill to be sized based on the depth of the borehole. E.g. 4.6X9m high tower, with 60m pipe and pump.
- Windmill parts to include but not limited to: tower, gearbox, shaft rods, brake slide, mast support, couplings, line shafts, sockets, mono pump, valves, and extract pipes. E.t.c
- 3m Galvanised Tank Stand secured with 20MPa concrete footings (500 mm X 500 mm X 500 mm).
- 5000L Jojo tank braced with 4mm wire ties to tank stand.
- Precast concrete drinking troughs 600L capacity with lid and float valve.

- Tap and tap stand secured in concrete and pvc piping 800mm above the concrete slab.
- Concrete slab is to be 15Mpa (1.2m X 1m X 200mm). The slab is to be recessed 50mm below natural ground level and runoff must drain away from the water collection point.
- Supply (rising main) and delivery lines is to be 32mm HDPE class 10 (SABS approved), 100 m supply from borehole and a maximum of 200 m delivery to water points.
- Trenching for piped water supply to be 600mm deep by 300 mm wide.
- Fittings - control valves must be installed on both independent supply lines from the Jojo tank to the tap.
- The borehole pump will be secured in a concrete ring. Galvanised lockable lid to be used to secure control box and pump (Alternative to be discussed with Engineer prior to any installations). The ring or lid to be fitted with ease of use lockable box which houses plug lead to prevent the continuous opening and closing of the lid.
- All operation and service manuals to be supplied on commissioning.

e. Testing and commissioning of boreholes.

- A complete operational test will be performed of the borehole pump and all associated pipes and fittings. The Geohydrologist will be required to be present on site to verify proper functioning of the borehole and to commission each project.

f. Technical Report.

- The PSP will compile a comprehensive technical report based on the findings and results of the investigation. This would include the outcomes of the desktop review, geophysical investigation, drilling and testing data, analysis and interpretation, equipping and reticulation design.

## 2) MATERIALS AND CONSTRUCTION

All materials must conform to SABS specifications for the products. This includes all items such as piping, HDPE fittings, tank stands, reservoir tank, all other fittings, borehole pump and control box, etc.

All construction works must conform to the applicable standard specifications and installation requirements as per NBR requirements and manufacturers recommendations. All concrete works to conform to Cement & Concrete Institute standards and recommendations.

STANDARD CONCRETE MIXES: (Class B concrete Slabs and footings)

Mixing, pouring and curing of concrete: SABS 1200 GA (5.4)

Materials: SABS 1200 AA (3); SABS 1200 GA (3)

Cement: Common cement 32,5N or R to SANS 50197-1

Testing: SABS 1200 AA (7); SABS 1200 GA (7)

Quality control through the slump test SABS 1200 GA (5.4.1.2) SABS method 862. The contractor is to supply the slump testing equipment.

Tolerances to SABS 1200 GA (6.4)

Formwork: Refer to SABS 1200 GA (4.4; 5.2)

Reinforcing: SABS 1200 GA (5.1)

Refer to standard concrete mixes specification.



### STANDARD CONCRETE MIXES:

Concrete for non-structural purposes shall be "Prescribed mix concrete" produced in accordance with the requirements indicated in table 5.1, and the Contractor is also referred to the foregoing preambles insofar as they apply: -

Class of Concrete	Estimated Minimum Compressive Strength in MPA at 28 Days	Maximum Nominal Size of Coarse Aggregate in mm	Proportion of Constituents		
			Cement (Parts)	Fine Aggregate (Parts)	Coarse Aggregate (Parts)
A	10	37,5	1 (=2 bags)	4	5
B	15	19,0	1 (=2 bags)	3	4
C	20	19,0	1 (=2 bags)	2½	3½
D	25	19,0	1 (=2 bags)	2	3
E	30	19,0	1 (=2 bags)	2	2½

Cement and aggregates shall be mixed by volume and the contents of a 50kg sack of cement shall be taken to be 0,033m<sup>3</sup>. Water addition should be kept to a minimum. Only sufficient water should be used to produce a workable mix of 60-100mm slump. A recommended maximum water: cement ratio is 1 for a 10Mpa; 0.8 for a 15Mpa; 0.65 for a 20Mpa; 0.59 for a 25Mpa; 0.53 for a 30Mpa mix, however the lower the ratio the better the durability of the concrete. Approximately 210 litres per m<sup>3</sup> of concrete is required for an average quality sand and optimum quantity 19mm stone.

**BILL OF QUANTITIES**

**GEOHYDROLOGICAL SERVICES**

Payment Reference	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	<b>PRE-FEASIBILITY DESKTOP STUDY</b>	project	1		
2	<b>GEOPHYSICAL BOREHOLE SITING</b> To include travel, accommodation, travel time and all related disbursements.	project	1		
3	<b>DRILLING SUPERVISION</b> Full-time supervision for a field hydrogeologist. To include travel, accommodation, travel time and all related disbursements.	Day	2		
4	<b>TESTING SUPERVISION</b> Full-time supervision for a field hydrogeologist. To include travel, accommodation, travel time and all related disbursements.	Day	2		
5	<b>EQUIPPING</b> Site monitoring by hydrogeologist. To include travel, travel time and all related disbursements.	Day	1		
6	<b>REPORTING</b> Inclusive of professional time and all associated disbursements. Technical report in a word format, to detail study approach, results, recommendation complete with all geophysical data, drill log, test data and applicable maps and photographs.	No.	1		
7	<b>COMMISSIONING</b> Commissioning of project with Departmental Engineer, Extension Departmental Officer and community participants. <i>To include travel, accommodation, travel time and all related disbursements.</i>	Project	1		
8	<b>PROJECT MANAGEMENT</b> To include professional fees for overall management of the project and disbursements for communications, printing etc.	Project	1		
9	<b>SUBMISSION OF INFORMATION TO EMPLOYER</b> All borehole data needs to be sent to DWS in a specified format	Project	1		

<b>SUB TOTAL</b>	
ADD: 15% VAT	
<b>TOTAL CARRIED FORWARD</b>	

**BILL OF QUANTITIES  
DRILLING OF BOREHOLE**

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	<b>ESTABLISH</b>				
1.1	Initial establishment to site for drilling	No.	1		
1.2	<b>Set-up at site</b>				
	a) Percussion	No.	1		
2	<b>DRILLING OF BOREHOLES</b>				
2.1	<b>For internal borehole diameter of 165mm</b>				
2.1.1	<b>Air Percussion Drilling</b>				
	a) Drilling Depth Range : 0 - 120m				
	216 mm drilling diameter	m	30		
	165 mm drilling diameter	m	90		
	b) Mild Steel 3- 4mm wall thickness	m	30		
	c) Development (Air Flush)	hr	1		
	d) Silica grit 3-5 mm	m	rate only		
	e) Sanitary Seal (3-5m)	project	1		
	f) Concrete Collar	project	1		
	g) Borehole protection (welding of casing)	project	1		
	h) Borehole marking (as per DWS specification)	project	1		
	<i>To include travel, accommodation, travel time and all related disbursements.</i>				

<b>SUB TOTAL</b>	
ADD: 15% VAT	
<b>TOTAL CARRIED FORWARD</b>	

**BILL OF QUANTITIES  
TEST PUMPING**

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	<b>Establishment and Set-up Pump Testing</b>	No.	1		
2	<b>Pump Test</b> To include stepped discharge test (4hr discharge), 24hr constant discharge, recovery monitoring (28hrs)	No.	1		
3	<b>Borehole Disinfection - Granular chlorine (HTH or equivalent)</b>	No.	1		
4	<b>Borehole capping (re-welding of casing)</b>	No.	1		
5	<b>Data Recording - (hard copy field sheet and digital excel spreadsheet including log graphs)</b>	No.	1		
6	<b>Water level monitoring at observation borehole</b>	No.	rate only		
7	<b>Collection of water sample (cold storage and delivery to the laboratory)</b>	No.	1		
8	<b>SANS 241 (2015) Abbrev. at accredited laboratory</b>  <i>To include travel, accommodation, travel time and all related disbursements.</i>	No.	Rate		
<b>SUB TOTAL</b>					
ADD: 15% VAT					
<b>TOTAL CARRIED FORWARD</b>					

**BILL OF QUANTITIES  
EQUIPPING TO ALLOW 6 HRS OF PUMPING TO FILL 2 X 5 m<sup>3</sup> STORAGE TANKS**

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	<b>Establishment, Set-up and Equipping(labour)</b>	No.	1		
2	Disinfection of borehole (only if pathogens indicated by total coliforms and e-Coli, are present)	No.	1		
3	Trenching (600mm X 300mm)	m	230		
	Erect a windmill				
4	Complete with tower frames, gearbox, shaft rods, brake slide, brake cables, mast support, wheel, couplings, line shafts, sockets, mono pump, valves, and extract pipes. E.t.c	sum	1		
	Fittings, rubber, grease and oil (Termination kit, safety rope, compression fittings, external fittings, tank fittings, tap stand and tap, wooden bearing blocks, gearbox oil, gland packing, e.t.c)	sum	1		
5					
6	Rod protector	M	50		
7	Galvanized tank Stand (3m High)	No.	2		
8	Jojo Tank 5000L	No.	2		
9	Precast concrete drinking troughs 600L Trough to include: legs, lid and float valves	No.	2		
10	Piping 32mm Class 10 HDPE (SABS approved	m	300		
11	Protective Pump House (Concrete ring with lockable lid)	No.	1		
12	Tap stand with Concrete block (1.5m X 1m X 200mm (20 MPa)	No.	1		
13	Commissioning of borehole On site for snags <i>To include travel, accommodation, travel time and all related disbursements.</i>	No.	1		
<b>SUB TOTAL</b>					
ADD: 15% VAT					
<b>TOTAL CARRIED FORWARD</b>					

**SUMMARY**

ITEM NO	DESCRIPTION	AMOUNT
1	Sub-Total Geohydrological Services	
2	Sub-Total Drilling The borehole	
3	Sub-Total Test Pumping	
4	Sub-Total Equipping The borehole	
<b>TOTAL</b>		

**ANNEXURE A : Work Phases Schedule for Drilling and Equipping of a Single Borehole**

*Please note these values are primarily estimates of what part of the work phase constitutes of the entire project, and do NOT reflect the exact amounts per part payment. Usually payment certificates reflect work done in several work phases, which do not necessarily mean that they have been completed.*

<b>Work phase No.</b>	<b>PHASE DESCRIPTION</b>	<b>App. % of work/ contract</b>
<b>1</b>	<b>Hydrogeological Services</b>	<b>20%</b>
<b>2</b>	<b>Drilling</b>	<b>20%</b>
<b>3</b>	<b>Pump Test and laboratory water sampling.</b>	<b>10%</b>
<b>4</b>	<b>Equipping of borehole</b>	<b>50%</b>
	<b>TOTAL</b>	<b>100%</b>

**1. PROFESSIONAL REGISTRATION**

Please note that the awarded bidder will be required to supply proof of registration with the appropriate body.

Please note that Completion of the table below is mandatory and proof of registration must be attached !!!!

#	PROFESSIONAL BODY REGISTRATION	REGISTRATION NUMBER
1		
2		
3		
4		

#	CONSULTANT / ORGANISATION	REGISTRATION NUMBER
1		
2		
3		
4		

**2. EXPERIENCE**

Please indicate your experience and expertise by completing the table.

#	NAME OF PROJECT + PERIOD	PROJECT DESCRIPTION	ROLE	PROJECT VALUE	NAME AND CONTACT NUMBER OF REFEREE
1					
2					
3					
4					
5					



**ANNEXURE C: EVALUATION OF BIDS (FUNCTIONALITY) FOR BOREHOLE DEVELOPMENT**

<b>TABLE 1: BID EVALUATION CRITERIA</b>				
	<b>FUNCTIONALITY EVALUATION CRITERIA</b>	<b>Max Points</b>	<b>Evidence</b>	<b>Bidders Score</b>
1.	<p><b>Bidder's/JV's own experience : In borehole development (siting, drilling , testing and equipping)</b></p> <p>No project experience = 0 points            1 project = 20 points            2 – 5 projects = 30 points            &gt; 5 projects = 35 points</p>	<b>35</b>	<p>Completion Certificate (Works or other)            In support of <b>Annexure B</b></p>	
2.	<p><b>Financial Capacity</b></p> <p>Total Credit Facility (with financial institution and/or supplier(s) of material and equipment)</p> <p>R 200 000 – R 500 000.00 = 15 points            R 500 000 – R 900 000.00 = 15 points            &gt; R 900 000 = 25 points</p>	<b>25</b>	<p>Evidence of credit facility with manufacturer/supplier and/or Registered Financial Institution  <b>Or</b>            Evidence of access to any legal funding instrument ( e.g. <b>Letter of intent</b>)</p>	
3.	<p><b>Access to a transportation facility/ Light Delivery Vehicle (LDV) / Truck</b></p>	<b>25</b>	<p>Letter of commitment from fleet company  <b>Or</b>            Confirmation from producer that delivery shall also be undertaken  <b>Or</b>            Documentary proof of transport or transportation facility (Log Books/ Letter of agreement supported by Log book)</p>	
4.	<p><b>Proof of Physical address</b></p> <p>Office of Bidder outside borders of KZN = 5 pts            Office of Bidder within borders of KZN = 15 pts</p>	<b>15</b>	<p>Lease agreement; Municipal Utility Bill; or Copy of Bank Statement (first page only) with address</p>	
	<b>TOTAL</b>	<b>100</b>		
	<b>Minimum Functionality Threshold</b>	<b>70%</b>		