

COMPULSORY BID INFORMATION MEETING

PLEASE TAKE NOTE THAT NO LATE BIDDER(S)
WILL BE ADMITTED.

PLACE : A compulsory briefing session at
PROVINCIAL DEPARTMENT OF RURAL,
ENVIRONMENTAL AND AGRICULTURAL
DEVELOPMENT (READ)
LEHURUTSE LOCAL DISTRICT MUNICIPALITY
OFFICES

DATE : 13 APRIL 2016

TIME : 10H00

ENQUIRIES : Technical Enquiries: Ms. M. Phuthi
TEL NO: 012 309 5855

General Enquiries: Ms D. Lelaka
TEL. NO.: (012) 319 7129

FAILURE TO ATTEND THE COMPULSORY BID INFORMATION MEETING WILL
RESULT IN THE BIDDER'S BID TO BE REJECTED.

CERTIFICATION BY BIDDER THAT THE COMPULSORY BID INFORMATION
MEETING DESCRIBED ABOVE WAS ATTENDED:

I/We, _____
as representative of the company/firm _____
hereby declare that the compulsory site inspection was attended and that I/we am/are
fully aware of the extent of the task.

SIGNATURE

DATE

CERTIFICATION BY DEPARTMENTAL REPRESENTATIVE ON SITE AFTER THE BID
INFORMATION MEETING

I _____ hereby confirm that the site inspection was attended by
the above bidder.

SIGNATURE

DATE

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES

BID NUMBER: 4.4.12.2/43/15 CLOSING DATE: 22 APRIL 2016 CLOSING TIME: 11:00 (TELKOM TIME)

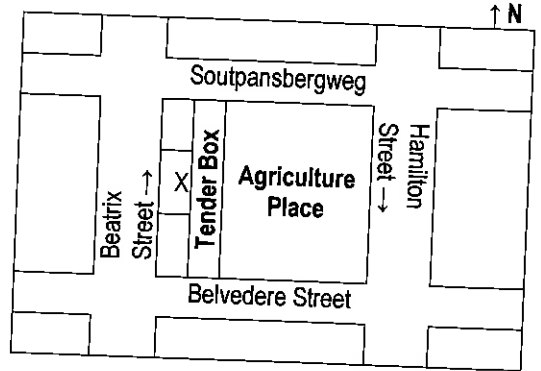
DESCRIPTION: THE APPOINTMENT OF A SERVICE PROVIDER FOR THE EQUIPPING OF BOREHOLES IN THE NORTH WEST PROVINCE, ADMINISTERED BY THE DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES THROUGH ITS DIRECTORATE: CLIMATE CHANG AND DISASTER MANAGEMENT FOR THE PERIOD OF SIX (6) MONTHS

The successful bidder will be required to fill in and sign a written Contract Form (SBD 7).

BID DOCUMENTS MAY BE POSTED TO: THE TENDER RECEIPT OFFICE , ROOM NO. A-GF-06,
DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES
Private Bag X250, PRETORIA, 0001

OR

DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)
Department of Agriculture, Forestry and Fisheries
Agriculture Place
Main Entrance
TENDER RECEIPT OFFICE (AT THE RECEPTION)
Room No. A-GF-06
20 Steve Biko Street (Beatrix Street)
ARCADIA
Pretoria



Bidders should ensure that bids are delivered timeously to the correct address. The bidding box will be closed on the closing time of bids for ± 1 hour, during which time bids may be deposited over the counter at room A-GF-06. However, if the bid is late, it will not be accepted for consideration. It also remains the responsibility of the bidder to ensure that posted bids reach the bidding box before the closing time and date of bid.

The bid box is generally open 24 hours a day, 7 days a week. (It is advisable that bids must reach the bidding box 24 hours before closing time as the bidding box is located in the reception area. Bidders are required to allow time to access the premises due to security arrangements.)

ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS – (NOT TO BE RE-TYPED)

THIS BID IS SUBJECT TO THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT

THE FOLLOWING PARTICULARS MUST BE FURNISHED
(FAILURE TO DO SO MAY RESULT IN YOUR BID BEING DISQUALIFIED)

NAME OF BIDDER
 POSTAL ADDRESS
 STREET ADDRESS
 TELEPHONE NUMBER
 CELL PHONE NUMBER CODE: NUMBER:
 FACSIMILE NUMBER CODE: NUMBER:
 E-MAIL ADDRESS
 CONTACT PERSON
 JOB TITLE
 VAT REGISTRATION NUMBER
 HAS A TAX CLEARANCE CERTIFICATE BEEN SUBMITTED (SBD 2)?
 SIGNATURE OF BIDDER YES/NO
 DATE
 CAPACITY UNDER WHICH THIS BID IS SIGNED

TAX CLEARANCE CERTIFICATE REQUIREMENTS

It is a condition of bid that the taxes of the successful bidder must be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the bidder's tax obligations.

- 1 In order to meet this requirement bidders are required to complete in full the attached form TCC 001 "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign bidders / individuals who wish to submit bids.
- 2 SARS will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
- 3 The original Tax Clearance Certificate must be submitted together with the bid. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be acceptable.
- 4 In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate.
- 5 Copies of the TCC 001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website www.sars.gov.za.
- 6 Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website www.sars.gov.za.



Application for a Tax Clearance Certificate

Purpose

Select the applicable option

If "Good standing", please state the purpose of this application

Tenders

Good standing

Particulars of applicant

Name/Legal name
(Initials & Surname
or registered name)

Trading name
(if applicable)

ID/Passport no

Income Tax ref no

VAT registration no 4

Customs code

Telephone no

E-mail address

Physical address

Postal address

Company/Close Corp.
registered no

PAYE ref no 7

SDL ref no L

UIF ref no U

Fax
no

Particulars of representative (Public Officer/Trustee/Partner)

Surname

First names

ID/Passport no

Telephone no

E-mail address

Physical address

Income Tax ref no

Fax
no

Particulars of tender (If applicable)

Tender number

Estimated Tender amount R

Expected duration of the tender year(s)

Particulars of the 3 largest contracts previously awarded

Date started	Date finalised	Principal	Contact person	Telephone number	Amount
--------------	----------------	-----------	----------------	------------------	--------

Audit

Are you currently aware of any Audit investigation against you/the company?
If "YES" provide details

YES NO

Appointment of representative/agent (Power of Attorney)

I the undersigned confirm that I require a Tax Clearance Certificate in respect of Tenders or Goodstanding.

I hereby authorise and instruct SARS the applicable Tax Clearance Certificate on my/our behalf. to apply to and receive from

Signature of representative/agent

Name of representative/agent

Date

Declaration

I declare that the information furnished in this application as well as any supporting documents is true and correct in every respect.

Signature of applicant/Public Officer

Name of applicant/
Public Officer

Date

Notes:

1. It is a serious offence to make a false declaration.
2. Section 75 of the Income Tax Act, 1962, states: Any person who
 - (a) fails or neglects to furnish, file or submit any return or document as and when required by or under this Act; or
 - (b) without just cause shown by him, refuses or neglects to-
 - (i) furnish, produce or make available any information, documents or things;
 - (ii) reply to or answer truly and fully, any questions put to him ...As and when required in terms of this Act ... shall be guilty of an offence ...
3. **SARS will, under no circumstances, issue a Tax Clearance Certificate unless this form is completed in full.**
4. Your Tax Clearance Certificate will only be issued on presentation of your South African Identity Document or Passport (Foreigners only) as applicable.

PRICING SCHEDULE –FIRM PRICES

SBD 3.3

NOTE: ONLY FIRM PRICES WILL BE ACCEPTED. NON-FIRM PRICES (INCLUDING PRICES SUBJECT TO RATE OF EXCHANGE VARIATIONS) WILL NOT BE CONSIDERED.

NAME OF SERVICE PROVIDER: BID NO.: 4.4.12.2/43/15

CLOSING TIME 11:00 ON

OFFER TO BE VALID FOR 90 DAYS (UNTIL 1st of July 2016) FROM THE CLOSING DATE OF BID.

ITEM NO	DESCRIPTION	BID PRICE IN RSA CURRENCY INCLUSIVE OF VALUE ADDED TAX
1.	Bid Description: THE APPOINTMENT OF SERVICE PROVIDERS FOR THE EQUIPPING OF BOREHOLES IN THE NORTH WEST PROVINCE, ADMINISTERED BY THE DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES THROUGH ITS DIRECTORATE: CLIMATE CHANGE AND DISASTER MANAGEMENT	
2.	Project Cost	
	• Project 1: Klipfontein Total price including vat and all cost R _____	
	• Project 2: Schoonlaagte Total price including vat and all cost R _____	
	• Project 3: Nicholasdoorn Total price including vat and all cost R _____	
	• Project 4: Disobelo Total price including vat and all cost R _____	
	• Project 5: Braaklaagte Total price including vat and all cost R _____	
	• Project 6: Maramage Total price including vat and all cost R _____	
	• Project 7: Lerobeng Total price including vat and all cost R _____	
	• Project 8: Klaarstroom Total price including vat and all cost R _____	
	• Project 9: Nyetse Total price including vat and all cost R _____	
	• Project 10: Matsiepane Total price including vat and all cost R _____	
	• Project 11: Madutle Total price including vat and all cost R _____	
	• Project 12: Ikageleng Total price including vat and all cost R _____	
	• Project 13: Majage Total price including vat and all cost R _____	
	• Project 14: Mosweu Total price including vat and all cost R _____	
	• Project 15: Manogela Total price including vat and all cost R _____	
	• Project 16: Phata Ya Kgori Total price including vat and all cost R _____	
	❖ Total price for all 16 Projects including vat and all cost R _____	

Period required for commencement of project after receipt of an official order

Does the offer comply with the specification(s) Yes / No

If not to specification, indicate deviation(s)

Name of Bidder:

Period required for delivery

.....

*Delivery: Firm / Not Firm

Did you submit a Valid Certificate B-BBEE?

.....

B-BBEE Status Level of Contribution

..... =
(A maximum of 10 points)

Technical enquiries can be directed to:

Mrs M Phuthi
Tel: 012 309 5855

General enquiries

Dikeledi
Tel. no. 012 319 7129
Email: DikelediL@daff.gov.za

SBD 4

DECLARATION OF INTEREST

1. Any legal person, including persons employed by the state¹, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes an advertised competitive bid, a limited bid, a proposal or written price quotation). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where-
 - the bidder is employed by the state; and/or
 - the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.
2. **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**
 - 2.1 Full Name of bidder or his or her representative:
 - 2.2 Identity Number:.....
 - 2.3 Position occupied in the Company (director, trustee, shareholder², member):
.....
 - 2.4 Registration number of company, enterprise, close corporation, partnership agreement or trust:
.....
 - 2.5 Tax Reference Number:
 - 2.6 VAT Registration Number:
 - 2.6.1 The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee / PERSAL numbers must be indicated in paragraph 3 below.

¹"State" means -

- (a) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999);
- (b) any municipality or municipal entity;
- (c) provincial legislature;
- (d) national Assembly or the national Council of provinces; or
- (e) Parliament.

²"Shareholder" means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.

2.7 Are you or any person connected with the bidder presently employed by the state? YES / NO

2.7.1 If so, furnish the following particulars:

Name of person / director / trustee / shareholder/ member:
Name of state institution at which you or the person connected to the bidder is employed :
Position occupied in the state institution:

Any other particulars:
.....
.....
.....

2.7.2 If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector? YES / NO

2.7.2.1 If yes, did you attach proof of such authority to the bid document? YES / NO

(Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.

2.7.2.2 If no, furnish reasons for non-submission of such proof:
.....
.....
.....

2.8 Did you or your spouse, or any of the company's directors / trustees / shareholders / members or their spouses conduct business with the state in the previous twelve months? YES / NO

2.8.1 If so, furnish particulars:
.....
.....
.....

2.9 Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid? YES / NO

2.9.1 If so, furnish particulars.
.....

4 DECLARATION

I, THE UNDERSIGNED (NAME).....

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 and 3 ABOVE IS CORRECT.
I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME SHOULD THIS
DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

November 2011

SBD 6.1

**PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT
REGULATIONS 2011**

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011.

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all bids:

- **the 90/10 system for requirements with a Rand value above R1 000 000 (all applicable taxes included).**

1.2 The value of this bid is estimated to exceed **R1 000 000** (all applicable taxes included) and therefore the 90/10 point system shall be applicable.

1.3 Preference points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contribution.

1.3.1 The maximum points for this bid are allocated as follows:

	POINTS
1.3.1.1 PRICE	90
1.3.1.2 B-BBEE STATUS LEVEL OF CONTRIBUTION	10
Total points for Price and B-BBEE must not exceed	100

1.4 Failure on the part of a bidder to fill in and/or to sign this form and submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA) together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.5 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2. DEFINITIONS

- 2.1 **“all applicable taxes”** includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;
- 2.2 **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- 2.3 **“B-BBEE status level of contributor”** means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- 2.4 **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals;
- 2.5 **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- 2.6 **“comparative price”** means the price after the factors of a non-firm price and all unconditional discounts that can be utilized have been taken into consideration;
- 2.7 **“consortium or joint venture”** 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;
- 2.8 **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;
- 2.9 **“EME”** means any enterprise with an annual total revenue of R5 million or less .
- 2.10 **“Firm price”** means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- 2.11 **“functionality”** means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a bidder;
- 2.12 **“non-firm prices”** means all prices other than “firm” prices;
- 2.13 **“person”** includes a juristic person;
- 2.14 **“rand value”** means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;
- 2.15 **“sub-contract”** means the primary contractor’s assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;
- 2.16 **“total revenue”** bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the *Government Gazette* on 9 February

- 2.17 **“trust”** means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- 2.18 **“trustee”** means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

3. **ADJUDICATION USING A POINT SYSTEM**

- 3.1 The bidder obtaining the highest number of total points will be awarded the contract.
- 3.2 Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts;.
- 3.3 Points scored must be rounded off to the nearest 2 decimal places.
- 3.4 In the event that two or more bids have scored equal total points, the successful bid must be the one scoring the highest number of preference points for B-BBEE.
- 3.5 However, when functionality is part of the evaluation process and two or more bids have scored equal points including equal preference points for B-BBEE, the successful bid must be the one scoring the highest score for functionality.
- 3.6 Should two or more bids be equal in all respects, the award shall be decided by the drawing of lots.

4. **POINTS AWARDED FOR PRICE**

4.1 **THE 90/10 PREFERENCE POINT SYSTEMS**

A maximum of 90 points is allocated for price on the following basis:

90/10

$$P_s = 90 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where

- P_s = Points scored for comparative price of bid under consideration
- P_t = Comparative price of bid under consideration
- P_{\min} = Comparative price of lowest acceptable bid

5. **Points awarded for B-BBEE Status Level of Contribution**

- 5.1 In terms of Regulation 5 (2) and 6 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (90/10 system)
1	10
2	9
3	8
4	5
5	4
6	3
7	2
8	1
Non-compliant contributor	0

- 5.2 Bidders who qualify as EMEs in terms of the B-BBEE Act must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates.
- 5.3 Bidders other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
- 5.4 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.
- 5.5 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.
- 5.6 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.
- 5.7 A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.
- 5.8 A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

6. BID DECLARATION

6.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

7. B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.3.1.2 AND 5.1

7.1 B-BBEE Status Level of Contribution: =(maximum of 10 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 5.1 and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA or an Accounting Officer as contemplated in the CCA).

8 SUB-CONTRACTING

8.1 Will any portion of the contract be sub-contracted? YES / NO (delete which is not applicable)

8.1.1 If yes, indicate:

(i) what percentage of the contract will be subcontracted?

(ii) the name of the sub-contractor?

(iii) the B-BBEE status level of the sub-contractor?

(iv) whether the sub-contractor is an EME? YES / NO (delete which is not applicable)

9 DECLARATION WITH REGARD TO COMPANY/FIRM

9.1 Name of company/firm

9.2 VAT registration number

9.3 Company registration number

9.4 TYPE OF COMPANY/ FIRM

- Partnership/Joint Venture / Consortium
- One person business/sole propriety
- Close corporation
- Company
- (Pty) Limited

[TICK APPLICABLE BOX]

9.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

.....

.....

9.6 COMPANY CLASSIFICATION

- Manufacturer
 - Supplier
 - Professional service provider
 - Other service providers, e.g. transporter, etc.
- [TICK APPLICABLE BOX]

9.7 Total number of years the company/firm has been in business?

9.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contribution indicated in paragraph 7 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- (i) The information furnished is true and correct;
- (ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form.
- (iii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 7, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- (iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution

WITNESSES:

1.

.....
SIGNATURE(S) OF BIDDER(S)

2.

.....

7

DATE:.....

ADDRESS:.....

.....

.....

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

1. This Standard Bidding Document must form part of all bids invited.
2. It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
3. The bid of any bidder may be disregarded if that bidder, or any of its directors have-
 - a. abused the institution's supply chain management system;
 - b. committed fraud or any other improper conduct in relation to such system; or
 - c. failed to perform on any previous contract.
4. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

Item	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's database as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the <i>audi alteram partem</i> rule was applied.)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? To access this Register enter the National Treasury's website, www.treasury.gov.za, click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number (012)326-5445.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
4.4	Was any contract between the bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)
CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS
TRUE AND CORRECT.

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY
BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

CERTIFICATE OF INDEPENDENT BID DETERMINATION

SBD 9

- 1 This Standard Bidding Document (SBD) must form part of all bids¹ invited.
- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
 - a. disregard the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
 - b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.
- 4 This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (SBD 9) must be completed and submitted with the bid:

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

² Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

 (Bid Number and Description)

in response to the invitation for the bid made by:

 (Name of Institution)

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of: _____ that:
 (Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder

6. 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^a will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. 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.

^a 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.

10. 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.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

Js914w 2



agriculture, forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

Bid invitation

BID NUMBER: 4.4.12.2/43/15
SUBJECT: THE APPOINTMENT OF SERVICE PROVIDERS FOR THE EQUIPPING OF BOREHOLES IN THE NORTH WEST PROVINCE, ADMINISTERED BY THE DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES THROUGH ITS DIRECTORATE: CLIMATE CHANGE AND DISASTER MANAGEMENT FOR A PERIOD OF SIX (6) MOTNHS

1. GENERAL BID CONDITIONS

- 1.1 Bids of bidders who failed to complete the bid Terms of Reference in all respects will automatically be disqualified.
- 1.2 Bids of bidders who failed to complete and sign all the bid documentation and/or failed to submit all the required information/documentation as requested in terms of the bid documentation may be disqualified. The recommended bidder(s) may be requested to complete and sign all bid documentation within five (5) working days from date of request. Failure to submit will result in disqualification in the bid.
- 1.3 The bid must therefore either conform to the minimum requirements as set out in this document, or it must be stated clearly how it deviates from these requirements and why. Offers exceeding the minimum requirements of the specification are acceptable.
- 1.4 Bidders must complete all the necessary bid forms and undertakings, which normally or otherwise accompany a government bid. The following forms and terms of reference must be completed and submitted together with the bidder's response to this bid:
 - SBD 1 = Invitation to bid
 - SBD 2 = Tax declaration
 - SBD 3 = Pricing schedule
 - SBD 4 = Declaration of interest
 - SBD 6.1 = Preference points claim form
 - SBD 8 = Declaration of bidder's past Supply Chain Management (SCM) practices
 - SBD 9 = Certificate of Independent Bid Determination
 - Supplier maintenance form
- 1.5 The successful bidder will be required to sign a written contract form (SBD 7). This document will be a binding contract between the successful bidder and the department. No service should be rendered without receipt of an official order issued by the department.

- 1.6 The official forms as per paragraph 1.4 above and the bid specification must NOT be retyped.
- 1.7 This bid is subject to Government Procurement: General Conditions of Contract, which may not be amended.
- 1.7.1 Bids should not be qualified by the bidder's own conditions.
- Failure to withdraw, waive and/or renounce the bidder's own bid conditions, when called upon to do so, may invalidate the bid.
- 1.8 During evaluation of the bids, additional information may be requested in writing from bidders. Replies to such requests must be submitted within five (5) working days or else bids may be disregarded.
- 1.9 The department may **only accept a total ceiling price** for the entire project that must be inclusive of **all costs** (including travel and subsistence expenses). The bidders will not be entitled to claim for travel and subsistence expenses, such items must be included in the bid price.
- 1.10 The department will give preference to bidders that bid firm prices for the entire duration of the contract in terms of this bid. Non-firm prices (including prices that are subject to rates of exchange variations) may be considered if supporting documentation is submitted. **Should the bidder fail to indicate the bid price on the SBD 3 form (Pricing schedule), the bid may be regarded as invalid.**
- 1.11 The department will not be held liable for any expenses incurred by bidders in preparing and submitting bids. See paragraph 3.1 of the General Conditions of Contract.
- 1.12 The department reserves the right to appoint more than one bidder, depending on conditions of the bid.
- 1.13 The department hereby chooses the following street address as its *domicilium citandi et executandi* for the purpose of serving notices and legal documentation:

Street address

Agriculture Place
20 Steve Biko Road
ARCADIA
Pretoria
0007

- 1.14 Bidders are encouraged to register on the Department of Agriculture, Forestry and Fisheries' supplier database. Application forms must be submitted to:

Postal address

The Deputy Director: Demand and Acquisition Management
Department of Agriculture, Forestry and Fisheries
Private Bag X250
PRETORIA
0001

Hand delivery

The Deputy Director: Demand and Acquisition Management
Department of Agriculture, Forestry and Fisheries
20 Steve Biko Road (cnr Soutpansberg Road and Steve Biko Road)
Agriculture Place
Room N-GF-10
ARCADIA

Application forms can be obtained at the physical address above or downloaded from the department's website (www.daff.gov.za).

- 1.15 **An original valid Tax Clearance Certificate** must be submitted together with the bid. The Tax Clearance Certificate requirements are also applicable to foreign bidders/individuals who wish to submit bids. In cases where **consortiums/joint ventures/subcontracts** are involved, each party must submit a separate Tax Clearance Certificate and a separate SBD 6.1 form (preference points claim form). **The percentage of contract value managed and executed by each party must also be indicated** (see paragraph 8 of the SBD 6.1 form).
- 1.16 Bidders must submit an original and valid B-BBEE Status Level Verification Certificate issued by a verification agency accredited by the South African Accreditation System (SANAS) or registered auditors approved by the Independent Regulatory Board of Auditors (IRBA). Copies of original and valid B-BBEE Status Level Verification Certificates certified at any Commissioner of Oaths office will also be acceptable.
- 1.16.1 Bidders who qualify as Exempted Micro Enterprises (EMEs) (an enterprise with a total annual revenue of R5 million or less, qualifies as an EME) must submit a certificate to substantiate the B-BBEE rating claims issued by:
 - (i) Accounting officers as contemplated in section 60(4) of the Close Corporation Act, Act No. 69 of 1984 (CCA); or
 - (ii) Verification agency accredited by SANAS; or
 - (iii) Registered auditors approved by the IRBA.
- 1.16.2 EMEs automatically qualify for B-BBEE status "Level four (4) contributors". EMEs owned by more than 50% black people are regarded to be B-BBEE "Level three (3) status contributors".
- 1.17 Bids submitted by a trust, consortium or joint venture, will qualify for points for a B-BBEE status level as an unincorporated entity, provided that the entity submits a consolidated B-BBEE scorecard.
- 1.18 Public entities and tertiary institutions must also submit B-BBEE Status Level Verification Certificates in terms of the specialised scorecard contained in the B-BBEE codes of good practice.
- 1.19 Bidder(s) may be requested to submit a valid company registration certificate issued by the Registrar of Companies and copies of the ID document(s) of active director(s).

1.20 Enquiries

Bidders are at liberty to discuss any aspect of the bid with the contact persons below:

Technical enquiries	Mrs. Phuthi	Tel. 012 309 5855
General SCM enquiries	Dikeledi Mohlala	Tel. 012 319 7129

- 1.21 The successful service provider must supply and deliver goods to the address as indicated in the bid documentation.
- 1.22 The validity period of this bid must be at least 90 days from the closing date of the bid.

2. CONFIDENTIALITY

- 2.1 This bid and all information in connection therewith shall be held in strict confidence by bidders and the use of such information shall be limited to the preparation of the bid. Bidders shall undertake to limit the number of copies of this document.
- 2.2 All bidders are bound by a confidentiality clause preventing the unauthorised disclosure of any information regarding the department or of its activities to any other organisation or individual. The bidders may not disclose any information, documentation or products to other clients without the written approval of the Director-General or the delegated official.

3. COPYRIGHT

- 3.1 Copyright of all documentation in relation to this bid belongs to the department. The successful bidder may not disclose any information, documentation or products to other clients without the written approval of the Director-General or the delegated official.

4. PAYMENTS

- 4.1 Payment shall normally be made within 30 days after receipt of an original invoice, subject to satisfactory delivery of the service as outlined in the Terms of Reference.
- 4.2 The bidder will not be entitled to claim for travel and subsistence expenses. If such expenses are applicable, these charges must be included in the bid price.

5. NON-COMPLIANCE WITH DELIVERY TERMS

As soon as it becomes known to the contractor that he will not be able to perform the services within the agreed time/or delivery period and/or against the quoted price and/or as specified in the contract, the department must be given immediate written notice to this effect. The department reserves the right to implement remedies as provided for in paragraph 22 of the General Conditions of Contract.

6. RETENTION

- 6.1 On termination of this agreement, the contractor shall on demand, hand over all documentation, information, etc. to the department without the right of retention.

- 6.2 No agreement to amend or vary a contract or order or the conditions, stipulations or provisions thereof shall be valid and of any force and effect unless such agreement to amend or vary is entered into in writing and signed by the contracting parties. Any waiver of the requirement of the agreement to amend or vary conditions shall be in writing.

7. EVALUATION TEAM

The department will appoint an evaluation team to evaluate the bid submissions. The team will make recommendations to the Bid Adjudication Committee.

8. EVALUATION OF BIDS ON A POINTS SYSTEM

Bids will be evaluated on the following basis:

8.1 Phase 1: Compliance with minimum bid requirements

- 8.1.1 All bids duly lodged will be evaluated to determine compliance with the bid requirements and conditions. Bids with obvious deviations from the bid requirements/conditions and not acceptable to the evaluation committee will be eliminated from the adjudication process, i.e. will not be shortlisted.

8.2 Phase II: Price

- 8.2.1 Only bidders/service providers who met all the minimum requirements in terms of paragraph 8.1.1 above will be brought on a comparative price basis in terms of the applicable preference point system prescribed in the Preferential Procurement Regulations 5 and 6 of 2011 as indicated in the SBD 6.1 form.

8.3 Phase III: Awarding of bid

- 8.3.1 The recommended bidder/service provider will usually be the bidder/ service provider scoring the highest number of points.

9. LATE BIDS

All completed documentation must be returned to the Department of Agriculture, Forestry and Fisheries before 11:00 on 22nd April 2016. The location of the drop off is: Agriculture Place, Tender Receipt Office, Tender Box, Room A-GF-06.

Bids received late shall not be considered. The bidding box shall be locked at exactly **11:00**. The closing time will be in accordance with Telkom time (1026).

Bidders are therefore advised to ensure that bids are dispatched allowing sufficient time for any unforeseen events that may delay the delivery of the bid and time to access the premises because of security arrangements when entering the department's gate.

10. FRAUD AND CORRUPTION

All prospective bidders should take note of the implications of contravening the Prevention and Combating of Corrupt Activities Act, Act No. 12 of 2004 and any other act applicable.

11. THE DEPARTMENT RESERVES THE RIGHT TO REJECT OR CANCEL BIDS

Bids can be cancelled for any of the following reasons:

- 11.1 If the bidder has committed a proven corrupt or fraudulent act in competing for a particular contract.
- 11.2 If the bidder or any of its directors have:
 - (i) Abused the SCM system of any government department.
 - (ii) Failed to perform any previous contract and the proof thereof exists.
 - (iii) Restricted from doing business with the public sector if such a bidder obtained preferences fraudulently or if such bidder failed to perform on a contract based on the specific goals.
 - (iv) If there is proof of fraud or any other improper conduct in relation to such system.

TERMS OF REFERENCE FOR THE QUOTATION FOR THE APPOINTMENT OF A SERVICE PROVIDER FOR THE EQUIPPING OF BOREHOLES IN THE NORTH WEST PROVINCE, ADMINISTERED BY THE DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES THROUGH ITS DIRECTORATE: CLIMATE CHANGE AND DISASTER MANAGEMENT

1. INTRODUCTION AND BACKGROUND

Agricultural production is a risky business as it is very sensitive to extreme weather and climate conditions. Due to the frequency of extreme weather and climate events in the country, the agricultural sector has moved from one disaster to another. Some of the impacts were directly related to the extreme weather and climate events i.e. floods, droughts etc. while others were indirectly related i.e. outbreak of some diseases and pests etc. which were reported as the secondary impacts. These disasters were costly for the government and funds utilized for disaster relief and recovery could have been prioritized for other developmental needs in the country.

Disaster Management Act 57 of 2002 puts more emphasis on pre-disaster risk reduction phase where activities aimed at disaster risk avoidance, prevention, mitigation and preparedness are prioritized. The Department of Agriculture, Forestry and Fisheries (DAFF) through among other disaster risk management activities implements an early warning system in support of disaster risk management. This system disseminates monthly National Agro-meteorological Committee (NAC) Advisories and daily extreme weather warnings with suggested strategies aimed at disaster risk reduction, prevention, avoidance, mitigation and preparedness as per the Disaster Management Act (Act No. 57 of 2002). Disaster risk reduction measures suggested in the advisories and warnings were not always implemented by the farming communities due to lack of resources which led to more exposure to natural hazards.

Disaster Risk Prevention and Mitigation Fund is aimed at effective implementation of disaster risk reduction measures as required by the Disaster Management Act 57 of 2002.

2. SCOPE OF SERVICE

The Directorate: Climate Change and Disaster Management wishes to appoint a service provider for the equipping of boreholes on the Disaster Risk Prevention and Mitigation Fund that is administered by the Department of Agriculture, Forestry and Fisheries, Directorate: Climate Change and Disaster Management.

		COMPLY		
		YES	NO	REMARKS
3.	SERVICE REQUIREMENTS			
3.1	A total number of 16 boreholes together with their reservoirs and drinking troughs to be equipped in North West Province.			
3.2	The service provider must submit a detailed implementation plan/schedule with the budget			

I.B

		COMPLY		
		YES	NO	REMARKS
	containing a cost (as per proposal) together with the bid documents with the breakdown of how the work will be completed within a period of six months. Failure to submit these documents will lead to the bid to be viewed as invalid and therefore rejected.			
3.3	The successful bidder will be expected to sign the implementation plan/schedule with time frames developed by the Department of Agriculture, Forestry and Fisheries (DAFF) in collaboration with the Provincial Department of Rural, Environmental and Agricultural Development (READ).			
3.4	The successful bidder should submit a status report with every signed invoice by him/her together with the relevant official from READ. The service provider should further submit the final report in accordance with the template to be provided by DAFF. No invoice will be processed prior the verification by DAFF and READ of the work done.			
3.5	The successful bidder must ensure that the beneficiaries sign-off the work done in their premises in a template to be provided by DAFF. The list where beneficiaries signed should be provided together with a progress report and signed invoices. No invoice will be processed if it does not have these documents.			
3.6	The successful bidder should ensure that they provide skills transfer (general maintenance of a windmill, reservoir and drinking troughs) to the project beneficiaries.			
3.7	Bidders must provide proof in the form of a declaration letter that they will be able to finalise more than one project of the Department simultaneously within the stipulated timeframe in case they have an existing project prior application to this bid. Failure to provide the declaration letter together with the bid document by the bidder who has work prior application to this bid on the closing date and time will invalidate the bid. The bidder who does not have any existing project does not need to submit any declaration letter.			

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		COMPLY		
		YES	NO	REMARKS
4.	DELIVERABLES			
4.1	16 boreholes together with their reservoirs and drinking troughs to be equipped in North West Province as follows:			
	Preliminary and general:			
	Site establishment			
	- No housing facilities available			
	- No water and electricity available			
	Occupational health and safety measures			
	• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act			
	• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements			
	• Compilation and maintenance of a Health and Safety File			
	The costing must include transportation costs of all material to the sites as well as travelling to the sites.			
	1. Klipfontein (Location: -25.162022882; 25.912249825)			
	INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)			
	• Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs (1 windmill)			
	• Fork rod (1 rod)			
	• Bucket rod (Pitman) (1 rod)			
	• Wooden rod (1 rod)			
	• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (23 pipes)			
	• 12mm Ø x 3.0m Electro plated pump rods with socks and protectors (23 rod)			
	• Stainless steel borehole cylinder (1 cylinder)			

I.B.

	COMPLY		REMARKS
	YES	NO	
<p>Borehole specifications</p> <p>Borehole Depth: 90m, 1st strike: 35m , last strike: 68m, water level before test: 34.9m and after test: 64m</p> <p>Delivery Rate: 2250 L/H</p> <p>Cylinder</p> <p>Make:.....</p> <p>Model:.....</p> <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 R/bush) • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 M/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) <p>CONSTRUCTION OF CONCRETE RESERVOIR</p> <p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes. (1 reservoir)</p> <p>Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush(galV) (1 R/bush) • 32mm Male adapter (nylon) (1 Adapter) • 50 mm M&F bend (galv) (1 bend) • 2.5 meter x 50 mm Standpipe (galv) (1 S/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 S/pipe) 			

I.B

	COMPLY		REMARKS
	YES	NO	
<ul style="list-style-type: none"> • 50 mm Bend (galv) (2 bend) • 50 mm Male Adaptor (galv) (1 adaptor) 			
Outlet pipe fittings(50 mm)			
<ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 S/pipe) • 2 meter x 50 mm Standpipe (galv) (1 S/pipe) • 50 mm Brass gate valve (brass) (1 gate valve) • 50 mm Bend (galv) (1 bend) • 50mm x 32 mm Reducing bush (galv) (1 R/bush) • 32 mm Male Adaptor (1 adaptor) 			
Drainage outlet pipe (80 mm)			
<ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) • 0.3 meter x 80 mm standpipe (galv) (1 S/pipe) • 3 meter x 80 standpipe (galv) (1 S/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) 			
DRINKING TROUGHS			
Concrete casted drinking troughs (2 troughs)			
Size: 3 meter x 0, 6 meter x 0, 45 meter			
Capacity : 810 liters			
Fittings for troughs			
<ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 F/bend) • 32mmx0.8m Standpipe (2 S/pipe) 			

I.B

	COMPLY		REMARKS
	YES	NO	
<ul style="list-style-type: none"> • 32 mm bend (galv) (2 bend) • 32 M&F bend (2 bend) • 32 mm Brass gate valve (2 gate valve) • 32 mm Inserts T-piece (Nylon) (4 T-piece) • 32mm Ball valve (Control water level) (2 ball valve) • 32mm Clamps (Wire type) (24 clamps) • 32mm class 3 LDPE pipe (200 meter) • Thread Tape (20 rolls) <p>2. Schoonlaagte (Location: -24.825704658; 25.996437901)</p> <p>INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs (1 windmill) • Fork rod (1 rod) • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (20 pipes) • 12mm Ø x 3.0m Electro plated pump rods with socks and protectors (20 rod) • Stainless steel borehole cylinder (1 cylinder) <p>Borehole specifications</p> <p>Borehole Depth: 120m, 1st strike: 36m , last strike: 57m, water level before test: 34m and after test: 56.6m</p> <p>Delivery Rate: 421 L/H</p> <p>Cylinder</p> <p>Make:.....</p>			

I.B

	COMPLY		REMARKS
	YES	NO	
<p>Model:.....</p> <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 R/bush) • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 M/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 Adaptor) <p>CONSTRUCTION OF CONCRETE RESERVOIR</p> <p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes. (1 reservoir)</p> <p>Inlet pipe fittings (50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush(galV) (1 R/bush) • 32mm Male adapter (nylon) (1 adapter) • 50 mm M&F bend (galv) (1 bend) • 2.5 meter x 50 mm Standpipe (galv) (1 S/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 S/pipe) • 50 mm Bend (galv) (2 bend) • 50 mm Male Adaptor (galv) (1 adaptor) <p>Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 out/screen) 			

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	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 S/pipe) • 2 meter x 50 mm Standpipe (galv) (1 S/pipe) • 50 mm Brass gate valve (brass) (1 gate valve) • 50 mm Bend (galv) (1 bend) • 50mm x 32 mm Reducing bush (galv) (1 R/bush) • 32 mm Male Adaptor (1 adaptor) <p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) • 0.3 meter x 80 mm standpipe (galv) (1 s/pipe) • 3 meter x 80 standpipe (galv) (1 s/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) <p>DRINKING TROUGHS</p> <p>Concrete casted drinking troughs (2 troughs)</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter</p> <p>Capacity : 810 litres</p> <p>Fittings for troughs</p> <ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 f/bend) • 32mmx0.8m Standpipe (2 s/pipe) • 32 mm bend (galv) (2 bend) • 32 M&F bend (2 bend) • 32 mm Brass gate valve (2 gate valve) • 32 mm Inserts T-piece (Nylon) (4 T-piece) • 32mm Ball valve (Control water level) (2 ball valve) 			

I.B

	COMPLY		REMARKS
	YES	NO	
<ul style="list-style-type: none"> • 32mm Clamps (Wire type) (24 clamps) • 32mm class 3 LDPE pipe. (200 meter) • Thread Tape (20 rolls) <p>3. Nicholasdoorn (Location: -24.747922285; 26.025593004)</p> <p>INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs (1 windmill) • Fork rod (1 rod) • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (16 pipes) • 12mm Ø x 3.0m Electro plated pump rods with socks and protectors (16 rod) • Stainless steel borehole cylinder (1 cylinder) <p>Borehole specifications</p> <p>Borehole Depth: 66m, 1st strike: 37m , last strike:44m , water level before test: 25.6m and after test: 40.35m</p> <p>Delivery Rate: 960 L/H</p> <p>Cylinder</p> <p>Make:.....</p> <p>Model:.....</p> <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 r/bush) 			

I.B

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 m/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) <p>CONSTRUCTION OF CONCRETE RESERVOIR</p> <p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes. (1 reservoir)</p> <p>Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush(galv) (1 r/bush) • 32mm Male adapter (nylon) (1 adapter) • 50 mm M&F bend (galv) (1 bend) • 2.5 meter x 50 mm Standpipe (galv) (1 s/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (2 bend) • 50 mm Male Adaptor (galv) (1 adaptor) <p>Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 2 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Brass gate valve (brass) (1 gate valve) • 50 mm Bend (galv) (1 bend) 			

I.B

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 50mm x 32 mm Reducing bush (galv) (1 r/bush) • 32 mm Male Adaptor (1 adaptor) <p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) • 0.3 meter x 80 mm standpipe (galv) (1 s/pipe) • 3 meter x 80 standpipe (galv) (1 s/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) <p>DRINKING TROUGHS</p> <p>Concrete casted drinking troughs (2 troughs)</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter</p> <p>Capacity : 810 litres</p> <p>Fittings for troughs:</p> <ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 f/bend) • 32mmx0.8m Standpipe (2 s/pipe) • 32 mm bend (galv) (2 bend) • 32 M&F bend (2 bend) • 32 mm Brass gate valve (2 gate valve) • 32 mm Inserts T-piece (Nylon) (4 T- piece) • 32mm Ball valve (Control water level) (2 ball valve) • 32mm Clamps (Wire type) (24 clamps) • 32 mm class 3 LDPE pipe (200 meters) • Thread Tape (20 rolls) 			

I.B

	COMPLY		REMARKS
	YES	NO	
<p>4. Disobelo (Location: -25.075348459; 26.009677099)</p> <p>INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Install 4.3 m Ø Windmill with 9m tower, head, wheel, ladder, gearbox and brake system with four (4) legs (1 windmill) • Fork rod (1 rod) • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (24 pipes) • 12mm Ø x 3.0m Electro plated pump rods with socks and protectors (24 rod) • Stainless steel borehole cylinder (1 cylinder) <p>Borehole specifications</p> <p>Borehole Depth: 138m, water level before test: 33.8m and after test: 67.50m</p> <p>Delivery Rate: 503 L/H</p> <p>Cylinder</p> <p>Make:.....</p> <p>Model:.....</p> <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 r/bush) • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 m/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) 			

I.B

	COMPLY		
	YES	NO	REMARKS
<p>CONSTRUCTION OF CONCRETE RESERVOIR</p> <p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes. (1 reservoir)</p> <p>Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush(galv) (1 r/bush) • 32mm Male adapter (nylon) (1 adapter) • 50 mm M&F bend (galv) (1 bend) • 2.5 meter x 50 mm Standpipe (galv) (1 s/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (2 bend) • 50 mm Male Adaptor (galv) (1 adaptor) <p>Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 Out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 2 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Brass gate valve (brass) (1 gate valve) • 50 mm Bend (galv) (1 bend) • 50mm x 32 mm Reducing bush (galv) (1 r/bush) • 32 mm Male Adaptor (1 adaptor) <p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) 			

I.B

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 0.3 meter x 80 mm standpipe (galv) (1 s/pipe) • 3 meter x 80 standpipe (galv) (1 s/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) <p>DRINKING TROUGHS</p> <p>Concrete casted drinking troughs (2 troughs)</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter</p> <p>Capacity : 810 litres</p> <p>Fittings for troughs:</p> <ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 f/bend) • 32mmx0.8m Standpipe (2 s/pipe) • 32 mm bend (galv) (2 bend) • 32 M&F bend (2 bend) • 32 mm Brass gate valve (2 gate valve) • 32 mm Inserts T-piece (Nylon) (4 T-piece) • 32mm Ball valve (Control water level) (2 ball valve) • 32mm Clamps (Wire type) (24 clamps) • 32 mm class 3 LDPE pipe (200 meters) • Thread Tape (20 rolls) <p>5. Braklaagte (Location: -24.748660959; 26.095030115)</p> <p>2. INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs (1 windmill) • Fork rod (1 rod) 			

I.B

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (16 pipes) • 12mm Ø x 3.0m Electro plated pump rods with socks and protectors (16 rod) • Stainless steel borehole cylinder (1 cylinder) <p>Borehole specifications</p> <p>Borehole Depth: 90m, 1st strike: 40m , last strike:40m , water level before test: 32.20m and after test: 39 .20m</p> <p>Delivery Rate: 782 L/H</p> <p>Cylinder</p> <p>Make:.....</p> <p>Model:.....</p> <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1valve) • 40x32mm reducing bush (galv) (4 r/bush) • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 m/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) <p>CONSTRUCTION OF CONCRETE RESERVOIR</p> <p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes. (1 reservoir)</p>			

I.B

	COMPLY		
	YES	NO	REMARKS
<p>Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush(galV) (1 r/bush) • 32mm Male adapter (nylon) (1 adapter) • 50 mm M&F bend (galv) (1 bend) • 2.5 meter x 50 mm Standpipe (galv) (1 s/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (2 bend) • 50 mm Male Adaptor (galv)(1 adaptor) <p>Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 Out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 2 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Brass gate valve (brass) (1 gate valve) • 50 mm Bend (galv) (1 bend) • 50mm x 32 mm Reducing bush (galv) (1 r/bush) • 32 mm Male Adaptor (1 adaptor) <p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) • 0.3 meter x 80 mm standpipe (galv) (1 s/pipe) • 3 meter x 80 standpipe (galv) (1 s/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<p>DRINKING TROUGHS</p> <p>Concrete casted drinking troughs (2 troughs)</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter</p> <p>Capacity : 810 litres</p> <p>Fittings for troughs</p> <ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 f/bend) • 32mmx0.8m Standpipe (2 s/pipe) • 32 mm bend (galv) (2 bend) • 32 M&F bend (2 bend) • 32 mm Brass gate valve (2 gate valve) • 32 mm Inserts T-piece (Nylon) (4 T-piece) • 32mm Ball valve (Control water level) (2 ball valve) • 32mm Clamps (Wire type) (24 clamps) • 32 mm class 3 LDPE pipe (200 meter) • Thread Tape (20 rolls) <p>6. Maramage (Location: -25.379949938; 25.882226869)</p> <p>INSTALLATION / CONSTRUCTION Windmill (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Complete 3.0m Ø Windmill with 6 m tower, head, wheel, tail and brake system with four (4) legs (1 windmill) • Fork rod (1 rod) • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (12 pipes) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 12mm Ø x 3.0m Electro plated pump rods with socks and Protectors (12 rods) • Stainless steel borehole cylinder (1 cylinder) <p>Borehole specifications</p> <p>Borehole Depth: 60m, Last strike: 27m; water level before test: 22.70m after test: 25.60m Delivery: 0.25 L/S</p> <p>Cylinder</p> <p>Make:.....</p> <p>Model:.....</p> <ul style="list-style-type: none"> • 40mm Ø base plate (1 baseplate) • 40mm Ø brass non return valve (1 valve) • Air chamber (150mm Ø x 900mm steel pipe (2mm thick) with 20mm brass gate valve) (1 chamber) • 40mm Ø Force Head Brass (1 head brass) • Concrete: Windmill Tower Foundation Includes: Cement, Sand and Crusher stone(19mm) (2.8m³) • Concrete block around casing: 800mm diameter x 600mm high 4 x12mm bolts and nuts (0.3 m³) <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 R/bush) • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 M/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) 			

I.B.

	COMPLY		REMARKS
	YES	NO	
<p>CONCRETE RESEVOIR</p> <p>The reservoir should be design and build according to specifications in Appendix A</p> <p>Circular reinforced concrete reservoir, diameter 4,5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33,5 m³ (33,5 kl) Wall should be reinforced horizontally and vertically and the floors horizontally. Reservoir should by supply with inlet, outlet and drainages pipes. (1 reservoir)</p> <p>Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush(galv) (1 R/bush) • 32mm Male adapter (nylon) (1 adapter) • 50 mm M&F bend (galv) (1 bend) • 2.5 meter x 50 mm Standpipe (galv) (1 S/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 S/pipe) • 50 mm Bend (galv) (1 bend) • 50 mm Male Adaptor (galv) (1 adaptor) <p>Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 Out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 S/pipe) • 2 meter x 50 mm Standpipe (galv) (1 S/pipe) • 50 mm Bend (galv) (1 bend) • 50 mm Brass gate valve (brass) (1 valve) • 50mm x 32 mm Reducing bush (galv) (1 R/bush) • 32 mm Male Adaptor (1 adaptor) 			

I.B

	COMPLY		REMARKS
	YES	NO	
<p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) • 0.3 meter x 80 mm standpipe (galv) (1 S/pipe) • 3 meter x 80 mm stand pipe(galv) (1 S/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) <p>DRINKING TROUGHS</p> <p>Concrete casted drinking troughs (2 troughs)</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter.</p> <p>Capacity : 810 litres</p> <p>Fittings for troughs</p> <ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 F/bend) • 32mmx0.8m Standpipe (2 S/pipe) • 32mm Bend (galv) (2 bend) • 32mm Ball valve (Control water level) (2 ball valve) • 32mm M& F bend (2 M&F bend) • 32mm Brass gate valve (2 valve) • 32mm Clamps (Wire type) (24 clamps) • 32 mm Inserts T-piece (Nylon) (4 T-piece) • 32mm class 3 LDPE pipe (200 meter) • Thread Type (20 rolls) <p>7. Lerobeng (Location: -25.095843343; 25.807950367)</p> <p>INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, 			

I.B

	COMPLY		
	YES	NO	REMARKS
<p>gearbox and brake system with four (4) legs (1 windmill)</p> <ul style="list-style-type: none"> • Fork rod (1 rod) • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (19 pipes) • 12mm Ø x 3.0m Electro plated pump rods with socks and protectors (19 rod) • Stainless steel borehole cylinder (1 cylinder) <p>Borehole specifications</p> <p>Borehole Depth: 90m, 1st strike: 54m, last strike: 54m</p> <p>Delivery Rate:.....</p> <p>Cylinder</p> <p>Make:.....</p> <p>Model:.....</p> <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 r/bush) • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 m/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) <p>CONSTRUCTION OF CONCRETE RESERVOIR</p> <p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes.</p>			

I.B.

	COMPLY		
	YES	NO	REMARKS
<p>(1 reservoir)</p> <p>Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush(galV) (1 r/bush) • 32mm Male adapter (nylon) (1 adapter) • 50 mm M&F bend (galv) (1 bend) • 2.5 meter x 50 mm Standpipe (galv) (1 s/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (2 bend) • 50 mm Male Adaptor (galv) (1 adaptor) <p>Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 Out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 2 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Brass gate valve (brass) (1 gate valve) • 50 mm Bend (galv) (1 bend) • 50mm x 32 mm Reducing bush (galv) (1 r/bush) • 32 mm Male Adaptor (1 adaptor) <p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) • 0.3 meter x 80 mm standpipe (galv) (1 s/pipe) • 3 meter x 80 standpipe (galv) (1 s/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<p>DRINKING TROUGHS</p> <p>Concrete casted drinking troughs (2 troughs)</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter</p> <p>Capacity : 810 litres</p> <p>Fittings for troughs</p> <ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 f/bend) • 32mmx0.8m Standpipe (2 s/pipe) • 32 mm bend (galv) (2 bend) • 32 M&F bend (2 bend) • 32 mm Brass gate valve (2 gate valve) • 32 mm Inserts T-piece (Nylon) (2 T-piece) • 32mm Ball valve (Control water level) (2 ball valve) • 32mm Clamps (Wire type) (24 clamps) • 32 mm class 3 LDPE pipe (200 meter) • Thread Tape (20 rolls) <p>8. Klaarstroom (Location: -25.523182396; 26.014263955)</p> <p>INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Install 2.5m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs (1 windmill) • Fork rod (1 rod) • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (12 pipes) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 12mm Ø x 3.0m Electro plated pump rods with socks and protectors (12 rod) • Stainless steel borehole cylinder (1 cylinder) <p>Borehole specifications</p> <p>Borehole Depth: 114m, 1st strike: 26m , last strike: 26m, water level before test: 21.2m and after test: 25.9m</p> <p>Delivery Rate: 610 L/H</p> <p>Cylinder</p> <p>Make:.....</p> <p>Model:.....</p> <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 r/bush) • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 m/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) <p>CONSTRUCTION OF CONCRETE RESERVOIR</p> <p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes. (1 reservoir)</p> <p>Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush (galv) (1 r/bush) • 32mm Male adapter (nylon) (1 adapter) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 50 mm M&F bend (galv) (1 bend) • 2.5 meter x 50 mm Standpipe (galv) (1 s/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (2 bend) • 50 mm Male Adaptor (galv) (1 adaptor) <p>Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 2 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Brass gate valve (brass) (1 gate valve) • 50 mm Bend (galv) (1 bend) • 50mm x 32 mm Reducing bush (galv) (1 r/bush) • 32 mm Male Adaptor (1 adaptor) <p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) • 0.3 meter x 80 mm standpipe (galv) (1 s/pipe) • 3 meter x 80 standpipe (galv) (1 s/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) <p>DRINKING TROUGHS</p> <p>Concrete casted drinking troughs (2 troughs)</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter</p> <p>Capacity : 810 litres</p>			

I.B

	COMPLY		
	YES	NO	REMARKS
<p>Fittings for troughs</p> <ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 f/bend) • 32mmx0.8m Standpipe (2 s/pipe) • 32 mm bend (galv) (2 bend) • 32 M&F bend (2 bend) • 32 mm Brass gate valve (2 gate valve) • 32 mm Inserts T-piece (Nylon) (4 T-piece) • 32mm Ball valve (Control water level) (2 ball valve) • 32mm Clamps (Wire type) (24 clamps) • 32 mm class 3 LDPE pipe (200 meter) • Thread Tape (20 rolls) <p>9. Nyetse (Location: -25.309217649; 26.025288564)</p> <p>INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs (1 windmill) • Fork rod (1 rod) • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (18 pipes) • 12mm Ø x 3.0m Electro plated pump rods with socks and protectors (18 rod) • Stainless steel borehole cylinder (1 cylinder) <p>Borehole specifications</p> <p>Borehole Depth: 60m, 1st strike: 42m , last strike: 50m, water level before test: 33.13m and after test: 47.05m</p>			

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	COMPLY		
	YES	NO	REMARKS
<p>Delivery Rate: 6545 L/H</p> <p>Cylinder</p> <p>Make:.....</p> <p>Model:.....</p> <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 r/bush) • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 m/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) <p>CONSTRUCTION OF CONCRETE RESERVOIR</p> <p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes. (1 reservoir)</p> <p>Inlet pipe fittings (50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush(galV) (1 r/bush) • 32mm Male adapter (nylon) (1 adapter) • 50 mm M&F bend (galv) (1 bend) • 2.5 meter x 50 mm Standpipe (galv) (1 s/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (2 bend) • 50 mm Male Adaptor (galv) (1 adaptor) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<p>Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 2 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Brass gate valve (brass) (1 gate valve) • 50 mm Bend (galv) (1 bend) • 50mm x 32 mm Reducing bush (galv) (1 r/bush) • 32 mm Male Adaptor (1 adaptor) <p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) • 0.3 meter x 80 mm standpipe (galv) • 3 meter x 80 standpipe (galv) • 80 mm Bras gate valve (brass) • 80 mm Male Adaptor (galv) <p>DRINKING TROUGHS</p> <p>Concrete casted drinking troughs (2 troughs)</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter</p> <p>Capacity : 810 litres</p> <p>Fittings for troughs</p> <ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 f/bend) • 32mmx0.8m Standpipe (2 s/pipe) • 32 mm bend (galv) (2 bend) • 32 M&F bend (2 bend) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 32 mm Brass gate valve (2 gate valve) • 32 mm Inserts T-piece (Nylon) (4 T-piece) • 32mm Ball valve (Control water level) (2 ball valve) • 32mm Clamps (Wire type) (24 clamps) • 32mm class 3 LDPE pipe (200 meter) • Thread Tape (20 rolls) <p>10. Matsiepane (Location: -25.388354354; 25.716892256)</p> <p>INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs (1 windmill) • Fork rod (1 rod) • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (36 pipes) • 16mm Ø x 3.0m Electro plated pump rods with socks and Protectors (36 rod) • Stainless steel borehole cylinder (1 cylinder) <p>Borehole specifications</p> <p>Borehole Depth: 132 m, 1st strike: 101 m , last strike: 101m, water level before test: 41.90 m and after test:98.70 m</p> <p>Delivery Rate: 684 L/H</p> <p>Cylinder</p> <p>Make:.....</p> <p>Model:.....</p>			

I.B.

	COMPLY		
	YES	NO	REMARKS
<p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 R/bush) • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 M/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) <p>CONSTRUCTION OF CONCRETE RESERVOIR</p> <p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes. (1 reservoir)</p> <p>Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush(galv) (1 R/bush) • 32mm Male adapter (nylon) (1 Adapter) • 50 mm M&F bend (galv) (1 bend) • 2.5 meter x 50 mm Standpipe (galv) (1 S/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 S/pipe) • 50 mm Bend (galv) (2 bend) •50 mm Male Adaptor (galv) (1 adaptor) <p>Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 Out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 S/pipe) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 2 meter x 50 mm Standpipe (galv) (1 S/pipe) • 50 mm Brass gate valve (brass) (1 gate valve) • 50 mm Bend (galv) (1 bend) • 50mm x 32 mm Reducing bush (galv) (1 R/bush) • 32 mm Male Adaptor (1 adaptor) <p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) • 0.3 meter x 80 mm standpipe (galv) (1 S/pipe) • 3 meter x 80 standpipe (galv) (1 S/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) <p>DRINKING TROUGHS</p> <p>Concrete casted drinking troughs (2 troughs)</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter</p> <p>Capacity : 810 litres</p> <p>Fittings for troughs</p> <ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 F/bend) • 32mmx0.8m Standpipe (2 S/pipe) • 32 mm bend (galv) (2 bend) • 32 M&F bend (2 bend) • 32 mm Brass gate valve (2 gate valve) • 32 mm Inserts T-piece (Nylon) (4 T- piece) • 32mm Ball valve (Control water level) (2 ball valve) • 32mm Clamps (Wire type) (24 clamps) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 32mm class 3 LDPE pipe. (200 meter) • Thread Tape (20 rolls) <p>11. Madutle (Location: -25.500110096; 25.675829797)</p> <p>INSTALLATION / CONSTRUCTION Windmill (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Complete 3.7m Ø Windmill with 9 m tower, head, wheel, tail and brake system with four (4) legs (1 windmill) • Fork rod (1 rod) • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 50mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (32 pipes) • 12mm Ø x 3.0m Electro plated pump rods with socks and protectors (32 rod) • Stainless steel borehole cylinder (1 cylinder) <p>Borehole specifications</p> <p>Borehole Depth: 102m, Last strike: 92m; water level before test: 19.00m after test: 90.05m Delivery: 0.24 L/S</p> <p>Cylinder</p> <p>Make:.....</p> <p>Model:.....</p> <ul style="list-style-type: none"> • 40mm Ø base plate (1 baseplate) • 40mm Ø brass non return valve (1 valve) • Air chamber (150mm Ø x 900mm steel pipe (2mm thick) with 20mm brass gate valve) (1 chamber) • 40mm Ø Force Head Brass (1 head brass) • Concrete: Windmill Tower Foundation Includes: Cement, Sand and Crusher stone(19mm) (2.8m³) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • Concrete block around casing: 800mm diameter x 600mm high 4 x12mm bolts and nuts (0.3 m³) <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 r/bush) • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 m/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) <p>CONCRETE RESEVOIR</p> <p>The reservoir should be design and build according to specifications in Appendix A</p> <p>Circular reinforced concrete reservoir, diameter 4,5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33,5 m³ (33,5 kl) Wall should be reinforced horizontally and vertically and the floors horizontally. Reservoir should by supply with inlet, outlet and drainages pipes. (1 reservoir)</p> <p>Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush(galV) (1 r/bush) • 32mm Male adapter (nylon) (1 adapter) • 50 mm M&F bend (galv) (1 bend) • 2.5 meter x 50 mm Standpipe (galv) (1 s/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (1 bend) • 50 mm Male Adaptor (galv) (1 adaptor) 			

I.B

	COMPLY		
	YES	NO	REMARKS
<p>Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 2 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (1 bend) • 50 mm Brass gate valve (brass) (1 valve) • 50mm x 32 mm Reducing bush (galv) (1 r/bush) • 32 mm Male Adaptor (1 adaptor) <p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) • 0.3 meter x 80 mm standpipe (galv) (1 s/pipe) • 3 meter x 80 mm stand pipe(galv) (1 s/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) <p>DRINKING TROUGHHS</p> <p>Concrete casted drinking troughs (2 troughs)</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter.</p> <p>Capacity : 810 litres</p> <p>Fittings for troughs</p> <ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 f/bend) • 32mmx0.8m Standpipe (2 s/pipe) • 32mm Bend (galv) (2 bend) • 32mm Ball valve (Control water level) (2 ball valve) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 32mm M& F bend (2 m&f bend) • 32mm Brass gate valve (2 valve) • 32mm Clamps (Wire type) (24 clamps) • 32 mm Inserts T-piece (Nylon) (4 T-piece) • 32 mm class 3 LDPE pipe (200 meter) • Thread Type (20 rolls) <p>12. Ikageleng (Location: -25.485589935; 25.923639530)</p> <p>INSTALLATION / CONSTRUCTION Windmill (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Complete 3.0m Ø Windmill with 6 m tower, head, wheel, tail and brake system with four (4) legs (1 windmill) • Fork rod (1 rod) • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (19 pipes) • 12mm Ø x 3.0m Electro plated pump rods with socks and protectors (19 rod) • Stainless steel borehole cylinder (1 cylinder) <p>Borehole specifications</p> <p>Borehole Depth: 72m, Last strike: 52m; water level before test: 11.40m after test: 50.00m Delivery: 0.30 L/S</p> <p>Cylinder</p> <p>Make:.....</p> <p>Model:.....</p> <ul style="list-style-type: none"> • 40mm Ø base plate (1 baseplate) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 40mm Ø brass non return valve (1 valve) • Air chamber (150mm Ø x 900mm steel pipe (2mm thick) with 20mm brass gate valve) (1 chamber) • 40mm Ø Force Head Brass (1 head brass) • Concrete: Windmill Tower Foundation Includes: Cement, Sand and Crusher stone(19mm) (2.8m³) • Concrete block around casing: 800mm diameter x 600mm high 4 x12mm bolts and nuts (0.3m³) <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 r/bush) • 32 mm M&F bend (galv) (1 bend) • 32 mm male bend (nylon) (1 m/bend) • 32 mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) <p>CONCRETE RESERVOIR</p> <p>The reservoir should be design and build according to specifications in Appendix A.</p> <p>Circular reinforced concrete reservoir, diameter 4,5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33,5 m³ (33,5 kl) Wall should be reinforced horizontally and vertically and the floors horizontally. Reservoir should by supply with inlet, outlet and drainages pipes. (1 reservoir)</p> <p>Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush(galV) (1 r/bush) • 32mm Male adapter (nylon) (1 adapter) • 50 mm M&F bend (galv) (1 bend) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 2.5 meter x 50 mm Standpipe (galv) (1 s/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (1 bend) • 50 mm Male Adaptor (galv) (1 adaptor) <p>Outlet pipe fittings (50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 2 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (1 bend) • 50 mm Brass gate valve (brass) (1 valve) • 50mm x 32 mm Reducing bush (galv) (1 r/bush) • 32 mm Male Adaptor (1 adaptor) <p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) • 0.3 meter x 80 mm standpipe (galv) (1 s/pipe) • 3 meter x 80 mm stand pipe(galv) (1 s/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) <p>DRINKING TROUGHS</p> <p>Concrete casted drinking troughs (2 troughs)</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter.</p> <p>Capacity : 810 litres</p> <p>Fittings for troughs</p>			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 f/bend) • 32mmx0.8m Standpipe (2 s/pipe) • 32mm Bend (galv) (2 bend) • 32mm Ball valve (Control water level) (2 ball valve) • 32mm M& F bend (2 m&f bend) • 32mm Brass gate valve (2 valve) • 32mm Clamps (Wire type) (24 clamps) • 32 mm Inserts T-piece (Nylon) (4 T-piece) • 32 mm class 3 LDPE pipe (200 meter) • Thread Type (20 rolls) <p>13. Majage (Location: -25.430209184; 25.924994608)</p> <p>INSTALLATION / CONSTRUCTION Windmill (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Complete 4.3m Ø Windmill with 9 m tower, head, wheel, tail and brake system with four (4) legs (1 windmill) • Fork rod (1 rod) • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (40 pipes) • 12mm Ø x 3.0m Electro plated pump rods with socks and protectors (40 rod) • Stainless steel borehole cylinder (1 cylinder) <p>Borehole specifications</p> <p>Borehole Depth: 126m, Last strike: 114m; water level before test: 12.40m after test: 98.60m Delivery: 2.67 L/S</p> <p>Cylinder</p>			

I.B

	COMPLY		
	YES	NO	REMARKS
<p>Make:.....</p> <p>Model:.....</p> <ul style="list-style-type: none"> • 40mm Ø base plate (1 baseplate) • 40mm Ø brass non return valve (1 valve) • Air chamber 150mm Ø x 900mm steel pipe (2mm thick) with 20mm brass gate valve) (1 chamber) • 40mm Ø Force Head Brass (1 head brass) • Concrete: Windmill Tower Foundation Includes: Cement, Sand and Crusher stone (19mm) (2.8 m³) • Concrete block around casing: 800mm diameter x 600mm high 4 x12mm bolts and nuts (0.3 m³) <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 r/bush) • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 m/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) <p>CONCRETE RESERVOIR</p> <p>The reservoir should be design and build according to specifications in Appendix A.</p> <p>Circular reinforced concrete reservoir, diameter 4,5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33,5 m³ (33,5 kl) Wall should be reinforced horizontally and vertically and the floors horizontally. Reservoir should by supply with inlet, outlet and drainages pipes. (1 reservoir)</p> <p>Inlet pipe fittings (50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 50 x32mm Reducing bush(galV) (1 r/bush) • 32mm Male adapter (nylon) (1 adapter) • 50 mm M&F bend (galv) (1 bend) • 2.5 meter x 50 mm Standpipe (galv) (1 s/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (1 bend) • 50 mm Male Adaptor (galv) (1 adaptor) <p>Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 2 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (1 bend) • 50 mm Brass gate valve (brass) (1 valve) • 50mm x 32 mm Reducing bush (galv) (1 r/bush) • 32 mm Male Adaptor (1 adaptor) <p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) • 0.3 meter x 80 mm standpipe (galv) (1 s/pipe) • 3 meter x 80 mm stand pipe(galv) (1 s/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) <p>DRINKING TROUGHS</p> <p>Concrete casted drinking troughs (2 troughs)</p>			

I.B.

	COMPLY		
	YES	NO	REMARKS
<p>Size: 3 meter x 0, 6 meter x 0, 45 meter.</p> <p>Capacity : 810 litres</p> <p>Fittings for troughs:</p> <ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 f/bend) • 32mmx0.8m Standpipe (2 s/pipe) • 32mm Bend (galv) (2 bend) • 32mm Ball valve (Control water level) (2 ball valve) • 32mm M& F bend (2 m&f bend) • 32mm Brass gate valve (2 valve) • 32mm Clamps (Wire type) (24 clamps) • 32 mm Inserts T-piece (Nylon) (4 T-piece) • 32 mm class 3 LDPE pipe (200 meter) • Thread Type (20 rolls) <p>14. Mosweu (Location: -25.381811237; 26.000118313)</p> <p>INSTALLATION / CONSTRUCTION Windmill (Includes all materials and labour required)</p> <p>INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs (1 windmill) • Fork rod (1 rod) • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (30 pipes) • 16mm Ø x 3.0m Electro plated pump rods with socks and Protectors (30 rod) 			

2.8

	COMPLY		
	YES	NO	REMARKS
<p>• Stainless steel borehole cylinder (1 cylinder)</p> <p>Borehole specifications</p> <p>Borehole Depth: 96 m, 1st strike: 46m , last strike: 83m , water level before test: 31.4m and after test: 81.4m</p> <p>Delivery Rate: 847 L/H</p> <p>Cylinder</p> <p>Make:.....</p> <p>Model:.....</p> <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 R/bush) • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 M/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) <p>CONSTRUCTION OF CONCRETE RESERVOIR</p> <p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes. (1 reservoir)</p> <p>Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush(galV) (1 R/bush) • 32mm Male adapter (nylon) (1 adapter) • 50 mm M&F bend (galv) (1 bend) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 2.5 meter x 50 mm Standpipe (galv) (1 S/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 S/pipe) • 50 mm Bend (galv) (2 bend) • 50 mm Male Adaptor (galv) (1 adaptor) <p>Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 Out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 S/pipe) • 2 meter x 50 mm Standpipe (galv) (1 S/pipe) • 50 mm Brass gate valve (brass) (1 gate valve) • 50 mm Bend (galv) (1 bend) • 50mm x 32 mm Reducing bush (galv) (1 R/bush) • 32 mm Male Adaptor (1 Adaptor) <p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) • 0.3 meter x 80 mm standpipe (galv) (1 S/pipe) • 3 meter x 80 standpipe (galv) (1 S/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) <p>DRINKING TROUGHS</p> <p>Concrete casted drinking troughs (2 troughs)</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter</p> <p>Capacity : 810 litres</p>			

I.B.

	COMPLY		
	YES	NO	REMARKS
<p>Fittings for troughs</p> <ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 F/bend) • 32mmx0.8m Standpipe (2 S/pipe) • 32 mm bend (galv) (2 bend) • 32 M&F bend (2 bend) • 32 mm Brass gate valve (2 gate valve) • 32 mm Inserts T-piece (Nylon) (4 T-piece) • 32mm Ball valve (Control water level) (2 ball valve) • 32mm Clamps (Wire type) (24 clamps) • 32mm class 3 LDPE pipe (200 meter) • Thread Tape (20 rolls) <p>15. Manogela (Location: -25.283284649; 26.148072362)</p> <p>INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Install 3.7m Ø Windmill with 9m tower, head, wheel, ladder, gearbox and brake system with four (4) legs (1 windmill) • Fork rod (1 rod) • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 50mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (32 pipes) • 12mm Ø x 3.0m Electro plated pump rods with socks and protectors (32 rod) • Stainless steel borehole cylinder (1 cylinder) <p>Borehole specifications</p> <p>Borehole Depth: 108m, 1st strike: 90m , last strike:90m , water level before test: 41 m and after test: 86.75m</p>			

I.B.

	COMPLY		
	YES	NO	REMARKS
<p>Delivery Rate: 5760 L/H</p> <p>Cylinder</p> <p>Make:.....</p> <p>Model:.....</p> <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 r/bush) • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 m/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) <p>CONSTRUCTION OF CONCRETE RESEVOIR</p> <p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes. (1 reservoir)</p> <p>Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush(galV) (1 r/bush) • 32mm Male adapter (nylon) (1 adapter) • 50 mm M&F bend (galv) (1 bend) • 2.5 meter x 50 mm Standpipe (galv) (1 s/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (2 bend) • 50 mm Male Adaptor (galv) (1 adaptor) 			

I.B.

	COMPLY		REMARKS
	YES	NO	
<p>Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (1 out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 2 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Brass gate valve (brass) (1 gate valve) • 50 mm Bend (galv) (1 bend) • 50mm x 32 mm Reducing bush (galv) (1 r/bush) • 32 mm Male Adaptor (1 adaptor) <p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) • 0.3 meter x 80 mm standpipe (galv) (1 s/pipe) • 3 meter x 80 standpipe (galv) (1 s/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) <p>DRINKING TROUGHHS</p> <p>Concrete casted drinking troughs (2 troughs)</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter</p> <p>Capacity : 810 litres</p> <p>Fittings for troughs</p> <ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 f/bend) • 32mmx0.8m Standpipe (2 s/pipe) • 32 mm bend (galv) (2 bend) • 32 M&F bend (2 bend) 			

I.B

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 32 mm Brass gate valve (2 gate valve) • 32 mm Inserts T-piece (Nylon) (4 T-piece) • 32mm Ball valve (Control water level) (2 ball valve) • 32mm Clamps (Wire type) (24 clamps) • 32mm class 3 LDPE pipe (200 meter) • Thread Tape (20 rolls) <p>16. Phata Ya Kgori (Location: -25.307713622; 25.751076064)</p> <p>INSTALLATION / CONSTRUCTION Windmill (Includes all materials and labour required)</p> <ul style="list-style-type: none"> • Complete 3.0m Ø Windmill with 6 m tower, head, wheel, tail and brake system with four (4) legs (1 windmill) • Fork rod (1 rod) • Bucket rod (Pitman) (1 rod) • Wooden rod (1 rod) • 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS (18 pipes) • 12mm Ø x 3.0m Electro plated pump rods with socks and protectors (18 rod) • Stainless steel borehole cylinder (1 cylinder) <p>Borehole specifications</p> <p>Borehole Depth: 66m, Last strike: 49m; water level before test: 33.50m after test: 47.60m Delivery: 0.16 L/S</p> <p>Cylinder</p> <p>Make:.....</p> <p>Model:.....</p>			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 40mm Ø base plate (1 base plate) • 40mm Ø brass non return valve (1 valve) • Air chamber (150mm Ø x 900mm steel pipe (2mm thick) with 20mm brass gate valve) (1 chamber) • 40mm Ø Force Head Brass (1 head brass) • Concrete: Windmill Tower Foundation Includes: Cement, Sand and Crusher stone(19mm) (2.8 m³) • Concrete block around casing: 800mm diameter x 600mm high 4 x12mm bolts and nuts (0.3m³) <p>Fittings from windmill to reservoir</p> <ul style="list-style-type: none"> • 32mm Brass valve (1 valve) • 40x32mm reducing bush (galv) (4 r/bush) • 32 mm M&F bend (galv) (1 bend) • 32mm male bend (nylon) (1 m/bend) • 32mmx 0,5 meter stand pipe (galv) (1 pipe) • 32 mm Male Adaptor (nylon) (1 adaptor) <p>CONCRETE RESERVOIR</p> <p>The reservoir should be design and build according to specifications in Appendix A</p> <p>Circular reinforced concrete reservoir, diameter 4,5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33,5 m³ (33,5 kl) Wall should be reinforced horizontally and vertically and the floors horizontally. Reservoir should by supply with inlet, outlet and drainages pipes. (1 reservoir)</p> <p>Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve (1 valve) • 50 x32mm Reducing bush(galV) (1 r/bush) • 32mm Male adapter (nylon) (1 adapter) • 50 mm M&F bend (galv) (1 bend) 			

I.B.

	COMPLY		
	YES	NO	REMARKS
<ul style="list-style-type: none"> • 2.5 meter x 50 mm Standpipe (galv) (1 s/pipe) • 0,3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (1 bend) • 50 mm Male Adaptor (galv) (1 adaptor) <p>Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) (out/screen) • 50 mm M&F bend (galv) (1 bend) • 0.3 meter x 50 mm Standpipe (galv) (1 s/pipe) • 2 meter x 50 mm Standpipe (galv) (1 s/pipe) • 50 mm Bend (galv) (1 bend) • 50 mm Brass gate valve (brass) (1 valve) • 50mm x 32 mm Reducing bush (galv) (1 r/bush) • 32 mm Male Adaptor (1 adaptor) <p>Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) (1 bend) • 0.3 meter x 80 mm standpipe (galv) (1 s/pipe) • 3 meter x 80 mm stand pipe(galv) (1 s/pipe) • 80 mm Bras gate valve (brass) (1 valve) • 80 mm Male Adaptor (galv) (1 adaptor) <p>DRINKING TROUGHS</p> <p>Concrete casted drinking troughs (2 troughs)</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter.</p> <p>Capacity : 810 litres</p>			

I.B.

		COMPLY		
		YES	NO	REMARKS
Fittings for troughs <ul style="list-style-type: none"> • 32mm Female bend (nylon) (2 f/bend) • 32mmx0.8m Standpipe (2 s/pipe) • 32mm Bend (galv) (2 bend) • 32mm Ball valve (Control water level) (2 ball valve) • 32mm M& F bend (2 m&f bend) • 32mm Brass gate valve (2 valve) • 32mm Clamps (Wire type) (24 clamps) • 32 mm Inserts T-piece (Nylon) (4 T-piece) • 32mm class 3 LDPE pipe (200 meter) • Thread Type (20 rolls) 				
4.2	The service provider is expected to deliver materials and windmills to all borehole sites without additional costs.			
4.3	<p>The bidder should have successfully executed a minimum of three contracts on equipping of boreholes with windmills and or repairing of windmills. The bidder is expected to submit proof by means of completion letters/certificates from where the service was provided.</p> <p>The letters with an official letterhead must be signed and have references i.e. contact persons and telephone numbers must be included. In cases where the letters do not have letterheads they must be accompanied by affidavits from the South African Police Service. Relevant experience should be clearly highlighted. Failure to submit the completion letters/certificates will invalidate the bid.</p>			
4.4	Local community members must be prioritised for jobs during equipping.			
4.5	The service provider is expected to travel to the specified properties to attend site visits at no extra costs to the Department.			
4.6	The service provider must have someone in the company who is able to communicate in the official local languages in case the service provider is unable			

I.B.

		COMPLY		
		YES	NO	REMARKS
	to.			
4.7	Work must be completed within six months after receiving the order number.			
4.8	The Department reserves the right to appoint more than one service provider to render the required service.			

5. Did the service provider complete all the required documentation (Pricing schedule), specification and submitted all the required documentation/valid Tax Clearance Certificate/Cipro certificate?

Ensure that all relevant documentation are completed in full or signed and submitted.

PLEASE NOTE THAT CONTACT DETAILS MUST BE ACTIVE THROUGH COMPLETION OF CONTRACT AND THE DEPARTMENT MUST BE NOTIFIED IMMEDIATELY IF THERE ARE ANY AMENDMENT OF THE CONTACT DETAILS. FAILURE TO DO SO WILL INVALIDATE YOUR QUOTATION.

I/we, the undersigned, declare that the information furnished is true and correct and warrants that he/she is duly authorised to sign on behalf of the company.

NAME AND CAPACITY: _____

SIGNATURE OF SUPPLIER: _____

DATE: _____

NAME OF COMPANY: _____

I.B.

Farm Name: Klipfontein

Location: -25.162022882; 25.912249825

<u>DESCRIPTION</u>	<u>Qty</u>	<u>Unit</u>	<u>Price/Unit</u> <u>VAT Include</u>	<u>Total Price</u> <u>VAT Include</u>
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)				
• Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	23	Pipes		
• 16mm Ø x 3.0m Electro plated pump rods with socks and protectors	23	Rod		
• Stainless steel borehole cylinder	1	Cylinder		
Borehole specifications				
Borehole Depth: 90m, 1st strike: 35m , last strike: 68m, water level before test: 34.9m and after test: 64m				
Delivery Rate: 2250 L/H				
Cylinder				
Make:.....				
Model:.....				
2.1 Fittings from windmill to reservoir				
• 32mm Brass valve	1	Valve		
• 40x32mm reducing bush (galv)	4	R/bush		
• 32 mm M&F bend (galv)	1	Bend		
• 32mm male bend (nylon)	1	M/bend		
• 32mmx 0,5 meter stand pipe (galv)	1	Pipe		

3. CONSTRUCTION OF CONCRETE RESEVIOUR				
Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m ³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes.		1	Reservoir	
3.1 Inlet pipe fittings(50 mm)				
• 50mm Brass valve		1	Valve	
• 50 x32mm Reducing bush(galV)		1	R/bush	
• 32mm Male adapter (nylon)		1	Adapter	
• 50 mm M&F bend (galv)		1	Bend	
• 2.5 meter x 50 mm Standpipe (galv)		1	S/pipe	
• 0,3 meter x 50 mm Standpipe (galv)		1	S/pipe	
• 50 mm Bend (galv)		2	Bend	
• 50 mm Male Adaptor (galv)		1	Adaptor	
3.2 Outlet pipe fittings(50 mm)				
• 50 mm Outlet screen (Stainless steel)		1	Out/screen	
• 50 mm M&F bend (galv)		1	Bend	
• 0.3 meter x 50 mm Standpipe (galv)		1	S/pipe	
• 2 meter x 50 mm Standpipe (galv)		1	S/pipe	
• 50 mm Brass gate valve (brass)		1	Gate valve	
• 50 mm Bend (galv)		1	Bend	
• 50mm x 32 mm Reducing bush (galv)		1	R/bush	
• 32 mm Male Adaptor		1	Adaptor	
3.3 Drainage outlet pipe (80 mm)				
• 80 mm bend (galv)				
• 0.3 meter x 80 mm standpipe (galv)		1	Bend	
• 3 meter x 80 standpipe (galv)		1	S/pipe	
• 80 mm Bras gate valve (brass)		1	S/pipe	
• 80 mm Male Adaptor (galv)		1	Valve	
		1	Adaptor	
4. DRINKING TROUGHS				
Concrete casted drinking troughs		2	Troughs	
Size: 3 meter x 0, 6 meter x 0, 45 meter				
Capacity : 810 liters				
4.1 Fittings for troughs				

• 32mmx0.8m Standpipe	2	S/pipe		
• 32 mm bend (galv)	2	Bend		
• 32 M&F bend	2	Bend		
• 32 mm Brass gate valve	2	Gate valve		
• 32 mm Inserts T-piece (Nylon)	4	T-piece		
• 32mm Ball valve (Control water level)	2	Ball valve		
• 32mm Clamps (Wire type)	24	Clamps		
• 32mm class 3 LDPE pipe.	200	Meter		
• Thread Tape	20	Rolls		
5. TRANSPORT				
• Delivery of materials and windmills to the sites	1	Transport		
TOTAL				

Farm Name: Schoonlaagte

Location: -24.825704658; 25.996437901

<u>DESCRIPTION</u>	<u>Qty</u>	<u>Unit</u>	<u>Price/Unit</u> <u>VAT Include</u>	<u>Total Price</u> <u>VAT Include</u>
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)				
• Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	20	Pipes		
• 16mm Ø x 3.0m Electro plated pump rods with socks and protectors	20	Rod		
• Stainless steel borehole cylinder	1	Cylinder		
Borehole specifications				
Borehole Depth: 120m, 1st strike: 36m , last strike: 57m, water level before test: 34m and after test: 56.6m				
Delivery Rate: 421 L/H				
Cylinder				
Make:.....				
Model:.....				
2.1 Fittings from windmill to reservoir				
• 32mm Brass valve	1	Valve		
• 40x32mm reducing bush (galv)	4	R/bush		
• 32 mm M&F bend (galv)	1	Bend		
• 32mm male bend (nylon)	1	M/bend		
• 32mmx 0,5 meter stand pipe (galv)	1	Pipe		

3. CONSTRUCTION OF CONCRETE RESEVIOUR

Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes.

3.1 Inlet pipe fittings(50 mm)

- 50mm Brass valve
- 50 x32mm Reducing bush(galV)
- 32mm Male adapter (nylon)
- 50 mm M&F bend (galv)
- 2.5 meter x 50 mm Standpipe (galv)
- 0,3 meter x 50 mm Standpipe (galv)
- 50 mm Bend (galv)
- 50 mm Male Adaptor (galv)

1 Reservoir

1 Valve

1 R/bush

1 Adapter

1 Bend

1 S/pipe

1 S/pipe

2 Bend

1 Adaptor

3.2 Outlet pipe fittings(50 mm)

- 50 mm Outlet screen (Stainless steel)
- 50 mm M&F bend (galv)
- 0.3 meter x 50 mm Standpipe (galv)
- 2 meter x 50 mm Standpipe (galv)
- 50 mm Brass gate valve (brass)
- 50 mm Bend (galv)
- 50mm x 32 mm Reducing bush (galv)
- 32 mm Male Adaptor

1 Out/screen

1 Bend

1 S/pipe

1 S/pipe

1 Gate valve

1 Bend

1 R/bush

1 Adaptor

3.3 Drainage outlet pipe (80 mm)

- 80 mm bend (galv)
- 0.3 meter x 80 mm standpipe (galv)
- 3 meter x 80 standpipe (galv)
- 80 mm Bras gate valve (brass)
- 80 mm Male Adaptor (galv)

1 Bend

1 S/pipe

1 S/pipe

1 Valve

1 Adaptor

4. DRINKING TROUGHS

Concrete casted drinking troughs

Size: 3 meter x 0, 6 meter x 0, 45 meter

Capacity : 810 liters

4.1 Fittings for troughs

2 Troughs

• 32mmx0.8m Standpipe	2	S/pipe		
• 32 mm bend (galv)	2	Bend		
• 32 M&F bend	2	Bend		
• 32 mm Brass gate valve	2	Gate valve		
• 32 mm Inserts T-piece (Nylon)	4	T-piece		
• 32mm Ball valve (Control water level)	2	Ball valve		
• 32mm Clamps (Wire type)	24	Clamps		
• 32mm class 3 LDPE pipe.	200	Meter		
• Thread Tape	20	Rolls		
5. TRANSPORT				
• Delivery of materials and windmills to the sites	1	Transport		
TOTAL				

Farm Name: Nicholasdoorn

Location: -24.747922285; 26.025593004

<u>DESCRIPTION</u>	<u>Qty</u>	<u>Unit</u>	<u>Price/Unit</u> <u>VAT Include</u>	<u>Total Price</u> <u>VAT Include</u>
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)				
• Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	16	Pipes		
• 16mm Ø x 3.0m Electro plated pump rods with socks and protectors	16	Rod		
• Stainless steel borehole cylinder	1	Cylinder		
Borehole specifications				
Borehole Depth: 66m, 1st strike: 37m , last strike:44m , water level before test: 25.6m and after test: 40.35m				
Delivery Rate: 960 L/H				
Cylinder				
Make:.....				
Model:.....				
2.1 Fittings from windmill to reservoir				
• 32mm Brass valve	1	Valve		
• 40x32mm reducing bush (galv)	4	R/bush		
• 32 mm M&F bend (galv)	1	Bend		
• 32mm male bend (nylon)	1	M/bend		
• 32mmx 0,5 meter stand pipe (galv)	1	Pipe		

3. CONSTRUCTION OF CONCRETE RESEIVOIR

Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes.

3.1 Inlet pipe fittings(50 mm)

- | | | |
|--------------------------------------|---|---------|
| • 50mm Brass valve | 1 | Valve |
| • 50 x32mm Reducing bush(galV) | 1 | R/bush |
| • 32mm Male adapter (nylon) | 1 | Adapter |
| • 50 mm M&F bend (galv) | 1 | Bend |
| • 2.5 meter x 50 mm Standpipe (galv) | 1 | S/pipe |
| • 0,3 meter x 50 mm Standpipe (galv) | 1 | S/pipe |
| • 50 mm Bend (galv) | 2 | Bend |
| • 50 mm Male Adaptor (galv) | 1 | Adaptor |

3.2 Outlet pipe fittings(50 mm)

- | | | |
|---|---|------------|
| • 50 mm Outlet screen (Stainless steel) | 1 | Out/screen |
| • 50 mm M&F bend (galv) | 1 | Bend |
| • 0.3 meter x 50 mm Standpipe (galv) | 1 | S/pipe |
| • 2 meter x 50 mm Standpipe (galv) | 1 | S/pipe |
| • 50 mm Brass gate valve (brass) | 1 | Gate valve |
| • 50 mm Bend (galv) | 1 | Bend |
| • 50mm x 32 mm Reducing bush (galv) | 1 | R/bush |
| • 32 mm Male Adaptor | 1 | Adaptor |

3.3 Drainage outlet pipe (80 mm)

- | | | |
|--------------------------------------|---|---------|
| • 80 mm bend (galv) | 1 | Bend |
| • 0.3 meter x 80 mm standpipe (galv) | 1 | S/pipe |
| • 3 meter x 80 standpipe (galv) | 1 | S/pipe |
| • 80 mm Bras gate valve (brass) | 1 | Valve |
| • 80 mm Male Adaptor (galv) | 1 | Adaptor |

4. DRINKING TROUGHS

Concrete casted drinking troughs
 Size: 3 meter x 0, 6 meter x 0, 45 meter
 Capacity : 810 liters

4.1 Fittings for troughs

2	Troughs
---	---------

• 32mmx0.8m Standpipe	2	S/pipe		
• 32 mm bend (galv)	2	Bend		
• 32 M&F bend	2	Bend		
• 32 mm Brass gate valve	2	Gate valve		
• 32 mm Inserts T-piece (Nylon)	4	T-piece		
• 32mm Ball valve (Control water level)	2	Ball valve		
• 32mm Clamps (Wire type)	24	Clamps		
• 32mm class 3 LDPE pipe.	200	Meter		
• Thread Tape	20	Rolls		
5. TRANSPORT				
• Delivery of materials and windmills to the sites	1	Transport		
TOTAL				

Farm Name: Disobelo

Location: -25.075348459; 26.009677099

<u>DESCRIPTION</u>	<u>Qty</u>	<u>Unit</u>	<u>Price/Unit</u> <u>VAT Include</u>	<u>Total Price</u> <u>VAT Include</u>
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)				
• Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	24	Pipes		
• 16mm Ø x 3.0m Electro plated pump rods with socks and protectors	24	Rod		
• Stainless steel borehole cylinder	1	Cylinder		
Borehole specifications				
Borehole Depth: 138m, water level before test: 33.8m and after test: 67.50m				
Delivery Rate: 503 L/H				
Cylinder				
Make:.....				
Model:.....				
2.1 Fittings from windmill to reservoir				
• 32mm Brass valve	1	Valve		
• 40x32mm reducing bush (galv)	4	R/bush		
• 32 mm M&F bend (galv)	1	Bend		
• 32mm male bend (nylon)	1	M/bend		
• 32mmx 0,5 meter stand pipe (galv)	1	Pipe		

3. CONSTRUCTION OF CONCRETE RESEIVOIR			
Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m ³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes.			
3.1 Inlet pipe fittings(50 mm)			
• 50mm Brass valve	1	Valve	
• 50 x32mm Reducing bush(galv)	1	R/bush	
• 32mm Male adapter (nylon)	1	Adapter	
• 50 mm M&F bend (galv)	1	Bend	
• 2.5 meter x 50 mm Standpipe (galv)	1	S/pipe	
• 0,3 meter x 50 mm Standpipe (galv)	1	S/pipe	
• 50 mm Bend (galv)	2	Bend	
• 50 mm Male Adaptor (galv)	1	Adaptor	
3.2 Outlet pipe fittings(50 mm)			
• 50 mm Outlet screen (Stainless steel)	1	Out/screen	
• 50 mm M&F bend (galv)	1	Bend	
• 0.3 meter x 50 mm Standpipe (galv)	1	S/pipe	
• 2 meter x 50 mm Standpipe (galv)	1	S/pipe	
• 50 mm Brass gate valve (brass)	1	Gate valve	
• 50 mm Bend (galv)	1	Bend	
• 50mm x 32 mm Reducing bush (galv)	1	R/bush	
• 32 mm Male Adaptor	1	Adaptor	
3.3 Drainage outlet pipe (80 mm)			
• 80 mm bend (galv)	1	Bend	
• 0.3 meter x 80 mm standpipe (galv)	1	S/pipe	
• 3 meter x 80 standpipe (galv)	1	S/pipe	
• 80 mm Bras gate valve (brass)	1	Valve	
• 80 mm Male Adaptor (galv)	1	Adaptor	
4. DRINKING TROUGHS			
Concrete casted drinking troughs	2	Troughs	
Size: 3 meter x 0, 6 meter x 0, 45 meter			
Capacity : 810 liters			
4.1 Fittings for troughs			

• 32mmx0.8m Standpipe	2	S/pipe		
• 32 mm bend (galv)	2	Bend		
• 32 M&F bend	2	Bend		
• 32 mm Brass gate valve	2	Gate valve		
• 32 mm Inserts T-piece (Nylon)	4	T-piece		
• 32mm Ball valve (Control water level)	2	Ball valve		
• 32mm Clamps (Wire type)	24	Clamps		
• 32mm class 3 LDPE pipe.	200	Meter		
• Thread Tape	20	Rolls		
5. TRANSPORT				
• Delivery of materials and windmills to the sites	1	Transport		
TOTAL				

Farm Name: Braklaagte

Location: -24.748660959; 26.095030115

<u>DESCRIPTION</u>	<u>Qty</u>	<u>Unit</u>	<u>Price/Unit</u> <u>VAT Include</u>	<u>Total Price</u> <u>VAT Include</u>
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)				
• Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	16	Pipes		
• 16mm Ø x 3.0m Electro plated pump rods with socks and protectors	16	Rod		
• Stainless steel borehole cylinder	1	Cylinder		
Borehole specifications				
Borehole Depth: 90m, 1st strike: 40m , last strike:40m , water level before test: 32.20m and after test: 39 .20m				
Delivery Rate: 782 L/H				
Cylinder				
Make:.....				
Model:.....				
2.1 Fittings from windmill to reservoir				
• 32mm Brass valve	1	Valve		
• 40x32mm reducing bush (galv)	4	R/bush		
• 32 mm M&F bend (galv)	1	Bend		
• 32mm male bend (nylon)	1	M/bend		
• 32mmx 0,5 meter stand pipe (galv)	1	Pipe		

3. CONSTRUCTION OF CONCRETE RESEVIOUR			
<p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes.</p>		1	Reservoir
3.1 Inlet pipe fittings(50 mm)			
• 50mm Brass valve		1	Valve
• 50 x32mm Reducing bush(galv)		1	R/bush
• 32mm Male adapter (nylon)		1	Adapter
• 50 mm M&F bend (galv)		1	Bend
• 2.5 meter x 50 mm Standpipe (galv)		1	S/pipe
• 0,3 meter x 50 mm Standpipe (galv)		1	S/pipe
• 50 mm Bend (galv)		2	Bend
• 50 mm Male Adaptor (galv)		1	Adaptor
3.2 Outlet pipe fittings(50 mm)			
• 50 mm Outlet screen (Stainless steel)		1	Out/screen
• 50 mm M&F bend (galv)		1	Bend
• 0.3 meter x 50 mm Standpipe (galv)		1	S/pipe
• 2 meter x 50 mm Standpipe (galv)		1	S/pipe
• 50 mm Brass gate valve (brass)		1	Gate valve
• 50 mm Bend (galv)		1	Bend
• 50mm x 32 mm Reducing bush (galv)		1	R/bush
• 32 mm Male Adaptor		1	Adaptor
3.3 Drainage outlet pipe (80 mm)			
• 80 mm bend (galv)		1	Bend
• 0.3 meter x 80 mm standpipe (galv)		1	S/pipe
• 3 meter x 80 standpipe (galv)		1	S/pipe
• 80 mm Bras gate valve (brass)		1	Valve
• 80 mm Male Adaptor (galv)		1	Adaptor
4. DRINKING TROUGHS			
<p>Concrete casted drinking troughs Size: 3 meter x 0, 6 meter x 0, 45 meter Capacity : 810 liters</p>		2	Troughs
4.1 Fittings for troughs			

• 32mmx0.8m Standpipe	2	S/pipe		
• 32 mm bend (galv)	2	Bend		
• 32 M&F bend	2	Bend		
• 32 mm Brass gate valve	2	Gate valve		
• 32 mm Inserts T-piece (Nylon)	4	T-piece		
• 32mm Ball valve (Control water level)	2	Ball valve		
• 32mm Clamps (Wire type)	24	Clamps		
• 32mm class 3 LDPE pipe.	200	Meter		
• Thread Tape	20	Rolls		
5. TRANSPORT				
• Delivery of materials and windmills to the sites	1	Transport		
TOTAL				

Project 7: Maramage

Location: -25.379949938; 25.882226869

<u>DESCRIPTION</u>	<u>Qty</u>	<u>Unit</u>	<u>Price/Unit</u> <u>VAT Include</u>	<u>Total Price</u> <u>VAT Include</u>
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION / CONSTRUCTION Windmill (Includes all materials and labour required)				
• Complete 3.0m Ø Windmill with 6 m tower, head, wheel, tail and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	12	Pipes		
• 12mm Ø x 3.0m Electro plated pump rods with socks and protectors	12	Rod		
• Stainless steel borehole cylinder				
Borehole specifications	1	Cylinder		
Borehole Depth: 60m, Last strike: 27m; water level before test: 22.70m after test: 25.60m				
Delivery: 0.25 L/S				
Cylinder				
Make:.....				
Model:.....				
• 40mm Ø base plate	1	Baseplate		
• 40mm Ø brass non return valve	1	Valve		
• Air chamber (150mm Ø x 900mm steel pipe (2mm thick) with 20mm brass gate valve)	1	Chamber		
• 40mm Ø Force Head Brass	1	Head brass		

<ul style="list-style-type: none"> Concrete: Windmill Tower Foundation <i>Includes: Cement, Sand and Crusher stone(19mm)</i> 	2.8	m ³		
<ul style="list-style-type: none"> Concrete block around casing: 800mm diameter x 600mm high 4 x12mm bolts and nuts 	0.3	m ³		
2.1 Fittings from windmill to reservoir				
<ul style="list-style-type: none"> 32mm Brass valve 	1	Valve		
<ul style="list-style-type: none"> 40x32mm reducing bush (galv) 	4	R/bush		
<ul style="list-style-type: none"> 32 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 32mm male bend (nylon) 	1	M/bend		
<ul style="list-style-type: none"> 32mmx 0,5 meter stand pipe (galv) 	1	Pipe		
<ul style="list-style-type: none"> 32 mm Male Adaptor (nylon) 	1	Adaptor		
3. CONCRETE RESEVIOUR				
The reservoir should be design and build according to specifications in Appendix A				
Circular reinforced concrete reservoir, diameter 4,5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33,5 m ³ (33,5 kl) Wall should be reinforced horizontally and vertically and the floors horizontally. Reservoir should by supply with inlet, outlet and drainages pipes.				
3.1 Inlet pipe fittings(50 mm)				
<ul style="list-style-type: none"> 50mm Brass valve 	1	Valve		
<ul style="list-style-type: none"> 50 x32mm Reducing bush(galv) 	1	R/bush		
<ul style="list-style-type: none"> 32mm Male adapter (nylon) 	1	Adapter		
<ul style="list-style-type: none"> 50 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 2.5 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 0,3 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 50 mm Bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 50 mm Male Adaptor (galv) 	1	Adaptor		
3.2 Outlet pipe fittings(50 mm)				
<ul style="list-style-type: none"> 50 mm Outlet screen (Stainless steel) 	1	Out/screen		
<ul style="list-style-type: none"> 50 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 0.3 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 2 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 50 mm Bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 50 mm Brass gate valve (brass) 	1	Valve		

<ul style="list-style-type: none"> • 50mm x 32 mm Reducing bush (galv) • 32 mm Male Adaptor 	1	R/bush		
	1	Adaptor		
3.3 Drainage outlet pipe (80 mm)				
<ul style="list-style-type: none"> • 80 mm bend (galv) 	1	Bend		
<ul style="list-style-type: none"> • 0.3 meter x 80 mm standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> • 3 meter x 80 mm stand pipe(galv) 	1	S/pipe		
<ul style="list-style-type: none"> • 80 mm Bras gate valve (brass) 	1	Valve		
<ul style="list-style-type: none"> • 80 mm Male Adaptor (galv) 	1	Adaptor		
4. DRINKING TROUGHS				
Concrete casted drinking troughs	2	Troughs		
Size: 3 meter x 0, 6 meter x 0, 45 meter.				
Capacity : 810 liters				
4.1 Fittings for troughs				
<ul style="list-style-type: none"> • 32mm Female bend (nylon) 	2	F/bend		
<ul style="list-style-type: none"> • 32mmx0.8m Standpipe 	2	S/pipe		
<ul style="list-style-type: none"> • 32mm Bend (galv) 	2	Bend		
<ul style="list-style-type: none"> • 32mm Ball valve (Control water level) 	2	Ball valve		
<ul style="list-style-type: none"> • 32mm M& F bend 	2	M&F bend		
<ul style="list-style-type: none"> • 32mm Brass gate valve 	2	Valve		
<ul style="list-style-type: none"> • 32mm Clamps (Wire type) 	24	Clamps		
<ul style="list-style-type: none"> • 32 mm Inserts T-piece (Nylon) 	4	T-piece		
<ul style="list-style-type: none"> • 32mm class 3 LDPE pipe. 	200	Meter		
<ul style="list-style-type: none"> • Thread Type 	20	Rolls		
5. TRANSPORT				
<ul style="list-style-type: none"> • Delivery of materials and windmills to the sites 	1	Transport		
TOTAL				

Farm Name: Lerobeng

Location: -25.095843343; 25.807950367

<u>DESCRIPTION</u>	<u>Qty</u>	<u>Unit</u>	<u>Price/Unit</u> <u>VAT Include</u>	<u>Total Price</u> <u>VAT Include</u>
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)				
• Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	19	Pipes		
• 16mm Ø x 3.0m Electro plated pump rods with socks and protectors	19	Rod		
• Stainless steel borehole cylinder	1	Cylinder		
Borehole specifications				
Borehole Depth: 90m, 1st strike: 54m , last strike: 54m				
Delivery Rate:.....				
Cylinder				
Make:.....				
Model:.....				
2.1 Fittings from windmill to reservoir				
• 32mm Brass valve	1	Valve		
• 40x32mm reducing bush (galv)	4	R/bush		
• 32 mm M&F bend (galv)	1	Bend		
• 32mm male bend (nylon)	1	M/bend		
• 32mmx 0,5 meter stand pipe (galv)	1	Pipe		
• 32 mm Male Adaptor (nylon)				

3. CONSTRUCTION OF CONCRETE RESEVIOUR			
Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m ³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes.		1	Reservoir
3.1 Inlet pipe fittings(50 mm)			
• 50mm Brass valve		1	Valve
• 50 x32mm Reducing bush(galV)		1	R/bush
• 32mm Male adapter (nylon)		1	Adapter
• 50 mm M&F bend (galv)		1	Bend
• 2.5 meter x 50 mm Standpipe (galv)		1	S/pipe
• 0,3 meter x 50 mm Standpipe (galv)		1	S/pipe
• 50 mm Bend (galv)		2	Bend
• 50 mm Male Adaptor (galv)		1	Adaptor
3.2 Outlet pipe fittings(50 mm)			
• 50 mm Outlet screen (Stainless steel)		1	Out/screen
• 50 mm M&F bend (galv)		1	Bend
• 0.3 meter x 50 mm Standpipe (galv)		1	S/pipe
• 2 meter x 50 mm Standpipe (galv)		1	S/pipe
• 50 mm Brass gate valve (brass)		1	Gate valve
• 50 mm Bend (galv)		1	Bend
• 50mm x 32 mm Reducing bush (galv)		1	R/bush
• 32 mm Male Adaptor		1	Adaptor
3.3 Drainage outlet pipe (80 mm)			
• 80 mm bend (galv)			
• 0.3 meter x 80 mm standpipe (galv)		1	Bend
• 3 meter x 80 standpipe (galv)		1	S/pipe
• 80 mm Bras gate valve (brass)		1	S/pipe
• 80 mm Male Adaptor (galv)		1	Valve
		1	Adaptor
4. DRINKING TROUGHS			
Concrete casted drinking troughs		2	Troughs
Size: 3 meter x 0, 6 meter x 0, 45 meter			
Capacity : 810 liters			
4.1 Fittings for troughs			

• 32mmx0.8m Standpipe	2	S/pipe		
• 32 mm bend (galv)	2	Bend		
• 32 M&F bend	2	Bend		
• 32 mm Brass gate valve	2	Gate valve		
• 32 mm Inserts T-piece (Nylon)	2	T-piece		
• 32mm Ball valve (Control water level)	2	Ball valve		
• 32mm Clamps (Wire type)	24	Clamps		
• 32mm class 3 LDPE pipe.	200	Meter		
• Thread Tape	20	Rolls		
5. TRANSPORT				
• Delivery of materials and windmills to the sites	1	Transport		
TOTAL				

Farm Name: Klaarstroom

Location: -25.523182396; 26.014263955

DESCRIPTION	Qty	Unit	Price/Unit VAT Include	Total Price VAT Include
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)				
• Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	12	Pipes		
• 16mm Ø x 3.0m Electro plated pump rods with socks and protectors	12	Rod		
• Stainless steel borehole cylinder	1	Cylinder		
Borehole specifications				
Borehole Depth: 114m, 1st strike: 26m , last strike: 26m, water level before test: 21.2m and after test: 25.9m				
Delivery Rate: 610 L/H				
Cylinder				
Make:.....				
Model:.....				
2.1 Fittings from windmill to reservoir				
• 32mm Brass valve	1	Valve		
• 40x32mm reducing bush (galv)	4	R/bush		
• 32 mm M&F bend (galv)	1	Bend		
• 32mm male bend (nylon)	1	M/bend		
• 32mmx 0,5 meter stand pipe (galv)	1	Pipe		

3. CONSTRUCTION OF CONCRETE RESEVIOUR				
Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m ³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes.				
3.1 Inlet pipe fittings(50 mm)				
• 50mm Brass valve	1	Valve		
• 50 x32mm Reducing bush (galv)	1	R/bush		
• 32mm Male adapter (nylon)	1	Adapter		
• 50 mm M&F bend (galv)	1	Bend		
• 2.5 meter x 50 mm Standpipe (galv)	1	S/pipe		
• 0,3 meter x 50 mm Standpipe (galv)	1	S/pipe		
• 50 mm Bend (galv)	2	Bend		
• 50 mm Male Adaptor (galv)	1	Adaptor		
3.2 Outlet pipe fittings(50 mm)				
• 50 mm Outlet screen (Stainless steel)	1	Out/screen		
• 50 mm M&F bend (galv)	1	Bend		
• 0.3 meter x 50 mm Standpipe (galv)	1	S/pipe		
• 2 meter x 50 mm Standpipe (galv)	1	S/pipe		
• 50 mm Brass gate valve (brass)	1	Gate valve		
• 50 mm Bend (galv)	1	Bend		
• 50mm x 32 mm Reducing bush (galv)	1	R/bush		
• 32 mm Male Adaptor	1	Adaptor		
3.3 Drainage outlet pipe (80 mm)				
• 80 mm bend (galv)	1	Bend		
• 0.3 meter x 80 mm standpipe (galv)	1	S/pipe		
• 3 meter x 80 standpipe (galv)	1	S/pipe		
• 80 mm Bras gate valve (brass)	1	Valve		
• 80 mm Male Adaptor (galv)	1	Adaptor		
4. DRINKING TROUGHS				
Concrete casted drinking troughs	2	Troughs		
Size: 3 meter x 0, 6 meter x 0, 45 meter				
Capacity : 810 liters				
4.1 Fittings for troughs				

<ul style="list-style-type: none"> • 32mmx0.8m Standpipe • 32 mm bend (galv) • 32 M&F bend • 32 mm Brass gate valve • 32 mm Inserts T-piece (Nylon) • 32mm Ball valve (Control water level) • 32mm Clamps (Wire type) • 32mm class 3 LDPE pipe. • Thread Tape 	2 2 2 2 4 2 24 200 20	S/pipe Bend Bend Gate valve T-piece Ball valve Clamps Meter Rolls		
5. TRANSPORT <ul style="list-style-type: none"> • Delivery of materials and windmills to the sites 	1	Transport		
TOTAL				

Farm Name: Nyetse

Location: -25.309217649; 26.025288564

DESCRIPTION	Qty	Unit	Price/Unit VAT Include	Total Price VAT Include
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)				
• Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	18	Pipes		
• 16mm Ø x 3.0m Electro plated pump rods with socks and protectors	18	Rod		
• Stainless steel borehole cylinder	1	Cylinder		
Borehole specifications				
Borehole Depth: 60m, 1 st strike: 42m , last strike: 50m, water level before test: 33.13m and after test: 47.05m				
Delivery Rate: 6545 L/H				
Cylinder				
Make:.....				
Model:.....				
2.1 Fittings from windmill to reservoir				
• 32mm Brass valve	1	Valve		
• 40x32mm reducing bush (galv)	4	R/bush		
• 32 mm M&F bend (galv)	1	Bend		
• 32mm male bend (nylon)	1	M/bend		
• 32mmx 0,5 meter stand pipe (galv)	1	Pipe		

3. CONSTRUCTION OF CONCRETE RESEVIOUR			
Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m ³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes.			
3.1 Inlet pipe fittings(50 mm)			
• 50mm Brass valve	1	Valve	
• 50 x32mm Reducing bush(galV)	1	R/bush	
• 32mm Male adapter (nylon)	1	Adapter	
• 50 mm M&F bend (galv)	1	Bend	
• 2.5 meter x 50 mm Standpipe (galv)	1	S/pipe	
• 0,3 meter x 50 mm Standpipe (galv)	1	S/pipe	
• 50 mm Bend (galv)	2	Bend	
• 50 mm Male Adaptor (galv)	1	Adaptor	
3.2 Outlet pipe fittings(50 mm)			
• 50 mm Outlet screen (Stainless steel)	1	Out/screen	
• 50 mm M&F bend (galv)	1	Bend	
• 0.3 meter x 50 mm Standpipe (galv)	1	S/pipe	
• 2 meter x 50 mm Standpipe (galv)	1	S/pipe	
• 50 mm Brass gate valve (brass)	1	Gate valve	
• 50 mm Bend (galv)	1	Bend	
• 50mm x 32 mm Reducing bush (galv)	1	R/bush	
• 32 mm Male Adaptor	1	Adaptor	
3.3 Drainage outlet pipe (80 mm)			
• 80 mm bend (galv)			
• 0.3 meter x 80 mm standpipe (galv)	1	Bend	
• 3 meter x 80 standpipe (galv)	1	S/pipe	
• 80 mm Bras gate valve (brass)	1	S/pipe	
• 80 mm Male Adaptor (galv)	1	Valve	
	1	Adaptor	
4. DRINKING TROUGHS			
Concrete casted drinking troughs	2	Troughs	
Size: 3 meter x 0, 6 meter x 0, 45 meter			
Capacity : 810 liters			
4.1 Fittings for troughs			

• 32mmx0.8m Standpipe	2	S/pipe		
• 32 mm bend (galv)	2	Bend		
• 32 M&F bend	2	Bend		
• 32 mm Brass gate valve	2	Gate valve		
• 32 mm Inserts T-piece (Nylon)	4	T-piece		
• 32mm Ball valve (Control water level)	2	Ball valve		
• 32mm Clamps (Wire type)	24	Clamps		
• 32mm class 3 LDPE pipe.	200	Meter		
• Thread Tape	20	Rolls		
5. TRANSPORT				
• Delivery of materials and windmills to the sites	1	Transport		
TOTAL				

Farm Name: Matsiepane

Location: -25.388354354; 25.716892256

DESCRIPTION	Qty	Unit	Price/Unit VAT Include	Total Price VAT Include
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)				
• Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	36	Pipes		
• 16mm Ø x 3.0m Electro plated pump rods with socks and protectors	36	Rod		
• Stainless steel borehole cylinder	1	Cylinder		
Borehole specifications				
Borehole Depth: 132 m, 1st strike: 101 m , last strike: 101m, water level before test: 41.90 m and after test:98.70 m				
Delivery Rate: 684 L/H				
Cylinder				
Make:.....				
Model:.....				
2.1 Fittings from windmill to reservoir				
• 32mm Brass valve	1	Valve		
• 40x32mm reducing bush (galv)	4	R/bush		
• 32 mm M&F bend (galv)	1	Bend		
• 32mm male bend (nylon)	1	M/bend		
• 32mmx 0,5 meter stand pipe (galv)	1	Pipe		

3. CONSTRUCTION OF CONCRETE RESEVIOUR				
<p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 Kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes.</p>	1	Reservoir		
3.1 Inlet pipe fittings(50 mm)				
<ul style="list-style-type: none"> • 50mm Brass valve 	1	Valve		
<ul style="list-style-type: none"> • 50 x32mm Reducing bush(galV) 	1	R/bush		
<ul style="list-style-type: none"> • 32mm Male adapter (nylon) 	1	Adapter		
<ul style="list-style-type: none"> • 50 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> • 2.5 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> • 0,3 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> • 50 mm Bend (galv) 	2	Bend		
<ul style="list-style-type: none"> • 50 mm Male Adaptor (galv) 	1	Adaptor		
3.2 Outlet pipe fittings(50 mm)				
<ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) 	1	Out/screen		
<ul style="list-style-type: none"> • 50 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> • 0.3 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> • 2 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> • 50 mm Brass gate valve (brass) 	1	Gate valve		
<ul style="list-style-type: none"> • 50 mm Bend (galv) 	1	Bend		
<ul style="list-style-type: none"> • 50mm x 32 mm Reducing bush (galv) 	1	R/bush		
<ul style="list-style-type: none"> • 32 mm Male Adaptor 	1	Adaptor		
3.3 Drainage outlet pipe (80 mm)				
<ul style="list-style-type: none"> • 80 mm bend (galv) 	1	Bend		
<ul style="list-style-type: none"> • 0.3 meter x 80 mm standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> • 3 meter x 80 standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> • 80 mm Bras gate valve (brass) 	1	Valve		
<ul style="list-style-type: none"> • 80 mm Male Adaptor (galv) 	1	Adaptor		
4. DRINKING TROUGHS				
<p>Concrete casted drinking troughs</p>	2	Troughs		
<p>Size: 3 meter x 0, 6 meter x 0, 45 meter</p>				
<p>Capacity : 810 liters</p>				
4.1 Fittings for troughs				

• 32mmx0.8m Standpipe	2	S/pipe		
• 32 mm bend (galv)	2	Bend		
• 32 M&F bend	2	Bend		
• 32 mm Brass gate valve	2	Gate valve		
• 32 mm Inserts T-piece (Nylon)	4	T-piece		
• 32mm Ball valve (Control water level)	2	Ball valve		
• 32mm Clamps (Wire type)	24	Clamps		
• 32mm class 3 LDPE pipe.	200	Meter		
• Thread Tape	20	Rolls		
5. TRANSPORT				
• Delivery of materials and windmills to the sites	1	Transport		
TOTAL				

Project 3: Madutle

Location: -25.500110096; 25.675829797

DESCRIPTION	Qty	Unit	Price/Unit VAT Include	Total Price VAT Include
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION / CONSTRUCTION Windmill (Includes all materials and labour required)				
• Complete 3.0m Ø Windmill with 6 m tower, head, wheel, tail and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	32	Pipes		
• 12mm Ø x 3.0m Electro plated pump rods with socks and protectors	32	Rod		
• Stainless steel borehole cylinder				
Borehole specifications	1	Cylinder		
Borehole Depth: 102m, Last strike: 92m; water level before test: 19.00m after test: 90.05m				
Delivery: 0.24 L/S				
Cylinder				
Make:.....				
Model:.....				
• 40mm Ø base plate	1	Baseplate		
• 40mm Ø brass non return valve	1	Valve		
• Air chamber (150mm Ø x 900mm steel pipe (2mm thick) with 20mm brass gate valve)	1	Chamber		
• 40mm Ø Force Head Brass	1	Head brass		

<ul style="list-style-type: none"> Concrete: Windmill Tower Foundation <i>Includes: Cement, Sand and Crusher stone(19mm)</i> 	2.8	m ³		
<ul style="list-style-type: none"> Concrete block around casing: 800mm diameter x 600mm high 4 x12mm bolts and nuts 	0.3	m ³		
2.1 Fittings from windmill to reservoir				
<ul style="list-style-type: none"> 32mm Brass valve 	1	Valve		
<ul style="list-style-type: none"> 40x32mm reducing bush (galv) 	4	R/bush		
<ul style="list-style-type: none"> 32 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 32mm male bend (nylon) 	1	M/bend		
<ul style="list-style-type: none"> 32mmx 0,5 meter stand pipe (galv) 	1	Pipe		
<ul style="list-style-type: none"> 32 mm Male Adaptor (nylon) 	1	Adaptor		
3. CONCRETE RESEIVOIR				
The reservoir should be design and build according to specifications in Appendix A				
Circular reinforced concrete reservoir, diameter 4,5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33,5 m ³ (33,5 kl) Wall should be reinforced horizontally and vertically and the floors horizontally. Reservoir should by supply with inlet, outlet and drainages pipes.				
3.1 Inlet pipe fittings(50 mm)				
<ul style="list-style-type: none"> 50mm Brass valve 	1	Valve		
<ul style="list-style-type: none"> 50 x32mm Reducing bush(galV) 	1	R/bush		
<ul style="list-style-type: none"> 32mm Male adapter (nylon) 	1	Adapter		
<ul style="list-style-type: none"> 50 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 2.5 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 0,3 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 50 mm Bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 50 mm Male Adaptor (galv) 	1	Adaptor		
3.2 Outlet pipe fittings(50 mm)				
<ul style="list-style-type: none"> 50 mm Outlet screen (Stainless steel) 	1	Out/screen		
<ul style="list-style-type: none"> 50 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 0.3 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 2 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 50 mm Bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 50 mm Brass gate valve (brass) 	1	Valve		

<ul style="list-style-type: none"> • 50mm x 32 mm Reducing bush (galv) • 32 mm Male Adaptor 	1	R/bush		
	1	Adaptor		
3.3 Drainage outlet pipe (80 mm)				
<ul style="list-style-type: none"> • 80 mm bend (galv) 	1	Bend		
<ul style="list-style-type: none"> • 0.3 meter x 80 mm standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> • 3 meter x 80 mm stand pipe(galv) 	1	S/pipe		
<ul style="list-style-type: none"> • 80 mm Bras gate valve (brass) 	1	Valve		
<ul style="list-style-type: none"> • 80 mm Male Adaptor (galv) 	1	Adaptor		
4. DRINKING TROUGHS				
Concrete casted drinking troughs	2	Troughs		
Size: 3 meter x 0, 6 meter x 0, 45 meter.				
Capacity : 810 liters				
4.1 Fittings for troughs				
<ul style="list-style-type: none"> • 32mm Female bend (nylon) 	2	F/bend		
<ul style="list-style-type: none"> • 32mmx0.8m Standpipe 	2	S/pipe		
<ul style="list-style-type: none"> • 32mm Bend (galv) 	2	Bend		
<ul style="list-style-type: none"> • 32mm Ball valve (Control water level) 	2	Ball valve		
<ul style="list-style-type: none"> • 32mm M& F bend 	2	M&F bend		
<ul style="list-style-type: none"> • 32mm Brass gate valve 	2	Valve		
<ul style="list-style-type: none"> • 32mm Clamps (Wire type) 	24	Clamps		
<ul style="list-style-type: none"> • 32 mm Inserts T-piece (Nylon) 	4	T-piece		
<ul style="list-style-type: none"> • 32mm class 3 LDPE pipe. 	200	Meter		
<ul style="list-style-type: none"> • Thread Type 	20	Rolls		
5. TRANSPORT				
<ul style="list-style-type: none"> • Delivery of materials and windmills to the sites 	1	Transport		
TOTAL				

Project 5: Ikageleng

Location: -25.485589935; 25.923639530

<u>DESCRIPTION</u>	<u>Qty</u>	<u>Unit</u>	<u>Price/Unit</u> <u>VAT Include</u>	<u>Total Price</u> <u>VAT Include</u>
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION / CONSTRUCTION Windmill (Includes all materials and labour required)				
• Complete 3.0m Ø Windmill with 6 m tower, head, wheel, tail and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	19	Pipes		
• 12mm Ø x 3.0m Electro plated pump rods with socks and protectors	19	Rod		
• Stainless steel borehole cylinder				
Borehole specifications	1	Cylinder		
Borehole Depth: 72m, Last strike: 52m; water level before test: 11.40m after test: 50.00m				
Delivery: 0.30 L/S				
Cylinder				
Make:.....				
Model:.....				
• 40mm Ø base plate	1	Baseplate		
• 40mm Ø brass non return valve	1	Valve		
• Air chamber (150mm Ø x 900mm steel pipe (2mm thick) with 20mm brass gate valve)	1	Chamber		
• 40mm Ø Force Head Brass	1	Head brass		

<ul style="list-style-type: none"> Concrete: Windmill Tower Foundation <i>Includes: Cement, Sand and Crusher stone(19mm)</i> 	2.8	m ³		
<ul style="list-style-type: none"> Concrete block around casing: 800mm diameter x 600mm high 4 x12mm bolts and nuts 	0.3	m ³		
2.1 Fittings from windmill to reservoir				
<ul style="list-style-type: none"> 32mm Brass valve 	1	Valve		
<ul style="list-style-type: none"> 40x32mm reducing bush (galv) 	4	R/bush		
<ul style="list-style-type: none"> 32 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 32mm male bend (nylon) 	1	M/bend		
<ul style="list-style-type: none"> 32mmx 0,5 meter stand pipe (galv) 	1	Pipe		
<ul style="list-style-type: none"> 32 mm Male Adaptor (nylon) 	1	Adaptor		
3. CONCRETE RESEIVOIR				
The reservoir should be design and build according to specifications in Appendix A				
Circular reinforced concrete reservoir, diameter 4,5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33,5 m ³ (33,5 kl) Wall should be reinforced horizontally and vertically and the floors horizontally. Reservoir should by supply with inlet, outlet and drainages pipes.				
3.1 Inlet pipe fittings(50 mm)				
<ul style="list-style-type: none"> 50mm Brass valve 	1	Valve		
<ul style="list-style-type: none"> 50 x32mm Reducing bush(galV) 	1	R/bush		
<ul style="list-style-type: none"> 32mm Male adapter (nylon) 	1	Adapter		
<ul style="list-style-type: none"> 50 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 2.5 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 0,3 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 50 mm Bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 50 mm Male Adaptor (galv) 	1	Adaptor		
3.2 Outlet pipe fittings(50 mm)				
<ul style="list-style-type: none"> 50 mm Outlet screen (Stainless steel) 	1	Out/screen		
<ul style="list-style-type: none"> 50 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 0.3 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 2 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 50 mm Bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 50 mm Brass gate valve (brass) 	1	Valve		

<ul style="list-style-type: none"> • 50mm x 32 mm Reducing bush (galv) 	1	R/bush		
<ul style="list-style-type: none"> • 32 mm Male Adaptor 	1	Adaptor		
3.3 Drainage outlet pipe (80 mm)				
<ul style="list-style-type: none"> • 80 mm bend (galv) 	1	Bend		
<ul style="list-style-type: none"> • 0.3 meter x 80 mm standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> • 3 meter x 80 mm stand pipe(galv) 	1	S/pipe		
<ul style="list-style-type: none"> • 80 mm Bras gate valve (brass) 	1	Valve		
<ul style="list-style-type: none"> • 80 mm Male Adaptor (galv) 	1	Adaptor		
4. DRINKING TROUGHS				
Concrete casted drinking troughs	2	Troughs		
Size: 3 meter x 0, 6 meter x 0, 45 meter.				
Capacity : 810 liters				
4.1 Fittings for troughs				
<ul style="list-style-type: none"> • 32mm Female bend (nylon) 	2	F/bend		
<ul style="list-style-type: none"> • 32mmx0.8m Standpipe 	2	S/pipe		
<ul style="list-style-type: none"> • 32mm Bend (galv) 	2	Bend		
<ul style="list-style-type: none"> • 32mm Ball valve (Control water level) 	2	Ball valve		
<ul style="list-style-type: none"> • 32mm M& F bend 	2	M&F bend		
<ul style="list-style-type: none"> • 32mm Brass gate valve 	2	Valve		
<ul style="list-style-type: none"> • 32mm Clamps (Wire type) 	24	Clamps		
<ul style="list-style-type: none"> • 32 mm Inserts T-piece (Nylon) 	4	T-piece		
<ul style="list-style-type: none"> • 32mm class 3 LDPE pipe. 	200	Meter		
<ul style="list-style-type: none"> • Thread Type 	20	Rolls		
5. TRANSPORT				
<ul style="list-style-type: none"> • Delivery of materials and windmills to the sites 	1	Transport		
TOTAL				

Project 6: Majage

Location: -25.430209184; 25.924994608

<u>DESCRIPTION</u>	<u>Qty</u>	<u>Unit</u>	<u>Price/Unit</u> <u>VAT Include</u>	<u>Total Price</u> <u>VAT Include</u>
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION / CONSTRUCTION Windmill (Includes all materials and labour required)				
• Complete 3.0m Ø Windmill with 6 m tower, head, wheel, tail and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	40	Pipes		
• 12mm Ø x 3.0m Electro plated pump rods with socks and protectors	40	Rod		
• Stainless steel borehole cylinder				
Borehole specifications	1	Cylinder		
Borehole Depth: 126m, Last strike: 114m; water level before test: 12.40m after test: 98.60m				
Delivery: 2.67 L/S				
Cylinder				
Make:.....				
Model:.....				
• 40mm Ø base plate	1	Baseplate		
• 40mm Ø brass non return valve	1	Valve		
• Air chamber (150mm Ø x 900mm steel pipe (2mm thick) with 20mm brass gate valve)	1	Chamber		
• 40mm Ø Force Head Brass	1	Head brass		

<ul style="list-style-type: none"> Concrete: Windmill Tower Foundation <i>Includes: Cement, Sand and Crusher stone(19mm)</i> 	2.8	m ³		
<ul style="list-style-type: none"> Concrete block around casing: 800mm diameter x 600mm high 4 x12mm bolts and nuts 	0.3	m ³		
2.1 Fittings from windmill to reservoir				
<ul style="list-style-type: none"> 32mm Brass valve 	1	Valve		
<ul style="list-style-type: none"> 40x32mm reducing bush (galv) 	4	R/bush		
<ul style="list-style-type: none"> 32 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 32mm male bend (nylon) 	1	M/bend		
<ul style="list-style-type: none"> 32mmx 0,5 meter stand pipe (galv) 	1	Pipe		
<ul style="list-style-type: none"> 32 mm Male Adaptor (nylon) 	1	Adaptor		
3. CONCRETE RESEVIOUR				
The reservoir should be design and build according to specifications in Appendix A				
Circular reinforced concrete reservoir, diameter 4,5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33,5 m ³ (33,5 kl) Wall should be reinforced horizontally and vertically and the floors horizontally. Reservoir should by supply with inlet, outlet and drainages pipes.				
3.1 Inlet pipe fittings(50 mm)				
<ul style="list-style-type: none"> 50mm Brass valve 	1	Valve		
<ul style="list-style-type: none"> 50 x32mm Reducing bush(galv) 	1	R/bush		
<ul style="list-style-type: none"> 32mm Male adapter (nylon) 	1	Adapter		
<ul style="list-style-type: none"> 50 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 2.5 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 0,3 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 50 mm Bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 50 mm Male Adaptor (galv) 	1	Adaptor		
3.2 Outlet pipe fittings(50 mm)				
<ul style="list-style-type: none"> 50 mm Outlet screen (Stainless steel) 	1	Out/screen		
<ul style="list-style-type: none"> 50 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 0.3 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 2 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 50 mm Bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 50 mm Brass gate valve (brass) 	1	Valve		

<ul style="list-style-type: none"> • 50mm x 32 mm Reducing bush (galv) • 32 mm Male Adaptor 	1	R/bush		
	1	Adaptor		
3.3 Drainage outlet pipe (80 mm)				
<ul style="list-style-type: none"> • 80 mm bend (galv) • 0.3 meter x 80 mm standpipe (galv) • 3 meter x 80 mm stand pipe(galv) • 80 mm Bras gate valve (brass) • 80 mm Male Adaptor (galv) 	1	Bend		
	1	S/pipe		
	1	S/pipe		
	1	Valve		
	1	Adaptor		
4. DRINKING TROUGHS				
Concrete casted drinking troughs	2	Troughs		
Size: 3 meter x 0, 6 meter x 0, 45 meter.				
Capacity : 810 liters				
4.1 Fittings for troughs				
<ul style="list-style-type: none"> • 32mm Female bend (nylon) • 32mmx0.8m Standpipe • 32mm Bend (galv) • 32mm Ball valve (Control water level) • 32mm M& F bend • 32mm Brass gate valve • 32mm Clamps (Wire type) • 32 mm Inserts T-piece (Nylon) • 32mm class 3 LDPE pipe. • Thread Type 	2	F/bend		
	2	S/pipe		
	2	Bend		
	2	Ball valve		
	2	M&F bend		
	2	Valve		
	24	Clamps		
	4	T-piece		
	200	Meter		
	20	Rolls		
5. TRANSPORT				
<ul style="list-style-type: none"> • Delivery of materials and windmills to the sites 	1	Transport		
TOTAL				

Farm Name: Mosweu

Location: -25.381811237; 26.000118313

DESCRIPTION	Qty	Unit	Price/Unit VAT Include	Total Price VAT Include
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)				
• Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	30	Pipes		
• 16mm Ø x 3.0m Electro plated pump rods with socks and protectors	30	Rod		
• Stainless steel borehole cylinder	1	Cylinder		
Borehole specifications				
Borehole Depth: 96 m, 1st strike: 46m , last strike: 83m , water level before test: 31.4m and after test: 81.4m				
Delivery Rate: 847 L/H				
Cylinder				
Make:.....				
Model:.....				
2.1 Fittings from windmill to reservoir				
• 32mm Brass valve	1	Valve		
• 40x32mm reducing bush (galv)	4	R/bush		
• 32 mm M&F bend (galv)	1	Bend		
• 32mm male bend (nylon)	1	M/bend		
• 32mmx 0,5 meter stand pipe (galv)	1	Pipe		

<p>3. CONSTRUCTION OF CONCRETE RESEVIOUR</p> <p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl), The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes.</p> <p>3.1 Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve • 50 x32mm Reducing bush(galv) • 32mm Male adapter (nylon) • 50 mm M&F bend (galv) • 2.5 meter x 50 mm Standpipe (galv) • 0,3 meter x 50 mm Standpipe (galv) • 50 mm Bend (galv) • 50 mm Male Adaptor (galv) <p>3.2 Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) • 50 mm M&F bend (galv) • 0.3 meter x 50 mm Standpipe (galv) • 2 meter x 50 mm Standpipe (galv) • 50 mm Brass gate valve (brass) • 50 mm Bend (galv) • 50mm x 32 mm Reducing bush (galv) • 32 mm Male Adaptor <p>3.3 Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) • 0.3 meter x 80 mm standpipe (galv) • 3 meter x 80 standpipe (galv) • 80 mm Bras gate valve (brass) • 80 mm Male Adaptor (galv) 	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>2</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>	<p>Reservoir</p> <p>Valve</p> <p>R/bush</p> <p>Adapter</p> <p>Bend</p> <p>S/pipe</p> <p>S/pipe</p> <p>Bend</p> <p>Adaptor</p> <p>Out/screen</p> <p>Bend</p> <p>S/pipe</p> <p>S/pipe</p> <p>Gate valve</p> <p>Bend</p> <p>R/bush</p> <p>Adaptor</p> <p>Bend</p> <p>S/pipe</p> <p>S/pipe</p> <p>Valve</p> <p>Adaptor</p>		
<p>4. DRINKING TROUGHS</p> <p>Concrete casted drinking troughs</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter</p> <p>Capacity : 810 liters</p> <p>4.1 Fittings for troughs</p>	<p>2</p>	<p>Troughs</p>		

• 32mmx0.8m Standpipe	2	S/pipe		
• 32 mm bend (galv)	2	Bend		
• 32 M&F bend	2	Bend		
• 32 mm Brass gate valve	2	Gate valve		
• 32 mm Inserts T-piece (Nylon)	4	T-piece		
• 32mm Ball valve (Control water level)	2	Ball valve		
• 32mm Clamps (Wire type)	24	Clamps		
• 32mm class 3 LDPE pipe.	200	Meter		
• Thread Tape	20	Rolls		
5. TRANSPORT				
• Delivery of materials and windmills to the sites	1	Transport		
TOTAL				

Farm Name: Manogela

Location: -25.283284649; 26.148072362

<u>DESCRIPTION</u>	<u>Qty</u>	<u>Unit</u>	<u>Price/Unit</u> <u>VAT Include</u>	<u>Total Price</u> <u>VAT Include</u>
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION OF NEW WINDMILL (Includes all materials and labour required)				
• Install 3.0m Ø Windmill with 6m tower, head, wheel, ladder, gearbox and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	32	Pipes		
• 16mm Ø x 3.0m Electro plated pump rods with socks and protectors	32	Rod		
• Stainless steel borehole cylinder	1	Cylinder		
Borehole specifications				
Borehole Depth: 108m, 1st strike: 90m , last strike:90m , water level before test: 41 m and after test: 86.75m				
Delivery Rate: 5760 L/H				
Cylinder				
Make:.....				
Model:.....				
2.1 Fittings from windmill to reservoir				
• 32mm Brass valve	1	Valve		
• 40x32mm reducing bush (galv)	4	R/bush		
• 32 mm M&F bend (galv)	1	Bend		
• 32mm male bend (nylon)	1	M/bend		
• 32mmx 0,5 meter stand pipe (galv)	1	Pipe		

3. CONSTRUCTION OF CONCRETE RESEVIOUR			
<p>Circular reinforced concrete reservoir, diameter 4.5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33.5m³ (33.5 kl). The wall should be reinforced horizontally and vertically and the floor horizontally. Reservoir should supply with inlet, outlet and drainage be pipes.</p> <p>3.1 Inlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50mm Brass valve • 50 x32mm Reducing bush(galV) • 32mm Male adapter (nylon) • 50 mm M&F bend (galv) • 2.5 meter x 50 mm Standpipe (galv) • 0,3 meter x 50 mm Standpipe (galv) • 50 mm Bend (galv) • 50 mm Male Adaptor (galv) <p>3.2 Outlet pipe fittings(50 mm)</p> <ul style="list-style-type: none"> • 50 mm Outlet screen (Stainless steel) • 50 mm M&F bend (galv) • 0.3 meter x 50 mm Standpipe (galv) • 2 meter x 50 mm Standpipe (galv) • 50 mm Brass gate valve (brass) • 50 mm Bend (galv) • 50mm x 32 mm Reducing bush (galv) • 32 mm Male Adaptor <p>3.3 Drainage outlet pipe (80 mm)</p> <ul style="list-style-type: none"> • 80 mm bend (galv) • 0.3 meter x 80 mm standpipe (galv) • 3 meter x 80 standpipe (galv) • 80 mm Bras gate valve (brass) • 80 mm Male Adaptor (galv) 	1	Reservoir	
	1	Valve	
	1	R/bush	
	1	Adapter	
	1	Bend	
	1	S/pipe	
	1	S/pipe	
	2	Bend	
	1	Adaptor	
	1	Out/screen	
	1	Bend	
	1	S/pipe	
	1	S/pipe	
	1	Gate valve	
	1	Bend	
	1	R/bush	
	1	Adaptor	
	1	Bend	
	1	S/pipe	
	1	S/pipe	
	1	Valve	
	1	Adaptor	
4. DRINKING TROUGHS			
<p>Concrete casted drinking troughs</p> <p>Size: 3 meter x 0, 6 meter x 0, 45 meter</p> <p>Capacity : 810 liters</p> <p>4.1 Fittings for troughs</p>	2	Troughs	

• 32mmx0.8m Standpipe	2	S/pipe		
• 32 mm bend (galv)	2	Bend		
• 32 M&F bend	2	Bend		
• 32 mm Brass gate valve	2	Gate valve		
• 32 mm Inserts T-piece (Nylon)	4	T-piece		
• 32mm Ball valve (Control water level)	2	Ball valve		
• 32mm Clamps (Wire type)	24	Clamps		
• 32mm class 3 LDPE pipe.	200	Meter		
• Thread Tape	20	Rolls		
5. TRANSPORT				
• Delivery of materials and windmills to the sites	1	Transport		
TOTAL				

Project 4: Phata Ya Kgori

Location: -25.307713622; 25.751076064

<u>DESCRIPTION</u>	<u>Qty</u>	<u>Unit</u>	<u>Price/Unit</u> <u>VAT Include</u>	<u>Total Price</u> <u>VAT Include</u>
1. PRELIMINARY AND GENERAL:				
1.1 SITE ESTABLISHMENT				
- No housing facilities available	1	Sum		
- -No water and electricity available				
1.2 OCCUPATIONAL HEALTH AND SAFETY MEASURES				
• Cost of health and safety measures required in terms of the Construction Regulations (2003) of the Occupational Health and Safety act	1	Sum		
• Compilation and maintenance of a Health and Safety Plan, including Risk Assessments, Safe Work Procedures and Method Statements	1	Sum		
• Compilation and maintenance of a Health and Safety File	1	Sum		
2. INSTALLATION / CONSTRUCTION Windmill (Includes all materials and labour required)				
• Complete 3.0m Ø Windmill with 6 m tower, head, wheel, tail and brake system with four (4) legs	1	Windmill		
• Fork rod	1	Rod		
• Bucket rod (Pitman)	1	Rod		
• Wooden rod	1	Rod		
• 40mm Ø x 3.0m Galvanized medium screwed/socket pipe SANS	18	Pipes		
• 12mm Ø x 3.0m Electro plated pump rods with socks and protectors	18	Rod		
• Stainless steel borehole cylinder				
Borehole specifications	1	Cylinder		
Borehole Depth: 66m, Last strike: 49m; water level before test: 33.50m after test: 47.60m				
Delivery: 0.16 L/S				
Cylinder				
Make:.....				
Model:.....				
• 40mm Ø base plate	1	Baseplate		
• 40mm Ø brass non return valve	1	Valve		
• Air chamber (150mm Ø x 900mm steel pipe (2mm thick) with 20mm brass gate valve)	1	Chamber		
• 40mm Ø Force Head Brass	1	Head brass		

<ul style="list-style-type: none"> Concrete: Windmill Tower Foundation <i>Includes: Cement, Sand and Crusher stone(19mm)</i> 	2.8	m ³		
<ul style="list-style-type: none"> Concrete block around casing: 800mm diameter x 600mm high 4 x12mm bolts and nuts 	0.3	m ³		
2.1 Fittings from windmill to reservoir				
<ul style="list-style-type: none"> 32mm Brass valve 	1	Valve		
<ul style="list-style-type: none"> 40x32mm reducing bush (galv) 	4	R/bush		
<ul style="list-style-type: none"> 32 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 32mm male bend (nylon) 	1	M/bend		
<ul style="list-style-type: none"> 32mmx 0,5 meter stand pipe (galv) 	1	Pipe		
<ul style="list-style-type: none"> 32 mm Male Adaptor (nylon) 	1	Adaptor		
3. CONCRETE RESEVIOUR				
The reservoir should be design and build according to specifications in Appendix A				
<p>Circular reinforced concrete reservoir, diameter 4,5 meters, height 2.1 meters , wall thickness 225 mm, capacity 33,5 m³ (33,5 kl) Wall should be reinforced horizontally and vertically and the floors horizontally. Reservoir should by supply with inlet, outlet and drainages pipes.</p>	1	Reservoir		
3.1 Inlet pipe fittings(50 mm)				
<ul style="list-style-type: none"> 50mm Brass valve 	1	Valve		
<ul style="list-style-type: none"> 50 x32mm Reducing bush(galV) 	1	R/bush		
<ul style="list-style-type: none"> 32mm Male adapter (nylon) 	1	Adapter		
<ul style="list-style-type: none"> 50 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 2.5 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 0,3 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 50 mm Bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 50 mm Male Adaptor (galv) 	1	Adaptor		
3.2 Outlet pipe fittings(50 mm)				
<ul style="list-style-type: none"> 50 mm Outlet screen (Stainless steel) 	1	Out/screen		
<ul style="list-style-type: none"> 50 mm M&F bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 0.3 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 2 meter x 50 mm Standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> 50 mm Bend (galv) 	1	Bend		
<ul style="list-style-type: none"> 50 mm Brass gate valve (brass) 	1	Valve		

<ul style="list-style-type: none"> • 50mm x 32 mm Reducing bush (galv) • 32 mm Male Adaptor 	1	R/bush		
	1	Adaptor		
3.3 Drainage outlet pipe (80 mm)				
<ul style="list-style-type: none"> • 80 mm bend (galv) 	1	Bend		
<ul style="list-style-type: none"> • 0.3 meter x 80 mm standpipe (galv) 	1	S/pipe		
<ul style="list-style-type: none"> • 3 meter x 80 mm stand pipe(galv) 	1	S/pipe		
<ul style="list-style-type: none"> • 80 mm Bras gate valve (brass) 	1	Valve		
<ul style="list-style-type: none"> • 80 mm Male Adaptor (galv) 	1	Adaptor		
4. DRINKING TROUGHS				
Concrete casted drinking troughs	2	Troughs		
Size: 3 meter x 0, 6 meter x 0, 45 meter.				
Capacity : 810 liters				
4.1 Fittings for troughs				
<ul style="list-style-type: none"> • 32mm Female bend (nylon) 	2	F/bend		
<ul style="list-style-type: none"> • 32mmx0.8m Standpipe 	2	S/pipe		
<ul style="list-style-type: none"> • 32mm Bend (galv) 	2	Bend		
<ul style="list-style-type: none"> • 32mm Ball valve (Control water level) 	2	Ball valve		
<ul style="list-style-type: none"> • 32mm M& F bend 	2	M&F bend		
<ul style="list-style-type: none"> • 32mm Brass gate valve 	2	Valve		
<ul style="list-style-type: none"> • 32mm Clamps (Wire type) 	24	Clamps		
<ul style="list-style-type: none"> • 32 mm Inserts T-piece (Nylon) 	4	T-piece		
<ul style="list-style-type: none"> • 32mm class 3 LDPE pipe. 	200	Meter		
<ul style="list-style-type: none"> • Thread Type 	20	Rolls		
5. TRANSPORT				
<ul style="list-style-type: none"> • Delivery of materials and windmills to the sites 	1	Transport		
TOTAL				

Appendix A

Specifications for Reinforced Circular Reservoir

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Specifications for Reinforced Circular Reservoir

1. Introduction

The design of the circular reinforced concrete reservoir should be based on norms and standards of BS: 8007, which are SANS compliant. The reservoir should be designed to accommodate 33.5 kL of water with a diameter of 4.5 m, a height of 2.1 m and a wall thickness of 225 mm. The wall should be horizontal and vertical reinforcing. The floor slab is to be segmented into individually reinforced panels which are placed together with the reservoir wall on a footing which is also reinforced. The footing is also reinforced to the reservoir wall and is further bonded with a sliding joint (bitumen). Each of the components of the reservoir should be designed individually through structural analysis and all function as one unit. All of the components should be reinforced. The construction should be carried out according to the specifications stipulated in this document. A geotechnical soil survey of the site for construction should be conducted prior to construction. If there are changes that need to be made to the design, they will be done so taking into account the geology of the site. A test must be carried out to verify the working ability of the reservoir before it can be used.

2. Reservoir Capacity

Recommended design specifications for circular reservoirs will have a diameter of 4.5 m and a water depth of 2.1 m, with a capacity of 33.5 kL. The reservoir wall will have a thickness of 225 mm.

3. Site Preparation

Reservoirs will be built close to the borehole on the farm. The site chosen should be fairly level, firm and on a well-drained soil for equal support. All the top soil and soft material over the entire area to be occupied by the reservoir including an extended 1 m all around should be removed down to firm, uniform material. Soft spots should be dug out and backfilled with gravel or broken stone to ensure uniformity.

If the reservoir is to be built on a slope, the first step would be to excavate a horizontal bench on which to build.

The bench must be in wholly undisturbed ground and not made-up ground. It is recommended that the ground on the high side must be cut back to a stable slope. The horizontal area must be large enough to allow at least 1.5 m between the reservoir wall and the edge of the down-slope and 1m between the wall and the foot of the excavated slope.

A furrow should be cut at the foot of this slope, to intercept surface water and prevent it from percolating under the reservoir. A similar furrow should be cut about 3 m up the hill from the top of the excavation to divert surface water clear round the excavated area. It must be ensured that these protective works be completed before proceeding with any further work on the reservoir.

Once preparation of the site is underway, the next step is to dig trenches for the wall footings, for the ribs under the joints in the floor and for pipe work which is to be installed underneath the reservoir.

Furthermore, the site should be located in a place that can be accessed. A comprehensive geotechnical engineering field investigation should be conducted to determine the soil type and bearing strength, the foundation design requirements and the ground water table elevation. It must also be ensured that the top of the reservoir should not be less than 0.6 m above the original ground surface or normal flood level of any adjacent body of water.

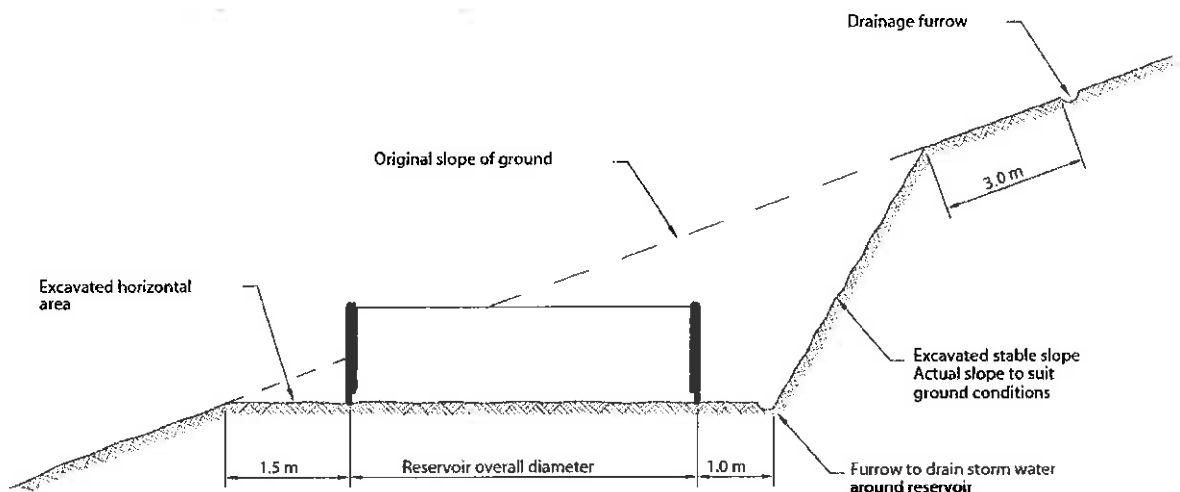


Figure 1: Excavations for a reservoir sited on a slope

4. Materials Design

As the structure is required to be serviceable and waterproof for many years and will, when full, be subjected to considerable water pressure, it is important that the materials and workmanship should be of the best possible quality.

The most important requirement in all materials employed when building reservoirs, particularly their walls, is their density in order to prevent. Any water

which seeps through the walls causes the reinforcing to rust in the walls and this deterioration consequently shortens the lifespan of the reservoir. The strength of the structure depends on the effectiveness of the reinforcing in the walls, which is in turn dependent on the density and the quality of the material composing the wall. Furthermore, the objective is to limit the development of cracks in the structure and maintain a crack width less than 0.2 mm throughout. All materials selected would each be on the basis of their effectiveness, strength and overall compatibility to function as a unit with the other material selected.

4.1 Concrete

The concrete should be designed to be impermeable. Concrete with a grade of 30 Mpa should be used for the reservoir structure with a ratio of cement: stone: sand equal to 1:2:3. A slump test (SABS Method 862-1: 1994) should be carried out to ensure consistency of the concrete mix. Concrete mix: All concrete must have 28 day compression strength of at least 30Mpa. Contractor must provide moulded test cubes.

4.2 Cement

Cement is the binding agent in concrete. The cement used should comply with SANS 50197-1 for which CEM II 42.5 is recommended as it has a high strength and is suitable for year round use in all areas. In areas where concrete shows signs of deterioration as a result of excessive soluble salts in the water, a sulphate-resistant additive may be added to the cement. A comprehensive analysis should be done on the effects of the environment before a cement mix can be selected to ensure the concrete would be resistant to any element that may deteriorate it.

4.3 Aggregates

The composition of aggregates should be of sand and stone. The size of stone should not exceed a diameter of 19 mm. Sand for concrete must be clean and should be fairly coarse and evenly graded from the coarsest to the finest particles.

4.4 Water quality and content

The water used for making concrete should be clean, pure and drinkable. The strength of concrete for a given mix depends on the amount of water used. The drier the mixture, the stronger the concrete. However, if the mixture is too dry it cannot be easily worked and voids develop which weaken the concrete. The recommended cement: water ratio in water-retaining structures should be greater or equal to 2.0.

4.5 Curing of concrete

Early-age curing is important in achieving good quality concrete. Concrete can be damp-cured by covering it with sack or empty cement bags which are kept continuously saturated. Concrete can also be covered with plastic sheeting to prevent drying.

4.6 Concrete cover

The concrete cover would depend on the state of the environment and a classification must be done so according to SANS 10100 1:2000. A concrete cover less than 40 mm can lead to corrosion of the reinforce cement

4.7 Reinforcing

The vertical reinforcing must consist of high tensile-steel bars ($f_y = 450$ Mpa), whereas the horizontal 'hoop' reinforcing should be mild steel (R-steel bars, $f_y = 250$ Mpa). The reinforcing recommendations for each individual component of the reservoir must be adhered to. Reinforcing with a larger cross-sectional surface area is used which will be able to stretch when under tensile stress as compared to reinforcing with a smaller cross-sectional area. Light binding wire should be used to ensure the reinforcing is held in place before the concrete is cast

4.8 Water control fittings

All pipe works for the reservoir must consist of good quality galvanised steel pipes and control valves that are compliant with SANS 966.

5. DESIGN AND CONSTRUCTION

The construction of the reservoir should be carried out in parts. The components of the reservoir should be individually designed, i.e., footing, floor slab, wall, and piping.

5.1 Reservoir Footing

5.1.1 Footing design specifications

The footing of the reservoir is important as it provides the stable support necessary for the reservoir wall. Generally reinforcing is not a priority for footings, but without geotechnical information of the site, the worst case was considered. The footing must be reinforced with R10 @ 180 mm spacing hoops, placed 50 mm down from the top surface of the concrete, with Y8 bars @ 300 mm spacing

running across for support. The R10 rods may be joined by overlapping their ends by 900 mm. The footing must be connected to the reservoir wall by means of shear links, Y8 @ 300 mm spacing.

5.1.2 Setting out the footing

When the site has been levelled in all directions a strong pipe is set firmly and truly plumb at the centre of the reservoir (Figure 2). A strong wire loop is formed in such a way that it fits loosely round the central pipe and can easily slide up or down. To this loop attach a lighter wire and measure accurately along it a length equal to half the inside diameter of the reservoir. At this point twist a small loop into the wire. The loop serves not only as a base from which the trench for the footing can be set out, but also as a guide for laying the bricks or blocks of the wall or, in the case of reinforced concrete tanks, for the setting up of the forms.

Holding the wire taut on the ground, drive a steel peg 100 mm back from the base loop towards the centre of the tank. From the peg, measure outwards along the centre wire a distance equal to the required width of footing and drive a second peg. Next wind the loose end of the wire tightly round the first peg, withdraw it from the ground and with the bottom end mark out a circle round the centre pipe. Straighten the wire and repeat the procedure using the second (outer) peg. The inner and outer circles scratched on the ground mark the corresponding inner and outer edges of the excavation for the footing.

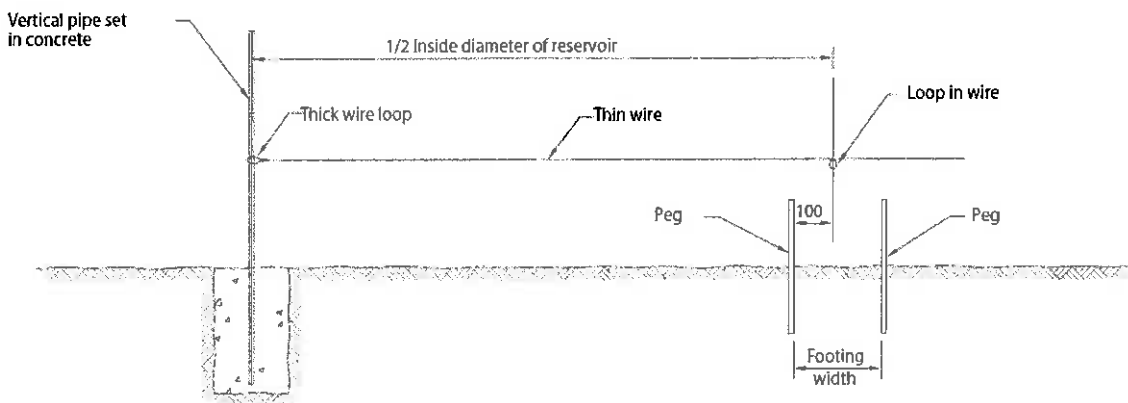


Figure 2: Setting out the reservoir footing

The final step in the setting out consists of driving a series of wooden pegs into the ground at about 1,5 m intervals along the perimeter of the tank and just inside the circle marking the inner edge of the footing excavation. The pegs should be levelled with a straight edge and hand level to serve as reference point for the top of the footing. The top of the footing should be perfectly level and should correspond with the top of the ground surface on which the floor is to be laid (or

that of any compact layer of gravel or hard-core which may be necessary because of the nature of the ground).

5.1.3 Construction of footing

The excavations for footings should be carried down to firm ground, but in any case to a depth of not less than 225 mm below the prepared surface of the site. The bottom of the excavation should be level, or cut in a series of steps, the top surface of which are horizontal. Stepped footings should be used only if the floor is to be sloped.

Pipe work under the reservoir must be placed and concreted in before the footing and ribs are cast.

Before placing any concrete, the bottom and sides of the excavation should be well damped to prevent absorption of water from the concrete. When the concrete is placed, however, there should be no free water in the trench. The concrete for footings need not be watertight: low strength concrete is therefore suitable. It should be placed uniformly and continuously along the trench, construction joints being avoided as far as possible. The concrete should be thoroughly tamped and spaded into place.

The top surfaces of footings must be brought up to exact levels and the concrete wood-floated to a smooth surface immediately after placing. Some water will rise to the surface this is known as bleeding. When all bleeding has ceased (usually one to three hours after placing) the bleed water should be removed by mopping or be allowed to evaporate, the surface of the concrete should be heavily steel-trowelled to a smooth, flat finish.

The footing should be damp-cured for about a week by covering it with sacking or old paper sacks which are kept saturated. Before the walls are built up and when the concrete is sufficiently dry, the surface of the footing should be mopped with bitumen to provide the sliding joint.

5.2 Reservoir Walls

The reservoir wall is to be constructed with a thickness of 225 mm and be cast in the centre of the footing. The pressure of the water in a circular tank produces horizontal tension in the wall which must be resisted by steel reinforcement. Calculation on the wall reinforcing and wall design calculation should be based

on the recognized standards approved by SANS or SANS 10160 parts 1,2 and 4 can be used.

|

5.2.1 Wall reinforcing

The wall must be reinforced both horizontally and vertically, on the inside and outside faces of the wall. The horizontal reinforcing for the outside face must consist of hoops of R12 steel rods @ 125 mm spacing, placed 40 mm from the edge of the outside face (O.F) of the wall. Vertical reinforcing of Y10 steel rods @ 200 mm spacing must be placed 50 mm from the edge of the outside face (O.F) of the wall. The minimum overlapping for the R12 is 1100 mm and for the Y10 is 900 mm. The horizontal reinforcing for the inside face must consist of hoops of R10 steel rods @ 125 mm spacing, placed 50 mm from the edge of the inside face (I.F) of the wall. Vertical reinforcing of Y10 steel rods @ 200 mm spacing must be placed 40 mm from the edge of the inside face (I.F) of the wall. The minimum overlapping for both the R10 and Y10 is 900 mm. The hoop steel should be tied firmly to the vertical reinforcing using light binding wire.

To help set up the reinforcement make a gauge rod consisting of length of planking of the same height as the wall. Mark the position and size of each hoop of reinforcement for the tank on the gauge rod. In use, the rod stands vertically on the footing while the position of each rod is checked at a glance.

5.3 Reservoir Floor Slab

The floor slab is designed to be 100 mm thick. Calculation on the floor slab design should be based on the recognized standards approved by SANS or SANS 10160 parts 1,2 and 4 can be used.

5.3.1 Floor Joints

For the large-sized reservoir, it is necessary that the floor be divided into 4 m x 4m panels means of construction joints as indicated in Figure 3, where adjacent floor panels would rest on concrete ribs 200 mm wide by 75 mm deep. The upper surface of these ribs should be exactly level with the upper surface of the footing. The construction of the ribs, including the final steel trowelling of their surfaces and painting with bitumen, is carried out in the same way, and usually at the same time, as the construction of the footing.

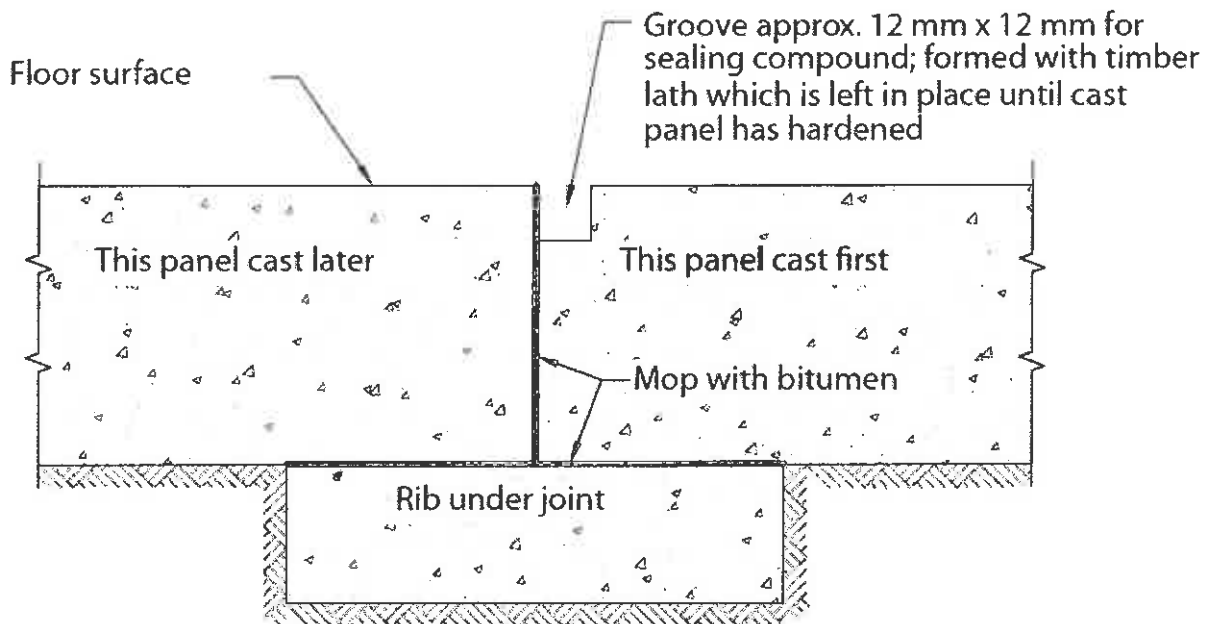


Figure 3: Joints between panels in reservoir floor

A flexible, watertight expansion joint is required between the edge of the floor and the floor of the reservoir and its walls. The type of joint recommended is illustrated in Figure 4. The joint-filler in board form must be of resilient material, such as closed cell expanded polyethylene, cut beforehand into strips of the appropriate width, namely 75mm.

The timber strips for forming the grooves in the floor for the sealing compound should be prepared beforehand. If they are of the tapered cross-section shown in the drawing they will be easy to remove when necessary. To make them easy to bend to fit against curved walls, saw-cuts may be made at intervals into the face of the timber which bears against the wall. A detachable strip of joint filler board may be used instead of the timber strip to form the groove. Joint-fillers and timber strips are placed against the foot of the wall immediately before the concrete for the floor is cast.

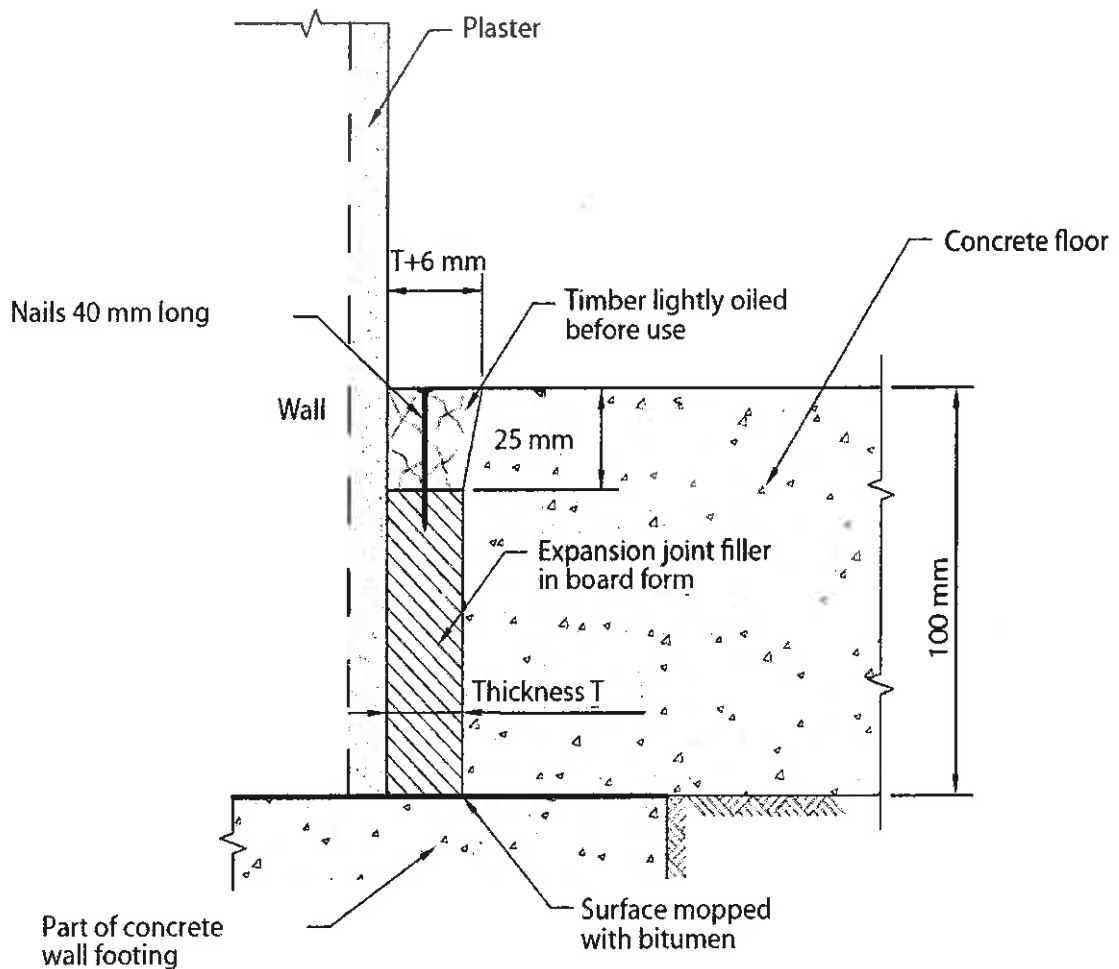


Figure 4: Joint between edge of wall and floor

5.3.2 Floor panel reinforcing

The reinforcement for each 4 m by 4 m panel consists of Y10 steel rods @ 200 mm spacing, in two directions perpendicular to one another. The rods should be tied together with light binding wire. Reinforcement should not cross any joints, and should have a cover of 40 mm from the edge of the panel. The minimum overlapping length is 400 mm.

5.3.3 Floor construction

The floor should be laid on 75 mm layer of well-compacted gravel. Before placing any concrete, the ground (or layer of compacted material) under the floor should

be thoroughly damped down to prevent absorption of moisture from the fresh concrete. At the time of placing, however, there should be no free water on the surface. When placing concrete, each panel must be rigidly retained at its edges by smooth, rigidly-fixed vertical forms, the top edges of the forms being at exactly the level of the finished concrete. Panels should be cast in successions in such a way that each panel is at least 24 hours old before an adjacent panel is against it. To prevent bond at the joint between the two panels, the edge of the previously-cast panel should be painted with bitumen emulsion before the concrete is cast against it. The top edges of all panels should be rounded off slightly to prevent them being easily damaged.

The concrete in reservoir floors must be thoroughly compacted. The surface should be screeded level and floated smooth with a wood float as soon as possible. If a smoother surface is required, the surface may be steel trowelled, but such trowelling should be delayed until the water sheen on the concrete has disappeared and slight stiffening of the concrete is apparent. The floor concrete should be damp-cured for at least 14 days.

5.3.4 Sealing of joints

After the concrete has been damp-cured and has dried out, the timber strips are removed. The resulting groove is then cleaned, primed (to aid the adhesion of the joint-sealant) and finally filled with permanently-plastic (elastomeric) joint sealant.

Some types of elastomeric sealant can be applied cold. Most of these compounds require that the concrete must be primed (i.e. painted beforehand with a suitable material). The concrete must be scrupulously clean. While these proprietary materials may be more expensive than solid bitumen, they are easier to use especially where they can be applied cold, and are far more satisfactory in service than bitumen.

5.4 Reservoir Piping

The piping for a reservoir is important as no changes can be made once it has been installed and the reservoir cast over. Three (3) main piping requirements for a reservoir are: (i) a supply pipe for filling the tank, (ii) an outlet pipe for drawing off water, and (iii) a drain/scour pipe for cleaning the tank. A valve-access pit should be built close to the reservoir to house the control valves against damage

5.4.1 Supply pipe

The supply pipe should be 50 mm in diameter, and should go over the wall of the reservoir. Further, the pipe should be connected to a 50 mm gate valve so that the supplies can be shut off manually when the need arises.

5.4.2 Overflow pipe

No over flow pipe is needed on the reservoirs.

5.4.3 Outlet pipe

The outlet pipe (50 mm in diameter) must be brought under the footing and taken about 150 mm above the floor level. The position of the pipe above the floor level prevents sludge or sediment from being drawn into the delivery system. A screen should be fitted to the inlet end of the outlet pipe to prevent blockage. Further, the outlet pipe should be fitted with a 50 mm gate valve.

5.4.4 Drain/Scour pipe

A drain pipe (80 mm diameter) should be fitted through the wall in level with the floor so that the tank can be cleaned up of sludge or sediment. The drain pipe should be fitted with a gate valve and should discharge into a furrow some distance outside the wall.

5.4.5 Pipe installation

Pipes that are to be built into a wall or cast into a floor, and all piping underneath a reservoir, should be of galvanized steel. Pipe threads not embedded in the wall or floor should be bitumen painted to prevent corrosion. Other materials (eg. plastic) may be used for pipelines clear of the reservoir. Whenever pipes pass through a wall, it is preferable to build in short lengths of pipe to which the valves or main lines can be coupled after the walling material has fully hardened. Where pipes are to come up through the floor of a reservoir, they must be laid below the bottom of the wall footing. Before the concrete of the wall footing is cast, trenches for the pipes should be excavated, the pipes laid in correct position and the trenches carefully backfilled. A spring bend should be used to turn the pipe up through the floor, the bend and the part of the adjacent pipe being embedded in a concrete block about 600 x 600 x 300 mm in size, the surface of the block being at the level of the underside of the floor. Concrete as for wall footing should be used for the block. In positioning these pipes, they should be arranged to pass upwards through the floor near the middle of a floor panel- not near an edge or corner. Control valves on these pipes should be set about 1.5 m clear of the reservoir- in a small brick lined pit with a cover.

Pipelines which pass through the walls of the reservoir should have bends in them close to the reservoir to give them some flexibility. This will prevent relative expansion and contraction from the tending to push or pull pipes out of the wall.

Pipelines should be anchored in heavy concrete blocks at their ends, and at changes of direction or level.

All valves should be of the wheel of the spindle type to prevent shock pressure due to sudden closure, and scour and outlet valves should be of the full flow gate type to enable cleaning rods to be passed through them if necessary.

6. FIRST FILLING OF THE RESERVOIR

Cement develops strength gradually, and then only when kept damp. It is therefore important that concrete should be kept damp for a period before being called upon to resist full water pressure. Reservoirs should not be filled completely until the finished walls are at least 28 days old and have been actively cured for 14 days. It is generally safe to fill the tank half-full 7 days after completion of the walls and three-quarters full after 14 days.

Once the tank has been completely filled it should be checked for any leakages by marking the level of the surface and measuring the subsequent drop in level. Losses due to evaporation in hot dry windy weather may average a drop in water level of 50 to 75 mm per week, but in cooler weather in fairly moist climates this should not exceed about 40 mm per week. At the same time the tank should be checked for any cracks, damp patches and seepages. Patches of damp on the outside walls will generally seal themselves, unless droplets of water actually seep through. If leakages occur, the tank should be emptied and any cracks opened up and filled with the sealant used in the floor expansion joints. Damp areas on the walls should be given two coats of cement paint, each coat being carefully cured. Floor joints and the perimeters of embedded pipes should be inspected and any defective areas removed and made good with jointing compound.

THE NATIONAL TREASURY

Republic of South Africa



GOVERNMENT PROCUREMENT: GENERAL CONDITIONS OF CONTRACT

July 2010

GOVERNMENT PROCUREMENT
GENERAL CONDITIONS OF CONTRACT
July 2010

NOTES

The purpose of this document is to:

- (i) Draw special attention to certain general conditions applicable to government bids, contracts and orders; and
- (ii) To ensure that clients be familiar with regard to the rights and obligations of all parties involved in doing business with government.

In this document words in the singular also mean in the plural and vice versa and words in the masculine also mean in the feminine and neuter.

- The General Conditions of Contract will form part of all bid documents and may not be amended.
- Special Conditions of Contract (SCC) relevant to a specific bid, should be compiled separately for every bid (if applicable) and will supplement the General Conditions of Contract. Whenever there is a conflict, the provisions in the SCC shall prevail.

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General Conditions of Contract

1. Definitions

1. The following terms shall be interpreted as indicated:
 - 1.1 "Closing time" means the date and hour specified in the bidding documents for the receipt of bids.
 - 1.2 "Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
 - 1.3 "Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
 - 1.4 "Corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
 - 1.5 "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
 - 1.6 "Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
 - 1.7 "Day" means calendar day.
 - 1.8 "Delivery" means delivery in compliance of the conditions of the contract or order.
 - 1.9 "Delivery ex stock" means immediate delivery directly from stock actually on hand.
 - 1.10 "Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
 - 1.11 "Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the

RSA.

- 1.12 "Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 1.13 "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
- 1.14 "GCC" means the General Conditions of Contract.
- 1.15 "Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
- 1.16 "Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.
- 1.17 "Local content" means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.
- 1.18 "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.19 "Order" means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20 "Project site," where applicable, means the place indicated in bidding documents.
- 1.21 "Purchaser" means the organization purchasing the goods.
- 1.22 "Republic" means the Republic of South Africa.
- 1.23 "SCC" means the Special Conditions of Contract.
- 1.24 "Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such

obligations of the supplier covered under the contract.

1.25 “Written” or “in writing” means handwritten in ink or any form of electronic or mechanical writing.

2. Application

2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.

2.2 Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.

2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

3. General

3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.

3.2 With certain exceptions, invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from www.treasury.gov.za

4. Standards

4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.

5. Use of contract documents and information; inspection.

5.1 The supplier shall not, without the purchaser’s prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.

5.2 The supplier shall not, without the purchaser’s prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.

5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier’s performance under the contract if so required by the purchaser.

5.4 The supplier shall permit the purchaser to inspect the supplier’s records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

6. Patent rights

6.1 The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.

7. Performance security

- 7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- 7.3 The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
 - (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or
 - (b) a cashier's or certified cheque
- 7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.

8. Inspections, tests and analyses

- 8.1 All pre-bidding testing will be for the account of the bidder.
- 8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organization acting on behalf of the Department.
- 8.3 If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5 Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- 8.6 Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7 Any contract supplies may on or after delivery be inspected, tested or

analyzed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract. Failing such removal the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.

8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.

9. Packing

9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.

9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.

10. Delivery and documents

10.1 Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.

10.2 Documents to be submitted by the supplier are specified in SCC.

11. Insurance

11.1 The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.

12. Transportation

12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.

13. Incidental services

13.1 The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:

- (a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;
- (b) furnishing of tools required for assembly and/or maintenance of the supplied goods;
- (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;

- (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
- (e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.

13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

14. Spare parts

14.1 As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:

- (a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
- (b) in the event of termination of production of the spare parts:
 - (i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

15.1 The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.

15.2 This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.

15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.

15.4 Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.

15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take

such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

- 16. Payment**
- 16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.
- 16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfillment of other obligations stipulated in the contract.
- 16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
- 16.4 Payment will be made in Rand unless otherwise stipulated in SCC.
- 17. Prices**
- 17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.
- 18. Contract amendments**
- 18.1 No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.
- 19. Assignment**
- 19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.
- 20. Subcontracts**
- 20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under this contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.
- 21. Delays in the supplier's performance**
- 21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.
- 21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.
- 21.3 No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.
- 21.4 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the

supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.

21.5 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.

21.6 Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without canceling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

22. Penalties

22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination for default

23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:

- (a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
- (b) if the Supplier fails to perform any other obligation(s) under the contract; or
- (c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.

23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.

23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.

23.4 If a purchaser intends imposing a restriction on a supplier or any

person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.

23.5 Any restriction imposed on any person by the Accounting Officer / Authority will, at the discretion of the Accounting Officer / Authority, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the Accounting Officer / Authority actively associated.

23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:

- (i) the name and address of the supplier and / or person restricted by the purchaser;
- (ii) the date of commencement of the restriction
- (iii) the period of restriction; and
- (iv) the reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.

24. Anti-dumping and countervailing duties and rights

24.1 When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which

may be due to him

25. Force Majeure

- 25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.
- 25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

26. Termination for insolvency

- 26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

27. Settlement of Disputes

- 27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
- 27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
- 27.4 Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.
- 27.5 Notwithstanding any reference to mediation and/or court proceedings herein,
- (a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and
 - (b) the purchaser shall pay the supplier any monies due the supplier.

28. Limitation of liability

- 28.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6;
- (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and

- (b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.
- 29. Governing language** 29.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.
- 30. Applicable law** 30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.
- 31. Notices** 31.1 Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice
- 31.2 The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.
- 32. Taxes and duties** 32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
- 32.2 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
- 32.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African Revenue Services.
- 33. National Industrial Participation (NIP) Programme** 33.1 The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.
- 34 Prohibition of Restrictive practices** 34.1 In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is / are or a contractor(s) was / were involved in collusive bidding (or bid rigging).
- 34.2 If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.

- 34.3 If a bidder(s) or contractor(s), has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.

Js General Conditions of Contract (revised July 2010)



**Department of Agriculture,
Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA
SUPPLIER MAINTENANCE:**

The Director-General : Department of Agriculture , Forestry and Fisheries

I/We hereby request and authorise you to pay any amounts, which may accrue to me/us to the credit of my/our account with the mentioned bank.

I/we understand that the credit transfers hereby authorised will be processed by computer through a system known as "ACB - Electronic Fund Transfer Service", and I/we understand that not additional advice of payment will be provided by my/our bank, but that the details of each payment will be printed on my/our bank statement or any accompanying voucher. (This does not apply where it is not customary for banks to furnish bank statements).

I/we understand that the Department will supply a payment advice in the normal way, and that it will indicate the date on which the funds will be made available on my/our account.

This authority may be cancelled by me/us by giving thirty days notice by prepaid registered post. Please ensure information is validated as per required bank screens .

I/We understand that bank details provided should be exactly as per the records held by the bank.

I/We understand that the Department will not assume responsibility for any delayed payments, as a result of incorrect information supplied.

New Detail			
<input type="checkbox"/> New information	<input type="checkbox"/> Update information		
Supplier Type:	<input type="checkbox"/> Individual	<input type="checkbox"/> Department	<input type="checkbox"/> Partnership
	<input type="checkbox"/> Company	<input type="checkbox"/> Trust	
	<input type="checkbox"/> CC	<input type="checkbox"/> Other (Specify)	<input style="width: 50px; height: 15px;" type="text"/>
Department Number	<input style="width: 30px; text-align: center;" type="text"/> 47		

Company / Personal Details (COMPULSORY)	
Registered Name	<input style="width: 80%;" type="text"/>
Trading Name	<input style="width: 80%;" type="text"/>
Tax Number	<input style="width: 80%;" type="text"/>
VAT Number	<input style="width: 80%;" type="text"/>
Title:	<input style="width: 80%;" type="text"/>
Initials:	<input style="width: 80%;" type="text"/>
First Name:	<input style="width: 80%;" type="text"/>
Surname:	<input style="width: 80%;" type="text"/>

OFFICE USE: DEPARTMENT OF AGRICULTURE		
Compulsory for Regional/Head Office	Office Use Only (LOGIS)	Office Use Only (BAS)
Sender name: Regional/Head Office: Tel no.:	LOGIS supplier no: _____ Document no: _____	Captured By: _____ Date Captured: _____ Authorised By: _____ Date Authorised: _____

Address Details (COMPULSORY)

Payment Address

(Compulsory)

Postal Code

Postal Address

(Compulsory)

Postal Code

Business/street
Address

(Compulsory)

Postal Code

Contact Details (COMPULSORY)

Business

Area Code

Telephone Number

Extension

Home

Area Code

Telephone Number

Extension

Fax

Area Code

Fax Number

Cell

Cell Code

Cell Number

Email Address of
accounts office

Contact Person:

