



## agriculture & rural development

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

### QUOTATION PAGE

QUOTATION NUMBER: <b>R/S/1819/1462</b>	VALIDITY PERIOD OF QUOTATION: 90 Days
CHIEF USER: 700A	CLOSING DATE:12/10/2018
REQUEST NO: ETHEK 2018/116	CLOSING TIME: <b>11:00</b>
DESCRIPTION(SPECIFICATION/S) OF ITEMS/ SERVICE REQUIRED: <b>SUPPLY,DELIVER AND INSTALL IRRIGATION SYSTEM AT BONGIMPILO PROJECT</b>	COMPANY NAME:  Tel NO:- FAX NO:  CONTACT PERSON:  CENTRAL SUPPLIERS DATABASE NO: ..... ( To be completed by the supplier)
DOES OFFER COMPLY WITH SPECIFICATION?	YES/NO (DELETE WHICH EVER IS NOT APPLICABLE)
DOES ARTICLE COMPLY WITH SABS SPECIFICATION? HAS IT BEEN INSPECTED BY SABS?	YES/NO YES/NO (DELETE WHICH EVER IS NOT APPLICABLE)
IS THE PRICE FIRM?	
DELIVERY PERIOD AFTER INITIAL ORDER	
DELIVERY PERIOD AFTER SUBSEQUENT ORDER	
WHERE ARE STOCK HELD? (PHYSICAL ADDRESS)	
QUOTATION PRICE EXCLUDING VAT	TOTAL: R .....
QUOTATION PRICE INCLUDING VAT (VAT TO BE ADDED BY REGISTERED VAT VENDORS ONLY)	TOTAL: R .....
COMPANY OFFICIAL STAMP (COMPULSORY)	..... NAME OF BIDDER  ..... SIGNATURE OF BIDDER  ..... DATE
NUMBER OF PAGES FAXED BACK TO THE DEPARTMENT BY THE SUPPLIER	.....( Supplier to complete)

**NB:** Quotations must be deposited in the bid box situated at Department of Agriculture and Rural Development, Supply Chain Management, 1 Cedara Road, Cedara, 3200  
Tel: (033) 343 8225/ 033 355 9184

## ANNEXURE A

COMPANY NAME -----  
 ADDRESS -----  
 -----  
 CONTACT PERSON -----  
 CONTACT NUMBER -----  
 FAX NUMBER -----  
 EMAIL ADDRESS -----

LINE NO.	DESCRIPTION OR SPECIFICATION OF ITEM (Please be very specific and clear)	REQUIRED QUANTITY	UNIT PRICE EXCL. VAT		TOTAL PRICE	
			R	C	R	C
1.	<b>For the Bongimpilo garden Project falling under the kwaNcema Cluster:</b>  Supply, deliver irrigation pump engine according to departmental design and specification	1				
NOTE						
	ARE YOU A VAT REGISTERED SUPPLIER	YES: _____	NO: __			
			* LABOUR (IF APPLICABLE)			
			*DELIVERY (IF APPLICABLE)			
			TOTAL			
			*ONLY APPLICABLE TO VAT REGISTERED SUPPLIERS 15% VAT			
			TOTAL PRICE			

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

When Required (Requester): 1 September 2018

Where Required (Requester): INCHANGA OFFICE, KWANCEMA CLUSTER – BONGIMPILO GARDEN PROJECTS as per attached GPS coordinates

S 29 41 48.34

E 30 49 32.37

Contact details of requester: Ms. B.P. Msibi

Tel: 076 821 6558

**(COMPULSORY)**



**COMPANY STAMP**  
**PRICES ARE VALID FOR..... DAYS**

**SIGNATURE** .....

**DATE** .....

**BID DOCUMENT FOR THE**  
**SUPPLY, DELIVERY, INSTALLATION, TEST AND COMMISSION**  
**THREE (3) PUMPING UNITS FOR INCHANGA SUB DISTRICT**

**PROJECT NAME: INCHANGA PUMP UNITS**

**PROJECT DESCRIPTION**

The contract covers the supply, deliver, installation; test and commission 3 pump units for Inchanga sub districts for three gardens.

**PROJECT LOCATION**

District eThekweni DM

The site is situated near Hillcrest, at approximately 20 km North East of Hillcrest

Project Coordinates 29° 41'26.12"S 30°50'33.39"E

**DOCUMENT DATA (FOR INTERNAL USE ONLY)**

1) Name of official responsible for attaching this bid document to the request memo:

2) Designation of official (post + station):

3) Date when bid document was obtained:

4 Origin of bid document. Tick applicable box

- (a) copied from original at Hilton head office
- (b) sent electronically from Head office and printed out (provide sender's name)  
.....
- (c) sent electronically by an Engineering colleague not from Hilton (provide name)  
.....
- (d) copy of a hard copy
- (e) Other

## **DISCLAIMER**

1. If the contractor has the impression that the information provided in the drawing(s) and the technical specifications/Schedule of quantities contradict each other or are perceived to be ambiguous, (s)he should point this out to the Engineer and ask for clarification at an early stage, but not later than before the commencement of any construction. The same applies for purported differences between the technical specifications and schedule of quantities.
2. The Engineering Services Directorate (ESD) takes no responsibility for an implemented project on the basis of this document alone without any prior involvement of ESD before (partial) completion.

This involvement consists of, but is not necessarily restricted to:

- Signing off of the bid/quote document and Drawings by ESD;
  - Presence of ESD at the handover of the site to the contractor and at the commencement of the work. The contractor is to make sure that ESD is informed of his/her intention to commence the work so that ESD presence can be assured.
  - Regular site inspections by ESD and the processing of invoices on the basis of achieved progress.
3. District managers and other departmental end users are therefore required to involve ESD at the earliest possible stage, i.e. during PPC meetings or before submission of the request memo is submitted.

## **TABLE OF CONTENTS**

No.	Section	Pages	Read/ Complete
1	Cover Page	1	Read
2	Disclaimer & Table of Contents	2	Read
3	1 - Project Background	3	Read
4	2- Scope of Works	3	Read
5	3 - Project Particular Specification	3 - 4	Read
6	4 - Project Technical Specifications	5 - 10	Read
7	ANNEXURE A : Layout of the Schemes	11	Read
8	ANNEXURE B : Pricing Schedule/ Bill of quantities	12	Complete
9	ANNEXURE C : Pump house	13	Complete
10	ANNEXURE D : Bid Evaluation Criteria	14	Read

## 1. PROJECT BACKGROUND

The schemes namely Zenzeleni (2.5ha), Bongimpilo (1.5ha) and Phaphamani (1.4ha) participants at have requested the Department of Agriculture and Rural Development (DARD) to assist with the supply and installation of new pumping units

The above-mentioned schemes are existing schemes with irrigation systems, but the pumping units are broken therefore unable to producing vegetable. (The schemes are producing winter and summer vegetables)



Figure 1: Locality map for Inchanga Pumping units

## 2. SCOPE OF WORKS

The work required involves -

- Supply, delivery, installation, test and commission of a complete three (3) pumping units with all required fittings and materials.
- Supply all construction material and construct one (1) pump house at Zenzeleni Garden
- Supply two (2) galvanized steel frames with pneumatic wheels, swivel handle bar, and mount the pumps at Bongimpilo and Phaphamani garden.
- Testing and commissioning of three (3) pumping units.

## 3. PROJECT PARTICULAR SPECIFICATIONS

A pumping units shall be installed for the application of water to Zenzeleni (2.5ha), Bongimpilo (1.5ha) and Phaphamani (1.4ha) vegetable garden. In addition to the standard specifications, the following project particular specifications are applicable to the specified operations.

## **PPS1 PUMP STATION**

The pumping units are required to deliver the following;

- Zenzeleni (2.5ha) a flow rate of 63m<sup>3</sup>/hr at a total head of 51.15m.
- Bongimpilo (1.5ha) a flow rate of 40m<sup>3</sup>/hr at a total head of 45.6m
- Phaphamani (1.4ha) a flow rate of 40m<sup>3</sup>/hr at a total head of 49.6m

The proposed pumps performance specifications must include pump curves. The units must include a suitable diesel motor (Lister, Hatz, Perkins or Yanmar or similar approved) and be direct coupled to the pump (KSB or Grundfos or similar approved).

The pump for Zenzeleni garden should be securely mounted on a suitable galvanised steel frame and suitably fixed (bolted) to the pump house floor slab using raw bolts

The pumps at Bongimpilo and Phaphamani garden should be securely mounted on galvanised steel frame with pneumatic wheels and swivel handlebar

The contractor is responsible for the correct alignment of both pump and motor unit. All necessary fittings, adaptors, air valves, reticulation, reducers, pressure gauge, priming funnels, tools etc should be supplied with the unit.

## **PPS 2 AIR VALVES (DOUBLE PURPOSE AIR VALVES)**

Double purpose air release and vacuum break valves shall be ARI type as specified or similar approved. Double purpose air valves shall be able to release appropriate volumes of air (for instance during the pumping process) and let appropriate volumes of air into the system when needed.

## **PPS 3 COMMISSIONING**

Should any defects in the equipment become apparent during commissioning or during maintenance accounting; it will be the suppliers' responsibility to replace such faulty equipment.

## **PPS 4 OPERATION AND MAINTENANCE MANUAL**

3 sets of documents are to be provided that include the following:

Operational philosophy

Pump and motor data forms and curves

All technical data and information sheets for equipment and materials

## **4. PROJECT TECHNICAL SPECIFICATION**

In general, the Specifications published by the South African Bureau of Standards (SABS/SANS), series 1200 (Standardised Specifications for Civil Engineering Construction) shall apply.

The following specifications are applicable to this contract: -

- SABS 1200 A: General
- SABS 1200 GA: Concrete (Small Works)
- SABS 1200 L: Medium Pressure Pipelines

In addition, the following Occupational Health and Safety Regulations (No 85 of 1993) are applicable: -

- General Safety Regulations
- Environmental regulations for workplaces
- Facilities regulations

### **4.1 Preliminaries and General**

The contractor is to note that all insurances (UIF, workman's compensation, works, public liability etc.); site and equipment safety; site establishment and security; services (water and electricity); testing of materials and any specialist services are for the contractors responsibility and attention throughout the contract duration until handover of the project. Please also refer to general conditions of contract. The Department reserves the right to stop progress of the works until these conditions are complied with.

### **4.2 Materials and Constructions**

- UPVC pipes and fitting shall be fitted with spigot and socket rubber ring joints and shall comply with requirement of SABS 966.
- All materials must conform to SABS specifications for the products. This includes all items such as pipes, valves, flanges and accessories etc.
- Test pressure shall be performed as stipulated in SABS for test pressure.
- All construction works must conform to the applicable standard specifications and installation requirements as per NBR requirements and manufacturers recommendations.
- All concrete works to conform to Cement & Concrete Institute Standards and Recommendations. Standard Concrete Mixes:
  - Mixing, pouring and curing of concrete: SABS 1200 GA (5.4)
  - Materials: SABS 1200 AA (3); SABS 1200 GA (3)
  - Cement: Commencement 32,5N or R to SANS 50197-1
  - Testing: SABS 1200 AA (7); SABS 1200 GA (7)
  - Quality control through the slump test SABS 1200 GA (5.4.1.2) SABS method 862. The contractor is to supply the slump testing equipment.
  - Tolerances to SABS 1200 GA (6.4)
  - Formwork: Refer to SABS 1200 GA (4.4; 5.2)
  - Reinforcing: SABS 1200 GA (5.1)
  - Refer to standard concrete mixes specification.



### STANDARD CONCRETE MIXES

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

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

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

MORTAR CLASS	MIX RATIO: (By Volume)	MASONRY CEMENT: kg	LIME: L	SAND: (loose and damp) L (max)
I	1 : 4	50	0-10	130
II	1 : 6	50	0-40	200
PLASTER CLASS	MIX RATIO: (By Volume)	MASONRY CEMENT: kg	LIME: L	SAND: (loose and damp) L (max)
Rich mix (foundations, wet areas)	1 : 4	50	0-10	130
General purpose	1 : 5	50	0-40	165

#### 4.3 Safety

1. One 5kg ozone friendly fire extinguisher and 1 fully fitted 1<sup>st</sup> aid box is to be provided in the facility.
2. All safety equipment required to construct the facility are for the contractor's responsibility and provisioning. Examples include: safety and protective clothing; sound scaffolding; false work and bracing; ladders etc... all equipment, tools and safety equipment are to be in a safe operating condition and must be used by the workers where appropriate.

3. Refer to general conditions for site safety. Site operations and conditions requiring special attention include but are not limited to:
- Equipment, machinery, tools: (stationary or mobile) such as vehicles, generators, pumps, drills, augers, picks, spades, hand tools, ladders, scaffolding to be in a safe operating condition and are to be used in a safe and responsible manner. The contractor is responsible for all such monitoring and control of site operations and equipment throughout the works for the entire contract duration.
  - Lifting and lowering of materials or personnel in any way whatsoever.
  - Personnel access and operations at raised levels or on raised platforms or scaffolding.
  - Excavation works and holes are to be clearly indicated to prevent injury to personnel.
  - Potential ingress of water on/through the site.
  - Potentially hazardous services may be present on site such as water and sewerage mains, electricity cables etc.
  - Chemical transport, storage and usage whatsoever – this includes chemical contact through equipment use such as fuels and oils; materials such as creosote, paints, solvents, cement, concrete.
  - Safety equipment: Safety and protective clothing, gloves, goggles, masks, hard hats, boots, harnesses etc.
  - A first aid box is to be provided and available at all times on site during working hours and is to comply with the requirements of the Occupational Health and Safety Act.
  - Additional risks associated with specific methods of construction selected by the contractor which are not necessarily covered in the above.

#### **4.4 Flanges and Accessories**

Flanges shall comply with the requirements of SABS 1123 latest edition. Flanges designed for rated working pressures of less than 1600kPa shall have flat flange faces and those for equal or greater working pressures raised flange faces.

It shall be the responsibility of the Contractor to ensure that the flanges on pumps, valves, fittings, specials and pipes, which shall be fitted together, are fully compatible. The flanges shall be drilled to the relevant table or to match existing flange drillings if applicable.

Before the machined surfaces have become affected by rust, they shall be coated with a mixture of white lead and tallow or other approved protective composition.

#### **4.5 Flange Jointing Material**

All flanged jointing material shall be approved by the Engineer before erection is commenced. Insertions for flat flange faces shall be of the full flange diameter encompassing the bolts. Insertion for raised flanges shall fit neatly inside the bolt rights.

All packing must be cut from rubber insertions (for pipe diameters 300 mm and smaller) with a nominal thickness of 3,2mm according to SABS 564-1973. The inside and outside diameters should be according to SABS 1123-1977. For pipe diameters exceeding 300 mm Klingerrite gaskets should be used to the applicable specifications.

#### **4.6 Bolts and Nuts**

All nuts, bolts, studs and washers shall comply with SABS 135:1985 and shall be hot dipped galvanised according to ISO 1461.

No bolts or studs of less than the size indicated on the drawings shall be used. The length of each bolt shall be such that after tightening between one thread and one diameter in length projects through the nut and at least one full thread in addition to the thread run-out remains clear between the nut and the unthreaded shank. The threaded portion of bolts shall be clear of the shear plane. All nuts and studs shall be locked in position by lock-washers and where necessary, locknuts. High tensile bolts and nuts should be used to couple the flexible hoses to limit the rust-effect on these very important elements when the pump units have to be moved.

#### **4.7 Gate Valves and Scour Valves**

Resilient seal gate valves (RSV) shall be similar to VOSA configuration and shall comply with SABS 664 (latest amendment) with classes and flanged drillings as scheduled in the bill of quantities. Where plain-ended valves are required, the ends shall be suitable for the type of pipe specified. The valves shall be designed for drop tight closure over the full range of pressures from zero to maximum working pressure.

The valves shall be provided with a straight unobstructed body passage without pockets. The spindle seat shall consist of 2 nitrile rubber O-rings located in a corrosion resistant housing. A wiper ring shall also be provided. The gates shall be completely rubber covered. The gate guides shall be of the tongue and groove type. Spindles shall be manufactured on solid stainless steel and shall be of non-rising type. The body of the valve shall be coated to a minimum DFT of 250 microns.

Extension spindles and brackets shall be provided where detailed and hand-wheels shall be clearly marked with the direction of opening. All valves shall be clockwise opening/closing. Gearing shall be chosen to limit the total effort at the hand-wheel or valve key to 350 Newton's.

#### **4.8 Butterfly Valves**

All butterfly valves shall be similar to AMRI configuration and must be provided with a gearbox and hand-wheel mechanism unless otherwise detailed and it must be possible to install the unit between flanges drilled according to SABS specifications. Valves are to have a stainless steel stem and are to incorporate a resilient disc seal mechanically retained around the periphery of the valve disc. Working pressure required is 1000kPa, or as detailed in the Schedule of Quantities and/or the drawings.

#### **4.9 Non Return Valves**

All wafer type non return valves may have a cast iron body, but stainless steel plates having machined sealing faces, 316 stainless steel pin and springs, nitrile seat and Teflon or similar bearing washers.

#### **4.10 Pressure Gauges**

Pressure gauges shall comply with BS 1780 or equivalent for Industrial Gauges shall be calibrated in kilopascals and shall be not less than 100 mm diameter. Full-scale reading shall be between 1.5 and 2 times the maximum actual operating pressure except where otherwise specified.

All gauges shall be suitable for continuous operation and shall be liquid filled where fluctuations in pressure may cause damage.

Where blockages of the gauge are possible, diaphragm seals with large bases and a facility for cleaning shall be provided. This shall apply in all cases where liquids bearing solids or sludge are handled.

Gauges shall not be mounted directly on equipment subject to variation. For dry locations indoors, the casing may be plastic or epoxy coated aluminium. For damp indoor locations, particularly in any location where sewage is flowing, and for all locations outdoors, the gauges shall be weatherproof and have AISI 316 stainless steel cases.

Isolating and bleed cocks shall be provided for each pressure gauge, except on installations for hazardous fluids.

#### **4.11 Pumps and Motors**

##### **Guarantee**

All pumps and motors must carry a guarantee of twelve months. The pump and motor must be capable of reaching the required pressure. The pump must be free of any defects pointed out by the engineer or client.

##### **General**

- Pumps to be provided shall include power rating, rotational speed/rpm and efficiency.
- Pumps shall be silent and vibration free during operation.
- No pump shall be started before installation of strainers.
- Pumps shall be provided with adequate protection over inlet and outlet flanges before being delivered to site. Protection covers shall be able to withstand normal handling during construction.
- Pumps shall be suitable for the fluids and fluid temperature that they handle, and shall be selected accordingly. See pump data forms in this regard.
- Manual vent valves shall be provided at high points on the pump casings. For applications with temperatures above boiling point, the vent must be piped to a safe drain point.
- Drain plugs shall be provided at low points on the pump casings.

##### **Couplings, Base Plate and Alignment**

- The power source and pump must be connected by means of a coupling which can transmit the full power supply of the power source, whether or not a spacer is used, or as specified in the Bill of Quantities. All couplings should be safeguarded to prevent to prevent injury to operators.
- Pumps shall be complete with flexible drive couplings to allow for angular and axial misalignment where applicable.
- The pump and power source must be mounted together on a base plate and the required tolerances:
- Maximum permissible axial alignment error – 0.03mm
- Maximum permissible radial alignment error – 0.05mm
- After installation and before commissioning the alignment must again be checked and adjusted with shims.

- Pumps shall be aligned by a representative of the pump supplier but the contractor still remains solely responsible for the guarantee period.
- The tolerances of measurements of the base plate, as indicated by the tenderer in the tender document, must be approximately 2mm.
- Pump drives shall be suitably protected by a securely mounted sheet metal guard and comply with Machinery and Occupational Safety Act (Act 611983).
- Each flexibly coupled pump shall be provided with a cast iron or fabricated steel base plate of ample size to hold both pump and motor in correct alignment. The pump and motor shall be accurately aligned when running at normal temperature. Dowel pins shall be fitted to base plates after alignment.
- Couplings shall be selected to match at least the power of the electric motor and shall not impose any restriction on the normal expansion and tolerances.

### **Pump Installation**

All pumps are to be installed in accordance with the Manufacturers specifications. The rate for installation and commissioning of pumps must include for all nuts, bolts, base plates or straps that are required for their fixing, according to the Manufacturers specifications.

### **Standard Specifications**

The workmanship must be of the highest standard throughout and be done according to the most modern practices. All inferior work will be replaced or rectified, as soon as it is pointed out by the engineer, at the cost of the contract.

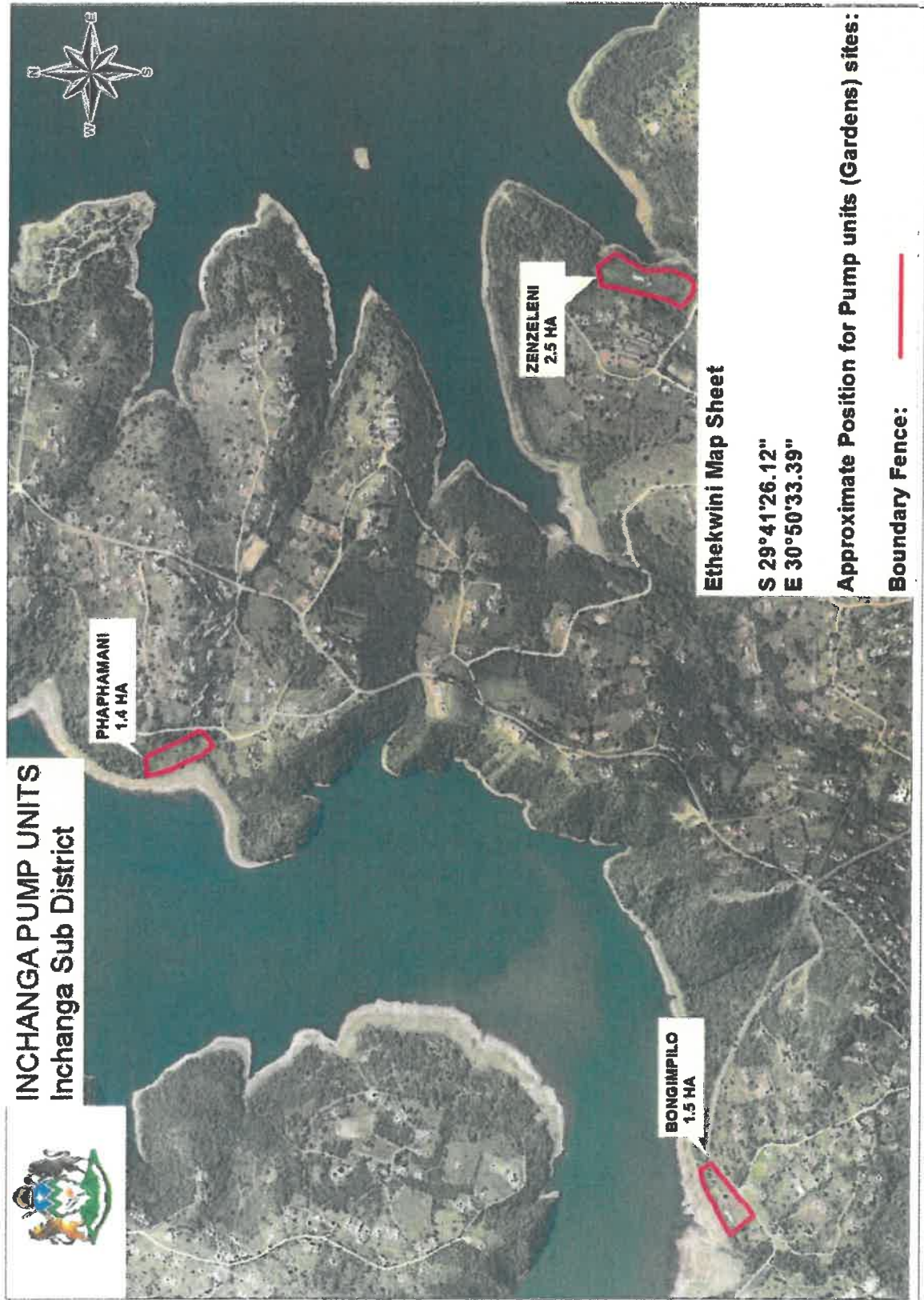
### **Inlet and Outlet Adapters**

These form part of the selection of the tender with the necessary nuts, bolts and gaskets for coupling to the pump, and flanged to fit the large end of the steel piping. Suction reducers should be eccentric and conform to a length equals to  $5(D1 - D2)$ .

### **Safety Precautions**

All necessary safety covers must be supplied to ensure total protection of the operator.

# ANNEXURE A: SITE LAYOUT PLAN



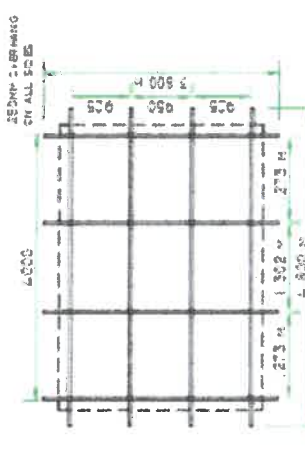
## ANNEXURE B: BILL OF QUANTITIES

No	Pay Ref	Description	Unit	Qty	Rate	Amount
	SABS 1200A					
1	A	<b>Section 1: Preliminary &amp; General</b>				
1.1	8.3.1	Contractual requirements and general	Sum	1		
2		<b>Section 2: Pump Station</b>				
2.1	PPS 1	Supply, deliver, install, test and commission a KSB, Grundfos or similar approved pumping units with a capacity as specified on the <b>PPS1</b> . The pumping units are to be driven by a Lister, Hatz, Perkins or Yanmar diesel motor with electric starter. The rate includes provision of the <b>THREE (3) PUMPS</b> . Pumps to be approved by the responsible engineer prior to procurement and delivery	Sum	1		
2.2	PPS 2	Construct a suitable pump station structure complete with blockwork walls, IBR roof sheeting, steel door and ventilation in accordance with the NHBRC regulations. Rate to include all necessary earthworks, concrete, building and civil works. Structure to be a maximum of 10m <sup>2</sup> . <b>SEE THE ATTACHED DRAWING</b>	Sum	1		
2.3	PPS 2	Supply and install galvanised steel frame with pneumatic wheels and swivel handlebar. The rate to include all necessary fittings				
2.4		Ancillary Material to assist in pumps installation	sum	1	R10 000.00	R10 000.00
<b>SUB-TOTAL</b>						
<b>SUB-TOTAL</b>						
<b>VAT (15%)</b>						
<b>FINAL TOTAL (INCL VAT)</b>						

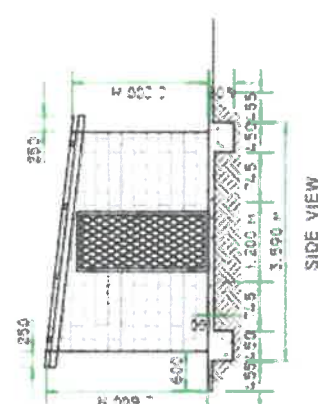


# ANNEXURE C: PUMP HOUSE

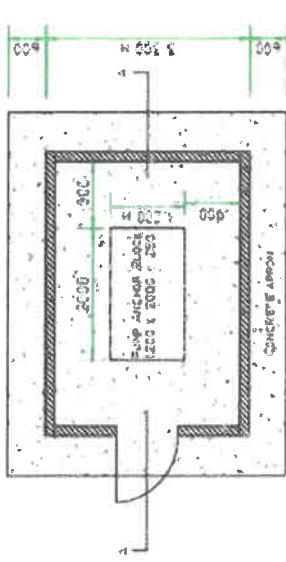
- NOTES**
1. ROOF BEAMS MUST BE PROPERLY SECURED TO WALLS.
  2. USE WIDE FLANGE BEAMS FOR ALL JOISTS.
  3. FLOOR SHALL BE REINFORCED WITH 63 CUBIC METRE REINFORCED CONCRETE WITH 100mm TO 150mm aggregate.
  4. REINFORCING BARS SHALL BE WELDED TO THE MAIN REINFORCING BARS.
  5. JOISTS SHALL BE WELDED TO THE MAIN REINFORCING BARS.
  6. JOIST SPACING SHALL BE 1000mm.
  7. WALLS SHALL BE 200mm THICK WITH 100mm TO 150mm aggregate.
  8. WALLS SHALL BE REINFORCED WITH 63 CUBIC METRE REINFORCED CONCRETE WITH 100mm TO 150mm aggregate.
  9. WALLS SHALL BE WELDED TO THE MAIN REINFORCING BARS.
  10. WALLS SHALL BE WELDED TO THE MAIN REINFORCING BARS.
  11. WALLS SHALL BE WELDED TO THE MAIN REINFORCING BARS.
  12. WALLS SHALL BE WELDED TO THE MAIN REINFORCING BARS.
  13. WALLS SHALL BE WELDED TO THE MAIN REINFORCING BARS.
- BILL OF QUANTITIES**
- | ITEM NO. | DESCRIPTION                          | UNIT           | QUANTITY |
|----------|--------------------------------------|----------------|----------|
| 1        | TREATED ROOF BEAMS 300               | m              | 300      |
| 2        | WELDED ROOF JOISTS 100               | m              | 300      |
| 3        | CONCRETE FOR FLOOR SLAB              | m <sup>3</sup> | 100      |
| 4        | REINFORCING BARS WITH 63mm MAS-BARS  | kg             | 1000     |
| 5        | REINFORCING BARS WITH 100mm MAS-BARS | kg             | 1000     |
| 6        | CONCRETE FOR WALLS                   | m <sup>3</sup> | 100      |
| 7        | REINFORCING BARS WITH 100mm MAS-BARS | kg             | 1000     |
| 8        | STEEL PLATE TO MOUNT PUMP ON         | kg             | 100      |
| 9        | STEEL BARS FOR GUARD                 | kg             | 100      |
| 10       | SUITABLE PAVING FOR GATE AND COVER   | m <sup>2</sup> | 100      |



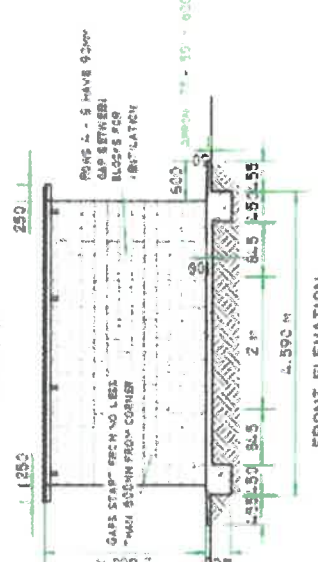
**ROOF STRUCTURE**



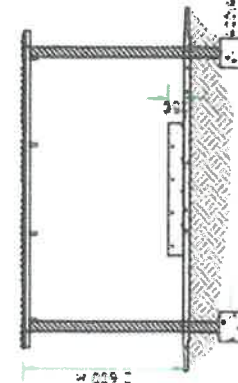
**SIDE VIEW**



**PLAN VIEW**



**FRONT ELEVATION**



**SECTION A - A**

	<b>DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT KWAZULU - NATAL</b>		<b>CHECKED</b> E. ROCH
	<b>ENGINEERING SERVICES</b>		<b>DATE</b> 01/08/2012
<b>PROPOSED PUMP HOUSE DESIGN</b>		<b>DRAWING NO.</b> 2012011RR	<b>CHECKED BY</b> E. ROCH
<b>DESIGNED BY</b> R. SAYED		<b>DATE</b> 01/08/2012	



## DECLARATION OF INTEREST

1. Any legal person, including persons employed by the state<sup>1</sup>, 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 a price quotation, advertised competitive bid, limited bid or proposal). 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, shareholder<sup>2</sup>): .....

2.4 Company Registration Number: .....

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.

<sup>1</sup>"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.

<sup>2</sup>"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 attached 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**



**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 IN TERMS OF  
PARAGRAPH 23 OF THE GENERAL CONDITIONS OF CONTRACT SHOULD THIS DECLARATION  
PROVE TO BE FALSE.

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of bidder

**CERTIFICATE OF INDEPENDENT BID DETERMINATION**

- 1 This Standard Bidding Document (SBD) must form part of all bids<sup>1</sup> 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).<sup>2</sup> 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:

<sup>1</sup> Includes price quotations, advertised competitive bids, limited bids and proposals.

<sup>2</sup> 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<sup>3</sup> 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.

<sup>3</sup> Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

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

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