



Knysna Municipality is inviting quotations from suitable suppliers for the goods described below. Category: Distribution board and motor

(For publication on the Knysna Municipality website & notice boards)

<b>ADVERTISEMENT DATE:</b>	24 Nov 2016
<b>RFQ NUMBER:</b>	<b>95/2016/17</b>
<b>DESCRIPTION OF GOODS/SERVICES:</b>	Supply and delivery only of a new distribution board and motor control panel to operate the existing submersible sewerage pumps at Thesen Pump station A.
<b>RFQ DOCUMENTS ARE OBTAINABLE FROM:</b>	Supply Chain Management Section Clyde Street Knysna <b>or</b> Knysna Municipality website: <a href="http://www.knysna.gov.za">www.knysna.gov.za</a> (Council adverts >Quotations)
<b>CLOSING DATE: TIME:</b>	<b>Friday 09 Dec 2016 12:00</b>
<b>SUBMISSIONS:</b>	Sealed quotations clearly marked, “ <b>RFQ 95/2016/17</b> : Supply and delivery only of a new distribution board and motor control panel to operate the existing submersible sewerage pumps at Thesen Pump station A ”, can be submitted: By hand to: Supply Chain Management Section Knysna Municipality Clyde Street Knysna By fax to: 086 650 1415 By email to: <a href="mailto:procurement@knysna.gov.za">procurement@knysna.gov.za</a>  Contact person: Sandra Fourie (Tel: 044 302 6328) Electronic bid documents must reach the Supply Chain Management Section before the closing time.
<b>COMPULSORY REQUIREMENTS:</b>	
<b>TECHNICAL ENQUIRIES:</b>	Contact Person : Asiphe Mgoqi Email : <a href="mailto:amgoqi@knysna.gov.za">amgoqi@knysna.gov.za</a> Tell : 044 302 6357

**The following conditions will apply:**

- Price(s) quoted must be valid for at least thirty (30) days from date of your offer.
- Price(s) quoted must be firm and must be inclusive of VAT when applicable.
- Attached KMBD6.1 must be completed to qualify for B-BBEE Status Level of Contribution.
- Tax Clearance Certificate or Sufficient Evidence that Tax matters are raised with SARS must be attached.
- An original or certified copy of B-BBEE Certificate must be attached to qualify for points.
- Price must include all related expenses, i.e. transport, accommodation etc.
- Attached KMBD 4 document must be completed.
- Status of Municipal accounts must be submitted
- Only an Official order and appointment letter will bind the Council.

**ACTING MUNICIPAL MANAGER  
B ELLMAN**

*The Knysna Municipality is implementing an online purchasing management system. This system allows vendors to register online, receive automated alerts via e-mail and will eventually allow vendors to submit bids electronically. All opportunities >R30 000 (RFQ's and Tenders) are processed through our online system. To register go to [www.knysna.gov.za](http://www.knysna.gov.za) – Council adverts – Supply Chain Management – SCM e-mail list – complete info and click on submit form.*

*Enquiries may be directed to: [nmlisana@knysna.gov.za](mailto:nmlisana@knysna.gov.za)*



## ELECTRICAL SPECIFICATION

### 1.0 GENERAL

This contract involves the supply and delivery only of a new distribution board and motor control panel to operate the existing submersible sewerage pumps at Thesen Pumpstation A.

The existing pumpstation installation consists of 2 x 34 kW pumps installed inside a sump inside building in a wetwell type configuration. The existing control panel is of the floor standing type and is to be replaced under this project with a wall mounted unit. The pumpstation is currently monitored via existing telemetry equipment, which is to be retained and re-connected to the new MCC panel to be installed.

The new control panel is depicted schematically on **Drawing No. 10225/E/01** and it is envisaged that same will be installed inside the same room as the existing MCC panel to be removed. Furthermore the various LV service connections supplying other buildings and pumpstations currently taken from the existing MCC panel shall also be removed and reconnected to a new Distribution Board to be supplied under this contract for this purpose.

The installation of the new distribution board and MCC shall be undertaken by others under a separate contract at a later date.

### 2.0 NEW MAIN DISTRIBUTION BOARD

A new wall mounted Main Distribution Board shall be supplied under this project and installed by others at a later date.

The new distribution board shall provide the supplies for the existing pumpstation building's internal small power and lighting electrical installations and new MCC panel to be supplied under this contract, as well as the various downstream service connections as depicted schematically on **Drawing No. 10225/E/01**.

The new distribution board shall be IP 44 minimum and manufactured from **304 Stainless Steel**, and shall be a minimally tested assembly, i.e. MTA in accordance with SANS 1973 and 60439 as applicable. Certification / documentation verifying that the panel has been manufactured to SANS 1973-8 MTA shall be provided by the manufacturer.

### 3.0 NEW MCC CONTROL PANEL

A new wall mounted MCC pump control panel shall be installed inside the building in the approximate position of the existing MCC to be removed.

The control panel shall comply with the requirements of the technical specification as detailed below:

#### 3.1 Mode of Operation

A selector switch shall be supplied for each item of equipment to allow for switching between Auto / Manual / Off mode. The state of this switch is to be monitored via the telemetry.

- (i) In Auto mode the operation of the pumps will be automatically controlled by various set points ( i.e. start level, standby pump start level, stop level ) received from an ultrasonic type sensor installed inside the sump. The instantaneous level reading and set points shall be displayed on the ultrasonic controller on the control panel. The level settings are to be determined on site with the Engineer / Municipality.

In Auto mode the duty pump shall automatically commence operation, following a "Start Level" signal being received via the level sensor and shall stop operating when the level in the sump reaches a "Stop Level".

The operator shall select the required duty pump via a selector switch ( i.e. Pump No. 1 or Pump No. 2 or automatic change-over ). The respective standby pump shall come into operation if the duty pump trips, is in the off position or does not start after an adjustable period ( say 30 seconds ). Furthermore if the duty pump is insufficient in reducing the fluid level inside the sump and the "Standby Pump Start Level" is reached the standby pump shall commence operation together with the duty pump.

Two float switches installed inside the sump shall provide the high level and low level alarms. The health of the ultrasonic level sensor shall be monitored and should the 4-20 mA signal go outside the normal range a "Sensor Fail" alarm shall be generated and transmitted via telemetry and the starting / stopping of the pumps shall be controlled automatically by the afore-mentioned floats.

The "Start Level", "Standby Start Level" and "Stop Level" signal shall be adjustable via the Ultrasonic Controller.

No alarm condition shall be overridden when in Auto Mode.

- (ii) In Manual Mode it shall be possible to manually control each item of equipment from the Control Panel or via the remotely located field Start / Stop push button stations for said equipment.

The equipment shall be started and stopped in accordance with the start / stop buttons pushed. In the case of pumping equipment same shall start once the Start button has been activated by the operator and shall continue pumping until a stop level signal is received from the ultrasonic sensor installed inside the sump, tank, etc. or until the Stop Button is depressed.

No alarm condition shall be overridden when in Manual Mode, although the operator shall be able to pump down below the sump stop level by holding in the pump start button.

- (iii) The operation of the power factor correction ( PFC ) equipment for the motors shall be inhibited / locked out during operation of the standby generator set via drop-out contactors or similar type arrangement to prevent any possible damage that may occur due to interaction between the generator / PFC equipment.
- (iv) All equipment is to be so wired as to allow remote stopping and starting via the telemetry controls. This ability shall only be available when the equipment placed in Automatic Mode and shall not override any normal automatic running condition such as an alarm or low level signal.
- (v) A no flow condition monitored via a limit switch mounted on the counterweight of the non-return valve shall initiate tripping of the motor starter on the occurrence of a no flow condition. The output of the 'no flow limit' switch shall be brought into circuit after motor starting (  $\pm 30 - 60$  seconds ), to ensure a proper flow rate is available. A further adjustable timer set 10 seconds, to delay a trip condition occurring in the event of a momentary drop in the flow rate shall form part of the circuitry.

In the event of a trip due to a no-flow condition it will be necessary to cancel the trip indicator and reset the no-flow relay before the pump can be re-started.

- (vi) A voltage monitor / phase failure relay connected to the incoming supply will isolate the control circuit and inhibit operation of the equipment in the event of a low voltage condition occurring for longer than a selected period, set 20 seconds. The status of the voltage monitor relay shall be monitored via the telemetry equipment and shall initiate a "mains failure" signal upon activation.
- (vii) The system shall be designed to shut down without damage upon an electrical power failure and shall automatically resume normal operating duties and be brought back online following a power failure.
- (viii) A Lock-off twist to release emergency stop push button shall be provided for the new equipment on the Control Panel and at a remote station near the field equipment. Activation of same shall only trip the equipment concerned and said equipment shall immediately cease operation.
- (ix) The running amps of the motor shall also be monitored via the telemetry for trending purposes.
- (x) A "Drive Not Available" signal indicating tripping of the motor circuit breaker shall be provided for the motor and displayed on the telemetry.
- (xi) All alarms shall be manually resettable at the control panel via a reset pushbutton and all alarms are to be monitored via the telemetry.
- (xii) A test button is to be hardwired to all indication lights in order to test their functionality.

Regardless of the above, all alarms, manual controls, etc are to be hardwired such that the outstation will be able to continue to operate in Manual mode without fail should the telemetry malfunction or be removed.

### 3.2 Construction

The MCC panel shall incorporate the motor control equipment and other control systems and facilities as indicated on the drawings.

The electrical supply will be at 400V 3 phase / 230V single phase, 50Hz system, with a nominal fault level as indicated on the drawings. The circuit breakers in the control panel shall be of one manufacture throughout correctly cascaded for the supply conditions concerned. All electrical equipment, materials and apparatus provided under this contract shall be suitable for operation on the supply system conditions given above.

The MCC panel / switchboard shall be IP 44 minimum and shall be a minimally tested assembly, i.e. MTA in accordance with SANS 1973 and 60439 as applicable. Certification / documentation verifying that the panel has been manufactured to SANS 1973-8 MTA shall be provided by the manufacturer.

The board shall be of the totally enclosed metal clad type, fabricated from **304 Stainless Steel**. The board shall be flush fronted and hinged covers shall be provided on the front of each compartment except as otherwise indicated. Each front cover shall be lockable by square key operated locks with 3 keys supplied.

The control panel shall be wall mounted and shall incorporate a purpose made cable entry / glanding compartment to allow for the terminations of the various cables. The suitability of the dimensions of the board must be verified by the Contractor on site in order to ensure sufficient space is available in this regard and that no interference with other items of equipment will be experienced. The heat build-up inside the various compartments shall be vented to the rear of the panel exiting vertically where required.

The completed board shall be finished with orange peel ( structured ) type epoxy powder coating, colour orange externally. All internal surfaces shall be finished white, except for front covers which shall be orange.

All outgoing connections to the various items of equipment, including the telemetry facilities, shall be brought to easily accessible and appropriately current rated terminals.

The equipment controls, lights and plug circuit breakers shall all be installed inside the control panel.

Cognisance shall be taken of the potential radiated electrical noise and interference that may be produced by the VSD of the motors and all measures shall be taken to limit same. Attempts shall be made for electromagnetic shielding of the control circuitry and cabling via the screening of same behind the earthed steelwork of the enclosure where possible.

### **3.3 Equipment**

#### **(i) Main Incoming / Motor Circuit Breakers and Isolators**

The main incoming and motor circuit breakers shall be as indicated on the drawings.

The door to the main and individual motor compartments shall be interlocked with either the main / motor circuit breaker or isolator such that the circuit breaker or isolator must be in the "off" position before the door can be opened.

The afore-mentioned circuit breakers and isolators must be operable via a rotary handle with the doors closed unless otherwise specified.

#### **(ii) Soft Starters / Variable Speed Drives**

The soft starters / variable speed drives ( VSD ) shall be similar or equivalent to the Weg type as currently utilised by the Municipality.

The soft starters shall be of the soft start / soft stop type with bypass contactors and the VSD's shall be of the variable frequency / voltage AC type using latest proven technology.

They soft starters / VSD's shall be selected and rated to suit the load characteristics of the motors and shall be mounted on heat sinks in adequately ventilated cubicles / compartments manufactured from stainless steel and, if needed, forced ventilation shall be provided. The temperature of each VSD unit shall be monitored and should the temperature exceed safe operating conditions the VSD shall be turned off.

A main circuit breaker and ultra rapid fuses shall be supplied and installed as standard inside each soft starter / VSD cubicle in order to protect the soft starter / VSD and motor equipment.

Each soft starters / VSD module shall incorporate the necessary communication equipment and comms protocols to communicate with the telemetry / HMI equipment in order that the complete status of the soft starter i.e. individual alarms, running amps, etc. can be monitored.

Units offering the maximum degree of self-diagnostic ability are preferred, as are menu driven units. Utmost care should also be taken to ensure that protection systems are appropriately set and do not result in nuisance tripping.

Utmost care is to be taken to ensure that harmonics present on the electrical system do not adversely affect the units and also that harmonics generated by the drive units themselves do not adversely affect the electrical feed system or telemetry equipment.

Allowance shall be made for the installation of harmonic filtering equipment, i.e. series / parallel connected line reactors, etc. in this regard inside the cubicles. The combined maximum total harmonic distortion (  $THD_{voltage}$  ) of the soft starter / VSD / harmonic filter equipment provided shall not exceed 5%. In no case shall the combined power factor of the motor / soft starter / VSD / harmonic filter be leading more than 95% at 100% speed and load.

(iii) Power Factor Correction Capacitors

Power factor correction capacitors shall be provided for the various motors where required. The power factor of the motor load shall be between 0.90 and 0.95 lagging and the capacitors shall be of the sizes as given on the drawings.

The capacitors shall be automatically switched in or out by means of suitably rated contactors, which shall operate in conjunction with the bypass contactor of the relevant motor soft starter, suitably time delayed to avoid transient switching. The power factor correction equipment shall under no circumstances operate during the motor soft starter ramp up / ramp down period and shall be electrically interlocked to prevent same.

Protection for LV systems ( 400V ) shall comprise HRC fuses in fuse-holders for each step.

It shall be ensured that the rupturing capacity of a fuse chosen for a specific application shall be adequate, both as far as short circuit current and applied voltage are concerned.

Fuses shall be chosen to withstand a higher than normal full-load current ( 1.5 times rated capacitor current ) to allow for harmonics, and shall not deteriorate due to the high transients at switch-on.

(iv) Temperature Monitoring and Overheat Protection

PT100 temperature probes, thermistors or klixon type temperature monitoring and overheat protection shall be installed in the Control Panel for each pump's motor windings ( i.e. red, white, blue ), as well as for each motor and pump's drive end and non-drive end bearings. It shall be possible to reset the temperature controller without having to open the door of the panel. The pump shall not start until it has been manually reset.

The temperature of the motor and pump bearings shall be visible on the MCC panel and monitored via the telemetry.

(v) Supply Monitor

The incoming supply shall be monitored by means of power supply analyzer module similar or approved equal to the Lovato DMG 700 type. The power analyzer shall simultaneously display the voltage and currents of all three phases as well as the record the peak, i.e. maximum values of same. The instantaneous power consumed and power factor shall also be displayed.

(vi) Under Voltage Indication and Tripping System

A voltage monitor / phase failure unit shall be provided for the mains supply as shown on the drawings.

**The operation of the mains system shall be such that on the occurrence of the mains voltage falling to preset limits on all or any one phase the VM will initiate the operation of the timer. On expiry of the preset period the timer will energize relay UVR to cause the tripping of any motor that may be running**

**and inhibit the starting of any motor. Simultaneously, the UVR will initiate a “mains failure” telemetry signal. When the mains voltage returns to normal the VM will de-energize the system to permit normal function.**

(vii) Control Circuit Voltages

The pump motor control circuitry and other control circuitry shall operate on a 24V DC system.

(viii) General

All equipment mounting such as ammeters, voltmeters, selector switches, indicating lights, push buttons etc., shall be flush mounted in hinged panels to provide ease of access to equipment mounted within the board. Circuit breakers shall, however, be mounted in fixed chassis with cut-outs in hinged panels for switch toggles and escutcheon plates.

Emergency stop (abb. E. Stop) push buttons, of the lock-off / twist to release type with red mushroom heads, shall be provided on the face of each motor control compartment.

Except as otherwise indicated and as is practically possible, all components such as starters, contactors and relays shall be of one manufacture. All circuit breakers shall also be of one manufacture.

(ix) Surge Arrestors

Class 2 type surge arrestors, similar or approved equal to the Surge Sentry type, shall be installed inside a clear plastic enclosure inside the MCC panel and connected between each phase and the earth bar, and one between the neutral bar and the earth bar. The arrestors shall have the following minimum specifications:

Max Impulse Current I <sub>max</sub> 8/20us	40kA
Maximum peak residual voltage	< 800V
Energy Absorption (W)	550J
Response time	< 25ns

### 3.4 Operation Functions and Indicators

(i) Common Fault Indicators

The cause of a trip condition shall be indicated on the respective control compartments by means of a coloured LED labelled accordingly eg. “Tripped on O/L”, “Tripped on No-Flow”, “E-Stop Locked Out”, etc.

The individual fault signals shall be brought to terminal connections for connection to the telemetry equipment.

(ii) Emergency Stop Lock Out Indication

A fail safe method of operation shall be incorporated in the E-Stop circuitry. The E-Stop should preferably be connected directly into the Main Contactor coil circuit.

When any E-Stop is operated a red LED shall indicate “E-Stop Locked Out”.

(iii) No-Flow Trip and Indication

The pump trip and indication for a no-flow condition, monitored via a limit switch mounted on the counterweight of the non return valves, shall be initiated after selected time delays, as described in the Modes of Operation above.

(iv) Reset

A single reset push button per equipment compartment must be provided to reset all alarms specific to that compartment.

(v) Indications

The following is required on the face of the new MCC Panel as applicable:

Sewage Pumps:	- Green LED labeled	“PUMP RUN”
	- Red LED labeled	“TRIPPED ON SOFT STARTER FAULT”
	- Red LED labeled	“TRIPPED ON MOTOR OVERHEAT”
	- Red LED labeled	“TRIPPED ON SEAL FAIL”
	- Red LED labeled	“EARTH LEAKAGE TRIP”
	- Red LED labeled	“TRIPPED ON NO FLOW”
	- Red LED labeled	“E-STOP LOCKED OUT”
	- N/O Push button labeled	“LAMP TEST”
	- Selector switch labeled	“AUTO / OFF / MANUAL”
	- Start Push Button	
	- Stop Push Button	
	- E-Stop Push Button	
	- Reset Push Button	
- Hours Run meter		
Other:	- Pump Duty Selector switch labeled	“P1 / P2 / Auto”
	- Red LED labeled	“SUMP HIGH LEVEL”
	- Red LED labeled	“SUMP LOW LEVEL”

All indication lights shall be of a type, which can easily be seen when operating in normal daylight.

### 3.5 **Socket Outlets**

A weatherproof double phase 16 amp 3 pin double switch socket is to be installed inside the Main Distribution Board. The socket shall be flush mounted with the exterior surface of the panel so as to be externally accessible.

## 4.0 **TELEMETRY INSTALLATION**

### 4.1 **General**

The operation, status and health of the new MCC panel and associated pumping equipment is to be monitored via telemetry. The new MCC panel shall therefore be wired as to make provision for the necessary I/O and interfacing in this regard as indicated in the table below.

Provision shall be made via a dedicated telemetry cubicle inside the new MCC panel to house the existing Spectrum Teleranger Compact type telemetry equipment currently installed inside the pumpstation.



All telemetry signals shall be configured so that a Mains Failure does not create erroneous signals. It shall also be possible to completely remove the telemetry equipment without adversely affecting the normal functioning or manual operation of the system in any way.

#### 4.2 Outstation Additional I/O List

The ensuing I / O shall be allowed for at this outstation:

ITEM	DESCRIPTION	DIGITAL I/O		ANALOGUE I/O	
		DIN	DOUT	AIN	AOUT
Pumps (1 & 2)	Auto	2			
	Manual	2			
	Run	2			
	Soft Starter Fault	2			
	Motor Overheat	2			
	Earth Leakage Trip	2			
	Seal Fail	2			
	No Flow Trip	2			
	Emergency Stop	2			
	Drive Not Available	2			
	Start / Stop		2		
Miscellaneous	Intruder	1			
	Mains Fail	1			
	Duty Select (P1/P2/Auto)	3			
	Sump High Level	1			
	Sump Low Level	1			
	Allowance for 4-20 mA output of existing Flow Meter (Meinecke Type MAG 5000)			1	
Totals	Total I / O	27	2	1	0



5.0	TOTAL MATERIAL AND LABOUR, EXCL VAT						
6.0	ADD 14 % VAT						
7.0	GROSS TENDER AMOUNT						

**Delivery period: .....**



### **Contact Details of Tenderer**

Knysna Municipality Supplier number	
CSD Supplier number	
CSD Unique Registration Reference Number	
The name of the Tenderer:	
The name of the contact person:	
The address of the Tenderer:	
Telephone:	
Facsimile:	
E-mail:	
Address (physical):	
Address (postal):	
Signature:	
Date:	

## MBD 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 80/20 system for requirements with a Rand value of up to R1 000 000 (all applicable taxes included); and
  - 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 not to exceed R200 000 (all applicable taxes included) and therefore the 80/20 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	80
1.3.1.2 B-BBEE status level of contribution	20
<b>Total points for Price and B-BBEE must not exceed</b>	<b>100</b>

- 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 **“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 2007;
- 2.16 **“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
- 2.17 **“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 80/20 OR 90/10 PREFERENCE POINT SYSTEMS**

A maximum of 80 or 90 points is allocated for price on the following basis:

$$P_s = 80 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right) \quad \text{or} \quad P_s = 90 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where

- Ps = Points scored for comparative price of bid under consideration  
 Pt = Comparative price of bid under consideration  
 Pmin = 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>B-BBEE Status Level of Contributor</b>	<b>Number of points (90/10 system)</b>	<b>Number of points (80/20 system)</b>
5.2	1	10	20
	2	9	18
	3	8	16
	4	5	12
	5	4	8
	6	3	6
	7	2	4
	8	1	2
	Non-compliant contributor	0	0

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.

**6. BID DECLARATION**  
 6.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

<b>6.1.2 B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.3.1.2 AND 5.1</b>	
6.1.2.1 B-BBEE Status Level of Contribution as reflected on the B-BBEE Certificate	
6.1.2.2 Points claimed in respect of Level of Contribution (maximum of 10 or 20 points)	

Points claimed in respect of paragraph 6.1 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

**7. SUB-CONTRACTING**

7.1. Will any portion of the contract be sub-contracted? <i>(Tick applicable box)</i>	YES		NO	
7.1.1. If yes, indicate:				
7.1.1.1. what percentage of the contract will be subcontracted?				%
7.1.1.2. the name of the sub-contractor?				
7.1.1.3. the B-BBEE status level of the sub-contractor?				
7.1.1.4. whether the sub-contractor is an EME? <i>(Tick applicable box)</i>	YES		NO	

**8. DECLARATION WITH REGARD TO COMPANY/FIRM**

8.1	Name of Company / Firm			
8.2	VAT Registration number			
8.3	Company Registration number			
8.4	Type of Company / Firm (Tick Applicable Box)	Partnership/Joint Venture / Consortium		
		One person business/sole propriety		
		Close corporation		
		Company (Pty) Limited		
8.5	Describe Principal Business Activities			
8.6	Company Classification (Tick Applicable Box)	Manufacturer		
		Supplier		
		Professional Service Provider		
		Other service providers, eg transporter		



8.7

**TOTAL NUMBER OF YEARS THE ENTERPRISE HAS BEEN IN BUSINESS**

9. 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

NAME OF BIDDER		DATE	
SIGNATURE			
WITNESS 1		WITNESS 2	
WITNESS 1			
DATE		DATE	

**MBD 4  
DECLARATION OF INTEREST**

1.	No bid will be accepted from persons in the service of the state <sup>1</sup> .		
2.	Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.		
3.	In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.		
3.1	Full Name of bidder or his or her representative:		
3.2	Identity Number:		
3.3	Position occupied in the Company (director, trustee, hareholder <sup>2</sup> ):		
3.4	Company Registration Number:		
3.5	Tax Reference Number:		
3.6	VAT Registration Number:		
3.7	The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.		
3.8	Are you presently in the service of the state?	YES	NO
3.8.1	If yes, furnish particulars: _____ _____		
3.9	Have you been in the service of the state for the past twelve months?	YES	NO
3.9.1	If yes, furnish particulars: _____ _____		
3.10	Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved the evaluation and or adjudication of this bid?	YES	NO
3.10.1	If yes, furnish particulars: _____ _____		
3.11	Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid	YES	NO
3.11.1	If yes, furnish particulars: _____ _____		
3.12	Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state?	YES	NO
3.12.1	If yes, furnish particulars: _____ _____		
3.13	Are any spouse, child or parent of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state?	YES	NO
3.13.1	If yes, furnish particulars: _____		

3.14	Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract	YES	NO
3.14.1	If yes, furnish particulars:  _____		

<sup>1</sup>MSCM Regulations: "in the service of the state" means to be –

- (a) a member of –
  - (i) any municipal council;
  - (ii) any provincial legislature; or
  - (iii) the national Assembly or the national Council of provinces;
- (b) a member of the board of directors of any municipal entity;
- (c) an official of any municipality or municipal entity;
- (d) an employee of 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);
- (e) a member of the accounting authority of any national or provincial public entity; or
- (f) An employee of Parliament or a provincial legislature.

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

4.	Full details of directors / trustees/ members / shareholders:																																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #e1ecf4;"> <th style="width: 50%;">Full Name</th> <th style="width: 25%;">Identity Number</th> <th style="width: 25%;">State Employee Number</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>		Full Name	Identity Number	State Employee Number																														
Full Name	Identity Number	State Employee Number																																

5. I, the undersigned (name) \_\_\_\_\_, certify that the information furnished in paragraphs 3 and 4 above is correct.

I accept that the state may act against me should this declaration prove to be false.

Name of Bidder		Date	
Signature		Capacity	

## 11. MDB 15 – Certificate for Payment of Municipal Services

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

**FURTHER DETAILS OF THE BIDDER'S; Director / Shareholder / Partners, etc:**

Director / Shareholder / partner	Physical address of the Business	Municipal Account number(s)	Physical residential address of the Director / shareholder / partner	Municipal Account number(s)

**NB:** Please attach certified copy (ies) of ID document(s)

I, \_\_\_\_\_,

(Full name in block letters) the undersigned, certify that the information furnished on this declaration form is correct and that I / we have no undisputed commitments for municipal services towards a municipality in respect of which payment is overdue for more than 90 days.

If the value of the transaction is expected to exceed R10 million (VAT included) I certify that the bidder has no undisputed commitments for municipal services towards **a Municipality** in respect of which payment is overdue for more than 30 days;

**THUS DONE AND SIGNED** for and on behalf of the Bidder, at \_\_\_\_\_, on the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_ .

Number of sheets appended by the tenderer to this schedule (If nil, enter NIL)	
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SIGNATURE:		NAME (PRINT):	
CAPACITY:		NAME OF FIRM:	

**For office use (comments):**