



C 2.2. BILL OF QUANTITIES  
**C2.2: BILL OF QUANTITIES**

TENDER NO. JSM/WB-O&M/05 22-23

APPOINTMENT OF A PANEL OF SERVICE PROVIDERS FOR THE REPAIRS, MAINTENANCE, REPLACEMENT AND EQUIPPING OF BOREHOLES AND ASSOCIATED WORKS AS AND WHEN REQUIRED FOR A PERIOD OF 36 MONTHS (Rates Only).

**PRICE SCHEDULE**

NOTE 1: The tender will be evaluated and awarded FOR THE WHOLE BILL OF QUANTITIES. Tenderers must tender on all sub-items per section. Tenderers, who did not tender on all sub-items per section, will automatically be disqualified.

NOTE 2: The quantities indicated are only approximate figures for evaluation purposes and the Municipality does not guarantee to purchase this or any quantity.

NOTE 3: The tendered rate shall include the repairs, maintenance and equipping of boreholes and associated works for small schemes of the specified items in the Bill of Quantities.

NOTE 4: All the items in the Bill of Quantities must comply with SABS standards.

**REPAIRS, MAINTENANCE, REPLACEMENT AND EQUIPING OF BOREHOLES AND ASSOCIATED WORKS FOR SMALL SCHEMES**

ITEM DESCRIPTION	UNIT	RATE PER UNIT COST	QUANTITY	TOTAL
<b>1 GENERAL WORKS</b>				
Clear vegetation and trees of the girth lower than 1m	m <sup>2</sup>			
Remove of tree girth of more than 1m	no			
Remove and Replace Fence the Area of the Borehole	m			
Siting	no			

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



BALANCE CARRIED OVER				
BALANCE BROUGHT FORWARD				
<b>2.BENDS:Supply Fitting to be suitable for coupling directly(mechanically) onto pipes-for the repairs</b>				
<b>2.1 90 degree</b>				
50 mm diameter				
63 mm diameter				
75 mm diameter				
90 mm diameter				
<b>2.2 Tees(Equal)</b>				
50 mm diameter				
63 mm diameter				
75 mm diameter				
90 mm diameter				
<b>2.3 Scour Tee(flanged)</b>				
50 mm diameter				
63 mm diameter				
75 mm diameter				
90 mm diameter				
<b>2.4 Repair coupling</b>				
50 mm diameter				
63 mm diameter				
75 mm diameter				
90 mm diameter				
<b>2.5 Flange Adaptors</b>				
50 mm diameter				
63 mm diameter				
75 mm diameter				

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



90 mm diameter				
<b>Balance Carried Forward</b>				
<b>Balance brought Forward</b>				
<b>2.6 Gate Valves</b>				
50 mm diameter				
80 mm diameter				
90 mm diameter				
100 mm diameter				
<b>2.7 Nipple</b>				
50 mm diameter				
63 mm diameter				
75 mm diameter				
90 mm diameter				
<b>2.8 Socket</b>				
50 mm diameter				
63 mm diameter				
75 mm diameter				
90 mm diameter				
<b>2.9 Reducing Bush</b>				
50 x 20 mm diameter				
63 x 20 mm diameter				
75 x 20mm diameter				
90 x 20 mm diameter				
<b>2.9 Reducing Bush</b>				
50 x 20 mm diameter				
63 x 20 mm diameter				
75 x 20mm diameter				
90 x 20 mm diameter				
<b>BALANCE CARRIED FORWARD</b>				

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



<b>BALANCE BROUGHT FORWARD</b>				
<b>2.10 Ball Valve</b>				
20 mm				
<b>2.11 Pressure Gauge:63 mm</b>				
<b>2.12 SUPPLY HDPE PIPE FOR LOW YIELD BOREHOLES</b>				
32 mm				
40 mm				
<b>2.13 SUPPLY THREADED CASING PIPE FOR HIGH YIELD BOREHOLES</b>				
75 mm				
90 mm				
110 mm				
<b>2.14 SUPPLY COMPRESSION FITTING TO REPAIR</b>				
32 mm male adaptor				
40 mm male adaptor				
32 mm straight adaptor				
40 mm straight adaptor				
<b>2.15 SUPPLY TO REPAIR USING BASE-PLATE</b>				
32 mm				
40 mm				
<b>2.16 SUPPLY TO REPAIR THE SUPPLY LINE</b>				
63 mm				
75 mm				
90 mm				
<b>BALANCE CARRIED FORWARD</b>				

Tenderer

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Witness 1

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<b>BALANCE BROUGHT FORWARD</b>				
<b>2.17 NON-RETURN VALVES</b> SUPPLY,DELIVER,HANDLE,REMOVE,SERVICE/REPAIR,CLEAN AND RE-ASSEMBLE INCLUDING THE NEW GASKET,BOLTS,NUTS AND WASHERS				
50 mm				
80 mm				
100 mm				
<b>2.18 SCOUR VALVE/BUTTERFLY</b> SUPPLY,DELIVER,HANDLE,REMOVE AND REPLACE WITH THE NEW SCOUR VALVE INCLUDING THE NEW GASKET,BOLTS,NUTS AND WASHERS.				
50 mm				
80 mm				
100 mm				
<b>2.19 BULK METERS</b> SUPPLY,DELIVER,HANDLE,REMOVE AND REPLACE WITH THE NEW WATER METER WITH GASKET,BOLTS,NUTS AND WASHERS				
50 mm				
80 mm				
100 mm				
<b>2.20 FENCING</b>				

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



SUPPLY AND ERECT COMPLETE WELDED RIBBON MESH SECURITY FENCING 2.0m HEIGHT INCLUDING 4mm GALVANISED STRAINING WIRE AND BINDING WIRE				
SUPPLY AND ERECT ON TOP COMPLETE FLAT WRAP RAZOR RIPPER INCLUDING 4mm GALVANISED STRAINING WIRE AND BINDING WIRE				
SUPPLY AND INSTALL GALVANISED CORNER POST 100mm x 2mm including EXCATION ,CONCRETE AND BACKFILL FOR 2M HIGH FENCE(no. of)				
SUPPLY AND INSTALL GALVANISED GATE POST 100mm x 2mm including EXCATION ,CONCRETE AND BACKFILL FOR 2M HIGH FENCE				
<b>BALANCE CARRIED FORWARD</b>				
<b>BALANCE BROUGHT FORWARD</b>				
SUPPLY AND INSTALL GALVANIZED CORNER CORNER POST DIAMETER 100MM X 2MM INCLUDING EXCAVATION, CONCRETE AND BACKFILL FOR 2M HIGH FENCE				
SUPPLY AND INSTALL GALVANIZED GATE POST DIAMETER 100MM X 2MM INCLUDING EXCAVATION, CONCRETE AND BACKFILL FOR 2M HIGH FENCE				
SUPPLY AND INSTALL Y SECURITY STATION 2M HEIGHT				

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



SUPPLY AND INSTALL COMPLETE DOUBLE SECURITY GATE 5M WIDTH AND 2M HEIGHT				
<b>2.21. CONTROL BOX</b>				
SUPPLY AND INSTALL RECTANGULAR BULKHEAD FITTING WITH ENERGY SAVING LIGHT, 220V WEATHERPROOF PLUG				
SUPPLY AND INSTALL HEAVY DUTY PADDLOCKS				
<b>2.22. RISER PIPEWORK</b>				
50 mm class 16 hdpe				
65 mm class 16 hdpe				
50 mm Bore Quip				
80 mm Bore Quip				
50 mm Top and Bottom Connector				
100 mm Top and Bottom Connector				
<b>2.23. BOREHOLE DRILLING AND CLEANING</b>				
CLEAN THE BOREHOLE UPON THE INSTRUCTION BY THE MUNICIPALITY				
DRILL THE BOREHOLE UPON THE INSTRUCTION BY THE MUNICIPALITY				
Ream the Borehole				
<b>BALANCE CARRIED FORWARD</b>				
<b>BALANCE BROUGHT FORWARD</b>				
Casing 200mm to the new Borehole				
Re-Sleeve the cleaned Borehole				

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



Camera Testing				
Geo Siting				
<b>2.24 SUPPLY, DELIVERY AND ERECT 10 KL WITH 3 – 4 METER GALVANIZED STEEL STAND</b>				
<b>2.25 BULK METERS</b>				
Supply, deliver, remove and replace the water meter with gasket, bolt, nuts and washers				
50 mm				
80 mm				
100 mm				
<b>2.26 YIELD TESTING</b>				
Supply pump,2500l tank and lay flat for testing				
<b>2.27 CABLING</b>				
Supply, fit, test complete submersible pump for core cabling including cable joints and glands for:				
2.5mm <sup>2</sup>				
4mm <sup>2</sup>				
6mm <sup>2</sup>				
10mm <sup>2</sup>				
16mm <sup>2</sup>				
25mm <sup>2</sup>				
<b>BALANCE CARRIED FORWARD</b>				
<b>BALANCE BROUGHT FORWARD</b>				

Tenderer

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Witness 1

Witness 2





<b>2.28 ELECTRICAL ACCESORIES</b>				
Surge arrestors, Motor scope protection unit, Time switch, Pilots Light, Volt Selector Voltmeter, Amp meter, On-Off-Auto selector switch, Isolator, circuit breaker and wiring including cabling and glands for connection to main supply				
1.1 kW;400V				
1.5 KW;400V				
2.2 KW;400 V				
3.7 kW;400 V				
5.6 kW;400 V				
7.5 kW;400 V				
11 kW;400 V				
15 kW;400 V				
18 kW;400 V				
22 kW;400 V				
30kW;400 V				
Submit Electrical certification and manuals				
<b>2.29 Supply, deliver the new electric motor and remove the old motor pump and replace with the new one</b>				
1.1 kW;				
2.2 kW;				
1.5 kW				
3.7 kW;				
5.6 kW;				
7.5 kW;				

Tenderer

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11 kW;				
15 kW;				
18 kW;				
22 kW;				
30kW;				
<b>3. HAND PUMPS</b>				
Supply and Install hand pumps(Mono Head T5 and T7)				
Supply and Install hand pump with force rod				
4. Supply the following components of the hand pumps to repair				
4.1 Force Rod				
Piston Rod				
Cylinder				
Water Outlet				
Piston				
Check Valve				
Sealing O-ring				
4.2 Rod pump electro plated – 16 mm x 700/800				
- 20 mm x 700/800				
- 25 mm x 700/800				
- 32 mm x 700/800				
Lock-Nut electro plated Range				
Socket Rod electro Plated Range				
Rod pump electro plated				
<b>TOTAL (including VAT)</b>				

**TOTAL AMOUNT (INCLUDING VAT) TO BE FORWARDED TO FORM C 1.1 (FORM OF OFFER)**

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



Service providers must provide the following information [not to be included in the offer amount but to be reflected in the detailed proposals]:

Item	Description	Unit	Rate	Over time	AMOUNT
1.	<b>OTHER OPERATIONAL COSTS</b>				
1.1	Labour rate [working hours]	hour			
1.2	Skilled Labour – Artisan Electrical	hour			
1.3	Skilled Labour – Artisan Plumber	hour			
1.4	Hydrologist	hour			
1.5	TLB	hour			
1.6	Crane Truck	hour			
1.7	Suction water pump (size.....)	hour			

**NB:** Pricing must comply with the requirements as set in the scope of work.

Items not covered on the BOQ will be required to quote the municipality in line with MRI market related prices and with a mark-up of 20 %.

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