**VOI CONSTITUENCY DEVELOPMENT FUND BOREHOLE DRILLING AND EQUIPING BILL OF QUANTITIES**

|  |  |  |  |  |  |
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|  | **DESCRIPTION** | **QT Y** | **UNIT** | **RATE** | **AMOUNT** |
| 1 | **Mobilizations to site** |  |  |  |  |
| a | Allow for mobilization of equipment and personnel to and from site on completion. | 2 | LM | 80,000.00 | 160,000.00 |
| 2 | **BILL .2. Drilling** |  |  |  |  |
| a | AIR Drilling of 200MM diameter borehole from the surface through all type of loose formation until 200m is achieved and keeping drilling records as specified meters | 200 | Lm | 3,700.00 | 740,000.00 |
| b | Allow for provision of drilling powders for use on site (no water) | 1 | item | 50,000.00 | 50,000.00 |
| 3 | **Casings** |  |  |  | - |
| a | supply and install of 6M " plain steel casing into the borehole. | 140 | Lm | 3,200.00 | 448,000.00 |
| b | supply and install of 6M slotted steel casing into the borehole. | 60 | Lm | 3,000.00 | 180,000.00 |
| 4 | **Case Grouting** |  |  |  | - |
| a | Grout between the case and the borehole for the top two (3) meters | 1 | Item | 30,000.00 | 30,000.00 |
| 5 | **Gravel Pack** |  |  |  | - |
| a | Supply and install 2-4 mm inert quartz gravel park in the annular space between the borehole and the casing | 6 | Ton | 20,000.00 | 120,000.00 |
| 6 | **Well development** |  |  |  | - |
| a | physical development of the borehole including inserting and removal of development equipment’s | 1 | Hour s | 150,000.00 | 150,000.00 |
|  | Undertake a constant discharge test to a certain borehole yield for at least 24hrs including installation and withdrawal of pumping unit and recovery measurements | 24 | Hour s | 2,500.00 | 60,000.00 |
|  | Undertake water level observation and record recovery | 2 | Hour s | 10,000.00 | 20,000.00 |

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| 7 | Allow for taking of samples, conduction of bacteriological and chemical analysis of the borehole water and development of the completion report | 1 | sum | 10,000.00 | 10,000.00 |
| **TOTAL FOR WORKS** |  |  |  | 1,968,000.00 |
| **16% VAT** |  |  |  | 314,880.00 |
| **TOTAL** |  |  |  | **2,282,880.00** |

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| **BILL OF QUANTITIES: SOLAR INSTALLATION.** | | | | |
| **DESCRIPTION** | **QTY** | **UNIT** | **RATE** | **AMOUNT** |
| 5.5kw 3ph motor MS 4000 | 1 | pcs | 98,000.00 | 98,000.00 |
| Bps 8-48 5.5kw 3PH PUMP 4" | 1 | PCS | 105,000.00 | 105,000.00 |
| 5.5kw 3pH hybrid inverter | 1 | pcs | 95,000.00 | 95,000.00 |
| solar PV disconnect switch | 1 | pcs | 9,000.00 | 9,000.00 |
| 550 watts solar modules monocrystalline | 15 | pcs | 25,350.00 | 380,250.00 |
| 6MM 4CORE 185mtrs drop cable | 185 | mtr | 950.00 | 175,750.00 |
| 1.5mm 2core 185mtrs index cable | 185 | mtr | 180.00 | 33,300.00 |
| **level sensor unit** | 2 | pcs | 8,000.00 | 16,000.00 |
| **Lightning arrestor** | 1 | pcs | 5,000.00 | 5,000.00 |
| **4mm U/G cable** | 30 | mtr | 945.00 | 28,350.00 |
| copper earth rod with clamp | 1 | pcs | 8500 | 8500 |
| Solar pv cable | 30 |  | 245 | 7,350.00 |
| Twin with earth cable | 10 |  | 320 | 3,200.00 |
| 6mm dual pv cable | 12 |  | 245 | 2,940.00 |
| cable joint | 1 | pcs | 2,800.00 | 2,800.00 |
| 1,1/22" pvc riser pipes | 72 | pcs | 1,850.00 | 133,200.00 |
| 1,1/2" adopter set with its fittings | 1 | m | 4,500.00 | 4,500.00 |
| 8x1,1/4 borehole cover | 2 | NO. | 9,550.00 | 19,100.00 |
| 16mm braided safety rope | 240 | mtr | 60.00 | 14,400.00 |
| juction box | 1 | pcs | 4,350.00 | 4,350.00 |
| Inverter security box | 1 |  | 7,500.00 | 7,500.00 |
| 1.5mm 2core u/g cable | 10 | mtr | 200.00 | 2,000.00 |
| Solar structure | 1 |  | 80,000.00 | 80,000.00 |
| installation sundries and labor | 1 | sum | 70,000.00 | 70,000.00 |
| **10,000 Litres Tank** |  |  | 93,000.00 | 93,000.00 |
| **Labour and transport** |  |  | 100,000.00 | 100,000.00 |
| **TOTAL COST** |  |  |  | 1,498,490.00 |
| **16% VAT** |  |  |  | 239,758.4 |
| **TOTAL** | | | | **1,738,248.40** |

**SUMMARY**

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| **SERIAL NO:** | **DESCRIPTION** | **TOTAL** |
| **1** | BOREHOLE DRILLING AND EQUIPPING | 2,282,880.00 |
| **2** | BOREHOLE SOLARISATION AND PUMP INSTALLATION | 1,738,248.40 |
| **TOTAL** |  | **4,021,128.40** |