|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Client** | **IGAD Climate Predictions and Application Centre** |  |  |  |
| **Activity** | **Lot 1.2: Rehabilitation of Qolujeed Borehole** |  |  |  |
| **Village** | **Qolujeed** |  |  |  |
| **District** | **Borama, Somaliland** |  |  |  |
|  | **Summary** |  |  |  |
| **NO.** | **Description** | **Qty** | **Rate** | **Amount USD** |
|  | Unit prices will include mobilization i.e. Contractor’s plant, machinery, other equipment including his work force etc. to the site |  |  |  |
| 1.2.1 | Supply of generator set with pump | 1 |  |  |
| 1.2.2 | Construction of new elevated water tank 50 m3 | 1 |  |  |
| 1.2.3 | Construction of caretaker room | 1 |  |  |
| 1.2.4 | Rehabilitation of generator room | 1 |  |  |
| 1.2.5 | Construction of communal water point | 1 |  |  |
| 1.2.6 | Rehabilitation of water kiosk | 2 |  |  |
| 1.2.7 | Pipeline extensions | 1 |  |  |
| 1.2.8 | Rehabilitation of elevated water tank | 2 |  |  |
| **Total (USD)** | | | | **-** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ITEM** | **DESCRIPTION** | **UNIT** | **QTY** | **RATE** | **TOTAL (USD)** |
|  |  |  |  |  |  |
|  | **SUPPLY OF GENERATOR SET WITH PUMP** |  |  |  |  |
|  |  |  |  |  |  |
| **1** | **Supply and Installation of Generator Set with Pump** |  |  |  |  |
| 1.1 | Supply and installation of 45KVA Air Cooled Diesel Generator Set, KVA: 45 Engine, Open / Volts: 400/230 v, Cycles Hz: 50 Volts, R.P.M: 1500 | Fuel Consumption: 8.3 Litre/hr, diesel driven, 3 phase water cooled | Item | 1 |  |  |
| 1.2 | Supply and installation of submersible pump with 11 Kw motor, 15 HP, 3PH, 208/230V | Item | 1 |  |  |
| 1.3 | Supply and installation of rising main GI pipe 2” with all necessary fittings | Item | 20 |  |  |
| 1.4 | Control Panel | Item | 1 |  |  |
| 1.5 | Water meter | Item | 1 |  |  |
|  | **Sub-total of Supply of generator set with pump** |  |  |  |  |
|  |  |  |  |  |  |
|  | **MAIN SUMMARY** |  |  |  | **AMOUNT (USD)** |
|  | Supply of Generator Set with Pump |  |  |  |  |
|  |  |  |  |  |  |
| **Total of Supply of Generator Set with Pump** | | | | |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ITEM** | **DESCRIPTION** | **UNIT** | **QTY** | **RATE** | **TOTAL (USD)** |
|  |  |  |  |  |  |
|  | **CONSTRUCTION OF 50M3 ELEVATED WATER TANK AT BOREHOLE SITE** |  |  |  |  |
|  |  |  |  |  |  |
| **1.0** | **SITE PREPARATION** |  |  |  |  |
| 1.1 | Clear site of all bushes and debris. Grab up roots and burn the arisings | m2 | 18.00 |  |  |
| 1.2 | Load, wheel and cart deposit and spread surplus excavated material where directed on site at a distance not exceeding 100 meters | Item | 1.00 |  |  |
|  | **Sub-total site preparation** |  |  |  |  |
|  |  |  |  |  |  |
| **2.0** | **SUBSTRUCTURES (PROVISIONAL)** |  |  |  |  |
|  | Excavations including maintaining and supporting sides and keeping free from water, mud and fallen material |  |  |  |  |
| 2.1 | Top soil excavation average 200mm deep | m3 | 3.60 |  |  |
| 2.2 | Excavate for foundation not exceeding 0.3 meters deep, starting from stripped levels | m3 | 0.36 |  |  |
| 2.3 | Extra over for excavation in rock | m3 | 3.00 |  |  |
|  | Ditto |  |  |  |  |
| 2.4 | Column bases | m3 | 17.64 |  |  |
|  | Planking and strutting |  |  |  |  |
| 2.5 | Allow for keeping foundations free from water, mud, fallen materials, etc. | LS | 1.00 |  |  |
|  | Disposal |  |  |  |  |
| 2.6 | Return, fill and ram selected excavated material around foundations | m3 | 5.29 |  |  |
| 2.7 | Load, wheel and cart deposit and spread surplus excavated material where directed on site at a distance not exceeding 100 meters | m3 | 12.35 |  |  |
|  | Hard-core or other approved filling, as described |  |  |  |  |
| 2.8 | 300mm thick well compacted hard-core filling blinded with 25mm thick quarry dust layer to receive surface bed | m2 | 1.08 |  |  |
| 2.9 | 50mm thick Quarry dust blinding to surfaces of hard-core :rolled smooth to receive polytheen sheeting (m.s) | m2 | 24.00 |  |  |
|  | Anti-termite treatment |  |  |  |  |
| 2.1 | Gladiator or equal and approved chemical anti-termite treatment, executed complete by an approved specialist under a ten-year guarantee, to surfaces of blinding | m2 | 24.00 |  |  |
|  | Damp-proof membrane |  |  |  |  |
| 2.11 | 1000 gauge polythene or other equal and approved damp-proof membrane, laid over blinded hardcore (m.s) with 300mm side and end laps (measured nett-allow for laps) | m2 | 24.00 |  |  |
|  | **Sub-total substructures (provisional)** |  |  |  |  |
|  |  |  |  |  |  |
| **3.0** | **CONCRETE WORKS** |  |  |  |  |
|  | Plain concrete class 15 in: |  |  |  |  |
| 3.1 | 100mm blinding | m3 | 2.40 |  |  |
| 3.2 | Ditto for column bases | m3 | 7.06 |  |  |
|  | In-situ concrete class 25/20 , vibrated and reinforced with 60mm thick maximum aggregate size in as described, in:- |  |  |  |  |
|  | BEAMS |  |  |  |  |
| 3.3 | Ground beam | m3 | 3.84 |  |  |
| 3.4 | Ring beam 1 | m3 | 1.92 |  |  |
| 3.5 | Ring beam 2 | m3 | 1.92 |  |  |
| 3.6 | Main beam | m3 | 3.84 |  |  |
|  | COLUMNS |  |  |  |  |
| 3.7 | Columns bases | m3 | 7.06 |  |  |
| 3.8 | Starter columns | m3 | 0.96 |  |  |
| 3.9 | Columns (Height 6m) | m3 | 9.60 |  |  |
|  | SLABS |  |  |  |  |
| 3.1 | 200mm thick surface bed laid in bays including all necessary formwork | m3 | 7.00 |  |  |
|  | Ditto: |  |  |  |  |
| 3.11 | Suspended slab | m3 | 7.00 |  |  |
| 3.12 | 150mm thick Roof slab | m3 | 3.60 |  |  |
|  | Walls |  |  |  |  |
| 3.13 | 150mm thick RC wall | m3 | 3.15 |  |  |
|  | Reinforcement, as described:-[PROVISIONAL] |  |  |  |  |
|  | High yield square twisted reinforcement bars to B.S 4461 including cutting bending and tying |  |  |  |  |
|  | BEAMS |  |  |  |  |
|  | GROUND BEAM |  |  |  |  |
| 3.14 | Y12 (Nominal Diameter 12mm) bars as main bars, Cross-Sectional Area (113mm2), Mass per unit length (0.888kg/m) | Kg | 177.60 |  |  |
| 3.15 | R8 (Nominal Diameter 8mm) bars as rings, Cross-Sectional Area (50.3mm2), Mass per unit length (0.395kg/m) | Kg | 53.64 |  |  |
|  | RING BEAM 1 |  |  |  |  |
| 3.16 | Ditto for Y12 as main bars | Kg | 177.60 |  |  |
| 3.17 | Ditto for R8 as rings | Kg | 53.64 |  |  |
|  | RING BEAM 2 |  |  |  |  |
| 3.18 | Ditto for Y12 as main bars | Kg | 177.60 |  |  |
| 3.19 | Ditto for R8 as rings | Kg | 60.83 |  |  |
|  | Main BEAM 1 |  |  |  |  |
| 3.2 | Ditto for Y12 as main bars | Kg | 177.60 |  |  |
| 3.21 | Ditto for R8 as rings | Kg | 60.83 |  |  |
|  | COLUMNS |  |  |  |  |
|  | COLUMN BASES |  |  |  |  |
| 3.22 | Y14 (Nominal Diameter 14mm) bars as main bars, Cross-Sectional Area (154mm2), Mass per unit length (1.209kg/m) | Kg | 174.10 |  |  |
|  | STARTER COLUMNS |  |  |  |  |
| 3.23 | Y16 (Nominal Diameter 16mm) bars as main bars, Cross-Sectional Area (201mm2), Mass per unit length (1.579kg/m) | Kg | 113.69 |  |  |
| 3.24 | R8 (Nominal Diameter 8mm) bars as rings, Cross-Sectional Area (50.3mm2), Mass per unit length (0.395kg/m) | Kg | 14.22 |  |  |
|  | COLUMNS |  |  |  |  |
|  | 6m HIGH COLUMNS |  |  |  |  |
| 3.25 | Y16 (Nominal Diameter 16mm) bars as main bars, Cross-Sectional Area (201mm2), Mass per unit length (1.579kg/m) | Kg | 757.92 |  |  |
| 3.26 | R8 (Nominal Diameter 8mm) bars as rings, Cross-Sectional Area (50.3mm2), Mass per unit length (0.395kg/m) | Kg | 177.75 |  |  |
|  | SLABS |  |  |  |  |
|  | ROOF SLAB |  |  |  |  |
| 3.27 | Y12 (Nominal Diameter 12mm) bars as main bars tops 1 Cross-Sectional Area (113mm2), Mass per unit length (0.888kg/m) | Kg | 106.56 |  |  |
| 3.28 | Y12 (Nominal Diameter 12mm) bars as main bars tops 2 Cross-Sectional Area (113mm2), Mass per unit length (0.888kg/m) | Kg | 106.56 |  |  |
| 3.29 | Y12 (Nominal Diameter 12mm) bars as main bars bottom 1 Cross-Sectional Area (113mm2), Mass per unit length (0.888kg/m) | Kg | 106.56 |  |  |
| 3.3 | Y12 (Nominal Diameter 12mm) bars as main bars bottom 2 Cross-Sectional Area (113mm2), Mass per unit length (0.888kg/m) | Kg | 106.56 |  |  |
|  | BASE SLAB |  |  |  |  |
| 3.31 | Y12 (Nominal Diameter 12mm) bars as main bars tops 1. Cross-Sectional Area (113mm2), Mass per unit length (0.888kg/m) | Kg | 155.40 |  |  |
| 3.32 | Y12 (Nominal Diameter 12mm) bars as main bars tops 2. Cross-Sectional Area (113mm2), Mass per unit length (0.888kg/m) | Kg | 155.40 |  |  |
| 3.33 | Y12 (Nominal Diameter 12mm) bars as main bars bottom 1. Cross-Sectional Area (113mm2), Mass per unit length (0.888kg/m) | Kg | 155.40 |  |  |
| 3.34 | Y12 (Nominal Diameter 12mm) bars as main bars bottom 2. Cross-Sectional Area (113mm2), Mass per unit length (0.888kg/m) | Kg | 155.40 |  |  |
|  | WALLS |  |  |  |  |
| 3.35 | Y10 (Nominal Diameter 12mm) bars as main bars tops 1. Cross-Sectional Area (79mm2), Mass per unit length 0.617kg/m) | Kg | 163.48 |  |  |
| 3.36 | Y10 (Nominal Diameter 12mm) bars as main bars tops 1. Cross-Sectional Area (79mm2), Mass per unit length 0.617kg/m) | Kg | 313.34 |  |  |
|  | Reference A142 mesh 200 x 200 mm , weight 2.22 kgs per square meter (measured net - no allowance made for laps (including bends, tying wire and distance blocks) |  |  |  |  |
| 3.37 | Fabric ref. A142 weighing 2.22kg/ sq.metre, in surface bed | m2 | 24.00 |  |  |
|  | Sawn formwork as described to:- |  |  |  |  |
| 3.38 | To edge of floor slab | m2 | 3.60 |  |  |
| 3.39 | Ditto to sides and soffits of roof slab | m2 | 2.70 |  |  |
| 3.4 | Ditto to sides and soffits of base slab | m2 | 3.60 |  |  |
| 3.41 | Ditto to walls | m2 | 50.40 |  |  |
|  | **Sub-total concrete works** |  |  |  |  |
|  |  |  |  |  |  |
| **4.0** | **FINISHING** |  |  |  |  |
|  | Plastering |  |  |  |  |
| 4.1 | 25 mm Thick screed to base slab with waterproof cement | m2 | 2.80 |  |  |
| 4.2 | 15mm internal plaster to cover slab with waterproof cement | m2 | 9.99 |  |  |
| 4.3 | 15mm plaster to internal sides of wall with waterproof cement | m2 | 22.20 |  |  |
| 4.4 | 12mm plaster to external sides of wall | m2 | 21.00 |  |  |
| 4.5 | 12mm plaster to cover slab | m2 | 12.00 |  |  |
| 4.6 | 12mm plaster to Ground beams | m2 | 13.76 |  |  |
| 4.7 | 12mm plaster to Ring 1 beams | m2 | 20.64 |  |  |
| 4.8 | 12mm plaster to Ring 2 beams | m2 | 20.64 |  |  |
| 4.9 | 12mm plaster to columns | m2 | 57.60 |  |  |
|  | **Sub-total finishing** |  |  |  |  |
|  |  |  |  |  |  |
| **5.0** | **PLUMBING INSTALLATION** |  |  |  |  |
|  | Galvanized Mild Steel pipes class "B" medium thickness with and including jointing, fittings and fixe as described |  |  |  |  |
| 5.1 | Supply and install 50mm diameter inlet pipe 800mm long | No | 2.00 |  |  |
| 5.2 | Supply and install 50mm diameter draw off pipe Ditto | No | 2.00 |  |  |
| 5.3 | Supply and install 50mm diameter overflow pipe Ditto | No | 1.00 |  |  |
| 5.4 | Supply and install 75mm diameter scour pipe Ditto | No | 3.00 |  |  |
| 5.5 | Supply and install 20mm diameter brass gate valve with wheel and head | No | 2.00 |  |  |
| 5.6 | Supply and install 20mm diameter stop corks | No | 3.00 |  |  |
| 5.7 | 600x600x6mm heavy gauge steel primed metal manhole cover on slab with and including metal framing all around | No | 1.00 |  |  |
|  | **Sub-total plumbing installation** |  |  |  |  |
|  |  |  |  |  |  |
|  | **MAIN SUMMARY** |  |  |  | **AMOUNT** |
|  | Site Preparation |  |  |  |  |
|  | Substructures (Provisional) |  |  |  |  |
|  | Concrete Works |  |  |  |  |
|  | Finishing |  |  |  |  |
|  | Plumbing Installation |  |  |  |  |
| **Total of Construction of New 50 m3****Elevated Water Tank** | | | | |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ITEM** | **DESCRIPTION** | **UNIT** | **QTY** | **RATE** | **TOTAL (USD)** |
|  |  |  |  |  |  |
|  | **CONSTRUCTION OF NEW CARETAKER ROOM** |  |  |  |  |
|  |  |  |  |  |  |
| **1.0** | **SUBSTRUCTURE (Provisional)** |  |  |  |  |
|  | Excavation |  |  |  |  |
|  | Excavation including maintaining and supporting sides and keeping free from water, mud and fallen materials by bailing, pumping or otherwise |  |  |  |  |
| 1.1 | Prepare site by stripping top 200 mm of soil to remove all debris including sand (if any) from site and carting away spoil | m2 | 41.58 |  |  |
| 1.2 | Excavate to reduce levels not exceeding 1.50m deep average depth 300mm | m2 | 7.62 |  |  |
| 1.3 | Excavate for foundation strip commencing at reduced levels depth not exceeding 1.50m deep | m3 | 7.62 |  |  |
| 1.4 | Extra-over for excavation in rock | m3 | 3 |  |  |
| 1.5 | Remove surplus excavated material from site | m3 | 4 |  |  |
| 1.6 | Backfill around foundation | m3 | 5.906 |  |  |
|  | Filing |  |  |  |  |
| 1.7 | 300 mm thick approved hard-core filling spread, well rammed and compacted in 150mm layers to receive concrete surface bed | m3 | 19.05 |  |  |
|  | In-situ concrete: class 15: mix 1:3:6 |  |  |  |  |
| 1.8 | 50mm blinding layer under foundations | m2 | 7.62 |  |  |
| 1.9 | 50mm blinding layer on hard-core surfaces | m2 | 7.62 |  |  |
| 1.1 | Treat hard-core surface with approved insecticide | m2 | 15.24 |  |  |
|  | Concrete work |  |  |  |  |
|  | Reinforced Concrete class 25 |  |  |  |  |
| 1.11 | Strip foundation | m3 | 2 |  |  |
| 1.12 | 100mm thick floor slab with surface steel trowelled smooth | m2 | 19 |  |  |
|  | Reinforcement |  |  |  |  |
| 1.13 | 10 and 8mm diameter high tensile reinforcement bars | kg | 55 |  |  |
| 1.14 | Mesh fabric reinforcement ref. No. A142 laid in floor slab with minimum 150 mm side allowance | m2 | 19 |  |  |
|  | Sawn formwork |  |  |  |  |
| 1.15 | Formwork to edges of floor slab girth over 75mm but not exceeding 150mm | m | 17 |  |  |
|  | Walling |  |  |  |  |
| 1.16 | 300mm Thick rubble stone foundation walling in cement and sand mortar (1:3) | m2 | 22.86 |  |  |
| 1.17 | One layer 1000 gauge polythene sheet damp proof membrane under beds: 300mm laps | m2 | 22.86 |  |  |
| 1.18 | 200mm wide Bituminous felt damp-proof course | m | 38.1 |  |  |
|  | Plinths |  |  |  |  |
| 1.19 | 15mm thick cement sand rendering (1:3) to plinths | m2 | 45.72 |  |  |
| 1.2 | Prepare and apply three coats black bituminous paint to rendered plinths externally | m2 | 45.72 |  |  |
|  | **Sub-total of Substructure** |  |  |  |  |
|  |  |  |  |  |  |
| **2.0** | **SUPERSTRUCTURES** |  |  |  |  |
|  | Walling |  |  |  |  |
| 2.1 | 200 Thick load bearing solid concrete block walling | m2 | 133.35 |  |  |
|  | Wall Coping |  |  |  |  |
| 2.2 | Precast concrete 600 x 300 x 50 mm Thick twice weathered and throated coping jointed and pointed in cement and sand mortar | m3 | 0.09 |  |  |
|  | Concrete Work |  |  |  |  |
|  | Vibrated reinforced concrete class 25 (1:1.5:3) with 20mm maximum aggregate as described in: |  |  |  |  |
| 2.3 | Ring Beam | m3 | 1.524 |  |  |
| 2.4 | Columns | m3 | 0.12 |  |  |
| 2.5 | 100mm Thick suspended seat /bench | m2 | 4 |  |  |
|  | Reinforcement |  |  |  |  |
| 2.6 | 8mm Diameter high tensile reinforcement bar | kg | 30 |  |  |
| 2.7 | Ditto but 10mm | kg | 55 |  |  |
| 2.8 | Ditto but 12mm | Kg | 25 |  |  |
| 2.9 | Mesh fabric reinforcement ref. No. A142 laid in floor slab with minimum 150 mm side allowance | m2 | 2 |  |  |
|  | Sawn Formwork to: |  |  |  |  |
| 2.1 | Sides and soffits of ring beam | m2 | 12 |  |  |
| 2.11 | Vertical sides of columns | m2 | 5 |  |  |
| 2.12 | Sides and soffits of concrete seat | m2 | 5 |  |  |
|  | Roofing |  |  |  |  |
| 2.13 | Roof Structure |  |  |  |  |
|  | Sawn cellcured cypress timber as described in: |  |  |  |  |
| 2.14 | 200mm x 25mm Fascia Board | m | 28 |  |  |
| 2.15 | l00x50mm Rafters | m | 30 |  |  |
| 2.16 | 100mm x 50mm wall plate | m | 21 |  |  |
| 2.17 | 50 x 50 Purlins | m | 35 |  |  |
|  | Roof Covering |  |  |  |  |
| 2.18 | The following in sawn cellcured timber roof trusses with nailed connections including hoisting and fixing in position not exceeding 5.0 meters above ground floor level |  |  |  |  |
| 2.19 | 100x50mm rafters | m | 182 |  |  |
| 2.2 | 100x50mm strut or tie | m | 56 |  |  |
| 2.21 | 100x50mm tie beam | m | 67 |  |  |
| 2.22 | 100x50mm wall plate fixed with and including 200mm long 12mm diameter rag bolts cast into beam at 1500mm centres | m | 73 |  |  |
| 2.23 | 200mm x 25mm Fascia Board | m | 43 |  |  |
|  | Roof sheets as IT4 profile gauge 28 pre-painted galvanised |  |  |  |  |
| 2.24 | Roof sheets as IT4 profile gauge 28 pre-painted galvanised roofing sheets laid with 95 mm side and 200 mm end laps hook bolts, PVC washer and tropicalized slip cup | m2 | 38 |  |  |
|  | Painting and Decorating |  |  |  |  |
| 2.25 | Knot prime stop and apply two undercoats and one gloss finishing coat oil paint to fascia board 200- 300 mm wide | m | 10 |  |  |
|  | Doors and Windows |  |  |  |  |
| 2.26 | 45mm thick Match boarded timber single door, overall size 900x 2100mm high | No | 2 |  |  |
|  | Wrot cypress 1st grade |  |  |  |  |
| 2.27 | 150x50mm frame two labours plugged screwed and pellated | m | 10 |  |  |
| 2.28 | 50x25mm architrave two labours | m | 10 |  |  |
| 2.29 | 25x15mm quadrant one labour | m | 10 |  |  |
|  | Supply and fix the following ironmongery to timber with matching screws |  |  |  |  |
| 2.3 | Stainless steel hinges | Pairs | 4 |  |  |
| 2.31 | Three lever mortice lock | No | 2 |  |  |
|  | WINDOWS |  |  |  |  |
|  | Supply and Fix the following purpose made steel Lourved windows manufactured from heavy duty standard sections primed with one coat of red oxide primer and fixing to masonry or concrete head and jambs complete with closing mechanism and other fittings. |  |  |  |  |
| 2.32 | Window overall size 1000x900mm high | No | 2 |  |  |
|  | 5mm thick clear sheet glass bedded in mastic |  |  |  |  |
| 2.33 | In panes of various sizes | m2 | 3 |  |  |
|  | Purpose made mild steel burglar proofing to windows; 10mm square section steel bars smooth welded together at 75mm centers both ways fixed with lugs built into walls; one coat shop primer |  |  |  |  |
| 2.34 | Grille overall size 1000x900mm high | No | 2 |  |  |
| 2.35 | Precast concrete window cell size 260 x 50mm Thick sunk - weathered and throated and bedded and jointed in cement sand mortar | m | 6 |  |  |
| 2.36 | Prepare and apply two undercoats and one finishing coat oil paint to timber door | m2 | 12 |  |  |
| 2.37 | Ditto windows | m2 | 15 |  |  |
|  | Finishes |  |  |  |  |
|  | Floor Finishes |  |  |  |  |
|  | Cement and sand mortar (1:3) in: |  |  |  |  |
| 2.38 | 30mm thick steel trowelled screed | m2 | 41.58 |  |  |
| 2.39 | 100 x 25mm Thick skirting to junction with floor and wall finish | m | 41.58 |  |  |
|  | Wall Finishes |  |  |  |  |
|  | Cement and sand mortar (1:3) rendering in: |  |  |  |  |
| 2.4 | 12 mm Thick mortar rendering with steel float finish to masonry and concrete surfaces | m2 | 38 |  |  |
|  | 12mm lime plaster: steel trowelled finish: on concrete, block work or stonework: to |  |  |  |  |
| 2.41 | Walls and beams | m2 | 266.7 |  |  |
|  | Prepare and apply three coats plastic emulsion paint to: |  |  |  |  |
| 2.42 | Rendered surfaces | m2 | 38 |  |  |
| 2.43 | Plastered surfaces | m2 | 33 |  |  |
|  | **Sub-total SUPERSTRUCTURES** |  |  |  |  |
|  |  |  |  |  |  |
|  | **MAIN SUMMARY** |  |  |  | **AMOUNT** |
|  |  |  |  |  |  |
|  | Substructure |  |  |  |  |
|  | Superstructure |  |  |  |  |
|  |  |  |  |  |  |
| **Total of Construction of New Generator Room** | | | | |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ITEM** | **DESCRIPTION** | **UNIT** | **QTY** | **RATE** | **TOTAL (USD)** |
|  |  |  |  |  |  |
|  | **REHABILITATION OF EXISTING GENERATOR ROOM** |  |  |  |  |
|  |  |  |  |  |  |
| **1.0** | **SITE PREPARATION** |  |  |  |  |
| 1.1 | Clear site of all trees, bushes and shrubs, grab up roots and burn the arisings. | m2 | 14.52 |  |  |
| 1.2 | Load, wheel and cart deposit and spread surplus excavated material where directed on site at a distance not exceeding 100 meters | LS | 1.00 |  |  |
|  | **Sub-total of Site Preparation** |  |  |  |  |
|  |  |  |  |  |  |
| **2.0** | **REHABILITATION WORKS** |  |  |  |  |
| 2.1 | Supply all materials and labor to rehabilitate roof to remove the old mastic sealing (between Steigers and between Steigers and Parapet) and seal all joints with new mastic, cutting ,fitting ,fixing ,grouting , and all other details according to engineer's instructions. The price includes transport the debris and to a proper location. | m2 | 50.00 |  |  |
| 2.2 | Supply all materials and labor to Plaster interior and exterior walls with 1:6 ratio of cement sand mortar the price include all the smoothing works, also the work include plastering of the previous tests locations . | m2 | 240.00 |  |  |
| 2.3 | Supply all materials and labor to paint interior and exterior walls and ceilings with two coats of high quality paint, the price include all the smoothing works, also the work include plastering of the previous tests locations . | m2 | 240.00 |  |  |
| 2.4 | Supply all materials and labor to remove the damaged floor concrete, compensate the broken and re install using 1:2:3 ratio plain concrete materials and fill the joints with cement. | m3 | 50.00 |  |  |
| 2.5 | Supply and replace doors with metal doors | No | 2.00 |  |  |
| 2.6 | Supply and replace windows with metal windows | No | 2.00 |  |  |
| 2.7 | Supply all materials and labor to repair and put in good condition wooden door, according to engineer's instructions | LS | 1.00 |  |  |
|  | **Sub-total of Rehabilitation Works** |  |  |  |  |
|  |  |  |  |  |  |
|  | **MAIN SUMMARY** |  |  |  | **AMOUNT** |
|  |  |  |  |  |  |
|  | Site Preparation |  |  |  |  |
|  | Rehabilitation Works |  |  |  |  |
|  |  |  |  |  |  |
| **Total of Rehabilitation of Existing Generator Room** | | | | |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ITEM** | **DESCRIPTION** | **UNIT** | **QTY** | **RATE** | **TOTAL (USD)** |
|  |  |  |  |  |  |
|  | **CONSTRUCTION OF COMMUNAL WATER POINT** |  |  |  |  |
|  |  |  |  |  |  |
| **1.0** | **Site Clearance and Site Preparation** |  |  |  |  |
| 1.1 | Prepare site by stripping top 200 mm of soil to remove all debris including sand (if any) from site and carting away spoil | m2 | 5.95 |  |  |
|  | Excavation |  |  |  |  |
| 1.2 | Excavate for kiosk bed area at depth not exceeding 30cm | m3 | 1.78 |  |  |
|  | **Sub-total of Site Clearance and Site Preparation** |  |  |  |  |
|  |  |  |  |  |  |
| **2.0** | **Concrete Work** |  |  |  |  |
|  | Mass concrete: class 15: mix 1:3:6 |  |  |  |  |
| 2.1 | Mass concrete in 10cm thick blinding layer (1:3:6mix ) under the Kiosk bed to allow to receive RCC bed during Casting | m2 | 0.30 |  |  |
| 2.2 | Treat hard-core surface with approved insecticide | m2 | 1.49 |  |  |
| 2.3 | Concrete work (Walls and Bed) - Reinforced Concrete class 25 |  |  |  |  |
| 2.4 | Construction of RCC structure for Kiosk up to height of 1.25m from ground level. Use 12mm Diameter Reinforcement Box @25c/c with mix ratio of 1:2:4.Proper curing will be applied twice a day for 7 days Minimum. | m3 | 0.59 |  |  |
| 2.5 | Construction of 10cm Concrete Ram of Masonry In Two Sides Of Kiosk at Distance of 1m (Water Tap Sides). Water Channel in Each side will be established to Direct the Water To Soak Pit Hole. Eventually, Lay Concrete Screed Over the Ram With 1:2 Cement & Sand Ratio | m3 | 1.06 |  |  |
| 2.6 | Construction PCC Water Channel with Dimension (10cm Wide x 20cm Deep x 3m Long) to Direct the water away from Kiosk. Proper Plastering will be applied and edges must point properly. | LS | 1.00 |  |  |
| 2.7 | External & internal plastering, 12 mm thick, cement and sand mix 1:4, with wood float finish. | m2 | 7.00 |  |  |
| 2.8 | Apply two coats of white wash | m2 | 7.00 |  |  |
| 2.9 | 2x3 timber wood for roofing | No | 8.00 |  |  |
| 2.1 | 32G Corrugated Iron sheet | No | 6.00 |  |  |
|  | **Sub-total of Concrete Work** |  |  |  |  |
|  |  |  |  |  |  |
| **3.0** | **Water Supply System** |  |  |  |  |
| 3.1 | Supply and Install 25mm diameter (1 Inch) GI pipe completed with 6 water outlets and all connecting pipes. The GI pipes must be erected and installed inside the RCC concrete wall. | LS | 1.00 |  |  |
| 3.2 | Supply and Install 25mm diameter brass gate valve with wheel and head, complete with 6 water outlets and all connecting pipes. | LS | 1.00 |  |  |
|  | **Sub-total of Water Supply System** |  |  |  |  |
|  |  |  |  |  |  |
| **4.0** | **Construction of Chamber** |  |  |  |  |
| 4.1 | Construction of Control 2" To 1" GI Valve for Chambers Covered by Manhole and Associated Works For Water Kiosks. | Job | 1.00 |  |  |
|  | **Sub-total of Construction of Chamber** |  |  |  |  |
|  |  |  |  |  |  |
| **5.0** | **Soakway pit** |  |  |  |  |
| 5.1 | Excavation of soak-away pit and trenches, | m3 | 2.00 |  |  |
| 5.2 | supply and fill 15mm filtration Stones in the pit and cement on top | m3 | 2.00 |  |  |
| 5.3 | Construction of 150mm concrete cover | m3 | 0.20 |  |  |
|  | **Sub-total of Soakway pit** |  |  |  |  |
|  |  |  |  |  |  |
|  | **MAIN SUMMARY** |  |  |  | **AMOUNT** |
|  |  |  |  |  |  |
|  | Site Clearance and Site Preparation |  |  |  |  |
|  | Concrete Work |  |  |  |  |
|  | Water Supply System |  |  |  |  |
|  | Construction of Chamber |  |  |  |  |
|  | Soakway pit |  |  |  |  |
|  |  |  |  |  |  |
| **Total of Construction of Communal Water Point** | | | | |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ITEM** | **DESCRIPTION** | **UNIT** | **QTY** | **RATE** | **TOTAL (USD)** |
|  |  |  |  |  |  |
|  | **PIPELINE EXTENSIONS** |  |  |  |  |
|  |  |  |  |  |  |
| **1.0** | **EXCAVATION** |  |  |  |  |
|  | Excavation including maintaining and supporting sides and keeping free from water, mud and fallen materials by bailing, |  |  |  |  |
| 1.1 | Prepare site by stripping top 200 mm of soil to remove all debris including sand (if any) from site and carting away spoil | m2 | 160.00 |  |  |
| 1.2 | Excavate for foundation strip commencing at stripped levels depth not exceeding 1.50m deep | m3 | 160.00 |  |  |
| 1.3 | Remove surplus excavated material from site | m3 | 32.00 |  |  |
|  | **Sub-total of Excavation** |  |  |  |  |
|  |  |  |  |  |  |
| **2.0** | **PIPELINE** |  |  |  |  |
| 2.1 | Supply and install high pressure UPVC pipe 2" diameter, the price includes all type of bends, elbows, tees, and laying metallic plastic, tracer tape…etc to connect all as noted above, described in the Specifications and as shown on the detailed drawings and as directed by the Engineer. | m | 800.00 |  |  |
| 2.2 | Supply and install all required fittings (Tees, elbows, Flanges, reducers/extruders, couplings, spigots, required steel pipes, gaskets, SS bolts, …etc, to connect the proposed UPVC pipe according to Detail. The price should exclude the gate valve and its connection fittings (to be in a separate item). | LS | 1.00 |  |  |
| 2.3 | Allow for 3" brass gate valves | No | 6.00 |  |  |
|  | **Sub-total of Pipeline** |  |  |  |  |
|  |  |  |  |  |  |
| **3.0** | **BACKFILLING** |  |  |  |  |
| 3.1 | Backfill around foundations | m3 | 128.00 |  |  |
|  | **Sub-total of Backfilling** |  |  |  |  |
|  |  |  |  |  |  |
|  | **MAIN SUMMARY** |  |  |  | **AMOUNT** |
|  |  |  |  |  |  |
|  | Excavation |  |  |  |  |
|  | Pipeline |  |  |  |  |
|  | Backfilling |  |  |  |  |
|  |  |  |  |  |  |
| **Total of Pipeline Extensions** | | | | |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ITEM** | **DESCRIPTION** | **UNIT** | **QTY** | **RATE** | **TOTAL(USD)** |
|  |  |  |  |  |  |
|  | **REHABILITATION OF WATER KIOSK** |  |  |  |  |
|  |  |  |  |  |  |
| **1.0** | **Site Clearance and Site Preparation** |  |  |  |  |
| 1.1 | Prepare site by stripping top 200 mm of soil to remove all debris including sand (if any) from site and carting away spoil | m2 | 5.95 |  |  |
|  | Excavation |  |  |  |  |
| 1.2 | Excavate for kiosk bed area at depth not exceeding 30cm | m3 | 1.78 |  |  |
|  | **Sub-total of Site Clearance and Site Preparation** |  |  |  |  |
|  |  |  |  |  |  |
| **2.0** | **Concrete Work** |  |  |  |  |
|  | Mass concrete: class 15: mix 1:3:6 |  |  |  |  |
| 2.1 | Mass concrete in 10cm thick blinding layer (1:3:6mix ) under the Kiosk bed to allow to receive RCC bed during Casting | m2 | 0.30 |  |  |
| 2.2 | Treat hardcore surface with approved insecticide | m2 | 1.49 |  |  |
| 2.3 | Concrete work (Walls and Bed) - Reinforced Concrete class 25 |  |  |  |  |
| 2.4 | Construction of RCC structure for Kiosk up to height of 1.25m from ground level. Use 12mm Diameter Rain for cement Box @25c/c with mix ratio of 1:2:4.Proper curing will be applied twice a day for 7 days Minimum. | m3 | 0.59 |  |  |
| 2.5 | Construction of 10cm Concrete Ram of Mansonry In Two Sides Of Kiosk at Distance of 1m (Water Tap Sides). Water Channel in Each side will be established to Direct the Water To Soak Pit Hole. Eventually, Lay Concrete Screed Over the Ram With 1:2 Cement & Sand Ratio | m3 | 1.06 |  |  |
| 2.6 | Construction PCC Water Channel with Dimension (10cm Wide x 20cm Deep x 3m Long) to Direct the water away from Kiosk. Proper Plastering will be applied and edges must pointed properly. | LS | 1.00 |  |  |
| 2.7 | External & internal plastering, 12 mm thick, cement and sand mix 1:4, with wood float finish. | m2 | 7.00 |  |  |
| 2.8 | Apply two coats of white wash | m2 | 7.00 |  |  |
| 2.9 | 2x3 timber wood for roofing | No | 8.00 |  |  |
| 2.1 | 32G Corrugated Iron sheet | No | 6.00 |  |  |
|  | **Sub-total of Concrete Work** |  |  |  |  |
|  |  |  |  |  |  |
| **3.0** | **Water Supply System** |  |  |  |  |
| 3.1 | Supply and Install 25mm diameter (1 Inch) GI pipe completed with 6 water outlets and all connecting pipes. The GI pipes must be erected and installed inside the RCC concrete wall. | LS | 1.00 |  |  |
| 3.2 | Supply and Install 25mm diameter brass gate valve with wheel and head, complete with 6 water outlets and all connecting pipes. | LS | 1.00 |  |  |
|  | **Sub Total** |  |  |  |  |
|  |  |  |  |  |  |
| **4.0** | **Construction of Chamber** |  |  |  |  |
| 4.1 | Construction of Control 2" To 1" GI Valve for Chambers Covered by Manhole and Associated Works For Water Kiosks. | Job | 1.00 |  |  |
|  | **Sub Total** |  |  |  |  |
|  |  |  |  |  |  |
| **5.0** | **Soakway pit** |  |  |  |  |
| 5.1 | Excavation of soak-away pit and trenches, | m3 | 2.00 |  |  |
| 5.2 | supply and fill 15mm filtration Stones in the pit and cement on top | m3 | 2.00 |  |  |
| 5.3 | Construction of 150mm concrete cover | m3 | 0.20 |  |  |
|  | **Sub Total** |  |  |  |  |
|  |  |  |  |  |  |
|  | **MAIN SUMMARY** |  |  |  | **AMOUNT** |
|  |  |  |  |  |  |
|  | Site Clearance and Site Preparation |  |  |  |  |
|  | Concrete Work |  |  |  |  |
|  | Water Supply System |  |  |  |  |
|  | Construction of Chamber |  |  |  |  |
|  | Soakway pit |  |  |  |  |
|  |  |  |  |  |  |
| **Total for Rehabilitation of Water Kiosk** | | | | |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ITEM** | **DESCRIPTION** | **UNIT** | **QTY** | **RATE** | **TOTAL (USD)** |
|  |  |  |  |  |  |
|  | **REHABILITATION OF WATER TANK** |  |  |  |  |
|  |  |  |  |  |  |
| **1.0** | **Tank Whitewashing** |  |  |  |  |
| 1.1 | Tank White washing (including columns, tank external surfaces) 2 coats | m2 | 48.76 |  |  |
|  | **Sub-total of Tank Whitewashing** |  |  |  |  |
|  |  |  |  |  |  |
| **2.0** | **Access ladder** |  |  |  |  |
| 2.1 | Supply and install cat ladder for external tank access, made from 1.5 inch GI pipe welded components with protective shop priming and site paint, approximately 10.5m overall height, properly fixed in position at intervals to the tank concrete structure and Engineer's approval. | LS | 1.00 |  |  |
| 2.2 | Supply and install ladder for internal tank access, made from aluminum, approximately 3m overall height, properly fixed in position and to Engineer's approval. | LS | 1.00 |  |  |
| 2.3 | Supply and install roof slab access opening cover/door made from mild steel components with protective shop priming and site paint, 1m square size, properly fixed in position complete with handles and ironmongery to Engineer's approval | LS | 1.00 |  |  |
|  | **Sub-total of Access ladder** |  |  |  |  |
|  |  |  |  |  |  |
| **3.0** | **Water Supply System** |  |  |  |  |
| 3.1 | Supply and install stainless steel 2inch GI inlet pipe class B 6m long, 10.30m long, completed with fittings and accessories including Non return valve | No | 2.00 |  |  |
| 3.2 | Supply and install stainless steel 2inch GI draw off pipe class B 6m long, 7.50m long, completed with fittings and accessories including brass gate valve at the bottom. | No | 2.00 |  |  |
| 3.3 | Supply and install 2inch GI overflow pipe, class B | LS | 1.00 |  |  |
| 3.4 | Supply and install 2inch GI scour pipe, class B completed with fittings and accessories including gate valve | LS | 1.00 |  |  |
| 3.5 | Supply and install 2inch PVC pipe, High pressure connected to the kiosk and animal troughs completed with fittings and accessories including gate valve | No | 30.00 |  |  |
| 3.6 | Supply paint and labour and brand generator house on white background (1000mmx450mm) include for logos to detail. TBD | LS | 1.00 |  |  |
|  | **Sub-total of Water supply system** |  |  |  |  |
|  |  |  |  |  |  |
|  | **MAIN SUMMARY** |  |  |  | **AMOUNT** |
|  |  |  |  |  |  |
|  | Tank whitewashing |  |  |  |  |
|  | Access ladder |  |  |  |  |
|  | Water supply system |  |  |  |  |
|  |  |  |  |  |  |
| **Total of Rehabilitation of One Water Tank** | | | | |  |