

| NCORA FLATS JPS: WATER PROJECT | | Unit | Qty | Rate | Amount |
|--|---------|------|------|------|-------------|
| <u>SECTION 1</u> | | | | | |
| <u>BILL No. 1</u> | | | | | |
| <u>PRELIMINARIES</u> | | | | | |
| Fixed Related Items F:..... V:..... | | | | | |
| 1 | T:..... | | Item | | |
| Value Related Items F:..... V:..... | | | | | |
| 2 | T:..... | | Item | | |
| Time Related Items F:..... V:..... | | | | | |
| 3 | T:..... | | Item | | |
| Total Carried Forward To Summary | | | | | 0,00 |
| <u>SECTION No. 2</u> | | | | | |
| <u>BILL NO.1</u> | | | | | |
| <u>WATER TANKS AND RAINWATER HARVESTING</u> | | | | | |
| <u>EARTHWORKS (PROVISIONAL)</u> | | | | | |
| <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <p>Nature of ground:</p> <p>The nature of the ground is assumed to be loose sandy material, therefore 'earth', but possibly interspersed with hard or soft rock.</p> <p>Carting away of excavated material:</p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site.</p> <p>Dewatering of Excavations</p> | | | | | |

| | | | | |
|---|---|----------------|-----|------|
| The Contractor shall allow for removing seepage and other water from subterranean sources from the excavations by pumping , baling or otherwise. Accurate records of all such dewatering shall be kept to determine the total volume of water so removed and a clear distinction shall be made between water from subterranean sources and other water. | | | | |
| Density testing on filling | | | | |
| Rates of filling, etc shall include for all density and soil type testing to prove that the specified compaction is achieved When additional testing is done on instruction of the Architect and these tests are successful, they will be paid for additionally. | | | | |
| TEST BLOCKS | | | | |
| Test blocks: | | | | |
| 1 | Making and testing set of three 150x150x150mm concrete strength test cubes (Provisional). | No. | 3 | 0,00 |
| BRICKWORK IN FOUNDATIONS (PROVISIONAL) | | | | |
| Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: | | | | |
| 2 | One brick walls. | m ² | 4 | 0,00 |
| BRICKWORK IN SUPERSTRUCTURE | | | | |
| Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar: | | | | |
| 3 | One brick walls. | m ² | 8,5 | 0,00 |
| BRICKWORK AND BLOCKWORK SUNDRIES | | | | |
| 4 | Galvanized brickwork reinforcement | | | |
| 5 | 230mm Wide reinforcement built in horizontally. | m | 46 | 0,00 |
| 6 | Ditto, but in foundations (Provisional). | m | 24 | 0,00 |
| REINFORCEMENT | | | | |
| Fabric reinforcement: | | | | |

| | | | | |
|----------------------------------|---|----------------|-------|------|
| 7 | Type 193 fabric reinforcement in concrete surface beds, slabs, etc | m ² | 18,5 | 0,00 |
| | EXTERNAL PLASTER | | | |
| | Cement plaster on superstructure brickwork: | | | |
| 8 | On walls. | m ² | 17 | 0,00 |
| | PAINTWORK ETC TO NEW WORK | | | |
| | ON FLOATED PLASTER | | | |
| | Prepare surface and remove all loose material, and rinse. apply Polycell Mendall 90 flexible crack filler to holes and cracks, one coat undercoat, one coat tinted Micatex and two coats PLASCON WALL & ALL or equal Architect approved, to cover surface sufficiently. All to manufacturer's specifications. Colour and type to Architect's approval: | | | |
| 9 | On external plastered walls. | m ² | 17 | 0,00 |
| | <u>RAIN WATER POLYETHYLENE TANK</u> | | | |
| | 5000 Litre polyethylene rotomoulded rainwater storage tank, including lid, fitted with and including 50 x 15mm reducer and setting in position on concrete tank stand (elsewhere measured) and tying down with 4mm diameter galvanised wire wrapped twice around centre of tank and secure to each corner of tank stand with a double strand of 4mm diameter galvanised wire embedded into concrete. (Note: tanks to be filled with water before practical completion). | | | |
| 10 | | No | 9 | 0,00 |
| | CARTING OF WATER | | | |
| | Carting of Water | | | |
| 11 | Supply/carting of portable water to an elevated tank including once off testing of reliable source | litre | 45000 | 0,00 |
| Total Carried Forward To Summary | | | | 0,00 |

| | Unit | Qty | Rate | Amount |
|---|------|-----|------|--------|
| <u>SECTION 2</u> | | | | |
| <u>BILL NO.2</u> | | | | |
| <u>BUFFER TANKS</u> | | | | |
| <u>EARTHWORKS (PROVISIONAL)</u> | | | | |
| <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <p>Nature of ground:</p> <p>The nature of the ground is assumed to be loose sandy material, therefore 'earth', but possibly interspersed with hard or soft rock.</p> <p>Carting away of excavated material:</p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site.</p> <p>Dewatering of Excavations</p> <p>The Contractor shall allow for removing seepage and other water from subterranean sources from the excavations by pumping , baling or otherwise. Accurate records of all such dewatering shall be kept to determine the total volume of water so removed and a clear distinction shall be made between water from subterranean sources and other water.</p> <p>Density testing on filling</p> <p>Rates of filling, etc shall include for all density and soil type testing to prove that the specified compaction is achieved When additional testing is done on instruction of the Architect and these tests are successful, they will be paid for additionally.</p> | | | | |
| MISCELLANEOUS | | | | |

| | | | | |
|----|--|------|-------|------|
| | Supply and fit complete to manufacturer's standards the following to downpipes and tanks to prevent blocking and intrusion of mosquitoes and pests to tanks. | | | |
| 1 | Leaf eater rain heads | No | 1 | 0,00 |
| 2 | Screen filter | No | 1 | 0,00 |
| 3 | First flush diverters | No | 1 | 0,00 |
| | Sundries: | | | |
| 4 | Galvanized reno mattresses 2.0m X 1.0m X 0.3m deep with 60 x 80 mm mesh filled with 100 - 150mm stones. | m3 | 1 | 0,00 |
| | CARTING OF WATER | | | |
| | Carting of Water | | | |
| 5 | Supply/carting of portable water to an elevated tank including once off testing of reliable source | l | 12000 | 0,00 |
| | MANHOLE COVERS | | | |
| 6 | 600 x 600mm Type 2A Heavy duty cast iron manhole cover and frame to SABS 558. | No | 2 | 0,00 |
| | UNDERGROUND PUMP: | | | |
| | Prepare and Install a complete set of submersible pump: | | | |
| 7 | SVM 285/07 Wet End | No | 1 | 0,00 |
| 8 | 1,5KW Franlil 230V Motor. | No | 1 | 0,00 |
| 9 | 1,5KW Data 120 Control Box. | No | 1 | 0,00 |
| 10 | 32mm Base plate cast iron. | No | 1 | 0,00 |
| 11 | 2,5mm X 4 Core Aquavern submersible cable (meters). | m | 30 | 0,00 |
| 12 | HDPE 32mm Class 12 piping (meters). | No | 1 | 0,00 |
| 13 | Installation and Commission. | Item | 1 | 0,00 |
| | <u>Straining wires, fencing and razor wire:</u> | | | |

| | | | | |
|----|--|----|----|------|
| 14 | Four strands of 4 mm galvanised straining wires secured to fencing posts with doubled 2 mm galvanised wire inserted through hole in post and turned a minimum of four turns around straining wire and attached to straining frame at one end with not less than four turns at the other end to straining bolts (elsewhere measured). | m | 34 | 0,00 |
| 15 | 3 Strands of galvanised barbed wire tied to standards, posts and eye bolts | m | 34 | 0,00 |
| 16 | Fencing formed of 100 x 50 x 2.5mm diameter galvanised fencing 1 800mm high and fixed to each straining wire with 8 guage binding wire at 500mm centres (straining wires elsewhere measured). | m | 34 | 0,00 |
| 17 | Posts for 1 800mm high security fence: | | | |
| 18 | 60 mm Diameter galvanised steel intermediate fencing post 1800mm long fitted with a pressed steel mushroom cap one end and 150 x 150 x 5 mm baseplate at bottom and embedded in and including 350 x 350 x 600 mm mass concrete (15 MPa) base. | No | 12 | 0,00 |
| 19 | 100 mm Ditto as corner post, fitted with two 50mm diameter galvanised steel stay set raking and with top end flattened and bolted through post, with post and stay both embedded in mass concrete (15 MPa) bases as last. | No | 4 | 0,00 |
| 20 | 150mm Ditto as gate post 1 800mm long, fitted with two 50mm diameter galvanised steel stay set raking and with top end flattened and bolted through post, with post and stay both embedded in mass concrete (15 MPa) bases as last. | No | 1 | 0,00 |
| 21 | 12 mm Diameter galvanised mild steel straining eye bolt with hook, threaded portion and two nuts and washers. | No | 34 | 0,00 |
| 22 | Form 12mm diameter hole through fence post. | No | 64 | 0,00 |
| | Gates: | | | |

| | | | | |
|----------------------------------|--|----|---|------|
| 23 | Security fence single gate, size 1 000 mm wide x 1 800 mm high, formed of 50 mm diameter nominal bore x 3,25 mm wall thickness hot dip galvanised mild steel pipe framing all round with mitred and welded angles and cross braces mullion and transome, scribed and welded into angles and at cross intersections, with two 50 mm diameter nominal bore x 3,25 mm wall thickness security posts each 600 mm long with one end welded to top rail of gate and closure plate to other end, the gate covered with 100 x 50 x 2,5 mm weld mesh with four straining wires as before described and with four 2,37 mm four point core diameter single "kampeon" wires with crimped droppers to security posts as before described; including three strands flat wrap razor barbed tape wire fixed as before described, leaf fitted with three 24 mm diameter x 300 mm long eyebolt hinges and stops including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including 500 mm long approved chain spot welded to gate | No | 1 | 0,00 |
| | PADLOCKS | | | |
| 24) | Supply 50 mm "Viro" Padlocks and Keys (or equal approved | No | 1 | 0,00 |
| Total Carried Forward To Summary | | | | 0,00 |

| | Unit | Qty | Rate | Amount |
|---|------|-----|------|--------|
| <u>SECTION 2</u> | | | | |
| <u>Bill No. 3</u> | | | | |
| <u>ELEVATED TANKS</u> | | | | |
| EARTHWORKS (PROVISIONAL) | | | | |
| Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect. | | | | |
| Nature of ground: | | | | |
| The nature of the ground is assumed to be loose sandy material, therefore 'earth', but possibly interspersed with hard or soft rock. | | | | |
| Carting away of excavated material: | | | | |
| Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site. | | | | |
| Dewatering of Excavations | | | | |
| The Contractor shall allow for removing seepage and other water from subterranean sources from the excavations by pumping , baling or otherwise. Accurate records of all such dewatering shall be kept to determine the total volume of water so removed and a clear distinction shall be made between water from subterranean sources and other water. | | | | |
| Density testing on filling | | | | |
| Rates of filling, etc shall include for all density and soil type testing to prove that the specified compaction is achieved When additional testing is done on instruction of the Architect and these tests are successful, they will be paid for additionally. | | | | |
| CONCRETE, FORMWORK AND REINFORCEMENT | | | | |

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|---|---|----|-----|------|
| SUPPLEMENTARY PREAMBLES | | | | |
| Cost of tests: | | | | |
| <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 'Tests' of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Architect. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Architect. (Test cubes are measured separately).</p> | | | | |
| Formwork: | | | | |
| <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as left in or permanent), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use.</p> | | | | |
| <p>Formwork to sides of bases, pile caps, ground beams, etc., will only be measured where it is prescribed by the Engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks.</p> | | | | |
| REINFORCED CONCRETE | | | | |
| 25 MPa/19mm Concrete: | | | | |
| 1 | Bases | m3 | 0,3 | 0,00 |
| TEST BLOCKS | | | | |
| Test blocks: | | | | |
| 2 | Making and testing set of three 150x150x150mm concrete strength test cubes (Provisional). | No | 1 | 0,00 |
| REINFORCEMENT | | | | |
| High tensile steel reinforcement to structural concrete work: | | | | |

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|----|--|-----|-----|------|
| 3 | 12mm Diameter bars. | t | 0,1 | 0,00 |
| | PLUMBING AND DRAINAGE (PROVISIONAL) | | | |
| | Galvanised steel Pipe | | | |
| 4 | 65mm Mild steel galvanised pipes fixed to elevated tank stand. | m | 20 | 0,00 |
| 5 | Extra over for pipe fittings. | | | |
| 6 | Bend | No | 12 | 0,00 |
| | ELEVATED POLYETHYLENE WATER TANK | | | |
| 7 | Supply and Erect Galvanised Mild Steel Water Tank Stand to support 1 x 10 000 litre and 1 x 5 000 litre Polyethylene Water Tanks (elsewhere measured) at 4000mm height above natural ground level. | ton | 1 | 0,00 |
| 8 | Supply and Install 1 x 10 000 litre Polyethylene water tank complete with all control valves, fittings, holding down ties or straps etc and install to Elevated tank stand (elsewhere measured) at 4 000mm height from natural ground level. | No | 1 | 0,00 |
| | MISCELLANEOUS | | | |
| 9 | Supply and fit complete to manufacturer's standards the following to downpipes and tanks to prevent blocking and intrusion of mosquitoes and pests to tanks. | | | |
| 10 | Leaf eater rain heads | No | 1 | 0,00 |
| 11 | Screen filter | No | 1 | 0,00 |
| 12 | First flush diverters | No | 1 | 0,00 |
| | <u>SECURITY FENCING</u> | | | |
| | Straining wires, fencing and razor wire: | | | |
| 13 | Four strands of 4 mm galvanised straining wires secured to fencing posts with doubled 2 mm galvanised wire inserted through hole in post and turned a minimum of four turns around straining wire and attached to straining frame at one end with not less than four turns at the other end to straining bolts (elsewhere measured). | m | 64 | 0,00 |

| | | | | |
|----------------------------------|--|----|----|------|
| 14 | 3 Strands of galvanised barbed wire tied to standards, posts and eye bolts | m | 16 | 0,00 |
| 15 | Fencing formed of 100 x 50 x 2.5mm diameter galvanised fencing 1 800mm high and fixed to each straining wire with 8 guage binding wire at 500mm centres (straining wires elsewhere measured). | m | 16 | 0,00 |
| | Gates: | | | |
| 16 | Security fence single gate, size 1 000 mm wide x 1 800 mm high, formed of 50 mm diameter nominal bore x 3,25 mm wall thickness hot dip galvanised mild steel pipe framing all round with mitred and welded angles and cross braces mullion and transome, scribed and welded into angles and at cross intersections, with two 50 mm diameter nominal bore x 3,25 mm wall thickness security posts each 600 mm long with one end welded to top rail of gate and closure plate to other end, the gate covered with 100 x 50 x 2,5 mm weld mesh with four straining wires as before described and with four 2,37 mm four point core diameter single "kampeon" wires with crimped droppers to security posts as before described; including three strands flat wrap razor barbed tape wire fixed as before described, leaf fitted with three 24 mm diameter x 300 mm long eyebolt hinges and stops including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including 500 mm long approved chain spot welded to gate | No | 1 | 0,00 |
| | PADLOCKS | | | |
| 17 | Supply 50 mm "Viro" Padlocks and Keys (or equal approved) | No | 1 | 0,00 |
| Total Carried Forward To Summary | | | | 0,00 |

| | Unit | Qty | Rate | Amount |
|--|------|-----|------|--------|
| <u>SECTION 2</u> | | | | |
| <u>BILL No. 4</u> | | | | |
| <u>STAND PIPES:</u> | | | | |
| CONCRETE, FORMWORK AND REINFORCEMENT | | | | |
| REINFORCED CONCRETE | | | | |
| 25Mpa/19mm Concrete | | | | |
| 1 1000mm V' shaped concrete slab. | m3 | 1 | | 0,00 |
| 2 In 110mm PVC Blue Water Pipe. | m3 | 1 | | 0,00 |
| SMOOTH FORMWORK (DEGREE OF ACCURACY II) | | | | |
| 3 Smooth Formwork to Sides: | | | | |
| 4 Edges, risers, ends and reveals not exceeding 300mm high or wide. | m | 18 | | 0,00 |
| REINFORCEMENT (PROVISIONAL) | | | | |
| 5 Fabric reinforcement: | | | | |
| 6 Type 193 fabric reinforcement in concrete surface beds, slabs, etc | m2 | 8 | | 0,00 |
| DAMPPROOFING OF WALLS AND FLOORS | | | | |
| 7 One layer of 350 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape': | | | | |
| 8 Under surface beds. | m2 | 8 | | 0,00 |
| PIPEWORK | | | | |
| 9 Pipes, pipe fittings, etc | | | | |
| WATER SUPPLIES | | | | |
| Galvanised steel pipe. | | | | |
| 10 20mm Diameter galvanised pipes fixed to concrete. | m | 3 | | 0,00 |

| | | | | |
|----------------------------------|---|------|---|------|
| | Extra over for pipe fittings. | | | |
| 11 | Bend | No | 3 | 0,00 |
| 12 | uPVC Pipes | | | |
| 13 | 110mm Blue Water Pipe. | m | 3 | 0,00 |
| | SANITARY FITTINGS | | | |
| 14 | Solid cast brass taps, valves, etc | | | |
| 15 | Bib Tap or Similar approved. | No | 6 | 0,00 |
| | MISCELLANEOUS | | | |
| | Aqualoc Flow Restrictors/Valve | | | |
| 16 | Supply and install Aqualoc Monobox or equal approved, with flow restrictors installations | No | 3 | 0,00 |
| 17 | Supply Aqualoc Service set, complete with all fittings | No | 3 | 0,00 |
| | Sundries: | | | |
| 18 | Galvanized reno mattresses 2.0m X 1.0m X 0.3m deep with 60 x 80 mm mesh filled with 100 - 150mm stones. | m3 | 3 | 0,00 |
| | Testing: | | | |
| 19 | Testing drainage system. | Item | 1 | 0,00 |
| Total Carried Forward To Summary | | | | 0,00 |

| | | Unit | Qty | Rate | Amount |
|---|--------------------------------|----------------|-----|------|--------|
| <u>SECTION 2</u> | | | | | |
| <u>BILL No.5</u> | | | | | |
| <u>RETICULATION AND FITTINGS</u> | | | | | |
| Pipe Trenches | | | | | |
| 1 | Hard rock. | m ³ | 2 | | 0,00 |
| MEDIUM PRESSURE PIPELINES | | | | | |
| HDPE Class 6 pipes | | | | | |
| 2 | 32mm Diameter pipe | m | 115 | | 0,00 |
| 3 | 50mm Diameter pipe | m | 90 | | 0,00 |
| 4 | 90mm Diameter pipe | m | 115 | | 0,00 |
| Extra over for pipes fittings: | | | | | |
| 5 | 32mm Bend. | No | 5 | | 0,00 |
| 6 | 32mm Tee. | No | 2 | | 0,00 |
| 7 | 50mm Bend. | No | 4 | | 0,00 |
| 8 | 90mm Bend. | No | 14 | | 0,00 |
| 9 | 90mm Tee. | No | 8 | | 0,00 |
| Supply, delivery and installation of compression type fittings for use with HDPE piping : | | | | | |
| 10 | 90 -40 mm Reducing Couplings | No | 4 | | 0,00 |
| 11 | 50 mm Equal Tee | No | 6 | | 0,00 |
| 12 | 32 mm Equal Tee | No | 2 | | 0,00 |
| Supply, delivery and installation of spigot & socket type fittings complete for use with PVC piping : | | | | | |
| 14 | 40- 2½" Male Threaded Adapters | No | 6 | | 0,00 |
| 15 | 25- 2½" Male Threaded Adapters | No | 6 | | 0,00 |

| | | | | |
|----------------------------------|---|----|---|------|
| 16 | 25- 2" Male Threaded Adapters | No | 6 | 0,00 |
| | MISCELLANEOUS | | | |
| | Aqualoc Flow Restrictors/Valve | | | |
| 17 | Supply and install Aqualoc Monobox or equal approved, with flow restrictors installations | No | 9 | 0,00 |
| 18 | Supply Aqualoc Service set, complete with all fittings | No | 9 | 0,00 |
| Total Carried Forward To Summary | | | | 0,00 |

| | Unit | Qty | Rate | Amount |
|--|------|-----|------|--------|
| <u>SECTION 2</u> | | | | |
| <u>BILL No. 6</u> | | | | |
| <u>TOOL BOX</u> | | | | |
| TOOL BOX: | | | | |
| Supply and Installation of a complete set of tool box on the buffer tank and to be fully labelled. | | | | |
| 1 Tool Box. | No | 1 | | 0,00 |
| Total Carried Forward To Summary | | | | 0,00 |

| | Unit | Qty | Rate | Amount |
|---|----------------|-----|------|--------|
| <u>SECTION 2</u> | | | | |
| <u>BILL NO. 7</u> | | | | |
| <u>WATER PURIFICATION SYSTEM:</u> | | | | |
| WATER PURIFICATION (TREATMENT UNIT): | | | | |
| EARTHWORKS (PROVISIONAL) | | | | |
| EXCAVATION OTHER THAN BULK | | | | |
| Excavate in pickable material not exceeding 2m deep below natural or reduced ground level: | | | | |
| 1 Trenches, Holes | m ³ | 1 | | 0,00 |
| Risk of collapse of excavations other than bulk: | | | | |
| Risk of collapse to sides of excavations to holes, trenches, etc. from ground level to not exceeding 1,5m deep. | | | | |
| 2 | m ² | 5 | | 0,00 |
| CARTING AWAY. | | | | |
| Extra over all excavations for carting away surplus excavated material and spreading, levelling and lightly compacting on site where directed not exceeding 100m from the excavations.(measured nett - no allowance made for bulking) | | | | |
| 3 | m ³ | 1 | | 0,00 |
| EARTH FILLING, ETC. | | | | |
| Filling with material from the excavations compacted to a density of at least 95% Mod. AASHTO maximum density: | | | | |
| 4 | | | | |
| 5 Backfilling to trenches, holes, etc. | m ³ | 1 | | 0,00 |
| Filling with approved natural gravel material (G5) supplied and carted onto site by the Contractor and compacted to 95% Mod AASHTO density: | | | | |
| 6 Under trenches, holes, surface beds, etc. | m ³ | 0,2 | | 0,00 |
| KEEPING EXCAVATIONS FREE OF WATER | | | | |

| | | | | |
|----|--|----------------|-----|------|
| | Keeping excavations free of water: | | | |
| 7 | Keeping excavations entirely free of all water or mud. | Item | 1 | 0,00 |
| | CONCRETE, FORMWORK AND REINFORCEMENT | | | |
| | UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES | | | |
| | 25Mpa/19mm Concrete | | | |
| 8 | Strip footings. | m ³ | 0,4 | 0,00 |
| | REINFORCED CONCRETE | | | |
| 9 | 25 MPa/19mm Concrete: | | | |
| 10 | Base slab, etc | m ³ | 0,1 | 0,00 |
| | TEST BLOCKS | | | |
| | Test blocks: | | | |
| | Making and testing set of three 150x150x150mm concrete | | | |
| 11 | strength test cubes (Provisional). | No. | 1 | 0,00 |
| | ROUGH FORMWORK (DEGREE OF ACCURACY II) | | | |
| | Rough Formwork to Sides: | | | |
| | Edges, risers, ends and reveals not exceeding 300mm high | | | |
| 12 | or wide. | m | 4 | 0,00 |
| | BRICKWORK IN FOUNDATIONS (PROVISIONAL) | | | |
| | Brickwork of NFX bricks (14 MPa nominal compressive | | | |
| 13 | strength) in Class I mortar: | | | |
| 14 | One brick walls. | m ² | 2 | 0,00 |
| | BRICKWORK IN SUPERSTRUCTURE | | | |
| | Brickwork of NFP bricks (14 MPa nominal compressive | | | |
| | strength) in Class II mortar: | | | |
| 15 | One brick walls. | m ² | 5 | 0,00 |
| | BRICKWORK AND BLOCKWORK SUNDRIES | | | |

| | Unit | Qty | Rate | Amount |
|--|------|-----|------|--------|
| <u>SECTION 2</u> | | | | |
| <u>BILL No. 8</u> | | | | |
| ELECTRICAL INSTALLATION (PROVISIONAL): | | | | |
| MODEL PREAMBLES | | | | |
| The tenderer is referred to the "Model Preambles for Trades 2008" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates | | | | |
| SUPPLEMENTARY PREAMBLES | | | | |
| SANS Standards: | | | | |
| The following to be installed in strict accordance to the following SANS Standards: · | | | | |
| MISCELLANEOUS | | | | |
| 1 Allow for the 12 months guarantee period. | Item | 1 | | 0,00 |
| 2 Allow for labelling of all equipment where required | Item | 1 | | 0,00 |
| 3 Allow for the submission of Asbuilt drawings | Item | 1 | | 0,00 |
| LV RETICULATION | | | | |
| COPPER CABLES | | | | |
| Supply and installation of 1000/600 volts PVC/SWA/PVC ECC copper cables as specified, excluding terminations and cable supports. Lengths given shall be taken as measured lengths to cable run from terminal to terminal and rates quoted shall include for off-cuts and wastage. Note should cables without ECC be utilized the tenderer will supply the additional external earth at no additional cost. | | | | |
| 16mm ² 4C PVC/SWA/PVC ECC Cable. | | | | |
| 4 Supply | m | 90 | | 0,00 |
| 5 Install | m | 90 | | 0,00 |

| | | | | |
|---|--|------|----|------|
| CABLE TERMINATION | | | | |
| For PVC/SWA/PVC shall include supply and fitting of the cable gland, neoprene shroud, making-off cables, lugs, and fitting the gland to the board gland plate, switchgear and final connection of cable tails into board or terminal. | | | | |
| 16mm ² 4C PVC/SWA/PVC ECC Cable. | | | | |
| 6 | Supply | No | 2 | 0,00 |
| 7 | Install | No | 2 | 0,00 |
| CABLE MARKER TAPE. | | | | |
| 8 | 320mm Wide. | | | |
| 9 | Supply | m | 90 | 0,00 |
| 10 | Install | m | 90 | 0,00 |
| Supply cable route markers, must consist of 150x150x300mm high concrete blocks with aluminium or other rust free material marked with arrows to indicate cable route. | | | | |
| Cable route markers. | | | | |
| 11 | Supply | No | 10 | 0,00 |
| 12 | Install | No | 10 | 0,00 |
| EXCAVATION AND BACKFILLING: | | | | |
| Excavate, backfill and compact in all materials including disposal of unsuitable/surplus material per running meter 600mm deep x 450mm wide. | | | | |
| 13 | 600mm deep x 450mm wide soft excavation. | m | 50 | 0,00 |
| 14 | 600mm deep x 450mm wide intermediate excavation. | m | 40 | 0,00 |
| 15 | Rock (Provisional). | Item | 1 | 0,00 |
| 16 | Allow for the importation of bedding material as directed by the Engineer. | Item | 1 | 0,00 |
| CABLE SLEEVES. | | | | |

| | | | | | |
|----|---|------|-----|--|-------------|
| | Supply and Installation of Cable Sleeve as specified in trenches or cast in concrete, excluding trenching or backfilling: | | | | |
| | 75mm ² PVC cable sleeves | | | | |
| 17 | Supply | m | 90 | | 0,00 |
| 18 | Install | m | 90 | | 0,00 |
| | MANHOLES | | | | |
| | 600mm x 600mm manhole. | | | | |
| 19 | Supply | m | 2 | | 0,00 |
| 20 | Install | m | 2 | | 0,00 |
| | DRAW WIRES . | | | | |
| | Supply and Installation of galvanized steel draw wires drawn into conduit, cable sleeve or wiring channel. | | | | |
| | 1mm ² Galvanized draw wire. | | | | |
| 21 | Supply | m | 100 | | 0,00 |
| 22 | Install | m | 100 | | 0,00 |
| | LIGHTING AND POWER | | | | |
| | DISTRIBUTION BOARD | | | | |
| | Installation and Commissioning of the specified Control Panel, including making off all wire connections, earthing and conduit terminations but exclude cable terminations. | | | | |
| | 63A Single Phase IP65 Weather Proof Control Panel Pole mounted. | | | | |
| 23 | Supply | m | 1 | | 0,00 |
| 24 | Install | m | 1 | | 0,00 |
| | TESTING AND COMMISSIONING | | | | |
| | Allow for a Lump Sum for testing and commissioning of the entire electrical installation, including the provision of | | | | |
| 25 | Compliance Certificate. | Item | 1 | | 0,00 |
| | Total Carried Forward To Summary | | | | 0,00 |

| | | | | |
|---|--|--|--|--------------------|
| <u>SUMMARY PAGE</u> | | | | |
| Preliminaries | | | | 0,00 |
| Water Tanks & Rainwater Harvesting | | | | 0,00 |
| Buffer Tanks | | | | 0,00 |
| Elevated Tank | | | | 0,00 |
| Stand Pipes | | | | 0,00 |
| Reticulation and Fittings | | | | 0,00 |
| Toolbox | | | | 0,00 |
| Water Purification System | | | | 0,00 |
| Electrical Installation | | | | 0,00 |
| Sub-total A | | | | 0,00 |
| Credit For Materials On Site | | | | -93 205,00 |
| Sub-total B | | | | -93 205,00 |
| Allow a 5% Contingency amount for the unforeseen to be used at the discretion of the Project Manager/Client | | | | -4 660,25 |
| Sub-total C | | | | -97 865,25 |
| Add 15% VAT | | | | -14 679,79 |
| TOTAL FOR REMAINDER OF WATER WORKS | | | | -112 545,04 |