

1. Section summary



| Bill No. | Description | Amount |
|------------|---|--------|
| | <u>SUMMARY</u> | |
| | <u>SECTION 1 - PRELIMINARIES AND GENERAL</u> | |
| SCHEDULE A | PRELIMINARIES AND GENERAL | |
| | <u>SECTION 2 - BUILDING WORKS</u> | |
| SCHEDULE B | DEMOLITIONS | |
| SCHEDULE C | EARTHWORKS | |
| SCHEDULE D | CONCRETE, FORMWORK AND REINFORCEMENT | |
| SCHEDULE E | PRECAST CONCRETE | |
| SCHEDULE F | MANSORY | |
| SCHEDULE G | WATERPROOFING | |
| SCHEDULE H | ROOF COVERING | |
| SCHEDULE I | CARPENTRY & JOINERY | |
| SCHEDULE J | CEILING, PARTITIONS AND ACCESS | |
| SCHEDULE K | FLOOR COVERINGS | |
| SCHEDULE L | IRONMONGERY | |
| SCHEDULE N | STRUCTURAL STEELWORK | |
| SCHEDULE O | METALWORK | |
| SCHEDULE P | PLASTERING | |
| SCHEDULE Q | TILING | |
| SCHEDULE S | GLAZING | |
| SCHEDULE T | PLUMBING AND DRAINAGE | |
| SCHEDULE U | PAINTWORK | |
| SCHEDULE V | ELECTRICAL | |

1. Section summary

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| SCHEDULE W | CCTV | |
| SCHEDULE X | ACCESS CONTROL | |
| SCHEDULE Y | ICT | |
| SCHEDULE Z | MECHANICAL WORKS | |
| | <u>SECTION 3 - EXTERNAL WORKS</u> | |
| SCHEDULE A1 | EXTERNAL WORKS | |
| | <u>SECTION 4 - PROVISIONAL SUMS</u> | |
| SCHEDULE B1 | PROVISIONAL SUMS | |
| | SUB TOTAL 1 | |
| | <p>CIDB CONTRACT SKILLS DEVELOPMENT GOALS (CSDG) (0.375% FACTOR X SUB TOTAL 1)</p> <p>Allow the Sum of 0.2% of Sub total 1 for the CIDB BUILD Fee:</p> | |
| | Total carried forward to form of offer | |



| Item No. | Payment clause | Description | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|------|------|--------|
| | SANS 1200 | Section 1 - Preliminaries and General | | | | |
| | | Fixed charge and value related items | | | | |
| | | <u>Contractual requirements:</u> | | | | |
| 1.1.1 | A 8.3.1 | Contractual requirements. | Sum | 1.00 | | |
| | | <u>Establishment of facilities for engineer:</u> | | | | |
| 1.1.2 | | (a) Furnished offices | Sum | 1.00 | | |
| 1.1.3 | | (b) Telephone. | Sum | 1.00 | | |
| 1.1.4 | | (c) Nameboards. | Sum | 1.00 | | |
| | | <u>Establishment of facilities for contractor:</u> | | | | |
| 1.1.5 | | (a) Offices and storage sheds. | Sum | 1.00 | | |
| 1.1.6 | | (b) Workshops. | Sum | 1.00 | | |
| 1.1.7 | | (c) Laboratories. | Sum | 1.00 | | |
| 1.1.8 | | (d) Living accommodation. | Sum | 1.00 | | |
| 1.1.9 | | (e) Ablution and latrine facilities. | Sum | 1.00 | | |
| 1.1.10 | | (f) Tools and equipment. | Sum | 1.00 | | |
| 1.1.11 | | (g) Water supplies, electric power and communications. | Sum | 1.00 | | |
| 1.1.12 | | (h) Dealing with water. | Sum | 1.00 | | |
| 1.1.13 | | (i) Access. | Sum | 1.00 | | |
| 1.1.14 | | (j) Plant. | Sum | 1.00 | | |
| | | <u>Other Fixed-charge Obligations:</u> | | | | |
| 1.1.15 | A 8.3.3 | Survey, setting out and preparation of as-built drawings. | Sum | 1.00 | | |
| 1.1.16 | | Soil testing equipment. | Sum | 1.00 | | |
| 1.1.17 | | Environmental management. | Sum | 1.00 | | |
| 1.1.18 | | Occupational Health and Safety. | Sum | 1.00 | | |
| 1.1.19 | A 8.3.3 | Items in terms of the Industrial Relations Act and Employment conditions for tender purposes. | Sum | 1.00 | | |
| | | <u>Removal of site establishment:</u> | | | | |
| 1.1.20 | A.8.3.4 | Removal of site establishment. | Sum | 1.00 | | |
| | | Total carried forward to section summary | | | | |

2. Preliminary & General

| Item No. | Payment clause | Description | Unit | Qty | Rate | Amount |
|----------|----------------|--|--------|-----|------|--------|
| | SANS 1200 | Section 1: Preliminaries and General | | | | |
| | | Time related items | | | | |
| | | <u>Contractual requirements:</u> | | | | |
| 1.1.21 | A 8.4.1 | Contractual requirements. | Months | 12 | | |
| | | <u>Establishment of facilities for engineer:</u> | | | | |
| 1.1.22 | A 8.4.2.1 | (a) Furnished offices. | Months | 12 | | |
| 1.1.23 | A 8.4.2.1 | (b) Telephone. | Months | 12 | | |
| 1.1.24 | A 8.4.2.1 | (c) Nameboards. | Months | 12 | | |
| 1.1.25 | A 8.4.2.1 | (d) Survey assistants and materials. | Months | 12 | | |
| | | <u>Establishment of Facilities for contractor:</u> | | | | |
| 1.1.26 | A 8.4.2.2 | (a) Offices and storage sheds. | Months | 12 | | |
| 1.1.27 | A 8.4.2.2 | (b) Workshops. | Months | 12 | | |
| 1.1.28 | A 8.4.2.2 | (c) Laboratories. | Months | 12 | | |
| 1.1.29 | A 8.4.2.2 | (d) Living accommodation. | Months | 12 | | |
| 1.1.30 | A 8.4.2.2 | (e) Ablution and latrine facilities. | Months | 12 | | |
| 1.1.31 | A 8.4.2.2 | (f) Tools and equipment. | Months | 12 | | |
| 1.1.32 | A 8.4.2.2 | (g) Water supplies, electric power and communications. | Months | 12 | | |
| 1.1.33 | A 8.4.2.2 | (h) Dealing with water. | Months | 12 | | |
| 1.1.34 | A 8.4.2.2 | (i) Access. | Months | 12 | | |
| 1.1.35 | A 8.4.2.2 | (j) Plant. | Months | 12 | | |
| | | <u>Supervision:</u> | | | | |
| 1.1.36 | A 8.4.3 | Supervision for the duration of Construction. | Months | 12 | | |
| | | <u>Company and Head office Overhead Cost:</u> | | | | |
| 1.1.37 | A 8.4.4 | Company and Head office Overhead Cost for the duration for the contract. | Months | 12 | | |
| | | <u>Other time related obligations:</u> | | | | |
| 1.1.38 | A 8.4.5 | Survey, setting out and preparation of as-built drawings. | Months | 12 | | |
| 1.1.39 | A 8.4.5 | Soil testing equipment. | Months | 12 | | |
| 1.1.40 | A 8.4.5 | Environmental management. | Months | 12 | | |
| | | Total carried forward to section summary | | | | |

2. Preliminary & General

| Item No. | Payment clause | Description | Unit | Qty | Rate | Amount | |
|----------|----------------|--|----------|--------|------|--------|--|
| 1.1.41 | A 8.4.5 | Occupational Health and Safety. | Months | 12 | | | |
| 1.1.42 | A 8.4.5 | Items in terms of the industrial Relations Act and Employment conditions for tender purposes Temporary works <u>Temporary works:</u> | Months | 12 | | | |
| 1.1.43 | 8.8.1 | Main access roads to works. | Months | 12 | | | |
| 1.1.44 | 8.8.1 | Dealing with traffic SANS approved weld mesh type temporary barrier fencing 1,8m high covered with a 80% knitted HDPE monofilament green shed netting fixed to and including 100mm diameter gum poles set securely min 300mm deep in ground at max 3m spacing including excavation, backfilling, etc <u>Existing services</u> a) Supply or hire of specialist equipment for the detection of existing services. b) The use of equipment referred to in item (a) above. c) Excavation by hand in soft material to expose existing services d) Allow for temporary protection, as required in terms of the project specification of existing services e) 110 mm Sleeves incl. excavations, bedding material, G7 imported fill. Enterprise Development (CIDB B.U.I.L.D PROGRAM) <u>Indirect targeting for Enterprise Development through Construction garzatts notice No 35190 of 25 February 2013</u> (a) Enterprise Development of Targeted Enterprise or JV Partners. (a.1) Needs Analysis and Enterprise Development Plan per targeted Enterprise (a.2) Monitoring and Interim Reporting per Targeted Enterprise (a.3) Project Completion Report per Targeted Enterprise Total (a.1+a.2+a.3) | Months | 12 | | | |
| | | | m | 150 | | | |
| | | | item | 1.00 | | | |
| | | | item | 1.00 | | | |
| | | | m3 | 100.00 | | | |
| | | | item | 1.00 | | | |
| | | | m | 500.00 | | | |
| | | | item | 1.00 | | | |
| | | | Per Qu | 4.00 | | | |
| | | | item | 1.00 | | | |
| | | | item | 1.00 | | | |
| | | | Prov.Sum | 1.00 | | | |
| | | Total carried to summary | | | | | |

2. Preliminary & General

| Item No. | Payment clause | Description | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
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| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|--------|------|--------|
| | | <p>Section 2 Building works</p> <p><u>BILL NO 1</u></p> <p><u>DEMOLITIONS,ETC</u></p> <p><u>TRADE PREAMBLES</u></p> <p><u>Trade Preambles:</u></p> <p>For Trade Preambles refer to 'Model Preambles for Trades' (2008 edition) for the full descriptions of material to be used and work to be done in this Bill.</p> <p><u>Taking Out and Removal of Asbestos</u></p> <p>Taking out and removing asbestos roof, gutters, underlay, fibreglass, downpipes, etc. must be in strict accordance with health and occupational safety regulations and a specialist firm must be contracted to dispose of the material</p> <p>The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent</p> <p>Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the principal agent</p> <p>Breaking up and removing and disposing to a designated area to be allocated by the project manager.</p> | | | | |
| | 1 | Asphalt surfacing (30 - 100mm thick) | m2 | 700.00 | | |
| | 2 | Concrete surfacing | m2 | 600.00 | | |
| | 3 | 1.8m high double skin wall | m | 35.00 | | |
| | 4 | Single story building and foundation | m2 | 65.00 | | |
| | | Total carried forward to section summary | | | | |

3. Demolition

Page 1

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Total carried to section summary



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| | | BILL NO 2 EARTHWORKS | | | | |
| | | SITE CLEARANCE, ETC. Site clearance | | | | |
| 1 | | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees n.e 200mm girth and cart away | m2 | 897 | | |
| | | EXCAVATION, FILLING, ETC. | | | | |
| | | EXCAVATION, FILLING, ETC. OTHER THAN BULK | | | | |
| | | <u>Digging up topsoil</u> | | | | |
| 2 | | Digging up topsoil to an average depth of 150mm and stockpiling on site including carting away to dumpsite selected by contractor | m2 | 897 | | |
| | | <u>Excavate in trenches n.e 2m deep</u> | | | | |
| 3 | | Trenches | m3 | 75 | | |
| 4 | | Holes | m3 | 291 | | |
| 5 | | Lift pits | m3 | 94 | | |
| | | <u>Extra over trenches and holes excavations</u> | | | | |
| 6 | | Soft rock | m3 | 230 | | |
| 7 | | Hard rock | m3 | 230 | | |
| | | <u>Extra over all excavations for carting away</u> | | | | |
| 8 | | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor. | m3 | 460 | | |
| | | <u>Risk of collapse of excavations</u> | | | | |
| 9 | | To sides of trenches and holes n.e 1.5m deep | m2 | 550 | | |
| | | <u>Keeping excavations free from water</u> | | | | |
| 10 | | Keep excavations free from water | item | 1 | | |
| | | Total carried to summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----------|------|--------|
| | | <u>FILLING ETC</u> | | | | |
| | | <u>Earth filling supplied by the Contractor</u> | | | | |
| | | 150mm layers of G7 compacted to 95% Mod AASTO under floors | m3 | rate only | | |
| | | 150mm layers of G5 compacted to 95% Mod AASTO under floors | m3 | 212 | | |
| | | <u>Compaction of ground</u> | | | | |
| | | Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density | m2 | 510 | | |
| | | Compaction of natural or excavated ground surface to bottom of foundations etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density | m2 | 271 | | |
| | | Ditto but in Pavings, etc. | m3 | 200 | | |
| | | Backfilling to trenches, holes, etc. | m3 | 200 | | |
| | | <u>Prescribed density tests on filling</u> | | | | |
| | | Modified AASHTO Density test. | no | 52 | | |
| | | Field Density test including Optimum Moisture Content (four readings per test). | no | 50 | | |
| | | <u>SOIL POISONING</u> | | | | |
| | | <u>Soil insecticide</u> | | | | |
| | | Under floors, etc. including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming. | m2 | 781 | | |
| | | Under paving | m2 | 200 | | |
| | | Total carried to summary | | | | |

4. Earthworks



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
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| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-------|------|--------|
| | | BILL NO 3 | | | | |
| | | <u>CONCRETE, FORMWORK AND REINFORCEMENT</u> | | | | |
| | | <u>UNREINFORCED CONCRETE</u> | | | | |
| 1 | | 15MPa/19mm Concrete in blinding cast against excavated surfaces | m3 | 13 | | |
| 2 | | Filling of cavity walls | m3 | 46 | | |
| | | <u>30MPa/19mm Reinforced concrete</u> | | | | |
| 3 | | Bases | m3 | 101 | | |
| 4 | | Strip footings | m3 | 14 | | |
| 5 | | Surface bed | m3 | 87 | | |
| 6 | | Columns in foundations (Provisional) | m3 | 4 | | |
| 7 | | Columns | m3 | 14 | | |
| 8 | | Beams | m3 | 30 | | |
| 9 | | Lift shaft | m3 | 47 | | |
| 10 | | Ramps | m3 | 8 | | |
| 11 | | Staircase including landings | m3 | 15 | | |
| 12 | | Slabs | m3 | 161 | | |
| 13 | | Cantilever slabs | m3 | 4 | | |
| 14 | | Plinth | m3 | 5 | | |
| | | <u>Test cubes</u> | | | | |
| 15 | | Making and testing 150x150x150mm concrete strength test cubes | no | 293 | | |
| | | <u>Finishing top surfaces of concrete with power float</u> | | | | |
| 16 | | Surface beds, slabs etc. | m2 | 1,050 | | |
| | | <u>Rough formwork</u> | | | | |
| | | <u>Rough formwork to sides</u> | | | | |
| 17 | | Bases (Provisional) | m2 | 109 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-----|------|--------|
| 18 | | Columns in foundations (Provisional) | m2 | 40 | | |
| 19 | | Columns | m2 | 145 | | |
| 20 | | Edges, risers, ends and reveals not exceeding 300mm wide | m2 | 100 | | |
| 21 | | Slabs | m2 | 540 | | |
| 22 | | Ramps | m2 | 10 | | |
| 23 | | Lift shaft | m2 | 44 | | |
| 24 | | Cantilever slabs | m2 | 14 | | |
| 25 | | Staircase including landings | m2 | 7 | | |
| | | Plinths | m2 | 7 | | |
| 26 | | <u>Smooth formwork</u> | | | | |
| 27 | | Lift shaft internal | m2 | 55 | | |
| | | <u>MOVEMENT JOINTS ETC</u> | | | | |
| | | <u>Expansion joints with 20mm softboard (bitumen impregnated softboard) (closed cell expanded polyethylene) between vertical concrete and brick surfaces</u> | | | | |
| 29 | | Not exceeding 300mm wide through columns | m | 89 | | |
| | | <u>REINFORCEMENT</u> | | | | |
| 30 | | <u>High tensile steel reinforcement to structural concrete work</u> | | | | |
| 31 | | Steel reinforcement in various diameter bars | t | 32 | | |
| 32 | | Ref 245 mesh | m2 | 2 | | |
| 33 | | REF 395 mesh | m2 | 73 | | |
| 34 | | REF 888 mesh | m2 | 26 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|---|----------------|-------------|------|-----|------|--------|
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| Total carried to section summary | | | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|--------|------|--------|
| | | BILL NO 4 | | | | |
| | | PRECAST CONCRETE | | | | |
| | | PRECAST CONCRETE CLADDING ETC | | | | |
| | | Terra Rust Natural Stone Cladding 600 x 200mm, a blend of randomly shaped pieces of natural stone with a concrete backing in puzzle pieces, with no visible horizontal lines. The cement mesh base ensures that the rock pieces don't come off after the installation. Select corner pieces to form continuity around corners Cladding to be done by approved specialist experienced Applicator | | | | |
| 1 | | To walls | m2 | 150.00 | | |
| | | Red Quartz Tiles: rectangular large format 10mm thick full bodied 'fire station' red high density polished quartz wall tiles fixed to cement plastered walls with manufacturer approved corrosion and weather resistant mechanical and chemical fixing systems. High strength, rapid set waterproof tile grey adhesive. Stainless steel mechanical fixings 2mm exterior waterproof grouting to match selected tiles. Medium complexity tiling pattern to be determined following selection of tiles Cladding to be done by approved specialist experienced Applicator | | | | |
| 2 | | To walls | m2 | 100.00 | | |
| | | Precast concrete finished smooth on exposed surfaces including bedding, jointing and pointing | | | | |
| 3 | | Sills | m | 79 | | |
| | | PRECAST CONCRETE COPINGS ETC | | | | |
| | | Precast concrete finished smooth on exposed surfaces including bedding, jointing and pointing | | | | |
| | | 350 x 150mm Thick overall copings weathered on top to 230mm thick along one edge, with drip groove in bottom along one edge | m | 50.00 | | |
| | | Total carried to summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|--------|------|--------|
| | | <p><u>BILL NO 5</u> <u>MASONRY</u></p> <p><u>BRICKWORK</u></p> <p><u>FOUNDATIONS (PROVISIONAL)</u></p> <p><u>Solid NFX (Non-Facing Extra) burnt clay bricks, minimum compressive strength ≥ 17.5 MPa (recommended 20–30 MPa), water absorption $\leq 10\%$ (preferred $\leq 7\%$), Durability Class F2 for MX3/MX4 marine and sulphate exposure. Bricks to comply with SANS 227. Mortar 1:5 using sulphate-resistant cement</u></p> | | | | |
| 1 | | 115mm wall | m2 | 18.83 | | |
| 2 | | 230mm brick walls | m2 | 121.23 | | |
| 3 | | 280mm cavity walls | m2 | 131.52 | | |
| | | <p><u>SUPERSTRUCTURE</u></p> <p><u>FBX (Face Brick Extra) burnt clay bricks, solid units, minimum compressive strength ≥ 17.5 MPa (recommended $\geq 25-35$ MPa), water absorption $\leq 10\%$ (preferred 4–7%), Durability Class F2. Bricks to comply with SANS 227. Use mortar: 1:4 for external and 1:5 for internal walls. Platinum Travertine FBX (for plinth, allow 2 course below ground and 2 courses above ground all</u></p> | | | | |
| 4 | | 115mm wall | m2 | 46.13 | | |
| 5 | | 230mm brick walls | m2 | 329.30 | | |
| 6 | | 280mm Hollow walls of two half brick skins, including butterfly wall ties | m2 | 635.81 | | |
| 7 | | Extra over beam filling (masonry above wall plate level) | m2 | 123.36 | | |
| | | <p>Platinum Travertine FBX face bricks pointed with recessed horizontal and flush vertical joints</p> <p>Extra over brickwork for face brickwork.</p> | m2 | 36.92 | | |
| | | <p><u>BRICKWORK SUNDRIES</u></p> <p><u>Brick reinforcement</u></p> | | | | |
| | | Total carried to summary | | | | |

7. Masonry

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|---------------------------------|---|----|----------|--|--|
| 8 | 150mm Wide reinforcement built in horizontally. | m | 798.42 | | |
| 9 | 110mm x 75 mm lintels in lengths not exceeding 3m | m | 133.00 | | |
| | <u>Galvanized wire tires</u> | | | | |
| 11 | 4mm diameter roof tie 2m girth bent double, with one end built into brickwork and other end fixed to timber | no | 1,500.00 | | |
| | <u>Galvanized hoop iron cramps, tie etc</u> | | | | |
| 12 | 30 x 1.6m wall tie 500mm long with one end cast into concrete and other end into brickwork | no | 3,069.00 | | |
| <u>Total carried to summary</u> | | | | | |

7. Masonry

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| | | | | | | | |
| | | Total carried to section summary | | | | | |

8. Waterproofing

TRANSNET



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|----------|------|--------|
| | | Bill NO 6 | | | | |
| | | WATERPROOFING | | | | |
| | | Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs | | | | |
| | | DAMPPROOFING OF WALLS AND FLOORS | | | | |
| | | One layer of 375 micron damp proof course | | | | |
| 1 | | In walls | m2 | 33.60 | | |
| 2 | | In window sills | m2 | 111.38 | | |
| | | One layer of 250 Micron Waterproof Sheeting Sealed At Laps With dampproof course (SANS 952-1985 type B) | | | | |
| 3 | | Under surface beds | m2 | 1,277.33 | | |
| 4 | | Vertically between walls | m2 | 767.33 | | |
| | | WATERPROOFING TO ROOFS ETC | | | | |
| | | One layer 4mm special polyester fully bonded waterproof membrane comprising a matrix modified with polypropylene dual reinforced with non-woven polyester cloth and glass fibre tissue, laid with 75mm side and 100mm end laps | | | | |
| 5 | | On flat roofs | m2 | 601.06 | | |
| 6 | | On balcony floors | m2 | 22.10 | | |
| 7 | | On shower floors | m2 | 5.63 | | |
| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|--------|------|--------|
| | | <p><u>Bill no 7</u></p> <p>Supplementary Preambles</p> <p>Fixing of flashing and eaves</p> <p>Fabricate to required profiles with hemmed edges. Fix using stainless steel fixings to steel roof structure. Install with minimum 150 mm laps and sealed joints. Provide separation membrane where in contact with dissimilar materials.</p> <p><u>ROOF COVERING, CLADDING</u></p> <p><u>PROFILED METAL SHEETING AND ACCESSORIES</u></p> <p><u>Mono-pitched PVDF-coated Klintite aluminium roof sheeting fastened on steel purlins</u></p> <p>Profile roll formed in continuous lengths from 0.80mm thick 3004 hazy grey PVDF aluminium roof sheeting</p> <p><u>ROOF AND WALL INSULATION</u></p> <p>One layer of 75mm thick non-combustible lightweight industrial mineral wool insulation material (nominal density 12kg per m3), with reinforced kraft aluminium foil faced finished, taut over trusses and fixed concurrent with purlins with galvanised steel straining wires at 300mm centres, and tied down top and bottom after tensioning with galvanized hoop iron ties.</p> <p><u>Carpport covering</u></p> <p><u>Mono-pitched PVDF-coated Klintite aluminium roof sheeting fastened on steel purlins</u></p> <p>Profile roll formed in continuous lengths from 0.80mm thick 3004 hazy grey PVDF aluminium roof sheeting</p> | | | | |
| 1 | | Profile roll formed in continuous lengths from 0.80mm thick 3004 hazy grey PVDF aluminium roof sheeting | m2 | 708.55 | | |
| 2 | | One layer of 75mm thick non-combustible lightweight industrial mineral wool insulation material (nominal density 12kg per m3), with reinforced kraft aluminium foil faced finished, taut over trusses and fixed concurrent with purlins with galvanised steel straining wires at 300mm centres, and tied down top and bottom after tensioning with galvanized hoop iron ties. | m2 | 591.26 | | |
| 3 | | Profile roll formed in continuous lengths from 0.80mm thick 3004 hazy grey PVDF aluminium roof sheeting | m2 | 200.00 | | |
| | | Total carried to summary | | | | |

| | | | | | |
|---|---|----|--------|--|--|
| | <p>SHEET METAL FLASHINGS, LININGS, COPINGS, ETC.</p> <p>PVDF-coated aluminium flashings, 0.8–1.0 mm thick, aluminium alloy 3004/3005/3105, coil-coated with 70% PVDF resin (Kynar 500 or equivalent), total DFT 25–30 microns. Flashings to match PVDF aluminium roof sheeting in colour and gloss.</p> | | | | |
| 4 | Aluminum flashing and eaves closure | m | 85 | | |
| | <p>ROOF AND WALL INSULATION</p> <p>Rigid Polyisocyanurate (PIR) insulation board, installed in between steel purlins and directly under aluminium roof sheeting. Boards to be foil faced both sides, minimum λ value 0.022–0.026 W/m·K, thickness 80mm fire rating Class B/B1/2 to SANS 428. Installation to ensure tight joints, sealed edges, mechanical fixing as per manufacturer's requirements, and full coordination with roofing contractor</p> | | | | |
| 5 | Insulation laid taut and fastened to best suit marine environment | m2 | 708.55 | | |
| | Total carried to summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|------|------|--------|
| | | <p><u>BILL NO 8</u> <u>CARPENTRY AND JOINERY</u></p> <p>The following joinery fittings have been measured as complete units, that is, the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc.</p> <p>The references given in the descriptions are to the respective types of fittings detailed on the architect's drawings issued with these Bills of Quantities.</p> <p>The contractor will be responsible for the detailed design of doors and windows and necessary shop drawings to be developed</p> <p>Detail design of Doors and Windows and necessary shop drawings to be developed from the door and window schedules provided by the Employer</p> | | | | |
| | | <p>DOORS, ETC.</p> <p><u>Solid core flush panel</u></p> <p>40mm thick commercial veneered solid core flush panel door. Finish: Prepare Prime & Paint 1 undercoat and 2 coats mid-sheen enamel, as per Specifications (Dk & DR).</p> | No | 7.00 | | |
| | | <p>40mm thick commercial veneered semi-solid core flush panel door. Undercut: 120mm and reinstate door bottom edge. Finish: Prepare Prime & Paint 1 undercoat and 2 coats mid-sheen enamel, as per Specifications. (DL)</p> | No | 9.00 | | |
| | | <p>FITTINGS</p> <p>Kitchen cupboards, etc.</p> | | | | |
| | | Total carried to summary | sum | 1.00 | | |

10. Carpenrty & Joinery

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|------|------|--------|
| 1 | | <p><u>Laundry cupboards</u></p> <p>Robust open shelving including best humidity and resistant carcass shelves, shelves and fascia type 2040x300x2720mm high with top, sides, bottom, division and shelf, including all necessary ironmongery</p> | no | 1.00 | | |
| 2 | | <p><u>Kitchen cupboards</u></p> <p>Robust open shelving including best humidity and resistant carcass shelves, shelves doors, hinges, handles, locks and name/number plates. Melamine facings to conceal canvass 3970x300x2720mm high with top, sides, bottom, division and shelf, including all necessary ironmongery</p> | no | 1.00 | | |
| 3 | | <p><u>Restroom cupboards</u></p> <p>Combination cupboard, including best humidity and corrosion resistant Carcass, Shelves, Doors, Hinges, Handles, Locks and Name/Number plates. Melamine facings to conceal carcass size 3382x600x2720mm high with top, sides, bottom, division, shelf, back and double hinged doors, including all necessary ironmongery</p> | no | 1.00 | | |
| 4 | | <p><u>Reception desk</u></p> <p>Floor L-section desk with one section 2400x920x950mm high and other section 1000x920x920 with sides, bottom, divisions, shelf, back and double hinged doors (sink elsewhere) including brush polished stainless steel kickplate (a/b), including all necessary ironmongery</p> | no | 1.00 | | |
| 5 | | <p><u>Changeroom bench</u></p> <p>Floor plugged hardwood timber bench 1400x380x400mm high formed of custom galvanized and painted mild steel frame below fixed to floor</p> | no | 2.00 | | |
| | | Total carried to summary | | | | |

10. Carpenrty & Joinery

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| | | page 1 | | | | |
| | | page 2 | | | | |
| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| | | <p>BILL NO 9 CEILING, PARTITIONS AND ACCESS FLOORING</p> <p>SUPPLEMENTARY PREAMBLES</p> <p>Items described as "nailed" shall be deemed to be fixed with Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete.</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere.</p> <p>All ceiling systems must comply with SANS 10400, SANS 2001, and applicable fire & acoustic regulations</p> <p>All materials must be suitable for marine/coastal environments with high humidity, salt corrosion, and temperature variations</p> <p>Ceilings must allow for access to services (fire detection, electrical, HVAC, CCTV, etc.) where required</p> <p>Bulkheads</p> <p>Bulkheads are those areas of the ceiling which are at a level differing from the general ceiling in a particular room or area and which generally occur along the perimeter of the room or area. Their purpose is either to conceal services or to create and which generally occur along the perimeter of the room or an architectural feature by changing levels.</p> <p>Bulkheads will only be measured as such when they conform with the above description and when the horizontal or vertical dimensions do not exceed 1,2m. Should these dimensions be more than 1,2m then the horizontal or vertical ceilings will be included in the general ceiling measurements.</p> <p>Partitions</p> | | | | |

11. Ceiling

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|--------|------|--------|
| | | Installations to comply with SANS 10400 (all parts as applicable), SANS 2001 series (workmanship), SANS 10177 (fire testing where ratings are claimed), and SANS 204 (energy efficiency—insulation). Use manufacturer’s tested and certified systems for stated fire/acoustic performance | | | | |
| | | All metal components to be corrosion-protected for marine/coastal conditions; minimum Z275 galvanized or marine-grade aluminium/stainless steel where exposed or at openings | | | | |
| | | NAILED UP CEILINGS | | | | |
| 1 | | 9.5mm layer of Plasterboard ceilings as per drawing | m2 | 40.00 | | |
| 2 | | Opening for sprinkler head | no | 18 | | |
| 3 | | Extra over celing for opening for grille/ air conditioning diffuser | no | 1.00 | | |
| | | SUSPENDED CEILINGS | | | | |
| | | 600x600x15mm pre-painted acoustic panels on exposed suspension grid system including hangers, necessary hold-down clips and wedges, etc | | | | |
| 4 | | Ceilings suspended not exceeding 1m below concrete soffits | m2 | 350.00 | | |
| 5 | | Opening for sprinkler head | no | 156 | | |
| 6 | | Extra over celing for opening for grille/ air conditioning diffuser | no | 1.00 | | |
| | | 600x600x15mm pre-painted humidity resistant panels on exposed suspension grid system including hangers, necessary hold-down clips and wedges, etc | | | | |
| 7 | | Ceilings suspended not exceeding 1m below concrete soffits | m2 | 97.00 | | |
| 8 | | Opening for sprinkler head | no | 43 | | |
| 9 | | Extra over celing for opening for grille/ air conditioning diffuser | no | 2.00 | | |
| | | Total carried to summary | | | | |

11. Ceiling

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|------|------|--------|
| | | PARTITIONS, ETC. | | | | |
| | | <p>Drywall partitioning shall comprise steel studding top and bottom tracks with vertical studs, friction fitted or pop-riveted to the top and bottom tracks with similar additional vertical studs as necessary at abutments, ends, etc. and covered as described with wall board screwed to studding with "Drywall" screws at maximum 220mm centres. Boards are to be butt jointed and finished with plasterboard tape and jointing compound all in accordance with the manufacturer's instructions. Intersections and abutments are measured separately and descriptions shall be deemed to include any additional studs, corner beads, jointing compound, tape, etc.</p> | | | | |
| 10 | | Partitioning with bottom track plugged and top track fixed to suspended ceiling tees. | m | 173 | | |
| 11 | | Extra over partition 2,81m high for corner | no | 4.00 | | |
| 12 | | Extra over partition 2,81m high for T-intersection | no | 5.00 | | |
| 13 | | Extra over partition 2,81m high for fair end | no | 3.00 | | |
| | | Total to carried to summary | | | | |

11. Ceiling

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
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| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|--------|------|--------|
| | | <p>BILL NO 10</p> <p>FLOOR COVERINGS, WALL LININGS, ETC.</p> <p>Supplementary preambles</p> <p>Install to SANS 10400 and manufacturer requirements. Materials must suit marine/coastal conditions (humidity, salt, temperature fluctuations).</p> <p>Prepare substrates: cleaning, levelling, priming, moisture control, and smoothing as required</p> <p>Include all adhesives, trims, skirtings, transitions, movement joints, and protection of finished work</p> <p>FLOOR COVERINGS</p> <p>FLOOR: 50 × 50 cm modular carpet tiles manufactured from solution-dyed nylon fibres (including eco-blend or recycled nylon content), on suitable backing, laid in a tessellated pattern using an approved adhesive system, all in accordance with manufacturer's preparation and installation requirements. Colour to be selected'</p> | | | | |
| 1 | | On floors | m2 | 167.93 | | |
| 2 | | 60mm high matching skirting | m | 15.20 | | |
| 3 | | <p>FLOOR: Rubberized Surface 4mm Heavy Commercial use. Colour to be selected.</p> <p>on floors</p> | m2 | 56.59 | | |
| 4 | | 100mm matching skirting | m | 121.91 | | |
| 5 | | <p>FLOOR: 3mm Heavy Commercial luxury vinyl tile; Colour to be selected</p> <p>On floors</p> | m2 | 110.49 | | |
| 6 | | 100mm high pvc matching skirting | m | 120.78 | | |
| 7 | | <p>FLOOR: Static dissipative vinyl flooring - Steel Grey</p> <p>on Floors</p> | m2 | 4.08 | | |
| 8 | | 100mm pvc matching skirting | m | 6.18 | | |
| | | Total carried to summary | | | | |

12. Floor coverings

| | | | | | | |
|----|--|--|----|--------|--|--|
| | | EPOXY COATING & DEMARCATION | | | | |
| 9 | | FLOOR: Prime and Apply 3 coats two component polyurethane enamel applied in accordance with paint Manufacturers recommendations/specifications by an approved Applicator Colours Red, Yellow and Grey to be selected on floors | m2 | 142.67 | | |
| 10 | | 100mm high pvc matching skirting | m | 24.57 | | |
| | | GRANOLITHIC SCREED | | | | |
| 11 | | on floors | m2 | 37.38 | | |
| | | SKIRTINGS, NOSINGS, ETC. | | | | |
| | | PVC skirtings, nosings, etc | | | | |
| 12 | | 60mm high | m | 108.98 | | |
| 13 | | 100mm high | m | 133.00 | | |
| | | Total carried to summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|--------|------|--------|
| | | BILL NO 11 | | | | |
| | | IRONMONGERY | | | | |
| | | HINGES, BOLTS, ETC | | | | |
| 1 | | 102x75x3mm Aluminium hinge with stainless steel washers | No | 150.00 | | |
| | | CATCHES, CABIN HOOKS, ETC | | | | |
| 3 | | Dust proof strike, 38x19x13mm, Stainless Steel | No | 9.00 | | |
| 4 | | Stainless steel Adjustable Roller Bolt, Rollerbolt & Deadbolt Lock, Heavy Duty, Euro Cylinder, Excluding Cylinder, 55mm (Backset), 60mm (ctc) | No | 2.00 | | |
| 5 | | Stainless steel wall buffer / door wall protector | No | 8.00 | | |
| 6 | | Stainless steel floor mounted door stop | No | 29.00 | | |
| 7 | | Stainless steel Hat and coat hook with rubber buffer | No | 9.00 | | |
| 8 | | Stainless steel Cabin hook 150mm | No | 3.00 | | |
| | | LOCKS | | | | |
| 9 | | Stainless steel narrow stile sash lock operating with european profile cylinder. | No | 19.00 | | |
| 10 | | Helping hand indicator bolt for paraplegic wc | No | 1.00 | | |
| 11 | | Stainless steel bathroom deadlock | No | 15.00 | | |
| 12 | | Stainless steel Cylinder sash lock | No | 2.00 | | |
| 13 | | Satin Nickel 63mm double cylinder - Master Key / 63mm, Double, Cylinder, Keyed Different, 5 Pin? | No | 23.00 | | |
| 14 | | Satin Nickel 43mm half knob cylinder | No | 1.00 | | |
| 15 | | MK Satin Nickel 40.5mm single cylinder - Master keyed | No | 6.00 | | |
| 16 | | Stainless steel Round cylinder escutcheon | No | 1.00 | | |
| 17 | | Stainless steel narrow stile cylinder escutcheon | No | 8.50 | | |
| | | Total carried to summary | | | | |

13. Ironmongery

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|------|------|--------|
| 18 | | Two point locking panic bar -door leaf 1000mm wide x 2270mm high | No | 2.00 | | |
| 2 | | Privacy lockset for WC door, complete with turn-and-release mechanism and emergency release/ Bathroom, Indicator with Bolt, Stainless Steel? | No | 8.00 | | |
| | | <u>HANDLES</u> | | | | |
| 19 | | Stainless steel 120x40mm oval flush pull handle | No | 4.00 | | |
| 20 | | Pull handle bt fixed on a 170x170x1.2mm thick grade 430 stainless steel plate with no cylinder cutout. | No | 4.00 | | |
| 21 | | Pull handle bt fixed on a 170x170x1.2mm thick grade 430 stainless steel plate with cylinder cutout. | No | 5.00 | | |
| 22 | | Stainless steel 382x32mm D shaped offset tubular pull handle btb fixing sets included | No | 6.00 | | |
| 23 | | Stainless steel 382x25mm straight tubular pull handle btb fixing sets included) | No | 1.00 | | |
| 24 | | Stainless steel 149x19mm straight tubular pull handle BTB (BTB fixing sets included) | No | 8.00 | | |
| 25 | | Stainless steel 149x19mm stainless steel tubular pull handle BT | No | 2.00 | | |
| | | <u>TH120 BP Cyl Stainless Steel</u> | | | | |
| 26 | | Stainless steel lever handle on 170x170 plate with cylinder cut out | No | 2.00 | | |
| 27 | | Stainelss steel lever handle on narrow stile rose with narrow stile cylinder escutcheons | No | 9.00 | | |
| | | <u>PHT3901 Satin Nickel</u> | | | | |
| 28 | | Exterior locking panic bar (one two or three point locking, 1000 or 1300mm wide) | No | 2.00 | | |
| | | <u>PUSH PLATES AND KICK PLATES</u> | | | | |
| 29 | | 170x170x1.2mm thick grade 430 stainless steel plate | No | 5.00 | | |
| 30 | | 170x170x1.2mm thick grade 430 stainless steel plate with cylinder cutout left | No | 2.00 | | |
| | | Total carried to summary | | | | |

13. Ironmongery

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-------|------|--------|
| 31 | | M4 Patent Male/Female fixing screws (Pack) | No | 18.00 | | |
| 32 | | 200x 800x 1.2mm thick grade 430 stainless steel kick plate | No | 20.00 | | |
| | | <u>DOOR CLOSERS</u> | | | | |
| 33 | | Silver finish 232L x 78W x 45D overhead regular arm Non hold open door closer fitted on doors up to 1100mm wide. | No | 4.00 | | |
| 34 | | Silver finish 232L x 60W x 40D overhead regular arm Non hold open door closer - adjustable strength, hydraulic speed | No | 2.00 | | |
| 35 | | EN 3/4 Regular Arm delayed action open door selector set | No | 1.00 | | |
| 36 | | EN 2-4 Parallel Arm non hold open door selector set | No | 3.00 | | |
| 37 | | EN 3-6 Regular Arm non hold open door selector set | No | 2.00 | | |
| 38 | | EN 3-6 Parallel Arm non hold open door selector set | No | 3.00 | | |
| 39 | | Patent fixing screws for door closer | No | 20.00 | | |
| | | <u>SLIDING GEAR</u> | | | | |
| 40 | | Aluminium sliding door gear set with track 2445mm fixed to drywall including brackets, hanger, rollers, guides, stops etc | No | 2.00 | | |
| | | <u>LETTERS, NAMEPLATES, ETC</u> | | | | |
| 41 | | Stainless steel 150x150x1.2mm male toilet sign. | No | 2.00 | | |
| 42 | | Stainless steel 150x150x1.2mm female toilet sign (Stainless Steel?) | No | 2.00 | | |
| 43 | | Stainless steel 150x150x1.2mm disabled /physically challenged/wheelchair sign | No | 1.00 | | |
| 44 | | Stainless steel 150x150x1.2mm tea cup sign | No | 1.00 | | |
| 45 | | Stainless steel 150x150x1.2mm electrical warning sign | No | 2.00 | | |
| 46 | | Stainless steel 150x150x1.2mm cleaner sign | No | 2.00 | | |
| | | Total carried to summary | | | | |

13. Ironmongery

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|------|------|--------|
| | | <u>BATHROOM FITTINGS.</u> | | | | |
| | | <u>Towel Dispenser:</u> | | | | |
| 47 | | Aluminium wall-mounted paper towel holder frame, with non-corrosive components, size 230 x 420 x 420mm (to be confirmed prior order) | No | 3.00 | | |
| 48 | | Stainless steel (coastal grade) wall-mounted paper towel dispensing unit, with automatic dispenser (to be confirmed prior order) | No | 6.00 | | |
| 49 | | Stainless steel lockable 3 toilet roll holder, with cylinder lock, size 385 x 126 136mm, plugged to wall with stainless steel screws (to be confirmed prior order) | No | 8.00 | | |
| 50 | | Stainless steel soap dispenser, 1.25 liter, size 140 x 235 x 140mm, plugged to wall with stainless steel screws (to be confirmed prior order) | No | 5.00 | | |
| 51 | | Stainless Steel 10l SHE Bin | No | 5.00 | | |
| 52 | | Stainless steel wall-mounted waste bin, with inner binliner securing system, plugged to wall (to be confirmed prior order) | No | 5.00 | | |
| 53 | | Stainless steel air freshner spray dispenser (400ml) wall-mounted seat sanitiser spray | No | 9.00 | | |
| 54 | | Heavy duty industrial quality concealed plastic bin, with non-corrosive mechanism | No | 2.00 | | |
| | | <u>SUNDRIES.</u> | | | | |
| 55 | | Stainless steel 2 tier, wall corner shelf, size 235 x 265 x 160mm, plugged. | No | 6.00 | | |
| 56 | | Stainless steel automatic hand dryer (1400w), Vandal-Proof, Automatic power cut-off | No | 4.00 | | |
| 57 | | Stainless steel heavy duty towel hooks | No | 6.00 | | |
| 58 | | Stainless steel jacket hook (8 hooks), size 20 x 120 x 29000 mm sealed hardwood fixed to wall | No | 8.00 | | |
| 59 | | Stainless steel towel rack and hooks, 500mm long | No | 4.00 | | |
| | | <u>White nylon toilet brush:</u> | | | | |
| 60 | | Toilet brush | No | 3.00 | | |
| | | Total carried to summary | | | | |

13. Ironmongery

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
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| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|------|------|--------|
| | | <u>BILL NO 12</u> | | | | |
| | | <u>STRUCTURAL STEELWORK</u> | | | | |
| | | <u>STEEL TRUSSES, ETC</u> | | | | |
| | | <u>Steel rafter</u> | | | | |
| 1 | | 203 x 133x 30kg/m I section rafters | t | 3.07 | | |
| 2 | | 254 x 146 x 311 rafter | t | 1.00 | | |
| | | <u>Bottom chord</u> | | | | |
| 3 | | 100x100x8 equa leg angles | t | 1.25 | | |
| | | <u>Posts</u> | | | | |
| 4 | | 70x70x8 equal leg angles posts | t | 1.00 | | |
| | | <u>Struts</u> | | | | |
| 5 | | 70x70x6 Equal leg angle struts | t | 1.00 | | |
| 6 | | 89 x 3 CHS eaves struts | t | 1.00 | | |
| | | <u>Sag angles</u> | | | | |
| 7 | | 60x60x6 Equal leg angles sag angles | t | 1.00 | | |
| 8 | | 40 x 40 x 4L sag rods | t | 1.00 | | |
| | | <u>Tie back</u> | | | | |
| 9 | | 60x60x6 equal leg angle tie back | t | 1.00 | | |
| | | <u>Roof cross bracing</u> | | | | |
| 10 | | 101.6x3 circular hallow section roof cross bracing | t | 1.30 | | |
| 11 | | 60 x 60x 6 L rafter bracing | t | 1.00 | | |
| | | <u>Purlins</u> | | | | |
| 12 | | 250x75x3.5 C channel | t | 4.29 | | |
| 13 | | 175 x 75 x 20 x 3.5 purlin at 1250 c/c | t | 1.00 | | |
| | | <u>Plates</u> | | | | |
| 16 | | 450 x 280 x 20 THK base plate | t | 1.00 | | |
| 17 | | 8 mm THK END PLATE WITH 13mm Ø | t | 1.00 | | |
| 18 | | 85 x85 x12mm THK anchor plate | t | 1.00 | | |
| | | <u>Bolts</u> | | | | |
| | | Total carried to summary | | | | |

14. Structural steelwork

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|------|------|--------|
| 19 | | 26mm Ø hole for M24 holding down bolts <u>Column/stachion</u> | t | 1.00 | | |
| 20 | | 254 x 146 x 31 I stachion welded to base <u>Haunch cut</u> | t | 1.00 | | |
| 21 | | 254 x 146 x 31 I <u>STEEL FLOORS, STAIRS, ETC.</u> | t | 1.00 | | |
| 22 | | 152 x 152x 4.5 THK poles | t | 1.00 | | |
| 23 | | 150x150x23 H section | t | 1.00 | | |
| 24 | | 60x60x6 L section | t | 1.00 | | |
| 25 | | 180x70 PFC forming stringer | t | 1.00 | | |
| 26 | | 180 x 70 PFC forming landing | t | 1.00 | | |
| 27 | | 40x40x4mm L | t | 1.00 | | |
| 28 | | m12 bolt with washers | | | | |
| 29 | | 4mm thick gusset plate to welded to S.H.S and bolted 40x40x4mm THK. | t | 1.00 | | |
| 30 | | 76x4mm THK.C.H.S | t | 1.00 | | |
| 31 | | 100X100X4mm | m3 | 2.30 | | |
| 32 | | 100 x 50 PFC forming landing | t | 1 | | |
| 33 | | Landing finished vitagrid | m2 | 100 | | |
| 34 | | 6mm cap plate to be welded to 100x 100x4mm S.H.S and bolted 180x70PFC | t | 1.0 | | |
| 35 | | 5mm THK stiffener welded to inside of 180x70mm pfc <u>KITCHN AND BACK ENTRANCE</u> | t | 1.00 | | |
| 36 | | 210x150x10mm baseplate with 2x M16 bolts grade 8.8 | t | 1.00 | | |
| 37 | | 160 IPE stanchion welded to base plate | t | 1.00 | | |
| 38 | | 270x100x10mm end plate | t | 1.00 | | |
| 39 | | 60x 60x10mm THK anchor plate | t | 1.00 | | |
| 40 | | PFC 180x70 | t | 1.00 | | |
| 41 | | 150x7520x2.5mm CFLC purlin | t | 1.00 | | |
| 42 | | 40x40 x 4L sag rod | t | 1.00 | | |
| 43 | | IPE 160 rafter <u>Vastrap floor</u> | t | 1.00 | | |
| 44 | | In duct floors | m2 | 1.54 | | |
| | | Total carried to summary | | | | |

14. Structural steelwork

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
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| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| | | <p>BILL NO 13 METALWORK</p> <p>Supplementary Preambles</p> <p>Provide all metalwork complete, including design (where required), fabrication, finishing, transport, installation, fixings, anchors, welds, and protection</p> <p>Mild steel: hot-dip galvanized to SANS requirements; paint-grade where scheduled. Stainless steel: Grade 304 internal, 316 external or in high-exposure areas. Aluminium: Marine-grade alloy for exposed exterior elements</p> <p>Fabricate to approved shop drawings with accurate joints, welds, and tolerances. All welds continuous, ground smooth where exposed.</p> <p>Handrails, balustrades, brackets, frames, grilles, guards, gates, and supports to be manufactured by an approved specialist where noted.</p> <p>Design</p> <p>Detail design of Metalwork and necessary shop drawings of items like balustrades and gates to be developed from the concepts illustrated in the Employer's Design Layouts</p> <p>GALVANISED STEEL HANDRAILS, BALUSTRADES, ETC</p> <p>Welded balustrading to walkways</p> <p>1 1000mm high Horizontal balustrading</p> <p>2 Raking balustrading to staircase no.</p> <p>3 Extra over for junction of end of horizontal with end of raking balustrades</p> <p>ALUMINIUM WINDOWS, DOORS, ETC</p> <p>Custom Aluminum Window, installed in prepared opening and, secured to plastered brickwork and or concrete structure, with non-corrosive mechanical fixings as specified by Window Specialist's.</p> | | | | |
| | | | sum | 1 | | |
| | | | m | 11 | | |
| | | | m | 40 | | |
| | | | no | 2 | | |
| | | | | | | |
| | | Total carried to summary | | | | |

15. Metalwork

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| 4 | | Window Frame composed of suitable premium quality Powder Coated sections including integrated gaskets & seals | | | | |
| 5 | | Window size 1500x1200mm high as per specification | no | 2 | | |
| 6 | | Window size 600x600mm high as per specification | no | 8 | | |
| 7 | | Window size 800x1200mm high as per specification | no | 1 | | |
| 8 | | Window size 3000x1200mm high as per specification | no | 1 | | |
| 9 | | Window size 3600x560mm high as per specification | no | 1 | | |
| 10 | | Window size 2230x2400mm high as per specification | no | 2 | | |
| 11 | | Window size 5550x2605mm high as per specification | no | 1 | | |
| 12 | | Window size 3920x2605mm high as per specification | no | 1 | | |
| 13 | | Window size 1500x2400mm high as per specification | no | 2 | | |
| 14 | | Window size 2800x550mm high as per specification | no | 1 | | |
| 15 | | Window size 2500x4475mm high as per specification | no | 1 | | |
| 16 | | Window size 3000x2400mm high as per specification | no | 2 | | |
| 17 | | Window size 1700x2400mm high as per specification | no | 2 | | |
| | | Window size 5550x1275mm high as per specification | no | 2 | | |
| 18 | | Window size 3600x21635mm high as per specification | no | 1 | | |
| | | Window size 3600x2635mm high as per specification | no | 1 | | |
| 19 | | Window size 7135x2635mm high as per specification | no | 1 | | |
| 20 | | Window size 5325x2635mm high as per specification | no | 1 | | |

15. Metalwork

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-----|------|--------|
| | | Total carried to summary | | | | |
| 21 | | Window size 2800x600mm high as per specification | no | 1 | | |
| | | ALUMINIUM LOUVRE UNITS | | | | |
| | | POWDER COATED HORIZONTAL | | | | |
| | | Custom Fixed Aluminum Louvre, installed in prepared opening and, secured to plastered brickwork and or concrete structure, with non-corrosive mechanical fixings as specified by Window Specialist's Engineer. Louvre composed of suitable premium quality Powder Coated sections including integrated gaskets & seals. Colour to be selected by Architect | | | | |
| 22 | | Aluminum Louvre unit for 800x2400mm high opening | no | 1 | | |
| | | ALUMINIUM CANOPY | | | | |
| | | Design, supply, deliver and Install Glass paneling Kitchen entrance cover canopy size 2000 x 3260mm. Workshop drawings for canopy structure to be prepared by contractor for review and acceptance by the architect/engineer to fabricated. | no | 1 | | |
| | | Design, supply, deliver and Install Glass paneling Main entrance cover canopy size 2975 x 5990mm. Workshop drawings for canopy structure to be prepared by contractor for review and acceptance by the architect/engineer to fabricated. | no | 1 | | |
| | | Design, supply, deliver and Install Glass paneling Back entrance cover canopy size 2000 x 8000mm. Workshop drawings for canopy structure to be prepared by contractor for review and acceptance by the architect/engineer to fabricated. | no | 1 | | |
| | | Aluminium Glass partition | | | | |
| | | Shopfront 2720mm high with single door size 950 x 2090mm high overall, shopfront glazed with Clear laminated safety glass, including self-adhesive, sandblast vinyl (plain) at 2100mm high etc., installed complete. | m | 18 | | |
| | | Total carried to summary | | | | |

15. Metalwork

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| | | PRESSED STEEL DOOR FRAMES | | | | |
| | | Custom 2.0 mm thick Class C homogeneous vinyl-clad galvanized steel frames, prepared for bolt-on installation (230 mm wall thickness excluding plaster), finished with one coat primer and two coats mid-sheen enamel paint, complete with all required ironmongery, sealing and finishing, in accordance with the project specification. | | | | |
| 23 | | Steel door , 900x2032mm high | no | 4 | | |
| | | Custom 2.0 mm thick Class D homogeneous vinyl-clad galvanized steel frames, prepared for bolt-on installation (230 mm wall thickness excluding plaster), finished with one coat primer and two coats mid-sheen enamel paint, complete with all required ironmongery, sealing and finishing, in accordance with the project specification | | | | |
| 24 | | Steel door , 900x2032mm high | no | 2 | | |
| | | Custom 2.0mm brushed polished pressed stainless steel frame (230mm wall thickness excluding plaster) | | | | |
| 25 | | Steel door, 900x2032mm high | no | 2 | | |
| | | Custom 2.0mm pressed rebated galvanized steel frame (230mm wall thickness excluding plaster) finished with Prime & Paint 1 undercoat and 2 coats mid-sheen enamel, as per Specifications | | | | |
| 26 | | Steel door , 900x2032mm high | no | 1 | | |
| 27 | | Steel door, 813x2032mm high | no | 1 | | |
| | | Custom 2.0mm pressed rebated galvanized steel frame (115mm wall thickness excluding plaster) finished with Prime & Paint 1 undercoat and 2 coats mid-sheen enamel, as per Specifications | | | | |
| 28 | | Steel door, 762x2032mm high | no | 8 | | |
| | | Custom 1.6 mm thick Class B homogeneous vinyl-clad galvanized steel frames, prepared for bolt-on installation (230 mm wall thickness excluding plaster), finished with one coat primer and two coats mid-sheen enamel paint, in accordance with the project specifications | | | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| 29 | | Steel door, 762x2032mm high | no | 1 | | |
| 30 | | Steel door, 900x2032mm high | no | 2 | | |
| | | Aluminum doors | | | | |
| | | Custom Fixed Aluminum Louvre Door & Top Light, installed in prepared opening and, secured to plastered brickwork and or concrete structure, with non-corrosive mechanical fixings as specified by Window Specialist's Engineer. Powder Coated 'Crealco Clip 44 with Fixed Louvres' or similar approved sections including integrated gaskets & seals. | | | | |
| 31 | | Aluminum door, 800x 2680mm high | no | 1 | | |
| | | Custom Aluminum Double Door Frame with Fanlights , installed in prepared opening and, secured to plastered brickwork and or concrete structure, with non-corrosive mechanical fixings as specified by Door Specialist's Engineer. Door Frame composed of suitable premium quality Powder Coated sections including integrated gaskets | | | | |
| 32 | | Aluminum door, 1700mm x 2605mm high | no | 1 | | |
| | | Custom Aluminum Double Door Frame with Fanlights , installed in prepared opening and, secured to plastered brickwork and or concrete structure, with non-corrosive mechanical fixings as specified by Door Specialist's Engineer. Door Frame composed of suitable premium quality Powder Coated sections including integrated gaskets & seals | | | | |
| 33 | | Aluminum door, 1700 x 2720mm high | no | 1 | | |
| | | Custom Aluminum Double Door Frame with Fanlights and Sidelights, installed in prepared opening and, secured to plastered brickwork and or concrete structure, with non-corrosive mechanical fixings as specified by Door Specialist's Engineer. Door Frame composed of suitable premium quality Powder Coated sections including integrated gaskets | | | | |
| 34 | | Aluminum door, 3600 x 2605 | no | 1 | | |
| | | Total carried to summary | | | | |

15. Metalwork

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| 35 | | Custom Aluminum Double Door Frame with Fanlights , installed in prepared opening and, secured to plastered brickwork and or concrete structure, with non-corrosive mechanical fixings as specified by Door Specialist's Engineer. Door Frame composed of suitable premium quality Powder Coated sections including integrated gaskets & seals Aluminum door, 800 x 2605mm high | no | 1 | | |
| 36 | | Custom Aluminum Sliding Door Frame with Fanlights and Sidelights, installed in prepared opening and, secured to plastered brickwork and or concrete structure, with non-corrosive mechanical fixings as specified by Door Specialist's Engineer. Door Frame composed of suitable premium quality Powder Coated 'Creance Clip 44' or similar approved sections including integrated gaskets Aluminum door, 5548 x 2650mm high | no | 1 | | |
| 37 | | Custom Aluminum Double Door Frame with Top lights , installed in dry wall partitioning with suitable drywall glazing rails, by Drywall Specialist. Door Frame composed of suitable premium quality approved powder coated aluminum sections including gaskets & seals. Aluminum door, 1575 x 2690mm high | no | 5 | | |
| 38 | | Custom Door Frame with Top lights , installed in dry wall partitioning with suitable drywall glazing rails, by drywall Specialist. Door Frame composed of suitable premium quality approved powder coated aluminum sections including gaskets & seals. Aluminum door, 960 x 2690 | no | 3 | | |
| 39 | | Custom Aluminum Door Frame with Top lights , installed in dry wall partitioning with suitable drywall glazing rails, by Drywall Specialist. Door Frame composed of suitable premium quality approved powder coated aluminum sections including gaskets & seals. Aluminum door, 2445 x 2690 | no | 1 | | |
| 40 | | Custom Aluminum Double Door Frame with Fanlights , installed in prepared opening and, secured to plastered brickwork and or concrete structure, with non-corrosive mechanical fixings as specified by Door Specialist's Engineer. Door Frame composed of suitable premium quality Powder Coated sections including integrated gaskets & seals Aluminum door, 1700 x 2635 | no | 1 | | |
| | | Total carried to summary | | | | |

15. Metalwork

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| | | Page 1 | | | | |
| | | Page 2 | | | | |
| | | Page 3 | | | | |
| | | Page 4 | | | | |
| | | Page 5 | | | | |
| | | Page 6 | | | | |
| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|--------|------|--------|
| | | <p><u>BILL NO 14</u> <u>PLASTERING</u></p> <p>Supplementary preambles</p> <p>Screed</p> <p>Standard cement: sand screed 1:3 , clean sharp sand, potable water. Minimum thickness 25–40 mm unless otherwise specified. Include bonding slurry where screed is laid monolithically onto concrete</p> <p>Internal plastered</p> <p>Cement:sand plaster 1:5 mix (or as specified), using clean well-graded plaster sand. Additives permitted only where specified. Allow for additional Gypsum Plaster coat to internal plastered walls for painting</p> <p>External plaster</p> <p>Cement:sand mix 1:4 minimum, using washed plaster sand. Include approved waterproofing or polymer additive where specified for enhanced durability.</p> <p><u>Granolithic Screed</u></p> <p><u>1:3 Cement screed steel trowelled on concrete</u></p> | | | | |
| 1 | | 30mm Thick on floors. | m2 | 335.22 | | |
| | | <u>INTERNAL PLASTER</u> | | | | |
| 2 | | On walls | m2 | 329.30 | | |
| 3 | | On narrow width | m2 | 15.00 | | |
| 4 | | On sloping top, front edge and projecting soffit of sills | m | 79.00 | | |
| | | <u>EXTERNAL PLASTER</u> | | | | |
| 5 | | On walls | m2 | 635.81 | | |
| | | <u>Plasterboard Ceilings</u> | | | | |
| 6 | | 12mm thick plastered | m2 | 127.00 | | |
| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| | | <p><u>BILL NO. 15</u> <u>PLUMBING AND DRAINAGE</u></p> <p><u>TRADE PREAMBLES</u> <u>Trade Preambles:</u> For Trade Preambles refer to 'Model Preambles for Trades' (2008 edition) for the full descriptions of material to be used and work to be done in this Bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>uPVC pipes and fittings.</u> Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings. Soil, waste and vent pipes and fittings shall be solvent weld jointed.</p> <p><u>uPVC pressure pipes and fittings:</u> Pipes for water supply shall be of the class stated. Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings. Pipes of 50mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints.</p> <p><u>Concrete pipes:</u> Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings.</p> <p><u>Rainwater Good</u> Provide a complete seamless aluminium rainwater management system, including gutters, downpipes, brackets, outlets, bends, shoes, stop ends, fixings, sealants, and all accessories for a fully operational installation</p> <p>System to be designed, manufactured, and installed by an approved Specialist, using certified equipment for continuous on site roll forming</p> | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| | | <p>Seamless aluminium gutters roll formed on site from pre painted aluminium coil, minimum thickness 0.6–0.8 mm (or as specified)</p> <p>Aluminium alloy suitable for marine/coastal exposure</p> <p>Factory pre finished with polyester, PVDF, or equivalent high durability coating in approved colour</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (halfhard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be Premium-quality chrome-plated brass tapware/fittings. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground.</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include for fixing to walls etc. casting in, building in or suspending not exceeding 1m below suspension level.</p> <p><u>Lead pipes and traps</u></p> <p>All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel.</p> <p><u>Reducing fittings:</u></p> <p>Where fittings have reducing ends or branches they are described as 'reducing'. In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the Contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| | | <p><u>Exposed concrete surfaces:</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gully tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster.</p> <p><u>Excavations:</u></p> <p>No claim for rock excavation will be entertained unless the Contractor has timeously notified the quantity surveyor thereof prior to backfilling. 'Soft rock' and 'hard rock' shall be as defined in 'Earthworks'.</p> <p><u>Laying, backfilling, bedding, etc of pipes:</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions. Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SAB</p> <p><u>Waste unions:</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings.</p> <p><u>Petrolatum anti-corrosion wrapping tape for pipelines, bolts and steel components, including primer and conformable wrap, applied to manufacturer's requirements for long-term corrosion protection</u></p> <p>Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described. Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, 'Layflat' sheeting, securing of same, etc. Prices for wrapping of pipes shall include for all work as described to couplings in the length.</p> | | | | |

17. Plumbing & Drainage

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| | | <u>RAINWATER DISPOSAL</u> | | | | |
| | | <u>Aluminum:</u> | | | | |
| 1 | | Seamless 125 x 95 x 115mm aluminium gutter with baked enamel finish fixed with concealed brackets, all to suppliers specification. | m | 40.60 | | |
| 2 | | 100x75mm Rainwater pipes | m | 14.75 | | |
| 3 | | Extra over gutter for stopped end | No | 2.00 | | |
| 4 | | Extra over gutter for outlet for 100x75mm pipe | No | 2.00 | | |
| 5 | | Extra over rainwater pipe for bend | No | 2.00 | | |
| 6 | | Extra over rainwater pipe for shoe | No | 2.00 | | |
| | | <u>Precast concrete splash-plate</u> | | | | |
| 7 | | 600mm rainwater channel | No | 4.00 | | |
| | | <u>PRECAST CONCRETE CHANNELS</u> | | | | |
| 8 | | Precast concrete combined kerb and drainage channel unit, complete with inlet openings, manufactured to SANS requirements | m | 71.97 | | |
| | | <u>STORMWATER DRAINAGE</u> | | | | |
| 9 | | Excavation in earth not exceeding 1m deep for Blocks & Max Tech trenches | m3 | 12.25 | | |
| 10 | | Unreinforced concrete bedding under precast concrete blocks | m3 | 3.06 | | |
| | | <u>Construct complete sumps, catchpits, inspection chambers, etc including concrete kerbs or precast concrete cover slabs (gratings and covers elsewhere)</u> | | | | |
| 11 | | 1200 x 1200mm Brick catchpit 3000mm deep internally | No | 2.00 | | |
| | | <u>Cast iron gratings, covers, etc</u> | | | | |
| 12 | | 450 x 450mm x 40kg Stormwater grating and frame | No | 4.00 | | |
| | | <u>Municipal connection</u> | | | | |
| 13 | | Provide the sum of Eight Thousand eight hundred Rand (R8 800) for municipal connection | Item | 1.00 | | |
| | | Total carried to summary | | | | |

17. Plumbing & Drainage

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|---------|------|--------|
| | | <u>SLEEVES FOR ELECTRICAL AND TELEPHONE CABLES ETC</u> | | | | |
| 14 | | Excavation in earth not exceeding 1m deep for pipe trenches | m3 | 220.80 | | |
| 15 | | Excavation in earth not exceeding 2m deep for holes, tranches, etc | m3 | 22.62 | | |
| 16 | | Backfilling to pipe trenches compacted to 90% Mod AASHTO density | m3 | 91.08 | | |
| 17 | | Selected filling (placed in 100mm uncompacted layers) | m3 | 55.20 | | |
| 18 | | Unreinforced concrete bedding under pipes | m3 | 74.52 | | |
| | | <u>PVC-U pipes</u> | | | | |
| 19 | | 110mm Pipes laid in trenches (trenches elsewhere) | m | 3200.00 | | |
| | | <u>Draw wires</u> | | | | |
| 20 | | 1,6mm Galvanised steel draw wires in pipes | m | 3200.00 | | |
| | | <u>Construct complete inspection chambers</u> | | | | |
| 21 | | 1590 x 1590mm Brick inspection chamber not exceeding 1000mm deep internally (cover elsewhere) | No | 8.00 | | |
| 22 | | 900 x 900mm x 72kg Cast iron single seal manhole cover and frame | No | 8.00 | | |
| | | <u>SUB-SOIL DRAINAGE</u> | | | | |
| 23 | | Excavation in earth not exceeding 1m deep for pipe trenches | m3 | 23.19 | | |
| 24 | | Excavation in earth exceeding 1m and not exceeding 2m deep for pipe trenches | m3 | 122.40 | | |
| 25 | | Excavation in earth exceeding 2m and not exceeding 4m deep for pipe trenches | m3 | 22.76 | | |
| 26 | | Backfilling to pipe trenches | m3 | 108.59 | | |
| 27 | | Backfilling to pipe trenches compacted to 93% Mod AASHTO density | m3 | 35.89 | | |
| 28 | | Selected granular filling in bedding under and filling around pipes | m3 | 14.36 | | |
| | | <u>Normal duty PVC-U sewer channels</u> | | | | |
| 29 | | 110mm Channels in bottoms of inspection chambers | m | 5.50 | | |
| | | Total carried to summary | | | | |

17. Plumbing & Drainage

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| | | <u>Extra over normal duty PVC-U sewer channels for fittings</u> | | | | |
| 30 | | 110mm Bend | No | 1.00 | | |
| 31 | | 110mm Junction | No | 2.00 | | |
| | | <u>Heavy duty (Class 34) PVC-U sewer and drain pipes</u> | | | | |
| 32 | | 110mm Pipes vertically or ramped to cleaning eyes etc (no excavation) | m | 10.00 | | |
| 33 | | 110mm Pipes laid in and including trenches not exceeding 1m deep (trenches elsewhere) | m | 15.35 | | |
| 34 | | Ditto, but exceeding 1m not exceeding 2m deep | m | 38.68 | | |
| 35 | | 160mm Pipes laid in and including trenches not exceeding 1m deep (trenches elsewhere) | m | 19.97 | | |
| 36 | | Ditto, but exceeding 1m not exceeding 2m deep | m | 69.89 | | |
| 37 | | Ditto, but exceeding 2m not exceeding 4m deep | m | 13.52 | | |
| | | <u>Extra over heavy duty (Class 34) PVC-U sewer and drain pipes for fittings</u> | | | | |
| 38 | | 160mm Bend | No | 4.00 | | |
| 39 | | 160mm Junction | No | 4.00 | | |
| | | <u>uPVC gulleys</u> | | | | |
| 40 | | 160mm Gully not exceeding 500mm deep | No | 1.00 | | |
| 41 | | 160mm Dished gully not exceeding 500mm deep | No | 4.00 | | |
| | | <u>Construct complete precast concrete circular inspection chambers, including benching (covers and channels elsewhere)</u> | | | | |
| 42 | | 900mm Diameter inspection chamber not exceeding 2m deep internally | No | 3.00 | | |
| 43 | | 1250mm Diameter inspection chamber exceeding 2mm and not exceeding 4mm deep internally | No | 3.00 | | |
| | | <u>Cast iron covers etc</u> | | | | |
| 44 | | 900mm Diameter x 204kg pavement manhole cover and frame | No | 3.00 | | |
| | | Total carried to summary | | | | |

17. Plumbing & Drainage

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|--------|------|--------|
| 45 | | 1250mm Diameter x 504kg pavement manhole cover and frame | No | 3.00 | | |
| | | <u>The following in precast concrete inspection chambers</u> | | | | |
| 46 | | Excavation in earth not exceeding 2m deep | m3 | 11.45 | | |
| 47 | | Excavation in earth exceeding 2m and not exceeding 4m deep | m3 | 36.82 | | |
| 48 | | Unreinforced concrete in bottoms | m3 | 2.24 | | |
| | | <u>SUNDRIES</u> | | | | |
| 49 | | Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock | m3 | 46.53 | | |
| 50 | | Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock | m3 | 23.27 | | |
| 51 | | Extra over excavation for pipe trenches, chambers, etc for carting away surplus material to a dumping site to be located by the contractor | m3 | 339.06 | | |
| 52 | | Concrete encasing to 110mm horizontal pipes | m | 10.00 | | |
| 53 | | Concrete encasing to 110mm vertical bend | No. | 3.00 | | |
| | | <u>Municipal connection</u> | | | | |
| 54 | | Provide the sum of Eight Thousand Eight Hundred Rand (R8 800) for municipal connection | Item | 1.00 | | |
| 55 | | Testing soil drainage system | Item | 1.00 | | |
| | | <u>PIPE JACKING INSTATION</u> | | | | |
| | | <u>Jacking establishment</u> | | | | |
| 56 | | Fixed charges | Sum | 1.00 | | |
| 57 | | Time-related charges for jacking operations | Sum | 1.00 | | |
| | | <u>Excavation and backfilling</u> | | | | |
| 58 | | Excavate for pipes at the jacking face (including removal and disposal of surplus excavated material within a 0,5 km radius of the working area) | m3 | 107.86 | | |
| 59 | | Extra over excavation in earth for excavation in soft rock | m3 | 10.79 | | |
| | | Total carried to summary | | | | |

17. Plumbing & Drainage

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-------|------|--------|
| 60 | | Extra over excavation in earth for excavation in hard rock | m3 | 5.39 | | |
| | | <u>Supply of pipes to be jacked</u> | | | | |
| 61 | | 160 mm diameter pipe | m | 56.86 | | |
| | | <u>SANITARY FITTINGS</u> | | | | |
| | | <u>Wash hand basins:</u> | | | | |
| 62 | | Square wall-hung white wash hand basin size 473 x 473 x 645mm colour white with one centre taphole integrated overflow and chainstay hole, mounted to wall on and including two bolts | No | 8.00 | | |
| | | <u>Wash hand basin:</u> | | | | |
| 63 | | Square wall-hung white washhand basin size 609 x 442mm colour white with one centre taphole integrated overflow and chainstay hole, mounted to wall on and including two bolts | No | 1.00 | | |
| | | <u>Urinals:</u> | | | | |
| 64 | | Wall hung back inlet urinal, ultra Eco design to accommodate a water saving 0.9l flush, compact concealed trapway, control rear entry colour white with chromium plated back inlet spreader, 38mm chromium plated domical grating hung on and including two hanger brackets | No | 4.00 | | |
| | | <u>WC suites:</u> | | | | |
| 65 | | White top entry vitreous china wall hung washdown suite comprising 90° outlet open rim pan, size 570 x 370 x 400mm, with back inlet with icon soft close toilet seat with metal hinges and 'Orchid' element for wall hung wc, etc., concealed flush valve, protection cover for service opening and flush pipe, fitted on and including bolt-through the- wall bracket bolted to brick wall | No | 9.00 | | |
| | | <u>Stainless steel domestic inset sinks:</u> | | | | |
| 66 | | Double end bowl inset sink and drainer unit, size 1160 x 500mm overall with two bowls 410 x 343 x 167mm, including two 90mm waste outlets, built into worktop. (Worktop elsewhere) | No | 2.00 | | |
| | | Total carried to summary | | | | |

17. Plumbing & Drainage

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-------|------|--------|
| | | <u>Stainless steel wash trough:</u> | | | | |
| 67 | | Wash trough and drainer unit, size 500 x 450 x 240mm overall, including 1,2mm gauge, built into worktop (Worktop elsewhere) | No | 2.00 | | |
| | | <u>Stainless steel slop hopper:</u> | | | | |
| 68 | | Slop Hopper and drainer unit, 1,2mm thick, including a 100mm high integral splash back to the rear and both sides | No | 1.00 | | |
| | | <u>Stainless steel catering sink:</u> | | | | |
| 69 | | Single bowl catering sink and drainer unit, size 500 x 500 x 230mm deep overall, 1,2mm gauge, with galvanized sheet and slatted under shelf, including splash backs under shelf | No | 1.00 | | |
| | | <u>Stainless steel single wash basin:</u> | | | | |
| 70 | | Stainless steel single rectangular wash basin wall-hung, size 550 x 350 x 140mm, 75mm tap ledge, with overflow | No | 1.00 | | |
| | | <u>WASTE UNIONS, ETC</u> | | | | |
| | | <u>Waste unions etc:</u> | | | | |
| 71 | | 62mm Flange, 80mm long shank with integral overflow | No | 9.00 | | |
| | | <u>Stainless steel waste unions etc:</u> | | | | |
| 72 | | Urinal waste union (domical type) | No | 4.00 | | |
| 73 | | 100 x 100mm square plate with brass | No | 6.00 | | |
| 74 | | 90mm polished basket strainer with overflow connection | No | 4.00 | | |
| 75 | | 40mm pvc waste outlet with basket and plug | No | 4.00 | | |
| | | <u>TRAPS, ETC</u> | | | | |
| | | <u>PVC traps, etc:</u> | | | | |
| 76 | | 38mm PVC double bowl plumbing kit, 50/90mm outlet | No | 6.00 | | |
| 77 | | 101mm PVC "P" trap | No | 1.00 | | |
| | | <u>Traps etc:</u> | | | | |
| 78 | | Chrome plated concealed trap and waste for wash hand basin | No | 10.00 | | |
| | | Total carried to summary | | | | |

17. Plumbing & Drainage

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-------|------|--------|
| | | <u>Rubber traps etc:</u> | | | | |
| 79 | | P/S trap with universal connection for both in and out for 40mm and 50mm | No | 3.00 | | |
| 80 | | ditto, but with T connector to double waste | No | 2.00 | | |
| | | <u>TAPS, VALVES, ETC</u> | | | | |
| | | <u>Shower roses and accessories:</u> | | | | |
| 81 | | 15mm Chrome plated single-function showerhead with self-cleaning nozzle, including 1/2 BSP female inlet | No | 6.00 | | |
| | | <u>Angle regulating valves:</u> | | | | |
| 82 | | 15mm Ball type angle regulating valve, including waste adaptor | No | 10.00 | | |
| | | <u>Urinal flush valves:</u> | | | | |
| 83 | | Toilet Pan Flushmaster with push button flush valve for toilet top entry chrome-plated | No | 9.00 | | |
| 84 | | Exposed non-hold open feature, with 'Ball O Stop control inlet, wall flange, including matching flush pipes and other matching fittings, 600kPa | No | 4.00 | | |
| 85 | | 35mm water supply flush valve, 1.2 straight flush pipe connected to CP on brass adaptor | No | 1.00 | | |
| | | <u>Washbasin mixer:</u> | | | | |
| 86 | | Single lever standard basin mixer, pillar type with single hole, dezincification resistant (DZR) brass | No | 10.00 | | |
| 87 | | Sink mixer | No | 3.00 | | |
| | | <u>Shower mixer:</u> | | | | |
| 88 | | Single lever shower mixer, Starlight chrome finish adjustable flow rate limiter escutcheon and shaft sealing optional temperature limiter | No | 6.00 | | |
| | | <u>Mixers:</u> | | | | |
| 89 | | 15mm Chromium plated single-hole sink mixer with overarm swivel chrome outlet, mounting kit, angle valves and 234mm long flexible inlets | No | 2.00 | | |
| | | Total carried to summary | | | | |

17. Plumbing & Drainage

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|--------|------|--------|
| | | <u>Brass' hose tap:</u> | | | | |
| 90 | | 22mm hose bib tap | No | 5.00 | | |
| | | <u>SANITARY PLUMBING</u> | | | | |
| | | <u>uPVC pipes:</u> | | | | |
| 91 | | 40mm Pipes. | m | 140.00 | | |
| 92 | | 50mm Pipes. | m | 110.00 | | |
| 93 | | 50mm Pipes laid in trenches not exceeding 1m deep | m | 80.00 | | |
| 94 | | 110mm Pipes. | m | 80.00 | | |
| 95 | | 110mm Pipes laid in trenches not exceeding 1m deep | m | 120.00 | | |
| 96 | | 40mm Pipes chased into brick walls. | m | 10.00 | | |
| | | <u>Extra over uPVC pipes for fittings:</u> | | | | |
| 97 | | 50mm Straight reducer | No | 24.00 | | |
| 98 | | 40mm Bend. | No | 46.00 | | |
| 99 | | 50mm Bend. | No | 24.00 | | |
| 100 | | 110mm Bend. | No | 40.00 | | |
| 101 | | 40mm Access bend | No | 24.00 | | |
| 102 | | 50mm Access bend. | No | 12.00 | | |
| 103 | | 40mm Junction. | No | 24.00 | | |
| 104 | | 110mm Junction. | No | 24.00 | | |
| 105 | | 110mm Access bend. | No | 12.00 | | |
| 106 | | 40mm Access junction. | No | 24.00 | | |
| 107 | | 50mm Access junction. | No | 12.00 | | |
| 108 | | 110mm Access junction. | No | 24.00 | | |
| 109 | | 110mm Double junction. | No | 12.00 | | |
| 110 | | 110mm Rodding eye. | No | 8.00 | | |
| 111 | | 110mm Access bend with anti-syphon horn. | No | 8.00 | | |
| 112 | | 50 x 40mm Access reducing junction. | No | 24.00 | | |
| 113 | | 110 x 50mm Access reducing junction. | No | 24.00 | | |
| | | Total carried to summary | | | | |

17. Plumbing & Drainage

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|--------|------|--------|
| 114 | | 110mm Pan connector. | No | 24.00 | | |
| 115 | | 50mm Air release vent valve. | No | 12.00 | | |
| 116 | | 110mm Air release vent valve. | No | 8.00 | | |
| 117 | | 50mm Vent cowl. | No | 8.00 | | |
| 118 | | 110mm Vent cowl. | No | 8.00 | | |
| | | <u>Sundries:</u> | | | | |
| 119 | | Testing waste pipe system. | Item | 1.00 | | |
| | | <u>WATER SUPPLIES</u> | | | | |
| | | <u>High density black polyethylene (HDPE) pipes with and including compression fittings:</u> | | | | |
| 120 | | 25mm Piping laid in trenches not exceeding 1m deep. | m | 40.00 | | |
| | | <u>Extra over HDPE pipes for polypropylene compression fittings:</u> | | | | |
| 121 | | 25mm Fittings. | No | 70.00 | | |
| | | <u>Class 2 copper pipes:</u> | | | | |
| 122 | | 15mm Pipes. | m | 90.00 | | |
| 123 | | 22mm Pipes. | m | 32.00 | | |
| 124 | | 28mm Pipes. | m | 42.00 | | |
| 125 | | 15mm Pipes chased into brick walls. | m | 264.00 | | |
| 126 | | 22mm Pipes chased into brick walls. | m | 32.00 | | |
| 127 | | 28mm Pipes chased into brick walls. | m | 21.00 | | |
| | | <u>Extra over class 2 copper pipes for capillary fittings:</u> | | | | |
| 128 | | 15mm Fittings. | No | 280.00 | | |
| 129 | | 22mm Fittings. | No | 48.00 | | |
| 130 | | 28mm Fittings. | No | 63.00 | | |
| | | <u>Copper overflow and service pipes:</u> | | | | |
| 131 | | 15mm Braided flexible connector 350mm girth. | No | 60.00 | | |
| 132 | | 15mm Braided flexible connector 500mm girth. | No | 14.00 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| | | <u>Sundries:</u> | | | | |
| 133 | | Cut into existing 28mm copper or polycarb pipe and join new 25mm HDPE pipe including all necessary fittings etc | No | 1.00 | | |
| | | <u>TESTING</u> | | | | |
| | | <u>Testing:</u> | | | | |
| 134 | | Testing water pipe system. | Item | 1.00 | | |
| | | <u>ELECTRIC WATER HEATERS</u> | | | | |
| | | <u>electric hot-water storage geyser, complete with all required valves, gauges, drip tray, vacuum breakers, shut-off valve on the cold-water supply, pressure-temperature control valve with drain piping, thermostat, sacrificial anode, and power wiring from the isolator. Unit to be installed strictly in accordance with the manufacturer's specifications and relevant SANS standards</u> | | | | |
| 135 | | 200 Liter wall electric water heater. | No | 1.00 | | |
| | | <u>Fire hydrant pedestals</u> | | | | |
| 144 | | Unreinforced concrete hydrant pedestal 700mm high, cast around vertical pipe with bottom 300mm below ground, 400 x 400mm square at base and tapering to 200 x 305mm overall octagonal shaped top, including excavation, formwork and two coats of paint to exposed surfaces | No | 1.00 | | |
| | | <u>WATER SUPPLIES TO FIRE APPLIANCES</u> | | | | |
| 145 | | Excavation in earth not exceeding 1m deep for pipe trenches | m3 | 36.00 | | |
| 146 | | Excavation in earth not exceeding 1m deep for pipe trenches, holes, etc | m3 | 3.74 | | |
| 147 | | Backfilling to pipe trenches compacted to 90% Mod AASHTO density | m3 | 13.50 | | |
| 148 | | Selected filling (placed in 100mm uncompactd layers) compacted to 90% Mod AASHTO density | m3 | 4.50 | | |
| 149 | | Selected granular filling in bedding under and filling around pipes | m3 | 18.00 | | |
| | | Total carried to summary | | | | |

17. Plumbing & Drainage

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-------|------|--------|
| | | <u>Class 16 PVC-U pressure pipes with rubber ring joints</u> | | | | |
| 150 | | 110mm diameter Pipes laid in and including trenches not exceeding 1m deep | m | 90.00 | | |
| | | <u>Extra over class 16 PVC-U pressure pipes for uPVC pressure fittings with rubber rings</u> | | | | |
| 151 | | 110mm Bend | No | 10.00 | | |
| 152 | | 110mm Tee | No | 8.00 | | |
| 153 | | 110mm BSP adaptor | No | 4.00 | | |
| | | <u>Extra over class 16 PVC-U pressure pipes for cast iron pressure fittings</u> | | | | |
| 154 | | 110mm End cap | No | 2.00 | | |
| 155 | | 110mm Reducer | No | 10.00 | | |
| 156 | | 110mm Tee | No | 10.00 | | |
| 157 | | 110mm Reducing tee | No | 8.00 | | |
| | | <u>Galvanised steel pipes</u> | | | | |
| 158 | | 80mm Pipes | m | 80.00 | | |
| 159 | | 80mm Pipes chased into brickwork | m | 10.00 | | |
| 160 | | 80mm pipes laid in and including trenches not exceeding 1m deep | m | 10.00 | | |
| | | <u>Extra over galvanised steel pipes for steel fittings</u> | | | | |
| | | <u>80mm Fittings</u> | | | | |
| 161 | | 80mm Bush | No | 30.00 | | |
| 162 | | 80mm Elbow | No | 30.00 | | |
| 163 | | 80mm Bend | No | 30.00 | | |
| 164 | | 80mm Tee | No | 30.00 | | |
| 165 | | 80mm Reducing tee | No | 10.00 | | |
| 166 | | 80mm Longscrew connector | No | 10.00 | | |
| 167 | | 80mm Union | No | 10.00 | | |
| | | Total carried to summary | | | | |

17. Plumbing & Drainage

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|------|------|--------|
| | | <u>Sundries</u> | | | | |
| 168 | | Unreinforced concrete in thrust blocks in trenches at bends, tees, etc, including extra excavation, formwork, etc | m3 | 1.00 | | |
| 169 | | 400 x 324 x 152mm x 24kg Cast iron stopcock box including brick chamber below 800mm deep internally | No | 5.00 | | |
| 170 | | 600x 450 x 40mm x 38kg Cast iron meter box and valve chamber, including brick chamber below 800mm deep internally | No | 2.00 | | |
| | | <u>Municipal connection</u> | | | | |
| 171 | | Provide the sum of Eight Thousand and eighty Rand (R8 000) for municipal connection | Item | 1.00 | | |
| | | <u>Testing</u> | | | | |
| 172 | | Testing fire water pipe system | Item | 1.00 | | |
| | | Total carried to summary | | | | |

17. Plumbing & Drainage

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
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| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|--------|------|--------|
| | | BILL NO. 16 | | | | |
| | | TILING | | | | |
| | | WALL TILING | | | | |
| 1 | | Wall tiles 1. 300 x 200mm glazed and rectified premium porcelain wall tiles, fixed to internal wall plaster/plasterboard backing with approved tile adhesive, 2-3mm grout to match on walls | m2 | 34.39 | | |
| 2 | | Walls tiles 2. 300 x 200mm glazed and rectified premium porcelain wall tiles, fixed to internal wall plaster/plaserboard backing with approved tile adhesive. 2-3mm grout to match. Tile and grout colour to be selected. Natural Anodised edge trims visible tile edges. On walls | m2 | 345.25 | | |
| 3 | | Wall tiles 3. 300 x 200mm glazed and rectified premium porcelain wall tiles, fixed to internal wall plaster /plasterboard backing with approved tile adhesive. 2-3mm grout to match. Tile and grout colour to be selected. Natural Anodised edge trims visible tile edges. on walls | m2 | 46.31 | | |
| | | FLOOR TILING | | | | |
| 4 | | Tile 1 - large format full body porcelain lapato floor 600x600 or similar, to be selected from premium range full bodied rectified high traffic glazed lappato tiles, set in manufacturer approved adhesive, and with 2mm water resistant grout (colour to be selected) On floors | m2 | 115.32 | | |
| 5 | | SKIRTING: 120mm high matching tile skirting with edge trims along all walls | m | 160.96 | | |
| | | Total carried to summary | | | | |

18. Tiling

| | | | | | | |
|---|--|--|----|-------|--|--|
| | | <p>Tile 2 - medium format full body porcelain lapato floor: 300x300 or similar, to be selected from premium range full bodied rectified high traffic glazed lappatiles, set in manufacturer approved adhesive, and with 2mm water resistant grout (colour to be selected)</p> | | | | |
| 6 | | on floors | m2 | 94.27 | | |
| 7 | | SKIRTING: 120mm high matching tile skirting with edge trims along | m | 90.51 | | |
| 8 | | <p>Tile 3 - Mosaic full body porcelain glazed matt floor: 50x50 or similar, to be selected from premium range full bodied glazed mosaic tiles, set in manufacturer approved adhesive for wet areas, and with water resistant grout (colour to be selected).</p> <p>On floors</p> | m2 | 4.93 | | |
| | | Total carried to summary | | | | |

18. Tiling

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| | | | | | | |
| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| | | <u>BILL NO17</u> | | | | |
| | | <u>GLAZING</u> <u>GLAZING TO STEEL WITH PUTTY</u> | | | | |
| | | TOPS, SHELVES, DOORS, MIRRORS, ETC | | | | |
| | | <u>6mm Silvered float glass copper backed mirrors with polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u> | | | | |
| | | Mirror 450 x 600mm high | no | 15.00 | | |
| | | Mirror 600 x 1800mm high | no | 2.00 | | |
| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|--------|------|--------|
| | | <u>BILL NO 18</u> | | | | |
| | | <u>PAINTWORK</u> | | | | |
| | | <u>PAINTWORK ETC TO NEW WORK</u> | | | | |
| | | <u>ON FLOOR SURFACES</u> | | | | |
| | | <u>Provide and apply three-coat two-component polyurethane enamel coating for system, including surface preparation and application to manufacturer's specifications, executed by an approved specialist applicator</u> | | | | |
| 1 | | Floors | m2 | 223.00 | | |
| | | <u>ON INTERNAL FLOATED PLASTER SURFACES</u> | | | | |
| | | <u>Prepare, prime and finish concrete wall surfaces and apply two coats of approved matt interior premium-grade acrylic wall paint, completed to manufacturer's requirements.</u> | | | | |
| 2 | | Concrete walls | m2 | 66.87 | | |
| | | <u>ON EXTERNAL FLOATED PLASTER SURFACES</u> | | | | |
| | | <u>Provide and apply one coat acrylic primer and two coats approved water-based acrylic wall coating (light grey), applied by brush, roller or spray, with required drying intervals, all to manufacturer's specification</u> | | | | |
| 3 | | Walls | m2 | 116.90 | | |
| | | <u>One coat of acrylic primer and two coats of water-based textured/acrylic wall coating, applied by brush, roller or spray, in medium grey, allowing appropriate drying time between coats and in accordance with the manufacturer's specifications</u> | | | | |
| 4 | | Walls | m2 | 397.23 | | |
| | | <u>One coat of acrylic primer and two coats of water-based acrylic wall coating, applied by brush, roller, or spray, in medium grey, allowing adequate drying time between coats and strictly in accordance with the manufacturer's specifications</u> | | | | |
| 5 | | Walls | m2 | 89.81 | | |
| | | Total carried to summary | | | | |

20. Paintwork

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|--------|------|--------|
| | | <u>ON PLASTERBOARD SURFACES</u> | | | | |
| | | <u>One coat of acrylic primer and two coats of water-based acrylic wall coating, applied by brush, roller, or spray, in medium grey, allowing adequate drying time between coats and strictly in accordance with the manufacturer's specifications</u> | | | | |
| 6 | | On walls | m2 | 254.71 | | |
| | | <u>One coat prime and two coats emulsion paint with brilliant white humidity and mold resistant</u> | | | | |
| 7 | | Prime and paint with brilliant white humidity and mold resistant | | | | |
| | | Ceilings | m2 | 167.00 | | |
| 8 | | Galvanized roof beams, purlins and bracing. Paint Insulation | m2 | 155.00 | | |
| | | <u>Apply approved epoxy primer and polyurethane topcoat spray paint system suitable for marine/port environment (C4/C5 corrosivity).</u> | | | | |
| | | <u>Balustrade</u> | | | | |
| 9 | | Balustrade | m | 55.00 | | |
| | | <u>Sills</u> | | | | |
| 10 | | Sills | m | 79.00 | | |
| | | Total carried to summary | | | | |

20. Paintwork

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
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| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|------|------|--------|
| | | BILL NO.19 | | | | |
| 1 | | <p><u>Mechanical Installation</u> <u>Fire Protection, Water Reticulation, Air conditioning and ventilation systems</u></p> <p>Allow for all the preliminary and general items required to provide the health & safety, mechanical & electrical installation for this project,</p> | | | | |
| 2 | | <p><u>GUARANTEE AND MAINTENANCE</u> Guarantee and maintenance for the complete installation of mechanical installation including materials and workmanship for a period of TWELVE MONTHS after date of completion</p> | Sum | 1.00 | | |
| 3 | | <p><u>REMOVAL OF WASTE</u> Tenderer to allow for all costs associated with cleaning the site of all rubbish and waste caused by this contract</p> | Sum | 1.00 | | |
| 4 | | <p><u>COMMISSIONING AND TESTING</u> Allow for testing and commissioning the whole of the Mechanical Installation as laid down in the specification and for re-testing as may be required after the making good of all defective work to the satisfaction of the Consulting Engineer.</p> | Sum | 1.00 | | |
| 5 | | <p><u>CERTIFICATE FOR COMPLIANCE</u> Provision for the Certificate of Compliance to be issued on completion of the project.</p> | Sum | 1.00 | | |
| 6 | | <p><u>CONTRACTORS SHOP DRAWINGS</u> Contract shop drawings prepared in accordance with coordinated Architectural, Structural & Service layouts.</p> | Sum | 1.00 | | |
| 7 | | <p><u>PROGRAMMING OF WORKS</u> <u>PRESSURE TEST PIPING</u> Pressure Testing & Inspection of all pipework to meet design specifications.</p> | Sum | 1.00 | | |
| 8 | | <p><u>SCAFFOLDING</u> Provision of Scaffolding for installation of equipment at high level.</p> | Sum | 1.00 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|------|------|--------|
| 9 | | <u>OPERATION & MAINTENANCE MANUALS</u> Provision of Operating and Maintenance Manuals as per the Technical Specification. | Sum | 1.00 | | |
| 10 | | <u>Cleaning, disinfecting, and treating air-conditioning equipment using an approved HVAC cleaning and antimicrobial treatment system, including coil cleaning, duct sanitation (if applicable), and condensate tray treatment, carried out in accordance with the manufacturer's and specialist technician's recommendations.</u> Provision of Treatment | Sum | 1.00 | | |
| 11 | | <u>Variable refrigerant flow (VRF) outdoor condensing unit, inverter-driven, heat-pump type, with multiple refrigerant ports, integrated control electronics, and capacity matched to connected indoor units, complete with mounting, vibration isolation, and commissioning to manufacturer and engineer requirements</u> <u>Variable flow OUTDOOR UNIT</u> Supply with all required accessories, deliver, install, wire to weather proof mechanical DB's connect refrigerant lines and commission as per specification the following outdoor units for use as per design parameters: | | | | |
| 12 | | MULTI V 5 OUTDOOR UNIT MODEL NUMBER: ARUN480LTE5 | No | 1.00 | | |
| | | Supply and Fill Refrigerant gas for HVAC system 9kg | No | 1.00 | | |
| | | <u>Variable refrigerant flow (VRF) indoor fan-coil units, approved equivalent type, complete with electronic expansion valves, condensate drains, washable filters, mounting brackets, and control interface modules, fully compatible with the selected VRF outdoor system and installed to manufacturer and engineer requirements</u> | | | | |
| 13 | | Supply will all required accessories, deliver, install, wire to isolators, connect refrigerant lines and commission as per specification the following Ceiling Mounted Cassette Units and Concealed unit complete with hard wired thermostat remote controls, face panel, return filter, control wiring and commissioning: | | | | |
| 14 | | Ceiling cassette - 4 way, model no: arnu54gtmc4 | No | 2.00 | | |
| | | Total carried to summary | | | | |

21. Mechanical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|-------------|----------------|--|------|-------|------|--------|
| 15 | | Ceiling cassette - 4 way, model no: arnu21gtqb4 | No | 2.00 | | |
| 16 | | Ceiling cassette - 4 way, model no: arnu12gtrb4 | No | 6.00 | | |
| 17 | | Ceiling unit -1 way, model no: arnu18gttc4 | No | 1.00 | | |
| 18 | | Fresh air intake unit, model no: arnu76gb8z4 | No | 1.00 | | |
| 19 | | Ceiling unit -2 way, model no: arnu12gtsa4 | No | 2.00 | | |
| | | <u>MULTI V HEAT ROCOVERY UNITS, HYDRO KIT, HEAT EXCHANGER</u> | | | | |
| 20 | | Supply with all required accessories, deliver, install, wire to isolators, connect refrigerant lines and commission the following Heat Recovery Units, Hydrokit Unit and HEAT Exchanger: | | | | |
| 21 | | Heat recovery unit - 4 port, model no: prhr043a | No | 1.00 | | |
| 22 | | Heat recovery unit - 8 port, model no: prhr083 | No | 2.00 | | |
| 23 | | Vrf water heating hydro kit high temp, model no: arnh08gk3a4 | No | 1.00 | | |
| 24 | | Gasketed plate heat exchanger, model no: se 0020+ 007a00 qnpv0jj 11 / 29 plates max / single pass | No | 1.00 | | |
| 25.0 | | <u>Condenser and Refrigerant pipes :</u> | | | | |
| | | Supply with all required accessories, deliver, install and commission the following refrigerant lines, condensate piping and valves complete Insulation: | | | | |
| 26 | | Y-branch pipe :high pressure gas pipe , copper | No | 3.00 | | |
| 27 | | Y-branch pipe : liquid pipe, copper | No | 5.00 | | |
| 28 | | Y-branch pipe: low pressure gas pipe , copper | No | 3.00 | | |
| 29 | | Y-branch pipe : gas pipe , copper | No | 2.00 | | |
| 30 | | Refrigerant stopper valve model no: prvt120 , copper | No | 27.00 | | |
| 31 | | Refrigerant stopper valve model no: prvt780, copper | No | 11.00 | | |
| 32 | | Refrigerant stopper valve model no: prvt980 , copper | No | 3.00 | | |
| | | Total carried to summary | | | | |

21. Mechanical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-------|------|--------|
| 33 | | Refrigerant straight pipe: 1/2 (inch) , copper | m | 217.9 | | |
| 34 | | Refrigerant straight pipe: 1/4 (inch), copper | m | 217.9 | | |
| 35 | | Refrigerant straight pipe: 3/4 (inch), copper | m | 24.7 | | |
| 36 | | Refrigerant straight pipe: 3/8 (inch), copper | m | 44.9 | | |
| 37 | | Refrigerant straight pipe: 5/8 (inch), copper | m | 52.1 | | |
| 38 | | Refrigerant straight pipe: 7/8 (inch), copper | m | 21.1 | | |
| 39 | | Refrigerant straight pipe: 1+1/8 (inch), copper | m | 31.9 | | |
| 40 | | Refrigerant straight pipe: 1+3/8 (inch), copper | m | 2 | | |
| 41 | | Refrigerant straight pipe: 1+5/8 (inch), copper | m | 8.8 | | |
| 42 | | Refrigerant : 1/2 (inch) , 90° elbow, copper | No | 98 | | |
| 43 | | Refrigerant : 1/4 (inch), 90° elbow, copper | No | 98 | | |
| 44 | | Refrigerant : 3/4 (inch), 90° elbow, copper | No | 36.00 | | |
| 45 | | Refrigerant : 3/8 (inch), 90° elbow, copper | No | 40.00 | | |
| 46 | | Refrigerant : 5/8 (inch), 90° elbow, copper | No | 41.00 | | |
| 47 | | Refrigerant : 7/8 (inch), 90° elbow, copper | No | 21.00 | | |
| 48 | | Refrigerant : 1+1/8 (inch), 90° elbow, copper | No | 37.00 | | |
| 49 | | Refrigerant : 1+3/8 (inch), 90° elbow, copper | No | 4.00 | | |
| 50 | | Refrigerant : 1+5/8 (inch), 90° elbow, copper | No | 12.00 | | |
| 51 | | Refrigerant : 1/2 (inch) , straight coupling, copper | No | 55.00 | | |
| 52 | | Refrigerant : 1/4 (inch), straight coupling, copper | No | 55.00 | | |
| 53 | | Refrigerant : 3/4 (inch), straight coupling, copper | No | 7.00 | | |
| 54 | | Refrigerant : 3/8 (inch), straight coupling, copper | No | 12.00 | | |
| 55 | | Refrigerant : 5/8 (inch), straight coupling, copper | No | 14.00 | | |
| 56 | | Refrigerant : 7/8 (inch), straight coupling, copper | No | 6.00 | | |
| 57 | | Refrigerant : 1+1/8 (inch), straight coupling, copper | No | 8.00 | | |
| 58 | | Refrigerant : 1+3/8 (inch), straight coupling, copper | No | 1.00 | | |
| | | Total carried to summary | | | | |

21. Mechanical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| 59 | | Refrigerant : 1+5/8 (inch), straight coupling, copper | No | 3.00 | | |
| 60 | | Refrigerant : 1/2 (inch) , 45° elbow, copper | No | 30.00 | | |
| 61 | | Refrigerant : 1/4 (inch), 45° elbow, copper | No | 30.00 | | |
| 62 | | Refrigerant : 3/4 (inch), 45° elbow, copper | No | 11.00 | | |
| 63 | | Refrigerant : 3/8 (inch), 45° elbow, copper | No | 12.00 | | |
| 64 | | Refrigerant : 5/8 (inch), 45° elbow, copper | No | 13.00 | | |
| 65 | | Refrigerant : 7/8 (inch), 45° elbow, copper | No | 7.00 | | |
| 66 | | Refrigerant : 1+1/8 (inch), 45° elbow, copper | No | 12.00 | | |
| 67 | | Refrigerant : 1+3/8 (inch), 45° elbow, copper | No | 2.00 | | |
| 68 | | Refrigerant : 1+5/8 (inch), 45° elbow, copper | No | 4.00 | | |
| 69 | | Drainage: Straight pipe , 25 mm Dia, PVC-U, Class 4, SANS966-1 | m | 46.07 | | |
| 70 | | Drainage: Straight pipe , 50 mm Dia, PVC-U, Class 4, SANS966-1 | m | 73.00 | | |
| 71 | | Drainage: 25 mm Dia, 90° Elbow, PVC-U, Class 4, SANS966-1 | No | 35.00 | | |
| 72 | | Drainage: 50 mm Dia, 90° Elbow, PVC-U, Class 4, SANS966-1 | No | 20.00 | | |
| 73 | | Drainage: 25 mm Dia, TEE , PVC-U, Class 4, SANS966-1 | No | 17.00 | | |
| 74 | | Drainage: 50 mm Dia, REDUCING TEE 25MM BRANCH X 50MM MAIN, PVC-U, Class 4, SANS966-1 | No | 24.00 | | |
| 75 | | Drainage: 25 mm Dia, Straight coupling, PVC-U, Class 4, SANS966-1 | No | 22.00 | | |
| 76 | | Drainage: 50 mm Dia, Straight coupling, PVC-U, Class 4, SANS966-1 | No | 14.00 | | |
| 77 | | Drainage: 25 mm Dia, 45° Elbow, PVC-U, Class 4, SANS966-1 | No | 18.00 | | |
| 78 | | Drainage: 50 mm Dia, 45° Elbow, PVC-U, Class 4, SANS966-1 | No | 10.00 | | |
| 79 | | Design of Supports for mechanical works. Supports inclusive of refrigerant pipe supports, Condensate drain piping Supports, Ducting supports and Mechanical Equipment supports. Incl fasteners and vibration pads and dumpers where required | Sum | 1.00 | | |
| | | Total carried to summary | | | | |

21. Mechanical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-------|------|--------|
| 80 | | Supply and delivery of Supports for mechanical works. Supports inclusive of refrigerant pipe supports, Condensate drain piping Supports, Ducting supports and Mechanical Equipment supports. Incl fasteners and vibration pads and dumpers where required | Sum | 1.00 | | |
| 81 | | Installation of Supports for mechanical works. Supports inclusive of refrigerant pipe supports, Condensate drain piping Supports, Ducting supports and Mechanical Equipment supports. Incl fasteners and vibration pads and dumpers where required | Sum | 1.00 | | |
| 82 | | Design, Supply and install supports for all HVAC Ducting | Sum | 1.00 | | |
| | | <u>DUCTING SYSTEM</u> | | | | |
| 85 | | Supply, deliver, Install, test and commission the following duct work with all mechanical equipment for the ventilation systems as per the drawings and Specification. | | | | |
| 86 | | 1500 x 500mm Straight Duct Galvanised Sheet, Rigid | m | 1.5 | | |
| 87 | | 1000 x 500mm Straight Duct Galvanised Sheet, Rigid | m | 3.5 | | |
| 88 | | 500 x 500mm Straight Duct Galvanised Sheet, Rigid | m | 11.9 | | |
| 89 | | 400 x 400mm Straight Duct Galvanised Sheet, Rigid | m | 13.4 | | |
| 90 | | 350 x 350mm Straight Duct Galvanised Sheet, Rigid | m | 1.775 | | |
| 91 | | 350 X 250mm Straight Duct Galvanised Sheet, Rigid | m | 3.6 | | |
| 92 | | 300 x 300mm Straight Duct Galvanised Sheet, Rigid | m | 11.32 | | |
| 93 | | 250 x 250mm Straight Duct Galvanised Sheet, Rigid | m | 14.6 | | |
| 94 | | 200 x 200mm Straight Duct Galvanised Sheet, Rigid | m | 16.2 | | |
| 95 | | 150 x 150mm Straight Duct Galvanised Sheet, Rigid | m | 3 | | |
| 96 | | Ø 125mm Straight Duct Galvanised Sheet, Rigid | m | 14 | | |
| 97 | | Ø 160mm Straight Duct Galvanised Sheet, Rigid | m | 16 | | |
| 98 | | Ø 200mm Straight Duct Galvanised Sheet, Rigid | m | 26.9 | | |
| | | Total carried to summary | | | | |

21. Mechanical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| 99 | | Ø 250mm Straight Duct Galvanised Sheet, Rigid | m | 2 | | |
| 100 | | Ø 125mm Straight Duct Insulated Flexible Duct, Flexible | m | 7 | | |
| 101 | | Ø 160mm Straight Duct Insulated Flexible Duct, Flexible | m | 7 | | |
| 102 | | Ø 200mm Straight Duct Insulated Flexible Duct, Flexible | m | 7 | | |
| 103 | | Ø 250mm Straight Duct Insulated Flexible Duct, Flexible | m | 1 | | |
| 104 | | (1500 x 500) to (1000 x 500)mm Reducer,Rect Galvanised sheet, Transition, Rectangular, two sides parallel symmetrical | No | 1 | | |
| 105 | | (1000 x 500) to (500 x 500)mm Reducer,Rect Galvanised sheet, Transition, Rectangular, two sides parallel symmetrical | No | 1 | | |
| 106 | | (500 x 500) to (400 x 400)mm Reducer,Rect Galvanised sheet, Transition, Rectangular, to Rectangular | No | 1 | | |
| 107 | | (Size to suit selected ACU-5) to (350x 350)mm Redcurrant Galvanised sheet, Transition, Rectangular, to Rectangular | No | 1 | | |
| 108 | | (400 x 400) to (300x 300)mm Reducer,Rect Galvanised sheet, Transition, Rectangular, to Rectangular | No | 1 | | |
| 109 | | (300 x 300) to (350x 250)mm Reducer,Rect Galvanised sheet, Transition, Rectangular, to Rectangular | No | 1 | | |
| 110 | | (350 x 250) to (250x 250)mm Reducer,Rect Galvanised sheet, Transition, Rectangular, to Rectangular | No | 1 | | |
| 111 | | (200x200) to (300x100) mm Reducer,Rect F.O.T (Flat On Top) Galvanised sheet, Transition, Rectangular, to Rectangular | No | 2 | | |
| 112 | | (500 x 500) to (250x 250)mm Reducer,Rect Galvanised sheet, Transition, Rectangular, to Rectangular | No | 1 | | |
| 113 | | (500 x 500) to suit selected Fan equipment (500Dia.)mm Reducer,Rect to Round Galvanised sheet, Transition, Rectangular to Round | No | 1 | | |
| 114 | | (150 x 150) to (Ø125)mm Reducer,Rect to Round Galvanised sheet, Transition, Rectangular to Round | No | 1 | | |
| | | Total carried to summary | | | | |

21. Mechanical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| 115 | | (200 x 200) to (Ø160)mm Reducer, Rect to Round Galvanised sheet, Transition, Rectangular to Round | No | 1 | | |
| 116 | | (250 x 250) to (Ø160)mm Reducer, Rect to Round, Transition, Rectangular to Round | No | 2 | | |
| 117 | | size fo suit Selected fan EFD-2 (Ø200)mm Flexible connector, Flexible connection | No | 2 | | |
| 118 | | size fo suit Selected SFD-1 and attenuators (Ø500)mm Flexible connector, Flexible connection | No | 2 | | |
| 119 | | size fo suit Selected ACU-5 AHU, rectangularmm Flexible connector Galvanised sheet, Flexible connection | No | 2 | | |
| 120 | | Ø 125mm Elbow Galvanised sheet, 90 Degree, r/D=1.5. DIE stamped Elbow | No | 3 | | |
| 121 | | Ø 200mm Elbow Galvanised sheet, 90 Degree, r/D=1.5. DIE stamped Elbow | No | 9 | | |
| 122 | | Ø 160mm Elbow Galvanised sheet, 90 Degree, r/D=1.5. DIE stamped Elbow | No | 9 | | |
| 123 | | (400 x 400)mm Elbow Galvanised sheet, 90 Degree, r/D=1.5. Smooth Radius | No | 1 | | |
| 124 | | (300 x 300)mm Elbow Galvanised sheet, 45 Degree, r/D=1.5. Smooth Radius | No | 2 | | |
| 125 | | (300 x 300)mm Elbow Galvanised sheet, 90 Degree, r/D=1.5. Smooth Radius | No | 2 | | |
| 126 | | (250 x 250)mm Elbow Galvanised sheet, 90 Degree, r/D=1.5. Smooth Radius | No | 1 | | |
| 127 | | (200 x 200)mm Elbow Galvanised sheet, 90 Degree, r/D=1.5. Smooth Radius | No | 1 | | |
| 128 | | To Suit ACU-5 AHU (1600 x 500 x 700)mm Planum Box, insulated with stiffners Galvanised sheet, | No | 2 | | |
| 129 | | 350 x 350mm Duct End Caps Galvanised sheet, Rectangular | No | 1 | | |
| 130 | | 250 x 250mm Duct End Caps Galvanised sheet, Rectangular | No | 2 | | |
| 131 | | 200 x 200mm Duct End Caps Galvanised sheet, Rectangular | No | 1 | | |
| | | Total carried to summary | | | | |

21. Mechanical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| 132 | | 150 x 150mm Balancing Dumper Galvanised sheet, Rectangular | No | 1 | | |
| 133 | | 200 x 200mm Balancing Dumper Galvanised sheet, Rectangular | No | 2 | | |
| 134 | | 350 x 350mm Balancing Dumper Galvanised sheet, Rectangular | No | 1 | | |
| 135 | | Ø 160mm Balancing Dumper Galvanised sheet, Round | No | 3 | | |
| 136 | | Ø 125mm Balancing Dumper Galvanised sheet, Round | No | 4 | | |
| 137 | | 150 x 150mm TAP, Rectangular Galvanised sheet, 45 DEG ANGLE Branch, Rectangular MAIN | No | 1 | | |
| 138 | | 200 x 200 mm TAP, Rectangular Galvanised sheet, 45 DEG ANGLE Branch, Rectangular MAIN | No | 2 | | |
| 139 | | 350 x 350 mm TAP, Rectangular Galvanised sheet, 45 DEG ANGLE Branch, Rectangular MAIN | No | 1 | | |
| 140 | | 350 x 350 mm TAP, Rectangular Galvanised sheet, Plunum Box TAP, Rectangular MAIN | No | 1 | | |
| 141 | | Ø 125mm Tap,Round Galvanised sheet, Branch, Rectangular MAIN | No | 7 | | |
| 142 | | Ø 160mm Tap,Round Galvanised sheet, Branch, Rectangular MAIN | No | 3 | | |
| 143 | | Ø 200mm Tap,Round Galvanised sheet, Branch, Rectangular MAIN | No | 7 | | |
| 144 | | (1500 x 500)mm filter box c/w filters galvanised sheet, filter unit-side access filter housing(1 off), c/w removable filters primary filter : self supporting pleated washable filters, g4 class minimum, 50 mm deep (1 off) secondary filter : self supporting pocket filter to suite, f8 class minimum, 450 mm deep (1 off) | Sum | 1 | | |
| 145 | | Supply and install insulation of Insulation for the ACU (AHU) unit Supply ducting diffusers and return and Supply Plunum Boxes. , | Sum | 1 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| | | <u>Air Diffusers and Louvers: Supply, Deliver, Install, Balance and Commission.</u> | | | | |
| 146 | | EXTRACT DICS VALVE MODEL: LVS/160/G1 Supply with 600x600mm Adaptor Plate and Suframe | No | 2 | | |
| 147 | | Shutter louver model: vk-50/548x548/pvc/colour to architect details pvc uv protected shutter louver for protection against direct ingress of rain, leaves and birds into the discharge openings of ventilation system wire mesh screen rear, finish to architects details. | No | 3 | | |
| 148 | | Weather louvermodel: awk/1/500x500/op/0/p1/colour to architect details aluminum weather reistant louver for protection against direct ingress of rain, leaves and birds into the intake and discharge openings of ventilation systeme comprising of borderframe with rain restant blade sections and wire mesh screen rear, finish epoxycoated to architects details. | No | 2 | | |
| 149 | | Weather louver awk/1/250x250/op/0/p1/colour to architect details aluminum weather reistant louver for protection against direct ingress of rain, leaves and birds into the intake and discharge openings of ventilation systeme comprising of borderframe with rain restant blade sections and coated to architects details. wire mesh screen rear, finish epoxy | No | 3 | | |
| 150 | | Shutter louver model: vk-20/243x243/pvc/colour to architect details pvc uv protected shutter louver for protection against direct ingress of rain, leaves and birds into the discharge openings of ventilation system wire mesh screen rear, finish to architects details. | No | 2 | | |
| 151 | | Weather louver model: awk/1/1500x500/op/0/p1/colour to architect details aluminum weather reistant louver for protection against direct ingress of rain, leaves and birds into the intake and discharge openings of ventilation system comprising of borderframe with rain restant blade sections and wire mesh screen rear, finish epoxy coated to architects details. | No | 1 | | |
| | | Total carried to summary | | | | |

21. Mechanical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-----|------|--------|
| 152 | | Weather louver model: awk/1/300x300/op/0/p1/colour to architect details aluminum weather reistant louver for protection against direct ingress of rain, leaves and birds into the intake and discharge openings of ventilation system comprising of borderframe with rain restant blade sections and wire mesh screen rear, finish epoxy coated to architects details. | No | 1 | | |
| 153 | | Door grill model: ags-t/1/300x400/1/0 door grille with matching rear frame,natural anodised. aluminum | No | 1 | | |
| 154 | | Door grill model: ags-t/1/250x400/1/0 door grille with matching rear frame,natural anodised. aluminum | No | 3 | | |
| 155 | | Door grill model: ags-t/1/500x400/1/0 door grille with matching rear frame,natural anodised. aluminum | No | 2 | | |
| 156 | | Door grill model: ags-t/1/250x500/1/0 door grille with matching rear frame,natural anodised. aluminum | No | 1 | | |
| 157 | | Return air grill model: ah-a/400x400/op/28/3/0/colour to archite's spec natural anodized return air grille. finish to architects details. | No | 3 | | |
| 158 | | Return air grill model: at-ag/200x100/op/28/3/0/colour to architec's spec natural anodized return air grill, duct mounted finish to archtect's details | No | 2 | | |
| 159 | | Return air grill model: ah-ag/500x500/op/28/3/0/colour to architec's spec natural anodized return air grill, duct mounted.finish to architect's details | No | 1 | | |
| 160 | | Air diffuser, three way pattern model: adlq-ck-h-u-0-0/356x356x%%c200/of/3/ / *f aluminum air diffuser with side entry plenum box, with opposite blade volume dumper adjustable from diffuser face. colour and finish to architect's detail., supply with suitable ceiling dapter plate 600x600mm and mounting accessories | No | 2 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-----|------|--------|
| 161 | | Air diffuser, two way pattern model: adlq-ck-v-u-0-c/356x356x%%c125/of/2//*/f aluminum air diffuser with top entry plenum box, with opposite blade volume dumper adjustable from diffuser face. colour and finish to architect's detail. supply with suitable ceiling dapter plate 600x600mm and mounting accessories | No | 1 | | |
| 162 | | Air diffuser, one way pattern model: adlq-ck-h-u-0-c/356x356x%%c125/of/1//*/f aluminum air diffuser with side entry plenum box,with opposite blade volume dumper adjustable from diffuser face. colour and finish to architect's detail. supply with suitable ceiling dapter plate 600x600mm and mounting accessories | No | 1 | | |
| 163 | | Air diffuser, roundmodel: dcv/200/-/-p1/ colour to arch's detail aluminum air diffuser with opposite blade volume dumper adjustable from diffuser face. colourand finish to architect's detail. supply with suitable ceiling dapter plate 600x600mm and mounting accessories | No | 3 | | |
| 164 | | Air diffuser, two way patternmodel: adlq-ck-v-u-0-c/356x356%%c200/of/2e/ /*/f aluminum air diffuser with top entry plenum box, with opposite blade volume dumper adjustable from diffuser face, *colour and finish to architect's detail. supply with suitable ceiling dapter plate 600x600mm and mounting accessories | No | 1 | | |
| 165 | | Air diffuser, one way pattern model: adlq-ck-v-u-0-c/356x356x%%c160/of/1//*/f aluminum air diffuser with top entry plenum box, with opposite blade volume dumper adjustable from diffuser face, *colour and finish to architect's detail. supply with suitable ceiling dapter plate 600x600mm and mounting accessories | No | 1 | | |
| 166 | | Air diffuser, four way pattern model: adlq-ck-h-u-0-o/595x595x%%c250/of/4/ /*/f aluminum air diffuser with side entry plenum box, with opposite blade volume dumper adjustable from diffuser face, colour and finish to architect's detail. supply with suitable ceiling dapter plate 600x600mm and mounting accessories | No | 1 | | |
| | | Total carried to summary | | | | |

21. Mechanical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| 167 | | Air diffuser, one way patternmodel: adlq-ck-h-u-0-0/595x595x%%c250/of/10/*f aluminum air diffuser with side entry plenum box, with opposite blade volume dumper adjustable from diffuser face. colour and finish to architect's detail. supply with suitable ceiling dapter plate 600x600mm and mounting accessories | No | 1 | | |
| 168 | | Air diffuser, two way patternmodel: adlq-ck-v-u-0-c/356x356%%c200/of/2/1/*f aluminum air diffuser with top entry plenum box, with opposite blade volume dumper adjustable from diffuser face, *colour and finish to architect's detail. supply with suitable ceiling dapter plate 600x600mm and mounting accessories | No | 1 | | |
| 169 | | Air diffuser, four way pattern model: adlq-ck-h-u-0-o/595x595x%%c300/of/4/1/*f aluminum air diffuser with side entry plenum box, with opposite blade volume dumper adjustable from diffuser face, colour and finish to architect's detail. supply with suitable ceiling dapter plate 600x600mm and mounting accessories | No | 1 | | |
| 170 | | Air diffuser, one way patternmodel: adlq-ck-h-u-0-0/595x595x%%c300/of/1 /1/*f aluminum air diffuser with side entry plenum box, with opposite blade volume dumper adjustable from diffuser face. colour and finish to architect's detail. supply with suitable ceiling dapter plate 600x600mm and mounting accessories | No | 1 | | |
| 171 | | Air diffuser, two way pattern model: adlq-ck-v-u-0-c/356x356%%c160/of/2e/1/*f aluminum air diffuser with topeentry plenum box, with opposite blade volume dumper adjustable from diffuser face, *colour and finish to architect's detail. supply with suitable ceiling dapter plate 600x600mm and mounting accessories | No | 1 | | |
| 172 | | Air diffuser, two way pattern model: adlq-ck-v-u-0-c/356x356%%c125/of/2e/1/*f aluminum air diffuser with top entry plenum box, with opposite blade volume dumper adjustable from diffuser face, *colour and finish to architect's detail. supply with suitable ceiling dapter plate 600x600mm and mounting accessories | No | 2 | | |
| | | Total carried to summary | | | | |

21. Mechanical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| | | <u>Fire Dumpers: Supply, Deliver, Install, Balance and Commission.</u> | | | | |
| 173 | | Fussable link shutter type fire dumper model: fsdl-11/500x500 supply with all required installation accessores | No | 2 | | |
| 174 | | Fussable link shutter type fire dumper model: fsdl-11/400x400 supply with all required installation accessores | No | 1 | | |
| 175 | | Fire dumper, electric equator model: fdf-e-1/0/c/500x500/600 electric equator 230v spr.return, supply with all required installation accessores | No | 1 | | |
| 176 | | Fire dumper, electric equator model: fdf-e-1/0/c/300x300/400 electric equator 230v spr.return, supply with all required installation accessores | No | 1 | | |
| | | <u>Fans: Supply, Deliver, Install, Balance and Commission.</u> | | | | |
| 177 | | wall mounted fanmodel: wx-9 supply with all required installation accessores | No | 7 | | |
| 178 | | Window mounted fan model: gx-12 supply with all required installation accessores | No | 2 | | |
| 179 | | Wall mounted fan model: aw 200e2-c supply with all required installation accessores | No | 2 | | |
| 180 | | Wall mounted axial fan model: aw 500dv sileo supply with all required installation accessores | No | 3 | | |
| 181 | | Inline ducted fan model: k150 m sileo supply with all required installation accessores | No | 2 | | |
| 182 | | Inline ducted fan model: k200 m sileo supply with all required installation accessores | No | 1 | | |
| 183 | | Inline ducted fan model: ktex 50-30-4 explosion proof, supply with all required installation accessores for flammable stores enviroment | No | 1 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| 184 | | Inline ducted fan model: kv duo 630 ec supply with all required installation accessories | No | 1 | | |
| 185 | | Sound attenuators to suit sfd-1 model: size and performance to suit selected sfd-1 | No | 2 | | |
| 186 | | Wind turbine roof ventilation fan model: 610mm tornado-aluminum supply with all required installation accessories | No | 2 | | |
| 187 | | Design supply and carbon mono-oxide sensor and control system. connect the system to control fans in apparatus bay (model: supply with all required installation accessories, to be installed in apparatus bay | No | 1 | | |
| 188 | | HUMIDSTAT XRH MODEL: XRH Stand alone humidistat switches fan On/Off when RH reaches preset levels. Complete with pull cord override switch to be installed in the Male and female shower fan (EXF1 and EXF3 male and female change rooms) | No | 2 | | |
| 189 | | PASSIVE INFRARED Movement Sensor MODEL: 90219AW To be installed in Toilet Spaces | No | 10 | | |
| 190 | | Time delay units MODEL: DT20 To be installed in Toilet Spaces and Kitchens | No | 8 | | |
| | | <u>Water Reticulation System:</u> | | | | |
| 191 | | For the design, supply, delivery, installation testing and Commissioning of the Water reticulation system including connection pipework, supports, hangers, pipe fittings, valves, pumps and control systems as per the manufacturer's specification and recommendations. Provision shall also be made for all plinths/foundations required under the relevant plant. | | | | |
| | | <u>Pipe Lengths</u> | | | | |
| 192 | | Pipe, DN 65: copper pipe | m | 6 | | |
| 193 | | Pipe, DN 50: copper pipe | m | 12 | | |
| 194 | | Pipe, DN 40: copper pipe | m | 2 | | |
| 195 | | Pipe, DN 32: copper pipe | m | 28 | | |
| | | Total carried to summary | | | | |

21. Mechanical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| 196 | | Pipe, DN 25: copper pipe | m | 40 | | |
| 197 | | Pipe, DN 22: copper pipe | m | 15 | | |
| 198 | | Pipe, DN 20: copper pipe | m | 35 | | |
| 199 | | Pipe, DN 15: copper pipe | m | 24 | | |
| 200 | | Pipe, DN 15: hdpe pipe | m | 24 | | |
| | | <u>Tee fittings</u> | | | | |
| 201 | | Tee, DN 65 x DN 65 x DN 65: copper pipe | no | 1 | | |
| 202 | | Tee, DN 50 x DN 50 x DN 50: copper pipe | no | 2 | | |
| 203 | | Tee, DN 40 x DN 22 x DN 40: copper pipe | no | 1 | | |
| 204 | | Tee, DN 32 x DN 25 x DN 25: copper pipe | no | 1 | | |
| 205 | | Tee, DN 32 x DN 22 x DN 32: copper pipe | no | 5 | | |
| 206 | | Tee, DN 25 x DN 25 x DN 25: copper pipe | no | 2 | | |
| 207 | | Tee, DN 25 x DN 22 x DN 25: copper pipe | no | 3 | | |
| 208 | | Tee, DN 25 x DN 15 x DN 25: copper pipe | no | 9 | | |
| 209 | | Tee, DN 20 x DN 15 x DN 20: copper pipe | no | 7 | | |
| 210 | | Tee, DN 15 x DN 15 x DN 15: hdpe pipe | no | 1 | | |
| | | <u>90 Degrees Fittings</u> | | | | |
| 211 | | DN 65, 90 degree bends | no | 6 | | |
| 212 | | DN 50, 90 degree bends | no | 5 | | |
| 213 | | DN 40, 90 degree bends | no | 5 | | |
| 214 | | DN 32, 90 degree bends | no | 5 | | |
| 215 | | DN 25, 90 degree bends | no | 12 | | |
| 216 | | DN 22, 90 degree bends | no | 15 | | |
| 217 | | DN 20, 90 degree bends | no | 14 | | |
| 218 | | DN 15, 90 degree bends | no | 16 | | |
| | | <u>Strainers</u> | | | | |
| 219 | | Strainer, DN 110 | no | 1 | | |
| | | <u>Isolating valves</u> | | | | |
| 220 | | Isolating valve, DN 50 | no | 4 | | |
| 221 | | Isolating valve, DN 40 | no | 5 | | |
| 222 | | Isolating valve, DN 32 | no | 10 | | |
| 223 | | Isolating valve, DN 25 | no | 5 | | |
| 224 | | Isolating valve, DN 20 | no | 7 | | |
| | | Total carried to summary | | | | |

21. Mechanical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-----|------|--------|
| 225 | | Reducers Reducer, DN 65 x DN 50 | no | 1 | | |
| 226 | | Reducer, DN 50 x DN 20 | no | 1 | | |
| 227 | | Reducer, DN 50 x DN 32 | no | 2 | | |
| 228 | | Reducer, DN 40 x DN 25 | no | 1 | | |
| 229 | | Reducer, DN 32 x DN 25 | no | 2 | | |
| 230 | | Reducer, DN 25 x DN 22 | no | 5 | | |
| 231 | | Reducer, DN 25 x DN 15 | no | 5 | | |
| 232 | | Reducer, DN 20 x DN 15 | no | 6 | | |
| | | <u>Water Reticulation Equipment</u> | | | | |
| 233 | | 500L vertical hot water storage tank with dual coil and back up heating element, tank shall be insulated. Water storage shall include all accessories and fittings as per the specifications and manufacturer's requirements. Concrete slab shall be erected for the hot water storage tank to be installed on, area where tank is installed shall be bunded and waterproofed, with a drainage point in the case of leakage. This shall be read in conjunction with the drawings provided. | no | 1 | | |
| 234 | | In-line vertical multistage centrifugal pump TPE 32-380/2 A-F-A-BAQE-JDB to be used as hot water circulation for the entire hot water system, as indicated on the drawings provided. Pump setup is to come complete with power wiring from isolator, all necessary accessories and pipe work. | no | 1 | | |
| 235 | | High-efficiency variable-speed circulation pump (heat pump system) to circulate refrigerate from the heat exchanger to the hot water storage tank, as indicated on the drawings provided. Pump setup is to come complete with power wiring from isolator, all necessary accessories and pipe work. | no | 2 | | |
| 236 | | Insulation for all hot water pipework, plant, fittings and valves as per specifications. | Sum | 1 | | |
| 237 | | Pipe hangers and supports | Sum | 1 | | |
| 238 | | Installation, Testing and Commissioning | Sum | 1 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-----|------|--------|
| 239 | | <p>Fire Suppression System <u>Supply, deliver and install the following fire protection system, complete with fire extinguishers, hose reel, and all related signage, brackets, supports and all necessary accessories, as per the manufacturer's recommendations.</u></p> <p>Seal all penetrations around pipes, sleeves, cable, etc. all rooms with firestop mortar, to be approved by Employee Engineer, in accordance with the manufacturers installation guide.</p> | Sum | 1 | | |
| 240 | | Fire extinguishers (4.5 kg dry chemical powder) and timber backing board, supports and all necessary accessories, as per the, manufacturer's recommendations. | No | 10 | | |
| 241 | | Fire extinguishers (9 kg dry chemical powder) and timber backing board, supports and all necessary accessories, as per the, manufacturer's recommendations. | No | 10 | | |
| 242 | | Fire extinguishers (6L wet chemical) and timber backing board, supports and all necessary accessories, as per the, manufacturer's recommendations. | No | 1 | | |
| 243 | | Fire extinguishers (9L high expansion foam) and timber backing board, supports and all necessary accessories, as per the, manufacturer's recommendations. | No | 2 | | |
| 244 | | 150x150 mm Fire equipment signages and Photoluminescent emergency exit signages as per fire drawings including all necessary fixing accessories. | No. | 140 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| | | Fire Detection System | | | | |
| 253 | | Supply and Installation of functional fire detection, addressable fire alarm system in entire building. The equipment will be free issued to the contractor. | | | | |
| | | Heavy duty galvanized steel | | | | |
| 253.1 | | 25mm conduit | m | 234 | | |
| 253.2 | | 25mm coupling | no | 8 | | |
| 253.3 | | 25mm 90 degree bends | no | 14 | | |
| 253.4 | | 25mm thread couplings | no | 8 | | |
| 253.5 | | 32mm conduit | m | 157 | | |
| 253.6 | | 32mm coupling | no | 6 | | |
| 253.7 | | 32mm 90 degree bends | no | 11 | | |
| 253.8 | | 32mm thread couplings | no | 10 | | |
| 254 | | Smoke detectors, xp 95 optical smoke detectors | no. | 46 | | |
| 255 | | Heat detector, xp 95 multi-sensor optical/heat detector | no. | 2 | | |
| 256 | | Intelligent manual call point | no. | 11 | | |
| 257 | | Advanced 1-4 loop addressable fire control panel mx-5404 | no. | 1 | | |
| 258 | | Electronic fire alarm sounder | no. | 2 | | |
| 259 | | Addressable open-area sounder beacon installed to manufacturer and engineer specifications. | no. | 1 | | |
| | | Testing and commissioning and handover fully a functional fire detection, addressable fire alarm system in entire building. The equipment will be free issued to the contractor | Sum | 1 | | |
| | | Lift installation | | | | |
| 261 | | Design of fully operated and certified lift complete with all components, with reference to the specification attached to this works information | Sum | 1 | | |
| 262 | | Supply and deliver Lift complete with all components, with reference to the specification attached to this works information. | Sum | 1 | | |
| 263 | | Install lift complete with all components, with reference to the specification attached to this works information. | Sum | 1 | | |
| | | Total carried to summary | | | | |

21. Mechanical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-----|------|--------|
| 264 | | Test, commission, and handover a fully operated and certified lift complete with all components, with reference to the specification attached to this works information. | Sum | 1 | | |
| | | Total carried to summary | | | | |
| | | <p style="text-align: right;">page 1</p> <p style="text-align: right;">page 2</p> <p style="text-align: right;">page 3</p> <p style="text-align: right;">page 4</p> <p style="text-align: right;">page 5</p> <p style="text-align: right;">page 6</p> <p style="text-align: right;">page 7</p> <p style="text-align: right;">page 8</p> <p style="text-align: right;">page 9</p> <p style="text-align: right;">page 10</p> <p style="text-align: right;">page 11</p> <p style="text-align: right;">page 12</p> <p style="text-align: right;">page 13</p> <p style="text-align: right;">page 14</p> <p style="text-align: right;">page 15</p> <p style="text-align: right;">page 16</p> <p style="text-align: right;">page 17</p> <p style="text-align: right;">page 18</p> <p style="text-align: right;">page 19</p> <p style="text-align: right;">page 20</p> | | | | |
| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|--------|------|--------|
| | | <u>BILL NO 20</u> | | | | |
| | | <u>ELECTRICAL WORKS</u> | | | | |
| | | <u>LOW VOLTAGE ELECTRICAL</u> | | | | |
| | | <u>RETICULATION</u> | | | | |
| | | <u>LOW VOLTAGE CABLE AND</u> | | | | |
| | | <u>TERMINATION</u> | | | | |
| 1 | | 6mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable. | m | 70.00 | | |
| 2 | | 10mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable. | m | 50.00 | | |
| 3 | | 25mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable. | m | 120.00 | | |
| 4 | | 35mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable. | m | 120.00 | | |
| 6 | | 240mm ² 3 core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable. | m | 500.00 | | |
| 7 | | 10mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable termination kit. | no | 4.00 | | |
| 8 | | 25mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable termination kit. | no | 4.00 | | |
| 9 | | 35mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable termination kit. | no | 4.00 | | |
| 10 | | 50mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable termination kit. | no | 4.00 | | |
| 11 | | 240mm ² 1core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable termination kit. | no | 4.00 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|---------|------|--------|
| | | <u>CABLE SLEEVE</u> | | | | |
| 13 | | 160mm diameter flexible cable sleeve (underground cable installation sleeve) | m | 1000.00 | | |
| 14 | | 110mm diameter flexible cable sleeve (underground cable installation sleeve) | m | 1000.00 | | |
| | | <u>EXCAVATION AND BACKFILLING</u> | | | | |
| 15 | | Excavation for cable installation (Excavating and backfilling) | m3 | 500.00 | | |
| 16 | | Backfilling using River sand or 3mm screened soil | m3 | 125.00 | | |
| 17 | | Backfilling using 6mm screened soil | m3 | 200.00 | | |
| 18 | | Supply and Installation of Cable Danger Tape | m | 625.00 | | |
| 19 | | Backfilling using excavated soil from site | m3 | 200.00 | | |
| | | <u>TESTING AND COMMISSIONING</u> | | | | |
| 20 | | Testing and Commissioning of complete installation in accordance to SANS 10142-1 including the issue of COC certificates. | sum | 1.00 | | |
| | | <u>STANDBY PLANT</u> | | | | |
| | | <u>STANDBY DIESEL GENERATOR PLANT</u> | | | | |
| 21 | | Design, supply and install a 200kVA, 400V diesel standby generator plant for continuous back-up operation, including all the requirements to obtain the warranty and guarantee. The generator shall be supplied and installed with an automatic changeover panel, battery charger and encased in a 3CR12 stainless steel material with sound attenuation. . The generator plant shall be supplied with a 100m 4 core 35mm ² , ECC, SWA LV 600/1000V cable for connecting the main Distribution board (DB-A) incomer and the changeover panel. The generator plant shall be supplied with a 8 x 35mm ² , ECC, SWA LV 600/1000V termination kit for connecting the main provisional facility incomer and the changeover panel. | sum | 1.00 | | |
| 22 | | Testing and commissioning of the entire installation | sum | 1.00 | | |
| 23 | | Allow for fuel to fill the tank to full capacity (100%) at the time of issuing the first delivery (handover) | sum | 1.00 | | |
| 24 | | Training, including four copies of the Maintenance Manual, Documentation and as built drawings | sum | 1.00 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-------|------|--------|
| | | <u>Ground Floor</u> <u>DISTRIBUTION BOARD</u> | | | | |
| 25 | | Design, Supply and installation of Distribution Board A, comprising of all the switch gear, earth leakage, surge protection, labelling and wiring as per drawing No: PLZENG00051-1-000-E-SL-0001-02 and TPD - 002- DBSPEC | no | 1.00 | | |
| 26 | | Design, Supply and installation of Distribution Board Comprising of all the switch gear, earth leakage, surge protection, labelling and wiring as per drawing No:PLZENG00051-1-000-E-SL-0001-04 and TPD - 002- DBSPEC | no | 1.00 | | |
| 27 | | Design, Supply and installation of Lift Distribution Board ,comprising of all the switch gear, earth leakage with overload protection, circuit breakers, labelling and wiring as per TPD - 002- DBSPEC | no | 1.00 | | |
| | | <u>UPS</u> | | | | |
| 28 | | Supply and Installation of a new modular, online double conversion, 15kVA, 400V UPS. | no | 1.00 | | |
| | | <u>INTERIOR LIGHTING</u> | | | | |
| 29 | | Supply and Installation of new , 77W surface mounts complete with the stainless steel mounting bracket, as per drawing PLZENG00051-1-000-E-LA-0002-01 | no | 1.00 | | |
| 30 | | Supply and Installation of 1200mm X 600mm, 70W recessed mounted , EMG/15 MIN | no | 1.00 | | |
| 31 | | Supply and Installation of 600mm X 600mm, 35W recessed mounted | no | 23.00 | | |
| | | Total carried to summary | | | | |

22. Electrical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| 32 | | Supply and Installation of 600mm X 600mm, 35W recessed mounted , EMG/15 MIN | no | 11.00 | | |
| 33 | | Supply and Installation of new (Industrial LED Luminaire) 49W surfaced mounted , EMG/15 MIN, as per drawing PLZENG00051-1-000-E-LA-0002-01 | no | 2.00 | | |
| 34 | | Supply and Installation of new (Industrial LED Luminaire) 49W surfaced mounted , EMG/15 MIN, as per drawing PLZENG00051-1-000-E-LA-0002-01 | no | 3.00 | | |
| 35 | | Supply and Installation of VLN LED 26W surfaced mounted, as per drawing PLZENG00051-1-000-E-LA-0002-01 | no | 5.00 | | |
| 36 | | Supply and Installation of VLN LED 26W surfaced mounted, EMG/15 MIN, as per drawing PLZENG00051-1-000-E-LA-0002-01 | no | 5.00 | | |
| 37 | | Supply and Installation of bulkhead LED 10W, surface mounted the wall, as per drawing PLZENG00051-1-000-E-LA-0002-01 | no | 17.00 | | |
| 38 | | Supply and Installation of bulkhead LED 10W, surface mounted the wall, EMG/15 MIN, as per drawing PLZENG00051-1-000-E-LA-0002-01 | no | 4.00 | | |
| 39 | | Supply and Installation of LED, downlighter 10W recessed mounted. | no | 20.00 | | |
| 40 | | Supply and Installation of LED, downlighter 10W recessed mounted, EMG/15 MIN | no | 9.00 | | |
| 41 | | Supply and Installation of coreline SPOT LED, downlighter 11W recessed mounted | no | 7.00 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| 42 | | Supply and Installation of new coreline SPOT LED, downlighter 11W recessed mounted, EMG/15 MIN | no | 15.00 | | |
| 43 | | Supply and Installation of 16A one-way light switch complete with recess mount box and cover plate | no | 11.00 | | |
| 44 | | Supply and Installation of one-way, one-lever light switch complete with recess mount box and cover plate, as per drawing PLZENG00051-1-000-E-LA-0002-01 | no | 4.00 | | |
| 45 | | Supply and Installation of 16A one-way, Two-lever light switch complete with recess mount box and cover plate, as per drawing PLZENG00051-1-000-E-LA-0002-01 | no | 1.00 | | |
| 46 | | Supply and Installation of 16A two-way light switch complete with recess mount box and cover plate, as per drawing PLZENG00051-1-000-E-LA-0002-01 | no | 2.00 | | |
| 47 | | Supply and Installation of 16A demountable light switch complete with recess mount box and cover plate, as per drawing PLZENG00051-1-000-E-LA-0002-01 | no | 1.00 | | |
| 48 | | Supply and Installation of 16A three phase industrial four-way light switch complete with recess mount box and cover plate | no | 2.00 | | |
| 49 | | Supply and Installation of occupancy sensor 360°, 7m range complete with all the accessories | no | 19.00 | | |
| 50 | | Supply and Installation of outdoor photo cell, as per drawing PLZENG00051-1-000-E-LA-0002-01 | no | 2.00 | | |
| | | <u>POWER SUPPLY POINTS</u> | | | | |
| 51 | | Supply and Installation of 16A 230V Dedicated Single switch socket outlet (Red) mounted in power skirting | no | 14.00 | | |
| 53 | | Supply and Installation of 16A, single phase, single switched standard socket outlets (grey) mounted in power skirting as per drawing | no | 9.00 | | |
| | | Total carried to summary | | | | |

22. Electrical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| 53 | | Supply and Installation of 16A, single phase, weatherproof single standard socket outlet (White), complete with recessed mount box and cover plate | no | 3.00 | | |
| 54 | | Supply and Installation of 16A, single phase, single standard socket outlet (White), complete with recessed mount box and cover plate. (Installed 300mm above floor level) as per drawing No: PLZENG00051-1-000-E-LA-0003-01 | no | 8.00 | | |
| 55 | | Supply and Installation of 16A, single phase, double switched, double standard socket outlet (White), complete with recessed mount box and cover plate. (Installed 1350mm above floor level) as per drawing No: PLZENG00051-1-000-E-LA-0003-01 | no | 7.00 | | |
| 56 | | Supply and Installation of cavity floor box with 2 x 2 standard socket outlets, and 2 x ethernet double floor sockets CAT 6 & CAT 5 complete with lid, as per drawing No: PLZENG00051-1-000-E-LA-0003-01 | no | 1.00 | | |
| 57 | | Supply and Installation of pull up tower with 2 x standard socket outlet, 1 x RSA Slimline, USB Type - A, Type - C and RJ45 complete with 2.5m power lead, as per drawing No: PLZENG00051-1-000-E-LA- | no | 5.00 | | |
| 58 | | Supply and Installation of 5A, single phase, standard socket outlet (White), complete with recessed mount box and cover plate. installed in ceiling void as per drawing No: PLZENG00051-1-000-E-LA-0003-01 | no | 13.00 | | |
| 59 | | Supply and Installation of 25A single phase isolator (To be installed in ceiling void) | no | 1.00 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|--------|------|--------|
| 60 | | Supply and Installation of 20A, single phase cordgrip isolator (Installed 1800mm above floor level), as per drawing No: PLZENG00051-1-000-E-LA-0003-01 | no | 5.00 | | |
| 61 | | Supply and Installation of 20A, single phase cordgrip isolator weatherproof (Installed 1800mm above floor level), as per drawing No: PLZENG00051-1-000-E-LA-0003-02 | no | 1.00 | | |
| 62 | | Supply and Installation of 10A, single phase cordgrip isolator (Installed 1800mm above floor level), as per drawing No: PLZENG00051-1-000-E-LA-0003-01 | no | 11.00 | | |
| 63 | | Supply and Installation of 10A, single phase cordgrip isolator (To be installed in the ceiling), as per drawing No: PLZENG00051-1-000-E-LA-0003-01 | no | 7.00 | | |
| 64 | | Supply and Installation of , three phase Weatherproof isolator (Mounting Position to be determined on site), as per drawing No: PLZENG00051-1-000-E-LA-0003-01 | no | 3.00 | | |
| 65 | | Supply and Installation of 32A, three phase isolator for the lift (Mounting Position to be determined on site), as per drawing No: PLZENG00051-1-000-E-LA-0003-01 | no | 1.00 | | |
| 66 | | Supply and Installation of 20A, three phase weatherproof isolator (Mounting Position to be determined on site), as per drawing No: PLZENG00051-1-000-E-LA-0003-01 | no | 3.00 | | |
| 67 | | Supply and Installation of 10A, three phase isolator (To be installed under roof slab), as per drawing No: PLZENG00051-1-000-E-LA-0003-01 | no | 4.00 | | |
| | | <u>LOW VOLTAGE CABLES</u> | | | | |
| 68 | | 6mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable. | m | 100.00 | | |
| 69 | | 6mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable termination kit. | no | 4.00 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|---------|------|--------|
| 70 | | 10mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable. | m | 200.00 | | |
| 71 | | 50mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable termination kit. | no | 4.00 | | |
| | | <u>WIRING</u> | | | | |
| 72 | | Low Voltage 4 mm ² stranded house wiring for internal wiring - red | m | 600.00 | | |
| 73 | | Low Voltage 4 mm ² stranded house wiring for internal wiring - white | m | 600.00 | | |
| 74 | | Low Voltage 4 mm ² stranded house wiring for internal wiring - blue | m | 600.00 | | |
| 75 | | Low Voltage 4 mm ² stranded house wiring for internal wiring -black | m | 600.00 | | |
| 76 | | Low Voltage 6 mm ² stranded house wiring for internal wiring - green | m | 1000.00 | | |
| 77 | | Low Voltage 6 mm ² stranded house wiring for internal wiring - red | m | 1000.00 | | |
| 78 | | Low Voltage 6 mm ² stranded house wiring for internal wiring - white | m | 1000.00 | | |
| 79 | | Low Voltage 6 mm ² stranded house wiring for internal wiring - blue | m | 1000.00 | | |
| 80 | | Low Voltage 6 mm ² stranded house wiring for internal wiring - black | m | 1000.00 | | |
| 81 | | Low Voltage 6 mm ² stranded house wiring for internal wiring - green | m | 1000.00 | | |
| | | <u>PVC PRODUCTS, SLEEVES AND CONDUIT ACCESSORIES</u> | | | | |
| 82 | | 20 mm diameter PVC conduit, boxes, couples adapters and accessories | m | 1500.00 | | |
| 83 | | 20 mm diameter PVC conduit chased in wall , boxes, couples adapters and accessories | m | 1500.00 | | |
| 84 | | 25 mm Diameter PVC conduit, boxes, couples adapters and accessories | m | 1300.00 | | |
| 85 | | 25 mm Diameter PVC conduit chased in walls, boxes, couples adapters and accessories | m | 1300.00 | | |
| 86 | | 32 mm Diameter PVC conduit, boxes, couples adapters and accessories | m | 1800.00 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|---------|------|--------|
| 87 | | PVC trunking Wiring Consumable accessories including Lugs, Ferrules, Terminal Blocks, Screws, connections, compression glands etc | sum | 1.00 | | |
| | | <u>Power Skirting</u> | | | | |
| 88 | | Supply and install 3-compartment(70 mm ²) power skirting complete with covers and accessories.(To be mounted along the wall). | m | 425.00 | | |
| | | <u>Cable Ladders and Accessories</u> | | | | |
| 89 | | Supply and installation of powder coated hot dipped galvanised cable ladder including bends, T-Pieces, hot dipped galvanised threaded rod, fasteners and accessories | m | 63.00 | | |
| 90 | | Supply and installation of powder coated and painted hot dipped galvanised P9000 trunking including bends, T-Pieces, hot dipped galvanised threaded rod, fasteners and accessories. | m | 1005.00 | | |
| | | <u>EARTHING AND LIGHTNING PROTECTION</u> | | | | |
| 91 | | Design, Supply and installation of the building earthing and lightning protection including down conductors, conduits for running down conductors, bonding bar, and other accessories. | sum | 1.00 | | |
| | | <u>TESTING AND COMMISSIONING</u> | | | | |
| 92 | | Testing and Commissioning of complete installation in accordance to SANS 10142-1 including the issue of COC certificates | sum | 1.00 | | |
| | | <u>FIRST FLOOR DISTRIBUTION BOARD</u> | | | | |
| 93 | | Design, Supply and installation of Distribution Board Comprising of all the switch gear, earth leakage, surge protection, labelling and wiring as per drawing No: PLZENG00051-1-000-E-SL-0004-03-A and TPD - 002- DBSPEC | no | 1.00 | | |
| | | <u>INTERIOR LIGHTING</u> | | | | |
| 94 | | Supply and Installation of 600mm X 600mm, 35W recessed mounted | no | 40.00 | | |
| 95 | | Supply and Installation of 600mm X 600mm, 35W recessed mounted , EMG/15 MIN | no | 15.00 | | |
| | | Total carried to summary | | | | |

22. Electrical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| 96 | | Supply and Installation of 224 LED, 146W Suspended on ceiling | no | 5.00 | | |
| 97 | | Supply and Installation of 224 LED, 146W Suspended on ceiling, EMG/15 MIN | no | 7.00 | | |
| 98 | | Supply and Installation of bulkhead LED 9W, surface mounted the wall, EMG/15 MIN | no | 10.00 | | |
| 99 | | Supply and Installation of , downlighter 10W recessed mounted. | no | 25.00 | | |
| 100 | | Supply and Installation of new LED, downlighter 10W recessed mounted, EMG/15 MIN | no | 10.00 | | |
| 101 | | Supply and Installation of new coreline SPOT LED, downlighter 11W recessed mounted | no | 30.00 | | |
| 102 | | Supply and Installation of new coreline SPOT LED, downlighter 11W recessed mounted, EMG/15 MIN | no | 10.00 | | |
| 103 | | Supply and Installation of 16A one-way light switch complete with recess mount box and cover plate | no | 5.00 | | |
| 104 | | Supply and Installation of 16A two way one- lever light switch complete with recess mount box and cover plate | no | 5.00 | | |
| 105 | | Supply and Installation of 16A three phase industrial four-way light switch complete with recess mount box and cover plate | no | 6.00 | | |
| 106 | | Supply and Installation of new dimming switch | no | 5.00 | | |
| 107 | | Supply and Installation of occupancy sensor 360°, 7m range complete with all the accessories | no | 25.00 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| | | <u>POWER SUPPLY POINTS</u> | | | | |
| 108 | | Supply and Installation of 16A 230V Dedicated Single switch socket outlet (Red) mounted in power skirting | no | 25.00 | | |
| 109 | | Supply and Installation of 16A 230V single switched socket outlets (White) mounted in power skirting | no | 10.00 | | |
| 110 | | Supply and Installation of 16A 230V single flush switch socket outlet (White), complete with recessed mount box and cover plate. (Installed 300mm above floor level) | no | 10.00 | | |
| 111 | | Supply and Installation of 16A 230V Single flush switch socket outlet (White), complete with recessed mount box and cover plate. (Installed 1350mm above floor level) | no | 3.00 | | |
| 112 | | Supply and Installation of 16A 230V Double flush switch socket outlet (White), complete with recessed mount box and cover plate. (Installed 1350mm above floor level) | no | 3.00 | | |
| 113 | | Supply and Installation of 16A 230V single flush switch socket outlet (White), 2x16A Slimline(164-2) and 1 x RJ45 Modules complete with recessed mount box and cover plate. (Installed in underfloor box with Lid) | no | 8.00 | | |
| 114 | | Supply and Installation of multiplug pull up tower with 2 x 16A RSA(164-1) 2x16A SLIMLINE (164-2) and 1xRJ45 Module with 3.5m POWER LEAD and 16A Slimline(164-2) Plug Top . | no | 5.00 | | |
| 115 | | Supply and Installation of Socket outlet with 2 x 16A Slimline (164-2) and 2 x RJ45 Modules (installed 300mm above floor level) . | no | 10.00 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|--------|------|--------|
| 116 | | Supply and Installation of 5A 230V single flush switch socket outlet (White), complete with recessed mount box and cover plate. (Installed as per drawing No: PLZENG00051-1-000-E-LA-0003-02-A) | no | 7.00 | | |
| 117 | | Supply and Installation of 10A 230V single phase cordgrip isolator (Installed 1800mm above floor level) | no | 8.00 | | |
| 118 | | Supply and Installation of 10A 230V single phase cordgrip isolator (Installed in ceiling void) | no | 10.00 | | |
| 119 | | Supply and Installation of 20A 230V single phase cordgrip isolator (Installed 1800mm above floor level) | no | 6.00 | | |
| 120 | | Supply and Installation of 32A 230V single phase cordgrip isolator (Installation position to be determined on site) | no | 2.00 | | |
| | | <u>LOW VOLTAGE CABLES</u> | | | | |
| 121 | | 6mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable. | m | 200.00 | | |
| 122 | | 6mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable termination kit. | no | 4.00 | | |
| 123 | | 10mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable. | m | 200.00 | | |
| 124 | | 10mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable termination cable | no | 4.00 | | |
| | | <u>WIRING</u> | | | | |
| 125 | | Low Voltage 2.5 mm ² stranded house wiring for internal wiring - red | m | 300.00 | | |
| 126 | | Low Voltage 2.5 mm ² stranded house wiring for internal wiring - white | m | 300.00 | | |
| 127 | | Low Voltage 2.5 mm ² stranded house wiring for internal wiring - blue | m | 300.00 | | |
| 128 | | Low Voltage 2.5 mm ² stranded house wiring for internal wiring -black | m | 300.00 | | |
| 129 | | Low Voltage 2.5 mm ² stranded house wiring for internal wiring - green | m | 300.00 | | |
| 130 | | Low Voltage 4 mm ² stranded house wiring for internal wiring - red | m | 300.00 | | |
| | | Total carried to summary | | | | |


| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|---|----------------|---|------|--------|------|--------|
| 131 | | Low Voltage 4 mm2 stranded house wiring for internal wiring - white | m | 300.00 | | |
| 132 | | Low Voltage 4 mm2 stranded house wiring for internal wiring - blue | m | 300.00 | | |
| 133 | | Low Voltage 4 mm2 stranded house wiring for internal wiring - black | m | 300.00 | | |
| 134 | | Low Voltage 4 mm2 stranded house wiring for internal wiring - green | m | 300.00 | | |
| <u>PVC PRODUCTS, SLEEVES AND CONDUIT ACCESSORIES</u> | | | | | | |
| 135 | | 20 mm diameter PVC conduit, boxes, couples adapters and accessories | m | 750.00 | | |
| 136 | | 20 mm diameter PVC conduit chased in walls, boxes, couples adapters and accessories | m | 750.00 | | |
| 137 | | 25 mm Diameter PVC conduit, boxes, couples adapters and accessories | m | 500.00 | | |
| 138 | | 25 mm Diameter PVC conduit chased in walls, boxes, couples adapters and accessories | m | 500.00 | | |
| 139 | | 32 mm Diameter PVC conduit, boxes, couples adapters and accessories | m | 800.00 | | |
| 140 | | 32 mm Diameter PVC conduit chased in walls, boxes, couples adapters and accessories | m | 800.00 | | |
| 141 | | PVC trunking Wiring Consumable accessories including Lugs, Ferrules, Terminal Blocks, Screws, connections, compression glands etc | m | 1.00 | | |
| <u>POWER SKIRTING</u> | | | | | | |
| 142 | | Supply and install 3-compartment(70 mm2) power skirting complete with covers and accessories.(To be mounted along the wall). | m | 425.00 | | |
| <u>CABLE LADDERS AND ACCESSORIES</u> | | | | | | |
| 143 | | Supply and installation of powder coated hot dipped galvanised cable ladder including bends, T-Pieces, hot dipped galvanised threaded rod, fasteners and accessories | m | 60.00 | | |
| 144 | | Supply and installation of powder coated hot dipped galvanised P9000 trunking including bends, T-Pieces, hot dipped galvanised threaded rod, fasteners and accessories. | m | 980.00 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| | | <u>EARTHING AND LIGHTNING PROTECTION</u> | | | | |
| 145 | | Design, Supply and installation of the building earthing and lightning protection including down conductors, conduits for running down conductors, bonding bar, and other accessories. | sum | 1.00 | | |
| | | <u>TESTING AND COMMISSIONING</u> | | | | |
| 146 | | Testing and Commissioning of complete installation in accordance to SANS 10142-1 including the issue of COC certificates | sum | 1.00 | | |
| | | <u>Parking Junction Box</u> | | | | |
| 147 | | Design, Supply and installation of a Junction box | no | 4.00 | | |
| | | <u>Exterior LIGHTING</u> | | | | |
| 148 | | Supply and Installation of VLN LED 26W surfaced mounted | no | 7.00 | | |
| 149 | | Supply and Installation of new VLN LED 26W surfaced mounted, EMG/15 MIN | no | 4.00 | | |
| 150 | | Supply and Installation of O-line P1000 Stainless Steel Unistrut | m | 65.00 | | |
| 151 | | Supply and install national photocell. Photocell shall be installed in a IP65 housing. | no | 2.00 | | |
| | | <u>LOW VOLTAGE CABLES</u> | | | | |
| 152 | | 4mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable. | m | 50.00 | | |
| 153 | | 4mm ² 4core PVC insulated PVC bedded SWA PVC sheathed 600/1000V ECC cable termination kit. | no | 4.00 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| | | <u>WIRING</u> | | | | |
| 154 | | Low Voltage 2.5 mm2 stranded house wiring for internal wiring - red | m | 50.00 | | |
| 155 | | Low Voltage 2.5 mm2 stranded house wiring for internal wiring - white | m | 50.00 | | |
| 156 | | Low Voltage 2.5 mm2 stranded house wiring for internal wiring - blue | m | 50.00 | | |
| 157 | | Low Voltage 2.5 mm2 stranded house wiring for internal wiring -black | m | 50.00 | | |
| 158 | | Low Voltage 2.5 mm2 stranded house wiring for internal wiring - green | m | 50.00 | | |
| | | <u>PVC PRODUCTS, SLEEVES AND CONDUIT ACCESSORIES</u> | | | | |
| 159 | | 32 mm Diameter PVC conduit, boxes, couples adapters and accessories | no | 12.00 | | |
| 160 | | PVC trunking Wiring Consumable accessories including Lugs, Ferrules, Terminal Blocks, Screws, connections, compression glands etc | sum | 1.00 | | |
| | | <u>EARTHING AND LIGHTNING PROTECTION</u> | | | | |
| 161 | | Design, Supply and installation of the building earthing and lightning protection including down conductors, conduits for running down conductors, bonding bar, and other accessories. | sum | 1.00 | | |
| | | <u>TESTING AND COMMISSIONING</u> | | | | |
| 166 | | Testing and Commissioning of complete installation in accordance to SANS 10142-1 including the issue of COC certificates | sum | 1.00 | | |
| | | Total carried to summary | | | | |

22. Electrical

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|----------------------------------|------|-----|------|--------|
| | | page 1 | | | | |
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| | | Total carried to section summary | | | | |

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|---|----------|--|------|----------|------|-------|
| | Item No. | Description | Unit | Quantity | Rate | Total |
| | | BILL NO.21 | | | | |
| | | CCTV | | | | |
| 1 | | Supply and Installation Flexidome IP indoor 5000i IR 4MP Dome Camera complete with ceiling-mount/wall-mount bracket and mounting accessories | no. | 17.00 | | |
| 2 | | Supply and Installation of Outdoor bullet fixed camera 4MP complete with wall-mount bracket | no. | 2.00 | | |
| 3 | | Supply, deliver, and Installation of Tilt Zoom Camera complete with mounting accessories | no. | 4.00 | | |
| | | Supply, delivery and installation of RJ45 to RJ45 Inline surge arrestor | no. | 5.00 | | |
| | | Software, Licenses, and System Training | | | | |
| 4 | | Cognify client workstations software Cognify camera licences | sum | 23.00 | | |
| | | Cabling | | | | |
| 5 | | Supply, deliver, installation, and termination of CAT6 STP ethernet cable (complete with terminations, labelling, and associated accessories) | m | 1150.00 | | |
| 6 | | 25 mm Diameter hot deep steel galvanised bosal conduit, boxes,couples adapters and accessories | sum | 1.00 | | |
| | | Total carried to section summary | | | | |



| Item no | Description | Unit | Quantity | Rate | Total |
|---|---|------|----------|------|-------|
| BILL NO.22 | | | | | |
| ACCESS CONTROL | | | | | |
| 1 | Supply, delivery, and Installation of Biometric/Card Access Control Reader equal or similar approved to XMP-TMC32xx7. | no. | 7.00 | | |
| 2 | Supply, delivery, and Installation of Electromagnetic Door locks (maglock) including bracket | no. | 7.00 | | |
| 3 | Supply, delivery, and Installation of Break Glass units green call point resettable | no. | 10.00 | | |
| 4 | Supply, delivery, and installation of Key Box Switch | no. | 5.00 | | |
| 5 | Supply, delivery, and Installation Switch No Touch Exit Sensor 12VDC | no. | 6.00 | | |
| 6 | Supply, delivery, and installation expandable to 8 card readers complete with housing and PSU with back-up battery and housing and accessories. | no. | 8.00 | | |
| 7 | Supply, delivery, and installation of Mylar 0.5mm ² Multi Core 8 Pair | m | 500.00 | | |
| 8 | Supply, delivery, and installation of CAT6 Network Cable | m | 1000.00 | | |
| Software, Licenses, and Systems Training | | | | | |
| 9 | Autec Babylon, XMP-Babylon (XMP-NT) System Package license | sum | 1.00 | | |
| 10 | System Base Software package expansions | sum | 1.00 | | |
| 11 | Access Control systems and equipment training including Babylon User Training (new users) | sum | 1.00 | | |
| Total carried to section summary | | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|--------|------|--------|
| | | BILL NO 23 | | | | |
| | | ICT Infrastructure | | | | |
| 1 | | Supply, deliver, installation of Optical Fibre 24 core Single Mode - (Procurement Building to Fire Building) complete with associated accessories for installation and termination | m | 200.00 | | |
| 2 | | Supply, deliver, installation of 43U 800mm Cabinet (complete with cooling fans, breakers, blank plates, brush panels, mounting accessories, cable management, PDU, and back-up battery system) | no. | 1.00 | | |
| 3 | | Supply, deliver, and installation of core switch 24 Port PoE 1G + 2x10G Uplink IP Base - (one to be installed at the Procurement Building and one Fire Building) | no. | 2.00 | | |
| 4 | | Supply, deliver, and installation of 48 Port PoE 2xG Uplink IP Base network switch | no. | 2.00 | | |
| 5 | | Supply, deliver, and installation of 48 Fibre 2U Patch Panel | no. | 2.00 | | |
| 6 | | Supply, deliver, and installation of 24 Fibre 2U Patch Panel | no. | 2.00 | | |
| 7 | | Supply, deliver and installation of LC duplex patch leads Single Mode 1m | no. | 8.00 | | |
| 8 | | Supply, deliver, and installation of 48 CAT6 Patch panel (complete with RJ45-connectors with surge protection and STP patch leads) | no. | 2.00 | | |
| 9 | | Supply, deliver and installation of CAT6 RJ45 LAN point outlet to be installed in power skirting | no. | 20.00 | | |
| 10 | | Supply, deliver and installation of CAT6 RJ45 LAN point outlet to be installed in flush mount 100mm x 50mm box | no. | 4.00 | | |
| 11 | | Supply, deliver, and installation of CAT 6 RJ45 LAN point outlet flush mount block to be installed in the ceiling for Wi-Fi access point | no. | 5.00 | | |
| 12 | | Wi-Fi 802.11ac (Wave 2) controller-based access point, indoor type, with 4x4 MIMO, 3 spatial streams, and advanced RF interference management | no. | 5.00 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|---------|------|--------|
| 13 | | Supply, deliver, and installation of CAT 6 STP ethernet cable for LAN point outlets and Wi-Fi access points complete with RJ45 terminations | m | 1000.00 | | |
| 14 | | Labelling of this section of the installation as specified and /or required by any applicable SANS standard(s), including all necessary and correct fixing materials etc. complete | sum | 1.00 | | |
| 15 | | Complete testing and commissioning of this section of the Network Infrastructure installation as required. Note: Suitably qualified and experienced personnel only to test and commission the relevant equipment / installations | sum | 1.00 | | |
| | | Total carried to summary | | | | |

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
| | | Page 1 page 2 | | | | |
| | | Total carried to section summary | | | | |



| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|--------|------|--------|
| | | <p><u>SECTION No. 3 : EXTERNAL WORKS</u></p> <p><u>BILL NO. 1</u></p> <p><u>EXTERNAL WORK</u></p> <p><u>TRADE PREAMBLES</u></p> <p>Trade Preambles:</p> <p>For Trade Preambles refer to 'Model Preambles for Trades' (2008 edition) for the full descriptions of material to be used and work to be done in this Bill.</p> <p>Where items in this Bill are identical to those in the previous Bills, the descriptions have been shortened, and the full descriptions in the Trades concerned are to be referred to for the full meaning and intent of each item</p> <p><u>Testing of material and filling</u></p> <p>Descriptions of earth filling, compaction, etc shall be deemed to include for all necessary testing required in accordance with the SABS 1200 series</p> <p><u>Precast concrete block road surfacing</u></p> <p>Paving shall be laid in accordance with SABS 1200 MJ, SANS 1058 and the Concrete Masonry Association's specifications</p> <p>Paving shall be laid to herringbone pattern on 20mm thick (thickness after final compaction) clean river sand (preparation of ground or filling elsewhere)</p> <p>Clean sand shall be swept into joints between roadstones at completion</p> <p><u>ROADWORK, PARKING AREAS, PAVING AND RAMPS</u></p> <p><u>Excavation in earth</u></p> <p>Not exceeding 2m deep over site between buildings, retaining walls, etc to reduce levels and dispose in prescribed stock piles on site</p> <p><u>Extra over bulk excavation in earth for excavation in</u></p> | | | | |
| 1 | | Not exceeding 2m deep over site between buildings, retaining walls, etc to reduce levels and dispose in prescribed stock piles on site | m3 | 567.50 | | |
| 2 | | Soft rock | m3 | 56.75 | | |
| 3 | | Hard rock | m3 | 28.38 | | |
| | | Total carried to summary | | | | |

26. External Works

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|--------|------|--------|
| 4 | | <p><u>Extra over all excavations for carting away</u></p> <p>Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor</p> | m3 | 950.00 | | |
| 5 | | <p><u>Keeping excavations free of water</u></p> <p>Keeping excavations free of water other than subterranean water</p> | Item | 1.00 | | |
| 6 | | <p><u>Compaction of surfaces</u></p> <p>Compaction of ground surfaces under pavings etc, including scarifying for a depth of 80mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density</p> | m2 | 950.00 | | |
| | | <u>LAYER WORKS</u> | | | | |
| | | <u>Filling supplied by the contractor under parking areas, roadways, etc</u> | | | | |
| 7 | | G7 material in accordance with SABS 1200 DM, compacted to 93% Mod AASHTO density | m3 | 142.50 | | |
| 8 | | G4 Subbase compacted to 95% MOD AASHTO Density | m3 | 95.00 | | |
| 9 | | G4 Base compacted to 98% MOD AASHTO Density | m3 | 95.00 | | |
| 10 | | 20mm River sand bedding | m2 | 10.00 | | |
| | | <u>Bituminous premix road surfacing</u> | | | | |
| 11 | | 13.2mm Double seal Thick paving to parking areas, roadways, etc including bitumen spray to base course | m2 | 950.00 | | |
| | | <u>60mm Thick 25MPa concrete interlocking block paving of 200 x 100mm grey paving blocks in accordance with SANS 1058, laid to falls on and including 20mm thick sand layer with joints filled in with sand, compacted with a vibration compactor (sand layer elsewhere)</u> | | | | |
| 12 | | Paving to sidewalks etc to falls, including necessary straight edge blocks | m2 | 500.00 | | |
| | | Total carried to summary | | | | |

26. External Works

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| | | <u>Precast concrete finished smooth on exposed surfaces, including bedding, jointing and pointing</u> | | | | |
| 13 | | 125 x 230mm High Channel kerbs (SANS 927 fig 3) with 150 x 150 x 300mm unreinforced concrete haunching at back of each joint, including excavation, backfilling, etc | m | 25.00 | | |
| 14 | | 150 x 250mm High Barrier kerbs (SANS 927 fig 3) with 150 x 150 x 300mm unreinforced concrete haunching at back of each joint, including excavation, backfilling, etc | m | 35.00 | | |
| 15 | | 1000 x 230mm High Vehicular scoop, including excavation, backfilling, etc | m | 30.00 | | |
| 16 | | 1000 x 230mm High transition kerb, including excavation, backfilling, etc | m | 4.00 | | |
| 17 | | 1000 x 230mm High Pedestrian scoop, including excavation, backfilling, etc | m | 10.00 | | |
| 18 | | 1000 x 230mm High Barrier to mountable, including excavation, backfilling, etc | m | 10.00 | | |
| | | <u>Road signs</u> | | | | |
| 19 | | Standard "STOP" sign with 50mm diameter galvanised mild steel post bedded in and including unreinforced concrete base, including any necessary excavation, paint finish, etc | No | 1.00 | | |
| | | <u>Paintwork</u> | | | | |
| | | <u>Prepare and apply two coats white reflective road marking paint on tarmacadam</u> | | | | |
| 20 | | 100mm wide line at parking bay (RM6) | m | 72.00 | | |
| 21 | | 100mm wide pedestrian crossing line (RTM3) | m | 20.00 | | |
| 22 | | 300mm wide yield line (RTM2) | m | 10.00 | | |
| 23 | | Disabled Persons Symbol 750 x 1000mm overall (RM17.3) | No | 1.00 | | |
| 24 | | Pedestrian Crossing 2400 x 10000mm overall (RTM4) | No | 1.00 | | |
| 25 | | Yield control ahead symbol 450 x 1250mm overall (WM5) | No | 1.00 | | |
| | | <u>Ditto, but 150mm white and 200mm yellow, as per drawing detail</u> | | | | |
| 26 | | Painted Island 1200 x 5000mm overall (RM5) | No | 1.00 | | |
| | | Total carried to summary | | | | |

26. External Works

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|--------|------|--------|
| | | <u>CONCRETE STORMWATER CHANNELS ETC</u> | | | | |
| 27 | | Excavation in earth for SWC trenches | m3 | 3.60 | | |
| 28 | | Unreinforced concrete bedding under precast concrete blocks | m3 | 1.38 | | |
| | | <u>Concrete stormwater channels</u> | | | | |
| 29 | | 410 x 180mm Channel 1000mm long with segmental channel with one open end and one stopped end formed therein and finished smooth, including placing in position under shoe of rainwater pipe on a well rammed earth bottom | No | 40.00 | | |
| | | <u>MESH FENCING</u> | | | | |
| | | Note: | | | | |
| | | In high corrosion areas fence posts, stays, gates, etc are to be galvanised | | | | |
| | | <u>Fencing</u> | | | | |
| | | <u>Excavations other than bulk</u> | | | | |
| | | <u>Excavation in earth not exceeding 2m deep:</u> | | | | |
| 30 | | Trenches. | m3 | 4.36 | | |
| 31 | | Holes. | m3 | 3.35 | | |
| | | <u>Extra over excavations other than bulk in earth for excavation in:</u> | | | | |
| 32 | | Soft rock. | m3 | 0.77 | | |
| 33 | | Hard rock. | m3 | 0.39 | | |
| 34 | | Compaction of excavated surfaces, adding suitable material where necessary and compact to 93% Mod AASHTO density | m2 | 950.00 | | |
| | | <u>Extra over all excavations for loading, carting away and dumping</u> | | | | |
| 35 | | Surplus excavated material (no allowance made for increase in bulk) off site to a dumping site located by the contractor. | m3 | 7.71 | | |
| | | <u>Risk of collapse of excavations</u> | | | | |
| 36 | | To sides of trenches and holes not exceeding 1.5m deep | m2 | 81.74 | | |
| | | <u>Keeping excavations free from water</u> | | | | |
| 37 | | Keeping excavations free from water | Item | 1.00 | | |
| | | Total carried to summary | | | | |

26. External Works

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|--------|------|--------|
| 38 | | <u>Unreinforced concrete cast against excavated surfaces</u> 15Mpa/19mm stone Concrete | m3 | 7.71 | | |
| 39 | | <u>Finishing all exposed edges and corners of concrete:</u> 20mm chamfers, sloping and splayed, etc. Hot dipped galvanized palisade fencing: | m | 10.90 | | |
| | | <u>FENCING, GATES, ETC (PROVISIONAL)</u> | | | | |
| 40 | | Supply and deliver high-density and anti-cut pressed mesh fence panels as per specification (similar to free issue material). (300 x 3.05m wide) | m | 200.00 | | |
| | | Supply and deliver compatible fencing posts as per specification. | No | 66.67 | | |
| | | Install new 2400mm high pressed mesh fence, posts, anti-climbing measure (sharktooth bars), including provision of required fixtures. | m | 200.00 | | |
| | | <u>BOUNDRY WALL</u> | | | | |
| | | <u>Excavations</u> | | | | |
| | | <u>excavations in earth not exceeding 2m deep</u> | | | | |
| 41 | | Trenches. | m3 | 17.06 | | |
| | | <u>Extra over excavations other than bulk in earth for excavation in:</u> | | | | |
| 42 | | Soft rock. | m3 | 1.71 | | |
| 43 | | Hard rock. | m3 | 0.85 | | |
| 44 | | Compaction of ground level to a depth of 150mm, adding suitable material where necessary and compact to 93% Mod AASHTO density | m2 | 24.72 | | |
| | | <u>Extra over all excavations for loading, carting away and dumping</u> | | | | |
| 45 | | Surplus excavated material (no allowance made for increase in bulk) off site to a dumping site located by the contractor. | m3 | 17.06 | | |
| | | <u>Risk of collapse of excavations</u> | | | | |
| 46 | | To sides of trenches and holes not exceeding 1.5m deep | m2 | 56.85 | | |
| | | Total carried to summary | | | | |

26. External Works

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| 47 | | <u>Keeping excavations free from water</u> Keeping excavations free from water | Item | 1.00 | | |
| | | <u>FILLING ETC</u> | | | | |
| 48 | | <u>Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 93% Mod AASHTO density</u> Backfilling to tranches, holes, etc | m3 | 10.75 | | |
| | | <u>SOIL POISONING</u> | | | | |
| 49 | | <u>Soil insecticide to be executed with SABS compliance by a firm of specialists under a 5 year guarantee</u> To bottoms and sides of tranches | m2 | 81.57 | | |
| | | <u>Weedkiller mixed in accordance to supplier's specifications</u> | | | | |
| 50 | | To bottoms and sides of tranches | m2 | 81.57 | | |
| | | <u>CONCRETE, FORMWORK & REINFORCEMENT</u> | | | | |
| | | <u>Unreinforced concrete cast against excavated surfaces</u> | | | | |
| | | <u>15Mpa/19mm stone Concrete</u> | | | | |
| 51 | | Surface blinding under footings | m3 | 1.24 | | |
| | | <u>Reinforced concrete cast against excavated surfaces</u> | | | | |
| | | <u>25Mpa/19mm stone Concrete</u> | | | | |
| 52 | | Strip footings | m3 | 6.30 | | |
| | | <u>Reinforcement</u> | | | | |
| | | <u>Mild steel reinforcement to structural concrete work</u> | | | | |
| 53 | | 10mm Diameter bars | t | 0.49 | | |
| | | <u>MASONRY</u> | | | | |
| | | <u>Masonry</u> | | | | |
| | | <u>Brickwork of FBS bricks in class II mortar</u> | | | | |
| 54 | | Piers | m3 | 4.86 | | |
| | | Total carried to summary | | | | |

26. External Works

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|--------|------|--------|
| | | <u>Ditto, but FBA bricks in class II mortar</u> | | | | |
| 55 | | Piers in foundations | m3 | 0.88 | | |
| 56 | | One brick walls | m2 | 98.88 | | |
| 57 | | One brick wall in foundations | m2 | 32.34 | | |
| | | <u>Brickwork sundries</u> | | | | |
| | | <u>Brickwork reinforcement</u> | | | | |
| 58 | | 150mm wide reinforcement built in horizontally | m | 411.98 | | |
| 59 | | 150mm wide reinforcement built in horizontally (in foundations) | m | 41.20 | | |
| | | <u>Movement Joints, etc</u> | | | | |
| | | <u>Expansion joints with bitumen impregnated soft board between vertical brickwork surfaces</u> | | | | |
| 60 | | | | | | |
| 61 | | 10mm joints exceeding 300mm high | m | 9.60 | | |
| 62 | | 10mm joints exceeding 300mm high in foundations | m | 1.74 | | |
| | | <u>Face brickwork</u> | | | | |
| | | <u>Face bricks pointed with recessed and vertical joints</u> | | | | |
| 63 | | Extra over brickwork for face brickwork | m2 | 98.88 | | |
| | | <u>Brick on edge header course coping, sills, etc of face bricks</u> | | | | |
| 64 | | Extra over brickwork for horizontal corbelled band one (1) course high, 85mm protection on band, corbelling on one (1) side pointing on face and soffits | m | 41.20 | | |
| | | Total carried to summary | | | | |

26. External Works

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|------|------|--------|
| | | <u>METALWORK</u> | | | | |
| | | <u>Sundry steelwork</u> | | | | |
| | | <u>Welded screens, gates, etc to brickwork:</u> | | | | |
| 65 | | Single vehicular gate 4360 x 2000mm high, with 1600 x 2000mm double swing gate opening, of 150 x 150 x 4mm hollow section frame with 50 x 75 x 4mm bottom rail section, filled in with 50 x 50 x 5mm inverted angle bars at 150mm centres, with 100 x 100 x 4mm hollow section posts in-between, together with 50 x 10mm flat bar screens/leaf, and fitted with three heavy duty bullet type hinges to gate welded to post and with barrel bolt welded on to gate frame as per architect drawings | No | 1.00 | | |
| 66 | | Double pedestrian gate 1770 x 2055mm high, with 885 x 2005mm double swing gate opening, of 50 x 50 x 4mm hollow section frame with 50 x 75 x 4mm bottom rail section, filled in with 50 x 50 x 5mm inverted angle bars at 150mm centres, together with 50 x 10mm flat bar screens/leaf, and fitted with three heavy duty bullet type hinges to gate welded to post and with barrel bolt welded on to gate frame as per architect drawings | No | 1.00 | | |
| 67 | | Single garden screen 2300 x 1750mm high, with 1125 x 1725mm double swing gate opening, of 50 x 50 x 4mm hollow section frame with 50 x 75 x 4mm bottom rail section, filled in with 50 x 50 x 5mm inverted angle bars at 150mm centres, together with 50 x 10mm flat bar screens/leaf, and fitted with three heavy duty bullet type hinges to gate welded to post and with barrel bolt welded on to gate frame, to align with balustrade as per architect drawings | No | 1.00 | | |
| | | Total carried to summary | | | | |

26. External Works

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|--|------|-------|------|--------|
| | | <u>BOLLARDS</u> | | | | |
| | | <u>Precast concrete bollards</u> | | | | |
| | | <u>excavations in earth not exceeding 2m deep</u> | | | | |
| 68 | | Holes. | m3 | 2.72 | | |
| | | <u>Extra over excavations other than bulk in earth for excavation in:</u> | | | | |
| 69 | | Soft rock. | m3 | 0.27 | | |
| 70 | | Hard rock. | m3 | 0.14 | | |
| 71 | | Compaction of ground level to a depth of 150mm, adding suitable material where necessary and compact to 93% Mod AASHTO density | m2 | 5.45 | | |
| | | <u>Extra over all excavations for loading, carting away and dumping</u> | | | | |
| 72 | | Surplus excavated material (no allowance made for increase in bulk) off site to a dumping site located by the contractor. | m3 | 2.72 | | |
| | | <u>Unreinforced concrete cast against excavated surfaces</u> | | | | |
| | | <u>25Mpa/19mm stone Concrete</u> | | | | |
| 73 | | Holes. | m3 | 2.72 | | |
| | | <u>Risk of collapse of excavations</u> | | | | |
| 74 | | To sides of trenches and holes not exceeding 1.5m deep | m2 | 19.80 | | |
| | | <u>Keeping excavations free from water</u> | | | | |
| 75 | | Keeping excavations free from water | Item | 1.00 | | |
| | | <u>Smooth grey standard precast concrete bollards</u> | | | | |
| 76 | | 250mm diameter bollard, 1200mm high planted to concrete | No | 18.00 | | |
| | | Total carried to summary | | | | |

26. External Works

| Item no. | Payment clause | DESCRIPTION | Unit | Qty | Rate | Amount |
|----------|----------------|---|------|-----|------|--------|
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| | | Total carried to section summary | | | | |



| | Item No. | Description | Unit | Quantity | Rate | Total |
|--|----------|---|------|----------|------|----------------|
| | | <p>Section 4</p> <p>BILL NO.1</p> <p><u>PROVISIONAL SUMS</u></p> <p>Work for which budgetary allowances are provided will be measured and valued in accordance with the relevant building contract and deducted in whole or in part if not required without any compensation for loss of profit on the said allowances</p> <p><u>Where stated, the contractor may allow for profit if required</u></p> <p>Furniture</p> <p>Provide the provisional sum of R1 600 000.00(One million six hundred thousand) for the supply, delivery and installatoin of furniture.</p> <p>Profit</p> <p>Attendance</p> <p>SIGNAGE AND NOTICE BOARDS</p> <p>Provide the amount of R 50 000.00 (Fifty Thousand Rands) for external Signage and Notice Boards</p> <p>Profit</p> <p>Attendance</p> <p>Provide the amount of R 50 000.00 (Fifty Thousand Rands) for internal Signage and Notice Boards</p> <p>Profit</p> <p>Attendance</p> | | | | |
| | | | item | 1.00 | | R 1,600,000.00 |
| | | | item | | | |
| | | | item | | | |
| | | | item | 1.00 | | R 50,000.00 |
| | | | item | | | |
| | | | item | 1.00 | | R 50,000.00 |
| | | | item | | | |
| | | | item | | | |
| | | Total carried to section summary | | | | |