

Item No.	Description	Quantity	Rate	Amount
1	<u>SECTION 1 - GENERAL PROVISIONS</u>			
1.1	BILL No.1 : PRELIMINARIES For Preambles refer to the ASAQS "Model Preambles to All Trades", 2008 Edition Supplementary preambles are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles shall take precedence over the provisions of the said Model Preambles The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the said Model Preambles and in any supplementary preambles <u>PRICING OF PRELIMINARIES</u> <u>CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS</u>			
1.1.1	The Contractor's general obligations:			
	(a) Fixed obligations -	lump	sum	
	(b) Value-related obligations -	lump	sum	
	(c) Time-related obligations month 6	6		
1.1.2	Contractors General Obligations in terms of OHS 1993 Health and Safety Specification			
	(a) Fixed obligations -	lump	sum	
	(b) Time-related obligations month 6	6		
1.1.3	Supply protective clothing for site staff			
	(a) Reflective vests N°	10		
	(b) Reflective bibs N°	10		
	(c) Hard hats N°	10		
	(d) Protective foot wear N°	10		
	(e) Earplugs N°	10		
	(f) Dust masks N°	10		
	(g) Gloves for concrete work N°	10		
	(h) Two piece conti-suit Orange colour with EPWP on the back written in black to screen print N°	10		
1.1.4	Provisional Amounts by the Engineer			
	(a) Provide the amount of <u>R 5 500.00</u> (Five thousand five hundred rands) per month to be used for Community Liason Officer N°	6		
	(b) Provide the amount of <u>R 5 000.00</u> (Five thousand rands) per month to be used for Security N°	6		
	(c) Provide the amount of <u>R 300</u> (Three hundred rands) per month to be used for 6 PSC members N°	6		
Total Carried Forward To Summary			R	

Item No.	Description	Quantity	Rate	Amount
2	SECTION 2 - SITEWORKS			
2.1	BILL No. 1: EARTHWORKS (PROVISIONAL)			
	SUPPLEMENTARY PREAMBLES			
	Nature of ground Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes			
	Carting away of excavated material Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site For Preambles refer to the ASQA "Model Preambles to All Trades", 2008 Edition			
	SITE CLEARANCE ETC			
	User Note: Where the value is of significance, the removal of hedges etc shall be given separately in meters or in number			
	Site clearance			
2.1.1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc. including removal from site	m ²	3 500	
	BULK EXCAVATION, FILLING, ETC			
	Open face excavation in earth over sloping site			
2.1.4	Open face excavation to reduce levels	m ³	300	
	Extra over bulk excavation in earth for excavation in			
2.1.5	Intermediate excavation	m ³	200	
	Extra over all excavations for carting away			
2.1.9	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m ³	200	
	Keeping excavations free of water			
2.1.10	Keeping excavations free of all water other than subterranean water		Item	
	Earth filling obtained from the excavations and/or prescribed stock piles on site including haulage approximately 50m from perimeter of excavations or stock piles compacted to 98% Mod AASHTO density			
2.1.11	Over site to form platforms	m ³	300	
	Earth filling of G6 material supplied by the contractor compacted to 98% Mod AASHTO density			
2.1.12	Over site and to form platforms	m ³	100	
2.1.13	Behind retaining walls	m ³	25	
Total Carried Forward				

Item No.	Description	Quantity	Rate	Amount
Brought Forward				
2.1.14	<u>Compaction of surfaces</u> Compaction of ground surface under floors 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	428	
2.1.15	<u>Prescribed density tests on filling</u> "Modified AASHTO Density" test	Nº	12	
Total Carried Forward To Summary				R

Item No.	Description	Quantity	Rate	Amount
2	SECTION 2 - SITEWORKS			
2.2	BILL No. 2 : SITE DRAINAGE			
	Subsoil Drainage			
	Descriptions for pipes below ground shall be deemed to include excavations, backfilling, compaction and carting away of surplus material from site.			
	Composite subsoil drainage systems:			
2.2.1	Geocomposite pre-manufactured drainage system (Kaytech Flo-Drain) with Flownet drainage core			
	(i) Flodrain A2 (30m x 600mm) along Driveway	m	100	
	(ii) Flodrain A2 (30m x 600mm) along Apron Slab	m	50	
	(iii) GeoPipe (6m x 100mm) M100 meshcore HDPE drainage pipe	m	150	
2.2.2	Extra over for 110mm capped end	No.	2	
2.2.3	Extra over for 110mm T-piece	No.	2	
	Open Channel Concrete Drains			
	Earthworks			
2.2.4	Reduce levels in earth not exceeding 1m deep	m ³	25	
2.2.5	Extra over all excavations for loading, carting and dumping surplus excavated material within site	m ³	25	
2.2.6	25MPa/19mm Reinforced concrete in panels cast against compacted earth laid to falls and currents	m ³	15	
2.2.7	Finishing to top surfaces of concrete with smooth wood float (Class FM2) to channels to falls and currents	m ²	140	
	Reinforcement			
2.2.8	Type Ref. 193 fabric reinforcement in concre channels	kg	265	
	Apron Concrete Drains Cast in Pannels on waterproofing (measured somewhere else)			
2.2.4	Reduce levels in earth not exceeding 1m deep	m ³	16	
2.2.5	Extra over all excavations for loading, carting and dumping surplus excavated material within site	m ³	16	
2.2.6	25MPa/19mm Reinforced concrete in panels cast against compacted earth laid to falls and currents	m ³	12	
2.2.7	Finishing to top surfaces of concrete with smooth wood float (Class FM2) to channels to falls and currents	m ²	115	
	Reinforcement			
2.2.8	Type Ref. 193 fabric reinforcement in concre channels	kg	215	
	Damp - Proofing of Apron Concrete Drains			
2.2.9	One layer of 250 micron USB Green waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"	m ²	115	
Total Carried Forward To Summary			R	

Item No.	Description	Quantity	Rate	Amount
2	SECTION 2 - SITEWORKS			
2.3	BILL No. 3 : ROADWORKS			
	PAVEMENT LAYERS			
	Compaction of surfaces			
	Compaction of ground surface under roadworks etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density			
2.3.1	In access road and Parking Areas m³	195		
	G6 material in stockpiles selected from site excavations compacted to 93% Mod AASHTO density, material with a PI not exceeding 6, free from stones exceeding 20mm, organic matter and lumps of clay, compacted in layers not greater than 150mm thick.			
2.3.2	In access road and Parking Areas m³	195		
	Imported G2 material obtained from commercial sources supplied by the contractor, compacted to 87% Relative Density or other approved gravel material with a PI not exceeding 6, free from stones exceeding 20mm, organic matter and lumps of clay, compacted in layers not greater than 150mm thick.			
2.3.3	In access road and Parking Areas m³	195		
	PRECAST CONCRETE KERBING			
2.3.4	Prefabricated mountable kerb, SABS 927 Figure 7 m³	130		
	Concrete kerbing-channelling combination:			
2.3.5	Prefabricated battered kerb, SABS 927 Fig 7, with 300 mm wide cast in situ class 20/19 concrete channel, as shown on the Drawings* m	150		
	ASPHALT SURFACING			
	Prime Coat			
2.3.6	MC-30 cut-back bitumen litre	780		
	Asphalt surfacing 25 mm thick using 60/70 penetration-grade bitumen:			
2.3.7	Continuously graded, fine grade m²	1 280		
2.3.8	Tack coat of 30% stable-grade emulsion litre	780		
Total Carried Forward To Summary			R	

Item No.	Description	Quantity	Rate	Amount
2	<u>SECTION 2 - SITEWORKS</u>			
2.4	<u>BILL No. 4 : FENCING</u>			
2.4.1	CLEAR VU FENCE			
	Supply and erect new Clear Vu Fence all galvanised and Marine Fusion Bond coated			
	(i) Supply and Install 2.1m high x 3m wide mesh panels including 2.7m long posts, brackets and accessories	m 272		
	(ii) Shark Tooth Spike - 100mm x 1.65m length	m 272		
	(iii) Supply 4.2m wide x 2.1m high Pedestrian Gate	Nº 1		
	(iv) Supply 4.2m wide x 2.1m high Sliding Gate	Nº 1		
2.4.2	Cut-out existing welded mesh fence and make good to suit double swing gate	Item Prov. Sum	15 000.00	15 000.00
2.4.2	Welded mesh double swing gate	Item Prov. Sum	8 000.00	8 000.00
Total Carried Forward To Summary			R	

Item No.	Description	Quantity	Rate	Amount
2	SECTION 2 - SITEWORKS			
2.5	<u>BILL No. 5 : PLUMBING AND DRAINAGE</u> <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 or sealed with butyl rubber rings <u>uPVC pressure pipes and fittings</u> Pipes of 50mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings pipes of 63mm 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 <u>High density polyethylene (HDPE) pipes and fittings</u> Pipes shall be type IV and of the class specified with Plasson or Alprene compression fittings <u>Polycorp polypropylene pipes</u> Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with Fast-Fuse heat welded thermoplastic or where so described Polylock compression fittings. Pipes shall be firmly fixed to walls, etc. with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions. <u>Copper pipes</u> Pipes shall be hard drawn and half-hard Maksal pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard) Class 2 (Half-hard) 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 antisiphon pipes, capillary solder fittings and compression fittings shall be Cobra Watertech type. Capillary solder fittings shall comply with ISO 2016. <u>Excavations</u> No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling Intermediate material and "hard material" shall be as defined in "Earthworks" <u>Laying, backfilling, bedding, etc. of pipes</u> 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 clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB: Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes).			

Item No.	Description	Quantity	Rate	Amount
	RAINWATER DISPOSAL			
	Ogee profile aluminium H3003h 14 or other approved seamless gutter in marble white colour with and including matching rivet fixed mitres and end caps internally sealed using "Sika" or other approved silicon mastic sealer. Gutters are to be hung with nailed fixed internal aluminium hangers at 600mm centres to fibre cement fascia boards (Fibre cement fascia boards elsewhere measured)			
2.5.1	125 x 85 x 0.6mm Ogee profile gutter	m	25	
2.5.2	Extra on gutter for corner	Nº	4	
	Marley or other approved uPVC downpipes			
2.5.3	75mm Diameter rainwater pipe	m	15	
2.5.4	Extra on rainwater pipe for bend	Nº	4	
2.5.5	Extra on rainwater pipe for outlet	Nº	4	
	SOIL DRAINAGE			
	Earthworks : Pipe Trenches			
	Set Out, Excavate in all materials for trenches backfill, compact and dispose of surplus / unsuitable material for pipes			
2.5.6	Exceeding 1.0m but not exceeding 1.5m	m³	60	
	Bedding			
2.5.7	Supply, place, compact, and test bedding selected from excavations on site	m³	10	
	PVC pipes in class B bedding:			
2.5.8	50mm Pipes vertically or ramped to cleaning eyes etc (no excavation)	m	18	
2.5.9	110mm Pipes vertically or ramped to cleaning eyes etc (no excavation)	m	12	
2.5.10	110mm Pipes laid in trenches excluding excavation	m	150	
	SANITARY FITTINGS			
2.5.11	Lecico Atlas/ Delt P-Trap Pan and AP110 Low level Vall Vaal Sanitaryware vitreous china "Daisy" semi-close coupled 90° outlet open rim washdown pan (Code 751400) and matching 9 litre cistern (Code 7116SC) complete with lid, fittings and flush pipe elbow.	Nº	1	
2.5.12	Vaal Sanitaryware vitreous china 510 x 405mm round "Hibiscus" Code 7023 basin with one taphole	Nº	1	
2.5.13	Budgetary Allowances			
	(i) Allow for an amount of R 15 000 for materials ordered by the Engineer	P. Sum	1	15 000.00
	WATER SUPPLY AND CONNECTIONS			
	Allow for an amount of R 50 000 for materials in water supply and water connection as ordered by the Engineer	P. Sum	1	50 000.00
Total Carried Forward To Summary			R	

Item No.	Description	Quantity	Rate	Amount
3	<u>SECTION 3 - BUILDING WORK</u>			
3.1	BILL No. 1 : EXCAVATION OTHER THAN BULK			
	The Tenderer is referred to the relevant Clauses in the Standard Preambles to All Trades and to the Supplementary Preambles which are incorporated in these Bills of Quantities.			
	Excavation in soft excavation not exceeding 2m deep for:			
3.1.1	Reduced levels under floors.	m ³	3	
3.1.2	Foundation Trenches.	m ³	15	
	<u>FILLING, ETC.</u>			
	<u>Filling with material from the excavations or from spoil heaps on site, compacted to a density of at least 90% Mod AASHTO maximum density</u>			
3.1.3	Over site, including transporting a distance not exceeding 200m.	m ³	3	
	<u>Filling with material from the excavations or from spoil heaps on site, compacted to a density of at least 95% Mod AASHTO maximum density</u>			
3.1.4	Backfilling to trenches, pit, etc.	m ³	10	
	<u>Filling with approved G6 material supplied and carted onto site by the contractor, compacted to a density of at least 95% Mod. AASHTO maximum density:</u>			
3.1.5	Under floors.	m ³	5	
	<u>Filling with approved G2 material supplied and carted onto site by the contractor, compacted to a density of at least 95% Mod. AASHTO maximum density:</u>			
3.1.6	Under floors.	m ³	NIL	
	<u>Approved coarse river sand filling supplied and carted onto site by the contractor, compacted to a density of at least 95% Mod. AASHTO maximum density:</u>			
3.1.7	25mm Thick layer under floors.	m ²	430	
	<u>PROTECTION AGAINST TERMITES</u>			
	<u>Protection against subterranean wood-destroying termites:</u>			
3.1.8	Under floors, etc., including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming.	m ²	430	
Total Carried Forward To Summary				R

Item No.	Description	Quantity	Rate	Amount
3	<u>SECTION 3 - BUILDING WORK</u>			
3.2	<u>BILL No. 2 : CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>Concrete Class 25/19mm stone in:</u>			
3.2.1	Column footings and Strip footings. (Provisional).			
	(i) Main Building Structure	m ³	NIL	
	(ii) Guardhouse	m ³	5	
	<u>FORMED VIBRATED REINFORCED CONCRETE</u>			
	<u>Concrete Class 25/19mm stone in:</u>			
3.2.2	Concrete foundation columns for steel columns	m ³	NIL	
3.2.3	Surface beds, etc., cast in panels on waterproofing (elsewhere measured).	m ³	2	
3.2.4	Ramps	m ³	18	
	<u>FINISHING TOP SURFACES OF CONCRETE</u>			
	<u>Finish top surfaces of concrete smooth with a Class U3 Steel Trowel Finish to an even surface:</u>			
3.2.5	Ramps to falls	m ²	75	
	<u>Finishing top surfaces of concrete smooth with a power float</u>			
3.2.6	Surface beds : (<i>NOTE : Power Floated Concrete</i>)	m ²	430	
	<u>FORMWORK</u>			
	<u>Formwork Class 1 Ordinary Finish to:</u>			
3.2.7	Edges, ramps risers, ends and reveals not exceeding 300mm high or wide.	m	15	
	<u>Formwork Class F2 Smooth Finish to:</u>			
3.2.8	Column Bases.	m ²	NIL	
	<u>MOVEMENT JOINTS, ETC</u>			
	<u>Expansion joints formed with 12mm bitumen impregnated softboard fillerboard between vertical concrete surfaces:</u>			
3.2.9	Joints not exceeding 300mm high.	m	17	
	<u>Construction joints formed with alternating slab construction between slab panels</u>			
3.2.10	Joints not exceeding 300mm high.	m	210	
Total Carried Forward				

Item No.	Description	Quantity	Rate	Amount
Brought Forward				
	<u>REINFORCEMENT</u>			
	<u>Steel Fabric Reinforcement:</u>			
3.2.11	Type 193 fabric reinforcement in concrete surface beds.	kg 27		
3.2.12	Type 245 fabric reinforcement in concrete surface beds.	kg 1 055		
3.2.13	Type 245 fabric reinforcement in ramps	kg 180		
	<u>High Tensil Steel Reinforcement</u>			
3.2.14	10mm Diameter	kg 89		
3.2.15	12mm Diameter	kg 155		
3.2.16	16mm Diameter	kg 0		
Total Carried Forward To Summary				R

Item No.	Description	Quantity	Rate	Amount
Bill No. 2 : Concrete, Formwork and Reinforcement				C20. 11
3	<u>SECTION 3 - BUILDING WORK</u>			
3.3	<u>BILL No. 3 : MASONRY</u>			
	<u>BRICKWORK</u>			
	<u>FOUNDATIONS (PROVISIONAL)</u>			
	<u>Brickwork of NFXE bricks (14 Mpa nominal compressive strength in class I mortar in loadbearing wall etc</u>			
3.3.1	One brick wall			
	(i) Main Building Structure m ²	NIL		
	(ii) Guardhouse m ²	25		
	<u>Face brickwork (Starting at one Course Below NGL) pointed with recessed horizontal and vertical joints</u>			
3.3.2	Extra over brickwork for face brickwork			
	(i) Main Building Structure m ²	NIL		
	(ii) Guardhouse m ²	12		
	<u>SUPERSTRUCTURE</u>			
	<u>Brickwork of NFXE bricks (14 Mpa nominal compressive strength in class I mortar in loadbearing wall etc</u>			
3.3.3	Half brick walls			
	(ii) Guardhouse m ²	17		
3.3.4	One brick walls			
	(i) Main Building Structure m ²	250		
	(ii) Guardhouse m ²	55		
	(iii) Office Partition in the Main Building m ²	100		
	<u>BRICKWORK SUNDRIES</u>			
	<u>Steelbar Reinforcements</u>			
3.3.5	8mm Diameter mild steel bars in horizontally t	0.4		
	<u>Brickwork reinforcement</u>			
3.3.6	75mm Wide reinforcement built in horizontally			
	(ii) Guardhouse 20m Roll	3		
3.3.7	150mm Wide reinforcement built in horizontally			
	(i) Main Building Structure 20m Roll	65		
	(ii) Guardhouse 20m Roll	12		
	<u>FACE BRICKWORK</u>			
	<u>Face brickwork (Starting at one Course Below NGL) pointed with recessed horizontal and vertical joints</u>			
3.3.8	Extra over brickwork for face brickwork			
	(i) Main Building Structure m ²	300		
	(ii) Guardhouse m ²	55		
Total Carried Forward				

Item No.	Description	Quantity	Rate	Amount
Brought Forward				
3.3.9	<u>Bevelled Facebrick Window Sills</u>			
	(i) Main Building Structure	m	20	
	(ii) Guardhouse	m	10	
Total Carried Forward To Summary				R

Item No.	Description	Quantity	Rate	Amount
3	<u>SECTION 3 - BUILDING WORK</u>			
3.4	<u>BILL No. 4 : FLOOR FINISHES</u>			
	<u>SCREEDS</u>			
	Screeds wood floated, on concrete			
3.4.1	<u>Guardhouse</u> : Average 30mm Thick on floors m ²	20		
	<u>TILING</u>			
	Tiling described as "fixed with adhesive on concrete screed" shall be deemed to include for approved tiling cement			
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the Tal Professional range of products as recommended by the manufacturer.			
	Floor Tiling			
3.4.2	<u>Guardhouse</u> : 600 x 600 Grey natural(R9) full bodied porcelain tiles by union tiles or similar other approved - ZEN series fixed with an approved adhesive to concrete screed (screed elsewhere measured) m ²	20		
3.4.3	<u>Guardhouse</u> : 75mm High skirting m	28		
	<u>EPOXY PAINT</u>			
3.4.4	Bonding Primer on power floated concrete m ²	430		
3.4.5	Epoxy paint on primed concrete surfaces m ²	430		
3.4.6	100mm wide road marking m	240		
Total Carried Forward To Summary			R	

Item No.	Description	Quantity	Rate	Amount
3	SECTION 3 - BUILDING WORK			
3.5	BILL No. 5 : PLASTERING AND PAINTWORK			
	INTERNAL PLASTER			
	Method			
	The method to be used shall be either the monolithic method or the bonded method			
3.5.1	One coat cement plaster wood floated on brickwork			
	(i) Main Building Structure m²	250		
	(ii) Guardhouse m²	55		
	PAINTWORK			
	SABS Specifications			
	Alkali resistant primer - SABS 1416			
	Wash primer (metal etch) - SANS 723			
	Primers for internal wood work - SABS 678 Type 111			
	Zinc chromate primer for steel - SANS 5679			
	Undercoat for paints (Except emulsion paint) - SABS 681 Type 1			
	Gloss enamel paint - SABS 631			
	Aluminium paint - SABS 682 Grade 11			
	Structural steel paint - SANS 684			
	Emulsion paint - SABS 1586 (Gloss, Semi gloss, Matt : Internal /External)			
	ON INTERNAL PLASTER			
3.5.2	Dulux or other approved alkali resistant primer and two coats "Dulux Trade 100 Lowsheen" emulsion paint for interior use			
	(i) Main Building Structure m²	23		
	(ii) Guardhouse m²	5		
	(iii) Extra-Over (i) and(ii) above in narrow width m²	4		
	ON PLASTERBOARD			
	One coat clear sealer to CKS 564 and two coats interior quality PVA emulsion paint to SABS 1586 Grade 1 (matt finish) on:			
3.5.3	Unplastered gypsum board ceilings internally, including priming nail heads. m²	20		
	ON METAL			
3.5.4	Touch up manufacturers priming coat and apply one coat universal undercoat to SABS 681 Type II and two coats gloss enamel to SABS 630 Type 1 on steel:			
	Door Frames and Burglar guards to windows m²	10		
	SUNDRIES			
3.5.5	Provisional Sum for Budgetary Allowance P. Sum	1	20 000.00	20 000.00
Total Carried Forward To Summary			R	

Item No.	Description	Quantity	Rate	Amount
3	<u>SECTION 3 - BUILDING WORK</u>			
3.6	<u>BILL No. 6 : GLAZING</u>			
	Tenderers are advised to refer to the Model Preambles for trades before pricing these provisional Bill of Quantities.			
	<u>Glazing to Steel Putty</u>			
	6.3mm Clear float glass			
3.6.1	Panes exceeding 0,1m ² and not exceeding 0,5m ² m²	8		
Total Carried Forward To Summary			R	

Item No.	Description	Quantity	Rate	Amount
3	SECTION 3 - BUILDING WORK			
3.7	BILL No. 7 : METALWORK			
	ALUMINIUM WINDOWS AND DOORS			
	<u>Natural anodized aluminium windows, complete with subframes, ironmongery, glass, sealing, etc. and fixing to brickwork or concrete.</u>			
3.7.1	Window size 2490 x 1190mm high overall (W 1). Tenderers are referred to Engineer's drawings annexured to these Bills of Quantities Drawing number MAT-046-201-Rev-T	Nº 1		
3.7.2	Window size 1020 x 1190mm high overall (W 2). Tenderers are referred to Engineer's drawings annexured to these Bills of Quantities Drawing number MAT-046-201-Rev-T	Nº 2		
3.7.3	Window size 600 x 1190mm high overall (W 3). Tenderers are referred to Engineer's drawings annexured to these Bills of Quantities Drawing number MAT-046-201-Rev-T	Nº 2		
3.7.4	Window size 600 x 650mm high overall (W 4). Tenderers are referred to Engineer's drawings annexured to these Bills of Quantities Drawing number MAT-046-201-Rev-T	Nº 1		
	<u>Natural anodized aluminium door, complete with subframes, ironmongery, glass, sealing, etc. and fixing to brickwork or concrete.</u>			
3.7.5	Door size 815 x 2100mm high overall (D 1). Tenderers are referred to Engineer's drawings annexured to these Bills of Quantities Drawing number MAT-046-201-Rev-T	Nº 1		
	GALVANISED PRESSED STEEL DOOR FRAMES			
3.7.6	1,6mm Double rebated frames suitable for half brick wall fitted with three 100mm hinges	Nº 1		
	GALVANISED STEEL WINDOWS AND DOORS			
3.7.7	Standard residential section windows fitted with and including 20 x 5mm flat bar standard burglar bars over all opening sections			
	Window type E1, 1510 x 850mm high.	Nº 6		
	STEEL ROLLER SHUTTERS, ETC			
3.7.8	Galvanised steel powder coated roller shutters fixed to brickwork or concrete			
	Galvanized mild steel manually operated roller shutter door suitable for opening size 4000 x 2650mm high and fixing to 40 x 40 x 5mm angle iron corner protection, complete with 85mm wide x 1.2mm thick interlocking slatted curtain, 75 x 30 x 3mm channel section guides and spring loaded roller mechanism with canopy. Installed complete with cushion rubber, bottom weather seal.	Nº 2		
Total Carried Forward To Summary			R	

Item No.	Description	Quantity	Rate	Amount
3	SECTION 3 - BUILDING WORK			
3.8	<u>BILL No. 8 : CARPENTRY AND JOINERY</u>			
	The following is applicable in respect of timber roof trusses: Trusses are at approximately 850mm centres for metal roof sheets on 50 x 75mm purlins. Ceilings are plaster board sheeting on softwood brandering.			
	SAWN WOOD			
3.8.1	38 x 114mm Wall plates including bedding level in cement mortar	m	20	
3.8.2	50 x 75mm Purlins	m	72	
	ROOF TRUSSES			
	The following in plate nailed timber roof trusses with a pitch not exceeding 27.5 Degrees, from an approved supplier, delivered to site, hoisted into position, fixed and braced on timber wall plates			
3.8.3	Mono pitch roof truss with 600mm over hang on one side and tie beam spanning 1.00 - 2.00m	Nº	12	
3.8.4	Double pitch roof truss with 600mm over hang on one side and tie beam spanning 3.00 - 4.00m	Nº	5	
	<u>Everite or other approved fibre-cement fascias and barge boards</u>			
3.8.5	15 x 255mm Fascias, including galvanised steel Hprofile joiners	m	20	
	<u>FRAMED DOORS, etc.</u>			
	Wrought meranti doors hung to steel frames			
3.8.6	44mm Ledged, braced and batten door size 813 x 2032mm high with 44 x 110mm styles and top rail, 24 x 144mm middle ledge, 44 x 220mm bottom legde and 2 x 110mm braces hung to steel frames. (D1) (steel frames elsewhere measured)	Nº	1	
	WORKTOP, COUNTERS, etc.			
	1.2mm Formica decorative plastic laminate on 32mm waterproof chipboard			
3.8.7	600mm wide worktop, post formed on leading edge, and with one edge fixed to 38 x 38mm bearers plugged to wall and supported by and including metal brackets	m	3	
	CEILINGS			
	Nailed up ceilings			
	<u>9.5mm Taper-edge gypsum plasterboard with taped and skimmed flush joints</u>			
3.8.8	Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres in one direction	m²	18	
Total Carried Forward				

Item No.	Description	Quantity	Rate	Amount
Brought Forward				
3.8.9	Extra over ceiling for 600 x 600mm trap door of 32 x 44mm wrought softwood rebated framing with one cross brander, covered with ceiling board and fitted flush in opening, including necessary trimmers around <u>Nº</u>	1		
	Gypsum plasterboard cornices			
3.8.10	75mm Coved cornices mitred at corners with splayed heading joints and bed with Rhinobed gypsum plaster and spiked to branders <u>m</u>	20		
	Ironmongery			
3.8.11	'Union' or other approved 3 lever lockset <u>Nº</u>	2		
	Sundries			
3.8.12	'9002AS 1 EA' Aluminium door stop AS or other approved <u>Nº</u>	2		
Total Carried Forward To Summary				R

Item No.	Description	Quantity	Rate	Amount
3	<u>SECTION 3 - BUILDING WORK</u>			
3.9	<u>BILL No. 9 : ROOF COVERINGS AND CLADDING</u>			
	<u>IBR METAL SHEETING AND ACCESSORIES</u>			
	<u>0.53mm Thick Inverted Box Rib (IBR) profile</u>			
	<u>Aluminium-Zinc coated steel fixed to galvanised cold rolled</u>			
	<u>lipped steel channels purlins (elsewhere measured)</u>			
	<u>with steel screws, with mastic sealant under all side laps:</u>			
	<u>All sheets to be DEEP OCEAN COLOUR</u>			
3.9.1	Roof covering with pitch not exceeding 5 degrees cut to size according to drawing single lengths on roof top and single lengths on side cladding			
	a) Main Building			
	(i) Roof top-square cut _____ m	650		
	(ii) Cantilever Roof top-square cut _____ m	70		
	(iii) Side cladding-square cut _____ m	250		
	(iv) Side cladding-bevelled cut _____ m	200		
	(v) Extra-Over a) (iv) for Transparent sheets _____ m	150		
	b) Guardhouse			
	(i) Roof top-square cut _____ m	19		
	(ii) Roof top-bevelled cut _____ m	31		
3.9.2	Extra Over Item 3.10.1 for Bull Nose (separate units) _____ N°	75		
	<u>FLASHINGS AND SIDE STITCHING</u>			
3.9.3	Roof Apex Ridge flashing _____ m	27		
3.9.4	Cladding Corner flashing _____ m	51		
3.9.5	Drip flashing _____ m	90		
3.9.6	Extra Over Item 3.11.4 for Curve (separate units) _____ N°	4		
	<u>FASTENERS FOR IBR, FLASHINGS AND SIDE STITCHING</u>			
3.9.7	ND12 x 65mm hex head metal fastener for Roof _____ N°	7 200		
3.9.8	ND12 x 25mm hex head metal fastener for Side Cladding _____ N°	4 500		
3.9.9	ND14 x 22mm metal stitching fastener _____ N°	1 800		
	<u>ROOF AND WALL INSULATION</u>			
3.9.10	"Safintra Saftherm" 202FR or other approved double-sided reflective Aluminium foil radiant barrier, fixed to underside of roof sheeting and over purlins (Roof sheeting and purlins elsewhere measured). All in accordance with the Manufacturer's recommendations 1.25m x 40m Roll _____ N°	22		
Total Carried Forward To Summary			R	

Item No.	Description	Quantity	Rate	Amount
4	<u>SECTION 4 - BULK SERVICES CONNECTION</u>			
4.1	<u>BILL No. 1 : ELECTRICAL INSTALLATION</u>			
4.1.1	Allow Lump Sum of R 150 000.00 (One hundred and fifty thousand Rands) for Electrical Installations Lump	Sum	1	150 000.00
Total Carried Forward To Summary			R	

Item No.	Description	Quantity	Rate	Amount
4	SECTION 4 - BULK SERVICES CONNECTION			
4.2	BILL No. 2: WATER SERVICES CONNECTION			
4.2.1	Allow Lump Sum of R 50 000.00 (Fifty thousand rands) for Water Connections <u>Lump</u>	Sum	1	50 000.00
Total Carried Forward To Summary			R	

BILL No.	DESCRIPTION	FROM PAGE No.	AMOUNT
	SECTION 1 - GENERAL PROVISIONS		
1.1	BILL No.1 : PRELIMINARIES	C20.1	
	SECTION 2 - SITEWORKS		
2.1	BILL No. 1: EARTHWORKS (PROVISIONAL)	C20.3	
2.2	BILL No. 2 : SITE DRAINAGE	C20.4	
2.3	BILL No. 3 : ROADWORKS	C20.5	
2.4	BILL No. 4 : FENCING	C20.6	
2.5	BILL No. 5 : PLUMBING AND DRAINAGE	C20.8	
	SECTION 3 - BUILDING WORK		
3.1	BILL No. 1 : EXCAVATION OTHER THAN BULK	C20.9	
3.2	BILL No. 2 : CONCRETE, FORMWORK AND REINFORCEMENT	C20.11	
3.3	BILL No. 3 : MASONRY	C20.13	
3.4	BILL No. 4 : FLOOR FINISHES	C20.14	
3.5	BILL No. 5 : PLASTERING AND PAINTWORK	C20.15	
3.6	BILL No. 6 : GLAZING	C20.16	
3.7	BILL No. 7 : METALWORK	C20.17	
3.8	BILL No. 8 : CARPENTRY AND JOINERY	C20.19	
3.10	BILL No. 9 : ROOF COVERINGS AND CLADDING	C20.20	
	SECTION 4 - BULK SERVICES CONNECTION		
4.1	BILL No. 1 : ELECTRICAL INSTALLATION	C20.21	
4.2	BILL No. 2: WATER SERVICES CONNECTION	C20.22	
	Sub-Total		
	Contingencies @ 5%		
	Sub-Total		
	Add 15% VAT		
	Total Carried to Form of Tender		