

Item No	Quantity	Rate	Amount
<u>SECTION 1</u>			
<u>BILL NO. 1</u>			
<u>PRELIMINARIES</u>			
<u>BUILDING AGREEMENT AND PRELIMINARIES</u>			
The JBCC Series 2000 Edition 4.1 Code 2101 March 2005 edition prepared by the Joint Building Contracts Committee, shall be the agreement, amended as hereinafter described			
The Preliminaries are for use with the JBCC Series 2000 Principal Building Agreement (May 2005 edition) prepared by the Joint Building Contracts Committee, shall be deemed to be incorporated in these bills of quantities			
Contractors are referred to the above-mentioned documents for the full intent and meaning of each clause thereof			
These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the above-mentioned documents			
Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"			
Notwithstanding anything to the contrary contained in any of the contract documents including the Principal Building Agreement and the Preliminaries, the provision of the "Preliminaries" as hereinafter set forth shall prevail and shall take precedence			
		R	
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Brought Forward		R	
<u>PREAMBLES FOR TRADES</u>			
The Model Preambles for Trades (1999 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained Supplementary preambles to the Model Preambles covering clauses of a general nature, clauses pertaining to specific materials and amendments to clauses in the Model Preambles are incorporated in these bills of quantities to satisfy the requirements of this project 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 Model Preambles and in any supplementary preambles			
<u>GENERAL</u>			
If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories "F", "T" or "V" as the case may be below such item, where "F" denotes a fixed amount (amount not to be varied), "T" denotes an amount variable in proportion to time and "V" denotes an amount variable in proportion to value			
<u>SECTION A - PRINCIPAL BUILDING AGREEMENT</u>			
<u>Definitions (A1)</u>			
1	Definitions and interpretation (clause 1)		
F:..... V:..... T:.....		Item	
Carried Forward			R
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Brought Forward			R	
<u>Objective and Preparation (A2 to A14)</u>				
2	Offer acceptance and performance (clause 2) F:..... V:..... T:.....	Item		
3	Documents (clause 3) F:..... V:..... T:.....	Item		
4	Design responsibility (clause 4) F:..... V:..... T:.....	Item		
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	Brought Forward		R	
5	Employer's agents (clause 5) F:..... V:..... T:..... The principal agent shall: - monitor and control progress and scheduling - monitor all contract conditions, and - coordinate the efforts of the employer's agents, the contractor and subcontractors The powers conferred on the principal agent in terms of this clause and/or the exercising of these powers shall not be construed as removing or diminishing any of the obligations of the Contractor in terms of the Principal Building Agreement, whether financial, contractual or otherwise, nor shall the exercising of these powers create any privity of contract as between the Employer or his agents on the one part and the Contractor or subcontractors or suppliers on the other part The principal agent reserves the right to attend and participate in all contractor/subcontractor's meetings, to invite other employer's agents to attend such meetings at his discretion and to converse and chair any such meetings if the contractor is derelict in his duty in arranging such meetings to the degree of frequency and comprehensiveness dictated in the opinion of the project manager by the circumstances and exigencies of the construction process			
		Item		
6	Site representative (clause 6) F:..... V:..... T:.....			
		Item		
	Carried Forward		R	
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	Brought Forward		R	
7	Compliance with regulations (clause 7)			
	F:..... V:..... T:.....			
	Sub-clause 7.3 added:			
	The Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations 2014 will in all respects be applicable to this contract. All obligations in respect of health and safety requirements of the Contractor are set out in the Scope of Work.			
	Sub-clause 7.3.1 is added:			
	Notwithstanding any actions which the employer may take, the contractor accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and all its regulations, including the Construction Regulations, 2014, for which the contractor is liable as mandatory. By entering into this agreement it shall be deemed that the parties have agreed in writing to the above provisions in terms of Section 37 (2) of the Act and will enter into the mandatory agreement as set out in the Scope of Work. This clause will be sufficient to establish the mandatory obligations of the contractor in the event the parties fail to execute the aforesaid mandatory agreement."			
	Note: A separate clause has been included in Section C: Specific Preliminaries of the bills of quantities / lump sum document for the contractor to have the opportunity to price for all the requirements of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification.			
	The contractor shall also comply with the additional requirements with regard to the Coronavirus pandemic in terms of all Covid-19 legislation, regulations and guidelines.			
		Item		
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8	Works risk (clause 8) F:..... V:..... T:.....			
		Item		
9	Indemnities (clause 9) F:..... V:..... T:.....			
		Item		
10	Works insurances (clause 10) F:..... V:..... T:.....			
		Item		
11	Liability insurances (clause 11) F:..... V:..... T:.....			
		Item		
12	Effecting insurance (clause 12) F:..... V:..... T:.....			
		Item		
13	NO CLAUSE	N/A		
14	Security (clause 14) The security to be submitted by the contractor to the employer will be as a payment reduction of ten per cent (10%) of the value certified in the payment certificate (excluding VAT) F:..... V:..... T:.....			
		Item		
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Brought Forward			R
<u>Execution (A15-A23)</u>			
15	Preparation for and execution of the works (clause 15) F:..... V:..... T:.....	Item	
16	Access to the works (clause 16) F:..... V:..... T:.....	Item	
17	Contract instructions (clause 17) F:..... V:..... T:.....	Item	
18	Setting out of the works (clause 18) F:..... V:..... T:..... The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc exist in order that the necessary arrangements may be made for the rectification of any such encroachments	Item	
19	Assignment (clause 19) F:..... V:..... T:..... The contractor shall not cede his rights or delegate his obligations in terms of this agreement unless specifically called for by the employer	Item	
20	Nominated subcontractors (clause 20) F:..... V:..... T:.....	Item	
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	Brought Forward		R
21	Selected subcontractors (clause 21) F:..... V:..... T:..... Written proof is required from subcontract tenderers at tendering that they can meet the JBCC Selected Subcontract Agreement or other tender agreements and provide security in terms of the agreement. If the above is not provided the tender may not be accepted All amounts allowed under Provisional Amounts are intended to be awarded to Selected Subcontractors	Item	
22	Employer's Direct Contractors (clause 22) F:..... V:..... T:.....	Item	
23	Contractor's Domestic Sub-Contractors (Clause 23) F:..... V:..... T:.....	Item	
	<u>Completion (A24-A30)</u>		
24	Practical completion (clause 24) F:..... V:..... T:.....	Item	
25	Works completion (clause 25) F:..... V:..... T:.....	Item	
26	Final completion (clause 26) F:..... V:..... T:.....	Item	
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Brought Forward			R
27	Latent defects liability period (clause 27) F:..... V:..... T:.....	Item	
28	Sectional completion (clause 28) F:..... V:..... T:.....	Item	
29	Revision of date of practical completion (clause 29) F:..... V:..... T:..... The removal and replacement of materials and/or workmanship that do not conform to specification or drawings shall not constitute grounds for an extension of the construction period nor for an adjustment to the contract sum (clause 29.3)	Item	
30	Penalty for non-completion (clause 30) F:..... V:..... T:.....	Item	
<u>Payment (A31 - A35)</u>			
31	Interim payment to the contractor (clause 31) F:..... V:..... T:.....	Item	
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	Brought Forward		R	
32	Adjustment to the contract value (clause 32) F:..... V:..... T:..... Where prices are submitted by the contractor or nominated/selected subcontractors during the progress of the works in respect of contract instructions or in regard to a claim under the terms of the contract and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the final certificate, it will be in writing	Item		
33	Recovery of expense and loss (clause 33) F:..... V:..... T:.....	Item		
34	Final account and final payment (clause 34) F:..... V:..... T:..... The employer shall not pay any interest on amounts payable to the contractor for one hundred and forty two (142) days after the date of issue of the certificate of practical completion The employer shall, however, pay interest to the contractor at the rate stipulated in clause 34.11 on any amounts payable to the contractor more than one hundred and forty two (142) days after the date of issue of the certificate of practical completion but only for such period as the settlement of the final account is delayed by the non-performance of the principal agent or the employer or his agents. In evaluating non-performance for purposes of this clause a reasonable time shall be allowed to the employer or his agents to respond to any matter brought to his/their attention and which may affect the settlement of the final account	Item		
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	Brought Forward		R	
35	Payment to other parties (clause 35) F:..... V:..... T:.....	Item		
	<u>Cancellation (A36-A39)</u>			
36	Cancellation by employer - contractor's default (clause 36) F:..... V:..... T:.....	Item		
37	Cancellation by employer - loss and damage (clause 37) F:..... V:..... T:.....	Item		
38	Cancellation by contractor - employer's default (clause 38) F:..... V:..... T:.....	Item		
39	Cancellation - cessation of the works (clause 39) F:..... V:..... T:.....	Item		
	<u>Dispute (A40)</u>			
40	Dispute Settlement (clause 40) F:..... V:..... T:.....	Item		
	<u>Substitute Provisions (A41)</u>			
41	State clauses (Clause 41) F:..... V:..... T:.....	Item		
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Brought Forward			R
<u>THE SCHEDULE</u>			
Information necessary for completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder			
42	Pre-tender information (clause 42)		
	F:..... V:..... T:.....	Item	
<u>42.1 CONTRACTING AND OTHER PARTIES</u>			
	42.1.1 Employer: The Mvula Trust		
	42.1.2 Principal Agent: BVI Consulting Engineers		
<u>42.2 CONTRACT DETAILS</u>			
	42.2.1 Works Description: Construction of water and sanitation facilities		
	42.2.2 Site Description: As per the information provided in the tender data		
	42.2.3 Work or installations by direct contractors:		
	As per the information provided in the tender data		
	42.2.4 This agreement is for a government contract where there are specific options that are applicable to a State organ only		
	Yes		
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Brought Forward	R
42.2.5 Date on which possession of the site is intended to be given: As per the information provided in the tender data	
42.2.6 Period for the commencement of the works after the contractor takes possession of site: Seven days	
42.2.7 For the works as a whole. Intended date of practical completion and the penalty per calendar day Intended Date of Practical Completion: As per the information provided in the tender data <i>Penalty Amount:</i> <i>The penalty per calendar day shall be: 0.1% of the tendered amount (inclusive of value added tax)</i>	
42.2.8 For the works in sections: Intended date of practical completion and the penalty per calendar day Section 1 N/A..... Date N/A..... Penalty Amount	
42.2.9 The law applicable to this agreement shall be that of: <i>South Africa</i> (Country)	
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Brought Forward	R
<u>42.3 INSURANCES</u>	
42.3.1 Contract works insurance to be effected by:	
<i>Contractor:</i>	
<i>For the Sum of R Contract Amount + 10.00 %</i>	
<i>With a deductible amount the contractor deems appropriate</i>	
42.3.2 Supplementary insurance is required:	
<i>No</i>	
42.3.3 Public liability insurance to be effected by:	
<i>Contractor:</i>	
<i>For the Sum of R 5 000 000-00</i>	
<i>With a deductible amount the contractor deems appropriate</i>	
<u>42.4 DOCUMENTS</u>	
42.4.1 Waivers of contractors lien or right of continuing possession is required	
<i>Yes</i>	
42.4.2 Number of construction document copies to be supplied to the contractor free of charge:	
<i>3 Number of</i>	
42.4.3 Bills of Quantities/Lump sum document schedule of rates drawn up in accordance with:	
<i>"Standard System of Measuring Builders' Work"</i>	
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	Brought Forward		R
42.4.4	On acceptance of the tender the bills of quantities/lump sum document is to be submitted within: 5 Working days <i>The priced bills of quantities must be handed in with the tender</i>		
42.4.5	JBCC Engineering General Conditions are to be included in the contract documents : <i>No</i>		
42.4.6	The contract value is to be adjusted using escalation adjustment indices <i>No</i> Where JBCC CPAP is to be used <i>Base Month N/A</i>		
42.4.7	Details of changes made to the provision of JBCC standard documentation: Part 1 - Contract Data completed by the Employer		
	<u>SECTION B: PRELIMINARIES</u>		
	<u>Definitions and interpretation (B1)</u>		
43	Definition and interpretation (B1.1 - B1.4.6) F:..... V:..... T:.....	Item	
	<u>Documents (B2)</u>		
44	Checking of documents (B2.1) F:..... V:..... T:.....	Item	
	Carried Forward		R
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Brought Forward		R
Existing premises occupied (B3.4)		
F:..... V:..... T:.....		
Specific requirements: The contractor shall also comply with the additional requirements with regard to the Coronavirus pandemic in terms of all Covid-19 legislation, regulations and guidelines.		
Previous work - dimensional accuracy (B3.5)		
F:..... V:..... T:.....		
Previous work - defects (B3.6)		
F:..... V:..... T:.....		
53 Services - known (B3.7)		
F:..... V:..... T:.....	Item	
54 Services - unknown (B3.8)		
F:..... V:..... T:.....	Item	
55 Protection of trees etc (B3.9)		
F:..... V:..... T:.....	Item	
56 Articles of value (B3.10)		
F:..... V:..... T:.....	Item	
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	Brought Forward		R	
	<u>Management of contract (B4)</u>			
57	Inspection of adjoining properties etc (B3.11) F:..... V:..... T:.....	Item		
58	Management of the works (B4.1) F:..... V:..... T:.....	Item		
59	Programme for the works (B4.2) F:..... V:..... T:.....	Item		
60	Progress meetings (B4.3) F:..... V:..... T:.....	Item		
61	Technical meetings (B4.4) F:..... V:..... T:.....	Item		
62	Labour and Plant records (B4.5) F:..... V:..... T:.....	Item		
	<u>Samples, Shop Drawings and Manufacturer's Instructions (B5)</u>			
63	Samples of materials (B5.1) F:..... V:..... T:.....	Item		
64	Workmanship samples (B5.2) F:..... V:..... T:.....	Item		
	Carried Forward		R	
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Brought Forward			R
65	Shop drawings (B5.3) F:..... V:..... T:.....	Item	
66	Compliance with Manufacturer's Instructions (B5.4) F:..... V:..... T:.....	Item	
<u>Temporary works and plant (B6)</u>			
67	Deposits and fees (B6.1) F:..... V:..... T:.....	Item	
68	Enclosure of the works (B6.2) F:..... V:..... T:.....	Item	
69	Advertising (B6.3) F:..... V:..... T:.....	Item	
70	Plant, equipment, sheds and offices (B6.4) F:..... V:..... T:.....	Item	
71	Main notice board (B6.5) F:..... V:..... T:.....	Item	
72	Subcontractors' notice board (B6.6) F:..... V:..... T:.....	N/A	
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	Brought Forward		R	
	<u>Temporary services (B7)</u>			
73	Location (B7.1) F:..... V:..... T:.....	Item		
74	Water (B7.2) Option [A] shall apply F:..... V:..... T:.....	Item		
75	Electricity (B7.3) Option [A] shall apply F:..... V:..... T:.....	Item		
76	Telecommunication facilities (B7.4) F:..... V:..... T:.....	Item		
77	Ablution facilities (B7.5) Option [A] shall apply F:..... V:..... T:.....	Item		
	<u>Prime cost amounts (B8)</u>			
78	Responsibility for prime cost amounts (B8.1) F:..... V:..... T:.....	Item		
	<u>Attendance on N/S Subcontractors (B9)</u>			
79	General attendance (B9.1) F:..... V:..... T:.....	Item		
	Carried Forward		R	
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	Brought Forward		R	
80	Special attendance (B9.2) F:..... V:..... T:.....	Item		
81	Commissioning - Fuel, water and power (B9.3) F:..... V:..... T:.....	Item		
	<u>Financial aspects (B10)</u>			
	Statutory taxes, duties and levies (B10.1) F:..... V:..... T:.....	Item		
82	Payment of preliminaries (B10.2) Option [B] shall apply F:..... V:..... T:.....	Item		
83	Adjustment of preliminaries (B10.3) Option [A] shall apply F:..... V:..... T:.....	Item		
84	Payment certificate cash flow (B10.4) F:..... V:..... T:.....	Item		
	<u>General (B11)</u>			
85	Protection of works (B11.1) F:..... V:..... T:.....	Item		
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Brought Forward			R
86	Protection/isolation of existing/sectionally occupied works (B11.2)		
	F:..... V:..... T:.....	Item	
87	Security of the Works (B11.3)		
	The security to be submitted by the contractor to the employer will be as a payment reduction of ten per cent (10%) of the value certified in the payment certificate (excluding VAT)		
	F:..... V:..... T:.....	Item	
88	Notice before covering work (B11.4)		
	F:..... V:..... T:.....	Item	
89	Disturbance (B11.5)		
	F:..... V:..... T:.....	Item	
90	Environmental Disturbance (B11.6)		
	F:..... V:..... T:.....	Item	
91	Works cleaning and clearing (B11.7)		
	F:..... V:..... T:.....	Item	
92	Vermin (B11.8)		
	F:..... V:..... T:.....	Item	
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	Brought Forward		R	
93	Overhand work (B11.9) F:..... V:..... T:.....	Item		
94	Instruction manuals and guarantees (B11.10) F:..... V:..... T:.....	Item		
95	As built information (B11.11) F:..... V:..... T:.....	Item		
96	Tenant Installations (B11.12) F:..... V:..... T:.....	Item		
	<u>Schedule of variables (B12)</u>			
97	Pre-tender information (B12.1) F:..... V:..... T:.....	Item		
	12.1.1 Provisional bills of quantities (B2.2) The quantities are provisional: No			
	12.1.2 Availability of construction documentation (B2.3) Construction documentation is not complete No			
	12.1.3 Interest of agents (B2.4)			
	12.1.4 Defined works area (B3.1)			
	Carried Forward		R	
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Brought Forward 12.1.5 Geotechnical investigation (B3.2) N/A 12.1.6 Existing premises occupied (B3.4) 12.1.7 Previous work - dimensional accuracy (B3.4) 12.1.8 Previous work - defects (B3.5) 12.1.9 Services - known (B3.7) 12.1.10 Protection of trees (B3.9) All trees should be protected and only on instruction of the Principal Agent may any trees be removed 12.1.12 Enclosure of the works (B6.2) 12.1.11 Inspection of adjoining properties (B3.11) 12.1.13 Offices (B6.4.3) Specific requirements: The contractor shall provide, maintain and remove on completion of the works an office for the exclusive use of the principal agent, minimum size 4 x 3 x 3m high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times. Carried Forward Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES BVI CONSULTING ENGINEERS	R R
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Brought Forward		R	
12.1.14 Main notice board (B6.5)	YES		
12.1.15 Subcontractors notice board (B6.6)			
A notice board is required	Yes		
12.1.16 Water (B7.2)			
Alternative Selected: A			
12.1.17 Electricity (B7.3)			
Alternative selected: A			
12.1.18 Telecommunications (B7.4)			
12.1.19 Ablution facilities (B7.5)			
Alternative selected: A			
12.1.20 Protection of existing/sectionally occupied works (B11.2)			
12.1.21 Special attendance (B9.2)			
Subcontractor (1) details:	N/A		
12.1.22 Protection of the works (B11.1)	N/A		
12.1.23 Disturbance (B11.5)	N/A		
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	12.1.24 Environmental Disturbance (B11.6)		
	N/A		
	<u>Post tender information (B12.2)</u>		
	12.2.1 Payment of preliminaries		
	Alternative selected: B		
	12.2.2 Adjustment of preliminaries		
	Alternative selected: A		
	12.2.3 Additional agreed preliminaries items		
	N/A		
	<u>SECTION C: SPECIFIC PRELIMINARIES</u>		
	Any special items to meet the particular circumstances of a specific project are embodied in this section. Where required for an aspect of the works to be executed according to a design by a consulting engineer, a recital of the headings to the individual clauses of the JBCC Engineering General Conditions are included		
98	Site instructions		
	Instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor		
	F: V:..... T:.....	Item	
99	Black economic empowerment and training		
	F:..... V:..... T:.....	Item	
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	Brought Forward		R	
100	Proprietary branded products F:..... V:..... T:.....	Item		
101	Testing of flat roof waterproofing for watertightness Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept "ponded" for at least 36 hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing F:..... V:..... T:..... The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instructions after consultation with the manufacturer's authorised representative	Item		
102	Contract instructions F:..... V:..... T:..... Contract instructions issued on site are to be recorded in triplicate in a contract instruction book which is to be supplied and maintained on site by the contractor	Item		
103	Labour record F:..... V:..... T:..... At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and descriptions of tradesmen and labourers employed by him and all subcontractors on the works each day of that week	Item		
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	Brought Forward		R	
104	Plant record F:..... V:..... T:..... At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools used on the works each day of that week	Item		
105	Guarantees F:..... V:..... T:..... Where guarantees are called for, the contractor shall obtain a written guarantee, addressed to the employer, from the firm supplying the materials and/or doing the work and shall deliver same to the principal agent on the certified completion of the contract. The guarantee shall state that workmanship, materials and installation are guaranteed for a specified period from the date of certified completion of the contract, and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice from the principal agent to do so. This guarantee will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the contractor. The principal agent shall be the sole judge of the cause responsible for defects in the work and his decision shall be final and binding in terms of clause 40.2 of the agreement	Item		
106	Overtime F:..... V:..... T:.....	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES BVI CONSULTING ENGINEERS			

	Brought Forward		R	
	Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorised, in writing, prior to execution thereof, that costs for such overtime are to be borne by the employer			
107	Co-operation of contractor for cost management F:..... V:..... T:..... It is specifically agreed that the contractor accepts the obligation of assisting the professional consultants in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The quantity surveyor undertakes to make available to the contractor all budgetary allowances and cost assessments/reports to enable the proper procedures to be implemented and the contractor will attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures in regard to all subcontractors	Item		
108	Occupational Health and Safety Specification F:..... V:..... T:..... The contractor shall comply with all the requirements set out in the Construction Regulations, 2014 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) It is required of the contractor to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document The contractor must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the			
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES BVI CONSULTING ENGINEERS			

	Brought Forward		R	
	provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment			
	Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause, as well as the clauses that follow hereafter and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced under these clauses and no additional claims in this regard shall be entertained			
	The contractor shall also comply with the additional requirements with regard to the Coronavirus pandemic in terms of all Covid-19 legislation, regulations and guidelines. It is explicitly pointed out that all requirements of the aforementioned are deemed to be priced under this clause and the specific related clauses hereafter and no additional claims in this regard shall be entertained			
		Item		
109	Occupational Health and Safety Specification			
	F:..... V:..... T:.....			
	Preparation of contractor's site specific health and safety plan, including compliance with Covid-19 legislation, regulations and guidelines	Item		
110	Occupational Health and Safety Specification			
	F:..... V:..... T:.....			
	Principal contractor's initial obligations in respect of the Health and Safety Act, Construction Regulations and Covid-19 regulations, etc	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES			
	BVI CONSULTING ENGINEERS			

	Brought Forward		R
111	Occupational Health and Safety Specification F:..... V:..... T:..... Principal contractor's time related obligations in respect of the Health and Safety Act, Construction Regulations and Covid-19 regulations, etc	Item	
112	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of reflective vests	Item	
113	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of hard hats	Item	
114	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of protective footwear	Item	
115	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of earplugs	Item	
116	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of dust masks	Item	
117	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of gloves	Item	
	Carried Forward		R
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES BVI CONSULTING ENGINEERS		

	Brought Forward		R
118	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of high visibility overalls to SARTSM Chapter 13 Level 3	Item	
119	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of SANS approved ear defenders	Item	
120	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of face masks (Covid -19)	Item	
121	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of face shields (Covid -19)	Item	
122	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of gloves (Covid -19)	Item	
123	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of hand sanitiser (min 70% alcohol), foot press stands and paper towels (Covid -19)	Item	
124	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of covered refuse bins and refuse bags and waste (including hazardous) management (Covid -19)	Item	
	Carried Forward		R
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES BVI CONSULTING ENGINEERS		

	Brought Forward		R
125	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of digital infrared non-contact body thermometer (Covid -19, minimum of two per site entrance)	Item	
126	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of perspex screens for office staff (Covid -19, minimum size 600 x 500mm)	Item	
127	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of signage, including Covid -19 related signage	Item	
128	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of full time construction health and safety officer (SACPCMP Registered)	Item	
129	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Medical certificates and medical surveillance including initial (baseline) medical examinations, periodic examinations, and exit examinations	Item	
130	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Medical screenings, examinations, etc in terms of Covid-19 regulations	Item	
	Carried Forward		R
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES BVI CONSULTING ENGINEERS		

Brought Forward		R
131	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Induction training, including Covid-19 training	Item
132	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of first aid boxes to GSR requirements	Item
133	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Noise monitoring including establishment of noise zones (plant), audiograms (personnel), etc	Item
134	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Submission of health and safety file	Item
Carried Forward		R
Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES BVI CONSULTING ENGINEERS		

	Brought Forward		R
135	HIV/AIDS Awareness F:..... V:..... T:..... It is required of the contractor to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document. Provision for pricing of HIV/AIDS awareness is made under items C11.1 to C11.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained. The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of clause A 31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment Any Principal Contractor entering into a contract with The Developer must achieve an acceptable level of Occupational Health and Safety performance. Refer to "Project Specification" and "Safety, Health and Environmental Evaluation Questionnaire" The contractor to comply with all provisions of the above and to be enforced on all selected and or other sub-contractors, as no claim afterwards will be entertained <u>SUMMARY OF CATEGORIES</u> Category : Fixed R..... Category : Value R..... Category : Time R..... Carried to Final Summary Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES BVI CONSULTING ENGINEERS	Item	R

Item No		Quantity	Rate	Amount
	<u>SECTION 2</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs,bush and trees not exceeding 200mm girth, etc.	m2	51	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	51	
	<u>EXCAVATION,FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep:</u>			
3	Trenches	m3	13	
4	For aprons thickening	m3	3	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
5	Soft rock	m3	17	
6	Hard rock	m3	17	
	<u>Extra over all excavations for carting away:</u>			
7	Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the Contractor	m3	6	
	Carried Forward		R	
	Section No. 2 SFD2 Bill No. 1 EARTHWORKS			
	BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Risk of collapse of excavations:</u>			
8	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	39
<u>Keeping excavations free of water:</u>			
9	Keeping excavations free of water other than subterranean water	Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% ModAASHTO density:</u>			
10	Under floors, steps, pavings, etc.	m3	4
11	Backfilling to trenches, holes, etc.	m3	7
<u>Compaction of surfaces:</u>			
12	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 93% Mod AASHTO density	m2	14
13	Compaction of ground surface to aprons 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	33
<u>Prescribed density tests on filling:</u>			
14	Modified AASHTO Density tests	No	5
<u>SOIL POISONING</u>			
<u>Soil insecticide:</u>			
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	14
Carried Forward			R
Section No. 2 SFD2 Bill No. 1 EARTHWORKS			
BVI CONSULTING ENGINEERS			

		Brought Forward			R
16	To bottom of concrete aprons	m2	33		
17	To bottoms and sides of trenches, etc.	m2	52		
Carried Forward to Summary of Section No. 2					R
Section No. 2					
SFD2					
Bill No. 1					
EARTHWORKS					
BVI CONSULTING ENGINEERS					

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Brought Forward			R
	<u>Finishing top surfaces of concrete smooth with a steel trowel:</u>		
7	Surface beds, slabs, etc.	m2	14
	<u>Finishing top surfaces of concrete smooth with a wood float:</u>		
8	Aprons and pavings to falls	m2	33
<u>TEST CUBES</u>			
9	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	24
<u>FORMWORK</u>			
	<u>Rough formwork to sides:</u>		
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	30
<u>REINFORCEMENT</u>			
	<u>Mesh Reinforcement (measure nett):</u>		
11	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	14
 Carried Forward to Summary of Section No. 2			
Section No. 2			R
SFD2			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			
BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 2</u>			
<u>BILL NO.3</u>			
<u>BRICKWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>BRICKWORK</u>			
<u>Sizes in descriptions:</u>			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<u>Hollow walls etc.:</u>			
Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixéal" bitumen emulsion waterproofing coating.			
User note: The above preamble generally applies for works in hot and humid coastal areas			
<u>Face bricks:</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
Carried Forward			R
Section No. 2 SFD2 Bill No. 3 MASONRY			
BVI CONSULTING ENGINEERS			

	Brought Forward			R
	<u>Pointing:</u>			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	<u>SAMPLES</u>			
	Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6			
	<u>FOUNDATIONS</u>			
	<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	15	
	<u>FACE BRICKWORK</u>			
	<u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:</u>			
2	Extra over brickwork for face brickwork in foundation	m2	3	
	<u>SUPERSTRUCTURE</u>			
	<u>FACE BRICKWORK</u>			
	<u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:</u>			
3	Half brickwork for face brick walls pointed both sides	m2	18	
4	One brickwork for face brick walls pointed both sides	m2	58	
5	Extra over brickwork for face brickwork in beamfilling	m2	3	
6	Fair raking and cutting	m	7	
	Carried Forward			R
	Section No. 2 SFD2 Bill No. 3 MASONRY			
	BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces:</u>			
7	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	7
	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	4
8	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	2
9	Fair cutting and fitting around pipe exceeding 100mm diameter and not exceeding 100mm diameter.	No	3
<u>BRICKWORK SUNDRIES</u>			
<u>Brick reinforcement:</u>			
10	75mm Wide reinforcement built in horizontally	m	53
11	150mm Wide reinforcement built in horizontally	m	223
<u>Turning pieces:</u>			
12	220mm Wide turning piece to lintel etc	m	7
<u>Galvanised wire ties etc.:</u>			
13	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	12
<u>Prestressed fabricated lintels:</u>			
14	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	9
<u>Ventillation bricks:</u>			
15	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	7
Carried Forward to Summary of Section No. 2			R
Section No. 2			
SFD2			
Bill No. 3			
MASONRY			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 2</u>			
	<u>BILL NO.4</u>			
	<u>WATERPROOFING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer 375mm micron embossed damp proof course:</u>			
1	In walls	m2	5	
	<u>One layer of 250mm micron waterproof sheeting and sealed at overlaps with pressure sensitive tape:</u>			
2	Under surface beds	m2	14	
3	Aprons and ramps	m2	33	
	<u>FLOOR AND WALLS SEALERS</u>			
	<u>"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:</u>			
4	Around steel windows and door frames.	m	7	
	Carried Forward to Summary of Section No. 2			R
	Section No. 2			
	SFD2			
	Bill No. 4			
	WATERPROOFING			
	BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 2</u>			
	<u>BILL NO.5</u>			
	<u>ROOF COVERINGS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,6mm "Kliplok" chromadek profile roof sheeting fixed to timber purlins (elsewhere):</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	23	
	<u>Sundries</u>			
2	12" Thermal resistance sisalation laid on purlins	m2	23	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	5	
4	Extra over for closed ends	No	2	
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	3	
6	Extra over rainwater pipe for eaves offset	No	1	
	Carried Forward			
	Section No. 2 SFD2 Bill No. 5 ROOF COVERINGS		R	
	BVI CONSULTING ENGINEERS			

		Brought Forward			R
7	Ditto ,for shoe	No	1		
Carried Forward to Summary of Section No. 2 Section No. 2 SFD2 Bill No. 5 ROOF COVERINGS BVI CONSULTING ENGINEERS					R

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Brought Forward			R
<u>Wrought meranti doors hung to steel frames:</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2
9	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed (door raised by 120mm from bottom) (D2)	No	2
Carried Forward to Summary of Section No. 2			R
Section No. 2			
SFD2			
Bill No. 6			
CARPENTRY AND JOINERY			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 2</u>			
	<u>BILL NO.7</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>CATCHES, CABIN, HOOKS, ETC</u>			
	<u>Approved:</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
	<u>LOCKS</u>			
	<u>Approved:</u>			
2	Three lever mortice lockset	No	2	
3	Indicator lockset	No	2	
	<u>DOORSTOPS</u>			
	<u>Approved:</u>			
4	38mm Diameter rubber door stop plugged	No	4	
	<u>LETTERS, NAMEPLATES, ETC.</u>			
	<u>"Union" or similar approved:</u>			
5	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2	
	Carried Forward		R	
	Section No. 2 SFD2 Bill No. 7 IRONMONGERY			
	BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>"Vaal Paragon" or similar approved:</u>			
6	32mm Type 9 back grab rail 800mm long plugged	No	1
7	32mm Type 8 side grab rail 900mm girth plugged	No	1
<u>BATHROOM FITTINGS</u>			
<u>"Kimberley-Clark" or Simlilar:</u>			
8	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	3
<u>Stainless steel</u>			
9	Stainless steel mirror size 350 x 400m plugged to wall with chrome plated screws.	No	2
<u>Sundries:</u>			
10	Female SHE BIN plugged to walls	No	2
Carried Forward to Summary of Section No. 2			R
Section No. 2			
SFD2			
Bill No. 7			
IRONMONGERY			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 2</u>			
	<u>BILL NO.8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1,2mm Single rebated frames suitable for half brick walls:</u>			
1	Frame for door 813 x 2032mm high	No	2	
	<u>1,6mm Double rebated frames suitable for one brickwalls:</u>			
2	Frame for door 813 x 2032mm high	No	2	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
3	Window type NE1, 533 x 654mm high including burglar bars	No	3	
4	Window type NE 7,1022 x 654mm high including burglar bars	No	2	
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames:</u>			
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2	
	<u>Sundires:</u>			
6	Purpose made protective steel cage to SHE-BIN	No	2	
	Carried Forward to Summary of Section No. 2		R	
	Section No. 2			
	SFD2			
	Bill No. 8			
	METALWORK			
	BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 2</u>			
<u>BILL NO. 9</u>			
<u>PLASTERING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>CEMENT SCREEDS TO CONCRETE</u>			
<u>Screeds to steel trowelled, on concrete:</u>			
1	30mm thick on floors	m2	14
<u>FLOOR AND WALLS SEALERS</u>			
<u>Minimum two coats approved epoxy coat:</u>			
2	On screed	m2	14
Carried Forward to Summary of Section No. 2			R
Section No. 2			
SFD2			
Bill No. 9			
PLASTERING			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 2</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Allow an amount of R 36 343.65 (Thirty Six Thousand Three Hundred and Forty Three Rands and Sixty Five Cents) for the supply of Standard Industrial I1040 components complete including urinals	Item		36 343.65
2	Collect "Enviroloo" components systems complete as supplied by the manufacturer (This item allows for the collection of the 'Enviroloo' components systems only. Supply and install measured eslwhere)	No	3	
3	Supply and install pre-cast concrete double wash-trough, complete with all necessary pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim"	No	1	
	<u>INSTALLATION OF "ENVIRO LOO"</u>			
4	Allow an amount of R 3 000.00 (Three Thousand Rands) for installation of Enviroloo systems	Item		3 000.00
	<u>SANITARY FITTINGS</u>			
	<u>Vaal or similar approved:</u>			
5	Wash hand basin bolted to wall including all fittings and necessary pipework	No	2	
	Carried Forward		R	
	Section No. 2 SFD2 Bill No. 10 PLUMBING AND DRAINAGE BVI CONSULTING ENGINEERS			

Brought Forward			R
6	WC suite comprising pan with double flap heavy duty plastic seat and matching 9 litre cistern	No	3
<u>TRAPS, ETC</u>			
<u>uPVC:</u>			
7	40mm "P" or "S" trap	No	5
<u>TAPS, VALVES, ETC</u>			
8	15mm elbow action pillar tap	No	1
9	19mm chrome plated push button taps to WHB	No	1
<u>WATER SUPPLIES</u>			
<u>uPVC pipes:</u>			
10	20mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	50
11	40mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	10
<u>Extra over uPVC pipes for fittings:</u>			
12	20mm Bend	No	5
13	40mm Bend	No	5
<u>Galvanised steel pipes:</u>			
14	20mm Pipes chased into brick walls	m	3
<u>Extra over galvanised steel pipes for steel fittings:</u>			
15	20mm Fittings	No	5
Carried Forward			R
Section No. 2 SFD2 Bill No. 10 PLUMBING AND DRAINAGE BVI CONSULTING ENGINEERS			

Brought Forward		R
<u>TESTING</u>		
16	Provide all necessary apparatus water, etc for and test the whole of the Water Supply installation to the satisfaction of the Representative/Agent and Municipality, replace any defective work free of charge and leave perfect	Item
Carried Forward to Summary of Section No. 2 Section No. 2 SFD2 Bill No. 10 PLUMBING AND DRAINAGE BVI CONSULTING ENGINEERS		R

Item No	Quantity	Rate	Amount
<u>SECTION 2</u>			
<u>BILL NO. 11</u>			
<u>GLAZING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>GLAZING TO STEEL WITH PUTTY</u>			
<u>4mm Obscure safety glass:</u>			
1	Panes not exceeding 0,1 m2	m2	2
Carried Forward to Summary of Section No. 2			R
Section No. 2			
SFD2			
Bill No. 11			
GLAZING			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
<u>SECTION 2</u>				
<u>BILL NO. 12</u>				
<u>PAINTWORK</u>				
<u>SUPPLEMENTARY PREAMBLES</u>				
For preambles see "Specifications of materials and methods to be used - PW 371"				
<u>ON FIBRE-CEMENT</u>				
<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint:</u>				
1	On fascias and barge boards	m2	6	
<u>ON WOOD</u>				
<u>Undercoat and minimum 2 coat gloss enamel:</u>				
2	On doors (Internal)	m2	7	
3	On doors (External)	m2	7	
<u>ON METAL</u>				
<u>Undercoat and minimum 2 coat gloss enamel:</u>				
4	On door frames	m2	1	
5	On gates (Measured over the full flat area of both sides)	m2	8	
6	On gutters and down pipes	m	10	
<u>Spot prining defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel:</u>				
7	On windows with burglar bars	m2	2	
Carried Forward to Summary of Section No. 2				R
Section No. 2 SFD2 Bill No. 12 PAINTWORK				
BVI CONSULTING ENGINEERS				

Bill No	SECTION SUMMARY - SFD2	Page No	Amount
1	EARTHWORKS	38	
2	CONCRETE, FORMWORK AND REINFORCEMENT	40	
3	MASONRY	43	
4	WATERPROOFING	44	
5	ROOF COVERINGS	46	
6	CARPENTRY AND JOINERY	48	
7	IRONMONGERY	50	
8	METALWORK	51	
9	PLASTERING	52	
10	PLUMBING AND DRAINAGE	55	
11	GLAZING	56	
12	PAINTWORK	57	
Carried to Final Summary			R
Section No. 2 SFD2			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 3</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	73	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	73	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep:</u>			
3	Trenches	m3	18	
4	Pit	m3	27	
5	For aprons thickening	m3	4	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	49	
7	Hard rock	m3	49	
	<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 allocated by the Contractor	m3	35	
	Carried Forward		R	
	Section No. 3 SMD3 Bill No. 1 EARTHWORKS			
	BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Risk of collapse of excavations:</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	82
<u>Keeping excavations free of water:</u>			
10	Keeping excavations free of water other than subterranean water	Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% ModAASHTO density:</u>			
11	Under floors, steps, pavings, etc.	m3	7
12	Backfilling to trenches, holes, etc.	m3	9
<u>Compaction of surfaces:</u>			
13	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 93% Mod AASHTO density	m2	25
14	Compaction of ground surface to pits 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	20
15	Compaction of ground surface to aprons 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	44
<u>Prescribed density tests on filling:</u>			
16	Modified AASHTO Density tests	No	5
<u>SOIL POISONING</u>			
Carried Forward			R
Section No. 3 SMD3 Bill No. 1 EARTHWORKS			
BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Soil insecticide:</u>			
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	25
18	To bottom of concrete aprons	m2	44
19	To bottoms and sides of trenches, etc.	m2	69
Carried Forward to Summary of Section No. 3			R
Section No. 3			
SMD3			
Bill No. 1			
EARTHWORKS			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 3</u>			
	<u>BILL NO.2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<u>UNREINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete:</u>			
1	Strip footings	m3	4	
2	Ditto, but surface bed in pit	m3	3	
3	2Aprons cast in panels	m3	4	
4	Ramp	m3	1	
5	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	8	
6	Thickening down apron on edge 110mm deep x 200mm wide	m	34	
	<u>REINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete:</u>			
7	Surface beds	m3	2	
8	Slabs	m3	1	
	Carried Forward			
	Section No. 3			
	SMD3			
	Bill No. 2			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	BVI CONSULTING ENGINEERS			
			R	

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a steel trowel:</u>			
9	Surface beds, slabs, etc.	m2	35
<u>Finishing top surfaces of concrete smooth with a wood float:</u>			
10	Aprons and pavings to falls	m2	44
<u>TEST CUBES</u>			
11	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	24
<u>FORMWORK</u>			
<u>Rough formwork to sides:</u>			
12	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	39
<u>Permanent formwork to soffits:</u>			
13	Slabs propped up not exceeding 1.5m high	m2	7
14	Leave or form 500mm diameter opening in top of floor slab	No	4
<u>REINFORCEMENT</u>			
<u>Mesh Reinforcement (measure nett):</u>			
15	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	25
Carried Forward to Summary of Section No. 3			R
Section No. 3			
SMD3			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			
BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 3</u>			
<u>BILL NO.3</u>			
<u>BRICKWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>BRICKWORK</u>			
<u>Sizes in descriptions:</u>			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<u>Hollow walls etc.:</u>			
Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixal" bitumen emulsion waterproofing coating.			
User note: The above preamble generally applies for works in hot and humid coastal areas			
<u>Face bricks:</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
Carried Forward			R
Section No. 3 SMD3 Bill No. 3 MASONRY BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Pointing:</u> Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SAMPLES</u> Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6			
<u>FOUNDATIONS</u> <u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	20
2	One brick walls in pit	m2	44
3	4Half brick corbelling in pit	m	12
<u>FACE BRICKWORK</u> <u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:</u>			
4	Extra over brickwork for face brickwork in foundation	m2	4
<u>SUPERSTRUCTURE</u> <u>FACE BRICKWORK</u> <u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:</u>			
5	Half brickwork for face brick walls pointed both sides	m2	21
6	One brickwork for face brick walls pointed both sides	m2	77
Carried Forward			R
Section No. 3 SMD3 Bill No. 3 MASONRY BVI CONSULTING ENGINEERS			

	Brought Forward			R
7	Extra over brickwork for face brickwork in beamfilling	m2	4	
8	Fair raking and cutting	m	7	
	<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces:</u>			
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	11	
	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	6	
10	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	1	
	<u>BRICKWORK SUNDRIES</u>			
	<u>Brick reinforcement:</u>			
11	75mm Wide reinforcement built in horizontally	m	61	
12	150mm Wide reinforcement built in horizontally	m	501	
	<u>Turning pieces:</u>			
13	220mm Wide turning piece to lintel etc	m	6	
	<u>Galvanised wire ties etc.:</u>			
14	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	18	
	<u>Prestressed fabricated lintels:</u>			
15	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	15	
	<u>Ventillation bricks:</u>			
16	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	11	
	Carried Forward to Summary of Section No. 3			R
	Section No. 3			
	SMD3			
	Bill No. 3			
	MASONRY			
	BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 3</u>			
<u>BILL NO.4</u>			
<u>WATERPROOFING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
<u>One layer 375mm micron embossed damp proof course:</u>			
1	In walls	m2	14
<u>One layer of 250mm micron waterproof sheeting and sealed at overlaps with pressure sensitive tape:</u>			
2	Under surface beds	m2	38
3	Aprons and ramps	m2	44
<u>FLOOR AND WALLS SEALERS</u>			
<u>"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:</u>			
4	Around steel windows and door frames.	m	11
Carried Forward to Summary of Section No. 3			R
Section No. 3			
SMD3			
Bill No. 4			
WATERPROOFING			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 3</u>			
	<u>BILL NO.5</u>			
	<u>ROOF COVERINGS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,6mm "Kliplok" chromadek profile roof sheeting fixed to timber purlins (elsewhere)</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	37	
	<u>Sundries:</u>			
2	12" Thermal resistance sisalation laid on purlins	m2	37	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	8	
4	Extra over for closed ends	No	2	
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	3	
6	Extra over rainwater pipe for eaves offset	No	1	
	Carried Forward			
	Section No. 3 SMD3 Bill No. 5 ROOF COVERINGS			
	BVI CONSULTING ENGINEERS			
			R	

Brought Forward				
7	Ditto ,for shoe	No	1	R
Carried Forward to Summary of Section No. 3 Section No. 3 SMD3 Bill No. 5 ROOF COVERINGS BVI CONSULTING ENGINEERS				R

Item No		Quantity	Rate	Amount
<u>SECTION 3</u>				
<u>BILL NO.6</u>				
<u>CARPENTRY AND JOINERY</u>				
<u>SUPPLEMENTARY PREAMBLES</u>				
For preambles see "Specifications of materials and methods to be used - PW 371"				
<u>ROOFS, ETC.</u>				
<u>Sawn softwood:</u>				
1	38 x 152mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	41	
2	76 x 38mm Wall plates	m	14	
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	41	
<u>Sundries:</u>				
4	Two coats creosote on sawn timbers	m2	26	
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18	
6	Hurricane clips	No	45	
<u>EAVES, VERGES, ETC.</u>				
<u>Pressed fibre-cement:</u>				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	28	
<u>DOORS, ETC.</u>				
Carried Forward				R
Section No. 3 SMD3 Bill No. 6 CARPENTRY AND JOINERY				
BVI CONSULTING ENGINEERS				

Brought Forward			R
<u>Wrought meranti doors hung to steel frames:</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2
9	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed (door raised by 120mm from bottom) (D2)	No	3
Carried Forward to Summary of Section No. 3			
Section No. 3			
SMD3			
Bill No. 6			
CARPENTRY AND JOINERY			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 3</u>			
	<u>BILL NO.7</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>CATCHES, CABIN, HOOKS, ETC</u>			
	<u>Approved:</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
	<u>LOCKS</u>			
	<u>Approved:</u>			
2	Three lever mortice lockset	No	2	
3	Indicator lockset	No	3	
	<u>DOORSTOPS</u>			
	<u>Approved:</u>			
4	38mm Diameter rubber door stop plugged	No	5	
	<u>LETTERS, NAMEPLATES, ETC.</u>			
	<u>"Union" or similar approved:</u>			
5	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2	
	Carried Forward		R	
	Section No. 3 SMD3 Bill No. 7 IRONMONGERY			
	BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>"Vaal Paragon" or similar approved:</u>			
6	32mm Type 9 back grab rail 800mm long plugged	No	1
7	32mm Type 8 side grab rail 900mm girth plugged	No	1
<u>BATHROOM FITTINGS</u>			
<u>"Kimberley-Clark" or Simlilar:</u>			
8	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	4
<u>Stainless steel</u>			
9	Stainless steel mirror size 350 x 400m plugged to wall with chrome plated screws.	No	1
Carried Forward to Summary of Section No. 3			R
Section No. 3			
SMD3			
Bill No. 7			
IRONMONGERY			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 3</u>			
	<u>BILL NO.8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1.2mm Single rebated frames suitable for half brick walls:</u>			
1	Frame for door 813 x 2032mm high	No 3		
	<u>1.6mm Double rebated frames suitable for one brickwalls:</u>			
2	Frame for door 813 x 2032mm high	No 2		
	<u>STEEL WINDOWS, DOORS, ETC</u>			
3	Window type NE1, 533 x 654mm high including burglar bars	No 6		
4	Window type NE 7,1022 x 654mm high including burglar bars	No 3		
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames:</u>			
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No 2		
	Carried Forward to Summary of Section No. 3		R	
	Section No. 3			
	SMD3			
	Bill No. 8			
	METALWORK			
	BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 3</u>			
<u>BILL NO. 9</u>			
<u>PLASTERING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>CEMENT SCREEDS TO CONCRETE</u>			
<u>Screeds to steel trowelled, on concrete:</u>			
1	30mm thick on floors	m2	25
<u>INTERNAL PLASTER</u>			
<u>Cement plaster on brickwork or blockwork:</u>			
2	On pits walls	m2	37
<u>FLOOR AND WALLS SEALERS</u>			
<u>Minimum two coats approved epoxy coat:</u>			
3	On screed	m2	25
4	On internal textured plaster walls and floors in pit	m2	45
Carried Forward to Summary of Section No. 3			R
Section No. 3 SMD3 Bill No. 9 PLASTERING			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 3</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Allow an amount of R 60 209.00 (Sixty Thousand and Two Hundred and Nine Rands) for the supply of Standard Industrial I1040 components complete including urinals	Item		60 209.00
2	Collect "Enviroloo" components systems complete as supplied by the manufacturer (This item allows for the collection of the 'Enviroloo' components systems only. Supply and install measured eslwhere)	No	5	
3	Supply and install pre-cast concrete double wash-trough, complete with all necessary pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim"	No	1	
	<u>INSTALLATION OF "ENVIRO LOO"</u>			
4	Allow an amount of R 5 000.00 (Five Thousand Rands) for installation of Enviroloo systems	Item		5 000.00
	<u>SANITARY FITTINGS</u>			
	<u>White glazed fireclay or vitreous china coupling with SABS specification 497 in:</u>			
5	Wash hand basin bolted to wall including all fittings and necessary pipework	No	1	
	Carried Forward		R	
	Section No. 3 SMD3 Bill No. 10 PLUMBING AND DRAINAGE BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>TRAPS, ETC</u>			
<u>uPVC:</u>			
6	40mm "P" or "S" trap	No	3
<u>TAPS, VALVES, ETC</u>			
7	15mm elbow action pillar tap	No	1
8	19mm chrome plated push button taps to wash troughs	No	2
<u>WATER SUPPLIES</u>			
<u>uPVC pipes:</u>			
9	20mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	50
10	40mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	10
<u>Extra over uPVC pipes for fittings:</u>			
11	20mm Bend	No	5
12	40mm Bend	No	5
<u>Galvanised steel pipes:</u>			
13	20mm Pipes chased into brick walls	m	3
<u>Extra over galvanised steel pipes for steel fittings:</u>			
14	20mm Fittings	No	5
<u>TESTING</u>			
15	Provide all necessary apparatus water, etc for and test the whole of the Water Supply installation to the satisfaction of the Representative/Agent and Municipality, replace any defective work free of charge and leave perfect	Item	
Carried Forward to Summary of Section No. 3			R
Section No. 3			
SMD3			
Bill No. 10			
PLUMBING AND DRAINAGE			
BVI CONSULTING ENGINEERS			

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Item No		Quantity	Rate	Amount
<u>SECTION 3</u>				
<u>BILL NO. 12</u>				
<u>PAINTWORK</u>				
<u>SUPPLEMENTARY PREAMBLES</u>				
For preambles see "Specifications of materials and methods to be used - PW 371"				
<u>ON FIBRE-CEMENT</u>				
<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint:</u>				
1	On fascias and barge boards	m2	8	
<u>ON WOOD</u>				
<u>Undercoat and minimum 2 coat gloss enamel:</u>				
2	On doors (Internal)	m2	10	
3	On doors (External)	m2	7	
<u>ON METAL</u>				
<u>Undercoat and minimum 2 coat gloss enamel:</u>				
4	On door frames	m2	1	
5	On gates (Measured over the full flat area of both sides)	m2	8	
6	On gutters and down pipes	m	13	
<u>Spot prining defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel:</u>				
7	On windows with burglar bars	m2	4	
Carried Forward to Summary of Section No. 3				R
Section No. 3 SMD3 Bill No. 12 PAINTWORK				
BVI CONSULTING ENGINEERS				

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6	CARPENTRY AND JOINERY	71	
7	IRONMONGERY	73	
8	METALWORK	74	
9	PLASTERING	75	
10	PLUMBING AND DRAINAGE	77	
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Section No. 3 SMD3			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	109	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	109	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep:</u>			
3	Trenches	m3	25	
4	Pit	m3	45	
5	For aprons thickening	m3	6	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	76	
7	Hard rock	m3	76	
	<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 allocated by the Contractor	m3	57	
	Carried Forward		R	
	Section No. 4 FD10 Bill No. 1 EARTHWORKS			
	BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Risk of collapse of excavations:</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	118
<u>Keeping excavations free of water:</u>			
10	Keeping excavations free of water other than subterranean water	Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% ModAASHTO density:</u>			
11	Under floors, steps, pavings, etc.	m3	13
12	Backfilling to trenches, holes, etc.	m3	13
<u>Compaction of surfaces:</u>			
13	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 93% Mod AASHTO density	m2	43
14	Compaction of ground surface to pits 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	36
15	Compaction of ground surface to aprons 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	56
<u>Prescribed density tests on filling:</u>			
16	Modified AASHTO Density tests	No	5
<u>SOIL POISONING</u>			
Carried Forward			R
Section No. 4 FD10 Bill No. 1 EARTHWORKS			
BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Soil insecticide:</u>			
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	43
18	To bottom of concrete aprons	m2	56
19	To bottoms and sides of trenches, etc.	m2	97
Carried Forward to Summary of Section No. 4			R
Section No. 4			
FD10			
Bill No. 1			
EARTHWORKS			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
<u>SECTION 4</u>				
<u>BILL NO.2</u>				
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>				
<u>SUPPLEMENTARY PREAMBLES</u>				
For preambles see "Specifications of materials and methods to				
be used - PW 371"				
<u>UNREINFORCED CONCRETE, ETC</u>				
<u>25Mpa/19mm Concrete:</u>				
1	Strip footings	m3	6	
2	Ditto, but surface bed in pit	m3	4	
3	2Aprons cast in panels	m3	5	
4	Ramp	m3	1	
5	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	26	
6	Thickening down apron on edge 110mm deep x 200mm wide	m	44	
<u>REINFORCED CONCRETE, ETC</u>				
<u>25Mpa/19mm Concrete:</u>				
7	Surface beds	m3	4	
8	Slabs	m3	2	
Carried Forward				R
Section No. 4				
FD10				
Bill No. 2				
CONCRETE, FORMWORK AND REINFORCEMENT				
BVI CONSULTING ENGINEERS				

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a steel trowel:</u>			
9	Surface beds, slabs, etc.	m2	60
<u>Finishing top surfaces of concrete smooth with a wood float:</u>			
10	Aprons and pavings to falls	m2	56
<u>TEST CUBES</u>			
11	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	24
<u>FORMWORK</u>			
<u>Rough formwork to sides:</u>			
12	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	50
<u>Permanent formwork to soffits:</u>			
13	Slabs propped up not exceeding 1.5m high	m2	18
14	Leave or form 500mm diameter opening in top of floor slab	No	11
<u>REINFORCEMENT</u>			
<u>Mesh Reinforcement (measure nett):</u>			
15	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	43
Carried Forward to Summary of Section No. 4			R
Section No. 4			
FD10			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			
BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 4</u>			
<u>BILL NO.3</u>			
<u>BRICKWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>BRICKWORK</u>			
<u>Sizes in descriptions:</u>			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<u>Hollow walls etc.:</u>			
Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixéal" bitumen emulsion waterproofing coating.			
User note: The above preamble generally applies for works in hot and humid coastal areas			
<u>Face bricks:</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
Carried Forward			R
Section No. 4 FD10 Bill No. 3 MASONRY			
BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Pointing:</u> Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SAMPLES</u> Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6			
<u>FOUNDATIONS</u> <u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	28
2	One brick walls in pit	m2	69
3	Half brick corbelling in pit	m	28
<u>FACE BRICKWORK</u> <u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:</u>			
4	Extra over brickwork for face brickwork in foundation	m2	6
<u>SUPERSTRUCTURE</u> <u>FACE BRICKWORK</u> <u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:</u>			
5	Half brickwork for face brick walls pointed both sides	m2	65
6	One brickwork for face brick walls pointed both sides	m2	108
Carried Forward			R
Section No. 4 FD10 Bill No. 3 MASONRY BVI CONSULTING ENGINEERS			

Brought Forward			R
7	Extra over brickwork for face brickwork in beamfilling	m2	6
8	Fair raking and cutting	m	7
	<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces:</u>		
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	20
	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	9
10	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	1
	<u>BRICKWORK SUNDRIES</u>		
	<u>Brick reinforcement:</u>		
11	75mm Wide reinforcement built in horizontally	m	192
12	150mm Wide reinforcement built in horizontally	m	619
	<u>Turning pieces:</u>		
13	220mm Wide turning piece to lintel etc	m	20
	<u>Galvanised wire ties etc.:</u>		
14	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	30
	<u>Prestressed fabricated lintels:</u>		
15	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	26
	<u>Ventillation bricks:</u>		
16	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	17
	Carried Forward to Summary of Section No. 4		
	Section No. 4		
	FD10		
	Bill No. 3		
	MASONRY		
	BVI CONSULTING ENGINEERS		

Item No	Quantity	Rate	Amount
<u>SECTION 4</u>			
<u>BILL NO.4</u>			
<u>WATERPROOFING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
<u>One layer 375mm micron embossed damp proof course:</u>			
1	In walls	m2	21
<u>One layer of 250mm micron waterproof sheeting and sealed at overlaps with pressure sensitive tape:</u>			
2	Under surface beds	m2	66
3	Aprons and ramps	m2	56
<u>FLOOR AND WALLS SEALERS</u>			
<u>"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:</u>			
4	Around steel windows and door frames.	m	20
Carried Forward to Summary of Section No. 4			R
Section No. 4			
FD10			
Bill No. 4			
WATERPROOFING			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.5</u>			
	<u>ROOF COVERINGS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,6mm "Kliplok" chromadek profile roof sheeting fixed to timber purlins (elsewhere):</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	60	
	<u>Sundries:</u>			
2	12" Thermal resistance sisalation laid on purlins	m2	60	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	13	
4	Extra over for closed ends	No	2	
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	3	
6	Extra over rainwater pipe for eaves offset	No	1	
	Carried Forward			
	Section No. 4 FD10 Bill No. 5 ROOF COVERINGS		R	
	BVI CONSULTING ENGINEERS			

		Brought Forward			R
7	Ditto ,for shoe	No	1		
Carried Forward to Summary of Section No. 4 Section No. 4 FD10 Bill No. 5 ROOF COVERINGS BVI CONSULTING ENGINEERS					R

Item No		Quantity	Rate	Amount
<u>SECTION 4</u>				
<u>BILL NO.6</u>				
<u>CARPENTRY AND JOINERY</u>				
<u>SUPPLEMENTARY PREAMBLES</u>				
For preambles see "Specifications of materials and methods to be used - PW 371"				
<u>ROOFS, ETC.</u>				
<u>Sawn softwood:</u>				
1	38 x 152mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	67	
2	76 x 38mm Wall plates	m	26	
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	64	
<u>Sundries:</u>				
4	Two coats creosote on sawn timbers	m ²	46	
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	30	
6	Hurricane clips	No	75	
<u>EAVES, VERGES, ETC.</u>				
<u>Pressed fibre-cement:</u>				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	36	
<u>DOORS, ETC.</u>				
Carried Forward				R
Section No. 4 FD10 Bill No. 6 CARPENTRY AND JOINERY				
BVI CONSULTING ENGINEERS				

Brought Forward			R
<u>Wrought meranti doors hung to steel frames:</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2
9	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed (door raised by 120mm from bottom) (D2)	No	10
Carried Forward to Summary of Section No. 4			
Section No. 4			
FD10			
Bill No. 6			
CARPENTRY AND JOINERY			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
<u>SECTION 4</u>				
<u>BILL NO.7</u>				
<u>IRONMONGERY</u>				
<u>SUPPLEMENTARY PREAMBLES</u>				
For preambles see "Specifications of materials and methods to be used - PW 371"				
<u>CATCHES, CABIN, HOOKS, ETC</u>				
<u>Approved:</u>				
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
<u>LOCKS</u>				
<u>Approved:</u>				
2	Three lever mortice lockset	No	2	
3	Indicator lockset	No	10	
<u>DOORSTOPS</u>				
<u>Approved:</u>				
4	38mm Diameter rubber door stop plugged	No	12	
<u>LETTERS, NAMEPLATES, ETC.</u>				
<u>"Union" or similar approved:</u>				
5	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2	
			R	
Carried Forward				
Section No. 4 FD10 Bill No. 7 IRONMONGERY				
BVI CONSULTING ENGINEERS				

Brought Forward				R
<u>"Vaal Paragon" or similar approved:</u>				
6	32mm Type 9 back grab rail 800mm long plugged	No	1	
7	32mm Type 8 side grab rail 900mm girth plugged	No	1	
<u>BATHROOM FITTINGS</u>				
<u>"Kimberley-Clark" or Similar:</u>				
8	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	11	
<u>Stainless steel</u>				
9	Stainless steel mirror size 350 x 400mm plugged to wall with chrome plated screws.	No	1	
<u>Sundries:</u>				
10	Female SHE BIN plugged to walls	No	2	
Carried Forward to Summary of Section No. 4				R
Section No. 4				
FD10				
Bill No. 7				
IRONMONGERY				
BVI CONSULTING ENGINEERS				

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1,2mm Single rebated frames suitable for half brick walls:</u>			
1	Frame for door 813 x 2032mm high	No	10	
	<u>1,6mm Double rebated frames suitable for one brickwalls:</u>			
2	Frame for door 813 x 2032mm high	No	2	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
3	Window type NE1, 533 x 654mm high including burglar bars	No	11	
4	Window type NE 7,1022 x 654mm high including burglar bars	No	4	
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames:</u>			
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2	
	<u>Sundires:</u>			
6	Purpose made protective steel cage to SHE-BIN	No	2	
	Carried Forward to Summary of Section No. 4		R	
	Section No. 4			
	FD10			
	Bill No. 8			
	METALWORK			
	BVI CONSULTING ENGINEERS			

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Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Allow an amount of R 119 981.00 (One Hundred and Nineteen Thousand and Nine Hundred and Eighty One Rands) for the supply of Standard Industrial I1040 components complete including urinals	Item		119 981.00
2	Collect "Enviroloo" components systems complete as supplied by the manufacturer (This item allows for the collection of the 'Enviroloo' components systems only. Supply and install measured elsewhere)	No	11	
3	Supply and install pre-cast concrete double wash-trough, complete with all necessary pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim"	No	2	
	<u>INSTALLATION OF "ENVIRO LOO"</u>			
4	Allow an amount of R 11 000.00 (Eleven Thousand Rand) for installation of Enviroloo systems	Item		11 000.00
	<u>SANITARY FITTINGS</u>			
	<u>White glazed fireclay or vitreous china coupling with SABS specification 497 in:</u>			
5	Wash hand basin bolted to wall including all fittings and necessary pipework	No	1	
	Carried Forward		R	
	Section No. 4 FD10 Bill No. 10 PLUMBING AND DRAINAGE BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>TRAPS, ETC</u>			
<u>uPVC:</u>			
6	40mm "P" or "S" trap	No	1
<u>TAPS, VALVES, ETC</u>			
7	15mm elbow action pillar tap	No	1
8	19mm chrome plated push button taps to wash troughs	No	5
<u>WATER SUPPLIES</u>			
<u>uPVC pipes:</u>			
9	20mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	50
10	40mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	10
<u>Extra over uPVC pipes for fittings:</u>			
11	20mm Bend	No	5
12	40mm Bend	No	5
<u>Galvanised steel pipes:</u>			
13	20mm Pipes chased into brick walls	m	3
<u>Extra over galvanised steel pipes for steel fittings:</u>			
14	20mm Fittings	No	5
<u>TESTING</u>			
15	Provide all necessary apparatus water, etc for and test the whole of the Water Supply installation to the satisfaction of the Representative/Agent and Municipality, replace any defective work free of charge and leave perfect	Item	
Carried Forward to Summary of Section No. 4			R
Section No. 4			
FD10			
Bill No. 10			
PLUMBING AND DRAINAGE			
BVI CONSULTING ENGINEERS			

[illegible]

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO. 12</u>			
	<u>PAINTWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ON FIBRE-CEMENT</u>			
	<u>Prepare and brush to remove all loose contaminations. apply one coat primer and two coats PVA emulsion paint:</u>			
1	On fascias and barge boards	m2	11	
	<u>ON WOOD</u>			
	<u>Undercoat and minimum 2 coat gloss enamel:</u>			
2	On doors (Internal)	m2	33	
3	On doors (External)	m2	7	
	<u>ON METAL</u>			
	<u>Undercoat and minimum 2 coat gloss enamel:</u>			
4	On door frames	m2	2	
5	On gates (Measured over the full flat area of both sides)	m2	8	
6	On gutters and down pipes	m	17	
	<u>Spot priming defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel:</u>			
7	On windows with burglar bars	m2	6	
	Carried Forward to Summary of Section No. 4			
	Section No. 4			
	FD10			
	Bill No. 12			
	PAINTWORK			
	BVI CONSULTING ENGINEERS			

Bill No	SECTION SUMMARY - FD10	Page No	Amount
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10	PLUMBING AND DRAINAGE	99	
11	GLAZING	100	
12	PAINTWORK	101	
Carried to Final Summary			R
Section No. 4 FD10			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs,bush and trees not exceeding 200mm girth, etc.	m2	103	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	103	
	<u>EXCAVATION,FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep:</u>			
3	Trenches	m3	24	
4	Pit	m3	42	
5	For aprons thickening	m3	5	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	71	
7	Hard rock	m3	71	
	<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 allocated by the Contractor	m3	53	
	Carried Forward		R	
	Section No. 5 MD6 Bill No. 1 EARTHWORKS			
	BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Risk of collapse of excavations:</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	112
<u>Keeping excavations free of water:</u>			
10	Keeping excavations free of water other than subterranean water	Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% ModAASHTO density:</u>			
11	Under floors, steps, pavings, etc.	m3	12
12	Backfilling to trenches, holes, etc.	m3	13
<u>Compaction of surfaces:</u>			
13	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 93% Mod AASHTO density	m2	39
14	Compaction of ground surface to pits 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	33
15	Compaction of ground surface to aprons 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	54
<u>Prescribed density tests on filling:</u>			
16	Modified AASHTO Density tests	No	5
<u>SOIL POISONING</u>			
Carried Forward			R
Section No. 5 MD6 Bill No. 1 EARTHWORKS			
BVI CONSULTING ENGINEERS			

	Brought Forward			R
	<u>Soil insecticide:</u>			
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	39	
18	To bottom of concrete aprons	m2	54	
19	To bottoms and sides of trenches, etc.	m2	92	
Carried Forward to Summary of Section No. 5				R
Section No. 5				
MD6				
Bill No. 1				
EARTHWORKS				
BVI CONSULTING ENGINEERS				

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<u>UNREINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete:</u>			
1	Strip footings	m3	6	
2	Ditto, but surface bed in pit	m3	4	
3	2Aprons cast in panels	m3	5	
4	Ramp	m3	1	
5	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	17	
6	Thickening down apron on edge 110mm deep x 200mm wide	m	42	
	<u>REINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete:</u>			
7	Surface beds	m3	4	
8	Slabs	m3	2	
	Carried Forward			
	Section No. 5			
	MD6			
	Bill No. 2			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	BVI CONSULTING ENGINEERS			
			R	

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a steel trowel:</u>			
9	Surface beds, slabs, etc.	m2	56
<u>Finishing top surfaces of concrete smooth with a wood float:</u>			
10	Aprons and pavings to falls	m2	54
<u>TEST CUBES</u>			
11	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	24
<u>FORMWORK</u>			
<u>Rough formwork to sides:</u>			
12	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	48
<u>Permanent formwork to soffits:</u>			
13	Slabs propped up not exceeding 1.5m high	m2	12
14	Leave or form 500mm diameter opening in top of floor slab	No	7
<u>REINFORCEMENT</u>			
<u>Mesh Reinforcement (measure nett):</u>			
15	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	39
Carried Forward to Summary of Section No. 5			R
Section No. 5			
MD6			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			
BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 4</u>			
<u>BILL NO.3</u>			
<u>BRICKWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>BRICKWORK</u>			
<u>Sizes in descriptions:</u>			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<u>Hollow walls etc.:</u>			
Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixal" bitumen emulsion waterproofing coating.			
User note: The above preamble generally applies for works in hot and humid coastal areas			
<u>Face bricks:</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
Carried Forward			R
Section No. 5 MD6 Bill No. 3 MASONRY BVI CONSULTING ENGINEERS			

	Brought Forward			R	
	<u>Pointing:</u>				
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
	<u>SAMPLES</u>				
	Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6				
	<u>FOUNDATIONS</u>				
	<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>				
1	One brick walls	m2	26		
2	One brick walls in pit	m2	56		
3	4Half brick corbelling in pit	m	19		
	<u>FACE BRICKWORK</u>				
	Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:				
4	Extra over brickwork for face brickwork in foundation	m2	6		
	<u>SUPERSTRUCTURE</u>				
	<u>FACE BRICKWORK</u>				
	Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:				
5	Half brickwork for face brick walls pointed both sides	m2	42		
6	One brickwork for face brick walls pointed both sides	m2	102		
	Carried Forward			R	
	Section No. 5 MD6 Bill No. 3 MASONRY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R
7	Extra over brickwork for face brickwork in beamfilling	m2	6	
8	Fair raking and cutting	m	7	
	<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces:</u>			
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	16	
	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	9	
10	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	1	
	<u>BRICKWORK SUNDRIES</u>			
	<u>Brick reinforcement:</u>			
11	75mm Wide reinforcement built in horizontally	m	124	
12	150mm Wide reinforcement built in horizontally	m	577	
	<u>Turning pieces:</u>			
13	220mm Wide turning piece to lintel etc	m	18	
	<u>Galvanised wire ties etc.:</u>			
14	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	28	
	<u>Prestressed fabricated lintels:</u>			
15	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	17	
	<u>Ventillation bricks:</u>			
16	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	16	
	Carried Forward to Summary of Section No. 5			R
	Section No. 5			
	MD6			
	Bill No. 3			
	MASONRY			
	BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.4</u>			
	<u>WATERPROOFING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer 375mm micron embossed damp proof course:</u>			
1	In walls	m2	18	
	<u>One layer of 250mm micron waterproof sheeting and sealed at overlaps with pressure sensitive tape:</u>			
2	Under surface beds	m2	61	
3	Aprons and ramps	m2	54	
	<u>FLOOR AND WALLS SEALERS</u>			
	<u>"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:</u>			
4	Around steel windows and door frames.	m	16	
	Carried Forward to Summary of Section No. 5			R
	Section No. 5			
	MD6			
	Bill No. 4			
	WATERPROOFING			
	BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.5</u>			
	<u>ROOF COVERINGS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,6mm "Kliplok" chromadek profile roof sheeting fixed to timber purlins (elsewhere)</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	56	
	<u>Sundries:</u>			
2	12" Thermal resistance sisalation laid on purlins	m2	56	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	13	
4	Extra over for closed ends	No	2	
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	3	
6	Extra over rainwater pipe for eaves offset	No	1	
	Carried Forward			
	Section No. 5 MD6 Bill No. 5 ROOF COVERINGS			
	BVI CONSULTING ENGINEERS			
			R	

Brought Forward			R
7	Ditto ,for shoe	No	1
Carried Forward to Summary of Section No. 5 Section No. 5 MD6 Bill No. 5 ROOF COVERINGS BVI CONSULTING ENGINEERS			R

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ROOFS, ETC.</u>			
	<u>Sawn softwood:</u>			
1	38 x 152mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	62	
2	76 x 38mm Wall plates	m	23	
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	62	
	<u>Sundries:</u>			
4	Two coats creosote on sawn timbers	m2	40	
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	28	
6	Hurricane clips	No	70	
	<u>EAVES, VERGES, ETC.</u>			
	<u>Pressed fibre-cement:</u>			
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	34	
	<u>DOORS, ETC.</u>			
	Carried Forward		R	
	Section No. 5 MD6 Bill No. 6 CARPENTRY AND JOINERY			
	BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Wrought meranti doors hung to steel frames:</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2
9	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed (door raised by 120mm from bottom) (D2)	No	6
Carried Forward to Summary of Section No. 5			
Section No. 5			
MD6			
Bill No. 6			
CARPENTRY AND JOINERY			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.7</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>CATCHES, CABIN, HOOKS, ETC</u>			
	<u>Approved:</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
	<u>LOCKS</u>			
	<u>Approved:</u>			
2	Three lever mortice lockset	No	2	
3	Indicator lockset	No	6	
	<u>DOORSTOPS</u>			
	<u>Approved:</u>			
4	38mm Diameter rubber door stop plugged	No	8	
	<u>LETTERS, NAMEPLATES, ETC.</u>			
	<u>"Union" or similar approved:</u>			
5	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2	
	Carried Forward		R	
	Section No. 5 MD6 Bill No. 7 IRONMONGERY			
	BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>"Vaal Paragon" or similar approved:</u>			
6	32mm Type 9 back grab rail 800mm long plugged	No	1
7	32mm Type 8 side grab rail 900mm girth plugged	No	1
<u>BATHROOM FITTINGS</u>			
<u>"Kimberley-Clark" or Similar:</u>			
8	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	7
<u>Stainless steel</u>			
9	Stainless steel mirror size 350 x 400mm plugged to wall with chrome plated screws.	No	1
Carried Forward to Summary of Section No. 5			R
Section No. 5			
MD6			
Bill No. 7			
IRONMONGERY			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1.2mm Single rebated frames suitable for half brick walls:</u>			
1	Frame for door 813 x 2032mm high	No	6	
	<u>1.6mm Double rebated frames suitable for one brickwalls:</u>			
2	Frame for door 813 x 2032mm high	No	2	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
3	Window type NE1, 533 x 654mm high including burglar bars	No	10	
4	Window type NE 7,1022 x 654mm high including burglar bars	No	4	
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames:</u>			
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2	
	Carried Forward to Summary of Section No. 5		R	
	Section No. 5			
	MD6			
	Bill No. 8			
	METALWORK			
	BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 4</u>			
<u>BILL NO. 9</u>			
<u>PLASTERING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>CEMENT SCREEDS TO CONCRETE</u>			
<u>Screeds to steel trowelled, on concrete:</u>			
1	30mm thick on floors	m2	39
<u>INTERNAL PLASTER</u>			
<u>Cement plaster on brickwork or blockwork:</u>			
2	On pits walls	m2	59
<u>FLOOR AND WALLS SEALERS</u>			
<u>Minimum two coats approved epoxy coat:</u>			
3	On screed	m2	39
4	On internal textured plaster walls and floors in pit	m2	71
Carried Forward to Summary of Section No. 5			R
Section No. 5			
MD6			
Bill No. 9			
PLASTERING			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Allow an amount of R 106 097.00 (One Hundred and Six Thousand and Ninety Seven Rands) for the supply of Standard Industrial I1040 components complete including urinals	Item		106 097.00
2	Collect "Enviroloo" components systems complete as supplied by the manufacturer (This item allows for the collection of the 'Enviroloo' components systems only. Supply and install measured elsewhere)	No	10	
3	Supply and install pre-cast concrete double wash-trough, complete with all necessary pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim"	No	1	
	<u>INSTALLATION OF "ENVIRO LOO"</u>			
4	Allow an amount of R 10 000.00 (Ten Thousand Rand) for installation of Enviroloo systems	Item		10 000.00
	<u>SANITARY FITTINGS</u>			
	<u>White glazed fireclay or vitreous china coupling with SABS specification 497 in:</u>			
5	Wash hand basin bolted to wall including all fittings and necessary pipework	No	1	
	Carried Forward		R	
	Section No. 5 MD6 Bill No. 10 PLUMBING AND DRAINAGE BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>TRAPS, ETC</u>			
<u>uPVC:</u>			
6	40mm "P" or "S" trap	No	3
<u>TAPS, VALVES, ETC</u>			
7	15mm elbow action pillar tap	No	1
8	19mm chrome plated push button taps to wash troughs	No	2
<u>WATER SUPPLIES</u>			
<u>uPVC pipes:</u>			
9	20mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	50
10	40mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	10
<u>Extra over uPVC pipes for fittings:</u>			
11	20mm Bend	No	5
12	40mm Bend	No	5
<u>Galvanised steel pipes:</u>			
13	20mm Pipes chased into brick walls	m	3
<u>Extra over galvanised steel pipes for steel fittings:</u>			
14	20mm Fittings	No	5
<u>TESTING</u>			
15	Provide all necessary apparatus water, etc for and test the whole of the Water Supply installation to the satisfaction of the Representative/Agent and Municipality, replace any defective work free of charge and leave perfect	Item	
Carried Forward to Summary of Section No. 5			R
Section No. 5			
MD6			
Bill No. 10			
PLUMBING AND DRAINAGE			
BVI CONSULTING ENGINEERS			

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Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO. 12</u>			
	<u>PAINTWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ON FIBRE-CEMENT</u>			
	<u>Prepare and brush to remove all loose contaminations. apply one coat primer and two coats PVA emulsion paint:</u>			
1	On fascias and barge boards	m2	10	
	<u>ON WOOD</u>			
	<u>Undercoat and minimum 2 coat gloss enamel:</u>			
2	On doors (Internal)	m2	20	
3	On doors (External)	m2	7	
	<u>ON METAL</u>			
	<u>Undercoat and minimum 2 coat gloss enamel:</u>			
4	On door frames	m2	2	
5	On gates (Measured over the full flat area of both sides)	m2	8	
6	On gutters and down pipes	m	15	
	<u>Spot priming defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel:</u>			
7	On windows with burglar bars	m2	6	
	Carried Forward to Summary of Section No. 5			
	Section No. 5			
	MD6			
	Bill No. 12			
	PAINTWORK			
	BVI CONSULTING ENGINEERS			

Bill No	SECTION SUMMARY - MD6	Page No	Amount
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6	CARPENTRY AND JOINERY	115	
7	IRONMONGERY	117	
8	METALWORK	118	
9	PLASTERING	119	
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11	GLAZING	122	
12	PAINTWORK	123	
Carried to Final Summary			R
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BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	103	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	103	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep:</u>			
3	Trenches	m3	24	
4	Pit	m3	42	
5	For aprons thickening	m3	5	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	71	
7	Hard rock	m3	71	
	<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 allocated by the Contractor	m3	53	
	Carried Forward		R	
	Section No. 6 MD7 Bill No. 1 EARTHWORKS			
	BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Risk of collapse of excavations:</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	112
<u>Keeping excavations free of water:</u>			
10	Keeping excavations free of water other than subterranean water	Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% ModAASHTO density:</u>			
11	Under floors, steps, pavings, etc.	m3	12
12	Backfilling to trenches, holes, etc.	m3	13
<u>Compaction of surfaces:</u>			
13	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 93% Mod AASHTO density	m2	39
14	Compaction of ground surface to pits 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	33
15	Compaction of ground surface to aprons 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	54
<u>Prescribed density tests on filling:</u>			
16	Modified AASHTO Density tests	No	5
<u>SOIL POISONING</u>			
Carried Forward			R
Section No. 6 MD7 Bill No. 1 EARTHWORKS			
BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Soil insecticide:</u>			
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	39
18	To bottom of concrete aprons	m2	54
19	To bottoms and sides of trenches, etc.	m2	92
Carried Forward to Summary of Section No. 6			R
Section No. 6			
MD7			
Bill No. 1			
EARTHWORKS			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<u>UNREINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete:</u>			
1	Strip footings	m3	6	
2	Ditto, but surface bed in pit	m3	4	
3	2Aprons cast in panels	m3	5	
4	Ramp	m3	1	
5	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	17	
6	Thickening down apron on edge 110mm deep x 200mm wide	m	42	
	<u>REINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete:</u>			
7	Surface beds	m3	4	
8	Slabs	m3	2	
	Carried Forward		R	
	Section No. 6 MD7 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT			
	BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a steel trowel:</u>			
9	Surface beds, slabs, etc.	m2	56
<u>Finishing top surfaces of concrete smooth with a wood float:</u>			
10	Aprons and pavings to falls	m2	54
<u>TEST CUBES</u>			
11	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	24
<u>FORMWORK</u>			
<u>Rough formwork to sides:</u>			
12	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	48
<u>Permanent formwork to soffits:</u>			
13	Slabs propped up not exceeding 1.5m high	m2	12
14	Leave or form 500mm diameter opening in top of floor slab	No	7
<u>REINFORCEMENT</u>			
<u>Mesh Reinforcement (measure nett):</u>			
15	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	39
Carried Forward to Summary of Section No. 6			R
Section No. 6			
MD7			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			
BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 4</u> <u>BILL NO.3</u> <u>BRICKWORK</u> <u>SUPPLEMENTARY PREAMBLES</u> For preambles see "Specifications of materials and methods to be used - PW 371" <u>BRICKWORK</u> <u>Sizes in descriptions:</u> Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick <u>Hollow walls etc.:</u> Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole. Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixal" bitumen emulsion waterproofing coating. User note: The above preamble generally applies for works in hot and humid coastal areas <u>Face bricks:</u> Bricks shall be ordered timeously to obtain uniformity in size and colour			
		R	
Carried Forward Section No. 6 MD7 Bill No. 3 MASONRY BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Pointing:</u> Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SAMPLES</u> Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6			
<u>FOUNDATIONS</u> <u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	26
2	One brick walls in pit	m2	56
3	4Half brick corbelling in pit	m	19
<u>FACE BRICKWORK</u> <u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:</u>			
4	Extra over brickwork for face brickwork in foundation	m2	6
<u>SUPERSTRUCTURE</u> <u>FACE BRICKWORK</u> <u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:</u>			
5	Half brickwork for face brick walls pointed both sides	m2	42
6	One brickwork for face brick walls pointed both sides	m2	102
Carried Forward			R
Section No. 6 MD7 Bill No. 3 MASONRY BVI CONSULTING ENGINEERS			

	Brought Forward			R
7	Extra over brickwork for face brickwork in beamfilling	m2	6	
8	Fair raking and cutting	m	7	
	<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces:</u>			
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	16	
	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	9	
10	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	1	
	<u>BRICKWORK SUNDRIES</u>			
	<u>Brick reinforcement:</u>			
11	75mm Wide reinforcement built in horizontally	m	124	
12	150mm Wide reinforcement built in horizontally	m	577	
	<u>Turning pieces:</u>			
13	220mm Wide turning piece to lintel etc	m	18	
	<u>Galvanised wire ties etc.:</u>			
14	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	28	
	<u>Prestressed fabricated lintels:</u>			
15	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	17	
	<u>Ventillation bricks:</u>			
16	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	16	
	Carried Forward to Summary of Section No. 6			R
	Section No. 6			
	MD7			
	Bill No. 3			
	MASONRY			
	BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.4</u>			
	<u>WATERPROOFING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer 375mm micron embossed damp proof course:</u>			
1	In walls	m2	18	
	<u>One layer of 250mm micron waterproof sheeting and sealed at overlaps with pressure sensitive tape:</u>			
2	Under surface beds	m2	61	
3	Aprons and ramps	m2	54	
	<u>FLOOR AND WALLS SEALERS</u>			
	<u>"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:</u>			
4	Around steel windows and door frames.	m	16	
	Carried Forward to Summary of Section No. 6			R
	Section No. 6			
	MD7			
	Bill No. 4			
	WATERPROOFING			
	BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.5</u>			
	<u>ROOF COVERINGS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,6mm "Kliplok" chromadek profile roof sheeting fixed to timber purlins (elsewhere)</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	56	
	<u>Sundries:</u>			
2	12" Thermal resistance sisalation laid on purlins	m2	56	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	13	
4	Extra over for closed ends	No	2	
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	3	
6	Extra over rainwater pipe for eaves offset	No	1	
	Carried Forward		R	
	Section No. 6 MD7 Bill No. 5 ROOF COVERINGS			
	BVI CONSULTING ENGINEERS			

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Brought Forward			R
<u>Wrought meranti doors hung to steel frames:</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2
9	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed (door raised by 120mm from bottom) (D2)	No	6
Carried Forward to Summary of Section No. 6			
Section No. 6			
MD7			
Bill No. 6			
CARPENTRY AND JOINERY			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
<u>SECTION 4</u>				
<u>BILL NO.7</u>				
<u>IRONMONGERY</u>				
<u>SUPPLEMENTARY PREAMBLES</u>				
For preambles see "Specifications of materials and methods to be used - PW 371"				
<u>CATCHES, CABIN, HOOKS, ETC</u>				
<u>Approved:</u>				
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
<u>LOCKS</u>				
<u>Approved:</u>				
2	Three lever mortice lockset	No	2	
3	Indicator lockset	No	6	
<u>DOORSTOPS</u>				
<u>Approved:</u>				
4	38mm Diameter rubber door stop plugged	No	8	
<u>LETTERS, NAMEPLATES, ETC.</u>				
<u>"Union" or similar approved:</u>				
5	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2	
Carried Forward				R
Section No. 6 MD7 Bill No. 7 IRONMONGERY				
BVI CONSULTING ENGINEERS				

Brought Forward			R
<u>"Vaal Paragon" or similar approved:</u>			
6	32mm Type 9 back grab rail 800mm long plugged	No	1
7	32mm Type 8 side grab rail 900mm girth plugged	No	1
<u>BATHROOM FITTINGS</u>			
<u>"Kimberley-Clark" or Simlilar:</u>			
8	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	7
<u>Stainless steel</u>			
9	Stainless steel mirror size 350 x 400m plugged to wall with chrome plated screws.	No	1
Carried Forward to Summary of Section No. 6			R
Section No. 6			
MD7			
Bill No. 7			
IRONMONGERY			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1.2mm Single rebated frames suitable for half brick walls:</u>			
1	Frame for door 813 x 2032mm high	No	6	
	<u>1.6mm Double rebated frames suitable for one brickwalls:</u>			
2	Frame for door 813 x 2032mm high	No	2	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
3	Window type NE1, 533 x 654mm high including burglar bars	No	10	
4	Window type NE 7,1022 x 654mm high including burglar bars	No	4	
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames:</u>			
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2	
	Carried Forward to Summary of Section No. 6		R	
	Section No. 6			
	MD7			
	Bill No. 8			
	METALWORK			
	BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 4</u>			
<u>BILL NO. 9</u>			
<u>PLASTERING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>CEMENT SCREEDS TO CONCRETE</u>			
<u>Screeds to steel trowelled, on concrete:</u>			
1	30mm thick on floors	m2	39
<u>INTERNAL PLASTER</u>			
<u>Cement plaster on brickwork or blockwork:</u>			
2	On pits walls	m2	59
<u>FLOOR AND WALLS SEALERS</u>			
<u>Minimum two coats approved epoxy coat:</u>			
3	On screed	m2	39
4	On internal textured plaster walls and floors in pit	m2	71
Carried Forward to Summary of Section No. 6			R
Section No. 6 MD7 Bill No. 9 PLASTERING			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Allow an amount of R 106 097.00 (One Hundred and Six Thousand and Ninety Seven Rands) for the supply of Standard Industrial I1040 components complete including urinals	Item		106 097.00
2	Collect "Enviroloo" components systems complete as supplied by the manufacturer (This item allows for the collection of the 'Enviroloo' components systems only. Supply and install measured elsewhere)	No	10	
3	Supply and install pre-cast concrete double wash-trough, complete with all necessary pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim"	No	1	
	<u>INSTALLATION OF "ENVIRO LOO"</u>			
4	Allow an amount of R 10 000.00 (Ten Thousand Rand) for installation of Enviroloo systems	Item		10 000.00
	<u>SANITARY FITTINGS</u>			
	<u>White glazed fireclay or vitreous china coupling with SABS specification 497 in:</u>			
5	Wash hand basin bolted to wall including all fittings and necessary pipework	No	1	
	Carried Forward		R	
	Section No. 6 MD7 Bill No. 10 PLUMBING AND DRAINAGE BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>TRAPS, ETC</u>			
<u>uPVC:</u>			
6	40mm "P" or "S" trap	No	3
<u>TAPS, VALVES, ETC</u>			
7	15mm elbow action pillar tap	No	1
8	19mm chrome plated push button taps to wash troughs	No	2
<u>WATER SUPPLIES</u>			
<u>uPVC pipes:</u>			
9	20mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	50
10	40mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	10
<u>Extra over uPVC pipes for fittings:</u>			
11	20mm Bend	No	5
12	40mm Bend	No	5
<u>Galvanised steel pipes:</u>			
13	20mm Pipes chased into brick walls	m	3
<u>Extra over galvanised steel pipes for steel fittings:</u>			
14	20mm Fittings	No	5
<u>TESTING</u>			
15	Provide all necessary apparatus water, etc for and test the whole of the Water Supply installation to the satisfaction of the Representative/Agent and Municipality, replace any defective work free of charge and leave perfect	Item	
Carried Forward to Summary of Section No. 6			R
Section No. 6			
MD7			
Bill No. 10			
PLUMBING AND DRAINAGE			
BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 4</u>			
<u>BILL NO. 11</u>			
<u>GLAZING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>GLAZING TO STEEL WITH PUTTY</u>			
<u>4mm Obscure safety glass:</u>			
1	Panes not exceeding 0,1 m2	m2	6
Carried Forward to Summary of Section No. 6			R
Section No. 6			
MD7			
Bill No. 11			
GLAZING			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO. 12</u>			
	<u>PAINTWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ON FIBRE-CEMENT</u>			
	<u>Prepare and brush to remove all loose contaminations. apply one coat primer and two coats PVA emulsion paint:</u>			
1	On fascias and barge boards	m2	10	
	<u>ON WOOD</u>			
	<u>Undercoat and minimum 2 coat gloss enamel:</u>			
2	On doors (Internal)	m2	20	
3	On doors (External)	m2	7	
	<u>ON METAL</u>			
	<u>Undercoat and minimum 2 coat gloss enamel:</u>			
4	On door frames	m2	2	
5	On gates (Measured over the full flat area of both sides)	m2	8	
6	On gutters and down pipes	m	15	
	<u>Spot priming defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel:</u>			
7	On windows with burglar bars	m2	6	
	Carried Forward to Summary of Section No. 6			
	Section No. 6			
	MD7			
	Bill No. 12			
	PAINTWORK			
	BVI CONSULTING ENGINEERS			

Bill No	SECTION SUMMARY - MD7	Page No	Amount
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3	MASONRY	132	
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6	CARPENTRY AND JOINERY	137	
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11	GLAZING	144	
12	PAINTWORK	145	
Carried to Final Summary			R
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Item No		Quantity	Rate	Amount
	<u>SECTION 7</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	81	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	81	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep:</u>			
3	Trenches	m3	19	
4	Pit	m3	23	
5	For aprons thickening	m3	5	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	47	
7	Hard rock	m3	47	
	<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 allocated by the Contractor	m3	32	
	Carried Forward		R	
	Section No. 7 GRMD4 Bill No. 1 EARTHWORKS			
	BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Risk of collapse of excavations:</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	83
<u>Keeping excavations free of water:</u>			
10	Keeping excavations free of water other than subterranean water	Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% ModAASHTO density:</u>			
11	Under floors, steps, pavings, etc.	m3	9
12	Backfilling to trenches, holes, etc.	m3	9
<u>Compaction of surfaces:</u>			
13	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 93% Mod AASHTO density	m2	28
14	Compaction of ground surface to pits 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	18
15	Compaction of ground surface to aprons 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	46
<u>Prescribed density tests on filling:</u>			
16	Modified AASHTO Density tests	No	5
<u>SOIL POISONING</u>			
Carried Forward			R
Section No. 7 GRMD4 Bill No. 1 EARTHWORKS			
BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Soil insecticide:</u>			
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	28
18	To bottom of concrete aprons	m2	46
19	To bottoms and sides of trenches, etc.	m2	75
Carried Forward to Summary of Section No. 7			R
Section No. 7			
GRMD4			
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BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 7</u>			
	<u>BILL NO.2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<u>UNREINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete:</u>			
1	Strip footings	m3	4	
2	Ditto, but surface bed in pit	m3	2	
3	2Aprons cast in panels	m3	4	
4	Ramp	m3	1	
5	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	11	
6	Thickening down apron on edge 110mm deep x 200mm wide	m	36	
	<u>REINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete:</u>			
7	Surface beds	m3	3	
8	Slabs	m3	1	
	Carried Forward			
	Section No. 7			
	GRMD4			
	Bill No. 2			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	BVI CONSULTING ENGINEERS			
			R	

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a steel trowel:</u>			
9	Surface beds, slabs, etc.	m2	38
<u>Finishing top surfaces of concrete smooth with a wood float:</u>			
10	Aprons and pavings to falls	m2	46
<u>TEST CUBES</u>			
11	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	24
<u>FORMWORK</u>			
<u>Rough formwork to sides:</u>			
12	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	41
<u>Permanent formwork to soffits:</u>			
13	Slabs propped up not exceeding 1.5m high	m2	8
14	Leave or form 500mm diameter opening in top of floor slab	No	5
<u>REINFORCEMENT</u>			
<u>Mesh Reinforcement (measure nett):</u>			
15	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	28
Carried Forward to Summary of Section No. 7			R
Section No. 7			
GRMD4			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			
BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 7</u>			
<u>BILL NO.3</u>			
<u>BRICKWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>BRICKWORK</u>			
<u>Sizes in descriptions:</u>			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<u>Hollow walls etc.:</u>			
Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixal" bitumen emulsion waterproofing coating.			
User note: The above preamble generally applies for works in hot and humid coastal areas			
<u>Face bricks:</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
Carried Forward			R
Section No. 7 GRMD4 Bill No. 3 MASONRY BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Pointing:</u> Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SAMPLES</u> Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6			
<u>FOUNDATIONS</u> <u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	21
2	One brick walls in pit	m2	36
3	4Half brick corbelling in pit	m	14
<u>FACE BRICKWORK</u> <u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:</u>			
4	Extra over brickwork for face brickwork in foundation	m2	5
<u>SUPERSTRUCTURE</u> <u>FACE BRICKWORK</u> <u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:</u>			
5	Half brickwork for face brick walls pointed both sides	m2	28
6	One brickwork for face brick walls pointed both sides	m2	83
Carried Forward			R
Section No. 7 GRMD4 Bill No. 3 MASONRY BVI CONSULTING ENGINEERS			

	Brought Forward			R
7	Extra over brickwork for face brickwork in beamfilling	m2	5	
8	Fair raking and cutting	m	7	
	<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces:</u>			
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	12	
	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	7	
10	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	1	
	<u>BRICKWORK SUNDRIES</u>			
	<u>Brick reinforcement:</u>			
	75mm Wide reinforcement built in horizontally	m	82	
11	150mm Wide reinforcement built in horizontally	m	382	
	<u>Turning pieces:</u>			
12	220mm Wide turning piece to lintel etc	m	12	
	<u>Galvanised wire ties etc.:</u>			
13	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	20	
	<u>Prestressed fabricated lintels:</u>			
14	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	13	
	<u>Ventillation bricks:</u>			
15	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	12	
	Carried Forward to Summary of Section No. 7			R
	Section No. 7			
	GRMD4			
	Bill No. 3			
	MASONRY			
	BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 7</u>			
	<u>BILL NO.4</u>			
	<u>WATERPROOFING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer 375mm micron embossed damp proof course:</u>			
1	In walls	m2	13	
	<u>One layer of 250mm micron waterproof sheeting and sealed at overlaps with pressure sensitive tape:</u>			
2	Under surface beds	m2	40	
3	Aprons and ramps	m2	46	
	<u>FLOOR AND WALLS SEALERS</u>			
	<u>"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:</u>			
4	Around steel windows and door frames.	m	12	
	Carried Forward to Summary of Section No. 7			R
	Section No. 7			
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	Bill No. 4			
	WATERPROOFING			
	BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 7</u>			
	<u>BILL NO.5</u>			
	<u>ROOF COVERINGS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,6mm "Kliplok" chromadek profile roof sheeting fixed to timber purlins (elsewhere)</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	42	
	<u>Sundries:</u>			
2	12" Thermal resistance sisalation laid on purlins	m2	42	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	9	
4	Extra over for closed ends	No	2	
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	3	
6	Extra over rainwater pipe for eaves offset	No	1	
	Carried Forward			
	Section No. 7 GRMD4 Bill No. 5 ROOF COVERINGS		R	
	BVI CONSULTING ENGINEERS			

Brought Forward		R
7	Ditto ,for shoe	No 1
Carried Forward to Summary of Section No. 7 Section No. 7 GRMD4 Bill No. 5 ROOF COVERINGS BVI CONSULTING ENGINEERS		R

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Brought Forward			R
<u>Wrought meranti doors hung to steel frames:</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2
9	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed (door raised by 120mm from bottom) (D2)	No	4
Carried Forward to Summary of Section No. 7			
Section No. 7			
GRMD4			
Bill No. 6			
CARPENTRY AND JOINERY			
BVI CONSULTING ENGINEERS			

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Brought Forward			R
<u>"Vaal Paragon" or similar approved:</u>			
6	32mm Type 9 back grab rail 800mm long plugged	No	1
7	32mm Type 8 side grab rail 900mm girth plugged	No	1
<u>BATHROOM FITTINGS</u>			
<u>"Kimberley-Clark" or Simlilar:</u>			
8	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	5
<u>Stainless steel</u>			
9	Stainless steel mirror size 350 x 400m plugged to wall with chrome plated screws.	No	1
Carried Forward to Summary of Section No. 7			R
Section No. 7			
GRMD4			
Bill No. 7			
IRONMONGERY			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 7</u>			
	<u>BILL NO.8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1.2mm Single rebated frames suitable for half brick walls:</u>			
1	Frame for door 813 x 2032mm high	No 4		
	<u>1.6mm Double rebated frames suitable for one brickwalls:</u>			
2	Frame for door 813 x 2032mm high	No 2		
	<u>STEEL WINDOWS, DOORS, ETC</u>			
3	Window type NE1, 533 x 654mm high including burglar bars	No 7		
4	Window type NE 7,1022 x 654mm high including burglar bars	No 3		
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames:</u>			
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No 2		
	Carried Forward to Summary of Section No. 7		R	
	Section No. 7 GRMD4 Bill No. 8 METALWORK			
	BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 7</u>			
<u>BILL NO. 9</u>			
<u>PLASTERING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>CEMENT SCREEDS TO CONCRETE</u>			
<u>Screeds to steel trowelled, on concrete:</u>			
1	30mm thick on floors	m2	28
<u>INTERNAL PLASTER</u>			
<u>Cement plaster on brickwork or blockwork:</u>			
2	On pits walls	m2	44
<u>FLOOR AND WALLS SEALERS</u>			
<u>Minimum two coats approved epoxy coat:</u>			
3	On screed	m2	28
4	On internal textured plaster walls and floors in pit	m2	53
Carried Forward to Summary of Section No. 7			R
Section No. 7 GRMD4 Bill No. 9 PLASTERING			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 7</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Allow an amount of R 82 655.00 (Eighty Two Thousand Six Hundred and Fifty Five Rands) for the supply of Standard Industrial I1040 components complete including urinals	Item		82 655.00
2	Collect "Enviroloo" components systems complete as supplied by the manufacturer (This item allows for the collection of the 'Enviroloo' components systems only. Supply and install measured eslwhere)	No	7	
3	Supply and install pre-cast concrete double wash-trough, complete with all necessary pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim"	No	1	
	<u>INSTALLATION OF "ENVIRO LOO"</u>			
4	Allow an amount of R 7 000.00 (Seven Thousand Rand) for installation of Enviroloo systems	Item		7 000.00
	<u>SANITARY FITTINGS</u>			
	<u>White glazed fireclay or vitreous china coupling with SABS specification 497 in:</u>			
5	"Vaal hibiscus" wash hand basin bolted to wall including all fittings and necessary pipework	No	1	
	Carried Forward		R	
	Section No. 7 GRMD4 Bill No. 10 PLUMBING AND DRAINAGE BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>TRAPS, ETC</u>			
<u>uPVC:</u>			
6	40mm "P" or "S" trap	No	3
<u>TAPS, VALVES, ETC</u>			
7	15mm elbow action pillar tap	No	1
8	19mm chrome plated push button taps to wash troughs	No	2
<u>WATER SUPPLIES</u>			
<u>uPVC pipes:</u>			
9	20mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	50
10	40mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	10
<u>Extra over uPVC pipes for fittings:</u>			
11	20mm Bend	No	5
12	40mm Bend	No	5
<u>Galvanised steel pipes:</u>			
13	20mm Pipes chased into brick walls	m	3
<u>Extra over galvanised steel pipes for steel fittings:</u>			
14	20mm Fittings	No	5
<u>TESTING</u>			
15	Provide all necessary apparatus water, etc for and test the whole of the Water Supply installation to the satisfaction of the Representative/Agent and Municipality, replace any defective work free of charge and leave perfect	Item	
Carried Forward to Summary of Section No. 7			R
Section No. 7			
GRMD4			
Bill No. 10			
PLUMBING AND DRAINAGE			
BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 7</u>			
<u>BILL NO. 11</u>			
<u>GLAZING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>GLAZING TO STEEL WITH PUTTY</u>			
<u>4mm Obscure safety glass:</u>			
1	Panes not exceeding 0,1 m2	m2	4
Carried Forward to Summary of Section No. 7			R
Section No. 7			
GRMD4			
Bill No. 11			
GLAZING			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 7</u>			
	<u>BILL NO. 12</u>			
	<u>PAINTWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ON FIBRE-CEMENT</u>			
	<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint:</u>			
1	On fascias and barge boards	m2	8	
	<u>ON WOOD</u>			
	<u>Undercoat and minimum 2 coat gloss enamel:</u>			
2	On doors (Internal)	m2	13	
3	On doors (External)	m2	7	
	<u>ON METAL</u>			
	<u>Undercoat and minimum 2 coat gloss enamel:</u>			
4	On door frames	m2	1	
5	On gates (Measured over the full flat area of both sides)	m2	8	
6	On gutters and down pipes	m	15	
	<u>Spot prining defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel:</u>			
7	On windows with burglar bars	m2	4	
	Carried Forward to Summary of Section No. 7			
	Section No. 7			
	GRMD4			
	Bill No. 12			
	PAINTWORK			
	BVI CONSULTING ENGINEERS			

Bill No	SECTION SUMMARY - GRMD4	Page No	Amount
1	EARTHWORKS	149	
2	CONCRETE, FORMWORK AND REINFORCEMENT	151	
3	MASONRY	154	
4	WATERPROOFING	155	
5	ROOF COVERINGS	157	
6	CARPENTRY AND JOINERY	159	
7	IRONMONGERY	161	
8	METALWORK	162	
9	PLASTERING	163	
10	PLUMBING AND DRAINAGE	165	
11	GLAZING	166	
12	PAINTWORK	167	
Carried to Final Summary			R
Section No. 7 GRMD4			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 8</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	87	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	87	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep:</u>			
3	Trenches	m3	21	
4	Pit	m3	34	
5	For aprons thickening	m3	5	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	59	
7	Hard rock	m3	59	
	<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 allocated by the Contractor	m3	44	
	Carried Forward			
	Section No. 8 GRFD7 Bill No. 1 EARTHWORKS			
	BVI CONSULTING ENGINEERS			
			R	

Brought Forward			R
<u>Risk of collapse of excavations:</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	96
<u>Keeping excavations free of water:</u>			
10	Keeping excavations free of water other than subterranean water	Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% ModAASHTO density:</u>			
11	Under floors, steps, pavings, etc.	m3	10
12	Backfilling to trenches, holes, etc.	m3	11
<u>Compaction of surfaces:</u>			
13	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 93% Mod AASHTO density	m2	32
14	Compaction of ground surface to pits 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	27
15	Compaction of ground surface to aprons 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	48
<u>Prescribed density tests on filling:</u>			
16	Modified AASHTO Density tests	No	5
<u>SOIL POISONING</u>			
Carried Forward			R
Section No. 8 GRFD7 Bill No. 1 EARTHWORKS			
BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Soil insecticide:</u>			
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	33
18	To bottom of concrete aprons	m2	48
19	To bottoms and sides of trenches, etc.	m2	80
Carried Forward to Summary of Section No. 8			R
Section No. 8			
GRFD7			
Bill No. 1			
EARTHWORKS			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 8</u>			
	<u>BILL NO.2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<u>UNREINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete:</u>			
1	Strip footings	m3	5	
2	Ditto, but surface bed in pit	m3	3	
3	2Aprons cast in panels	m3	5	
4	Ramp	m3	1	
5	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	18	
6	Thickening down apron on edge 110mm deep x 200mm wide	m	38	
	<u>REINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete:</u>			
7	Surface beds	m3	3	
8	Slabs	m3	1	
	Carried Forward			
	Section No. 8			
	GRFD7			
	Bill No. 2			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	BVI CONSULTING ENGINEERS			
			R	

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a steel trowel:</u>			
9	Surface beds, slabs, etc.	m2	45
<u>Finishing top surfaces of concrete smooth with a wood float:</u>			
10	Aprons and pavings to falls	m2	48
<u>TEST CUBES</u>			
11	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	24
<u>FORMWORK</u>			
<u>Rough formwork to sides:</u>			
12	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	43
<u>Permanent formwork to soffits:</u>			
13	Slabs propped up not exceeding 1.5m high	m2	13
14	Leave or form 500mm diameter opening in top of floor slab	No	8
<u>REINFORCEMENT</u>			
<u>Mesh Reinforcement (measure nett):</u>			
15	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	32
Carried Forward to Summary of Section No. 8			R
Section No. 8			
GRFD7			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			
BVI CONSULTING ENGINEERS			

Item No	Quantity	Rate	Amount
<u>SECTION 8</u>			
<u>BILL NO.3</u>			
<u>BRICKWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>BRICKWORK</u>			
<u>Sizes in descriptions:</u>			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<u>Hollow walls etc.:</u>			
Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixal" bitumen emulsion waterproofing coating.			
User note: The above preamble generally applies for works in hot and humid coastal areas			
<u>Face bricks:</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
Carried Forward			R
Section No. 8 GRFD7 Bill No. 3 MASONRY			
BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Pointing:</u> Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SAMPLES</u> Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6			
<u>FOUNDATIONS</u> <u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	26
2	One brick walls in pit	m2	60
3	4Half brick corbelling in pit	m	21
<u>FACE BRICKWORK</u> <u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:</u>			
4	Extra over brickwork for face brickwork in foundation	m2	5
<u>SUPERSTRUCTURE</u> <u>FACE BRICKWORK</u> <u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:</u>			
5	Half brickwork for face brick walls pointed both sides	m2	44
6	One brickwork for face brick walls pointed both sides	m2	89
Carried Forward			R
Section No. 8 GRFD7 Bill No. 3 MASONRY BVI CONSULTING ENGINEERS			

Brought Forward			R
7	Extra over brickwork for face brickwork in beamfilling	m2	5
8	Fair raking and cutting	m	7
	<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces:</u>		
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	15
	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	7
10	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	1
	<u>BRICKWORK SUNDRIES</u>		
	<u>Brick reinforcement:</u>		
11	75mm Wide reinforcement built in horizontally	m	130
12	150mm Wide reinforcement built in horizontally	m	544
	<u>Turning pieces:</u>		
13	220mm Wide turning piece to lintel etc	m	7
	<u>Galvanised wire ties etc.:</u>		
14	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	22
	<u>Prestressed fabricated lintels:</u>		
15	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	19
	<u>Ventillation bricks:</u>		
16	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	13
	Carried Forward to Summary of Section No. 8		
	Section No. 8		R
	GRFD7		
	Bill No. 3		
	MASONRY		
	BVI CONSULTING ENGINEERS		

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Item No		Quantity	Rate	Amount
	<u>SECTION 8</u>			
	<u>BILL NO.5</u>			
	<u>ROOF COVERINGS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,6mm "Kliplok" chromadek profile roof sheeting fixed to timber purlins (elsewhere):</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	46	
	<u>Sundries:</u>			
2	12" Thermal resistance sisalation laid on purlins	m2	46	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	10	
4	Extra over for closed ends	No	2	
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	3	
6	Extra over rainwater pipe for eaves offset	No	1	
	Carried Forward			
	Section No. 8 GRFD7 Bill No. 5 ROOF COVERINGS		R	
	BVI CONSULTING ENGINEERS			

Brought Forward		R
7	Ditto ,for shoe	No 1
Carried Forward to Summary of Section No. 8 Section No. 8 GRFD7 Bill No. 5 ROOF COVERINGS BVI CONSULTING ENGINEERS		R

Item No		Quantity	Rate	Amount
	<u>SECTION 8</u>			
	<u>BILL NO.6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ROOFS, ETC.</u>			
	<u>Sawn softwood:</u>			
1	38 x 152mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	51	
2	76 x 38mm Wall plates	m	19	
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	51	
	<u>Sundries:</u>			
4	Two coats creosote on sawn timbers	m2	36	
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	22	
6	Hurricane clips	No	55	
	<u>EAVES, VERGES, ETC.</u>			
	<u>Pressed fibre-cement:</u>			
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	29	
	<u>DOORS, ETC.</u>			
	Carried Forward		R	
	Section No. 8 GRFD7 Bill No. 6 CARPENTRY AND JOINERY			
	BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>Wrought meranti doors hung to steel frames:</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2
9	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed (door raised by 120mm from bottom) (D2)	No	7
Carried Forward to Summary of Section No. 8			
Section No. 8			
GRFD7			
Bill No. 6			
CARPENTRY AND JOINERY			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 8</u>			
	<u>BILL NO.7</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>CATCHES, CABIN, HOOKS, ETC</u>			
	<u>Approved:</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
	<u>LOCKS</u>			
	<u>Approved:</u>			
2	Three lever mortice lockset	No	2	
3	Indicator lockset	No	7	
	<u>DOORSTOPS</u>			
	<u>Approved:</u>			
4	38mm Diameter rubber door stop plugged	No	9	
	<u>LETTERS, NAMEPLATES, ETC.</u>			
	<u>"Union" or similar approved:</u>			
5	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2	
Carried Forward			R	
Section No. 8 GRFD7 Bill No. 7 IRONMONGERY				
BVI CONSULTING ENGINEERS				

Brought Forward				R
<u>"Vaal Paragon" or similar approved:</u>				
6	32mm Type 9 back grab rail 800mm long plugged	No	1	
7	32mm Type 8 side grab rail 900mm girth plugged	No	1	
<u>BATHROOM FITTINGS</u>				
<u>"Kimberley-Clark" or Similar:</u>				
8	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	8	
<u>Stainless steel</u>				
9	Stainless steel mirror size 350 x 400mm plugged to wall with chrome plated screws.	No	1	
<u>Sundries:</u>				
10	Female SHE BIN plugged to walls	No	2	
Carried Forward to Summary of Section No. 8				R
Section No. 8				
GRFD7				
Bill No. 7				
IRONMONGERY				
BVI CONSULTING ENGINEERS				

Item No		Quantity	Rate	Amount
	<u>SECTION 8</u>			
	<u>BILL NO.8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1.2mm Single rebated frames suitable for half brick walls:</u>			
1	Frame for door 813 x 2032mm high	No	7	
	<u>1.6mm Double rebated frames suitable for one brickwalls:</u>			
2	Frame for door 813 x 2032mm high	No	2	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
3	Window type NE1, 533 x 654mm high including burglar bars	No	8	
4	Window type NE 7,1022 x 654mm high including burglar bars	No	3	
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames:</u>			
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2	
	<u>Sundires:</u>			
6	Purpose made protective steel cage to SHE-BIN	No	2	
	Carried Forward to Summary of Section No. 8		R	
	Section No. 8 GRFD7 Bill No. 8 METALWORK			
	BVI CONSULTING ENGINEERS			

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Item No		Quantity	Rate	Amount
	<u>SECTION 8</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Allow an amount of R 87 968.00 (Eighty Seven Thousand Nine Hundred and Sixty Eight Rands) for the supply of Standard Industrial I1040 components complete including urinals	Item		87 968.00
2	Collect "Enviroloo" components systems complete as supplied by the manufacturer (This item allows for the collection of the 'Enviroloo' components systems only. Supply and install measured eslwhere)	No	8	
3	Supply and install pre-cast concrete double wash-trough, complete with all necessary pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim"	No	2	
	<u>INSTALLATION OF "ENVIRO LOO"</u>			
4	Allow an amount of R 8 000.00 (Eight Thousand Rand) for installation of Enviroloo systems	Item		8 000.00
	<u>SANITARY FITTINGS</u>			
	<u>White glazed fireclay or vitreous china coupling with SABS specification 497 in:</u>			
5	Wash hand basin bolted to wall including all fittings and necessary pipework	No	1	
	Carried Forward		R	
	Section No. 8 GRFD7 Bill No. 10 PLUMBING AND DRAINAGE BVI CONSULTING ENGINEERS			

Brought Forward			R
<u>TRAPS, ETC</u>			
<u>uPVC:</u>			
6	40mm "P" or "S" trap	No	1
<u>TAPS, VALVES, ETC</u>			
7	15mm elbow action pillar tap	No	1
8	19mm chrome plated push button taps to wash troughs	No	5
<u>WATER SUPPLIES</u>			
<u>uPVC pipes:</u>			
9	20mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	50
10	40mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	10
<u>Extra over uPVC pipes for fittings:</u>			
11	20mm Bend	No	5
12	40mm Bend	No	5
<u>Galvanised steel pipes:</u>			
13	20mm Pipes chased into brick walls	m	3
<u>Extra over galvanised steel pipes for steel fittings:</u>			
14	20mm Fittings	No	5
<u>TESTING</u>			
15	Provide all necessary apparatus water, etc for and test the whole of the Water Supply installation to the satisfaction of the Representative/Agent and Municipality, replace any defective work free of charge and leave perfect	Item	
Carried Forward to Summary of Section No. 8			R
Section No. 8			
GRFD7			
Bill No. 10			
PLUMBING AND DRAINAGE			
BVI CONSULTING ENGINEERS			

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Item No		Quantity	Rate	Amount
	<u>SECTION 8</u>			
	<u>BILL NO. 12</u>			
	<u>PAINTWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ON FIBRE-CEMENT</u>			
	<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint:</u>			
1	On fascias and barge boards	m2	9	
	<u>ON WOOD</u>			
	<u>Undercoat and minimum 2 coat gloss enamel:</u>			
2	On doors (Internal)	m2	23	
3	On doors (External)	m2	7	
	<u>ON METAL</u>			
	<u>Undercoat and minimum 2 coat gloss enamel:</u>			
4	On door frames	m2	2	
5	On gates (Measured over the full flat area of both sides)	m2	8	
6	On gutters and down pipes	m	15	
	<u>Spot prining defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel:</u>			
7	On windows with burglar bars	m2	5	
	Carried Forward to Summary of Section No. 8			
	Section No. 8			
	GRFD7			
	Bill No. 12			
	PAINTWORK			
	BVI CONSULTING ENGINEERS			

Bill No	SECTION SUMMARY - GRFD7	Page No	Amount
1	EARTHWORKS	171	
2	CONCRETE, FORMWORK AND REINFORCEMENT	173	
3	MASONRY	176	
4	WATERPROOFING	177	
5	ROOF COVERINGS	179	
6	CARPENTRY AND JOINERY	181	
7	IRONMONGERY	183	
8	METALWORK	184	
9	PLASTERING	185	
10	PLUMBING AND DRAINAGE	187	
11	GLAZING	188	
12	PAINTWORK	189	
Carried to Final Summary			R
Section No. 8 GRFD7			
BVI CONSULTING ENGINEERS			

Item No		Quantity	Rate	Amount
	<u>SECTION 9</u>			
	<u>BILL NO.1</u>			
	<u>PROVISIONAL SUMS</u>			
	All the provisional sums cover supply of material and equipment and installation where applicable by firms of specialists.			
	Provisional sums are net and do not include builder's discount, but the Tenderer may allow under "Profit" items any profit he considers necessary.			
	The Tenderer is referred to Clause 87.1 and 87.2 in the "Preliminaries" section for the definition and adjustment of "General Attendance".			
	<u>N.B ALL PROVISIONAL WORKS ARE SUBJECT TO RE-MEASUREMENTS. THE PROVISIONAL WORK SHALL BE PAID AS PER THE WORK DONE</u>			
1	Provide an amount of R 295 000.00 (Two Hundred and Ninety Five Thousand Rands) for drilling and equipping of a new borehole.	Item		295 000.00
2	Profit & Attendance	Item		
3	Provide an amount of R 141 000.00 (One Hundred and Forty One Thousand Rands) for water storage, elevated tank stands and fencing around elevated tank stands including drinking fountains complete.	Item		141 000.00
4	Profit & Attendance	Item		
5	Provide an amount of R160 000.00 (One Hundred and Twenty Thousand Rands) for walkways and storm water control.	Item		160 000.00
6	Profit & Attendance	Item		
	Carried Forward		R	
	Section No. 9 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS			
	BVI CONSULTING ENGINEERS			

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KGWADU PRIMARY SCHOOL

Brought Forward			R
7	Provide an amount of R 30 000.00 (Thirty Thousand Rands) for fencing around Grade R facilities.	Item	30 000.00
8	Profit & Attendance	Item	
9	Provide an amount of R180 000.00 (One Hundred and Eighty Thousand Rands) for demolition of existing brick and mortar toilet structures and backfill all pits with soil where applicable.	Item	180 000.00
10	Profit & Attendance	Item	
11	Provide an amount of R480 000.00 (Four Hundred and Eighty Thousand Rands) for refurbishment of existing toilet structures.	Item	480 000.00
12	Profit & Attendance	Item	
13	Provide an amount of R660 000.00 (Six Hundred and Sixty Thousand Rand) for supply and installation of steel palisade fencing around the school perimeter, including sliding and pedestrian gates etc.	Item	660 000.00
14	Profit & Attendance	Item	
15	Allow an amount of R15 000.00 (Fifteen Thousand Rand) for the employment of a Community Liaison Officer for the duration of the contract plus sundries.	Item	15 000.00
Carried to Final Summary			R
Section No. 9			
PROVISIONAL SUMS			
Bill No. 1			
PROVISIONAL SUMS			
BVI CONSULTING ENGINEERS			

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