Item No		Quantity	Rate	Amount
	SECTION 1			
	BILL NO. 1			
	PRELIMINARIES			
	BUILDING AGREEMENT AND PRELIMINARIES			
	The JBCC Series 2000 Edition 4.1 Code 2101 March 2005 2005 edition prepared by the Joint Building Contracts Committee, shall be the agreement, amended as hereinafter described			
	The Preliminaries 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			
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES AND GENERAL			

Brought Forward		R	
PREAMBLES FOR TRADES	1		
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			
GENERAL			
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			
SECTION A - PRINCIPAL BUILDING AGREEMENT			
Definitions (A1)			
Definitions and interpretation (clause 1)			
F: T:	Item		
Carried Forward		R	
Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES AND GENERAL			

	Brought Forward		R	
	Objective and Preparation (A2 to A14)			
2	Offer acceptance and performance (clause 2)			
	F: T:	Item		
3	Documents (clause 3)			
	F: T:	Item		
4	Design responsibility (clause 4)			
	F: V: T:	Item		
5	Employer's agents (clause 5)			
	F: T:	Item		
	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			
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES AND GENERAL			

	Brought Forward		R	
	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			
6	Site representative (clause 6) F:V:			
7	T: Compliance with regulations (clause 7)	Item		
	F:V:			
٥	T:	Item		
8	Works risk (clause 8)			
	F: T:	Item		
9	Indemnities (clause 9)			
	F: T:	Item		
10	Works insurances (clause 10)			
	F: T:	Item		
11	Liability insurances (clause 11)			
	F: T:	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1			
	PRELIMINARIES AND GENERAL			

	Brought Forward		R	
12	Effecting insurance (clause 12)			
	F: T:	Item		
13	NO CLAUSE	N/A		
14	Security (clause 14)			
	F: T:	ltem		
	Execution (A15-A23)			
15	Preparation for and execution of the works (clause 15)			
	F: T:	Item		
16	Access to the works (clause 16)			
	F: T:	Item		
17	Contract instructions (clause 17)			
	F: T:	Item		
18	Setting out of the works (clause 18)			
	F: T:	Item		
	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			
	Carried Forward Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES AND GENERAL		R	

	Brought Forward		R	
19	Assignment (clause 19)			
	F: V: T:	Item		
	The contractor shall not cede his rights or delegate his obligations in terms of this agreement unless specifically called for by the employer			
20	Nominated subcontractors (clause 20)			
	F: T:	Item		
21	Selected subcontractors (clause 21)			
	F: T:	Item		
	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			
22	Employer's Direct Contractors (clause 22)			
	F: T:	Item		
23	Contractor's Domestic Sub-Contractors (Clause 23) F:			
	T:	Item		
	Completion (A24-A30)			
24	Practical completion (clause 24)			
	F: T:	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1			
	PRELIMINARIES AND GENERAL			

THE MVULA TRUST LDOE 2022/23 WATER & SANITATION PROGRAMME KGOLAKALELEME SECONDARY SCHOOL

	Brought Forward		R	
25	Works completion (clause 25)			
	F: T:	Item		
26	Final completion (clause 26)			
	F: T:	Item		
27	Latent defects liability period (clause 27)			
	F: T:	Item		
28	Sectional completion (clause 28)			
	F: T:	Item		
29	Revision of date of practical completion (clause 29)			
	F: T:	Item		
	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)			
30	Penalty for non-completion (clause 30)			
	F: T:	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1			
	PRELIMINARIES AND GENERAL			

	Brought Forward		R	
	Payment (A31 - A35)			
31	Interim payment to the contractor (clause 31)			
	F: T:	Item		
32	Adjustment to the contract value (clause 32)			
33	F:	Item		
24	T:	Item		
34	Final account and final payment (clause 34) F:	Item		
	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			
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES AND GENERAL			

	Brought Forward		R	
	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			
35	Payment to other parties (clause 35) F:V: T:	ltem		
	Cancellation (A36-A39)			
36	Cancellation by employer - contractor's default (clause 36)			
	F: T:	Item		
37	Cancellation by employer - loss and damage (clause 37)			
	F: T:	Item		
38	Cancellation by contractor - employer's default (clause 38)			
	F: T:	Item		
39	Cancellation - cessation of the works (clause 39)			
	F: T:	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES AND GENERAL			
		I	ı	

	Brought Forward		R		
	Dispute (A40)				
40	Dispute Settlement (clause 40)				
	F: T:	Item			
	Substitute Provisions (A41)				
41	State clauses (Clause 41)				
	F: T:	Item			
	Information necessary for the completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder				
	THE SCHEDULE				
	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: T:	Item			
	42.1 CONTRACTING AND OTHER PARTIES				
	42.1.1 Employer: As per infomation on the tender data				
	42.1.2 Principal Agent: As per the infomation on the Tender data				
	42.1.3 Architect: Afro Architectural				
	Carried Forward		R		
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES AND GENERAL				
				1	

Brought Forward	R	
42.1.4 Quantity Surveyor:		
Structural :		
42.1.5 Civil:		
42.1.6 Electrical Engineer:		
42.1.6 Mechanical Engineer:		
42.2 CONTRACT DETAILS		
42.2.1 Works Description: Construction of sanitation facilities		
42.2.2 Site Description: as per the infomation on the tender data		
42.2.3 Work or installations by direct contractors:		
N/A		
42.2.4 This agreement is for a government contract where there are specific options that are applicable to a State organ only Yes		
42.2.5 Date on which possession of the site is intended to be given:		
UNKNOWN		
Carried Forward Section No. 1	R	
PRELIMINARIES AND GENERAL Bill No. 1		
PRELIMINARIES AND GENERAL		

Brought Forward	R	
42.2.6 Period for the commencement of the works after the contractor takes posse		
42.2.7 For the works as a whole. Intended date of practical completion and the penalty per calendar day		
18 weeks after contractual commencement date		
Penalty Amount The penalty 7.5c per R100 of the final value per calender day (inclusive of value added tax)		
42.2.8 For the works in sections : Intended date of practical completion and the penalty per calender day		
Section 1 .N/A Date		
R.N/A Penalty Amount		
42.2.9 The law applicable to this agreement shall be that of		
South Africa (country)		
42.3 INSURANCES		
42.3.1 Contract works insurance to be effected by:		
Contractor:		
For the Sum of R Contract Amount + 20.00 %		
With a deductible of - to be determined by the contractor		
42.3.2 Supplementary insurance is required No		
Carried Forward Section No. 1	R	
PRELIMINARIES AND GENERAL		
Bill No. 1 PRELIMINARIES AND GENERAL		

	Brought Forward	R	
42.3.3	Public liability insurance to be effected by: Contractor:		
	For the Sum of R 2 500 000-00		
With a	deductible of - to be determined by the contractor		
42.4	DOCUMENTS .		
42.4.1	Waivers of contractors lien or right of ling possession is required		
	Yes		
42.4.2	Number of construction document copies to be supplied to the contractor free of charge:		
	3 Number of		
42.4.3	Bills of Quantities/Lump sum document schedule of rates drawn up in accordance with:		
	"Standard System of Measuring Builders' Work"		
42.4.4	On acceptance of the tender the bills of quantities/lump sum document is to be submitted within working days		
The pi	riced bills of quantities must be handed in with the tender		
42.4.5	JBCC Engineering General Conditions are to be included in the contract documents :		
	The contract value is to be adjusted using ion adjustment indices		
	Yes Where JBCC CPAP is to be used **Base Month** July 2010**		
42.4.7	Details of changes made to the provision of JBCC standard documentation:		
	Carried Forward	R	
Section PRELIM Bill No.	No. 1 MINARIES AND GENERAL		
	NINARIES AND GENERAL		

	Brought Forward		R	
	SECTION B: PRELIMINARIES			
	Definitions and interpretation (B1)			
43	Definition and interpretation (B1.1 - B1.4.6)			
	F: V: T:	Item		
	Documents (B2)			
44	Checking of documents (B2.1)			
	F: V: T:	Item		
45	Provisional bills of quantities (B2.2)			
	F: T:	N/A		
46	Availability of construction documentation (B2.3)			
	F: T:	Item		
47	Interests of agents (B2.4)			
	F: T:	Item		
48	Priced documents (B2.5)			
	F: T:	Item		
49	Tender submission (B2.6)			
	F: T:	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES AND GENERAL			

	Brought Forward		R	
50	Defined works area (B3.1)			
	F: T:	Item		
	The site (B3)			
51	Geotechnical investigation (B3.2)			
	F: T:	Item		
52	Inspection of the site (B3.3)			
	F: T:	Item		
	Existing premises occupied (B3.4)			
	F: T:			
	Previous work - dimensional accuracy (B3.5)			
	F: T:			
	Previous work - defects (B3.6)			
	F: T:			
53	Services - known (B3.7)			
	F: T:	Item		
				_
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES AND GENERAL			

	Brought Forward		R	
54	Services - unknown (B3.8)			
	F: T:	Item		
55	Protection of trees etc (B3.9)			
	F: T:	Item		
56	Articles of value (B3.10)			
	F: T:	Item		
	Management of contract (B4)			
57	Inspection of adjoining properties etc (B3.11)			
	F: T:	Item		
58	Management of the works (B4.1)			
	F: T:	Item		
59	Programme for the works (B4.2)			
	F: T:	Item		
60	Progress meetings (B4.3)			
	F: T:	Item		
61	Technical meetings (B4.4)			
	F: T:	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1			
	PRELIMINARIES AND GENERAL			

	Brought Forward		R	
62	Labour and Plant records (B4.5)			
	F:V:	Item		
	Samples, Shop Drawings and Manufacturer's Instructions (B5)			
63	Samples of materials (B5.1)			
	F: T:	Item		
64	Workmanship samples (B5.2)			
	F: T:	Item		
65	Shop drawings (B5.3)			
	F: T:	Item		
66	Compliance with Manufacturer's Instructions (B5.4)			
	F: T:	Item		
	Temporary works and plant (B6)			
67	Deposits and fees (B6.1)			
	F: T:	Item		
68	Enclosure of the works (B6.2)			
	F: T:	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1			
	PRELIMINARIES AND GENERAL			

	Brought Forward		R	
69	Advertising (B6.3)			
	F: T:	Item		
70	Plant, equipment, sheds and offices (B6.4)			
	F: T:	Item		
71	Main notice board (B6.5)			
	F: T:	Item		
72	Subcontractors' notice board (B6.6) F:V:			
	T:	N/A		
	Temporary services (B7)			
73	Location (B7.1)			
	F: T:	Item		
74	Water (B7.2) Option [A] shall apply			
	F: T:	Item		
75	Electricity (B7.3) Option [A] shall apply			
	F: T:	Item		
76	Telecommunication facilities (B7.4)			
	F: T:	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1			
	PRELIMINARIES AND GENERAL			

	Brought Forward		R	
77	Ablution facilities (B7.5) Option [A] shall apply			
	F: T:	Item		
	Prime cost amounts (B8)			
78	Responsibility for prime cost amounts (B8.1)			
	F: T:	Item		
	Attendance on N/S Subcontractors (B9)			
79	General attendance (B9.1)			
	F: T:	Item		
80	Special attendance (B9.2)			
	F: T:	Item		
81	Commissioning - Fuel, water and power (B9.3)			
	F: T: Financial aspects (B10)	Item		
	Statutory taxes, duties and levies (B10.1)			
	F:V:			
	T:	Item		
82	Payment of preliminaries (B10.2) Option [B] shall apply			
	F: T:	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1		K	
	PRELIMINARIES AND GENERAL			

	Brought Forward		R	
83	Adjustment of preliminaries (B10.3) Option [A] shall apply			
	F: T:	Item		
84	Payment certificate cash flow (B10.4)			
	F: T:	Item		
	General (B11)			
85	Protection of works (B11.1)			
	F: T:	Item		
86	Protection/isolation of existing/sectionally occupied works (B11.2)			
	F: T:	Item		
87	Security of the Works (B11.3)			
	F: T:	Item		
88	Notice before covering work (B11.4)			
	F: T:	Item		
89	Disturbance (B11.5)			
	F: T:	Item		
90	Environmental Disturbance (B11.6)			
	F: T:	Item		
	Carried Forward Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES AND GENERAL		R	

	Brought Forward		R	
)1 V	Norks cleaning and clearing (B11.7)			
	=·V:			
	Γ:	Item		
2 \	Vermin (B11.8)			
	=·V:			
	Г:	Item		
3 0	Overhand work (B11.9)			
	=:V:			
	Γ:	Item		
4 I	nstruction manuals and guarantees (B11.10)			
	=:V:			
	F:	Item		
5 <i>A</i>	As built information (B11.11)			
	-:V:V			
	-: Γ:	Item		
3 T	Геnant Installations (В11.12)			
	=:V:			
	 Γ:	Item		
5	Schedule of variables (B12)			
7 F	Pre-tender information (B12.1)			
	Ξ· <i>γ</i> /.			
	=: T:	Item		
	12.1.1. Provisional bills of quantities (P2.2)			
	12.1.1 Provisional bills of quantities (B2.2) The quantities are provisional:			
	No			
1	12.1.2 Availability of construction documentation (B2.3)			
	Construction documentation is not complete No			
	NO			
	Carried Forward		R	
	Section No. 1			
	PRELIMINARIES AND GENERAL Bill No. 1			
	PRELIMINARIES AND GENERAL			

	Brought Forward	R	
12.1.3 Interest of agents (B2.4)			
12.1.4 Defined works area (B3.1)			
12.1.5 Geotechnical investigation (B3	.2)		
N/A			
12.1.6 Existing premises occupied (B	3.4)		
12.1.7 Previous work - dimensional a	ccuracy (B3.4)		
12.1.8 Previous work - defects (B3.5)			
12.1.9 Services - known (B3.7)			
12.1.10 Protection of trees (B3	3.9)		
All trees should be protected a instruction of the Principal Agent may a removed			
12.1.12 Enclosure of the works (B6.2)			
12.1.11 Inspection of adjoining (B3.11)	ı properties		
12.1.13 Offices (B6.4.3)			
An office for the clerck of work provided	s should be		
12.1.14 Main notice board (B6.5)			
	YES		
	Carried Forward	R	
Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1			
PRELIMINARIES AND GENERAL			

	Brought Fo	orward	R	
12.1.15	Subcontractors notice board (B6.6) A notice board is required	No		
12.1.16	Water (B7.2) Alternative Selected: A			
12.1.17	Zelectricity (B7.3) Alternative selected: A			
12.1.18	3 Telecommunications (B7.4)			
12.1.19	Ablution facilities (B7.5) Alternative selected: A			
12.1.20 (B11.2)	Protection of existing/sectionally occupied v	vorks		
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	B Disturbance (B11.5)			
	N/A			
12.1.24	Environmental Disturbance (B11.6)			
	N/A			
Post te	ender information (B12.2)			
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			
	Carried Fo	orward	R	
Bill No.	MINARIES AND GENERAL 1			
PRELIN	MINARIES AND GENERAL			

	Brought Forward		R	
	SECTION C: SPECIFIC PRELIMINARIES			
	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: : T:	Item		
99	Black economic empowerment and training			
	F:V:			
	T:	Item		
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:	Item		
	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			
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1			
	PRELIMINARIES AND GENERAL			

	Brought Forward		R	
102	Contract instructions			
	F: V:			
	T:	Item		
	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			
103	Labour record			
	F:V:			
	T:	Item		
	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			
104	Plant record			
	F: T:	Item		
		liteiii		
	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			
105	Guarantees			
	F: V:			
	T:	Item		
	Carried Forward		R	
	Section No. 1			
	PRELIMINARIES AND GENERAL Bill No. 1			
	PRELIMINARIES AND GENERAL			

	Brought Forward		R	
	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			
106	Overtime			
	F: T:			
		Item		
	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: T:			
	1	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES AND GENERAL			
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	Brought Forward		R	
	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			
108	Occupational Health and Safety Specification			
	F: T:	Item		
	Any Principal Contractor entering into a contract with The Developer must achieve an acceptable level of Occopational Health and Safety performance. Refer to "Project Specification" and "Safety, Health and Environmental Evaluation Questionaire" 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			
	SUMMARY OF CATEGORIES			
	Category : Fixed R			
	Category : Value R			
	Category : Time R			
	Carried to Final Summary		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1			
	PRELIMINARIES AND GENERAL			

Item No		Quantity	Rate	Amount
	SECTION 2			
	BILL NO. 1			
	ALTERATIONS			
	<u>View site</u>			
	Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials salvageable from the alterations. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained			
	<u>Explosives</u>			
	No explosives whatsoever may be used for alteration purposes unless otherwise stated			
	General			
	The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to tenants in the building and to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent			
	Doors, fanlights, windows, fittings, frames, linings, etc which are to remain the property of the employer shall be carefully taken out, temporarily stored, transported over a distance of approximately ?km to store and handed over to the employer			
	Carried Forward		R	
	Section No. 2 ALTERATIONS Bill No. 1 ALTERATIONS AND DEMOLITIONS			

	Rrought Forward	Ī		R	Γ
	Doors, fanlights, windows, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given separately Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc) DEMOLITIONS AND ALTERATIONS			R	
	DEMOLITIONS OF EXISTING TOILET STRUCTURES				
1	Demolish existing pit toilet structures including hacking up and removing foundations and surface beds ,doors ,windows and door frames ,ironmongery and plumbing fittings complete. All pits are to be filled with soil.	No	15		
2	Take out and remove fence	m	868		
	Carried Forward Section No. 2 ALTERATIONS Bill No. 1 ALTERATIONS AND DEMOLITIONS			R	

	Brought Forward		R	
	BUDGETARY ALLOWANCE FOR RENOVATIONS OF EXISTING ENVIRO-LOO TOILETS			
3	Allow a budget of R80 000.00 (Eight Thousand Rands and Zero Cents) for the renovations of existing Enviro-Loo toilet structures.	Item		80 000.00
	Carried to Final Summary		R	
	Section No. 2 ALTERATIONS			
	Bill No. 1 ALTERATIONS AND DEMOLITIONS			

Item No			Quantity	Rate	Amount
	SECTION 3				
	BILL NO.1				
	<u>EARTHWORKS</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	SITE CLEARANCE				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs,bush and trees not exceeding 200mm girth, etc.	m2	67		
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	67		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
3	Trenches	m3	8		
4	Pit	m3	23		
5	For aprons thickenning	m3	2		
	Extra over trench and hole excavations in earth for				
	excavation:				
6	Soft rock	m3	4		
7	Hard rock	m3	2		
	Extra over all excavations for carting away:				
8	Surplus material from excavations and/or stock piles on site to a dumping site to be alocated by the Contractor	m3	25		
	Carried Forward Section No. 3 BUILDING WORKS - M4 Bill No. 1 EARTHWORKS			R	

	Brought Forward			R	
	Risk of collapse of excavations				•
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	47		
	Keeping excavations free of water.				
10	Keeping excavations free of water other than subterranean water		Item		
	Earth filling obtained from the excavations and/or				
	prescribed stock piles on site compacted to 93% Mod				
	AASHTO density				
11	Under floors, steps, pavings, etc.	m3	8		
12	Backfilling to trenches, holes, etc.	m3	4		
	Compaction of surfaces				
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	23		
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	25		
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	29		
	Prescribed density tests on filling				
16	Modified AASHTO Density tests	No	4		
	SOIL POISONING				
	Carried Forward			R	
	Section No. 3 BUILDING WORKS - M4 Bill No. 1 EARTHWORKS				

	Brought Forward			R	
	Soil insecticide				
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	23		
18	To bottom of concrate aprons	m2	23		
19	To bottoms and sides of trenches, etc.	m2	19		
	Commind Formand to Comming and Constant No. Co.			5	\vdash
	Carried Forward to Summary of Section No. 3 Section No. 3			R	+
	BUILDING WORKS - M4 Bill No. 1				
	EARTHWORKS				

Item No			Quantity	Rate	Amount
	BILL NO.2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to				
	be used - PW 371"				
	UNREINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete				
1	Strip footings	m3	5		
2	Ditto, but surface bed in pit	m3	23		
3	Aprons cast in panels	m3	3		
4	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	33		
5	Thickening down apron on edge 110mm deep x 200mm wide	m	11		
	REINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete				
6	Slabs	m3	2		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a wood float				
7	Aprons and pavings to falls	m2	23		
	Carried Forward Section No. 3			R	
	BUILDING WORKS - M4 Bill No. 2				
	CONCRETE, FORMWORK AND REINFORCEMENT				

	Brought Forward			R	Π
	TEST CUBES				
8	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	4		
	Finishing top surfaces of concrete smooth with a steel trowel				
9	Suface beds, slabs, etc.	m2	25		
	FORMWORK				
	Rough formwork to sides:				
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	33		
	Permanent formwork to soffits:				
11	Slabs propped up not exceeding 1.5m high	m2	12		
12	Leave or form 500mm diameter opening in top of floor slab	No	4		
	REINFORCEMENT				
	Mesh Reinforcement (measure nett)				
13	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	23		
					_
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 BUILDING WORKS - M4				Ī
	Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT				

Item No		Quantity	Rate	Amount
	BILL NO.3			
	BRICKWORK			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	BRICKWORK			
	Sizes in descriptions			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	Hollow walls etc			
	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 "Brixeal" bitumen emulsion waterproofing coating.			
	User note: The above preamble generally applies for works in hot and humid coastal areas			
	Face bricks			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	Pointing			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	Section No. 3 BUILDING WORKS - M4 Bill No. 3 MASONRY		R	

	Brought Forward			R	
	SAMPLES				
	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>				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar				
1	One brick walls	m2	9		
2	One brick walls in pit	m2	15		
3	4Half brick corbelling in pit	m	6		
	FACE BRICKWORK				
	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	4		
	SUPERSTRUCTURE				
	FACE BRICKWORK				
	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	21		
6	One brickwork for face brick walls pointed both sides	m2	57		
7	Extra over brickwork for face brickwork in beamfilling	m2	4		
8	Fair raking and cutting	m	11		
	Carried Forward			R	
	Section No. 3 BUILDING WORKS - M4 Bill No. 3 MASONRY				

	Brought Forward			R	
	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				
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	8		
10	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	6		
11	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	6		
	BRICKWORK SUNDRIES				
	Brick reinforcement				
12	75mm Wide reinforcement built in horizontally	m	125		
13	150mm Wide reinforcement built in horizontally	m	362		
	Turning pieces				
14	220mm Wide turning piece to lintel etc	m	7		
	Galvanised wire ties etc				
15	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	11		
	Prestressed fabricated lintels				
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	9		
	Ventillation bricks				
17	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	8		
	Carried Forward to Summary of Section No. 3 Section No. 3 BUILDING WORKS - M4 Bill No. 3 MASONRY			R	

Item No			Quantity	Rate	Amount
	BILL NO.4				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer 375mm micron embossed damp proof course				
1	In walls	m2	5		
	One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape				
2	Under surface beds	m2	25		
	FLOOR AND WALLS SEALERS				
	"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:				
3	Around steel windows and door frames.	m	12		
	Carried Forward to Summary of Section No. 3 Section No. 3 BUILDING WORKS - M4 Bill No. 4 WATERPROOFING			R	

No			Quantity	Rate	Amount
	BILL NO.5				
	ROOF COVERINGS				
	SUPPLEMENTARY PREAMBLES				
	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				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)				
1	Roof covering with pitch not exceeding 25 degrees	m2	29		
	Sundries				
2	12" Thermal resistance sisalition laid on purlins	m2	29		
	RAINWATER DISPOSAL				
	Aluzink seamless metal gutters:				
3	$100 \times 100 \times 0.6$ mm 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	6		
6	Extra over rainwater pipe for eaves offset	No	2		
7	Ditto ,for shoe	No	2		
	Carried Forward to Summary of Section No. 3 Section No. 3			R	
	BUILDING WORKS - M4				
	Bill No. 5 ROOF COVERINGS				

Item No			Quantity	Rate	Amount
	BILL NO.6				
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ROOFS, ETC.				
	Sawn softwood				
1	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	33		
2	76 x 38mm Wall plates	m	19		
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	42		
	Sundries				
4	Two coats creosote on sawn timbers	m2	33		
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	11		
6	Hurricane clips	No	18		
	EAVES, VERGES, ETC.				
	Pressed fibre-cement				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	22		
	DOORS, ETC.				
	Carried Forward			R	
	Section No. 3 BUILDING WORKS - M4 Bill No. 6 CARPENTRY AND JOINERY				

	Brought Forward			R	
	Wrought meranti doors hung to steel frames				
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	1		
9	44mm Purpose made 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. 3			R	
	Section No. 3 BUILDING WORKS - M4 BIII No. 6 CARPENTRY AND JOINERY				

Item No			Quantity	Rate	Amount
	BILL NO.7				
	IRONMONGERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	CATCHES, CABIN, HOOKS, ETC				
	<u>Approved</u>				
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	1		
	LOCKS				
	<u>Approved</u>				
2	Three lever mortice lockset	No	1		
3	Indicator lockset	No	4		
	DOORSTOPS				
	<u>Approved</u>				
4	38mm Diameter rubber door stop plugged	No	5		
	LETTERS, NAMEPLATES, ETC.				
	"Union" or similar approved				
5	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	1		
	BATHROOM FITTINGS				
	"Kimberley-Clark"or Simlilar				
6	"Kimberly Clark" SQ2 code 405607B white lockable				
	toilet roll holder	No	4		
	Carried Forward to Summary of Section No. 3 Section No. 3			R	
	BUILDING WORKS - M4 Bill No. 7				
	IRONMONGERY				

Item No			Quantity	Rate	Amount
	BILL NO.8	1			
	METALWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	PRESSED STEEL DOOR FRAMES				
	1,2mm Single rebated frames suitable for half brick walls				
1	Frame for door 813 x 2032mm high	No	4		
	1,6mm Double rebated frames suitable for one brickwalls				
2	Frame for door 813 x 2032mm high	No	1		
	STEEL WINDOWS, DOORS, ETC				
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	4		
	WELDED SCREENS, GATES, ETC				
	Steel gates and frames				
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	1		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 BUILDING WORKS - M4				
	Bill No. 8 METALWORK				
	I				II I

Item No		Quantity	Rate	Amount
	BILL NO. 9			
	PLASTERING			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	CEMENT SCREEDS TO CONCRETE			
	Screeds to steel trowelled, on concrete:			
1	30mm thick on floors	2 25		
	INTERNAL PLASTER			
	Cement plaster on brickwork or blockwork			
2	On pits walls	2 30		
	FLOOR AND WALLS SEALERS			
	Minimum two coats approved epoxy coat:			
3	On screed m	2 25		
4	On internal textured plaster walls and floors in pit	2 54		
	Carried Forward to Summary of Section No. 3		R	
	Section No. 3 BUILDING WORKS - M4			
	Bill No. 9 IN SITU FINISHES			
		1	I	

Item No			Quantity	Rate	Amount
	BILL NO. 10				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ENVIRO-LOO TOILET SYSTEMS				
1	Supply and Install "Enviro-Loo" Industrial 1040 Model complete, installed strictly in accordance with manufacturers instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets, standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping, etc				
		No	4		
2	Supply and Erect "Enviro-loo" "Industrial 1040 Model,5-bowl Urinal Evaporative Tank system fixed complete as per manufacturers specification unit, comprising of urinal evaporative tank, urinal bowls including brackets, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary piping, traps, etc	No	1		
	SOIL DRAINAGE				
	Normal duty (Class 51) uPVC sewer and drain pipes				
3	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30		
	Extra over normal duty (Class 51) uPVC sewer and drain pipes for fittings				
4	110mm Bend	No	4		
5	110mm Junction	No	2		
	Carried Forward Section No. 3 BUILDING WORKS - M4 Bill No. 10 PLUMBING AND DRAINAGE			R	

	Brought Forward			R	
	uPVC gulleys				
6	110mm Dished gulley trap assembly with head, grid and concrete surround not exceeding 750mm deep	No	3		
	SANITARY FITTINGS				
7	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		
	TRAPS, ETC.				
	<u>uPVC</u>				
8	32 x 50mm Deep seal "P" or "S" trap	No	2		
	TAPS, VALVES, ETC.				
	"Cobra Watertech" or other equal approved				
9	15mm gate valve plugged	No	4		
10	19mm chrome plated push button taps to wash troughs	No	4		
	WATER SUPPLIES				
	Class 0 copper pipes				
11	15 mm Pipes	m	3		
12	15mm Pipes chased in walls	m	10		
	Extra over class 0 copper pipes for capillary fittings				
13	15mm Fittings	No	5		
	Sundries				
14	Testing water pipe system		Item		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 BUILDING WORKS - M4				
	Bill No. 10 PLUMBING AND DRAINAGE				

Item No		Quantity	Rate	Amount
	BILL NO. 11			
	GLAZING			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	GLAZING TO STEEL WITH PUTTY			
	6.38mm Obscure safety glass			
1	Panes not exceeding 0,1 m2 m2	4		
	Carried Forward to Summary of Section No. 3		R	
	Section No. 3 BUILDING WORKS - M4			
	GLAZING			
	BUILDING WORKS - M4 Bill No. 11			

Item No			Quantity	Rate	Amount
	BILL NO. 12	1			
	PAINTWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ON FIBRE-CEMENT				
	Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint				
1	On fascias and barge boards	m2	6		
	ON WOOD				
	Undercoat and minimum 2 coat gloss enamel				
2	On doors (Internal)	m2	16		
3	On doors (External)	m2	4		
	ON METAL				
	Undercoat and minimum 2 coat gloss enamel				
4	On door frames	m2	3		
5	On gates (Measured over the full flat area of both sides)	m2	3		
6	On gutters and down pipes	m	9		
	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				
7	On windows with burglar bars	m2	8		
	Carried Forward to Summary of Section No. 3 Section No. 3			R	
	BUILDING WORKS - M4 Bill No. 12				
	PAINTWORK				

	Section No. 3			
	BUILDING WORKS - M4			
	SECTION SUMMARY - BUILDING WORKS - M4			
Bill No		Page No		Amount
1	EARTHWORKS	33		
2	CONCRETE,FORMWORK AND REINFORCEMENT	35		
3	MASONRY	38		
4	WATERPROOFING	39		
5	ROOF COVERINGS	40		
6	CARPENTRY AND JOINERY	42		
7	IRONMONGERY	43		
8	METALWORK	44		
9	IN SITU FINISHES	45		
10	PLUMBING AND DRAINAGE	47		
11	GLAZING	48		
12	PAINTWORK	49		
	Carried to Final Summary Section No. 3		R	
	BUILDING WORKS - M4			

Item No			Quantity	Rate	Amount
	SECTION 4				
	BILL NO.1				
	<u>EARTHWORKS</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	SITE CLEARANCE				
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		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
3	Trenches	m3	19		
4	Pit	m3	23		
5	For aprons thickenning	m3	5		
	Extra over trench and hole excavations in earth for				
	excavation:				
6	Soft rock	m3	4		
7	Hard rock	m3	3		
	Extra over all excavations for carting away:				
8	Surplus material from excavations and/or stock piles on site to a dumping site to be alocated by the Contractor	m3	32		
	Carried Forward Section No. 4 BUILDING WORKS - MD4 Bill No. 1 EARTHWORKS			R	

	Brought Forward			R	
	Risk of collapse of excavations				
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	83		
	Keeping excavations free of water.				
10	Keeping excavations free of water other than subterranean water		Item		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density				
11	Under floors, steps, pavings, etc.	m3	9		
12	Backfilling to trenches, holes, etc.	m3	9		
	Compaction of surfaces				
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	29		
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	m2	46		
	density	1112	40		
16	Prescribed density tests on filling Modified AASHTO Density tests	No	5		
.0	SOIL POISONING				
	Comical Forward			D	
	Section No. 4 BUILDING WORKS - MD4 Bill No. 1 EARTHWORKS			R	

	Brought Forward			R	
	Soil insecticide				
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 concrate aprons	m2	46		
19	To bottoms and sides of trenches, etc.	m2	75		
	Carried Forward to Summary of Section No. 4 Section No. 4			R	+
	BUILDING WORKS - MD4 Bill No. 1				
	EARTHWORKS				

Item No			Quantity	Rate	Amount
	BILL NO.2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to				
	be used - PW 371"				
	UNREINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete				
1	Strip footings	m3	4		
2	Ditto, but surface bed in pit	m3	2		
3	Aprons cast in panels	m3	4		
4	Aprons cast in panels	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	33		
	REINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete				
7	Surface beds	m3	3		
8	Slabs	m3	1		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a wood float				
9	Aprons and pavings to falls	m2	38		
	Carried Forward			R	
	Section No. 4 BUILDING WORKS - MD4				
	Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT				

	Brought Forward			R	Τ
	TEST CUBES				
10	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		
	Finishing top surfaces of concrete smooth with a steel trowel				
11	Suface beds, slabs, etc.	m2	38		
	Finishing top surfaces of concrete smooth with a wood float				
12	Suface beds, slabs, etc.	m2	46		
	<u>FORMWORK</u>				
	Rough formwork to sides:				
13	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	41		
	Permanent formwork to soffits:				
14	Slabs propped up not exceeding 1.5m high	m2	12		
15	Leave or form 500mm diameter opening in top of floor slab	No	5		
	REINFORCEMENT				
	Mesh Reinforcement (measure nett)				
16	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	28		
				_	+
	Carried Forward to Summary of Section No. 4 Section No. 4			R	+
	BUILDING WORKS - MD4 Bill No. 2				
	CONCRETE, FORMWORK AND REINFORCEMENT				

Item No		Quantity	Rate	Amount
	BILL NO.3			
	BRICKWORK			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	BRICKWORK			
	Sizes in descriptions			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	Hollow walls etc			
	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 "Brixeal" bitumen emulsion waterproofing coating.			
	User note: The above preamble generally applies for works in hot and humid coastal areas			
	Face bricks			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	Pointing			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	Section No. 4 BUILDING WORKS - MD4 Bill No. 3 MASONRY		R	

	Brought Forward			R	
	<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>				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar				
1	One brick walls	m2	21		
2	One brick walls in pit	m2	36		
3	Half brick corbelling in pit	m	14		
	FACE BRICKWORK				
	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	5		
	SUPERSTRUCTURE				
	FACE BRICKWORK				
	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	28		
6	One brickwork for face brick walls pointed both sides	m2	83		
7	Extra over brickwork for face brickwork in beamfilling	m2	5		
8	Fair raking and cutting	m	7		
	Carried Forward			R	
	Section No. 4 BUILDING WORKS - MD4 Bill No. 3 MASONRY				

	Brought Forward			R		
	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					
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	12			
10	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	7			
11	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	6			
	BRICKWORK SUNDRIES					
	Brick reinforcement					
12	75mm Wide reinforcement built in horizontally	m	125			
13	150mm Wide reinforcement built in horizontally	m	362			
	Turning pieces					
14	220mm Wide turning piece to lintel etc	m	12			
	Galvanised wire ties etc					
15	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	20			
	Prestressed fabricated lintels					
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	13			
	Ventillation bricks					
17	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. 4			R		
	Section No. 4 BUILDING WORKS - MD4					Ħ
	Bill No. 3 MASONRY					
					1	

Item No			Quantity	Rate	Amount
	BILL NO.4				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer 375mm micron embossed damp proof course				
1	In walls	m2	12		
	One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape				
2	Under surface beds	m2	40		
3	Aprons and ramps	m2	46		
	FLOOR AND WALLS SEALERS				
	"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:				
4	Around steel windows and door frames.	m	12		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 BUILDING WORKS - MD4				
	Bill No. 4 WATERPROOFING				

BILL NO.5 ROOF COVERINGS	l			
ROOF COVERINGS				
TOOL GOVERNINGS				
SUPPLEMENTARY PREAMBLES				
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				
PROFILED METAL SHEETING AND ACCESSORIES				
0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)				
Roof covering with pitch not exceeding 25 degrees	m2	42		
Sundries				
12" Thermal resistance sisalition laid on purlins	m2	42		
RAINWATER DISPOSAL				
Aluzink seamless metal gutters:				
100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	9		
Extra over for closed ends	No	2		
75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	4		
Extra over rainwater pipe for eaves offset	No	2		
Ditto ,for shoe	No	2		
Carried Forward to Summary of Section No. 4 Section No. 4 BUILDING WORKS - MD4 Bill No. 5 ROOF COVERINGS			R	
	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 PROFILED METAL SHEETING AND ACCESSORIES O,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere) Roof covering with pitch not exceeding 25 degrees Sundries 12" Thermal resistance sisalition laid on purlins RAINWATER DISPOSAL Aluzink seamless metal gutters: 100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets Extra over for closed ends 75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall Extra over rainwater pipe for eaves offset Ditto ,for shoe Carried Forward to Summary of Section No. 4 Section No. 4 BUILDING WORKS - MD4	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 PROFILED METAL SHEETING AND ACCESSORIES 0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere) Roof covering with pitch not exceeding 25 degrees m2 Sundries 12" Thermal resistance sisalition laid on purlins m2 RAINWATER DISPOSAL Aluzink seamless metal gutters: 100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets m Extra over for closed ends No 75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall m Extra over rainwater pipe for eaves offset No Ditto ,for shoe No Carried Forward to Summary of Section No. 4 Section No. 4 Section No. 4 Section No. 5	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 PROFILED METAL SHEETING AND ACCESSORIES O.6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere) Roof covering with pitch not exceeding 25 degrees m2 42 Sundries 12" Thermal resistance sisalition laid on purlins m2 42 RAINWATER DISPOSAL Aluzink seamless metal gutters: 100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets m 9 Extra over for closed ends No 2 75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall m 4 Extra over rainwater pipe for eaves offset No 2 Ditto ,for shoe No 2 Carried Forward to Summary of Section No. 4 Section No. 4 Section No. 4 Sull DING WORKS - MD4 Bill No. 5	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 PROFILED METAL SHEETING AND ACCESSORIES 0.6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere) Roof covering with pitch not exceeding 25 degrees m2 42 Sundries 12" Thermal resistance sisalition laid on purlins m2 42 RAINWATER DISPOSAL Aluzink seamless metal gutters: 100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets m 9 Extra over for closed ends No 2 75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall m 4 Extra over rainwater pipe for eaves offset No 2 Ditto ,for shoe No 2 Carried Forward to Summary of Section No. 4 Section No. 4 BUILDING WORKS - MD4 Bill No. 5

Item No			Quantity	Rate	Amount
	BILL NO.6				
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ROOFS, ETC.				
	Sawn softwood				
1	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	46		
2	76 x 38mm Wall plates	m	19		
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	46		
	Sundries				
4	Two coats creosote on sawn timbers	m2	33		
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	20		
6	Hurricane clips	No	50		
	EAVES, VERGES, ETC.				
	Pressed fibre-cement				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	28		
	DOORS, ETC.				
	Carried Forward			R	
	Section No. 4 BUILDING WORKS - MD4 Bill No. 6 CARPENTRY AND JOINERY				

	Brought Forward			R	
	Wrought meranti doors hung to steel frames				
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	1		
9	44mm Purpose made 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		
10	44mm Framed ledged and braced batten door 914 x 2032mm high of 44 x 100mm top rail and stiles, 20 x 100mm bottom rail and 20 x 100mm middle ledge and braces, filled in with 20 x 76mm tongued and grooved V-jointed one side boarding and covered on other side with 4mm plywood with hardwood veneer to match door let into and including rebates all round and splayed 50 x 76mm weather bar (D3)	No	1		
	Carried Forward to Summary of Section No. 4 Section No. 4 BUILDING WORKS - MD4 Bill No. 6 CARPENTRY AND JOINERY			R	

Item No		Quantity	Rate	Amount
	BILL NO.7			
	IRONMONGERY			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	CATCHES, CABIN, HOOKS, ETC			
	<u>Approved</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged No	2		
	LOCKS			
	<u>Approved</u>			
2	Three lever mortice lockset No	2		
3	Indicator lockset No	4		
	<u>DOORSTOPS</u>			
	<u>Approved</u>			
4	38mm Diameter rubber door stop plugged No	6		
	DOOR CLOSERS			
	"Dorma" or equal approved			
5	Code 737 3-5 Door closer No	1		
	LETTERS, NAMEPLATES, ETC.			
	"Union" or similar approved			
6	75 x 150mm Natural anodised aluminium plate with male or female symbol No	2		
	Carried Forward		R	
	Section No. 4 BUILDING WORKS - MD4 Bill No. 7 IRONMONGERY			

	Brought Forward			R		
	"Vaal Paragon" or similar approved					
7	32mm Type 9 back grab rail 800mm long plugged	No	1			
8	32mm Type 8 side grab rail 900mm girth plugged	No	1			
	Stainless steel					
9	Stainless steel mirror size 350 x 400m plugged to wall with chrome platted screws.	No	1			
	BATHROOM FITTINGS					
	"Kimberley-Clark"or Simlilar					
10	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	5			
	Carried Forward to Summary of Section No. 4			R		
	Section No. 4 BUILDING WORKS - MD4					
	Bill No. 7 IRONMONGERY					
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Item No			Quantity	Rate	Amount
	BILL NO.8				
	<u>METALWORK</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	PRESSED STEEL DOOR FRAMES				
	1,2mm Single rebated frames suitable for half brick walls				
1	Frame for door 813 x 2032mm high	No	4		
	1,6mm Double rebated frames suitable for one brickwalls				
2	Frame for door 813 x 2032mm high	No	1		
3	Frame for door 914 x 2032mm high	No	1		
	STEEL WINDOWS, DOORS, ETC				
4	Window type NE1, 533 x 654mm high including burglar bars	No	8		
5	Window type NE 7,1022 x 654mm high including burglar bars	No	5		
	WELDED SCREENS, GATES, ETC				
	Steel gates and frames				
6	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	1		
7	Purpose made square hallow section mild steel security gate, size 914 x 2032mm High	No	1		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4				
	BUILDING WORKS - MD4 Bill No. 8				
	METALWORK				

Item No		Quantity	Rate	Amount	-
	BILL NO. 9				
	PLASTERING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	CEMENT SCREEDS TO CONCRETE				
	Screeds to steel trowelled, on concrete:				
1	30mm thick on floors m2	28			
	INTERNAL PLASTER				
	Cement plaster on brickwork or blockwork				
2	On pits walls m2	2 44			
	FLOOR AND WALLS SEALERS				
	Minimum two coats approved epoxy coat:				
3	On screed m2	2 28			
4	On internal textured plaster walls and floors in pit m2	76			
					_
	Carried Forward to Summary of Section No. 4		R		
	Section No. 4 BUILDING WORKS - MD4				=
	Bill No. 9 IN SITU FINISHES				
	66				

Item No		Quantity	Rate	Amount
	BILL NO. 10			
	PLUMBING AND DRAINAGE (PROVISIONAL)			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	ENVIRO-LOO TOILET SYSTEMS			
1	Supply and Install "Enviro-Loo" Industrial 1040 Model complete, installed strictly in accordance with manufacturers instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets, standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping, etc			
	N	lo 4		
2	Supply and Erect disabled "Enviro-loo" Industrial 1040 Model set up and fixed complete as per manufacturers instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets, paraplegic toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping,etc			
	N	lo 1		
3	Supply and Erect "Enviro-loo""Industrial 1040 Model, 5-bowl Urinal Evaporative Tank system fixed complete as per manufacturers specification unit, comprising of urinal evaporative tank, urinal bowls including brackets, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary piping, traps, etc			
	N	lo 1		
	Carried Forward Section No. 4 BUILDING WORKS - MD4 Bill No. 10 PLUMBING AND DRAINAGE		R	

	Brought Forward			R	
	SOIL DRAINAGE				
	Normal duty (Class 51) uPVC sewer and drain pipes				
4	110mm Pipes vertically or ramped to cleaning eyes, etc.	m	30		
	Extra over normal duty (Class 51) uPVC sewer and drain pipes for fittings				
5	110mm Bend	No	3		
6	110mm Junction	No	2		
	uPVC gulleys				
7	110mm Dished gulley trap assembly with head, grid and concrete surround not exceeding 750mm deep	No	3		
	SANITARY FITTINGS (PROVISIONAL)				
8	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	3		
9	450 x 290mm "Bantam" cloakroom hand basin complete with single punched tapholes fixed to wall with and including two number 10mm bolts	No	1		
	WASTE UNIONS, ETC				
10	32mm "301CP" Basin waste union	No	1		
	TRAPS, ETC				
	<u>"Marley"</u>				
11	32 x 50mm Deep seal "P" or "S" trap	No	1		
	<u>FITTINGS</u>				
12	15mm gate valve plugged	No	7		
13	19mm chrome plated push button taps to wash troughs	No	6		
	Carried Forward			R	
	Section No. 4 BUILDING WORKS - MD4 BIII No. 10 PLUMBING AND DRAINAGE				

	Brought Forward			R		Π
14	15mm Elbow action pillar tap plugged	No	1			
	SANITARY PLUMBING					
	uPVC pipes					
15	50mm Pipes	m	20			
	Extra over uPVC pipes for fittings					
16	50mm Bend	No	2			
17	50 mm Junction	No	2			
18	50mm Access junction	No	2			
19	50mm Access bend	No	2			
20	50mm Access reducing junction	m	2			
21	50mm "GI Two-way" vent valve	No	2			
	WATER SUPPLY					
	Class 0 copper pipes					
22	15 mm Pipes	m	6			
23	15mm Pipes chased in walls	m	5			
	Extra over class 0 copper pipes for capillary fittings					
24	15mm Fittings	No	5			
	Copper overflow and service pipes					
25	15mm Service pipe 350mm girth	No	1			
	<u>Sundries</u>					
26	Testing water pipe system		Item			
	Carried Forward to Summary of Section No. 4			R		
	Section No. 4 BUILDING WORKS - MD4					<u> </u>
	Bill No. 10 PLUMBING AND DRAINAGE					
					ll .	

Item No		Quantity	Rate	Amount
	BILL NO. 11			
	GLAZING			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	GLAZING TO STEEL WITH PUTTY			
	6.38mm Obscure safety glass			
1	Panes not exceeding 0,1 m2 m2	4		
	Carried Forward to Summary of Section No. 4		R	
	Section No. 4 BUILDING WORKS - MD4			
	Bill No. 11 GLAZING			

Item No			Quantity	Rate	Amount
	BILL NO. 12	•			
	<u>PAINTWORK</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ON FIBRE-CEMENT				
	Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint				
1	On fascias and barge boards	m2	8		
	ON WOOD				
	Undercoat and minimum 2 coat gloss enamel				
2	On doors (Internal)	m2	13		
3	On doors (External)	m2	7		
	ON METAL				
	Undercoat and minimum 2 coat gloss enamel				
4	On door frames	m2	3		
5	On gates (Measured over the full flat area of both sides)	m2	8		
6	On gutters and down pipes	m	15		
	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				
7	On windows with burglar bars	m2	4		
	Carried Forward to Summary of Section No. 4 Section No. 4			R	
	BUILDING WORKS - MD4 Bill No. 12				
	PAINTWORK				

	Section No. 4			
	BUILDING WORKS - MD4			
	SECTION SUMMARY - BUILDING WORKS - MD4			_
Bill No		Page No		Amount
1	EARTHWORKS	53		
2	CONCRETE,FORMWORK AND REINFORCEMENT	55		
3	MASONRY	58		
4	WATERPROOFING	59		
5	ROOF COVERINGS	60		
6	CARPENTRY AND JOINERY	62		
7	IRONMONGERY	64		
8	METALWORK	65		
9	IN SITU FINISHES	66		
10	PLUMBING AND DRAINAGE	69		
11	GLAZING	70		
12	PAINTWORK	71		
	Comind to Final Comment			
	Carried to Final Summary Section No. 4		R	
	BUILDING WORKS - MD4			

Item No			Quantity	Rate	Amount
	SECTION 5				
	BILL NO.1				
	<u>EARTHWORKS</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	SITE CLEARANCE				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs,bush and trees not exceeding 200mm girth, etc.	m2	133		
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	133		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
3	Trenches	m3	18		
4	Pit	m3	43		
5	For aprons thickenning	m3	1		
	Extra over trench and hole excavations in earth for				
	excavation:				
6	Soft rock	m3	7		
7	Hard rock	m3	3		
	Extra over all excavations for carting away:				
8	Surplus material from excavations and/or stock piles on site to a dumping site to be alocated by the Contractor	m3	13		
	Carried Forward			R	
	Section No. 5 BUILDING WORKS - FD8 Bill No. 1 EARTHWORKS				

	Brought Forward			R	
	Risk of collapse of excavations				!
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	64		
	Keeping excavations free of water.				
10	Keeping excavations free of water other than subterranean water		ltem		
	Earth filling obtained from the excavations and/or				
	prescribed stock piles on site compacted to 93% Mod				
	AASHTO density				
11	Under floors, steps, pavings, etc.	m3	7		
12	Backfilling to trenches, holes, etc.	m3	51		
	Compaction of surfaces				
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	m2	49		
	density	1112	49		
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	29		
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	35		
	Prescribed density tests on filling				
16	Modified AASHTO Density tests	No	5		
	SOIL POISONING				
	Carried Forward Section No. 5 BUILDING WORKS - FD8			R	
	Bill No. 1 EARTHWORKS				

	Brought Forward			R	Τ
	Soil insecticide				
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 concrate aprons	m2	33		
19	To bottoms and sides of trenches, etc.	m2	72		
	Counted Forward to Commercial of Continue No. 5				\vdash
	Carried Forward to Summary of Section No. 5 Section No. 5 BUILDING WORKS - FD8 Bill No. 1			R	+
	EARTHWORKS				

Item No			Quantity	Rate	Amount
	BILL NO.2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to				
	be used - PW 371"				
	UNREINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete				
1	Strip footings	m3	7		
2	Ditto, but surface bed in pit	m3	3		
3	Aprons 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	33		
6	Thickening down apron on edge 110mm deep x 200mm wide	m	33		
	REINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete				
7	Slabs	m3	4		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a wood float				
8	Aprons and pavings to falls	m2	33		
	Carried Forward			R	
	Section No. 5				
	BUILDING WORKS - FD8 Bill No. 2				
	CONCRETE,FORMWORK AND REINFORCEMENT				

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Item No		Quantity	Rate	Amount	_
	BILL NO.3				
	BRICKWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	BRICKWORK				
	Sizes in descriptions				
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
	Hollow walls etc				
	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 "Brixeal" bitumen emulsion waterproofing coating.				
	User note: The above preamble generally applies for works in hot and humid coastal areas				
	Face bricks				
	Bricks shall be ordered timeously to obtain uniformity in size and colour				
	<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				
	Carried Forward		R		_
	Section No. 5 BUILDING WORKS - FD8 Bill No. 3 MASONRY		R		

	Brought Forward			R	
	<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>				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar				
1	One brick walls	m2	21		
2	One brick walls in pit	m2	23		
3	Half brick corbelling in pit	m	34		
	FACE BRICKWORK				
	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	5		
	SUPERSTRUCTURE				
	FACE BRICKWORK				
	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	29		
6	One brickwork for face brick walls pointed both sides	m2	82		
7	Extra over brickwork for face brickwork in beamfilling	m2	8		
8	Fair raking and cutting	m	14		
	Carried Forward Section No. 5			R	
	BUILDING WORKS - FD8 Bill No. 3 MASONRY				

	Brought Forward			R		Π
	Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 4000.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces					
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	12			
10	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	14			
11	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	3			
	BRICKWORK SUNDRIES					
	Brick reinforcement					
12	75mm Wide reinforcement built in horizontally	m	101			
13	150mm Wide reinforcement built in horizontally	m	343			
	Turning pieces					
14	220mm Wide turning piece to lintel etc	m	8			
	Galvanised wire ties etc					
15	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	35			
	Prestressed fabricated lintels					
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	13			
	Ventillation bricks					
17	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	10			
						<u></u>
	Carried Forward to Summary of Section No. 5			R		
	Section No. 5 BUILDING WORKS - FD8 Bill No. 3 MASONRY					
	I				I	I

Item No			Quantity	Rate	Amount
	BILL NO.4				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer 375mm micron embossed damp proof course				
1	In walls	m2	8		
	One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape				
2	Under surface beds	m2	43		
	FLOOR AND WALLS SEALERS				
	"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:				
3	Around steel windows and door frames.	m	14		
				_	
	Carried Forward to Summary of Section No. 5 Section No. 5 BUILDING WORKS - FD8 Bill No. 4 WATERPROOFING			R	

Item No			Quantity	Rate	Amount
	BILL NO.5				
	ROOF COVERINGS				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)				
1	Roof covering with pitch not exceeding 25 degrees	m2	48		
	ROOF AND WALL INSULATION				
	<u>Sundries</u>				
	"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation				
2	Insulation laid taut over purlins (at approximately 1 000mm centres) and fixed concurrent with roof covering including galvanised steel straining wires	m2	48		
	RAINWATER DISPOSAL				
	Aluzink seamless metal gutters:				
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	11		
4	Extra over for closed ends	No	3		
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	8		
6	Extra over rainwater pipe for eaves offset	No	3		
7	Ditto ,for shoe	No	3		
	Carried Forward to Summary of Section No. 5 Section No. 5 BUILDING WORKS - FD8			R	
	Bill No. 5 ROOF COVERINGS				

Item No			Quantity	Rate	Amount
	BILL NO.6				
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ROOFS, ETC.				
	Sawn softwood				
1	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	56		
2	76 x 38mm Wall plates	m	11		
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	39		
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	23		
6	Hurricane clips	No	31		
	EAVES, VERGES, ETC.				
	Pressed fibre-cement				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	32		
	DOORS, ETC.				
	Carried Forward			R	
	Section No. 5 BUILDING WORKS - FD8 Bill No. 6 CARPENTRY AND JOINERY				

	Brought Forward			R	
	Wrought meranti doors hung to steel frames				
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	1		
9	44mm Purpose made 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	8		
10	44mm Framed ledged and braced batten door 914 x 2032mm high of 44 x 100mm top rail and stiles, 20 x 100mm bottom rail and 20 x 100mm middle ledge and braces, filled in with 20 x 76mm tongued and grooved V-jointed one side boarding and covered on other side with 4mm plywood with hardwood veneer to match door let into and including rebates all round and splayed 50 x 76mm weather bar (D3)	No	1		
	Carried Forward to Summary of Section No. 5 Section No. 5 BUILDING WORKS - FD8 Bill No. 6 CARPENTRY AND JOINERY			R	

Item No		Quantity	Rate	Amount
	BILL NO.7			
	IRONMONGERY			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	CATCHES, CABIN, HOOKS, ETC			
	<u>Approved</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged No	10		
	LOCKS			
	<u>Approved</u>			
2	Three lever mortice lockset No	2		
3	Indicator lockset No	8		
	<u>HANDLES</u>			
	Aluminium Pull handle			
4	Set of two ,300mm pull handles fixed back to back on door No	8		
	<u>DOORSTOPS</u>			
	<u>Approved</u>			
5	38mm Diameter rubber door stop plugged No	10		
	DOOR CLOSERS			
	"Dorma" or equal approved			
6	Code 737 3-5 Door closer No	1		
	LETTERS, NAMEPLATES, ETC.			
	Carried Forward		R	
	Section No. 5 BUILDING WORKS - FD8 BIII No. 7 IRONMONGERY			

	Brought Forward			R	
	"Union" or similar approved				
7	75 x 150mm Natural anodised aluminium plate with female symbol	No	2		
	"Vaal Paragon" or other approved				
8	32mm Type 9 back stainless steel side grab rail 800mm long plugged	No	1		
9	32mm Type 8 back stainless steel side grab rail 900mm long plugged	No	1		
	BATHROOM FITTINGS				
	"Kimberley-Clark"or Simlilar				
10	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	9		
	Stainless steel				
11	Stainless steel mirror 350 x 400mm high	No	1		
	<u>Sundires</u>				
12	Stainless-steel SHE-BIN plugged to walls	No	9		
				_	\vdash
	Carried Forward to Summary of Section No. 5 Section No. 5			R	\vdash
	BUILDING WORKS - FD8 Bill No. 7				
	IRONMONGERY				

Item No			Quantity	Rate	Amount
	BILL NO.8	l			
	<u>METALWORK</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	PRESSED STEEL DOOR FRAMES				
	1,2mm Single rebated frames suitable for half brick walls				
1	Frame for door 813 x 2032mm high	No	8		
	1,6mm Double rebated frames suitable for one brickwalls				
2	Frame for door 813 x 2032mm high	No	1		
3	Frame for door 914 x 2032mm high	No	1		
	STEEL WINDOWS, DOORS, ETC				
	Standard industrial windows with type "B1" burglar bars to opening sashes				
4	Window type NE1, 533 x 654mm high	No	9		
5	Window type NE 7,1022 x 654mm high	No	5		
	WELDED SCREENS, GATES, ETC				
	Steel gates and frames				
6	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	1		
7	Purpose made square hallow section mild steel security gate, size 914 x 2032mm High	No	1		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 BUILDING WORKS - FD8				
	Bill No. 8 METALWORK				

Item No			Quantity	Rate	Amount
	BILL NO. 9				
	PLASTERING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	CEMENT SCREEDS TO CONCRETE				
	Screeds to steel trowelled, on concrete:				
1	30mm thick on floors	m2	35		
	INTERNAL PLASTER				
	Cement plaster on brickwork or blockwork				
2	On pits walls	m2	59		
	FLOOR AND WALLS SEALERS				
	Minimum two coats approved epoxy coat:				
3	On screed	m2	35		
4	On internal textured plaster walls and floors in pit	m2	95		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 BUILDING WORKS - FD8				
	Bill No. 9 IN SITU FINISHES				
	00	'	1	•	ıı

Item No			Quantity	Rate	Amount
	BILL NO. 10				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ENVIRO-LOO TOILET SYSTEMS				
1	Supply and Install "Enviro-Loo" Industrial 1040 Model complete,installed strictly in accordance with manufacturers instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets,standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping,etc				
		No	8		
2	Supply and Erect disabled "Enviro-loo"Industrial 1040 Model set up and fixed complete as per manufacturers instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets, paraplegic toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping,etc				
		No	1		
	SOIL DRAINAGE				
	Normal duty (Class 51) uPVC sewer and drain pipes				
3	110mm Pipes vertically or ramped to cleaning eyes, etc.	m	30		
	Extra over normal duty (Class 51) uPVC sewer and drain pipes for fittings				
4	110mm Bend	No	3		
	Carried Forward			R	
	Section No. 5 BUILDING WORKS - FD8 BIII No. 10 PLUMBING AND DRAINAGE				

Brought Forward			R	
110mm Junction	No	2		
uPVC gulleys				
110mm Dished gulley trap assembly with head, grid and concrete surround not exceeding 750mm deep	No	3		
SANITARY FITTINGS				
Supply and install pre-cast concrete double wash-trough, complete with all necessary fittings and pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim"	No	3		
450 x 290mm "Bantam" cloakroom hand basin complete with single punched tapholes fixed to wall with and including two number 10mm bolts	No	1		
WASTE UNIONS, ETC				
32mm "301CP" Basin waste union	No	1		
TRAPS, ETC				
<u>"Marley"</u>				
32 x 50mm Deep seal "P" or "S" trap	No	6		
TAPS, VALVES, ETC.				
"Cobra Watertech" or other equal approved				
15mm gate valve plugged	No	7		
15mm Elbow action pillar tap	No	1		
19mm Chrome plated push button taps to wash troughs	No	6		
SANITARY PLUMBING				
uPVC pipes				
50mm Pipes	m	30		
Carried Forward Section No. 5 BUILDING WORKS - FD8 Bill No. 10 BLUMBING AND DRAINAGE			R	
	110mm Junction uPVC gulleys 110mm Dished gulley trap assembly with head, grid and concrete surround not exceeding 750mm deep SANITARY FITTINGS Supply and install pre-cast concrete double washtrough, complete with all necessary fittings and pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim" 450 x 290mm "Bantam" cloakroom hand basin complete with single punched tapholes fixed to wall with and including two number 10mm bolts WASTE UNIONS, ETC 32mm "301CP" Basin waste union TRAPS, ETC "Marley" 32 x 50mm Deep seal "P" or "S" trap TAPS, VALVES, ETC. "Cobra Watertech" or other equal approved 15mm gate valve plugged 15mm Elbow action pillar tap 19mm Chrome plated push button taps to wash troughs SANITARY PLUMBING uPVC pipes 50mm Pipes Carried Forward Section No. 5 BUILDING WORKS - FD8	110mm Junction No UPVC gulleys 110mm Dished gulley trap assembly with head, grid and concrete surround not exceeding 750mm deep No SANITARY FITTINGS Supply and install pre-cast concrete double wash-trough, complete with all necessary fittings and pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim" No 450 x 290mm "Bantam" cloakroom hand basin complete with single punched tapholes fixed to wall with and including two number 10mm bolts No WASTE UNIONS, ETC 32mm "301CP" Basin waste union TRAPS, ETC "Marley" 32 x 50mm Deep seal "P" or "S" trap No TAPS, VALVES, ETC. "Cobra Watertech" or other equal approved 15mm gate valve plugged No 15mm Elbow action pillar tap No 19mm Chrome plated push button taps to wash troughs SANITARY PLUMBING UPVC pipes 50mm Pipes m Carried Forward Section No. 5 BUILDING WORKS - FD8 Bill No. 10	110mm Junction No 2 uPVC gulleys 110mm Dished gulley trap assembly with head, grid and concrete surround not exceeding 750mm deep No 3 SANITARY FITTINGS Supply and install pre-cast concrete double wash-trough, complete with all necessary fittings and pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim" No 3 450 x 290mm "Bantam" cloakroom hand basin complete with single punched tapholes fixed to wall with and including two number 10mm bolts No 1 WASTE UNIONS, ETC 32mm "301CP" Basin waste union TRAPS, ETC "Marley" 32 x 50mm Deep seal "P" or "S" trap No 6 TAPS, VALVES, ETC. "Cobra Watertech" or other equal approved 15mm gate valve plugged No 7 15mm Elbow action pillar tap No 1 19mm Chrome plated push button taps to wash troughs SANITARY PLUMBING uPVC pipes 50mm Pipes m 30 Carried Forward Section No. 5 BUILDING WORKS - FD8 BUILDING WORKS - FD8	110mm Junction No 2 uPVC gulleys 110mm Dished gulley trap assembly with head, grid and concrete surround not exceeding 750mm deep No 3 SANITARY FITTINGS Supply and install pre-cast concrete double wash-trough, complete with all necessary fittings and pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim" No 3 450 x 290mm "Bantam" cloakroom hand basin complete with single punched tapholes fixed to wall with and including two number 10mm bolts No 1 WASTE UNIONS, ETC 32mm "301CP" Basin waste union TRAPS, ETC "Marley" 32 x 50mm Deep seal "P" or "S" trap No 6 TAPS, VALVES, ETC. "Cobra Watertech" or other equal approved 15mm gate valve plugged No 7 15mm Elbow action pillar tap No 1 19mm Chrome plated push button taps to wash troughs No 5 SANITARY PLUMBING UPVC plpes 50mm Pipes m 30 Carried Forward R Section No. 5 BUILDING WORKS - FD8 BIII No. 10

	Brought Forward			R	
	Extra over uPVC pipes for fittings				
15	50mm Bend	No	2		
16	50 mm Junction	No	2		
17	50mm Access junction	No	2		
18	50mm Access bend	No	2		
19	50mm Access reducing junction	m	2		
20	50mm "GI Two-way" vent valve	No	2		
	WATER SUPPLIES				
	Class 0 copper pipes				
21	15 mm Pipes	m	3		
22	15mm Pipes chased in walls	m	10		
	Extra over class 0 copper pipes for capillary fittings				
23	15mm Fittings	No	5		
	Copper overflow and service pipes				
24	15mm Service pipe 350mm girth	No	1		
	<u>Sundries</u>				
25	Testing water pipe system		Item		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5			, K	+
	BUILDING WORKS - FD8 Bill No. 10 PLUMBING AND DRAINAGE				
	PLUIVIDING AND DRAINAGE				

Item No		Quantity	Rate	Amount
	BILL NO. 11			
	GLAZING			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	GLAZING TO STEEL WITH PUTTY			
	6.38mm Obscure safety glass			
1	Panes not exceeding 0,1 m2 m2	4		
	Carried Forward to Summary of Section No. 5		R	
	Section No. 5 BUILDING WORKS - FD8			
	Bill No. 11 GLAZING			
	GLAZING			

Item No			Quantity	Rate	Amount
	BILL NO. 12				
	<u>PAINTWORK</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ON FIBRE-CEMENT				
	Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint				
1	On fascias and barge boards	m2	6		
	ON WOOD				
	Undercoat and minimum 2 coat gloss enamel				
2	On doors (Internal)	m2	18		
3	On doors (External)	m2	14		
	ON METAL				
	Undercoat and minimum 2 coat gloss enamel				
4	On door frames	m2	17		
5	On gates (Measured over the full flat area of both sides)	m2	14		
6	On Gutters and downpipes	m	20		
	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				
7	On windows with burglar bars	m2	8		
	Carried Forward to Summary of Section No. 5 Section No. 5			R	
	BUILDING WORKS - FD8				
	Bill No. 12 PAINTWORK				

	Section No. 5			
	BUILDING WORKS - FD8			
	SECTION SUMMARY - BUILDING WORKS - FD8			
Bill No		Page No		Amount
1	EARTHWORKS	75		
2	CONCRETE,FORMWORK AND REINFORCEMENT	77		
3	MASONRY	80		
4	WATERPROOFING	81		
5	ROOF COVERINGS	82		
6	CARPENTRY AND JOINERY	84		
7	IRONMONGERY	86		
8	METALWORK	87		
9	IN SITU FINISHES	88		
10	PLUMBING AND DRAINAGE	91		
11	GLAZING	92		
12	PAINTWORK	93		
	Comind to Final Comment			
	Carried to Final Summary Section No. 5		R	
	BUILDING WORKS - FD8			

Item No		Q	uantity	Rate	Amount
	SECTION 6				
	BILL NO.1				
	<u>EARTHWORKS</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	SITE CLEARANCE				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs,bush and trees not exceeding 200mm girth, etc.	m2	162		
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	162		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
3	Trenches	m3	21		
4	Pit	m3	37		
5	For aprons thickenning	m3	1		
	Extra over trench and hole excavations in earth for				
	excavation:				
6	Soft rock	m3	2		
7	Hard rock	m3	5		
	Extra over all excavations for carting away:				
8	Surplus material from excavations and/or stock piles on site to a dumping site to be alocated by the Contractor	m3	38		
	Carried Forward			R	
	Section No. 6 BUILDING WORKS - F10 Bill No. 1 EARTHWORKS				

	Brought Forward			R	
	Risk of collapse of excavations				
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	87		
	Keeping excavations free of water.				
10	Keeping excavations free of water other than subterranean water		ltem		
	Earth filling obtained from the excavations and/or				
	prescribed stock piles on site compacted to 93% Mod				
	AASHTO density				
11	Under floors, steps, pavings, etc.	m3	11		
12	Backfilling to trenches, holes, etc.	m3	8		
	Compaction of surfaces				
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	41		
4.4	•	1112	71		
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	24		
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	36		
	Prescribed density tests on filling				
16	Modified AASHTO Density tests	No	5		
	SOIL POISONING				
	Carried Forward Section No. 6 BUILDING WORKS - F10			R	
	Bill No. 1 EARTHWORKS				

	Brought Forward			R	Τ
	Soil insecticide				
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	41		
18	To bottom of concrate aprons	m2	36		
19	To bottoms and sides of trenches, etc.	m2	112		
	Carried Forward to Summary of Section No. 6			R	T
	Section No. 6 BUILDING WORKS - F10				<u> </u>
	Bill No. 1 EARTHWORKS				

Item No			Quantity	Rate	Amount
	BILL NO.2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to				
	be used - PW 371"				
	UNREINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete				
1	Strip footings	m3	7		
2	Ditto, but surface bed in pit	m3	2		
3	2Aprons cast in panels	m3	3		
4	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	22		
5	Thickening down apron on edge 110mm deep x 200mm wide	m	36		
	REINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete				
6	Slabs	m3	5		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a wood float				
7	Aprons and pavings to falls	m2	28		
	Carried Forward Section No. 6 BUILDING WORKS - F10 Bill No. 2			R	
	CONCRETE,FORMWORK AND REINFORCEMENT				

	Brought Forward			R	
	TEST CUBES				
8	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	5		
	Finishing top surfaces of concrete smooth with a steel trowel				
9	Suface beds, slabs, etc.	m2	53		
	FORMWORK				
	Rough formwork to sides:				
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	25		
	Permanent formwork to soffits:				
11	Slabs propped up not exceeding 1.5m high	m2	20		
12	Leave or form 500mm diameter opening in top of floor slab	No	10		
	REINFORCEMENT				
	Mesh Reinforcement (measure nett)				
13	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	53		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 BUILDING WORKS - F10				
	Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT				
			I	II	ı

Item No		Quantity	Rate	Amount
	BILL NO.3			
	BRICKWORK			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	BRICKWORK			
	Sizes in descriptions			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	Hollow walls etc			
	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 "Brixeal" bitumen emulsion waterproofing coating.			
	User note: The above preamble generally applies for works in hot and humid coastal areas			
	Face bricks			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	<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			
	Carried Forward Section No. 6		R	
	BUILDING WORKS - F10 Bill No. 3 MASONRY			

	Brought Forward			R	
	<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>				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar				
1	One brick walls	m2	11		
2	One brick walls in pit	m2	22		
3	4Half brick corbelling in pit	m	21		
	FACE BRICKWORK				
	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	12		
	SUPERSTRUCTURE				
	FACE BRICKWORK				
	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	40		
6	One brickwork for face brick walls pointed both sides	m2	124		
7	Extra over for brickwork in beamfilling	m2	5		
8	Fair raking and cutting	m	8		
	Carried Forward			R	
	Section No. 6 BUILDING WORKS - F10 Bill No. 3 MASONRY				

	Brought Forward			R	Π
	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				
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	14		
10	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	14		
11	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	14		
	BRICKWORK SUNDRIES				
	Brick reinforcement				
12	75mm Wide reinforcement built in horizontally	m	158		
13	150mm Wide reinforcement built in horizontally	m	285		
	Turning pieces				
14	220mm Wide turning piece to lintel etc	m	11		
	Galvanised wire ties etc				
15	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	28		
	Prestressed fabricated lintels				
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	15		
	Ventillation bricks				
17	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	6		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 BUILDING WORKS - F10 Bill No. 3 MASONRY				
	INIMOUNT				

Item No			Quantity	Rate	Amount
	BILL NO.4				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer 375mm micron embossed damp proof course				
1	In walls	m2	6		
	One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape				
2	Under surface beds	m2	53		
	FLOOR AND WALLS SEALERS				
	"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:				
3	Around steel windows and door frames.	m	41		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6				
	BUILDING WORKS - F10 Bill No. 4 WATERBROOFING				
	WATERPROOFING				

Item No			Quantity	Rate	Amount
	BILL NO.5				
	ROOF COVERINGS				
	SUPPLEMENTARY PREAMBLES				
	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				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)				
1	Roof covering with pitch not exceeding 25 degrees	m2	60		
	Sundries				
2	12" Thermal resistance sisalition laid on purlins	m2	60		
	RAINWATER DISPOSAL				
	Aluzink seamless metal gutters:				
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	5		
6	Extra over rainwater pipe for eaves offset	No	2		
7	Ditto ,for shoe	No	2		
	Carried Forward to Summary of Section No. 6 Section No. 6 BUILDING WORKS - F10 Bill No. 5			R	
	ROOF COVERINGS				

Item No			Quantity	Rate	Amount
	BILL NO.6				
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ROOFS, ETC.				
	Sawn softwood				
1	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	67		
2	76 x 38mm Wall plates	m	20		
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	54		
	Sundries				
4	Two coats creosote on sawn timbers	m2	17		
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	28		
6	Hurricane clips	No	15		
	EAVES, VERGES, ETC.				
	Pressed fibre-cement				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	30		
	DOORS, ETC.				
	Carried Forward			R	
	Section No. 6 BUILDING WORKS - F10 Bill No. 6 CARPENTRY AND JOINERY				

	Brought Forward			R	
	Wrought meranti doors hung to steel frames				
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 Purpose made 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. 6 Section No. 6 BUILDING WORKS - F10 Bill No. 6 CARPENTRY AND JOINERY			R	

Item No		Quantity	Rate	Amount
	BILL NO.7			
	IRONMONGERY			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	CATCHES, CABIN, HOOKS, ETC			
	<u>Approved</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged No	2		
	LOCKS			
	<u>Approved</u>			
2	Three lever mortice lockset No	2		
3	Indicator lockset No	10		
	DOORSTOPS			
	<u>Approved</u>			
4	38mm Diameter rubber door stop plugged No	2		
	LETTERS, NAMEPLATES, ETC.			
	"Union" or similar approved			
5	75 x 150mm Natural anodised aluminium plate with male or female symbol	2		
	BATHROOM FITTINGS			
	"Kimberley-Clark"or Simlilar			
6	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder No	10		
	Carried Forward		R	
	Section No. 6 BUILDING WORKS - F10 Bill No. 7 IRONMONGERY			

	Brought Forward		R	
	Sundries			
7	Female she-bins No	2		
	Carried Forward to Summary of Section No. 6		R	
	Section No. 6 BUILDING WORKS - F10			
	Bill No. 7 IRONMONGERY			

Item No			Quantity	Rate	Amount
	BILL NO.8				
	<u>METALWORK</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	PRESSED STEEL DOOR FRAMES				
	1,2mm Single rebated frames suitable for half brick walls				
1	Frame for door 813 x 2032mm high	No	10		
	1,6mm Double rebated frames suitable for one brickwalls				
2	Frame for door 813 x 2032mm high	No	2		
	STEEL WINDOWS, DOORS, ETC				
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		
	WELDED SCREENS, GATES, ETC				
	Steel gates and frames				
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 Section No. 6 BUILDING WORKS - F10 Bill No. 8 METALWORK			R	

Item No			Quantity	Rate	Amount
	BILL NO. 9	I.			
	PLASTERING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	CEMENT SCREEDS TO CONCRETE				
	Screeds to steel trowelled, on concrete:				
1	30mm thick on floors	m2	51		
	INTERNAL PLASTER				
	Cement plaster on brickwork or blockwork				
2	On pits walls	m2	122		
	FLOOR AND WALLS SEALERS				
	Minimum two coats approved epoxy coat:				
3	On screed	m2	51		
4	On internal textured plaster walls and floors in pit	m2	142		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6			ĸ	
	BUILDING WORKS - F10 Bill No. 9 IN SITU FINISHES				
	IN SHU FINISHES				

Item No			Quantity	Rate	Amount
	BILL NO. 10				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ENVIRO-LOO TOILET SYSTEMS				
1	Supply and Install "Enviro-Loo" Industrial 1040 Model complete, installed strictly in accordance with manufacturers instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets, standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping, etc				
		No	10		
	SOIL DRAINAGE				
	Normal duty (Class 51) uPVC sewer and drain pipes				
2	110mm Pipes vertically or ramped to cleaning eyes, etc.	m	30		
	Extra over normal duty (Class 51) uPVC sewer and drain pipes for fittings				
3	110mm Bend	No	3		
4	110mm Junction	No	2		
	uPVC gulleys				
5	110mm Dished gulley trap assembly with head, grid and concrete surround not exceeding 750mm deep	No	3		
	Carried Forward Section No. 6 BUILDING WORKS - F10 Bill No. 10 PLUMBING AND DRAINAGE			R	

	Brought Forward			R	
	SANITARY FITTINGS				
6	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	3		
	TRAPS, ETC				
	<u>"Marley"</u>				
7	32 x 50mm Deep seal "P" or "S" trap	No	6		
	TAPS, VALVES, ETC.				
	"Cobra Watertech" or other equal approved				
8	15mm gate valve plugged	No	6		
9	19mm Chrome plated push button taps to WHB	No	6		
	SANITARY PLUMBING				
	uPVC pipes				
10	50mm Pipes	m	30		
	Extra over uPVC pipes for fittings				
11	50mm Bend	No	2		
12	50 mm Junction	No	2		
13	50mm Access junction	No	2		
14	50mm Access bend	No	2		
15	50mm Access reducing junction	m	2		
16	50mm "GI Two-way" vent valve	No	2		
	WATER SUPPLIES				
	Carried Forward			R	
	Section No. 6 BUILDING WORKS - F10 Bill No. 10 PLUMBING AND DRAINAGE				

	Brought Forwa	rd		R	
	Class 0 copper pipes				
17	15 mm Pipes	m	3		
18	15mm Pipes chased in walls	m	10		
	Extra over class 0 copper pipes for capillary fittings	<u>.</u>			
19	15mm Fittings	No	5		
	<u>Sundries</u>				
20	Testing water pipe system		Item		
					\vdash
	Carried Forward to Summary of Section No Section No. 6	. 6		R	⊨
	BUILDING WORKS - F10 Bill No. 10				
	PLUMBING AND DRAINAGE				

Item No		Quantity	Rate	Amount
	BILL NO. 11			
	GLAZING			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	GLAZING TO STEEL WITH PUTTY			
	6.38mm Obscure safety glass			
1	Panes not exceeding 0,1 m2 m2	4		
	Carried Forward to Summary of Section No. 6		R	
	Section No. 6 BUILDING WORKS - F10			
	Bill No. 11 GLAZING			
		ı	ı	ıı I

Item No			Quantity	Rate	Amount
	BILL NO. 13	١			
	<u>PAINTWORK</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ON FIBRE-CEMENT				
	Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint				
1	On fascias and barge boards	m2	30		
	ON WOOD				
	Undercoat and minimum 2 coat gloss enamel				
2	On doors (Internal)	m2	4		
3	On doors (External)	m2	32		
	ON METAL				
	Undercoat and minimum 2 coat gloss enamel				
4	On door frames	m2	13		
5	On gates (Measured over the full flat area of both sides)	m2	14		
6	On gutters and down pipes	m	25		
	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				
7	On windows with burglar bars	m2	14		
	Carried Forward to Summary of Section No. 6 Section No. 6			R	
	BUILDING WORKS - F10 Bill No. 12				
	PAINTWORK				

	Section No. 6			
	BUILDING WORKS - F10			
	SECTION SUMMARY - BUILDING WORKS - F10			
Bill No		Page No		Amount
1	EARTHWORKS	97		
2	CONCRETE,FORMWORK AND REINFORCEMENT	99		
3	MASONRY	102		
4	WATERPROOFING	103		
5	ROOF COVERINGS	104		
6	CARPENTRY AND JOINERY	106		
7	IRONMONGERY	108		
8	METALWORK	109		
9	IN SITU FINISHES	110		
10	PLUMBING AND DRAINAGE	113		
11	GLAZING	114		
12	PAINTWORK	115		
	Comind to Final Comment			
	Carried to Final Summary Section No. 6		R	
	BUILDING WORKS - F10			

Item No		Quantity	Rate	Amount
	SECTION 7			
	BILL NO.1			
	<u>EARTHWORKS</u>			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	SITE CLEARANCE			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs,bush and trees not exceeding 200mm girth, etc.	51		
2	Stripping average 100mm thick layer of top soil and stockpiling on site m2	51		
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep			
3	Trenches m3	13		
4	Pit m3	23		
5	For aprons thickenning m3	3		
	Extra over trench and hole excavations in earth for excavation:			
6	Soft rock m3	2		
7	Hard rock m3	1		
	Extra over all excavations for carting away:			
8	Surplus material from excavations and/or stock piles on site to a dumping site to be alocated by the Contractor m3	6		
	Section No. 7 BUILDING WORKS - SD2 Bill No. 1 EARTHWORKS		R	

	Brought Forward			R	Τ
	Risk of collapse of excavations				
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	39		
	Keeping excavations free of water.				
10	Keeping excavations free of water other than subterranean water		Item		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density				
11	Under floors, steps, pavings, etc.	m3	4		
12	Backfilling to trenches, holes, etc.	m3	7		
	Compaction of surfaces				
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	14		
14	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		
	Prescribed density tests on filling				
15	Modified AASHTO Density tests	No	5		
	SOIL POISONING				
	Soil insecticide				
16	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	14		
17	To bottom of concrate aprons	m2	33		
18	To bottoms and sides of trenches, etc.	m2	52		
	Carried Forward to Summary of Section No. 7 Section No. 7 BUILDING WORKS - SD2 Bill No. 1 FARTHWORKS			R	_
	EARTHWORKS				

Item No			Quantity	Rate	Amount
	BILL NO.2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to				
	be used - PW 371"				
	UNREINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete				
1	Strip footings	m3	3		
2	Ditto, but surface bed in pit	m3	2		
3	2Aprons cast in panels	m3	3		
4	Ramp	m3	1		
5	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	4		
6	Thickening down apron on edge 110mm deep x 200mm wide	m	25		
	REINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete				
7	Slabs	m3	2		
8	Surface beds	m3	1		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a wood float				
9	Aprons and pavings to falls	m2	33		
	Carried Forward			R	
	Section No. 7 BUILDING WORKS - SD2				
	Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT				
	CONTRACTOR ON AND ILLINFORGENIEN				

	Brought Forward			R	
	TEST CUBES				l
10	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		
	Finishing top surfaces of concrete smooth with a steel trowel				1
11	Suface beds, slabs, etc.	m2	14		l
	<u>FORMWORK</u>				l
	Rough formwork to sides:				l
12	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	30		ĺ
	Permanent formwork to soffits:				ı
13	Slabs propped up not exceeding 1.5m high	m2	10		l
14	Leave or form 500mm diameter opening in top of floor slab	No	3		
	REINFORCEMENT				ı
	Mesh Reinforcement (measure nett)				ı
15	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	14		1
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	Carried Forward to Summary of Section No. 7			R	_
	Section No. 7 BUILDING WORKS - SD2				l
	Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT				

Item No		Quantity	Rate	Amount	_
	BILL NO.3				
	BRICKWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	BRICKWORK				
	Sizes in descriptions				
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
	Hollow walls etc				
	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 "Brixeal" bitumen emulsion waterproofing coating.				
	User note: The above preamble generally applies for works in hot and humid coastal areas				
	Face bricks				
	Bricks shall be ordered timeously to obtain uniformity in size and colour				
	<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				
	0				_
	Section No. 7 BUILDING WORKS - SD2 Bill No. 3 MASONRY		R		

	Brought Forward			R	
	<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>				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar				
1	One brick walls	m2	15		
2	One brick walls in pit	m2	3		
3	4Half brick corbelling in pit	m	18		
	FACE BRICKWORK				
	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	3		
	SUPERSTRUCTURE				
	FACE BRICKWORK				
	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	18		
6	One brickwork for face brick walls pointed both sides	m2	58		
7	Extra over brickwork for face brickwork in beamfilling	m2	3		
8	Fair raking and cutting	m	7		
	Carried Forward			R	
	Section No. 7 BUILDING WORKS - SD2 Bill No. 3 MASONRY				

				R	1
<u>b</u> <u>s</u>	Brick-on-edge header course coping, sills, etc. of face oricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces				
	Extra over brickwork for brick-on-edge header course intels pointed on two sides and 110mm soffit	m	7		
	Face brick-on-edge window sill 220mm wide pointed on wo side and on top and set at a angle	m	4		
	Fair cutting and fitting around pipe not exceeding 00mm diameter.	No	2		
	Fair cutting and fitting around pipe exceeding 100mm liameter and not exceeding 100mm diameter.	No	3		
<u> </u>	BRICKWORK SUNDRIES				
<u>B</u>	Brick reinforcement				
13 7	5mm Wide reinforcement built in horizontally	m	53		
14 1	50mm Wide reinforcement built in horizontally	m	223		
Ī	Furning pieces				
15 2	220mm Wide turning piece to lintel etc	m	7		
<u>G</u>	Salvanised wire ties etc				
16 6 e	Smm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	12		
<u> </u>	Prestressed fabricated lintels				
	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	9		
<u>\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ </u>	/entillation bricks				
p	Set of two 22 x 155mm high terra cotta clay vermin broof air bricks including making good reveals and gauze	No	8		
	Comical Formand to Commercial Continue No. 7				_
	Carried Forward to Summary of Section No. 7			R	_
В	BUILDING WORKS - SD2 Bill No. 3 MASONRY				

Item No			Quantity	Rate	Amount
	BILL NO.4				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer 375mm micron embossed damp proof course				
1	In walls	m2	5		
	One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape				
2	Under surface beds	m2	14		
3	Aprons and ramps	m2	33		
	FLOOR AND WALLS SEALERS				
	"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:				
4	Around steel windows and door frames.	m	7		
	Carried Forward to Summary of Section No. 7			R	
	Section No. 7 BUILDING WORKS - SD2				
	Bill No. 4 WATERPROOFING				
					1

Item No			Quantity	Rate	Amount
	BILL NO.5				
	ROOF COVERINGS				
	SUPPLEMENTARY PREAMBLES				
	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				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)				
1	Roof covering with pitch not exceeding 25 degrees	m2	23		
	Sundries				
2	12" Thermal resistance sisalition laid on purlins	m2	23		
	RAINWATER DISPOSAL				
	Aluzink seamless metal gutters:				
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		
7	Ditto ,for shoe	No	1		
	Carried Forward to Summary of Section No. 7			R	
	Section No. 7 BUILDING WORKS - SD2 Bill No. 5 ROOF COVERINGS				

Item No			Quantity	Rate	Amount
	BILL NO.6				
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ROOFS, ETC.				
	Sawn softwood				
1	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	25		
2	76 x 38mm Wall plates	m	8		
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	25		
	<u>Sundries</u>				
4	Two coats creosote on sawn timbers	m2	18		
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	12		
6	Hurricane clips	No	30		
	EAVES, VERGES, ETC.				
	Pressed fibre-cement				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	19		
	DOORS, ETC.				
	Carried Forward			R	
	Section No. 7 BUILDING WORKS - SD2 Bill No. 6 CARPENTRY AND JOINERY				

	Brought Forward			R	
	Wrought meranti doors hung to steel frames				
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 Purpose made 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	1		
10	44mm Framed ledged and braced batten door 914 x 2032mm high of 44 x 100mm top rail and stiles, 20 x 100mm bottom rail and 20 x 100mm middle ledge and braces, filled in with 20 x 76mm tongued and grooved V-jointed one side boarding and covered on other side with 4mm plywood with hardwood veneer to match door let into and including rebates all round and splayed 50 x 76mm weather bar (D3)	No	1		
	Carried Forward to Summary of Section No. 7 Section No. 7 BUILDING WORKS - SD2 Bill No. 6 CARPENTRY AND JOINERY			R	

Item No		Quantity	Rate	Amount
	BILL NO.7			
	IRONMONGERY			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	CATCHES, CABIN, HOOKS, ETC			
	<u>Approved</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged No	2		
	LOCKS			
	<u>Approved</u>			
2	Three lever mortice lockset No	2		
3	Indicator lockset No	2		
	<u>HANDLES</u>			
	Aluminium Pull Handle			
4	Set of two, 300mm pull handles fixed back to back on doors No	1		
	<u>DOORSTOPS</u>			
	<u>Approved</u>			
5	38mm Diameter rubber door stop plugged No	4		
	DOOR CLOSERS			
	"Dorma" or equal approved			
6	Code 737 3-5 Door closer No	1		
	LETTERS, NAMEPLATES, ETC.			
	Carried Forward		R	
	Section No. 7 BUILDING WORKS - SD2 Bill No. 7 IRONMONGERY			

	Brought Forward			R	
	"Union" or similar approved				
7	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2		
	"Vaal Paragon" or similar approved				
8	32mm Type 9 back grab rail 800mm long plugged	No	1		
9	32mm Type 8 side grab rail 900mm girth plugged	No	1		
	BATHROOM FITTINGS				
	"Kimberley-Clark"or Simlilar				
10	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	3		
	Stainless steel				
11	Stainless steel mirror size 350 x 400m plugged to wall with chrome platted screws.	No	2		
	Carried Forward to Summary of Section No. 7			R	
	Section No. 7 BUILDING WORKS - SD2				
	Bill No. 7 IRONMONGERY				
					ı

Item No			Quantity	Rate	Amount
	BILL NO.8				
	<u>METALWORK</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	PRESSED STEEL DOOR FRAMES				
	1,2mm Single rebated frames suitable for half brick walls				
1	Frame for door 813 x 2032mm high	No	2		
	1,6mm Double rebated frames suitable for one brickwalls				
2	Frame for door 813 x 2032mm high	No	2		
3	Frame for door 914 x 2032mm high	No	1		
	STEEL WINDOWS, DOORS, ETC				
4	Window type NE1, 533 x 654mm high including burglar bars	No	6		
5	Window type NE 7,1022 x 654mm high including burglar bars	No	3		
	WELDED SCREENS, GATES, ETC				
	Steel gates and frames				
6	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2		
7	Purpose made square hallow section mild steel security gate, size 914 x 2032mm High	No	1		
	Carried Forward to Summary of Section No. 7			R	
	Section No. 7				
	BUILDING WORKS - SD2 Bill No. 8				
	METALWORK				

Item No		Quantity	Rate	Amount
	BILL NO. 9			
	PLASTERING			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	CEMENT SCREEDS TO CONCRETE			
	Screeds to steel trowelled, on concrete:			
1	30mm thick on floors m	2 25		
	INTERNAL PLASTER			
	Cement plaster on brickwork or blockwork			
2	On pits walls m	2 24		
	FLOOR AND WALLS SEALERS			
	Minimum two coats approved epoxy coat:			
3	On screed m	2 25		
4	On internal textured plaster walls and floors in pit m	2 49		
	Carried Forward to Summary of Section No. 7		R	
	Section No. 7 BUILDING WORKS - SD2			
	Bill No. 9 IN SITU FINISHES			
		I		ll I

Item No		Quantity	Rate	Amount
	BILL NO. 10			
	PLUMBING AND DRAINAGE (PROVISIONAL)			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	ENVIRO-LOO TOILET SYSTEMS			
1	Supply and Install "Enviro-Loo" Industrial 1040 Model complete,installed strictly in accordance with manufacturers instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets, standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping,etc			
	No	2		
2	Supply and Install "Enviro-Loo" Industrial 1040 Model complete, installed strictly in accordance with manufacturers instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets, standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping, etc			
	No	1		
	Carried Forward		R	
	Section No. 7 BUILDING WORKS - SD2 Bill No. 10 PLUMBING AND DRAINAGE			

	Brought Forward			R	
3	Supply and Erect "Enviro-loo""Industrial 1040 Model, 5-bowl Urinal Evaporative Tank system fixed complete as per manufacturers specification unit, comprising of urinal evaporative tank, urinal bowls including brackets, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary piping, traps, etc				
		No	1		
	SOIL DRAINAGE				
	Normal duty (Class 51) uPVC sewer and drain pipes				
4	110mm Pipes vertically or ramped to cleaning eyes, etc.	m	5		
5	110mm Pipes laid in and including trenches not exceeding 1m deep	m	25		
	Extra over normal duty (Class 51) uPVC sewer and drain pipes for fittings				
6	110mm Bend	No	4		
7	110mm Junction	No	2		
	uPVC gulleys				
8	110mm Dished gulley trap assembly with head, grid and concrete surround not exceeding 750mm deep	No	2		
	SANITARY FITTINGS				
	Vaal or equal approved				
9	450 x 290mm "Bantam" cloakroom hand basin complete with single punched tapholes fixed to wall with and				
	including two number 10mm bolts	No	1		
10	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		
	Carried Forward			R	
	Section No. 7 BUILDING WORKS - SD2 Bill No. 10 PLUMBING AND DRAINAGE				

	Brought Forward			R	
11	Vaal Sanitaryware vitreous china "Afsan" low level 90B0 outlet washdown pan.Vaal Sanitaryware vitreous china "Hibiscus Elite Vandal Proof" low level cistern (code7116LV), complete with front push button, lid, fitments and low level flush pipe.	No			Rate Only
12	Vaal Sanitaryware vitreous china "Protea Paraplegic" 90B0 outletpan (code 750200) and matching 9 litre cistern (code 7116LP) complete with lid, fitments,and purpose-made C.P. side-flush lever (left or right) or a back inlet exposed flushvalve	No			Rate Only
13	Vaal Sanitaryware vitreous china wall hung "Lavatera" urinal with top inlet (code705426). Overall size 600 x 385 x 380 mm. Top inlet fittings (code 7054Z1). include a 38mm c.p. domical grating, a spreader (with a 20 mm diameter thread), and two hanger brackets.	No			Rate Only
	WASTE UNIONS, ETC				
14	32mm "301CP" Basin waste union	No	1		
	TRAPS, ETC.				
	"Marley"				
15	32 x 50mm Deep seal "P" or "S" trap	No	2		
	TAPS, VALVES, ETC.				
	"Cobra Watertech" or other equal approved				
16	15mm gate valve plugged	No	5		
17	10mm Chrome plated push button tone to week traughe		5		
17	19mm Chrome plated push button taps to wash troughs	No	4		
18	15mm Elbow action pillar tap	No	1		
	SANITARY PLUMBING				
	uPVC pipes				
19	50mm Pipes	m	30		
	Carried Forward			R	
	Section No. 7 BUILDING WORKS - SD2 Bill No. 10 PLUMBING AND DRAINAGE				

	Brought Forward			R	\prod
	Extra over uPVC pipes for fittings				
20	50mm Bend	No	2		
21	50 mm Junction	No	2		
22	50mm Access junction	No	2		
23	50mm Access bend	No	2		
24	50mm Access reducing junction	m	2		
25	50mm "Gl Two-way" vent valve	No	2		
	WATER SUPPLIES				
	Class 0 copper pipes				
26	15 mm Pipes	m	3		
27	15mm Pipes chased in walls	m	10		
	Extra over class 0 copper pipes for capillary fittings				
28	15mm Fittings	No	5		
	Copper overflow and service pipes				
29	15mm Service pipe 350mm girth	No	1		
	<u>Sundries</u>				
30	Testing water pipe system		Item		
	Carried Forward to Summary of Section No. 7			R	T
	Section No. 7				+
	BUILDING WORKS - SD2 Bill No. 10 PLUMBING AND DRAINAGE				
	PLUIVIBING AND DRAINAGE				

Item No		Quantity	Rate	Amount
	BILL NO. 11			
	GLAZING			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	GLAZING TO STEEL WITH PUTTY			
	6.38mm Obscure safety glass			
1	Panes not exceeding 0,1 m2 m2	4		
	Carried Forward to Summary of Section No. 7		R	
	Section No. 7 BUILDING WORKS - SD2			
	Bill No. 11 GLAZING			

Item No			Quantity	Rate	Amount
	BILL NO. 12				
	<u>PAINTWORK</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ON FIBRE-CEMENT				
	Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint				
1	On fascias and barge boards	m2	6		
	ON WOOD				
	Undercoat and minimum 2 coat gloss enamel				
2	On doors (Internal)	m2	7		
3	On doors (External)	m2	7		
	ON METAL				
	Undercoat and minimum 2 coat gloss enamel				
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		
	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				
7	On windows with burglar bars	m2	2		
	Carried Forward to Summary of Section No. 7 Section No. 7			R	
	BUILDING WORKS - SD2				
	Bill No. 12 PAINTWORK				

	Section No. 7			
	BUILDING WORKS - SD2			
	SECTION SUMMARY - BUILDING WORKS - SD2			
Bill No		Page No		Amount
1	EARTHWORKS	118		
2	CONCRETE,FORMWORK AND REINFORCEMENT	120		
3	MASONRY	123		
4	WATERPROOFING	124		
5	ROOF COVERINGS	125		
6	CARPENTRY AND JOINERY	127		
7	IRONMONGERY	129		
8	METALWORK	130		
9	IN SITU FINISHES	131		
10	PLUMBING AND DRAINAGE	135		
11	GLAZING	136		
12	PAINTWORK	137		
	Comind to Final Comment			
	Carried to Final Summary Section No. 7		R	
	BUILDING WORKS - SD2			

Item No			Quantity	Rate	Amount
	SECTION 8				
	BILL NO.1				
	<u>EARTHWORKS</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	SITE CLEARANCE				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs,bush and trees not exceeding 200mm girth, etc.	m2	66		
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	66		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
3	Trenches	m3	16		
4	Pit	m3	23		
5	For aprons thickenning	m3	4		
	Extra over trench and hole excavations in earth for				
	excavation:				
6	Soft rock	m3	4		
7	Hard rock	m3	2		
	Extra over all excavations for carting away:				
8	Surplus material from excavations and/or stock piles on site to a dumping site to be alocated by the Contractor	m3	31		
	Carried Forward			R	
	Section No. 8 BUILDING WORKS - SD4 Bill No. 1 EARTHWORKS				

	Brought Forward			R	
	Risk of collapse of excavations				
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	74		
	Keeping excavations free of water.				
10	Keeping excavations free of water other than subterranean water		Item		
	Earth filling obtained from the excavations and/or				
	prescribed stock piles on site compacted to 93% Mod				
	AASHTO density				
11	Under floors, steps, pavings, etc.	m3	6		
12	Backfilling to trenches, holes, etc.	m3	9		
	Compaction of surfaces				
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	m2	21		
	density	1112	21		
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	41		
	Prescribed density tests on filling				
16	Modified AASHTO Density tests	No	5		
	SOIL POISONING				
	Carried Forward			R	
	Section No. 8 BUILDING WORKS - SD4 Bill No. 1 EARTHWORKS				

	Brought Forward			R	
	Soil insecticide				
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	21		
18	To bottom of concrate aprons	m2	41		
19	To bottoms and sides of trenches, etc.	m2	63		
	Carried Forward to Summary of Section No. 8 Section No. 8			R	
	BUILDING WORKS - SD4 Bill No. 1				
	EARTHWORKS				

Item No			Quantity	Rate	Amount
	BILL NO.2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to				
	be used - PW 371"				
	UNREINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete				
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	9		
6	Thickening down apron on edge 110mm deep x 200mm wide	m	32		
	REINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete				
7	Surface beds	m3	2		
8	Slabs	m3	1		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a wood float				
9	Aprons and pavings to falls	m2	41		
	Carried Forward			R	
	Section No. 8			· · ·	
	BUILDING WORKS - SD4 Bill No. 2				
	CONCRETE,FORMWORK AND REINFORCEMENT				

	Brought Forward			R	
	TEST CUBES				
10	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		
	Finishing top surfaces of concrete smooth with a steel trowel				
11	Suface beds, slabs, etc.	m2	30		
	FORMWORK				
	Rough formwork to sides:				
12	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	37		
	Permanent formwork to soffits:				
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		
	REINFORCEMENT				
	Mesh Reinforcement (measure nett)				
15	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	21		
	Carried Forward to Summary of Section No. 8			R	
	Section No. 8 BUILDING WORKS - SD4				
	Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT				

Item No		Quantity	Rate	Amount
	BILL NO.3			
	BRICKWORK			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	BRICKWORK			
	Sizes in descriptions			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	Hollow walls etc			
	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 "Brixeal" bitumen emulsion waterproofing coating.			
	User note: The above preamble generally applies for works in hot and humid coastal areas			
	Face bricks			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	<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			
	Carried Forward Section No. 8		R	
	BUILDING WORKS - SD4 Bill No. 3 MASONRY			

	Brought Forward			R	
	SAMPLES				
	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>				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar				
1	One brick walls	m2	18		
2	One brick walls in pit	m2	36		
3	4Half brick corbelling in pit	m	14		
	FACE BRICKWORK				
	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	4		
	SUPERSTRUCTURE				
	FACE BRICKWORK				
	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	23		
6	One brickwork for face brick walls pointed both sides	m2	70		
7	Extra over brickwork for face brickwork in beamfilling	m2	4		
8	Fair raking and cutting	m	7		
	Carried Forward			R	
	Section No. 8 BUILDING WORKS - SD4 Bill No. 3 MASONRY				

	Brought Forward			R		
	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					
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	10			
10	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	5			
11	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	1			
	BRICKWORK SUNDRIES					
	Brick reinforcement					
12	75mm Wide reinforcement built in horizontally	m	68			
13	150mm Wide reinforcement built in horizontally	m	338			
	Turning pieces					
14	220mm Wide turning piece to lintel etc	m	10			
	Galvanised wire ties etc					
15	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	16			
	Prestressed fabricated lintels					
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	11			
	Ventillation bricks					
17	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	9			
	Carried Forward to Summary of Section No. 8			R		
	Section No. 8 BUILDING WORKS - SD4					<u> </u>
	Bill No. 3 MASONRY					
					1	

Item No			Quantity	Rate	Amount
	BILL NO.4				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer 375mm micron embossed damp proof course				
1	In walls	m2	12		
	One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape				
2	Under surface beds	m2	32		
3	Aprons and ramps	m2	41		
	FLOOR AND WALLS SEALERS				
	"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:				
4	Around steel windows and door frames.	m	10		
	Carried Forward to Summary of Section No. 8			R	
	Section No. 8 BUILDING WORKS - SD4				
	Bill No. 4 WATERPROOFING				
					1

No			Quantity	Rate	Amount
	BILL NO.5				
	ROOF COVERINGS				
	SUPPLEMENTARY PREAMBLES				
	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				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)				
1	Roof covering with pitch not exceeding 25 degrees	m2	32		
	<u>Sundries</u>				
2	12" Thermal resistance sisalition laid on purlins	m2	32		
	RAINWATER DISPOSAL				
	Aluzink seamless metal gutters:				
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	7		
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		
7	Ditto ,for shoe	No	1		
	Carried Forward to Summary of Section No. 8 Section No. 8 BUILDING WORKS - SD4 Bill No. 5 ROOF COVERINGS			R	

Item No			Quantity	Rate	Amount
	BILL NO.6				
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ROOFS, ETC.				
	Sawn softwood				
1	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	35		
2	76 x 38mm Wall plates	m	13		
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	35		
	<u>Sundries</u>				
4	Two coats creosote on sawn timbers	m2	25		
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	16		
6	Hurricane clips	No	40		
	EAVES, VERGES, ETC.				
	Pressed fibre-cement				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	23		
	DOORS, ETC.				
	Carried Forward			R	
	Section No. 8 BUILDING WORKS - SD4 Bill No. 6 CARPENTRY AND JOINERY				

	Brought Forward			R	
	Wrought meranti doors hung to steel frames				
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	1		
9	44mm Purpose made 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		
10	44mm Framed ledged and braced batten door 914 x 2032mm high of 44 x 100mm top rail and stiles, 20 x 100mm bottom rail and 20 x 100mm middle ledge and braces, filled in with 20 x 76mm tongued and grooved V-jointed one side boarding and covered on other side with 4mm plywood with hardwood veneer to match door let into and including rebates all round and splayed 50 x 76mm weather bar (D3)	No	2		
	Carried Forward to Summary of Section No. 8 Section No. 8			R	
	BUILDING WORKS - SD4 Bill No. 6 CARPENTRY AND JOINERY				

Item No		Quantity	Rate	Amount
	BILL NO.7			
	IRONMONGERY			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	CATCHES, CABIN, HOOKS, ETC			
	<u>Approved</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged No	2		
	LOCKS			
	Approved			
2	Three lever mortice lockset No	2		
3	Indicator lockset No	4		
	HANDLES			
	Aluminium Pull Handle			
4	Set of two, 300mm pull handles fixed back to back on doors No	1		
	DOORSTOPS			
	Approved			
5	38mm Diameter rubber door stop plugged No	6		
	DOOR CLOSERS			
	"Dorma" or equal approved			
6	Code 737 3-5 Door closer No	1		
	LETTERS, NAMEPLATES, ETC.			
	Carried Forward		R	
	Section No. 8 BUILDING WORKS - SD4 Bill No. 7 IRONMONGERY			

	Brought Forward			R	
	"Union" or similar approved				
7	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2		
	"Vaal Paragon" or similar approved				
8	32mm Type 9 back grab rail 800mm long plugged	No	1		
9	32mm Type 8 side grab rail 900mm girth plugged	No	1		
	BATHROOM FITTINGS				
	"Kimberley-Clark"or Simlilar				
10	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	5		
	Stainless steel				
11	Stainless steel mirror size 350 x 400m plugged to wall with chrome platted screws.	No	1		
	Sundries				
12	Female SHE BIN plugged to walls	No	2		
					_
	Carried Forward to Summary of Section No. 8			R	
	Section No. 8 BUILDING WORKS - SD4				
	Bill No. 7 IRONMONGERY				
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Item No			Quantity	Rate	Amount
	BILL NO.8				
	<u>METALWORK</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	PRESSED STEEL DOOR FRAMES				
	1,2mm Single rebated frames suitable for half brick walls				
1	Frame for door 813 x 2032mm high	No	4		
	1,6mm Double rebated frames suitable for one brickwalls				
2	Frame for door 813 x 2032mm high	No	2		
3	Frame for door 914 x 2032mm high	No	1		
	STEEL WINDOWS, DOORS, ETC				
4	Window type NE1, 533 x 654mm high including burglar bars	No	5		
5	Window type NE 7,1022 x 654mm high including burglar bars	No	3		
	WELDED SCREENS, GATES, ETC				
	Steel gates and frames				
6	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	1		
7	Purpose made square hallow section mild steel security gate, size 914 x 2032mm High	No	1		
	Carried Forward to Summary of Section No. 8			R	
	Section No. 8 BUILDING WORKS - SD4				
	Bill No. 8 METALWORK				

Item No			Quantity	Rate	Amount
	BILL NO. 9				
	<u>PLASTERING</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	CEMENT SCREEDS TO CONCRETE				
	Screeds to steel trowelled, on concrete:				
1	30mm thick on floors	n2	21		
	INTERNAL PLASTER				
	Cement plaster on brickwork or blockwork				
2	On pits walls	n2	49		
	FLOOR AND WALLS SEALERS				
	Minimum two coats approved epoxy coat:				
3	On screed n	n2	21		
4	On internal textured plaster walls and floors in pit	n2	70		
	Carried Forward to Summary of Section No. 8			R	
	Section No. 8 BUILDING WORKS - SD4				
	IN SITU FINISHES				
	Bill No. 9				

Item No			Quantity	Rate	Amount
	BILL NO. 10				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ENVIRO-LOO TOILET SYSTEMS				
1	Supply and Install "Enviro-Loo" Industrial 1040 Model complete,installed strictly in accordance with manufacturers instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets,standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping,etc	No	4		
2	Complete and English displayed "English to all the decade" of 4040	110	,		
2	Supply and Erect disabled "Enviro-loo" Industrial 1040 Model set up and fixed complete as per manufacturers instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets, paraplegic toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping,etc	No	4		
		No	1		
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		
	SOIL DRAINAGE				
	Normal duty (Class 51) uPVC sewer and drain pipes				
4	110mm Pipes laid in and including trenches not exceeding 1m deep	m	20		
	Carried Forward Section No. 8 BUILDING WORKS - SD4 Bill No. 10 PLUMBING AND DRAINAGE			R	

	Brought Forward			R	
	Extra over normal duty (Class 51) uPVC sewer and drain pipes for fittings				
5	110mm Bend	No	2		
6	110mm Junction	No	2		
	uPVC gulleys				
7	110mm Dished gulley trap assembly with head, grid and concrete surround not exceeding 750mm deep	No	2		
	SANITARY FITTINGS				
	<u>Vaal or equal approved</u>				
8	450 x 290mm "Bantam" cloakroom hand basin complete with single punched tapholes fixed to wall with and including two number 10mm bolts				
		No	1		
	WASTE UNIONS, ETC				
9	32mm "301CP" Basin waste union	No	1		
	TRAPS, ETC.				
	<u>"Marley"</u>				
10	32 x 50mm Deep seal "P" or "S" trap	No	4		
	TAPS, VALVES, ETC.				
	"Cobra Watertech" or other equal approved				
11	15mm gate valve plugged	No	6		
12	15mm Elbow action pillar tap	No	1		
13	19mm Chrome plated push button taps to WHB	No	4		
13		NO	4		
	WATER SUPPLIES				
	Carried Forward			R	
	Section No. 8 BUILDING WORKS - SD4 BIII No. 10 PLUMBING AND DRAINAGE				

	Brought Forward			R	_
	Class 0 copper pipes				
14	15 mm Pipes	m	3		
15	15mm Pipes chased in walls	m	10		
	Extra over class 0 copper pipes for capillary fittings				
16	15mm Fittings	No	5		
	Copper overflow and service pipes				
17	15mm Service pipe 350mm girth	No	1		
	Sundries				
18	Testing water pipe system		Item		
					—
	Carried Forward to Summary of Section No. 8 Section No. 8			R	_
	BUILDING WORKS - SD4 Bill No. 10				
	PLUMBING AND DRAINAGE				

Item No		Quantity	Rate	Amount
	BILL NO. 11			
	GLAZING			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	GLAZING TO STEEL WITH PUTTY			
	4mm Obscure safety glass			
1	Panes not exceeding 0,1 m2 m2	4		
	Carried Forward to Summary of Section No. 8		R	
	Section No. 8 BUILDING WORKS - SD4			
	Bill No. 11 GLAZING			
				1

Item No			Quantity	Rate	Amount
	BILL NO. 12	'			
	<u>PAINTWORK</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ON FIBRE-CEMENT				
	Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint				
1	On fascias and barge boards	m2	17		
	ON WOOD				
	Undercoat and minimum 2 coat gloss enamel				
2	On doors (Internal)	m2	13		
3	On doors (External)	m2	7		
	ON METAL				
	Undercoat and minimum 2 coat gloss enamel				
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		
	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				
7	On windows with burglar bars	m2	3		
	Carried Forward to Summary of Section No. 8 Section No. 8			R	
	BUILDING WORKS - SD4				
	Bill No. 12 PAINTWORK				

	Section No. 8			
	BUILDING WORKS - SD4			
	SECTION SUMMARY - BUILDING WORKS - SD4			
Bill No		Page No		Amount
1	EARTHWORKS	141		
2	CONCRETE,FORMWORK AND REINFORCEMENT	143		
3	MASONRY	146		
4	WATERPROOFING	147		
5	ROOF COVERINGS	148		
6	CARPENTRY AND JOINERY	150		
7	IRONMONGERY	152		
8	METALWORK	153		
9	IN SITU FINISHES	154		
10	PLUMBING AND DRAINAGE	157		
11	GLAZING	158		
12	PAINTWORK	159		
	Comind to Final Comment			
	Carried to Final Summary Section No. 8		R	
	BUILDING WORKS - SD4			

Item No			Quantity	Rate	Amount
	SECTION NO. 9				
	BILL NO. 1				
	STORMWATER CONTROL				
	SITE CLEARANCE ETC				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	200		
	BULK EXCAVATION, FILLING, ETC				
	Excavation in earth				
2	Excavate in earth below natural, reduced or made up ground level , not exceeding 2m deep, to reduced levels under aprons, etc	m3	30		
	Extra over bulk excavation in earth for excavation in				
3	Soft rock	m3	3		
4	Hard rock	m3	2		
	Extra over all excavations for carting away				
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	30		
	Keeping excavations free of water				
6	Keeping excavations free of all water other than subterranean water		Item		
	Carried Forward			R	
	Section No. 9 EXTERNAL WORKS Bill No. 1 STORMWATER CONTROL				

	Brought Forward			R	
	Compaction of surfaces				
7	Re-compaction of disturbed formation levels, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	200		
	Soil poisoning				
8	Treat soil under concrete rain water channels, etc. with an approved insecticide solution at the rate not less than 2 litre per 1 m2	m2	200		
	Unreinforced Concrete				
	25Mpa/19mm concrete				
9	25Mpa/19mm Mass concrete in V-shaped channel 2000mm wide x 75mm thick with rounded salient edges and finished on exposed surfaces with 2: 1 cement mortar, with and including one layer of ref.193 mesh reinforcement, laid to falls in panels not exceeding 2,0m long with 12mm bitumen impregnated sailboard movement joints with exposed edges raked out for a depth of 10mm and filled with bituminous compound including all processory exceptations and formwork	m	200		
	including all necessary excavations and formwork	m			
10	Extra for fair open end	No	20		
11	Extra for fair stopped end	No	20		
12	Extra for angle intersection	No	25		
	Carried Forward to Summary of Section No. 9 Section No. 9 EXTERNAL WORKS Bill No. 1 STORMWATER CONTROL			R	

Item No		Quantity	Rate	Amount
	SECTION NO. 9			
	BILL NO 2			
	PAVED WALKWAYS			
	<u>EARTHWORKS</u>			
	Site clearance			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc m2	220		
2	Stripping average 100mm thick layer of lop soil and stockpiling on site m2	220		
	<u>Earthworks</u>			
	Open face excavation in earth over sloping site			
3	Open face excavation to form platforms under parking areas, roads, etc and dispose in prescribed stock piles on site "Labour Intensive" m3	220		
	Extra over all excavations for carting away			
4	Surplus material from stock piles on site to a dumping site to be located by the Contractor "Labour Intensive" m3	15		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted as specified			
5	Subbase course of G5 material in 150mm layer, compacted to 93% Mod AASHTO density "Labour Intensive" m3	50		
	Compaction of surfaces			
6	Compaction of ground surface under pavings, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density "LI" m2	220		
	Carried Forward		R	
	Section No. 9 EXTERNAL WORKS Bill No. 2 PAVED WALKWAY			

	Brought Forward			R	Τ
	Additional tests required by the engineer (Refer to Supplementary Preambles for contractor's tests: SABS 1200) "LI"				
7	"Modified AASHTO Density" test	No	5		
	Paving of type 60mm interlocking precast concrete paving blocks with butt joints including 50mm thick river sand bed with sand swept into joints, including preparation of ground or filling "LI"				
8	Paving to parking areas etc to falls, including necessary straight edge blocks "Labour Intensive"	m2	220		
	Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrasien 248,6 g/l) mixed in the proportion of 100 ml weedkiller to 100 l water and applied at a rate of 10 l/mý "LI"				
9	Under paving etc "Labour Intensive"	m2	220		
	Kerbs, etc "LI"				
	Precast concrete finished smooth on exposed surfaces including bedding, jointing and pointing				
10	Fig 12 kerb with 150 x 150 x 300mm unreinforced concrete haunching at back of each joint, including excavation, backfilling, etc "Labour Intensive"	m	200		
					+
	Carried Forward to Summary of Section No. 9 Section No. 9 EXTERNAL WORKS Bill No. 2			R	<u></u>
	PAVED WALKWAY				

Item No		Quantity	Rate	Amount
	SECTION NO. 9			
	BILL NO. 4			
	<u>FENCING</u>			
	<u>FENCING</u>			
	Steel Palisade Fencing			
	The following in steel palisade fencing			
1	1800mm High palisade fencing comprising 40 x 40 x 2mm x 1750mm angle pales bolted at 175mm centres using M8 anti vandal nuts and round headed bolts onto 50 x 50 x 3mm angle iron crossbars bolted onto 76 x 76 x 2mm square tube posts 2400mm long by means of 40 x 5.00mm flatbar fishplate and M12 antivandal nuts and bolts and including planting posts into 600 x 600 x 600mm deep 25MPa concrete complete with all earthworks, trimmings and fixing.	868		
0				
2	Sliding gate 5000mm x 1800mm High formed from 40 x 40 x 2mm welded angle iron paling; 76 x 38 x 2mm rectangular tubing frame; two 80mm roller coaster wheels fitted with ball bearing; track formed of 12mm steel rod welded lo 40 x 40 x 5mm angel iron fixed into a 300 x 400 x 5000mm concrete base; gale posts formed of 75 x 75 x 2mm steel square tubing 2400mm overall length planted into 450 x 450 x 600mm concrete base (all concrete work lo engineer's specification).	1		
3	Pedestrian gate 1500mm x 1800mm High formed from 40 x 40 x 2mm welded angle iron paling; 50 x 25 x 1.6mm rectangular tubing frame; gate posts formed of 75 x 75 x 2mm steel square tubing 2400mm overall length planted into 450 x 450 x 600mm concrete base (all concrete work to engineer's specification).	1		
	<u>PAINTWORK</u>			
	On metal			
	Carried Forward Section No. 9 EXTERNAL WORKS Bill No. 3 FENCING		R	

	Brought Forward			R	Τ
	Undercoat and minimum 2 coats gloss enamel				
4	Prime, apply one coat undercoat and two coats of high gloss enamel paint on steel (Measured over the full flat area of both sides according specification)	m2	3 125		
	Carried Forward to Summary of Section No. 9 Section No. 9 EXTERNAL WORKS Bill No. 3 FENCING			R	
	FEINOING				

Item No			Quantity	Rate	Amount
	WATER SUPPLIES				
	SECTION NO. 9				
	BILL NO. 4				
	Class 10 HDPe type IV pipes				
1	40mm Pipes laid in and including trenches not exceeding 1m deep "Labour Intensive"	m	10		
2	50mm Pipes laid in and including trenches not exceeding 1m deep "Labour Intensive"	m	273		
	Extra over Class 10 HDPe type IV pipes for fittings				
3	40mm Fittings	No	20		
4	50mm Fittings	No	25		
5	40mm Reducer	No	6		
6	50mm Reducer	No	6		
7	40mm Bend	No	12		
8	50mm Bend	No	12		
9	50mm Threaded adaptor	No	5		
	Galvanised medium steel pipes with screwed and socketed joints				
10	50mm Pipes	m	24		
	Extra over galvanised medium steel pipes with screwed and socketed joints for steel fittings				
11	50mm Fittings	No	4		
12	50mm Bush	No	4		
13	50mm Elbow	No	4		
	Carried Forward to Summary of Section No. 9 Section No. 9 EXTERNAL WORKS Bill No. 4 WATER SUPPLY			R	

Item No		Quantity	Rate	Amount
	SECTION NO. 8			
	BILL NO. 5			
	WATER FOUNTAINS			
	<u>Earthworks</u>			
	Excavation in compacted building platform not exceeding 2m deep			
1	Trenches	3 2		
	Extra over all excavations for carting away			
2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor "Labour Intensive"	3 2		
	Compaction of surfaces			
3	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	2 2		
	<u>FILLING</u>			
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93 % Mod AASHTO density			
4	Backfilling to trenches, holes, etc m	3 1		
	Concrete, etc			
	25Mpa/19mm reinforced concrete			
5	Wall m	3 1		
6	Slabs	3 1		
	Carried Forward Section No. 9 EXTERNAL WORKS		R	
	Bill No. 5 STAND PIPES			

	Brought Forward			R	
	Rough formwork to sides	'			
7	Edges, risers, ends and reveals not exceeding 300mm high or wide "Labour Intensive"	m	12		
8	Formwork to sides	m2	4		
	Mesh Reinforcement (measure nett)				
9	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	4		
	WATER SUPPLIES				
	Class 0 copper pipes and fittings with capillary soldered type connections				
10	15mm Pipes	m	16		
	Extra over class 0 pipes for capillary fittings				
11	15mm fittings	No	8		
	Cobra Watertech or equal approved				
12	19mm chrome plated push button taps	No	4		
	Corried Equipment to Summary of Section No. 0			R	T
	Carried Forward to Summary of Section No. 9 Section No. 9				\vdash
	EXTERNAL WORKS Bill No. 5				
	STAND PIPES				

Item No		Quantity	Rate	Amount
	SECTION NO. 9			
	BILL NO. 6			
	WATER TANKS			
	SITE CLEARANCE ETC			
	Site clearance			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc m2	87		
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep			
2	Trenches m3	28		
	Extra over trench and hole excavations in earth for excavation in			
3	Soft rock m3	7		
4	Hard rock m3	70		
	Extra over all excavations for carting away			
5	Surplus material from excavations on site to a dumping site to be located by the contractor m3	14		
	Risk of collapse of excavations			
6	Sides of trench and hole excavations not exceeding 1,5m deep m2	33		
	Keeping excavations free of water			
7	Keeping excavations free of all water other than subterranean water	Item		
	Carried Forward		R	
	Section No. 9 EXTERNAL WORKS Bill No. 6 RAINWATER WATER TANKS			
	IVAIIVVVATER VVATER TAINNS			

	Brought Forward			R	\overline{T}
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
8	Backfilling to trenches, holes, etc	m3	9		
	SOIL POISONING				
	Soil poisoning mixed in accordance to supplier's specifications				
9	To bottoms and sides of trenches, etc.	m2	19		
	CONCRETE, FORMWORK AND REINFORCEMENT				
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	25MPa/19mm concrete				
10	Strip footings				
		m3	9		
11	Platform surface beds cast in panels	m3	2		
	FINISHING TOP SURFACE OF CONCRETE				
	Finishing top surfaces of concrete smooth with a wood float/steel trowel				
12	Surface beds, slabs, etc (rainwater tanks)	m2	19		
	REINFORCEMENT				
	Fabric reinforcement				
13	Type 295 fabric reinforcement in concrete surface beds, slabs, etc	m2	29		
	Carried Forward			R	
	Section No. 9 EXTERNAL WORKS Bill No. 6			IX.	
	RAINWATER WATER TANKS				

	Brought Forward			R	_
	TEST CUBES				
14	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	3		
	BRICKWORK				
	Brickwork of NFP bricks in class II mortar				
15	One brick walls				
		m2	23		
	BRICKWORK SUNDRIES				
	Brickwork reinforcement				
16	150mm Wide reinforcement built in horizontally	m	70		
	FACE BRICKWORK				
	Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints				
17	Extra over brickwork for face brickwork	m2	23		
	Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R3 500,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
18	Coping on top of one brick wall	m	37		
	WATERPROOFING				
	One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course				
19	In walls	m2	8		
					_
	Carried Forward Section No. 9			R	
	EXTERNAL WORKS Bill No. 6				
	RAINWATER WATER TANKS				

	Brought Forward			R	Π
	One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
20	Under surface beds	m2	19		
	WATER SUPPLIES				
	Galvanized medium normalized mild steel piping				
21	25mm Pipes laid in and including trenches not exceeding 1m deep "Labour Intensive"	m	60		
22	50mm Pipes laid in and including trenches not exceeding 1m deep "Labour Intensive"	m	60		
	Extra over galvanised mild steel water supply pipes for fittings:				
23	25mm Fittings.	No	30		
24	50mm Elbows.	No	30		
25	50mm Union.	No	30		
26	50mm Reducing bush.	No	30		
27	15mm "Cobra Ref. 108LK" brass hose biptap.	No	10		
	"Jojo" approved SANS PVC water tanks				
28	5 000 Litre plastic water tank fitted onto and secured to tank platforms	No	7		
					_
	Carried Forward to Summary of Section No. 9			R	
	Section No. 9 EXTERNAL WORKS				
	Bill No. 6 RAINWATER WATER TANKS				
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Item No		Quantity	Rate	Amount
	SECTION NO. 10			
	BILL NO. 7			
	WATER TANKS AND TANKS STANDS			
	Excavation in earth not exceeding 2m deep			
1	Holes m3	8		
	Extra over trench and hole excavations in earth for excavation in			
2	Soft rock m3	4		
3	Hard rock m3	4		
	Extra over all excavations for carting away			
4	Surplus material from excavations and/stock piles on site to the dumping site to be located by the Contractor. m3	8		
	Risk of collapse of excavations			
5	Sides of trench and hole excavation not exceeding 1,5m deep. m2	41		
	Keeping excavations free of water.			
6	Keeping excavations free of water.	Item		
	Earth filling obtained from the excavations and / or prescribed stock piles on site compacted to 93 % Mod AASHTO density			
7	Backfilling to trenches, holes, etc. m3	4		
	Soil insecticide			
8	To bottoms and sides of trenches, etc. m2	24		
	25Mpa/19mm Concrete			
9	Blinding m3	4		
	Carried Forward Section No. 9 EXTERNAL WORKS Bill No. 7		R	
	WATER TANK STANDS			

	Brought Forward			R	Τ
10	Bases	m3	8		
	Finishing top surfaces of concrete smooth with a wood float				
11	On top of bases	m2	10		
	"Jojo" approved SANS PVC water tanks				
12	10 000 Litre plastic water tank fitted onto and secured to tank platforms	No	2		
13	5 000 Litre plastic water tanks	No	1		
	Structural Steel				
	Welded columns in single lengths with flat base, cap, bearer and connection plates, bolted to concrete				
14	80 x 80mm x 6mm Angle-section	t	1.62		
	Welded beams in single lengths with flat bearer and connection plates, bolted to steel				
15	30 x 30mm x 6mm Flat-section	t	0.24		
16	40 x 40mm x 5mm Angle -section	t	0.24		
17	125 x 50 x 20 x 2mm Lipped channel-section	t	0.58		
18	125 x 75 x 8mm Flat-section	t	0.27		
	Bolts to columns, beams, etc				
19	High tensile bolts	t	0.10		
	Spot priming bare metal surfaces with zinc chromate primer an applying one undercoat and? coat/coats? alkyd enamel paint in colours which have a value of 7 or less on the Munsell system in accordance with SABS 1091 on previously painted steel in bad condition				
20	Paint to structural steel	m2	125		
					_
	Carried Forward to Summary of Section No. 9 Section No. 9 EXTERNAL WORKS Bill No. 7			R	<u></u>
	WATER TANK STANDS				

Item No			Quantity	Rate	Amount
	SECTION NO.4				
	BILL NO. 8				
	SEPTIC TANKS, ETC.				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
	SITE CLEARANCE ETC				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	40		
	EXCAVATION, FILLING, ETC				
	Excavation in earth exceeding 2m and not exceeding 4m deep				
2	Holes	m3	56		
	Extra over all excavations for carting away				
3	Extra over all excavations for carting away surplus material from excavations and/or stockpile on site to a dumping site to be located by the Contractor	m3	32		
	Risk of collapse of excavations				
4	Sides of trench and hole excavations exceeding 1,5m deep and not exceeding not exceeding 3m deep	m2	58		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
5	Backfilling to trenches, holes, etc	m3	7		
	Carried Forward Section No. 9 EXTERNAL WORKS Bill No. 8 SEPTIC TANK			R	

	Brought Forward			R	Π
	Keeping excavations free of water				
6	Keeping excavations free of all water other than subterranean water		ltem		
	REINFORCED CONCRETE				
	20MPa/19mm concrete				
7	15Mpa in blinding	m3	1		
8	25Mpa in base	m3	7		
9	25Mpa in slab over septic tank	m3	4		
10	Concrete haunch formed below pipes	m3	0.04		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a steel trowel				
11	Surface beds, slabs, etc to falls	m2	22		
	Permanent formwork to soffits				
12	Slab over septic tank	m2	22		
	Smooth formwork to form				
13	Opening not exceeding 1m girth through 170mm slab	No	2		
	SMOOTH FORMWORK (DEGREE OF ACCURACY I)				
	Smooth formwork to sides				
14	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	20		
	REINFORCEMENT				
	Carried Forward			R	\vdash
	Section No. 9 EXTERNAL WORKS Bill No. 8 SEPTIC TANK				

	Brought Forward			R	
	Fabric reinforcement				
15	Type 888 fabric reinforcement in concrete surface beds, slabs, etc	m2	44		
	MASONRY				
	Brickwork of NFP bricks in class II mortar				
16	One brick walls	m2	69		
	Brickwork reinforcement				
17	150mm Wide reinforcement built in horizontally	m	228		
	Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints				
18	Extra over brickwork for face brickwork in foundation	m2	16		
	BRICKWORK SUNDRIES				
19	Leave of form 450 x 150mm high opening through a one brick wall	No	2		
20	Leave or form opening through one brickwall for pipe 110mm dia	No	3		
	PLASTERING				
	Watertight cement plaster on brickwork				
21	On walls	m2	58		
	Two coats approved epoxy coats				
22	On walls and floors	m2	80		
	Screed				
23	On floors	m2	22		
	PLUMBING AND DRAINAGE				
	Carried Forward			R	
	Section No. 9 EXTERNAL WORKS Bill No. 8 SEPTIC TANK				

	Brought Forward			R	
	uPVC pipes				
24	110mm Pipes	m	1		
	Extra over uPVC pipes for fittings				
25	110mm Tee	No	2		
	Cover, etc				
26	600 x 600mm Type 2A cast iron single seal manhole cover and frame	No	2		
27	Lifting key for manhole cover	No	2		
	FRENCH DRAINS				
	SITE CLEARANCE ETC				
	Site clearance				
28	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	20		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
29	Holes	m3	15		
	Extra over trench and hole excavations in earth for excavation in				
30	Soft rock	m3	1		
31	Hard rock	m3	2		
	Extra over all excavations for carting away				
32	Extra over all excavations for carting away surplus material from excavations and/or stockpile on site to a dumping site to be located by the Contractor	m3	8		
	Carried Forward Section No. 9 EXTERNAL WORKS Bill No. 8			R	
	SEPTIC TANK				

	Brought Forward			R	Γ
	Risk of collapse of excavations				
33	Sides of trench and hole excavations not exceeding 1,5m deep	m2	4		
	Keeping excavations free of water				
34	Keeping excavations free of all water other than subterranean water		Item		
	Earth filling obtained from the excavations and/or prescribed stock piles on site (not compacted)				
35	On top of french drain as soil cover	m3	7		
	FILTER FABRIC				
	"Kaytech Engineered Fabric" or similar approved laid in strict accordance to the manufacturer's instructions				
36	"Kaymat U14" around stone filling in sub-soil drain trenches				
		m2	20		
	20mm Graded stone filling or similar approved				
37	In holes	m3	5		
	200 - 300mm Diameter clean washed stone filling or similar approved by engineer				
38	In holes	m3	15		
	WATERPROOFING				
	One layer of 250 micron "Tarkon USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
39	On top of pipes as protection of joints	m2	15		
	ROOF SHEETING				
	Roof sheeting				
40	On top of french drain	m2	15		
	Carried Forward			R	\vdash
	Section No. 9 EXTERNAL WORKS Bill No. 8 SEPTIC TANK				

	Brought Forward			R	\prod
	uPVC pipes				
41	110mm pipes laid in and including trenches	m	15		
42	160mm pipes laid in and including trenches	m	10		
	Extra over uPVC pipes for fittings				
43	110mm End cap	No	4		
44	110mm Bend	No	2		
	Carried Forward to Summary of Section No. 9			R	
	Section No. 9 EXTERNAL WORKS				+
	BIII No. 8 SEPTIC TANK				
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	Section No. 9			
	EXTERNAL WORKS			
	SECTION SUMMARY - EXTERNAL WORKS	_		
Bill No		Page No		Amount
1	STORMWATER CONTROL	162		
2	PAVED WALKWAY	164		
3	FENCING	166		
4	WATER SUPPLY	167		
5	STAND PIPES	169		
6	RAINWATER WATER TANKS	173		
7	WATER TANK STANDS	175		
8	SEPTIC TANK	181		
	Carried to Final Summan.		R	
	Carried to Final Summary Section No. 9			
	EXTERNAL WORKS			

Item No		Quantity	Rate	Amount
	SECTION NO. 10			
	PROVISIONAL SUMS			
	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".			
	N.B ALL PROVISIONAL WORKS ARE SUBJECT TO RE-MEASUREMENTS. THE PROVISIONAL WORK SHALL BE PAID AS PER THE WORK DONE			
	Upgrading and Equipping existing borehole			
1	Provide and amount of R100 000.00 (ONE HUNDRED THOUSAND RAND AND ZERO CENTS) NET for upgrading and equipping existing borehole	Item		100 000.00
2	Allow for profit	Item		
3	Allow for attendance	Item		
	Carried to Final Summary		R	
	Section No. 10 PROVISIONAL SUMS Bill No. 1 Provisional sums			

	FINAL SUMMARY			
Section No		Page No		Amount
1	PRELIMINARIES AND GENERAL	27		
2	ALTERATIONS	30		
3	BUILDING WORKS - M4	50		
4	BUILDING WORKS - MD4	72		
5	BUILDING WORKS - FD8	94		
6	BUILDING WORKS - F10	116		
7	BUILDING WORKS - SD2	138		
8	BUILDING WORKS - SD4	160		
9	EXTERNAL WORKS	182		
10	PROVISIONAL SUMS	183		
	SUB TOTAL (A)		R	
	Provide 10% (TEN PERCENT) on Sub-total (A) as contingency to be deducted in whole or in part if not required		R	
	SUB TOTAL (B)		R	
	Add VAlue Added Tax @ 15%		R	
	Carried to Final Cluster summary		R	