

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 1</u>			
	<u>BILL NO. 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BUILDING AGREEMENT AND PRELIMINARIES</u>			
	The JBCC Series 2000 Edition 4.1 Code 2101 March 2005 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	
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward		R
<u>PREAMBLES FOR TRADES</u>			
The Model Preambles for Trades (1999 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained Supplementary preambles to the Model Preambles covering clauses of a general nature, clauses pertaining to specific materials and amendments to clauses in the Model Preambles are incorporated in these bills of quantities to satisfy the requirements of this project The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the Model Preambles and in any supplementary preambles			
<u>GENERAL</u>			
If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories "F", "T" or "V" as the case may be below such item, where "F" denotes a fixed amount (amount not to be varied), "T" denotes an amount variable in proportion to time and "V" denotes an amount variable in proportion to value			
<u>SECTION A - PRINCIPAL BUILDING AGREEMENT</u>			
<u>Definitions (A1)</u>			
1 Definitions and interpretation (clause 1)			
F:..... V:..... T:.....		Item	
	Carried Forward		R
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward		R	
<u>Objective and Preparation (A2 to A14)</u>			
2	Offer acceptance and performance (clause 2) F:..... V:..... T:.....	Item	
3	Documents (clause 3) F:..... V:..... T:.....	Item	
4	Design responsibility (clause 4) F:..... V:..... T:.....	Item	
5	Employer's agents (clause 5) F:..... V:..... 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	
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

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:..... T:.....	Item
7	Compliance with regulations (clause 7) F:..... V:..... T:.....	Item
8	Works risk (clause 8) F:..... V:..... T:.....	Item
9	Indemnities (clause 9) F:..... V:..... T:.....	Item
10	Works insurances (clause 10) F:..... V:..... T:.....	Item
11	Liability insurances (clause 11) F:..... V:..... T:.....	Item
12	Effecting insurance (clause 12) F:..... V:..... T:.....	Item
Carried Forward		R
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za		

Brought Forward			R
13	NO CLAUSE	N/A	
14	Security (clause 14) F:..... V:..... T:.....	Item	
<u>Execution (A15-A23)</u>			
15	Preparation for and execution of the works (clause 15) F:..... V:..... T:.....	Item	
16	Access to the works (clause 16) F:..... V:..... T:.....	Item	
17	Contract instructions (clause 17) F:..... V:..... T:.....	Item	
18	Setting out of the works (clause 18) F:..... V:..... T:..... The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc exist in order that the necessary arrangements may be made for the rectification of any such encroachments	Item	
19	Assignment (clause 19) F:..... V:..... T:..... The contractor shall not cede his rights or delegate his obligations in terms of this agreement unless specifically called for by the employer	Item	
Carried Forward			R
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward		R	
20	Nominated subcontractors (clause 20) F:..... V:..... T:.....	Item		
21	Selected subcontractors (clause 21) F:..... V:..... 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:..... V:..... T:.....	Item		
23	Contractor's Domestic Sub-Contractors (Clause 23) F:..... V:..... T:.....	Item		
	<u>Completion (A24-A30)</u>			
24	Practical completion (clause 24) F:..... V:..... T:.....	Item		
25	Works completion (clause 25) F:..... V:..... T:.....	Item		
26	Final completion (clause 26) F:..... V:..... T:.....	Item		
	Carried Forward		R	
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward		R
27	Latent defects liability period (clause 27) F:..... V:..... T:.....	Item
28	Sectional completion (clause 28) F:..... V:..... T:.....	Item
29	Revision of date of practical completion (clause 29) F:..... V:..... T:..... The removal and replacement of materials and/or workmanship that do not conform to specification or drawings shall not constitute grounds for an extension of the construction period nor for an adjustment to the contract sum (clause 29.3)	Item
30	Penalty for non-completion (clause 30) F:..... V:..... T:.....	Item
<u>Payment (A31 - A35)</u>		
31	Interim payment to the contractor (clause 31) F:..... V:..... T:.....	Item
32	Adjustment to the contract value (clause 32) F:..... V:..... T:.....	Item
Carried Forward		R
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za		

Brought Forward		R
Where prices are submitted by the contractor or nominated/selected subcontractors during the progress of the works in respect of contract instructions or in regard to a claim under the terms of the contract and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the final certificate, it will be in writing		
33	Recovery of expense and loss (clause 33) F:..... V:..... T:.....	Item
34	Final account and final payment (clause 34) F:..... V:..... T:.....	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		
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:.....	Item
Carried Forward		R
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za		

Brought Forward			R	
<u>Cancellation (A36-A39)</u>				
36	Cancellation by employer - contractor's default (clause 36) F:..... V:..... T:.....	Item		
37	Cancellation by employer - loss and damage (clause 37) F:..... V:..... T:.....	Item		
38	Cancellation by contractor - employer's default (clause 38) F:..... V:..... T:.....	Item		
39	Cancellation - cessation of the works (clause 39) F:..... V:..... T:.....	Item		
<u>Dispute (A40)</u>				
40	Dispute Settlement (clause 40) F:..... V:..... T:.....	Item		
<u>Substitute Provisions (A41)</u>				
41	State clauses (Clause 41) F:..... V:..... T:.....	Item		
Information necessary for the completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder				
Carried Forward			R	
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za				

	Brought Forward		R	
	<u>THE SCHEDULE</u> Information necessary for completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder			
42	Pre-tender information (clause 42) F:..... V:..... T:..... <u>42.1 CONTRACTING AND OTHER PARTIES</u> 42.1.1 Employer: THE MVULA TRUST 42.1.2 Principal Agent: AES CONSULTING <u>42.2 CONTRACT DETAILS</u> 42.2.1 Works Description: Construction of sanitation facilities 42.2.2 Site Description: as per the information 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	Item		
	Carried Forward		R	
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward		R	
42.2.5 Date on which possession of the site is intended to be given: As per the information provided in the Tender Data			
42.2.6 Period for the commencement of the works after the contractor takes possession of site: 7 DAYS			
42.2.7 For the works as a whole. Intended date of practical completion and the penalty per calendar day Intended Date of Practical Completion: <i>As per the information provided in the Tender Data</i> Penalty Amount: <i>The penalty per calendar day shall be 0.1% of the Tendered Amount (inclusive of value added tax)</i>			
42.2.8 For the works in sections: Intended date of practical completion and the penalty per calendar day N/A			
42.2.9 The law applicable to this agreement shall be that of South Africa (country)			
Carried Forward		R	
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward	R	
<u>42.3 INSURANCES</u>		
42.3.1 Contract works insurance to be effected by:		
<i>Contractor:</i>		
<i>For the Sum of R Contract Amount + 10.00 %</i>		
<i>With a deductible of - to be determined by the contractor</i>		
42.3.2 Supplementary insurance is required		
No		
42.3.3 Public liability insurance to be effected by:		
<i>Contractor:</i>		
<i>For the Sum of R 5 000 000-00</i>		
<i>With a deductible of - to be determined by the contractor</i>		
<u>42.4 DOCUMENTS</u>		
42.4.1 Waivers of contractors lien or right of continuing 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"		
Carried Forward	R	
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za		

	Brought Forward		R	
42.4.4	On acceptance of the tender the bills of quantities/lump sum document is to be submitted within 5 working days <i>The priced bills of quantities must be handed in with the tender</i>			
42.4.5	JBCC Engineering General Conditions are to be included in the contract documents : No			
42.4.6	The contract value is to be adjusted using escalation adjustment indices No Where JBCC CPAP is to be used Base Month N/A			
42.4.7	Details of changes made to the provision of JBCC standard documentation: Part 1 - Contract Data completed by Employer			
	<u>SECTION B: PRELIMINARIES</u>			
	<u>Definitions and interpretation (B1)</u>			
43	Definition and interpretation (B1.1 - B1.4.6) F:..... V:..... T:.....	Item		
	<u>Documents (B2)</u>			
44	Checking of documents (B2.1) F:..... V:..... T:.....	Item		
	Carried Forward		R	
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward		R
45	Provisional bills of quantities (B2.2) F:..... V:..... T:.....	N/A	
46	Availability of construction documentation (B2.3) F:..... V:..... T:.....	Item	
47	Interests of agents (B2.4) F:..... V:..... T:.....	Item	
48	Priced documents (B2.5) F:..... V:..... T:.....	Item	
49	Tender submission (B2.6) F:..... V:..... T:.....	Item	
50	Defined works area (B3.1) F:..... V:..... T:.....	Item	
	<u>The site (B3)</u>		
51	Geotechnical investigation (B3.2) F:..... V:..... T:.....	Item	
52	Inspection of the site (B3.3) F:..... V:..... T:.....	Item	
	Carried Forward		R
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward		R
Existing premises occupied (B3.4)		
F:..... V:..... T:.....		
Specific requirements:		
The contractor shall also comply with the additional requirements with regard to the Coronavirus pandemic in terms of all Covid-19 legislation, regulations and guidelines.		
Previous work - dimensional accuracy (B3.5)		
F:..... V:..... T:.....		
Previous work - defects (B3.6)		
F:..... V:..... T:.....		
53 Services - known (B3.7)		
F:..... V:..... T:.....	Item	
54 Services - unknown (B3.8)		
F:..... V:..... T:.....	Item	
55 Protection of trees etc (B3.9)		
F:..... V:..... T:.....	Item	
56 Articles of value (B3.10)		
F:..... V:..... T:.....	Item	
Carried Forward		R
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za		

Brought Forward			R
<u>Management of contract (B4)</u>			
57	Inspection of adjoining properties etc (B3.11) F:..... V:..... T:.....	Item	
58	Management of the works (B4.1) F:..... V:..... T:.....	Item	
59	Programme for the works (B4.2) F:..... V:..... T:.....	Item	
60	Progress meetings (B4.3) F:..... V:..... T:.....	Item	
61	Technical meetings (B4.4) F:..... V:..... T:.....	Item	
62	Labour and Plant records (B4.5) F:..... V:..... T:.....	Item	
<u>Samples, Shop Drawings and Manufacturer's Instructions (B5)</u>			
63	Samples of materials (B5.1) F:..... V:..... T:.....	Item	
64	Workmanship samples (B5.2) F:..... V:..... T:.....	Item	
Carried Forward			R
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
65	Shop drawings (B5.3) F:..... V:..... T:.....	Item	
66	Compliance with Manufacturer's Instructions (B5.4) F:..... V:..... T:.....	Item	
<u>Temporary works and plant (B6)</u>			
67	Deposits and fees (B6.1) F:..... V:..... T:.....	Item	
68	Enclosure of the works (B6.2) F:..... V:..... T:.....	Item	
69	Advertising (B6.3) F:..... V:..... T:.....	Item	
70	Plant, equipment, sheds and offices (B6.4) F:..... V:..... T:.....	Item	
71	Main notice board (B6.5) F:..... V:..... T:.....	Item	
72	Subcontractors' notice board (B6.6) F:..... V:..... T:.....	N/A	
Carried Forward			R
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward		R	
	<u>Temporary services (B7)</u>			
73	Location (B7.1) F:..... V:..... T:.....	Item		
74	Water (B7.2) Option [A] shall apply F:..... V:..... T:.....	Item		
75	Electricity (B7.3) Option [A] shall apply F:..... V:..... T:.....	Item		
76	Telecommunication facilities (B7.4) F:..... V:..... T:.....	Item		
77	Ablution facilities (B7.5) Option [A] shall apply F:..... V:..... T:.....	Item		
	<u>Prime cost amounts (B8)</u>			
78	Responsibility for prime cost amounts (B8.1) F:..... V:..... T:.....	Item		
	Carried Forward		R	
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za				

	Brought Forward		R	
	<u>Attendance on N/S Subcontractors (B9)</u>			
79	General attendance (B9.1) F:..... V:..... T:.....	Item		
80	Special attendance (B9.2) F:..... V:..... T:.....	Item		
81	Commissioning - Fuel, water and power (B9.3) F:..... V:..... T:.....	Item		
	<u>Financial aspects (B10)</u>			
	Statutory taxes, duties and levies (B10.1) F:..... V:..... T:.....	Item		
82	Payment of preliminaries (B10.2) Option [B] shall apply F:..... V:..... T:.....	Item		
83	Adjustment of preliminaries (B10.3) Option [A] shall apply F:..... V:..... T:.....	Item		
84	Payment certificate cash flow (B10.4) F:..... V:..... T:.....	Item		
	Carried Forward		R	
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>General (B11)</u>			
85	Protection of works (B11.1) F:..... V:..... T:.....	Item	
86	Protection/isolation of existing/sectionally occupied works (B11.2) F:..... V:..... T:.....	Item	
87	Security of the Works (B11.3) F:..... V:..... T:.....	Item	
88	Notice before covering work (B11.4) F:..... V:..... T:.....	Item	
89	Disturbance (B11.5) F:..... V:..... T:.....	Item	
90	Environmental Disturbance (B11.6) F:..... V:..... T:.....	Item	
91	Works cleaning and clearing (B11.7) F:..... V:..... T:.....	Item	
92	Vermin (B11.8) F:..... V:..... T:.....	Item	
Carried Forward			R
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward		R	
93	Overhand work (B11.9) F:..... V:..... T:.....	Item		
94	Instruction manuals and guarantees (B11.10) F:..... V:..... T:.....	Item		
95	As built information (B11.11) F:..... V:..... T:.....	Item		
96	Tenant Installations (B11.12) F:..... V:..... T:.....	Item		
	<u>Schedule of variables (B12)</u>			
97	Pre-tender information (B12.1) F:..... V:..... T:.....	Item		
	12.1.1 Provisional bills of quantities (B2.2) The quantities are provisional: No			
	12.1.2 Availability of construction documentation (B2.3) Construction documentation is not complete No			
	12.1.3 Interest of agents (B2.4)			
	12.1.4 Defined works area (B3.1)			
	12.1.5 Geotechnical investigation (B3.2) N/A			
	Carried Forward		R	
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward		R	
12.1.6 Existing premises occupied (B3.4)			
12.1.7 Previous work - dimensional accuracy (B3.4)			
12.1.8 Previous work - defects (B3.5)			
12.1.9 Services - known (B3.7)			
12.1.10 Protection of trees (B3.9)			
All trees should be protected and only on instruction of the Principal Agent may any trees be removed			
12.1.11 Inspection of adjoining properties (B3.11)			
12.1.12 Enclosure of the works (B6.2)			
12.1.13 Offices (B6.4.3)			
Specific requirements:			
The contractor shall provide, maintain and remove, on completion of the works, an office for the exclusive use of the principal agent, minimum size 4 x 3 x 3m high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times.			
12.1.14 Main notice board (B6.5)			
YES			
Carried Forward		R	
PRELIMINARIES			
Ps & Gs			
AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward		R	
12.1.15 Subcontractors notice board (B6.6) A notice board is required Yes			
12.1.16 Water (B7.2) Alternative Selected: A			
12.1.17 Electricity (B7.3) Alternative selected: A			
12.1.18 Telecommunications (B7.4)			
12.1.19 Ablution facilities (B7.5) Alternative selected: A			
12.1.20 Protection of existing/sectionally occupied works (B11.2)			
12.1.21 Special attendance (B9.2) Subcontractor (1) details: N/A			
12.1.22 Protection of the works (B11.1) N/A			
12.1.23 Disturbance (B11.5) N/A			
12.1.24 Environmental Disturbance (B11.6) N/A			
<u>Post tender information (B12.2)</u>			
12.2.1 Payment of preliminaries Alternative selected: B			
12.2.2 Adjustment of preliminaries Alternative selected: A			
Carried Forward		R	
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward		R	
	12.2.3 Additional agreed preliminaries items N/A			
	<u>SECTION C: SPECIFIC PRELIMINARIES</u>			
	Any special items to meet the particular circumstances of a specific project are embodied in this section. Where required for an aspect of the works to be executed according to a design by a consulting engineer, a recital of the headings to the individual clauses of the JBCC Engineering General Conditions are included			
98	Site instructions Instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor F:..... V:..... T:.....	Item		
99	Black economic empowerment and training F:..... V:..... T:.....	Item		
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		
	Carried Forward		R	
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward		R
	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		
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:..... 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, 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
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za		

	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:..... V:..... T:..... 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	Item		
107	Co-operation of contractor for cost management F:..... V:..... T:.....	Item		
	Carried Forward		R	
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

	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:..... V:..... T:..... The contractor shall comply with all the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) It is required of the contractor to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document. The contractor must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.	Item		
	Carried Forward		R	
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward		R
	Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause, as well as the clauses that follow hereafter and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced under these clauses and no additional claims in this regard shall be entertained. The contractor shall also comply with the additional requirements with regard to the Coronavirus pandemic in terms of all Covid-19 legislation, regulations and guidelines. It is explicitly pointed out that all requirements of the aforementioned are deemed to be priced under this clause and the specific related clauses hereafter and no additional claims in this regard shall be entertained.	
109	Occupational Health and Safety Specification F:..... V:..... T:..... Preparation of contractor's site specific health and safety plan, including compliance with Covid-19 legislation, regulations and guidelines	Item
110	Occupational Health and Safety Specification F:..... V:..... T:..... Principal contractor's initial obligations in respect of the Health and Safety Act, Construction Regulations and Covid-19 regulations, etc	Item
111	Occupational Health and Safety Specification F:..... V:..... T:.....	Item
Carried Forward		R
PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za		

	Brought Forward		R	
	Principal contractor's time related obligations in respect of the Health and Safety Act, Construction Regulations and Covid-19 regulations, etc			
112	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of reflective vests			
113	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of hard hats			
114	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of protective footwear			
115	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of earplugs			
116	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of dust masks			
	Carried Forward		R	
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward		R	
117	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of gloves	Item		
118	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of high visibility overalls to SARTSM Chapter 13 Level 3	Item		
119	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of SANS approved ear defenders	Item		
120	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of face masks (Covid -19)	Item		
121	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of face shields (Covid -19)	Item		
122	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Provision of gloves (Covid -19)	Item		
	Carried Forward		R	
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward		R	
123	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of hand sanitiser (min 70% alcohol), foot press stands and paper towels (Covid -19)			
124	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of covered refuse bins and refuse bags and waste (including hazardous) management (Covid -19)			
125	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of digital infrared non-contact body thermometer (Covid -19, minimum of two per site entrance)			
126	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of perspex screens for office staff (Covid -19, minimum size 600 x 500mm)			
127	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of signage, including Covid -19 related signage			
128	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Carried Forward		R	
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward		R	
	Provision of full time construction health and safety officer (SACPCMP Registered)			
129	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Medical certificates and medical surveillance including initial (baseline) medical examinations, periodic examinations, and exit examinations			
130	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Medical screenings, examinations, etc in terms of Covid-19 regulations			
131	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Induction training, including Covid-19 training			
132	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of first aid boxes to GSR requirements			
133	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Noise monitoring including establishment of noise zones (plant), audiograms (personnel), etc			
	Carried Forward		R	
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward		R
134	Provision of personal protective equipment (PPE) F:..... V:..... T:..... Submission of health and safety file	Item	
135	HIV/AIDS Awareness F:..... V:..... T:..... It is required of the contractor to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document. Provision for pricing of HIV/AIDS awareness is made under items C11.1 to C11.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained. The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of clause A 31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.	Item	
	<u>SUMMARY OF CATEGORIES</u> Category : Fixed R..... Category : Value R..... Category : Time R.....		
	Carried to Final Summary		R
	PRELIMINARIES Ps & Gs AES CONSULTING CC admin@aesconsulting.co.za		

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO.1</u>			
	<u>ALTERATIONS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>View site</u>			
	Before submitting his tender the contractor 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 contained in the buildings or portions of the buildings to be demolished. 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 demolition.			
	<u>General</u>			
	The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent.			
	Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the principal agent.			
	Doors, fanlights, 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 easing, oiling, adjusting and repairing			
	Carried Forward		R	
	ALTERATIONS DEMOLITIONS & RENOVATIONS AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward				R
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 and making good floor and wall finishes to match existing. 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).				
<u>DEMOLITIONS AND ALTERATIONS</u>				
<u>DEMOLITIONS OF EXISTING TOILET STRUCTURES</u>				
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	16	
2	Demolish existing ground slab (max strength and size, 25MPa and 10m2 respectively) with mesh reinforcement for pit toilets that have been abandoned. All pits are to be filled with soil.	No	1	
Carried Forward				R
ALTERATIONS DEMOLITIONS & RENOVATIONS AES CONSULTING CC admin@aesconsulting.co.za				

Brought Forward		R	
<u>BUDGETARY ALLOWANCE FOR RENOVATIONS OF EXISTING ENVIRO-LOO TOILETS</u>			
3	Allow a budget of R130 000.00 (One Hundred and Thirty Thousand Rand and Zero Cents) for the renovations of existing Enviro-Loo toilet structures including but not limited to replacement of door handles, toilet pans, toilet seats, windows, toilet paper holders, Enviro-Loo components, etc. <i>Note: A mini BOQ for the renovation works will be provided to the contractor during stage 5 (construction). Scheduled rates will be used where applicable, otherwise market related rates will be built-up and agreed with the contractor.</i>	Item	
Carried to Final Summary		R	
ALTERATIONS DEMOLITIONS & RENOVATIONS AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	116	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	116	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	15	
4	Pit	m3	38	
5	For aprons thickening	m3	1	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	6	
7	Hard rock	m3	2	
	<u>Extra over all excavations for carting away:</u>			
8	Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the Contractor	m3	5	
	Carried Forward		R	
	TYPE GRMD4 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>Risk of collapse of excavations</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	56
<u>Keeping excavations free of water.</u>			
10	Keeping excavations free of water other than subterranean water	Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u>			
11	Under floors, steps, pavings, etc.	m3	6
12	Backfilling to trenches, holes, etc.	m3	44
<u>Compaction of surfaces</u>			
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	43
14	Compaction of ground surface to pits etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	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	31
<u>Prescribed density tests on filling</u>			
16	Modified AASHTO Density tests	No	5
Carried Forward			R
TYPE GRMD4 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>SOIL POISONING</u>			
<u>Soil insecticide</u>			
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	38
18	To bottom of concrete aprons	m2	29
19	To bottoms and sides of trenches, etc.	m2	63
Carried Forward to Summary of Section No. 3			R
TYPE GRMD4 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<u>UNREINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete</u>			
1	Strip footings	m3	6	
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	29	
6	Thickening down apron on edge 110mm deep x 200mm wide	m	29	
	<u>REINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete</u>			
7	Slabs	m3	4	
	Carried Forward		R	
	TYPE GRMD4 CONCRETE, FORMWORK AND REINFORCEMENT AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
8	Aprons and pavings to falls	m2	29
<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
9	Surface beds, slabs, etc.	m2	38
<u>TEST CUBES</u>			
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	5
<u>FORMWORK</u>			
<u>Rough formwork to sides:</u>			
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	32
<u>Permanent formwork to soffits:</u>			
12	Slabs propped up not exceeding 1.5m high	m2	3
13	Leave or form 500mm diameter opening in top of floor slab	No	6
<u>REINFORCEMENT</u>			
<u>Mesh Reinforcement (measure nett)</u>			
14	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	38
Carried Forward to Summary of Section No. 3			R
TYPE GRMD4 CONCRETE, FORMWORK AND REINFORCEMENT AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 3</u>			
	<u>BRICKWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>BRICKWORK</u>			
	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 "Brixal" 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			
	Carried Forward		R	
	TYPE GRMD4 MASONRY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SAMPLES</u>			
Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6			
<u>FOUNDATIONS</u>			
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	18
2	One brick walls in pit	m2	21
3	Half brick corbelling in pit	m	30
<u>FACE BRICKWORK</u>			
Face bricks (purchase price of R 4000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints			
4	Extra over brickwork for face brickwork in foundation	m2	5
<u>SUPERSTRUCTURE</u>			
<u>FACE BRICKWORK</u>			
Face bricks (purchase price of R 4000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints			
5	Half brickwork for face brick walls pointed both sides	m2	26
6	One brickwork for face brick walls pointed both sides	m2	72
Carried Forward			R
TYPE GRMD4 MASONRY AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward			R
7	Half brickwork for face brickwork in beamfilling	m2	7	
8	Fair raking and cutting	m	13	
	<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces</u>			
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	10	
10	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	13	
11	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	2	
	<u>BRICKWORK SUNDRIES</u>			
	<u>Brick reinforcement</u>			
12	75mm Wide reinforcement built in horizontally	m	89	
13	150mm Wide reinforcement built in horizontally	m	301	
	<u>Turning pieces</u>			
14	220mm Wide turning piece to lintel etc	m	7	
	<u>Galvanised wire ties etc</u>			
15	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	31	
	<u>Prestressed fabricated lintels</u>			
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	11	
	<u>Ventillation bricks</u>			
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. 3			R
	TYPE GRMD4 MASONRY AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 4</u>			
	<u>WATERPROOFING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer 375mm micron embossed damp proof course</u>			
1	In walls	m2	7	
	<u>One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape</u>			
2	Under surface beds	m2	38	
	<u>FLOOR AND WALLS SEALERS</u>			
	<u>"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:</u>			
3	Around steel windows and door frames.	m	13	
	Carried Forward to Summary of Section No. 3		R	
	TYPE GRMD4			
	WATERPROOFING			
	AES CONSULTING CC			
	admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 5</u>			
	<u>ROOF COVERINGS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	42	
	<u>Sundries</u>			
2	12" Thermal resistance sisalation laid on purlins	m2	42	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	10	
4	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	7	
5	Extra over rainwater pipe for eaves offset	No	2	
	Carried Forward		R	
	TYPE GRMD4 ROOF COVERINGS AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
6	Extra over for closed ends	No	2
7	Ditto ,for shoe	No	2
Carried Forward to Summary of Section No. 3			R
TYPE GRMD4 ROOF COVERINGS AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ROOFS, ETC.</u>			
	<u>Sawn softwood</u>			
1	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	49	
2	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	54	
3	76 x 38mm Wall plates	m	10	
	<u>Sundries</u>			
4	Two coats creosote on sawn timbers	m2	34	
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	21	
6	Hurricane clips	No	27	
	<u>EAVES, VERGES, ETC.</u>			
	<u>Pressed fibre-cement</u>			
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	28	
	Carried Forward		R	
	TYPE GRMD4 CARPENTRY AND JOINERY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>DOORS, ETC.</u>			
<u>Wrought meranti doors hung to steel frames</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2
9	44mm 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
TYPE GRMD4 CARPENTRY AND JOINERY AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 7</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>CATCHES, CABIN, HOOKS, ETC</u>			
	<u>Approved</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	6	
	<u>LOCKS</u>			
	<u>Approved</u>			
2	Three lever mortice lockset	No	2	
3	Indicator lockset	No	4	
	<u>HANDLES</u>			
	<u>Aluminium Pull Handle</u>			
4	Set of two, 300mm pull handles fixed back to back on doors	No	4	
	<u>DOORSTOPS</u>			
	<u>Approved</u>			
5	38mm Diameter rubber door stop plugged	No	6	
	Carried Forward		R	
	TYPE GRMD4 IRONMONGERY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>LETTERS, NAMEPLATES, ETC.</u>			
<u>"Union" or similar approved</u>			
6	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2
<u>"Vaal Paragon" or similar approved</u>			
7	32mm Type 9 back grab rail 800mm long plugged	No	1
8	32mm Type 8 side grab rail 900mm girth plugged	No	1
<u>BATHROOM FITTINGS</u>			
<u>"Kimberley-Clark" or Similar</u>			
9	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	5
<u>Stainless steel</u>			
10	Stainless steel mirror size 350 x 400mm plugged to wall with chrome plated screws.	No	1
Carried Forward to Summary of Section No. 3			R
TYPE GRMD4 IRONMONGERY AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1,2mm Single rebated frames suitable for half brick walls</u>			
1	Frame for door 813 x 2032mm high	No	4	
	<u>1,6mm Double rebated frames suitable for one brickwalls</u>			
2	Frame for door 813 x 2032mm high	No	2	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
3	Window type NE1, 533 x 654mm high including burglar bars	No	7	
4	Window type NE 7,1022 x 654mm high including burglar bars	No	3	
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames</u>			
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2	
	Carried Forward to Summary of Section No. 3		R	
	TYPE GRMD4 METALWORK AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 9</u>			
	<u>PLASTERING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>CEMENT SCREEDS TO CONCRETE</u>			
	<u>Screeds to steel trowelled, on concrete:</u>			
1	30mm thick on floors	m2	38	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork or blockwork</u>			
2	On pits walls	m2	22	
	<u>FLOOR AND WALLS SEALERS</u>			
	<u>Minimum two coats approved epoxy coat:</u>			
3	On screed	m2	38	
4	On internal textured plaster walls and floors in pit	m2	22	
	Carried Forward to Summary of Section No. 3		R	
	TYPE GRMD4 IN SITU FINISHES AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Supply and Install "Enviro-Loo" Industrial 1040 Model, complete as per manufacturer's specification	No	5	
2	Supply and Install "Enviro-Loo" 4-bowl Urinal Evaporative Tank system complete as per manufacturer's specification	No	2	
3	Supply and install pre-cast concrete double wash-trough, complete with all necessary pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim"	No	2	
	<u>White glazed fireclay or vitreous china coupling with SABS specification 497 in</u>			
4	"Vaal hibiscus" wash hand basin bolted to wall including all fittings and necessary pipework	No	1	
	Carried Forward		R	
	TYPE GRMD4 PLUMBING AND DRAINAGE AES CONSULTING CC admin@aesconsulting.co.za			

[illegible]

[illegible]

Item No	Quantity	Rate	Amount
<u>SECTION NO. 3</u>			
<u>BILL NO. 12</u>			
<u>PAINTWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>ON FIBRE-CEMENT</u>			
<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</u>			
1	On fascias and barge boards	m2	6
<u>ON WOOD</u>			
<u>Undercoat and minimum 2 coat gloss enamel</u>			
2	On doors (Internal)	m2	15
3	On doors (External)	m2	12
<u>ON METAL</u>			
<u>Undercoat and minimum 2 coat gloss enamel</u>			
4	On door frames	m2	15
5	On gates (Measured over the full flat area of both sides)	m2	13
6	On gutters and down pipes	m	17
<u>Spot prining defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel</u>			
7	On windows with burglar bars	m2	7
Carried Forward to Summary of Section No. 3			R
TYPE GRMD4 PAINTWORK AES CONSULTING CC admin@aesconsulting.co.za			

Section No. 3

TYPE GRMD4

SECTION SUMMARY - TYPE GRMD4

Bill No		Page No		Amount	
1	EARTHWORKS	39			
2	CONCRETE,FORMWORK AND REINFORCEMENT	41			
3	MASONRY	44			
4	WATERPROOFING	45			
5	ROOF COVERINGS	47			
6	CARPENTRY AND JOINERY	49			
7	IRONMONGERY	51			
8	METALWORK	52			
9	IN SITU FINISHES	53			
10	PLUMBING AND DRAINAGE	55			
11	GLAZING	56			
12	PAINTWORK	57			

Carried to Final Summary

TYPE GRMD4
AES CONSULTING CC
admin@aesconsulting.co.za

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	132	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	133	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	18	
4	Pit	m3	43	
5	For aprons thickening	m3	1	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	7	
7	Hard rock	m3	3	
	<u>Extra over all excavations for carting away:</u>			
8	Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the Contractor	m3	6	
	Carried Forward		R	
	TYPE MD9 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>Risk of collapse of excavations</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	64
<u>Keeping excavations free of water.</u>			
10	Keeping excavations free of water other than subterranean water	Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u>			
11	Under floors, steps, pavings, etc.	m3	7
12	Backfilling to trenches, holes, etc.	m3	51
<u>Compaction of surfaces</u>			
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	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
<u>Prescribed density tests on filling</u>			
16	Modified AASHTO Density tests	No	5
Carried Forward			R
TYPE MD9 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>SOIL POISONING</u>			
<u>Soil insecticide</u>			
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	43
18	To bottom of concrete aprons	m2	33
19	To bottoms and sides of trenches, etc.	m2	72
Carried Forward to Summary of Section No. 4			R
TYPE MD9 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<u>UNREINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete</u>			
1	Strip footings	m3	7	
2	Ditto, but surface bed in pit	m3	3	
3	2Aprons cast in panels	m3	4	
4	Ramp	m3	1	
5	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	33	
6	Thickening down apron on edge 110mm deep x 200mm wide	m	33	
	<u>REINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete</u>			
7	Slabs	m3	4	
	Carried Forward		R	
	TYPE MD9 CONCRETE, FORMWORK AND REINFORCEMENT AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
8	Aprons and pavings to falls	m2	33
<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
9	Surface beds, slabs, etc.	m2	43
<u>TEST CUBES</u>			
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	5
<u>FORMWORK</u>			
<u>Rough formwork to sides:</u>			
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	36
<u>Permanent formwork to soffits:</u>			
12	Slabs propped up not exceeding 1.5m high	m2	4
13	Leave or form 500mm diameter opening in top of floor slab	No	7
<u>REINFORCEMENT</u>			
<u>Mesh Reinforcement (measure nett)</u>			
14	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	43
Carried Forward to Summary of Section No. 4			R
TYPE MD9 CONCRETE, FORMWORK AND REINFORCEMENT AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 3</u>			
	<u>BRICKWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>BRICKWORK</u>			
	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 "Brixal" 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			
	Carried Forward		R	
	TYPE MD9 MASONRY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SAMPLES</u>			
Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6			
<u>FOUNDATIONS</u>			
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	21
2	One brick walls in pit	m2	23
3	Half brick corbelling in pit	m	34
<u>FACE BRICKWORK</u>			
Face bricks (purchase price of R 4000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints			
4	Extra over brickwork for face brickwork in foundation	m2	5
<u>SUPERSTRUCTURE</u>			
<u>FACE BRICKWORK</u>			
Face bricks (purchase price of R 4000.00/1000 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
Carried Forward			R
TYPE MD9 MASONRY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
7	Half brickwork for face brickwork in beamfilling	m2	8
8	Fair raking and cutting	m	14
	<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces</u>		
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	12
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
	<u>BRICKWORK SUNDRIES</u>		
	<u>Brick reinforcement</u>		
12	75mm Wide reinforcement built in horizontally	m	101
13	150mm Wide reinforcement built in horizontally	m	343
	<u>Turning pieces</u>		
14	220mm Wide turning piece to lintel etc	m	8
	<u>Galvanised wire ties etc</u>		
15	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	35
	<u>Prestressed fabricated lintels</u>		
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	13
	<u>Ventillation bricks</u>		
17	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	10
	Carried Forward to Summary of Section No. 4		
	TYPE MD9 MASONRY AES CONSULTING CC admin@aesconsulting.co.za		

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 4</u>			
	<u>WATERPROOFING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer 375mm micron embossed damp proof course</u>			
1	In walls	m2	8	
	<u>One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape</u>			
2	Under surface beds	m2	43	
	<u>FLOOR AND WALLS SEALERS</u>			
	<u>"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:</u>			
3	Around steel windows and door frames.	m	14	
	Carried Forward to Summary of Section No. 4		R	
	TYPE MD9 WATERPROOFING AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 5</u>			
	<u>ROOF COVERINGS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	48	
	<u>Sundries</u>			
2	12" Thermal resistance sisalation laid on purlins	m2	48	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	11	
4	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	8	
5	Extra over rainwater pipe for eaves offset	No	2	
	Carried Forward			
	TYPE MD9 ROOF COVERINGS AES CONSULTING CC admin@aesconsulting.co.za			
			R	

		Brought Forward		R
6	Extra over for closed ends	No	2	
7	Ditto ,for shoe	No	2	
Carried Forward to Summary of Section No. 4				R
TYPE MD9 ROOF COVERINGS AES CONSULTING CC admin@aesconsulting.co.za				

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ROOFS, ETC.</u>			
	<u>Sawn softwood</u>			
1	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	56	
2	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	62	
3	76 x 38mm Wall plates	m	11	
	<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	
	<u>EAVES, VERGES, ETC.</u>			
	<u>Pressed fibre-cement</u>			
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	32	
	Carried Forward		R	
	TYPE MD9 CARPENTRY AND JOINERY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>DOORS, ETC.</u>			
<u>Wrought meranti doors hung to steel frames</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2
9	44mm 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	9
Carried Forward to Summary of Section No. 4			R
TYPE MD9 CARPENTRY AND JOINERY AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 7</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>CATCHES, CABIN, HOOKS, ETC</u>			
	<u>Approved</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	11	
	<u>LOCKS</u>			
	<u>Approved</u>			
2	Three lever mortice lockset	No	2	
3	Indicator lockset	No	9	
	<u>HANDLES</u>			
	<u>Aluminium Pull Handle</u>			
4	Set of two, 300mm pull handles fixed back to back on doors	No	9	
	<u>DOORSTOPS</u>			
	<u>Approved</u>			
5	38mm Diameter rubber door stop plugged	No	11	
	Carried Forward		R	
	TYPE MD9 IRONMONGERY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>LETTERS, NAMEPLATES, ETC.</u>			
<u>"Union" or similar approved</u>			
6	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2
<u>"Vaal Paragon" or similar approved</u>			
7	32mm Type 9 back grab rail 800mm long plugged	No	1
8	32mm Type 8 side grab rail 900mm girth plugged	No	1
<u>BATHROOM FITTINGS</u>			
<u>"Kimberley-Clark" or Similar</u>			
9	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	10
<u>Stainless steel</u>			
10	Stainless steel mirror size 350 x 400mm plugged to wall with chrome plated screws.	No	1
Carried Forward to Summary of Section No. 4			R
TYPE MD9 IRONMONGERY AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1,2mm Single rebated frames suitable for half brick walls</u>			
1	Frame for door 813 x 2032mm high	No	9	
	<u>1,6mm Double rebated frames suitable for one brickwalls</u>			
2	Frame for door 813 x 2032mm high	No	2	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
3	Window type NE1, 533 x 654mm high including burglar bars	No	12	
4	Window type NE 7,1022 x 654mm high including burglar bars	No	4	
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames</u>			
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2	
	Carried Forward to Summary of Section No. 4		R	
	TYPE MD9 METALWORK AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 9</u>			
	<u>PLASTERING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>CEMENT SCREEDS TO CONCRETE</u>			
	<u>Screeds to steel trowelled, on concrete:</u>			
1	30mm thick on floors	m2	43	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork or blockwork</u>			
2	On pits walls	m2	25	
	<u>FLOOR AND WALLS SEALERS</u>			
	<u>Minimum two coats approved epoxy coat:</u>			
3	On screed	m2	43	
4	On internal textured plaster walls and floors in pit	m2	25	
	Carried Forward to Summary of Section No. 4		R	
	TYPE MD9 IN SITU FINISHES AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Supply and Install "Enviro-Loo" Industrial 1040 Model, complete as per manufacturer's specification	No	10	
2	Supply and Install "Enviro-Loo" 3-bowl Urinal Evaporative Tank system complete as per manufacturer's specification	No	2	
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	4	
	<u>White glazed fireclay or vitreous china coupling with SABS specification 497 in</u>			
4	"Vaal hibiscus" wash hand basin bolted to wall including all fittings and necessary pipework	No	1	
	Carried Forward		R	
	TYPE MD9 PLUMBING AND DRAINAGE AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>FITTINGS</u>			
5	Elbow taps	No	3
6	19mm chrome plated push button taps to wash troughs	No	3
<u>Sundires</u>			
7	Stainless-steel SHE-BIN plugged to walls	No	1
Carried Forward to Summary of Section No. 4			R
TYPE MD9 PLUMBING AND DRAINAGE AES CONSULTING CC admin@aesconsulting.co.za			

[illegible]

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 12</u>			
	<u>PAINTWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ON FIBRE-CEMENT</u>			
	<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</u>			
1	On fascias and barge boards	m2	6	
	<u>ON WOOD</u>			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
2	On doors (Internal)	m2	18	
3	On doors (External)	m2	14	
	<u>ON METAL</u>			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
4	On door frames	m2	17	
5	On gates (Measured over the full flat area of both sides)	m2	14	
6	On gutters and down pipes	m	20	
	<u>Spot priming defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel</u>			
7	On windows with burglar bars	m2	8	
	Carried Forward to Summary of Section No. 4		R	
	TYPE MD9 PAINTWORK AES CONSULTING CC admin@aesconsulting.co.za			

[illegible]

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	237	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	238	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	31	
4	Pit	m3	77	
5	For aprons thickening	m3	2	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	12	
7	Hard rock	m3	5	
	<u>Extra over all excavations for carting away:</u>			
8	Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the Contractor	m3	23	
	Carried Forward		R	
	TYPE FD7 & GRFD7 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>Risk of collapse of excavations</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	114
<u>Keeping excavations free of water.</u>			
10	Keeping excavations free of water other than subterranean water	Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u>			
11	Under floors, steps, pavings, etc.	m3	12
12	Backfilling to trenches, holes, etc.	m3	91
<u>Compaction of surfaces</u>			
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	89
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	51
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	63
<u>Prescribed density tests on filling</u>			
16	Modified AASHTO Density tests	No	9
Carried Forward			R
TYPE FD7 & GRFD7 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>SOIL POISONING</u>			
<u>Soil insecticide</u>			
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	78
18	To bottom of concrete aprons	m2	58
19	To bottoms and sides of trenches, etc.	m2	128
Carried Forward to Summary of Section No. 5			R
TYPE FD7 & GRFD7 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<u>UNREINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete</u>			
1	Strip footings	m3	12	
2	Ditto, but surface bed in pit	m3	5	
3	2Aprons cast in panels	m3	7	
4	Ramp	m3	2	
5	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	58	
6	Thickening down apron on edge 110mm deep x 200mm wide	m	58	
	<u>REINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete</u>			
7	Slabs	m3	8	
	Carried Forward		R	
	TYPE FD7 & GRFD7 CONCRETE, FORMWORK AND REINFORCEMENT AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
8	Aprons and pavings to falls	m2	58
<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
9	Surface beds, slabs, etc.	m2	77
<u>TEST CUBES</u>			
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	9
<u>FORMWORK</u>			
<u>Rough formwork to sides:</u>			
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	65
<u>Permanent formwork to soffits:</u>			
12	Slabs propped up not exceeding 1.5m high	m2	7
13	Leave or form 500mm diameter opening in top of floor slab	No	12
<u>REINFORCEMENT</u>			
<u>Mesh Reinforcement (measure nett)</u>			
14	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	77
Carried Forward to Summary of Section No. 5			R
TYPE FD7 & GRFD7 CONCRETE, FORMWORK AND REINFORCEMENT AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 3</u>			
	<u>BRICKWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>BRICKWORK</u>			
	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 "Brixal" 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			
	Carried Forward		R	
	TYPE FD7 & GRFD7 MASONRY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SAMPLES</u>			
Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6			
<u>FOUNDATIONS</u>			
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	37
2	One brick walls in pit	m2	42
3	Half brick corbelling in pit	m	61
<u>FACE BRICKWORK</u>			
Face bricks (purchase price of R 4000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints			
4	Extra over brickwork for face brickwork in foundation	m2	9
<u>SUPERSTRUCTURE</u>			
<u>FACE BRICKWORK</u>			
Face bricks (purchase price of R 4000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints			
5	Half brickwork for face brick walls pointed both sides	m2	52
6	One brickwork for face brick walls pointed both sides	m2	147
Carried Forward			R
TYPE FD7 & GRFD7 MASONRY AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward			R
7	Half brickwork for face brickwork in beamfilling	m2	14	
8	Fair raking and cutting	m	26	
	<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces</u>			
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	21	
10	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	26	
11	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	5	
	<u>BRICKWORK SUNDRIES</u>			
	<u>Brick reinforcement</u>			
12	75mm Wide reinforcement built in horizontally	m	182	
13	150mm Wide reinforcement built in horizontally	m	615	
	<u>Turning pieces</u>			
14	220mm Wide turning piece to lintel etc	m	14	
	<u>Galvanised wire ties etc</u>			
15	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	63	
	<u>Prestressed fabricated lintels</u>			
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	23	
	<u>Ventillation bricks</u>			
17	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	19	
	Carried Forward to Summary of Section No. 5			R
	TYPE FD7 & GRFD7 MASONRY AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 4</u>			
	<u>WATERPROOFING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer 375mm micron embossed damp proof course</u>			
1	In walls	m2	14	
	<u>One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape</u>			
2	Under surface beds	m2	78	
	<u>FLOOR AND WALLS SEALERS</u>			
	<u>"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:</u>			
3	Around steel windows and door frames.	m	26	
	Carried Forward to Summary of Section No. 5		R	
	TYPE FD7 & GRFD7 WATERPROOFING AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 5</u>			
	<u>ROOF COVERINGS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	87	
	<u>Sundries</u>			
2	12" Thermal resistance sisalation laid on purlins	m2	86	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	20	
4	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	14	
5	Extra over rainwater pipe for eaves offset	No	4	
	Carried Forward			
	TYPE FD7 & GRFD7 ROOF COVERINGS AES CONSULTING CC admin@aesconsulting.co.za			
			R	

Brought Forward			R
6	Extra over for closed ends	No	4
7	Ditto ,for shoe	No	4
Carried Forward to Summary of Section No. 5			R
TYPE FD7 & GRFD7 ROOF COVERINGS AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ROOFS, ETC.</u>			
	<u>Sawn softwood</u>			
1	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	100	
2	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	111	
3	76 x 38mm Wall plates	m	20	
	<u>Sundries</u>			
4	Two coats creosote on sawn timbers	m2	70	
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	42	
6	Hurricane clips	No	56	
	<u>EAVES, VERGES, ETC.</u>			
	<u>Pressed fibre-cement</u>			
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	58	
	Carried Forward		R	
	TYPE FD7 & GRFD7 CARPENTRY AND JOINERY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>DOORS, ETC.</u>			
<u>Wrought meranti doors hung to steel frames</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	4
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	14
Carried Forward to Summary of Section No. 5			R
TYPE FD7 & GRFD7 CARPENTRY AND JOINERY AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 7</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>CATCHES, CABIN, HOOKS, ETC</u>			
	<u>Approved</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	18	
	<u>LOCKS</u>			
	<u>Approved</u>			
2	Three lever mortice lockset	No	4	
3	Indicator lockset	No	14	
	<u>HANDLES</u>			
	<u>Aluminium Pull Handle</u>			
4	Set of two, 300mm pull handles fixed back to back on doors	No	14	
	<u>DOORSTOPS</u>			
	<u>Approved</u>			
5	38mm Diameter rubber door stop plugged	No	18	
	Carried Forward		R	
	TYPE FD7 & GRFD7 IRONMONGERY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>LETTERS, NAMEPLATES, ETC.</u>			
<u>"Union" or similar approved</u>			
6	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	4
<u>"Vaal Paragon" or similar approved</u>			
7	32mm Type 9 back grab rail 800mm long plugged	No	2
8	32mm Type 8 side grab rail 900mm girth plugged	No	2
<u>BATHROOM FITTINGS</u>			
<u>"Kimberley-Clark" or Similar</u>			
9	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	16
<u>Stainless steel</u>			
10	Stainless steel mirror size 350 x 400mm plugged to wall with chrome plated screws.	No	2
Carried Forward to Summary of Section No. 5			R
TYPE FD7 & GRFD7 IRONMONGERY AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1,2mm Single rebated frames suitable for half brick walls</u>			
1	Frame for door 813 x 2032mm high	No	14	
	<u>1,6mm Double rebated frames suitable for one brickwalls</u>			
2	Frame for door 813 x 2032mm high	No	4	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
3	Window type NE1, 533 x 654mm high including burglar bars	No	16	
4	Window type NE 7,1022 x 654mm high including burglar bars	No	8	
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames</u>			
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	4	
	Carried Forward to Summary of Section No. 5		R	
	TYPE FD7 & GRFD7 METALWORK AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 9</u>			
	<u>PLASTERING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>CEMENT SCREEDS TO CONCRETE</u>			
	<u>Screeds to steel trowelled, on concrete:</u>			
1	30mm thick on floors	m2	77	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork or blockwork</u>			
2	On pits walls	m2	44	
	<u>FLOOR AND WALLS SEALERS</u>			
	<u>Minimum two coats approved epoxy coat:</u>			
3	On screed	m2	77	
4	On internal textured plaster walls and floors in pit	m2	44	
	Carried Forward to Summary of Section No. 5		R	
	TYPE FD7 & GRFD7 IN SITU FINISHES AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Supply and Install "Enviro-Loo" Industrial 1040 Model, complete as per manufacturer's specification	No	16	
2	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	12	
	<u>White glazed fireclay or vitreous china coupling with SABS specification 497 in</u>			
3	"Vaal hibiscus" wash hand basin bolted to wall including all fittings and necessary pipework	No	2	
	Carried Forward		R	
	TYPE FD7 & GRFD7 PLUMBING AND DRAINAGE AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>FITTINGS</u>			
4	Elbow taps	No	12
5	19mm chrome plated push button taps to wash troughs	No	12
<u>Sundires</u>			
6	Stainless-steel SHE-BIN plugged to walls	No	6
Carried Forward to Summary of Section No. 5			R
TYPE FD7 & GRFD7 PLUMBING AND DRAINAGE AES CONSULTING CC admin@aesconsulting.co.za			

[illegible]

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 12</u>			
	<u>PAINTWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ON FIBRE-CEMENT</u>			
	<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</u>			
1	On fascias and barge boards	m2	12	
	<u>ON WOOD</u>			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
2	On doors (Internal)	m2	32	
3	On doors (External)	m2	25	
	<u>ON METAL</u>			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
4	On door frames	m2	30	
5	On gates (Measured over the full flat area of both sides)	m2	26	
6	On gutters and down pipes	m	35	
	<u>Spot priming defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel</u>			
7	On windows with burglar bars	m2	14	
	Carried Forward to Summary of Section No. 5		R	
	TYPE FD7 & GRFD7 PAINTWORK AES CONSULTING CC admin@aesconsulting.co.za			

Section No. 5

TYPE FD7 & GRFD7

SECTION SUMMARY - TYPE FD7 & GRFD7

Bill No		Page No	Amount
1	EARTHWORKS	83	
2	CONCRETE, FORMWORK AND REINFORCEMENT	85	
3	MASONRY	88	
4	WATERPROOFING	89	
5	ROOF COVERINGS	91	
6	CARPENTRY AND JOINERY	93	
7	IRONMONGERY	95	
8	METALWORK	96	
9	IN SITU FINISHES	97	
10	PLUMBING AND DRAINAGE	99	
11	GLAZING	100	
12	PAINTWORK	101	
Carried to Final Summary			R
TYPE FD7 & GRFD7 AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	81	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	82	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	11	
4	Pit	m3	26	
5	For aprons thickening	m3	1	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	4	
7	Hard rock	m3	2	
	<u>Extra over all excavations for carting away:</u>			
8	Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the Contractor	m3	8	
	Carried Forward		R	
	TYPE FD3 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
	<u>Risk of collapse of excavations</u>		
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	39
	<u>Keeping excavations free of water.</u>		
10	Keeping excavations free of water other than subterranean water	Item	
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u>		
11	Under floors, steps, pavings, etc.	m3	4
12	Backfilling to trenches, holes, etc.	m3	31
	<u>Compaction of surfaces</u>		
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	30
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	22
	<u>Prescribed density tests on filling</u>		
16	Modified AASHTO Density tests	No	3
Carried Forward			R
TYPE FD3 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward				R
<u>SOIL POISONING</u>				
<u>Soil insecticide</u>				
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	27	
18	To bottom of concrete aprons	m2	20	
19	To bottoms and sides of trenches, etc.	m2	44	
Carried Forward to Summary of Section No. 6				R
TYPE FD3 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za				

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<u>UNREINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete</u>			
1	Strip footings	m3	4	
2	Ditto, but surface bed in pit	m3	2	
3	2Aprons cast in panels	m3	2	
4	Ramp	m3	1	
5	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	20	
6	Thickening down apron on edge 110mm deep x 200mm wide	m	20	
	<u>REINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete</u>			
7	Slabs	m3	3	
	Carried Forward		R	
	TYPE FD3 CONCRETE, FORMWORK AND REINFORCEMENT AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
8	Aprons and pavings to falls	m2	20
<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
9	Surface beds, slabs, etc.	m2	26
<u>TEST CUBES</u>			
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	3
<u>FORMWORK</u>			
<u>Rough formwork to sides:</u>			
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	22
<u>Permanent formwork to soffits:</u>			
12	Slabs propped up not exceeding 1.5m high	m2	2
13	Leave or form 500mm diameter opening in top of floor slab	No	4
<u>REINFORCEMENT</u>			
<u>Mesh Reinforcement (measure nett)</u>			
14	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	26
Carried Forward to Summary of Section No. 6			R
TYPE FD3 CONCRETE, FORMWORK AND REINFORCEMENT AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 3</u>			
	<u>BRICKWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>BRICKWORK</u>			
	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 "Brixal" 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			
	Carried Forward		R	
	TYPE FD3 MASONRY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SAMPLES</u>			
Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6			
<u>FOUNDATIONS</u>			
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	13
2	One brick walls in pit	m2	14
3	Half brick corbelling in pit	m	21
<u>FACE BRICKWORK</u>			
Face bricks (purchase price of R 4000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints			
4	Extra over brickwork for face brickwork in foundation	m2	3
<u>SUPERSTRUCTURE</u>			
<u>FACE BRICKWORK</u>			
Face bricks (purchase price of R 4000.00/1000 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	51
Carried Forward			R
TYPE FD3 MASONRY AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward			R	
7	Half brickwork for face brickwork in beamfilling	m2	5		
8	Fair raking and cutting	m	9		
	<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces</u>				
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	7		
10	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	9		
11	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	2		
	<u>BRICKWORK SUNDRIES</u>				
	<u>Brick reinforcement</u>				
12	75mm Wide reinforcement built in horizontally	m	62		
13	150mm Wide reinforcement built in horizontally	m	211		
	<u>Turning pieces</u>				
14	220mm Wide turning piece to lintel etc	m	5		
	<u>Galvanised wire ties etc</u>				
15	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	22		
	<u>Prestressed fabricated lintels</u>				
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	8		
	<u>Ventillation bricks</u>				
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	
	TYPE FD3 MASONRY AES CONSULTING CC admin@aesconsulting.co.za				

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 4</u>			
	<u>WATERPROOFING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer 375mm micron embossed damp proof course</u>			
1	In walls	m2	5	
	<u>One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape</u>			
2	Under surface beds	m2	27	
	<u>FLOOR AND WALLS SEALERS</u>			
	<u>"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:</u>			
3	Around steel windows and door frames.	m	9	
	Carried Forward to Summary of Section No. 6		R	
	TYPE FD3			
	WATERPROOFING			
	AES CONSULTING CC			
	admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 5</u>			
	<u>ROOF COVERINGS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	30	
	<u>Sundries</u>			
2	12" Thermal resistance sisalation laid on purlins	m2	30	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	7	
4	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	5	
5	Extra over rainwater pipe for eaves offset	No	2	
	Carried Forward			
	TYPE FD3 ROOF COVERINGS AES CONSULTING CC admin@aesconsulting.co.za			
			R	

		Brought Forward		R
6	Extra over for closed ends	No	2	
7	Ditto ,for shoe	No	2	
Carried Forward to Summary of Section No. 6				R
TYPE FD3				
ROOF COVERINGS				
AES CONSULTING CC				
admin@aesconsulting.co.za				

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ROOFS, ETC.</u>			
	<u>Sawn softwood</u>			
1	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	34	
2	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	38	
3	76 x 38mm Wall plates	m	7	
	<u>Sundries</u>			
4	Two coats creosote on sawn timbers	m2	24	
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	14	
6	Hurricane clips	No	19	
	<u>EAVES, VERGES, ETC.</u>			
	<u>Pressed fibre-cement</u>			
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	20	
	Carried Forward		R	
	TYPE FD3 CARPENTRY AND JOINERY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>DOORS, ETC.</u>			
<u>Wrought meranti doors hung to steel frames</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2
9	44mm 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	3
Carried Forward to Summary of Section No. 6			R
TYPE FD3 CARPENTRY AND JOINERY AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 7</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>CATCHES, CABIN, HOOKS, ETC</u>			
	<u>Approved</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	5	
	<u>LOCKS</u>			
	<u>Approved</u>			
2	Three lever mortice lockset	No	2	
3	Indicator lockset	No	3	
	<u>HANDLES</u>			
	<u>Aluminium Pull Handle</u>			
4	Set of two, 300mm pull handles fixed back to back on doors	No	3	
	<u>DOORSTOPS</u>			
	<u>Approved</u>			
5	38mm Diameter rubber door stop plugged	No	5	
	Carried Forward		R	
	TYPE FD3 IRONMONGERY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>LETTERS, NAMEPLATES, ETC.</u>			
<u>"Union" or similar approved</u>			
6	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	1
<u>"Vaal Paragon" or similar approved</u>			
7	32mm Type 9 back grab rail 800mm long plugged	No	1
8	32mm Type 8 side grab rail 900mm girth plugged	No	1
<u>BATHROOM FITTINGS</u>			
<u>"Kimberley-Clark" or Similar</u>			
9	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	5
<u>Stainless steel</u>			
10	Stainless steel mirror size 350 x 400mm plugged to wall with chrome plated screws.	No	1
Carried Forward to Summary of Section No. 6			R
TYPE FD3 IRONMONGERY AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1,2mm Single rebated frames suitable for half brick walls</u>			
1	Frame for door 813 x 2032mm high	No	3	
	<u>1,6mm Double rebated frames suitable for one brickwalls</u>			
2	Frame for door 813 x 2032mm high	No	2	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
3	Window type NE1, 533 x 654mm high including burglar bars	No	4	
4	Window type NE 7,1022 x 654mm high including burglar bars	No	2	
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames</u>			
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2	
	Carried Forward to Summary of Section No. 6		R	
	TYPE FD3 METALWORK AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 9</u>			
	<u>PLASTERING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>CEMENT SCREEDS TO CONCRETE</u>			
	<u>Screeds to steel trowelled, on concrete:</u>			
1	30mm thick on floors	m2	26	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork or blockwork</u>			
2	On pits walls	m2	15	
	<u>FLOOR AND WALLS SEALERS</u>			
	<u>Minimum two coats approved epoxy coat:</u>			
3	On screed	m2	26	
4	On internal textured plaster walls and floors in pit	m2	15	
	Carried Forward to Summary of Section No. 6		R	
	TYPE FD3			
	IN SITU FINISHES			
	AES CONSULTING CC			
	admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Supply and Install "Enviro-Loo" Industrial 1040 Model, complete as per manufacturer's specification	No	4	
2	Supply and install pre-cast concrete double wash-trough, complete with all necessary pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim"	No	2	
	<u>White glazed fireclay or vitreous china coupling with SABS specification 497 in</u>			
3	"Vaal hibiscus" wash hand basin bolted to wall including all fittings and necessary pipework	No	1	
	Carried Forward		R	
	TYPE FD3 PLUMBING AND DRAINAGE AES CONSULTING CC admin@aesconsulting.co.za			

[illegible]

[illegible]

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 12</u>			
	<u>PAINTWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ON FIBRE-CEMENT</u>			
	<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</u>			
1	On fascias and barge boards	m2	4	
	<u>ON WOOD</u>			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
2	On doors (Internal)	m2	11	
3	On doors (External)	m2	9	
	<u>ON METAL</u>			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
4	On door frames	m2	10	
5	On gates (Measured over the full flat area of both sides)	m2	9	
6	On gutters and down pipes	m	12	
	<u>Spot priming defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel</u>			
7	On windows with burglar bars	m2	5	
	Carried Forward to Summary of Section No. 6		R	
	TYPE FD3 PAINTWORK AES CONSULTING CC admin@aesconsulting.co.za			

[illegible]

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 7</u>			
	<u>BILL NO. 1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	102	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	102	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	13	
4	Pit	m3	33	
5	For aprons thickening	m3	1	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	5	
7	Hard rock	m3	2	
	<u>Extra over all excavations for carting away:</u>			
8	Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the Contractor	m3	5	
	Carried Forward		R	
	TYPE MD3 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
	<u>Risk of collapse of excavations</u>		
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	49
	<u>Keeping excavations free of water.</u>		
10	Keeping excavations free of water other than subterranean water		Item
	<u>Earth filling obtained from the excavations and/or</u>		
	<u>prescribed stock piles on site compacted to 93% Mod</u>		
	<u>AASHTO density</u>		
11	Under floors, steps, pavings, etc.	m3	5
12	Backfilling to trenches, holes, etc.	m3	39
	<u>Compaction of surfaces</u>		
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	38
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	22
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	27
	<u>Prescribed density tests on filling</u>		
16	Modified AASHTO Density tests	No	4
Carried Forward			R
TYPE MD3 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>SOIL POISONING</u>			
<u>Soil insecticide</u>			
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	33
18	To bottom of concrete aprons	m2	25
19	To bottoms and sides of trenches, etc.	m2	55
Carried Forward to Summary of Section No. 7			R
TYPE MD3 EARTHWORKS AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 7</u>			
	<u>BILL NO. 2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<u>UNREINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete</u>			
1	Strip footings	m3	5	
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	25	
6	Thickening down apron on edge 110mm deep x 200mm wide	m	25	
	<u>REINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete</u>			
7	Slabs	m3	3	
	Carried Forward		R	
	TYPE MD3 CONCRETE, FORMWORK AND REINFORCEMENT AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
8	Aprons and pavings to falls	m2	25
<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
9	Surface beds, slabs, etc.	m2	33
<u>TEST CUBES</u>			
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	4
<u>FORMWORK</u>			
<u>Rough formwork to sides:</u>			
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	28
<u>Permanent formwork to soffits:</u>			
12	Slabs propped up not exceeding 1.5m high	m2	3
13	Leave or form 500mm diameter opening in top of floor slab	No	5
<u>REINFORCEMENT</u>			
<u>Mesh Reinforcement (measure nett)</u>			
14	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	33
Carried Forward to Summary of Section No. 7			R
TYPE MD3 CONCRETE, FORMWORK AND REINFORCEMENT AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 7</u>			
	<u>BILL NO. 3</u>			
	<u>BRICKWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>BRICKWORK</u>			
	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 "Brixal" 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			
	Carried Forward		R	
	TYPE MD3 MASONRY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SAMPLES</u>			
Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6			
<u>FOUNDATIONS</u>			
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	16
2	One brick walls in pit	m2	18
3	Half brick corbelling in pit	m	26
<u>FACE BRICKWORK</u>			
Face bricks (purchase price of R 4000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints			
4	Extra over brickwork for face brickwork in foundation	m2	4
<u>SUPERSTRUCTURE</u>			
<u>FACE BRICKWORK</u>			
Face bricks (purchase price of R 4000.00/1000 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	63
Carried Forward			R
TYPE MD3 MASONRY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
7	Half brickwork for face brickwork in beamfilling	m2	6
8	Fair raking and cutting	m	11
	<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces</u>		
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	9
10	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	11
11	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	2
	<u>BRICKWORK SUNDRIES</u>		
	<u>Brick reinforcement</u>		
12	75mm Wide reinforcement built in horizontally	m	78
13	150mm Wide reinforcement built in horizontally	m	264
	<u>Turning pieces</u>		
14	220mm Wide turning piece to lintel etc	m	6
	<u>Galvanised wire ties etc</u>		
15	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	27
	<u>Prestressed fabricated lintels</u>		
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	10
	<u>Ventillation bricks</u>		
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. 7		
	TYPE MD3		
	MASONRY		
	AES CONSULTING CC		
	admin@aesconsulting.co.za		

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 7</u>			
	<u>BILL NO. 4</u>			
	<u>WATERPROOFING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer 375mm micron embossed damp proof course</u>			
1	In walls	m2	6	
	<u>One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape</u>			
2	Under surface beds	m2	33	
	<u>FLOOR AND WALLS SEALERS</u>			
	<u>"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:</u>			
3	Around steel windows and door frames.	m	11	
	Carried Forward to Summary of Section No. 7		R	
	TYPE MD3 WATERPROOFING AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 7</u>			
	<u>BILL NO. 5</u>			
	<u>ROOF COVERINGS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	37	
	<u>Sundries</u>			
2	12" Thermal resistance sisalation laid on purlins	m2	37	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	9	
4	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	6	
5	Extra over rainwater pipe for eaves offset	No	2	
	Carried Forward			
	TYPE MD3 ROOF COVERINGS AES CONSULTING CC admin@aesconsulting.co.za			
			R	

		Brought Forward		R
6	Extra over for closed ends	No	2	
7	Ditto ,for shoe	No	2	
Carried Forward to Summary of Section No. 7				R
TYPE MD3 ROOF COVERINGS AES CONSULTING CC admin@aesconsulting.co.za				

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 7</u>			
	<u>BILL NO. 6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ROOFS, ETC.</u>			
	<u>Sawn softwood</u>			
1	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	43	
2	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	48	
3	76 x 38mm Wall plates	m	9	
	<u>Sundries</u>			
4	Two coats creosote on sawn timbers	m2	30	
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18	
6	Hurricane clips	No	24	
	<u>EAVES, VERGES, ETC.</u>			
	<u>Pressed fibre-cement</u>			
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	25	
	Carried Forward		R	
	TYPE MD3 CARPENTRY AND JOINERY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>DOORS, ETC.</u>			
<u>Wrought meranti doors hung to steel frames</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2
9	44mm 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	3
Carried Forward to Summary of Section No. 7			R
TYPE MD3 CARPENTRY AND JOINERY AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 7</u>			
	<u>BILL NO. 7</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>CATCHES, CABIN, HOOKS, ETC</u>			
	<u>Approved</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	5	
	<u>LOCKS</u>			
	<u>Approved</u>			
2	Three lever mortice lockset	No	2	
3	Indicator lockset	No	3	
	<u>HANDLES</u>			
	<u>Aluminium Pull Handle</u>			
4	Set of two, 300mm pull handles fixed back to back on doors	No	3	
	<u>DOORSTOPS</u>			
	<u>Approved</u>			
5	38mm Diameter rubber door stop plugged	No	5	
	Carried Forward		R	
	TYPE MD3 IRONMONGERY AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>LETTERS, NAMEPLATES, ETC.</u>			
<u>"Union" or similar approved</u>			
6	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2
<u>"Vaal Paragon" or similar approved</u>			
7	32mm Type 9 back grab rail 800mm long plugged	No	1
8	32mm Type 8 side grab rail 900mm girth plugged	No	1
<u>BATHROOM FITTINGS</u>			
<u>"Kimberley-Clark" or Similar</u>			
9	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	4
<u>Stainless steel</u>			
10	Stainless steel mirror size 350 x 400mm plugged to wall with chrome plated screws.	No	1
Carried Forward to Summary of Section No. 7			R
TYPE MD3 IRONMONGERY AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 7</u>			
	<u>BILL NO. 8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1,2mm Single rebated frames suitable for half brick walls</u>			
1	Frame for door 813 x 2032mm high	No	3	
	<u>1,6mm Double rebated frames suitable for one brickwalls</u>			
2	Frame for door 813 x 2032mm high	No	2	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
3	Window type NE1, 533 x 654mm high including burglar bars	No	6	
4	Window type NE 7,1022 x 654mm high including burglar bars	No	3	
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames</u>			
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2	
	Carried Forward to Summary of Section No. 7		R	
	TYPE MD3 METALWORK AES CONSULTING CC admin@aesconsulting.co.za			

Item No	Quantity	Rate	Amount
<u>SECTION NO. 7</u>			
<u>BILL NO. 9</u>			
<u>PLASTERING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>CEMENT SCREEDS TO CONCRETE</u>			
<u>Screeds to steel trowelled, on concrete:</u>			
1	30mm thick on floors	m2	33
<u>INTERNAL PLASTER</u>			
<u>Cement plaster on brickwork or blockwork</u>			
2	On pits walls	m2	19
<u>FLOOR AND WALLS SEALERS</u>			
<u>Minimum two coats approved epoxy coat:</u>			
3	On screed	m2	33
4	On internal textured plaster walls and floors in pit	m2	19
Carried Forward to Summary of Section No. 7			R
TYPE MD3 IN SITU FINISHES AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 7</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Supply and Install "Enviro-Loo" Industrial 1040 Model, complete as per manufacturer's specification	No	4	
2	Supply and Install "Enviro-Loo" 3-bowl Urinal Evaporative Tank system complete as per manufacturer's specification	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	
	<u>White glazed fireclay or vitreous china coupling with SABS specification 497 in</u>			
4	"Vaal hibiscus" wash hand basin bolted to wall including all fittings and necessary pipework	No	1	
	Carried Forward		R	
	TYPE MD3 PLUMBING AND DRAINAGE AES CONSULTING CC admin@aesconsulting.co.za			

		Brought Forward		R
<u>FITTINGS</u>				
5	Elbow taps	No	2	
6	19mm chrome plated push button taps to wash troughs	No	2	
<u>Sundries</u>				
7	Stainless-steel SHE-BIN plugged to walls	No	1	
Carried Forward to Summary of Section No. 7				R
TYPE MD3 PLUMBING AND DRAINAGE AES CONSULTING CC admin@aesconsulting.co.za				

[illegible]

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 7</u>			
	<u>BILL NO. 12</u>			
	<u>PAINTWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ON FIBRE-CEMENT</u>			
	<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</u>			
1	On fascias and barge boards	m2	5	
	<u>ON WOOD</u>			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
2	On doors (Internal)	m2	14	
3	On doors (External)	m2	11	
	<u>ON METAL</u>			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
4	On door frames	m2	13	
5	On gates (Measured over the full flat area of both sides)	m2	11	
6	On gutters and down pipes	m	15	
	<u>Spot prining defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel</u>			
7	On windows with burglar bars	m2	6	
	Carried Forward to Summary of Section No. 7		R	
	TYPE MD3 PAINTWORK AES CONSULTING CC admin@aesconsulting.co.za			

[illegible]

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 8</u>			
	<u>BILL NO. 1</u>			
	<u>STORMWATER CONTROL</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>Earthworks</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	250	
2	Excavate in earth below natural, reduced or made up ground level, not exceeding 2m deep, to reduced levels under aprons, paving, etc	m3	35	
3	Extra over surplus material from excavations and/stock piles on site to the dumping site to be located by the Contractor.	m3	35	
4	Extra over trench or hole for excavations in soft rock	m3	20	
5	Extra over trench or hole for excavations in hard rock	m3	15	
6	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	250	
7	Treat soil under concrete rain water channels, etc. with an approved insecticide solution at the rate not less than 2 litre per 1m2	m2	250	
	Carried Forward		R	
	EXTERNAL WORKS STORMWATER CONTROL AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>Reinforced Concrete</u>			
8	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 softboard movement joints with exposed edges raked out for a depth of 10mm and filled with bituminous compound including all necessary excavations and formwork	m	230
9	Extra for fair open end	No	25
10	Extra for fair stopped end	No	25
11	Extra for angle intersection	No	30
Carried Forward to Summary of Section No. 8			R
EXTERNAL WORKS STORMWATER CONTROL AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 8</u>			
	<u>BILL NO. 2</u>			
	<u>PAVED WALKWAYS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>Site Clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	410	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	410	
	<u>Open face excavation in earth over sloping site</u>			
3	Excavation in earth not exceeding 2m open face excavation to form platforms under parking areas etc and depositing excavated material over site, including haulage not exceeding 10m from perimeter of excavations exceeding 2m deep	m3	120	
	<u>Extra over all excavations for carting away</u>			
4	Surplus material from excavations and/stock piles on site to the dumping site to be located by the Contractor.	m3	120	
	<u>Earth filling supplied by the contractor under parking areas, roadways, etc</u>			
5	Sub-base course of G5 material in accordance with SABS 1200 DM, compacted to 93% Mod AASHTO density	m3	50	
	Carried Forward		R	
	EXTERNAL WORKS PAVED WALKWAYS AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward			R
	<u>Compaction of surfaces</u>			
6	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	410	
	<u>Soil poisoning</u>			
7	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/m ² on cleared ground	m2	410	
	<u>60mm Thick precast concrete DZZ interlocking heavy duty block paving of grey paving blocks in accordance with SANS 1058, laid to falls on and including 25mm thick sand layer with joints filled in with sand, compacted with a vibration compactor:</u>			
8	Paving to toilet areas etc to falls	m2	410	
9	25Mpa/19mm unreinforced concrete edge beam	m	615	
Carried Forward to Summary of Section No. 8				R
EXTERNAL WORKS PAVED WALKWAYS AES CONSULTING CC admin@aesconsulting.co.za				

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 8</u>			
	<u>BILL NO. 3</u>			
	<u>WATER TANKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>Excavation in earth not exceeding 2m deep</u>			
1	Trenches	m3	15	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
2	Soft rock	m3	1	
3	Hard rock	m3	1	
	<u>Extra over all excavations for carting away</u>			
4	Surplus material from excavations and/stock piles on site to the dumping site to be located by the Contractor.	m3	15	
	<u>Risk of collapse of excavations</u>			
5	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	40	
	<u>Keeping excavations free of water.</u>			
6	Keeping excavations free of water.	Item		
	<u>Earth filling obtained from the excavations and / or prescribed stock piles on site compacted to 93 % Mod AASHTO density</u>			
7	Backfilling to trenches, holes, etc.	m3	15	
	Carried Forward		R	
	EXTERNAL WORKS WATER TANKS AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
	<u>Soil insecticide</u>		
8	To bottoms and sides of trenches, etc.	m2	18
	<u>15Mpa/19mm Concrete</u>		
9	Strip footings	m3	7
10	Platform surface beds cast in panels	m3	4
	<u>Finishing top surfaces of concrete smooth with a wood float</u>		
11	Platform surface beds	m2	10
	<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>		
12	One brick walls	m2	35
	<u>Brick reinforcement</u>		
13	150mm Wide reinforcement built in horizontally	m	100
	<u>Face bricks pointed with recessed horizontal and vertical joints to match the existing.</u>		
14	Extra over brickwork for face brickwork in foundation	m2	25
	<u>Extra over brickwork for face brickwork in foundation bricks pointed with recessed joints on all exposed faces to match the existing.</u>		
15	Coping on top of one brick wall	m	20
	<u>One layer of 375 micron embossed black polyethylene damp proof course</u>		
16	On walls	m2	10
Carried Forward			R
EXTERNAL WORKS WATER TANKS AES CONSULTING CC admin@aesconsulting.co.za			

	Brought Forward			R
	<u>One layer of 250 micron green medium density waterproof sheeting sealed at laps with pressure sensitive tape in accordance with the manufacturer's instructions.</u>			
17	Under surface beds	m2	10	
	<u>Galvanized medium normalized mild steel piping</u>			
18	25mm Pipes	m	60	
19	50mm Pipes	m	60	
	<u>Extra over galvanised mild steel water supply pipes for fittings:</u>			
20	25mm Fittings.	No	30	
21	50mm Elbows.	No	30	
22	50mm Union.	No	30	
23	50mm Reducing bush.	No	30	
24	15mm "Cobra Ref. 108LK" brass hose biptap.	No	10	
	<u>"Jojo" approved SANS PVC water tanks</u>			
25	10 000 Litre plastic water tank fitted onto and secured to tank platforms	No	4	
Carried Forward to Summary of Section No. 8				R
EXTERNAL WORKS				
WATER TANKS				
AES CONSULTING CC				
admin@aesconsulting.co.za				

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 8</u>			
	<u>BILL NO. 4</u>			
	<u>FENCING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>Welded mesh fence</u>			
1	1800mm High welded mesh fencing formed of 2.5 x 50mm galvanized welded mesh in long lengths, with three strands of 1.6mm galvanized steel wire at 150mm centres to and including four strings of 2.5mm galvanized steel binding wire stringed through holes and secured to straining bolts or posts, 10mm Diameter galvanized straining eye bolt 300mm long with nut and washer sawn off and bent after straining, 3150mm high, 50mm diameter x 2.8mm round mild steel intermediates posts with cover cap, Corner post formed of 100mm diameter x 3mm thick x 3150mm overall length steel post and 50mm Diameter x 2.6mm steel stays.	m	45	
2	1800mm High and 900mm wide swing gate from 32mm diameter framework, all tube hot dipped galvanised after fabrication, with 50 x 50 x 2.5mm hot dipped galvanised welded mesh infill, fixed with heavy duty hinges to 100mm diameter x 3.5mm HDG corner posts, 2400mm long with standard type cap, 150 x 150 x 3mm base plate and casting into and including 500 x 500 x 600mm deep 20MPa concrete in ground, each corner post with off 32mm diameter x 2.5mm HDG stays at 45 degree angle, 50 x 50 x 2mm baseplate and casting into and including 300 x 300 x 300mm deep 20MPa concrete complete with all earthworks, trimmings and fixing	No	2	
	Carried Forward		R	
	EXTERNAL WORKS FENCING AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward			R
<u>Steel palisade fence</u>			
3	1800mm High steel palisade fencing formed of 1800 x 3000mm panels; 40 x 40 x 2mm welded angle iron, 300mm from top of paling and 300mm from bottom paling; 21 paling "devil fork" per panel; 30 x 30 x 2mm steel angle iron paling 1800mm high; Corner post formed of 30 x 30 x 2mm thick steel square tubing 2400mm overall length (600mm planted into concrete footing to engineer's specification).	m	536
4	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 to 40 x 40 x 5mm angel iron fixed into a 300 x 400 x 5000mm concrete base; 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).	No	1
5	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).	No	1
<u>PAINTWORK</u>			
<u>ON METAL</u>			
<u>Undercoat and minimum 2 coat gloss enamel</u>			
6	On palisade fence (Measured over the full flat area of both sides according to specification)	m2	1 930
Carried Forward to Summary of Section No. 8			R
EXTERNAL WORKS			
FENCING			
AES CONSULTING CC			
admin@aesconsulting.co.za			

Section No. 8

EXTERNAL WORKS

SECTION SUMMARY - EXTERNAL WORKS

Bill No		Page No	Amount
1	STORMWATER CONTROL	148	
2	PAVED WALKWAYS	150	
3	WATER TANKS	153	
4	FENCING	155	
Carried to Final Summary			R
EXTERNAL WORKS AES CONSULTING CC admin@aesconsulting.co.za			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 9</u>			
	<u>BILL NO.1</u>			
	<u>PROVISIONAL SUMS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	All the provisional sums cover supply of material and equipment and installation where applicable by firms of specialists.			
	Provisional sums are net and do not include builder's discount, but the Tenderer may allow under "Profit" items any profit he considers necessary.			
	The Tenderer is referred to Clause 87.1 and 87.2 in the "Preliminaries" section for the definition and adjustment of "General Attendance".			
	<u>N.B ALL PROVISIONAL WORKS ARE SUBJECT TO RE-MEASUREMENTS. THE PROVISIONAL WORK SHALL BE PAID AS PER THE WORK DONE</u>			
	<u>Equipping, testing existing borehole and upgrade reticulation system:</u>			
1	Provide an amount of R350 000.00 (Three Hundred and Fifty Thousand Rand and Zero Cents) for testing and equipping existing borehole and upgrading reticulation.	Item		350 000,00
2	Allow for profit	Item		
3	Allow for attendance	Item		
	Carried Forward		R	
	PROVISIONAL SUMS PS, PROFIT & ATTENDANCE AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward		R	
<u>Lockable fabricated steel manhole for borehole pumps:</u>			
4	Provide an amount of R19 500.00 (Nineteen Thousand Five Hundred Rand and Zero Cents) for three (3) lockable fabricated steel manholes for borehole pumps.	Item	19 500,00
5	Allow for profit	Item	
6	Allow for attendance	Item	
<u>Rainwater harvesting complete including leaf catchers:</u>			
7	Provide an amount of R27 750.00 (Twenty Seven Thousand Seven Hundred and Fifty Rand and Zero Cents) for rainwater harvesting complete to two (2) blocks including leaf catchers.	Item	27 750,00
8	Allow for profit	Item	
9	Allow for attendance	Item	
<u>Structural Steel Stands:</u>			
10	Provide an amount of R175 000.00 (One Hundred and Seventy Five Thousand Rand and Zero Cents) for three (3) structural steel stands.	Item	175 000,00
11	Allow for profit	Item	
12	Allow for attendance	Item	
<u>Drinkable water standpipes:</u>			
13	Provide an amount of R10 000.00 (Ten Thousand Rand and Zero Cents) for standpipes providing drinkable water..	Item	10 000,00
14	Allow for profit	Item	
15	Allow for attendance	Item	
Carried Forward		R	
PROVISIONAL SUMS PS, PROFIT & ATTENDANCE AES CONSULTING CC admin@aesconsulting.co.za			

Brought Forward		R
<u>Electrification and Cabling:</u>		
16	Provide an amount of R45 000.00 (Forty Five Thousand Rand and Zero Cents) for electrification and cabling.	Item 45 000,00
17	Allow for profit	Item
18	Allow for attendance	Item
Carried to Final Summary		R
PROVISIONAL SUMS PS, PROFIT & ATTENDANCE AES CONSULTING CC admin@aesconsulting.co.za		

FINAL SUMMARY				Amount
Section No		Page No		
1	PRELIMINARIES	33		
2	ALTERATIONS	36		
3	TYPE GRMD4	58		
4	TYPE MD9	80		
5	TYPE FD7 & GRFD7	102		
6	TYPE FD3	124		
7	TYPE MD3	146		
8	EXTERNAL WORKS	156		
9	PROVISIONAL SUMS	159		
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 Form of Offer and Acceptance			R	
AES CONSULTING CC admin@aesconsulting.co.za				