

Item No		Quantity	Rate	Amount
	<u>BILL NO 1</u>			
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	The JBCC Series 2000 Principal Building Agreement (March 2005 edition 4.1) prepared by the Joint Building Contract Committee shall be the applicable building agreement, amended as hereinafter described			
	The JBCC Principal Building Agreement Contract Data EC and the JBCC Principal Building Agreement Contract Data CE form an integral part of this agreement			
	The ASAQS Preliminaries (March 2005 edition) published by the Association of South African Quantity Surveyors for use with the said JBCC Principal Building Agreement shall be deemed to be incorporated in these bills of quantities			
	Contractors are referred to the abovementioned 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 agreement 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 abovementioned documents			
	Where any item is not relevant to this specific agreement such item is marked N/A, signifying "not applicable"			
	<u>PREAMBLES FOR TRADES</u>			
	The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained			
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<p>Supplementary preambles are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles shall take precedence over the provisions of the said Model Preambles</p> <p>The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the said Model Preambles and in any supplementary preambles</p> <p><u>PRICING OF PRELIMINARIES</u></p> <p>Should the contractor select Option A in terms of subclause 3.2.1 in the Contract Data - Contractor to Employer (CE) for the purpose of adjustment of these preliminaries, the amount entered into the amount column in these preliminaries is to be divided into one or more of the three categories provided namely Fixed (F), Value Related (V) and Time Related (T) and the respective amounts entered in the spaces provided under each item</p> <p><u>SECTION A - PRINCIPAL BUILDING AGREEMENT</u></p> <p><u>Definitions (A1)</u></p> <p>1 Clause 1.0 - Definitions and interpretation</p> <p>F:..... V:..... T:.....</p> <p><u>Objective and preparations (A2 - A14)</u></p> <p>2 Clause 2.0 - Offer acceptance and performance obligations F:..... V:..... T:.....</p> <p>3 Clause 3.0 - Documents</p> <p>F:..... V:..... T:.....</p> <p>4 Clause 4.0 - Design responsibility F:..... V:..... T:.....</p>			
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5	Clause 5.0 - Employer's agentsF:..... V:..... T:.....	Item	
6	Clause 6.0 - Contractor's site representative Clause 6.0 is amended by the addition of the following : The names and CV's of the contractor's proposed management team shall be submitted to the principal agent prior to commencement on site and, after the principal agent's agreement on the composition and competence thereof has been obtained, no changes shall be made nor shall any member of the said team be removed from the project while remaining in the employ of the contractor, without the principal agent's prior written approval. F:..... V:..... T:.....	Item	
7	Clause 7.0 - Compliance with laws and regulations Clause 7.0 is amended by the addition of the following clauses : 7.1 The employer reserves the right to pay direct (i.e. not through the contractor) for all or any permanent connections to local or other authority services, for which provisional amounts have been included within the selected sub-contract bill / section hereof. In the event of the employer paying direct for these charges, the contractor will not be entitled to a ten percent (10%) mark-up in terms of Clause 32.4. All such provisional amounts included in the contract sum will be omitted. F:..... V:.....T:.....	Item	
8	Clause 8.0 - Works riskF:..... V:..... T:.....	Item	
9	Clause 9.0 - Indemnities F:..... V:..... T:.....	Item	
10	Clause 10.0 - General insurances F:..... V:.....T:.....	Item	
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11	Clause 11.0 - Special insurances F:..... V:..... T:.....	Item	
12	Clause 12.0 - Effecting insurances F:..... V:..... T:.....	Item	
13	Clause 13.0 - Assignment F:..... V:..... T:.....	Item	
14	Clause 14.0 - Security Clause 14.0 is amended by the addition of the following clause : In the event that the value of the works (excluding adjustments in terms of the contract price adjustment provisions) were to increase during the course of the contract by an amount of 15% or more of the contract sum, upon written request from the principal agent, the contractor shall immediately arrange to have the construction guarantee " F:..... V:..... T:.....	Item	
<u>Execution (A15 - A23)</u>			
15	Clause 15.0 - Preparation for and execution of the works Clause 15.6 is deleted in its entirety and replaced with the following:- 15.6.1 Immediately on award of the contract and prior to commencement on site, the contractor shall submit a construction programme to the principal agent in sufficient detail to enable the principal agent to assess the progress of the works. The principal agent shall have the right to modify such programme to accommodate changes necessary, in his opinion, for co-ordinating the project as a whole. Any cost implications relating to such modification, shall be dealt with in accordance with the provisions of the agreement. 15.6.2 This programme shall be drawn up in accordance with the dates given herein, for possession, sectional completion and practical completion and shall be in sufficient and		
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<p style="text-align: center;">Brought Forward</p> <p>approved detail to ensure control over the work.</p> <p>15.6.3 The contractor shall be responsible at all times for maintaining the accuracy, validity and reasonableness of the programme, and the implementation thereof.</p> <p>15.6.4 The programme shall be compiled based on the critical path method of programming and the critical activities are to be clearly highlighted.</p> <p>15.6.5 Should documentation not be available in complete detail at the commencement stage. However the contractor, in consultation with the principal agent, shall plan the works on provisional information, to an agreed level of detail relating to the level of detailed information available and with sufficient scope to include future detail, without disrupting the basic logic as initially agreed.</p> <p>Where assumptions are made in regard to programming aspects, such assumptions shall be agreed by the contractor and the principal agent, and suitably recorded in the programme.</p> <p>15.6.6 Should circumstances change to the extent where the contractor is of the opinion that changes to the programme are required, then the contractor shall submit a written request to the principal agent for such changes, clearly identifying the reasons for requiring such change. The contractor and principal agent shall thereafter agree such changes, if any.</p> <p>Should the principal agent be of the opinion that the programme requires revisions, and notwithstanding the fact that a request for such revision has not been received from the contractor, the principal agent shall be entitled to instruct the contractor to revise the programme accordingly, unless the contractor can submit reasonable justification for not doing so.</p> <p>Any acceleration and/or special measures sanctioned by the principal agent together with associated effects shall be incorporated in a revision to the programme.</p> <p>15.6.7 The contractor and the principal agent shall, at regular intervals not exceeding two weeks,</p> <p style="text-align: center;">Carried Forward</p> <p>Section No. 1 Bill No. 1 Preliminaries</p>	<p style="text-align: center;">R</p>
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	<p>agree the state of progress of the works relative to the latest agreed revision of the programme. Such agreement shall include the recording of actual commencement and completion dates for each activity and shall constitute the official record of the progress at such point in time.</p> <p>F:..... V:..... T:.....</p>	Item		
16	<p>Clause 16.0 - Site and access</p> <p>In addition, the contractor shall acquaint himself with any limitations or restrictions on working space, any restrictions imposed by existing buildings adjoining the site, any restrictions imposed by any authorities and any limitations on the availability of water, power and sewerage facilities.</p> <p>Access to the works shall be strictly confined to that permitted by the principal agent. The contractor shall be solely responsible for maintaining such access and reinstating same upon completion. No claim whatsoever shall be entertained due to the access not being trafficable due to weather conditions and the like.</p> <p>No claims for extras arising from the contractor having failed to comply with this clause will be entertained.</p> <p>F:..... V:..... T:.....</p>	Item		
17	<p>Clause 17.0 - Contract instructions</p> <p>F:..... V:..... T:.....</p>	Item		
18	<p>Clause 18.0 - Setting out of the works</p> <p>F: V:.....T:.....</p>	Item		
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19	<p>Clause 19.0 - Temporary works and plant</p> <p>Clause 19.1.2 is deleted in its entirety and replaced by the following :</p> <p>19.1.2 Office accomodation as per the following requirements:</p> <p>(i) Provide, erect, maintain and remove at completion temporary site office (Container Conversion /Parkhome) or similar approved office to be perfectly secured and having desk with at least 10 chairs or more. The office shall be kept clean and fit for use at all times (For site meetings).</p> <p>(ii) Contactor to provide, erect, maintain and remove at completion his own temporary offices, storage facilities and ablution facilities, etc.</p> <p>F:..... V:..... T:.....</p>	Item
20	<p>Clause 20.0 - Nominated subcontractors</p> <p>F:..... V:..... T:.....</p>	Item
21	<p>Clause 21.0 - Selected subcontractors</p> <p>F:..... V:..... T:.....</p>	Item
22	<p>Clause 22.0 - Employer's direct contractorsF:..... V:..... T:.....</p>	Item
23	<p>Clause 23.0 - Contractor's domestic subcontractorsF:..... V:..... T:.....</p>	Item
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<u>Completion (A24 - A30)</u>			
24	Clause 24.0 - Practical completion F:..... V:..... T:.....	Item	
25	Clause 25.0 - Works completion F:..... V:..... T:.....	Item	
26	Clause 26.0 - Final completion F:..... V:..... T:.....	Item	
27	Clause 27.0 - Latent defects liability period F:..... V:..... T:.....	Item	
28	Clause 28.0 - Sectional completion F:..... V:..... T:.....	Item	
29	Clause 29.0 - Revision of date for practical completion F:..... V:..... T:.....	Item	
30	Clause 30.0 - Penalty for late or non-completion F:..... V:..... T:.....	Item	
<u>Payment (A31 - A35)</u>			
31	Clause 31.0 - Interim payment F:..... V:..... T:.....	Item	
32	Clause 32.0 - Adjustment to the contract value F:..... V:.....T:.....	Item	
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33	Clause 33.0 - Recovery of expense and loss F:..... V:..... T:.....	Item	
34	Clause 34.0 - Final account and final paymentF:..... V:..... T:.....	Item	
35	Clause 35.0 - Payment to other partiesF:..... V:..... T:.....	Item	
<u>Termination (A36 - A39)</u>			
36	Clause 36.0 - Termination by employer - contractor's default F:..... V:..... T:.....	Item	
37	Clause 37.0 - Termination by employer - loss and damage F:..... V:..... T:.....	Item	
38	Clause 38.0 - Termination by contractor - employer's default F:..... V:..... T:.....	Item	
39	Clause 39.0 - Termination - cessation of the works F:..... V:..... T:.....	Item	
<u>Dispute (A40)</u>			
40	Clause 40.0 - Settlement of disputesF:..... V:..... T:.....	Item	
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<u>Contract variables (A41 - A42)</u>			
41	<p>Clause 41.0 - Post tender provisions</p> <p>The contractor is to complete before submission of his tender the JBCC Principal Building Agreement Contract Data CE</p> <p>F:..... V:..... T:.....</p>	Item	
42	<p>Clause 41.0 - Post tender provisions</p> <p>The contractor is to complete before submission of his tender the JBCC Principal Building Agreement Contract Data CE</p> <p>F:..... V:..... T:.....</p>	Item	
<u>Contract Data - Contractor to Employer</u>			
1.0	Contracting Party		
1.1	Contractor :		
	Postal address :		
	Code :		
	Telephone :		
	Fax :		
	E-mail :		
	Tax/VAT registration No:		
[1.2]	Physical address :		
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2.0	Securities		
2.1	The security provisions selected are :		
2.1.1	[14.3] Variable construction guarantee		
	Yes/No		
2.1.2	[14.4] Fixed construction guarantee and Payment Reduction		
	Yes/No		
2.13	[14.5] Advanced Payment is required		
	No		
	Amount R		
2.1.4	[14.5] An Advance Payment Guarantee to be provided		
	No		
3.0	Payment and Adjustment of Preliminaries		
3.1	Payment of preliminaries		
	The payment of preliminaries shall be according to the option selected by the contractor. The amount included in each monthly payment certificate in respect of preliminaries as stated in the contract data shall be: [3.1.1-2]		
	Option A / B		
3.2.	Adjustment of preliminaries [3.2.1-2]		
	Option A / B		
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4.0 Employer Changes to JBCC Standard Documents		
4.1 Changes (if any) in terms of the Employer's Contract Data are accepted [3.11]		
Yes		
<i>Where "No" an addendum referenced to this clause is to be attached</i>		
5.0 The Tender		
The Total Tender Sum as submitted in the Contract Data Contractor - Employer will be utilised after consultation with the parties to the agreement, to reflect the accepted contract sum as stated in Clause 43.3 of this agreement.		
<u>Contract Data -Employer to Contractor</u>		
1.0 Contracting and other parties		
1.1 Employer : Development Bank of South Africa		
Postal address :	P O Box 1234 Halfway House South Africa	
Code :	1685	
Tel :	011 313 3911	
Fax :	031 821 0011	
E-mail :	webmaster@dbsa.org	
Physical address: [1.2]	:1258 Lever Road Headway Hill Midrand South Africa	
1.2 Interest of principal agent or other agents in the project [5.5]	No	
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<p style="text-align: center;">Brought Forward</p> <p>1.3 The principal agent named in 1.2 above is responsible for the preparation of the contract data schedule and must be contacted should the contractor be uncertain of the information provided or to be provided. Failure to complete the contract data schedule in full may result in the tender being disqualified.</p> <p>2.0 Contract and Site Information</p> <p>2.1 The law applicable to this agreement shall be that of [1.7]</p> <p style="text-align: center;">South Africa</p> <p>2.2 Works identification [1.1]</p> <p>Demolition of existing ablutions , construction of educators ablution block with 4 toilets seats and 1 urinal; male learners ablution block with 5 toilet seats and 1 urinal; female learner ablution block with 8 toilet seats; elevated water tanks; rainwater tanks with rainwater goods and associated external works.</p> <p><u>Objective and preparations (A2 - A14)</u></p> <p>2.3 Site description [1.1]</p> <p>ML Sultan School</p> <p>2.4 Possession of the site is to be given on [15.2.1]</p> <p>To be advised upon award</p> <p>2.5 Period for the commencement of the works after the contractor takes possession of the site [15.3]</p> <p>7 working days</p> <p style="text-align: center;">Carried Forward</p> <p>Section No. 1 Bill No. 1 Preliminaries</p>	<p style="text-align: center;">R</p> <hr/> <p style="text-align: center;">R</p>
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2.6	Completion of the works in sections is required <i>[15.4, 28.0]</i>		
	No		
2.7	Waiver of the contractor's lien or right of continuing possession is required <i>[3.3, 31.16.2]</i>		
	Yes		
2.8	Defined restrictions to the site area. Where "yes" the specific requirements are described below <i>[16.1]</i>		
	No		
2.9	Geotechnical investigation of the site has been undertaken <i>[16.4]</i>		
	Yes - (Report included with the tender document)		
2.10	Existing premises will be occupied. Where "yes" the specific requirements are described below <i>[16.6]</i>		
the	Yes - Contractor is expected to work within area allocated for construction activities.		
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2.11	Provision of temporary services is required. Where "yes" the specific requirements described below: [16.7]		
	Yes		
2.11.1	Water		
	Option A Contractor - his cost (including necessary temporary installation)		
2.11.2	Electricity		
	Option A Contractor - his cost (including necessary temporary installation)		
2.11.3	Telecommunications		
	Option A Contractor (his cost including necessary temporary installation)		
2.11.4	Ablution Facilities		
	Option A Contractor (his cost including maintenance of facility thoroughly clean and in a tidy condition)		
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2.12	Protection of existing trees and shrubs is required. Where "yes" the specific requirements are described below [16.8] No		
3.0	INSURANCES		
3.1	Contract works insurance to be effected by [10.1.1, 12.6] Contractor For the sum of (<i>amount</i>) R Contract Sum plus 20% With a deductible of (<i>amount</i>) R		
3.2	Supplementary / Special insurance to be effected by [10.1.2, 11.1-3, 12.6] N/A		
3.3	Public liability insurance to be effected by [10.1.3, 12.6] Contractor For the sum of (<i>amount</i>) As deemed necessary but not less than R 1 000 000 With a deductible of (<i>amount</i>) R		
3.4	Support insurance to be effected by the Employer - N/A [11.1.1] For the sum of (<i>amount</i>) R With a deductible of (<i>amount</i>) R		
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3.5	Special insurance to be effected by [11.1.2-3, 12.1] Employer / Contractor - N/A Type: For the sum of (<i>amount</i>) R With a deductible of (<i>amount</i>) R		
4.0	Practical Completion Dates and Penalties		
4.1	For the works as a whole : [24.3.1] The date for practical completion 8 months from construction commencement [30.1-3] and the penalty per calendar day is R 0.025% of the contract sum.		
4.2	For the works in sections : The date for practical completion [24.3.1] [28.1] N/A		
5.0	Documents and General		
5.1	Construction document copies to be supplied to the contractor free of charge [3.7] (<i>number of copies</i>) THREE		
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5.2	The priced document may be used as a specification of materials and goods and work methods [3.9]		
	No		
5.3	The contractor shall provide a schedule of rates [3.10]		
	Yes		
5.4	Changes made to the JBCC standard documents [3.11]		
	Yes		
5.5	On acceptance of the tender, the priced document is to be submitted within the stated working days [15.1.1]		
	Complete priced tender document to be submitted at the date of closing of tender.		
5.6	Work to be undertaken by direct contractors [22.2]		
	No		
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5.7	On achievement of practical completion the contractor is to hand over manual, etc. related to the works as listed below : [24.9]			
(1)	<u>Operating and Instruction manuals</u> All services subcontracts appointed through this Agreement including separate submissions for each Domestic subcontractor appointed by the Service subcontractors.			
(2)	<u>Product guarantees and Manufacturers' instructions</u> All propriety specified products / equipment that carries a Manufacturers' guarantee and needs to be maintained in a prescribed manner			
5.8	Interim payment certificate to be issued by [31.1]			
	25th day of the month			
43	Clause 42.0 - Contractual agreement F:..... V:..... T:.....	Item		
	<u>SECTION B - PRELIMINARIES</u>			
	<u>Definitions and interpretation (B1)</u>			
44	Clause 1.0 - Definitions and interpretation F:..... V:..... T:.....	Item		
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<u>Documents (B2)</u>			
45	Clause 2.1 - Checking of documents F:..... V:..... T:.....	Item	
46	Clause 2.2 - Provisional bills of quantities F:..... V:..... T:.....	Item	
47	Clause 2.3 - Availability of construction documentation F:..... V:..... T:.....	Item	
<u>Previous work and adjoining properties (B3)</u>			
48	Clause 3.1 - Previous work - dimensional accuracy F:..... V:..... T:.....	Item	
49	Clause 3.2 - Previous work - defects F:..... V:..... T:.....	Item	
50	Clause 3.3 - Inspection of adjoining properties F:..... V:..... T:.....	Item	
<u>Samples, shop drawings and manufacturer's instructions (B4)</u>			
51	Clause 4.1 - Samples of materials F:..... V:..... T:.....	Item	
52	Clause 4.2 - Workmanship samples F:..... V:..... T:.....	Item	
53	Clause 4.3 - Shop drawings F:..... V:..... T:.....	Item	
54	Clause 4.4 - Compliance with manufacturer's instructions F:..... V:..... T:.....	Item	
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<u>Deposits and fees (B5)</u>				
55	Clause 5.1 - Deposits and fees F:..... V:..... T:.....	Item		
<u>Temporary services (B6)</u>				
56	Clause 6.1 - WaterF:..... V:..... T:.....	Item		
57	Clause 6.2 - ElectricityF:..... V:..... T:.....	Item		
58	Clause 6.3 - Telecommunication facilitiesF:..... V:..... T:.....	Item		
59	Clause 6.4 - Ablution facilitiesF:..... V:..... T:.....	Item		
<u>Prime cost amounts (B7)</u>				
60	Clause 7.1 - Responsibility for prime cost amounts F:..... V:..... T:.....	Item		
<u>Special attendance on n/s subcontractors (B8)</u>				
61	Clause 8.1 - Special attendance F:..... V:..... T:.....	Item		
<u>General (B9)</u>				
62	Clause 9.1 - Protection of the worksF:..... V:..... T:.....	Item		
63	Clause 9.2 - Protection/isolation of existing/sectionally occupied works F:..... V:..... T:.....	Item		
64	Clause 9.3 - Security of the works F:..... V:..... T:.....	Item		
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65	Clause 9.4 - Notice before covering work F:..... V:..... T:.....	Item	
66	Clause 9.5 - Disturbance F:..... V:..... T:.....	Item	
67	Clause 9.6 - Environmental disturbance F:..... V:..... T:	Item	
68	Clause 9.7 - Works cleaning and clearing F:..... V:..... T:.....	Item	
69	Clause 9.8 - Vermin F:..... V:..... T:.....	Item	
70	Clause 9.9 - Overhand work F:..... V:..... T:.....	Item	
<u>Schedule of variables (B10)</u>			
Information necessary for elections and completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder. Where no information is given it shall mean that no specific requirements are expected or that the clause is not relevant to this specific contract			
10.1 - Provisional bills of quantities [clause 2.2] The quantities are provisional No			
10.2 - Availability of construction documentation [clause 2.3] Construction documentation is complete No			
10.3 - Previous work - dimensional accuracy [clause 3.1]			
10.4 - Previous work - defects [clause 3.2]			
10.5 - Inspection of adjoining properties [clause 3.3]			
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10.6 - Water [clause 7.2] Option A (by contractor) yes			
10.7 - Electricity [clause 7.3] Option A (by contractor) yes			
10.8 - Telecommunications [clause 7.4] Telephone <i>yes required</i> Facsimile <i>yes required</i> E-mail <i>yes required</i>			
10.9 - Ablution facilities [clause 7.5] Option A (by contractor) yes			
10.10 - Protection of the works [clause 9.1]			
10.11 - Protection/isolation of existing/sectionally occupied works [clause 9.2] Protection/isolation is required Yes			
10.12 - Disturbance [clause 9.5]			
10.13 - Environmental disturbance [clause 9.6]			
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SECTION C - SPECIFIC PRELIMINARIES

C1 THE SITE

71 Clause C1.1 - Unauthorised person on site

The contractor shall at all times strictly exclude all unauthorized persons from the works.

No workmen are to be allowed under any circumstances to sleep or deposit any personal effects on the premises. Furthermore, the contractor shall take all measures necessary to ensure that no unauthorised workmen are allowed into the building at any time without the specific permission of the principal agent.

F:..... V:.....
T:.....

Item

72 Clause C1.2 - Access to site

Access to the site shall be restricted to one entrance and one exit point only as directed by the principal agent.

F:..... V:.....
T:.....

Item

73 Clause C1.3 - Maintenance of roads and services

The contractor shall keep the approaches to the site clear of mud, other debris and the likes caused by the contractor or any subcontractors.

Damages caused to public and private roads and services due to negligence by the contractor, shall be made good by the contractor at his own expense.

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T:.....

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	<u>C2 GENERAL</u>			
74	<p>Clause C2.1 - Method Statement</p> <p>The contractor shall produce, when required to do so by the principal agent, a method statement outlining the methods of construction and labour and plant resources that he proposes to use in the execution of the works. Any approval given or observation made by the principal agent shall not relieve the contractor of his sole responsibility to adopt the methods of construction and to provide the labour and plant resources necessary for the due and proper timeous execution of the works.</p> <p>F:..... V:..... T:.....</p>	Item		
75	<p>Clause C2.1 - Mode of procedure</p> <p>Notwithstanding anything to the contrary contained herein, the principal agent at all times reserves the right to direct the order in which the various parts of the contract are to be executed. The contractor shall give priority to any individual section or portion of the works that, in the opinion of the principal agent, requires to be expedited.</p> <p>Should the contractor and/or principal agent be of the opinion that such instruction warrants a revision to the contract programme, then the provisions of Clause A15.6.6 hereof shall apply.</p> <p>Should it appear, in the principal agent's opinion that work in any area is not being executed in accordance with the requirement of the programme, the contractor shall provide additional manpower and resources and shall work additional overtime and do everything else required to bring the work back to programme to the satisfaction of the principal agent</p> <p>F:..... V:..... T:</p>	Item		
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	Brought Forward		R
	<u>C15: OCCUPATIONAL HEALTH AND SAFETY</u>		
	Without limiting the generality of the provisions of clause 7.0 of the Principal Building Agreement, the Contractors attention is drawn to the provisions of the Construction Regulations, 2014 issued in terms of Occupational Health and Safety Act, 1993 in which it is specifically stated and the Employer shall ensure that the Contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor is referred to the occupational Health and Safety of Construction attached to this document and the contractor shall price for compliance with the Act and the regulations and the provisions of the aforementioned Health and Safety Specification.		
	The Legal requirements contemplated in Construction Regulation CR (1) (g)		
	"A client must ensure that potential principal contractors submitting tenders, have made adequate provision for the cost of health and safety measures"		
	And CR 5(1) (h)		
	"A Client must ensure that the principal contractor to be appointed has the necessary competencies and resource to carry out the construction work safety"		
76	Total brought forward from Health and Safety Bills of Quantities	Item	
	Carried Forward		R
	Section No. 1 Bill No. 1 Preliminaries		

Brought Forward

SUMMARY OF CATEGORIES

Category: Fixed R

Category: Value R

Category: Time R

R

Carried to Final Summary

R

Section No. 1
Bill No. 1
Preliminaries

Item No		Quantity	Rate	Amount
	<u>SECTION No. 2</u>			
	<u>BILL No. 1</u>			
	<u>DEMOLITIONS, REMOVALS AND 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>General:</u>			
	The Supplementary Preambles reflected elsewhere in these Bills of Quantities shall apply equally to this Trade.			
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill			
	<u>Damage and repairs to services:</u>			
	Should the contractor damage any services which are to remain in operation or any services which have not yet been disconnected prior to removal, then the Contractor will be held solely responsible for such damage and any further resultant damage.			
	The Contractor shall immediately notify the Representative/Agent and the Authorities concerned and shall at his own cost make all necessary arrangements for disconnection and repairs with the relevant authorities and shall pay all fees and charges levied.			
	Carried Forward		R	
	Section No. 2 Bill No. 1 DEMOLITIONS			

<p style="text-align: center;">Brought Forward</p> <p><u>Demolitions and work on site:</u></p> <p>All demolitions and work on site must be carried out carefully and in the safest possible manner and the Contractor is to make a thorough examination and take all necessary precautions before proceeding with the work. The outmost care is to be observed to avoid any structural or other damage in the remaining portions of the existing buildings.</p> <p>Special care must be exercised as not to interfere with any electrical installation, and notice is to given to the Representative/Agent when any disconnections, removal of wire, etc, are necessary and the Contractor is to afford every facility to the workmen carrying out the work.</p> <p><u>Disposal of material</u></p> <p>All existing materials specified as 'removed' "demolished and removed", "hacked up or off and removed" or "taken down or off and removed" or "broken down and removed", etc. become the property of the Contractor.</p> <p>If any of the bricks or other material specified to be "removed" are sound and considered suitable for any portion of the new work they must be thoroughly cleaned off, stackered on site for inspection by the Representative/Agent must be obtained before any such materials are re-used in the work.</p> <p>All existing materials specified to be "taken down and set aside for re-use" or "taken down and set aside" shall remain the property of the Employer and must be cleaned off, cleared of all nails, etc., and neatly stacked and stored on site by the Contractor where directed and carefully handled during taking down, storage and re-fixing. The Contractor will be held responsible for the safety of these materials and must take all necessary pre-cautions for their protecction and any damage or loss that may occur maust be made good by the Contractor at his own expense.</p> <p><u>DEMOLITIONS TO EXISTING SITE AND BUILDINGS, SERVICES</u></p>		R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 2 Bill No. 1 DEMOLITIONS</p>		R	

Brought Forward			R	
<u>Breaking down including removal rubble and making good</u>				
1	Demolish brick walls in class II mortar and dispose all debris off-site	m2	250	
2	Demolish and remove existing damaged concrete surfaces	m3	10	
3	Demolish and remove existing storm-water structures	Item		
4	Demolish and remove existing fences and boundary walls	m	55	
5	Remove existing asbestos roof sheeting	m2	2 635	
6	Remove roof trusses incl purlins , battens and rafters	No	86	
7	Remove and dispose off site Rhinoboard ceiling	m2	2 348	
8	Doors including frames, set aside for re-use or dispose off site of all doors incl. ironmongery	No	5	
9	Remove and dispose of all damaged rainwater disposal features	m	640	
10	Windows ,set aside for re-use or dispose off site of window frames and panes incl. glazing	No	5	
	Remove finishes			R 30 000.00
11	Hack up and remove all existing vinyl flooring incl skirting and beads to be replaced by new flooring	m2	2 348	
12	Rip and remove all existing floor tiles in ablutions to be replaced by new flooring	m2	90	
<u>Servicing the existing work</u>				
13	Servicing existing galvanised steel verandah poles back to the acceptable condition.(all to engineers approval)	No	127	
	Contractor to visit site before pricing this item.			
14	Resurface existing tarmac including closing existing pot holes back to the acceptable condition.	m2	867	
Carried Forward			R	
Section No. 2 Bill No. 1 DEMOLITIONS				

	Brought Forward			R	
15	Servicing/replacing damaged concrete panels to the concrete hard stand back to an acceptable condition.	m3	818		
16	Repair existing worktop counter	m	35		
17	Repair existing teachers desk	m	32		
Carried Forward to Summary of Section No. 2				R	
Section No. 2					
Bill No. 1					
DEMOLITIONS					

Item No		Quantity	Rate	Amount
	<u>SECTION No. 2</u>			
	<u>BILL No. 2</u>			
	<u>EARTHWORKS (PROVISIONAL)</u>			
	<u>PREAMBLES</u>			
	SUPPLEMENTARY PREAMBLES			
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill			
	Reference to drawings and details:			
	Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Nature of ground</u>			
	The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with soft rock or "hard rock"			
	<u>Carting away of excavated material</u>			
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site			
	<u>Filling</u>			
	Notwithstanding the reference to prescribed multiple handling in clause 1, page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any necessary multiple handling of material			
	Carried Forward		R	
	Section No. 2 Bill No. 2 EARTHWORKS			

Brought Forward			R	
<u>GENERAL NOTES TO TENDERERS</u>				
The tenderers are advised to visit the site to acquaint themselves fully as to the conditions on site as no claim in this regard will be entertained.				
Tenderers are advised to discuss site security, access to the works, sequences of the work, programme, etc. with the Principal Agent to ensure that no delays occur.				
<u>EXCAVATION, FILLING, ETC</u>				
<u>Excavation in earth not exceeding 2m deep</u>				
1	Reduced levels under floors	m3	17	
2	Trenches	m3	108	
3	Holes	m3	55	
<u>Extra over trench and hole excavations in earth for excavation in</u>				
4	Soft rock	m3	6	
5	Hard rock	m3	6	
<u>Back excavation of vertical sides of excavations in earth for working space including backfilling compacted to 93% Mod AASHTO density</u>				
6	Not exceeding 500mm deep for placing and removing formwork to walls etc, 1000mm away from excavated face	m2	340	
7	Extra over for excavation in soft rock	m2	15	
8	Extra over for excavation in hard rock	m2	10	
<u>Extra over all excavations for carting away</u>				
9	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	54	
<u>Risk of collapse of excavations</u>				
10	Sides of trench and hole excavations not exceeding 1,5m deep	m2	52	
Carried Forward			R	
Section No. 2 Bill No. 2 EARTHWORKS				

Brought Forward			R
<u>Keeping excavations free of water</u>			
11	Keeping excavations free of all water other than subterranean water	Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted in 150mm layers to 95% Mod AASHTO density</u>			
12	Under floors, steps, pavings, etc	m3	819
13	Backfilling to trenches, holes, etc	m3	52
<u>Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u>			
14	Under floors, steps, pavings, etc	m3	679
<u>Coarse river sand filling supplied by the contractor</u>			
15	Under floors etc	m3	137
<u>COMPACTION OF SURFACES</u>			
16	Compaction of ground surfaces incl scarifying of 150mm and breaking down oversize material, adding material where necessary and compacting to 97% MOD AASHTO	m2	1 900
<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	1 900
18	To bottoms of trenches	m2	52
<u>Prescribed density test on filling:</u>			
19	Modified AASHTO Density test.	No	8
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 2			
EARTHWORKS			

Item No	Quantity	Rate	Amount
<u>SECTION No. 2</u>			
<u>BILL No. 3</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
SUPPLEMENTARY PREAMBLES			
<p>Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill</p> <p>Reference to drawings and details:</p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Cost of tests</u>			
<p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. (Test cubes are measured separately).</p>			
Carried Forward		R	
Section No. 2 Bill No. 3 CONCRETE, FORMWORK AND REINFORCEMENT			

Brought Forward			R	
<u>Formwork</u>				
<p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use.</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p> <p>Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons.</p> <p>Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks"</p>				
<u>UNREINFORCED CONCRETE CAST ON FORMWORK</u>				
<u>15MPa/19mm concrete</u>				
1	Surface blinding under footings and bases	m3	20	
<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
<u>25MPa/19mm concrete in:</u>				
2	Walkways	m3	180	
3	Aprons	m3	1	
4	V-drains	m3	55	
Carried Forward			R	
<p>Section No. 2 Bill No. 3 CONCRETE, FORMWORK AND REINFORCEMENT</p>				

Brought Forward			R
5	Storm-water drainage	m3	11
6	Bases	m3	24
7	Surface beds cast in panels on waterproofing	m3	275
<u>TEST BLOCKS</u>			
8	Making and testing 150 x 150 x 150mm concrete strength test cube	No	7
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with steel float to:</u>			
9	Walkways, aprons, etc.	m2	670
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY II)</u>			
<u>Smooth form work to soffit of :</u>			
10	Walkways	m2	670
11	Aprons	m2	180
<u>Saw cut joints:</u>			
12	8 x 12mm Saw-cut joints in top of concrete	m	55
<u>Horizontal construction joints through concrete including thick cement slurry to one face on:</u>			
13	Surface beds not exceeding 300mm thick	m	41
<u>Smooth formwork to sides</u>			
14	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	120
<u>REINFORCEMENT</u>			
(CPAP formula work group no. 114)			
<u>Mild steel reinforcement to structural concrete work</u>			
15	Various diameter bar reinforcement	t	12.00
Carried Forward			R
Section No. 2			
Bill No. 3			
CONCRETE, FORMWORK AND REINFORCEMENT			

Brought Forward				R
	<u>Fabric reinforcement</u>			
16	Type 193 fabric reinforcement in concrete surface beds, slabs, etc.	m2	110	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
Bill No. 3				
CONCRETE, FORMWORK AND REINFORCEMENT				

Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL No. 4</u></p> <p><u>MASONRY</u></p> <p>SUPPLEMENTARY PREAMBLES</p> <p>Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill</p> <p>Reference to drawings and details:</p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p> <p>Contractor to keep cavities clean all the time</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Brickwork</u></p> <p><u>Sizes in descriptions</u></p> <p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick.</p> <p><u>Face bricks</u></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p> <p><u>Pointing</u></p> <p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p> <p><u>BRICKWORK IN FOUNDATIONS</u></p> <p><u>Brickwork of NFP bricks in class II mortar in:</u></p>			
1	Half brick to foundation wall	m2	5	
	Carried Forward		R	
	Section No. 2 Bill No. 4 MASONRY			

Brought Forward			R
2	One brick foundation walls	m2	85
<u>BRICKWORK IN SUPERSTRUCTURE</u>			
<u>Brickwork of NFP bricks in class II mortar in:</u>			
3	Half brick walls	m2	100
4	One brick walls	m2	290
<u>Brickwork reinforcement</u>			
5	75mm Wide reinforcement built in horizontally	m	750
6	150mm Wide reinforcement built in horizontally	m	750
<u>Prestressed fabricated lintels</u>			
7	110 x 75mm Lintels in lengths not exceeding 3m	m	154
<u>Turning pieces</u>			
8	230mm Wide turning piece to lintels etc	m	114
<u>Galvanised hoop iron cramps, ties, etc</u>			
9	30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork	No	621
<u>NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS</u>			
<u>Natural grey sills in single lengths bedded in class I mortar including metal fixing lugs etc</u>			
10	15 x 150mm Wide sills set flat and slightly projecting	m	154
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 4			
MASONARY			

Item No		Quantity	Rate	Amount
	<u>SECTION No. 2</u>			
	<u>BILL No. 5</u>			
	<u>WATERPROOFING</u>			
	<u>PREAMBLES</u>			
	For preambles refer to "Model Preambles for Trades"			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Waterproofing</u>			
	Waterproofing of roofs, basements, etc. shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets, etc. with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs.			
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill			
	Reference to drawings and details:			
	Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course</u>			
1	In walls	m2	45	
	<u>One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting sealed at laps with Gunplas Pressure Sensitive Tape</u>			
2	Under surface beds	m2	22	
	Carried Forward		R	
	Section No. 2 Bill No. 5 WATERPROOFING			

Brought Forward			R
<u>Clear silicone sealant</u>			
3	In joint sealing and pointing between external steel window or timber door frames and facebrick surround.	m	56
<u>JOINT SEALANTS, ETC</u>			
<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>			
4	10 x 10mm In expansion joints in floors or walls including raking out expansion joint filler as necessary.	m	47
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 5			
WATERPROOFING			

Item No		Quantity	Rate	Amount
	<u>SECTION No. 2</u>			
	<u>BILL No. 6</u>			
	<u>ROOF COVERINGS, ETC</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	Proprietary products in descriptions			
	Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent. If the item specified in the Bills of Quantities is not applicable a similar approved product to be used.			
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill			
	Reference to drawings and details:			
	Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.			
	<u>Guarantee</u>			
	The contractor will be required to provide a written guarantee, stating that :			
	1. The roof sheeting is of the specified thickness.			
	2. The client is indemnified against any defects, including colour deterioration for a minimum period of 15 years.			
	3. The rate for roof sheeting is to include the cost of all the items involved to bring the fixing of roof sheeting to completion			
	<u>ROOF AND WALL LINING AND INSULATION</u>			
	Supplementary Preambles			
	Isoboard' products are to be installed in strict accordance with the manufacturers written instructions and Agreement Certificate recommendations.			
	Carried Forward		R	
	Section No. 2 Bill No. 6 ROOF COVERING,etc.			

Brought Forward			R
<p>Sheets are to be stored on flat surfaces, covered and protected from exposure to inclement weather, sunlight and any form of UV radiation and from surface or edge damage during storage and installation. Damaged sheets are to be removed from the site immediately and replaced with new sheets.</p> <p>In installations not exceeding 8m the sheets are to be installed in single lengths without joints where possible. Where the installed length is such as to require joints between ends of sheets, the joints must occur over supports and should be staggered. An expansion gap of 5mm must be allowed at butt ends of boards.</p> <p><u>STEEL ROOF SHEETING AND ACCESSORIES</u></p> <p><u>0,58mm Thick Z200 "IBR Profile" galvanised metal roof sheeting, in single sheet lengths, with "Chromadek" finish to external face and standard backing coat to internal face. Sheeting to include one coat plascon universal undercoat and two coats velvago water based.</u></p> <p>Note: Contractor to spot prime roof sheeting with Metalcare Galvanised Iron Primer (GIP1) before applying undercoat.</p>			
1	Roof sheeting laid to a pitch not exceeding 25° and secured to timber purlins at approximately 1 200mm centres including turning up sheet at ridge and turning down sheet at eaves.	m2	3 109
2	Ridge capping 460mm girth 3 (three) times bent and notched on site to suit roof profile	m	462
3	Side flashing 385mm girth 3 (three) times bent	m	466
4	abutment flashing 550mm girth 3 (three) times bent	m	150
5	Narrow and broad flute closers 700mm girth	m	924
6	Side cladding	m	466
7	Extra over for drilling hole into down pipe	No	28
Carried Forward to Summary of Section No. 2			R
<p>Section No. 2</p> <p>Bill No. 6</p> <p>ROOF COVERING,etc.</p>			

[illegible]

<p style="text-align: right;">Brought Forward</p> <p><u>CARPENTRY & JOINERY</u></p> <p>SUPPLEMENTARY PREAMBLES</p> <p>Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill</p> <p>Reference to drawings and details:</p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p> <p><u>Roof trusses</u></p> <p>The truss system shall be designed by an Engineer and the Contractor shall complete and submit a certificate of confirmation. This certificate will state that the trusses have been designed, manufactured and erected in have been designed, manufactured and erected in have been designed, manufactured and erected in accordance with the relevant SABS code. The details of the registered engineer certifying this will appear on the certificate.</p> <p><u>Joinery</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc.</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes.</p> <p><u>Fixing</u></p> <p>All nailing of timber roof trusses, purlins, etc shall be done with galvanised nails. In coastal areas, copper, aluminium or stainless steel nails shall be used.</p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.</p> <p>Where items are described as "bolted" the bolts have been measured elsewhere.</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 2 Bill No. 7 CARPENTRY AND JOINERY</p>	<p style="text-align: center;">R</p>
	R

<p style="text-align: right;">Brought Forward</p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>ROOFS ETC</u></p> <p><u>PREFABRICATED ROOF TRUSSES, ETC.</u></p> <p><u>Plate nailed timber roof truss construction</u></p> <p>The following is applicable in respect of roof trusses:</p>		R	
<p style="text-align: right;">Carried Forward</p> <p>Section No. 2 Bill No. 7 CARPENTRY AND JOINERY</p>		R	

Brought Forward			R
<p>Prefabricated timber roof trusses shall be constructed of South African pine by a firm of specialist designer manufacturers. Trusses to be a minimum of 1325mm centres and are to support metal roof covering. Ceilings are either gypsum plasterboard or claddit (suspended or fixed). Prices must include for the design , plans and approval of all timber trusses and no claim shall be considered. An Engineers approval certificate is required once the roof truss installation is complete and is for the contractors account.</p> <p>The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from the architect and/or the site before design or fabrication commences</p> <p><u>Sawn softwood</u></p> <p><u>The following is applicabe in respect of roof trusses, trusses not exceeding 25 degree pitch maximum. The contractor is to confirm dimensions from the Architect and confirm actual dimensions on site before fabrications:</u></p>			
1	<p>Roof construction to double pitched roof size 48.51 x 8m (measured on plan over eaves overhang at bottom end and 300mm verge overhang both sides) and 1.75m high overall including wall plates, trusses at maximum 1100mm centres, girders, permanent bracing, 38 x 75mm purlins at maximum 1250 centres and all necessary galvanised steel cleats, hangers, hurricane clips, brackets, etc. (Block A)</p>	No	1
2	<p>Roof construction to double pitched roof size 46.62 x 8m (measured on plan over eaves overhang at bottom end and 300mm verge overhang both sides) and 1.75m high overall including wall plates, trusses at maximum 1100mm centres, girders, permanent bracing, 38 x 75mm purlins at maximum 1250 centres and all necessary galvanised steel cleats, hangers, hurricane clips, brackets, etc. (Block B)</p>	No	1
Carried Forward			R
<p>Section No. 2 Bill No. 7 CARPENTRY AND JOINERY</p>			

Brought Forward			R
3	Roof construction to double pitched roof size 39.72 x 8.30m (measured on plan over eaves overhang at bottom end and 300mm verge overhang both sides) and 1.75m high overall including wall plates, trusses at maximum 1100mm centres, girders, permanent bracing, 38 x 75mm purlins at maximum 1250 centres and all necessary galvanised steel cleats, hangers, hurricane clips, brackets, etc. (Block E)	No	1
4	Roof construction to double pitched roof size 37.80 x 8.30m (measured on plan over eaves overhang at bottom end and 300mm verge overhang both sides) and 1.75m high overall including wall plates, trusses at maximum 1100mm centres, girders, permanent bracing, 38 x 75mm purlins at maximum 1250 centres and all necessary galvanised steel cleats, hangers, hurricane clips, brackets, etc. (Block D)	No	1
5	Roof construction to double pitched roof size 24.10 x 5.46m (measured on plan over eaves overhang at bottom end and 300mm verge overhang both sides) and 1.75m high overall including wall plates, trusses at maximum 1100mm centres, girders, permanent bracing, 38 x 75mm purlins at maximum 1250 centres and all necessary galvanised steel cleats, hangers, hurricane clips, brackets, etc. (Ablutions)	No	1
6	Roof construction to double pitched roof size 18.70 x 9.90m (measured on plan over eaves overhang at bottom end and 300mm verge overhang both sides) and 1.75m high overall including wall plates, trusses at maximum 1100mm centres, girders, permanent bracing, 38 x 75mm purlins at maximum 1250 centres and all necessary galvanised steel cleats, hangers, hurricane clips, brackets, etc. (Admin Block)	No	1
7	Roof construction to double pitched roof size 15.83 x 7.32m (measured on plan over eaves overhang at bottom end and 300mm verge overhang both sides) and 1.75m high overall including wall plates, trusses at maximum 1100mm centres, girders, permanent bracing, 38 x 75mm purlins at maximum 1250 centres and all necessary galvanised steel cleats, hangers, hurricane clips, brackets, etc. (New Block)	No	1
<u>DOORS ETC</u>			
Carried Forward			R
Section No. 2 Bill No. 7 CARPENTRY AND JOINERY			

Brought Forward			R
<u>Solid hollow core door for heavy duty with 3,2mm standard hardboard hung to timber frames (To be complete as per the door schedule)</u>			
8	44mm Door 813 x 2 032mm high	No	39
9	44mm Door 1612 x 2 032mm high	No	4
<u>Wrought meranti doors hung to timber frames (complete as per the door schedule)</u>			
10	44mm Framed ledged and batten door 813 x 2032mm high of 44 x 114mm top rail, stiles, middle ledge and braces and 44 x 244mm bottom rail filled in with 22mm V-jointed one side boarding and covered on other side with 10mm plywood with veneer to match, door let into and including rebates all round	No	15
<u>Wrot meranti frames (To be complete as per the door schedule)</u>			
11	1.6mm Thick rebated frames for door size 813 x 2100mm D1	No	54
12	1.6mm Thick rebated frames for door size 1612 x 2100mm	No	4
<u>EAVES, VERGES, ETC</u>			
<u>Everite Nutec medium density fibre-cement</u>			
13	12 x 225mm Fascia boards including aluminium H-profile jointing strips	m	462
14	80 x 200mm Socketless barge boards including aluminium H-profile jointing strips	m	222
<u>SKIRTINGS</u>			
<u>Wrought meranti</u>			
15	19 x 50mm Skirting including 19mm quadrant bead nailed	m	820
16	19mm Quadrant bead, nailed to skirting.	m	820
17	12 x 12mm Quadrant bead, nailed to ceilings at eaves, painted white to match ceiling	m	820
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 7			
CARPENTRY AND JOINERY			

Item No		Quantity	Rate	Amount
	<u>SECTION 2</u>			
	<u>BILL No. 8</u>			
	<u>CEILINGS</u>			
	SUPPLEMENTARY PREAMBLES			
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill			
	Reference to drawings and details:			
	Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete. Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as bolted, the bolts have been given elsewhere			
	<u>Ceilings</u>			
	Unless otherwise described ceilings shall be deemed to			
	<u>Bulkheads</u>			
	Bulkheads are defined as those portions of ceilings which are stepped down from the general ceiling level in a particular room or area and which generally occur along the perimeter. Their purpose is either to conceal services or to create architectural features			
	Bulkheads have only been described as such where they conform to the above definition and where the horizontal or vertical dimensions do not exceed 900mm. Where these dimensions are more than 900mm such portions of ceilings have been included in the appropriate general items of ceilings.			
	Carried Forward		R	
	Section No. 2 Bill No. 8 CEILINGS, PARTITIONS AND ACCESS FLOORING			

Brought Forward			R
Unless otherwise described bulkheads shall be deemed to be horizontal along the length.			
<u>Steel components</u>			
All steel components for ceilings, partitions, etc. are to be galvanised in accordance with SANS 121			
<u>NAILED UP CEILINGS</u>			
<u>6,4mm Gypsum plasterboard with 32mm wrought softwood half round cover strips over joints</u>			
1	Ceilings including 38 x 38mm SA pine brandering at 300mm centres in one direction.	m2	2 251
2	Extra over ceiling for 800 x 800mm trap door with 38 x 38mm softwood frame and 38 x 114mm sawn softwood trimmers, fitted flush in opening with 19 x 50mm wrot softwood fillets all round (Provisional)	No	30
<u>Rhino Gypsum plasterboard cornices</u>			
3	75 mm Coved cornices	m	820
<u>INSULATION</u>			
<u>Non-Combustible lightweight fibreglass insulation blanket</u>			
4	100mm Insulation closely fitted between tie beams and laid loose on top of brandering.	m2	2 251
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 8			
CEILINGS, PARTITIONS AND ACCESS FLOORING			

Item No		Quantity	Rate	Amount
	<u>SECTION 2</u>			
	<u>BILL No. 8</u>			
	<u>FLOOR COVERINGS, PLASTIC LININGS, ETC</u>			
	SUPPLEMENTARY PREAMBLES			
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill			
	Reference to drawings and details:			
	Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Fixing</u>			
	Floor coverings, wall linings, etc. shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc.			
	<u>FLOOR COVERINGS</u>			
	<u>300 x 300 x 2.5 mm Fully-flexible vinyl tiles</u>			
1	On floors and in door openings	m2	2 251	
	<u>POLISH, SEALERS, ETC</u>			
	<u>Scrub with a neutral detergent and seal with 'three coats water based polymer emulsion or 'other approved sealer:</u>			
2	On vinyl floors	m2	2 251	
	Carried Forward to Summary of Section No. 2		R	
	Section No. 2			
	Bill No. 9			
	FLOOR COVERINGS, PLASTIC LININGS, etc			

Item No	Quantity	Rate	Amount
<p><u>SECTION 2</u></p> <p><u>BILL No. 9</u></p> <p><u>IRONMONGERY</u></p> <p>SUPPLEMENTARY PREAMBLES</p> <p>Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill</p> <p>Reference to drawings and details:</p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p> <p><u>Fixing</u></p> <p>Descriptions of all items shall be deemed to include fixing in position and all fixing accessories</p> <p>All keys are to have a plastic tag with the door number</p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (1999 Edition), the Department of Public Works document No. OW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent:</p>			
Carried Forward		R	
<p>Section No. 2</p> <p>Bill No. 10</p> <p>IRONMONGERY</p>			

Brought Forward			R
<p><u>Finishes to ironmongery:</u></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list BS Satin bronze lacquered CP Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p> <p>Fixing:</p> <p>Descriptions of wall mounted and floor standing ironmongery items shall be deemed to include for fixing in position and all fixing accessories</p> <p>Descriptions of proprietary items shall be deemed to include fixing in position and all fixing accessories</p> <p>All ironmongery work to be done as per the Architectural ironmongery schedule</p> <p><u>HINGES, BOLTS, ETC.</u></p> <p><u>Hinges, etc.:</u></p>			
1	102 x 76 x 2mm Two ball bearing butt hinge.	Pairs	43.0
2	Geze or similar approved delayed action door closer code: TS4000	No	20
<u>Bolts, indicator bolts, etc :</u>			
3	Union bathroom WC indicator and turnknob code:37651AS	No	24
<u>LOCKS</u>			
<u>The following locks are to be suitable for master key operation:</u>			
4	33mm Heavy duty roller catch	No	33
5	Cylinder sash lock (code: L-2215-78SS/SL)	No	32
6	2 x 18 Cylinder profile (Code: scmkd)	No	32
7	8mm Bathroom/WC deadlock SS.	No	24
Carried Forward			R
<p>Section No. 2 Bill No. 10 IRONMONGERY</p>			

Brought Forward			R
<u>Union</u>			
8	2x18 Double Euro Cylinder SC	No 25	
9	LH8881 Latch slam lock w/o cylinder	No 16	
<u>HANDLES</u>			
<u>Handles, etc</u>			
10	FFP65 x 50SS Flush Finger Pull 65X50mm	No 25	
11	Union "Gower Handle" code:CZ682-05CH	No 25	
12	Lever handle on rose with cylinder escutcheons	No 36	
13	76mm Union stainless steel dove pull handle with 152x76mm back plate	No 33	
14	Dove stainless steel pull handle on 152x152 back plate pull handle on back plate code: SS5D66-06SS	No 33	
15	300mm Union stainless steel pull handle code:PHD-CF-300-22SS	No 33	
<u>LETTERS, NAME PLATE, ETC</u>			
<u>Union</u>			
16	152 x 152 x 2mm Anodised silver engraved sign with "Fire extinguisher" fixed to wall or door	No 5	
17	152 x 152 x 2mm Anodised silver engraved sign with "Male" fixed to wall or door	No 5	
18	152 x 152 x 2mm Anodised silver engraved sign with "Female" fixed to wall or door	No 5	
19	152 x 152 x 2mm Anodised silver engraved sign with "Paraplegic Toilet Sign" fixed to wall or door	No 3	
<u>PUSH PLATES AND KICK PLATES</u>			
Carried Forward			R
Section No. 2 Bill No. 10 IRONMONGERY			

Brought Forward				R
<u>1.2mm Thick anodised aluminium plates countersunk screwed along edges at not exceeding 200mm centres:</u>				
20	150 x 150mm Push plate	No	42	
21	700 x 800 x 1.2mm Union kick plate	No	42	
<u>SUNDRIES</u>				
<u>Union</u>				
22	Black rubber door stop fixed to floor (code:AL8730AS)	No	42	
<u>Dorma</u>				
23	Stainless steel hat and coat hook with rubber buffer. (code DDH-SS-020)	No	43	
24	Stainless steel round cylinder escutcheon. (code DCE-002 S.S)	No	42	
<u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u>				
<u>Standard 'Parrot' or equally aproved wall aluminum frame wall mounted Bulletin Boards (to be installed in strict accordance with the supplier/manufacturer specification):</u>				
25	2 x 2400 x 1200mm Pinning board with standard 20mm wide aluminium frame with concealed mounting & carpet finish.	No	25	
<u>Standard 'Parrot' or equally aproved wall aluminum frame wall mounted Swing Leaf Chalk Boards, with chalk trays (to be installed in strict accordance with the supplier/manufacturer specification):</u>				
26	2 x 3600 x 1140mm Chalkboard Non-Magnetic (Green) with standard 20mm wide aluminium frame with concealed mounting & Chalkrail at the back of board, Right hand board to have white lines spaced at 50 mm centres, permanently screened on.	No	25	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
Bill No. 10				
IRONMONGERY				

Item No		Quantity	Rate	Amount
	<p><u>SECTION 2</u></p> <p><u>BILL NO. 10</u></p> <p><u>METALWORK</u></p> <p>SUPPLEMENTARY PREAMBLES</p> <p>Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill</p> <p>Reference to drawings and details:</p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p> <p><u>Trade names</u></p> <p>Wherever trade names are specified in clauses, headings or item descriptions in this bill, the words 'or equal and approved' are deemed to be included in the relevant clause, heading or item description</p>			
	<p><u>CPAP WORK GROUP 136</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p>			
	<p style="text-align: right;">Carried Forward</p> <p>Section No. 2 Bill No. 11 METALWORK</p>		R	

<p style="text-align: center;">Brought Forward</p> <p>Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>NOTE : Pressed steel door frames shall be supplied with three 100mm steel washered brass butt hinges and frames for two leaved doors with three pairs of 100mm steel washered brass butt hinges</p> <p>Transomes for fanlights shall be fitted with a pair of 75mm steel washered butt hinges</p> <p style="text-align: center;">Carried Forward</p> <p>Section No. 2 Bill No. 11 METALWORK</p>		<p>R</p>	
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Brought Forward			R	
<u>PRESSED STEEL DOOR FRAMES</u>				
<u>1,6mm Double rebated frames suitable for half and one brick walls (To be complete as per the door schedule)</u>				
1	Frame for door 813 x 2032mm high and glazed fixed fanlight 688mm high	No	30	
<u>GALVANIZED STEEL WINDOWS, DOORS, ETC</u>				
<u>Galvanized steel school window frames with PFX7 standard sections pointing all round with silicon both sides (complete as per the Architectural window schedule)</u>				
2	Window 1300 x 1410mm high with one top hung light (W2)	No	25	
3	Window 889 x 1250mm high with one top hung light (W3)	No	56	
4	Window 1300 x 980mm high with one top hung light (W4)	No	45	
5	Window 889 x 854mm high with one top hung light (W5)	No	42	
<u>BURGLAR BARS</u>				
<u>"Xpanda" Supaguard type burglar bars comprising 12mm horizontal and vertical members all with fixing lugs fixed to brickwork with 60mm unremovable tamper proof screws. Or similar approved.</u>				
6	Window 1300 x 1410mm high with one top hung light (W2)	No	25	
7	Window 889 x 1250mm high with one top hung light (W3)	No	56	
8	Window 1300 x 980mm high with one top hung light (W4)	No	45	
9	Window 889 x 854mm high with one top hung light (W5)	No	42	
<u>SUNDRY GALVANIZED STEELWORK</u>				
Carried Forward			R	
Section No. 2 Bill No. 11 METALWORK				

Brought Forward			R
<u>GALVANIZED WELDED SCREENS, GATES, ETC</u>			
<u>Galvanized mild steel screens and gates</u>			
10	Double security gate 2380 x 2080mm high	No	35
11	Single security gate 1540 x 2080mm high	No	4
<u>Barrier Mesh in Ceilings</u>			
12	Flatex 338/VEM 6311F expanded metal steel mesh fixed to timber brandering in ceilings	m2	134
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 11			
METALWORK			

Item No		Quantity	Rate	Amount
	<u>SECTION 2</u>			
	<u>BILL NO. 11</u>			
	<u>PLASTERING</u>			
	SUPPLEMENTARY PREAMBLES			
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill			
	Reference to drawings and details:			
	Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.			
	<u>Trade names</u>			
	Wherever trade names are specified in clauses, headings or item descriptions in this bill, the words 'or equal and approved' are deemed to be included in the relevant clause, heading or item description			
	<u>Moisture tests:</u>			
	Before any finishes, coverings, etc are applied to screeds, plastering, etc or any other in-situ finish moisture tests are to be carried out to the complete satisfaction of the Principal Agent to ensure that these surfaces have the correct moisture content for the finish to be applied			
	<u>Labours, etc.:</u>			
	Labours such as fair, rounded and chamfered edges, trowel cuts, throats, V-joints, angles, etc shall be deemed to be included in the descriptions			
	<u>Granolithic:</u>			
	Coloured granolithic shall be tinted with an approved colouring pigment mixed into a true and even colour. Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying.			
	Carried Forward		R	
	Section No. 2 Bill No. 12 PLASTERING			

<p style="text-align: center;">Brought Forward</p> <p>Granolithic shall be laid in panels not exceeding 14m\² for monolithic finishes, not exceeding 9,5m\² for bonded finishes and not exceeding 6m\² for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width.</p> <p>Unless otherwise described, granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic.</p> <p>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc. is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic.</p> <p>Where possible joints between panels shall be positioned over joints in the floor slab and shall be at separated by strips of wood or fibreboard and finished least 3mm wide through the full thickness of the finish, with V-joints</p> <p><u>Cement plaster:</u></p> <p>Unless otherwise described, cement plaster shall be taken to mean Class 1 cement plaster</p> <p><u>Self - levelling screed:</u></p> <p>To Contractor's expense should Grade 1 variance in F1 above not be achieved. Grind & prime existing surface with self-leveling Tal-Screed Master or equal & approved - thickness between between 4 to 5mm</p> <p style="text-align: center;">Carried Forward</p> <p>Section No. 2 Bill No. 12 PLASTERING</p>		R	
		R	

Brought Forward			R
Self levelling screed: To Contractor's expense should Grade 1 variance in F1 above not be achieved. Grind & prime existing surface with self-leveling Tal-Screed Master or equal & approved - thickness between between 4 to 5mm			
<u>SCREEDS</u>			
<u>1:3 Cement plaster screeds power floated on concrete</u>			
1	25mm Thick on floors and landings	m2	766
2	30mm thick on floors and landings to receive tiles	m2	150
3	30mm thick on slabs falls	m2	21
4	Average 100mm thick screed on slabs and falls	m2	36
<u>INTERNAL PLASTER</u>			
<u>Cement plaster on brickwork</u>			
5	On walls	m2	1 870
6	Concrete soffit and beams	m2	150
7	On narrow widths	m2	187
<u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u>			
<u>Dividing strips</u>			
8	6 x 50mm Flat section brass dividing strips between different floor finishes	m	41
Carried Forward to Summary of Section No. 2			R
Section No. 2 Bill No. 12 PLASTERING			

Item No		Quantity	Rate	Amount
	<u>SECTION 2</u>			
	<u>BILL NO. 12</u>			
	<u>TILING</u>			
	SUPPLEMENTARY PREAMBLES			
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill			
	Reference to drawings and details:			
	Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.			
	<u>Trade names</u>			
	Wherever trade names are specified in clauses, headings or item descriptions in this bill, the words 'or equal and approved' are deemed to be included in the relevant clause, heading or item description			
	<u>Samples</u>			
	Contractor to allow in the rates for the provision of samples where so required by the Principal Agent			
	<u>Descriptions</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat			
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the "Tal Professional" range of products as recommended by the manufacturer of the tiles			
	Carried Forward		R	
	Section No. 2 Bill No. 13 TILING			

Brought Forward			R
<u>CPAP WORK GROUP 144</u>			
<u>WALL TILING</u>			
<u>300 x 300 x 4,7mm Grade 1 glazed ceramic wall tiles (PC R250/m2) with jointing and grouting in continuous joints in both directions, fixed with adhesive to plaster (plaster elsewhere)</u>			
1	On walls	m2	98
2	In splashbacks	m2	85
3	On narrow widths	m2	35
<u>FLOOR TILING</u>			
<u>350 x 350mm Ceramic tiles (PC R350/m2) fixed to internal floor screed with an approved tile adhesive (elsewhere specified) mixed with an approved bonding liquid in lieu of water with joints continuous in both directions and grouted with an approved tile grout (elsewhere specified), excess grout on the surface to be cleaned with water as work proceeds.</u>			
4	On floors and landings	m2	320
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 13			
TILING			

Item No		Quantity	Rate	Amount
	<p><u>SECTION 2</u></p> <p><u>BILL NO. 13</u></p> <p><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></p> <p>SUPPLEMENTARY PREAMBLES</p> <p>Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill</p> <p>Reference to drawings and details:</p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p> <p><u>Trade names</u></p> <p>Wherever trade names are specified in clauses, headings or item descriptions in this bill, the words 'or equal and approved' are deemed to be included in the relevant clause, heading or item description</p>			
	<p><u>CPAP WORK GROUP 146</u></p> <p><u>SANITARY PLUMBING</u></p> <p><u>RAINWATER DISPOSAL</u></p> <p><u>Marley Vynadeep or other approved with baked enamel finish fixed to supplier's specifications</u></p>			
1	125 x 125mm half round gutters, including fixing to fascia board.	m	924	
2	Extra over 228 x 228mm eaves gutter for stopped end	No	15	
3	Extra over 125 x 125mm eaves gutter for angle	No	10	
4	Extra over 125 x 125mm eaves gutter for outlet for 125 x 125mm pipe	No	10	
	Carried Forward		R	
	<p>Section No. 2</p> <p>Bill No. 14</p> <p>PLUMBING AND DRAINAGE</p>			

Brought Forward			R
5	125 x 125mm rainwater downpipes	m	50
6	Extra over 125 x 125mm rainwater pipe for bend	No	15
7	Extra over 125 x 125mm rainwater pipe for shoe	No	10
<u>SANITARY PLUMBING, FITTINGS, SUNDRIES, ETC.</u>			
<u>NOTE:</u>			
All joints/surrounds to wash hand basin to be sealed with Sikaflex -11 FC+ (colour white).			
<u>L G Green or other approved</u>			
8	Fabricated steel wash trough size 760 x 570 x 380mm deep complete with was unions, etc epoxy glued to and including standard precast concrete stands	No	8
<u>Franke sanitaryware or similar approved:</u>			
9	"Franke Citiline DT100E" or other approved inset sink and drainer overall size 1000 x 457 with one end bowl(measured elsewhere)	No	6
10	"Franke Citiline DT100E" or other approved inset sink and drainer overall size 1350x 457 with two end bowls(measured elsewhere)	No	1
<u>Vaal Sanitaryware or similar approved</u>			
11	Vaal or other approved wall mounted wash hand basin with single tap hole fixed with and including "Siphon" or other approved cover pedestal	No	16
12	Vaal approved wall mounted paraplegic wash hand basin with single tap hole fixed with and including "Siphon" or other approved cover pedestal	No	2
13	Vaal or equally approved wall mounted urinal, inclusive of concealed trap and back inlet	No	12
14	Vaal Sanitaryware vitreous china "Klip" 104° outlet washdown pan with enlarged pedestal (code 751200), pan can be used with a WISA concealed cistern or with a suitable back inlet flush valve.	No	12
Carried Forward			R
Section No. 2 Bill No. 14 PLUMBING AND DRAINAGE			

Brought Forward			R
15	Vaal Sanitaryware vitreous china "Pearl Paraplegic" semi close couple 90° outlet open rim washdown pan (code 7300SC), pan can be used with a WISA concealed cistern or with a suitable back inlet flush valve.	No	1
<u>Extruded polyvinyl acetate:</u>			
16	Granite finish closed coupled WC	No	23
17	Atlas granite finish or other approved wash hand basin size 520 x 432 x 150mm deep with narrow raised rims and 32mm flanged apron to front and 32mm diameter recessed waste outlet to bowl and fixing in position on and including a pair of galvanised steel galleys brackets bolted to wall.	No	8
18	Atlas' or other approved bowl urinal code 507AP with and including waterless urinal waste fitting code 496AP and bolting to plastered wall.	No	6
19	Soap dish	No	8
<u>SOIL DRAINAGE</u>			
<u>uPVC Class 34 sewer pipes</u>			
20	110mm Pipes laid in and including trenches not exceeding 1m deep	m	134
21	110mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	10
<u>Extra over uPVC pipes for fittings</u>			
22	110mm Bend	No	10
23	110mm Junction	No	10
24	160 x 110mm Reducing junction	No	10
25	110mm Access bend	No	10
<u>PVC gulleys</u>			
26	110mm Gulley not exceeding 750mm deep	m	50
Carried Forward			R
Section No. 2 Bill No. 14 PLUMBING AND DRAINAGE			

Brought Forward			R
27	110mm Gulley exceeding 750mm and not exceeding 1000mm deep	m	10
<u>Rodding Eyes</u>			
28	110mm cast iron rodding eyes set in 300 x 300 x 300mm thick 15MPa/19 unreinforced cobcrete surround finished smooth on exposed surfaces with rounded angles	No	4
<u>Sumps, catchpits, inspection chambers, manholes, etc cgratings and covers elsewhere)</u>			
29	Excavate for and build manhole with shaft, lower section comprising one brick thick sides in 14Mpa concrete bricks in 3:1 cement mortar, on 150mm thick 25/19mm concrete bottom, flush with external wall-faces, on 50mm thick concrete blinding, including 15/19 concrete benching finished smooth with a steel float, walls rendered smooth internally in 3:1 cement plaster, with 150mm thick 25/19mm concrete cover slab, reinforced with 12mm diameter bars and with 600 x 600mm opening. upper shaft comprising one brick sides in 14 Mpa concrete bricks in 3:1 cement mortar, walls rendered smooth internally in 3:1 cement plaster, and fitted with cover and frame bedded in cement mortar (cover/frame elsewhere), including step irons at 0.3m centres. Overall size internally 1.2 x 0.5m and depth exceeding 1.5m but not exceeding 2m to invert.	No	3
30	550mm Diameter x 176kg Type 2A heavy duty manhole cover and frame	m	10
31	Cast iron gratings, covers, etc	No	2
<u>WASTE UNIONS ETC</u>			
32	32mm Chromium plated lift-up slotted basin waste union	No	16
<u>TRAPS ETC</u>			
<u>"Cobra Watertech" or other approved</u>			
33	32mm 340 CP bottle trap	No	23
<u>TAPS, VALVES, ETC</u>			
Carried Forward			R
Section No. 2 Bill No. 14 PLUMBING AND DRAINAGE			

Brought Forward			R
<u>"Cobra Watertech" or other approved</u>			
34	15mm Stellar pillar tap	No	16
35	15mm Stop cock	No	4
<u>SANITARY PLUMBING</u>			
<u>uPVC pipes</u>			
36	40mm Pipes	m	122
<u>Extra over uPVC pipes for fittings</u>			
37	40mm Bend	No	60
38	50mm Bend	No	60
39	40mm inspection tee	No	60
40	50mm inspection tee	No	60
41	40mm inspection bend	No	60
42	50mm inspection bend	No	60
43	110mm Reducer	No	60
44	110mm Bend	No	60
45	110mm Access bend	No	20
46	50mm Access junction	No	20
47	110mm Access junction	No	20
48	110mm Access reducing junction	No	20
49	110mm Access cap	No	10
50	110 mm Y-Junction	No	15
51	100mm x 50 mm Junction	No	15
52	110mm Straight pan connector	No	30
Carried Forward			R
Section No. 2 Bill No. 14 PLUMBING AND DRAINAGE			

Brought Forward			R
<u>Sundries</u>			
53	110mm uPVC gully "P"trap complete with gully gratings and surrounds	No 10	
54	110mm uPVC two-way vent valve fitted onto vent pipe	No 15	
<u>TESTING</u>			
55	Allow for testing the sanitary installation and waste pipe installation to the satisfaction of the Principal agent and municipal Authorities and for re-testing after making good all defects.	Item	
56	Testing soil and waste pipe system	Item	
<u>WATER SUPPLIES</u>			
<u>Class 12 HDPE pipe laid on Class "B" bedding, including excavation in pickable material, backfilling and compacting to 95% Modified AASHTO density and all necessary risk of collapse and dewatering of trenches</u>			
57	32mm Pipes laid in trenches not exceeding 1m deep	m 50	
58	32mm HDPE to copper straight coupler	No 15	
59	32mm Elbow	No 30	
60	32mm Tee	No 30	
61	32mm Reducing tee	No 30	
62	32mm Reducer	No 30	
<u>Linea or equally approved Pex-al-pex multi-layered pipes with nickel coated brass mechanical crimp fittings</u>			
63	16mm Pipes	m 70	
64	25mm Pipes	m 70	
65	32mm Pipes	m 70	
66	16mm Pipe fittings	No 70	
Carried Forward			R
Section No. 2 Bill No. 14 PLUMBING AND DRAINAGE			

Brought Forward			R
67	25mm Pipe fittings	No	70
68	32mm Pipe fittings	No	70
69	28mm Diameter KENT water meter	No	1
<u>TESTING</u>			
70	Testing water pipe system	Item	
<u>FIRE APPLIANCES ETC</u>			
<u>Chubb</u>			
71	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	1
72	4,5kg Carbon dioxide fire extinguisher	No	32
<u>WATER SUPPLIES TO FIRE APPLIANCES</u>			
73	Excavation and backfill not exceeding 2m deep for pipe trenches. Backfilling to pipe trenches compacted to 95% Mod AASHTO density	m3	35
74	25 m Fire Horse reel, mounted on wall each connected to main water line, allow 25m piping installed underground to the nearest water line.	No	6
<u>Class 16 uPVC pressure pipes</u>			
75	110mm Pipes laid in trenches (trenches elsewhere)	m	5
<u>Extra over uPVC pipes for uPVC solvent welded pressure fittings</u>			
76	110mm End cap	No	5
77	110mm Reducer	No	10
78	110mm Elbow	No	10
79	110mm Bend	No	10
80	110mm Tee	No	10
Carried Forward			R
Section No. 2 Bill No. 14 PLUMBING AND DRAINAGE			

Brought Forward			R
81	110mm Reducing tee	No	10
<u>Galvanised steel pipes</u>			
82	50mm Pipes	m	45
83	25mm Pipes chased into brick walls	m	50
<u>Extra over galvanised steel pipes for steel fittings</u>			
84	50mm Bush	No	5
85	50mm Elbow	No	20
86	50mm Bend	No	20
87	50mm Tee	No	20
88	50mm Union	No	20
89	50mm Adaptor coupling	No	5
<u>TESTING</u>			
90	Testing fire water pipe system	Item	
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 14			
PLUMBING AND DRAINAGE			

Item No		Quantity	Rate	Amount
	<p><u>SECTION 2</u></p> <p><u>BILL NO. 14</u></p> <p><u>GLAZING</u></p> <p>SUPPLEMENTARY PREAMBLES</p> <p>Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill</p> <p>Reference to drawings and details:</p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p> <p><u>Trade names</u></p> <p>Wherever trade names are specified in clauses, headings or item descriptions in this bill, the words 'or equal and approved' are deemed to be included in the relevant clause, heading or item description</p> <p><u>Samples</u></p> <p>Contractor to allow in the rates for the provision of samples where so required by the Principal Agent</p>			
	<p><u>CPAP WORK GROUP 150</u></p> <p><u>GLAZING TO STEEL WINDOWS</u></p> <p><u>4mm Clear float glass in steel windows with putty</u></p>			
1	Panes not exceeding 0,1m2	m2	74	
2	Panes exceeding 0,1m2 and not exceeding 0.5m2	m2	56	
	<p><u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u></p>			
	Carried Forward		R	
	<p>Section No. 2</p> <p>Bill No. 15</p> <p>GLAZING</p>			

Brought Forward			R
<u>6mm Silvered float glass copper backed mirrors</u> <u>with polished edges holed for and fixed with</u> <u>chromium plated dome capped mirror screws with</u> <u>rubber buffers to plugs in brickwork</u>			
3	Mirror size 600 x 900mm high with four screws	No	5
Carried Forward to Summary of Section No. 2			R
Section No. 2 Bill No. 15 GLAZING			

Item No		Quantity	Rate	Amount
	<p><u>SECTION 2</u></p> <p><u>BILL NO. 15</u></p> <p><u>PAINTWORK</u></p> <p>SUPPLEMENTARY PREAMBLES</p> <p>Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill</p> <p>Reference to drawings and details:</p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p> <p><u>Trade names</u></p> <p>Wherever trade names are specified in clauses, headings or item descriptions in this bill, the words 'or equal and approved' are deemed to be included in the relevant clause, heading or item description</p>			
	<p><u>CPAP WORK GROUP 152</u></p> <p><u>ON FLOATED PLASTER</u></p> <p><u>Prepare surfaces, stop and remove all loose material, apply one coat Plascon Plaster Primer and finish with two coats Wall and All Colour or similar approved paint on:</u></p>			
1	Internal plastered walls	m2	1 870	
	<p><u>ON CONCRETE SURFACES</u></p> <p><u>Prepare surfaces and apply one coat bonding liquid, one coat universal undercoat and two coats super universal enamel :</u></p>			
2	On surface beds with 25mm screeds	m2	150	
	Carried Forward		R	
	<p>Section No. 2</p> <p>Bill No. 16</p> <p>PAINTWORK</p>			

Brought Forward

R

Carried Forward

R

Section No. 2
Bill No. 16
PAINTWORK

Brought Forward			R
<u>ON GYPSUM BOARD SURFACES</u>			
<u>One coat Plascon Professional Plaster Primer and Finish with two coats Plascon Professional Evolution Acrylic or similar approved :</u>			
3	Internal Gypsum ceiling and cornices.	m2	2 751
<u>ON METAL</u>			
<u>Prepare the surface, apply one coat alkyd based zinc chromate primer and two coats gloss enamel paint, on steel:</u>			
4	Window frames	m2	245
5	Gates	m2	247
<u>ON WOOD</u>			
<u>Stop, fill , sand down and prepare wood surfaces and apply one coat Plascon Woodcare pre treatment one coat Plascon universal undercoat and two coats Plascon non drip enamel or similar approved paint on :</u>			
6	On doors	m2	50
7	Door frames	m2	15
8	Roof timbers at eaves and verges	m2	1 120
9	On skirtings, rails, etc not exceeding 300 mm girth	m	820
<u>ON FIBRE CEMENT</u>			
<u>One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use:</u>			
10	External fibre cement fascias and barge boards	m2	684
11	On cills not exceeding 300mm girth.	m2	37
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 16			
PAINTWORK			

[illegible]

Item No		Quantity	Rate	Amount
	<u>SECTION 3</u>			
	<u>BILL NO.1</u>			
	<u>EXTERNAL WORKS</u>			
	<u>FENCING</u>			
	<u>THE FOLLOWING IN EARTHWORKS</u>			
	<u>THE FOLLOWING IN FENCING PERIMETER</u>			
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep:</u>			
1	Holes	m3	34	
2	Trenches.	m3	129	
	<u>Extra over all excavations for carting away</u>			
3	Extra over all excavations for carting away surplus excavated material from the site and dumping at a dumping ground to be found by the Contractor	m3	45	
	<u>Risk of collapse of excavations:</u>			
4	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	546	
	<u>Keeping excavations free of water:</u>			
5	Keeping excavations free from mud and all water including subterranean sources.		Item	
	<u>Earth filling obtained from the excavations and / or prescribed stock piles on site compacted to 93% Mod. AASHTO density:</u>			
6	Trenches and holes	m3	113	
	Carried Forward		R	
	Section No. 3 Bill No. 1 FENCING			

Brought Forward				R
	<u>Prescribed density tests on filling:</u>			
7	Allow for compaction tests by an approved laboratory to determine density of filling material.	No	15	
	<u>SOIL POISONING</u>			
	<u>Approved brand of anti-termite soil poison applied by a Registered Pest Control Company and guaranteed against termite infestation for ten years:</u>			
8	Treat filling under concrete beds with 'Chlordane Heptachlor Aldrin' or equal approved.	m2	86	
	<u>THE FOLLOWING IN CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	SUPPLEMENTARY PREAMBLES			
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill			
	Reference to drawings and details:			
	Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Cost of tests</u>			
	The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. (Test cubes are measured separately).			
Carried Forward				R
Section No. 3 Bill No. 1 FENCING				

Brought Forward			R
<u>Formwork</u>			
Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use.			
The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.			
Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described			
Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons.			
Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks"			
<u>UNREINFORCED CONCRETE CAST ON FORMWORK</u>			
<u>20MPa/19mm concrete</u>			
9	Holes	m3	16
10	Trenches	m3	73
<u>TEST BLOCKS</u>			
11	Making and testing 150 x 150 x 150mm concrete strength test cube	No	15
<u>CONCRETE SUNDRIES</u>			
Carried Forward			R
Section No. 3 Bill No. 1 FENCING			

Brought Forward			R
	<u>Finishing top surfaces of concrete smooth with wood float</u>		
12	Surface beds, slabs, etc	m2	286
	<u>THE FOLLOWING IN METALWORK</u>		
	<u>METALWORK</u>		
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (1999 Edition)		
	<u>Clearvu or similar approved</u>		
13	Clearvu or similar approved high anti-climbing and anticut pressed mesh fencing 2100mm high, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating including aperture size at 76.2mm x 12.7mm and reinforcing V-section ribs, bolted with vandal resistant bolts and clamping plates to 85mm taper locking posts at 3305mm centres with press on post caps including A 4" high toughened steel Shark Tooth spike shall be affixed to panel edge, internally at 6" intervals using Anti-vandal bolts. Spike finish shall be hot dipped galvanised.	m	426
	<u>Gates</u>		
14	7200mm x 2200mm steel sliding gate with 100 x 76 x 3mm steel top and bottom rails and 3no heavy duty vgroove gate rollers over 40 x 40 x 6mm angle track fixed into floor slab with steel lugs at 2400mm c/c with locking mechanism as per architect's specification fixed to 100mm diam steel post	No	1
15	1300 x 2200mm high galvanised steel pedestrian gate as per manufacturer's specification	No	1
	Carried Forward to Summary of Section No. 3		R
	Section No. 3		
	Bill No. 1		
	FENCING		

Item No		Quantity	Rate	Amount
	<u>SECTION 3</u>			
	<u>BILL NO.2</u>			
	<u>EXTERNAL WORKS</u>			
	<u>PAVING</u>			
	<u>THE FOLLOWING IN PAVING</u>			
	Note: Contractor when pricing the document to infuse the preliminary component to be incurred in the rate of each item.			
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavations</u>			
1	Excavate in pickable material for paving not exceeding 2m deep and stockpile excavated material	m3	20	
	<u>Extra over all excavations for carting away</u>			
2	Extra over all excavations for carting away surplus excavated material from the site and dumping at a dumping ground to be found by the Contractor	m3	14	
	<u>Surface Preparation</u>			
3	Trim and level off surface of ground (excavated or filled under this contract to receive crusher run base course, etc., including excavating or filling ripping and scarifying as necessary and compacting the whole area for a depth of 150mm to a density of at least 95% Mod AASHTO maximum density, part to falls.	m2	45	
	<u>G5 Filling supplied by contractor compacted to 93% Mod AASHTO density in layers not exceeding 150mm</u>			
4	Subbase under paving	m3	16	
	<u>G5 Filling supplied by contractor, stabilised with 4% portland cement and compacted to 93% Mod AASHTO density in layers not exceeding 150mm</u>			
5	Subbase under paving	m3	7	
	Carried Forward		R	
	Section No. 3 Bill No. 2 PAVING			

Brought Forward			R
<u>SOIL POISONING</u>			
<u>Soil insecticide</u>			
6	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	45
<u>20mm River sand</u>			
7	Under pavers	m2	3 400
<u>Pavers</u>			
8	Paving of "Interlocking G-blocks" or other approved precast concrete paving blocks size 224 x 112 x 80mm thick to SABS compliance, laid butt joint on 50mm thick river sand bed with sand to falls and cement mixtures swept into joints and hosed down, including preparation of ground or filling.	m2	45
9	Circular cutting	m	9
<u>Precast concrete kerbs</u>			
10	Barrier precast concrete kerb, size 1000 x 280 x 180mm thick, placed in position, bedded and jointed in (3:1) cement mortar and flush pointed on exposed faces, including 15MPa/19mm unreinforced concrete haunching at back of each joint, excavation, backfilling, ramming, etc.	m	11
11	Ditto. but circular on plan not exceeding 4m radius	m	6
<u>Prescribed density tests on filling</u>			
12	"Modified AASHTO Density" test	No	1
Carried Forward to Summary of Section No. 3			R
Section No. 3			
Bill No. 2			
PAVING			

Item No		Quantity	Rate	Amount
	<u>SECTION 3</u>			
	<u>BILL NO.4</u>			
	<u>EXTERNAL WORKS</u>			
	<u>COVERED WALKWAY</u>			
	<u>THE FOLLOWING IN COVERED WALKWAY</u>			
	Note: Contractor when pricing the document to infuse the preliminary component to be incurred in the rate of each item.			
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavations</u>			
1	Excavate in walkway material for driveway not exceeding 2m deep and stockpile excavated material	m3	432	
	<u>Extra over all excavations for carting away</u>			
2	Extra over all excavations for carting away surplus excavated material from the site and dumping at a dumping ground to be found by the Contractor	m3	288	
	<u>Surface Preparation</u>			
3	Trim and level off surface of ground (excavated or filled under this contract to receive crusher run base course, etc., including excavating or filling ripping and scarifying as necessary and compacting the whole area for a depth of 150mm to a density of at least 95% Mod AASHTO maximum density, part to falls.	m2	510	
	<u>G5 Filling supplied by contractor compacted to 93% Mod AASHTO density in layers not exceeding 150mm</u>			
4	Subbase under paving	m3	288	
	<u>G5 Filling supplied by contractor, stabilised with 4% portland cement and compacted to 93% Mod AASHTO density in layers not exceeding 150mm</u>			
5	Subbase under paving	m3	144	
	Carried Forward		R	
	Section No. 3 Bill No. 3 COVERED WALKWAY			

Brought Forward			R
<u>SOIL POISONING</u>			
<u>Soil insecticide</u>			
6	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	510
<u>Precast concrete kerbs</u>			
7	Barrier precast concrete kerb, size 1000 x 280 x 180mm thick, placed in position, bedded and jointed in (3:1) cement mortar and flush pointed on exposed faces, including 15MPa/19mm unreinforced concrete haunching at back of each joint, excavation, backfilling, ramming, etc.	m	640
8	Ditto. but circular on plan not exceeding 4m radius	m	120
<u>Prescribed density tests on filling</u>			
9	"Modified AASHTO Density" test	No	6
<u>THE FOLLOWING IN CONCRETE, FORMWORK AND REINFORCEMENT</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
SUPPLEMENTARY PREAMBLES			
Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill			
Reference to drawings and details:			
Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.			
<u>SUPPLEMENTARY PREAMBLES</u>			
Carried Forward			R
Section No. 3 Bill No. 3 COVERED WALKWAY			

Brought Forward			R
<u>Cost of tests</u>			
<p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. (Test cubes are measured separately).</p>			
<u>Formwork</u>			
<p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use.</p>			
<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p>			
<p>Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p>			
<p>Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons.</p>			
<p>Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks"</p>			
<u>REINFORCED CONCRETE CAST ON FORMWORK</u>			
<u>25MPa/19mm concrete</u>			
10	Concrete surface bed	m3	199
Carried Forward			R
<p>Section No. 3 Bill No. 3 COVERED WALKWAY</p>			

Brought Forward			R
<u>TEST BLOCKS</u>			
11	Making and testing 150 x 150 x 150mm concrete strength test cube	No	6
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with wood float</u>			
12	Surface beds, slabs, etc	m2	610
<u>Saw cut joints:</u>			
13	8 x 12mm Saw-cut joints in top of concrete	m	415
<u>Horizontal construction joints through concrete including thick cement slurry to one face on:</u>			
14	Surface beds not exceeding 300mmm thick	m	460
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY II)</u>			
<u>Smooth formwork to sides</u>			
15	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	415
<u>REINFORCEMENT</u>			
<u>Fabric reinforcement</u>			
16	Type 193 fabric reinforcement in concrete surface beds, slabs, etc.	m2	610
Carried Forward			R
Section No. 3 Bill No. 3 COVERED WALKWAY			

<p style="text-align: right;">Brought Forward</p> <p><u>ROOF COVERINGS, ETC</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Proprietary products in descriptions</p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent. If the item specified in the Bills of Quantities is not applicable a similar approved product to be used.</p> <p>Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill</p> <p>Reference to drawings and details:</p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p> <p>For Preambles refer to "Department of Public Works: Specification of materials and methods to be used - P W371"</p> <p><u>Guarantee</u></p> <p>The contractor will be required to provide a written guarantee, stating that :</p> <ol style="list-style-type: none"> 1. The roof sheeting is of the specified thickness. 2. The client is indemnified against any defects, including colour deterioration for a minimum period of 15 years. 3. The rate for roof sheeting is to include the cost of all the items involved to bring the fixing of roof sheeting to completion <p><u>STEEL ROOF SHEETING AND ACCESSORIES</u></p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 3 Bill No. 3 COVERED WALKWAY</p>	<p style="text-align: center;">R</p>
	<p style="text-align: center;">R</p>

	Brought Forward			R	
	<u>0.60mm Z275 spelter galvanised steel roof sheeting with Chromadek finish to one side and protective prime coating on reverse side fixed to new purlins on existing trusses</u>				
17	Roof covering with pitch not exceeding 25 degrees	m2	610		
	<u>CARPENTRY AND JOINERY</u>				
	<u>PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION, ETC.</u>				
	<u>Timber Beams</u>				
18	76 x 228mm Timber beam	m	481		
19	50 x 76mm Treated SA pine	m	471		
	<u>METALWORK</u>				
	SUPPLEMENTARY PREAMBLES				
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill				
	Reference to drawings and details:				
	Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.				
	For Preambles refer to "Department of Public Works: Specification of materials and methods to be used - P W371"				
	<u>STRUCTURAL STEEL WORK</u>				
	Structural steel posts to be 3m high				
	<u>STEEL POSTS</u>				
	<u>Welded posts in single lengths with flat section base, top, bearer and connection plates bolted to timber and concrete</u>				
20	60 x 6 x 1.6mm Hollow square tube	m	175		
	Carried Forward			R	
	Section No. 3 Bill No. 3 COVERED WALKWAY				

Brought Forward			R	
<u>Bolts to steel posts,etc.</u>				
21	M16 holding down bolt (grade 8.8) 400mm long embedded in top of concrete	No	680	
22	150mm M12 chemical expansion bolt	No	280	
Carried Forward to Summary of Section No. 3			R	
Section No. 3				
Bill No. 3				
COVERED WALKWAY				

Item No		Quantity	Rate	Amount
	<u>SECTION 3</u>			
	<u>BILL NO.5</u>			
	<u>EXTERNAL WORKS</u>			
	<u>RETAINING WALLS</u>			
	<u>THE FOLLOWING IN RETAINING WALLS</u>			
	Note: Contractor when pricing the document to infuse the preliminary component to be incurred in the rate of each item.			
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavations</u>			
1	Excavate in earth material for trenches not exceeding 2m deep and stockpile excavated material	m3	43	
	<u>Extra over all excavations for carting away</u>			
2	Extra over all excavations for carting away surplus excavated material from the site and dumping at a dumping ground to be found by the Contractor	m3	11	
	<u>Surface Preparation</u>			
3	Trim and level off surface of ground (excavated or filled under this contract to receive crusher run base course, etc., including excavating or filling ripping and scarifying as necessary and compacting the whole area for a depth of 150mm to a density of at least 95% Mod AASHTO maximum density, part to falls.	m2	120	
	<u>G5 Filling supplied by contractor compacted to 93% Mod AASHTO density in layers not exceeding 150mm</u>			
4	Subbase under paving	m3	752	
	<u>G5 Filling supplied by contractor, stabilised with 4% portland cement and compacted to 93% Mod AASHTO density in layers not exceeding 150mm</u>			
5	Subbase under paving	m3	22	
	Carried Forward		R	
	Section No. 3 Bill No. 4 RETAINING WALLS			

Brought Forward				R
<u>SOIL POISONING</u>				
<u>Soil insecticide</u>				
6	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	120	
<u>Prescribed density tests on filling</u>				
7	"Modified AASHTO Density" test	No	6	
<u>THE FOLLOWING IN CONCRETE, FORMWORK AND REINFORCEMENT</u>				
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>				
SUPPLEMENTARY PREAMBLES				
Note: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill				
Reference to drawings and details:				
Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.				
<u>SUPPLEMENTARY PREAMBLES</u>				
<u>Cost of tests</u>				
The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. (Test cubes are measured separately).				
Carried Forward				R
Section No. 3 Bill No. 4 RETAINING WALLS				

Brought Forward			R
<u>Formwork</u> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use.</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p> <p>Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons.</p> <p>Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks"</p>			
<u>UNREINFORCED CONCRETE</u> <u>15MPa/19mm concrete</u>			
8	Surface blinding under footings and bases	m3	4
<u>REINFORCED CONCRETE CAST ON FORMWORK</u> <u>25MPa/19mm concrete</u>			
9	Strip footings	m3	14
<u>TEST BLOCKS</u>			
10	Making and testing 150 x 150 x 150mm concrete strength test cube	No	6
Carried Forward			R
Section No. 3 Bill No. 4 RETAINING WALLS			

Brought Forward			R
<u>MOVEMENT JOINTS ETC</u>			
<u>Expansion joints with closed cell expanded polystyrene joint filler between vertical concrete and/or brick surfaces</u>			
11	10mm Joints not exceeding 300mm high	m	120
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY II)</u>			
<u>Smooth formwork to sides</u>			
12	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	120
<u>REINFORCEMENT</u>			
<u>High & Mild steel reinforcement to structural concrete work</u>			
13	Allow for various diameter bar reinforcement	t	7.20
<u>MASONRY</u>			
<u>Brickwork</u>			
<u>Sizes in descriptions</u>			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick.			
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>Dry stack retaining block</u>			
14	SR290 retaining blocks	m2	228
Carried Forward			R
Section No. 3 Bill No. 4 RETAINING WALLS			

Brought Forward			R	
<u>Sundries</u>				
15	Cut and fix facings around 50mm pipe	No	22	
<u>Sub-soil drainage pipes,etc</u>				
16	50mm Upvc pipe 400mm long built through 345mm wall	No	30	
17	110mm Perforated agri pipe laid in crushed stone (elsewhere measured)	m	150	
18	Bidim "U 14" cloth membrane lining	m2	375	
Carried Forward to Summary of Section No. 3			R	
Section No. 3				
Bill No. 4				
RETAINING WALLS				

Bill No	<u>SECTION SUMMARY - EXTERNAL WORKS</u>	Page No	Amount
1	FENCING	84	
2	PAVING	86	
3	COVERED WALKWAY	93	
4	RETAINING WALLS	98	
			R
Section No. 3			

Carried to Final Summary

Section No. 4
Bill No. 1
ELECTRICAL INSTALLATION

		Brought Forward			R
		<u>Supply installation and testing of the IP65 glands with corrosion guard, making-off the cable, lugs, and fitting the gland to the board gland plate, switchgear or appliance and final connection of cable tails into board or terminals. Rate to allow for all necessary accessories required to complete terminations.</u>			
9	1.5 mm2	2-core cable gland	m	130	
10	2.5 mm2	2-core cable gland	m	98	
11	10 mm2	2-core cable gland	m	24	
12	16 mm2	2-core cable gland	m	6	
13	70 mm2	4-core cable gland	m	6	
		<u>SUB - DISTRIBUTION BOARDS</u>			
		<u>DISTRIBUTION BOARD</u>			
14	Supply, installation and commissioning of the complete distribution board, including all busbars, switchgear and other equipment as per the drawings. Rates to include all required labelling electrical sign, internal circuit labelling, etc. Rates to include earthing of the DB doors. Refer to single line diagram attached.				SUM
		<u>CONDUCTORS</u>			
		<u>The supply, deliver and installation in conduit of insulated surfix conductors as follows:</u>			
15	2.5mm ² 2c + Earth wire surfix cable		m	1 450	
16	1.5mm ² 2c + Earth wire surfix cable		m	1 518	
		<u>DRAW WIRES</u>			
		<u>The supply and installation in conduit of galvanized steel draw wires.</u>			
17	1.5mm ² draw wire (not insulated)		m	300	
		<u>CABLE SLEEVES</u>			
		Carried Forward			R
	Section No. 4 Bill No. 1 ELECTRICAL INSTALLATION				

-102-

	Brought Forward			R	
	<u>SOCKET OUTLETS (100mm x 100mm) FLUSHED - Crabtree Classic Range</u>				
24	16A - 3 pin Single switched sockets outlets with white cover and toggle.	No	116		
25	Supply, install industrial fans including switches and cabling	No	54		
26	32A - AC Isolator	No	24		
	<u>CONDUITS</u>				
	<u>Supply and install the following PVC conduits in concrete slab, chased through brick walls and surface mounted to pvc boxes. Conduits are to include ends and all necessary conduits accessories. All material to be SABS approved and be suitable for conductors installation.</u>				
27	20mm pvc conduit	m	1 440		
28	Supply, install day and night light switch	No	8		
29	Complete earthing (lightning protection) system as per SABS and SANS 10313 (work to be performed by an SABS approved Contractor). Earthing and Bonding of building as per specifications. Earth Spikes 1.2M, D=16MM.			SUM	
30	Labelling of DB's & socket outlets			SUM	
	Carried to Final Summary			R	
	Section No. 4				
	Bill No. 1				
	ELECTRICAL INSTALLATION				

Item No	Quantity	Rate	Amount
<u>SECTION 5</u>			
<u>BILL NO.1</u>			
<u>PROVISIONAL SUMS</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>General:</u>			
Unless otherwise described, all prime cost amounts and provisional sums shall be nett. No provision for 5 percent cash discount shall be included for the main contractor.			
Prime cost amounts and provisional sums exclude value added tax.			
In the event of a prime cost amount or provisional sum being omitted the items "Allow for profit"... and "allow for attendance" applicable, shall be omitted together with the prime cost amount or provisional sum and no claim whatsoever will be entertained in this regard.			
The principal agent shall be entitled to nominate or select any further specialist and other to execute work or supply and fix any goods whether or not a provisional sum is included in the bills of quantities and such specialists and other will then be deemed to be "selected subcontractors" as the case may be.			
Where profit stated, the contractor may allow for profit if required			
<u>Attendance upon nominated/selected subcontractors:</u>			
The item "Allow for attendance...." which follows each provisional sum for nominated/selected subcontractors work, shall be deemed to cover all the contractors costs incurred in providing free of charge to the subcontractor the service as set out in the relevant clause in the preliminaries			
<u>Taking delivery:</u>			
Taking delivery of goods or articles by the contractor on site shall mean getting in, unpacking, checking that the quantity is correct and that the goods are complete and undamaged,submitting a report thereof to the interested parties and issuing vouchers for the receipt of			
Carried Forward		R	
Section No. 5 Bill No. 1 PROVISIONAL SUMS			

Brought Forward		R	
such goods. The contractor is to store the goods and will be held responsible for the safety thereof and indemnify the employer against any damage or loss which may occur.			
Works executed under a separate/direct contract:			
The contractor shall permit access to the site and to the places where the work is to be carried out and provide every facility to enable the specialist to carry out his work in a workmanlike manner and in proper order and sequence.			
<u>BUDGETARY ALLOWANCE FOR MAIN CONTRACTOR</u>			
<u>Landscaping</u>			
1	Allow the sum of R50 000.00 (Fifty Thousand Rand) for Landscaping	Item	50 000.00
<u>SOCIAL DELIVERABLES</u>			
<u>CLO REMUNERATION</u>			
2	Allow the sum of R100 000.00 (One Hundred Thousand Rand) for the remuneration of the Community Liaison Officer	Item	100,000.00
3	Profit on last if required	%	
4	Attendance in connection with Community Liaison Officer's remuneration	%	
<u>MINIMUM TARGETED ENTERPRISE DEVELOPMENT</u>			
5	A provisional amount has been allowed for in the execution of this project as described in C3. Project Specifications. The provisional amount allowed is for the appointment of training coordinator, mentor, training service providers and training of the beneficiary enterprises including monitoring and monthly reporting.	PS	416 806.39
6	Allowance for profit all inclusive of associated costs to the contractor for implementation.	%	
7	Allowance for attendance all inclusive of associated costs to	%	
<u>Decanting</u>			
8	Allow the sum of R1 000 000.00 (One Million Rand) for Decanting.	Item	1 000,000.00
Carried to Final Summary		R	
Section No. 5 Bill No. 1 PROVISIONAL SUMS			

Carried to Form of Tender