

Item No		Quantity	Rate	Amount
	<p><u>NCEKUYA PRIMARY SCHOOL</u> <u>EMIS NO. 500342213</u> <u>STORM DAMAGES (PHASE 17)</u></p> <p><u>BUILDING AGREEMENT AND PRELIMINARIES</u></p> <p>The JBCC Series 2000 Principal Building Agreement (March 2005 edition 4.1 Code 2101) prepared by the Joint Building Contract Committee shall be the applicable building agreement, amended as hereinafter described</p> <p>The ASAQs Preliminaries (November 2007 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</p> <p>Contractor's are referred to the abovementioned documents for the full intent and meaning of each clause thereof</p> <p>These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract, such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the abovementioned documents</p> <p>Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"</p> <p><u>PREAMBLES FOR TRADES</u></p> <p>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</p> <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 style="text-align: right;">Carried to Collection</p> <p>Bill No. 1 Preliminaries</p>			
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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

PRICING OF PRELIMINARIES

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)

SECTION A - PRINCIPAL BUILDING AGREEMENT

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Definitions (A1)

- 1 Clause 1.0 - Definitions and interpretation The measuring system used for the preparation of the bills of quantities is the Standard System of Measuring Building Work (sixth edition, revised 1999) published by the Association of South African Quantity Surveyors
- [1.1] COMMENCEMENT DATE – means the date that the site is handed over to the contractor.
- CONSTRUCTION GUARANTEE – means a guarantee at call obtained by the contractor from an institution approved by the employer in terms of the employer's construction guarantee form as selected in the schedule.
- n/a CONSTRUCTION PERIOD – means the period commencing on the commencement date and ending on the date of practical completion
- CORRUPT PRACTICE – means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.
- FRAUDULENT PRACTICE – means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any tenderer, and includes collusive practice among tenderers (prior to and after the tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the tenderer of the benefits of free and open competition.
- INTEREST – the interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be in terms of the legislation of the Republic of South Africa, and in particular: (a) in respect of interest owed by the employer, the interest rate as determined by the Minister of Justice and Constitutional Development from time to time, in terms of section 1(2) of the Prescribed Rate of Interest Act, 1975 (Act No. 55 of 1975), will apply; and (b) in respect of interest owed to the employer, the interest rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No. 1 of 1999), will apply
- SECURITY – means the form of security provided by the employer or contractor, as stated in the schedule, from which the contractor or employer may recover expenses or loss.
- 1.6 Any notice given may be delivered by hand, sent by prepaid registered post or telefax. Notice shall be presumed to have been given when:
- 1.6.4 No clause

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Objective and preparations (A2 - A14)

2	Clause 2.0 - Offer acceptance and performance obligations	Item
3	<p>Clause 3.0 - Documents</p> <p>3.2.1 A construction guarantee in terms of 14.0, where so elected in his tender</p> <p>3.7 Add at the end thereof: The contractor shall supply and keep a copy of the JBCC Series 200 Principal Building Agreement and Preliminaries applicable to this contract on the site, to which the employer, principal agent and agents shall have access to at all times.</p> <p>Clause 3.1 is hereby deleted and no payment guarantee will thus be provided by the employer. Clause 3.3 is hereby amended by deleting the words ".... within seven (7) calendar days of having received a payment guarantee from the employer in terms of 3.1." in the first sentence and substituting with ".... within twenty-one (21) calendar days of written acceptance of the contractor's tender." The second sentence shall remain unchanged.</p>	Item
4	Clause 4.0 - Design responsibility	Item
5	Clause 5.0 - Employer's agents	Item
6	<p>Clause 6.0 - Contractor's site representative</p> <p>Add the following to Clause 6.1: Prior to commencing work on site, the Contractor shall furnish a comprehensive schedule of proposed personnel to be utilised, including CV's of all key personnel.</p>	Item
7	Clause 7.0 - Compliance with laws and regulations	Item

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Without limiting the generality of the provisions of Clause 7.0, the contractor's attention is drawn to the provisions of the Construction Regulations, 2003 issued in terms of the Occupational Health and Safety Act, 1993 and Part C4.2 (Annexure C) of this tender document. It is specifically stated that the employer shall prepare a documented health and safety specification for the works and that 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 shall price opposite this item for compliance with the act and the regulations and the reasonable provisions of the aforementioned health and safety specifications.

The provisions for Occupational Health and Safety shall include the Covid-19 procedures as part of the Government's new legislative requirement.

8 Clause 8.0 - Works risk

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9 Clause 9.0 - Indemnities

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10 Clause 10.0 - General insurances10.6 Add the following as 10.6 Injury to Persons or loss of or damage to Propertiesa) The contractor shall be liable for and hereby indemnifies the employer against any liability, loss, claim or proceeding whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever arising out of or in the course of or caused by the execution of the works unless due to any act or neglect of any person for whose actions the employer is legally liableb) The contractor shall be liable for and hereby indemnifies the employer against any liability, loss, claim or proceeding consequent upon loss of or damage to any moveable, or immovable or personal property or property contiguous to the site, whether belonging to or under the control of the employer or any other body or person, arising out of or in the course of or by reason of the execution of the works unless due to any act or neglect of any person for whose actions the employer is legally liable c) The contractor shall upon receiving a contract instruction from the principal agent cause the same to be made good in a perfect and workmanlike manner at his own cost and in default thereof the employer shall be entitled to cause it to be made good and to recover the cost thereof from the contractor or to deduct the same from amounts due to the contractor.D) The contractor shall be responsible for the protection and safety of such portions of the premises placed under his control by the employer for the purpose of executing the works until

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the issue of the certificate of practical completion.E)
Where the execution of the works involves the risk of removal of or interference with support to adjoining properties including land or structures or any structures to be altered or added to, the contractor, shall and will remain adequately insured or insured against the death of or injury to persons or damage to such property consequent on such removal or interference with the support until such portion of the works has been completedf) The contractor shall at all times proceed immediately at his own cost to remove or dispose of any debris and to rebuild, restore, replace and/or repair such property and to execute the works10.7 Add the following as 10.7HIGH RISK INSURANCEIn the event of the project being executed in a geological area classified as a "High Risk Area", that is an area which is subject to highly unstable subsurface conditions that might result in catastrophic ground movement evident by sinkhole or do line formation the following will apply:10.7.1 Damage to the worksThe contractor shall, from the commencement date of the works until the date of the certificate of practical completion, bear the full risk of and hereby indemnifies and holds harmless the employer against any damage to and/or destruction of the works consequent upon a catastrophic ground movement as mentioned above. The contractor shall take such precautions and security measures and other steps for the protection of the works as he may deem necessaryWhen so instructed to do so by the principal agent, the contractor shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the works and to rebuild, restore, replace and/or repair the works, at the contractor's own costs10.7.2 Injury to persons or loss of or damage to propertyThe contractor shall be liable for and hereby indemnifies and holds harmless the employer against any liability, loss, claim or proceeding arising at any time during the period of the contract whether arising in common law or by statute,consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned aboveThe contractor shall be liable for and hereby indemnifies the employer against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable, or immovable or personal property or property contiguous to the site, whether belonging to or under the control of the employer or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the period of the contract10.7.3 It is the responsibility of the

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contractor to ensure that he has adequate insurance to cover his risk and liability as mentioned in 10.7.1 and 10.7.2. Without limiting the contractor's obligations in terms of the contract, the contractor shall, within twenty one (21) calendar days of the commencement date but before commencement of the works, submit to the employer proof of such insurance policy, if requested to do so. 10.7.4 The employer shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the contractor's default of his obligations as set out in 10.7.1; 10.7.2 and 10.7.3. Such losses or damages may be recovered from the contractor or by deducting the same from any amounts still due under this contract or under any other contract presently or hereafter existing between the employer and the contractor and for this purpose all these contracts shall be considered one indivisible whole.

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11 Clause 11.0 - Special insurances

Item

12 Clause 12.0 - Effecting insurances

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13 Clause 13.0 - Assignment

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14 Clause 14.0 - Security1 In respect of contracts with a contract sum up to R1 million, the security to be submitted by the contractor to the employer will be as a payment reduction of five per cent (5%) of the value certified in the payment certificate (excluding VAT). 14.1.1 The payment reduction of the value certified in a payment certificate shall be mutatis mutandi in terms of 31.8(A). 14.1.2 The employer shall be entitled to recover expense and loss from the payment reduction in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employer's entitlement shall take precedence over his obligations to refund the payment reduction security or portions thereof to the contractor. 14.2 In respect of contracts with a contract sum above R1 million, the contractor shall have the right to select the security to be provided in terms of 14.3, 14.4, 14.5, 14.6, or 14.7 as stated in the contract data. Such security shall be provided to the employer within twenty-one (21) calendar days from commencement date. Should the contractor fail to select the security to be provided or should the contractor fail to provide the employer with the selected security within twenty-one (21) calendar days from commencement date, the security in terms of 14.7 shall be deemed to have been selected. 14.3 Where the security as a cash deposit of ten per cent (10%) of the contract sum (excluding VAT)

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has been selected:14.3.1 The contractor shall furnish the employer with a cash deposit equal in value to ten per cent (10%) of the contract sum (excluding VAT) within twenty-one (21) calendar days from commencement date 14.3.2 Within twenty-one (21) calendar days of the date of practical completion of the works the employer shall reduce the cash deposit to an amount equal to three per cent (3%) of the contract value (excluding VAT), and refund the balance to the contractor14.3.3 Within twenty-one (21) calendar days of the date of final completion of the Works the employer shall reduce the cash deposit to an amount equal to one per cent (1%) of the contract value (excluding VAT) and refund the balance to the contractor14.3.4 On the date of payment of the amount in the final payment certificate, the employer shall refund the remainder of the cash deposit to the contractor14.3.5 The employer shall be entitled to recover expense and loss from the cash deposit in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employer's entitlement shall take precedence over his obligations to refund the cash deposit security or portions thereof to the contractor14.3.6 The parties expressly agree that neither the employer nor the contractor shall be entitled to cede the rights to the deposit to any third party 14.4 Where security as a variable construction guarantee of ten percent (10%) of the contract sum (excluding VAT) has been selected:14.4.1 The contractor shall furnish the employer with an acceptable variable Construction guarantee equal in value to ten per cent (10%) of the contract sum (excluding VAT) within twenty-one (21) calendar days from commencement date.14.4.2 The variable construction guarantee shall reduce and expire in terms of the Variable Construction guarantee form included in the invitation to tender .14.4.3 The employer shall return the variable construction guarantee to the Contractor within fourteen (14) calendar days of it expiring.14.4.4 Where the employer has a right of recovery against the contractor in terms of 33.0 the employer shall issue a written demand in terms of the variable construction guarantee.14.5 Where security as a fixed construction guarantee of five per cent (5%) of the contract sum (excluding VAT) and a five per cent (5%) payment reduction of the value certified in the payment certificate (excluding VAT) has been selected:14.5.1 The contractor shall furnish a fixed construction guarantee to the employer equal in value to five per cent (5%) of the contract sum (excluding VAT)14.5.2 The fixed construction guarantee shall come into force on the date of issue and shall expire on the date of the last certificate of practical completion 14.5.3

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The employer shall return the fixed construction guarantee to the contractor within fourteen (14) calendar days of it expiring 14.5.4 The payment reduction of the value certified in a payment certificate shall be in terms of 31.8A and 34.8B 14.5.5 Where the employer has a right of recovery against the contractor in terms of 33.0, the employer shall be entitled to issue a written demand in terms of the fixed construction guarantee or may recover from the payment reduction or may do both 14.6 Where security as a cash deposit of five per cent (5%) of the contract sum (excluding VAT) and a payment reduction of five per cent (5%) of the value certified in the payment certificate (excluding VAT) has been selected: 14.6.1 The contractor shall furnish the employer with a cash deposit equal in value to five per cent (5%) of the contract sum (excluding VAT) within twenty-one (21) calendar days from commencement date. 14.6.2 Within twenty-one (21) calendar days of the date of practical completion of the works the employer shall refund the cash deposit in total to the contractor 14.6.3 The payment reduction of the value certified in a payment certificate shall be mutatis mutandi in terms of 31.8A 14.6.4 Where the employer has a right of recovery against the contractor in terms of 33.0, the employer may issue a written notice in terms of 33.4 or may recover from the payment reduction or may do both 14.7 Where security as a payment reduction of ten per cent (10%) of the value certified in the payment certificate (excluding VAT) has been selected: 14.7.1 The payment reduction of the value certified in a payment certificate shall be mutatis mutandi in terms of 31.8B 14.7.2 The employer shall be entitled to recover expense and loss from the payment reduction in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employer's entitlement shall take precedence over his obligations to refund the payment reduction or portions thereof to the contractor 14.8 Payments made by the guarantor to the employer in terms of the fixed or variable construction guarantee shall not prejudice the rights of the employer or contractor in terms of this agreement 14.9 Should the contractor fail to furnish the security in terms of 14.2 the employer, in his sole discretion, and without notification to the contractor, is entitled to change the contractor's selected form of security to that of a ten per cent (10%) payment reduction of the value certified in the payment certificate (excluding VAT), where after 14.7 shall be applicable

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EXECUTION**Carried to Collection**

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Execution (A15 - A23)

15	Clause 15.0 - Preparation for and execution of the works 15.1.3 Add 15.1.3 as follows: An acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), within twenty-one (21) calendar days of commencement date 15.2.1 Replace clause 15.2.1 with the following: "Give the contractor possession of the site within ten (10) working days of the contractor complying with the terms of 15.1.2 and 15.1.3"	Item
16	Clause 16.0 - Site and access The restrictions to the site area to be occupied by the contractor. Reference as [16.1] Refer to Annexure C for the result of a structural investigation report [16.4] The existing premises are occupied, the detail and/or specific requirements. Reference as [16.6] Clause 16.7 - Known services Clause 16.8 - Protection of trees	Item
17	Clause 17.0 - Contract instructions The following new subclause is hereby added to the clause: '17.1.21 Acceleration' 17.1.11 Delete the words "The appointment of nominated and selected subcontractors"	Item
18	Clause 18.0 - Setting out of the works The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc. exist in order that the necessary arrangements may be made for the rectification of any such encroachments [18.1] The following new subclauses are hereby added to this clause: '18.5 The contractor shall perform tolerance control checks regularly throughout the contract period and report on these at regular intervals to the principal agent in a format approved by the principal agent. Should the contractor fail to comply with this requirement to the satisfaction of the principal agent, progressively as the structure is constructed, the employer will commission a registered land surveyor to do so on the contractor's behalf and at the contractor's expense. 18.6 The contractor shall provide general attendance and all reasonable assistance to the above-mentioned or any other land surveyor who may be appointed by the employer'	Item
19	Clause 19.0 - Temporary works and plant Clause 19.1.1 - Enclosure of the works Clause 19.1.2 - Office accommodation Clause 19.2 - Advertising rights and notice boards	Item

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20	Clause 20.0 - Nominated subcontractorsRefer to the provisions on general attendance hereinafter20.1.3 No clause	Item		
21	Clause 21.0 - Selected subcontractors21.0 No clause	Item		
22	Employer's direct contractors (Clause 22).The following new subclause is hereby added to this caluse:"22.6 The contractor shall not be entitled to any percentage profit or discount on the value of any work executed by direct contractors but shall nevertheless allow direct contractors and the employer's tenants and employees to have access to the works, allocate reasonable space in the building for the storage of their materials, tools and equipment, all to the satisfaction of the principal agent. The contractor shall also allow the direct contractors, etc. to use, free of charge, the ablution facilities and water and power supply on the site, and shall not in any way hinder or prevent the execution of their work. Attendance may be priced against the relevant specified items in the bills of quantities."	Item		
23	Clause 23.0 - Contractor's domestic subcontractors	Item		
<u>COMPLETION</u>				
<u>Completion (A24 - A30)</u>				
24	Practical completion (Clause 24).Clause 24.0 is hereby amended by the addition of the following clause:"24.11 Should the contractor, in the opinion of the principal agent, not have achieved practical completion of any area of the works, the employer may, notwithstanding the contractor's on-going responsibilities, take possession of any such area and such possession by the employer shall not be construed as the achievement of practical completion. Should such an instance arise, the principal agent will give notice to the contractor, in writing, that the employer is taking immediate possession without practical completion having been achieved in order to mitigate his exposure to any expenses. The contractor's responsibilities and liabilities shall remain in full force and effect until in the principal agent's opinion, practical completion is achieved. Access by the contractor to any such area in possession of the employer, prior to the contractor's achievement of practical completion, shall be at the employer's convenience, which will not be unreasonably withheld."	Item		
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Payment (A31 - A35)

- 31 Clause 31.0 - Interim payment The inclusion of materials and goods stored off site in the amount authorised for payment in terms of clause 31.4 shall be at the sole discretion of the principal agent and such inclusion shall only be considered upon the provision, by the contractor, of an approved guarantee issued by a registered commercial bank. Clause 31.6.5 is therefore not applicable [31.4.2, 31.6.5] Materials and goods stored off site shall not be included in the amount authorised for payment [31.6.5]

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Clause 31.0 is amended by the following: Clause 31.9 :
 The reference in the second line to "seven (7) calendar days" shall be amended to "thirty (30) calendar days".

31.5.2 Security adjustments in terms of 14.0 and 31.831.8 Amend as follows:

31.8(A) Where a security is selected in terms of 14.1; 14.5 or 14.6, the value of the works in terms of 31.4.1 and of the materials and goods in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments:

31.8(A).1 Ninety-five per cent (95%) of such value in interim payment certificates issued up to the date of practical completion

31.8(A).2 Ninety-seven per cent (97%) of such value in interim payment certificates issued on the date of practical completion and up to but excluding the date of final completion

31.8(A).3 Ninety-nine per cent (99%) of such value in interim payment certificates issued on the date of final completion and up to but excluding the final payment certificate in terms of 34.6

31.8(A).4 One hundred per cent (100%) of such value in the final payment certificate in terms of 34.6 except where the amount certified is in favour of the employer. In such an event the payment reduction shall remain at the adjustment level applicable to the final payment certificate.

31.8(B) Where security is a payment reduction in term of 14.7 has been selected the value of the works in terms of 31.4.1 and materials and goods in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments:

31.8(B).1 Ninety per cent (90%) of such value in interim payment certificates issued up to the date of practical completion

31.8(B).2 Ninety-seven per cent (97%) of such value in interim payment certificates issued on the date of practical completion and up to but excluding the date of final completion

31.8(B).3 Ninety-nine per cent (99%) of such value in interim payment certificates issued on the date of final completion and up to but excluding the final payment certificate in terms of 34.6

31.8(B).4 One hundred per cent (100%) of such value in the final payment certificate in terms of 34.6 except were the amount certified is in favour of the employer. In such an event the payment reduction shall remain at the adjustment level applicable to the final payment certificate

31.12 Replace "21 days" with "30 days".

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	Clause 31.10 : The words "practical completion" in the second and fourth lines shall be amended to "final completion".			
32	Clause 32.0 - Adjustment to the contract value All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor [32.13]Where prices are submitted by the contractor or n/s subcontractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of the agreement and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the certificate of final completion, it shall be in writing. The contractor shall not receive any mark-up for overheads and profit on any omission of the tenant installation work or tenant installation work by others. Claims for the loss of profit shall not be entertained [32.2]	Item		
33	Clause 33.0 - Recovery of expense and loss33.2 Add the following clauses 33.2.9 to 33.2.13:33.2.9 the contractor's failure or neglect to commence with the works on the dates prescribed in the contract33.2.10 the contractor's failure or neglect to proceed with the works in terms of the contract33.2.11 the contractor's failure or neglect for any reason to complete the works in accordance with the contract33.2.12 the contractor's refusal or neglect to comply strictly with any of the conditions of contract or any contract instructions and/or orders in writing given in terms of the contract33.2.13 the contractor's estate being sequestrated; liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa	Item		
34	Clause 34.0 - Final account and final payment	Item		
	Clause 34.0 is amended by the following:Clause 34.10 : The reference in the second line to "seven (7) calendar days" shall be amended to "twenty-one (21) calendar days".			
	Clause 34.11 : The words "practical completion" in the third and fourth lines shall be amended to "final completion".			
	34.13 Replace "seven (7) calendar days" with "thirty (30) calendar days" .			
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35	Clause 35.0 - Payment to other parties	Item		
	<u>TERMINATION</u>			
	<u>Termination (A36 - A39)</u>			
36	Clause 36.0 - Termination by employer - contractor's default	Item		
37	36.7 Add the following: "Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the and contractor; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site. The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever	Item		
38	Clause 37.0 - Termination by employer - loss and damage	Item		
	37.3.5 Replace "ninety (90)" with "one hundred and twenty (120)".			
39	37.5 Add the following: "Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the and contractor; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site. The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever	Item		
40	Clause 38.0 - Termination by contractor - employer's default	Item		
41	38.7 Add the following: "Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the and contractor; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site. The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever	Item		
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- 42 Clause 39.0 - Termination - cessation of the works
39.3.5 Add the following words at the end thereof:
:"within one hundred and twenty (120) working days of completion of such report"

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DISPUTE**Dispute (A40)**

- 43 Clause 40.0 - Settlement of disputes
40.7 Add the following to the end thereof:Whether or not mediation resolves the dispute, the parties shall bear their own costs concerning the mediation and equally share the costs of the mediator and related costs.

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CONTRACT VARIABLES**Contract variables (A41 - A42)**

- 44 Clause 41.0 - Post tender provisions

Item

The contractor is to complete before the submission of his tender the JBCC Principal Agreement Contract Data CE

- 45 Clause 42.0 - Contractual agreement

Item

The required information of the contracting parties and the amount of the accepted contract sum shall be inserted in the contractual agreement for signature of the agreement by the parties

SECTION B - PRELIMINARIES**B1.0 DEFINITIONS AND INTERPRETATION****Definitions and interpretation (B1)**

- 46 Clause 1.0 - Definitions and interpretation

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Documents (B2)

- 47 Clause 2.1 - Checking of documents

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48	Clause 2.2 - Provisional bills of quantities These bills of quantities are in multiple procurement format i.e. The 'wet trades' - earthworks, concrete, formwork and reinforcement, precast concrete, masonry, waterproofing and sub-surface drainage - are provisionally measured and the subsequent trades are budgetary allowances	Item		
49	Clause 2.3 - Availability of construction documentation The budgetary allowances and selected (nominated) subcontract amounts allocated for subsequent trades included in this document will be separately procured, based on multiple procurement of selected (nominated) subcontractors during the construction period.	Item		
<u>Previous work and adjoining properties (B3)</u>				
50	Clause 3.1 - Previous work - dimensional accuracy	Item		
51	Clause 3.2 - Previous work - defects	Item		
52	Clause 3.3 - Inspection of adjoining properties	Item		
<u>Samples, shop drawings and manufacturer's instructions (B4)</u>				
53	Clause 4.1 - Samples of materials Clause B4.1 is hereby amended by the addition of the following: The principal agent may reject any materials or colours not corresponding with the approved samples. The approved samples shall be kept on site until completion of the works. Should any materials or items specified prove to be either unavailable, in poor supply or likely to cause delay to the works, the contractor shall notify the principal agent in sufficient time for suitable alternatives to be considered. Any claims for delays resulting from the contractor not conforming with the terms of this clause will not be entertained or allowed.	Item		
54	Clause 4.2 - Workmanship samples	Item		
55	Clause 4.3 - Shop drawings Clause B4.3 is hereby amended by the addition of the following: General responsibilities The Contractor shall provide a person or persons who shall be available immediately upon commencement of the contract, whose responsibility will be:	Item		
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a) To familiarise himself with all drawings produced by the professional team. This will involve a clear understanding of services and element co-ordination performed by the principal agent, in order that subcontractors can be properly briefed. b) To provide the professional team with comprehensive lists of shop drawings to be prepared by relevant subcontractors.

c) To check all shop drawings for sufficiency prior to submission to the relevant consultant in the professional team. It is expected that such checking will include all co-ordination and pro-active resolution of any conflicting services and elements. It is also noted that resolution of co-ordination problems will require attendance at services and element co-ordination meetings, called by the principal agent as and when necessary.

Procedures The contractor shall, at his own expense, prepare and submit one reproducible print of shop drawings of all fabricated work, working or setting out drawings, shop details and schedules to the principal agent for approval by the relevant consultant/s and/or the employer as is appropriate and such work shall not be performed by the contractor until such approval has been given. The contractor shall take cognisance of and adhere to the Project Document Numbering System, if any, in use on this contract.

The contractor shall present a complete schedule showing the sequence of submission of shop drawings, including submission dates, for all trades and the scheduled dates for approval of all drawings. This schedule shall take into account that the relevant consultant/s and the employer reserve a two weeks check period from the date of the receipt of all shop drawings and/or catalogue data.

All submissions shall bear the contractor's dated stamp of approval as evidence that they have been so checked and corrected by the contractor. Any drawings, schedule or catalogue submitted without this stamp will not be considered by the principal agent and will be returned.

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All submissions shall be on dates as indicated in the above schedule and sufficiently in advance to allow the contractor to meet the fabrication deadlines. No claim for extensions to the contract time will be granted to the contractor by reason of his failure in this respect. The contractor shall submit four copies of catalogue and data for approval. The contractor shall check all submissions for conformity with the contract drawings and specifications and correct any errors, omissions or deviations before their transmission to the principal agent.

When the principal agent advises the contractor that shop drawings have been approved, he shall immediately submit to the principal agent the original transparencies of such drawings so that the principal agent's stamp of approval may be appended thereto. Thereafter the contractor shall furnish to the principal agent four prints of the approved shop drawings, setting out drawings and schedules. The contractor shall also furnish to the works as many prints of the approved shop drawings and schedules as may be required. No work shall be performed from any shop drawings and/or catalogues not stamped with the principal agent's approval.

The contractor shall be responsible for ensuring that all dimensions confirm to the dimensions of built work. The principal agent's approval of any document or drawing shall not in any way vary his contractual or delictual obligations and liabilities to the employer or any other party, nor does it vary the contractual or delictual obligations and liabilities of the party submitting such document or drawing for approval.

If the submissions differ from the requirements of the contract, the contractor shall make specific mention of each difference in his letter of transmission with a request for substitution, together with his reasons for same, in order that, if acceptable, suitable action may be taken by the principal agent. Otherwise the contractor will not be relieved of the responsibility for executing the work in accordance with the requirements of the Contract

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Corrections of shop drawings by the principal agent shall not change the scope of work. Should any such correction be considered to constitute a change of the scope of work, the contractor shall notify the principal agent in writing within not more than seven calendar days of such change and shall not proceed with the fabrication until so authorised by the principal agent. Claims for change of scope made after performance of the work constituting the claimed change of scope will not be considered.

Unless otherwise agreed with the principal agent, shop drawings shall be prepared to show all details of installation, including reticulation, fixing, etc. of all components and assemblies, or if the contractor desires to deviate from the design and these drawings shall be all in accordance with the above procedures and at the contractor's expense.

56 Clause 4.4 - Compliance with manufacturer's instructions

Item

Deposits and fees (B5)

57 Clause 5.1 - Deposits and fees

Item

Temporary services (B6)

58 Clause 6.1 - Water

Item

59 Clause 6.2 - Electricity

Item

60 Clause 6.3 - Telecommunication facilities

Item

61 Clause 6.4 - Ablution facilities

Item

Prime cost amounts (B7)

62 Clause 7.1 - Responsibility for prime cost amounts

Item

Special attendance on n/s subcontractors (B8)

63 Clause 8.1 - Special attendance

Item

General (B9)

64 Clause 9.1 - Protection of the works

Item

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65	Clause 9.2 - Protection/isolation of existing/sectionally occupied works Buildings that will be occupied during the construction period	Item
66	Clause 9.3 - Security of the works	Item
67	Clause 9.4 - Notice before covering work	Item
68	Clause 9.5 - Disturbance	Item
69	Clause 9.6 - Environmental disturbance	Item
70	Clause 9.7 - Works cleaning and clearing	Item
71	Clause 9.8 - Vermin	Item
72	Clause 9.9 - Overhand work	Item

SCHEDULE OF VARIABLES

Schedule of variables (B10)

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 [2.2] The quantities are provisional Yes

10.2 - Availability of construction documentation [2.3] Construction documentation is complete No

10.3 - Previous work - dimensional accuracy [3.1]

10.4 - Previous work - defects [3.2]

10.5 - Inspection of adjoining properties [3.3]

10.6 - Water [6.1]Option A (by contractor) yes Option B (by employer - free of charge) no Option C (by employer - metered) no

10.7 - Electricity [6.2]Option A (by contractor) yesOption B (by employer - free of charge) no Option C (by employer - metered) no

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10.8 - Telecommunications [6.3]Telephone
yesFacsimile yesE-mail yes

10.9 - Ablution facilities [6.4]Option A (by contractor)
yesOption B (by employer) no

10.10 - Protection of the works [9.1]

10.11 - Protection /isolation of existing/sectionally
occupied works [9.2] Protection / isolation is required
No

10.12 - Disturbance [9.5]

10.13 - Environmental disturbance [9.6]

SECTION C - SPECIFIC PRELIMINARIES

**Section C contains specific preliminary items which
apply to this contract except where N/A (Not
Applicable) appears against an item**

73 Confidentiality (Clause C1).

The drawings issued with the tender documents do not
comprise the complete set but serve as a guide only for
tendering purposes and for indicating the scope of the
work to enable the tenderer to acquaint himself with the
nature and extent of the works and the manner in which
they are to be executed Should any part of the drawings
not be clearly intelligible to the tenderer he shall, before
submitting his tender, obtain clarification in writing from
the principal agent

Item

74 Trade Names (Clause C2).

Wherever a trade name for any product has been
described in the bills of quantities, the tenderers
attention is drawn to the fact that any other product of
equal quality may be used subject to the written
approval of the principal agent being obtained prior to
the closing date for submission of tenders. If prior
written approval for an alternative product is not
obtained, it shall be deemed that the tenderer the
product described has been tendered for.

Item

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Bill No. 1
Preliminaries

75	Imported Materials (Clause C3).				
	Where imported items are listed in the tender documents, the tenderer shall provide all the information called for, failing which the price of any such item, materials or equipment shall be excluded from currency fluctuations. Notwithstanding any provisions elsewhere regarding the adjustment of contract prices, the price of any item, material or equipment listed in terms of this clause shall be excluded from the Contract Price Adjustment Provisions (if applicable)	Item			
76	Security Check of Personnel (Clause C4).				
	The principal agent may require the contractor to have his personnel and workmen, or a certain number of them, security classified In the event of the principal agent requesting the removal of a person or persons from the works for security reasons, the contractor shall do so forthwith and shall thereafter ensure that such person or persons are denied access to the works and the site and/or to any document or information relating to the works	Item			
77	Contract Instructions (Clause C5)				
	Contract instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the Contractor	Item			
78	Site Levels (Clause C6).				
	Before commencement of the works the Contractor shall carry out and provide the Principal Agent for approval a survey of the existing site levels in sufficient detail to enable the preparation of a final account	Item			
79	Unauthorised Persons on Site (Clause C7)				
	The Contractor shall not permit unauthorised persons onto and workmen to lodge on the site	Item			
Carried to Collection				R	
Bill No. 1 Preliminaries					

80 Plant and Labour Record (Clause C8)

At the end of each week the Contractor shall provide the Principal Agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day and the number, type and capacity of all plant, excluding hand tools, currently used on the works

Item

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Preliminaries

81	<p>Use of Local Labour from the Employer's Areas of Operation (Clause C9)</p> <p>It is a requirement of the contract that the work be executed in such a manner as to maximise the use of local labour from the Employer's areas of operation in order to provide the local community with employment opportunities. The tenderer is to identify all activities for which it is intended to employ workers from the local community and full details thereof are to be provided in the tender documentation. The total value of the work that is to be of a local labour nature may be a consideration in the adjudication process. Once a tender is accepted the activities and number of persons stated in the above-mentioned schedule shall become the minimum contractual commitment. In applying the principles set out above, it is a specific requirement of this tender that the successful tenderer employs, in consultation with the Employer's representative, unemployed persons from the ranks of the local communities and the immediate surroundings, who possess the appropriate skills required for a contract of this nature</p> <ul style="list-style-type: none"> - In order to achieve the recruitment of local labour, the Employer will establish, a database of unemployed persons, indicating their specialised training, previous experience and employment, etc. The successful tenderer will be required to directly employ suitable persons recruited from the employer's database and ensure that all legislative requirements regarding their employment are complied with and provide the Employer with the necessary documentary proof, if required - The Contractor is required to produce weekly records suitably detailed to enable the Employer's representative to monitor the achievement of the required local labour percentages. The Contractor is required to provide the Employer's database for the purposes of assessing skills transfer from informal skills training - The Contractor is required to provide informal skills training so that the required standard of workmanship is maintained - Any difficulty experienced by the tenderer/Contractor in the procurement of the required percentages of local labour is to be referred immediately to the Employer's representative 	Item		
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82 Community Liason Office (Clause C10)

It is a requirement of this Contract that a Community Liaison officer (CLO) be appointed for the area represented by the Tender. The function of the CLO shall be to represent the local community in matters concerning the use of local labour on the works and to assist with and facilitate communication between the Contractor, the Engineer and the local communities. The period of appointment of the CLO shall be as stated in the Contract for Temporary Employment as a Community Liaison officer referred to below. It must be noted that the date of commencement of temporary employment of the CLO shall be no later than the date of commencement of the Contract. The identification of the approved CLO to be appointed by the Contractor under the Contract shall be resolved by the Contractor, the particular Ward Councillors in collaboration with the Local Communities.

It will be required, therefore, that the successful Tenderer (i.e. the Contractor) enter into a contract for the employment of the above-mentioned CLO, the parties to which will be the Contractor, the RDP/Development Forum and the CLO. To this end a specimen Form of Contract for the Temporary Employment as a Community Liaison Officer is included in this document; this Form of Contract sets out, inter alia, the agreement between the parties, the duties and conditions of employment of the CLO (including the rate of remuneration to be paid). As said contract will be between the Contractor and the CLO, all costs involved shall be borne by the Contractor and the tender shall be deemed to include for this.

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83 Guarantees (Clause C11).

Where guarantees are called for, the Contractor shall obtain a written guarantee, addressed to the Employer, from the firm supplying the materials and/or doing the work and shall deliver same to the Principal Agent no later than the works completion date. The guarantee shall state that workmanship, materials and installation are guaranteed for a specified period from the final completion dated and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice from the Principal Agent to do so. This guarantee will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the Contractor. The Principal Agent shall be the sole judge of the cause responsible for defect of the works and his decision shall be final and binding in terms of clause 40.2 of the agreement

Item

84 Warranties for Material and Workmanship (Clause C12).

Where warranties for materials and/or workmanship are called for, the Contractor shall obtain a written warranty, addressed to the Employer, from the firm supplying the materials and/or doing the work and shall deliver same to the Principal Agent on the certified practical completion of the contract. The warranty shall state that workmanship, materials and installation are warranted for a specified period from the date of final completion and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice to do so. The warranty will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the Contractor

Item

85 Overtime (Clause C13).

Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the Contractor unless the Principal Agent has specifically authorised, in writing, prior to execution thereof, that costs for such overtime are to be borne by the Employer

Item

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86 Co-operation of Contractor for Cost Management (Clause C14).

It is specifically agreed that the Contractor accepts the obligation of assisting the agents in implementing proper cost management on this project. The Contractor will be advised by the Principal Agent of all cost management procedures which will be implemented to ensure that the final account does not exceed the budget

Item

87 Reinstatement of Damaged Areas on the Site or Employers' Properties in General Caused by Construction Operations, etc (Clause C16)

Before commencing the works, the Contractor shall arrange with the Principal Agent to inspect, among others, existing buildings, structures, roads, pavings, kerbs, channels and fences on the site or Employers' properties in general. The Contractor shall note in writing, all conditions that the works could affect and copy the Principal Agent accordingly. The Contractor should pay particular attention to cracks, defects and existing levels related to structures, roads, pavings, kerbs, channels and fences, which later could be claimed to have been caused or disturbed by the construction operations. Where instructed by the Principal Agent, levels and photographs shall be taken by the Contractor and the cost thereof shall be for the Employer's account. Certified copies shall be lodged with the Principal Agent. The Contractor will be held responsible for maintaining the above in its present condition during execution of the works and will be liable for all costs relating to the repairing or replacing of damaged areas caused by the construction operations

Item

SUMMARY OF CATEGORIES

Category : Fixed

Category : Value

Category : Time

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Prices for taking out and removing all beads architraves, doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing

With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork

Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary

The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc)

REMOVAL OF EXISTING WORK

Breaking down and removing brickwork including plaster, etc.

1	One brick walls including plaster in beamfilling and prepare walls to receive new beamfilling.	m2	47
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Hack up and remove plaster from walls

2	Plaster to walls.	m2	597
3	Plaster to walls.	m2	441

Take out and removing doors, windows, etc and preparing to receive new doors windows etc, including making good cement plaster on both sides (making good of paint elsewhere measure).

4	Timber or Steel window frames	No	12
5	Timber single door.	No	15
6	Single security gate.	No	7

Take out and remove sundry joinery work:

7	Timber cupboard doors.	m2	7
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Carried to Collection

R

Bill No. 2
Alterations

Taking down and removing roofs, floors, panelling, ceilings, partitions, etc:

8	Pitched roof structure including all timber trusses and purlins. (Roof covering, soffit covering, fascias, barge boards, gutters and rainwater pipes elsewhere measured).	m2	351
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9	Take carefully off existing damaged asbestos roof covering in accordance with health and safety regulations including screws, nails, etc and prepare timber or steel purlins, trusses, etc., to receive new roof covering (elsewhere) and store in accordance with the required regulation.	m2	663
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Take out and remove complete with brackets, claws, bolts, etc:

10	Existing PVC gutters and downpipes including all stop ends, bends, corners, offsets, shoes, fittings etc.	m	172
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11	Take down and remove barge and fascia boards.	m	196
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12	Take down and remove existing VIP toilets.	m	10
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13	Take down and remove existing wash hand basins	m	1
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Hack up and remove Screed to Floors:

14	Hack up existing screed from floors and prepare surface bed to receive new screed (new screed elsewhere measured).	m2	383
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15	Hack up existing screed from floors and prepare surface bed to receive new screed (new screed elsewhere measured).	m2	100
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Disposal of Asbestos

16	Safely dispose of Asbestos previously removed by an approved expert company including certificate of compliance.	Item	
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BUILDING UP, ALTERING AND FORM OPENINGS

Carried to Collection

R

Bill No. 2
Alterations

Repairs to septic tank

17 Servicing of the septic tank

No

2

18 Servicing of the soakaway & pipework including draining, cleaning and checking all existing pipework and repairing where necessary.

Item

Repairs to existing:

19 Service existing opening sashes of windows by easing and adjusting and lubricating hinges to open freely without catching including replacing heavy duty brass handle and stay.

No

50

20 Repair cracks on the existing tank stand to Engineers instructions.

No

1

REMOVAL OF EXISTING WORK**Demolish, hack up/off, take up/off/out and remove:**

21 Breakdown approximate size 2.5 x 2.5m dilapidated tank stand next to an existing classroom block consisting of block walls and concrete foundations.

No

3

22 Demolish approximate size 1.8 x 1.8m on plan existing ablution block consisting of Concrete floors, precast walls, precast roof covering, VIP toilet pans and timber doors including decommissioning and demolishing of existing pit and filling in with suitable backfill material, lightly compacting and raking smooth. Hand over roof structure,, doors etc. to the school governing body and remove all material not required from site.

No

4

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Bill No. 2
Alterations

Bill No. 2

Alterations

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Bill No. 2
Alterations

Item No		Quantity	Rate	Amount
	<u>EARTHWORKS (PROVISIONAL)</u>			
	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.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Proprietary products in descriptions:</u>			
	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.			
	<u>Nature of material to be excavated:</u>			
	The material to be excavated is assumed to be predominantly of a composition that will allow excavation in "earth" as specified, but including a percentage of excavation in "soft rock" and "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>Dewatering of excavations:</u>			
	The Contractor shall allow for removing seepage and other water from subterranean sources from the excavations by pumping, baling or otherwise. Accurate records of all such dewatering shall be kept to determine the total volume of water so removed and a clear distinction shall be made between water from subterranean sources and other water			
	Carried to Collection		R	
	Bill No. 3 Earthworks			

Density testing on filling:

Rates for filling, etc. shall include for all density and soil type testing to prove that the specified compaction is achieved. When additional testing is done on instruction of the Principal Agent and these tests are successful, they will be paid for additionally.

Imported fill:

"Filling and bedding to trenches etc. to be in compliance with SABS 1200 DB and LB respectively"

EXCAVATION, ETC**Excavation in earth not exceeding 2m deep:**

1	Reduced levels under floors.	m3	6
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Extra over trench and hole excavations in earth for excavation in:

2	Soft rock.	m3	1
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3	Hard rock.	m3	0.3
---	------------	----	-----

Extra over all excavations for carting away:

4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	2
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Keeping excavations free of water:

5	Keeping excavations free from mud and all water including subterranean sources.		Item
---	---	--	------

EARTH FILLING, ETC.**Earth filling obtained from the excavations and / or prescribed stock piles on site compacted to 95% Mod. AASHTO density:**

6	Backfilling to trenches, holes, etc.	m3	2
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Earth filling supplied by the contractor compacted to 95% Mod AASHTO density:

Carried to Collection

R

Bill No. 3
Earthworks

Coarse river sand filling supplied by the contractor:

- 7 Under floors etc. (Provisional).

m3

2

Compaction of surfaces:

- 8 Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density.

m2

15

Prescribed density tests on filling:

- 9 Allow for compaction tests by an approved laboratory to determine density of filling material.

No

7

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Bill No. 3
Earthworks

Bill No. 3

Earthworks

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Bill No. 3
Earthworks

Item No		Quantity	Rate	Amount
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<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> <p><u>Cost of tests:</u></p> <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> <p><u>Formwork:</u></p> <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>			
	Carried to Collection		R	
	Bill No. 4 Concrete, Formwork and Reinforcement			

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.

UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES

25MPa/20mm concrete:

- 1 Surface beds / ramps to falls.

m3

2

CONCRETE TESTS

Test blocks:

- 2 Making and testing set of three 150x150x150mm concrete strength test cubes (Provisional).

No

6

CONCRETE SUNDRIES

Finishing top surfaces of concrete smooth with a wood float:

- 3 Surface beds to falls.

m2

15

ROUGH FORMWORK (DEGREE OF ACCURACY III) (CPAP Work Group No 111)

Smooth Formwork to Sides:

- 4 Edges, risers, ends and reveals not exceeding 300mm high or wide.

m

19

MOVEMENT JOINTS ETC

Vertical construction joints through concrete including thick cement slurry to one face:

- 5 Surface beds not exceeding 300mm thick.

m

1

Carried to Collection

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Bill No. 4

Concrete, Formwork and Reinforcement

REINFORCEMENT (PROVISIONAL)

Fabric reinforcement:

6 REF. 193 fabric reinforcement in concrete surface beds,
slabs, etc.

m2

15

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Bill No. 4
Concrete, Formwork and Reinforcement

Bill No. 4

Concrete, Formwork and Reinforcement

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Bill No. 4

Concrete, Formwork and Reinforcement

Item No		Quantity	Rate	Amount
	<u>MASONRY</u>			
	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.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Proprietary products in descriptions:</u>			
	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.			
	<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, and cleaning etc.			
	<u>Samples, etc:</u>			
	Rates for brickwork, faced brickwork, etc shall include for all required samples.			
	<u>Concrete masonry units:</u>			
	Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7 MPa			
	Carried to Collection		R	
	Bill No. 5 Masonry			

Wall ties for blockwork:

Wall ties shall be polypropylene "Permaties" complying with BS 76377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed vertically above each other

Blockwork:

Blockwork shall comply with SABS 0145 "Concrete Masonry Construction"

Surfaces shall have joints raked out to a depth of at least 10mm and pointed on exposed surfaces. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole.

Standard complementary blocks:

Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary

BRICKWORK IN SUPERSTRUCTURE**Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar:**

1	Half brick walls in beamfilling.	m2	28
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BRICKWORK AND BLOCKWORK SUNDRIES**Galvanised wire ties etc:**

2	30x1.6x1600mm long galvanised hoop iron straps built into brickwork and fixed to timber.	No	110
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Carried to Collection

R

Bill No. 5
Masonry

Cramps, ties, etc:

- 3 30 x 2mm Galvanized door frame tie 350mm long with one end fixed to timber and other built into brickwork or concrete.

No

194

Carried to Collection

R

Bill No. 5
Masonry

Bill No. 5

Masonry

COLLECTION

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Bill No. 5

Masonry

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.

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.

Fixing:

Fixing shall be done according to SABS 1200HB with minimum 225mm end laps.

Guarantee:

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.

Pricing:

Prices for roof covering and cladding are to include for all necessary drive screws, hook bolts, sheet bolts, nuts, washers, etc., for drilling holes for screws and bolts including removing all swarf from the sheeting and all right angle cutting and waste (Measured net).

RIBBED SHEETING AND ACCESSORIES

Carried to Collection

Bill No. 6
Roof Coverings Etc.

Rate

Amount

R

0.6mm Continuous IBR profile roof sheeting with pre-painted factory finish fixed with leak king roofing screws. Holes for roofing screws to be drilled not punched. Sheets to project a minimum of 50mm beyond purlins and eaves. Sheets to be fixed to purlins at maximum 1250mm centre to centre.

1	Roof covering with pitch not exceeding 50 degrees.	m2	663		
---	--	----	-----	--	--

SHEET METAL FLASHINGS, LININGS, COPINGS, ETC

0.8mm Nominal thickness ditto, but flashings:

2	Ridge 460mm girth with minimum 230mm laps, fixed to roof sheeting (measured net).	m	51		
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ROOF INSULATION

'Sisalation RSA420' underlay over trusses and under purlins on straining wire prefabricated cleated roof trusses or trusses manufactured on site to be to departmental Engineer's approval.

3	Under roof sheets.	m2	663		
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Carried to Collection

Bill No. 6
Roof Coverings Etc.

R

Bill No. 6

Roof Coverings Etc.

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Bill No. 6
Roof Coverings Etc.

Item No		Quantity	Rate	Amount
	<u>CARPENTRY AND JOINERY</u>			
	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.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Proprietary products in descriptions:</u>			
	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.			
	<u>Prefabricated roof trusses:</u>			
	Prefabricated timber roof trusses shall be constructed of South African pine by a firm of specialist designer manufacturer's as approved by the Architect.			
	Prices must include for all cross and windbracing according to the manufacturer's instruction.			
	Prices must include for the design, plans and approval of all timber trusses and no claim shall be considered.			
	Pre-fabricated timber roof trusses shall comply with the requirements of SABS Specification 0163 and be constructed of South African pine as described in clause 8.5 to the designs shown on the Manufacturer's detail drawings. The timber shall be of cross-sectional dimensions shown, cut to correct lengths with ends square or at the required angle.			
	Trusses shall be assembled in truss fabricating jigs with the truss having the proper camber, all tightly clamped together with joints secured using approved connector plates of galvanised steel sheet. Connector plates shall be pressed into the timber simultaneously from both sides of the truss with a hydraulic press capable of exerting such pressure as will ensure complete penetration of the teeth into the timber.			
	Carried to Collection		R	
	Bill No. 7 Carpentry and Joinery			

The connector plates shall be of such size as will ensure that the joints so made will adequately withstand the forces exerted on the joints.

In coastal areas connector plates in buildings without ceilings shall be painted with two coats of epoxy tar complying with SABS Specification 801 Type 2, or rust neutralising paint.

Approval of pre-fabricated roofing systems, whether measured as an alternative or not, shall be subject to the following requirements:

(a) The Manufacturer of the pre-fabricated trusses shall hold a certificate of competence issued by the Institute for Timber Construction.

(b) A polyester print, size A1 having a minimum thickness of 0,5mm, shall be submitted by the Contractor to the Regional Representative at an early stage for approval by the Directorate: Structural Engineering Services.

(c) The drawings shall be signed by a Registered Professional Engineer whose name appears on the Departmental panel for structural work.

(d) In the case of systems buildings, approval shall be given with submission of the contract drawings on acceptance of the tender.

The following minimum information shall be shown on the drawings:

- (a) Details of the roof system with the position of the rafters and purlins indicated thereon as well as typical elevations.
- (b) Bracing as recommended by the Institute for Timber Construction.
- (c) Sizes and grading of the timber components.
- (d) Truss sizes, e.g. height of ridge or angle of pitch.
- (e) Plate sizes for every construction point. (Code numbers only are deemed insufficient).

Carried to Collection

Bill No. 7
Carpentry and Joinery

R

- (f) Seperate connection details for hip, valley and jack rafters.
- (g) Maximum spacing for purlins and branderling to ceilings shall be according to Subclauses 7.6.1 and 7.6.2 and Clauses 7.8, 7.9 and 9.5.
- (h) The type of roof covering as well as the design load. Over and above the supervision undertaken by the Representative / Agent, the Truss Fabricator or his Design Engineer shall inspect the completed roof structure and issue a certificate of confirmation to the Department that:
- "The roof structure(s) has (have) been erected in accordance with the Design Engineer's drawings, as accepted by the Department, and the relevant details given in the manual "THE ERECTION AND BRACING OF TIMBER ROOF TRUSSES" issued by the National Timber Research Institute and the Institute for Timber Construction".

Joinery:

Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc.

Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes.

Fixing:

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.

Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.

Where items are described as "bolted" the bolts have been measured elsewhere.

ROOFS ETC

Carried to Collection

Bill No. 7
Carpentry and Joinery

R

Sawn softwood:

1	38 x 114mm Wall plate.	m	47		
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Wrought softwood:

2	38 x 114mm Rafters.	m	48		
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3	50 x 76mm Purlins.	m	387		
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Sundries:

4	MiTek® eCo hurricane clip fixed externally to secure purlins to trusses.	No	58		
---	--	----	----	--	--

5	Fix only bolt through average 38mm softwood including drilling hole.	No	58		
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6	Fix only bolt through average 50mm softwood including drilling hole.	No	58		
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Laminated S. A. pine:

7	75 x 115mm beam.	m	85		
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PREFABRICATED ROOF TRUSSES, ETC.

Prefabricated timber roof trusses shall be constructed of South African pine by a firm of specialist designer manufacturers. Trusses to be a minimum of 1200mm 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.

Plate nailed timber roof truss construction:

Note: Tenderers are referred to the Architects roof plan drawings annexed to these bills of quantities / accompanying these bills of quantities for tender purposes. Specifications and calculations of prefabricated roof must be supplied by the contractor on award of the contract. Descriptions (prices) shall be deemed to include design.

Carried to Collection

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Bill No. 7
Carpentry and Joinery

8	Double pitched roof truss 9400mm span between plates to 20 degree pitch with 600mm eaves overhang both ends.	No	55		
	<u>EAVES, VERGES, ETC</u>				
	<u>Everite Nutec fibre cement barge boards and fascia boards:</u>				
9	12 x 225mm width H-profile aluminium Fascia board jointers (product no: 685-195) drill for and fix with hot dipped galvanised screws and washers.	m	155		
10	200 x 80mm width H-profile aluminium barge board jointers (product number : 685-187). Drill for and fix with hot dipped galvanised screws and washers 76x50mm trimmer battens fixed to underside of the purlin ends for barge boards.	m	83		
	<u>DOORS ETC</u>				
	<u>Approved semi-solid core doors, with Commercial veneer both sides and with hardwood edge strips, tongued and grooved on to edges:</u>				
11	44mm Thick, single flush door, size 813 x 2,032mm high.	No	7		
	<u>Meranti doors:</u>				
12	40mm Thick, framed, ledged, braced flush open back door formed of 44 x 114mm stiles and top rail, 22 x 114mm middle ledge and braces and 22 x 222mm bottom ledge, the stiles and top rail grooved for and filled in with 22 x 70mm tongued, grooved and V-jointed vertical boarding, with braces brass screwed to every board, size 813 x 2,032mm high.	No	17		
	<u>BEADS, ARCHITRAVES, ETC</u>				
	<u>Wrought meranti:</u>				
13	19mm Quadrant bead planted on.	m	294		
14	22 x 76mm Skirting fixed to walls including 16mm quadrant bead planted on.	m	323		
15	19 x 70mm meranti dado rail to internal walls.	m	223		
	Carried to Collection			R	
	Bill No. 7				
	Carpentry and Joinery				

SHELVING**Wrought laminated softwood:**

16	19mm Thick laminated wrot S A pine shelving with rounded edges on front side, screwed to brackets (elsewhere).	m2	20		
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PINNING BOARDS**Bitumen impregnated fibre board:**

17	12mm Insulation board backing plugged and glued to wall including all square cutting and waste.	m2	40		
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Wrought meranti:

18	22 x 44mm Rebated and chamfered surrounds plugged and screwed to wall at not exceeding 500mm centres, including screws, holes, plugs, etc.	m	101		
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Bill No. 7
Carpentry and Joinery

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Carpentry and Joinery

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Carpentry and Joinery

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Clean by stripping and sealing and apply three coats water based copolymer emulsion or other approved sealer:

2 On vinyl flooring.

m2

540

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Bill No. 8
Floor Covering

Bill No. 8

Floor Covering

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Bill No. 8
Floor Covering

Item No		Quantity	Rate	Amount
	<p><u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u></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> <p><u>Descriptions:</u></p> <p>Items described as nailed shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete.</p> <p>Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as bolted the bolts have been given.</p> <p><u>NAILED UP CEILINGS</u></p> <p><u>9mm Rhinoboard clout nailed to 38 x 50mm brandering at 450mm centres with 12mm wide H-profile metal cover strips over joints.</u></p>			
1	Ceilings including 38 x 50mm sawn softwood brandering at 450mm centres with cross brandering at joints, ends of sheets and at light fittings, etc.	m2	568	
	<p><u>Paper covered polystyrene cornice, or equal approved, plugged to walls including mitres, etc.:</u></p>			
2	75 x 20mm softwood cornice.	m	296	
	Carried to Collection			R
	Bill No. 9			
	Ceilings, Partitions and Access Floring			

3 Trap door

m

9

Non-combustible polyester thermal insulation of a density of not less than 10kg/m3:

4 100mm Insulation in blanket form closely fitted and laid on top of brandering between roof timbers etc.

m2

568

Carried to Collection

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Bill No. 9
Ceilings, Partitions and Access Flooring

Bill No. 9

Ceilings, Partitions and Access Flooring

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Bill No. 9

Ceilings, Partitions and Access Flooring

Item No		Quantity	Rate	Amount
	<u>IRONMONGERY</u>			
	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.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Proprietary products in descriptions:</u>			
	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:			
	<u>Finishes to ironmongery:</u>			
	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 Fixing:			
	Descriptions of wall mounted and floor standing ironmongery items shall be deemed to include for fixing in position and all fixing accessories			
	Descriptions of proprietary items shall be deemed to include fixing in position and all fixing accessories			
	<u>Hinges:</u>			
1	100 x 75mm Double washered solid brass butt hinges.	No	60	
	<u>Locks:</u>			
2	Three lever approved mortice lock (Union 2277-78) complete with approved chromium plated handles.	No	14	
	Carried to Collection			R
	Bill No. 10 Ironmongery			

3	BB-179S Brass barrel bolt toilet lockset or similar approved.	No	10		
4	Indicator bolts	No	10		
<u>BATHROOM FITTINGS ETC.</u>					
<u>Stainless steel 32mm diameter grab rails grade 304 stainless steel:</u>					
5	Franke CNTX750, size 750 x 90mm deep grab rails plugged and screwed to wall.	No	1		
6	Franke CNTX41R, size 127 x 127 x 500mm deep right side rails plugged and screwed to wall.	No	1		
7	Franke CNTX21, size 415 x 415 x 95mm deep grab rail plugged and screwed to wall.	No	1		
<u>Sundries:</u>					
8	32mm Diameter black rubber door stop plugged to concrete floor.	No	22		
9	50mm Plastic key tag.	No	22		
10	Toilet roll holders	No	10		
<u>LETTERS, NAMEPLATES, ETC.</u>					
<u>Acrylic door plates:</u>					
11	40 x 40 x 5mm Thick black acrylic door number plate with two numbers size 25mm high, engraved with arial font and painted white, fixed to door, door frame or wall with chromium plated domeheaded screws.	No	12		
<u>Sign plates:</u>					
12	152 x 152 x 2mm Anodised silver engraved sign with Male and Female Pictogram E12, fixed to wall or door (Union AL5066E-12/2AS).	No	2		
Carried to Collection				R	
Bill No. 10 Ironmongery					

Bill No. 10

Ironmongery

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Bill No. 10
Ironmongery

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Galvanised Mild Steel Door Frames and fixing to brickwork or concrete:

- 3 1.2mm double-rebate pressed metal door frame for 220mm walls, size 813 x 2032mm high, with galvanized finish.

No

9

GALVANIZED GATES**Hot Dipped Galvanised Steel Gates:**

Note: The contractor is to check on site measurements before placing of order.

- 4 Security gate size 900 x 2,097mm high formed of 60 x 40 x 2mm hollow square section frame, with two 40 x 6mm horizontal supports with 19mm holes drilled for and including six 19mm diameter vertical rods, the whole gate fitted inside a 40 x 60 x 2mm gate surround, with three 25mm diameter x 80mm long pin hinges welded to 25 x 3 x 200mm lugs built into concrete block walls complete with two 55 x 40 x 8mm padlock plates for locking and door hook, all as indicated on Engineerss Drawing No. J26075/009/0, attached to these bills of quantities.

No

14

SUNDRY GALVANISED STEELWORK**Galvanised Steel Tubes:**

- 5 150mm GMS diameter tubing support for overhang.

No

4

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Bill No. 11
Metalwork

Bill No. 11

Metalwork

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Metalwork

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Item No		Quantity	Rate	Amount
	<p><u>PLUMBING AND DRAINAGE</u> <u>(PROVISIONAL)</u></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> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be 'Cobra Watertech' type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground.</p> <p><u>Chasing:</u></p> <p>Chasing pipes into new walls shall be regarded as "building in" and is not measured separately. The cost of chasing, wrapping in suitable bown paper and making good shall be included in the rates for pipes.</p> <p><u>Holes for pipes through new walls:</u></p> <p>No allowance for holes and drilling for pipes through new walls has been made in these bills of quantities, the price for all holes and making good shall be deemed to be included in the description of pipes.</p>			
	Carried to Collection		R	
	Bill No. 13 Plumbing and Drainage			

Reducing fittings:

Where fittings have reducing ends or branches they are described as 'reducing'. In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the Contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained.

Description of pipes laid in trenches:

Descriptions of pipes laid in trenches shall be deemed to include for carting away all surplus excavated material to a dumping site located by the contractor.

Excavations:

No claim for rock excavation will be entertained unless the Contractor has timeously notified the quantity surveyor thereof prior to backfilling.

'Soft rock' and 'hard rock' shall be as defined in 'Earthworks'.

Laying, backfilling, bedding, etc of pipes:

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions.

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB: Earthworks (Pipe trenches) Clause 5.7.2 will only be applicable if authorised by the Engineer in writing.

Flush pans:

Flush pans shall have straight or side outlets and 'P' or 'S' traps as necessary.

Carried to Collection

R

Bill No. 13
Plumbing and Drainage

Stainless steel basins, sinks, wash troughs, urinals, etc:

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable.

Fixing:

Descriptions of wall mounted, floor standing, drop-in, etc type sanitary fittings shall be deemed to include fixing in position and all fixing accessories.

Descriptions of proprietary items shall include fixing in position and all fixing accessories as specified by the manufacturer.

Waste unions:

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings.

Sleeve pipes:

Electrical sleeve pipes to be Class 34 and are to include for draw wires.

RAINWATER DISPOSAL (PROVISIONAL):

0.8 mm Seamless Aluminium Ogee Gutters baked with enamel finish:

1	150 x 125 x 150mm High eaves gutter sfixed to falls in continuous lengths at not exceeding 600mm centres with and including approved gutter brackets.	m	154
2	Extra over eaves gutter for stopped end.	No	20
3	Extra over eaves gutter for outlet for 100 x 75mm pipe.	No	52
4	100 x 75mm Rainwater pipes fixed to walls with and including approved holderbats at 900mm centres.	m	158
5	Extra over rainwater pipe for bend.	No	106

SANITARY FITTINGS

Carried to Collection

R

Bill No. 13
Plumbing and Drainage

Polyethylene fittings:

- 6 Atlas Plastics rotomoulded polyethylene VIP 200 pit pedestal, or equal approved, size 370 x 500mm high (code: 223AP) with foot piece and VIP 200 inlet funnel (code: 224AP), inserted into precast concrete cover slab of pit (elsewhere specified) with a removable plug, with and including four 6mm diameter x 50mm long expansion bolts, including heavy duty white double flap seat fixed to pedestal.

No

10

- 7 Atlas Plastics rotomoulded polyethylene Christy wash hand basin (code: 382AP) 570mm x 395mm wide, or equal approved, with 2 tapholes and 40mm waste outlet, plugged and screwed to the wall with galvanised screws and brackets.

No

7

WASTE UNIONS ETC**Waste unions etc:**

- 8 32mm Code 301 chrome plated basin waste union.

No

7

TRAPS ETC**Traps etc:**

- 9 Rubber 32 x 40mm Plain basin P-trap.

No

7

- 10 40mm Rough brass shallow seal shower 'P' trap with FI outlet and chrome plated grating.

No

7

TAPS, VALVES, ETC**Pillar taps:**

- 11 Cobra 211-15mm star pillar tap with flanged backnut, manufactured in accordance to SANS 226 Type 2,DZR Brass, JASWIC-listed.

No

7

Sundries, etc:

- 12 Standard 15mm stainless steel braided female swivel connection piece 350mm long.

No

7

SANITARY PLUMBING

Carried to Collection

R

Bill No. 13
Plumbing and Drainage

Extra over uPVC piping for:

15	50mm Access bend.	No	4
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Testing:

WATER SUPPLIES

Polypropylene pipes with thermoplastic couplings:

Extra over polypropylene pipes for thermoplastic fittings:

Testing:

Sundry work in connection with all plumbing:

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Plumbing and Drainage

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Bill No. 13

Plumbing and Drainage

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Plumbing and Drainage

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Item No		Quantity	Rate	Amount
	<u>PAINTWORK</u>			
	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.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Proprietary products in descriptions:</u>			
	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.			
	All work to be executed in strict accordance with the specifications of the paint manufacturer.			
	Where surfaces of plaster etc are sandy / friable, the first coat must be replaced with plaster primer thinned 10% with turpentine.			
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>ON FIBRE-CEMENT</u>			
	<u>Prepare and apply two coats pure acrylic roof paint on:</u>			
1	Fascias and barge boards.	m2	103	
2	Ceilings and cornices.	m2	640	
	<u>ON PLASTERED SURFACES</u>			
	<u>Prepare and apply one undercoat and paint with two coats Emulsion paint, colour to be approved by the Architect:</u>			
3	Internal walls (Provisional).	m2	1,018	
4	External walls (Provisional).	m2	712	
	Carried to Collection			R
	Bill No. 15 Paintwork			

<u>Prepare screeded floors with pavelite and prime with one coat hypoxy purecoat clear (PUC 1) and finish with two coats Hypoxy purecoat (PUC):</u>					
5	On screeded floors	m2	44		
<u>ON WOOD</u>					
<u>Prepare and apply one coat wood primer, one undercoat and two coats ABE provonite, before fixing on roof sheets, fascias and bargeboards.</u>					
6	General surfaces of timbers at eaves.	m2	83		
<u>Prepare and apply one coat universal undercoat and two coats superior quality eggshell enamel paint:</u>					
7	Doors (all surfaces measured).	m2	78		
8	Frames, rails, etc not exceeding 300mm girth.	m	124		
<u>ON METAL</u>					
<u>Clean down thoroughly with galvanised iron cleaner, wash down with water, and apply one coat bituminous paint on:</u>					
9	Backs of frames, linings, etc not exceeding 300mm wide.	m	117		
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Bill No. 15 Paintwork					

Bill No. 15

Paintwork

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Bill No. 15

Paintwork

Item No		Quantity	Rate	Amount
	<u>EXTERNAL WORK (PROVISIONAL)</u>			
	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.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Proprietary products in descriptions:</u>			
	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.			
	<u>STORMWATER CHANNELS</u>			
	<u>Insitu concrete channels:</u>			
1	900 x 150mm 25Mpa open concrete stormwater channel with 560 x 60mm deep 'V' channel, on suitable 150mm subbase material compacted to 93% Mod A.A.S.H.T.O. density, including all necessary excavations, formwork, compaction, grading, carting away, etc.	m	206	
2	Extra over for angles, intersections, ends, dressing into sides of catchpits, etc	No	33	
3	2000mm long 25Mpa concrete spreader with staggered bricks in concrete slab opening up to be 1500mm wide.	No	16	
	<u>RAINWATER TANKS AND STANDS</u>			
	<u>Site clearance etc:</u>			
4	Allow for clearing site including removing trees, shrubs etc. not exceeding 200mm girth, grubbing up roots and roughly levelling.	m2	106	
	<u>Excavation in earth not exceeding 2m deep:</u>			
5	Trenches.	m3	44	
	Carried to Collection			R
	Bill No. 16 External Work			

	<u>Extra over trench and hole excavations in earth for excavation in:</u>				
6	Soft rock.	m3	6		
7	Hard rock.	m3	18		
	<u>Extra over all excavations for carting away:</u>				
8	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	17		
	<u>Risk of collapse of excavations:</u>				
9	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	88		
	<u>Keeping excavations free of water:</u>				
10	Keeping excavations free of water.		Item		
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density:</u>				
11	Backfilling to trenches, holes, etc.	m3	11		
	<u>Earth filling supplied by the contractor compacted to 95% Mod AASHTO density:</u>				
12	Under floors, steps, pavings, etc.	m3	10		
	<u>Compaction of surfaces:</u>				
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density.	m2	69		
	<u>15MPa/20mm concrete:</u>				
14	Strip footings.	m3	11		
	<u>25MPa/20mm concrete:</u>				
15	Surface beds.	m3	9		
Carried to Collection				R	
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External Work					

	<u>Sundries:</u>				
16	Extra for setting in position and casting holding down bolt into concrete base.	No	44		
	<u>Finishing top surfaces of concrete smooth with a wood float:</u>				
17	Apron slabs, paving, etc to slight falls.	m2	69		
	<u>Rough Formwork to Sides:</u>				
18	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	110		
	<u>Fabric reinforcement:</u>				
19	REF. 193 fabric reinforcement in concrete surface beds, slabs, etc.	m2	69		
	<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:</u>				
20	One brick walls.	m2	143		
	<u>Brickwork reinforcement:</u>				
21	150mm Wide reinforcement built in horizontally.	m	330		
	<u>Galvanised hoop iron cramps, ties, etc:</u>				
22	30 x 1,6mm Tie secured around tank and 4 times built into concrete (Total for one tank = 12 meters).	No	44		
	<u>Facebricks (FBS) prime cost of R5 500.00 per thousand excluding VAT delivered to the site pointed with square ruled recessed horizontal and vertical joints:</u>				
23	Extra over brickwork for face brickwork externally.	m2	88		
	<u>One layer of 250 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':</u>				
24	Under surface beds.	m2	69		
Carried to Collection				R	
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External Work					

Rainwater tanks:

25	5000 Litre low profile 'Jojo' water storage tank or similar approved, complete with lid, fitted with and including 15mm brass bib-tap (Type 108LK15) with suitable adaptor and setting in position on concrete tank-stand (elsewhere measured) and tying down with 4mm diameter galvanised wire wrapped twice around centre of tank and secured to each corner of tank stand with a double strand of 4mm diameter galvanised wire embedded into concrete. (Note: tanks to be filled with water before Practical Completion).	No	11
26	Hole through top of tank lid for 100mm diameter pipe.	No	11

Testing:

27	Allow for testing all drains, and water supplies to the satisfaction of the Architect and Engineer. All defective work is to be taken out and replaced at the Contractor's expense		Item
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CONCRETE WALKWAYS**Site clearance:**

28	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	242
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Open face excavation not exceeding 2m deep:

29	Over site to reduce levels and depositing excavated material in prescribed stock piles on site.	m3	73
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Extra over bulk excavation in earth for excavation in:

30	Soft rock.	m3	7
31	Hard rock.	m3	15

Extra over all excavations for carting away:

32	Surplus material from stock piles on site to a dumping site to be located by the contractor.	m3	36
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	<u>Keeping excavations free of water:</u>				
33	Keeping excavations free of water.		Item		
	<u>Earth filling supplied by the contractor under pavings etc:</u>				
34	Over site of SUBGRADE material compacted to 95% Mod A.A.S.H.T.O. density.	m3	36		
	<u>Compaction of surfaces.</u>				
35	Compaction of ground surface under roads etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material from excavated material where necessary and compacting to 93% Mod AASHTO density.	m2	242		
	<u>25MPa/20mm concrete:</u>				
36	Paving surface beds cast in panels.	m3	24		
	<u>Finishing top surfaces of concrete smooth with a wood float:</u>				
37	Paving, etc to slight falls.	m2	242		
	<u>Rough Formwork to Sides:</u>				
38	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	660		
	<u>Fabric reinforcement:</u>				
39	REF. 193 fabric reinforcement in concrete surface beds, slabs, etc.	m2	242		
	<u>SOAK AWAY</u>				
	<u>Site clearance etc:</u>				
40	Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, trees with trunks not exceeding 200mm girth, debris, etc., including grubbing up all roots, scoffling up as required and cart away all vegetation and debris.	m2	15		
	Carried to Collection			R	
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	External Work				

	<u>Excavation in earth not exceeding 2m deep:</u>				
41	Drain soakaway.	m3	18		
	<u>Extra over bulk excavation in earth for excavation in:</u>				
42	Soft rock.	m3	2		
43	Hard rock.	m3	1		
	<u>Extra over all excavations for carting away:</u>				
44	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	11		
	<u>Risk of collapse of excavations:</u>				
45	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	48		
	<u>Keeping excavations free of water:</u>				
46	Keeping excavations free from mud and all water including subterranean sources.			Item	
	<u>Topsoil:</u>				
47	Topsoil carted on top of Bidum (elsewhere) spread and levelled.	m3	2		
	<u>Earth filling supplied by the contractor and lightly compact:</u>				
48	Imported crusher dust or courses river sand.	m3	3		
49	Selected 38mm graded stone in drain soakaway.	m3	3		
	<u>Bidum</u>				
50	Kaymat U24 laid in french drain soakaway.	m2	24		
	<u>Drainage:</u>				
51	110mm Diameter perforated piping laid in drain soakaway.	m	20		
	Carried to Collection			R	
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Bill No. 16

External Work

COLLECTION

Total Brought Forward from Page No.

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No**

Amount

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Carried to Summary

R

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External Work

Item No		Quantity	Rate	Amount
	<u>PROVISIONAL SUMS</u>			
	<u>CLO ALLOWANCE</u>			
1	Provide an amount of R100 000.00 One Hundred Rand) nett for Community Liaison Officer's Salary to be R10 000.00 per month omitted in part or whole as instructed by Principal Agent .	Item		100,000.00
2	Allow for profit.	Item		
3	Allow for attendance.	Item		
	<u>ELECTRICAL WORK</u>			
4	Provide the amount of R820 000.00 (Eight hundred and Twenty Thousand Rand) for Electrical Work to be executed complete by a specialist subcontractor including all wiring, commissioning, COCs etc.	Item		820,000.00
5	Allow for profit if required.	Item		
6	Allow for attendance where required.	Item		
	MINIMUM TARGETED ENTERPRISE DEVELOPMENT			
7	A provisional amount has been allowed for in the execution of this project as described in C3.1 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		92 953.99
8	Allowance for profit all inclusive of associated costs to the contractor for implementation.	%		
9	Allowance for attendance all inclusive of associated costs to the contractor for implementation.	%		
	Carried to Summary		R	
	Bill No. 17 Provisional Sums			

FINAL SUMMARY		Page No	Amount	
Bill No				
1	Preliminaries	31		
2	Alterations	36		
3	Earthworks	40		
4	Concrete, Formwork and Reinforcement	44		
5	Masonry	48		
6	Roof Coverings Etc.	51		
7	Carpentry and Joinery	58		
8	Floor Covering	61		
9	Ceilings, Partitions and Access Flooring	64		
10	Ironmongery	67		
11	Metalwork	70		
12	Plastering	71		
13	Plumbing and Drainage	77		
14	Glazing	78		
15	Paintwork	81		
16	External Work	88		
17	Provisional Sums	89		
Total for Building Works:			R	
<u>CONTINGENCIES</u>				
The Tenderer shall add Five Percent (5%) the total of Schedule of Quantities and this Sum shall be under the sole control of the Client and maybe deducted in whole or in part			R	Not Priced
Sub Total			R	
Carried Forward			R	

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