

vi) If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories, where "F" denotes a fixed amount (amount not to be varied), "V" denotes an amount variable in proportion to value and "T" denotes an amount in proportion to time

vii) Any reference to the words "Tender" or "Tenderer" herein and/or in any other documentation shall be construed to have the same meaning as the words "Bid" or "Bidder"

SECTION A: JBCC PRINCIPAL BUILDING AGREEMENT

Definitions (A1)

1 Definitions and interpretation (clause 1)

Clause 1.1 Definition of "**Agreement**" is amended by replacing it with the following:

Agreement means the agreement arising from the signing of the Form of Offer and Acceptance by the parties.

Clause 1.1 Definition of "**Bills of Quantities**" is amended by adding the following:

"...and the Pricing Instructions contained in the Pricing Data" after the word measuring system.

Clause 1.1 Definition of "**Contract Documents**" is amended by adding the following:

".....this Agreement and all other documents referenced therein.." after the word this document"

Clause 1.1 Definition of "**Contract Drawings**" is amended by replacing it with the following:

Contract Drawings means the drawings upon which the tender was accepted and used in preparing the bills

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of quantities and are available for viewing at the offices of the Principal Agent at the time of tender

Clause 1.1 Definition of "**Contract Sum**" is amended by replacing it with the following:

Contract Sum means the total of prices in the Form of Offer and Acceptance.

Clause 1.1 Definition of "**Schedule**" is amended by adding the following:

".....and in the **Contract Data**". at the end on the sentence ending with **agreement**

Clause 1.1 Definition of "**Commencement Date**" is added:

"Commencement date" means the date that the **agreement**, made in terms of the Form of Offer and Acceptance, comes into effect

Clause 1.1 Definition of "**Construction Guarantee**" is amended by replacing it with the following:

"Construction guarantee" means 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**

Clause 1.1 Definition of "**Construction Period**" is amended by replacing it with the following:

"Construction period" means the period commencing on the commencement date and ending on the date of practical completion

Clause 1.1 Definition of "**Corrupt Practice**" is added:

"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

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Clause 1.1 Definition of "**Fraudulent Practice**" is added:

"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 or 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.

Clause 1.1 Definition of "**Interest**" is amended by replacing it with the following:

"Interest" means the interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be the 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).

Clause 1.1 Definition of "**Principal Agent**" is amended by replacing it with the following:

"Principal Agent" means the person or entity appointed by the **employer** and named in the **schedule**. In the event of a **principal agent** not being appointed, then all the duties and obligations of a **principal agent** as detailed in the **agreement** shall be fulfilled by a representative of the **employer** as named in the **schedule**.

Clause 1.1 Definition of "**Security**" is amended by replacing it with the following:

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 expense or loss

Fixed

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5	Employer's agents (clause 5)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
6	Contractor's site representative (clause 6)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
7	Compliance with laws and regulations (clause 7) Note: A separate clause has been included in Section C: Specific Preliminaries of the bills of quantities for the contractor to have the opportunity to price for all the requirements of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
8	Works risk (clause 8)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
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9	<p>Indemnities (clause 9)</p> <p>Clause 9.0 is amended by adding Clause 9.1.4:</p> <p>The contractor indemnifies and holds harmless the employer against all liability, losses, claims, damages, penalties, actions, proceedings or judgments (collectively referred to as "Losses") arising from any infringement of letters, patent design, trademark, name, copyright or other protected rights in respect of any machine, plant, work, materials, thing, system or method of using, fixing, working or arrangement used or fixed or supplied by the contractor, but such indemnity shall not cover any use of the equipment of part thereof otherwise than in accordance with the provisions of the specification. All payments and royalties payable in one sum or by installments or otherwise shall be included by the contractor in the price and shall be paid by him to those to whom they may be payable. The contractor shall reimburse the employer for all legal and other costs and expenses, including without limitation attorney's fees on attorney-client scale incurred by the employer in connection with investigation, defending or settling any Losses in connection with pending or threatening litigation in which the employer is a party.</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>			
10	<p>Works insurances (clause 10)</p> <p>Clause 10.0 is amended by the addition of the following clauses</p> <p>10.5 Damage to the Works</p> <p>(a) Without in any way limiting the contractor's obligations in terms of the contract, the contractor shall bear the full risk of damage to and/or destruction of the works by whatever cause during construction of the works and hereby indemnifies and holds harmless the</p> <p style="text-align: right;">Carried to Collection</p> <p>Prepared by Mgiba Consulting</p>	<p>Item</p> <p>Item</p> <p>Item</p>		<p>R</p>

employer against any such damage. The **contractor** shall take such precautions and security measures and other steps for the protection and security of the **works** as the **contractor** may deem necessary

- b) The **contractor** shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the **works** and to rebuild, restore, replace and/or repair the **works**
- (c) The **employer** shall carry the risk of damage to or destruction of the **works** and material paid for by the **employer** that is the result of the excepted risks as set out in 10.6
- (d) Where the **employer** bears the risk in terms of this contract, the **contractor** shall, if requested to do so, reinstate any damage or destroyed portions of the **works** and the costs of such reinstatement shall be measured and valued in terms of 32.0 hereof

10.6 Injury to Persons or loss of or damage to Properties

- (a) 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 liable
- (b) 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

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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 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 obtain adequate insurance and will remain adequately insured or insured to the specific limit stated in the contract 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 completed

- (f) 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 **works**

10.7 High risk insurance

In 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 doline formation the following will apply:

10.7.1 Damage to the works

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The **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 necessary

When 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

10.7.2 Injury to persons or loss of or damage to property

The **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 above

The **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 contract

10.7.3 It is the responsibility of the **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**

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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

		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
11	Liability insurances (clause 11)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
12	Effecting insurances (clause 12)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
13	No clause (clause 13)				
			Item		

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Execution (A15 - A23)

- 15 Preparation for and execution of the works (clause 15)
- Clause 15.1.1 is amended by replacing it with:
- No clause
- Clause 15.1.2 is amended by replacing it with:
- The **security** selected in terms of 14.0
- Clause 15.1 is amended by the addition of the following clause:
- 15.1.4 An acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) or latest edition, revision and amendments, within twenty-one (21) **calendar days** of **commencement date**
- Clause 15.2.1 is amended by replacing it with the following clause:
- Give the **contractor** possession of the **site** within ten (10) **working days** of the **contractor** complying with the terms of 15.1

Fixed

Item

Value Related

Item

Time Related

Item

- 16 Access to the works (clause 16)

Fixed

Item

Value Related

Item

Time Related

Item

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17	Contract instructions (clause 17)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
18	Setting out of the works (clause 18)				
	<i>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</i>				
	<i>The contractor shall perform tolerance control checks regularly throughout the contract period and report on this at regular interval to the Principal Agent in the approved format. Should the contractor fail to comply with this requirement to the satisfaction of the the Principal Agent, progressively as the structure is being constructed, the Employer will commission a Registered Land Surveyor to do so on the Contractor's behalf and at the Contractor's Expense.</i>				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
19	Assignment (clause 19)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
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	Time Related	Item		
28	Sectional completion (clause 28)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
29	Revision of date of practical completion (clause 29)			
	Clause 29.1.1 shall be deemed to be omitted and replaced by the following:			
	Inclement weather shall be defined as weather in excess of the average rainfall (volume and period) for each calender month over the past ten (10) years as recorded by the nearest commonly recognised weather bureau in the region of the project			
	It shall be deemed that the contractor has adequately allowed in his programme and tendered rates for expenses which might result from delays due to average or below rainfall as described above			
	Add Clause 29.9 as follows:			
	Revision to the date for practical completion shall only be considered when work on the critical path of the agreed programme for the works is delayed."			
	Add Clause 29.10 as follows:			
	Clause 29.10 - Acceleration			
	Clause 29.10.1			
	Irrespective of whether or not the principal agent rules that the contractor is entitled to an extension of time or a revision of the date for practical completion , the principal agent shall nevertheless, at any time, be entitled to instruct the contractor in writing to accelerate the			
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progress of the remaining **works** to ensure that the **works** are completed by the original date for **practical completion** or revised date as the case may be.

Clause 29.10.2

Upon receipt of such instruction, the **contractor** shall take all necessary steps to ensure that the **works** are completed timeously including the provision by him of additional resources, plant, manpower, etc and the working overtime or additional overtime beyond that contemplated at the time of tender (at all times adhering to the regulations and requirements of all authorities) and by all other adequate and proper means and methods. The **contractor** shall prove that such steps are being taken if called upon to do so.

Clause 29.10.3

The **contractor's** entitlement to compensation arising out of or in respect of any revision to the date for **practical completion** that may have been granted by the **principal agent** or alternatively where the **principal agent** has instructed the **contractor** to accelerate, shall be adjudicated strictly in terms of clause 32.

Fixed

Item

Value Related

Item

Time Related

Item

30 Penalty for non-completion (clause 30)

Clause 30 is amended by replacing reference to 36.3 at end of sentence with 36.0

Fixed

Item

Value Related

Item

Time Related

Item

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Payment (A31 - A35)

31 Interim payment to the contractor (clause 31)

Clause 31.9 is amended by replacing "seven (7) **calender** days" with "thirty (30) **calender** days" and by deleting the words "subject to the **contractor** giving the **employer** a tax invoice for the amount due"

Clause 31.12 is amended by deleting the following

Payment shall be subject to the **employer** giving the **contractor** a tax invoice for the amount due

Fixed

Item

Value Related

Item

Time Related

Item

32 Adjustment to the contract value (clause 32)

Clause 32.0

Clauses 32.5.1, 32.5.4 and 32.5.7 are amended by the addition of the following at the end of the sentence:

"due to no fault of the **contractor**"

Fixed

Item

Value Related

Item

Time Related

Item

33 Recovery of expense and loss (clause 33)

Fixed

Item

Value Related

Item

Time Related

Item

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Cancellation (A36-A39)

- 36 Cancellation by employer - contractor's default (clause 36)
- Clause 36.1 is amended by the additions of the following clauses:
- 36.1.3 refuses or neglects to comply strictly with any of the conditions of contract
- 36.1.4 estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa
- 36.1.5 in the judgement of the **employer**, has engaged in **corrupt** or **fraudulent practices** in competing for or in executing the contract
- Clause 36.3 is amended by removing the reference to "No clause" and replacing the words "**principal agent**" with "**employer**"
- Clause 36.0 is amended by the addition of the following clause:
- 36.7 Notwithstanding any clause to the contrary, on cancellation of this **agreement** either by the **employer** or the **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

Fixed

Item

Value Related

Item

Time Related

Item

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37	<p>Cancellation by employer - loss and damage (clause 37)</p> <p>Clause 37.3.5 is amended by replacing "ninety (90)" with "one-hundred and twenty (120)"</p> <p>Clause 37.0 is amended by the addition of the following clause:</p> <p>37.5 Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the 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</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>			
38	<p>Cancellation by contractor - employer's default (clause 38)</p> <p>Clause 38.5.4 is amended by replacing "ninety (90)" with "one-hundred and twenty (120)"</p> <p>Clause 38.0 is amended by the addition of the following clause:</p> <p>38.7 Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the 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</p> <p style="text-align: right;">Fixed</p>			
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	Value Related	Item		
	Time Related	Item		
39	Cancellation - cessation of the works (clause 39)			
	Clause 39.3.5 is amended by the addition of the following at the end of the sentence: "within one-hundred and twenty (120) working days of completion of such report"			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>Dispute Settlement (A40)</u>			
40	Disputes Settlement (clause 40)			
	Clause 40.2.2 is amended by replacing "one (1) year" with "three (3) years"			
	Clause 40.6 is amended by removing the reference to:			
	No clause			
	Clause 40.7.1 is amended by replacing "(10)" with "(15)" and by the addition of the following:			
	Whether or not mediation resolves the dispute, the parties shall bear their own cost concerning the mediation and equally share the costs of the mediator and related costs.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>State Provision (A41)</u>			
41	State Substitutions (clause 41)			
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Delete in the Substitute Provisions (41.0 State Clauses) clauses 40.2.1, 40.2.2, 40.3, 40.4, 40.5 and 40.6 and replace with the following:

40.1 Should any dispute between the **employer**, his **agents** or **principal agent** on the one hand and the contractors on the other arise out of this **agreement**, such dispute shall be referred to adjudication.

40.2 Adjudication shall be conducted in accordance with the edition of the JBCC Rules for Adjudication current at the time when the dispute is declared. The party, which raises the dispute, shall select three adjudicators from the panel of adjudicators published by the South African Institution of Civil Engineering or Association of Arbitrators (Southern Africa), determine their hourly fees and confirm that these adjudicators are available to adjudicate the dispute in question. The other party shall then select within 7 days one of the three nominated adjudicators, failing which the chairman for the time being of the Association of Arbitrators (Southern Africa) shall nominate an adjudicator. The **adjudicator** shall be appointed in terms of the Adjudicators Agreement set out in C1.4 .

40.3 If provided in the **schedule**, a dispute shall be finally settled by a single Arbitrator to be agreed on between the parties or, failing such agreement within 28 days after referring the dispute to Arbitration, an Arbitrator nominated by the chairman for the time being of the Association of Arbitrators (Southern Africa). Any such reference shall be deemed to be a submission to the arbitration of a single arbitrator in terms of the Arbitration Act (Act No 42 of 1965, as amended), or any legislation passed in substitution therefore. In the absence of any other agreed procedure, the arbitration shall take place in accordance with the Rules for the Conduct of Arbitrations issued by the Association of Arbitrators (Southern Africa) which are current at the time of the referral to arbitration. The Arbitrator shall, in his award, set

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	out the facts and the provisions of the contract on which his award is based.				
	40.4 If the schedule provides for court proceedings to finally resolve disputes, disputes shall be determined by court proceedings.				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
	<u>Contract Variables (A41)</u>				
42	The Schedule (clause 42)				
	<i>Tenderers are referred to the Contract Data and Notes to Tenderes for variable pertaining to this contract</i>				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
	<u>SECTION B: PRELIMINARIES</u>				
	<u>Definition and interpretation (B1)</u>				
43	Definition and interpretation				
	See also clause A1.0 of Section A for additional and/or amended definitions which shall apply equally to this Section				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
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	<u>Documents (B2)</u>				
44	Checking of documents (B2.1)				
	<i>These bills of quantities:</i>				
	<i>(1) contain pages and annexes as indexed, and;</i>				
	<i>(2) are in multiple procurement format, i.e. all trades are fully measured with minor budgetary allowances</i>				
	<i>Items in these bills of quantities are to be read and priced in conjunction with and the descriptions regarded as amplified by the Model Preambles for Trades, 2008 edition, as recommended and published by the Association of South African Quantity Surveyors and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained</i>				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
45	Provisional bills of quantities (B2.2)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
46	Availability of construction documentation (B2.3)				
	<i>The minor budgetary allowances included in this document will be separately procured, based on multiple procurement of selected sub-contractors during the construction period</i>				
	Fixed	Item			
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54	Previous work - dimensional accuracy (B3.5)				
	<i>Work executed under a previous contract and the extent thereof will be pointed out to the contractor by the principal agent on handing over of the site</i>				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
55	Previous work - defects (B3.6)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
56	Services - known (B3.7)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
57	Services - unknown (B3.8)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
58	Protection of trees, etc (B3.9)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
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|----|---|--|--|--|--|
| | <p>respects with the requirements of this Agreement.</p> | | | | |
| 2. | shall be drawn up using logic developed during the tender period and complies with the planning requirements of the Client. | | | | |
| 3. | shall be in accordance with the dates given herein for possession and practical completion; and | | | | |
| 4. | shall be in sufficient and approved detail to ensure effective control of the work, including all items necessary to enable calculations to be made for the distribution of finance during the cashflow analysis. | | | | |
| 5. | shall be accompanied by a full written method statement | | | | |

The principal agent shall examine and comment on the contract programme and method statement within two weeks of its submission.

Following on these comments the contractor shall amend the contract programme and method statement as may be necessary and submit the final contract programme and method statement to the principal agent for approval within a further two weeks thereafter.

The contract programme shall be processed by computer and be presented to the principal agent in the form of logic charts and bar charts in such a way as to determine the critical path and the float on non-critical activities. All supporting printouts must be available to the principal agent on demand.

The acceptance by the principal agent of the contract programme, or any revision thereof, does not necessarily sanction the accuracy of validity of the network logic, the correctness of individual activities in terms of description or duration, the comprehensiveness of networks or the discrepancies between drawings and any other documents presented by the contractor, and in no way relieves the responsibility of the contractor to comply with the requirements of the Agreement.

No policy decisions other than the planning requirements, procedures and policies provided, will be enforced on the contractor regarding construction of the project and the contractor shall be responsible at all

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times for ensuring the accuracy, validity and reasonableness of programming information.

Documentation will not be available in complete detail at the date of award of the contract. Non-availability of information will not be deemed an excuse for non-presentation of programmes. In the event of inadequate information, the contractor shall estimate the predicted time applications on available information and quality the submission accordingly.

Development of the contract programme and method statement

Within two weeks of award of the contract, the contractor shall submit an updated contract programme and written method statement which shall include the latest information in sufficient detail to permit comprehensive monitoring.

Progress of the works will be monitored by the principal agent. The contractor shall liaise with the principal agent in order to provide whatever information is required to facilitate such monitoring.

Revisions to the contract programme

Revisions to the contract programme may be introduced periodically by the contractor subject to compliance with the contract completion and handover dates.

Providing the required consultation between the relevant parties has highlighted the implications of the required changes, the programming strategy on the project may be changed and the changes noted and specified on logic charts delivered to the principal agent. The changes to the programme will be recorded as firm and binding once the principal agent has sanctioned the said changes.

A revision to the programme will not invalidate the contractual completion dates and applications for extensions of time will be processed by the principal agent in accordance with the conditions of contract.

Should the contractor fail to submit a request for revision to the construction programme , progress

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monitoring shall be based on the latest revised programme sanctioned by the principal agent.

The contractor shall make all his necessary revisions on the approved network sheets clearly marking, inter-alia, the logic changes and duration changes. These will then be processed by the necessary parties and then approved in the normal manner.

Progress Monitoring

The contractor shall provide regular progress reports showing actual and expected progress against the latest contract programme. Progress reports shall be submitted at each site progress meeting and shall outline the progress against key target dates and deviation which has occurred against the most recently updated control programme due to the progress reflected in the as-built construction programme.

The status of each activity must also be reported as follows:

Target - If the activity is not complete, the latest predicted completion date shall be supplied.

Start - If the activity has commenced, the actual date shall be supplied.

Finish - If the activity is complete, the actual completion date shall be supplied.

Problems which may occur during execution of the contract must be specifically identified in progress reports under a separate section of the contractor's report.

Should problems occur during the execution of the contract or the scope of work be increased or decreased, the contractor may be requested to increase the extent or the detail of the programme.

The principal agent may recommend action to be taken by the contractor, including the revision of resource levels, but this information will not be binding on the contractor unless the recommendations are enforced in

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terms of the conditions of contract by the principal agent and will in no way relieve the contractor's responsibility to comply with the requirements of the Agreement.

Extension of time

Any extension of time which is granted by the principal agent will be annotated to affect selected activities in the programme and the associated activities will be incorporated by revisions to the programme by the contractor. Should the additional activities or the extension of time on existing activities fall on a non-critical area of the programme, extension will be limited to the activities affected by the said additional activities or extensions and the contract dates shall not be affected. If, however, the additional activities fall on the critical path, the principal agent shall take this into account when granting any extension of time in terms of the conditions of contract.

The contractor agrees that the contract completion date (i.e. the date for practical completion) has been stipulated in the contract for the benefit of the employer, so that, without derogating from the generality of the foregoing principle it is provide that:

1. The contractor shall not be entitled to deliver the site and the works to the employer prior to the contract completion date and
2. Should there for any reason be any float period indicated in the contract programme prior to the contractual completion date then this float period shall be utilized to absorb any delays or extensions of time without affecting the contract completion date.
3. The contractor shall, at all times, ensure that, notwithstanding the approval or sanctioning, reviewing or inspection of a programme or any revision of a programme by the principal agent in the foregoing terms, practical completion and completion of the works shall take place strictly in accordance with this Agreement.

A defective or faulty programme, even if so sanctioned, approved, reviewed or inspected by the principal agent,

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shall therefore not constitute a cause for granting an extension of time for completion of the works or for entitling the contractor to the payment by the employer in terms of the contract of any loss, compensation or damage whatsoever.

The contractor acknowledges that the principal agent's foregoing participation in the approval of development of, revisions to and updating of the Contract Programme shall take place in consultation with the principal agent. The contractor shall therefore provide the principal agent with such co-operation and/or information and/or access as they may reasonably require for such purposes.

		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
63	Progress meetings (B4.3)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
64	Technical meetings (B4.4)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
65	Labour and plant records (B4.5)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		

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	<u>Samples, shop drawings and manufacturer's instructions (B5)</u>				
66	Samples of materials (B5.1)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
67	Workmanship samples (B5.2)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
68	Shop drawings (B5.3)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
69	Compliance with manufacturer's instructions (B5.4)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
	<u>Temporary works and plant (B6)</u>				
70	Deposits and fees (B6.1)				
	Fixed	Item			
	Value Related	Item			
	Carried to Collection		R		
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LDOE 2022/23 Schools Water and
Sanitation Programme at
Ladzani Primary School**

[illegible]

[illegible]

	<u>Prime cost amounts (B8)</u>			
81	Responsibility for prime cost amounts (B8.1)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>Attendance on nominated and selected subcontractors (B9)</u>			
82	General attendance (B9.1)			
	The schedule rates providing for attendance on nominated subcontractors and other contractors , will be adjusted only if the scope of the work has changed			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
83	Special attendance (B9.2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
84	Commissioning - Fuel, water and electricity (B9.3)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried to Collection		R	
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	<u>Financial aspects (B10)</u>				
85	Statutory taxes, duties and levies (B10.1)				
	<i>Provision is made in the summary of these bills of quantities for the inclusion of Value Added Tax (VAT)</i>				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
86	Payment of preliminaries (B10.2)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
87	Adjustment of preliminaries (B10.3)				
	Clauses B10.3.1 and B10.3.2 are amended by replacing "within fifteen (15) working days of taking possession of the site " with "when submitting his priced bills of quantities "				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
88	Payment certificate cash flow (B10.4)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
	Carried to Collection		R		
	Prepared by Mgiba Consulting				

	<u>General (B11)</u>				
89	Protection of works (B11.1)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
90	Protection/isolation of existing/sectionally occupied works(B11.2)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
91	Site security (B11.3)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
92	Notice before covering work (B11.4)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
93	Disturbance (B11.5)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
	Carried to Collection		R		
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94	Enviromental disturbance (B11.6)				
		Fixed	Item		
		Time Related	Item		
		Value Related	Item		
95	Works cleaning and clearing (B11.7)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
96	Vermin (B11.8)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
97	Overhand work (B11.9)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
98	Instruction manuals and guarantees (B11.10)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
99	As built information (B11.11)				
		Fixed	Item		
Carried to Collection				R	
Prepared by Mgiba Consulting					

[illegible]

12.1.4 **Defined works area (B12.1.4)**

The area of the works to be occupied by the contractor, any restriction on the area and the limit of access or exit will be pointed out to the contractor by the principal agent on handing over of the site

12.1.5 **Geotechnical investigation (B12.1.5)**

The geotechnical report is available for viewing at the offices of the Principal Agent

No

12.1.6 **Existing premises occupied (B12.1.6)**

[3.4] Specific requirements:
The contractor shall execute the works with as little noise and disturbance as possible. The contractor shall comply with the school calendar and/or program

12.1.7 Previous work - Dimensional accuracy (B12.1.7)

[3.5] Details:
No additional details

No

12.1.8 **Previous work - defects**

[3.6] Details:
No additional details

12.1.9 Services - known (B12.1.9)

Existing services and points of connection are shown on the site plan and/or will be pointed out on site by the principal agent

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12.1.10 **Protection of trees**

[3.9] Specific requirements:
No trees to be damaged or removed except those specifically designated in writing by the Architect

12.1.11 **Inspection of adjoining properties**

[3.11] Specific requirements:
None

12.1.12 **Enclosure of the works**

[6.2} Specific requirements:
Areas where work is taking place shall at all times be blocked off by appropriate means

12.1.13 **Offices**

[6.4.3] Specific requirements:
The contractor shall provide, maintain and remove on completion of the works a site office to provide space for site managers and administrators, site meetings and storage. The site office must be comfortable, attractive and versatile with a floor space of no less 24m². It must be formed with solid walls, a solid boarded floor and roof. The office must be well ventilated with windows and thermal control. It must be fitted with electric lighting and power supply. It must be furnished with a table, chairs, drawing board and lock-up drawers. The site office must comply to Occupational Health and Safety regulations. The office shall be kept clean and fit for use at all times.

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12.1.14 Main notice board

- [6.5] Specific requirements:
The contractor shall provide, erect where directed, maintain and remove on completion of the works a notice board size 3 x 3m constructed of suitable boarding with flat smooth surface and with edging bead 19mm thick round outer edges and projecting 12mm from face of boarding and rounded on front edge. The board shall be securely fixed to hoarding, where hoarding is provided, or fixed to and including a suitable supporting structure of timber or tubular posts and braces. The board is to be painted ivory white and the bead and 12mm wide dividing lines dark green. All wording shall be inscribed in dark green as per the coat of arms for SA. All wording shall be inscribed in dark green painted sans serif lettering. **YES**

12.1.15 *Subcontractors' notice board*

- [6.6] A notice board is required **NO**

Specific requirements:

12.1.16 *Water*

- [7.2] Option A (by **contractor**) **Yes**

12.1.17 *Electricity*

- [7.3] Option A (by **contractor**) **Yes**

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12.1.22 **Protection of the works**

[11.1] Specific requirements:
All work that requires protection during construction must be adequately protected up to practical completion by the **contractor**

12.1.23 **Security**

[11.3] Specific requirements:
The **contractor** shall provide 24 hours security

12.1.24 **Disturbance**

[11.5] Specific requirements:
The **contractor** shall keep the site, structures, etc well watered during operations to prevent dust and shall provide and erect and remove on completion of the **works** all necessary temporary dust screens all to the satisfaction of the **principal agent**

12.1.25 **Environmental disturbance**

[11.6] Specific requirements:
None

12.1.26 **Progress meetings**

[18.63] Specific requirements:
The **contractor** shall provide for refreshments and food during progress meetings (catering of meals to be out sourced to a local service provider)

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The **contractor** shall provide for refreshments and food during technical meetings (catering of meals to be out sourced to a local service provider)

All post-tender information for this section will be determined once tender is awarded

Item

Item

Item

Option B (calculated)	Yes
-----------------------	------------

Option B (detailed breakdown)	No
-------------------------------	----

Details:
None

R

-49-

103	Other post tender information (B12.3)				
	<i>All post-tender information for this section will be determined once tender is awarded</i>				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
	<u>SECTION C: SPECIFIC PRELIMINARIES</u>				
	Section C contains specific preliminary items which apply to this contract except where N/A (Not Applicable) appears against an item				
104	Clause C1 - Contract drawings				
	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 understood by the the tenderer he shall, before submitting his tender, obtain clarification in writing from the principal agent				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
	Carried to Collection		R		
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107	<p>Clause C4 - Trade Names</p> <p>Wherever a trade name for any product has been described in the bills of quantities, the tenderer's 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</p> <p>If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for</p> <div><div>Fixed</div><div>Value Related</div><div>Time Related</div></div>	<div>Item</div> <div>Item</div> <div>Item</div>		
108	<p>Clause C5 - Overtime</p> <p>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 authorized and indicated in writing, prior to the execution thereof, that costs for such overtime will to be borne by the employer</p> <div><div>Fixed</div><div>Value Related</div><div>Time Related</div></div>	<div>Item</div> <div>Item</div> <div>Item</div>		
109	<p>Clause C6 - As-built drawings</p> <p>The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the principal agent and the structural engineer for their records</p> <div><div>Fixed</div></div>	<div>Item</div>		
<div>Carried to Collection</div>			R	
<div>Prepared by Mgiba Consulting</div>				

		Value Related	Item		
		Time Related	Item		
110	Clause C5 - Labour record				
	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				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
111	Clause C6 - Plant record				
	At the end of each calendar week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
112	Clause C7 - Non-cession of monies				
	The contractor shall not cede nor assign his rights or claims to any monies due or to become due to him under this contract				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	Carried to Collection			R	
	Prepared by Mgiba Consulting				

113 **Clause C8 - Occupational Health and Safety Act**

The **contractor** shall comply with all the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993).

It is required of the **contractor** to thoroughly study the **latest** Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the **bills of quantities / lump sum document**.

The **contractor** must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the **principal agent**, notwithstanding the provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress **payment certificate** until the **contractor** provides satisfactory proof of compliance. The **contractor** shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.

Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause and it is explicitly pointed out that all requirements(including notification to the Department of labour, medical examinations, PPE compliance, etc) of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained.

Fixed

Item

Value Related

Item

Time Related

Item

Carried to Collection

R

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114	<p>Clause C9 - Viewing of the school areas</p> <p>The site is situated in a school area and the tenderer must arrange with the Principal or other responsible school staff to obtain permission to enter the site for tendering purposes</p>				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
115	<p>Clause C10 - Commencement of Works in School Areas</p> <p>As the works falls within a school area the contractor must give the Principal or other responsible staff member notice before commencement of the works. Should the contractor fail to make such arrangements, admission to the site may be refused and any additional costs will be for the contractor's account</p>				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
116	<p>Clause C11 - Entrance Permits to School Areas</p> <p>As the works falls within a school area the contractor shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which may be issued from time to time regarding the protection of persons and property under the control of the Principal, or chief security officer</p>				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
	Carried to Collection			R	
	Prepared by Mgiba Consulting				

117 | **Clause C12 - Security Check of Personnel**

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**

Fixed

Item

Value Related

Item

Time Related

Item

Carried to Collection

R

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118	<p>Clause C13 - HIV/Aids Awareness</p> <p>It is required of the contractor to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the bills of quantities. Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained</p> <p>The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of Clause A 31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>				
		Item			
		Item			
		Item			
119	<p>Clause C13.1 - Awareness Champion</p> <p>Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>				
		Item			
		Item			
		Item			
	Carried to Collection			R	
	Prepared by Mgiba Consulting				

120	<p>Clause C13.2 - Awareness Workshop</p> <p>Selection and appointment of a competent Service Provider approved by the principal agent, provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	Item			
		Item			
		Item			
121	<p>Clause C13.3 - Posters, booklets, videos, etc.</p> <p>Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the construction period, all in accordance with the HIV/AIDS Specification</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	Item			
		Item			
		Item			
122	<p>Clause C13.4 - Access to Condoms</p> <p>Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the construction period, all in accordance with the HIV/AIDS Specification</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	Item			
		Item			
		Item			
	Carried to Collection			R	
	Prepared by Mgiba Consulting				

123

Clause C13.5- Monitoring

Monitoring HIV/AIDS awareness of workers, providing the **principal agent** with access to information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the **construction period** and close out, all in accordance with the HIV/AIDS Specification

Fixed

Item

Value Related

Item

Time Related

Item

Carried to Collection

R

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Section No. 1

Bill No. 1

Preliminaries

COLLECTION

Total Brought Forward from Page No.

**Page
No**

Amount

1

2

3

4

5

6

7

8

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10

11

12

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15

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18

Carried Forward

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Section No. 1			
Bill No. 1			
Preliminaries			
<u>COLLECTION</u>			
	Page No		Amount
Brought Forward		R	
Total Brought Forward from Page No.	19		
	20		
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	22		
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Carried Forward		R	
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Section No. 1			
Bill No. 1			
Preliminaries			
<u>COLLECTION</u>			
	Page No		Amount
Brought Forward		R	
Total Brought Forward from Page No.	36		
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	48		
	49		
	50		
	51		
	52		
Carried Forward		R	
Prepared by Mgiba Consulting			

Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - EXISTING TOILETS</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Nature of ground</u>			
	Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes			
	<u>Nature of ground</u>			
	A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured			
	<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>Demolishing and removing</u>			
1	Single storey four seats pit latrine block 8300 x 4200mm x 2500mm high at eaves comprising concrete surface bed, 220mm external walls, 110 internal walls and corrugated iron roof covering on timber trusses	No	2	
	Carried to Collection		R	
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[illegible]

Section No. 2

Bill No. 1

Earthworks

COLLECTION

Total Brought Forward from Page No.

**Page
No**

64

65

Amount

Carried to Final Summary

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - GRMD2</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Nature of ground</u>			
	Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes			
	<u>Nature of ground</u>			
	A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured			
	<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>SITE CLEARANCE ETC</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	99	
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	99		
<u>EXCAVATION, FILLING, ETC</u>					
<u>Excavation in earth not exceeding 2m deep</u>					
3	Trenches	m3	7		
4	Holes	m3	17		
5	For aprons thickening	m3	1		
<u>Extra over trench and hole excavations in earth for excavation in</u>					
6	Soft rock	m3	2		
7	Hard rock	m3	1		
<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	21		
<u>Risk of collapse of excavations</u>					
9	Sides of trench and hole excavations not exceeding 1,5m deep	m2	53		
<u>Keeping excavations free of water</u>					
10	Keeping excavations free of all water other than subterranean water			Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u>					
11	Under floors, steps, pavings, etc	m3	8		
12	Backfilling to trenches, holes, etc	m3	4		
Carried to Collection				R	
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Compaction of surfaces

13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	36
14	Compaction of ground surface to pits etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	10
15	Compaction of ground surface under aprons etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	21

Prescribed density tests on filling

16	"Modified AASHTO Density" test	No	4
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SOIL POISONING

Soil insecticide

17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	26
18	To bottoms and sides of trenches etc	m2	30
19	To bottoms of concrete aprons etc	m2	21

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Section No. 3

Bill No. 1

Earthworks

COLLECTION

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Item No		Quantity	Rate	Amount
	BUILDING WORKS - GRMD2			
	<u>BILL NO.2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>UNREINFORCED CONCRETE</u>			
	<u>25MPa/19mm concrete</u>			
1	Strip footings m3	2		
2	Bases m3	2		
3	Aprons cast in panels m3	1		
4	Thickening down under surface beds 85mm deep x 200mm wide extreme, including preparing ground or earth filling m	13		
5	Thickening down apron on edge 110mm deep x 200mm wide m	21		
	<u>REINFORCED CONCRETE</u>			
6	Surface beds on waterproofing m3	3		
7	Slabs including beams and inverted beams m3	1		
	<u>TEST BLOCKS</u>			
8	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional) No	4		
	<u>CONCRETE SUNDRIES</u>			
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

<u>Finishing top surfaces of concrete smooth with a wood float</u>							
9	Surface beds, slabs, etc	m2	49				
10	Aprons to falls	m2	21				
<u>ROUGH FORMWORK (DEGREE OF ACCURACY III)</u>							
<u>Rough formwork to sides</u>							
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	42				
<u>Permenent formwork to soffits</u>							
12	Slabs propped up not exceeding 1.5m high	m2	8				
13	500mm Diameter opening through 100mm slab	No	3				
<u>Fabric reinforcement</u>							
14	Mesh ref no. 395 fabric reinforcement in concrete surface beds, slabs, etc	m2	36				
Carried to Collection						R	
Prepared by Mgiba Consulting							

Section No. 3

Bill No. 2

Concrete, Formwork and Reinforcement

COLLECTION

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Item No	Quantity	Rate	Amount
<u>BUILDING WORKS - GRMD2</u>			
<u>BILL NO.3</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>BRICKWORK</u>			
<u>Sizes in descriptions</u>			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<u>Hollow walls etc</u>			
Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixal" bitumen emulsion waterproofing coating.			
<u>User note:</u>			
The above preamble generally applies for works in hot and humid coastal areas			
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
Carried to Collection		R	
Prepared by Mgiba Consulting			

Pointing

Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc

BRICKWORK

FOUNDATIONS (PROVISIONAL)

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar

1	One brick walls	m2	61	
---	-----------------	----	----	--

BRICKWORK SUNDRIES

Brickwork reinforcement

2	150mm Wide reinforcement built in horizontally	m	322	
---	--	---	-----	--

FACE BRICKWORK

"Nebraska" or equal approved face bricks pointed with flush horizontal and vertical joints

3	Extra over brickwork for face brickwork in foundations (Provisional)	m2	2	
---	--	----	---	--

SUPERSTRUCTURE

Brickwork of NFP bricks in class II mortar

4	Half brick walls	m2	10	
---	------------------	----	----	--

5	Half brick walls in beamfilling	m2	2	
---	---------------------------------	----	---	--

6	One brick walls	m2	63	
---	-----------------	----	----	--

BRICKWORK SUNDRIES

Carried to Collection

R

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<u>Brickwork reinforcement</u>					
7	75mm Wide reinforcement built in horizontally	m	38		
8	150mm Wide reinforcement built in horizontally	m	248		
<u>Pair of prestressed fabricated lintels</u>					
9	110 x 75mm Lintels in lengths not exceeding 3m	m	5		
<u>Turning pieces</u>					
10	220mm Wide turning piece to lintels etc	m	6		
<u>Galvanised wire ties etc</u>					
11	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	8		
<u>Air bricks etc</u>					
12	230 x 152mm "Terra-colls" or equal approved vermin proof air brick including making good to reveals	No	6		
<u>FACE BRICKWORK</u>					
<u>"Nebraska" or equal approved face bricks pointed with flush horizontal and vertical joints</u>					
13	Extra over brickwork for face brickwork pointed on both sides	m2	74		
14	Extra over brickwork for brick-on-edge header course lintel	m	7		
15	Fair cutting and fitting around pipe not exceeding 100mm diameter	No	3		
<u>Brick-on-edge header course copings, sills, etc of ? face bricks pointed with recessed joints on all exposed faces</u>					
16	220mm Wide sill set level and slightly projecting	m	4		
Carried to Collection				R	
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Section No. 3

Bill No. 3

Masonry

COLLECTION

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Item No		Quantity	Rate	Amount
<u>BUILDING WORKS - GRMD2</u>				
<u>BILL NO.4</u>				
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>				
<u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course</u>				
1	In walls	m2	69	
<u>One layer of 250 micron "Consol Plastics Gunplas Black" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>				
2	Under surface beds	m2	26	
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>				
<u>Two coats "Flintkote Type 5" bitumen emulsion waterproof coating</u>				
3	On concrete floors	m2	10	
4	On brick walls	m2	34	
Carried Forward to Summary of Section No. 3				R
Prepared by Mgiba Consulting				

Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - GRMD2</u>			
	<u>BILL NO.5</u>			
	<u>PREAMBLES</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	0,6mm "Brownbuilt Klip-Lok Light Industrial" or equal approved galvanised troughed sheet steel with "Chromadek" or equal approved finish one side, fixed to roof members as described complete under a five year guarantee by an approved firm of Specialists, all in accordance with the materials supplied and methods employed by the Manufacturer			
1	Roof covering with a pitch not exceeding 25 degrees	m2	31	
	<u>ROOF AND WALL INSULATION</u>			
	<u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u>			
2	Insulation laid taut over rafters and fixed concurrent with purlins, etc	m2	31	
	<u>RAINWATER DISPOSAL</u>			
	<u>100mm Aluminium zinc seamless</u>			
3	100 x 100mm Eaves gutters	m	7	
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

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LDOE 2022/23 Schools Water and
Sanitation Programme at
Ladzani Primary School**

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Section No. 3

Bill No. 5

Roof Coverings

COLLECTION

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<u>Prefabricated timber trusses with pitch not exceeding 25 degrees</u>			
1	Allow the provisional sum of R 11 000.00 for supply and complete installation of roof trusses including all necessary bracing, gang boarding, purlins, splayed eaves purlins, wall plates, etc.,	Item	11 000.00
2	Profit and attendance on the above item	Item	1 800.00
<u>Sundries</u>			
3	Two coats creosote on sawn timbers	m2	2
4	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	8
5	Hurricane clips	No	6
<u>EAVES, VERGES, ETC</u>			
<u>"Everite Flexit" or equal approved pressed nutec-cement</u>			
6	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	21
<u>DOORS ETC</u>			
<u>Wrought meranti doors hung to steel frames</u>			
7	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and covered on other side and including rebates all round	No	2
8	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and covered on other side and including rebates all round	No	2
Carried to Collection			R
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Section No. 3

Bill No. 6

Carpentry and Joinery

COLLECTION

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - GRMD2</u>			
	<u>BILL NO.7</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Finishes to ironmongery</u>			
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH 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			
	<u>CATCHES, CABIN HOOKS, ETC</u>			
	<u>"Union" or equal approved</u>			
1	100mm cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
	<u>LOCKS</u>			
	<u>"Union" or equal approved</u>			
2	Three lever lockset	No	2	
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

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Section No. 3

Bill No. 7

Ironmongery

COLLECTION

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - GRMD2</u>			
	<u>BILL NO.8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Descriptions</u>			
	Descriptions of bolts shall be deemed to include nuts and washers			
	Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete			
	Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described			
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Screens and gates</u>			
1	Single gate and frame for opening 813 x 2 032mm high overall, the outer frame of 50 x 50 x 2,5mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 800 x 2 038mm high of 60 x 40 x 2,0mm hollow section frame with two 60 x 40 x 2,0mm hollow section horizontal rails with 20mm diameter vertical rods at 110mm centers with 25mm diameter x 80mm long pin hinge, complete with 5pin upright double throw security mortice deadlock in 3mm steel plate housing	No	2	
	<u>PRESSED STEEL DOOR FRAMES</u>			
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

Section No. 3

Bill No. 8

Metalwork

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<u>"Vaal" or equal approved</u>				
3	510 x 405mm "Hibiscus" code VAA-702303 ceramic wash hand basin and 32mm anti-theft plug with spindle supported on a universal floor mounted pedestal complete with all necessary pipework, traps, waste union, etc and connection to soak away (taps measured elsewhere)	No	1	
<u>"Vanstone" or equal approved</u>				
4	Reinforced concrete double compartment wash trough size 1065mm long on pedestal complete with all necessary pipework, traps, waste union, etc and connection to soak away (taps measured elsewhere)	No	1	
<u>TAPS, VALVES, ETC</u>				
<u>"Cobra watertech" or equal approved</u>				
5	15mm COB-NM-851 single lever elbow action basin mixer tap	No	1	
<u>"Macneil triumph" or equal approved</u>				
6	15mm Stainless steel Extended bip tap	No	2	
Carried to Collection				R
Prepared by Mgiba Consulting				

Section No. 3

Bill No. 10

Plumbing and Drainage (Provisional)

COLLECTION

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - GRMD2</u>			
	<u>BILL NO.12</u>			
	<u>PAINTWORK</u>			
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>ON FIBRE-CEMENT</u>			
	<u>One coat primer and two coats exterior quality PVA emulsion paint</u>			
1	On fascias and barge boards	m2	21	
	<u>ON METAL</u>			
	<u>Spot priming defects in pre primed surfaces with polyamide cured epoxy zinc chromate primer and applying one polyamide cured epoxy undercoat and ? coat/coats ? polyamide cured finishing epoxy paint on steel</u>			
2	On door frames	m2	3	
3	On windows with burglar bars	m2	5	
4	On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)	m2	7	
5	On eaves gutters not exceeding 300 mm girth	m	12	
	<u>ON WOOD</u>			
	<u>Three coats polyurethane semi-gloss varnish</u>			
6	On doors	m2	10	
	Carried Forward to Summary of Section No. 3		R	
	Prepared by Mgiba Consulting			

SECTION SUMMARY - Building Works - GRMD2 (two seats + one disable fac			
Bill No		Page No	Amount
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10	Plumbing and Drainage (Provisional)	94	
11	Glazing	95	
12	Paintwork	96	
Carried to Final Summary			R
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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - GRFD3</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Nature of ground</u>			
	Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes			
	<u>Nature of ground</u>			
	A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured			
	<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>SITE CLEARANCE ETC</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	87	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	87	
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

EXCAVATION, FILLING, ETC

Excavation in earth not exceeding 2m deep

3	Trenches	m3	11
4	Holes	m3	19
5	For aprons thickening	m3	1

Extra over trench and hole excavations in earth for excavation in

6	Soft rock	m3	3
7	Hard rock	m3	2

Extra over all excavations for carting away

8	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	25
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Risk of collapse of excavations

9	Sides of trench and hole excavations not exceeding 1,5m deep	m2	64
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Keeping excavations free of water

10	Keeping excavations free of all water other than subterranean water	Item	
----	---	------	--

Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density

11	Under floors, steps, pavings, etc	m3	5
12	Backfilling to trenches, holes, etc	m3	5

Carried to Collection

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Compaction of surfaces

13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	31
14	Compaction of ground surface to pits etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	12
15	Compaction of ground surface under aprons etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	22

Prescribed density tests on filling

16	"Modified AASHTO Density" test	No	4
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SOIL POISONING

Soil insecticide

17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	15
18	To bottoms and sides of trenches etc	m2	47
19	To bottoms of concrete aprons etc	m2	22

Carried to Collection

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Section No. 4

Bill No. 1

Earthworks

COLLECTION

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Finishing top surfaces of concrete smooth with a wood float

9	Surface beds, slabs, etc	m2	40
10	Aprons to falls	m2	22

ROUGH FORMWORK (DEGREE OF ACCURACY III)

Rough formwork to sides

11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	38
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Permenent formwork to soffits

12	Slabs propped up not exceeding 1.5m high	m2	9
13	500mm Diameter opening through 100mm slab	No	4

Fabric reinforcement

14	Mesh ref no. 395 fabric reinforcement in concrete surface beds, slabs, etc	m2	28
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Section No. 4

Bill No. 2

Concrete, Formwork and Reinforcement

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Item No	Quantity	Rate	Amount
<u>BUILDING WORKS - GRFD3</u>			
<u>BILL NO.3</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>BRICKWORK</u>			
<u>Sizes in descriptions</u>			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<u>Hollow walls etc</u>			
Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixéal" bitumen emulsion waterproofing coating.			
<u>User note:</u>			
The above preamble generally applies for works in hot and humid coastal areas			
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
Carried to Collection			R
Prepared by Mgiba Consulting			

Pointing

Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc

BRICKWORK

FOUNDATIONS (PROVISIONAL)

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar

1	One brick walls	m2	72	
---	-----------------	----	----	--

BRICKWORK SUNDRIES

Brickwork reinforcement

2	150mm Wide reinforcement built in horizontally	m	410	
---	--	---	-----	--

FACE BRICKWORK

"Nebraska" or equal approved face bricks pointed with flush horizontal and vertical joints

3	Extra over brickwork for face brickwork in foundations (Provisional)	m2	4	
---	--	----	---	--

SUPERSTRUCTURE

Brickwork of NFP bricks in class II mortar

4	Half brick walls	m2	10	
---	------------------	----	----	--

5	Half brick walls in beamfilling	m2	1	
---	---------------------------------	----	---	--

6	One brick walls	m2	56	
---	-----------------	----	----	--

BRICKWORK SUNDRIES

Carried to Collection

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<u>Brickwork reinforcement</u>					
7	75mm Wide reinforcement built in horizontally	m	38		
8	150mm Wide reinforcement built in horizontally	m	219		
<u>Pair of prestressed fabricated lintels</u>					
9	110 x 75mm Lintels in lengths not exceeding 3m	m	5		
<u>Turning pieces</u>					
10	220mm Wide turning piece to lintels etc	m	6		
<u>Galvanised wire ties etc</u>					
11	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	7		
<u>Air bricks etc</u>					
12	230 x 152mm "Terra-colls" or equal approved vermin proof air brick including making good to reveals	No	5		
<u>FACE BRICKWORK</u>					
<u>"Nebraska" or equal approved face bricks pointed with flush horizontal and vertical joints</u>					
13	Extra over brickwork for face brickwork pointed on both sides	m2	67		
14	Extra over brickwork for brick-on-edge header course lintel	m	8		
15	Fair cutting and fitting around pipe not exceeding 100mm diameter	No	3		
<u>Brick-on-edge header course copings, sills, etc of ? face bricks pointed with recessed joints on all exposed faces</u>					
16	220mm Wide sill set level and slightly projecting	m	3		
Carried to Collection				R	
Prepared by Mgiba Consulting					

Section No. 4

Bill No. 3

Masonry

COLLECTION

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - GRFD3</u>			
	<u>BILL NO.5</u>			
	<u>PREAMBLES</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	0,6mm "Brownbuilt Klip-Lok Light Industrial" or equal approved galvanised troughed sheet steel with "Chromadek" or equal approved finish one side, fixed to roof members as described complete under a five year guarantee by an approved firm of Specialists, all in accordance with the materials supplied and methods employed by the Manufacturer			
1	Roof covering with a pitch not exceeding 25 degrees	m2	26	
	<u>ROOF AND WALL INSULATION</u>			
	<u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u>			
2	Insulation laid taut over rafters and fixed concurrent with purlins, etc	m2	26	
	<u>RAINWATER DISPOSAL</u>			
	<u>100mm Aluminium zinc seamless</u>			
3	100 x 100mm Eaves gutters	m	5	
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

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Section No. 4

Bill No. 5

Roof Coverings

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<u>Prefabricated timber trusses with pitch not exceeding 25 degrees</u>					
1	Allow the provisional sum of R 12 000.00 for supply and complete installation of roof trusses including all necessary bracing, gang boarding, purlins, splayed eaves purlins, wall plates, etc.,		Item		9 000.00
2	Profit and attendance on the above item		Item		1 800.00
<u>Sundries</u>					
3	Two coats creosote on sawn timbers	m2	1		
4	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	7		
5	Hurricane clips	No	6		
<u>EAVES, VERGES, ETC</u>					
<u>"Everite Flexit" or equal approved pressed nutec-cement</u>					
6	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	15		
<u>DOORS ETC</u>					
<u>Wrought meranti doors hung to steel frames</u>					
7	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and covered on other side and including rebates all round	No	2		
8	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and covered on other side and including rebates all round	No	3		
Carried to Collection				R	
Prepared by Mgiba Consulting					

Section No. 4

Bill No. 6

Carpentry and Joinery

COLLECTION

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Item No		Quantity	Rate	Amount
<u>BUILDING WORKS - GRFD3</u>				
<u>BILL NO.7</u>				
<u>IRONMONGERY</u>				
<u>SUPPLEMENTARY PREAMBLES</u>				
<u>Finishes to ironmongery</u>				
Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH 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				
<u>CATCHES, CABIN HOOKS, ETC</u>				
<u>"Union" or equal approved</u>				
1	100mm cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
<u>LOCKS</u>				
<u>"Union" or equal approved</u>				
2	Three lever lockset	No	2	
Carried to Collection				R
Prepared by Mgiba Consulting				

3	Indicator bolt with keep fixed to metal	No	3	
<u>LETTERS, NAMEPLATES, ETC</u>				
<u>"Solid" or equal approved</u>				
4	152 x 152mm Anodised aluminium plate with male or female or paraplegic symbol	No	2	
<u>BATHROOM FITTINGS</u>				
<u>"Steiner" or equal approved</u>				
5	Lockable "crystalline range" aluminium three(3) roll toilet holder fixed to brick wall	No	4	
6	Lockable 'crystalline range" aluminium soap dispenser size 135 x 110 x 275mm high 1.3l holding capacity with a sensor unit fixed to wall	No	2	
7	Wall mounted "crystalline range" aluminium She bin 420 x 125 x 600mm high with a central opening lid	No	2	
<u>"Vaal Paragon"</u>				
8	32mm Type 9 back grab rail 800mm long plugged	No	1	
9	32mm Type 8 side grab rail 900mm girth plugged	No	1	
<u>SUNDRIES</u>				
<u>"Solid"</u>				
10	38mm Diameter rubber door stop plugged	No	2	
Carried to Collection				R
Prepared by Mgiba Consulting				

Section No. 4

Bill No. 7

Ironmongery

COLLECTION

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Item No	Quantity	Rate	Amount
<u>BUILDING WORKS - GRFD3</u>			
<u>BILL NO.8</u>			
<u>METALWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Descriptions</u>			
Descriptions of bolts shall be deemed to include nuts and washers			
Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete			
Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described			
<u>WELDED SCREENS, GATES, ETC</u>			
<u>Screens and gates</u>			
1	No	2	
Single gate and frame for opening 813 x 2 032mm high overall, the outer frame of 50 x 50 x 2,5mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 800 x 2 038mm high of 60 x 40 x 2,0mm hollow section frame with two 60 x 40 x 2,0mm hollow section horizontal rails with 20mm diameter vertical rods at 110mm centers with 25mm diameter x 80mm long pin hinge, complete with 5pin upright double throw security mortice deadlock in 3mm steel plate housing			
<u>PRESSED STEEL DOOR FRAMES</u>			
Carried to Collection			R
Prepared by Mgiba Consulting			

Section No. 4

Bill No. 8

Metalwork

COLLECTION

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - GRFD3</u>			
	<u>BILL NO.10</u>			
	<u>PLUMBING AND DRAINAGE</u> <u>(PROVISIONAL)</u>			
	Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions			
	<u>ENVIRO-LOO TOILET SYSTEM</u>			
	<u>"Enviro loo" or equal approved</u>			
1	"Industrial 1040 junior toilet system" installed to manufactures specification complete with top unit with hinged inspection cover, bottom unit with 3 support pipes, drying plate, 2 inlet pipes with liquid level indicator, 2300mm outlet vent pipe, wall mounting bracket, drying bag, extraction unit, toilet bowl seat and lid, anchors, enzyme, organic starter and toilet cleaner	No	4	
	<u>SANITARY FITTINGS</u>			
	<u>"Vaal" or equal approved</u>			
2	510 x 405mm "Hibiscus" code VAA-702303 ceramic wash hand basin and 32mm anti-theft plug with spindle supported on a universal floor mounted pedestal complete with all necessary pipework, traps, waste union, etc and connection to soak away (taps measured elsewhere)	No	1	
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

1

"Cobra watertech" or equal approved

1

2

R

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Section No. 4

Bill No. 10

Plumbing and Drainage (Provisional)

COLLECTION

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - GRFD3</u>			
	<u>BILL NO.12</u>			
	<u>PAINTWORK</u>			
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>ON FIBRE-CEMENT</u>			
	<u>One coat primer and two coats exterior quality PVA emulsion paint</u>			
1	On fascias and barge boards	m2	15	
	<u>ON METAL</u>			
	<u>Spot priming defects in pre primed surfaces with polyamide cured epoxy zinc chromate primer and applying one polyamide cured epoxy undercoat and ? coat/coats ? polyamide cured finishing epoxy paint on steel</u>			
2	On door frames	m2	4	
3	On windows with burglar bars	m2	4	
4	On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)	m2	7	
5	On eaves gutters not exceeding 300 mm girth	m	10	
	<u>ON WOOD</u>			
	<u>Three coats polyurethane semi-gloss varnish</u>			
6	On doors	m2	11	
	Carried Forward to Summary of Section No. 4		R	
	Prepared by Mgiba Consulting			

SECTION SUMMARY - Building Works - GRFD3 (three seats + one disable fa				
Bill No		Page No		Amount
1	Earthworks	101		
2	Concrete, Formwork and Reinforcement	104		
3	Masonry	108		
4	Waterproofing	109		
5	Roof Coverings	112		
6	Carpentry and Joinery	115		
7	Ironmongery	118		
8	Metalwork	121		
9	Plastering	122		
10	Plumbing and Drainage (Provisional)	125		
11	Glazing	126		
12	Paintwork	127		
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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - MD5</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Nature of ground</u>			
	Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes			
	<u>Nature of ground</u>			
	A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured			
	<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>SITE CLEARANCE ETC</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	126	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	126	
	<u>EXCAVATION, FILLING, ETC</u>			
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

	<u>Excavation in earth not exceeding 2m deep</u>				
3	Trenches	m3	8		
4	Holes	m3	36		
5	For aprons thickening	m3	2		
	<u>Extra over trench and hole excavations in earth for excavation in</u>				
6	Soft rock	m3	5		
7	Hard rock	m3	2		
	<u>Extra over all excavations for carting away</u>				
8	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	41		
	<u>Risk of collapse of excavations</u>				
9	Sides of trench and hole excavations not exceeding 1,5m deep	m2	84		
	<u>Keeping excavations free of water</u>				
10	Keeping excavations free of all water other than subterranean water		Item		
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u>				
11	Under floors, steps, pavings, etc	m3	13		
12	Backfilling to trenches, holes, etc	m3	5		
	<u>Compaction of surfaces</u>				
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	55		
	Carried to Collection			R	
	Prepared by Mgiba Consulting				

Section No. 5

Bill No. 1

Earthworks

COLLECTION

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Finishing top surfaces of concrete smooth with a wood float

9	Surface beds, slabs, etc	m2	92
10	Aprons to falls	m2	31

ROUGH FORMWORK (DEGREE OF ACCURACY III)

Rough formwork to sides

11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	69
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Permenent formwork to soffits

12	Slabs propped up not exceeding 1.5m high	m2	13
13	500mm Diameter opening through 100mm slab	No	6

Fabric reinforcement

14	Mesh ref no. 395 fabric reinforcement in concrete surface beds, slabs, etc	m2	65
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Carried to Collection

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R

Section No. 5

Bill No. 2

Concrete, Formwork and Reinforcement

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - MD5</u>			
	<u>BILL NO.3</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>BRICKWORK</u>			
	<u>Sizes in descriptions</u>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<u>Hollow walls etc</u>			
	Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
	Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixal" bitumen emulsion waterproofing coating.			
	<u>User note:</u>			
	The above preamble generally applies for works in hot and humid coastal areas			
	<u>Face bricks</u>			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	<u>Pointing</u>			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

BRICKWORK

FOUNDATIONS (PROVISIONAL)

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar

1	One brick walls	m2	94	
---	-----------------	----	----	--

BRICKWORK SUNDRIES

Brickwork reinforcement

2	150mm Wide reinforcement built in horizontally	m	508	
---	--	---	-----	--

FACE BRICKWORK

"Nebraska" or equal approved face bricks pointed with flush horizontal and vertical joints

3	Extra over brickwork for face brickwork in foundations (Provisional)	m2	3	
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SUPERSTRUCTURE

Brickwork of NFP bricks in class II mortar

4	Half brick walls	m2	24	
---	------------------	----	----	--

5	Half brick walls in beamfilling	m2	3	
---	---------------------------------	----	---	--

6	One brick walls	m2	88	
---	-----------------	----	----	--

BRICKWORK SUNDRIES

Brickwork reinforcement

7	75mm Wide reinforcement built in horizontally	m	94	
---	---	---	----	--

8	150mm Wide reinforcement built in horizontally	m	346	
---	--	---	-----	--

Carried to Collection

R

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<u>Pair of prestressed fabricated lintels</u>					
9	110 x 75mm Lintels in lengths not exceeding 3m	m	10		
<u>Turning pieces</u>					
10	220mm Wide turning piece to lintels etc	m	11		
<u>Galvanised wire ties etc</u>					
11	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	14		
<u>Air bricks etc</u>					
12	230 x 152mm "Terra-colls" or equal approved vermin proof air brick including making good to reveals	No	11		
<u>FACE BRICKWORK</u>					
<u>"Nebraska" or equal approved face bricks pointed with flush horizontal and vertical joints</u>					
13	Extra over brickwork for face brickwork pointed on both sides	m2	115		
14	Extra over brickwork for brick-on-edge header course lintel	m	14		
15	Fair cutting and fitting around pipe not exceeding 100mm diameter	No	5		
<u>Brick-on-edge header course copings, sills, etc of ? face bricks pointed with recessed joints on all exposed faces</u>					
16	220mm Wide sill set level and slightly projecting	m	7		
Carried to Collection				R	
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Section No. 5

Bill No. 3

Masonry

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Item No		Quantity	Rate	Amount
<u>BUILDING WORKS - MD5</u>				
<u>BILL NO.4</u>				
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>				
<u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course</u>				
1	In walls	m2	98	
<u>One layer of 250 micron "Consol Plastics Gunplas Black" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>				
2	Under surface beds	m2	43	
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>				
<u>Two coats "Flintkote Type 5" bitumen emulsion waterproof coating</u>				
3	On concrete floors	m2	22	
4	On brick walls	m2	60	
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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - MD5</u>			
	<u>BILL NO.5</u>			
	<u>PREAMBLES</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	0,6mm "Brownbuilt Klip-Lok Light Industrial" or equal approved galvanised troughed sheet steel with "Chromadek" or equal approved finish one side, fixed to roof members as described complete under a five year guarantee by an approved firm of Specialists, all in accordance with the materials supplied and methods employed by the Manufacturer			
1	Roof covering with a pitch not exceeding 25 degrees	m2	52	
	<u>ROOF AND WALL INSULATION</u>			
	<u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u>			
2	Insulation laid taut over rafters and fixed concurrent with purlins, etc	m2	52	
	<u>RAINWATER DISPOSAL</u>			
	<u>100mm Aluminium zinc seamless</u>			
3	100 x 100mm Eaves gutters	m	12	
4	Extra over eaves gutter for stopped end	No	2	
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

**The Mvula Trust
LDOE 2022/23 Schools Water and
Sanitation Programme at
Ladzani Primary School**

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Section No. 5

Bill No. 5

Roof Coverings

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - MD5</u>			
	<u>BILL NO.6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
	<u>ROOFS ETC</u>			
	<u>Plate nailed timber roof truss construction</u>			
	The following is applicable in respect of roof trusses:			
	Trusses are at maximum 7mm centres Roof covering is 7 on purlins/battens Ceilings are 7mm sheeting (with skimming?) on 7 x 7mm brandering The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings numbered annexed to these bills of quantities/accompanying these bills of quantities for tender purposes The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from the architect and/or the site before design or fabrication commences			
	<u>PLATE NAILED ROOF TRUSS CONSTRUCTION</u>			
	<u>Prefabricated timber trusses with pitch not exceeding 25 degrees</u>			
1	Allow the provisional sum of R 18 500.00 for supply and complete installation of roof trusses including all necessary bracing, gang boarding, purlins, splayed eaves purlins, wall plates, etc.,	Item		18 500.00
2	Profit and attendance on the above item	Item		3 600.00
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

<u>Sundries</u>					
3	Two coats creosote on sawn timbers	m2	3		
4	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	14		
5	Hurricane clips	No	6		
<u>EAVES, VERGES, ETC</u>					
<u>"Everite Flexit" or equal approved pressed nutec-cement</u>					
6	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	31		
<u>DOORS ETC</u>					
<u>Wrought meranti doors hung to steel frames</u>					
7	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and covered on other side and including rebates all round	No	3		
8	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and covered on other side and including rebates all round	No	5		
Carried to Collection				R	
Prepared by Mgiba Consulting					

Section No. 5

Bill No. 6

Carpentry and Joinery

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3	<p>Indicator bolt with keep fixed to metal</p>	No	5	
<p><u>LETTERS, NAMEPLATES, ETC</u></p>				
<p><u>"Solid" or equal approved</u></p>				
4	152 x 152mm Anodised aluminium plate with male or female or paraplegic symbol	No	3	
<p><u>BATHROOM FITTINGS</u></p>				
<p><u>"Steiner" or equal approved</u></p>				
5	Lockable "crystalline range" aluminium three(3) roll toilet holder fixed to brick wall	No	6	
6	Lockable 'crystalline range' aluminium soap dispenser size 135 x 110 x 275mm high 1.3l holding capacity with a sensor unit fixed to wall	No	3	
<p><u>"Kimberley-Clark"</u></p>				
7	Lockable toilet roll holder plugged	No	6	
<p><u>"Vaal Paragon"</u></p>				
8	32mm Type 9 back grab rail 800mm long plugged	No	1	
9	32mm Type 8 side grab rail 900mm girth plugged	No	1	
<p><u>SUNDRIES</u></p>				
<p><u>"Solid"</u></p>				
10	38mm Diameter rubber door stop plugged	No	3	
<p>Carried to Collection</p>				R
<p>Prepared by Mgiba Consulting</p>				

Section No. 5

Bill No. 7

Ironmongery

COLLECTION

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - MD5</u>			
	<u>BILL NO.8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Descriptions</u>			
	Descriptions of bolts shall be deemed to include nuts and washers			
	Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete			
	Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described			
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Screens and gates</u>			
1	Single gate and frame for opening 813 x 2 032mm high overall, the outer frame of 50 x 50 x 2,5mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 800 x 2 038mm high of 60 x 40 x 2,0mm hollow section frame with two 60 x 40 x 2,0mm hollow section horizontal rails with 20mm diameter vertical rods at 110mm centers with 25mm diameter x 80mm long pin hinge, complete with 5pin upright double throw security mortice deadlock in 3mm steel plate housing	No	3	
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1,2mm Rebated frames suitable for half brick walls</u>			
2	Frame for door 813 x 2032mm high	No	5	
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

1,2mm Double rebated frames suitable for one brick walls

3	Frame for door 813 x 2032mm high	No	3	
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STEEL WINDOWS, DOORS, ETC

Standard school windows

4	Window type NE1, 533 x 654mm high including burglar bars	No	8	
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5	Window type NE7, 1022 x 654mm high including burglar bars	No	3	
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Section No. 5

Bill No. 8

Metalwork

COLLECTION

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - MD5</u>			
	<u>BILL NO.10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions			
	<u>ENVIRO-LOO TOILET SYSTEM</u>			
	<u>"Enviro loo" or equal approved</u>			
1	"Industrial 1040 standard toilet system" installed to manufactures specification complete with top unit with hinged inspection cover, bottom unit with 3 support pipes, drying plate, 2 inlet pipes with liquid level indicator, 2300mm outlet vent pipe, wall mounting bracket, drying bag, extraction unit, toilet bowl seat and lid, anchors, enzyme, organic starter and toilet cleaner	No 6		
	<u>ENVIRO-LOO URINAL AND EVAPORATIVE SYSTEM</u>			
	<u>"Enviro loo" or equal approved</u>			
2	"Urinal evaporative tank system" installed to manufactures specification complete with urinal evaporative tank, ventilation extraction unit, outlet vent pipe, vent pipe bracket, six (6) urinal bowls and bag of mounting screws	No 1		
3	"Urinal evaporative tank system" installed to manufactures specification complete with urinal evaporative tank, ventilation extraction unit, outlet vent pipe, vent pipe bracket, five (5) urinal bowls and bag of mounting screws	No 1		
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

SANITARY FITTINGS

"Vaal" or equal approved

- 4 510 x 405mm "Hibiscus" code VAA-702303 ceramic wash hand basin and 32mm anti-theft plug with spindle supported on a universal floor mounted pedestal complete with all necessary pipework, traps, waste union, etc and connection to soak away (taps measured elsewhere)

No

1

"Vanstone" or equal approved

- 5 Reinforced concrete double compartment wash trough size 1065mm long on pedestal complete with all necessary pipework, traps, waste union, etc and connection to soak away (taps measured elsewhere)

No

2

TAPS, VALVES, ETC

"Cobra watertech" or equal approved

- 6 15mm COB-NM-851 single lever elbow action basin mixer tap

No

1

"Macneil triumph" or equal approved

- 7 15mm Stainless steel Extended bip tap

No

4

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Section No. 5

Bill No. 10

Plumbing and Drainage (Provisional)

COLLECTION

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - MD5</u>			
	<u>BILL NO.12</u>			
	<u>PAINTWORK</u>			
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>ON FIBRE-CEMENT</u>			
	<u>One coat primer and two coats exterior quality PVA emulsion paint</u>			
1	On fascias and barge boards	m2	31	
	<u>ON METAL</u>			
	<u>Spot priming defects in pre primed surfaces with polyamide cured epoxy zinc chromate primer and applying one polyamide cured epoxy undercoat and ? coat/coats ? polyamide cured finishing epoxy paint on steel</u>			
2	On door frames	m2	6	
3	On windows with burglar bars	m2	9	
4	On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)	m2	11	
5	On eaves gutters not exceeding 300 mm girth	m	16	
	<u>ON WOOD</u>			
	<u>Three coats polyurethane semi-gloss varnish</u>			
6	On doors	m2	17	
	Carried Forward to Summary of Section No. 5		R	
	Prepared by Mgiba Consulting			

SECTION SUMMARY - Building Works - MD5 (five seats + one disable facility)			
Bill No		Page No	Amount
1	Earthworks	132	
2	Concrete, Formwork and Reinforcement	135	
3	Masonry	139	
4	Waterproofing	140	
5	Roof Coverings	143	
6	Carpentry and Joinery	146	
7	Ironmongery	149	
8	Metalwork	152	
9	Plastering	153	
10	Plumbing and Drainage (Provisional)	156	
11	Glazing	157	
12	Paintwork	158	
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Prepared by Mgiba Consulting			

Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - FD4</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Nature of ground</u>			
	Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes			
	<u>Nature of ground</u>			
	A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured			
	<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>SITE CLEARANCE ETC</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	108	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	108	
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

EXCAVATION, FILLING, ETC

Excavation in earth not exceeding 2m deep

3	Trenches	m3	13
4	Holes	m3	23
5	For aprons thickening	m3	1

Extra over trench and hole excavations in earth for excavation in

6	Soft rock	m3	4
7	Hard rock	m3	2

Extra over all excavations for carting away

8	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	30
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Risk of collapse of excavations

9	Sides of trench and hole excavations not exceeding 1,5m deep	m2	49
---	--	----	----

Keeping excavations free of water

10	Keeping excavations free of all water other than subterranean water	Item	
----	---	------	--

Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density

11	Under floors, steps, pavings, etc	m3	6
12	Backfilling to trenches, holes, etc	m3	6

Carried to Collection

R

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Compaction of surfaces

13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	38
14	Compaction of ground surface to pits etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	15
15	Compaction of ground surface under aprons etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	25

Prescribed density tests on filling

16	"Modified AASHTO Density" test	No	4
----	--------------------------------	----	---

SOIL POISONING

Soil insecticide

17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	19
18	To bottoms and sides of trenches etc	m2	56
19	To bottoms of concrete aprons etc	m2	25

Carried to Collection

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Section No. 6

Bill No. 1

Earthworks

COLLECTION

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Finishing top surfaces of concrete smooth with a wood float

9	Surface beds, slabs, etc	m2	49
10	Aprons to falls	m2	25

ROUGH FORMWORK (DEGREE OF ACCURACY III)

Rough formwork to sides

11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	42
----	--	---	----

Permenent formwork to soffits

12	Slabs propped up not exceeding 1.5m high	m2	11
13	500mm Diameter opening through 100mm slab	No	5

Fabric reinforcement

14	Mesh ref no. 395 fabric reinforcement in concrete surface beds, slabs, etc	m2	34
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Carried to Collection

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Section No. 6

Bill No. 2

Concrete, Formwork and Reinforcement

COLLECTION

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Pointing

Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc

BRICKWORK

FOUNDATIONS (PROVISIONAL)

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar

1	One brick walls	m2	81		
---	-----------------	----	----	--	--

BRICKWORK SUNDRIES

Brickwork reinforcement

2	150mm Wide reinforcement built in horizontally	m	475		
---	--	---	-----	--	--

FACE BRICKWORK

"Nebraska" or equal approved face bricks pointed with flush horizontal and vertical joints

3	Extra over brickwork for face brickwork in foundations (Provisional)	m2	5		
---	--	----	---	--	--

SUPERSTRUCTURE

Brickwork of NFP bricks in class II mortar

4	Half brick walls	m2	14		
---	------------------	----	----	--	--

5	Half brick walls in beamfilling	m2	2		
---	---------------------------------	----	---	--	--

6	One brick walls	m2	62		
---	-----------------	----	----	--	--

BRICKWORK SUNDRIES

Carried to Collection

R

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<u>Brickwork reinforcement</u>					
7	75mm Wide reinforcement built in horizontally	m	56		
8	150mm Wide reinforcement built in horizontally	m	245		
<u>Pair of prestressed fabricated lintels</u>					
9	110 x 75mm Lintels in lengths not exceeding 3m	m	7		
<u>Turning pieces</u>					
10	220mm Wide turning piece to lintels etc	m	6		
<u>Galvanised wire ties etc</u>					
11	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	8		
<u>Air bricks etc</u>					
12	230 x 152mm "Terra-colls" or equal approved vermin proof air brick including making good to reveals	No	6		
<u>FACE BRICKWORK</u>					
<u>"Nebraska" or equal approved face bricks pointed with flush horizontal and vertical joints</u>					
13	Extra over brickwork for face brickwork pointed on both sides	m2	78		
14	Extra over brickwork for brick-on-edge header course lintel	m	9		
15	Fair cutting and fitting around pipe not exceeding 100mm diameter	No	2		
<u>Brick-on-edge header course copings, sills, etc of ? face bricks pointed with recessed joints on all exposed faces</u>					
16	220mm Wide sill set level and slightly projecting	m	4		
Carried to Collection				R	
Prepared by Mgiba Consulting					

Section No. 6

Bill No. 3

Masonry

COLLECTION

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Item No		Quantity	Rate	Amount
BUILDING WORKS - FD4				
BILL NO.4				
DAMP-PROOFING OF WALLS AND FLOORS				
<u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course</u>				
1	In walls	m2	68	
<u>One layer of 250 micron "Consol Plastics Gunplas Black" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>				
2	Under surface beds	m2	19	
DAMP-PROOFING OF WALLS AND FLOORS				
<u>Two coats "Flintkote Type 5" bitumen emulsion waterproof coating</u>				
3	On concrete floors	m2	15	
4	On brick walls	m2	52	
Carried Forward to Summary of Section No. 6				R
Prepared by Mgiba Consulting				

Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - FD4</u>			
	<u>BILL NO.5</u>			
	<u>PREAMBLES</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	0,6mm "Brownbuilt Klip-Lok Light Industrial" or equal approved galvanised troughed sheet steel with "Chromadek" or equal approved finish one side, fixed to roof members as described complete under a five year guarantee by an approved firm of Specialists, all in accordance with the materials supplied and methods employed by the Manufacturer			
1	Roof covering with a pitch not exceeding 25 degrees	m2	31	
	<u>ROOF AND WALL INSULATION</u>			
	<u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u>			
2	Insulation laid taut over rafters and fixed concurrent with purlins, etc	m2	31	
	<u>RAINWATER DISPOSAL</u>			
	<u>100mm Aluminium zinc seamless</u>			
3	100 x 100mm Eaves gutters	m	7	
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

**The Mvula Trust
LDOE 2022/23 Schools Water and
Sanitation Programme at
Ladzani Primary School**

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Section No. 6

Bill No. 5

Roof Coverings

COLLECTION

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Item No	Quantity	Rate	Amount
<u>BUILDING WORKS - FD4</u>			
<u>BILL NO.6</u>			
<u>CARPENTRY AND JOINERY</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Fixing</u>			
Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
<u>ROOFS ETC</u>			
<u>Plate nailed timber roof truss construction</u>			
The following is applicable in respect of roof trusses:			
Trusses are at maximum 700mm centres			
Roof covering is 12mm on purlins/battens Ceilings are 12mm sheeting (with skimming?) on 100 x 50mm bracing The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings numbered annexed to these bills of quantities/accompanying these bills of quantities for tender purposes			
The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from the architect and/or the site before design or fabrication commences			
<u>PLATE NAILED ROOF TRUSS CONSTRUCTION</u>			
Carried to Collection			R
Prepared by Mgiba Consulting			

Prefabricated timber trusses with pitch not exceeding 25 degrees

1	Allow the provisional sum of R 8 000 for supply and complete installation of roof trusses including all necessary bracing, gang boarding, purlins, splayed eaves purlins, wall plates, etc.,	Item	8 000.00
2	Profit and attendance on the above item	Item	1 600.00

Sundries

3	Two coats creosote on sawn timbers	m2	2
4	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	8
5	Hurricane clips	No	6

EAVES, VERGES, ETC

"Everite Flexit" or equal approved pressed nutec-cement

6	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	17
---	--	---	----

DOORS ETC

Wrought meranti doors hung to steel frames

7	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and covered on other side and including rebates all round	No	2
8	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and covered on other side and including rebates all round	No	4

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Section No. 6

Bill No. 6

Carpentry and Joinery

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - FD4</u>			
	<u>BILL NO.7</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Finishes to ironmongery</u>			
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH 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			
	<u>CATCHES, CABIN HOOKS, ETC</u>			
	<u>"Union" or equal approved</u>			
1	100mm cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
	<u>LOCKS</u>			
	<u>"Union" or equal approved</u>			
2	Three lever lockset	No	2	
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

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Section No. 6

Bill No. 7

Ironmongery

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Item No	Quantity	Rate	Amount
<u>BUILDING WORKS - FD4</u>			
<u>BILL NO.8</u>			
<u>METALWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Descriptions</u>			
Descriptions of bolts shall be deemed to include nuts and washers			
Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete			
Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described			
<u>WELDED SCREENS, GATES, ETC</u>			
<u>Screens and gates</u>			
1	No	2	
Single gate and frame for opening 813 x 2 032mm high overall, the outer frame of 50 x 50 x 2,5mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 800 x 2 038mm high of 60 x 40 x 2,0mm hollow section frame with two 60 x 40 x 2,0mm hollow section horizontal rails with 20mm diameter vertical rods at 110mm centers with 25mm diameter x 80mm long pin hinge, complete with 5pin upright double throw security mortice deadlock in 3mm steel plate housing			
<u>PRESSED STEEL DOOR FRAMES</u>			
Carried to Collection			R
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Section No. 6

Bill No. 8

Metalwork

COLLECTION

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - FD4</u>			
	<u>BILL NO.10</u>			
	<u>PLUMBING AND DRAINAGE</u> <u>(PROVISIONAL)</u>			
	Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions			
	<u>ENVIRO-LOO TOILET SYSTEM</u>			
	<u>"Enviro loo" or equal approved</u>			
1	"Industrial 1040 standard toilet system" installed to manufactures specification complete with top unit with hinged inspection cover, bottom unit with 3 support pipes, drying plate, 2 inlet pipes with liquid level indicator, 2300mm outlet vent pipe, wall mounting bracket, drying bag, extraction unit, toilet bowl seat and lid, anchors, enzyme, organic starter and toilet cleaner	No	5	
	<u>SANITARY FITTINGS</u>			
	<u>"Vaal" or equal approved</u>			
2	510 x 405mm "Hibiscus" code VAA-702303 ceramic wash hand basin and 32mm anti-theft plug with spindle supported on a universal floor mounted pedestal complete with all necessary pipework, traps, waste union, etc and connection to soak away (taps measured elsewhere)	No	1	
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

1

"Cobra watertech" or equal approved

No

No

R

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Section No. 6

Bill No. 10

Plumbing and Drainage (Provisional)

COLLECTION

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - FD4</u>			
	<u>BILL NO.12</u>			
	<u>PAINTWORK</u>			
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>ON FIBRE-CEMENT</u>			
	<u>One coat primer and two coats exterior quality PVA emulsion paint</u>			
1	On fascias and barge boards	m2	17	
	<u>ON METAL</u>			
	<u>Spot priming defects in pre primed surfaces with polyamide cured epoxy zinc chromate primer and applying one polyamide cured epoxy undercoat and ? coat/coats ? polyamide cured finishing epoxy paint on steel</u>			
2	On door frames	m2	4	
3	On windows with burglar bars	m2	5	
4	On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)	m2	7	
5	On eaves gutters not exceeding 300 mm girth	m	11	
	<u>ON WOOD</u>			
	<u>Three coats polyurethane semi-gloss varnish</u>			
6	On doors	m2	13	
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	Prepared by Mgiba Consulting			

SECTION SUMMARY - Building Works - FD4 (four seats + one disable facilit				
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4	Waterproofing	171		
5	Roof Coverings	174		
6	Carpentry and Joinery	177		
7	Ironmongery	180		
8	Metalwork	183		
9	Plastering	184		
10	Plumbing and Drainage (Provisional)	187		
11	Glazing	188		
12	Paintwork	189		
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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - SD5</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Nature of ground</u>			
	Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes			
	<u>Nature of ground</u>			
	A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured			
	<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>SITE CLEARANCE ETC</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	127	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	127	
	<u>EXCAVATION, FILLING, ETC</u>			
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

<u>Excavation in earth not exceeding 2m deep</u>					
3	Trenches	m3	11		
4	Holes	m3	39		
5	For aprons thickening	m3	2		
<u>Extra over trench and hole excavations in earth for excavation in</u>					
6	Soft rock	m3	5		
7	Hard rock	m3	2		
<u>Extra over all excavations for carting away</u>					
8	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	45		
<u>Risk of collapse of excavations</u>					
9	Sides of trench and hole excavations not exceeding 1,5m deep	m2	92		
<u>Keeping excavations free of water</u>					
10	Keeping excavations free of all water other than subterranean water		Item		
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u>					
11	Under floors, steps, pavings, etc	m3	11		
12	Backfilling to trenches, holes, etc	m3	6		
<u>Compaction of surfaces</u>					
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	52		
Carried to Collection				R	
Prepared by Mgiba Consulting					

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Section No. 7

Bill No. 1

Earthworks

COLLECTION

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Finishing top surfaces of concrete smooth with a wood float

9	Surface beds, slabs, etc	m2	88
10	Aprons to falls	m2	40

ROUGH FORMWORK (DEGREE OF ACCURACY III)

Rough formwork to sides

11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	73
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Permenent formwork to soffits

12	Slabs propped up not exceeding 1.5m high	m2	17
13	500mm Diameter opening through 100mm slab	No	7

Fabric reinforcement

14	Mesh ref no. 395 fabric reinforcement in concrete surface beds, slabs, etc	m2	61
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Section No. 7

Bill No. 2

Concrete, Formwork and Reinforcement

COLLECTION

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Item No	Quantity	Rate	Amount
<u>BUILDING WORKS - SD5</u>			
<u>BILL NO.3</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>BRICKWORK</u>			
<u>Sizes in descriptions</u>			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<u>Hollow walls etc</u>			
Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixal" bitumen emulsion waterproofing coating.			
<u>User note:</u>			
The above preamble generally applies for works in hot and humid coastal areas			
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
Carried to Collection		R	
Prepared by Mgiba Consulting			

BRICKWORK

FOUNDATIONS (PROVISIONAL)

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar

1	One brick walls	m2	105
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BRICKWORK SUNDRIES

Brickwork reinforcement

2	150mm Wide reinforcement built in horizontally	m	582
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FACE BRICKWORK

"Nebraska" or equal approved face bricks pointed with flush horizontal and vertical joints

3	Extra over brickwork for face brickwork in foundations (Provisional)	m2	4
---	--	----	---

SUPERSTRUCTURE

Brickwork of NFP bricks in class II mortar

4	Half brick walls	m2	18
---	------------------	----	----

5	Half brick walls in beamfilling	m2	3
---	---------------------------------	----	---

6	One brick walls	m2	105
---	-----------------	----	-----

BRICKWORK SUNDRIES

Brickwork reinforcement

7	75mm Wide reinforcement built in horizontally	m	70
---	---	---	----

8	150mm Wide reinforcement built in horizontally	m	410
---	--	---	-----

Carried to Collection

Prepared by Mgiba Consulting

R

<u>Pair of prestressed fabricated lintels</u>					
9	110 x 75mm Lintels in lengths not exceeding 3m	m	11		
<u>Turning pieces</u>					
10	220mm Wide turning piece to lintels etc	m	14		
<u>Galvanised wire ties etc</u>					
11	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	14		
<u>Air bricks etc</u>					
12	230 x 152mm "Terra-colls" or equal approved vermin proof air brick including making good to reveals	No	14		
<u>FACE BRICKWORK</u>					
<u>"Nebraska" or equal approved face bricks pointed with flush horizontal and vertical joints</u>					
13	Extra over brickwork for face brickwork pointed on both sides	m2	126		
14	Extra over brickwork for brick-on-edge header course lintel	m	17		
15	Fair cutting and fitting around pipe not exceeding 100mm diameter	No	6		
<u>Brick-on-edge header course copings, sills, etc of ? face bricks pointed with recessed joints on all exposed faces</u>					
16	220mm Wide sill set level and slightly projecting	m	9		
Carried to Collection				R	
Prepared by Mgiba Consulting					

Section No. 7

Bill No. 3

Masonry

COLLECTION

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Item No		Quantity	Rate	Amount
<u>BUILDING WORKS - SD5</u>				
<u>BILL NO.4</u>				
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>				
<u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course</u>				
1	In walls	m2	118	
<u>One layer of 250 micron "Consol Plastics Gunplas Black" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>				
2	Under surface beds	m2	37	
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>				
<u>Two coats "Flintkote Type 5" bitumen emulsion waterproof coating</u>				
3	On concrete floors	m2	24	
4	On brick walls	m2	78	
Carried Forward to Summary of Section No. 7				R
Prepared by Mgiba Consulting				

Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - SD5</u>			
	<u>BILL NO.5</u>			
	<u>PREAMBLES</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	0,6mm "Brownbuilt Klip-Lok Light Industrial" or equal approved galvanised troughed sheet steel with "Chromadek" or equal approved finish one side, fixed to roof members as described complete under a five year guarantee by an approved firm of Specialists, all in accordance with the materials supplied and methods employed by the Manufacturer			
1	Roof covering with a pitch not exceeding 25 degrees	m2	55	
	<u>ROOF AND WALL INSULATION</u>			
	<u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u>			
2	Insulation laid taut over rafters and fixed concurrent with purlins, etc	m2	55	
	<u>RAINWATER DISPOSAL</u>			
	<u>100mm Aluminium zinc seamless</u>			
3	100 x 100mm Eaves gutters	m	12	
4	Extra over eaves gutter for stopped end	No	2	
	Carried to Collection		R	
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Section No. 7

Bill No. 5

Roof Coverings

COLLECTION

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No**

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Amount

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R

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Sundries

2	Two coats creosote on sawn timbers	m2	3
3	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	14
4	Hurricane clips	No	6

EAVES, VERGES, ETC

"Everite Flexit" or equal approved pressed nutec-cement

5	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	32
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DOORS ETC

Wrought meranti doors hung to steel frames

6	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and covered on other side and including rebates all round	No	4
7	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and covered on other side and including rebates all round	No	5

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Section No. 7

Bill No. 6

Carpentry and Joinery

COLLECTION

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Amount

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - SD5</u>			
	<u>BILL NO.7</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Finishes to ironmongery</u>			
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list:			
	BS Satin bronze lacquered CH 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			
	<u>CATCHES, CABIN HOOKS, ETC</u>			
	<u>"Union" or equal approved</u>			
1	100mm cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	4	
	<u>LOCKS</u>			
	<u>"Union" or equal approved</u>			
2	Three lever lockset	No	4	
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

Section No. 7

Bill No. 7

Ironmongery

COLLECTION

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - SD5</u>			
	<u>BILL NO.8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Descriptions</u>			
	Descriptions of bolts shall be deemed to include nuts and washers			
	Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete			
	Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described			
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Screens and gates</u>			
1	Single gate and frame for opening 813 x 2 032mm high overall, the outer frame of 50 x 50 x 2,5mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 800 x 2 038mm high of 60 x 40 x 2,0mm hollow section frame with two 60 x 40 x 2,0mm hollow section horizontal rails with 20mm diameter vertical rods at 110mm centers with 25mm diameter x 80mm long pin hinge, complete with 5pin upright double throw security mortice deadlock in 3mm steel plate housing	No	4	
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1,2mm Rebated frames suitable for half brick walls</u>			
2	Frame for door 813 x 2032mm high	No	5	
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

1,2mm Double rebated frames suitable for one brick walls

3	Frame for door 813 x 2032mm high	No	4	
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STEEL WINDOWS, DOORS, ETC

Standard school windows

4	Window type NE1, 533 x 654mm high including burglar bars	No	11	
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5	Window type NE7, 1022 x 654mm high including burglar bars	No	3	
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Section No. 7

Bill No. 8

Metalwork

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	<u>"Vaal" or equal approved</u>				
3	510 x 405mm "Hibiscus" code VAA-702303 ceramic wash hand basin and 32mm anti-theft plug with spindle supported on a universal floor mounted pedestal complete with all necessary pipework, traps, waste union, etc and connection to soak away (taps measured elsewhere)	No	2		
	<u>"Vanstone" or equal approved</u>				
4	Reinforced concrete double compartment wash trough size 1065mm long on pedestal complete with all necessary pipework, traps, waste union, etc and connection to soak away (taps measured elsewhere)	No	2		
	<u>TAPS, VALVES, ETC</u>				
	<u>"Cobra watertech" or equal approved</u>				
5	15mm COB-NM-851 single lever elbow action basin mixer tap	No	2		
	<u>"Macneil triumph" or equal approved</u>				
6	15mm Stainless steel Extended bip tap	No	4		
Carried to Collection				R	
Prepared by Mgiba Consulting					

Section No. 7

Bill No. 10

Plumbing and Drainage (Provisional)

COLLECTION

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Item No		Quantity	Rate	Amount
	<u>BUILDING WORKS - SD5</u>			
	<u>BILL NO.12</u>			
	<u>PAINTWORK</u>			
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>ON FIBRE-CEMENT</u>			
	<u>One coat primer and two coats exterior quality PVA emulsion paint</u>			
1	On fascias and barge boards	m2	32	
	<u>ON METAL</u>			
	<u>Spot priming defects in pre primed surfaces with polyamide cured epoxy zinc chromate primer and applying one polyamide cured epoxy undercoat and ? coat/coats ? polyamide cured finishing epoxy paint on steel</u>			
2	On door frames	m2	7	
3	On windows with burglar bars	m2	12	
4	On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)	m2	15	
5	On eaves gutters not exceeding 300 mm girth	m	17	
	<u>ON WOOD</u>			
	<u>Three coats polyurethane semi-gloss varnish</u>			
6	On doors	m2	21	
	Carried Forward to Summary of Section No. 7		R	
	Prepared by Mgiba Consulting			

<u>Compaction of surfaces</u>				
3	Compaction of ground surface including scarifying as necessary for a depth of 150mm, breaking down oversize material, adding suitable material where necessary, levelling and compacting to 95% Mod AASHTO density	m2	280	
<u>Prescribed density tests on filling</u>				
4	"Modified AASHTO Density" tests	No	5	
<u>SOIL POISONING</u>				
<u>Approved weedkiller mixed and applied strictly in accordance with the manufacturer's instructions</u>				
5	Under paving, etc	m2	280	
<u>Approved soil poisoning applied under a 10 year guarantee</u>				
6	Soil insecticide applied and mixed in the proportion and rate as specified under floors	m2	280	
<u>PAVING</u>				
<u>Light grey 60mm "Grinaker G-blocks" interlocking precast concrete (35 MPa) paving blocks or equal approved laid with butt joints on 30mm thick river sand bed with sand swept into joints including preparation of ground for filling</u>				
7	Paving in herringbone bond in walkways	m2	280	
8	220mm Wide brick-on-edge header course edging on 80mm thick mortar bed	m	433	
Carried to Collection				R
Prepared by Mgiba Consulting				

10	Mountable kerb (figure 8c) 275 x 300 x 200mm high unreinforced concrete, bedded in concrete, including excavation, backfilling, etc	m	217
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11	Cutting units to fit edge restraints	m	43
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EXCAVATIONS (PROVISIONAL)

12	Shallow trenches with sloping sides	m3	13
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13	Soft rock	m3	2
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14	Hard rock	m3	1
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15	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	21
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R

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	<u>Compaction of surfaces</u>				
16	Compaction of ground surface under stormwater channels 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	367		
	<u>UNREINFORCED CONCRETE</u>				
	<u>25MPa/19mm concrete</u>				
17	Bottom and sides of stormwater channels	m3	21		
	<u>SUNDRIES</u>				
	<u>Finishing top surfaces of concrete smooth with a steel float</u>				
18	Surfaces of stormwater channel	m2	408		
	<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>				
	<u>Rough formwork to sides</u>				
19	Edges and risers, etc not exceeding 300mm high	m	1 667		
	<u>SEWER DRAINAGE (PROVISIONAL)</u>				
	<u>Class 400 uPVC pipes for underground installations</u>				
20	160mm Pipes in and including trenches not exceeding 1m deep	m	60		
21	160mm Pipes in and including trenches exceeding 1m and not exceeding 2m deep	m	90		
	<u>Extra over 160mm uPVC pipes for fittings</u>				
22	Bend	No	8		
23	Access bend	No	3		
	Carried to Collection			R	
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24	Access junction	No	10		
25	Rodding eye	No	3		
	<u>uPVC channels</u>				
26	160mm Half-round channels in bottoms of inspection chambers	m	3		
27	160mm Half round channel junctions in bottoms of inspection chambers	No	6		
28	160mm Half round channel bends in bottoms of inspection chambers	No	6		
	<u>Precast concrete circular inspection chambers (covers elsewhere)</u>				
29	Inspection chamber 1500mm diameter exceeding 1500mm and not exceeding 1750mm deep internally (covers elsewhere measured)	No	1		
30	Inspection chamber 1800mm diameter exceeding 1750mm and not exceeding 2000mm deep internally (covers elsewhere measured)	No	1		
31	Inspection chamber 1950mm diameter exceeding 1750mm and not exceeding 2000mm deep internally (covers elsewhere measured)	No	1		
	<u>Covers etc</u>				
32	300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground	No	3		
33	Type 4 cast iron manhole cover and frame	No	3		
34	Lifting key for manhole cover	No	3		
	<u>Sundries</u>				
35	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	14		
Carried to Collection				R	
Prepared by Mgiba Consulting					

36	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock	m3	8		
37	Selected sand filling from the excavations in bedding under and filling around pipes	m3	3		
38	Testing sewer pipe system		Item		
<u>SEPTIC TANK AND SOAKAWAY</u>					
<u>EARTHWORKS</u>					
<u>SITE CLEARANCE ETC</u>					
<u>Site clearance</u>					
39	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	55		
<u>EXCAVATIONS</u>					
<u>Excavate in earth not exceeding 2m deep</u>					
40	Holes	m3	14		
<u>Excavation in earth exceeding 2m and not exceeding 4m deep</u>					
41	Holes	m3	3		
<u>Extra over trench and hole excavations in earth for excavations in</u>					
42	Soft rock	m3	1		
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	16		
Carried to Collection				R	
Prepared by Mgiba Consulting					

	<u>Risk of collapse of excavations</u>				
45	Risk of collapse of sides of excavations for trenches and holes from natural, elevated or reduced ground level to not exceeding 1,5m deep	m2	27		
	<u>Keeping excavations free of water</u>				
46	Allow for keeping all excavations entirely free from water and mud		Item		
	<u>FILLING</u>				
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93 % Mod AASHTO density</u>				
47	Backfilling to trenches, holes, etc	m3	1		
	<u>G5 filling obtained from the demolitions and/or prescribed stockpiles on site compacted to 93% Mod AASHTO density</u>				
48	Under floors, steps, paving etc.	m3	2		
	<u>Coarse dry, clean, washed riversand filling supplied by the contractor and evenly spread, levelled, watered and rammed to receive waterproof membrane (elsewhere)</u>				
49	Under floors etc	m3	1		
	<u>Stone filling of 19mm broken stone</u>				
50	Under floors etc	m3	6		
	<u>Filter fabric</u>				
51	Geofabric bidim on stone surface	m2	8		
Carried to Collection				R	
Prepared by Mgiba Consulting					

m2

7

m2

7

m3

1

m3

1

m2

7

m2

14

FOUNDATIONS

R

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	<u>Loadbearing brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>				
58	One brick walls	m2	23		
	<u>SUNDRIES</u>				
	<u>Brick reinforcement</u>				
59	Brick reinforcement 150mm wide built into brick walls with sufficient laps at end joints, angles and intersections (measured net)	m	3		
	<u>INTERNAL PLASTER</u>				
	<u>Cement plaster on brickwork</u>				
60	On walls	m2	23		
	<u>SUBSOIL DRAINAGE</u>				
61	Excavation not exceeding 2m deep for drain trenches	m3	5		
62	Backfilling to drain trenches compacted to 93% Mod AASHTO density	m3	3		
63	110mm "uPVC" perforated pipes laid in stone encasing	m	3		
64	Extra over for 110mm capped end	No	1		
65	Extra over for 110mm junction	No	1		
66	Extra over for 110mm bend	No	1		
67	110mm Rodding eye	No	1		
68	300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground	No	1		
	<u>Gratings, covers, etc</u>				
69	600 x 750mm Diameter type M2579 cast iron manhole cover and frame	No	2		
Carried to Collection				R	
Prepared by Mgiba Consulting					

70	Lifting key for manhole cover	No	1		
	<u>Sundries</u>				
71	173 x 240mm Cast iron horseshoe pattern step iron built into brickwork	No	20		
72	Testing drainage pipe system		Item		
	<u>WATER RETICULATION</u>				
	<u>Class 9 uPVC pressure pipes</u>				
73	50mm Pipes laid in and including trenches	m	10		
74	75mm Pipes laid in and including trenches	m	300		
	<u>Extra over class 9 uPVC pipes for fittings</u>				
75	50mm Bend	No	1		
76	50mm Endcap	No	0.2		
77	75mm Bend	No	15		
78	75mm Endcap	No	6		
	<u>"Taps, valves etc."</u>				
79	50mm R.S.V gate valve	No	0.4		
80	75mm R.S.V gate valve	No	6		
81	Strainer	No	3		
82	Inspection chamber 1500mm diameter exceeding 1500mm and not exceeding 1750mm deep internally (covers elsewhere measured)	No	3		
Carried to Collection				R	
Prepared by Mgiba Consulting					

	<u>Valve boxes</u>				
83	600 x 600mm Cast iron stopcock box including brick chamber not exceeding 500mm deep internally	No	6		
	<u>Sundries</u>				
84	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	12		
85	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock	m3	6		
86	50mm sand filling supplied by contractor in bedding under and filling around pipes	m3	56		
87	Unreinforced concrete in thrust blocks at bends, tees, etc including necessary extra excavation, formwork, etc	m3	6		
88	300 x 300 x 50mm Precast concrete pipeline marker slab set in ground	No	6		
89	Testing water pipe system		Item		
	<u>WATER STORAGE TANK AND STAND</u>				
	<u>Earthworks</u>				
90	Excavate in earth not exceeding 2m deep for holes	m3	4		
91	Risk of collapse to sides of excavations	m2	12		
	<u>25MPa/20mm reinforced concrete</u>				
92	Bases	m3	2		
	<u>Galavanised tank stand</u>				
93	Pre-fabricated steel tank stand with 4,75m long legs, constructed complete as per details engineers specification	No	2.00		
	Carried to Collection			R	
	Prepared by Mgiba Consulting				

"Jojo" or equal approved fixed uPVC vertical tank

94 Polyethylene tank (10kl) 1,82m diameter x 2,25m high on and including galvanised tank stand(stand measured elsewhere)

No

1

95 Polyethylene tank (5kl) 1,82m diameter x 2,25m high on and including galvanised tank stand(stand measured elsewhere)

No

1

FENCING

Scope

This specification covers the erection of a security fence. The tenderers are not bound to specific trade names but materials offered are to meet relevant SABS Specifications and to be within CCS451 - 1976 specifications for anti-intruder fencing.

Interpretations

Fencing shall be deemed to include all items such as gates etc., and material and labour required to complete the work.

Height

The fence shall be 2,1 or 2,4 meters high measured from natural ground levels, from cleared strip of ground one metre wide on boundary.

Carried to Collection

R

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Fence wire razor mesh

Razor mesh made up of 2,5mm diameter core wire with minimum 0,4mm thick galvanised blade strips with 8mm re-inforcing shoulder with standard 300 x 150mm aperture size 2,1m high to be fixed to the straining wires by 1,6mm binding at 700mm intervals.

Razor mesh to be placed on outside of all fencing poles.

The top end of mesh to be finished to form barbs after the loose ends have been wrapped twice around the top straining wire.

Gates

Supply each gate with a suitable length of heavy duty chain and a 50mm heavy duty brass padlock with two keys

Gates shall have all joints and accessories securely welded on with all welds neatly trimmed and waterproofed, with either square and mitred corners or accurately jig-formed rounded corners with a radius not exceeding 100mm

Gates shall be hot dipped galvanised after fabrication, to conform with the requirements of SABS specification 763 - Class A

Fencing

Galvanised diamond mesh security fencing

96	1800mm High fencing, set up complete as described including site clearance, eyebolts and posts with footings	m	68		
97	Strainer post with two stays embedded into and including concrete blocks	No	27		
98	Corner post with two stays embedded into and including concrete blocks	No	4		

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Section No. 8

Bill No. 1

External Works

COLLECTION

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Item No		Quantity	Rate	Amount
	<u>PROVISIONAL SUMS</u>			
	<u>BILL NO. 1</u>			
	<u>PROVISIONAL SUMS</u>			
	<u>CASH DISCOUNT</u>			
	No cash discount. All provisional sums are "NET".			
	<u>ATTENDANCE</u>			
	Without in any way limiting the meaning and interpretation, "general attendance" on sub-contractors shall include free of charge to the sub-contractor the following services for the purpose of the relative sub-contract works:			
	1) access to the site and to the places where the work is to be carried out, including the use of any temporary personnel hoists erected by the Contractor for his own use;			
	2) the provision of water and lighting and of single and/or three phase electric power to a position within 50 metres of the place where work is to be carried out, but excluding water, fuel and power for commissioning of the installation for which the Contractor shall be responsible;			
	3) the provision of an area for office accommodation, temporary workshops and for the storage of plant and materials;			
	4) the use of erected scaffolding belonging to the Contractor, in common with others having the like right whilst it so remains erected upon the site;			
	5) the use of messrooms, latrine, health and welfare facilities, and the like, where provided;			
	Carried to Collection		R	
	Prepared by Mgiba Consulting			

- 6) the use of the site telephone (if provided) subject to the payment by the sub-contractor for all his outgoing calls;
- 7) temporary casing and/or other protection of the work;
- 8) site security measures;
- 9) hoisting of the sub-contractor's material in loads not exceeding 500 kg;
- 10) making good in all trades and final cleaning down on completion.

FUEL, POWER AND WATER FOR COMMISSIONING PLANT

The cost of fuel, power and water for the commissioning of plant shall be borne by the sub-contractor appointed for the relevant sub-contract works in terms of the conditions under which they have/are contract for the specialist work involved. The contractor shall allow opposite this item or under the relevant attendance items for the recovery of such costs via the installation of the necessary metres, etc.

REFURBISHMENT OF EXISTING BOREHOLE

- 1 Provide an allowance for refurbishment of existing borehole including yield and water quality testing, and reticulation, to be expended as the Agent/Representative may direct or deduct in whole or in part, if not required.
- 2 Allow for profit on last if required.
- 3 Allow for giving every facility to, attending upon and making good after the Specialists installing the service complete and for providing the use of all ordinary plant

Item	250 000.00
Item	
Item	

Carried to Collection

R

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**REFURBISHMENT OF EXISTING ENVIRO-LOO
TOILET BLOCKS**

4 Provide an allowance for refurbishment of existing enviro-loo toilet blocks/seats, to be expended as the Agent/Representative may direct or deduct in whole or in part, if not required.

Item 80 000.00

5 Allow for profit on last if required.

Item

6 Allow for giving every facility to, attending upon and making good after the Specialists installing the service complete and for providing the use of all ordinary plant

Item

TERMITE CONTROL AND TREATMENT

7 Provide an allowance for termite treatment and control complete , to be expended as the Agent/Representative may direct or deduct in whole or in part, if not required.

Item 35 000.00

8 Allow for profit on last if required.

Item

9 Allow for giving every facility to, attending upon and making good after the Specialists installing the service complete and for providing the use of all ordinary plant

Item

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Section No. 9

Bill No. 1

Provisional Sums

COLLECTION

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Section No	<u>FINAL SUMMARY</u>	Page No	Amount	
	<u>TOTAL SECTION 1- PRELIMINARIES</u>			
1	Preliminaries	63		
	<u>TOTAL SECTION 2- EXISTING BUILDINGS</u>			
2	Building Works - Existing Buildings	66		
	<u>TOTAL SECTION 3- BUILDING WORKS - GRMD2</u>			
3	Building Works - GRMD2 (two seats + one disable facility + six urinals)	97		
	<u>TOTAL SECTION 4- BUILDING WORKS - GRFD3</u>			
4	Building Works - GRFD3 (three seats + one disable facility)	128		
	<u>TOTAL SECTION 5- BUILDING WORKS - MD5</u>			
5	Building Works - MD5 (five seats + one disable facility + 11 urinals)	159		
	<u>TOTAL SECTION 6- BUILDING WORKS - FD4</u>			
6	Building Works - FD4 (four seats + one disable facility)	190		
	<u>TOTAL SECTION 7- BUILDING WORKS - SD5</u>			
7	Building Works - SD5 (five seats + two disable facilities + three urinals)	221		
	<u>TOTAL SECTION 8- EXTERNAL WORKS</u>			
8	External Works	236		
	<u>TOTAL SECTION 9- PROVISIONAL SUMS</u>			
9	Provisional Sums	240		
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