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- 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 "**Commencement Date**" is added:

"**Commencement date**" means the date of issue of the letter of Acceptance or any such other date as may in the Letter of Acceptance, which ever is the later, provided always that any such other date so specified shall not be more than FOURTEEN (14) days after the date of the Letter of Appointment.

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

"**Construction guarantee**" means a guarantee at call obtained by the **contractor** from an institution approved by the **employer** in terms of the **employer's** construction guarantee form as selected in the **schedule**

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:

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"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

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 and after the tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the tenderer of the benefits of free and open competition.

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 in terms of the legislation of the Republic of South Africa, and in particular:

(a) in respect of interest owed by the **employer**, the interest rate as determined by the Minister of Justice and Constitutional Development from time to time, in terms of section 1 (2) of the section 1(2) of Prescribed Rate of Interest Act, 1975 (Act No. 55 of 1975), will apply; and

(b) in respect of interest owed to the **employer**, the interest rate as determined by the Management Act, 1999 (Act No. 1 of 1999), will apply

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

Clause 1.6 Definition of **"Notice given"** is amended by replacing it with the following:

1.6 Any notice given may be delivered by hand, sent by prepaid registered post or telefax. Notice shall be presumed to have been given when:

1.6.4 No clause

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	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>Objective and Preparation (A2 - A14)</u>			
2	Offer, acceptance and performance (clause 2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
3	Documents (clause 3)			
	Clause 3.2.1 is amended by replacing it with:			
	3.2.1 A construction guarantee in terms of 14.0, where so elected in his/her tender.			
	Clause 3.7 is amended by the addition of the following:			
	Add at the end thereof:			
	The contractor shall supply and keep a copy of the JBCC applicable to this contract on site , to which the employer, principal agent and agents shall have access to at all times.			
	Clause 3.10 is amended as follows:			
	Replace the second reference to " principal agent " with the word " employer "			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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4	Design responsibility (clause 4)				
	Clause 4 is amended as follows:				
	4.3 No clause				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
5	Employer's agents (clause 5)				
	Clause 5 " Employer's agents " is amended as follows:				
	5.1.2 under clause 41- Include reference to 32.6.3; 34.3 and 34.4 in terms of which the employer has retained its authority and has not given a mandate to the principal agent and in terms of which the employer shall sign all documents.				
	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			
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	Time Related	Item		
8	Works risk (clause 8)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
9	Indemnities (clause 9)			
	Clause 9.0 is amended by adding Clause 9.1.4:			
	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.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
10	Works insurances (clause 10)			
	Clause 10.0 is amended by the addition of the following clauses			
	10.5 Damage to the Works			
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|-----|---|--|--|--|
| (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 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, | | | |

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arising out of or in the course of or by reason of the execution of the works unless due to any act or neglect of any person for whose actions the employer is legally liable c) The contractor shall, upon receiving a contract instruction from the principal agent, cause the same to be made good in a perfect and workmanlike manner at his own cost and in default thereof the employer shall be entitled to cause it to be made good and to recover the cost thereof from the contractor or to deduct the same from amounts due to the contractor (d) The contractor shall be responsible for the protection and safety of such portions of the premises placed under his control by the employer for the purpose of executing the works until 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 The contractor shall, from the commencement date of Carried to Collection Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 PRELIMINARIES & GENERAL			R
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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's own costs

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** 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**

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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

14 Security (clause 14)

Clause 14.0 is amended by:-

14.1 In respect of contracts with a **contract sum** up to R1 million, the **security** to be submitted by the **contractor** to the **employer** will be as a payment reduction of five per cent (5%) of the value certified in the **payment certificate** (excluding VAT)

14.1.1 The payment reduction of the value certified in a **payment certificate** shall be mutatis mutandi in terms of 31.8(A)

14.1.2 The **employer** shall be entitled to recover expense

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and loss from the payment reduction in terms of 33.0 provided that the **employer** complies with the provisions of 33.4 in which event the **employer's** entitlement shall take precedence over his obligations to refund the payment reduction **security** or portions thereof to the **contractor**

14.2 In respect of contracts with a **contract sum** above R1 million, the **contractor** shall have the right to select the **security** to be provided in terms of 14.3, 14.4, 14.5, 14.6, or 14.7 as stated in the schedule. Such **security** shall be provided to the **employer** within twenty-one (21) calendar days from **commencement date**. Should the **contractor** fail to select the **security** to be provided or should the **contractor** fail to provide the **employer** with the selected **security** within twenty-one (21) calendar days from **commencement date**, the **security** in terms of 14.7 shall be deemed to have been selected.

14.3 Where the **security** as a cash deposit of ten per cent (10%) of the **contract sum** (excluding VAT) has been selected:

14.3.1 The **contractor** shall furnish the **employer** with a cash deposit equal in value to ten per cent (10%) of the **contract sum** (excluding VAT) within twenty-one (21) calendar days from **commencement date**

14.3.2 Within twenty-one (21) calendar days of the date of **practical completion** of the **works** the **employer** shall reduce the cash deposit to an amount equal to three per cent (3%) of the contract value (excluding VAT), and refund the balance to the **contractor**

14.3.3 Within twenty-one (21) calendar days of the date of **final completion** of the **works** the **employer** shall reduce the cash deposit to an amount equal to one per cent (1%) of the contract value (excluding VAT) and refund the balance to the **contractor**

14.3.4 On the date of payment of the amount in the final **payment certificate**, the **employer** shall refund the remainder of the cash deposit to the **contractor**

14.3.5 The **employer** shall be entitled to recover expense and loss from the cash deposit in terms of 33.0 provided that the **employer** complies with the provisions of 33.4 in which event the **employer's** entitlement shall take precedence over his obligations to refund the cash deposit **security** or portions thereof to the **contractor**

14.3.6 The parties expressly agree that neither the **employer** nor the **contractor** shall be entitled to cede the rights to the deposit to any third party

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14.4 Where **security** as a variable **construction guarantee** of ten per cent (10%) of the **contract sum** (excluding VAT) has been selected:

14.4.1 The **contractor** shall furnish the **employer** with an acceptable variable **construction guarantee** equal in value to ten per cent (10%) of the **contract sum** (excluding VAT) within twenty-one (21) calendar days from **commencement date**

14.4.2 The variable **construction guarantee** shall reduce and expire in terms of the Variable **Construction guarantee** form included in the invitation to tender

14.4.3 The **employer** shall return the variable **construction guarantee** to the **contractor** within fourteen (14) calendar days of it expiring.

14.4.4 Where the **employer** has a right of recovery against the **contractor** in terms of 33.0, the **employer** shall issue a written demand in terms of the variable **construction guarantee**

14.5 Where **security** as a fixed **construction guarantee** of five per cent (5%) of the **contract sum** (excluding VAT) and a five per cent (5%) payment reduction of the value certified in the **payment certificate** (excluding VAT) has been selected:

14.5.1 The **contractor** shall furnish a fixed **construction guarantee** to the **employer** equal in value to five per cent (5%) of the **contract sum** (excluding VAT)

14.5.2 The fixed **construction guarantee** shall come into force on the date of issue and shall expire on the date of the last **certificate of practical completion**

14.5.3 The **employer** shall return the fixed **construction guarantee** to the **contractor** within fourteen (14) calendar days of it expiring

14.5.4 The payment reduction of the value certified in a **payment certificate** shall be in terms of 31.8(A) and 34.8

14.5.5 Where the **employer** has a right of recovery against the **contractor** in terms of 33.0, the **employer** shall be entitled to issue a written demand in terms of the fixed **construction guarantee** or may recover from the payment reduction or may do both

14.6 Where **security** as a cash deposit of five per cent (5%) of the **contract sum** (excluding VAT) and a payment reduction of five per cent (5%) of the value certified in the **payment certificate** (excluding VAT) has been selected:

14.6.1 The **contractor** shall furnish the **employer** with a cash deposit equal in value to five per cent (5%) of the

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contract sum (excluding VAT) within twenty-one (21) calendar days from **commencement date**

14.6.2 Within twenty-one (21) calendar days of the date of **practical completion** of the **works** the **employer** shall refund the cash deposit in total to the **contractor**

14.6.3 The payment reduction of the value certified in a **payment certificate** shall be mutatis mutandi in terms of 31.8(A)

14.6.4 Where the **employer** has a right of recovery against the **contractor** in terms of 33.0, the **employer** may issue a written notice in terms of 33.4 or may recover from the payment reduction or may do both

14.7 Where **security** as a payment reduction of ten per cent (10%) of the value certified in the **payment certificate** (excluding VAT) has been selected:

14.7.1 The payment reduction of the value certified in a **payment certificate** shall be mutatis mutandi in terms of 31.8(B)

14.7.2 The **employer** shall be entitled to recover expense and loss from the payment reduction in terms of 33.0 provided that the **employer** complies with the provisions of 33.4 in which event the **employer's** entitlement shall take precedence over his obligations to refund the payment reduction or portions thereof to the **contractor**

14.8 Payments made by the guarantor to the **employer** in terms of the fixed or variable **construction guarantee** shall not prejudice the rights of the **employer** or **contractor** in terms of this agreement

14.9 Should the **contractor** fail to furnish the **security** in terms of 14.2 the **employer**, in his sole discretion, and without notification to the **contractor**, is entitled to change the **contractor's** selected form of **security** to that of a ten per cent (10%) payment reduction of the value certified in the **payment certificate** (excluding VAT), where after 14.7 shall be applicable

Fixed

Item

Value Related

Item

Time Related

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<u>Execution (A15 - A23)</u>				
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		
17	Contract instructions (clause 17)			
	Fixed	Item		
	Value Related	Item		
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	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		
20	Nominated sub-contractors (clause 20)			
	Clause 20.0			
	Clause 20.1.3 is amended by replacing it with the following:			
	No Clause			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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21	Selected sub-contractors (clause 21)				
	Clause 21				
	Clause 21 is amended by replacing it with the following:				
	No Clause				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
22	Employer's direct contractors (clause 22)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
23	Contractor's domestic sub-contractors (Clause 23)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
<u>COMPLETION</u>					
<u>Completion (A24-A30)</u>					
24	Practical completion (clause 24)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
25	Works completion (clause 25)				
	Fixed	Item			
	Value Related	Item			
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Payment (A31 - A35)

31	Interim payment to the contractor (clause 31) Clause 31.5.2 is amended by deleting and replacing with: Security adjustment in terms of 14.0 and 31.8 Clause 31.8 is amended as follows: 31.8(A) Where a security is selected in terms of 14.1; 14.5 or 14.6, the value of the works in terms of 31.4.1 and of the materials and goods in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments: 31.8(A).1 Ninety-five per cent (95%) of such value in interim payment certificates issued up to the date of practical completion 31.8. (A).2 Ninety-seven per cent (97%) of such value in interim payment certificates issued on the date of practical completion and up to but excluding the date of final completion 31.8(A).3 Ninety-nine per cent (99%) of such value in interim payment certificates issued on the date of final completion and up to but excluding the final payment certificate in terms of 34.6 31.8(A).4 One hundred per cent (100%) of such value in the final payment certificate in terms of 34.6 except where the amount certified is in favour of the employer. In such an event the payment reduction shall remain at the adjustment level applicable to the final payment certificate. 31.8(B) Where security is a payment reduction in term of 14.7 has been selected the value of the works in terms of 31.4.1 and materials and goods in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments: 31.8(B).1 Ninety per cent (90%) of such value in interim payment certificates issued up to the date of practical completion 31.8(B).2 Ninety-seven per cent (97%) of such value in interim payment certificates issued on the date of practical completion and up to but excluding the date of final completion 31.8(B).3 Ninety-nine per cent (99%) of such value in interim payment certificates issued on the date of final completion and up to but excluding the final payment certificate in terms Carried to Collection Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 PRELIMINARIES & GENERAL			R
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of 34.6

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

Clause 31.9 is amended by replacing "seven (7) **calender** days" with "twenty one (21) **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

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33	Recovery of expense and loss (clause 33) 33.2 Add the following clauses 33.2.9 to 33.2.13: 33.2.9 the contractor's failure or neglect to commence with the works on the dates prescribed in the contract 33.2.10 the contractor's failure or neglect to proceed with the works in terms of the contract 33.2.11 the contractor's failure or neglect for any reason to complete the works in accordance with the contract 33.2.12 the contractor's refusal or neglect to comply strictly with any of the conditions of contract or any contract instructions and/or orders in writing given in terms of the contract 33.2.13 the contractor's estate being sequestrated; liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa			
	Fixed	Item		
	Value Related	Item		
	Carried to Collection		R	
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	Time Related	Item		
34	Final account and final payment (clause 34)			
	Clause 34.0			
	Clause 34.2 is amended by inserting # next to 34.2			
	Clause 34.13 is amended by replacing "seven (7) calendar days " with "twenty one (21) calendar days " and deleting the words "subject to the employer giving the contractor a tax invoice for the amount due"			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
35	Payment to other parties (clause 35)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>Cancellation (A36-A39)</u>			
36	Cancellation by employer - contractor's default (clause 36)			
	36.3 Remove reference to "No clause", and replace " principal agent " with " employer "			
	36.7 Add the following: "Notwithstanding any clause to the contrary, on cancellation of 37.5 this agreement either by the employer or the and contractor ; or for any reason and 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		
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	Time Related	Item		
37	Cancellation by employer - loss and damage (clause 37)			
	Clause 37.3.5 is amended by replacing "ninety (90)" with "one-hundred and twenty (120)"			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
38	Cancellation by contractor - employer's default (clause 38)			
	Clause 38.5.4 is amended by replacing "ninety (90)" with "one-hundred and twenty (120)"			
	Fixed	Item		
	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		
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	<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 under clause 41 remove reference to no clause Clause 40.7.1 should be amended By changing "(10)" to "(15)" and adding the following to the end thereof: Whether or not mediation resolves the dispute, the parties shall bear their own costs concerning the mediation and equally share the costs of the mediator and related costs. Fixed Value Related Time Related	Item Item Item		
	<u>State Provision (A41)</u>			
41	State Substitutions (clause 41) 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			
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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 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.

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		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> (1) <i>contain pages and annexes as indexed, and;</i> (2) <i>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 Value Related Time Related	Item Item Item		
45	Provisional bills of quantities (B2.2) Fixed Value Related Time Related	Item Item 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 Value Related Time Related	Item Item Item		
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		Time Related	Item		
52	Inspection of the site (B3.3)				
	<i>Tenderers are instructed to familiarise themselves before submission of their tender with regard to the relevant local site conditions, site accessibility, the nature of operations required, availability of labour and any conditions pertaining thereto, together with conditions relating to unloading, carting and storage of materials, equipment and tools required for the works.</i>				
	<i>No claims for extras arising from the contractor having failed to comply with this clause will be entertained</i>				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
53	Existing premises occupied (B3.4)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
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		
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	Value Related	Item	
	Time Related	Item	
62	Programming for the works (B4.2) Clause B4.2 is hereby amended by the addition of the following: Programme: The contractor and the principal agent shall agree to a Contract Programme for the control of the Works. The contractor shall submit a draft of the Contract Programme and method statement to the principal agent for approval together with the tender. The contractor shall ensure that the contract programme: 1. Shall be prepared and drawn up to comply in all respects with the requirements of this Agreement. 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		
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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 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.

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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 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

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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 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,

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	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, 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		
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Attendance on nominated and selected subcontractors (B9)

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

81 Special attendance (B9.2)

Fixed

Item

Value Related

Item

Time Related

Item

82 Commissioning - Fuel, water and electricity (B9.3)

Fixed

Item

Value Related

Item

Time Related

Item

Financial aspects (B10)

83 Statutory taxes, duties and levies (B10.1)

Provision is made in the summary of these bills of quantities for the inclusion of Value Added Tax (VAT)

Fixed

Item

Value Related

Item

Time Related

Item

84 Payment of preliminaries (B10.2)

Fixed

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		Value Related	Item		
		Time Related	Item		
85	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		
86	Payment certificate cash flow (B10.4)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	<u>General (B11)</u>				
87	Protection of works (B11.1)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
88	Protection/isolation of existing/sectionally occupied works(B11.2)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
89	Site security (B11.3)				
		Fixed	Item		
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95	Overhand work (B11.9)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
96	Instruction manuals and guarantees (B11.10)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
97	As built information (B11.11)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
98	Tenant installations (B11.12)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	<u>Schedule of variables (B12)</u>				
99	Pre-tender information (B12.1)				
	This schedule contains all variables referred to in this document and is divided into pretender and post-tender categories. The pre-tender category must be completed in full and included in the tender documents. Both the pre-tender and post-tender categories form part of these Preliminaries .				
		Fixed	Item		
		Value Related	Item		
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Time Related	Item		
12.1.1 Provisional bills of quantities (B12.1.1)			
The quantities are provisional:	Yes		
12.1.2 Availability of construction documentation (B12.1.2)			
Construction documentation is complete:	Yes		
12.1.3 Interest of agents (B12.1.3)	No		
12.1.4 Defined works area (B12.1.4)			
<i>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</i>			
12.1.5 Geotechnical investigation (B12.1.5)			
The geotechnical report is available for viewing at the offices of the Principal Agent	Yes		
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			
12.1.6 Existing premises occupied			
[3.4] Specific requirements: The contractor shall execute the works with as little noise and disturbance as possible			
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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			
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 an office for the exclusive use of the principal agent, minimum size 4 x 3 x 3m high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times.			
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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.

12.1.15 Subcontractors' notice board

- [6.6] A notice board is required (yes/no)
NO
Specific requirements:

12.1.16 Water

- [7.2] Option A (by **contractor**) (yes/no)
YES

12.1.17 Electricity

- [7.3] Option A (by **contractor**) (yes/no)
YES

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12.1.18 Telecommunications			
[7.4] Telephone (yes/no) YES			
YES Facsimile (yes/no)			
YES E-mail (yes/no)			
12.1.19 Ablution facilities			
[7.5] Option A (by contractor) (yes/no) YES			
NO Option B (by employer) (yes/no)			
12.1.20 Protection of existing/sectionally occupied works			
[11.2] Protection is required (yes/no) YES			
12.1.21 Special attendance			
The contractor must obtain information from all subcontractors at tender stage regarding special attendance that might be required and make allowance for each and every subcontract that requires special attendance			
[9.2] Subcontractor (1) Details:			
Subcontractor (2) Details:			
Subcontractor (3) Details:			
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			
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100	12.1.23 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			
	12.1.24 Environmental disturbance			
	[11.6] Specific requirements: None			
	Post-tender information (B12.2)			
	<i>All post-tender information for this section will be determined once tender is awarded</i>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	12.2.1 Payment of preliminaries			
	[10.2] Option A (prorated) (yes/no) YES			
	Option B (calculated) (yes/no) NO			
	12.2.2 Adjustment of preliminaries			
	[10.3] Option A (three categories) (yes/no) YES			
	Option B (detailed breakdown) (yes/no) NO			
	12.2.3 Additional agreed preliminaries items			
	Details: None			
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101	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				
102	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			
103	Clause C2 - General Preambles				
	The "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the trades is deemed to be included herein and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.				
	Fixed	Item			
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	Time Related	Item		
104	Clause C3 - Site instructions			
	All site instructions issued on site shall be recorded in writing within seven (7) calendar days in site instruction book (A4 size and triplicate carbon format), which is to be provided and maintained by the contractor. The said site instruction book shall be kept on site at all times for the exclusive use of recording site instructions only			
	Site instructions may be issued by the architect or any of the consultants only. Copies of the site instructions are to be submitted to the architect and quantity surveyor within seven (7) calendar days of such recording in the site instruction book			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
105	Clause C4 - Trade Names			
	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			
	If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for			
	Fixed	Item		
	Value Related	Item		
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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106	Clause C5 - Overtime 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 FixedItem Value RelatedItem Time RelatedItem			
107	Clause C6 - As-built drawings 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 FixedItem Value RelatedItem Time RelatedItem			
108	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 FixedItem Value RelatedItem Time RelatedItem			
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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111	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 of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained. Fixed Value Related Time Related	Item Item Item		
112	Clause C9 - Viewing of the school areas 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 Fixed Value Related	Item Item		
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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	Time Related	Item		
113	Clause C10 - Commencement of Works in School Areas			
	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			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
114	Clause C11 - Entrance Permits to School Areas			
	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			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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115	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 Value Related Time Related	Item Item Item	
116	Clause C13 - HIV/Aids Awareness 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 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 Fixed Value Related Carried to Collection Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 PRELIMINARIES & GENERAL	Item Item	R

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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	Time Related	Item		
117	Clause C13.1 - Awareness Champion			
	Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
118	Clause C13.2 - Awareness Workshop			
	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			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
119	Clause C13.3 - Posters, booklets, videos, etc.			
	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			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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120	Clause C13.4 - Access to Condoms 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 Fixed Value Related Time Related	Item		
121	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 Value Related Time Related	Item		
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BILL NO. 1</u>			
	<u>ALTERATIONS</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>REMOVAL OF EXISTING WORK:</u>			
	NATURE OF WORK: Tenderers are advised to visit the site and to satisfy themselves as to the nature and extent of the work to be done and provide in their tenders any items not specifically mentioned which they may deem necessary for the proper completion of the work.			
	DIMENSIONS The Contractor is advised to take all dimensions affecting the existing buildings on the site, as he will be held solely responsible for all new work being of the correct size.			
	PIPES, ETC Special care is to be taken not to interfere unnecessary with any supply pipes or other piping that may be met with and found necessary to disconnect or cut, are to be effectively stopped off and any new connections that may be necessary are to be made with proper fittings and to the satisfaction of the Principal Agent to whom due notice must be given of any alterations to the existing services.			
	PROTECTION In taking down and removing existing work the utmost care is to be observed to avoid any structural or other damage to the remaining portions of the buildings. The Contractor must also protect all work not removed such as walls, floors, doors, windows or other joinery, loose and fixed fittings and electrical appliances, etc. from damage during the progress of the work and provide all necessary materials for doing so. The Contractor will be held solely responsible for any damage to persons or property and for the safety of the structure throughout the whole of this Contract and must make good at his own expense any damage that may occur.			
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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OLD USABLE MATERIALS from the alterations/demolitions are to become the property of the Client. Old materials for re-use are to be carefully removed, stored and protected from injury including making good any damaged or defective parts as required before fixing. Old reusable materials are to be handed over to the Client are to be carefully removed and neatly stacked on site where directed. The remainder of the old materials and all rubbish to be immediately carted away and the site left clean and unencumbered. The Contractor should allow for removing of rubble from site on daily basis, failing which the client might stop the construction until the site has been cleaned. None of the old stock bricks from the pulling down are to be re-used for any new work. Materials to be handed over to the Client should be kept safely and handed over to the School Governing Body or the school principal who shall sign for all materials received.

MATERIALS, ETC The materials to be used and work to be done to be similar in all respects to that described for new work insofar as they concur. All work in making good is to be properly jointed to the existing.

Unless otherwise stated, all usable material from the demolitions should be kept safely and handed over to the school governing body or the school principal who shall sign for all material received.

DEMOLITIONS, ETC.

- | | | | | |
|---|---|----|---|---|
| 1 | Break down and demolish pit latrines, including closing and filling of pits etc, removal of surface beds, backfilling, brickwalls, roof structure & coverings, cart away etc. of all rubble and leaving no visible sign of the building | No | 9 | R |
|---|---|----|---|---|

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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BILL NO.2</u>			
	<u>FOUNDATIONS</u>			
	<u>EARTHWORKS</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<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>Filling</u>			
	Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material			
	Carried to Collection		R	
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Soil poisoning

Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent

SITE CLEARANCE ETCSite clearance

- | | | | |
|---|---|----|-----|
| 1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc
C : 269 | m2 | 269 |
|---|---|----|-----|

Earthworks

- | | | | |
|---|--|----|-----|
| 2 | Rip and scarify ground level to a depth of 150mm and consolidate to 90% mod. AASHTO density
C : 238 | m2 | 238 |
|---|--|----|-----|

EXCAVATION, FILLING, ETCExcavation in earth not exceeding 2m deep

- | | | | |
|---|----------------------------------|----|-----|
| 3 | Trenches
C : 54 | m3 | 54 |
| 4 | Holes for tanks, etc.
C : 132 | m3 | 132 |

Extra over trench and hole excavations in earth for excavation in

- | | | | |
|---|---------------------|----|----|
| 5 | Soft rock
C : 4 | m3 | 4 |
| 6 | Hard rock
C : 16 | m3 | 16 |

Extra over all excavations for carting away

- | | | | |
|---|---|----|----|
| 7 | Surplus material from excavations on site to a dumping site to be located by the contractor
C : 90 | m3 | 90 |
|---|---|----|----|

Carried to Collection

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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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	<u>Risk of collapse of excavations</u>				
8	Sides of trench and hole excavations not exceeding 1,5m deep C : 295	m2	295		
	<u>Keeping excavations free of water</u>				
9	Keeping excavations free of all water other than subterranean water <u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>		Item		
10	Under floors, steps, paving, etc C : 18	m3	18		
11	Backfilling to trenches, holes, etc C : 79	m3	79		
	<u>Compaction of surfaces</u>				
12	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 C : 101	m2	101		
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 (Ramps) C : 8	m2	8		
14	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 (Enviro Loo Tanks Pit) C : 89	m2	89		
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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	<u>Prescribed density tests on filling</u>				
15	"Modified AASHTO Density" C : 38	No	38		
	<u>SOIL POISONING</u>				
	<u>Weedkiller mixed in accordance to supplier's specifications</u>				
16	To bottoms and sides of trenches, etc. C : 344	m2	344		
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming C : 70	m2	70		
	<u>Soil insecticide</u>				
18	To bottoms and sides of trenches etc C : 344	m2	344		
19	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming C : 70	m2	70		
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>				
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
	<u>15MPa/19mm concrete</u>				
20	Surface blinding under footings and bases C : 4	m3	4		
	<u>25MPa/19mm concrete</u>				
21	Strip footings C : 19	m3	19		
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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	<u>25MPa/19mm concrete</u>				
22	Surface beds in tank bottoms C : 5	m3	5		
23	Surface beds of rainwater tanks, etc. C : 4	m3	4		
24	Extra over for thickening in bottoms of tanks for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc. C : 67	m	67		
<u>REINFORCED CONCRETE</u>					
	<u>30Mpa/19mm concrete</u>				
25	Slabs including beams and inverted beams C : 5	m3	5		
<u>FINISHING TOP SURFACE OF CONCRETE</u>					
	<u>Finishing top surfaces of concrete smooth with a wood float/steel trowel</u>				
26	Surface beds, slabs, etc C : 81	m2	81		
27	Surface beds, slabs, etc (Bottom of tanks) C : 50	m2	50		
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u>					
	<u>Smooth formwork to sides</u>				
28	Edges, risers, ends and reveals not exceeding 300mm high or wide C : 134	m	134		
<u>PERMANENT FORMWORK TO SOFFITS</u>					
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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	<u>Permanent formwork formed of 0.6mm thick corrugated sheeting supported by carbolenium treated gumpoles to the satisfaction of the principal agent to:</u>				
29	Slabs propped up not exceeding 1,5m high C : 50	m2	50		
30	Form 500mm radius opening in floor slab C : 18	No	18		
	<u>REINFORCEMENT</u>				
	<u>Fabric reinforcement</u>				
31	Steeledale Mesh standard square fabric mesh, nominal mass 3,95 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (code 395), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long. (Rainwater tanks)	m2	31		
	C : 31				
32	Steeledale Mesh standard square fabric mesh, nominal mass 3,95 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (code 395), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long. (Bottom slab of enviroloo toilets)	m2	50		
	C : 50				
33	Steeledale Mesh standard square fabric mesh, nominal mass 3,95 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (code 395), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long (Slabs of enviroloo toilets)	m2	50		
	C : 50				
	<u>TEST CUBES</u>				
34	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith. C : 40	Sets	40		
	<u>BRICKWORK</u>				
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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	<u>Brickwork of NFP bricks in class II mortar</u>				
35	One brick walls C : 96	m2	96		
36	One brick walls-in holes C : 111	m2	111		
37	Half brick wall brick-on-flat and projecting approximately 115mm built all around tank pit as support to Enviro loo tanks C : 84	m	84		
	<u>BRICKWORK SUNDRIES</u>				
	<u>Brickwork reinforcement</u>				
38	150mm Wide reinforcement built in horizontally C : 2118	m	2 118		
	<u>FACE BRICKWORK</u>				
	<u>Face bricks (Purchase price of R6 000-00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>				
39	Extra over brickwork for face brickwork C : 80	m2	80		
	<u>INTERNAL PLASTER</u>				
	<u>Cement plaster on brickwork:</u>				
40	On walls in septic tank C : 125	m2	125		
	<u>PAINTWORK ETC TO NEW WORK</u>				
	<u>FLOOR AND WALL SEALERS</u>				
	<u>Prepare and apply two coats approved black epoxy paint</u>				
41	On internal plastered walls C : 125	m2	125		
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	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Cost of tests</u>			
	The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. (Test cubes are measured separately)			
	Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated			
	<u>"Foamcement " lightweight concrete</u>			
	"Foamcement" lightweight concrete is to have a density of 600kg/m3 for the top 50mm and 400kg/m3 for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 50mm			
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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"Celbeton" lightweight concrete

"Celbeton" lightweight concrete is to have a density of 1000kg/m³ for the top 20mm and 480kg/m³ for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 30mm

Formwork

Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use

The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.

Formworks to soffits of solid etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described

Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"

**UNREINFORCED CONCRETE CAST
AGAINST EXCAVATED SURFACES**20MPa/19mm concrete

1	Ramps C : 1	m3	1
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REINFORCED CONCRETE30MPa/19mm concrete

2	Surface beds cast in panels on waterproofing. C : 6	m3	6
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CONCRETE SUNDRIES**Carried to Collection****R**

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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>				
3	Ramps to falls C : 8	m2	8		
4	Surface beds, slabs, etc C : 70	m2	70		
<u>TEST CUBES</u>					
5	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith C : 38	Sets	38		
<u>DIVIDING STRIPS, ETC.</u>					
6	6 x 38mm Angle iron step guard cast into concrete with 3 x 6mm anchors C : 6	m	6		
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u>					
<u>Smooth formwork to sides</u>					
7	Edges, risers, ends and reveals not exceeding 300mm high or wide C : 7	m	7		
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
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CONCRETE, FORMWORK & REINFORCEMENT

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BUILDING

Bill No. 3

CONCRETE, FORMWORK & REINFORCEMENT

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BILL NO.4</u>			
	<u>MASONRY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<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>Linings to concrete</u>			
	Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties			
	<u>Face bricks</u>			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	<u>Pointing</u>			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	<u>SUPERSTRUCTURE</u>			
	<u>Brickwork of NFP bricks in class II mortar</u>			
1	Half brick walls in beamfilling C : 14	m2	14	
2	One brick walls C : 268	m2	268	
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

BRICKWORK SUNDRIESBrickwork reinforcement

3	75mm Wide reinforcement built in horizontally C : 416	m	416
4	150mm Wide reinforcement built in horizontally C : 1172	m	1 172

Galvanised wire ties etc

5	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork C : 59	No	59
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Turning pieces

6	115mm Wide turning piece to lintels etc C : 50	m	50
7	230mm Wide turning pieces to lintels etc C : 8	m	8

Prestressed fabricated lintels

8	110 x 75mm Lintels in lengths not exceeding 3m (across enviro loo pit for support of one brick wall) C : 0.0	m	
9	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m (across enviro loo pit for support of one brick wall) C : 44	m	44
10	110 x 75mm Lintels in lengths exceeding 6m and not exceeding 7,5m (across enviro loo pit for support of one brick wall) C : 0.0	m	
11	110 x 75mm Lintels in lengths exceeding 7,5m and not exceeding 9m (across enviro loo pit for support of one brick wall) C : 0.0	m	

Holes

12	Leave or form opening through one brickwall for pipe n.e 100mm diameter C : 2	No	2
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Section No. 2
BUILDING
Bill No. 4
MASONRY

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

13	Leave or form opening through one brickwall for pipe exceeding 100mm and n.e 200mm diameter C : 18	No	18		
<u>FACE BRICKWORK</u>					
<u>Face bricks (Purchase price of R6 000-00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>					
14	Extra over brickwork for face brickwork C : 564	m2	564		
15	Half brick wall faced on both sides C : 49	m2	49		
16	Extra over brickwork for brick-on-edge header course lintel C : 29	m	29		
17	Fair cutting and fitting around pipe not exceeding 100mm diameter C : 2	No	2		
18	Fair cutting and fitting around pipe exceeding 100mm and not exceeding 200mm diameter C : 18	No	18		
<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 000-00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>					
19	110mm Wide sill set level and slightly projecting C : 21	m	21		
20	220mm Wide sill set sloping and slightly protecting outside C : 21	m	21		
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Section No. 2

BUILDING

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MASONRY

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BUILDING

Bill No. 4

MASONRY

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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Traffic Green color to be as follows:

Colour: Traffic Green

Gloss: 30+/-Gardner 60

Film Thickness: 17 - 22 Microns

Primer: Global Prime 204

Pencil Hardness: H

Flexibility: >8mm

Impact Resistance: >30 INLB on HDG

Bending: 2 Ton HDG

Solvent Resistance: > 100 Double Rubs with MEK

Salt Spray Test: 500 Hours ECCA T8. Corrosion, Blisters, Loss of Adhesion less than 3mm from the scribe

Weather-0-meter: 2000 Hours ECCA T10, loss of gloss less than 50% average colour change not greater than 5 units (CEILAB)

Florida Exposure Test: After two (2) years loss of gloss less than 75%, average colour change not greater than three (3) units (CEILAB)

PROFILED METAL SHEETING AND ACCESSORIES

Global Roofing Solutions 0,58mm thick 700mm cover

Klip-Lok 700™ profile Chromadek Z200 spelter ISQ550

Traffic Green finish top coat and grey backing coat

galvanised steel roof sheeting, fixed to timber

intermediate purlins at 2500mm centres and eaves and

ridge purlins at 2100mm centres using KL700 clips fixed

with 10No.11 x 45mm long self drilling wafer head PH2

screws, type 17 drill point fasteners, all in accordance

with the manufacturer's specifications.

• Installation region: exceeding 5km from the coast.

1	Roof covering with pitch not exceeding 25 degrees C : 153	m2	153
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BUILDING

Bill No. 6

ROOF COVERINGS, ETC

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BILL NO.7</u>			
	<u>CARPENTRY AND JOINERY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Particle board:</u>			
	Particle board shall comply with the following specifications:			
	a) SABS 1300 Particle board: exterior and flooring type			
	b) SABS 1301 Particle board: interior type			
	<u>Joinery:</u>			
	Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes			
	<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>Decorative laminate finish:</u>			
	Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish			
	<u>ROOFS, ETC.</u>			
	<u>Sawn softwood</u>			
1	38 x 114mm Wall plates C : 53	m	53	
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	Section No. 2 BUILDING Bill No. 7 CARPENTRY AND JOINERY			

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

2	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m C : 124	m	124
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m C : 48	m	48
4	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m C : 129	m	129
5	50 x 76mm Purlins in lengths exceeding 8,1m and not exceeding 9,6m C : 0.0	m	
<u>Sundries</u>			
6	Two coats creosote on sawn timbers C : 16	m2	16
7	MiTek® eCo hurricane clips hurricane clip fixed using Permfix nails or bolts through pre-drilled holes. C : 114	No	114
<u>EAVES, VERGES, ETC</u>			
<u>"Everite FC77" pressed fibre-cement</u>			
8	Everite medium density plain ungrooved Nutec fascia boards (Code: 040-904), size 225 x 10mm, fixed to timber rafters twice screwed with 12 x 40mm countersunk brass screws with PVC H-profile fascia joiner between boards and PVC H-profile fascia corner joiners at board ends. C : 59	m	59
9	Everite moulded Nutec moulded barge boards (Code: 721-740), size 275 x 80mm, fixed to 38 x 38mm trimmer batten twice screwed with 12 x 40mm countersunk brass screws with PVC H-profile barge board joiners between boards and at roof apex. C : 46	m	46

DOORS, ETC

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BUILDING
Bill No. 7
CARPENTRY AND JOINERY

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

	<u>44mm Wrought meranti framed, ledged, braced and battened door of 44 x 150mm top rails and stiles, 22 x 150mm middle legde and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding</u>				
10	Door size 813 x 2032mm high with standard weather bar C : 8	No	8		
11	Door size 914 x 2032mm high including weatherboard C : 2	No	2		
	<u>40mm Solid core interior door size 813 x 2032mm high with Masonite® Plain standard hardboard door panel for paint (elsewhere specified).</u>				
12	Door size 813 x 2032mm high C : 10	No	10		
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BILL NO.8</u>			
	<u>IRONMONGERY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<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>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged C : 10	No	10	
	<u>LOCKS</u>			
2	ASSA ABLOY 50mm Brass padlock (Code: UN335000000000) with 28mm hardened steel shackle. C : 10	No	10	
3	ASSA ABLOY Gower handle on 152 x 41mm backplate with Satin Chrome finish (Code: CZ682-24SC) including 3 lever upright lock (Code: 2252-76SS). C : 10	No	10	
4	UNION stainless steel indicator bolts (code: SS8023SS) with Stainless Steel finish. C : 10	No	10	
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	Section No. 2 BUILDING Bill No. 8 IRONMONGERY			

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

5	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres. C : 2.0	Pairs	2.0		
<u>SUNDRIES</u>					
<u>"ASSA ABLOY"</u>					
6	UNION aluminium door stop (code: AL8730AS) with Anodised Silver finish. C : 20	No	20		
<u>"Vaal Paragon"</u>					
7	32mm Type 9 back grab rail 800mm long plugged C : 2	No	2		
8	32mm Type 8 side grab rail 900mm girth plugged C : 2	No	2		
9	Female SHE bin including steel welded cage C : 0.0	m			
<u>BATHROOM FITTINGS</u>					
<u>"Franke"</u>					
10	Franke Stratos STRX 672 1,2/1,5mm thick Grade 304 18/10 satin stainless steel toilet roll holders (code: 359716), size 304 x 156 x 140,7mm deep for 2 rolls maximum 108mm diameter with spindle system and cylinder lock with standard Franke key, plugged and screwed to the wall with stainless steel screws. C : 18	No	18		
11	Franke Stratos STRX611 1,2/1,5mm thick satin finished stainless steel sanitary towel disposal bin (Code: 359740), size 205 x 134 x 305mm high with capacity of 3,8 litres, plugged and screwed to the wall with stainless steel screws. C : 6	No	6		
<u>LETTERS, NAMEPLATES, ETC</u>					
<u>"ASSA ABLOY"</u>					
12	ASSA ABLOY Aluminium engraved plate E10, size 152 x 152mm (Code: AL5066-06ASE10). (Male) C : 3	No	3		
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

13	ASSA ABLOY Aluminium engraved plate E11, size 152 x 152mm (Code: AL5066-06ASE11). (Female) C : 2	No	2		
14	ASSA ABLOY Aluminium engraved plate E14, size 152 x 152mm (Code: AL5066-06ASE14). (Paraplegic) C : 2	No	2		
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Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BILL NO.9</u>			
	<u>METALWORK</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<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>Gates to external doors</u>			
1	Single gate and frame size 1000 x 2185mm high (PC Amount R3 000-00 each VAT excl. supplied and installed to site) (Nutrition Centre)	No	10	
	C : 10			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1,2mm Double rebated frames suitable for half brick walls</u>			
2	Frame for door size 813 x 2032mm high	No	10	
	C : 10			
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	METALWORK			

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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

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METALWORK

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BUILDING

Bill No. 9

METALWORK

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BILL NO.11</u>			
	<u>PLUMBING AND DRAINAGE</u>			
	<u>RAINWATER DISPOSAL</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>PLEASE NOTE THAT THE CLIENT (TMT) ALREADY BOUGHT ALL THE MATERIAL NEEDED FOR ENVIRO-LOO COMPONENTS CONTRACTOR TO MAKE PROPER ARRANGEMENTS TO COLLECT THE MATERIAL FROM THE CLIENT'S STORAGE IN POLOKWANE AT NO.44 GYPSUM STREET, SUPERBIA MATERIAL COST WILL BE RECOVERED FROM THIS CONTRACT</u>			
	<u>0.6mm Galvanised sheet iron with "Chromadek" finish on one side</u>			
1	100 x 100mm Eaves gutters with beaded front edge C : 29	m	29	
2	Extra over eaves gutter for outlet for 75 x 100mm down pipe C : 5	No	5	
3	Extra over eaves gutter for stopped end C : 10	No	10	
4	75 x 100mm Diameter rainwater pipes C : 3	m	3	
	<u>Rainwater tank, etc.</u>			
5	Rainwater tank (PC Amount R7 500-00 VAT incl. supplied, delivered and installed on site) C : 5	No	5	
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

	<u>Plinths</u>				
6	Water Tank Plinth constructed of a concrete strip footing, one brickwall, earthfilling, floated surface beds, etc C : 5	m	5		
	<u>SOIL DRAINAGE</u>				
	<u>uPVC pipes</u>				
7	110mm Pipes laid in and including trenches not exceeding 1m deep C : 21	m	21		
	<u>Extra over "Corflo" double walled radial ribbed uPVC pipes with integral moulded cuff joints and rubber seal rings for uPVC fittings</u>				
8	110mm Bend C : 4	No	4		
9	110mm Junction C : 2	No	2		
	<u>uPVC gulleys</u>				
10	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc. C : 4	No	4		
	<u>SANITARY FITTINGS</u>				
	<u>"Old World"</u>				
11	Old World Concretes twin laundry tub, size 1080 x 705mm wide with reinforcing to extend from below supports, mortared into position and onto trough. C : 7	No	7		
	<u>"Atlas"</u>				
12	Atlas Plastics rotomoulded polyethylene Viking with pedestal - 381 wash hand basin colour Super White, overall size 380 x 510 x 250mm high with one taphole and 40mm waste outlet, fitted to pedestal and plugged and screwed to wall with galvanised screws. C : 2	No	2		
	<u>WASTE UNIONS ETC</u>				
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

<u>"Cobra Watertech"</u>					
13	Cobra Watertech 32mm chrome plated basin waste (Code: 308) with 62mm diameter flange, 80mm long shank and plug. C : 12	No	12		
<u>TRAPS ETC</u>					
<u>"Cobra Watertech"</u>					
14	"Cobra Ref. 365/40" CP bottle trap C : 2	No	2		
<u>"Marley"</u>					
15	40 x 300mm Sink combination for double bowl with deep seal "P" trap C : 7	No	7		
<u>TAPS, VALVES, ETC</u>					
16	Cobra Watertech 15mm MI x FI x 75mm long extension piece with sliding wall flange (Code: 059-15). C : 10	No	10		
17	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350). C : 12	No	12		
18	Cobra Watertech 32mm cast brass gate valve (Code: 1001/125-32) parrallel F x F threaded inlets, non-rising spindle and guided wedge. C : 5	No	5		
19	Cobra Watertech 15mm chrome plated demand bibtap (Code: KM2-202-15), manufactured in accordance to SANS 1808-66:2005. C : 14	No	14		
20	Cobra Watertech 15mm chrome plated bibtap (Code: NM-500-21B) with blue indice and elbow action lever, manufactured in accordance with SANS 226:2009 Type 2 (BS 5412). C : 2	No	2		
<u>SANITARY PLUMBING</u>					
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

	<u>uPVC pipes</u>				
21	50mm Pipes C : 7	m	7		
	<u>Extra over uPVC pipes for fittings</u>				
22	50mm Bend C : 7	No	7		
23	50mm Access bend C : 2	No	2		
24	50mm Junction C : 7	No	7		
	<u>WATER SUPPLIES</u>				
	<u>Class 16 uPVC pressure pipes with solvent welded joints</u>				
25	32mm Pipes laid in and including trenches not exceeding 1m deep C : 175	m	175		
	<u>Extra over class 16 uPVC pressure pipes for fittings with solvent welded joints</u>				
26	32mm Bend C : 10	No	10		
27	32mm Tee C : 10	No	10		
	<u>Class 0 copper pipes</u>				
28	15mm Pipes C : 17	m	17		
	<u>Extra over class 0 copper pipes for capillary fittings</u>				
29	15mm Fittings C : 41	No	41		
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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

**INSTALLATION ONLY OF "ENVIRO LOO"
AT MUTSHALINGANA PRIMARY SCHOOL**

30	Collect from store, transport and delivered to site, protect on site and install complete standard enviro-loo system type 1040 industrial CER/ABS-V1 (code FG-1040 STDCA/A) C : 8	No	8
31	Collect from store, transport and delivered to site, protect on site and install complete junior enviro-loo system type 1040 industrial CER/ABS-V1 (code FG-1040 JNRCA/A) C : 6	No	6
32	Collect from store, transport and delivered to site, protect on site and install complete new enviro-loo urinal with 4 pans type FG-862B C : 2	No	2

INSPECTION BY ENVIRO-LOO / SUPPLIER

33	Allow for two site visits to be made by the "enviro loo" suppliers to assist/support the contractor in the installation of the "enviro loo" and a final inspection to ascertain the enviro loo has been installed correctly at which time a Certificate of Compliance should be issued between end-user department and enviro loo supplier	Item	
34	Profit C : 0.10	%	
35	Allow for general attendance	Item	

BUDGETARY ALLOWANCE

NOTES:

The items described hereunder cover work which is not fully defined at tender stage and is intended to be executed by the contractor at rates to be agreed with the contractor in accordance with clause B1.9 of the Preliminaries at the time the work is defined. The amounts shown shall be used as directed by the Representative/Agent and shall be deducted in whole or in part if not required.

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BUILDING
Bill No. 11
PLUMBING AND DRAINAGE

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Budgetary allowance to be recovered by Employer for the supply of complete enviro-loo system

36 Provide the Amount of R105 000.00 (One Hundred and Five Thousand rand) for the supply of complete standard enviro-loo system (code FG-1040 STDCA/A) by the Employer and to be recovered in whole or in part.

Item

37 Provide the Amount of R27 500.00 (Twenty Seven Thousand Five Hundred Rand) for the supply of complete junior enviro-loo system (code FG-1040 JNRCA/A) by the Employer and to be recovered in whole or in part.

Item

38 Provide the Amount of R64 000.00 (Sixty Four Thousand rand) for the supply of enviroloo urinal system complete (code FG-862B) by the Employer and to be recovered in whole or in part.

Item

**INSTALLATION ONLY OF "ENVIRO LOO"
AT MUTSHALINGANA PRIMARY SCHOOL**

39 Collect from store, transport and delivered to site, protect on site and install complete standard enviro-loo system type 1040 industrial CER/ABS-V1 (code FG-1040 STDCA/A)

No

4

C : 4

40 Collect from store, transport and delivered to site, protect on site and install complete new enviro-loo urinal with 4 pans type FG-862B

No

4

C : 4

INSPECTION BY ENVIRO-LOO / SUPPLIER

41 Allow for two site visits to be made by the "enviro loo" suppliers to assist/support the contractor in the installation of the "enviro loo" and a final inspection to ascertain the enviro loo has been installed correctly at which time a Certificate of Compliance should be issued between end-user department and enviro loo supplier

Item

42 Profit

%

C : 0.05

43 Allow for general attendance

Item

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Section No. 2
BUILDING
Bill No. 11
PLUMBING AND DRAINAGE

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

BUDGETARY ALLOWANCE**NOTES:**

The items described hereunder cover work which is not fully defined at tender stage and is intended to be executed by the contractor at rates to be agreed with the contractor in accordance with clause B1.9 of the Preliminaries at the time the work is defined. The amounts shown shall be used as directed by the Representative/Agent and shall be deducted in whole or in part if not required.

Budgetary allowance to be recovered by Employer for the supply of complete enviro-loo system

44 Provide the Amount of R135 000.00 (One Hundred and Thirty Five Thousand Rand) for the supply of complete standard enviro-loo system (code FG-1040 STDCA/A) by the Employer and to be recovered in whole or in part.

Item

45 Provide the Amount of R64 000.00 (Sixty Four Thousand Rand) for the supply of enviroloo urinal system complete (code FG-862B) by the Employer and to be recovered in whole or in part.

Item

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BUILDING
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PLUMBING AND DRAINAGE

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

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BUILDING

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PLUMBING AND DRAINAGE

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BUILDING

Bill No. 11

PLUMBING AND DRAINAGE

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Plascon Sure Coat Gloss Enamel to exterior new fibre cement. Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.

ON METAL

Plascon Velvagro Satin to interior new mild steel.Surface to be clean and dry. Remove surface contaminants using Metalcare Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3 of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat Metalcare Mild Steel Primer (UC 501) with an overcoating time of 16 hours and finish with two coats Velvagro Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.

3	On windows with burglar bars C : 27	m2	27
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4	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	34
C : 34			

ON WOOD

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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

	<u>Plascon Woodcare Clear Varnish to exterior new wood. Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat Woodcare Clear Varnish (CVE 5) with an overcoating time of 16 hours and finish with two coats Woodcare Clear Varnish (CVE 5) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.</u>				
5	On doors C : 36	m2	36		
	<u>Plascon Professional Eggshell Enamel to interior new wood. Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat Professional Wood Primer (PP 800) with an overcoating time of 16 hours and finish with two coats Professional Eggshell Enamel (PSB 700) with 16 hours drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.</u>				
6	On doors C : 35	m2	35		
Carried to Collection					R
Section No. 2 BUILDING Bill No. 13 PAINTWORK					

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Section No. 2

BUILDING

Bill No. 13

PAINTWORK

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BUILDING

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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BILL NO. 1</u>			
	<u>CONCRETE APRONS.</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>APRONS AROUND BUILDINGS</u>			
	<u>Compaction of surfaces</u>			
1	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density C : 118	m2	118	
	<u>Weedkiller mixed in accordance to supplier's specifications</u>			
2	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming C : 118	m2	118	
	<u>Soil insecticide</u>			
3	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming C : 118	m2	118	
	<u>15 MPa/20 mm concrete</u>			
4	Aprons cast in panels to falls C : 15	m3	15	
5	Extra over for concrete thickening in aprons size approximately 100mm deep, 400mm at top and tapering one side to 200mm at bottom, including all excavations, cart away, etc. C : 118	m	118	
	Carried to Collection		R	
	Section No. 3			
	EXTERNAL WORKS			
	Bill No. 1			
	CONCRETE APRONS			

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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Section No. 3

EXTERNAL WORKS

Bill No. 1

CONCRETE APRONS

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Section No. 3

EXTERNAL WORKS

Bill No. 1

CONCRETE APRONS

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Item No		Quantity	Rate	Amount
	<u>SECTION NO .3</u>			
	<u>BILL NO. 2</u>			
	<u>PAVINGS ETC,</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades as well as Engineering Specifications attached to these documents.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Materials and workmanship must be in accordance to the following SABS 1200 specifications:</u>			
	C - Site clearance			
	D - Earthworks			
	DM - Earthworks (Roads, subgrade)			
	M - Roads (General)			
	ME - Sub-base			
	MF - Base			
	MK - Kerb and Channeling			
	MM - Ancillary Roadworks			
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc C : 275	m2	275	
	<u>Open face excavation in earth over sloping site</u>			
2	Stripping average 150mm thick layer of top soil and stockpiling on site C : 17	m3	17	
3	Excavate in pickable earth to reduce ground level below paving and but cart away excavated material to a dumping place to be found by the contractor (cut to spoil) C : 17	m3	17	
	Carried to Collection			
	Section No. 3			
	EXTERNAL WORKS			
	Bill No. 2			
	PAVINGS, ETC.			

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

4	Excavate in pickable earth to reduce ground level below paving and set aside for later use C : 25	m3	25		
5	Rip and scarify ground level to a depth of 150mm and consolidate to 100% mod. AASHTO density (minimum CBR 3) C : 165 <u>Paving layers</u> The following to be natural selected gravel layers evenly spread and consolidated in layers and dimensions as specified and on the drawings. All thicknesses to be consolidated thicknesses. Where described as "imported" the gravel to be supplied and carted on by the contractor from an approved borrow pit	m2	165		
6	150mm Selected filling previously set aside compacted to 93% mod. AASHTO density C : 25	m3	25		
7	150mm Imported G5 material compacted to 93% mod. AASHTO density C : 17 <u>Prescribed density tests on filling</u>	m3	17		
8	"Mod. AASHTO Density" test C : 4 <u>PAVING</u>	No	4		
Carried to Collection					R
Section No. 3 EXTERNAL WORKS Bill No. 2 PAVINGS, ETC.					

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

	<u>Interlocking paving</u>				
9	Bosun concrete Medium Urban paver colour Autumn-blend, size 200 x 150 x 60mm thick manufactured in accordance with SANS 1058:2012, laid in stretcher bond in accordance with SANS 1200 MJ and CMA Concrete Block Paving Manuals, with a minimum longitudinal fall of 1% on a transverse fall of at least 2% on 25mm compacted sand bed with fine jointing sand swept and vibrated into joints, all laid on subgrade conforming to SANS 1200 D Degree Of Accuracy I. Paving to be inspected and re-sanded after three months.	m2	165		
	C : 165				
10	Weed-killing treatment of surface under paving	m2	165		
	C : 165				
11	Garden kerb (PC Amount R200-00/m VAT excl.)	m	220		
	C : 220				
12	Straight cutting units to fit edge restraints	m	220		
	C : 220				
	<u>Sundries</u>				
13	Mass concrete (25MPa) in 60 x 60mm edge filler strip finished smooth on top with a wood float, including all excavation, formwork, etc	m	220		
	C : 220				
Carried to Collection					R
Section No. 3 EXTERNAL WORKS Bill No. 2 PAVINGS, ETC.					

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Section No. 3

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Bill No. 2

PAVINGS, ETC.

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EXTERNAL WORKS
Bill No. 2
PAVINGS, ETC.

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 3</u>			
	<u>DRINKING FOUNTAIN, ETC.</u>			
	<u>EXCAVATIONS</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
1	Holes C : 0.2	m3	0.2	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
2	Soft rock C : 0.009	m3	0.009	
3	Hard rock C : 0.017	m3	0.017	
	<u>Extra over all excavations for carting away</u>			
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor C : 0.1	m3	0.1	
	<u>Risk of collapse of excavations</u>			
5	Sides of trench and hole excavations not exceeding 1,5m deep C : 1	m2	1	
	<u>Keeping excavations free of water</u>			
6	Keeping excavations free of water C : 1.00	Item		
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>15MPa/19mm concrete</u>			
7	Surface blinding under footings and bases C : 0.02	m3	0.02	
	Carried to Collection			
	Section No. 3			
	EXTERNAL WORKS			
	Bill No. 3			
	DRINKING FOUNTAIN ETC.			

**REINFORCED CONCRETE CAST AGAINST
EXCAVATED SURFACES**30MPa/19mm concrete

8	Bases C : 0.1	m3	0.1		
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REINFORCED CONCRETE30MPa/19mm concrete

9	Drinking fountains	m3	0.1		
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CONCRETE SUNDRIESFinishing top surfaces of concrete smooth with a steel
trowel

10	On top of bollards to form a 25mm high rounded concrete cap 300mm diameter C : 1	No	1		
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SMOOTH FORMWORKSpecial formwork to circular columns

11	300mm Diameter circular PVC columns 1000mm high buried 150mm deep as formwork to concrete drinking fountains (concrete e/m) C : 1	No	1		
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REINFORCEMENTMild steel reinforcement to structural concrete work

12	8mm Diameter bars C : 0.01	t	0.01		
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PLUMBING AND DRAINAGE**WATER SUPPLIES**Class 0 copper pipes

13	15mm Pipes C : 1.35	m	1.35		
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Section No. 3
EXTERNAL WORKS
Bill No. 3
DRINKING FOUNTAIN ETC.

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Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 4</u>			
	<u>WATERTANK BASE, ETC.</u>			
	<u>EXCAVATIONS</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
1	Holes C : 5	m3	5	
	<u>Extra over all excavations for carting away</u>			
2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor C : 5	m3	5	
	<u>Risk of collapse of excavations</u>			
3	Sides of trench and hole excavations not exceeding 1,5m deep C : 5	m2	5	
	<u>Keeping excavations free of water</u>			
4	Keeping excavations free of water C : 1.00	Item		
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>15MPa/19mm concrete</u>			
5	Surface blinding under footings and bases C : 0.70	m3	0.70	
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>30MPa/19mm concrete</u>			
6	Bases C : 4	m3	4	
	<u>REINFORCED CONCRETE</u>			
	Carried to Collection		R	
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	EXTERNAL WORKS			
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	WATERTANK BASE			

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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

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EXTERNAL WORKS

Bill No. 4

WATERTANK BASE

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EXTERNAL WORKS

Bill No. 4

WATERTANK BASE

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BILL NO. 5</u>			
	<u>FENCING AROUND WATER TANK, ETC.</u>			
	<u>EXCAVATIONS</u>			
	<u>SITE CLEARANCE ETC</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc C : 12	m2	12	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
2	Holes C : 3	m3	3	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
3	Soft rock C : 0.4	m3	0.4	
4	Hard rock C : 0.2	m3	0.2	
	<u>Extra over all excavations for carting away</u>			
5	Surplus material from excavations on site to a dumping site to be located by the contractor C : 3	m3	3	
	<u>Risk of collapse of excavations</u>			
6	Sides of trench and hole excavations not exceeding 1,5m deep C : 23	m2	23	
	Carried to Collection			
	Section No. 3			
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	Bill No. 5			
	FENCING AROUND WATER TANK			

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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

	<u>Keeping excavations free of water</u>				
7	Keeping excavations free of all water other than subterranean water		Item		
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>				
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
	<u>15MPa/19mm concrete</u>				
8	Base C : 3	m3	3		
	<u>FENCING</u>				
	<u>Diamond mesh fencing erected in strict accordance to the manufacturer's instructions</u>				
9	1800mm Galvanised diamond mesh fence fixed to and including 4mm thick galvanised straining wires at 600mm centres C : 24	m	24		
10	Corner post size 2,4m high x 101mm diameter x 2mm thick with cap and baseplate and finished with silver bitumen primer fixed in concrete base (e/m) C : 4	No	4		
11	Gate post size 2,4m high x 101mm diameter x 2mm thick with cap and baseplate and finished with silver bitumen primer fixed in concrete base (e/m) C : 4	No	4		
12	Inclined stay size 2400mm x 48mm x 2mm thick with steel base plate fixed to concrete base (e/m) C : 10	No	10		
13	Pedestrian gate 2400 x 1800mm high to suit diamond mesh fencing covered with galvanised wire diamond mesh fixed to framing and cross brace including sliding lock (PC Amount R2 700-00 each VAT excl. supplied and delivered to site) C : 1	No	1		
	Carried to Collection			R	
	Section No. 3 EXTERNAL WORKS Bill No. 5 FENCING AROUND WATER TANK				

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Section No. 3

EXTERNAL WORKS

Bill No. 5

FENCING AROUND WATER TANK

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FENCING AROUND WATER TANK

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	<u>SECTION NO.3</u>			
	<u>BILL NO. 6</u>			
	<u>SEPTIC TANKS AND DISTRIBUTION CHAMBER, ETC.</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>SITE CLEARANCE ETC</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc C : 97	m2	97	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
2	Holes C : 158	m3	158	
	<u>Extra over all excavations for carting away</u>			
3	Extra over all excavations for carting away surplus material from excavations and/or stockpile on site to a dumping site to be located by the Contractor C : 94	m3	94	
	<u>Risk of collapse of excavations</u>			
4	Sides of trench and hole excavations not exceeding 1,5m deep C : 103	m2	103	
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
5	Backfilling to trenches, holes, etc C : 64	m3	64	
	Carried to Collection			
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	Section No. 3			
	EXTERNAL WORKS			
	Bill No. 6			
	SEPTIC TANK AND DISTRIBUTION CHAMBER			

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

	<u>Keeping excavations free of water</u>				
6	Keeping excavations free of all water other than subterranean water		Item		
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
	<u>15MPa/19mm concrete</u>				
7	Surface blinding C : 0.1	m3	0.1		
8	50mm Thick around septic tank and distribution chamber cover including on top of brick walls including finishing smooth with steel trowel C : 4	m2	4		
	<u>Finishing top surfaces of concrete smooth with a power float</u>				
	<u>REINFORCED CONCRETE</u>				
	<u>20MPa/19mm concrete</u>				
9	Surface beds cast in panels C : 12	m3	12		
10	Slab over septic tank C : 6	m3	6		
	<u>CONCRETE SUNDRIES</u>				
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>				
11	Surface beds, slabs, etc to falls C : 54	m2	54		
	<u>Grooves, channels, mortice , sinkings, etc in concrete</u>				
	Form 25 x 25mm chamfer to edges of concrete C : 26	m	26		
	<u>Permanent formwork to soffits</u>				
12	Slab over septic tank C : 33	m2	33		
	Carried to Collection			R	
	Section No. 3 EXTERNAL WORKS Bill No. 6 SEPTIC TANK AND DISTRIBUTION CHAMBER				

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

	<u>Smooth formwork to form</u>				
13	Leave or form opening size 600 x 600mm wide on through 170mm concrete slab C : 2	No	2		
	<u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u>				
	<u>Smooth formwork to sides</u>				
14	Edges, risers, ends and reveals not exceeding 300mm high or wide C : 57	m	57		
	<u>REINFORCEMENT</u>				
	<u>Fabric reinforcement</u>				
15	Steeledale Mesh standard square fabric mesh, nominal mass 3,95 kg/m ² with nominal 8mm thick wires and 200 x 200mm pitch (code 395), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.(septic tank bottoms) C : 39	m2	39		
16	Steeledale Mesh standard square fabric mesh, nominal mass 8,88 kg/m ² with nominal 12mm thick wires and 200 x 200mm pitch (code 888), complying with SANS 1024/2006 requirements cut to 500mm width and laid loose in concrete strip footings C : 36	m2	36		
	<u>MASONRY</u>				
	<u>Brickwork of NFP bricks in class II mortar</u>				
17	One brick walls C : 65	m2	65		
	<u>Brickwork reinforcement</u>				
18	150mm Wide reinforcement built in horizontally C : 624	m	624		
	Carried to Collection			R	
	Section No. 3 EXTERNAL WORKS Bill No. 6 SEPTIC TANK AND DISTRIBUTION CHAMBER				

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

BRICKWORK SUNDRIES

19	Leave of form 450 x 150mm high opening through a one brick wall C : 1	No	1
20	Leave or form opening through one brickwall for pipe exceeding 100mm and n.e 200mm diameter C : 4	No	4

PLASTERINGWatertight cement plaster on brickwork

21	On walls C : 67	m2	67
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PLUMBING AND DRAINAGEuPVC pipes

22	110mm Pipes C : 1	m	1
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Extra over uPVC pipes for fittings

23	110mm Tee C : 2	No	2
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Cover, etc

24	600 x 600mm Type 2A cast iron single seal manhole cover and frame C : 3	No	3
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25	Lifting key for manhole cover C : 1	No	1
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EXTERNAL WORKS
Bill No. 6
SEPTIC TANK AND DISTRIBUTION CHAMBER

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

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SEPTIC TANK AND DISTRIBUTION CHAMBER

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EXTERNAL WORKS

Bill No. 6

SEPTIC TANK AND DISTRIBUTION CHAMBER

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BILL NO. 7</u>			
	<u>FRENCH DRAINS</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>SITE CLEARANCE ETC</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc C : 45	m2	45	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
2	Holes C : 14	m3	14	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
3	Soft rock C : 1	m3	1	
4	Hard rock C : 1	m3	1	
	<u>Extra over all excavations for carting away</u>			
5	Extra over all excavations for carting away surplus material from excavations and/or stockpile on site to a dumping site to be located by the Contractor C : 11	m3	11	
	Carried to Collection			
			R	
	Section No. 3			
	EXTERNAL WORKS			
	Bill No. 7			
	FRENCH DRAIN			

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

	<u>Risk of collapse of excavations</u>				
6	Sides of trench and hole excavations not exceeding 1,5m deep C : 26	m2	26		
	<u>Keeping excavations free of water</u>				
7	Keeping excavations free of all water other than subterranean water C : 1.00		Item		
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site (not compacted)</u>				
8	On top of french drain as soil cover C : 3	m3	3		
	<u>FILTER FABRIC</u>				
	<u>"Kaytech Engineered Fabric" or similar approved laid in strict accordance to the manufacturer's instructions</u>				
9	"Kaymat U14" around stone filling in sub-soil drain trenches C : 38	m2	38		
	<u>20mm Graded stone filling or similar approved</u>				
10	In holes C : 5	m3	5		
	<u>200 - 300mm Diameter clean washed stone filling or similar approved by engineer</u>				
11	In holes C : 7	m3	7		
	<u>WATERPROOFING</u>				
	<u>One layer of 250 micron "Tarkon USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>				
12	On top of pipes as protection of joints C : 9	m2	9		
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	Section No. 3 EXTERNAL WORKS Bill No. 7 FRENCH DRAIN				

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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BILL NO. 8</u>			
	<u>FENCING</u>			
	<u>EXCAVATIONS</u>			
	<u>SITE CLEARANCE ETC</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc C : 125	m2	125	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
2	Holes C : 11	m3	11	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
3	Soft rock C : 0.3	m3	0.3	
4	Hard rock C : 1	m3	1	
	<u>Extra over all excavations for carting away</u>			
5	Surplus material from excavations on site to a dumping site to be located by the contractor C : 11	m3	11	
	<u>Risk of collapse of excavations</u>			
6	Sides of trench and hole excavations not exceeding 1,5m deep C : 75	m2	75	
	Carried to Collection			
	Section No. 3			
	EXTERNAL WORKS			
	Bill No. 8			
	FENCING AROUND GRADE R TOILETS, ETC			

**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

	<u>Keeping excavations free of water</u>				
7	Keeping excavations free of all water other than subterranean water		Item		
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>				
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
	<u>15MPa/19mm concrete</u>				
8	Base C : 11	m3	11		
	<u>FENCING</u>				
	<u>50 x 50mm Galvanized welded mesh fencing erected in strict accordance to the manufacturer's instructions</u>				
9	1220mm Galvanised 50 x 50mm welded mesh fixed to steel posts etc. C : 125	m	125		
10	Corner post size 1,6m high x 101mm diameter x 2mm thick with cap and baseplate and finished with silver bitumen primer fixed in concrete base (e/m) C : 4	No	4		
11	Gate post size 1,6m high x 101mm diameter x 2mm thick with cap and baseplate and finished with silver bitumen primer fixed in concrete base (e/m) C : 2	No	2		
12	Immediate post size 1,6m high x 101mm diameter x 2mm thick with cap and base plate and finished with silver bitumen primer fixed in concrete base (e/m) C : 12	No	12		
13	Inclined stay size 2400mm x 48mm x 2mm thick with steel base plate fixed to concrete base (e/m) C : 34	No	34		
14	1600mm Standard Y nailed into the ground C : 30	No	30		
	Carried to Collection			R	
	Section No. 3 EXTERNAL WORKS Bill No. 8 FENCING AROUND GRADE R TOILETS, ETC				

Carried to Collection

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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

Section No. 3

EXTERNAL WORKS

Bill No. 8

FENCING AROUND GRADE R TOILETS, ETC

COLLECTION

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EXTERNAL WORKS

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FENCING AROUND GRADE R TOILETS, ETC

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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

<u>Upgrading, equipping, testing existing borehole and reticulation system</u>			
1	Provide the amount of R250 000.00 (One Hundred and Sixty Five Thousand Rands) nett for Borehole refurbishment including Borehole Drilling, lockable fabricated manhole and electrical connection, borehole testing, booster pump, equipping borehole including reticulation system executed complete C : 1.00	Item	250 000.00
2	Profit C : 0.05	%	
3	Allow for general attendance	Item	
<u>Water tank and stand</u>			
4	Provide the amount of R150 000.00 (One Hundred and Fifty Thousand Rands) NET for the supply and install of water tank and stand executed complete	Item	
5	Profit C : 0.05	%	
6	Allow for general attendance	Item	
<u>Budgetary Allowance</u>			
7	Provide an Amount of R200,000.00 (Two Hundred Thousand Rand) for the Refurbishment of existing Female / Girls Water-borne Toilets	Item	200 000.00
8	Provide an Amount of R75,000.00 (Seventy Five Thousand Rand) for Stormwater Drainage	Item	75 000.00
Carried to Collection			
Section No. 3 EXTERNAL WORKS Bill No. 9 PROVISIONAL SUMS		R	

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**CONSTRUCTION OF WATER AND SANITATION FACILITIES AT
MUTSHALINGANA PRIMARY SCHOOL**

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1	PRELIMINARIES & GENERAL	60	
2	BUILDING	109	
3	EXTERNAL WORKS	143	
	Sub Total 1 - BUILDING COSTS		R
	<u>CONTINGENCY SUM</u>		
	ALLOW 10% OF THE TENDER AMOUNT to be used as Contingencies for building work, to be used as directed by the Principal Agent and deducted in whole or in part if not required		
			R
	Sub total BUILDINGS (VAT excl.)		R
	Value Added Tax		R
	Sub Total (VAT INCL.) CARRIED TO TENDER FORM		R
	Carried to Form of Tender		R