

Item No.	Quantity	Rate	Amount
<b><u>SECTION 1 - PRELIMINARIES</u></b>			
<b><u>BILL NO. 1</u></b>			
<b><u>PRELIMINARIES</u></b>			
<b><u>BUILDING AGREEMENT AND PRELIMINARIES</u></b>			
<p>The JBCC Series 2000 Principal Building Agreement (March 2005 edition 4.1) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described together with the associated documentation as prepared by the Joint Building Contracts Committee</p> <p>The JBCC Preliminaries (May 2005 edition) published by the Joint Building Contracts Committee for use with the said JBCC Principal Building Agreement shall be deemed to be incorporated in these bills of quantities</p> <p>The Contractor is deemed to have referred to the abovementioned documents for the full intent and meaning of each clause thereof</p> <p>These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the abovementioned documents</p> <p>Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"</p> <p>The Bills of Quantities have been drawn up in accordance with the "Standard System of Measuring Building Work Seventh Edition (Revised 2015)" published by The South African Association of Quantity Surveyors</p>			
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The Bills of Quantities have been drawn up in accordance with the "Standard System of Measuring Building Work Seventh Edition (Revised 2015)" published by The South African Association of Quantity Surveyors

The quantities or specifications contained in these bills of quantities are not to be used for the calculation or ordering of materials.

**PREAMBLES FOR TRADES**

The General Preambles for Trades (2017 edition) as published by The Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained

Where Architect's or Engineer's specifications or drawings (where issued) are in conflict with the above Preambles, etc, the Architect's or Engineer's specification and drawings, as the case may be, are to take preference Where the drawings and Architect's or Engineer's specifications are in conflict, the Contractor is to obtain written clarification from the Principal Agent prior to the closing of tenders

The Contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the said Model Preambles and in any supplementary preambles

**PRICING OF PRELIMINARIES**

If option A as set out in clause B10.3.1 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories "F", "V" or "T" as the case may be below such item, where:

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F - An amount which shall not be varied (Fixed)

V - An amount which shall be varied in proportion to the contract value as compared with the contract sum (Value)

T - An amount which shall be varied in proportion to the construction period as compared to the initial construction period excluding revisions to the construction period for which the Contractor is not entitled to adjustment of the contract value in terms of the agreement (Time)

Items not priced in these Preliminaries shall be deemed to be included elsewhere in these Bills of Quantities

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**SECTION A: JBCC PRINCIPAL BUILDING AGREEMENT****DEFINITIONS**

## 1 1.0 Definitions and Interpretation

## 1.0 Clause

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

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

Clause 1.1 Definition of "**Construction 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 "**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 Prescribed Rate of Interest Act, 1975 (Act No. 55 of 1975), will apply; and

(b) in respect of interest owed to the **employer**, the interest rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No. 1 of 1999), will apply.

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		Clause 1.6.4 is amended by replacing it with the following:		
		No clause		
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		<b>OBJECTIVE AND PREPARATION</b>		
2		2.0 Offer, Acceptance and Performance		
		F: ..... V: ..... T: ..... Item		
3		3.0 Documents		
		3.7 is amended by the addition of the following:		
		The Contractor shall supply and keep a copy of the JBCC Series 2000 Principal Building Agreement and Preliminaries applicable to this contract on the site, to which the Employer, Principal Agent and agents shall have access at all times		
		F: ..... V: ..... T: ..... Item		
4		4.0 Design Responsibility		
		F: ..... V: ..... T: ..... Item		
5		5.0 Employer's Agent		
		5.1.2 is amended to include clauses 32.6.3, 34.3 and 34.4		
		F: ..... V: ..... T: ..... Item		
6		6.0 Site Representative		
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7	<p>7.0 Compliance with Regulations Note: The provisions herein include inter alia, compliance 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), and in particular with Regulation 5(1) requiring the compilation of a health and safety plan, as well as Regulation 6(1) requiring the appointment of a construction supervisor</p> <p>See also clause C10 of Section C - Specific Preliminaries</p> <p>F: ..... V: ..... T: ..... Item</p>		
8	<p>8.0 Works Risk</p> <p>F: ..... V: ..... T: ..... Item</p>		
9	<p>9.0 Indemnities</p> <p>F: ..... V: ..... T: ..... Item</p>		
10	<p><b>10.0 WORKS INSURANCES</b></p> <p>Clause 10.0 is amended by the addition of the following clauses:</p> <p>10.5 Damage to the Works</p> <p>(a) without in any way limiting the <b>contractor's</b> obligations in terms of the contract, the <b>contractor</b> shall bear the full risk of damage to and/or destruction of the <b>works</b> by whatever cause during construction of the <b>works</b> and hereby indemnifies and holds harmless the <b>employer</b> against any such damage. The <b>contractor</b> shall take such precautions and security measures and other steps for the protection and security of the <b>works</b> as the <b>contractor</b> may deem necessary</p> <p>(b) The <b>contractor</b> shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the <b>works</b> and to rebuild, restore, replace and/or repair the <b>works</b></p>		
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(c) The **employer** shall carry the risk of damage to or destruction of the **works** and material paid for by the **employer** that is the result of the excepted risks as set out in 10.6

(d) Where the **employer** bears the risk in terms of this contract, the **contractor** shall, if requested to do so, reinstate any damage or destroyed portions of the **works** and the costs of such reinstatement shall be measured and valued in terms of 32.0 hereof

**10.6 Injury to Persons or loss of or damage to Properties**

(a) The **contractor** shall be liable for and hereby indemnifies the **employer** against any liability, loss, claim or proceeding whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever arising out of or in the course of or caused by the execution of the **works** unless due to any act or neglect of any person for whose actions the **employer** is legally liable

(b) The **contractor** shall be liable for and hereby indemnifies the **employer** against any liability, loss, claim or proceeding consequent upon loss of or damage to any moveable or immovable or personal property or property contiguous to the **site**, whether belonging to or under the control of the **employer** or any other body or person, arising out of or in the course of or by reason of the execution of the **works** unless due to any act or neglect of any person for whose actions 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**

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(e) Where the execution of the **works** involves the risk of removal of or interference with support to adjoining properties including land or structures or any structures to be altered or added to, the **contractor** shall and will remain adequately insured or insured against the death of or injury to persons or damage to such property consequent on such removal or interference with the support until such portion of the **works** has been 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 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****Carried Forward**

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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** default of his obligations as set out in 10.7.1; 10.7.2 and 10.7.3. Such losses or damages may be recovered from the **contractor** or by deducting the same from any amounts still due under this contract or under any other contract presently or hereafter existing between the **employer** and the **contractor** and for this purpose all these contracts shall be considered one indivisible whole

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**11.0 Liability Insurances**

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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

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

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

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

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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 **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:

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14.6.1 The **contractor** shall furnish the **employer** with a cash deposit equal in value to five per cent (5%) of the **contract sum** (excluding VAT) within twenty-one (21) **calendar days** from **commencement date**

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

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

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		14.9 Should the <b>contractor</b> fail to furnish the <b>security</b> in terms of 14.2, the <b>employer</b> , in his sole discretion and without notification to the <b>contractor</b> , is entitled to change the <b>contractor's</b> selected form of <b>security</b> to that of a ten per cent (10%) payment reduction of the value certified in the payment certificate (excluding VAT), whereafter 14.7 shall be applicable		
		F: ..... V: ..... T: ..... Item		
		<b>EXECUTION</b>		
15		<b>15.0 PREPARATION FOR AND EXECUTION OF THE WORKS</b>		
		Clause 15.1.1 is amended by replacing it with:		
		No Clause		
		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), within twenty-one (21) <b>calendar days of commencement date</b>		
		Clause 15.2.1 is amended by replacing it with the following clause:		
		Give the <b>contractor</b> possession of the site within ten (10) <b>working days</b> of the <b>contractor</b> complying with the terms of 15.1.2 and 15.1.4		
		F: ..... V: ..... T: ..... Item		
16		16.0 Access to the Works		
		F: ..... V: ..... T: ..... Item		
17		17.0 Contract Instructions		
		F: ..... V: ..... T: ..... Item		
18		18.0 Setting out of the Works		
		F: ..... V: ..... T: ..... Item		
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19	19.0 Assignment			
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20	20.0 Nominated Subcontractors 20.1.3 is amended by replacing it with the following: Note: See item B9.1 hereinafter for adjustment of attendance on nominated subcontractors executing work allowed for under provisional sums			
	F: ..... V: ..... T: .....	Item		
21	21.0 Selected Subcontractors 21 is amended by replacing it with: No Clause			
	F: ..... V: ..... T: .....	N/A		
22	22.0 Employer's Direct Contractors			
	F: ..... V: ..... T: .....	Item		
23	23.0 Contractor's Domestic Subcontractors			
	F: ..... V: ..... T: .....	Item		
	<b>COMPLETION</b>			
24	24.0 Practical Completion			
	F: ..... V: ..... T: .....	Item		
25	25.0 Work's Completion			
	F: ..... V: ..... T: .....	Item		
26	26.0 Final Completion			
	F: ..... V: ..... T: .....	Item		
27	27.0 Latent Defects Liability Period			
	F: ..... V: ..... T: .....	Item		
28	28.0 Sectional Completion			
	F: ..... V: ..... T: .....	Item		
29	29.0 Revision of Date for Practical Completion			
	F: ..... V: ..... T: .....	Item		
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30	30.0 Penalty for Noncompletion		
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	<b>PAYMENT</b>		
31	<b>31.0INTERIM PAYMENT TO THE CONTRACTOR</b>		
	31.8 is amended by replacing it with the following two alternative clauses:		
	<b>Alternative A</b>		
	31.8(A) Where a <b>security</b> is selected in terms of 14.1; 14.5 or 14.6, the value of the <b>works</b> in terms of 31.4.1 and <b>materials and goods</b> 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 <b>payment certificates</b> issued up to the date of <b>practical completion</b>		
	31.8(A).2 Ninety-seven per cent (97%) of such value in interim <b>payment certificates</b> issued on the date of <b>practical completion</b> and up to but excluding the date of <b>final completion</b>		
	31.8(A).3 Ninety-nine per cent (99%) of such value in interim <b>payment certificates</b> issued on the date of <b>final completion</b> and up to but excluding the final <b>payment certificate</b> in terms of 34.6		
	31.8(A).4 One hundred per cent (100%) of such value in the final <b>payment certificate</b> in terms of 34.6 except where the amount certified is in favour of the <b>employer</b> . In such an event the payment reduction shall remain at the adjustment level applicable to the final <b>payment certificate</b>		
	<b>Alternative B</b>		
	31.8(B) Where <b>security</b> is a payment reduction in terms of 14.7 the value of the <b>works</b> in terms of 31.4.1 and <b>materials and goods</b> in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments:		
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		33.2.11 the <b>contractor</b> <del>"is"</del> failure or neglect for any reason to complete the <b>works</b> in accordance with the contract		
		33.2.12 the <b>contractor</b> <del>"is"</del> refusal or neglect to comply strictly with any of the conditions of contract or any <b>contract instructions</b> and/or orders in writing given in terms of the contract		
		33.2.13 the <b>contractor</b> <del>"is"</del> estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa		
		F: ..... V: ..... T: ..... Item		
34		34.0 Final Account and Final Payment		
		Clause 34.13 is amended by replacing " <del>Seven (7)</del> calendar days" with " <del>Twenty-one (21)</del> calendar days" and deleting the words " <del>Subject to the employer giving the contractor a tax invoice for the amount due</del> "		
		F: ..... V: ..... T: ..... Item		
35		35.0 Payment to other Parties		
		F: ..... V: ..... T: ..... Item		
		<b><u>CANCELLATION</u></b>		
36		<b>36.0 CANCELLATION BY EMPLOYER - CONTRACTOR <del>"S"</del> DEFAULT</b>		
		36.3 is amended by removing the reference to " <del>the</del> clause" and replacing the words " <del>principal agent</del> " with " <del>employer</del> "		
		36.0 is amended by the addition of the following clause:		
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36.7 Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the contractor; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site. The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever

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37 **37.0 CANCELLATION BY EMPLOYER - LOSS AND DAMAGE**

37.0 is amended by the addition of the following clause:

37.5 Notwithstanding any clause to the contrary, on cancellation of this **agreement** either by the employer or the **contractor**; or for any reason whatsoever, the **contractor** shall on written instruction, discontinue with the **works** on a date stated and withdraw himself from the **site**. The **contractor** shall not be entitled to refuse to withdraw from the **works** on the grounds of any lien or right of retention or on the grounds of any other right whatsoever

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38 **38.0 CANCELLATION BY CONTRACTOR - EMPLOYER'S DEFAULT**

Clause 38.0 is amended by the addition of the following clause:

38.7 Notwithstanding any clause to the contrary, on cancellation of this **agreement** either by the **employer** or the **contractor**; or for any reason whatsoever, the **contractor** shall on written instruction, discontinue with the **works** on a date stated and withdraw himself from the site. The **contractor** shall not be entitled to refuse to withdraw from the **works** on the grounds of any lien or right of retention or on the grounds of any other right whatsoever

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39	39.0 Cancellation - Cessation of the Works			
	F: ..... V: ..... T: .....	Item		
40	40.0 Dispute Settlement			
	40.2.2 is amended by replacing "one (1) year" with "three (3) years"			
	40.6 is amended by removing the reference to:			
	No clause			
	40.7.1 is amended by replacing "(10)" with "(5)" and by the addition of the following:			
	Whether or not mediation resolves the dispute, the parties shall bear their own cost concerning the mediation and equally share the costs of the mediator and related costs			
	F: ..... V: ..... T: .....	Item		
	<b><u>SUBSTITUTE PROVISIONS</u></b>			
41	41.0 State Clauses			
	F: ..... V: ..... T: .....	Item		
	<b><u>CONTRACT VARIABLES</u></b>			
	<b><u>THE SCHEDULE (DPW04EC)</u></b>			
42	42.0 E-TENDER INFORMATION			
	Tenderers are referred to section "C1.2 Contract Data" on page 56 for variables pertaining to this contract			
	F: ..... V: ..... T: .....	Item		
	<b><u>SECTION B: JBCC PRELIMINARIES</u></b>			
	<b><u>1.0 DEFINITIONS AND INTERPRETATION</u></b>			
42	1.1 Definitions and interpretation			
		<b>Carried Forward</b>		R
	Section No. 1			
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		<b>Brought Forward</b>		R
	F: ..... V: ..... T: .....	Item		
	<b><u>2.0 DOCUMENTS</u></b>			
43	2.1 Checking of documents			
	F: ..... V: ..... T: .....	Item		
44	2.2* Provisional bills of quantities			
	F: ..... V: ..... T: .....	Item		
45	2.3* Availability of construction documentation			
	F: ..... V: ..... T: .....	Item		
46	2.4* Interests of agents			
	F: ..... V: ..... T: .....	Item		
47	2.5 Priced documents			
	F: ..... V: ..... T: .....	Item		
48	2.6 Tender submission Clause 2.6 is amended by replacing "BCC Form of Tender" with "Form of Offer and Acceptance (DPW07)"			
	F: ..... V: ..... T: .....	Item		
	<b><u>3.0 THE SITE</u></b>			
49	3.*1 Defined works area			
	F: ..... V: ..... T: .....	Item		
50	3.2* Geotechnical investigation			
	F: ..... V: ..... T: .....	Item		
51	3.3 Inspection of the site			
	Tenderers shall complete the Site Inspection Certificate (DPW16 EC) included in the tender documents and return the same with the tender submission.			
	F: ..... V: ..... T: .....	Item		
		<b>Carried Forward</b>		R
	Section No. 1			
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		<b>Brought Forward</b>		R
		<b><u>7.0 TEMPORARY SERVICES</u></b>		
75	7.1 Location			
	F: ..... V: ..... T: .....	Item		
76	7.2& Water			
	F: ..... V: ..... T: .....	Item		
77	7.3& Electricity			
	F: ..... V: ..... T: .....	Item		
78	7.4& Telecommunication facilities			
	F: ..... V: ..... T: .....	Item		
79	7.5& Ablution facilities			
	F: ..... V: ..... T: .....	Item		
		<b><u>8.0 PRIME COST AMOUNTS</u></b>		
80	8.1 Responsibility for prime cost amounts			
	F: ..... V: ..... T: .....	Item		
		<b><u>9.0 ATTENDANCE ON N/S SUBCONTRACTORS</u></b>		
81	9.1 General attendance			
	The schedule rates providing for attendance on nominated subcontractors and other contractors, will be adjusted only if the scope of the work has changed			
	F: ..... V: ..... T: .....	Item		
82	9.2* Special attendance			
	F: ..... V: ..... T: .....	Item		
83	9.3 Commissioning - fuel, water and electricity			
	F: ..... V: ..... T: .....	Item		
		<b><u>10.0 FINANCIAL ASPECTS</u></b>		
		<b>Carried Forward</b>		R
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		<b>Brought Forward</b>		R
88	11.1* Protection of the works			
	F: ..... V: ..... T: .....	Item		
89	11.2* Protection / isolation of existing / sectionally occupied works			
	F: ..... V: ..... T: .....	Item		
90	11.3 Security of the works			
	F: ..... V: ..... T: .....	Item		
91	11.4 Notice before covering work			
	F: ..... V: ..... T: .....	Item		
92	11.5* Disturbance			
	F: ..... V: ..... T: .....	Item		
93	11.6* Environmental disturbance			
	F: ..... V: ..... T: .....	Item		
94	11.7 Works cleaning and clearing			
	F: ..... V: ..... T: .....	Item		
95	11.8 Vermin			
	F: ..... V: ..... T: .....	Item		
96	11.9 Overhand work			
	F: ..... V: ..... T: .....	Item		
97	11.10 Instruction manuals and guarantees			
	F: ..... V: ..... T: .....	Item		
98	11.11 As built information			
	F: ..... V: ..... T: .....	Item		
99	11.12 Tenant installations			
	F: ..... V: ..... T: .....	Item		
		<b>Carried Forward</b>		R
	Section No. 1			
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			R
<b>Brought Forward</b>			
<b><u>12.0 SCHEDULE OF VARIABLES</u></b>			
12.1 PRE-TENDER INFORMATION			
12.1.1 Provisional bills of quantities [2.2]			
YES			
12.1.2 Availability of construction documentation [2.3]			
YES			
12.1.3 Interests of agents [2.4]			
N/A			
12.1.4 Defined works area [3.1]			
Give details and/or refer Architect's site plan drawing no where available			
12.1.5 Geotechnical Investigation [3.2]			
Geotechnical investigation report where available			
12.1.6 Existing premises occupied [3.4]			
The existing buildings on the site is occupied by school learners and staff			
12.1.7 Previous work - dimensional accuracy [3.5]			
N/A			
12.1.8 Previous work - defects [3.6]			
N/A			
12.1.9 Services - known [3.7]			
Not known			
12.1.10 Protection of trees [3.9]			
Trees not being removed must be protected.			

**Brought Forward**

R

## 12.1.11 Inspection of adjoining properties [3.11]

This also applies to roads and services, etc.

## 12.1.12 Enclosure of the works [6.2]

No specific requirements

## 12.1.13 Offices [6.4.3]

The Contractor shall provide, maintain and remove on completion of the works an office for the exclusive use of the Principal Agent, minimum size 6 x 3 x 3m high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times

## 12.1.14 Main notice board [6.5]

Provide ONE (1) noticeboards, eg:

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]

NO

## 12.1.16 Water [7.2]

Option A (by contractor)

## 12.1.17 Electricity [7.3]

Option A (by contractor)

**Carried Forward**

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<p style="text-align: right;"><b>Brought Forward</b></p> <p>12.1.18 Telecommunications [7.4]</p> <p>Telephone - YES Facsimile - YES Email - YES</p> <p>12.1.19 Ablution facilities [7.5]</p> <p>Option A (by contractor)</p> <p>12.1.20 Protection of existing/sectionally occupied works [11.2]</p> <p>Protection is required</p> <p>YES</p> <p>12.1.21 Special attendance [9.2]</p> <p>N/A</p> <p>12.1.22 Protection of the works [11.1]</p> <p>No specific requirements</p> <p>12.1.23 Disturbance [11.5]</p> <p>The Contractor shall be responsible for and take all precautions in controlling all forms of pollution during the contract period due to noise, artificial light, wind-blown sand, dust, etc in the dry season and deposits of mud etc in the wet season by whatever means necessary and daily removal of deposits etc, all to the satisfaction of the Principal Agent and any costs, claims, etc will be for the Contractor's account</p> <p>The surrounding buildings will be occupied and functioning during these works and the Contractor is to ensure that the works are carried out with as little mess and noise as possible and with a minimum of disturbance to adjoining and close buildings and properties and their occupants. The Contractor is to make use of appropriate plant and methods of execution which result in the least possible noise factors. All machinery shall be fully muffled</p>			<p>R</p>
<p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES AND GENERAL</p>			<p>R</p>

**Brought Forward**

R

The Contractor shall keep the site, structures and materials well watered during the operations to prevent dust and shall provide, erect and maintain all temporary tarpaulins, dust and weatherproof screens, barriers and temporary plumbing that may be necessary during the progress of the works

The Contractor shall ensure that the functioning of the existing School is not disturbed or disrupted, except where special arrangements are made with the Principal Agent

The Contractor may not carry out construction operations outside of normal working times without the permission of the Principal Agent

**12.1.24 Environmental disturbance [11.6]**

No specific requirements

**12.2 POST-TENDER INFORMATION****12.2.1 Payment of preliminary**

[10.2] Option A or B (post tender)

**12.2.2 Adjustment of preliminaries**

[10.3] Option A or B (post tender)

**12.2.3 Additional agreed preliminaries items**

Details: To be agreed post tender where relevant

**SECTION C: SPECIFIC PRELIMINARIES**

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

**C1: CONFIDENTIALITY**

100

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

**Carried Forward**

R

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R

Should any part of the drawings not be clearly intelligible to the tenderer he shall, before submitting his tender, obtain clarification in writing from the **principal agent**

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

**C2: TRADE NAMES**

101 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, it shall be deemed that the tenderer the product described has been tendered for

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

**C3: IMPORTED MATERIALS**

102 Where imported items are listed in the tender documents, the tenderer shall provide all the information called for, failing which the price of any such item, materials or equipment shall be excluded from currency fluctuations.

Notwithstanding any provisions elsewhere regarding the adjustment of contract prices, the price of any item, material or equipment listed in terms of this clause shall be excluded from the Contract Price Adjustment Provisions (if applicable)

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

**C4: SECURITY CHECK OF PERSONNEL**

103 The **principal agent** may require the **contractor** to have his personnel and workmen, or a certain number of them, security classified

**Carried Forward**

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		<b>Brought Forward</b>	R	
		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		
		F: ..... V: ..... T: ..... Item		
		<b><u>C5: CONTRACT INSTRUCTIONS</u></b>		
104		Contract instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the Contractor		
		F: ..... V: ..... T: ..... Item		
		<b><u>C6: SITE LEVELS</u></b>		
105		Before commencement of the works the Contractor shall carry out and provide the Principal Agent for approval a survey of the existing site levels in sufficient detail to enable the preparation of a final account		
		F: ..... V: ..... T: ..... Item		
		<b><u>C7: UNAUTHORISED PERSONS ON SITE</u></b>		
106		The Contractor shall not permit unauthorised persons onto and workmen to lodge on the site		
		F: ..... V: ..... T: ..... Item		
		<b><u>C8: PLANT AND LABOUR RECORD</u></b>		
107		At the end of each week the Contractor shall provide the Principal Agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day and the number, type and capacity of all plant, excluding hand tools, currently used on the works		
		F: ..... V: ..... T: ..... Item		
		<b>Carried Forward</b>	R	
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R

**C9: USE OF LOCAL LABOUR FROM THE  
EMPLOYER'S AREAS OF OPERATION**

108

It is a requirement of the contract that the work be executed in such a manner as to maximise the use of local labour from the Employer's areas of operation in order to provide the local community with employment opportunities

The tenderer is to identify all activities for which it is intended to employ workers from the local community and full details thereof are to be provided in the tender documentation

The total value of the work that is to be of a local labour nature may be a consideration in the adjudication process. Once a tender is accepted the activities and number of persons stated in the above-mentioned schedule shall become the minimum contractual commitment. In applying the principles set out above, it is a specific requirement of this tender that the successful tenderer employs, in consultation with the Employer's representative, unemployed persons from the ranks of the local communities and the immediate surroundings, who possess the appropriate skills required for a contract of this nature

- In order to achieve the recruitment of local labour, the Employer will establish, a database of unemployed persons, indicating their specialised training, previous experience and employment, etc. The successful tenderer will be required to directly employ suitable persons recruited from the employer's database and ensure that all legislative requirements regarding their employment are complied with and provide the Employer with the necessary documentary proof, if required

- The Contractor is required to produce weekly records suitably detailed to enable the Employer's representative to monitor the achievement of the required local labour percentages. The Contractor is required to provide the Employer's database for the purposes of assessing skills transfer from informal skills training

**Carried Forward**

R

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R

- The Contractor is required to provide informal skills training so that the required standard of workmanship is maintained

- Any difficulty experienced by the tenderer/Contractor in the procurement of the required percentages of local labour is to be referred immediately to the Employer's representative

- In respect to "Target Labour", the minimum rate for any and all workers contracted for this project shall be R120 per day

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

Item

**C10: COMMUNITY LIASON OFFICER**

109

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

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

**Carried Forward**

R

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**Brought Forward**

R

As said contract will be between the Contractor and the CLO, all costs involved shall be borne by the Contractor and the tender shall be deemed to include for this.

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

Item

**C11: GUARANTEES**

110

Where guarantees are called for, the Contractor shall obtain a written guarantee, addressed to the Employer, from the firm supplying the materials and/or doing the work and shall deliver same to the Principal Agent no later than the works completion date.

The guarantee shall state that workmanship, materials and installation are guaranteed for a specified period from the final completion dated and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice from the Principal Agent to do so. This guarantee will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the Contractor.

The Principal Agent shall be the sole judge of the cause responsible for defect of the works and his decision shall be final and binding in terms of clause 40.2 of the agreement

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

Item

**C12: WARRANTIES FOR MATERIAL AND WORKMANSHIP**

111

Where warranties for materials and/or workmanship are called for, the Contractor shall obtain a written warranty, addressed to the Employer, from the firm supplying the materials and/or doing the work and shall deliver same to the Principal Agent on the certified practical completion of the contract

**Carried Forward**

R

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		<b>Brought Forward</b>	R
		<p>The warranty shall state that workmanship, materials and installation are warranted for a specified period from the date of final completion and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice to do so. The warranty will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the Contractor</p> <p>F: ..... V: ..... T: ..... Item</p> <p><b><u>C13: OVERTIME</u></b></p> <p>112 Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the Contractor unless the Principal Agent has specifically authorised, in writing, prior to execution thereof, that costs for such overtime are to be borne by the Employer</p> <p>F: ..... V: ..... T: ..... Item</p> <p><b><u>C14: CO-OPERATION OF CONTRACTOR FOR COST MANAGEMENT</u></b></p> <p>113 It is specifically agreed that the Contractor accepts the obligation of assisting the agents in implementing proper cost management on this project. The Contractor will be advised by the Principal Agent of all cost management procedures which will be implemented to ensure that the final account does not exceed the budget</p> <p>F: ..... V: ..... T: ..... Item</p> <p><b><u>C15: FINANCIAL INVESTIGATION</u></b></p> <p>114 Tenderers must be prepared to furnish the following documentation at own cost within seven (7) days of being called upon to do so:</p> <p>- Audited financial statements for the past three financial years plus a certified financial statement covering the period from the end of the last financial year to date. If audited statements are not readily available provisional certified statements must be submitted</p>	
		<b>Carried Forward</b>	R
		<p>Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES AND GENERAL</p>	

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R

**SUMMARY OF CATEGORIES**

Category : Fixed R.....

Category : Value R.....

Category : Time R.....

Carried to final summary

R

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Item No.	Quantity	Rate	Amount
<b><u>SECTION 2</u></b>			
<b><u>BILL NO. 1</u></b>			
<b><u>ALTERATIONS (PROVISIONAL)</u></b>			
<b><u>PREAMBLES</u></b>			
<p>The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be included in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained</p> <p>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles</p>			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<b>View site:</b>			
<p>Before submitting his tender, the Contractor shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained</p>			
<b>Old materials to become property of the Contractor:</b>			
<p>Old materials from alterations, except where described as to be re-used or handed over, become the property of the Contractor, who must allow credit for same in the last item of the "Alterations" trade</p>			
<b>Old materials to be carted away:</b>			
<p>Old materials from the alterations, except where described as to be re-used or handed over, as well as all rubbish, etc must be regularly carted from the site and not be allowed to accumulate on or around the site</p>			
<b>Carried Forward</b>			
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R

**Old materials to be re-used:**

None of the old materials are to be used for new work, except where specifically described as being set aside for re-use

**Handing over of materials:**

Where certain materials or articles from demolitions or alterations are described as to be "handed over to the Employer", it shall be taken to mean "handed over by the Contractor to the Principal Agent" and such materials or articles shall be properly stored by the Contractor until handing over thereof and shall include all necessary transport. The Contractor must obtain an official receipt from the Principal Agent listing the materials or articles and dates of handing over. Should the Contractor fail to submit the receipt when requested to do so, it shall be deemed that the materials or articles are still in his possession and he will be held liable to the Employer for the full replacement value thereof, which amount will be deducted from any monies due to the Contractor.

**Explosives:**

No explosives whatsoever may be used for demolition purposes, unless otherwise stated

**GENERAL**

The contractor shall carry out the whole of the work with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their tenants. He shall provide proper protection and provide and erect any temporary tarpaulins and temporary plumbing that may be necessary during the progress of the works, all to the satisfaction of the Architect, and remove when directed.

Any water supplies pipes and other piping that may be met with and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the Architect.

**Carried Forward**

R

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R

Doors, fanlights, fittings, frames, linings, etc shall be thoroughly overhauled before re-fixing including taking off, easing and rehanging, cramping up, re-wedging as required and making good cramps, dowels, etc and easing, oiling, adjusting and repairing ironmongery if necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted wood to match timber.

Where doors, windows, etc are described as taken out this shall be understood to include for removal of all beads, architraves, ironmongery, etc and doors which are re-fixed are to be provided with new architraves (elsewhere measured ).

Prices for taking out and removing doors and frames shall include for removing door stops, cabin locks, etc and making good to match existing.

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

Allow for making good all existing plastered walls where damaged by furniture, etc, and stopping up all screw and holes before painting.

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

The contractor will be required to take all dimensions affecting existing building on the site and he will be held solely responsible for the accuracy of all such dimensions.

**Hazardous materials:**

Demolitions of buildings, services, external works, site services, etc are to include for the safe removal and disposal of asbestos or asbestos products or other hazardous materials by approved Registered Specialists

**Carried Forward**

R

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Brought Forward				R	
<b>DEMOLITIONS, ETC</b>					
1	Allow the budgetary amount of R55 000.00 (fifty five thousand rands) for demolition of dilapidated inappropriate toilets structure to be used as directed by the Principal Agent and deducted in whole or in part if not required	Item	1	55 000,00	55 000,00
<b><u>SUNDRIES</u></b>					
2	Clean out pit latrine by desludging including removal of all debris and waste including solid waste and make good on completion including disposing of all debris and waste at an authorised municipal waste disposal facility. Contractor to price per seat	No	8		
<u>Breaking up and removing mass concrete</u>					
3	Concrete aprons, size approximately 1000mm Wide x 125mm thick	m	50		
4	Concrete toilet seats	m2	4		
<u>Taking out and removing doors, windows, etc</u>					
5	Timber single door 813 x 2032mm high	No	12		
<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>					
6	Corrugated iron roof covering, rafters and timber purlins	m2	65		
<u>Taking out and removing piping, sanitary fittings, etc including disconnecting piping from fittings and making good floor and wall finishes</u>					
7	Enviro-loo components complete	No	8		
<u>Taking out and removing glass and mirrors</u>					
8	Glass from steel windows, including cleaning out rebates and preparing for new glass	m2	2		
<b>SERVICING OF DOORS AND WINDOWS</b>					
9	Replace window stays, handles and pegs (PC Amount R150-00 Vat excl supplied and delivered to site)	No	10		
<b>Carried Forward</b>				R	
Section No. 2 ALTERATIONS Bill No. 1 ALTERATIONS					

Brought Forward				R
10	Remove door striker plate and replace with new (PC Amount R150-00 Vat excl supplied and delivered to site)	No	4	
11	Replace missing striker plate with new (PC Amount R150-00 Vat excl supplied and delivered to site)	No	6	
12	Tighten loose door striker plate	No	2	
Carried forward to summary of section 2				R
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Item No.		Quantity	Rate	Amount
	<b><u>SECTION NO.2</u></b>			
	<b><u>BILL NO.3</u></b>			
	<b><u>CARPENTRY AND JOINERY</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>Particle board:</u></b>			
	Particle board shall comply with the following specifications:			
	a) SABS 1300 Particle board: exterior and flooring type			
	b) SABS 1301 Particle board: interior type			
	<b><u>Joinery:</u></b>			
	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			
	<b><u>Fixing</u></b>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
	<b><u>Decorative laminate finish:</u></b>			
	Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish			
	<b><u>ROOFS, ETC.</u></b>			
	<b><u>Sawn softwood</u></b>			
1	38 x 114mm Wall plates	m	18	
2	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	64	
3	50 x 76mm purlins in lengths exceeding 8,1m and not exceeding 9,6m	m	50	
	<b><u>Sundries</u></b>			
	<b>Carried Forward</b>		R	
	Section No. 2			
	ALTERATIONS			
	Bill No. 1			
	CARPENTRY AND JOINERY			

Brought Forward				R
4	Two coats creosote on sawn timbers	m2	5	
5	MiTek® eCo hurricane clips hurricane clip fixed using Permfix nails or bolts through pre-drilled holes.	No	50	
<b><u>EAVES, VERGES, ETC</u></b>				
6	"Everite FC77" pressed fibre-cement 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.	m	20	
7	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.	m	26	
<b><u>DOORS, ETC</u></b>				
	<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>			
8	Door size 813 x 2032mm high cut 100mm short at the bottom	No	8	
9	Door size 813 x 2032mm high with standard weather bar	No	4	
<b>Carried forward to summary of section 2</b>				R
Section No. 2 ALTERATIONS Bill No. 3 CARPENTRY AND JOINERY				

Item No.		Quantity	Rate	Amount
	<b><u>SECTION NO.2</u></b>			
	<b><u>BILL NO.4</u></b>			
	<b><u>IRONMONGERY</u></b>			
	For preambles see "Model Preambles for Trades (2008			
	Edition)" and Supplementary preambles as specified in			
	the Trades			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Finishes to ironmongery</u></b>			
	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			
	<b><u>CATCHES,CABIN HOOKS, ETC</u></b>			
	<u>"ASSA ABLOY" or similar approved</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	8	
	<b><u>LOCKS</u></b>			
	<u>"ASSA ABLOY" or similar approved</u>			
2	ASSA ABLOY 50mm Brass padlock (Code: UN335000000000) with 28mm hardened steel shackle.	No	4	
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).	No	12	
4	UNION stainless steel indicator bolts (code: SS8023SS) with Stainless Steel finish.	No	8	
	<b>Carried Forward</b>			
	Section No. 2			
	ALTERATIONS			
	Bill No. 4			
	IRONMONGERY			

Brought Forward			R
<b><u>SUNDRIES</u></b>			
<u>"ASSA ABLOY" or similar approved</u>			
5	UNION aluminium door stop (code: AL8730AS) with Anodised Silver finish.	No	12
<u>Stainless steel kick/push plates</u>			
6	150 x 300mm High x 1,2mm thick stainless steel push plate	No	4
<b><u>BATHROOM FITTINGS</u></b>			
<u>"Kimberley-Clark or similar approved"</u>			
7	SQ2 code 405607B white none lockable toilet roll holder plugged to wall	No	8
8	Brushed stainless steel body rust resistant she bin approximately 300 x 280 x 180mm etc	No	4
<b><u>LETTERS, NAMEPLATES, ETC</u></b>			
<u>"ASSA ABLOY" or similar approved</u>			
9	ASSA ABLOY Aluminium engraved plate E10, size 152 x 152mm (Code: AL5066-06ASE10). (Male)	No	1
10	ASSA ABLOY Aluminium engraved plate E14, size 152 x 152mm (Code: AL5066-06ASE14). (Female)	No	1
<u>Stainless steel:</u>			
11	Stainless steel mirror size 350 x 400mm plugged to wall with chrome plated screws.	No	2
<b>Carried forward to summary of section 2</b>			R
Section No. 2			
ALTERATIONS			
Bill No. 4			
IRONMONGERY			



Item No.	Quantity	Rate	Amount
<b><u>SECTION NO.2</u></b>			
<b><u>BILL NO.5</u></b>			
<b><u>METALWORK</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b><u>Descriptions</u></b>			
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			
Items described as "holed for bolt(s)" shall be deemed to exclude the bolts, unless otherwise described			
Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres			
<b><u>Fixing:</u></b>			
Unless otherwise described, descriptions of items shall be deemed to include for fixing to brickwork or concrete			
Where items are described as "bolted", the bolts are measured elsewhere as stated in clause N.7 of the Model Preambles			
<b><u>STEEL GATES, SCREENS, ETC</u></b>			
<b><u>Welded screens and gates, to walls:</u></b>			
<b>Carried Forward</b>			R
Section No. 2 ALTERATIONS Bill No. 5 METALWORK			

<b>Brought Forward</b>					
1	Single gate and frame 925 x 2082mm high of 25 x 25 x 2mm hollow section frame and 25 x 25 x 2mm hollow section horizontal middle rail filled in with 12 x 12mm square section vertical rails at 75mm centers and fitted with a pair of suitable hinges welded to frame and with locking mechanism for padlock all in and including outer frame of 25 x 25 x 2mm hollow section welded frame bolted to brickwork	No	2	R	
<b>Carried forward to summary of section 2</b>					
Section No. 2 ALTERATIONS Bill No. 5 METALWORK				R	

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Item No.			Quantity	Rate	Amount
	<b><u>SECTION NO.2</u></b>				
	<b><u>BILL NO.7</u></b>				
	<b><u>PLUMBING AND DRAINAGE</u></b>				
	<b><u>RAINWATER DISPOSAL</u></b>				
	For preambles see "Model Preambles for Trades (2008Edition)" and Supplementary preambles as specified in the Trades				
	<u>0,6mm Galvanised sheet iron with "Chromadek" finish on one side</u>				
1	100 x 100mm Eaves gutters with beaded front edge	m	10		
2	Extra over eaves gutter for outlet for 75 x 100mm downpipe	No	4		
3	Extra over eaves gutter for stopped end	No	4		
4	75 x 100mm Diameter rainwater pipes	m	8		
5	Extra over 75 X 100mm rainwater pipe for shoe	No	4		
6	Extra over 75 x 100mm rainwater pipe for eaves or plinth offset 600mm projection	No	4		
	<b><u>ENVIRO-LOO TOILET SYSTEM</u></b>				
7	Supply and install " Enviro-loo" industrial 1040 model complete, installed strictly in accordance with manufactures instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping, etc	No	8		
	<b><u>SANITARY FITTINGS (PROVISIONAL)</u></b>				
8	Supply and install pre-cast concrete double wash through, complete with all necessary fittings and pipework including soakway size 1000 x 1000 x 1000mm covered with "bidim"	No	2		
	<b>Carried Forward</b>				R
	Section No. 2 ALTERATIONS Bill No. 7 PLUMBING AND DRAINAGE				

		Brought Forward			R
	<b><u>TRAPS, ETC</u></b>				
	<b><u>uPVC</u></b>				
9	32 x 50mm deep seal "P" or "S" trap	No	8		
	<b><u>SANITARY PLUMBING</u></b>				
	<b><u>uPVC pipes</u></b>				
10	50mm Pipes	m	4		
	<b><u>Extra over uPVC pipes for fittings</u></b>				
11	50mm Bend	No	4		
12	50mm Junction	No	4		
13	50mm Access Junction	No	4		
14	50mm Access bend	No	4		
15	50mm Access reducing junction	No	4		
16	50mm "GI Two-way" vent valve	No	4		
17	110mm Air vent valve	No	8		
18	250mm "Whirly Bird) Air Vent	No	8		
	<b><u>WATER SUPPLY</u></b>				
	<b><u>Class "O" copper pipes</u></b>				
19	15mm Pipes	m	18		
20	15mm pipes chased in walls	m	6		
	<b><u>Extra over class "O" copper pipes for capillary fittings</u></b>				
21	15mm Fittings	No	44		
		Carried Forward			R
	Section No. 2				
	ALTERATIONS				
	Bill No. 7				
	PLUMBING AND DRAINAGE				

Section No. 2  
ALTERATIONS  
Bill No. 7  
PLUMBING AND DRAINAGE

Item No.			Quantity	Rate	Amount
	<b><u>SECTION NO.2</u></b>				
	<b><u>BILL NO.8</u></b>				
	<b><u>GLAZING</u></b>				
	For preambles see "Model Preambles for Trades (2008Edition)" and Supplementary preambles as specified in the Trades				
	<b><u>GLAZING TO STEEL WITH PUTTY</u></b>				
	<u>6,38mm Obscure safety glass</u>				
1	Panes not exceeding 0,1 m2	m2	3		
	<b>Carried forward to summary of section 2</b>				
	Section No. 2				
	ALTERATIONS				
	Bill No. 8				
	GLAZING				

R

Item No.	Quantity	Rate	Amount
<b>SECTION NO.2</b>			
<b>BILL NO.9</b>			
<b>PAINTWORK</b>			
For preambles see "Model Preambles for Trades (2008Edition)" and Supplementary preambles as specified in the Trades			
<b>PAINTWORK ETC TO NEW WORK</b>			
<b>PREPARATORY WORK TO EXISTING WORK</b>			
<b><u>Previously painted plastered surfaces</u></b>			
Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth			
<b><u>Previously painted metal surfaces</u></b>			
Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
<b><u>Previously painted wood surfaces</u></b>			
Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth			
<b><u>ON FIBRE-CEMENT</u></b>			
<u>Plascon Sure Coat Gloss Enamel to exterior new fibrecement. Surface to be dry, sound and clean, with 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 coat Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.</u>			
<b>Carried Forward</b>		R	
Section No. 2			
ALTERATIONS			
Bill No. 9			
PAINTWORK			



Brought Forward			R
1	On fascias and barge boards	m2	24
	<p><b><u>ON METAL</u></b></p> <p><u>Plascon Velvagio 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 Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.</u></p>		
2	On door frames	m2	20
3	On windows with burglar bars	m2	11
4	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area )	m2	30
	<p><b><u>ON WOOD</u></b></p> <p><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 (A1A5) &lt; 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></p>		
5	On doors	m2	43
	<p><b>Carried forward to summary of section 2</b></p> <p>Section No. 2 ALTERATIONS Bill No. 9 PAINTWORK</p>		
			R

Item No.		Quantity	Rate	Amount
	<b><u>SECTION NO.2</u></b>			
	<b><u>BILL NO. 10</u></b>			
	<b><u>CONCRETE APRONS.</u></b>			
	For preambles see "Model Preambles for Trades (2008Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>APRONS AROUND BUILDINGS</u></b>			
	<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 oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	134	
	<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	m2	74	
	<u>Soil insecticide</u>			
	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	74	
	<u>15 MPa/20 mm concrete</u>			
3	Aprons cast in panels to falls	m3	10	
4	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.	m	50	
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
5	Aprons to falls	m2	74	
	<u>Smooth formwork to sides</u>			
	<b>Carried Forward</b>			
	Section No. 2			
	ALTERATIONS			
	Bill No. 10			
	CONCRETE APRONS.			

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SECTION 2 SUMMARY - Alterations			
Bill No.		Page No	Amount
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4	IRONMONGERY	48	
5	METALWORK	50	
6	PLASTERING	51	
7	PLUMBING AND DRAINAGE	54	
8	GLAZING	55	
9	PAINTWORK	57	
10	CONCRETE APRONS.	59	
Carried forward to final summary			R
Section No. 2 Alterations			

Item No.		Quantity	Rate	Amount
	<b><u>SECTION 3</u></b>			
	<b><u>BILL NO.1</u></b>			
	<b><u>EARTHWORKS</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>SITE CLEARANCE</u></b>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	66	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	66	
	<b><u>EXCAVATION, FILLING, ETC</u></b>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	12	
4	Pit	m3	26	
5	For aprons thickening	m3	6	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	1	
7	Hard rock	m3	1	
	<u>Extra over all excavations for carting away:</u>			
8	Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the Contractor	m3	12	
	<b>Carried Forward</b>			R
	Section No. 3			
	BUILDING WORKS - MD2			
	Bill No. 1			
	FOUNDATION			
	NEMORANGO CONSULTING ENGINEERS			

Brought Forward			R
<u>Risk of collapse of excavations</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	35
<u>Keeping excavations free of water.</u>			
10	Keeping excavations free of water other than subterranean water	Item	1
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u>			
11	Under floors, steps, pavings, etc.	m3	3
12	Backfilling to trenches, holes, etc.	m3	6
<u>Compaction of surfaces</u>			
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	40
14	Compaction of ground surface to pits etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density (Pit)	m2	13
15	Compaction of ground surface to aprons etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density (Ramp)	m2	1
<u>Prescribed density tests on filling</u>			
16	Modified AASHTO Density tests	No	8
Carried Forward			R
Section No. 3			
BUILDING WORKS - MD2			
Bill No. 1			
FOUNDATION			
NEMORANGO CONSULTING ENGINEERS			

<b>Brought Forward</b>			R
<b><u>SOIL POISONING</u></b>			
<u>Weedkiller mixed in accordance to suppliers specifications</u>			
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	20
18	To bottoms and sides of trenches, etc.	m2	51
<u>Soil insecticide</u>			
19	To bottoms and sides of trenches, etc.	m2	51
20	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	20
<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
<b><u>UNREINFORCED CONCRETE, CAST AGAINST EXCAVATED SURFACES</u></b>			
15Mpa/19mm Concrete			
21	Surface blinding under footings and bases	m3	1
<u>25Mpa/19mm Concrete</u>			
22	Strip footings	m3	3
23	Slabs	m3	3
<b><u>REINFORCEMENT</u></b>			
<u>Fabric Reinforcement</u>			
24	Steeldale mesh standard square fabric mesh, nominal mass 8,8kg/m2 with nominal 12mm wires and 200 x 200mm pitch (code 888), complying with SANS 1025/2006 Requirements cut to 500mm width and laid loose in concrete strip footings	m2	23
<b>Carried Forward</b>			R
Section No. 3			
BUILDING WORKS - MD2			
FOUNDATION			
NEMORANGO CONSULTING ENGINEERS			

NEMORANGO CONSULTING ENGINEERS



Item No.		Quantity	Rate	Amount
	<b><u>BILL NO.2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<b><u>UNREINFORCED CONCRETE, CAST AGAINST EXCAVATED SURFACES</u></b>			
	20Mpa/19mm Concrete			
1	Ramps	m3	0,1	
2	Ditto, but surface bed in pit	m3	3	
	<b><u>REINFORCED CONCRETE, ETC</u></b>			
	<u>30Mpa/19mm Concrete</u>			
3	Surface beds cast in panels on waterproofing	m3	2	
	<b><u>CONCRETE SUNDRIES</u></b>			
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
4	Ramps to falls	m2	1	
5	Surface beds, slabs etc,	m2	20	
6	surface bed in pit	m2	26	
	<b><u>TEST CUBES</u></b>			
7	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testinglaboratory for testing and paying all charges in connection therewith.	No	8	
	<b>Carried Forward</b>			
	Section No. 3			
	BUILDING WORKS - MD2			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	NEMORANGO CONSULTING ENGINEERS			

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Brought Forward				R
<b><u>SAMPLES</u></b>				
Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6				
<b><u>FOUNDATIONS</u></b>				
<b><u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u></b>				
1	Half brick walls in beamfilling	m2	3	
2	One brick walls	m2	63	
3	One brick walls in pit	m2	33	
4	Half brick walls corbelling in pit	m2	9	
<b><u>BRICKWORK SUNDRIES</u></b>				
<u>Brick reinforcement</u>				
5	75mm Wide reinforcement built in horizontally	m	93	
6	150mm Wide reinforcement built in horizontally	m	271	
<u>Galvanised wire ties etc</u>				
7	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	15	
<u>Turning pieces</u>				
8	115mm Wide turning piece to lintel etc	m	9	
9	230mm Wide turning piece to lintel etc	m	2	
Carried Forward				R
Section No. 3				
BUILDING WORKS - MD2				
Bill No. 3				
MASONRY				
NEMORANGO CONSULTING ENGINEERS				

<b>Brought Forward</b>			R
<b><u>FACE BRICKWORK</u></b>			
<u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
10	Extra over brickwork for face brickwork	m2	132
11	One brickwork for face brick walls pointed both sides	m2	10
12	Extra over brickwork for brick on edge header course lintel	m	5
13	Fair raking and cutting	m	5
<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces</u>			
9	110 wide sill set level and slightly projecting	m	4
10	220mm wide sill set level and slightly projecting outside	m	4
<u>Prestressed fabricated lintels</u>			
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	11
<u>Ventillation bricks</u>			
17	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	6
<b>Carried Forward to summary of section No. 3</b>			R
Section No. 3			
BUILDING WORKS - MD2			
Bill No. 3			
MASONRY			
NEMORANGO CONSULTING ENGINEERS			

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Item No.		Quantity	Rate	Amount
	<b><u>BILL NO.6</u></b>			
	<b><u>CARPENTRY AND JOINERY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>ROOFS, ETC.</u></b>			
	<u>Sawn softwood</u>			
1	38 x 114mm Wall plates	m	13	
2	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	31	
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	36	
	<u>Sundries</u>			
4	Two coats creosote on sawn timbers	m2	4	
5	MiTek® eCo Hurricane clips fixed using permfix nails or bolts through pre-drilled holes.	No	20	
	<b><u>EAVES, VERGES, ETC.</u></b>			
	<u>Everite FC77 Pressed fiber cement</u>			
6	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.	m	13	
	<b>Carried Forward</b>			
	Section No. 3			
	BUILDING WORKS - MD2			
	Bill No. 6			
	CARPENTRY AND JOINERY			
	NEMORANGO CONSULTING ENGINEERS			

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Item No.			Quantity	Rate	Amount
	<b><u>BILL NO.7</u></b>				
	<b><u>IRONMONGERY</u></b>				
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	<b><u>CATCHES, CABIN, HOOKS, ETC</u></b>				
	<u>"ASSA ABLOY" or similar approved</u>				
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2		
	<b><u>LOCKS</u></b>				
	<u>"ASSA ABLOY" or similar approved</u>				
2	ASSA ABLOY 50mm Brass padlock (Code: UN335000000000) with 28mm hardened steel shackle.	No	2		
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).	No	2		
4	UNION stainless steel indicator bolts (code: SS8023SS) with Stainless Steel finish.	No	2		
5	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Pairs	1		
	<b><u>SUNDRIES</u></b>				
	<u>"ASSA ABLOY" or similar approved</u>				
6	UNION aluminium door stop (code: AL8730AS) with Anodised Silver finish.	No	4		
	<b>Carried Forward</b>			R	
	Section No. 3				
	BUILDING WORKS - MD2				
	Bill No. 7				
	IRONMONGERY				
	NEMORANGO CONSULTING ENGINEERS				

Brought Forward			R
<u>Stainless steel kick/push plates</u>			
7	150 x 300mm High x 1,2mm thick stainless steel push plate	No	1
8	900 x 300mm High x 1,2mm thick stainless steel kick plate	No	1
<u>"Vaal Paragon" or similar approved</u>			
9	32mm Type 9 back grab rail 800mm long plugged	No	1
10	32mm Type 8 side grab rail 900mm girth plugged	No	1
<b><u>BATHROOM FITTINGS</u></b>			
<u>"Kimberley-Clark or similar approved"</u>			
11	SQ2 code 405607B white none lockable toilet roll holder plugged to wall	No	3
<b><u>LETTERS, NAMEPLATES, ETC</u></b>			
<u>"ASSA ABLOY" or similar approved</u>			
12	ASSA ABLOY Aluminium engraved plate E10, size 152 x 152mm (Code: AL5066-06ASE10). (Male)	No	1
13	ASSA ABLOY Aluminium engraved plate E14, size 152 x 152mm (Code: AL5066-06ASE14). (Paraplegic)	No	1
<u>Stainless steel:</u>			
14	Stainless steel mirror size 350 x 400mm plugged to wall with chrome plated screws.	No	3
<b>Carried Forward to summary of section No. 3</b>			R
Section No. 3			
BUILDING WORKS - MD2			
Bill No. 7			
IRONMONGERY			
NEMORANGO CONSULTING ENGINEERS			

Item No.		Quantity	Rate	Amount
	<b><u>BILL NO.8</u></b>			
	<b><u>METALWORK</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>WELDED SCREENS, GATES, ETC</u></b>			
	<u>Gates to external doors</u>			
1	Single gate and frame size 925 x 2082mm high	No	2	
	<b><u>PRESSED STEEL DOOR FRAMES</u></b>			
	<u>1,2mm Double rebated frames suitable for half brick walls</u>			
2	Frame for door size 813 x 2032mm high	No	2	
	<u>1,2mm Double rebated frames suitable for one brick walls</u>			
3	Frame for door size 813 x 2032mm high	No	1	
4	Frame for door size 914 x 2032mm high	No	1	
	<b><u>STEEL WINDOWS, DOORS, ETC</u></b>			
	<u>"Nty" steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</u>			
5	Window type NE1, size 533 x 654mm high	No	5	
6	Window type NE7, size 1022 x 654mm high	No	2	
	<b>Carried Forward to summary of section No. 3</b>			R
	Section No. 3			
	BUILDING WORKS - MD2			
	Bill No. 8			
	METALWORK			
	NEMORANGO CONSULTING ENGINEERS			

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Item No.		Quantity	Rate	Amount
	<b><u>BILL NO. 10</u></b>			
	<b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>RAINWATER DISPOSAL</u></b>			
	<b><u>0.6mm Galvanised sheet iron with "Chromadek" finish on one side</u></b>			
1	100 x 100mm Eaves gutters with beaded front edge	m	7	
2	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2	
3	Extra over eaves gutter for stopped end	No	2	
4	75 x 100mm Diameter rainwater pipes	m	4	
5	Extra over 75 X 100mm rainwater pipe for shoe	No	2	
6	Extra over 75 x 100mm rainwater pipe for eaves or plinth offset 600mm projection	No	2	
	<b><u>ENVIRO-LOO TOILET SYSTEM</u></b>			
7	Supply and install " Enviro-loo"industrial 1040 model complete, installed strickly in accordance with manufactures instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping, etc	No	3	
	<b>Carried Forward</b>			
	Section No. 3			
	BUILDING WORKS - MD2			
	Bill No. 10			
	PLUMBING AND DRAINAGE (PROVISIONAL)			
	NEMORANGO CONSULTING ENGINEERS			

R

	<b>Brought Forward</b>			R
8	Supply and Erect "Enviro-loo" industrial 1040 Model 2-Bowl urinal evaporative tank system fixed complete as per manufactures specification unit, comprising of urinal evaporative tank, urinal bowls, including brackets 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary piping, traps, etc	No	2	
	<b><u>SOIL DRAINAGE</u></b>			
	<u>Normal duty (Class 51) Upvc sewer and drain pipes</u>			
9	50mm Pipes	m	58	
10	110mm Pipes laid in and including trenches not exceeding 1m deep	m	4	
	<u>Extra over normal duty (Class 51) Upvc sewer and drain pipes for fittings</u>			
11	50mm Bend	No	9	
12	50mm Junction	No	6	
13	50mm Access junction	No	6	
14	110mm Bend	No	5	
15	110mm Junction	No	4	
	<u>uPVC gulleys</u>			
16	110mm dished gulley trap assembly with head, grid and concrete surround not exceeding 500mm deep	No	3	
	<b>TAPS, VALVES, ETC</b>			
17	19mm Chromium plated push button taps to wash troughs	No	4	
	<b>Carried Forward</b>			R
	Section No. 3			
	BUILDING WORKS - MD2			
	Bill No.10			
	PLUMBING AND DRAINAGE (PROVISIONAL)			
	NEMORANGO CONSULTING ENGINEERS			

		<b>Brought Forward</b>		R	
18	15mm gate valve plugged	No	2		
	<b>SANITARY FITTINGS (PROVISIONAL)</b>				
19	Supply and install pre-cast concrete double wash through, complete with all necessary fittings and pipework including soakway size 1000 x 1000 x 1000mm coverd with "bidim"	No	2		
	<b>TRAPS, ETC</b>				
	<b>uPVC</b>				
20	32 x 50mm deep seal "P" or "S" trap	No	3		
	<b>SANITARY PLUMBING</b>				
	<b>uPVC pipes</b>				
21	50mm Pipes	m	25		
	<b>Extra over uPVC pipes for fittings</b>				
22	50mm Bend	No	9		
23	50mm Junction	No	6		
24	50mm Access Junction	No	1		
25	50mm Access bend	No	4		
26	50mm Access reducing junction	No	5		
27	50mm "GI Two-way" vent valve	No	2		
28	110mm Air vent valve	No	5		
29	250mm "Whirly Bird) Air Vent	No	3		
	<b>Carried Forward</b>			R	
	Section No. 3				
	BUILDING WORKS - MD2				
	Bill No. 10				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	NEMORANGO CONSULTING ENGINEERS				



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**BILL NO. 14****CONCRETE APRONS**

For preambles see "Specifications of materials and methods to be used - PW 371"

**APRON AROUND BUILDINGS**Compaction of surfaces

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

m2 23

Weedkiller mixed in accordance to suppliers specifications

- 2 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.

m2 23

Soil insecticide

- 3 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.

m2 23

20Mpa/20mm Concrete

- 4 Aprons cast in panels

m3 3

- 5 Extra over for concrete thickening in apron sizes approximately 100mm deep, 400mm at top and tapering one side to 200mm at bottom including all excavations, cart away etc,

m 23

Finishing top surfaces of concrete smooth with a wood float

- 6 Aprons s to falls

m2 23

**Carried Forward**

R

Section No. 3

BUILDING WORKS - MD2

Bill No. 13

APRON

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R

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SECTION 3 SUMMARY - MD2			
Bill No.		Page No	Amount
1	FOUNDATION	64	
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11	GLAZING	82	
12	PAINTWORK	83	
13	CONCRETE APRONS.	85	
Carried forward to final summary			R -
Section No. 3			
MD2			

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Brought Forward			R
<u>Risk of collapse of excavations</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	32
<u>Keeping excavations free of water.</u>			
10	Keeping excavations free of water other than subterranean water	Item	1
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u>			
11	Under floors, steps, pavings, etc.	m3	3
12	Backfilling to trenches, holes, etc.	m3	5
<u>Compaction of surfaces</u>			
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	33
14	Compaction of ground surface to pits etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density (Pit)	m2	12
15	Compaction of ground surface to aprons etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density (Ramp)	m2	1
<u>Prescribed density tests on filling</u>			
16	Modified AASHTO Density tests	No	6
Carried Forward			R
Section No. 4			
BUILDING WORKS - MD1			
Bill No. 1			
FOUNDATION			
NEMORANGO CONSULTING ENGINEERS			



		<b>Brought Forward</b>		R
<b><u>SOIL POISONING</u></b>				
<u>Weedkiller mixed in accordance to suppliers specifications</u>				
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	17	
18	To bottoms and sides of trenches, etc.	m2	47	
<u>Soil insecticide</u>				
19	To bottoms and sides of trenches, etc.	m2	47	
20	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	17	
<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>				
<b><u>UNREINFORCED CONCRETE, CAST AGAINST EXCAVATED SURFACES</u></b>				
15Mpa/19mm Concrete				
21	Surface blinding under footings and bases	m3	1	
<u>25Mpa/19mm Concrete</u>				
22	Strip footings	m3	3	
23	Slabs	m3	3	
<b><u>REINFORCEMENT</u></b>				
<u>Fabric Reinforcement</u>				
24	Steeldale mesh standard square fabric mesh, nominal mass 8,8kg/m2 with nominal 12mm wires and 200 x 200mm pitch (code 888), complying with SANS 1025/2006 Requirements cut to 500mm width and laid loose in concrete strip footings	m2	21	
		<b>Carried Forward</b>		R
Section No. 4				
BUILDING WORKS - MD1				
FOUNDATION				
NEMORANGO CONSULTING ENGINEERS				

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Item No.		Quantity	Rate	Amount
	<b><u>BILL NO.2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<b><u>UNREINFORCED CONCRETE, CAST AGAINST EXCAVATED SURFACES</u></b>			
	20Mpa/19mm Concrete			
1	Ramps	m3	0,1	
2	Ditto, but surface bed in pit	m3	3	
	<b><u>REINFORCED CONCRETE, ETC</u></b>			
	<u>30Mpa/19mm Concrete</u>			
3	Surface beds cast in panels on waterproofing	m3	2	
	<b><u>CONCRETE SUNDRIES</u></b>			
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
4	Ramps to falls	m2	1	
5	Surface beds, slabs etc,	m2	17	
6	surface bed in pit	m2	23	
	<b>TEST CUBES</b>			
7	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testinglaboratory for testing and paying all charges in connection therewith.	No	6	
	<b>Carried Forward</b>			
	Section No. 4			
	BUILDING WORKS - MD1			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	NEMORANGO CONSULTING ENGINEERS			

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Brought Forward			R
<b><u>SAMPLES</u></b>			
Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6			
<b><u>FOUNDATIONS</u></b>			
<b><u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u></b>			
1	Half brick walls in beamfilling	m2	3
2	One brick walls	m2	58
3	One brick walls in pit	m2	29
4	Half brick walls corbelling in pit	m2	9
<b><u>BRICKWORK SUNDRIES</u></b>			
<u>Brick reinforcement</u>			
5	75mm Wide reinforcement built in horizontally	m	60
6	150mm Wide reinforcement built in horizontally	m	248
<u>Galvanised wire ties etc</u>			
7	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	12
<u>Turning pieces</u>			
8	115mm Wide turning piece to lintel etc	m	7
9	230mm Wide turning piece to lintel etc	m	2
Carried Forward			R
Section No. 4			
BUILDING WORKS - MD1			
Bill No. 3			
MASONRY			
NEMORANGO CONSULTING ENGINEERS			

<b>Brought Forward</b>			R
<b><u>FACE BRICKWORK</u></b>			
<u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
10	Extra over brickwork for face brickwork	m2	120
11	One brickwork for face brick walls pointed both sides	m2	5
12	Extra over brickwork for brick on edge header course lintel	m	5
13	Fair raking and cutting	m	15
<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces</u>			
9	110 wide sill set level and slightly projecting	m	3
10	220mm wide sill set level and slightly projecting outside	m	3
<u>Prestressed fabricated lintels</u>			
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	9
<u>Ventillation bricks</u>			
17	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	6
<b>Carried Forward to summary of section No. 4</b>			R
Section No. 4			
BUILDING WORKS - MD1			
Bill No. 3			
MASONRY			
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Item No.			Quantity	Rate	Amount
	<b><u>BILL NO.7</u></b>				
	<b><u>IRONMONGERY</u></b>				
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	<b><u>CATCHES, CABIN, HOOKS, ETC</u></b>				
	<u>"ASSA ABLOY" or similar approved</u>				
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2		
	<b><u>LOCKS</u></b>				
	<u>"ASSA ABLOY" or similar approved</u>				
2	ASSA ABLOY 50mm Brass padlock (Code: UN335000000000) with 28mm hardened steel shackle.	No	2		
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).	No	2		
4	UNION stainless steel indicator bolts (code: SS8023SS) with Stainless Steel finish.	No	1		
5	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Pairs	1		
	<b><u>SUNDRIES</u></b>				
	<u>"ASSA ABLOY" or similar approved</u>				
6	UNION aluminium door stop (code: AL8730AS) with Anodised Silver finish.	No	3		
	<b>Carried Forward</b>			R	
	Section No. 4				
	BUILDING WORKS - MD1				
	Bill No. 7				
	IRONMONGERY				
	NEMORANGO CONSULTING ENGINEERS				

Brought Forward			R
<u>Stainless steel kick/push plates</u>			
7	150 x 300mm High x 1,2mm thick stainless steel push plate	No	1
8	900 x 300mm High x 1,2mm thick stainless steel kick plate	No	1
<u>"Vaal Paragon" or similar approved</u>			
9	32mm Type 9 back grab rail 800mm long plugged	No	1
10	32mm Type 8 side grab rail 900mm girth plugged	No	1
<b><u>BATHROOM FITTINGS</u></b>			
<u>"Kimberley-Clark or similar approved"</u>			
11	SQ2 code 405607B white none lockable toilet roll holder plugged to wall	No	2
<b><u>LETTERS, NAMEPLATES, ETC</u></b>			
<u>"ASSA ABLOY" or similar approved</u>			
12	ASSA ABLOY Aluminium engraved plate E10, size 152 x 152mm (Code: AL5066-06ASE10). (Male)	No	1
13	ASSA ABLOY Aluminium engraved plate E14, size 152 x 152mm (Code: AL5066-06ASE14). (Paraplegic)	No	1
<u>Stainless steel:</u>			
14	Stainless steel mirror size 350 x 400mm plugged to wall with chrome plated screws.	No	3
<b>Carried Forward to summary of section No. 4</b>			R
Section No. 4			
BUILDING WORKS - MD1			
Bill No. 7			
IRONMONGERY			
NEMORANGO CONSULTING ENGINEERS			

Item No.		Quantity	Rate	Amount
	<b><u>BILL NO.8</u></b>			
	<b><u>METALWORK</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>WELDED SCREENS, GATES, ETC</u></b>			
	<u>Gates to external doors</u>			
1	Single gate and frame size 925 x 2082mm high	No	2	
	<b><u>PRESSED STEEL DOOR FRAMES</u></b>			
	<u>1,2mm Double rebated frames suitable for half brick walls</u>			
2	Frame for door size 813 x 2032mm high	No	1	
	<u>1,2mm Double rebated frames suitable for one brick walls</u>			
3	Frame for door size 813 x 2032mm high	No	1	
4	Frame for door size 914 x 2032mm high	No	1	
	<b><u>STEEL WINDOWS, DOORS, ETC</u></b>			
	<u>"Nty" steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</u>			
5	Window type NE1, size 533 x 654mm high	No	7	
6	Window type NE7, size 1022 x 654mm high	No	2	
	<b>Carried Forward to summary of section No. 4</b>			R
	Section No. 4			
	BUILDING WORKS - MD1			
	Bill No. 8			
	METALWORK			
	NEMORANGO CONSULTING ENGINEERS			

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Item No.		Quantity	Rate	Amount
	<b><u>BILL NO. 10</u></b>			
	<b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>RAINWATER DISPOSAL</u></b>			
	<b><u>0.6mm Galvanised sheet iron with "Chromadek" finish on one side</u></b>			
1	100 x 100mm Eaves gutters with beaded front edge	m	6	
2	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2	
3	Extra over eaves gutter for stopped end	No	2	
4	75 x 100mm Diameter rainwater pipes	m	4	
5	Extra over 75 X 100mm rainwater pipe for shoe	No	2	
6	Extra over 75 x 100mm rainwater pipe for eaves or plinth offset 600mm projection	No	2	
	<b><u>ENVIRO-LOO TOILET SYSTEM</u></b>			
7	Supply and install " Enviro-loo"industrial 1040 model complete, installed strickly in accordance with manufactures instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping, etc	No	2	
	<b>Carried Forward</b>		R	
	Section No. 4			
	BUILDING WORKS - MD1			
	Bill No. 10			
	PLUMBING AND DRAINAGE (PROVISIONAL)			
	NEMORANGO CONSULTING ENGINEERS			



	<b>Brought Forward</b>			R
8	Supply and Erect "Enviro-loo" industrial 1040 Model 2-Bowl urinal evaporative tank system fixed complete as per manufactures specification unit, comprising of urinal evaporative tank, urinal bowls, including brackets 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary piping, traps, etc	No	8	
	<b><u>SOIL DRAINAGE</u></b>			
	<u>Normal duty (Class 51) Upvc sewer and drain pipes</u>			
9	50mm Pipes	m	40	
10	110mm Pipes laid in and including trenches not exceeding 1m deep	m	10	
	<u>Extra over normal duty (Class 51) Upvc sewer and drain pipes for fittings</u>			
11	50mm Bend	No	7	
12	50mm Junction	No	6	
13	50mm Access junction	No	6	
14	110mm Bend	No	4	
15	110mm Junction	No	2	
	<u>uPVC gulleys</u>			
16	110mm dished gulley trap assembly with head, grid and concrete surround not exceeding 500mm deep	No	2	
	<b>TAPS, VALVES, ETC</b>			
17	19mm Chromium plated push button taps to wash troughs	No	4	
	<b>Carried Forward</b>			R
	Section No. 4			
	BUILDING WORKS - MD1			
	Bill No. 10			
	PLUMBING AND DRAINAGE (PROVISIONAL)			
	NEMORANGO CONSULTING ENGINEERS			

		<b>Brought Forward</b>		R
18	15mm gate valve plugged	No	8	
	<b>SANITARY FITTINGS (PROVISIONAL)</b>			
19	Supply and install pre-cast concrete double wash through, complete with all necessary fittings and pipework including soakway size 1000 x 1000 x 1000mm coverd with "bidim"	No	2	
	<b>TRAPS, ETC</b>			
	<b>uPVC</b>			
20	32 x 50mm deep seal "P" or "S" trap	No	2	
	<b>SANITARY PLUMBING</b>			
	<b>uPVC pipes</b>			
21	50mm Pipes	m	26	
	<b>Extra over uPVC pipes for fittings</b>			
22	50mm Bend	No	7	
23	50mm Junction	No	6	
24	50mm Access Junction	No	1	
25	50mm Access bend	No	10	
26	50mm Access reducing junction	No	6	
27	50mm "GI Two-way" vent valve	No	2	
28	110mm Air vent valve	No	6	
29	250mm "Whirly Bird) Air Vent	No	2	
	<b>Carried Forward</b>			R
	Section No. 4			
	BUILDING WORKS - MD1			
	Bill No. 10			
	PLUMBING AND DRAINAGE (PROVISIONAL)			
	NEMORANGO CONSULTING ENGINEERS			

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Item No.		Quantity	Rate	Amount
	<b><u>BILL NO. 14</u></b>			
	<b><u>CONCRETE APRONS</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>APRON AROUND BUILDINGS</u></b>			
	<u>Compaction of surfaces</u>			
1	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	23	
	<u>Weedkiller mixed in accordance to suppliers specifications</u>			
2	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	23	
	<u>Soil insecticide</u>			
3	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	23	
	<u>20Mpa/20mm Concrete</u>			
4	Aprons cast in panels	m3	3	
5	Extra over for concrete thickening in apron sizes approximately 100mm deep, 400mm at top and tapering one side to 200mm at bottom including all excavations, cart away etc,	m	23	
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
6	Aprons s to falls	m2	23	
	<b>Carried Forward</b>			R
	Section No. 4			
	BUILDING WORKS - MD1			
	Bill No. 13			
	APRON			
	NEMORANGO CONSULTING ENGINEERS			

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SECTION 4 SUMMARY - MD1			
Bill No.		Page No	Amount
1	FOUNDATION	90	
2	CONCRETE, FORMWORK AND REINFORCEMENT	92	
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5	ROOF COVERINGS	97	
6	CARPENTRY AND JOINERY	99	
7	IRONMONGERY	101	
8	METALWORK	102	
9	PLASTERING	103	
10	PLUMBING AND DRAINAGE	107	
11	GLAZING	108	
12	PAINTWORK	109	
13	CONCRETE APRONS.	111	
Carried forward to final summary			R
Section No. 4			
MD1			



Item No.		Quantity	Rate	Amount
	<b><u>SECTION 2</u></b>			
	<b><u>BILL NO.1</u></b>			
	<b><u>EARTHWORKS</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>SITE CLEARANCE</u></b>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	57	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	57	
	<b><u>EXCAVATION, FILLING, ETC</u></b>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	11	
4	Pit	m3	24	
5	For aprons thickening	m3	6	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	1	
7	Hard rock	m3	1	
	<u>Extra over all excavations for carting away:</u>			
8	Surplus material from excavations and/or stock piles on to a dumping site to be allocated by the Contractor	m3	11	
	<b>Carried Forward</b>		R	
	Section No. 5			
	BUILDING WORKS - FD3			
	Bill No. 1			
	FOUNDATION			
	NEMORANGO CONSULTING ENGINEERS			

Brought Forward			R
<u>Risk of collapse of excavations</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	31
<u>Keeping excavations free of water.</u>			
10	Keeping excavations free of water other than subterranean water	Item	1
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u>			
11	Under floors, steps, pavings, etc.	m3	3
12	Backfilling to trenches, holes, etc.	m3	5
<u>Compaction of surfaces</u>			
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	35
14	Compaction of ground surface to pits etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density (Pit)	m2	9
15	Compaction of ground surface to aprons etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density (Ramp)	m2	1
<u>Prescribed density tests on filling</u>			
16	Modified AASHTO Density tests	No	6
Carried Forward			R
Section No. 5			
BUILDING WORKS - FD3			
Bill No. 1			
FOUNDATION			
NEMORANGO CONSULTING ENGINEERS			

		<b>Brought Forward</b>		R
<b><u>SOIL POISONING</u></b>				
<u>Weedkiller mixed in accordance to suppliers specifications</u>				
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	17	
18	To bottoms and sides of trenches, etc.	m2	46	
<u>Soil insecticide</u>				
19	To bottoms and sides of trenches, etc.	m2	46	
20	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	17	
<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>				
<b><u>UNREINFORCED CONCRETE, CAST AGAINST EXCAVATED SURFACES</u></b>				
15Mpa/19mm Concrete				
21	Surface blinding under footings and bases	m3	1	
<u>25Mpa/19mm Concrete</u>				
22	Strip footings	m3	3	
23	Slabs	m3	3	
<b><u>REINFORCEMENT</u></b>				
<u>Fabric Reinforcement</u>				
24	Steeldale mesh standard square fabric mesh, nominal mass 8,8kg/m2 with nominal 12mm wires and 200 x 200mm pitch (code 888), complying with SANS 1025/2006 Requirements cut to 500mm width and laid loose in concrete strip footings	m2	21	
<b>Carried Forward</b>				R
Section No. 5				
BUILDING WORKS - FD3				
FOUNDATION				
NEMORANGO CONSULTING ENGINEERS				

NEMORANGO CONSULTING ENGINEERS

Item No.		Quantity	Rate	Amount
	<b><u>BILL NO.2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<b><u>UNREINFORCED CONCRETE, CAST AGAINST EXCAVATED SURFACES</u></b>			
	20Mpa/19mm Concrete			
1	Ramps	m3	0,1	
2	Ditto, but surface bed in pit	m3	3	
	<b><u>REINFORCED CONCRETE, ETC</u></b>			
	<u>30Mpa/19mm Concrete</u>			
3	Surface beds cast in panels on waterproofing	m3	2	
	<b><u>CONCRETE SUNDRIES</u></b>			
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
4	Ramps to falls	m2	1	
5	Surface beds, slabs etc,	m2	17	
6	surface bed in pit	m2	23	
	<b><u>TEST CUBES</u></b>			
7	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testinglaboratory for testing and paying all charges in connection therewith.	No	6	
	<b>Carried Forward</b>			
	Section No. 5			
	BUILDING WORKS - FD3			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	NEMORANGO CONSULTING ENGINEERS			

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Brought Forward				R
<b><u>SAMPLES</u></b>				
Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6				
<b><u>FOUNDATIONS</u></b>				
<b><u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u></b>				
1	Half brick walls in beamfilling	m2	3	
2	One brick walls	m2	56	
3	One brick walls in pit	m2	28	
4	Half brick walls corbelling in pit	m2	9	
<b><u>BRICKWORK SUNDRIES</u></b>				
<u>Brick reinforcement</u>				
5	75mm Wide reinforcement built in horizontally	m	101	
6	150mm Wide reinforcement built in horizontally	m	243	
<u>Galvanised wire ties etc</u>				
7	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	12	
<u>Turning pieces</u>				
8	115mm Wide turning piece to lintel etc	m	9	
9	230mm Wide turning piece to lintel etc	m	2	
Carried Forward				R
Section No. 5				
BUILDING WORKS - FD3				
Bill No. 3				
MASONRY				
NEMORANGO CONSULTING ENGINEERS				



<b>Brought Forward</b>			R	
<b><u>FACE BRICKWORK</u></b>				
<u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>				
10	Extra over brickwork for face brickwork	m2	117	
11	One brickwork for face brick walls pointed both sides	m2	13	
12	Extra over brickwork for brick on edge header course lintel	m	5	
13	Fair raking and cutting	m	4	
<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces</u>				
9	110 wide sill set level and slightly projecting	m	3	
10	220mm wide sill set level and slightly projecting outside	m	3	
<u>Prestressed fabricated lintels</u>				
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	9	
<u>Ventillation bricks</u>				
17	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	6	
<b>Carried Forward to summary of section No. 5</b>			R	
Section No. 5				
BUILDING WORKS - FD3				
Bill No. 3				
MASONRY				
NEMORANGO CONSULTING ENGINEERS				

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Item No.		Quantity	Rate	Amount
	<b><u>BILL NO.6</u></b>			
	<b><u>CARPENTRY AND JOINERY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>ROOFS, ETC.</u></b>			
	<u>Sawn softwood</u>			
1	38 x 114mm Wall plates	m	11	
2	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	25	
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	29	
	<u>Sundries</u>			
4	Two coats creosote on sawn timbers	m2	3	
5	MiTek® eCo Hurricane clips fixed using permfix nails or bolts through pre-drilled holes.	No	20	
	<b><u>EAVES, VERGES, ETC.</u></b>			
	<u>Everite FC77 Pressed fiber cement</u>			
6	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.	m	12	
	<b>Carried Forward</b>			
	Section No. 5			
	BUILDING WORKS - FD3			
	Bill No. 6			
	CARPENTRY AND JOINERY			
	NEMORANGO CONSULTING ENGINEERS			

R

	Brought Forward			R
7	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.	m	10	
	<b><u>DOORS, ETC.</u></b>			
	<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>			
8	Door size 813 x 2032mm high cut 100mm short at the bottom	No	3	
9	Door size 813 x 2032mm high with standard weather bar	No	1	
10	Door size 914 x 2032mm high including weatherboard	No	1	
	<b>Carried Forward to summary of section No. 5</b>			R
	Section No. 5			
	BUILDING WORKS - FD3			
	Bill No. 6			
	CARPENTRY AND JOINERY			
	NEMORANGO CONSULTING ENGINEERS			

Item No.			Quantity	Rate	Amount
	<b><u>BILL NO.7</u></b>				
	<b><u>IRONMONGERY</u></b>				
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	<b><u>CATCHES, CABIN, HOOKS, ETC</u></b>				
	<u>"ASSA ABLOY" or similar approved</u>				
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2		
	<b><u>LOCKS</u></b>				
	<u>"ASSA ABLOY" or similar approved</u>				
2	ASSA ABLOY 50mm Brass padlock (Code: UN335000000000) with 28mm hardened steel shackle.	No	2		
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).	No	2		
4	UNION stainless steel indicator bolts (code: SS8023SS) with Stainless Steel finish.	No	3		
5	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Pairs	1		
	<b><u>SUNDRIES</u></b>				
	<u>"ASSA ABLOY" or similar approved</u>				
6	UNION aluminium door stop (code: AL8730AS) with Anodised Silver finish.	No	5		
	<b>Carried Forward</b>			R	
	Section No. 5				
	BUILDING WORKS - FD3				
	Bill No. 7				

IRONMONGERY				
NEMORANGO CONSULTING ENGINEERS				
<b>Brought Forward</b>				R
<u>Stainless steel kick/push plates</u>				
7	150 x 300mm High x 1,2mm thick stainless steel push plate	No	1	
8	900 x 300mm High x 1,2mm thick stainless steel kick plate	No	1	
<u>"Vaal Paragon" or similar approved</u>				
9	32mm Type 9 back grab rail 800mm long plugged	No	1	
10	32mm Type 8 side grab rail 900mm girth plugged	No	1	
<b><u>BATHROOM FITTINGS</u></b>				
<u>"Kimberley-Clark or similar approved"</u>				
11	SQ2 code 405607B white none lockable toilet roll holder plugged to wall	No	4	
<b><u>LETTERS, NAMEPLATES, ETC</u></b>				
<u>"ASSA ABLOY" or similar approved</u>				
12	ASSA ABLOY Aluminium engraved plate E10, size 152 x 152mm (Code: AL5066-06ASE10). (Male)	No	1	
13	ASSA ABLOY Aluminium engraved plate E14, size 152 x 152mm (Code: AL5066-06ASE14). (Paraplegic)	No	1	
<u>Stainless steel:</u>				
14	Stainless steel mirror size 350 x 400mm plugged to wall with chrome plated screws.	No	4	
15	Brushed stainless steel body, rust resistant, she bin approximately 330 x 280 x 180mm etc	No	2	
<b>Carried Forward to summary of section No. 5</b>				R
Section No. 5				
BUILDING WORKS - FD3				
Bill No. 7				
IRONMONGERY				
NEMORANGO CONSULTING ENGINEERS				

Item No.		Quantity	Rate	Amount
	<b><u>BILL NO.8</u></b>			
	<b><u>METALWORK</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>WELDED SCREENS, GATES, ETC</u></b>			
	<u>Gates to external doors</u>			
1	Single gate and frame size 925 x 2082mm high	No	2	
	<b><u>PRESSED STEEL DOOR FRAMES</u></b>			
	<u>1,2mm Double rebated frames suitable for half brick walls</u>			
2	Frame for door size 813 x 2032mm high	No	3	
	<u>1,2mm Double rebated frames suitable for one brick walls</u>			
3	Frame for door size 813 x 2032mm high	No	1	
4	Frame for door size 914 x 2032mm high	No	1	
	<b><u>STEEL WINDOWS, DOORS, ETC</u></b>			
	<u>"Nty" steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</u>			
5	Window type NE1, size 533 x 654mm high	No	4	
6	Window type NE7, size 1022 x 654mm high	No	2	
	<b>Carried Forward to summary of section No. 5</b>		R	
	Section No. 5			
	BUILDING WORKS - FD3			
	Bill No. 8			
	METALWORK			
	NEMORANGO CONSULTING ENGINEERS			



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Item No.		Quantity	Rate	Amount
	<b><u>BILL NO. 10</u></b>			
	<b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>RAINWATER DISPOSAL</u></b>			
	<b><u>0.6mm Galvanised sheet iron with "Chromadek" finish on one side</u></b>			
1	100 x 100mm Eaves gutters with beaded front edge	m	6	
2	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2	
3	Extra over eaves gutter for stopped end	No	2	
4	75 x 100mm Diameter rainwater pipes	m	4	
5	Extra over 75 X 100mm rainwater pipe for shoe	No	2	
6	Extra over 75 x 100mm rainwater pipe for eaves or plinth offset 600mm projection	No	2	
	<b><u>ENVIRO-LOO TOILET SYSTEM</u></b>			
7	Supply and install " Enviro-loo"industrial 1040 model complete, installed strickly in accordance with manufactures instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping, etc	No	4	
	<b>Carried Forward</b>		R	
	Section No. 5			
	BUILDING WORKS - FD3			
	Bill No. 10			
	PLUMBING AND DRAINAGE (PROVISIONAL)			
	NEMORANGO CONSULTING ENGINEERS			

<b>Brought Forward</b>			R
<b><u>SOIL DRAINAGE</u></b>			
<u>Normal duty (Class 51) Upvc sewer and drain pipes</u>			
8	50mm Pipes	m	5
9	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30
<u>Extra over normal duty (Class 51) Upvc sewer and drain pipes for fittings</u>			
10	50mm Bend	No	8
11	50mm Junction	No	7
12	50mm Access junction	No	1
13	110mm Bend	No	4
14	110mm Junction	No	3
<u>uPVC gulleys</u>			
15	110mm dished gulley trap assembly with head, grid and concrete surround not exceeding 500mm deep	No	4
<b>TAPS, VALVES, ETC</b>			
16	19mm Chromium plated push button taps to wash troughs	No	4
<b>Carried Forward</b>			R
Section No. 5			
BUILDING WORKS - FD3			
Bill No. 10			
PLUMBING AND DRAINAGE (PROVISIONAL)			
NEMORANGO CONSULTING ENGINEERS			

		<b>Brought Forward</b>		R
17	15mm gate valve plugged	No	2	
	<b>SANITARY FITTINGS (PROVISIONAL)</b>			
18	Supply and install pre-cast concrete double wash through, complete with all necessary fittings and pipework including soakway size 1000 x 1000 x 1000mm coverd with "bidim"	No	2	
	<b>TRAPS, ETC</b>			
	<b>uPVC</b>			
19	32 x 50mm deep seal "P" or "S" trap	No	4	
	<b>SANITARY PLUMBING</b>			
	<b>uPVC pipes</b>			
20	50mm Pipes	m	19	
	<b>Extra over uPVC pipes for fittings</b>			
21	50mm Bend	No	8	
22	50mm Junction	No	7	
23	50mm Access Junction	No	1	
24	50mm Access bend	No	2	
25	50mm Access reducing junction	No	3	
26	50mm "GI Two-way" vent valve	No	1	
27	110mm Air vent valve	No	4	
28	250mm "Whirly Bird) Air Vent	No	4	
		<b>Carried Forward</b>		R
	Section No. 5			
	BUILDING WORKS - FD3			
	Bill No. 10			
	PLUMBING AND DRAINAGE (PROVISIONAL)			
	NEMORANGO CONSULTING ENGINEERS			

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Item No.		Quantity	Rate	Amount
	<b><u>BILL NO. 13</u></b>			
	<b><u>PAINTWORK</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>ON FIBRE-CEMENT</u></b>			
	<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</u>			
1	On fascias and barge boards	m2	8	
	<b><u>ON WOOD</u></b>			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
2	On doors (Internal)	m2	11	
3	On doors (External)	m2	7	
	<b><u>ON METAL</u></b>			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
4	On door frames	m2	6	
5	On gates (Measured over the full flat area of both sides)	m2	4	
	<u>Spot prining defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel</u>			
6	On windows with burglar bars	m2	7	
	<b>Carried Forward to summary of section No. 2</b>			
	Section No. 5			
	BUILDING WORKS - FD3			
	Bill No. 12			
	PAINTWORK			
	NEMORANGO CONSULTING ENGINEERS			
			R	

**BILL NO. 14****CONCRETE APRONS**

For preambles see "Specifications of materials and methods to be used - PW 371"

**APRON AROUND BUILDINGS**Compaction of surfaces

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

m2 21

Weedkiller mixed in accordance to suppliers specifications

- 2 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.

m2 21

Soil insecticide

- 3 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.

m2 21

20Mpa/20mm Concrete

- 4 Aprons cast in panels

m3 3

- 5 Extra over for concrete thickening in apron sizes approximately 100mm deep, 400mm at top and tapering one side to 200mm at bottom including all excavations, cart away etc,

m 21

Finishing top surfaces of concrete smooth with a wood float

- 6 Aprons s to falls

m2 21

**Carried Forward**

R

Section No. 5

BUILDING WORKS - FD3

Bill No. 13

APRON

NEMORANGO CONSULTING ENGINEERS



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SECTION 5 SUMMARY - FD3			
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5	ROOF COVERINGS	123	
6	CARPENTRY AND JOINERY	125	
7	IRONMONGERY	127	
8	METALWORK	128	
9	PLASTERING	129	
10	PLUMBING AND DRAINAGE	133	
11	GLAZING	134	
12	PAINTWORK	135	
13	CONCRETE APRONS.	137	
Carried forward to final summary			R
Section No. 5			
FD3			

Item No.		Quantity	Rate	Amount
	<b><u>SECTION 2</u></b>			
	<b><u>BILL NO.1</u></b>			
	<b><u>EARTHWORKS</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>SITE CLEARANCE</u></b>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	78	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	78	
	<b><u>EXCAVATION, FILLING, ETC</u></b>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	14	
4	Pit	m3	28	
5	For aprons thickening	m3	10	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	1	
7	Hard rock	m3	1	
	<u>Extra over all excavations for carting away:</u>			
8	Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the Contractor	m3	14	
	<b>Carried Forward</b>			R
	Section No. 6			
	BUILDING WORKS - FD6			
	Bill No. 1			
	FOUNDATION			
	NEMORANGO CONSULTING ENGINEERS			

Brought Forward			R
<u>Risk of collapse of excavations</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	41
<u>Keeping excavations free of water.</u>			
10	Keeping excavations free of water other than subterranean water	Item	1
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u>			
11	Under floors, steps, pavings, etc.	m3	5
12	Backfilling to trenches, holes, etc.	m3	7
<u>Compaction of surfaces</u>			
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	54
14	Compaction of ground surface to pits etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density (Pit)	m2	29
15	Compaction of ground surface to aprons etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density (Ramp)	m2	1
<u>Prescribed density tests on filling</u>			
16	Modified AASHTO Density tests	No	9
Carried Forward			R
Section No. 6			
BUILDING WORKS - FD6			
Bill No. 1			
FOUNDATION			
NEMORANGO CONSULTING ENGINEERS			

		<b>Brought Forward</b>		R
<b><u>SOIL POISONING</u></b>				
<u>Weedkiller mixed in accordance to suppliers specifications</u>				
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	27	
18	To bottoms and sides of trenches, etc.	m2	59	
<u>Soil insecticide</u>				
19	To bottoms and sides of trenches, etc.	m2	59	
20	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	27	
<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>				
<b><u>UNREINFORCED CONCRETE, CAST AGAINST EXCAVATED SURFACES</u></b>				
15Mpa/19mm Concrete				
21	Surface blinding under footings and bases	m3	1	
<u>25Mpa/19mm Concrete</u>				
22	Strip footings	m3	4	
23	Slabs	m3	4	
<b><u>REINFORCEMENT</u></b>				
<u>Fabric Reinforcement</u>				
24	Steeldale mesh standard square fabric mesh, nominal mass 8,8kg/m2 with nominal 12mm wires and 200 x 200mm pitch (code 888), complying with SANS 1025/2006 Requirements cut to 500mm width and laid loose in concrete strip footings	m2	27	
<b>Carried Forward</b>				R
Section No. 6				
BUILDING WORKS - FD6				
FOUNDATION				
NEMORANGO CONSULTING ENGINEERS				

NEMORANGO CONSULTING ENGINEERS

Item No.		Quantity	Rate	Amount
	<b><u>BILL NO.2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<b><u>UNREINFORCED CONCRETE, CAST AGAINST EXCAVATED SURFACES</u></b>			
	20Mpa/19mm Concrete			
1	Ramps	m3	0,1	
2	Ditto, but surface bed in pit	m3	5	
	<b><u>REINFORCED CONCRETE, ETC</u></b>			
	<u>30Mpa/19mm Concrete</u>			
3	Surface beds cast in panels on waterproofing	m3	2	
	<b><u>CONCRETE SUNDRIES</u></b>			
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
4	Ramps to falls	m2	1	
5	Surface beds, slabs etc,	m2	27	
6	surface bed in pit	m2	33	
	<b><u>TEST CUBES</u></b>			
7	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testinglaboratory for testing and paying all charges in connection therewith.	No	9	
	<b>Carried Forward</b>			
	Section No. 6			
	BUILDING WORKS - FD6			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	NEMORANGO CONSULTING ENGINEERS			

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Brought Forward			R
<b><u>SAMPLES</u></b>			
Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6			
<b><u>FOUNDATIONS</u></b>			
<b><u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u></b>			
1	Half brick walls in beamfilling	m2	4
2	One brick walls	m2	73
3	One brick walls in pit	m2	48
4	Half brick walls corbelling in pit	m2	11
<b><u>BRICKWORK SUNDRIES</u></b>			
<u>Brick reinforcement</u>			
5	75mm Wide reinforcement built in horizontally	m	195
6	150mm Wide reinforcement built in horizontally	m	314
<u>Galvanised wire ties etc</u>			
7	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	19
<u>Turning pieces</u>			
8	115mm Wide turning piece to lintel etc	m	16
9	230mm Wide turning piece to lintel etc	m	2
Carried Forward			R
Section No. 6			
BUILDING WORKS - FD6			
Bill No. 3			
MASONRY			
NEMORANGO CONSULTING ENGINEERS			

<b>Brought Forward</b>			R
<b><u>FACE BRICKWORK</u></b>			
<u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
10	Extra over brickwork for face brickwork	m2	154
11	One brickwork for face brick walls pointed both sides	m2	27
12	Extra over brickwork for brick on edge header course lintel	m	7
13	Fair raking and cutting	m	5
<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces</u>			
9	110 wide sill set level and slightly projecting	m	6
10	220mm wide sill set level and slightly projecting outside	m	6
<u>Prestressed fabricated lintels</u>			
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	18
<u>Ventillation bricks</u>			
17	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	9
<b>Carried Forward to summary of section No. 6</b>			R
Section No. 6			
BUILDING WORKS - FD6			
Bill No. 3			
MASONRY			
NEMORANGO CONSULTING ENGINEERS			

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NEMORANGO CONSULTING ENGINEERS

Item No.			Quantity	Rate	Amount
	<b><u>BILL NO.7</u></b>				
	<b><u>IRONMONGERY</u></b>				
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	<b><u>CATCHES, CABIN, HOOKS, ETC</u></b>				
	<u>"ASSA ABLOY" or similar approved</u>				
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2		
	<b><u>LOCKS</u></b>				
	<u>"ASSA ABLOY" or similar approved</u>				
2	ASSA ABLOY 50mm Brass padlock (Code: UN335000000000) with 28mm hardened steel shackle.	No	2		
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).	No	2		
4	UNION stainless steel indicator bolts (code: SS8023SS) with Stainless Steel finish.	No	6		
5	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Pairs	1		
	<b><u>SUNDRIES</u></b>				
	<u>"ASSA ABLOY" or similar approved</u>				
6	UNION aluminium door stop (code: AL8730AS) with Anodised Silver finish.	No	8		
	<b>Carried Forward</b>			R	
	Section No. 6				
	BUILDING WORKS - FD6				
	Bill No. 7				
	IRONMONGERY				
	NEMORANGO CONSULTING ENGINEERS				



Brought Forward			R
<u>Stainless steel kick/push plates</u>			
7	150 x 300mm High x 1,2mm thick stainless steel push plate	No	1
8	900 x 300mm High x 1,2mm thick stainless steel kick plate	No	1
<u>"Vaal Paragon" or similar approved</u>			
9	32mm Type 9 back grab rail 800mm long plugged	No	1
10	32mm Type 8 side grab rail 900mm girth plugged	No	1
<b><u>BATHROOM FITTINGS</u></b>			
<u>"Kimberley-Clark or similar approved"</u>			
11	SQ2 code 405607B white none lockable toilet roll holder plugged to wall	No	7
<b><u>LETTERS, NAMEPLATES, ETC</u></b>			
<u>"ASSA ABLOY" or similar approved</u>			
12	ASSA ABLOY Aluminium engraved plate E10, size 152 x 152mm (Code: AL5066-06ASE10). (Male)	No	1
13	ASSA ABLOY Aluminium engraved plate E14, size 152 x 152mm (Code: AL5066-06ASE14). (Paraplegic)	No	1
<u>Stainless steel:</u>			
14	Stainless steel mirror size 350 x 400mm plugged to wall with chrome plated screws.	No	4
15	Brushed stainless steel body, rust resistant, she bin approximately 330 x 280 x 180mm etc	No	3
<b>Carried Forward to summary of section No. 7</b>			R
Section No. 6			
BUILDING WORKS - FD6			
Bill No. 7			
IRONMONGERY			
NEMORANGO CONSULTING ENGINEERS			

Item No.		Quantity	Rate	Amount
	<b><u>BILL NO.8</u></b>			
	<b><u>METALWORK</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>WELDED SCREENS, GATES, ETC</u></b>			
	<u>Gates to external doors</u>			
1	Single gate and frame size 925 x 2082mm high	No	2	
	<b><u>PRESSED STEEL DOOR FRAMES</u></b>			
	<u>1,2mm Double rebated frames suitable for half brick walls</u>			
2	Frame for door size 813 x 2032mm high	No	6	
	<u>1,2mm Double rebated frames suitable for one brick walls</u>			
3	Frame for door size 813 x 2032mm high	No	1	
4	Frame for door size 914 x 2032mm high	No	1	
	<b><u>STEEL WINDOWS, DOORS, ETC</u></b>			
	<u>"Nty" steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</u>			
5	Window type NE1, size 533 x 654mm high	No	4	
6	Window type NE7, size 1022 x 654mm high	No	3	
	<b>Carried Forward to summary of section No. 6</b>		R	
	Section No. 6			
	BUILDING WORKS - FD6			
	Bill No. 8			
	METALWORK			
	NEMORANGO CONSULTING ENGINEERS			

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Item No.		Quantity	Rate	Amount
	<b><u>BILL NO. 10</u></b>			
	<b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<b><u>RAINWATER DISPOSAL</u></b>			
	<b><u>0.6mm Galvanised sheet iron with "Chromadek" finish on one side</u></b>			
1	100 x 100mm Eaves gutters with beaded front edge	m	9	
2	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	4	
3	Extra over eaves gutter for stopped end	No	2	
4	75 x 100mm Diameter rainwater pipes	m	8	
5	Extra over 75 X 100mm rainwater pipe for shoe	No	4	
6	Extra over 75 x 100mm rainwater pipe for eaves or plinth offset 600mm projection	No	4	
	<b><u>ENVIRO-LOO TOILET SYSTEM</u></b>			
7	Supply and install " Enviro-loo"industrial 1040 model complete, installed strickly in accordance with manufactures instructions, unit comprising of top unit and two x louvred inlets, drying plate, two x air inlets standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping, etc	No	7	
	<b>Carried Forward</b>		R	
	Section No. 6			
	BUILDING WORKS - FD6			
	Bill No. 10			
	PLUMBING AND DRAINAGE (PROVISIONAL)			
	NEMORANGO CONSULTING ENGINEERS			

<b>Brought Forward</b>			R
<b><u>SOIL DRAINAGE</u></b>			
<u>Normal duty (Class 51) Upvc sewer and drain pipes</u>			
8	50mm Pipes	m	8
9	110mm Pipes laid in and including trenches not exceeding 1m deep	m	56
<u>Extra over normal duty (Class 51) Upvc sewer and drain pipes for fittings</u>			
10	50mm Bend	No	11
11	50mm Junction	No	8
12	50mm Access junction	No	1
13	110mm Bend	No	9
14	110mm Junction	No	9
<u>uPVC gulleys</u>			
15	110mm dished gulley trap assembly with head, grid and concrete surround not exceeding 500mm deep	No	7
<b>TAPS, VALVES, ETC</b>			
16	19mm Chromium plated push button taps to wash troughs	No	6
<b>Carried Forward</b>			R
Section No. 6			
BUILDING WORKS - FD6			
Bill No. 10			
PLUMBING AND DRAINAGE (PROVISIONAL)			
NEMORANGO CONSULTING ENGINEERS			

		<b>Brought Forward</b>		R
17	15mm gate valve plugged	No	3	
	<b>SANITARY FITTINGS (PROVISIONAL)</b>			
18	Supply and install pre-cast concrete double wash through, complete with all necessary fittings and pipework including soakway size 1000 x 1000 x 1000mm coverd with "bidim"	No	3	
	<b>TRAPS, ETC</b>			
	<b>uPVC</b>			
19	32 x 50mm deep seal "P" or "S" trap	No	7	
	<b>SANITARY PLUMBING</b>			
	<b>uPVC pipes</b>			
20	50mm Pipes	m	25	
	<b>Extra over uPVC pipes for fittings</b>			
21	50mm Bend	No	11	
22	50mm Junction	No	8	
23	50mm Access Junction	No	1	
24	50mm Access bend	No	2	
25	50mm Access reducing junction	No	4	
26	50mm "GI Two-way" vent valve	No	2	
27	110mm Air vent valve	No	7	
28	250mm "Whirly Bird) Air Vent	No	7	
		<b>Carried Forward</b>		R
	Section No. 6			
	BUILDING WORKS - FD6			
	Bill No. 10			
	PLUMBING AND DRAINAGE (PROVISIONAL)			
	NEMORANGO CONSULTING ENGINEERS			

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**BILL NO. 14****CONCRETE APRONS**

For preambles see "Specifications of materials and methods to be used - PW 371"

**APRON AROUND BUILDINGS**Compaction of surfaces

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

m2 28

Weedkiller mixed in accordance to suppliers specifications

- 2 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.

m2 28

Soil insecticide

- 3 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.

m2 28

20Mpa/20mm Concrete

- 4 Aprons cast in panels

m3 4

- 5 Extra over for concrete thickening in apron sizes approximately 100mm deep, 400mm at top and tapering one side to 200mm at bottom including all excavations, cart away etc,

m 28

Finishing top surfaces of concrete smooth with a wood float

- 6 Aprons s to falls

m2 28

**Carried Forward**

R

Section No. 6

BUILDING WORKS - FD6

Bill No. 13

APRON

NEMORANGO CONSULTING ENGINEERS

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SECTION 6 SUMMARY - FD6			
Bill No.		Page No	Amount
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2	CONCRETE, FORMWORK AND REINFORCEMENT	144	
3	MASONRY	147	
4	WATERPROOFING	148	
5	ROOF COVERINGS	149	
6	CARPENTRY AND JOINERY	151	
7	IRONMONGERY	153	
8	METALWORK	154	
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11	GLAZING	160	
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Carried forward to final summary			R
Section No. 6			
FD6			

Item No.		Quantity	Rate	Amount
	<b><u>SECTION NO. 7</u></b>			
	<b><u>BILL NO.1</u></b>			
	<b><u>EXTERNAL RETICULATION</u></b>			
	<b><u>SOIL DRAINAGE</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades as well as Engineerin Specifications attached to these documents.			
	<b>EXTERNAL RETICULATION</b>			
	<b>SUPPLEMENTARY PREAMBLES</b>			
1	<u>uPVC pipes</u>			
	110mm Pipes laid in and including trenches not exceeding 1m deep	m	253	
	<u>Extra over "Corflo" double walled radial ribbed uPVC pipes with integral moulded cuff joints and rubber seal rings for uPVC fittings</u>			
2	110mm Bend	No	21	
3	110mm Junction	No	11	
	<u>uPVC gulleys:</u>			
4	110mm Gulley not exceeding 500mm deep	No	6	
	<b><u>SUNDRIES</u></b>			
5	110mm "ABC" cleaning eye end of pipe	No	6	
	<b><u>WATER SUPPLIES</u></b>			
	<u>The following in trenches for pipes (pipes e/m)</u>			
6	Excavation not exceeding 2m deep	m3	177	
7	Extra over trench and hole excavations in earth for excavation in soft rock	m3	9	
8	Extra over trench and hole excavations in earth for excavation in hard rock	m3	18	
	<b>Carried Forward</b>			
	Section No. 7			
	EXTERNAL WORKS			
	Bill No. 1			
	RETICULATION			

Brought Forward			R
9	Risk of collapse to sides of trench and hole excavations not exceeding 1,5m deep	m2	636
10	Backfilling to trenches, holes, with materials obtained from excavations compacted in 150mm layers to 90% Mod AASHTO density	m3	177
	<u>Class 12 uPVC pipes with solvent welded joints</u>		
11	22mm Pipes laid in and including trenches not exceeding 1m deep incl. all excavations, backfilling, etc.	m	61
	<u>Extra over class 12 uPVC pipes for fittings with solvent welded joints</u>		
12	22mm Bend	No	12
13	22mm Junction	No	8
	<u>Class 16 uPVC pressure pipes with solvent welded joints</u>		
14	32mm Pipes laid in and including trenches not exceeding 1m deep	m	93
	<u>Extra over class 16 uPVC pressure pipes for fittings with solvent welded joints</u>		
15	32mm Bend	No	7
16	32mm Tee	No	5
	<b><u>TAPS, VALVES, ETC</u></b>		
	<u>Cobra Watertech</u>		
17	Cobra Watertech 22mm C x C cast brass heavy duty fullway gate valve with non-blowout, non rising spindle, non-asbestos gland packing, guided wedge and red pressed steel hand wheel (Code: 1003-125-22mm).	No	6
18	Cobra Watertech 15mm BSPT stub taper threaded FI x FI cast brass heavy duty fullway gate valve with non-blowout, non rising spindle, non-asbestos gland packing, guided wedge and red pressed steel hand wheel (Code: 1001-125-15mm).	No	6
	<b><u>TESTING</u></b>		
	<b>Carried Forward</b>		R
	Section No. 7		
	EXTERNAL WORKS		
	Bill No. 1		
	RETICULATION		

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Item No.		Quantity	Rate	Amount
	<b><u>SECTION NO.7</u></b>			
	<b><u>BILL NO. 2</u></b>			
	<b><u>PAVED WALKWAYS, ETC.</u></b>			
	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.			
	SUPPLEMENTARY PREAMBLES			
	<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			
	EXCAVATION, FILLING, ETC			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	620	
	<u>Open face excavation in earth over sloping site</u>			
2	Stripping average 150mm thick layer of top soil and stockpiling on site	m3	34	
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)	m3	34	
4	Excavate in pickable earth to reduce ground level below paving and set aside for later use	m3	51	
5	Rip and scarify ground level to a depth of 150mm and consolidate to 100% mod. AASHTO density (minimum CBR 3)	m2	338	
	<b>Carried Forward</b>			
	Section No. 7			
	EXTERNAL WORKS			
	Bill No. 2			
	PAVED WALKWAYS			
			R	



Brought Forward			R
<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			
6	150mm Selected filling previously set aside compacted to 93% mod. AASHTO density	m3	51
7	150mm Imported G5 material compacted to 93% mod. AASHTO density	m3	34
<u>Prescribed density tests on filling</u>			
8	"Mod. AASHTO Density" test	No	15
<b><u>PAVING</u></b>			
<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	338
10	Weed-killing treatment of surface under paving	m2	338
11	Precast concrete figure 7 kerb (SABS 927), levelled and jointed in 1:5 cement mortar complete with 15Mpa/19mm in situ concrete support blocks size 225 x 150 x 225mm high, at joints at 1,0m centres, including leaving 6mm expansion joints at 10m intervals between kerbs (PC Amount R150-00/m VAT excl.)	m	564
12	Straight cutting units to fit edge restraints	m	564
Carried Forward			R
Section No. 7			
EXTERNAL WORKS			
Bill No. 2			
PAVED WALKWAYS			

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Item No.			Quantity	Rate	Amount
	<b><u>SECTION NO.7</u></b>				
	<b><u>BILL NO.3</u></b>				
	<b><u>FENCING - PERIMETER</u></b>				
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
	<b><u>FENCE REFURBISHMENT</u></b>				
	<u>Removal of exixtion fence</u>				
1	Removal of damaged existing fence panels, concrete footer, etc	m	30		
	<b><u>EXCAVATION, FILLING, ETC</u></b>				
	<u>Excavation in earth not exceeding 2m deep</u>				
2	Holes	m3	3		
	<u>Extra over trench and hole excavations in earth for excavation in</u>				
3	Soft rock	m3	0,3		
4	Hard rock	m3	0,1		
	<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	m3	3		
	<u>Risk of collapse of excavations</u>				
6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	17		
	<u>Keeping excavations free of water</u>				
7	Keeping excavations free of all water other than subterranean water	Item	1		
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>				
	<b>Carried Forward</b>				
	Section No. 7				
	EXTERNAL WORKS				
	Bill No. 3				
	FENCING - PERIMETER				

<b>Brought Forward</b>			R
<b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>			
<u>20MPa/19mm concrete</u>			
8	Base	m3	3
<b><u>FENCING</u></b>			
<u>Steel palisade fence</u>			
9	1800mm High Steel Palisade fence formed of 30 x 30 x 2mm mild steel angle iron palings spaced at 133mm centres with devil fork at the top and dove tail at the bottom, vertically welded on two 40 x 40 x 2mm horizontal rails, including steel stiffeners, welding, cutting, all necessary fixings lugs, bolts, etc.	m	30
10	Steel posts 76 x 76 x 2mm, 2400mm long, with 150mm stiffener welded in and fixed into ground 600mm deep and cast into the concrete base	No	12
<b><u>PAINTING</u></b>			
Plascon Super Universal Enamel to exterior 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 breakfree. 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 Super Universal Enamel (NY 1/G) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.			
11	On rails, bars, pipes	m2	113
<b><u>PAINTING</u></b>			
<b>Carried Forward</b>			R
Section No. 7 EXTERNAL WORKS Bill No. 3 FENCING - PERIMETER			

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SECTION 2 SUMMARY - External works		
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	Sub Total 1 - BUILDING COSTS		R
	CONTINGENCY SUM		
	Allow 10% Contingencies for building works, 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 (15%)		R
	Sub Total (VAT INCL.) CARRIED TO TENDER FORM		R
	Carried to Form of Tender		R