

## **SECTION 1**

### **PRELIMINARIES**

#### **MEANING OF TERMS "TENDER / TENDERER"**

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

### **PRELIMINARIES**

The JBCC Preliminaries Code 2103, May 2005 edition for use with the JBCC Principal Building Agreement Edition 4.1 Code 2101, March 2005 is taken to be incorporated herein. The tenderer is deemed to have referred to these documents for the full intent and meaning of each clause. These clauses are referred to by number and heading only. Where standard clauses or options are not applicable to the contract such modifications or corrections as are necessary are given under each relevant clause. Where an item is not relevant to this specific contract such item is marked "N/A" signifying "Not Applicable"

The ASAQs Preliminaries (November 2007 edition) published by the Association of South African Quantity Surveyors for use with the said JBCC Principal Building Agreement shall be deemed to be incorporated in these bills of quantities

Contractor's are referred to the abovementioned documents for the full intent and meaning of each clause thereof

These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this 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

Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"

### **PREAMBLES FOR TRADES**

The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained

Supplementary preambles are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles shall take precedence over the provisions of the said Model Preambles

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

### **PRICING OF PRELIMINARIES**

Should Option A, as set out in clause B10.3.1 hereinafter be used for the adjustment of preliminaries then each item priced is to be allocated to one or more of the three categories Fixed, Value Related or Time Related and the respective amounts entered in the spaces provided under each item

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

A1.0

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

Clause 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 Guarantee**" is amended by replacing it with the following:

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

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

"**CONSTRUCTION PERIOD**" means the period commencing on the **commencement date** and ending on the date of **practical completion**

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

"**CORRUPT PRACTICE**" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

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

"**FRAUDULENT PRACTICE**" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any tenderer and includes collusive practice among tenderers (prior to or after the tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the tenderer of the benefits of free and open competition

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

"**INTEREST**" means the interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be the rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No. 1 of 1999)

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

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

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

"**SECURITY**" means the form of security provided by the **employer** or **contractor**, as stated in the **schedule**, from which the **contractor** or **employer** may recover expense or loss

Clause 1.6 is amended by replacing the words "prepaid registered post, telefax or e-mail" with "prepaid registered post or telefax"

Clause 1.6.4 is amended by replacing it with the following:

No clause

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

A2.0

**OBJECTIVE AND PREPARATION**  
**OFFER, ACCEPTANCE AND PERFORMANCE**

Clause 2.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

A3.0	<p><b>DOCUMENTS</b></p> <p>Clause 3.0</p> <p>Clause 3.2.1 is amended by replacing “14.1” with “14.0”</p> <p>Clause 3.7 is amended by the addition of the following:</p> <p>The <b>contractor</b> shall supply and keep a copy of the <b>JBCC</b> Series 2000 Principal Building Agreement and Preliminaries applicable to this contract on the <b>site</b>, to which the <b>employer principal agent</b> and <b>agents</b> shall have access at all times</p> <p>Clause 3.10 is amended by replacing the second reference to “<b>principal agent</b>” with the word “<b>employer</b>”</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
A4.0	<p><b>DESIGN RESPONSIBILITY</b></p> <p>Clause 4.0</p> <p>Clause 4.3 is amended by replacing it with the following:</p> <p>No clause</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
A5.0	<p><b>EMPLOYER’S AGENTS</b></p> <p>Clause 5.0</p> <p>Clause 5.1.2 is amended to include clauses 32.6.3, 34.3, 34.4 and 38.5.8</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
A6.0	<p><b>CONTRACTOR'S SITE REPRESENTATIVE</b></p> <p>Clause 6.0</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
A7.0	<p><b>COMPLIANCE WITH LAWS AND REGULATIONS</b></p> <p>Clause 7.0</p> <p>Without limiting the generality of the provisions of Clause 7.0, the contractor’s attention is drawn to the provisions of the Construction Regulations, 2014 issued in terms of the Occupational Health and Safety Act, 1993 and Part C6.0 (Annexure C) of this tender document. It is specifically stated that the employer shall prepare a documented health and safety specification for the works and that the employer shall ensure that the contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor shall price opposite this item for compliance with the act and the regulations and the reasonable provisions of the aforementioned health and safety specifications</p> <p>Note: A separate clause has been included in Section C: Specific Preliminaries of the <b>bills of quantities / lump sum document</b> for the <b>contractor</b> to have the opportunity to price for all the requirements of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
A8.0	<p><b>WORKS RISK</b></p> <p>Clause 8.0</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
A9.0	<p><b>INDEMNITIES</b></p> <p>Clause 9.0</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		

Clause 10.0

Clause 10.0 is amended by the addition of the following clauses:

#### **10.5 Damage to the Works**

(a) Without in any way limiting the **contractor's** obligations in terms of the contract, the **contractor** shall bear the full risk of damage to and/or destruction of the **works** by whatever cause during construction of the **works** and hereby indemnifies and holds harmless the **employer** against any such damage. The **contractor** shall take such precautions and security measures and other steps for the protection and security of the **works** as the **contractor** may deem necessary

(b) The **contractor** shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the **works** and to rebuild, restore, replace and/or repair the **works**

(c) The **employer** shall carry the risk of damage to or destruction of the **works** and materials 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 negligence 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 negligence of any person for whose actions the **employer** is legally liable

(c) The **contractor** shall, upon receiving a **contract instruction** from the **principal agent**, cause the same to be made good in a perfect and workmanlike manner at his own cost and in default thereof the **employer** shall be entitled to cause it to be made good and to recover the cost thereof from the **contractor** or to deduct the same from amounts due to the **contractor**

(d) The **contractor** shall be responsible for the protection and safety of such portions of the premises placed under his control by the **employer** for the purpose of executing the **works** until the issue of the **certificate of practical completion**

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

(f) The **contractor** shall at all times proceed immediately at his own cost to remove or dispose of any debris and to rebuild, restore, replace and/or repair such property and to execute the **works**

#### **10.7 High risk insurance**

In the event of the project being executed in a geological area classified as a "High Risk Area", that is an area which is subject to highly unstable subsurface conditions that might result in catastrophic ground movement evident by sinkhole or doline formation the following will apply:

##### **10.7.1 Damage to the works**

The **contractor** shall, from the **commencement date** of the **works** until the date of the **certificate of practical completion** bear the full risk of and hereby indemnifies and holds harmless the **employer** against any damage to and/or destruction of the **works** consequent upon a catastrophic ground movement as mentioned above. The **contractor** shall take such precautions and security measures and other steps for the protection of the **works** as he may deem necessary

When so instructed to do so by the **principal agent**, the **contractor** shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the **works** and to rebuild, restore, replace and/or repair the **works**, at the **contractor's** own costs

#### 10.7.2 Injury to persons or loss of or damage to property

The **contractor** shall be liable for and hereby indemnifies and holds harmless the **employer** against any liability, loss, claim or proceeding arising at any time during the period of the contract whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of, or caused by a catastrophic ground movement as mentioned above

The **contractor** shall be liable for and hereby indemnifies the **employer** against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable or immovable or personal property or property contiguous to the **site**, whether belonging to or under the control of the **employer** or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the period of the contract

**10.7.3** It is the responsibility of the **contractor** to ensure that he has adequate insurance to cover his risk and liability as mentioned in 10.7.1 and 10.7.2. Without limiting the **contractor's** obligations in terms of the contract, the **contractor** shall, within twenty-one (21) **calendar days** of the **commencement date** but before commencement of the **works**, submit to the **employer** proof of such insurance policy, if requested to do so

**10.7.4** The **employer** shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the **contractor's** default of his obligations as set out in 10.7.1; 10.7.2 and 10.7.3. Such losses or damages may be recovered from the **contractor** or by deducting the same from any amounts still due under this contract or under any other contract presently or hereafter existing between the **employer** and the **contractor** and for this purpose all these contracts shall be considered one indivisible whole

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

#### A11.0 LIABILITY INSURANCES

Clause 11.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

#### A12.0 EFFECTING INSURANCES

Clause 12.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

#### A13.0 No clause

#### A14.0 SECURITY

Clause 14.0

Clauses 14.1 - 14.8 are amended by replacing them with the following:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

	<p>14.6.3 The payment reduction of the value certified in a <b>payment certificate</b> shall be <i>mutatis mutandi</i> in terms of 31.8(A)</p> <p>14.6.4 Where the <b>employer</b> has a right of recovery against the <b>contractor</b> in terms of 33.0, the <b>employer</b> may issue a written notice in terms of 33.4 or may recover from the payment reduction or may do both</p> <p>14.7 Where <b>security</b> as a payment reduction of ten per cent (10%) of the value certified in the <b>payment certificate</b> (excluding VAT) has been selected:</p> <p>14.7.1 The payment reduction of the value certified in a <b>payment certificate</b> shall be <i>mutatis mutandi</i> in terms of 31.8(B)</p> <p>14.7.2 The <b>employer</b> shall be entitled to recover expense and loss from the payment reduction in terms of 33.0 provided that the <b>employer</b> complies with the provisions of 33.4 in which event the <b>employer's</b> entitlement shall take precedence over his obligations to refund the payment reduction or portions thereof to the <b>contractor</b></p> <p>14.8 Payments made by the guarantor to the <b>employer</b> in terms of the fixed or variable <b>construction guarantee</b> shall not prejudice the rights of the <b>employer</b> or <b>contractor</b> in terms of this <b>agreement</b></p> <p>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 <b>payment certificate</b> (excluding VAT), whereafter 14.7 shall be applicable</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>		
A15.0	<p><b>EXECUTION</b></p> <p><b>PREPARATION FOR AND EXECUTION OF THE WORKS</b></p> <p>Clause 15.0</p> <p>Clause 15.1.1 is amended by replacing it with:</p> <p>No clause</p> <p>Clause 15.1.2 is amended by replacing it with:</p> <p>The <b>security</b> selected in terms of 14.0</p> <p>Clause 15.1 is amended by the addition of the following clause:</p> <p>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></p> <p>Clause 15.2.1 is amended by replacing it with the following clause:</p> <p>Give the <b>contractor</b> possession of the <b>site</b> within ten (10) <b>working days</b> of the <b>contractor</b> complying with the terms of 15.1.4</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item	
A16.0	<p><b>SITE AND ACCESS</b></p> <p>Clause 16.0</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item	
A17.0	<p><b>CONTRACT INSTRUCTIONS</b></p> <p>Clause 17.0</p> <p>Clause 17.1.11 is amended by deleting the words "and the appointment of <b>nominated</b> and <b>selected subcontractors</b>"</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item	
A18.0	<p><b>SETTING OUT OF THE WORKS</b></p> <p>Clause 18.0</p> <p>The contractor shall notify the Principal Agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc exist in order that the necessary arrangements may be made for the rectification of any such encroachments.</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item	

A19.0	<b>ASSIGNMENT</b>  Clause 19.0 Fixed: _____ Value related: _____ Time related: _____	Item		
A20.0	<b>NOMINATED SUBCONTRACTORS</b>  Clause 20.0 Clause 20.1.3 is amended by replacing it with the following: No clause Note: See item B9.1 hereinafter for adjustment of attendance on <b>nominated subcontractors</b> executing work allowed for under provisional sums  Fixed: _____ Value related: _____ Time related: _____	Item		
A21.0	<b>SELECTED SUBCONTRACTORS</b>  Clause 21.0 Clause 21 is amended by replacing it with:  No clause Fixed: _____ Value related: _____ Time related: _____	Item		
A22.0	<b>EMPLOYER'S DIRECT CONTRACTORS</b>  Clause 22.0  Fixed: _____ Value related: _____ Time related: _____	Item		
A23.0	<b>CONTRACTOR'S DOMESTIC SUBCONTRACTORS</b> Clause 23.0 Fixed: _____ Value related: _____ Time related: _____	Item		
A24.0	<b>COMPLETION</b> <b>PRACTICAL COMPLETION</b> Clause 24.0 Fixed: _____ Value related: _____ Time related: _____	Item		
A25.0	<b>WORKS COMPLETION</b> Clause 25.0 Fixed: _____ Value related: _____ Time related: _____	Item		
A26.0	<b>FINAL COMPLETION</b> Clause 26.0 Clause 26.1.2 is amended by inserting “#” next to 26.1.2 Fixed: _____ Value related: _____ Time related: _____	Item		
A27.0	<b>LATENT DEFECTS LIABILITY PERIOD</b> Clause 27.0 Fixed: _____ Value related: _____ Time related: _____	Item		
A28.0	<b>SECTIONAL COMPLETION</b> Clause 28.0 Fixed: _____ Value related: _____ Time related: _____	Item		



A29.0 **REVISION OF DATE FOR PRACTICAL COMPLETION**

Clause 29.0

The removal and replacement of materials and/or workmanship which do not conform to specification or drawing shall not constitute grounds for the extension of the construction period nor the adjustment of contract value (Clause 29.3)

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

A30.0 **PENALTY FOR NON-COMPLETION**

Clause 30.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

**PAYMENT**

A31.0 **INTERIM PAYMENT TO THE CONTRACTOR**

Clause 31.0

Interim Payment to the Contractor (Clause 31) The inclusion of materials and goods stored off site in the amount authorized for payment in terms of Clause 31.4 shall be at the sole discretion of the Principal Agent and such inclusion shall only be considered upon the provision, by the contractor, of an approved guarantee issued by a registered commercial bank. Clause 31.6.5 is therefore not applicable.

Clause 31.5.2 is amended by replacing "14.7.1" with "14.0"

Clause 31.8 is amended by replacing it with the following two alternative clauses:

**Alternative A**

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

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

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

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

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

**Alternative B**

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

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

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

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

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

Clause 31.12 is amended by deleting the following:

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

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

#### A32.0 ADJUSTMENT TO THE CONTRACT VALUE

Clause 32.0

All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor.

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

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

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

#### A33.0 RECOVERY OF EXPENSE AND LOSS

Clause 33.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

#### A34.0 FINAL ACCOUNT AND FINAL PAYMENT

Clause 34.0

Clause 34.1 is amended by removing "#" next to 34.1

Clause 34.2 is amended by inserting "#" next to 34.2

Clause 34.8 is amended by deleting the words "where **security** as a fixed **construction guarantee** in terms of 14.4 has been selected or where payment reduction has been applied in terms of 14.7.1"

Clause 34.13 is amended by replacing "seven (7) **calendar days**" with "twenty-one (21) **calendar days**" and deleting the words "subject to the **employer** giving the **contractor** a tax invoice for the amount due"

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

#### A35.0 PAYMENT TO OTHER PARTIES

Clause 35.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

#### CANCELLATION

#### A36.0 CANCELLATION BY EMPLOYER – CONTRACTOR'S DEFAULT

Clause 36.0

Clause 36.1 is amended by the addition of the following clauses:

36.1.3 refuses or neglects to comply strictly with any of the conditions of contract

36.1.4 estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa

36.1.5 in the judgement of the **employer**, has engaged in **corrupt** or **fraudulent practices** in competing for or in executing the contract

Clause 36.3 is amended by removing the reference to "No clause" and replacing the words "**principal agent**" with "**employer**"

Clause 36.0 is amended by the addition of the following clause:

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

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

A37.0	<p><b>CANCELLATION BY EMPLOYER – LOSS AND DAMAGE</b></p> <p>Clause 37.0</p> <p>Clause 37.3.5 is amended by replacing “ninety (90)” with “one-hundred and twenty (120)”</p> <p>Clause 37.0 is amended by the addition of the following clause:</p> <p>37.5 Notwithstanding any clause to the contrary, on cancellation of this <b>agreement</b> either by the <b>employer</b> or the <b>contractor</b>; or for any reason whatsoever, the <b>contractor</b> shall on written instruction, discontinue with the <b>works</b> on a date stated and withdraw himself from the <b>site</b>. The <b>contractor</b> shall not be entitled to refuse to withdraw from the <b>works</b> on the grounds of any lien or right of retention or on the grounds of any other right whatsoever</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p style="text-align: right;"><b>Item</b></p>
A38.0	<p><b>CANCELLATION BY CONTRACTOR – EMPLOYER’S DEFAULT</b></p> <p>Clause 38.0</p> <p>Clause 38.5.4 is amended by replacing “ninety (90)” with “one-hundred and twenty (120)”</p> <p>Clause 38.0 is amended by the addition of the following clause:</p> <p>38.7 Notwithstanding any clause to the contrary, on cancellation of this <b>agreement</b> either by the <b>employer</b> or the <b>contractor</b>; or for any reason whatsoever, the <b>contractor</b> shall on written instruction, discontinue with the <b>works</b> on a date stated and withdraw himself from the <b>site</b>. The <b>contractor</b> shall not be entitled to refuse to withdraw from the <b>works</b> on the grounds of any lien or right of retention or on the grounds of any other right whatsoever</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p style="text-align: right;"><b>Item</b></p>
A39.0	<p><b>CANCELLATION – CESSATION OF THE WORKS</b></p> <p>Clause 39.0</p> <p>Clause 39.3.5 is amended by the addition of the following at the end of the sentence:</p> <p>“within one hundred and twenty (120) <b>working days</b> of completion of such a report”</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p style="text-align: right;"><b>Item</b></p>
A40.0	<p><b>DISPUTE</b></p> <p><b>DISPUTE SETTLEMENT</b></p> <p>Clause 40.0</p> <p>Clause 40.2.2 is amended by replacing “one (1) year” with “three (3) years”</p> <p>Clause 40.6 is amended by removing the reference to:</p> <p>No clause</p> <p>Clause 40.7.1 is amended by replacing “(10)” with “(15)” and by the addition of the following:</p> <p>Whether or not mediation resolves the dispute, the parties shall bear their own costs concerning the mediation and equally share the costs of the <b>mediator</b> and related costs</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p style="text-align: right;"><b>Item</b></p>
A41.0	<p><b>SUBSTITUTE PROVISIONS</b></p> <p><b>STATE CLAUSES</b></p> <p>Clause 41.0</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p style="text-align: right;"><b>Item</b></p>
A42.0	<p><b>CONTRACT VARIABLES</b></p> <p><b>THE SCHEDULE (DPW-04EC)</b></p> <p>Clause 42.0</p> <p>Tenderers are referred to the Contract Data DPW-04(EC) for variables pertaining to this contract</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p style="text-align: right;"><b>Item</b></p>

**SECTION B: JBCC PRELIMINARIES****B1.0 DEFINITIONS AND INTERPRETATION****B1.1 Definitions and interpretation**

See also clause A1.0 of Section A for additional and/or amended definitions which shall apply equally to this Section

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****B2.0 DOCUMENTS****B2.1 Checking of documents**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****B2.2 Provisional bills of quantities**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****B2.3 Availability of construction documentation**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****B2.4 Interests of agents**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****B2.5 Priced documents**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****B2.6 Tender submission**

Clause 2.6 is amended by replacing "JBCC Form of Tender" with "Form of Offer and Acceptance DPW-07(EC)"

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****B3.0 THE SITE****B3.1 Defined works area**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****B3.2 Geotechnical investigation**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****B3.3 Inspection of the site**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****B3.4 Existing premises occupied**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****B3.5 Previous work – dimensional accuracy**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****B3.6 Previous work – defects**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****B3.7 Services – known**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****B3.8 Services – unknown**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item**

B3.9	<b>Protection of trees</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B3.10	<b>Articles of value</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B3.11	<b>Inspection of adjoining properties</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B4.0	<b>MANAGEMENT OF CONTRACT</b>			
B4.1	<b>Management of the works</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B4.2	<b>Programme for the works</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B4.3	<b>Progress meetings</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B4.4	<b>Technical meetings</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B4.5	<b>Labour and plant records</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B5.0	<b>SAMPLES, SHOP DRAWINGS AND MANUFACTURERS' INSTRUCTIONS</b>			
B5.1	<b>Samples of materials</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B5.2	<b>Workmanship samples</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B5.3	<b>Shop drawings</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B5.4	<b>Compliance with manufacturers' instructions</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B6.0	<b>TEMPORARY WORKS AND PLANT</b> Temporary works and plant (Clause 19) The contractor shall provide, maintain and remove on completion all perimeter scaffolding required by the contractor for the due and proper fulfilment of the works			
B6.1	<b>Deposits and fees</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B6.2	<b>Enclosure of the works</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B6.3	<b>Advertising</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B6.4	<b>Plant, equipment, sheds and offices</b> Fixed: _____ Value related: _____ Time related: _____	Item		

B6.5	<b>Main notice board</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B6.6	<b>Subcontractors' notice board</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B7.0	<b>TEMPORARY SERVICES</b>			
B7.1	<b>Location</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B7.2	<b>Water</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B7.3	<b>Electricity</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B7.4	<b>Telecommunication facilities</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B7.5	<b>Ablution facilities</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B8.0	<b>PRIME COST AMOUNTS</b>			
B8.1	<b>Responsibility for prime cost amounts</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B9.0	<b>ATTENDANCE ON N/S SUBCONTRACTORS</b>			
B9.1	<b>General attendance</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B9.2	<b>Special attendance</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B9.3	<b>Commissioning – fuel, water and electricity</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B10.0	<b>FINANCIAL ASPECTS</b>			
B10.1	<b>Statutory taxes, duties and levies</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B10.2	<b>Payment for preliminaries</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B10.3	<b>Adjustment of preliminaries</b>  Clauses B10.3.1 and B10.3.2 are amended by replacing “within fifteen (15) <b>working days</b> of taking possession of the <b>site</b> ” with “when submitting his priced <b>bills of quantities / lump sum document</b> ” Fixed: _____ Value related: _____ Time related: _____	Item		
B10.4	<b>Payment certificate cash flow</b> Fixed: _____ Value related: _____ Time related: _____	Item		
B11.0	<b>GENERAL</b>			
B11.1	<b>Protection of the works</b>			

	Fixed: _____ Value related: _____ Time related: _____	Item
B11.2	<b>Protection / isolation of existing / sectionally occupied works</b> Fixed: _____ Value related: _____ Time related: _____	Item
B11.3	<b>Security of the works</b> Fixed: _____ Value related: _____ Time related: _____	Item
B11.4	<b>Notice before covering work</b> Fixed: _____ Value related: _____ Time related: _____	Item
B11.5	<b>Disturbance</b> Fixed: _____ Value related: _____ Time related: _____	Item
B11.6	<b>Environmental disturbance</b> Fixed: _____ Value related: _____ Time related: _____	Item
B11.7	<b>Works cleaning and clearing</b> Fixed: _____ Value related: _____ Time related: _____	Item
B11.8	<b>Vermin</b> Fixed: _____ Value related: _____ Time related: _____	Item
B11.9	<b>Overhand work</b> Fixed: _____ Value related: _____ Time related: _____	Item
B11.10	<b>Instruction manuals and guarantees</b> Fixed: _____ Value related: _____ Time related: _____	Item
B11.11	<b>As built information</b> Fixed: _____ Value related: _____ Time related: _____	Item
B11.12	<b>Tenant installations</b> Fixed: _____ Value related: _____ Time related: _____	Item
B12.0	<b>SCHEDULE OF VARIABLES</b>	
B12.1	<b>Schedule of variables</b> Fixed: _____ Value related: _____ Time related: _____	Item
<p>This <b>schedule</b> contains all variables referred to in this document and is divided into pre-tender and post-tender categories. The pre-tender category must be completed in full and included in the tender documents. Both the pre-tender and post-tender categories form part of these <b>Preliminaries</b></p> <p>Spaces requiring information must be filled in, shown as "not applicable" or deleted and not left blank. Where choices are offered, the non-applicable items are to be deleted. Where insufficient space is provided the information should be annexed hereto and cross-referenced to the applicable clause of the <b>schedule</b>. Key cross reference clauses are italicised in [ ] brackets</p>		
12.1	<b>PRE-TENDER INFORMATION</b>	
12.1.1	<b>Provisional bills of quantities</b>	
[2.2]	The quantities are provisional (yes/no)	<input type="text" value="NO"/>
12.1.2	<b>Availability of construction documentation</b>	
[2.3]	Construction documentation is complete (yes/no)	<input type="text" value="NO"/>

12.1.3 [2.4]	<b>Interests of agents – N/A</b> Details:			
12.1.4 [3.1]	<b>Defined works area</b> Details: The area of the works shall be as directed by the Principal Agent on site.			
12.1.5 [3.2]	<b>Geotechnical investigation – N/A</b> Details:			
12.1.6 [3.4]	<b>Existing premises occupied</b> Specific requirements: Tenderers are to note that the existing school is in use and further, that no disturbance and/or interference with school activities will be tolerated.			
12.1.7 [3.5]	<b>Previous work – dimensional accuracy</b> Details: The Contractor shall be responsible for checking all dimensions of existing structures and components thereof. Should any discrepancy be found, this should immediately be brought to the attention of the Principal Agent.			
12.1.8 [3.6]	<b>Previous work – defects</b> Details: Should any defects in existing work be encountered, the Contractor shall immediately notify the Principal Agent.			
12.1.9 [3.7]	<b>Services – known</b> Details: The Contractor shall take all reasonable steps to avoid the interference with or disturbance of existing services on site.			
12.1.10 [3.9]	<b>Protection of trees – N/A</b> Specific requirements:			
12.1.11 [3.11]	<b>Inspection of adjoining properties</b> Specific requirements: All adjoining properties contiguous to the works shall be inspected for existing defects and/or damage and all such defects/damage shall immediately be brought to the attention of the Principal Agent.			
12.1.12 [6.2]	<b>Enclosure of the works</b> Specific requirements: The Contractor shall ensure that all working areas are enclosed at all times in terms of the OHS Act and Construction Regulations 2003, and to the satisfaction of the Principal Agent.			
12.1.13 [6.4.3]	<b>Offices</b> Specific requirements: The <b>contractor</b> shall provide, maintain and remove on completion of the works an office for the exclusive use of the <b>principal agent</b> , minimum size 4 x 3 x 3m high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times			
12.1.14 [6.5]	<b>Main notice board</b> Specific requirements: The <b>contractor</b> shall provide, erect where directed, maintain and remove on completion of the <b>works</b> a notice board size 3 x 3m as type Drawing GEN 063, 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 [6.6]	<b>Subcontractors' notice board</b> A notice board is required Specific requirements:	(yes/no)	<input type="text" value="NO"/>	
12.1.16 [7.2]	<b>Water</b> Option A (by <b>contractor</b> ) Option B (by <b>employer</b> – free of charge) Option C (by <b>employer</b> – metered)	(yes/no) (yes/no) (yes/no)	<input type="text" value="YES"/> <input type="text"/> <input type="text"/>	



12.1.17 [7.3]	<b>Electricity</b> Option A (by <b>contractor</b> )	(yes/no)	<input type="text" value="YES"/>
	Option B (by <b>employer</b> – free of charge)	(yes/no)	<input type="text"/>
	Option C (by <b>employer</b> – metered)	(yes/no)	<input type="text"/>
12.1.18 [7.4]	<b>Telecommunications</b> Telephone	(yes/no)	<input type="text" value="YES"/>
	Facsimile	(yes/no)	<input type="text" value="YES"/>
	E-mail	(yes/no)	<input type="text" value="YES"/>
12.1.19 [7.5]	<b>Ablution facilities</b> Option A (by <b>contractor</b> )	(yes/no)	<input type="text" value="YES"/>
	Option B (by <b>employer</b> )	(yes/no)	<input type="text"/>
12.1.20 [11.2]	<b>Protection of existing/sectionally occupied works</b> Protection is required	(yes/no)	<input type="text" value="YES"/>
12.1.21 [9.2]	<b>Special attendance</b> Subcontractor (1) details:  Subcontractor (2) details:  Subcontractor (3) details:  Subcontractor (4) details:		
12.1.22 [11.1]	<b>Protection of the works</b> Specific requirements: Protection of the works at all times will be a requirement of this Contract.		
12.1.23 [11.5]	<b>Disturbance</b> Specific requirements:  The <b>contractor</b> shall keep the site, structures, etc well watered during operations to prevent dust and shall provide and erect and remove on completion of the <b>works</b> all necessary temporary dust screens all to the satisfaction of the <b>principal agent</b>		
12.1.24 [11.6]	<b>Environmental disturbance</b> Specific requirements: Due to the close proximity of the site to large bodies of water, <i>it is to be noted by the Contractor that no dumping of rubble and/or waste in any form whatsoever will be permitted.</i>		
12.2	<b>POST-TENDER INFORMATION</b>		
12.2.1 [10.2]	<b>Payment of preliminaries</b> Option A (prorated)	(yes/no)	<input type="text"/>
	Option B (calculated)	(yes/no)	<input type="text"/>
12.2.2 [10.3]	<b>Adjustment of preliminaries</b> Option A (three categories)	(yes/no)	<input type="text"/>
	Option B (detailed breakdown)	(yes/no)	<input type="text"/>
12.2.3	<b>Additional agreed preliminaries items</b> Details:		

## 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

### C1.0 CONTRACT DRAWINGS

The drawings issued with the tender documents do not comprise the complete set but serve as a guide only for tendering purposes and for indicating the scope of the work to enable the tenderer to acquaint himself with the nature and extent of the **works** and the manner in which they are to be executed

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

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

### C2.0 GENERAL PREAMBLES

The document "Specification of Materials and Methods to be used (PW371)" is deemed included as part of the tender document and should be read in conjunction with same.

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

### C3.0 TRADE NAMES

Wherever a trade name for any product has been described in the **bills of quantities** the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the **principal agent** being obtained prior to the closing date for submission of tenders

If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

### C4.0 SECURITY CHECK OF PERSONNEL

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

In the event of the **principal agent** requesting the removal of a person or persons from the **works** for security reasons, the **contractor** shall do so forthwith and shall thereafter ensure that such person or persons are denied access to the **works** and the **site** and/or to any document or information relating to the **works**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

### C5.0 HIV/AIDS AWARENESS

It is required of the **contractor** to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the **bills of quantities**. Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained

The **contractor** must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the **principal agent**, notwithstanding the provisions of clause A 31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress **payment certificate** until the **contractor** provides satisfactory proof of compliance. The **contractor** shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment

C5.1	<p><b>AWARENESS CHAMPION</b></p> <p>Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p>Item</p>		
C5.2	<p><b>AWARENESS WORKSHOPS</b></p> <p>Selection and appointment of a competent Service Provider approved by the <b>principal agent</b>, provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p>Item</p>		
C5.3	<p><b>POSTERS, BOOKLETS, VIDEOS, ETC.</b></p> <p>Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the <b>construction period</b>, all in accordance with the HIV/AIDS Specification</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p>Item</p>		
C5.4	<p><b>ACCESS TO CONDOMS</b></p> <p>Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the <b>construction period</b>, all in accordance with the HIV/AIDS Specification</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p>Item</p>		
C5.5	<p><b>MONITORING</b></p> <p>Monitoring HIV/AIDS awareness of workers, providing the <b>principal agent</b> with access to information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the <b>construction period</b> and close out, all in accordance with the HIV/AIDS Specification</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p>Item</p>		
C6.0	<p><b>OCCUPATIONAL HEALTH AND SAFETY ACT</b></p> <p>The <b>contractor</b> shall comply with all the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993)</p> <p>It is required of the <b>contractor</b> to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the <b>bills of quantities</b>.</p> <p>The <b>contractor</b> must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the <b>principal agent</b>, notwithstanding the provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress <b>payment certificate</b> until the <b>contractor</b> provides satisfactory proof of compliance. The <b>contractor</b> shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment</p> <p>Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p>Item</p>		

C6.1

**COVID SAFETY AND COMPLIANCE**

The contractor is to price against this item for all requirements in respect of COVID prevention, management and compliance. In this regard, the following items must as a minimum be considered when pricing and will be deemed to be included in the rate entered against this item:

- a. COVID marshalls for the due enforcement of COVID policy. The required number of marshalls in order to effectively enforce COVID protocol is to be determined by the contractor in accordance with his programme of works. Marshalls are to be duly and effectively trained in the execution of their duties. In addition, marshalls must be provided with the relevant PPE and tools i.e. temperature readers, sanitiser etc. to carry out their designated function.
- b. COVID related PPE - the contractor is to ensure that an ample supply of COVID specific PPE is available to the site at all times. This shall include relevant disposable masks, sanitiser, gloves (if applicable), etc. These items shall be sufficient for the contractors own staff, sub-contractors and their staff, as well as the professional team and all visitors to the site.
- c. Sanitising of surfaces - a major infection risk remains the contamination of surfaces. With this in mind, the contractor will be required to sanitise all touch surfaces daily i.e. door and window handles, tools, plant controls, desks and other works surfaces, ablutions, kitchens and associated surfaces, etc.
- d. COVID testing - the contractor will be required to ensure that all employees (own and subcontractor) are tested for COVID prior to the commencement of work on site.
- e. Signage - the contractor shall provide and maintain COVID signage around the site and work areas.
- f. Isolation areas - the contractor shall provide and maintain isolation areas for suspected COVID cases amongst the workforce.
- g. Waste disposal - COVID related PPE is to be properly disposed of in demarcated areas and the contractor shall accordingly provide same facilities including marked bins, regular waste removal, etc.
- h. Transportation of employees - where employees are transported to site by the contractor, he shall ensure that transport arrangements support social distancing and COVID safety.
- i. Programme effects - the contractor shall consider the effect of COVID compliance and regulations i.e. social distancing on his programme and shall ensure that costs related to this are included in this item.
- j. COVID Management - As part of OHS, the contractor shall ensure that COVID management and reporting are regular and accurate and that preventative or reactive measures are taken as required in order to ensure safety of all personnel on site.

The above mentioned items represent the minimum expected requirements in respect of COVID management and compliance. Tenderers shall in addition price any and all other anticipated costs against this item as no further claims in this regard will be entertained.

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item**

C7.0

**Contract Price Adjustment Provisions**

Bidders are advised that this Contract shall be a Fixed Price Contract and shall not be subject to the Contract Price Adjustment Provisions (CPAP) or any other escalation formula and therefore bidder are to allow for any increases (except any variations in the rate of Value Added Tax) in cost of labour, materials, transport, etc.

C8.0

**Site Instructions**

Site Instructions issued on site are to be recorded in triplicate in a site instruction book which is maintained on site by the contractor.

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item**

C9.0 **Warranties for material and workmanship**

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

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

C10.0 **Co-operation of contractor for cost management**

It is specifically agreed that the contractor accepts the obligation of assisting the principal agent in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The principal agent undertakes to make available to the contractor all budgetary allowances and cost assessments/ reports to enable the proper procedure to be implemented and the contractor shall attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures, as necessary, to all subcontractors

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

C11.0 **Confidentiality**

The contractor undertakes to maintain in confidence any and all information regarding this project and shall obtain appropriate similar undertakings from all subcontractors and suppliers. Such information shall not be used in any way except in connection with the execution of the works. No information regarding this project shall be published or disclosed without the prior written consent of the employer

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

C12.0 **Testing of windows for watertightness**

Each window shall be tested for watertightness with water sprayed on by means of a 20mm hosepipe using adequate pressure. If in the opinion of the principal agent, the pressure proves to be inadequate, then the pressure in the hosepipe shall be boosted by means of compressed air or other approved means

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

Tender Data Schedule

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

General Conditions of Contract

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

Special Conditions of Contract

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

Contract Data

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

Schedule of Variables

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

**C13.0 CONTRACTOR ACCESS**

The contractor shall provide for a security access card for all personnel (management and labour) entering the site. Each identification tag is to include for the following information: -

- i. Project name
- ii. Colour photo (ID book size)
- iii. Company name
- iv. Name and ID number

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****C14.0 PRICING OF BILLS OF QUANTITIES**

Tenderers are to allow opposite each item for all costs in connection therewith. All prices to include, unless otherwise stated, for all materials, fabrication, conveyance and delivery, unloading, storing, unpacking, hoisting, labour, setting, fitting and fixing in position, cutting and waste (except where to be measured in accordance with the Standard System of Measurement) patterns, models and templates, plant, temporary works, returning of packing, duties, taxes, imposts, establishment charges, overheads, profit, attendance (general and specific) and all other obligations arising out of the agreement.

The rate inserted by the tenderer opposite each item will be deemed to be applicable to the item as originally specified. Should the tenderer wish to offer an alternative specification to any particular item, he is to provide this as an alternative to his Bid sum for consideration by the principal agent as a submission with his Bid. No alternatives will be accepted during the construction period unless prior approval at tender stage is granted in writing by the Principal Agent. Under no circumstances are the descriptions in the bills of quantities to be altered by the tenderer.

Where a bill of quantities item includes "or other approved" within its description and the tenderer has priced a "or other approved" specification, the tenderer is to provide a schedule of all such bill items that have been priced as "or other approved" including the full details and specifications of the "or other approved" items priced. Should no schedule of "or other approved" items be received with the 'formal tender submission' from the tenderer it shall be deemed that the tenderer has priced the item as per the original specification in the tender documents and no alternative specifications will be accepted for the tendered rate.

Items left unpriced will be deemed to be covered in prices against other items throughout these bills of quantities and no claim for any extras arising out of the tenderer's omission to price any item will be entertained.

Prices for all plant, temporary works, services and other items provided shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary.

The contractor shall execute work during "overtime" hours as necessary in order to complete the project within the agreed construction period and shall provide such resources and work such overtime hours as necessary. Costs for the execution of this work under these conditions shall be included within the contract sum. (See requirements in terms of Clause B12.1.23 of these Preliminaries)

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item****C15.0 COSTS OF CLAIMS**

All costs incurred by the contractor in the preparation of claims to the satisfaction of the principal agent and/or quantity surveyor shall be borne by the contractor.

In furtherance of the above, the Contractor shall ensure that at least one dedicated, full-time, senior resource is allocated for the preparation of cost related information including but not limited to payment claims, cost reports, contractor cashflows, etc. Pricing will be deemed to be inclusive of this requirement

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**Item**

**SECTION 1**  
**PRELIMINARIES**

**COLLECTION**

Item		Page	AMOUNT	
			R	c
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	<b>Objective and Preparation</b>			
A2.0	Offer, acceptance and performance			
A3.0	Documents			
A4.0	Design responsibility			
A5.0	Employer's agents			
A6.0	Contractor's site representative			
A7.0	Compliance with laws and regulations			
A8.0	Works risk			
A9.0	Indemnities			
A10.0	Works insurances			
A11.0	Liability insurances			
A12.0	Effecting insurances			
A13.0	No clause			
A14.0	Security			
	<b>Execution</b>			
A15.0	Preparation for and execution of the works			
A16.0	Site and access			
A17.0	Contract instructions			
A18.0	Setting out of the works			
A19.0	Assignment			
A20.0	Nominated subcontractors			
A21.0	Selected subcontractors			
A22.0	Employer's direct contractors			
A23.0	Contractor's domestic subcontractors			
	<b>Completion</b>			
A24.0	Practical completion			
A25.0	Works completion			
A26.0	Final completion			
A27.0	Latent defects liability period			
A28.0	Sectional completion			
A29.0	Revision of date for practical completion			
A30.0	Penalty for non-completion			
	<b>Payment</b>			
A31.0	Interim payment to the contractor			
A32.0	Adjustment to the contract value			
A33.0	Recovery of expense and loss			
A34.0	Final account and final payment			
A35.0	Payment to other parties			
	<b>Cancellation</b>			
A36.0	Cancellation by employer – contractor's default			
A37.0	Cancellation by employer – loss and damage			
A38.0	Cancellation by contractor – employer's default			
A39.0	Cancellation – cessation of the works			
	<b>Dispute</b>			
A40.0	Dispute settlement			
	<b>Substitute Provisions</b>			
A41.0	State clauses			
	<b>Contract Variables</b>			
A42.0	The schedule			

	<b>SECTION B: JBCC PRELIMINARIES</b>			
B1.0	<b>Definitions and interpretation</b>			
B1.1	Definitions and interpretations			
B2.0	<b>Documents</b>			
B2.1	Checking of documents			
B2.2	Provisional bills of quantities			
B2.3	Availability of construction documentation			
B2.4	Interests of agents			
B2.5	Priced documents			
B2.6	Tender submission			
B3.0	<b>The Site</b>			
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B3.2	Geotechnical investigation			
B3.3	Inspection of the site			
B3.4	Existing premises occupied			
B3.5	Previous work – dimensional accuracy			
B3.6	Previous work – defects			
B3.7	Services – known			
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B3.9	Protection of trees			
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B4.3	Progress meetings			
B4.4	Technical meetings			
B4.5	Labour and plant records			
B5.0	<b>Samples, shop drawings and manufacturers' instructions</b>			
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B5.3	Shop drawings			
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B6.5	Main notice board			
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B7.0	<b>Temporary services</b>			
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B7.2	Water			
B7.3	Electricity			
B7.4	Telecommunication facilities			
B7.5	Ablution facilities			
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B9.3	Commissioning – fuel, water and electricity			
B10	<b>Financial aspects</b>			
B10.1	Statutory taxes, duties and levies			
B10.2	Payment for preliminaries			
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B11.10	Instruction manuals and guarantees			
B11.11	As built information			
B11.12	Tenant installations			
B12.0	<b>Schedule of Variables</b>			
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## SECTION C: SPECIFIC PRELIMINARIES

C1.0	Contract drawings
C2.0	General preambles
C3.0	Trade names
C4.0	Security check of personnel
C5.0	HIV / AIDS awareness
C5.1	Awareness champion
C5.2	Awareness workshops
C5.3	Posters, booklets, videos, etc
C5.4	Access to condoms
C5.5	Monitoring
C6.0	Occupational Health and Safety Act
C7.0	Contract Price Adjustment Provision
C8.0	Site Instructions
C9.0	Warranties for material and workmanship
C10.0	Co-operation of contractor for cost management
C11.0	Confidentiality
C12.0	Testing of windows for watertightness
C13.0	Contractor access
C14.0	Pricing of bills of quantities
C15.0	Costs of claims

## SECTION 1 PRELIMINARIES

**CARRIED TO FINAL SUMMARY**

**R**

**SUBTOTALS:**

Category: Fixed R

Category: Value R

Category: Time R

R	C

	Unit	Quantity	Rate	Amount
<b><u>BILL NO. 1</u></b>				
<b><u>ALTERATIONS</u></b>				
<b><u>Key:</u></b>	<b><u>Location Description:</u></b>			
Un/A	Unallocated			
A	Block A - 3 Class			
B	Block B- Admin & Kit			
B1	Block B1 - 6 Class			
C	Block C - 7 Class			
C1	Block C1 - Comp Rm			
Ext	External Works			
I	Item Location (Auto)			
<p>The tenderer is referred to the relevant clauses in the ASAQS Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.</p> <p>The tenderer is referred to SANS 10400 for full details of performance and specification requirements. All products and workmanship shall be in compliance with the relevant sections of SANS and approved accordingly.</p>				
<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
<b><u>View site</u></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><u>Damage to existing finishes:</u></b>				
<p>The Contractor will be held responsible for all damage, however caused, to existing finishes and fitting etc. and he must make good all damage at his own expense to the approval of the Principal Agent.</p> <p>Breaking down, demolition and alteration activities and tasks, hacking off of existing plaster, etc. is to be executed with care so as to prevent damage to remaining floor and wall surfaces and finishes (where these are to be retained). Tenders will be deemed to include allowance for any necessary protection of existing surfaces and structures as may be necessary to effect the above, as the cost of repairing damage to existing surfaces and structures will be solely for the Contractors account.</p>				
Carried to Collection			R	
Bill No. 1				
Alterations				

1

	Unit	Quantity	Rate	Amount
<p><b><u>Responsibility for site:</u></b></p> <p>The contractor is to note that upon possession of the site by himself, and extending until practical completion is achieved, he is solely responsible for the site, site security, general upkeep and cleaning of the site and all other responsibilities in maintaining a construction site in conformance with but not limited to, the Construction Regulations 2003, all local by-laws, all user client regulations, and all Client regulations and procedures, notwithstanding any partial occupation/usage by the school population. Tenderers are therefore urged to study all available material and to investigate fully the site and areas contiguous to the site, in order to determine the range and extent of responsibility. No additional monetary and/or time claims will be entertained in respect of the above.</p> <p><b><u>Explosives</u></b></p> <p>No explosives whatsoever may be used for demolition purposes unless otherwise stated</p> <p><b><u>General</u></b></p> <p>Water supply pipes and other piping that may be encountered 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 principal agent</p> <p>Doors, fanlights, fittings, frames, linings, etc. which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehangng, cramping up, re-wedging as required and making good cramps, dowels, etc., and easing, oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given separately</p> <p>Prices for taking out of doors, windows, etc. shall include for removal of all beads, architraves, ironmongery, etc.</p> <p>Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc. and making good floor and wall finishes to match existing</p> <p>With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc., shall be levelled and prepared for raising of brickwork</p>				
Carried to Collection			R	
Bill No. 1				
Alterations				

	Unit	Quantity	Rate	Amount
<p>Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary</p> <p>The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc.)</p> <p><b><u>Removal of materials:</u></b></p> <p>Where removal is included in the heading, sub-heading or item description, prices shall be deemed to include for the necessary costs in removal and appropriate disposal of materials including but not limited to labour, transportation and disposal costs. No further claims in this regard will be entertained.</p> <p><b><u>Removal of asbestos material:</u></b></p> <p>All preparatory work, alterations, etc., to existing asbestos cement roof sheeting, gutters, rainwater pipes, etc., is to be carried out strictly by an approved and certified specialist company and in accordance with statutory requirements (Occupational Health and Safety Act, 1993 - Asbestos Regulations 2001) and all necessary precautions must be taken when working with and disposing of asbestos cement products and the disposing of waste water resulting from cleaning operations, etc.</p> <p><b><u>The following shall apply in respect of asbestos removal</u></b></p> <p>The removal of asbestos shall be carried out by a certified entity, registered in accordance with the Occupational Health and Safety Act 1993 and the Asbestos Regulation 2001.</p> <p>Asbestos in all forms/building elements that is to be removed, shall be carried out in strict accordance with aforementioned regulation, and a certificate issued by the entity as contemplated in the above, shall be provided per block for the removal thereof, where the term block shall in this context refer to any single, free standing building structure, regardless of size or purpose.</p> <p>Corresponding disposal certificates shall be issued by the facility at which the asbestos is disposed off, with said facility to, prior to the disposal of any asbestos material provide satisfactory proof that the facility is duly registered and fully compliant in terms of the act, to receive the asbestos material.</p>				
Carried to Collection			R	
Bill No. 1 Alterations				

		Unit	Quantity	Rate	Amount
	Under no circumstances is the contractor nor any of his duly authorised representatives to sell and/or give away asbestos material to any member/s of the school community, the community in general or the public at large. Should this be found to be occurring, the contractor will be held responsible contractually and may further be prosecuted criminally.				
	The cost for complying with the above, and all requirements of regulation as reflected above is to be priced for in the items for removal of asbestos material. No further claims in this regard will therefore be entertained.				
	<b><u>TEMPORARY BARRIERS AND SCREENS</u></b>				
	<b><u>Temporary barriers, screens, etc. including removal</u></b>				
1	1.8m High standard gumpole, galvanised mild steel mesh and shade cloth fence hoarding with all materials securely fixed to each other around buildings externally under construction including all necessary gates etc, installation and rotation of the temporary protection throughout the contract period as per the construction programme.	m	170		
	C 170				
	<b><u>Taking out and removing doors, windows, etc., including thresholds, sills, etc. (building up openings and making good finishes elsewhere)</u></b>				
2	Timber single door and frame not exceeding 2,5m <sup>2</sup>	No	22		
	A 3 B 5 B1 6				
	C 7 C1 1				
	<b><u>Note: Tenderers are referred to the supplementary preambles when pricing the following item (removal of asbestos)</u></b>				
	<b><u>Taking down and removal of Asbestos by Specialist</u></b>				
3	Asbestos roof sheets including all timber purlins, fixings, etc.	m <sup>2</sup>	1 643		
	A 287 B1 672 C 587				
	C1 97				
4	Asbestos fascias and barge boards including fixings.	m	406		
	A 72 B 53 B1 113				
	C 130 C1 38				
5	Aluminium Seamless gutters and PVC downpipes including fixings.	m	485		
	A 80 B 50 B1 147				
	C 175 C1 33				
	If the item below is not priced it is deemed to form part of the OHS cost in the preliminaries				
	Carried to Collection			R	
	Bill No. 1				
	Alterations				

		Unit	Quantity	Rate	Amount
6	Issue of certificate of compliance by registered AIA appointed by your asbestos disposal and removal subcontractor, for the safe removal of asbestos contained products before the work on site commences  Un/A 1 <b><u>Taking out and removing sundry joinery work, fittings, etc., setting aside for re-use and later refixing in similar new position</u></b>	Item			
7	Timber wall cupboard 900mm x 450 deep x 2100mm high  A 3 B1 6 C 7 C1 1 <b><u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u></b>	No	17		
8	Double pitched timber roof truss with clear span between walls 6000mm - 7000mm long and approximately 1600mm high  C1 3	No	3		
9	Double pitched timber roof truss with clear span between walls 8000mm - 9000mm long and approximately 1600mm high  B 4 B1 13 C 15	No	32		
10	Double pitched timber roof truss with clear span between walls 9000mm - 10000mm long and approximately 1600mm high  A 7	No	7		
11	Gypsum plasterboard ceilings, including cornices, timber bandering, etc.  A 260 B 156 B1 456 C 540 C1 82 <b><u>TEMPORARY ROOF PROTECTION</u></b> <b><u>The Contractor will be held responsible for all damage, howsoever caused, to finishes inside rooms where the existing roof coverings have been removed and he must make good all damage at his own expense to the approval of the Employer.</u></b>	m <sup>2</sup>	1 494		
12	Cover and maintain existing roofs in a perfectly watertight condition during alterations by means of heavy tarpaulins properly secured and maintained in position to the approval of the Employer and make good all work damaged or disturbed after completion (measured on flat).  C 569	m <sup>2</sup>	569		
Carried to Collection				R	
Bill No. 1 Alterations					

		Unit	Quantity	Rate	Amount
	<b><u>Taking out and removing ironmongery</u></b>				
13	Remove existing chalkboards approximately 4800 x 1200mm high including fixings, etc., and cart off site	No	18		
	A 3 B1 6 C 8				
	C1 1				
	<b><u>Hacking up/off and removing granolithic, screeds, plaster, etc. from concrete or brickwork and preparing surfaces for new screed, plaster, tile finishes, etc.</u></b>				
14	25mm Screed from floors	m <sup>2</sup>	229		
	A 40 B 23 B1 73				
	C 82 C1 11				
15	Internal plaster from walls and columns	m <sup>2</sup>	22		
	A 4 B 2 B1 7				
	C 8 C1 1				
16	External plaster from walls and columns	m <sup>2</sup>	242		
	A 43 B 25 B1 76				
	C 85 C1 13				
	<b><u>Hacking up/off and removing ceramic tiles including removing mortar bed or adhesive from concrete or brickwork and preparing surfaces for new screed, plaster, tile finish, etc.</u></b>				
17	Tiles to floors	m <sup>2</sup>	1 494		
	A 260 B 156 B1 456				
	C 540 C1 82				
	<b><u>REMOVAL OF EXISTING WORK</u></b>				
	<b><u>Breaking down and removing brickwork etc.</u></b>				
18	One brick walls in beamfilling	m <sup>2</sup>	34		
	A 6 B 3 B1 11				
	C 12 C1 2				
	<b><u>PREPARATORY WORK TO EXISTING SURFACES</u></b>				
	<b><u>Preparatory work</u></b>				
19	Making good defects in existing screeded floors with 'Pavelite' or other approved	m <sup>2</sup>	131		
	B1 60 C 71				
	Carried to Collection			R	
	Bill No. 1				
	Alterations				

		Unit	Quantity	Rate	Amount
<b><u>MAKING GOOD OF FINISHES, ETC</u></b>					
<b><u>Making good brickwork</u></b>					
20	Making good existing external brickwork including carefully saw cutting the brickwork on both sides of cracks for a depth of 15mm and thoroughly remove brickwork and plaster from saw cuts. Thereafter, fill the resultant widened crack with "Epidermix 318" as required and according to manufacturers instructions	m	30		
	A 4 B 5 B1 7 C 10 C1 4				
21	Making good existing internal brickwork including carefully saw cutting the brickwork on both sides of cracks for a depth of 15mm and thoroughly remove brickwork and plaster from saw cuts. Thereafter, fill the resultant widened crack with "Epidermix 318" as required and according to manufacturers instructions	m	25		
	A 4 B 2 B1 5 C 10 C1 4				
<b><u>Making good of doors and windows</u></b>					
22	Make good existing glazed steel window approximately 1000mm x 1100mm high including sanding down thoroughly, apply metal primer and two coats gloss enamel paint, replacing broken glazing, overhauling, adjusting and servicing existing ironmongery to leave complete unit in a perfect condition	No	10		
	B 10				
23	Make good existing glazed steel window approximately 1000mm x 1500mm high including sanding down thoroughly, apply metal primer and two coats gloss enamel paint, replacing broken glazing, overhauling, adjusting and servicing existing ironmongery to leave complete unit in a perfect condition	No	121		
	A 21 B1 42 C 49 C1 9				
Carried to Collection				R	
Bill No. 1					
Alterations					



		Unit	Quantity	Rate	Amount
	<b><u>Making good existing Roof trusses</u></b>				
	<b><u>Repairs to Bottom Chord:</u></b>				
24	Make good existing timber roof truss previously taken down, of tie beam span approximately 7000mm - 8000mm between walls and approximately 1600mm high at apex, including carefully cutting out and removing sections of damaged 76 x 114mm bottom chord, replacing with new including bolting new section to old using approved galvanised mild steel bolts, washers, etc., replacing all bottom chord fixings, gang nails, etc. (whether damaged or not), sanding down and sealing entire truss to leave in a perfect condition, including reinstating in position as approved by the Engineer.	No	45		
	A 7 B 4 B1 14 C 16 C1 4				
	<b><u>Repairs to rafters:</u></b>				
25	Make good existing timber roof truss previously taken down, of tie beam span approximately 8000mm - 9000mm between walls and approximately 1600mm high at apex, including carefully cutting out and removing sections of damaged 76 x 114mm rafters, replacing with new including bolting new section to old using approved galvanised mild steel bolts, washers, etc., replacing all rafter fixings, gang nails, etc. (whether damaged or not), sanding down and sealing entire truss to leave in a perfect condition, including reinstating in position as approved by the Engineer.	No	45		
	A 7 B 4 B1 14 C 16 C1 4				
	<b><u>Repairs to king post:</u></b>				
26	Make good existing timber roof truss previously taken down, of tie beam span approximately 8000mm - 9000mm between walls and approximately 1600mm high at apex, including carefully cutting out and removing sections of damaged 76 x 76mm king post, replacing with new including bolting new section to old using approved galvanised mild steel bolts, washers, etc., replacing all king post fixings, gang nails, etc. (whether damaged or not), sanding down and sealing entire truss to leave in a perfect condition, including reinstating in position as approved by the Engineer.	No	45		
	A 7 B 4 B1 14 C 16 C1 4				
	Carried to Collection			R	
	Bill No. 1				
	Alterations				

		Unit	Quantity	Rate	Amount
	<b><u>Repairs to Bracings:</u></b>				
27	Make good existing timber roof truss previously taken down, of tie beam span approximately 8000mm - 9000mm between walls and approximately 1600mm high at apex, including carefully cutting out and removing sections of damaged 76 x 52mm queen posts and intermediate and diagonal bracing and supports, replacing with new including bolting new section to old using approved galvanised mild steel bolts, washers, etc., replacing all king post fixings, gang nails, etc. (whether damaged or not), sanding down and sealing entire truss to leave in a perfect condition, including reinstating in position as approved by the Engineer.	No	45		
	A 7 B 4 B1 14 C 16 C1 4				
	<b><u>Repairs to Queen posts:</u></b>				
28	Make good existing timber roof truss in position, of tie beam span approximately 8000mm - 9000mm between walls and approximately 1600mm high at apex, including carefully cutting out and removing sections of damaged 76 x 52mm queen posts and/or intermediate and diagonal bracing and/or supports, replacing with new including bolting new section to old using approved galvanised mild steel bolts, washers, etc., replacing all queen posts and intermediate and diagonal bracing and supports fixings, gang nails, etc. (whether damaged or not), sanding down and sealing entire truss to leave in a perfect condition, including reinstating in position as approved by the Engineer.	No	45		
	A 7 B 4 B1 14 C 16 C1 4				
	<b><u>FUMIGATION</u></b>				
	<b><u>Fumigation is to be performed by a registered fumigation specialist and undertaken with great care to ensure the safety of all persons within the vicinity of the building and in accordance with Government regulations:</u></b>				
	<b><u>DESLUDGING SEPTIC TANKS, ETC.</u></b>				
29	Allow for tented fumigation of all buildings with Methyl Bromide gas.	m <sup>2</sup>	1 494		
	A 260 B 156 B1 456 C 540 C1 82				
	<b><u>Desludging septic tank, etc.</u></b>				
30	Desludging septic tank and making good	Item			
	Un/A 1				
	Carried to Collection			R	
	Bill No. 1				
	Alterations				

		Unit	Quantity	Rate	Amount
<b><u>TEMPORARY PARKHOMES</u></b>					
Rates for parkhomes to include standard windows, burglar bars, curtains and tracks, two tier steps for access, light fittings and black boards					
<b><u>"M-Projects" or other approved temporary parkhomes</u></b>					
Provide temporary parkhomes on site for educational facilities during the construction phase as herewith mentioned, including levelling, positioning on site and connection to an electrical supply including issuing compliance certificates					
Parkhomes are to be standard classroom size minimum 7 x 7m or nearest size					
31	Provision of parkhome for a period of 14 months	No	7		
	B 7				
32	Provision of two tier steps for 14 months	No	7		
	B 7				
33	Provision of electrical compliance certificates for parkhomes	No	7		
	B 7				
34	Transport to and from site of parkhomes as per distance between supplier and site per return trip	No	7		
	B 7				
Carried to Collection				R	
Bill No. 1					
Alterations					

Amount

**BILL NO. 1**  
**ALTERATIONS**  
**COLLECTION**

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Carried to Summary

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	Unit	Quantity	Rate	Amount
<b>BILL NO. 2</b>				
<b>EARTHWORKS</b>				
<b>Key:</b>	<b>Location Description:</b>			
Un/A	Unallocated			
A	Block A - 3 Class			
B	Block B- Admin & Kit			
B1	Block B1 - 6 Class			
C	Block C - 7 Class			
C1	Block C1 - Comp Rm			
Ext	External Works			
I	Item Location (Auto)			
<p>The tenderer is referred to the relevant clauses in the ASAQS Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.</p>				
<b>SUPPLEMENTARY PREAMBLES</b>				
<b>Nature of ground</b>				
<p>The nature of the ground is assumed to be loose sandy material, therefore 'earth', but possibly interspersed with 'soft rock' or 'hard rock'</p>				
<b>Excavation for working space in rock</b>				
<p>Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as 'extra over' bulk excavation or trench and hole excavation as the case may be</p>				
<b>Carting away of excavated material</b>				
<p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p>				
<p>Descriptions for carting away of materials are deemed exclusive of bulking i.e. the measurement of same for payment will be based on the volume of earth removed based on the approved design, and not the volume of earth finally removed from site.</p>				
<b>Filling</b>				
<p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any necessary multiple handling of material</p>				
Carried to Collection			R	
Bill No. 2				
Earthworks				

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		Unit	Quantity	Rate	Amount
<b><u>Testing</u></b>					
Prices for filling are to include for all necessary density tests in accordance with SABS 1200D					
<b><u>EXCAVATION ETC</u></b>					
<b><u>Excavation in earth not exceeding 2m deep</u></b>					
1	Underpinning in 1000mm alternating sections under existing foundations. C 129	m <sup>3</sup>	129		
<b><u>Back excavation of vertical sides of excavations in earth for working space including backfilling compacted to 98% Mod AASHTO density</u></b>					
2	Exceeding 1,5m deep and not exceeding 3,5m deep, etc. 300mm away from excavated face C 786	m <sup>2</sup>	786		
<b><u>Extra over trench and hole excavations in earth for excavation in</u></b>					
3	Soft rock C 13	m <sup>3</sup>	13		
<b><u>Extra over all excavations for carting away</u></b>					
4	Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor C 65	m <sup>3</sup>	65		
<b><u>Risk of collapse of excavations</u></b>					
5	Sides of trench and hole excavations exceeding 1,5m deep C 786	m <sup>2</sup>	786		
<b><u>Keeping excavations free of water</u></b>					
6	Keeping excavations free of all water other than subterranean water I 1	Item			
<b><u>FILLING ETC OTHER THAN BULK</u></b>					
<b><u>Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 98% Mod AASHTO density</u></b>					
7	Backfilling to trenches, holes, etc. C 65	m <sup>3</sup>	65		
<b><u>Prescribed density tests on filling</u></b>					
8	Modified AASHTO Density test C 13	No	13		
Carried to Collection				R	
Bill No. 2 Earthworks					

		Unit	Quantity	Rate	Amount
<b><u>SOIL POISONING</u></b> <b><u>Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:</u></b>					
9	To bottoms and sides of trenches	m <sup>2</sup>	851		
	C 851				
<b><u>Soil Poisoning Certificate</u></b>					
10	Issue of Soil Poisoning Certificate by registered and authorised entity.	Item			
	I 1				
Carried to Collection					R
Bill No. 2					
Earthworks					

Amount

**BILL NO. 2**  
**EARTHWORKS**  
**COLLECTION**

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	Unit	Quantity	Rate	Amount
<b>BILL NO. 3</b>				
<b>CONCRETE, FORMWORK AND REINFORCEMENT</b>				
<b>Key:</b>	<b>Location Description:</b>			
Un/A	Unallocated			
A	Block A - 3 Class			
B	Block B- Admin & Kit			
B1	Block B1 - 6 Class			
C	Block C - 7 Class			
C1	Block C1 - Comp Rm			
Ext	External Works			
I	Item Location (Auto)			
<p>The tenderer is referred to the relevant clauses in the ASAQS Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.</p> <p>The tenderer is referred to SANS 10400 for full details of performance and specification requirements. All products and workmanship shall be in compliance with the relevant sections of SANS and approved accordingly.</p> <p><b>SUPPLEMENTARY PREAMBLES</b></p> <p><b>Cost of tests</b></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 Tests of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the principal agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the principal agent. (Test cubes are measured separately)</p> <p><b>Formwork</b></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as 'left in' or 'permanent'), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself</p>				
Carried to Collection			R	
Bill No. 3				
Concrete, Formwork And Reinforcement				

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		Unit	Quantity	Rate	Amount
Formwork to soffits of solid slabs etc. shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described					
Formwork to soffits of slabs, beams, etc. shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described					
Formwork to sides of bases, pile caps, ground beams, etc. will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks					
<b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>					
<b><u>30MPa/19mm concrete</u></b>					
1	Underpinning in alternating sections C      65	m³	65		
<b><u>TEST CUBES</u></b>					
<b><u>Test cubes</u></b>					
2	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional) C      32	No	32		
				R	
Carried to Collection					
Bill No. 3 Concrete, Formwork And Reinforcement					

Amount

**BILL NO. 3**

**CONCRETE, FORMWORK AND REINFORCEMENT**

**COLLECTION**

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Carried to Summary

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Bill No. 3

Concrete, Formwork And Reinforcement

Unit	Quantity	Rate	Amount
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**BILL NO. 4**  
**MASONRY**

<u>Key:</u>	<u>Location Description:</u>
Un/A	Unallocated
A	Block A - 3 Class
B	Block B- Admin & Kit
B1	Block B1 - 6 Class
C	Block C - 7 Class
C1	Block C1 - Comp Rm
Ext	External Works
I	Item Location (Auto)

The tenderer is referred to the relevant clauses in the ASAQs Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.

**BRICKWORK**

**Sizes in descriptions**

Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick

**Hollow walls**

Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole

**Bagged and sealed walls**

Walls in two skins described as 'bagged and sealed' shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats bitumen emulsion waterproofing coating

**Face bricks**

Bricks shall be ordered timeously to obtain uniformity in size and colour

**Pointing**

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

**BRICKWORK IN SUPERSTRUCTURE**

**Brickwork of NFP bricks (14 MPa nominal compressive strength) in class II mortar**

1	One brick walls in beamfilling						m <sup>2</sup>	266
	A	39	B	37	B1	78		
	C	90	C1	22				

Carried to Collection

R

Bill No. 4  
Masonry

			Unit	Quantity	Rate	Amount
	<b><u>BRICKWORK SUNDRIES</u></b>					
	<b><u>2.5mm Galvanised brick reinforcement</u></b>					
2	150mm Wide reinforcement built in horizontally		m	293		
	A 57 B 54 B1 114					
	C 36 C1 32					
	<b><u>Galvanised wire ties etc.</u></b>					
3	4mm Diameter roof tie 2m girth bent double, with one end built into brickwork and other end fixed to timber		No	194		
	A 30 B 24 B1 60					
	C 70 C1 10					
	<b><u>FACE BRICKWORK</u></b>					
	<b><u>Brick-on-edge header course copings, sills, etc. of "Corobrik Firelight Satin" or other approved face bricks pointed with recessed joints on all exposed surfaces:</u></b>					
4	220mm Wide sills set sloping and slightly projected		m	131		
	A 21 B 10 B1 42					
	C 49 C1 9					
	<b><u>FIBRE-CEMENT WINDOW SILLS</u></b>					
	<b><u>Fibre-cement Sills</u></b>					
5	Fibre-cement sill "Everite Nutec" or other approved, (Product Code: 031-509) built into 230mm wall, with and including fixing lugs and self-tapping screws		m	131		
	A 21 B 10 B1 42					
	C 49 C1 9					
	Carried to Collection					
					R	
Bill No. 4						
Masonry						

Amount

**BILL NO. 4**  
**MASONRY**  
**COLLECTION**

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Carried to Summary

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Bill No. 4  
Masonry

Unit	Quantity	Rate	Amount
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**BILL NO. 5**

**WATERPROOFING**

<u>Key:</u>	<u>Location Description:</u>
Un/A	Unallocated
A	Block A - 3 Class
B	Block B- Admin & Kit
B1	Block B1 - 6 Class
C	Block C - 7 Class
C1	Block C1 - Comp Rm
Ext	External Works
I	Item Location (Auto)

The tenderer is referred to the relevant clauses in the ASAQs Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.

**SUPPLEMENTARY PREAMBLES**

**Waterproofing**

Waterproofing of roofs, basements, etc. shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc. with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs

**DAMPPROOFING OF WALLS AND FLOORS**

**One layer 375 micron embossed polyethylene dampproof course (SANS 952-1985 type B)**

1	In walls	m <sup>2</sup>	30		
	A 5	B 2	B1 10		
	C 11	C1 2			

Carried to Summary

R

Bill No. 5  
Waterproofing

	Unit	Quantity	Rate	Amount
<b>BILL NO. 6</b>				
<b>ROOF COVERINGS</b>				
<b>Key:</b>	<b>Location Description:</b>			
Un/A	Unallocated			
A	Block A - 3 Class			
B	Block B- Admin & Kit			
B1	Block B1 - 6 Class			
C	Block C - 7 Class			
C1	Block C1 - Comp Rm			
Ext	External Works			
I	Item Location (Auto)			
<p>The tenderer is referred to the relevant clauses in the ASAQS Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.</p>				
<b>SUPPLEMENTARY PREAMBLES</b>				
<b>Sheeting:</b>				
<p>The roof sheeting shall be 0.55mm thick full hard IBR profile galvanised mild steel or other approved roof sheets, roll formed in continuous lengths and cut to length by a pneumatic cut-off process. A certificate verifying compliance to all current SABS codes in respect to galvanised sheeting shall be issued by the manufacturer.</p>				
<b>Finishing of sheets:</b>				
<p>The paint finish shall be colour plus on one side and standard grey finish on the other side</p>				
<b>Fixing of sheets:</b>				
<p>The roof sheeting shall be laid in long lengths, narrow flutes outermost, with single flute sidelaps facing away from prevailing wind. All sheets shall be secured to timber purlins utilising approved roofing screws in strict accordance to the manufacturers instructions. Sheeting is to be drilled and not punched, with side laps filled with approved Mastic sealant. Sheeting is to protrude a minimum of 50mm from ends of rafters</p>				
Carried to Collection			R	
Bill No. 6				
Roof Coverings				

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		Unit	Quantity	Rate	Amount
<p><b><u>Flashings:</u></b></p> <p>Flashings shall be approved by the manufacturer and fixed to the sheeting with approved fixings. Prior to flashings being fixed, all troughs at the apex shall be stop-ended to the full depth of the sheet in order to prevent any penetration of wind driven water. The trough shall be lipped at the eaves end to form a drip. Flashing flanges shall be notched to the sheet profile where necessary. Care shall be taken to ensure that no sheeting or flashing will be cut with abrasive disc on roof surface in order to prevent steel spatter from penetrating colour coated areas.</p> <p><b><u>Erection:</u></b></p> <p>Every precaution shall be taken to prevent damage to roof sheets during all stages of construction. Duck boards should be used when necessary to protect the sheeting from damage. Sheeting which has become deformed or damaged in any way, shall be replaced, at no additional cost to the Contract</p> <p><b><u>Safety:</u></b></p> <p>The contractor shall exercise special care when handling long length sheeting, particularly in windy conditions. Should work be interrupted for any reason, all loose sheeting and incomplete sections must be adequately secured against possible movement by wind and gravity.</p> <p><b><u>Guarantee:</u></b></p> <p>The manufacturer shall comply with ISO9002 Quality Management System. Sheeting shall be laid in strict accordance with manufacturers specifications by an approved contractor. A written and approved five (5) year guarantee of site workmanship and water tightness shall be issued after final inspection of roof sheets by the manufacturer.</p> <p><b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b></p> <p><b><u>0.55mm Thick galvanized continuous IBR profile metal sheeting with 'Colour Plus' finish on one side and standard grey finish on the other side fixed to timber purlins with and including approved roofing screws with 19mm round galvanised washers and rubber gasket (timber purlins measured elsewhere)</u></b></p>					
1	Roof covering with pitch not exceeding 25 degrees	m <sup>2</sup>	1 643		
	A    283                      B    170                      B1    497 C    589                      C1    104				
2	Ridge cappings 462mm girth	m	153		
	A    25                      B    16                      B1    46 C    55                      C1    11				
Carried to Collection				R	
Bill No. 6					
Roof Coverings					

				Unit	Quantity	Rate	Amount
3	Hot dip galvanised metal polyclosures to under ridge capping and eaves			m	609		
	A 100	B 63	B1 185				
	C 219	C1 42					
4	Sondor IBR pattern polyclosure under ridge capping and eaves			m	609		
	A 100	B 63	B1 185				
	C 219	C1 42					
5	Extra over roof sheet for fixing every crown at eaves.			m	305		
	A 50	B 32	B1 93				
	C 109	C1 21					
6	Extra over roof sheeting for fixing every crown at ridge.			m	305		
	A 50	B 32	B1 93				
	C 109	C1 21					
	<b>Sundries</b>						
7	"Teco" or other equally approved galvanised two way "hurricane" clips			No	5 408		
	A 884	B 572	B1 1638				
	C 1924	C1 390					
	<b>ROOF AND WALL INSULATION (CPAP WORK GROUP NO. 122)</b>						
	<b><u>Sisalation "GR 430 Residential - MMRI 00003BA" multi-layered reinforced single-sided aluminium foil sheeting in accordance with SANS 1381-4 with a mass of not less than 163g/m² and a Class I fire rating in accordance with SANS 10177-3</u></b>						
8	Insulation sheeting laid taut over timber purlins (timber purlins elsewhere measured) and fixed concurrent with roof covering with minimum 150mm stapled laps including galvanised steel straining wires at not exceeding 400mm centres and double-sided tape at edges where required			m²	1 494		
	A 246	B 153	B1 441				
	C 542	C1 112					
	Carried to Collection					R	
	Bill No. 6						
	Roof Coverings						

Amount

**BILL NO. 6**  
**ROOF COVERINGS**  
**COLLECTION**

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Bill No. 6  
Roof Coverings

Unit	Quantity	Rate	Amount
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**BILL NO. 7**

**CARPENTRY AND JOINERY**

<u>Key:</u>	<u>Location Description:</u>
Un/A	Unallocated
A	Block A - 3 Class
B	Block B- Admin & Kit
B1	Block B1 - 6 Class
C	Block C - 7 Class
C1	Block C1 - Comp Rm
Ext	External Works
I	Item Location (Auto)

The tenderer is referred to the relevant clauses in the ASAQs Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.

**SUPPLEMENTARY PREAMBLES**

**Fixing**

Items described as 'nailed' shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete

Items described as 'plugged' shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as 'bolted', the bolts have been given elsewhere

**Joinery**

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

Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts

**Decorative thermosetting plastic laminate covering**

Laminate covering shall be glued under pressure and edge strips of same shall be butt jointed at junctions with adjacent similar finish

**Prefabricated plate nailed timber roof truss construction:**

NOTE: The following is applicable in respect of roof trusses:

The Contractor shall allow for all items deemed necessary for the proper design, fabrication and erection of the roof trusses, bracing, etc.

Carried to Collection

R

Bill No. 7

Carpentry And Joinery

	Unit	Quantity	Rate	Amount
<p>The materials and design of the roof construction shall be in accordance with the relevant edition of the South African Bureau of Standards (SABS) and the Standard Building Regulations (SBR).</p> <p>The design of trusses and permanent bracing shall be carried out under the control of a registered professional engineer who shall provide the requisite certificate of stability on completion of the roof construction. All calculations and drawing, including a key plan of each building showing the position of each type of member shall be submitted timeously to the consulting Structural Engineer for his approval before fabrication is commenced.</p> <p>Prices are to include for the provision of adequate temporary bracing during construction to the approval of the Departmental Engineer.</p> <p>The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from the architect and/or the site before fabrication commences.</p> <p>Trusses must be designed in accordance with the environmental conditions of the area.</p> <p>The following roof trusses are to a pitch not exceeding 25 degrees (unless otherwise stated) spaced at approximately 1200mm centres and are to receive 0,55mm thick IBR-profile roof sheets on timber purlins and a nailed up ceiling under.</p> <p><b><u>PRETREATMENT OF TIMBER</u></b></p> <p>This service falls within the areas defined in the National Building Regulations for Treatment of Timber against insect pest affecting softwood fixed permanently in all buildings.</p> <p>The Regulations require that timber be treated in terms of SABS 05 and to comply with SABS 457, 753, 754 or 1288 as relevant. Tenderers are to make allowance in their rates.</p> <p><b><u>PREFABRICATED ROOF TRUSSES, ETC.</u></b></p> <p>All timber roof trusses including nail-plated trusses and bolted trusses with lapped members must comply with SABS 0243 : THE DESIGN, MANUFACTURE AND ERECTION OF TIMBER TRUSSES.</p> <p>Prices for roof trusses are to include for all temporary bracing and supports and for all necessary top and bottom chord bracing, wind bracing and runners where required and overhanging ends are to be wrot faced all round.</p>				
Carried to Collection			R	
<p>Bill No. 7</p> <p>Carpentry And Joinery</p>				

		Unit	Quantity	Rate	Amount
<b><u>Plate nailed timber roof truss construction:</u></b>					
The following is applicable in respect of roof trusses: Trusses are at maximum 1200mm centres. Roof covering is 0,55mm thick IBR-profile roof steel on timber purlins. Ceilings are plasterboard on softwood brandering. The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from the Architect and/or the site before design or fabrication commences.					
<b><u>The following in plate nailed timber roof trusses with pitch not exceeding 25 degrees from an approved supplier, delivered to site, hoisted into position, fixed and braced on timber wall plates to SABS 0243:</u></b>					
1	Supply and install roof truss size complete in accordance with the Standard Building Regulations, including all timber members, cross battens at hips, valleys, etc. all in accordance with the relevant specifications to tie beam span approximately 6000mm - 7000mm between walls and approximately 1600mm high at apex (Pitch not exceeding 25 degrees)	No	3		
	C1 3				
2	Supply and install roof truss size complete in accordance with the Standard Building Regulations, including all timber members, cross battens at hips, valleys, etc. all in accordance with the relevant specifications to tie beam span approximately 8000mm - 9000mm between walls and approximately 1600mm high at apex(Pitch not exceeding 25 degrees)	No	32		
	B 4 B1 13 C 15				
3	Supply and install roof truss size complete in accordance with the Standard Building Regulations, including all timber members, cross battens at hips, valleys, etc. all in accordance with the relevant specifications to tie beam span approximately 9000mm - 10 000mm between walls and approximately 1600mm high at apex(Pitch not exceeding 25 degrees)	No	7		
	A 7				
	<b><u>Sawn softwood</u></b>				
4	76 x 52mm Purlins	m	1 828		
	A 300 B 190 B1 556 C 656 C1 126				
5	114 x 38mm Wall plates	m	51		
	A 8 B 5 B1 16 C 18 C1 4				
Carried to Collection				R	
Bill No. 7 Carpentry And Joinery					

			Unit	Quantity	Rate	Amount
	<b><u>Sundries</u></b>					
6	Two coats "ABE Provonite" or other equally approved coal tar paint on roof timbers at eaves and verges		m <sup>2</sup>	666		
	A 109 B 70 B1 202					
	C 237 C1 48					
	The following certificates are required per block					
7	Provide manufacture and installation certificates (TR1 and TR2), to be supplied by the contractor and approved by the Consulting Structural Engineer after manufacture and installation respectively		Item			
	Un/A 1					
	<b><u>ROOFS ETC</u></b>					
	<b><u>Sawn softwood</u></b>					
8	38 x 114mm timber fixed to ends of timber trusses		m	305		
	A 50 B 32 B1 93					
	C 109 C1 21					
9	50 x 75mm timber fixed to ends of timber purlins		m	101		
	A 21 B 21 B1 21					
	C 21 C1 17					
10	Install 38 x 114mm Timber cross bracings fixed to existing timber roof trusses at rafter, using galvanised mild steel bolts, washers, etc. including sanding down and sealing entire trusses to leave in a perfect condition, including reinstating in position as approved by the engineer.		m	207		
	A 33 B 21 B1 63					
	C 75 C1 15					
	<b><u>EAVES, VERGES, ETC</u></b>					
	<b><u>"Everite Nutec" or other equally approved plain fibre-cement socketless fascias and barge boards</u></b>					
11	80 x 200mm Angle section barge boards (Product Code: 527-731) including galvanised steel H-Profile jointing strips (Product Code: 655-187) and fix with hot dip galvanised screws and washes		m	101		
	A 21 B 21 B1 21					
	C 21 C1 17					
12	12 x 225mm (Product Code: 041-702) medium density Fascia boards including galvanised H-Profile jointing strips (Product Code: 685-187) tide with and including hot dipped galvanised screws and washes		m	305		
	A 50 B 32 B1 93					
	C 109 C1 21					
	Carried to Collection				R	
	Bill No. 7					
	Carpentry And Joinery					

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Amount

**BILL NO. 7**

**CARPENTRY AND JOINERY**

**COLLECTION**

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Bill No. 7

Carpentry And Joinery

Unit	Quantity	Rate	Amount
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## **BILL NO. 8**

### **CEILINGS PARTITIONS AND ACCESS FLOORING**

<b><u>Key:</u></b>	<b><u>Location Description:</u></b>
Un/A	Unallocated
A	Block A - 3 Class
B	Block B- Admin & Kit
B1	Block B1 - 6 Class
C	Block C - 7 Class
C1	Block C1 - Comp Rm
Ext	External Works
I	Item Location (Auto)

The tenderer is referred to the relevant clauses in the ASAQs Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.

### **SUPPLEMENTARY PREAMBLES**

#### **Fixing**

Items described as 'nailed' shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete

Items described as 'plugged' shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as 'bolted', the bolts have been given elsewhere

#### **Ceilings**

Unless otherwise described ceilings shall be deemed to be horizontal

#### **Bulkheads**

Bulkheads are defined as those portions of ceilings which are stepped down from the general ceiling level in a particular room or area and which generally occur along the perimeter. Their purpose is either to conceal services or to create architectural features

Bulkheads have only been described as such where they conform to the above definition and where the horizontal or vertical dimensions do not exceed 900mm. Where these dimensions are more than 900mm such portions of ceilings have been included in the appropriate general items of ceilings

Unless otherwise described bulkheads shall be deemed to be horizontal along the length

#### **Steel components**

All steel components for ceilings, partitions, etc. are to be galvanised in accordance with SANS 121

Carried to Collection

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Bill No. 8

Ceilings Partitions And Access Flooring

		Unit	Quantity	Rate	Amount
	<b><u>CEILING TIMBERS, BEADS, INSULATION, ETC</u></b>				
	<b><u>"Aerolite" or equally approved insulation</u></b>				
1	100mm Thick insulation in blanket form closely fitted and laid on top of bracing between roof timbers etc.	m <sup>2</sup>	1 494		
	A 246 B 153 B1 441 C 542 C1 112				
	<b><u>NAILED-UP CEILINGS</u></b>				
	<b><u>9mm Gypsum plasterboard ceiling fixed print side up with 32mm galvanised semi-clout nails at 150mm centres with galvanised H-profile metal cover strips, all in strict accordance with the manufacturers instructions:</u></b>				
2	Ceilings including 38 x 50mm sawn softwood bracing at 450mm centers in both directions, complete with 38 x 50mm hanger brackets nailed to trusses and nailed to bracing as extra support system.	m <sup>2</sup>	1 494		
	A 246 B 153 B1 441 C 654				
3	Extra over ceiling for 600 x 600mm trap door of 38 x 50mm wrought softwood rebated framing with one cross bracer, covered with ceiling board and fitted flush in opening, including necessary trimmers around	No	20		
	A 3 B 3 B1 6 C 7 C1 1				
	<b><u>Gypsum plasterboard cornice</u></b>				
4	75mm Coved cornices plugged	m	652		
	A 106 B 84 B1 197 C 231 C1 34				
	Carried to Collection			R	
	Bill No. 8				
	Ceilings Partitions And Access Flooring				

Amount

**BILL NO. 8**

**CEILINGS PARTITIONS AND ACCESS FLOORING**

**COLLECTION**

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Bill No. 8

Ceilings Partitions And Access Flooring

Unit	Quantity	Rate	Amount
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**BILL NO. 9**

**FLOOR COVERINGS**

<u>Key:</u>	<u>Location Description:</u>
Un/A	Unallocated
A	Block A - 3 Class
B	Block B- Admin & Kit
B1	Block B1 - 6 Class
C	Block C - 7 Class
C1	Block C1 - Comp Rm
Ext	External Works
I	Item Location (Auto)

**FLOOR COVERINGS, WALL LININGS, ETC**

**Fixing**

Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc

**FLOOR COVERINGS**

**300 x 300 x 2mm "Marley FloorworX Floorflex" semi flexible vinyl tiles to SABS 581:1992 laid in approved adhesive and to manufacturers instructions**

1	On floors	m <sup>2</sup>	1 494		
	A 246 B 153 B1 441				
	C 542 C1 112				

**POLISH, SEALERS, ETC**

**Polish**

2	Thoroughly clean down and wash, strip with an ammonia based stripping agent and apply three coats of approved polyurethane sealer in strict accordance with the manufacturers instructions.	m <sup>2</sup>	1 494		
	A 246 B 153 B1 441				
	C 542 C1 112				

Carried to Summary

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Bill No. 9  
Floor Coverings

Unit	Quantity	Rate	Amount
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**BILL NO. 10**

**IRONMONGERY**

<u>Key:</u>	<u>Location Description:</u>
Un/A	Unallocated
A	Block A - 3 Class
B	Block B- Admin & Kit
B1	Block B1 - 6 Class
C	Block C - 7 Class
C1	Block C1 - Comp Rm
Ext	External Works
I	Item Location (Auto)

The tenderer is referred to the relevant clauses in the ASAQs Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.

**SUPPLEMENTARY PREAMBLES**

**Proprietary items**

Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items. Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc. clarifying the features of the products/articles offered. On request returnable samples are to be provided to the principal agent for consideration.

**Finishes to ironmongery**

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 AN Anodised natural AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded

**HINGES, BOLTS, ETC.**

**"Union" or other approved**

1	100mm Galvanised and welded loose pin hinges				
A	6	B	10	B1	12
C	14	C1	2		

Carried to Collection

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Bill No. 10  
Ironmongery

		Unit	Quantity	Rate	Amount
<b><u>LOCKS</u></b>					
<b><u>"Union" or other approved</u></b>					
2	Solid Art (Product Code: 390/313) Four-lever lockset with and including Satin Chrome plated handles	No	22		
	A      3                      B      5                      B1      6				
	C      7                      C1      1				
<b><u>SUNDRIES</u></b>					
<b><u>"Geze" or other approved</u></b>					
3	38mm Diameter rubber door stop plugged and screwed to floor with a 50mm long brass screw	No	22		
	A      3                      B      5                      B1      6				
	C      7                      C1      1				
<b><u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC.</u></b>					
<b><u>SANS approved combi board:</u></b>					
4	Combi board with and including anodised aluminum frame, size 2000 x 1200mm high plugged.	No	1		
	B      1				
<b><u>"Vitrex System 1000" or other equally approved vitreous enamelled Chalkboard:</u></b>					
5	System 1000 vitreous enamel magnetic chalkboards 1140 x 2400mm long complete with aluminium chalkrail, etc, fixed adjacent to similar unit to form panel 4800mm long, including fixing to brickwork, etc	No	36		
	A      6                      B1      12                      C      14				
	C1      4				
<b><u>"Vitrex System 2000" or other equally approved pinning board:</u></b>					
6	"Flortime Premier" carpet faced wall mounted pinning board with anodised aluminum channel surround, 1800 x 1200mm high all fixed in strict accordance with the Manufacturer's instructions.	No	18		
	A      3                      B1      6                      C      7				
	C1      2				
Carried to Collection					R
Bill No. 10					
Ironmongery					

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**BILL NO. 10**  
**IRONMONGERY**  
**COLLECTION**

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	Unit	Quantity	Rate	Amount
<b>BILL NO. 11</b>				
<b>METALWORK</b>				
<b>Key:</b>	<b>Location Description:</b>			
Un/A	Unallocated			
A	Block A - 3 Class			
B	Block B- Admin & Kit			
B1	Block B1 - 6 Class			
C	Block C - 7 Class			
C1	Block C1 - Comp Rm			
Ext	External Works			
I	Item Location (Auto)			
<p>The tenderer is referred to the relevant clauses in the ASAQS Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.</p>				
<b>SUPPLEMENTARY PREAMBLES</b>				
<b>Descriptions of bolts, anchors, etc.</b>				
<p>Descriptions of bolts shall be deemed to include nuts and washers</p>				
<p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p>				
<p>Items described as 'holed for bolt(s)' shall be deemed to exclude the bolts unless otherwise described</p>				
<p>Items described as 'plugged' shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres</p>				
<b>Hot dipped galvanising:</b>				
<p>The mass of hot dip galvanised steelwork has been calculated on the mass before galvanising and no allowance has been made for the additional mass of galvanising for which allowance must be made in pricing.</p>				
<p>Unless otherwise stated, all steelwork described as galvanised shall be deemed to include for 'hot-dip' galvanising in accordance with the latest SANS standards.</p>				
Carried to Collection			R	
Bill No. 11				
Metalwork				

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		Unit	Quantity	Rate	Amount
<b><u>Drawings:</u></b> Tenderers are to note that where descriptions include reference to drawings, notwithstanding anything contained in the descriptions, tenderers are to price these items in accordance with the drawings. Further, the onus is on the tenderer to ensure that all relevant drawings referenced in the Bills of Quantities are included in the tender documents. No additional time and/or monetary claims resulting from non-adherence to the above will be entertained.					
<b><u>GALVANISED STEEL GATES, SCREENS, ETC</u></b>					
<b><u>Security gates:</u></b>					
1	Purpose made single hot dipped galvanised mild steel gate, 1100mm x 2125mm formed of 40 x 60 x 3mm hollow sectioned frames and midrail, filled in with 12mm solid square vertical bars at 110mm centres welded to frame and fitted with 2no. Pin type gate hinges welded to frame and pad lock plates welded to gate and plugged to walls with and including expansion joints  A     3                      B     5                      B1     6 C     7                      C1     1	No	22		
<b><u>SUNDRY STEELWORK</u></b>					
<b><u>GALVANISED PRESSED STEEL DOOR FRAMES</u></b>					
<b><u>1.2mm Double rebated frames suitable for 220mm brick walls complete with 2 brass butt hinges per door leaf with straps for building in:</u></b>					
2	Frame for door 813 x 2032mm high.  A     3                      B     5                      B1     6 C     7                      C1     1	No	22		
Carried to Collection				R	
Bill No. 11 Metalwork					

Amount

**BILL NO. 11**  
**METALWORK**  
**COLLECTION**

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Bill No. 11  
Metalwork

	Unit	Quantity	Rate	Amount
<b>BILL NO. 12</b>				
<b>PLASTERING</b>				
<b>Key:</b>	<b>Location Description:</b>			
Un/A	Unallocated			
A	Block A - 3 Class			
B	Block B- Admin & Kit			
B1	Block B1 - 6 Class			
C	Block C - 7 Class			
C1	Block C1 - Comp Rm			
Ext	External Works			
I	Item Location (Auto)			
<p>The tenderer is referred to the relevant clauses in the ASAQS Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.</p>				
<b>SUPPLEMENTARY PREAMBLES</b>				
<b>Method</b>				
<p>The method to be used shall be either the monolithic method or the bonded method</p>				
<b>Preparation</b>				
<p>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc. is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic.</p>				
<b>Mix</b>				
<p>Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic.</p>				
Carried to Collection			R	
Bill No. 12				
Plastering				

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		Unit	Quantity	Rate	Amount
<p><b><u>Panels</u></b></p> <p>Granolithic shall be laid in panels not exceeding 14m\² for monolithic finishes, not exceeding 9,5m\² for bonded finishes and not exceeding 6m\² for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width.</p> <p>Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints</p> <p><b><u>Laying</u></b></p> <p>Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels</p> <p>Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels</p> <p>After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated</p> <p><b><u>Curing, seasoning and protection</u></b></p> <p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying.</p> <p><b><u>Colour</u></b></p> <p>Coloured granolithic shall be tinted with an approved colouring pigment mixed into a true and even colour.</p> <p><b><u>SCREEDS</u></b></p> <p><b><u>Screeds wood floated, on concrete</u></b></p>					
1	<p>Average 25mm thick on floors with upper surface to falls</p> <p>A     38                      B     24                      B1     69</p> <p>C     82                      C1     16</p>	m²	229		
<p><b><u>INTERNAL PLASTER</u></b></p> <p><b><u>Cement plaster, on brickwork</u></b></p>					
2	<p>On walls</p> <p>A     53                      B     32                      B1     105</p> <p>C     122                      C1     20</p>	m²	332		
Carried to Collection				R	
<p>Bill No. 12</p> <p>Plastering</p>					

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Amount

**BILL NO. 12**  
**PLASTERING**  
**COLLECTION**

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Bill No. 12  
Plastering

Unit	Quantity	Rate	Amount
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**BILL NO. 13**

**PLUMBING AND DRAINAGE**

<u>Key:</u>	<u>Location Description:</u>
Un/A	Unallocated
A	Block A - 3 Class
B	Block B- Admin & Kit
B1	Block B1 - 6 Class
C	Block C - 7 Class
C1	Block C1 - Comp Rm
Ext	External Works
I	Item Location (Auto)

The tenderer is referred to the relevant clauses in the ASAQs Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.

**SUPPLEMENTARY PREAMBLES**

**Wire gratings**

Descriptions of gutter outlets etc. shall be deemed to include wire balloon gratings

**Stormwater channels**

Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc., and disposal of surplus material on site

**French drains**

Descriptions of French drains shall be deemed to include excavation, stone filling graded from 300mm diameter at bottom to 75mm diameter at top, geofabric filter blanket over stone, 300mm earth filling over and disposal of surplus material on site

**Septic tanks**

Descriptions of proprietary type septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc. all in accordance with the manufacturer's instructions and disposal of surplus material on site

Carried to Collection

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	Unit	Quantity	Rate	Amount
<p><b><u>Stainless steel basins, sinks, wash troughs, urinals, etc.</u></b></p> <p>Stainless steel for economy basins, domestic sinks and worktops shall be Type 430 (17/0) Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc. shall be Type 304 (18/8) Stainless steel for laboratory sinks, photographic equipment, etc. shall be Type 316 (18/8) Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><b><u>Sealing of edges</u></b></p> <p>Outer edges of sinks, basins, baths, urinals, etc. are to be sealed against adjacent surfaces with approved silicone</p> <p><b><u>uPVC pipes and fittings</u></b></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings. Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings</p> <p><b><u>uPVC pressure pipes and fittings</u></b></p> <p>Pipes of 50mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings. Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><b><u>High density polyethylene (HDPE) pipes and fittings</u></b></p> <p>Pipes shall be type IV and of the class specified with Plasson or Alprene compression fittings</p> <p><b><u>Polycop polypropylene pipes</u></b></p> <p>Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with Fast-fuse heat welded thermoplastic or where so described Polylock compression fittings Pipes shall be firmly fixed to walls, etc. with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p>				
Carried to Collection			R	
<p>Bill No. 13</p> <p>Plumbing And Drainage</p>				

	Unit	Quantity	Rate	Amount
<p><b><u>Copper pipes</u></b></p> <p>Pipes shall be hard drawn and half-hard Maksal pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), Class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be Cobra Watertech type. Capillary solder fittings shall comply with ISO 2016</p> <p>Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc. to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition</p> <p><b><u>Reducing fittings</u></b></p> <p>Where fittings have reducing ends or branches they are described as 'reducing' and only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained</p> <p><b><u>Fixing of pipes</u></b></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc., casting in, building in or suspending not exceeding 1m below suspension level</p> <p><b><u>Paper wrapping to pipes</u></b></p> <p>Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings</p> <p><b><u>Disinfection of water pipework</u></b></p> <p>Water pipework is to be disinfected at completion in accordance with SABS 1200L (provision for disinfection elsewhere)</p> <p><b><u>Densyl petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u></b></p> <p>Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied in the appropriate widths and with 25% overlaps. Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including mastic, tape, Layflat sheeting, securing of same, etc.</p> <p>Prices for wrapping of pipes shall include for all work as described to couplings in the length</p>				
Carried to Collection			R	
<p>Bill No. 13</p> <p>Plumbing And Drainage</p>				

	Unit	Quantity	Rate	Amount
<p><b><u>Laying, backfilling, bedding, etc. of pipes</u></b></p> <p>Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled</p> <p>Where no manufacturers' instructions exist, pipes shall be laid in accordance with Clauses 5.1 and 5.2 of each of the following: SABS 1200L : Medium-pressure pipelines SABS 1200LD : Sewers SABS 1200LE : Stormwater drainage Pipe trenches, etc. shall be backfilled in accordance with Clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with Clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200LB : Bedding (Pipes) Unless otherwise described bedding of rigid pipes shall be Class B bedding</p> <p><b><u>General</u></b></p> <p>Descriptions of cast iron roof outlets shall be deemed to include joints to pipes and casting into concrete (adaptors for joints to PVC pipes, etc. are given separately) Descriptions of overflow pipes where measured in number, shall be deemed to include joints to cisterns and splay cut ends</p> <p>Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc. shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 98% Mod AASHTO density and disposal of surplus material on site</p> <p>Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc. and to steel pipes (adaptors for connections to copper pipes, etc. are given separately)</p> <p>Descriptions of WC pans, slop hoppers, etc. shall be deemed to include for joints to soil pipes (pan connectors are separately measured)</p> <p><b><u>As-built drawings</u></b></p> <p>Where required, the contractor shall prepare an updated set of as-built drawings. At completion of the contract the contractor shall hand these drawings to the principal agent for reproducing onto the originals for handing over to the employer (provision for allowance of as-built drawings elsewhere)</p>				
Carried to Collection			R	
Bill No. 13				
Plumbing And Drainage				

			Unit	Quantity	Rate	Amount
<b><u>RAINWATER DISPOSAL</u></b>						
<b><u>Seamless aluminium prepainted gutters and rainwater pipes, with baked enamel finish</u></b>						
1	150mm x 150mm x 0,6mm Square profile aluminium seamless roof gutters fixed to falls with brackets screwed to eaves, purlins/false timber through fibre cement fascia with galvanised screws/or bolted to fibre cement fascia or steel supporting structure with galvanised bolts/nuts and washers at 500mm centres.		m	305		
	A 50 B 32 B1 93					
	C 109 C1 21					
2	100 x 75 x 0,6mm thick rectangular fluted Rainwater downpipes including prepainted aluminium straps fixed to walls with nail plugs and/or fixed to steel supports with self tapping screws.		m	180		
	A 31 B 25 B1 50					
	C 57 C1 17					
3	Extra over gutter for stopped end		No	20		
	A 4 B 4 B1 4					
	C 4 C1 4					
4	Extra over eaves gutter for drop box suitable for 150 x 150mm box gutter		No	48		
	A 8 B 6 B1 14					
	C 16 C1 4					
5	Extra over gutter for outlet for 100 x 75mm pipe		No	48		
	A 8 B 6 B1 14					
	C 16 C1 4					
6	Extra over rainwater pipe for bend		No	96		
	A 16 B 12 B1 28					
	C 32 C1 8					
7	Extra over rainwater pipe for shoe		No	48		
	A 8 B 6 B1 14					
	C 16 C1 4					
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Plumbing And Drainage						

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**BILL NO. 13**

**PLUMBING AND DRAINAGE**

**COLLECTION**

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	Unit	Quantity	Rate	Amount
<b>BILL NO. 14</b>				
<b>GLAZING</b>				
<b>Key:</b>	<b>Location Description:</b>			
Un/A	Unallocated			
A	Block A - 3 Class			
B	Block B- Admin & Kit			
B1	Block B1 - 6 Class			
C	Block C - 7 Class			
C1	Block C1 - Comp Rm			
Ext	External Works			
I	Item Location (Auto)			
The tenderer is referred to the relevant clauses in the ASAQS Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.				
<b>SUPPLEMENTARY PREAMBLES</b>				
<b>Float glass</b>				
The term 'float glass' is used for monolithic annealed glass				
<b>Laminated glass</b>				
Laminated glass to have polyvinyl butyral (PVB) interlayer(s)				
<b>Certificate</b>				
Rates for glazing shall include for the relevant glazing certificates to be issued at completion of project				
<b>GLAZING TO STEEL WITH PUTTY</b>				
<b>6.38mm safety glass:</b>				
Panes not exceeding 0,1m <sup>2</sup>		m <sup>2</sup>	203	
A	35	B	11	B1 69
C	74	C1	14	
<b>CERTIFICATES</b>				
<b>Glazing Certificate</b>				
Issue of AAAMSA Glass & Glazing Certificate by registered and authorised entity.		Item		
Un/A	1			
Carried to Summary			R	
Bill No. 14				
Glazing				

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	Unit	Quantity	Rate	Amount
<b><u>BILL NO. 15</u></b>				
<b><u>PAINTWORK</u></b>				
<b><u>Key:</u></b>	<b><u>Location Description:</u></b>			
Un/A	Unallocated			
A	Block A - 3 Class			
B	Block B- Admin & Kit			
B1	Block B1 - 6 Class			
C	Block C - 7 Class			
C1	Block C1 - Comp Rm			
Ext	External Works			
I	Item Location (Auto)			
<p>The tenderer is referred to the relevant clauses in the ASAQS Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.</p>				
<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
<b><u>Propriety items or materials:</u></b>				
<p>Proprietary items or materials where specified are to be of the brand specified - or other approved - by the Head: Works.</p>				
<p>Tenderers attention is drawn to page SP52 of the standard preambles for all trades - WB20 for all full descriptions of preparatory work to be carried out before painting commences.</p>				
<b><u>SABS Specifications:</u></b>				
Alkali resistant plaster primer: SABS 1416				
Matt or eggshell decorative paint for interior works: SABS 515				
High gloss enamel paint: SABS 630 Grade I				
Oil gloss enamel paint: SABS 631				
Primers for wood for external work : SABS 678 type I				
Primers for wood for internal work : SABS 678 type III				
Zinc chromate primers for steel : SABS 679 type I				
Undercoats for paints (except emulsion paint) SABS 681 Type I				
Aluminium paint : SABS 682 Grade II				
Roof paints: SABS 683 Type B (Oil based)				
Roof paints: SABS 940 Type B (emulsion based)				
Structural steel paint : SABS 684 Type B				
Wash primer (metal etch) : SABS 723				
Carried to Collection			R	
Bill No. 15				
Paintwork				

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		Unit	Quantity	Rate	Amount
	Varnish for interior use: SABS 887 Type I				
	Emulsion paints : SABS 1227 (textured: internal/external)				
	Emulsion paints : SABS 1586 (Gloss, semi gloss, Matt: internal/external)				
	Calcium plumbate primer : SABS 912				
	Road marking paint: SABS 5731 Part I				
	<b><u>PREPARATORY WORK TO EXISTING WORK</u></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>COLOURS</u></b>				
	<b><u>Colours, etc.</u></b>				
	Unless otherwise described all paintwork shall be deemed to have a colour value in excess of 7 on the Munsell system in accordance with SANS 1091				
	<b><u>ON INTERNAL FLOATED PLASTER SURFACES</u></b>				
	<b><u>One coat alkali resistant primer and two coats "Plascon Wall and All" or other approved acrylic emulsion paint</u></b>				
1	Walls	m <sup>2</sup>	1 959		
	A 317 B 253 B1 591				
	C 694 C1 104				
	<b><u>ON EXTERNAL FLOATED PLASTER SURFACES</u></b>				
	<b><u>One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use</u></b>				
2	Walls	m <sup>2</sup>	1 362		
	A 240 B 172 B1 385				
	C 444 C1 121				
	Carried to Collection			R	
	Bill No. 15				
	Paintwork				



		Unit	Quantity	Rate	Amount
<b><u>ON INTERNAL GYPSUM PLASTER SURFACES</u></b>					
<b><u>One coat primer and two coats superior quality acrylic emulsion paint for interior and exterior use</u></b>					
3	Ceilings and cornices	m <sup>2</sup>	1 494		
	A      260                      B      156                      B1      456				
	C      540                      C1      82				
<b><u>ON FIBRE-CEMENT BOARD SURFACES</u></b>					
<b><u>One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use</u></b>					
4	Fascias and barge boards, including priming metal jointing strips	m <sup>2</sup>	218		
	A      41                      B      27                      B1      62				
	C      70                      C1      18				
<b><u>ON METAL SURFACES</u></b>					
<b><u>One coat alkyd based zinc phosphate primer and two coats premium quality polyurethane enamel paint, on steel</u></b>					
5	Door frames	m <sup>2</sup>	35		
	A      5                      B      8                      B1      9				
	C      11                      C1      2				
6	Windows	m <sup>2</sup>	286		
	A      48                      B      22                      B1      82				
	C      116                      C1      18				
7	Gates, grilles, burglar screens, balustrades, etc. (both sides measured over the full flat area)	m <sup>2</sup>	83		
	A      11                      B      11                      B1      34				
	C      23                      C1      4				
<b><u>ON WOOD SURFACES</u></b>					
<b><u>One coat primer and three coats premium quality polyurethane enamel paint</u></b>					
8	Doors	m <sup>2</sup>	83		
	A      11                      B      19                      B1      23				
	C      26                      C1      4				
				<b>R</b>	
Carried to Collection					
Bill No. 15 Paintwork					

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**BILL NO. 15**  
**PAINTWORK**  
**COLLECTION**

Amount

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R

		Unit	Quantity	Rate	Amount
<b>BILL NO. 16</b>					
<b>EXTERNAL WORKS</b>					
<b>Key:</b>		<b>Location Description:</b>			
Un/A		Unallocated			
A		Block A - 3 Class			
B		Block B- Admin & Kit			
B1		Block B1 - 6 Class			
C		Block C - 7 Class			
C1		Block C1 - Comp Rm			
Ext		External Works			
I		Item Location (Auto)			
<p>The tenderer is referred to the relevant clauses in the ASAQS Model Trades Preambles 2008 and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.</p> <p><b>Explosives</b></p> <p>No explosives whatsoever may be used for demolition purposes unless otherwise stated</p> <p><b>General</b></p> <p>The contractor shall carry out the whole of the works with as little mess and noise as possible and with minimum disturbance to adjoining classroom blocks and their students. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent</p> <p>Water supply pipes and other piping that may be encountered 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 principal agent</p> <p><b>Removal of materials:</b></p> <p>Where removal is included in the heading, sub-heading or item description, prices shall be deemed to include for the necessary costs in removal and appropriate disposal of materials including but not limited to labour, transportation and disposal costs. No further claims in this regard will be entertained.</p> <p><b>DEMOLITIONS</b></p> <p><b>Demolish and remove:</b></p>					
1	100mm Thick reinforced concrete to walkways	m²	251		
	Ext 251				
Carried to Collection				R	
Bill No. 16					
External Works					

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		Unit	Quantity	Rate	Amount
<b><u>THE FOLLOWING IN SITE WORKS</u></b>					
2	Excavation in earth not exceeding 2m deep to reduce levels under pavings and stockpile on site Ext 70	m <sup>3</sup>	70		
3	Take from stockpile and spread and consolidate topsoil over site including compaction to 93% Mod AASHTO density. Ext 98	m <sup>3</sup>	98		
4	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. Ext 468	m <sup>2</sup>	468		
5	Earth filling of approved G5 material in accordance with the relevant part of SANS 10400, supplied by the Contractor and filled to defined levels and compacted to a minimum density of 95% Mod AASHTO density. Ext 70	m <sup>3</sup>	70		
6	Course river sand filling under floors etc., supplied by the contractor. Ext 23	m <sup>3</sup>	23		
7	In-situ dry density test in accordance with method A10(b) of TMH1 Ext 14	No	14		
8	Maximum dry density test and optimum moisture content test in accordance with method A7 of TMH1 Ext 9	No	9		
<b><u>THE FOLLOWING IN STORMWATER CHANNELS TO BUILDINGS</u></b>					
<b><u>Earthworks</u></b>					
9	Excavation in earth not exceeding 2m deep to reduce levels Ext 83	m <sup>3</sup>	83		
10	Extra over excavations for carting away excavated material to a dumping site to be located by the contractor Ext 83	m <sup>3</sup>	83		
11	Compaction of ground surface under floor, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 98% MOD AASHTO Density Ext 1102	m <sup>2</sup>	1 102		
Carried to Collection				R	
Bill No. 16 External Works					

		Unit	Quantity	Rate	Amount
12	Earth filling of G5 material in accordance with SABS 1200 DM, compacted to 98% MOD AASHTO density in under floors Ext 83	m <sup>3</sup>	83		
13	Approved brand of anti-termite soil poison applied under floors by a registered pest control company and guaranteed against termites infestation for 10 years Ext 1102	m <sup>2</sup>	1 102		
	<b><u>Soil Poisoning Certificate</u></b>				
14	Issue of Soil Poisoning Certificate by registered and authorised entity. Un/A 1	Item			
	<b><u>Reinforced concrete cast in-situ channels:</u></b>				
15	2000mm Wide x 130mm thick overall mesh reinforced concrete "V"-shaped stormwater channels(1000mm wide) and apron slab (1000mm wide) combination of 25 Mpa/19mm concrete construction, "V" -shaped stormwater channel section to be 100mm thick at centre of 500mm wide adjacent surfaces, and both "V" -shaped stormwater channel and apron slab with and including Ref 193 mesh reinforcement, 250 micron "Console Plastics Gunplas Black" or other approved waterproof sheeting and rough formwork (Degree of Accuracy III) not exceeding 300mm high extreme to vertical edges of channels and apron slabs. Channels and apron slabs to be cast in 1000mm long panels, with and including bitumen impregnated fibreboard joints between adjacent panels and between panels and adjacent brick walls with approved joint sealant to all joints, and the whole to have a wood floated finish Ext 551	m	551		
16	Extra over 2000mm wide concrete stormwater channel for corner Ext 20	No	20		
	<b><u>THE FOLLOWING IN HEADWALLS</u></b>				
	<b><u>Excavation in earth not exceeding 2m deep:</u></b>				
17	Holes Ext 5	m <sup>3</sup>	5		
18	Trenches Un/A 1	m <sup>3</sup>	1		
	<b><u>Extra over all excavations for carting away:</u></b>				
19	Surplus material from excavations and/or stockpiles on site, to a dumping site to be located by the contractor Un/A 4	m <sup>3</sup>	4		
	Carried to Collection			R	
	Bill No. 16 External Works				

		Unit	Quantity	Rate	Amount
	<b><u>Risk of collapse</u></b>				
20	Sides of trenches and hole excavations not exceeding 1.5m deep Un/A 16	m <sup>2</sup>	16		
	<b><u>Earth filling obtained from the excavations and/or prescribed stockpiles on site, compacted to 95% MOD AASHTO</u></b>				
21	Backfilling behind retaining walls Un/A 1	m <sup>3</sup>	1		
	<b><u>Compaction of surfaces</u></b>				
22	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% MOD AASHTO density Un/A 5	m <sup>2</sup>	5		
	<b><u>Stone pitching of approximately 19mm diameter river stones tightly packed including preparation of ground surface under:</u></b>				
23	Against cut-off walls Un/A 5	m <sup>3</sup>	5		
	<b><u>Soil insecticide in accordance with SANS 5859:</u></b>				
24	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming Un/A 6	m <sup>2</sup>	6		
25	To bottom of and sides of trenches, etc Un/A 10	m <sup>2</sup>	10		
	<b><u>25MPa/19mm Concrete:</u></b>				
26	Splitter blocks Un/A 1	m <sup>3</sup>	1		
27	Surface beds Un/A 1	m <sup>3</sup>	1		
28	Strip footings Un/A 1	m <sup>3</sup>	1		
	<b><u>Finishing concrete smooth with a power float</u></b>				
29	Surface beds, etc to falls Un/A 6	m <sup>2</sup>	6		
	<b><u>Rough formwork to sides</u></b>				
30	Sides of splitter blocks not exceeding 300mm high Un/A 5	m	5		
Carried to Collection				R	
Bill No. 16 External Works					

		Unit	Quantity	Rate	Amount
	<b><u>Fabric reinforcement:</u></b>				
31	Type 193 fabric reinforcement in concrete surface beds, etc Un/A 9	m <sup>2</sup>	9		
	<b><u>Face bricks pointed with flush horizontal and vertical joints</u></b>				
32	One brick wall pointed both sides Un/A 3	m <sup>2</sup>	3		
	<b><u>Brick-on-edge header course copings, sills, etc of "Corobrik Firelight Satin FBX" face bricks, pointed with flush joints on all exposed faces:</u></b>				
33	Ditto, but raking Un/A 6	m	6		
34	220mm Copings on top of one brick walls Un/A 2	m	2		
	<b><u>Sundries</u></b>				
35	Forming opening in one brick wall for 450mm diameter pipe, and making good all edges, etc Un/A 2	No	2		
	<b><u>STORMWATER DRAINAGE (CPAP WORK GROUP NO. 146)</u></b>				
	<b><u>Class 100D concrete pipes with interlocking joints</u></b>				
36	450mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep Ext 45	m	45		
	<b><u>Sumps, catchpits, inspection chambers, etc. including concrete kerbs or precast concrete cover slabs, gratings and covers</u></b>				
37	Construct 230mm brick catchpit approximately 1255mm x 940mm overall size on plan and approximately 1100mm high, including excavation in earth and cartaway all excess material, 25MPa concrete surface bed with 2 layers of 395 Mesh, concrete benching for 450mm diameter pipe including 520 x 790 heavy duty stormwater grating and frame all as per attached engineering drawing number 04 Ext 6	No	6		
Carried to Collection				R	
Bill No. 16 External Works					

Amount

**BILL NO. 16**

**EXTERNAL WORKS**

**COLLECTION**

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Bill No. 16  
External Works



			Amount
Bill No.	<u>SUMMARY</u>	Page	
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	SUMMARY		

ITEM NO	DESCRIPTION	UNIT	QTY	SUPPLY AND INSTALL	AMOUNT
<b>Bill No.1</b>	<b>PRELIMINARIES AND GENERAL</b>				
	<b>Fixed Cost Items:</b>				
1	Contractual requirements	sum	1		
2	Co-operation and Programming with others	sum	1		
3	Clearing of site on Contract completion	sum	1		
4	Name Board	ea	1		
5	Ablution and latrine facilities	sum	1		
6	Office and storage facilities	sum	1		
7	Access	sum	1		
8	Tools and equipment	sum	1		
9	Living accommodation	sum	1		
10	Supervision during construction	sum	1		
11	Temporary construction electrical connection	sum	1		
12	Compliance with OHS Act Requirements	sum	1		
13	Other fixed charge obligations	sum	1		
14	Health and Safety Plan	sum	1		
15	Submission of commencement and completion form/cards to eThekweni Electricity	sum	1		
	<b>Time Dependant Costs:</b>				
16	Contractual requirements	sum	1		
17	Storage and protection of materials and equipment	sum	1		
18	Contract Insurance	sum	1		
19	Operate and maintain facilities on site	sum	1		
20	Office and storage facilities	sum	1		
21	Tools and equipment	sum	1		
22	Ablution and latrine facilities	sum	1		
23	Access	sum	1		
24	Living accommodation	sum	1		
25	Supervision during construction	sum	1		
26	Temporary construction electrical connection	sum	1		
27	Other time dependant obligations	sum	1		
28	Compliance with OHS Act Requirements	sum	1		
	<b>Additional Items:</b>				
29	Any additional items that the Tenderer may wish to detail	sum	1		
	<b>TOTALS FOR BILL NO.1 (EXCLUDING VAT)</b>				

ITEM NO	DESCRIPTION	UNIT	QTY	SUPPLY AND INSTALL	AMOUNT
<b>Bill No.2</b>	<b>ELECTRICAL INSTALLATION</b>				
	Refer to the specification and drawings				
	<b><u>Distribution Boards and DB Equipment</u></b>				
	<u>Supply and Install Form 1 Separation, 5kA rated</u>				
	<u>Distribution Boards as specified below, complete with</u>				
	<u>mounting accessories and etc. (Switchgear measured</u>				
	<u>under DB Equipment).</u>				
1	24 Way Flush Mounted Distribution Board including Metal Cover with cutout, Mandatory Warning Signage, Flush Galvanized tray, Mounting Rails for switchgear, 2 x Neutral Bars and Earth bar.	No	5		
2	12 Way Flush Mounted Distribution Board including Metal Cover with cutout, Mandatory Warning Signage, Flush Galvanized tray, Mounting Rails for switchgear, 2 x Neutral Bars and Earth bar.	No	1		
3	12 Way Surface Mounted Distribution Board including Metal Cover with cutout, Mandatory Warning Signage, Surface Metal Box Housing, Mounting Rails for switchgear, 2 x Neutral Bars and Earth bar.	No	2		
	<u>Supply and Install the following 6kA rated Switchgear</u>				
	<u>Equipment into the above Distribution boards as</u>				
	<u>specified below, including busbars, rated wiring tails and</u>				
	<u>labelling.</u>				
4	80A DP 6kA Isolator (Main Switch)	No	1		
5	63A DP 6kA Isolator (Main Switch)	No	4		
6	63A DP Earth Leakage Isolating Unit with 30mA trip rating.	No	8		
7	5A SP 6kA MCB (PEC circuit)	No	8		
8	10A SP 6kA MCB (Lights, Feeder Circuit)	No	26		
9	20A SP 6kA MCB (Plugs, Airconditioner, Feeder Circuit)	No	19		
10	30A SP 6kA MCB (Stove Circuit)	No	1		
11	20A 4P Contactor with 230V Coil (Exterior Light control).	No	1		
12	20A DP Contactor with 230V Coil (Exterior Light control)	No	7		
13	16A 1 Way Light Switch mounted in DB (Bypass Switch for PEC circuit)	No	8		
14	Type 2 6kA Surge Arrester 1P + N with indicators.	No	8		
15	Blank Covers for Spare Ways in Cutouts.	No	55		

ITEM NO	DESCRIPTION	UNIT	QTY	SUPPLY AND INSTALL	AMOUNT
	<b><u>Wiring Channel</u></b> <u>Supply and Install OL2000 galvanised steel horizontal Wiring Channel as specified.</u>				
16	Hot dipped galvanised OL2000 trunking or similar approved, complete with OL2000 PVC covers, T-off, Elbows, 20mm dia knock-outs (suitable for 20mm diameter conduit) at 300mm centres on both sides and including approved hangers at 1200mm centres, suspended from roof trusses or concrete slabs on M12 threaded bolt not exceeding 1200mm down (NB: Any drilling onto slabs shall be approved by Structural Engineer prior commencement)	m	60		
	<b><u>Conduit and Conduit Accessories</u></b> <u>Supply and Install Conduit and conduit accessories as specified.</u>				
17	20mm Diameter PVC conduit including bends, T-offs, saddles, joints, etc, fastened on surface.	m	1550		
18	20mm Diameter PVC conduit including bends, T-offs, saddles, joints, etc, chased into brickwork..	m	585		
19	20mm Diameter Galvanized conduit including bends, T-offs, saddles, joints, etc, fastened on surface.	m	110		
20	25mm Diameter Galvanized conduit including bends, T-offs, saddles, joints, etc, fastened on surface.	m	80		
21	32mm Diameter PVC conduit including bends, T-offs, saddles, joints, etc, fastened on surface.	m	15		
22	32mm Diameter PVC conduit including bends, T-offs, saddles, joints, etc, chased into brickwork..	m	25		
23	32mm Diameter Galvanized conduit including bends, T-offs, saddles, joints, etc, fastened on surface.	m	35		
24	40mm Diameter Galvanized conduit including, saddles, joints, etc, fastened on surface for kicker Pipe.	m	15		
25	PVC 60mm Diameter round box Flush or Surface mounted, complete with cover for 20mm Diameter PVC Conduit.	No	150		
26	Galvanized 60mm Diameter round box Surface mounted, complete with cover for 20mm diameter conduit.	No	30		
27	Galvanized 50mm x 100mm box Flush mounted for 20mm Diameter Conduit.	No	40		
28	Galvanized 100mm x 100mm box Flush mounted for 20mm Diameter Conduit.	No	50		
29	Galvanized 60mm Diameter round box Surface mounted, complete with cover for 25mm diameter conduit.	No	5		
30	Galvanized 100mm x 100mm box Flush mounted for 32mm Diameter Conduit.	No	5		
31	Mild Steel 50mm x 100mm box Surface mounted for 20mm Diameter Conduit.	No	40		
32	Mild Steel 100mm x 100mm box Surface mounted for 20mm Diameter Conduit.	No	50		

ITEM NO	DESCRIPTION	UNIT	QTY	SUPPLY AND INSTALL	AMOUNT
33	Mild Steel 100mm x 100mm box Surface mounted for 32mm Diameter Conduit.	No	5		
34	PVC or Galvanized ends for 20mm Diameter Conduit.	No	40		
35	PVC or Galvanized ends for 25mm Diameter Conduit.	No	1		
36	PVC or Galvanized ends for 32mm Diameter Conduit.	No	5		
	<b>Conductors</b> <u>Supply and Install conductors into Wiring Channel, Conduit and/or Power Skirting as specified.</u>				
37	1.5mm <sup>2</sup> PVC insulated stranded copper conductor	m	5800		
38	2.5mm <sup>2</sup> PVC insulated stranded copper conductor	m	2200		
39	4mm <sup>2</sup> PVC insulated stranded copper conductor	m	500		
	<b>Light Switches, Isolators and Socket Outlets:</b> <u>Supply and Install light switches, Isolators and Socket Outlets onto Flush or Surface mounted boxes (not including boxes).</u>				
1	Crabtree or similar approved single toggle <u>one way</u> 16A light switch complete with white engraved/labelled cover plate.	No	26		
41	Crabtree or similar approved <u>single</u> 16A RSA three-pin V-Slim switched socket outlet complete with white engraved/labelled cover plate.	No	45		
42	Crabtree or similar approved <u>Double</u> 16A three-pin switched socket outlet complete with white engraved/labelled cover plate.	No	1		
43	Crabtree or similar approved surface 5A Un-Switched Socket Outlet Mounted within 0.5m of the light fitting, Complete with white engraved/labelled cover plate.	No	100		
	<b>Light Fittings and Equipment</b> <u>Supply and Install light fittings and equipment as specified.</u>				
44	Type A - 1200mm 2 Lamp 16W LED Cool White Linear surface mounted Luminaire, SABS approved.	No	90		
45	Type B - Round IP65 20W LED Bulkhead Luminaire, SABS approved.	No	60		
46	Type C - Industrial 70W 3 x Metal Blade Ceiling Fan supplied complete with Wall Control Unit, SABS approved.	No	20		
47	Type D - Round IP 65 40W LED Pole Top luminaire, supplied complete with 4,1m Black Painted Galvanized metal 60mm Diameter poles.	No	5		
48	Royce Thompson Microstar 1000 Miniature Photocell Switch Installed in a ABB J1 Junction Box IP 65 Rated, Complete with Circuit Designation information	No	10		

ITEM NO	DESCRIPTION	UNIT	QTY	SUPPLY AND INSTALL	AMOUNT
	<b>Power Skirting</b> <u>Supply and Install PVC 2 Compartment Power Skirting, complete with covers, base cover joints and individual cover joints, 90 degree internal bends and equipment and accessories as specified below.</u>				
49	2 Compartment, 2 cover PVC Power Skirting supplied complete with covers.	m	60		
50	90 degree Internal PVC Power Skirting bends	No	4		
51	PVC Power Skirting End Caps	No	4		
52	PVC Power Skirting Base Cover Joints	No	16		
53	PVC Power Skirting Cover Joints	No	32		
54	Crabtree or similar approved <u>single</u> 16A three-pin switched socket outlet complete with white engraved/labelled cover plate mounted on Power Skirting.	No	8		
55	RJ 45 Data Outlet including cradle and cover on Power Skirting.	No	8		
56	RJ 11 Telephone Outlet including cradle and cover on Power Skirting.	No	8		
	<b><u>Testing, Commissioning and As-Builts</u></b>				
57	Testing and commissioning and Compliance Certificate for the complete Electrical Installation including Test report to SANS and OHSAct requirements.	No.	1		
58	Preparation and handing over of "As Built" drawings, indicating all conductor routes, exact spike positions and depths and provision of all test certificates for the entire building.	Sum	1		
59	Allow for full testing, balancing and commissioning the entire electrical installation.	Sum	1		
<b>TOTALS FOR BILL NO.2 (EXCLUDING VAT)</b>					

ITEM NO	DESCRIPTION	UNIT	QTY	SUPPLY AND INSTALL	AMOUNT
<b>Bill No.3</b>	<b>SITE RETICULATION</b>				
	Refer to the specification and drawings				
	<b><u>Trenches</u></b>				
	<u>Excavation of trenches as specified.</u>				
1	Cable or sleeve trenches not exceeding 1m deep	m <sup>3</sup>	50		
2	Extra over excavations for cable or sleeve trenches in soft rock	m <sup>3</sup>	10		
3	Extra over excavations for cable or sleeve trenches in hard rock	m <sup>3</sup>	5		
	<b><u>Cable Sleeves</u></b>				
	<u>Supply and Installation of cable sleeves in trenches as specified.</u>				
4	50mm Diameter u-PVC cable sleeve piping including short lengths, jointing and bends	m	110		
5	75mm Diameter u-PVC cable sleeve piping including short lengths, jointing and bends	m	100		
	<b><u>Cables</u></b>				
	<u>Supply and Installation of cables layed in ground, drawn through cable sleeves and installed on cable tray, including for wastage.</u>				
6	25mm <sup>2</sup> x 3c, Cu, PVC/PVC/SWA-ECC/PVC	m	35		
7	6mm <sup>2</sup> x 3c, Cu, PVC/PVC/SWA-ECC/PVC	m	165		
8	4mm <sup>2</sup> x 3c, Cu, PVC/PVC/SWA-ECC/PVC	m	400		
	<b><u>Cable Terminations</u></b>				
	<u>Supply and Installation of Cable Terminations, including glanding onto DB.</u>				
9	25mm <sup>2</sup> x 3c, Cu, PVC/PVC/SWA-ECC/PVC	No.	2		
10	6mm <sup>2</sup> x 3c, Cu, PVC/PVC/SWA-ECC/PVC	No.	6		
11	4mm <sup>2</sup> x 3c, Cu, PVC/PVC/SWA-ECC/PVC	No.	20		
	<b><u>Cable Warning Tape</u></b>				
	<u>Supply and Installation of cable warning tape 300mm above cable in trenches.</u>				
12	Cable warning tape	m	210		
	<b><u>Draw Wire</u></b>				
	<u>Supply and Installation of Draw wire in cable sleeves.</u>				
13	1.2mm Diameter galvanized draw wire	m	210		
	<b><u>Testing and Commissioning</u></b>				
14	Testing and commissioning and Compliance Certificate for the complete Electrical Installation including Test report to SANS and OHSAct requirements	No.	1		
<b>TOTALS FOR BILL NO.3 (EXCLUDING VAT)</b>					

ITEM NO	DESCRIPTION	UNIT	QTY	SUPPLY AND INSTALL	AMOUNT
<b>Bill No.4</b>	<b>EARTHING AND LIGHTNING PROTECTION</b>				
	Refer to the specification and drawings				
	<b><u>Earthing and Lightning Protection Installation</u></b> <u>Supply and Installation of Lightning Protection and earthing equipment by specialist contractor as specified.</u>				
1	1.8m x 16mm diameter copper earth electrodes driven into the ground, complete with brass coupling between rods (Bearing SABS Mark)	No	35		
2	16mm Diameter copper earth spike clamp	No	35		
3	25mm Diameter Galvanised conduit including bends, T-offs, saddles, joints, etc.	m	140		
4	Flush mounted S15 Duo weatherproof york box test complete with PVC sliding lid and stainless steel screws (mounted at 300mm Above finish floor level)	No	35		
5	10mm <sup>2</sup> Aluminium Roof conductor	m	35		
6	70mm <sup>2</sup> Stranded PVC insulated Copper Down Conductor	m	140		
7	70mm <sup>2</sup> Bare Copper earth conductor	m	500		
8	Bonding joints, etc. complete for 70mm <sup>2</sup> conductor, including lugs, nuts, bolts and washers	Sum	1		
9	Provisional Sum for Unforeseen Earthing and Lightning Protection Compliance	Sum	1	R 50 000.00	
	<b><u>Testing and Commissioning</u></b>				
10	Survey site and provide soil resistivity tests, conduct risk assessment & report, detailed installation drawings for Engineers comment, etc, prior to commencement of installation and procurement of materials	Sum	1		
11	Issue earthing and lightning protection certificates for each of the earthing and lightning protection systems installed	Sum	1		
12	Allow for Earthing / Bonding of water pipes, DB's and kiosks complete as required by the applicable regulations and consultant's specification	Sum	1		
<b>TOTALS FOR BILL NO.4 (EXCLUDING VAT)</b>					



ITEM NO	DESCRIPTION	UNIT	QTY	SUPPLY AND INSTALL	AMOUNT
<b>Bill No.5</b>	<b>ADDITIONAL ITEMS</b>				
	Refer to the specification and drawings				
	<b><u>Schedule of Additional Equipment</u></b>				
	1      Make safe, disconnect and dispose off-site the entire schools redundant electrical installation (All inclusive)	Sum	1		
	2      Schedule any additional equipment to ensure a fully operational system not included in this Bill of quantities. Furnish details:-	Sum	1		
	TOTALS FOR PART 5 (EXCLUDING VAT)				

SUMMARY

BILL NO.1 - PRELIMINARIES AND GENERAL	
BILL NO.2 - ELECTRICAL INSTALLATION	
BILL NO.3 - SITE RETICULATION	
BILL NO.4 - LIGHTNING PROTECTION AND EARTHING	
BILL NO.5 - ADDITIONAL ITEMS	
<b><u>TOTAL A (EXCLUDING VAT) =</u></b>	

Item No			Quantity	Rate	Amount R
	<b>PROVISIONAL SUMS - SECTION 4</b>				
	<b>Note to tenderers: As CPGs may not provide any bidder a competitive advantage. Provisional amounts and fixed percentages for profit and attendance have been provided. Only the provisional amount will be adjusted once the awarded tender amount and/or the beneficiaries have been appointed, and the final values have been ascertained.</b>				
	<b>MINIMUM TARGETED LOCAL BUILDING MATERIAL MANUFACTURERS</b>				
	Provision is made for the Minimum Targeted Local Building Material Manufacturers CPG in the execution of this project as described in C3.1 Project Specifications. Allowance for monitoring and monthly reporting on material purchased from Local Building Material Manufacturers by main contractor and subcontractors based on determination by Employer taking into account specific project variables	PS	1	R22 714,70	R22 714,70
	Allowance for profit and attendance, all inclusive of associated costs to the contractor for implementation.	%			
	Allowance for attendance all inclusive of associated costs to the contractor for implementation.	%			
	<b>MINIMUM TARGETED LOCAL BUILDING MATERIAL SUPPLIERS</b>				
	Provision is made for the Minimum Targeted Local Building Material Suppliers CPG in the execution of this project as described in C3.1 Project Specifications. Allowance for monitoring and monthly reporting on material purchased from Local Building Material Suppliers by main contractor and subcontractors based on determination by Employer taking into account specific project variables	PS	1	R22 714,70	R22 714,70
	Allowance for profit and attendance, all inclusive of associated costs to the contractor for implementation.	%			
	Allowance for attendance all inclusive of associated costs to the contractor for implementation	%			
				R	
	<b>Carried Forward to Summary of Section No.</b>				
	SECTION NO.4 - PROVISIONAL SUMS				
	Bill No. 1				
	Provisional Sums				

Item No			Quantity	Rate	Amount R
	<b>MINIMUM TARGETED ENTERPRISE DEVELOPMENT</b>				
	A provisional amount has been allowed for in the execution of this project as described in C3.1 Project Specifications. The provisional amount allowed is for the appointment of training coordinator, mentor, training service providers and training of the beneficiary enterprises including monitoring and monthly reporting.	PS	1	R208 719,86	R208 719,86
	Allowance for profit all inclusive of associated costs to the contractor for implementation.	%			
	Allowance for attendance all inclusive of associated costs to the contractor for implementation.	%			
	<b>LABOUR INTENSIVE PARTICIPATION GOAL</b>				
	Labour Intensive Participation Goal - Allowance for monthly reporting of labour intensive works by main contractor based on determination by Employer taking into account specific project variables. Allowance for monitoring and monthly reporting on Works executed by means of Labour Intensive methods by main contractor and subcontractors based on determination by Employer taking into account specific project variables	PS	1	R72 000,00	R72 000,00
	Allowance for profit all inclusive of associated costs to the contractor for implementation.	%			
	Allowance for attendance all inclusive of associated costs to the contractor for implementation.	%			
	<b>Carried to Collection</b>			R	
	<b>SECTION NO.4 – ASBESTOS REPLACEMENT</b>				
	Bill No. 1				
	Provisional Sums				



		Amount	
<b><u>Final Summary - Bills of Quantities</u></b>			
		Page	
1	Preliminaries	P 25	
2	Builders Work	64	
3	Electrical	E9	
4	Provisional Sums	3	
Sub Total			
<b>CONTINGENCY AMOUNT</b>			
Allow 5% Contingency Amount for the unforeseen and the sum provided is under the sole control of the client and upon approval by the Client Representative and deducted in whole or in part.			
Sub Total before VAT			
ADD VAT @ 15%			
Carried to Form of Offer and Acceptance		R	
FINAL SUMMARY CARRIED TO FORM OF OFFER AND ACCEPTANCE			