

<u>Item No</u>	<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
<u>BILL No. 1</u>			
<u>PRELIMINARIES</u>			
(CPAP Work Group No. 190 Unless Otherwise Stated)			
<u>MEANING OF TERMS "TENDER / TENDERER"</u>			
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"			
<u>PRELIMINARIES</u>			
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".			
<u>PRICING OF PRELIMINARIES</u>			
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.			
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SECTION A: JBCC PRINCIPAL BUILDING AGREEMENT

DEFINITIONS

1 A1.0 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:

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"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:

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1	<p>No clause</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p><u>OBJECTIVE AND PREPARATION</u></p> <p>A2.0 OFFER, ACCEPTANCE AND PERFORMANCE</p> <p>Clause 2.0</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p>A3.0 DOCUMENTS</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 contractor shall supply and keep a copy of the JBCC Series 2000 Principal Building Agreement and Preliminaries applicable to this contract on the site, to which the employer, principal agent and agents shall have access at all times</p> <p>Clause 3.10 is amended by replacing the second reference to "principal agent" with the word "employer"</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p>A4.0 DESIGN RESPONSIBILITY</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		
2		Item		
3		Item		
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1	<p>A5.0 EMPLOYER'S AGENTS</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		
2	<p>A6.0 SITE REPRESENTATIVE</p> <p>Clause 6.0</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
3	<p>A7.0 COMPLIANCE WITH REGULATIONS</p> <p>Clause 7.0</p> <p>Note: A separate clause has been included in Section C : Specific Preliminaries of the bills of quantities / lump sum document for the contractor to have the opportunity to price for all the requirements of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
4	<p>A8.0 WORKS RISK</p> <p>Clause 8.0</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
5	<p>A9.0 INDEMNITIES</p> <p>Clause 9.0</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
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1	<p>A10.0 WORKS INSURANCES</p> <p>Clause 10.0</p> <p>Clause 10.0 is amended by the addition of the following clauses:</p> <p>10.5 Damage to the Works</p> <p>(a) Without in any way limiting the contractor's obligations in terms of the contract, the contractor shall bear the full risk of damage to and/or destruction of the works by whatever cause during construction of the works and hereby indemnifies and holds harmless the 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</p> <p>(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</p> <p>(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</p> <p>(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</p>				
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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**

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- (e) Where the execution of the **works** involves the risk of removal of or interference with support to adjoining properties including land or structures or any structures to be altered or added to, the **contractor** shall obtain adequately 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

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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

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Time related: _____

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1	<p>A11.0 LIABILITY INSURANCES</p> <p>Clause 11.0</p> <p>Fixed: ____100%____ Value related:_____ Time related:_____</p>	Item		
2	<p>A12.0 EFFECTING INSURANCES</p> <p>Clause 12.0</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
3	<p>A13.0 No clause</p>			
4	<p>A14.0 SECURITY</p> <p>Clause 14.0</p> <p>Clauses 14.1 - 14.8 are amended by replacing them with the following:</p> <p>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)</p> <p>14.1.1 The payment reduction of the value certified in a payment certificate shall be <i>mutatis mutandi</i> in terms of 31.8(A)</p> <p>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</p>			
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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

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

- 1 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**
- 2 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
- 3 14.4.3 The **employer** shall return the variable **construction guarantee** to the **contractor** within fourteen (14) **calendar days** of it expiring
- 4 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

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

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

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

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

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

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

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

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

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

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

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

Fixed: _____ Value related: _____
Time related: _____

EXECUTION

1 A15.0 PREPARATION FOR AND EXECUTION OF THE WORKS

Clause 15.0

Clause 15.1.1 is amended by replacing it with:

No Clause

Clause 15.1.2 is amended by replacing it with:

The **security** selected in terms of 14.0

Clause 15.1 is amended by the addition of the following clause:

15.1.4 An acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), within twenty-one (21) **calendar days** of **commencement date**

Clause 15.2.1 is amended by replacing it with the following clause:

Give the **contractor** possession of the **site** within ten (10) **working days** of the **contractor** complying with the terms of 15.1.4

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1	<p>A16.0 ACCESS TO THE WORKS</p> <p>Clause 16.0</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
2	<p>A17.0 CONTRACT INSTRUCTIONS</p> <p>Clause 17.0</p> <p>Clause 17.1.11 is amended by deleting the words "and the appointment of nominated and selected subcontractors"</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
3	<p>A18.0 SETTING OUT OF THE WORKS</p> <p>Clause 18.0</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
4	<p>A19.0 ASSIGNMENT</p> <p>Clause 19.0</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
5	<p>A20.0 NOMINATED SUB-CONTRACTORS</p> <p>Clause 20.0</p> <p>Clause 20.1.3 is amended by replacing it with the following:</p> <p>No Clause</p> <p>Note: See item B9.1 hereinafter for adjustment of attendance on nominated subcontractors executing work allowed for under provisional sums</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
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1	A21.0 SELECTED SUBCONTRACTORS Clause 21.0 Clause 21 is amended by replacing it with: No Clause Fixed: _____ Value related: _____ Time related: _____	Item		
2	A22.0 EMPLOYER'S DIRECT CONTRACTORS Clause 22.0 Fixed: _____ Value related: _____ Time related: _____	Item		
3	A23.0 CONTRACTOR'S DOMESTIC SUBCONTRACTORS Clause 23.0 Fixed: _____ Value related: _____ Time related: _____	Item		
	<u>COMPLETION</u>			
4	A24.0 PRACTICAL COMPLETION Clause 24.0 Fixed: _____ Value related: _____ Time related: _____	Item		
5	A25.0 WORKS COMPLETION Clause 25.0 Fixed: _____ Value related: _____ Time related: _____	Item		
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1	A26.0 FINAL COMPLETION Clause 26.0 Clause 26.1.2 is amended by inserting "#" next to 26.1.2 Fixed:_____ Value related:_____ Time related:_____	Item		
2	A27.0 LATENT DEFECTS LIABILITY PERIOD Clause 27.0 Fixed:_____ Value related:_____ Time related:_____	Item		
3	A28.0 SECTIONAL COMPLETION Clause 28.0 Fixed:_____ Value related:_____ Time related:_____	Item		
4	A29.0 REVISION OF DATE FOR PRACTICAL COMPLETION Clause 29.0 Clause 29.2.5 is amended by replacing it with: No clause Fixed:_____ Value related:_____ Time related:_____	Item		
5	A30.0 PENALTY FOR NON-COMPLETION Clause 30.0 Fixed:_____ Value related:_____ Time related:_____	Item		
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PAYMENT

1 A31.0 INTERIM PAYMENT TO THE CONTRACTOR

Clause 31.0

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

Clause 31.8 as 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

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31.8(B) Where **security** is 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

1 A32.0 ADJUSTMENT TO THE CONTRACT VALUE

Clause 32.0

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

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

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1	<p>A33.0 RECOVERY OF EXPENSE AND LOSS</p> <p>Clause 33.0</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
2	<p>A34.0 FINAL ACCOUNT AND FINAL PAYMENT</p> <p>Clause 34.0</p> <p>Clause 34.1 is amended by removing "#" next to 34.1</p> <p>Clause 34.2 is amended by inserting "#" next to 34.2</p> <p>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"</p> <p>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"</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
3	<p>A35.0 PAYMENT TO OTHER PARTIES</p> <p>Clause 35.0</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item		
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CANCELLATION

- 1 **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

- 2 **A37.0 CANCELLATION BY EMPLOYER - LOSS AND DAMAGE**
- Clause 37.0
- Clause 37.3.5 is amended by replacing "ninety (90)" with "one-hundred and twenty (120)"

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Clause 37.0 is amended by the addition of the following clause:

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

Fixed: _____ Value related: _____ Time related: _____

Item

1 **A38.0 CANCELLATION BY CONTRACTOR - EMPLOYER'S DEFAULT**

Clause 38.0

Clause 38.5.4 is amended by replacing "ninety (90)" with "one-hundred and twenty (120)"

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

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

Fixed: _____ Value related: _____ Time related: _____

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1	<p>A39.0 CANCELLATION - CESSATION OF THE WORKS</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: "whitin one-hundred and twenty (120) working days of completion of such a report"</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p><u>DISPUTE</u></p>	Item		
2	<p>A40.0 DISPUTE SETTLEMENT</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 cost concerning the mediation and equally share the costs of the mediator and related costs</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p><u>SUBSTITUTE PROVISIONS</u></p>	Item		
3	<p>A41.0 STATE CLAUSES</p> <p>Clause 41.0</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p><u>CONTRACT VARIABLES</u></p>	Item		
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THE SCHEDULE (C1.2 CONTRACT DATA)

1 A42.0 PRE-TENDER INFORMATION

Clause 42.0

Tenderers are referred to the document C1.2 Contract Data for variables pertaining to this contract

Fixed: _____ Value related: _____ Time related: _____

Item

SECTION B: JBCC PRELIMINARIES

B1.0 DEFINITIONS AND INTERPRETATION

Item

2 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

Item

3 B2.1 *Checking of documents*

Fixed: _____ Value related: _____ Time related: _____

Item

4 B2.2 *Provisional bills of quantities*

Fixed: _____ Value related: _____ Time related: _____

Item

5 B2.3 *Availability of construction documentation*

Fixed: _____ Value related: _____ Time related: _____

Item

6 B2.4 *Interests of agents*

Fixed: _____ Value related: _____ Time related: _____

Item

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1	B2.5 Priced documents Fixed:_____ Value related:_____ Time related:_____	Item		
2	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	Item		
3	B3.1 Defined works area Fixed:_____ Value related:_____ Time related:_____	Item		
4	B3.2 Geotechnical investigation Fixed:_____ Value related:_____ Time related:_____	Item		
5	B3.3 Inspection of the site Tenderers shall complete the Site Inspection Certificate included in the tender documents and return the same with the tender submission. Fixed:_____ Value related:_____ Time related:_____	Item		
6	B3.4 Existing premises occupied Fixed:_____ Value related:_____ Time related:_____	Item		
7	B3.5 Previous work - dimensional accuracy Fixed:_____ Value related:_____ Time related:_____	Item		
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1	B3.6 Previous work - defects Fixed: _____ Value related: _____ Time related: _____	Item		
2	B3.7 Services - known Fixed: _____ Value related: _____ Time related: _____	Item		
3	B3.8 Services - unknown Fixed: _____ Value related: _____ Time related: _____	Item		
4	B3.9 Protection of trees Fixed: _____ Value related: _____ Time related: _____	Item		
5	B3.10 Articles of value Fixed: _____ Value related: _____ Time related: _____	Item		
6	B3.11 Inspection of adjoining properties Fixed: _____ Value related: _____ Time related: _____	Item		
	B4.0 MANAGEMENT OF CONTRACT	Item		
7	B4.1 Management of the works Fixed: _____ Value related: _____ Time related: _____	Item		
8	B4.2 Programme for the works Fixed: _____ Value related: _____ Time related: _____	Item		
9	B4.3 Progress meetings Fixed: _____ Value related: _____ Time related: _____	Item		
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1	B4.4 Technical meetings Fixed: _____ Value related: _____ Time related: _____	Item		
2	B4.5 Labour and plant records Fixed: _____ Value related: _____ Time related: _____	Item		
	B5.0 SAMPLES, SHOP DRAWINGS AND MANUFACTURERS' INSTRUCTIONS	Item		
3	B5.1 Samples of materials Fixed: _____ Value related: _____ Time related: _____	Item		
4	B5.2 Workmanship samples Fixed: _____ Value related: _____ Time related: _____	Item		
5	B5.3 Shop drawings Fixed: _____ Value related: _____ Time related: _____	Item		
6	B5.4 Compliance with manufacturers' instructions Fixed: _____ Value related: _____ Time related: _____	Item		
	B6.0 TEMPORARY WORKS AND PLANT	Item		
7	B6.1 Deposits and fees Fixed: _____ Value related: _____ Time related: _____	Item		
8	B6.2 Enclosure of the works Fixed: _____ Value related: _____ Time related: _____	Item		
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1	B6.3 Advertising Fixed: _____ Value related: _____ Time related: _____	Item		
2	B6.4 Plant, equipment, sheds and offices Fixed: _____ Value related: _____ Time related: _____	Item		
3	B6.5 Main notice board Fixed: _____ Value related: _____ Time related: _____	Item		
4	B6.6 Subcontractors' notice board Fixed: _____ Value related: _____ Time related: _____	Item		
	B7.0 TEMPORARY SERVICES	Item		
5	B7.1 Location Fixed: _____ Value related: _____ Time related: _____	Item		
6	B7.2 Water Fixed: _____ Value related: _____ Time related: _____	Item		
7	B7.3 Electricity Fixed: _____ Value related: _____ Time related: _____	Item		
8	B7.4 Telecommunication facilities Fixed: _____ Value related: _____ Time related: _____	Item		
9	B7.5 Ablution facilities Fixed: _____ Value related: _____ Time related: _____	Item		
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	B8.0 PRIME COST AMOUNTS	Item		
1	B8.1 Responsibility for prime cost amounts Fixed: _____ Value related: _____ Time related: _____	Item		
	B9.0 ATTENDANCE ON N/S SUBCONTRACTORS	Item		
2	B9.1 General attendance Fixed: _____ Value related: _____ Time related: _____	Item		
3	B9.2 Special attendance Fixed: _____ Value related: _____ Time related: _____	Item		
4	B9.3 Commissioning - fuel, water and electricity Fixed: _____ Value related: _____ Time related: _____	Item		
	B10.0 FINANCIAL ASPECTS	Item		
5	B10.1 Statutory taxes, duties and levies Fixed: _____ Value related: _____ Time related: _____	Item		
6	B10.2 Payment for preliminaries Fixed: _____ Value related: _____ Time related: _____	Item		
7	B10.3 Adjustment of preliminaries Clauses B10.3.1 and B10.3.2 are amended by replacing "within fifteen (15) working days of taking possession of the site " with "when submitting his priced bills of quantities / lump sum document " Fixed: _____ Value related: _____ Time related: _____	Item		
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1	B10.4 Payment certificate cash flow Fixed: _____ Value related: _____ Time related: _____	Item		
	B11.0 GENERAL	Item		
2	B11.1 Protection of the works Fixed: _____ Value related: _____ Time related: _____	Item		
3	B11.2 Protection / isolation of existing / sectionally occupied works Fixed: _____ Value related: _____ Time related: _____	Item		
4	B11.3 Security of the works Fixed: _____ Value related: _____ Time related: _____	Item		
5	B11.4 Notice before covering work Fixed: _____ Value related: _____ Time related: _____	Item		
6	B11.5 Disturbance Fixed: _____ Value related: _____ Time related: _____	Item		
7	B11.6 Environmental disturbance Fixed: _____ Value related: _____ Time related: _____	Item		
8	B11.7 Works cleaning and clearing Fixed: _____ Value related: _____ Time related: _____	Item		
9	B11.8 Vermin Fixed: _____ Value related: _____ Time related: _____	Item		
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1	<p>B11.9 Overhand work</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
2	<p>B11.10 Instruction manuals and guarantees</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
3	<p>B11.11 As built information</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
4	<p>B11.12 Tenant installations</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p>B12.0 SCHEDULE OF VARIABLES</p>	Item		
5	<p>B12.1 Schedule of variables</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p>This schedule 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 Preliminaries.</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 schedule. Key cross reference clauses are italicised in [] brackets</p> <p>12.1 PRE-TENDER INFORMATION</p> <p>12.1.1 Provisional Bills of Quantities</p> <p>[2.2] <i>The quantities are provisional</i></p> <p style="text-align: right;">NO</p> <p style="text-align: right;">Carried To Trade Summary</p> <p>Bill No. 1 Preliminaries</p> <p>JOB No. 21/0001</p>	Item		
			R	

12.1.2	Availability of construction documentation				
[2.3]	Construction documentation is complete	YES			
12.1.3	Interest of agents				
[2.4]	Details:	NIL			
12.1.4	Defined works area				
[3.1]	Details: The work area will be pointed out by the principal agent to the contractor who will sign written acknowledgement therefore before commencing operations.				
12.1.5	Geotechnical investigation				
[3.2]	Details: Trial holes, soils investigation, etc have been carried out.				
12.1.6	Existing premises occupied				
[3.4]	Specific requirements: The adjacent premises will be in use and occupied during the course of this contract . The contractor shall execute the works in such a manner as will least interfere with the general routine of the occupants of the premises and shall minimise any nuisance from dust, noise or other causes.				
12.1.7	Previous work - dimensional accuracy				
[3.5]	Details:	N/A			
12.1.8	Previous work - defects				
[3.6]	Details:	N/A			
12.1.9.	Services - known				
[3.7]	Details: Should the contractor encounter any existing services such as underground cables, pipes or sewer during the execution of the works he shall notify the principal agent immediatly and suspend all affected work in the immediate vicinity until instruction to proceed has been given by the principal agent .				
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- 12.1.10 **Protection of trees**
[3.9] Specific requirements:
Only those trees and shrubs indicated as such on the drawings shall be removed or cut down. The remainder of the trees and shrubs shall be left undamaged.
- 12.1.11 **Inspection of adjoining properties**
[3.11] Specific requirements:
N/A
- 12.1.12 **Enclosure of the works**
[6.2] Specific requirements:
*The **contractor** shall enclose the areas of work and mark areas with danger tape.*
- 12.1.13 **Offices**
[6.4.3] Specific requirements:
*The **contractor** shall provide, maintain and remove on completion of the **works** an office for the exclusive use of the **principal agent**, minimum size 4 x 3 x 3m high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times.*

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12.1.14 Main notice board

[6.5] Specific requirements:

A project name notice board must be provided and installed on wind resistant sturdy posts and frame, properly aligned and to the approval of the engineer. The notice board must be maintained for the duration of the contract period.

Specification : 3m x 3m of 1mm thick "Chromadek" board connected onto a square tubing frame of 50x50x2.5mm profiles with a "Unistrut" fastening system.

Lettering and logos must be of approved colour and font of a UV resistant material.

The bottom of board must be mounted 2.5m above ground level.

Notice board to conform to EPWP requirements as per attached drawing.

A pro-forma name board with dimensions will be issued at the handover of the site to the successful tenderer.

12.1.15 **Subcontractors' notice board**

[6.6] A notice board is required

NO

Specific requirements:

12.1.16 **Water**

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

YES

Option B (by **employer** - free of charge)

NO

Option C (by **employer** - metered)

NO

12.1.17 **Electricity**

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

YES

Option B (by **employer** - free of charge)

NO

Option C (by **employer** - metered)

NO

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12.1.18 Telecommunications	[7.4] Telephone	YES	
	Facsimile	YES	
	E-mail	YES	
12.1.19 Ablution facilities	[7.5] Option A (by contractor)	YES	
	Option B (by employer)	NO	
12.1.20 Protection of existing/sectionally occupied works	[11.2] Protection is required	YES	
12.1.21 Special attendance	[9.2] Subcontractor (1) details: n/a		
	Subcontractor (2) details:n/a		
	Subcontractor (3) details: n/a		
	Subcontractor (4) details: n/a		
12.1.22 Protection of works	[11.1] Specific requirements:	N/A	
12.1.23 Disturbance	[11.5] Specific requirements: <i>The contractor shall keep the site, structures, etc well watered during operations to prevent dust and shall provide and erect and remove on completion of the works all necessary temporary dust screens all to the satisfaction of the principal agent</i>		
12.1.24 Environmental disturbance	[11.6] Specific requirements:	NONE	
12.2 POST-TENDER INFORMATION			
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12.2.1 **Payment of preliminaries**

[10.2] Option A (prorated) NO
Option B (calculated) YES

12.2.2 **Adjustment of preliminaries**

[10.3] Option A (three categories) NO
Option B (detailed breakdown) YES

12.2.3 **Additional agreed preliminaries items**

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

1 **C1 CONTRACT DRAWINGS**

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

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

Fixed: _____ Value related: _____
Time related: _____

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1	<p>C2 GENERAL PREAMBLES</p> <p>The document "Specification of Materials and Methods to be used (PW371)" is obtainable on the Department's website (http://www.publicworks.gov.za/ under "Consultants Guidelines") and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>				
2	<p>C3 TRADE NAMES</p> <p>Wherever a trade name for any product has been described in the bills of quantities, the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the principal agent being obtained prior to the closing date for submission of tenders.</p> <p>If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for.</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item			
3	<p>C4 IMPORTED MATERIALS AND EQUIPMENT</p> <p>Where imported items are listed in the tender documents, the tenderer shall provide all the information called for, failing which the price of any such item, materials or equipment shall be excluded from currency fluctuations. (refer to Schedule of Imported Materials and Equipment DPW-23(EC) to be completed by tenderer).</p> <p>Notwithstanding any provisions elsewhere regarding the adjustment of contract prices, the price of any item, material or equipment listed in terms of this clause shall be excluded from the Contract Price Adjustment Provisions.</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item			
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1	<p>C5 CONTRACT INSTRUCTIONS</p> <p>Contract instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the Contractor.</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
2	<p>C6 SITE LEVELS</p> <p>Before commencement of the works the Contractor shall carry out and provide the Principal Agent for approval a survey of the existing site levels in sufficient detail to enable the preparation of a final account.</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
3	<p>C7 UNAUTHORISED PERSONS ON SITE</p> <p>The Contractor shall not permit unauthorised persons onto and workmen to lodge on the site.</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
4	<p>C8 PLANT AND LABOUR RECORD</p> <p>At the end of each week the Contractor shall provide the Principal Agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day and the number, type and capacity of all plant, excluding hand tools, currently used on the works.</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
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1	<p>C9 USE OF LOCAL LABOUR FROM THE EMPLOYER'S AREA OF OPERATION</p> <p>It is a requirement of the contract that the work be executed in such a manner as to maximise the use of local labour in order to provide the local community with employment opportunities. It is a specific requirement of this tender that the successful tenderer employs, in consultation with the Employer's representative, unemployed persons from the ranks of the local communities and the immediate surroundings, who possess the appropriate skills required for a contract of this nature.</p> <ul style="list-style-type: none"> - In order to achieve the recruitment of local labour, the Employer' representative will establish, a database of unemployed persons, indicating their specialised training, previous experience and employment, etc. The successful tenderer will be required to directly employ suitable persons recruited from the employer's database and ensure that all legislative requirements regarding their employment are complied with and provide the Employer with the necessary documentary proof, if required. - The Contractor is required to produce weekly records suitably detailed to enable the Employer's representative to monitor the achievement of the required local labour. - The Contractor is required to provide informal skills training so that the required standard of workmanship is maintained. - With respect to Labour, the minimum rate for any and all workers contracted for this project shall not be less than <u>R180 per day.</u> <p>Fixed: _____ Value related: _____ Time related: _____</p>			
	<p>Carried To Trade Summary</p>	Item	R	
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1	<p>C11 GUARANTEES</p> <p>Where guarantees are called for, the Contractor shall obtain a written guarantee, addressed to the Employer, from the firm supplying the materials and/or doing the work and shall deliver same to the Principal Agent no later than the works completion date. The guarantee shall state that workmanship, materials and installation are guaranteed for a specified period from the final completion dated and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice from the Principal Agent to do so. This guarantee will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the Contractor. The Principal Agent shall be the sole judge of the cause responsible for defect of the works and his decision shall be final and binding in terms of clause 40.2 of the agreement.</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
2	<p>C12 WARRANTIES FOR MATERIAL AND WORKMANSHIP</p> <p>Where warranties for materials and/or workmanship are called for, the Contractor shall obtain a written warranty, addressed to the Employer, from the firm supplying the materials and/or doing the work and shall deliver same to the Principal Agent on the certified practical completion of the contract The warranty shall state that workmanship, materials and installation are warranted for a specified period from the date of final completion and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice to do so. The warranty will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the Contractor.</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
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1 **C13 OVERTIME**

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

Fixed: _____ Value related: _____
Time related: _____

Item

2 **C14 CO-OPERATION OF CONTRACTOR FOR COST MANAGEMENT**

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

Fixed: _____ Value related: _____
Time related: _____

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C15 HIV/AIDS AWARENESS

It is required of the **contractor** to thoroughly study the HIV/AIDS Specification (PW1544) 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 C15.1 to C15.5 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.

Once the contractor has established site, he/she must go to the local Community Health Centre and report the project and that he will be recruiting local labour and that he/she would want the Health Centre to conduct the HIV/Aids awareness training.

1 C15.1 AWARENESS CHAMPION

Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification

Fixed: _____ Value related: _____ Time related: _____

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1	<p>C15.2 AWARENESS WORKSHOPS</p> <p>Selection and appointment of a competent Service Provider approved by the principal agent, provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification.</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
2	<p>C15.3 POSTERS, BOOKLETS, VIDEOS, ETC.</p> <p>Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the construction period, all in accordance with the HIV/AIDS Specification.</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
3	<p>C15.4 ACCESS TO CONDOMS</p> <p>Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the construction period, all in accordance with the HIV/AIDS Specification</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
4	<p>C15.5 MONITORING</p> <p>Monitoring HIV/AIDS awareness of workers, providing the principal agent with access to information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the construction period and close out, all in accordance with the HIV/AIDS Specification.</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item		
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Bill No. 1 Preliminaries				
JOB No. 21/0001				

1	<p>C17 EMPLOYMENT AND TRAINING OF YOUTH WORKERS</p> <p>The Contractor shall identify youth workers and employ them at the statutory labour rates for a minimum period of 6 months and train them.</p> <p>The Contractor shall avail the services his foreman to act as their construction supervisor. This foreman will be responsible for continuously monitoring the progress of the youth workers and to address questions and issues that may arise from the youth workers.</p> <p>A separate item, subject to re-measurement, has been scheduled in Bill No. 18 - Provisional Sums - to cover the direct costs associated with training. The sum allowed is not to be exceeded.</p> <p>Fixed:_____ Value related:_____</p> <p>Time related:_____</p>	Item	
2	<p>C18 SED REQUIREMENTS</p> <p>The total Social and Economic Deliverables target for the project is 30% of the Builders Works Trades which comprises the combined spending on the following specific targets:</p> <ol style="list-style-type: none"> 1. Local enterprise participation from within a 100km radius of site 2. Local employment from within a 100km radius of site 3. SMME participation <p>The contractor will be responsible for achieving the above requirements as well as providing proof of the same.</p> <p>Fixed:_____ Value related:_____</p> <p>Time related:_____</p>	Item	
	Carried To Trade Summary		R
	Bill No. 1 Preliminaries		
	JOB No. 21/0001		

1 **C19 CONSTRUCTION QUALITY MANAGEMENT AND QUALITY MONITORING**

1. The Contractor shall submit with his tender, a Construction Quality Management Plan (CQMO). This plan shall include the name and CV of the individual who will be responsible for construction quality management on site. This person shall be a different person from the Contractor's site representative (JBCC clause 6.0). The CQMP shall, among others, provide details of how the representatives of the PA responsible for the specific discipline will interface with the quality management function of the contractor.

2. The PA shall submit, for approval by the IA a CQMP before construction commences.

3. The IA shall submit both the CQMP prepared by the contractor and the construction quality monitoring plan prepared by the IA to the Department for approval before the site is handed over to the contractor for construction.

7.3.2 Should the quality not be to the satisfaction of the DBE, the DBE may request an update of the plans to be submitted within five (5) working days. The DBE will apply internationally accepted criteria for the review of the quality plans.

7.3.3 Should the quality plans not be to the satisfaction of the DBE after a further request, the DBE will have the right:

1. to prescribe to the IA and the PA the quality procedure to follow; or

2. to cancel the contracts of the IA, the PSPs and the contractor with the right to recover any relevant cost if the IA fails to follow quality procedures as set out under 7.3.3(1).

Fixed: _____ Value related: _____
Time related: _____

Item

Carried To Trade Summary

R

Bill No. 1
Preliminaries

JOB No. 21/0001

1 **C20 IMPLEMENTATION OF LABOUR-INTENSIVE
INFRASTRUCTURE PROJECTS UNDER THE
EXPANDED PUBLIC WORKS PROGRAMME (EPWP)**

The contractor shall comply with all the requirements of the "Code of Good Practice for Employment and Conditions of Work for Special Public Works Programmes" issued in terms of the "Basic Conditions of Employment Act, 1997 (Act No 75 of 1997)" and the related "Ministerial Determination", for the employment of locally employed temporary workers on a labour-intensive infrastructure project under the Expanded Public Works Programme (EPWP) The contractor shall maintain daily records with regard to the workers employed and shall, on a monthly basis, submit a report to the principal agent in the prescribed format. Compulsory indicators such as the project budget, actual project expenditure, number of job opportunities created, demographic characteristics of workers employed, minimum daily wage rate, number of person-days of employment created and number of training person-days, shall be included in said report, all as defined in the "Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)" Provision for pricing of compliance with the aforementioned is made under this clause and it is explicitly pointed out that all requirements in respect of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained

Fixed: _____ Value related: _____
Time related: _____ Item

Item

Carried To Trade Summary

R

Bill No. 1
Preliminaries

JOB No. 21/0001

Cluster 1A - Construction Of New Ablutions
Hota J.S.S.

[illegible]

Bill No. 1			
Preliminaries			
<u>Trade Summary</u>			
	<u>Page</u>		<u>Amount</u>
	<u>No</u>		
Brought Forward		R	
Total Brought Forward From Page No.	22		
	23		
	24		
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	26		
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Carried Forward		R	
Bill No. 1			
Preliminaries			
JOB No. 21/0001			

[illegible]

Item
No

Quantity

Rate

Amount

BILL No. 2

EARTHWORKS (PROVISIONAL)

PREAMBLES

For Preambles refer to The documents "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0" and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.

SUPPLEMENTARY PREAMBLES

Preambles

The Standard Preambles and the Notes in the various trade bills are to apply equally to this section.

Nature Of Ground

See attached trial hole results for ground conditions.

Quantities

The quantities of excavations and concrete shall be the net sizes to be formed in accordance with the drawings and specifications and shall be not less than the horizontal area of the bottom of the relevant structures multiplied by the average depth or thickness.

Carried To Trade Summary

R

Bill No. 2
Earthworks (Provisional)

JOB No. 21/0001

Working Space

Working space for any work requiring formwork, brick linings, etc, has been determined by the following conditions and shall be measured where:

1. The depth of the excavation does not exceed 1000mm and the distance from the finished face of the structure to the excavated face is less than 250mm for formwork or 600mm for brick linings and
2. The depth of the excavation exceeds 1000mm and the distance from the finished face of the structure to the excavated face is less than 600mm.

Carting Away Of Excavated Material

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.

Filling

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.

Imported fill:

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

Density Testing On Filling

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

Carried To Trade Summary

Bill No. 2
Earthworks (Provisional)

JOB No. 21/0001

R

Formwork

Formwork to sides of footings, 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.

EARTHWORKS

(CPAP Work Group No 104 Unless Otherwise Stated)

Demolitions

- | | | | |
|---|---|----|---|
| 1 | Break down and remove single storey structure approximately 57m ² in area x 6500mm high at eaves comprising concrete floors, brick walls internally and externally and corrugated iron pitched roof. | No | 4 |
|---|---|----|---|

Site Clearance

- | | | | |
|---|--|----------------|-----|
| 2 | Allow for clearing the site of all shrubs and trees not exceeding 200mm girth, rubbish, debris, vegetation, drains, etc, that may be encountered and roughly level site. | m ² | 380 |
| 3 | Strip topsoil, average 150mm thick, including depositing in stockpiles on site for later re-use. | m ³ | 57 |

EXCAVATIONS, FILLING, ETC

Excavation In Earth Not Exceeding 2m Deep For

- | | | | |
|---|-------------------|----------------|-----|
| 4 | Pit toilet. | m ³ | 233 |
| 5 | Surface trenches. | m ³ | 43 |

Carried To Trade Summary

Bill No. 2
Earthworks (Provisional)

JOB No. 21/0001

R

	<u>Excavation In Earth Exceeding 2m And Not Exceeding 4m Deep For</u>				
1	Pit toilet.	m3	17		
	<u>Extra Over Trench And Hole Excavations In Earth For Excavation In</u>				
2	Soft rock.	m3	29		
3	Hard rock.	m3	52		
	<u>Extra Over All Excavations For Carting Away Of</u>				
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	223		
	<u>Risk Of Collapse Of Excavations To</u>				
5	Sides of trench and base excavations not exceeding 1500mm deep.	m2	142		
6	Sides of trench and base excavations exceeding 1500mm deep.	m2	178		
	<u>Keeping Excavations Free Of Water</u>				
7	Allow for keeping excavations free from water.			Item	
	<u>Earth Filling Selected By The Contractor From The Excavated Material, Deposited In Layers Not Exceeding 150mm Thick, Watered And Consolidated In</u>				
8	Backfilling to trenches, bases, etc.	m3	90		
	<u>Earth Filling Selected And Supplied By The Contractor, Deposited In Layers Not Exceeding 150mm Thick, Watered And Consolidated In</u>				
9	G5 earth filling to 93% modified AASHTO density under floors, etc including compaction density tests.	m3	10		
10	G7 earth filling to 93% modified AASHTO density under floors, etc including compaction tests.	m3	10		
Carried To Trade Summary				R	
Bill No. 2 Earthworks (Provisional)					
JOB No. 21/0001					

<u>Scarify, Mix And Consolidate Top 150mm Of Subgrade</u>		
1	Under floors to 93% modified AASHTO density.	m2 132
<u>Prescribed Density Tests As Check On Contractors Tests Included In Filling Above</u>		
2	Modified AASHTO density test and deliver the results to the Architect within 24 hours of the tests being completed.	No 20
<u>Termite Proofing Treatment Of Chlordane Or Aldrin Type To</u>		
3	Surfaces of ground under floors, etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2 216
4	Bottoms and sides of trenches, bases, etc.	m2 185
Carried To Trade Summary		
Bill No. 2 Earthworks (Provisional)		
JOB No. 21/0001		

[illegible]

Item
No

Quantity

Rate

Amount

BILL No. 3

**CONCRETE, FORMWORK AND
REINFORCEMENT**

PREAMBLES

For Preambles refer to The documents "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0" and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.

SUPPLEMENTARY PREAMBLES

Preambles

The Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.

Proprietary Products In Descriptions

Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.

Carried To Trade Summary

R

Bill No. 3
Concrete, Formwork & Reinforcement

JOB No. 21/0001

Cost Of Tests

The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SANS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. (Test cubes are measured separately)

Should the strength required for the concrete in any portion of the structure not be attained in the test cubes, or should any concrete whatsoever be defective the portion in question is to be demolished and replaced at the expense of the Contractor.

Reinforced Concrete

All reinforced concrete is to be compacted with a mechanical vibrator.

Formwork

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

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

All formwork shall include for propping to not exceeding 3500mm high unless otherwise described.

Formwork to sides of walls and columns shall be to walls and columns not exceeding 3500mm high unless otherwise described.

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

Carried To Trade Summary

Bill No. 3
Concrete, Formwork & Reinforcement

JOB No. 21/0001

R

CONCRETE

**(CPAP Work Group No. 110 Unless
Otherwise Stated)**

TESTS

NOTE: Should the strength required for the concrete in any portion of the structure not be attained in the test cubes, or should any concrete whatsoever be defective the portion in question is to be demolished and replaced at the expense of the Contractor.

1	Set of three concrete test cubes size 150 x 150 x 150mm overall including testing (Provisional).	Sets	22
	<u>Reinforced Cement Concrete (25MPa) In</u>		
2	Filling to cavity of hollow brick wall.	m3	14

**CONCRETE CAST AGAINST EXCAVATED
SURFACES**

Reinforced Cement Concrete (30MPa) In

3	Footings.	m3	11
4	Base to pit toilet.	m3	25

CONCRETE

Reinforced Cement Concrete (30MPa) In

5	Surface beds on waterproof sheeting.	m3	6
6	Slab over pit toilet.	m3	14

FORMWORK

**CPAP Work Group No. 111 Unless
Otherwise Stated**

Carried To Trade Summary

Bill No. 3
Concrete, Formwork & Reinforcement

JOB No. 21/0001

R

<u>Rough Formwork To</u>					
1	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	131		
2	Sides, reveals, etc of opening 110mm diameter through 200mm thick slab.	No	4		
3	Sides, reveals, etc of opening 200mm diameter through 200mm thick slab.	No	16		
4	Sides, reveals, etc of opening 450 x 600mm through 200mm thick slab.	No	11		
<u>Formwork Left In To</u>					
5	Soffit of slabs and remove props through small opening.	m2	69		
<u>MOVEMENT JOINTS, ETC</u>					
<u>Bitumen Impregnated Softboard Expansion Joints</u>					
6	Joint not exceeding 300mm high or wide formed of one layer 10mm thick set between vertical concrete or brick surfaces.	m	37		
<u>Slip Joints</u>					
7	Joint not exceeding 300mm wide formed of two layers 375 micron DPC on and including bed of 3.1 cement mortar, on brick walls as bearing under concrete slabs, beams, etc.	m	125		
<u>Construction Joints</u>					
8	Joggle joint 100mm high between vertical concrete surfaces with and including 20mm half round fillet and whitewash or bitumen applied to one face.	m	18		
<u>REINFORCEMENT (PROVISIONAL)(CPAP</u>					
<u>Work Group No. 114 Unless Otherwise</u>					
<u>Stated)</u>					
Carried To Trade Summary				R	
Bill No. 3					
Concrete, Formwork & Reinforcement					
JOB No. 21/0001					

<u>High Tensile Steel Bar Reinforcement To Structural Concrete Work</u>			
1	8mm Diameter bars.	kg	196
2	10mm Diameter bars.	kg	275
3	12mm Diameter bars.	kg	314
<u>Fabric Reinforcement To Concrete Work</u>			
4	High tensile steel mesh Ref. 193 to concrete surface beds, slabs, etc.	m2	262
5	Ditto but mesh Ref. 395 to concrete surface beds, slabs, etc.	m2	168
6	High tensile steel mesh Ref. 193 set vertically in concrete filled cavity of hollow wall.	m2	166
Carried To Trade Summary			R
Bill No. 3 Concrete, Formwork & Reinforcement			
JOB No. 21/0001			

[illegible]

<u>Item No</u>		<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
	<u>BILL No. 4</u>			
	<u>MASONRY</u>			
	<u>PREAMBLES</u>			
	For Preambles refer to The documents "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0" and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Preambles</u>			
	The Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.			
	<u>Proprietary Products In Descriptions</u>			
	Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.			
	<u>BRICKWORK</u>			
	<u>Sizes In Descriptions</u>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick.			
	<u>Hollow Walls</u>			
	Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
	Carried To Trade Summary		R	
	Bill No. 4 Masonry			
	JOB No. 21/0001			

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.

Samples, Etc.

Rates for brickwork, faced brickwork, etc. shall include for all required samples.

FOUNDATION BRICKWORK
(PROVISIONAL)

Brickwork of NFX bricks (14 MPa Nominal Compressive Strength) In Class II Mortar

1	One brick wall.	m2	108
2	300mm Cavity wall in two half brick thicknesses including butterfly wire ties.	m2	143

Brickwork Sundries

3	Bag down face of brickwork with 4.1 cement slurry.	m2	169
---	--	----	-----

Brick Reinforcement

4	Galvanised brick reinforcement 155mm wide.	m	836
5	Ditto, but 235mm wide.	m	2 442

FACE BRICKWORK

Corobrik Country Manor Travertine FBS Face Bricks Pointed With Ruled-In square Vertical And Horizontal Joints

6	Extra over brickwork for face brickwork.	m2	19
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Carried To Trade Summary

Bill No. 4
Masonry

JOB No. 21/0001

R

SUPERSTRUCTURE BRICKWORK

BRICKWORK

**CPAP Work Group No. 116 Unless
Otherwise Stated**

**Brickwork Of NFP Bricks In Class II Cement Mortar
In**

1	Half brick wall.	m2	50
2	One brick wall.	m2	24
3	One cavity brick wall in two half brick thicknesses including butterfly wire ties.	m2	203
<u>Brickwork Sundries</u>			
4	Bag down outer face of inner skin of brick wall with 4.1 cement slurry and apply two coats bituminous emulsion including working around ties.	m2	203
<u>Brick Reinforcement</u>			
5	Galvanised brick reinforcement 80mm wide.	m	214
6	Ditto, but 155mm wide.	m	584
<u>Precast Prestressed Vibrated Cement Concrete (30MPa) Lintols Including Moulds, Reinforcement, Propping, Etc</u>			
7	Precast lintol 100mm wide x 75mm deep in lengths not exceeding 3000mm.	m	69
<u>Turning Pieces</u>			
8	Turning piece to soffit of one brick wall.	m	26

Carried To Trade Summary

R

Bill No. 4
Masonry

JOB No. 21/0001

-65-

1	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	14
Carried To Trade Summary			R
Bill No. 4 Masonry			
JOB No. 21/0001			

[illegible]

<u>Item No</u>	<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
<u>BILL No. 5</u>			
<u>WATERPROOFING</u> <u>(CPAP Work Group No. 120 Unless</u> <u>Otherwise Stated)</u>			
<u>PREAMBLES</u>			
For Preambles refer to The documents "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0"and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Preambles</u>			
The Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.			
<u>Proprietary Products In Descriptions</u>			
Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.			
Carried To Trade Summary			R
Bill No. 5 Waterproofing			
JOB No. 21/0001			

<u>Waterproofing</u>					
Waterproofing to roofs, etc. must be done by an approved firm of specialists in this type of work and must be carried out in accordance with the Manufacturer's Instructions. The Contractor must provide a ten year guarantee acceptable to the Employer for this work and deposit same with the Architect before the work is put in hand.					
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.					

<u>DAMP PROOFING TO WALLS AND FLOORS</u>					
<u>One Layer 250 Micron Waterproof Sheetting</u>					
1	Under surface beds.	m2	66		
<u>One Layer 375 Micron Embossed Dampproof Course</u>					
2	In walls.	m2	34		
<u>LIQUID WATERPROOFING</u>					
<u>Two Coats Thixotropic Water Dispersed Bitumen Emulsion Coating</u>					
3	Vertically on bagged surface of brickwork.	m2	259		
<u>Two Stage Application Comprising 100% Polypropylene Continuous Filament Saturation Membrane Sealed With Waterproof Flexible Slurry (For Corners And Joints) And Overcoated With Approved Epoxy Tar Coating Applied In Strict Accordance With The Manufacturer's Instructions</u>					
4	On internal face of pit walls.	m2	292		
5	Ditto, but external face ditto.	m2	292		
Carried To Trade Summary				R	
Bill No. 5 Waterproofing					
JOB No. 21/0001					

1	On floors of pit toilet.	m2	90		
<u>JOINT SEALANTS</u>					
<u>Clean, Prime, Caulk, Tool And Smooth With Abe</u> <u>Flexothane 1H Elastomeric One Part Polyurethane Or</u> <u>Other Equal Approved Sealant Applied With A Pressure</u> <u>Caulking Gun</u>					
2	Around timber or metal door or window frames.	m	77		
3	10 x 15mm Deep in saw cut joint on polyethylene baking cord on top surfaces of concrete floor including raking out expansion joint filler.	m	37		
Carried To Trade Summary					
Bill No. 5 Waterproofing				R	
JOB No. 21/0001					

[illegible]

<u>Item No</u>	<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
<u>BILL NO. 6</u>			
<u>ROOF COVERINGS, ETC.CPAP Work</u>			
<u>Group No. 122 Unless Otherwise Stated</u>			
<u>PREAMBLES</u>			
For Preambles refer to The documents "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0"and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Preambles</u>			
The Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.			
<u>Proprietary Products In Descriptions</u>			
Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.			
<u>Fixing</u>			
Fixing shall be done according to SANS 1200HB with minimum 225mm end laps.			
Carried To Trade Summary			R
Bill No. 6 Roof Coverings, Etc			
JOB No. 21/0001			

Guarantee

The contractor will be required to provide an Engineer and a written guarantee, stating that :

- (a) The roof sheeting is of the specified thickness.
- (b) The client is indemnified against any defects, including colour deterioration for a minimum period of 15 years.
- (c) All roof coverings and side cladding are to be installed to comply with SANS Code of Practice 0237 where applicable. All roof sheeting shall be laid under a 15 year guarantee for site workmanship and water tightness.

PROFILED METAL SHEETING

CPAP Work Group No. 124 Unless Otherwise Stated

NOTE: All roof coverings and side cladding are to be installed to comply with SABS Code of Practice 0237 where applicable. All roof sheeting shall be laid under a 5 year guarantee for site workmanship and water tightness.

0.58mm Thick "GRS 10.5 profile AZ275" or other equal approved interlocking roofing sheets and 0.8mm thick accessories with serrated closers and polyclosers where applicable and both with chromadek colour one side, in single sheet lengths and fixed to timber purlins all as per manufacturers specifications

1	Roof covering with pitch not exceeding 25 degrees.	m2	131
2	Gable trim.	m	35
3	Apex flashing	m	47
4	Hole through roof sheet for 110mm diameter PVC vent pipe and flash and seal all round.	No	16

Carried To Trade Summary

Bill No. 6
Roof Coverings, Etc

JOB No. 21/0001

R

<u>Roof Ventilators, Etc</u>					
1	Aluminium turbine ventilator with colour coated finish with 250mm diameter neck, fixed to top of 110mm diameter PVC pipe.	No	16		
<u>Insulation</u>					
2	Sisalation FR 405 reinforced aluminium foil insulation with 150mm wide laps at all joints, tightly strained and stapled to top of timber rafters under timber purlins.	m2	131		
<u>Rain Water Goods</u>					
<u>Pre-Painted Seamless Aluminium Box Profile Gutters, Rainwater Pipes And Accessories In Long Lengths</u>					
3	125 x 115 x 0,9mm Eaves gutter with brackets fixed to fibre cement fascia.	m	47		
4	100 x 75mm Rainwater pipe with brackets plugged to face brick wall.	m	8		
<u>Extra for</u>					
5	Stopped end.	No	16		
6	Bend.	No	4		
7	Swanneck, 600mm long	No	4		
8	Outlet with nozzle for 101mm diameter rainwater pipe.	No	4		
Carried To Trade Summary				R	
Bill No. 6 Roof Coverings, Etc					
JOB No. 21/0001					

[illegible]

<u>Item No</u>	<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
<u>BILL No. 7</u>			
<u>CARPENTRY & JOINERY(CPAP Work Group No. 126 Unless Otherwise Stated)</u>			
<u>PREAMBLES</u>			
For Preambles refer to The documents "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0"and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Preambles</u>			
The Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.			
<u>Proprietary Products In Descriptions</u>			
Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.			
<u>Fixing</u>			
Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins 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.			
Carried To Trade Summary			R
Bill No. 7 Carpentry & Joinery			
JOB No. 21/0001			

Joinery

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

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

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.

CARPENTRY

ROOFS, ETC

Sawn Pine

1	50 x 76mm Purlin.	m	149
2	38 x 114mm Wall plate wired down (wire ties elsewhere).	m	47
3	38 x 50 x 114mm Fascia fixing sprocket twice countersunk screwed with 5,5mm diameter x 63mm long brass screws.	No	208

Tanalith Treated (CCA)

4	50 x 152mm Rafter in lengths exceeding 3900mm and not exceeding 6600mm.	m	116
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Sundries

5	Galvanised hurricane clip fixed with Permfix nails to timber rafter and purlin.	No	151
6	90 Degree galvanised truss hanger to suit 50mm wide timber beam.	No	52

Carried To Trade Summary

Bill No. 7
Carpentry & Joinery

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1	10mm Diameter x 75mm long masonry anchor with nut and washer and including mortice in brickwork or concrete.	No	104		
<u>EAVES AND VERGES</u>					
<u>Pressed Fibre-cement:</u>					
2	15 x 225mm Fascia with aluminium H-profile jointing strips.	m	93		
3	80 x 275mm Bargeboard with aluminium H-profile jointing strips.	m	71		
<u>DOORS, ETC</u>					
<u>Wrot Red Meranti</u>					
4	44mm Framed, ledged and braced batten door finished flush on internal face with ply panel, (Hung) size 813 x 2032mm. (Door Type 1 - Arch DWG)	No	5		
5	44mm Framed, ledged and braced batten door finished flush on internal face with ply panel, (Hung) size 950 x 2032mm. (Door Type 2 - Arch DWG)	No	1		
6	44mm Framed, ledged and braced batten door finished flush on internal face with ply panel, (Hung) size 813 x 1832mm. (Door Type 3 - Arch DWG)	No	12		
7	44mm Framed, ledged and braced batten door finished flush on internal face with ply panel, (Hung) size 813 x 812mm. (Door Type 4 - Arch DWG)	No	3		
<u>FRAMES, ETC</u>					
<u>Frames And Linings (Framed)</u>					
<u>Wrot Red Meranti</u>					
8	70 x 108mm Rebated and angle rounded frame with 15 x 40m rebates for door, size 813 x 2032mm high.	No	17		
Carried To Trade Summary				R	
Bill No. 7 Carpentry & Joinery					
JOB No. 21/0001					

1	Ditto to suit door size 912 x 2032mm.	No	1		
2	70 x 108 x 1012mm Long jamb lining plugged to brickwork with and including three 8/80 Hilti HPS-1 impact anchors with head of impact anchors countersunk and pelleted.	No	6		
<u>MOULDINGS AND SUNDRIES</u>					
<u>Wrot Red Meranti</u>					
3	19mm Quadrant bead.	m	139		
4	44 x 69mm Splayed and rebated weatherboard, screwed to and including groove in door with heads of screws sunk and pelleted.	m	4		
Carried To Trade Summary					
Bill No. 7 Carpentry & Joinery				R	
JOB No. 21/0001					

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<u>Item No</u>	<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
<u>BILL No. 8</u>			
<u>IRONMONGERY(CPAP Work Group No. 132 Unless Otherwise Stated)</u>			
<u>PREAMBLES</u>			
For Preambles refer to The documents "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0"and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Preambles</u>			
The Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.			
<u>Proprietary Products In Descriptions</u>			
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.			
<u>Descriptions</u>			
Ironmongery is fixed to timber unless otherwise described.			
Carried To Trade Summary			R
Bill No. 8 Ironmongery			
JOB No. 21/0001			

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

IRONMONGERY TO DOORS, FRAMES, ETC

Hinges, Bolts, Etc

1	100 x 75mm Nylon washered brass butts.	No	47
2	Union CZ80941 chromium plated W.C. indicating bolt and keep.	No	16

Locks, Etc

3	Union CZ682-24SC/2277-78SS three lever mortice lockset.	No	5
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Handles, Etc

4	Dorma DPH 301 B stainless steel 425 x 25mm straight tubular pull handle.	No	1
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Push Plates, Kicking Plates, Nameplates, Etc

5	Union AL5066-06ASE11 female indicator plate.	No	2
6	Union AL5066-06ASE10 male indicator plate.	No	2
7	Union AL5066-06ASE14 paraplegic indicator plate.	No	1
8	Union SS5067-06SS pushplate 152 x 178 x 2mm no piercing.	No	1

Stops, Holders, Hooks, Etc

9	Union CZ8731SC door stop plugged to floor.	No	5
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Bill No. 8
Ironmongery

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Bill No. 8

Ironmongery

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Bill No. 8
Ironmongery

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Quantity

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BILL No. 9

METALWORK(CPAP Work Group No 136 Unless Otherwise Stated)

PREAMBLES

For Preambles refer to The documents "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0"and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.

SUPPLEMENTARY PREAMBLES

Preambles

The Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.

Proprietary Products In Descriptions

Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.

Descriptions

Tenderers are referred to architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes.

Descriptions Of Bolts, Anchors, Etc.

Descriptions of bolts shall be deemed to include nuts and washers.

Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.

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Bill No. 9
Metalwork

JOB No. 21/0001

Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described.

Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres.

Aluminium Doors, Windows, Etc.

Doors and windows shall comply with AAAMSA design criteria.

Glazing shall comply with SAGGA regulations. Glass type shall be type as shown on the window schedules/drawings appended to these bills of quantities. Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings.

Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed.

The following certificates shall be provided prior to commencement of site work:

- (a) A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product.
- (b) A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively.

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Metalwork

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- (c) A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process.
- (d) A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked.
- (e) A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years.

HOT DIP GALVANISED STEEL WINDOWS, DOORS, ETC

POWDER COATED CHARCOAL GREY ALUMINIUM WINDOWS, DOORS, ETC(CPAP Work Group No. 149 Unless Otherwise Stated)

Aluminium Windows Complete With Glazing, Ironmongery, 12 x 12mm Solid Aluminium Powder Coated Burglar Bars Fixed With Stainless Steel Screws And Including Fixing In Position And Filling Back Of Frame With Cement Mortar All As Attached Drawings

1	Window type W1 - PT66, size 600 x 600mm high with three horizontal burglar bars and glazed with safety Pacific obscure glass.	No	20
2	Window type W2 - PTT126, size 1200 x 600mm high with three horizontal burglar bars and glazed with safety Pacific obscure glass.	No	8

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Bill No. 9
Metalwork

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<u>Item No</u>		<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
	<p><u>BILL No. 10</u></p> <p><u>PLASTERING(CPAP Work Group No. 142 Unless Otherwise Stated)</u></p> <p><u>PREAMBLES</u></p> <p>Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill.</p> <p>For Preambles refer to the documents "Construction Works: Specifications: General Specification (PW371-A) Edition 2.1" and "Construction Works: Specifications: Particular Specification (PW371-B) Edition 2.2"and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Preambles</u></p> <p>The Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.</p> <p><u>Proprietary products in descriptions</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p>-----</p> <p><u>SCREED</u></p> <p><u>4:1 Cement Screed On Concrete</u></p>			
1	33mm Thick on floors to receive epoxy flooring finish.	m2	63	
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INTERNAL PLASTER

5:1 Cement Plaster On Brickwork On

1	Walls.	m2	308		
2	Narrow widths.	m2	7		

DIVIDING STRIPS, ETC

3	3 x 25mm Flat section brass dividing strip or waterbar set on edge in screed between different floor finishes.	m	4		
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Plastering

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Plastering

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Plastering

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<u>Item No</u>	<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
<u>BILL No. 11</u>			
<u>PLUMBING (PROVISIONAL)(CPAP Work Group No. 148 Unless Otherwise Stated)</u>			
<u>PREAMBLES</u>			
For Preambles refer to The documents "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0"and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Preambles</u>			
The Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.			
<u>Excavations</u>			
No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling.			
<u>Laying, Backfilling, Bedding, Etc. Of Pipes</u>			
Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled.			
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Bill No. 11 Plumbing & Drainage (Provisional)			
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Where no manufacturers' instructions exist, pipes shall be laid in accordance with Clauses 5.1 and 5.2 of each of the following:

SANS 1200L : Medium-pressure pipelines

SANS 1200LD : Sewers

SANS 1200LE : Stormwater drainage

Pipe trenches, etc shall be backfilled in accordance with Clauses 3, 5.5, 5.6, 5.7 and 7 of SANS 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 SANS 1200LB : Bedding (Pipes).

Unless otherwise described bedding of rigid pipes shall be Class B bedding.

uPVC Pipes And Fittings

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.

Exposed Concrete Surfaces

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc. shall be finished smooth with plaster.

General

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).

Descriptions of WC pans, slop hoppers, etc shall be deemed to include for joints to soil pipes (pan connectors are separately measured).

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Reducing Fittings

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.

Waste Unions

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

Sealing Of Edges

Outer edges of sinks, basins, baths, urinals, etc. are to be sealed against adjacent surfaces with approved silicone.

Stainless Steel Basins, Sinks, Wash Troughs, Urinals, Etc.

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.

Fixing Of Pipes

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.

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uPVC Pressure Pipes And Fittings

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.

High Density Polyethylene (HDPE) Pipes And Fittings

Pipes shall be type IV and of the class specified with "Plasson" or "Alprene" or equal and approved compression fittings.

Copper Pipes

Pipes shall be hard drawn and half-hard "Maksal" or equal and approved 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.

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.

Paper Wrapping To Pipes

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

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"Densyl" Petrolatum Anti-corrosion Tape or equal and approved As Manufactured By Denso SA (Pty) Ltd.

Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied in the appropriate widths and with minimum 15mm lap per spiral unless otherwise described.

Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including mastic, tape, "Layflat" sheeting or equal and approved, securing of same, etc.

Prices for wrapping of pipes shall include for all work as described to couplings in the length.

Disinfection Of Water Pipework

Water pipework is to be disinfected at completion in accordance with SABS 1200L (provision for disinfection elsewhere).

As-Built Drawings

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).

RAINWATER TANKS, ETC

- 1 2400 Litre plastic seamless water storage tank complete with fixing lugs and lid, fitted with and including 15mm brass bibtap with handle suitable for padlocking and setting in position on concrete tankstand (elsewhere measured) and tying down with 4mm diameter galvanised wire wrapped twice around centre of tank and secured to each corner of tank stand with a double strand of 4mm diameter galvanised wire embedded into concrete.

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<u>Fittings</u>					
1	PR100 Hydraulic jump rainwater filter complete with non-return valve and chamber cover.	No	4		
2	Adaptor from 75mm diameter aluminium rainwater pipe to 100mm diameter inlet of PR100 rainwater filter.	No	4		
3	Hole through top of tank lid for 100mm diameter pipe.	No	4		
<u>SOIL DRAINAGE</u>					
<u>(CPAP Work Group No. 146 Unless Otherwise Stated)</u>					
<u>Sundries</u>					
4	450 x 600mm x 74kg type 8A code 2170 cast iron two piece double seal manhole cover and frame bedded on top of concrete manhole cover slab.	No	11		
<u>(End Of CPAP Work Group No. 146)</u>					
<u>SANITARY PLUMBING</u>					
<u>uPVC Socketed Soil, Waste And Vent Piping And Fittings(SABS 967)</u>					
5	40mm Pipe and fixing to walls, falls, in concrete, etc.	m	24		
6	110mm Ditto.	m	120		
<u>Extra For</u>					
7	110mm Vent cowl.	No	16		
8	40mm Bend.	No	15		
9	40mm Access bend.	No	12		
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SANITARY FITTINGS

NOTE:

All fittings butting up against wall or floor finishes are to be sealed with an approved silicone sealer to the Architects satisfaction.

Precast Concrete

- | | | | |
|---|--|----|---|
| 1 | Vanstone or other equal approved double washtrough code 1411 with two outlets, size 1050 x 650 x 340mm deep and two pedestals 530mm high, all set up and fixed complete to brick wall. | No | 4 |
|---|--|----|---|

Rotational Moulded And Extruded Plastic Sanitaryware Products

- | | | | |
|---|---|----|----|
| 2 | Wash hand basin (Colour - Granite) with moulded-in soap holder, size 570 x 400mm, bolted to wall with galvanised brackets. | No | 5 |
| 3 | VIP Pit pedestal (Colour - Granite) complete with lid and fitments fixed to floors with an approved epoxy or bolted to floors with and including four 6mm diameter x 50mm long expansion bolts. | No | 13 |
| 4 | Long drop VIP pedestal for children complete with flap with lid and fitments fixed to floors with an approved epoxy or bolted to floors with and including four 6mm diameter x 50mm long expansion bolts. | No | 3 |
| 5 | Inlet funnel (Colour - Granite)" to suit VIP pit pedestal including setting in concrete in exact position. | No | 17 |

Atlas Plastics Or Other Equal Approved

- | | | | |
|---|---|----|---|
| 6 | Code 507AP bowl urinal and galvanised brackets fixed to wall with and including three 6mm diameter x 50mm long expansion bolts. | No | 5 |
|---|---|----|---|

Brass Fittings Including Couplings To Copper

- | | | | |
|---|-----------------------------|----|---|
| 7 | 15mm Brass stoptap. | No | 2 |
| 8 | 15mm Bibtap as Cobra 100-15 | No | 5 |

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Bill No. 11
Plumbing & Drainage (Provisional)

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1	15mm Chromium plated elbow action pillar tap.	No	1		
	<u>Chromium Plated Brass Fittings Including Couplings To Copper</u>				
2	15mm Extension piece with detachable wall flange as Cobra 059.	No	20		
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Bill No. 11

Plumbing & Drainage (Provisional)

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Plumbing & Drainage (Provisional)

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<u>Item No</u>	<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
<u>BILL No. 12</u>			
<u>GLAZING(CPAP Work Group No. 150 Unless Otherwise Stated)</u>			
<u>PREAMBLES</u>			
For Preambles refer to The documents "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0"and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Preambles</u>			
The Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.			
<u>Proprietary Products In Descriptions</u>			
Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.			
<u>Float glass</u>			
The term "float glass" is used for monolithic annealed glass.			
<u>Laminated glass</u>			
Laminated glass to have polyvinyl butyral (PVB) interlayer(s).			

Carried To Trade Summary			R
Bill No. 12 Glazing			
JOB No. 21/0001			

1	<u>4mm Float Glass Silver Backed Mirror With Polished Edges All Around</u>				
	Mirror size 600 x 900mm four times holed for and screwed with chromium plated two piece cover headed screws to and including hardwood plugs in wall.	No	5		

Bill No. 12

Glazing

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Bill No. 12

Glazing

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<u>Item No</u>	<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
<u>BILL No. 13</u>			
<u>PAINTWORK(CPAP Work Group No. 152 Unless Otherwise Stated)</u>			
<u>PREAMBLES</u>			
Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill.			
For Preambles refer to the documents "Construction Works: Specifications: General Specification (PW371-A) Edition 2.1" and "Construction Works: Specifications: Particular Specification (PW371-B) Edition 2.2"and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Preambles</u>			
The Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.			
<u>Proprietary products in descriptions</u>			
Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent			
<u>Descriptions</u>			
All concrete surfaces are smooth unless otherwise described.			
All surfaces of walls are internal unless otherwise described.			
All plaster surfaces are smooth (floated) unless otherwise described.			
Carried To Trade Summary			R
Bill No. 13 Paintwork			
JOB No. 21/0001			

<u>PAINT ON PLASTER, FIBRE REINFORCED CEMENT, ETC</u>					
<u>Prepare And Apply One Coat Primer And Two Coats Interior Quality PVA Emulsion On Internal</u>					
1	Plastered walls.	m2	345		
<u>Prepare And Apply One Coat Primer And Two Coats Exterior Quality Acrylic PVA On</u>					
2	Fibre cement fascia and bargeboard.	m2	17		
<u>Prepare And Apply One Coat Undercoat And Two Coats Interior Quality Eggshell Enamel On</u>					
3	Fibre cement cills not exceeding 300mm girth.	m	22		
<u>PREPARATION AND FINISH TO TOILET FLOOR</u>					
<u>Prepare And Apply Two Coats Abecote 337 Water Dispersed Epoxy Paint All In Accordance With The Manufacturer's Specification</u>					
4	On screeded floor.	m2	63		
5	Ditto, but on 50x50mm coved skirting high.	m	127		
<u>PAINT ON WOOD</u>					
<u>Prime Or Oil</u>					
6	Backs of frames or linings not exceeding 300mm girth. (LI)	m	98		
<u>Prepare And Apply Two Coats Carbolinium Wood Preservative On</u>					
7	Wall plate.	m2	28		
8	Laminated beams, rafters, etc.	m2	46		
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Bill No. 13 Paintwork					
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Prepare, Stop And Apply One Coat Pink Wood Primer,
One Undercoat And Two Coats Enamel On

1	Doors.	m2	69
2	Frames and linings.	m2	26
3	Exposed timbers at eaves and verges.	m2	30

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Paintwork

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Bill No. 13

Paintwork

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Bill No. 13
Paintwork

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<u>Item No</u>	<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
<u>BILL No. 14</u>			
<u>EXTERNAL WORKS (PROVISIONAL)</u>			
<u>PREAMBLES</u>			
Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill.			
For Preambles refer to the documents "Construction Works: Specifications: General Specification (PW371-A) Edition 2.1" and "Construction Works: Specifications: Particular Specification (PW371-B) Edition 2.2" and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Preambles</u>			
The Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.			
<u>Proprietary Products In Descriptions</u>			
Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.			
<u>Checking Levels</u>			
Before commencing any works under "Site Excavations", cross sections shall be taken by the contractor and these levels shall be compared with those given on the drawings. Failure by the contractor to report any discrepancy between the physical levels and those shown on the drawings will be construed as acceptance of the latter by him.			
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Nature Of Ground

The nature of the ground is unknown and the contractor is to make his own assessment and due allowance for same.

Quantities

The quantities of excavations and concrete shall be the net sizes to be formed in accordance with the drawings and specifications and shall be not less than the horizontal area of the bottom of the relevant structures multiplied by the average depth or thickness.

Carting Away Of Excavated Material

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.

Filling

Notwithstanding the reference to prescribed multiple handling in clause 1 page 10 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.

Imported fill:

Filling and bedding to trenches etc. to be in compliance with SANS 1200 DB and LB respectively.
Site clearance and external paved areas earthworks to be in compliance with SANS 1200C and D respectively.

Density Testing On Filling

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

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Formwork

Formwork to sides of footings, 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.

SITE EXCAVATIONS

Labour Intensive

Where possible all work in this section is to be executed using labour intensive methods.

EARTHWORKS

(CPAP Work Group No. 104 Unless Otherwise Stated)

Excavations, Filling, Etc As SANS 1200 DA : Earthworks (Small Works)

1	Soft excavation to open face over site to reduce levels.	m3	321
2	Soft excavation to open face over site to reduce levels, including depositing in layers not exceeding 150mm thick, watering and consolidating spoil to 93% modified AASHTO density to platforms, etc. including compaction tests.	m3	222
3	Extra over soft excavation for intermediate excavation.	m3	54
4	Ditto, but for hard rock excavation.	m3	27
<u>Extra Over All Excavations For Carting Away Of</u>			
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	321

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EARTHWORKS

(CPAP Work Group No. 104 Unless Otherwise Stated)

Excavations, Etc

1	Excavate in earth to reduce levels under pavings not exceeding 2000mm deep.	m3	41
2	Extra over bulk excavations in earth for excavation in soft rock.	m3	3
3	Ditto, but in hard rock.	m3	1
4	Extra over all excavations for carting away from the site all surplus excavated material.	m3	40
5	Allow for keeping excavations free from water.		Item

Layerworks, Etc Including Compaction Density Tests

6	G5 filling, selected and supplied by the Contractor, deposited in layers not exceeding 150mm thick, watered and consolidated to 95% modified AASHTO density under pavings.	m3	23
7	Scarify, mix and consolidate top 150mm of subgrade to 93% modified AASHTO density.	m2	240

Prescribed Density Tests As Check On Contractors Tests Included In Layerworks Above

8	Modified AASHTO density test and deliver the results to the Architect within 24 hours of the tests being completed.	No	3
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CONCRETE(CPAP Work Group No. 110 Unless Otherwise Stated)

9	Set of three concrete test cubes size 150 x 150 x 150mm overall including testing (Provisional).	Sets	9
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1	Extra over all excavations for carting away from the site all surplus excavated material.	m3	10		
2	Allow for risk of collapse to sides of trench and base excavations not exceeding 1500mm deep.	m2	57		
3	Allow for keeping excavations free from water.		Item		
4	Earth filling, selected by the Contractor from the excavated material, deposited in layers not exceeding 150mm thick, watered and consolidated as backfilling to trenches, bases, etc.	m3	10		
5	Earth filling, selected and supplied by the Contractor, deposited in layers not exceeding 150mm thick, watered and consolidated as filling under floors, etc including compaction density tests.	m3	7		
<u>CONCRETE</u>					
<u>(CPAP Work Group No. 110 Unless Otherwise Stated)</u>					
6	Set of three concrete test cubes size 150 x 150 x 150mm overall including testing (Provisional).	Sets	1		
<u>Concrete</u>					
<u>Concrete Cast Against Excavated Surfaces</u>					
7	Reinforced cement concrete (25MPa) in footings.	m3	5		
8	Reinforced cement concrete (25MPa) in water tank base.	m3	2		
<u>FORMWORK</u>					
<u>(CPAP Work Group No. 111 Unless Otherwise Stated)</u>					
<u>Rough Formwork To</u>					
9	Edge, risers, ends and reveals not exceeding 300mm high or wide.	m	62		
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REINFORCEMENT

(CPAP Work Group No. 114 Unless Otherwise Stated)

High Tensile Steel Bar Reinforcement To Structural Concrete Work

1	10mm Diameter bars.	kg	198
2	12mm Diameter bars.	kg	198

Fabric Reinforcement To Concrete Work

3	High tensile steel mesh Ref. 193 to concrete seat, etc.	m2	16
---	---	----	----

BRICKWORK

(CPAP Work Group No. 116 Unless Otherwise Stated)

Brickwork In Clay Bricks In 6:1 Cement Mortar In

4	One brick wall.	m2	71
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Movement Joints

5	10mm Bitumen impregnated softboard joint filler set between vertical brick surfaces.	m2	20
---	--	----	----

Reinforcement

6	Galvanised brick reinforcement 155mm wide.	m	833
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Corobrik Country Manor Travertine FBS Face Bricks Pointed With Ruled-In square Vertical And Horizontal Joints

7	Extra over brickwork for face brickwork.	m2	22
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WATERPROOFING

(CPAP Work Group No. 120 Unless Otherwise Stated)

- | | | | |
|---|---|---|----|
| 1 | Rake out 10mm wide joint filler on vertical surfaces of brickwork or concrete for a depth of 15mm and clean, prime and caulk with an approved external quality polysulphide sealing compound. | m | 14 |
|---|---|---|----|

PLASTERING

(CPAP Work Group No. 142 Unless Otherwise Stated)

Untinted Grano On Concrete

- | | | | |
|---|------------------------------|----|----|
| 2 | 25mm Thick on floors. | m2 | 16 |
| 3 | 25mm Thick on narrow widths. | m2 | 3 |

STORMWATER DRAINAGE(CPAP Work Group No. 146 Unless Otherwise Stated)

- | | | | |
|---|--|---|----|
| 4 | 600 x 100mm Thick cement concrete (20MPa) v-shaped surface water channel laid to falls in lengths not exceeding 2000mm on a well rammed earth bottom, including excavation, floating smooth, formwork, ramming and depositing and levelling spoil on site. | m | 41 |
|---|--|---|----|

Concrete Sundries

- | | | | |
|---|--|----|---|
| 5 | Float top of concrete v-shaped stormwater channel to falls with a wood float whilst the concrete is still green with the addition of 2.1 sand and cement as necessary. | m2 | 4 |
|---|--|----|---|

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<u>Item No</u>	<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
<u>BILL No. 15</u>			
<u>PROVISIONAL SUMS</u>			
<u>PREAMBLES</u>			
Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill.			
For Preambles refer to the documents "Construction Works: Specifications: General Specification (PW371-A) Edition 2.1" and "Construction Works: Specifications: Particular Specification (PW371-B) Edition 2.2" and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>General</u>			
Work for which budgetary allowances are provided will be measured and valued in accordance with clause 32 of the Principal Building Agreement and deducted in whole or in part if not required without any compensation for loss or profit on the said allowances.			
Prime cost amounts and provisional sums are net. Prime cost amounts include for delivery to site of all articles concerned. Provisional sums are for material and equipment supplied and installed complete by firms of specialists.			
<u>Profit</u>			
Where stated, the contractor may allow for profit if required.			
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Bill No. 15 Provisional Sums			
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General Attendance On Nominated/Selected Subcontractors

The item "Attendance" which follows each provisional sum for nominated/selected subcontractors' work, shall be deemed to cover all the contractor's costs incurred in providing free of charge to the nominated/selected subcontractors, the following:

- 1 The services as set out in clause B9.1 of the Preliminaries.
- 2 Making good in all trades and cleaning down and removal of rubbish on completion.

Special Attendance On Nominated/Selected Subcontractors

Where stated special attendance will be described in detail in the Schedule for Variables in the Preliminaries for the services as set out in clause B9.2.

Builder's Work

Builder's work in connection with specialist services is given elsewhere in these bills of quantities.

SIGNAGE

- 1 Provide the sum of R 5,000.00 (Five Thousand Rand) for Signs supplied and fixed complete.
- 2 Allow for general attendance on ditto.
- 3 Allow for profit if required.

Item	5 000.00
Item	
Item	

BUDGETARY ALLOWANCE FOR COMMUNITY LIASON OFFICER

- 4 Provide the sum of R 18 000.00 (Eighteen Thousand Rand) for a Community Liason Officer for the duration of the project. (3 months x R 6 000)
- 5 Allow for general attendance on ditto.

Item	18 000.00
Item	

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BUDGETARY ALLOWANCES

- 1 Provide the Budgetary Allowance of R100 000.00 (One Hundred Thousand Rand) for the construction of v-drains and pitching basin, to Engineers specifications to be measured and valued at bill rates at a later date.
- 2 Provide the Budgetary Allowance of R20 000.00 (Twenty Thousand Rand) for the construction of walkway culvert, to Engineers specifications to be measured and valued at bill rates at a later date.

Item 100 000.00

Item 20 000.00

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1	Preliminaries	49	
2	Earthworks (Provisional)	55	
3	Concrete, Formwork & Reinforcement	61	
4	Masonry	67	
5	Waterproofing	71	
6	Roof Coverings, Etc	75	
7	Carpentry & Joinery	80	
8	Ironmongery	84	
9	Metalwork	88	
10	Plastering	91	
11	Plumbing & Drainage (Provisional)	100	
12	Glazing	103	
13	Paintwork	107	
14	External Works (Provisional)	116	
15	Provisional Sums	120	
	TOTAL OF BUILDING WORKS		R
	Provide the Sum of R 150,000.00 (One Hundred and Fifty Thousand Rand) for Contingencies.		R 150 000.00
	TOTAL OF BUILDING WORKS & CONTINGENCIES		R
	VAT at the rate of 15%		R
	CARRIED TO TENDER FORM		R
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