

DEFINITIONS

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 Period**" is amended by replacing it with the following:

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

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

"INTEREST" means the interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be in terms of the legislation of the Republic of South Africa, and in particular:

- (a) in respect of interest owed by the **employer**, the interest rate as determined by the Minister of Justice and Constitutional Development, from time to time, in terms of section 1(2) of the Prescribed Rate of Interest Act, 1975 (Act No. 55 of 1975), will apply; and
- (b) in respect of interest owed to the **employer**, the interest rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No. 1 of 1999), will apply.

Clause 1.6.4 is amended by replacing it with the following:

No clause

Fixed: _____ Value related: _____ Time related: _____

Item

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OBJECTIVE AND PREPARATION

A2.0 OFFER, ACCEPTANCE AND PERFORMANCE

Clause 2.0

Fixed: _____ Value related: _____ Time
related: _____

Item

A3.0 DOCUMENTS

Clause 3.0

Clause 3.7 is amended by the addition of the following:

The **contractor** shall supply and keep a copy of the JBCC Series 2000 Principal Building Agreement and Preliminaries applicable to this contract on the **site**, to which the **employer**, **principal agent** and **agents** shall have access at all times

Fixed: _____ Value related: _____ Time
related: _____

Item

A4.0 DESIGN RESPONSIBILITY

Clause 4.0

Fixed: _____ Value related: _____ Time
related: _____

Item

A5.0 EMPLOYER'S AGENTS

Clause 5.0

Clause 5.1.2 is amended to include clauses 32.6.3, 34.3 and 34.4

Fixed: _____ Value related: _____ Time
related: _____

Item

A6.0 SITE REPRESENTATIVE

Clause 6.0

Fixed: _____ Value related: _____ Time
related: _____

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[illegible]

10.5 Damage to the Works

- (a) Without in any way limiting the **contractor's** obligations in terms of the contract, the **contractor** shall bear the full risk of damage to and/or destruction of the **works** by whatever cause during construction of the **works** and hereby indemnifies and holds harmless the **employer** against any such damage. The **contractor** shall take such precautions and security measures and other steps for the protection and security of the **works** as the **contractor** may deem necessary
- (b) The **contractor** shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the **works** and to rebuild, restore, replace and/or repair the **works**
- (c) The **employer** shall carry the risk of damage to or destruction of the **works** and material paid for by the **employer** that is the result of the excepted risks as set out in 10.6
- (d) Where the **employer** bears the risk in terms of this contract, the **contractor** shall, if requested to do so, reinstate any damage or destroyed portions of the **works** and the costs of such reinstatement shall be measured and valued in terms of 32.0 hereof

10.6 Injury to Persons or loss of or damage to Properties

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

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- (b) The **contractor** shall be liable for and hereby indemnifies the **employer** against any liability, loss, claim or proceeding consequent upon loss of or damage to any moveable or immovable or personal property or property contiguous to the **site**, whether belonging to or under the control of the **employer** or any other body or person, arising out of or in the course of or by reason of the execution of the **works** unless due to any act or neglect of any person for whose actions the **employer** is legally liable
- (c) The **contractor** shall, upon receiving a **contract instruction** from the **principal agent**, cause the same to be made good in a perfect and workmanlike manner at his own cost and in default thereof the **employer** shall be entitled to cause it to be made good and to recover the cost thereof from the **contractor** or to deduct the same from amounts due to the **contractor**
- (d) The **contractor** shall be responsible for the protection and safety of such portions of the premises placed under his control by the **employer** for the purpose of executing the **works** until the issue of the **certificate of practical completion**
- (e) Where the execution of the **works** involves the risk of removal of or interference with support to adjoining properties including land or structures or any structures to be altered or added to, the **contractor** shall and will remain adequately insured or insured against the death of or injury to persons or damage to such property consequent on such removal or interference with the support until such portion of the **works** has been completed
- (f) The **contractor** shall at all times proceed immediately at his own cost to remove or dispose of any debris and to rebuild, restore, replace and/or repair such property and to execute the **works**

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10.7 High risk insurance

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

10.7.1 Damage to the works

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

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

10.7.2 Injury to persons or loss of or damage to property

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

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

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

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

Fixed: _____ Value related: _____ Time related: _____

Item

A11.0 LIABILITY INSURANCES

Clause 11.0

Fixed: _____ Value related: _____ Time related: _____

Item

A12.0 EFFECTING INSURANCES

Clause 12.0

Fixed: _____ Value related: _____ Time related: _____

Item

A13.0 *No clause*

Item

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A14.0 SECURITY

Clause 14.0

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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:

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

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

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

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

Fixed:_____ Value related:_____ Time related:_____

EXECUTION

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 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:

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Give the **contractor** possession of the **site** within ten (10) **working days** of the **contractor** complying with the terms of 15.1.2 and 15.1.4

Fixed: _____ Value related: _____ Time related: _____

A16.0 ACCESS TO THE WORKS

Clause 16.0

Fixed: _____ Value related: _____ Time related: _____

Item

A17.0 CONTRACT INSTRUCTIONS

Clause 17.0

Fixed: _____ Value related: _____ Time related: _____

Item

A18.0 SETTING OUT OF THE WORKS

Clause 18.0

Fixed: _____ Value related: _____ Time related: _____

Item

A19.0 ASSIGNMENT

Clause 19.0

Fixed: _____ Value related: _____ Time related: _____

Item

A20.0 NOMINATED SUB-CONTRACTORS

Clause 20.0

Clause 20.1.3 is amended by replacing it with the following:

No Clause

Note: See item B9.1 hereinafter for adjustment of attendance on nominated subcontractors executing work allowed for under provisional sums

Fixed: _____ Value related: _____ Time related: _____

Item

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A21.0 SELECTED SUBCONTRACTORS

Clause 21.0

Clause 21 is amended by replacing it with:

No Clause

Fixed: _____ Value related: _____ Time
related: _____

Item

A22.0 EMPLOYER'S DIRECT CONTRACTORS

Clause 22.0

Fixed: _____ Value related: _____ Time
related: _____

Item

**A23.0 CONTRACTOR'S DOMESTIC
SUBCONTRACTORS**

Clause 23.0

Fixed: _____ Value related: _____ Time
related: _____

Item

COMPLETION

A24.0 PRACTICAL COMPLETION

Clause 24.0

Fixed: _____ Value related: _____ Time
related: _____

Item

A25.0 WORK'S COMPLETION

Clause 25.0

Fixed: _____ Value related: _____ Time
related: _____

Item

A26.0 FINAL COMPLETION

Clause 26.0

Fixed: _____ Value related: _____ Time
related: _____

Item

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A27.0 LATENT DEFECTS LIABILITY PERIOD

Clause 27.0

Fixed: _____ Value related: _____ Time
related: _____

Item

A28.0 SECTIONAL COMPLETION

Clause 28.0

Fixed: _____ Value related: _____ Time
related: _____

Item

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

Clause 29.0

Fixed: _____ Value related: _____ Time
related: _____

Item

A30.0 PENALTY FOR NON-COMPLETION

Clause 30.0

Fixed: _____ Value related: _____ Time
related: _____

Item

PAYMENT

A31.0 INTERIM PAYMENT TO THE CONTRACTOR

Clause 31.0

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

Alternative A

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

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

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

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

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

Alternative B

31.8(B) Where **security** is a payment reduction in terms of 14.7 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:

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

Fixed: _____ Value related: _____ Time related: _____

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**"

Fixed: _____ Value related: _____ Time related: _____

Item

A33.0 RECOVERY OF EXPENSE AND LOSS

Clause 33.0

Clause 33.2 is amended by adding the following clauses:

33.2.9 the **contractor's** failure or neglect to commence with the **works** on the dates prescribed in the contract

33.2.10 the **contractor's** failure or neglect to proceed with the **works** in terms of the contract

33.2.11 the **contractor's** failure or neglect for any reason to complete the **works** in accordance with the contract

33.2.12 the **contractor's** refusal or neglect to comply strictly with any of the conditions of contract or any **contract instructions** and/or orders in writing given in terms of the contract

33.2.13 the **contractor's** estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa

Fixed: _____ Value related: _____ Time related: _____

Item

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A34.0 FINAL ACCOUNT AND FINAL PAYMENT

Clause 34.0

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

Fixed: _____ Value related: _____ Time related: _____

Item

A35.0 PAYMENT TO OTHER PARTIES

Clause 35.0

Fixed: _____ Value related: _____ Time related: _____

Item

CANCELLATION

A36.0 CANCELLATION BY EMPLOYER - CONTRACTOR'S DEFAULT

Clause 36.0

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

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

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

Fixed: _____ Value related: _____ Time related: _____

Item

A37.0 CANCELLATION BY EMPLOYER - LOSS AND DAMAGE

Clause 37.0

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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: _____

A38.0 CANCELLATION BY CONTRACTOR - EMPLOYER'S DEFAULT

Clause 38.0

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: _____

A39.0 CANCELLATION - CESSATION OF THE WORKS

Clause 39.0

Fixed: _____ Value related: _____ Time related: _____

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Item

Item

Item

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A40.0 DISPUTE SETTLEMENT

Clause 40.0

Clause 40.2.2 is amended by replacing “one (1) year” with “three (3) years”

Clause 40.6 is amended by removing the reference to:

No clause

Clause 40.7.1 is amended by replacing “(10)” with “(15)” and by the addition of the following:

Whether or not mediation resolves the dispute, the parties shall bear their own cost concerning the mediation and equally share the costs of the mediator and related costs

Fixed:_____ Value related:_____ Time related:_____

Item

SUBSTITUTE PROVISIONS

A41.0 STATE CLAUSES

Clause 41.0

Fixed:_____ Value related:_____ Time related:_____

Item

CONTRACT VARIABLES

THE SCHEDULE (DPW04EC)

A42.0 PRE-TENDER INFORMATION

Clause 42.0

Tenderers are referred to the Contact Variables and Notes to Tenderers (EC) for variables pertaining to this contract

Fixed:_____ Value related:_____ Time related:_____

Item

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SECTION B: JBCC PRELIMINARIES

B1.0 DEFINITIONS AND INTERPRETATION

B1.1 Definitions and interpretation

Fixed: _____ Value related: _____ Time related: _____

Item

B2.0 DOCUMENTS

B2.1 Checking of documents

Fixed: _____ Value related: _____ Time related: _____

Item

B2.2 Provisional bills of quantities

Fixed: _____ Value related: _____ Time related: _____

Item

B2.3 Availability of construction documentation

Fixed: _____ Value related: _____ Time related: _____

Item

B2.4 Interests of agents

Fixed: _____ Value related: _____ Time related: _____

Item

B2.5 Priced documents

Fixed: _____ Value related: _____ Time related: _____

Item

B2.6 Tender submission

Clause 2.6 is amended by replacing "JBCC Form of Tender" with "Form of Offer and Acceptance (DPW07)"

Fixed: _____ Value related: _____ Time related: _____

Item

B3.0 THE SITE

B3.1 Defined works area

Fixed: _____ Value related: _____ Time related: _____

Item

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B3.2 Geotechnical investigation

Fixed: _____ Value related: _____ Time related: _____

Item

B3.3 Inspection of the site

Tenderers shall complete the Site Inspection Certificate (DW16 EC) included in the tender documents and return the same with the tender submission.

Fixed: _____ Value related: _____ Time related: _____

Item

B3.4 Existing premises occupied

Fixed: _____ Value related: _____ Time related: _____

Item

B3.5 Previous work - dimensional accuracy

Fixed: _____ Value related: _____ Time related: _____

Item

B3.6 Previous work - defects

Fixed: _____ Value related: _____ Time related: _____

Item

B3.7 Services - known

Fixed: _____ Value related: _____ Time related: _____

Item

B3.8 Services - unknown

Fixed: _____ Value related: _____ Time related: _____

Item

B3.9 Protection of trees

Fixed: _____ Value related: _____ Time related: _____

Item

B3.10 Articles of value

Fixed: _____ Value related: _____ Time related: _____

Item

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B3.11 <i>Inspection of adjoining properties</i>	Item	R
Fixed: _____ Value related: _____ Time related: _____		
B4.0 MANAGEMENT OF CONTRACT		
B4.1 <i>Management of the works</i>		
Fixed: _____ Value related: _____ Time related: _____	Item	
B4.1.1 <i>Community Liason Officer</i>		
Fixed: _____ Value related: _____ Time related: _____	Item	
B4.1.2 <i>2(No) Interns</i>		
Fixed: _____ Value related: _____ Time related: _____	Item	
B4.2 <i>Programme for the works</i>		
Fixed: _____ Value related: _____ Time related: _____	Item	
B4.3 <i>Progress meetings</i>		
Fixed: _____ Value related: _____ Time related: _____	Item	
B4.4 <i>Technical meetings</i>		
Fixed: _____ Value related: _____ Time related: _____	Item	
B4.5 <i>Labour and plant records</i>		
Fixed: _____ Value related: _____ Time related: _____	Item	
B5.0 SAMPLES, SHOP DRAWINGS AND MANUFACTURERS' INSTRUCTIONS		
B5.1 <i>Samples of materials</i>		
Fixed: _____ Value related: _____ Time related: _____	Item	
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B5.2 Workmanship samples

Fixed: _____ Value related: _____ Time
related: _____

Item

B5.3 Shop drawings

Fixed: _____ Value related: _____ Time
related: _____

Item

B5.4 Compliance with manufacturers' instructions

Fixed: _____ Value related: _____ Time
related: _____

Item

B6.0 TEMPORARY WORKS AND PLANT

B6.1 Deposits and fees

Fixed: _____ Value related: _____ Time
related: _____

Item

B6.2 Enclosure of the works

Fixed: _____ Value related: _____ Time
related: _____

Item

B6.3 Advertising

Fixed: _____ Value related: _____ Time
related: _____

Item

B6.4 Plant, equipment, sheds and offices

Fixed: _____ Value related: _____ Time
related: _____

Item

B6.5 Main notice board

Fixed: _____ Value related: _____ Time
related: _____

Item

B6.6 Subcontractors' notice board

Fixed: _____ Value related: _____ Time
related: _____

Item

B7.0 TEMPORARY SERVICES

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B7.1 Location				
Fixed: _____ Value related: _____ Time related: _____	Item			
B7.2 Water				
Fixed: _____ Value related: _____ Time related: _____	Item			
B7.3 Electricity				
Fixed: _____ Value related: _____ Time related: _____	Item			
B7.4 Telecommunication facilities				
Fixed: _____ Value related: _____ Time related: _____	Item			
B7.5 Ablution facilities				
Fixed: _____ Value related: _____ Time related: _____	Item			
B8.0 PRIME COST AMOUNTS				
B8.1 Responsibility for prime cost amounts				
Fixed: _____ Value related: _____ Time related: _____	Item			
B9.0 ATTENDANCE ON N/S SUBCONTRACTORS				
B9.1 General attendance				
The schedule rates providing for attendance on nominated subcontractors and other contractors , will be adjusted only if the scope of the work has changed.				
Fixed: _____ Value related: _____ Time related: _____	Item			
B9.2 Special attendance				
Fixed: _____ Value related: _____ Time related: _____	Item			
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B9.3 Commissioning - fuel, water and electricity	Item	
Fixed: _____ Value related: _____ Time related: _____		
B10.0 FINANCIAL ASPECTS		
B10.1 Statutory taxes, duties and levies	Item	
Fixed: _____ Value related: _____ Time related: _____		
B10.2 Payment for preliminaries	Item	
Fixed: _____ Value related: _____ Time related: _____		
B10.3 Adjustment of preliminaries	Item	
Fixed: _____ Value related: _____ Time related: _____		
B10.4 Payment certificate cash flow	Item	
Fixed: _____ Value related: _____ Time related: _____		
B11.0 GENERAL		
B11.1 Protection of the works	Item	
Fixed: _____ Value related: _____ Time related: _____		
B11.2 Protection / isolation of existing / sectionally occupied works	Item	
Fixed: _____ Value related: _____ Time related: _____		
B11.3 Security of the works	Item	
Fixed: _____ Value related: _____ Time related: _____		
B11.4 Notice before covering work	Item	
Fixed: _____ Value related: _____ Time related: _____		
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B11.5 Disturbance

Fixed: _____ Value related: _____ Time related: _____

Item

B11.6 Environmental disturbance

Fixed: _____ Value related: _____ Time related: _____

Item

B11.7 Works cleaning and clearing

Fixed: _____ Value related: _____ Time related: _____

Item

B11.8 Vermin

Fixed: _____ Value related: _____ Time related: _____

Item

B11.9 Overhand work

Fixed: _____ Value related: _____ Time related: _____

Item

B11.10 Instruction manuals and guarantees

Fixed: _____ Value related: _____ Time related: _____

Item

B11.11 As built information

Fixed: _____ Value related: _____ Time related: _____

Item

B11.12 Tenant installations

Fixed: _____ Value related: _____ Time related: _____

Item

B12.0 SCHEDULE OF VARIABLES

B12.1 Pre-tender information

Fixed: _____ Value related: _____ Time related: _____

Item

Carried to Collection

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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**.

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

12.1 **PRE TENDER INFORMATION**

12.1.1 ***Provisional Bills of Quantities***

[2.2] *The quantities are provisional*
No

12.1.2 ***Availability of construction documentation***

[2.3] *Construction documentation is complete*
Yes

12.1.3 ***Interests 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 a written acknowledgement therefore before commencing operations.

12.1.5 ***Geotechnical investigation***

[3.2] Details:

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12.1.6 **Existing premises occupied**

[3.4] Specific requirements:

Not applicable.

12.1.7 **Previous work - dimensional accuracy**

[3.5] Details:

Not applicable.

12.1.8 **Previous work - defects**

[3.6] Details:

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** immediately and suspend all affected work in the immediate vicinity until instruction to proceed has been given by the **principal agent**.*

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 back. The remainder of the trees and shrubs shall be left undamaged.

12.1.11 **Inspection of adjoining properties**

[3.11] Specific requirements:

*The **contractor** shall make his own arrangements with owners of adjoining properties in order to execute the **works**.*

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12.1.12 **Enclosure of the works**

[6.2] Specific requirements:

*The **contractor** shall provide, erect, alter as necessary, maintain, remove and make good on completion of the works suitable hoardings, complete with gantries, fans, safety screens, barriers, guard railing, access gates, covered gangways, steel sections at crane lifts, splayed corners, returned ends, etc. as indicated on the drawings and as necessary for the enclosure of the **works** and the protection of the public, all to the satisfaction of **principal agent** and the Local Authority.*

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.*

12.1.14 Main notice board

[6.5] Specific requirements:

*The contractor shall provide, erect where directed, maintain and remove on completion of the **works** a notice board size 3 x 3m as type Drawing GEN 063, constructed of suitable boarding with flat smooth surface and with edging bead 19mm thick round outer edges and projecting 12mm from face of boarding and rounded on front edge. The board shall be securely fixed to hoarding, where hoarding is provided, or fixed to and including a suitable supporting structure of timber or tubular posts and braces. The board is to be painted ivory white and the bead and 12mm wide dividing lines dark green. All wording shall be inscribed in dark green as per the coat of arms for SA. All wording shall be inscribed in dark green painted sans serif lettering.*

12.1.15 **Subcontractors' notice board**

[6.6] Specific requirements:

No

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12.1.16 Water [7.2] Option A (by contractor)	Yes			
12.1.17 Electricity [7.3] Option A (by contractor)	Yes			
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			
12.1.20 Protection of existing/sectionally occupied works [11.2] Protection is required	No			
12.1.21 Special attendance [9.2] Subcontractors (1) details:				
Subcontractors (2) details:				
Subcontractors (3) details:				
Subcontractors (4) details:				
12.1.22 Protection of works [11.1] Specific requirements:				
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:				
Carried to Collection		R		
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12.2 POST-TENDER INFORMATION

12.2.1 **Payment of preliminaries**

[10.2] Option A (pro-rated) (Yes/No)
Option B (calculated) (Yes/No)

12.2.2 **Adjustment of preliminaries**

[10.3] Option A (three categories) (Yes/No)
Option B (detailed breakdown) (Yes/No)

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

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 intelligible to the tenderer he shall, before submitting his tender, obtain clarification in writing from the principal agent

Fixed: _____ Value related: _____ Time related: _____

Item

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Preliminaries

C2 GENERAL PREAMBLES

The document "Specification of Materials and Methods to be used (PW371)" is obtainable on request from the head office and all regional offices of the Department, and shall be read in conjunction with the **bills of quantities** and be referred to for the full descriptions of work to be done and materials to be used

Fixed: _____ Value related: _____ Time related: _____

Item

C3 TRADE NAMES

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

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

Fixed: _____ Value related: _____ Time related: _____

Item

C4 IMPORTED MATERIALS AND EQUIPMENT

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 (DPW23EC) to be completed by tenderer)

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

Fixed: _____ Value related: _____ Time related: _____

Item

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C5 - C9 **SECURITY CLAUSES**

Clause C5 - C9: Viewing of site in security areas, commencement of work in security areas, entrance permits to security areas, security check on personnel, prohibition on taking photographs are not applicable.

Fixed: _____ Value related: _____ Time related: _____

Item

C10 **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 C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained

The **contractor** must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the **principal agent**, notwithstanding the provisions of Clause A 31 of "Section 1: Preliminaries (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.

C10.1 **AWARENESS CAMPAIGN**

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

Fixed: _____ Value related: _____ Time related: _____

Item

Carried to Collection

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C10.2 AWARENESS WORKSHOPS

Selection and appointment of a competent Service Provider approved by the **principal agent**, provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification

Fixed: _____ Value related: _____ Time related: _____

Item

C10.3 POSTERS, BOOKLETS, VIDEOS, ETC.

Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the **construction period**, all in accordance with the HIV/AIDS Specification

Fixed: _____ Value related: _____ Time related: _____

Item

C10.4 ACCESS TO CONDOMS

Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the **construction period**, all in accordance with the HIV/AIDS Specification

Fixed: _____ Value related: _____ Time related: _____

Item

C10.5 MONITORING

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

Fixed: _____ Value related: _____ Time related: _____

Item

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Bill No. 1
Preliminaries

C11 OCCUPATIONAL HEALTH AND SAFETY ACT

The **contractor** shall comply with all the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993), edition 23 Code of Practice.

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

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

Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained.

Fixed: _____ Value related: _____ Time related: _____

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Preliminaries

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Bill No. 1

Preliminaries

Imported fill:

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

SITE CLEARANCE, ETC

Site clearance etc:

1	Allow for clearing site including removing trees, shrubs etc. not exceeding 200mm girth, grubbing up roots and roughly levelling.	m2	272
2	Strip topsoil average 150mm deep and dispose offsite	m3	42

EXCAVATION, ETC

Excavation in earth not exceeding 2m deep:

3	Trenches.	m3	54
4	Toilet pit.	m3	30

Excavation in earth exceeding 2m and not exceeding 4m deep:

5	Toilet pit.	m3	4
---	-------------	----	---

Extra over trench and hole excavations in earth for excavation in:

6	Soft rock.	m3	14
7	Hard rock.	m3	7

Extra over all excavations for carting away:

8	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	57
---	---	----	----

Risk of collapse of excavations:

9	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	173
10	Sides of trench and hole excavations exceeding 1,5m deep.	m2	23

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Earthworks

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Bill No. 2

Earthworks

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Bill No. 2
Earthworks

Item No	Quantity	Rate	Amount
<p><u>BILL No. 3</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></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><u>Cost of tests:</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 'Tests' of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the 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).</p> <p><u>Formwork:</u></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as left in or permanent), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use.</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p> <p>Formwork to soffits of solid slabs etc., shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described.</p>			
<p align="right">Carried to Collection</p>			<p align="right">R</p>
<p>Bill No. 3 Concrete, Formwork and Reinforcement</p>			

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

UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES

15 MPa/19 mm concrete

1	Blinding	m3	2
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25MPa/19mm concrete:

2	1000 x 150mm 25Mpa open concrete stormwater channel with 860 x 90mm deep 'V' channel, cast in alternate panels on suitable 150mm subbase material compacted to 93% Mod A.A.S.H.T.O. density, including all necessary excavations, formwork, compaction, grading, carting away, etc.	m	75
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REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES

25MPa/19mm concrete:

3	Strip footings cast against excavated surfaces (Provisional).	m3	20
4	Rafts	m3	1
5	Walkways cast in panels	m3	8

REINFORCED CONCRETE

25MPa/19mm concrete:

6	Surface beds cast in panels on waterproofing.	m3	24
7	Slabs and beams	m3	3

CONCRETE TESTS

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Bill No. 3
Concrete, Formwork and Reinforcement

R

Test blocks:

8	Making and testing set of three 150x150x150mm concrete strength test cubes (Provisional).	No	12
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CONCRETE SUNDRIES

Finishing top surfaces of concrete smooth with a wood float:

9	Surface beds, slabs, etc	m2	89
---	--------------------------	----	----

Finishing top surfaces of concrete to an evenly ribbed non-slip surface (broom finish):

10	Surface beds to falls.	m2	150
----	------------------------	----	-----

ROUGH FORMWORK (DEGREE OF ACCURACY III)

Permanent Formwork to Sides and Soffits:

11	Slabs propped up not exceeding 3,5m high.	m2	13
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Smooth Formwork to Sides:

12	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	40
----	---	---	----

Extra on permanent formwork for boxing or blocking in or boxing out to form:

13	120mm Diameter opening through 200mm thick slab (Provisional).	No	3
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MOVEMENT JOINTS ETC

Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:

14	10mm Joints not exceeding 300mm high (Provisional).	m	150
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Saw cut joints

15	3 x 20mm Saw cut joints in top of concrete	m	46
----	--	---	----

REINFORCEMENT (PROVISIONAL)

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Bill No. 3
Concrete, Formwork and Reinforcement

R

Mild steel reinforcement to structural concrete work:

16	Bars of various diameters	t	0.10
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High tensile steel reinforcement to structural concrete work:

17	Bars of various diameters	t	0.20
----	---------------------------	---	------

Fabric reinforcement:

18	REF. 193 fabric reinforcement in concrete surface beds, slabs, etc.	m2	171
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19	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m2	29
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20	REF. 617 fabric reinforcement in concrete surface beds, slabs, etc.	m2	97
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Concrete, Formwork and Reinforcement

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Bill No. 3

Concrete, Formwork and Reinforcement

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Bill No. 3

Concrete, Formwork and Reinforcement

Item No	Quantity	Rate	Amount
<u>BILL No. 4</u>			
<u>MASONRY</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<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>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>Face bricks:</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour.			
<u>Pointing:</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, and cleaning etc.			
<u>Samples, etc:</u>			
Rates for brickwork, faced brickwork, etc shall include for all required samples.			
<u>BRICKWORK IN FOUNDATIONS</u>			
<u>(PROVISIONAL)</u>			
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:</u>			
1	Half brick walls.	m2	6
2	One brick walls.	m2	59
3	One brick wall to toilet pit.	m2	31
Carried to Collection			R
Bill No. 4 Masonry			

BRICKWORK IN SUPERSTRUCTURE

Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar:

4	Half brick walls.	m2	19
5	Half brick walls in beamfilling.	m2	13
6	One brick walls.	m2	158

BRICKWORK SUNDRIES

Bagging and sealing the outer face of the inner skin of walls with 1:3 cement and sand mixture and seal with two coats "Brixal" bitumen emulsion waterproofing coating:

7	To walls (Provisional).	m2	158
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Joint forming materials in movement joints

8	15mm fibre board built vertically between brick skins	m	10
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Brickwork reinforcement:

9	75mm Wide reinforcement built in horizontally.	m	180
10	150mm Wide reinforcement built in horizontally.	m	951

Concrete prestressed fabricated lintels

11	110 x 75mm Lintels in lengths not exceeding 3m	m	18
----	--	---	----

Galvanised hoop iron cramps, ties, etc

12	30 x 1,6 mm Hoop iron roof tie 1500 mm long with one end fixed to timber and other end built into six courses of brickwork	No	28
----	--	----	----

Turning pieces

13	110mm Wide turning piece to lintels etc	m	14
----	---	---	----

Air bricks etc:

14	230 x 160mm Cement vermin proof air brick.	No	9
----	--	----	---

Carried to Collection

Bill No. 4
Masonry

R

	Natural grey sills in single lengths bedded in class I mortar including metal fixing lugs etc:			
15	15 x 150mm Wide sills set flat and slightly projecting.	m	18	
	<u>FACE BRICKWORK</u>			
	<u>Facebricks (FBS) prime cost of R6 500.00 per thousand excluding VAT delivered to the site pointed with square ruled recessed horizontal and vertical joints:</u>			
16	Extra over brickwork for face brickwork externally.	m ²	207	
17	Ditto, but in foundations (Provisional).	m ²	30	
18	Ditto, but in beamfilling	m ²	13	
19	Fair raking cutting.	m	36	
20	Fair splay cutting.	m	3	
	<u>Brick-on-edge header course copings, sills, etc with recessed joints on all exposed faces:</u>			
21	Brick-on-edge header course lintel pointed on face and 110mm soffit	m	18	
22	Cut face brick-on-edge external window cill, 180mm wide, set sloping and slightly projecting in cement mortar and pointed on top, front edge and projecting soffit including	m	18	
23	Cut face brick-on-edge internal window cill, 115mm wide, set horizontal and flush in cement mortar and pointed on top and front edge	m	16	
	<u>Sample panel</u>			
24	Construct a sample panel 2000mm long x 1500mm high of one brick wall in cement mortar faced and pointed on both sides in stretcher bond and with brick-on-edge coping to top including pointing to top and both sides and with and including necessary excavations for and including 15MPa/38mm mass concrete strip footing in a position as directed by the Representative/Agent and including demolishing and removal after completion of all brickwork	No	1	
	<u>PAVING</u>			
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	Bill No. 4 Masonry			

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Bill No. 4

Masonry

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Bill No. 4

Masonry

Item No	Quantity	Rate	Amount
<u>BILL No. 5</u>			
<u>WATERPROOFING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
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.			
<u>DAMPPROOFING OF WALLS AND FLOORS</u>			
<u>One layer of 375 micron embossed dampcourse waterproof sheeting below walls, sills, etc:</u>			
1	Below walls, sills, etc.	m2	15
<u>One layer of 250 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':</u>			
2	Under surface beds.	m2	251
<u>JOINT SEALANTS ETC</u>			
<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>			
3	10 x 25mm In expansion joints in floors including raking out expansion joint filler as necessary	m	73
<u>Polyurethane sealing compound including backing cord, bond breaker, primer, etc</u>			
4	5 x 10mm In saw cut joints in floors	m	26
Carried to Summary			R
Bill No. 5 Waterproofing			

0,58mm Nominal thickness ditto, but flashings:

3	Ridge 460mm girth with minimum 230mm laps, fixed to roof sheeting (measured net).	m	15
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Sundries

4	Moulded narrow or broad rib polyethelene filler blocks to profiled metal sheeting (Provisional)	m	30
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ROOF INSULATION

"Sisalation 420" industrial grade reinforced aluminium foil and polyethelene insulation

5	Insulation laid taut over purlins (at maximum 1000mm centres) and fixed concurrent with roof covering, including galvanised steel straining wires	m2	202
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Carried to Collection

Bill No. 6
Roof Coverings Etc.

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Bill No. 6

Roof Coverings Etc.

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Bill No. 6

Roof Coverings Etc.

Item No	Quantity	Rate	Amount
<u>BILL No. 7</u>			
<u>CARPENTRY AND JOINERY</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Proprietary products in descriptions:</u>			
<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>			
<u>Prefabricated roof trusses:</u>			
<p>Pre-fabricated timber roof trusses shall comply with the requirements of SABS Specification 0163 and be constructed of South African pine as described in clause 8.5 to the designs shown on the Manufacturer's detail drawings. The timber shall be of cross-sectional dimensions shown, cut to correct lengths with ends square or at the required angle.</p>			
<p>The connector plates shall be of such size as will ensure that the joints so made will adequately withstand the forces exerted on the joints.</p>			
<p>In coastal areas connector plates in buildings without ceilings shall be painted with two coats of epoxy tar complying with SABS Specification 801 Type 2, or rust neutralising paint.</p>			
Carried to Collection			R
Bill No. 7 Carpentry and Joinery			

Approval of pre-fabricated roofing systems, whether measured as an alternative or not, shall be subject to the following requirements:

(a) The Manufacturer of the pre-fabricated trusses shall hold a certificate of competence issued by the Insitute for Timber Construction.

(b) A polyester print, size A1 having a minimum thickness of 0,5mm, shall be submitted by the Contractor to the Regional Representative at an early stage for approval by the Directorate: Structural Engineering Services.

(c) The drawings shall be signed by a Registered Professional Engineer whose name appears on the Departmental panel for structural work.

(d) In the case of systems buildings, approval shall be given with submission of the contract drawings on acceptance of the tender.

The following minimum information shall be shown on the drawings:

- (a) Details of the roof system with the position of the rafters and purlins indicated thereon as well as typical elevations.
- (b) Bracing as recommended by the Institute for Timber Construction.
- (c) Sizes and grading of the timber components.
- (d) Truss sizes, e.g. height of ridge or angle of pitch.
- (e) Plate sizes for every construction point. (Code numbers only are deemed insufficient).
- (f) Seperate connection details for hip, valley and jack rafters.
- (g) Maximum spacing for purlins and brandering to ceilings shall be according to Subclauses 7.6.1 and 7.6.2 and Clauses 7.8, 7.9 and 9.5.

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Bill No. 7
Carpentry and Joinery

R

(h) The type of roof covering as well as the design load. Over and above the supervision undertaken by the Representative / Agent, the Truss Fabricator or his Design Engineer shall inspect the completed roof structure and issue a certificate of confirmation to the Department that:

"The roof structure(s) has (have) been erected in accordance with the Design Engineer's drawings, as accepted by the Department, and the relevant details given in the manual "THE ERECTION AND BRACING OF TIMBER ROOF TRUSSES" issued by the National Timber Research Institute and the Institute for Timber Construction".

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.

Fixing:

All nailing of timber roof trusses, purlins, etc shall be done with galvanised nails. In coastal areas, copper, aluminium or stainless steel nails shall be used.

Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.

Where items are described as "bolted" the bolts have been measured elsewhere.

PREFABRICATED ROOF TRUSSES, ETC.

Prefabricated timber roof trusses shall be constructed of South African pine by a firm of specialist designer manufacturers. Trusses to be a minimum of 1200mm centres and are to support metal roof covering. Ceilings are either gypsum plasterboard or claddit (suspended or fixed). Prices must include for the design , plans and approval of all timber trusses and no claim shall be considered. An Engineers approval certificate is required once the roof truss installation is complete and is for the contractors account.

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Plate nailed timber roof truss construction:

Note: Tenderers are referred to the Architects roof plan drawings annexed to these bills of quantities / accompanying these bills of quantities for tender purposes. Specifications and calculations of prefabricated roof must be supplied by the contractor on award of the contract. Descriptions (prices) shall be deemed to include design.

Complete prefabricated timber roof trusses with a pitch not exceeding 25 degree pitch including all necessary hoisting labour, timber for bracing, purlins, wall plates, gangboards, beams, certificate and guarantee for design and erection to be supplied by truss manufacturer. All exposed timber sections as well as sections in contact with wet trades to be creosote treated before fixing into position.

1	1 x Grade R Classroom block approximately 143m ² measured flat including trusses, purlins, laminated beams, hurricane clips, etc	No	1.00
2	Grade R Ablutons approximately 19m ² measured flat including trusses, purlins, laminated beams, hurricane clips, etc	No	1

EAVES, VERGES, ETC

Pressed fibre-cement:

3	12 x 225mm Fascia board three times drilled, and brass screwed to and including 38 x 50 x 114mm long S.A. Pine cleats twice brass screwed to rafter foot including galvanised steel H-profile jointing strips, screws, holes etc.	m	34
4	85 x 275 x 6mm Barge board drilled and brass screwed to purlin ends including galvanised steel H-profile jointing strips, screws, holes etc.	m	33

DOORS ETC

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Carpentry and Joinery

R

<u>Wrought meranti doors hung to steel frames:</u>					
5	44mm Framed, ledged and braced batten door 813 x 2032mm high of 160mm wide top rail and stiles, 24 x 120mm middle ledge and braces and 24 x 200mm bottom ledge, filled in with 20mm tongued and grooved V-jointed one side vertical boarding with tongued and grooved joints to top rail and stiles and with inner edges of framing and abutting edges of boarding chamfered to form V-joint and covered at back with 10mm plywood with matching veneer, let into and including rebates all round (D01)	No	3		
<u>Semi-solid flush doors, with commercial veneer both sides and with hardwood edge strips, tounge and grooved on to edges</u>					
6	40mm Door, size 813 x 1932mm high	No	3		
7	Ditto, but door size 813 x 1170mm high	No	2		
<u>FRAMED FRAMES ETC</u>					
<u>BEADS, ARCHITRAVES, ETC</u>					
<u>Wrought meranti:</u>					
8	19 x 70mm Skirting fixed to walls including 19mm quadrant bead planted on.	m	45		
<u>Sundries:</u>					
9	38 x 76 mm Chamfered and grooved weatherboard fixed in and including groove or rebate in underside of door.	m	1		
<u>SHELVING</u>					
<u>PINNING BOARDS</u>					
<u>Bitumen impregnated fibre board:</u>					
10	12mm Insulation board backing plugged and glued to wall including all square cutting and waste.	m2	8		
11	'Belgotex' or similar approved carpet glued to pinning boards	m2	8		
Carried to Collection				R	
Bill No. 7 Carpentry and Joinery					

Wrought meranti:

12	22 x 44mm Rebated and chamfered surrounds plugged and screwed to wall at not exceeding 500mm centres, including screws, holes, plugs, etc.	m	20
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JOINERY FITTINGS

13	2-tier adjustable store shelving, 2460mm long as plan, elevation and section on drawing SK004.	No	1
14	Store floor cupboard sink unit, 1511 x 600 x 750mm high as plan, elevation and section on drawing SK004.	No	1
15	Store room under counter open shelf including stainless steel legs, 3783mm long as plan, elevation and section on drawing SK004.	No	1
16	Classroom floor cupboard sink unit, 1525 x 600 x 750mm high as plan, elevation and section on drawing SK004.	No	1
17	Classroom fixed shelving, 3190 x 300 x 1049mm high as plan, elevation and section on drawing SK004.	No	1
18	Magazine rack , 4456mm long with infill panels as plan, elevation and section on drawing SK004.	No	1
19	3-tier pigeon hole unit, 3847 x 300 x 1046mm long as plan, elevation and section on drawing SK004.	No	1

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Bill No. 7

Carpentry and Joinery

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Bill No. 7

Carpentry and Joinery

Item No	Quantity	Rate	Amount
<u>BILL No. 8</u>			
<u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<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>			
Items described as nailed shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete.			
Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as bolted the bolts have been given.			
<u>NAILED UP CEILINGS</u>			
<u>4mm Fibre-cement boards with 6 x 32mm wrought meranti coverstrips over joints:</u>			
1	Ceilings including 38 x 50mm sawn softwood brandering at 400mm centres with cross brandering at joints, ends of sheets and at light fittings, etc.	m2	75
2	Extra over Fibre-cement ceiling for forming trap door size 630 x 630mm in clear formed with 38 x 50mm sawn S.A. pine framing covered with ceiling boarding and set in 38 x 76mm wrought S.A. pine rebated kerb, including trimmers.	No	1
<u>Rhino gypsum plasterboard cornices:</u>			
3	75mm Coved cornice.	m	48
Carried to Summary			R
Bill No. 8 Ceilings, Partitions and Access Flooring			

Item No	Quantity	Rate	Amount
<u>BILL No. 10</u>			
<u>IRONMONGERY</u>			
The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (1999 Edition), the Department of Public Works document No. OW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<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>Finishes to ironmongery:</u>			
Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list BS Satin bronze lacquered CP 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 Fixing:			
Descriptions of wall mounted and floor standing ironmongery items shall be deemed to include for fixing in position and all fixing accessories			
Descriptions of proprietary items shall be deemed to include fixing in position and all fixing accessories			
<u>Hinges:</u>			
1	100 x 75mm Stainless steel hinges (Union 8352-100SS).	No	14
<u>Locks:</u>			
2	3 lever lockset and furniture (Allow a PC Amount of R500.00 each)	No	1
Carried to Collection			R
Bill No. 10 Ironmongery			

3	4 lever lockset and furniture (Allow a PC Amount of R650.00 each)	No	3
4	Mortice water-closet indicator lock set (Allow a PC Amount of R300.00 each)	No	2
5	Pad lock (PC Amount of R100.00 each)	No	2
<u>BATHROOM FITTINGS ETC.</u>			
<u>Stainless steel 32mm diameter grab rails grade 304 stainless steel:</u>			
6	DL2 32mm Stainless steel wall mounted side cranked grab rail plugged	No	1
7	SR2A 32mm Stainless steel wall mounted cistern rail plugged	No	1
<u>Toilet paper dispensers:</u>			
8	Standard approved lockable toilet paper dispenser, colour white, holding 3 rolls (Type SE3).	No	3
<u>Sundries:</u>			
9	32mm Diameter black rubber door stop plugged to concrete floor.	No	6
10	50mm Plastic key tag.	No	6
<u>LETTERS, NAMEPLATES, ETC.</u>			
<u>Acrylic door plates:</u>			
11	250 X 40 X 6mm thick white acrylic door name plate with five letters size 30mm high, engraved with arial font and painted navy, fixed to door with double sided adhesive tape	No	1
<u>Sign plates:</u>			
12	152 x 152 x 2mm anodised silver engraved with Male/Female sign, fixed to wall or door	No	1
13	152 x 152 x 2mm anodised silver engraved with Disbald sign, fixed to wall or door	No	1
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Bill No. 10 Ironmongery			

Bill No. 10

Ironmongery

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Bill No. 10
Ironmongery

<u>1,6mm galvanised double rebated frames with 1 pair of standard steel butt hinges suitable for half brick walls</u>					
2	Frame for door 813 x 2032mm high	No	3		
<u>1,6mm galvanised double rebated frames with 1 pair of standard steel butt hinges suitable for One brick walls</u>					
3	Frame for door 813 x 2032mm high	No	2		
<u>GALVANIZED STEEL WINDOW FRAMES</u>					
<u>Standard Industrial windows with Type B2 burglar bars to fixed lights and opening sashes</u>					
4	Window type "SS21", size 673 x 511mm high	No	3		
5	Window type 4BH window, size 889 x 457mm high, with MBP2 burglar bars.	No	3		
6	Window type 6HCH over 9f composite window, size 889 x 1250mm high, with MBP2 burglar bars.	No	9		
<u>CUPBOARDS</u>					
<u>Cupboard By Insight With Epoxy Powder Coated Finish</u>					
7	Code CU10 Cupboard with four shelves and lockable double doors, size 900 x 450 x 1800mm high bolted to wall with four 6mm diameter expansion bolts.	No	1		
<u>SUNDRY GALVANISED STEELWORK</u>					
<u>Purpose made roof supports, columns etc.</u>					
8	100mm outside diameter tubular column 3,085mm long with 200 x 200 x 12mm base plate welded on to bottom end and top end having a 150 x 3mm thick x 375mm girth channel shaped bracket eight times holed for bolts (elsewhere measured) welded on and including setting up in position and embedding bottom end in concrete	No	8		
9	75 x 75 x 3mm square tubular column 2,300mm long with 150 x 150 x 10mm base plate welded on to bottom end and top end having a 150 x 50 x 3mm plate welded to column.	No	14		
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Bill No. 11 Metalwork					

10	75 x 75 x 3mm square tubular rafter 1,700mm long bolted to columns.	No	7		
11	60 x 40 x 2.5mm rectangular purlins 12000mm long bolted to columns.	No	3		
	<u>Sundries:</u>				
12	M12 grade 8,8 anchor bolts, 100mm long	No	88		
13	Bolts	kg	15		
	<u>CHALKBOARDS</u>				
	<u>Approved chalkboards to comply with CKS-36-1980 standard specification:</u>				
14	Set of two standard Vitreous enamel magnetic chalkboards with aluminium chalkrail including setting up and fixing to walls complete and securing bottom of each board with two fixing brackets in accordance with the manufacturer's instructions, size 4,800 x 1,140 mm high overall.	Sets	1		
Carried to Collection				R	
Bill No. 11 Metalwork					

Bill No. 11

Metalwork

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Bill No. 11

Metalwork

Item No		Quantity	Rate	Amount
	<u>BILL No. 12</u>			
	<u>PLASTERING</u>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (1999 Edition), the Department of Public Works document No. OW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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>SCREEDS</u>			
	<u>3:1 Cement plaster screeds steel trowelled on concrete:</u>			
1	25mm thick on floors.	m2	96	
	<u>Prepare and clean surface and apply thin bed of single component protein free, quick hardening cement based screed, in strict accordance with manufacturer's instructions, to form an even surface to receive vinyl tiles (elsewhere measured):</u>			
2	On new screeded floors (Provisional).	m2	75	
	<u>GRANOLITHIC</u>			
	<u>Untinted grano</u>			
3	40 mm Thick untinted grano finished with steel trowel to floors and landings	m2	61	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork:</u>			
4	On walls.	m2	159	
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5 In narrow widths.

m2

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Bill No. 12
Plastering

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Bill No. 12

Plastering

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Bill No. 12
Plastering

Item No	Quantity	Rate	Amount
<p><u>BILL No. 13</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p><u>(PROVISIONAL)</u></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (1999 Edition), the Department of Public Works document No. OW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></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><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. 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. Only compression fittings shall be used in walls or in ground.</p> <p><u>Chasing:</u></p> <p>Chasing pipes into new walls shall be regarded as "building in" and is not measured separately. The cost of chasing, wrapping in suitable bown paper and making good shall be included in the rates for pipes.</p> <p><u>Holes for pipes through new walls:</u></p> <p>No allowance for holes and drilling for pipes through new walls has been made in these bills of quantities, the price for all holes and making good shall be deemed to be included in the description of pipes.</p>			
<p>Carried to Collection</p>			<p>R</p>
<p>Bill No. 13 Plumbing and Drainage</p>			

Reducing fittings:

Where fittings have reducing ends or branches they are described as 'reducing'. In the case of pipes with diameters not exceeding 60mm 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. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained.

Description of pipes laid in trenches:

Descriptions of pipes laid in trenches shall be deemed to include for carting away all surplus excavated material to a dumping site located by the contractor.

Excavations:

No claim for rock excavation will be entertained unless the Contractor has timeously notified the quantity surveyor thereof prior to backfilling.

'Soft rock' and 'hard rock' shall be as defined in 'Earthworks'.

Laying, backfilling, bedding, etc of pipes:

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions.

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB: Earthworks (Pipe trenches) Clause 5.7.2 will only be applicable if authorised by the Engineer in writing.

Stainless steel basins, sinks, wash troughs, urinals, etc:

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable.

Fixing:

Descriptions of wall mounted, floor standing, drop-in, etc type sanitary fittings shall be deemed to include fixing in position and all fixing accessories.

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Descriptions of proprietary items shall include fixing in position and all fixing accessories as specified by the manufacturer.

Waste unions:

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

RAINWATER DISPOSAL (PROVISIONAL):

"Watertite" aluminium

1	125mm x 85mm Ogee eaves gutters	m	41
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Extra For

2	Stopped end.	No	10
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3	Outlet with 100 x 75mm nozzle.	No	5
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4	100 x 75mm Rainwater pipes fixed to walls with and including approved holderbats at 900mm centres.	m	9
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5	Extra over rainwater pipe for plinth offset	No	3
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6	Extra over rainwater pipe for shoe.	No	3
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SANITARY FITTINGS

Stainless steel Grade 304 sink

7	Franke stainless steel sink model LD002 wash through size 1200 x 535 x 260mm deep with two pressed bowls with 50mm outlets, with two square stainless steel gallow brackets fixed to wall with 6mm stainless steel anchor bolts, with front legs and adjustable foot piece	No	1
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Water Closet

8	Atlas Plastics rotomoulded polyethylene VIP 200 pit pedestal, size 370 x 500mm high (code: 223AP) with foot piece and VIP 200 inlet funnel (code: 224AP), inserted into concrete cover slab of pit (measured elsewhere) with a removable plug. Citimetal stainless steel or other similar approved stainless steel	No	3
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Sinks

9	Christy Single Skin hand basin by Atlas Plastics or similar approved with one tap hole	No	2
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WASTE UNIONS, ETC

10	38mm Bath or sink waste union	No	3
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TRAPS ETC

11	32mm Cobra Watertech chrome plated deep seal bottle trap with outlet for 50mm pvc (Code 345/50)	No	3
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TAPS, VALVES, ETC

Approved

12	15mm CP angle regulating valve	No	3
----	--------------------------------	----	---

13	15mm Chrome plated code 2115-15 pillar tap	No	1
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14	Square type pillar tap with hot and cold indices and flanged back nut. All items to be fully fitted with all necessary plumbing accessories	No	2
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PIT COVER SLABS

Cover slabs

15	590 x 1100 x 150mm Thick pit cover slab, set on concrete slab and fitted with 6kg of high yield stress steel reinforcement, with Class U3 Steel Trowel Finish to all exposed surfaces and chamfered top corners all round, fitted with two galvanised lifting	No	2
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SANITARY PLUMBING

uPVC piping (SABS 967-1987):

16	50mm Waste piping fixed to walls.	m	15
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17	110mm Ditto.	m	10
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18	110mm Pipes including excavation, bedding, backfilling, etc	m	75
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19	160mm Pipes fixed to walls	m	6
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<u>Extra over uPVC piping for:</u>							
20	50mm Bend.	No	12				
21	50mm Access bend.	No	8				
22	50mm junction	No	8				
23	50mm access junction	No	4				
24	110mm Bend	No	2				
25	110mm Access junction	No	1				
26	110mm Two-way vent valve	No	2				
<u>Testing:</u>							
27	Testing waste water pipe system.		Item				
<u>WATER SUPPLIES</u>							
<u>Class 2 medium copper pipes:</u>							
28	15mm Pipes	m	75				
29	15mm Pipe building into walls.	m	55				
<u>Extra over class 2 copper pipes for brass compression fittings:</u>							
30	15mm Fittings.	No	35				
<u>Testing:</u>							
31	Testing water supply pipe system.		Item				
<u>Rainwater tanks:</u>							
32	5 000 Litre water storage Jojo tank including necessary plumbing fittings and constructing the plinth complete	No	2				
<u>SOIL DRAINAGE</u>							
<u>Soakaway Tank</u>							
33	Provide the sum of R 50 000.00 (Fifty Thousand Rand) for construction of Soakaway Tank complete with all plumbing fittings, etc to be used as directed by the Principal Agent or deducted in whole or in part.		Item				
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FIRE APPLIANCES ETC.

Portable fire extinguishers:

- 34 4.5 Kg carbondioxide portable chemical fire extinguisher complete with full load, wall hook and bracket, bracket fixed to and including 25 mm Wrot Meranti backboard, size 250 x 500mm high with chamfered edges, varnish and fixed to wall.

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Plumbing and Drainage

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 16</u>			
	<u>ELECTRICAL WORK</u>			
	The Tenderer is referred to the relevant Clauses in the Standard Preambles to All Trades and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.			
	<u>LIGHTING, SMALL AND MAIN POWER REQUIREMENTS</u>			
	<u>Supply and install PVC conduit and accessories including, adaptors, couplings, jointing, saddles cutting, bending, fixing and waste in concrete, ceiling, surface, on walls or brickwork. All conduit work to be chased on to the wall surface.</u>			
1	20mm diameter	m	250	
2	32mm diameter	m	80	
	Note: Drilling of structure is not permitted without the prior approval of the Engineer. Any drilling of the structure without the approval of the Engineer will result in the cost of all necessary remedial work and / or replacement of structural members to be charged to the contractor's account. The above also applies to ' HILTI ' shot type fixings.			
	<u>Round Boxes</u>			
3	60mm PVC.	No	30	
	<u>Supply and install PVC insulated copper conductors as specified drawn into conduit.</u>			
4	1.5mm ² (red)	m	280	
5	1.5mm ² (black)	m	280	
6	2.5mm ² (green)	m	280	
7	2.5mm ² (red)	m	100	
8	2.5mm ² (black)	m	100	
	Carried to Collection			
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	Electrical Installation			
			R	

9	2.5mm2 (green)	m	100		
	<u>LIGHT SWITCHES - Crabtree Crystal Range</u> <u>Supply and install 240 Volt flush mounted light switch complete with PVC cover plate and all fixings. Price to include for engraving on cover plate and conduit boxes</u>				
10	16 Amp 1 Lever 1 way.	No	3		
	<u>LIGHT FITTINGS</u> The supply, installation and termination of luminaires as indicated on the drawings and specification. All fittings shall be as indicated in the luminaire schedule. All fluorescent shall have cool white lamps. NOTE : All ceiling flush mounted fittings to have a 5 A SSO for supply connection.				
11	Type "f" (2 x 24 W T8 LED)	No	9		
12	Type "e" (1 x 20 W LED bulkhead luminaire)	No	8		
13	Type "c" (2 x 18 W vapour proof T4)	No	1		
	<u>SWITCHED SOCKET OUTLETS - EURO TYPE</u> <u>Supply and install 16 Amp 240 volt flush mounted euro switch socket outlets complete with all fixings in conduit box as well as the socket outlet box and cover.</u>				
14	Single Euro, 16 Amp, 3-pin, flush mounted outlet	No	3		
	<u>DISTRIBUTION BOARDS</u> <u>Supply, deliver, off load and install the following Distribution Boards including equipment, pre-fitted in the factory complete all accessories. Installation shall include all fixings, earthing and conduit terminations as per the specification and drawings.</u> NOTE: DB shall include lightning protection and surge suppression equipment				
15	DB-BLOCK GRADE R	No	1		
	<p style="text-align: right;">Carried to Collection</p> <p>Bill No. 14 Electrical Installation</p>				
				R	

PHOTOCELL

16	Supply and install Photo-Electric daylight sensitive switch on the outside wall complete with all accessories	No	1
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EARTHING AND BONDING

17	Install general earthing and bonding for metal structures,distribution boards, etc., in accordance with the drawings and specifications		Item
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TESTING AND COMMISSIONING

18	Conduct testing and commissioning of the electrical installation in accordance with the drawings and specifications.		Item
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ELECTRICAL CABLES (ECC TYPE Cables)

Supply and install the following cables running in in ground, trays, between LV distribution board, the meter boxes and the sub distribution baords.

19	6 mm2 2C PVC/SWA/ECC/Cu	m	80
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SLEEVES

Supply and install below indivated sleeves and accessories. Sleeves to be buried in the ground where the electrical cabling crosses road surfaces.

20	50 mm diameter	m	80
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CABLE TERMINATORS

Supply and install cable terminations complete with gland, lugs and other accessories.

21	6 mm2 2C	No	2
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TRECHING

Allow for the trenching and installation of cable sleeves for running electrical cables between the main LV DB and sub-distribution boards

22	Trenching	m3	50
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ELECTRICAL MANHOLES

- 23 Allow for the construction of electrical manholes by building contractor complete with stainless steel covers as per specification and drawings

No

1

CABLE MARKINGS

- 24 Supply and install concrete cable markers with aluminium inlays to indicate direction of cable runs

No

3

LIGHTNING PROTECTION SYSTEM

- 25 Supply and installation of external lightning protection equipment required in the selected blocks that make up the Esimanyama Primary School complete with components and accessories as specified in drawings.

Item

TESTING AND COMMISSIONING

- 26 Testing and commissioning the lightning protection installation in accordance with the drawings and Specification. The testing and issuing of SABS Compliant Test Certificate to be done by Registered SABS Specialist Contractor.

Item

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Electrical Installation

Bill No. 14

Electrical Installation

COLLECTION

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Bill No. 14

Electrical Installation

4	On sills.	m2	4
<u>ON WOOD</u>			
<u>One coat primer and two coats premium quality polyurethane enamel paint</u>			
5	Doors (all surfaces measured).	m2	12
<u>Three coats exterior quality penetrating wood preservative.</u>			
6	Doors (all surfaces measured).	m2	12
7	Skirtings, rails, etc not exceeding 300mm girth.	m	42
			R
Carried to Collection			
Bill No. 16 Paintwork			

Bill No. 16

Paintwork

COLLECTION

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Bill No. 16

Paintwork

Item No	Quantity	Rate	Amount
<u>BILL No. 16</u>			
<u>EXTERNAL WORK (PROVISIONAL)</u>			
The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (1999 Edition), the Department of Public Works document No. OW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<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>BULK EXCAVATION, FILLING, ETC</u>			
<u>Open face excavation in earth over sloping site</u>			
1	Open face excavation	m3 245	
<u>Earth filling obtained from the excavations and / or prescribed stock piles on site compacted to 95% Mod. AASHTO density:</u>			
2	Over site to form platforms	m3 15	
<u>Extra over trench and hole excavations in earth for excavation in:</u>			
3	Soft rock.	m3 25	
4	Hard rock.	m3 13	
<u>Extra over all excavations for carting away:</u>			
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3 205	
<u>JUNGLE GYM</u>			
<u>Jungle Gym:</u>			
Carried to Collection			R
Bill No. 17			
External Work			

Main 100/125mm poles and stays are to be set in concrete min 600mm deep and with bottom ends of poles protruding through concrete base to allow water to drain. 10mm Stainless steel threaded bar, stainless steel flat washers and nuts are to be used to assemble the structure.

- 6 Timber Jungle Gym (tanalith treated) with raised platform, size 1,800 x 1,800mm, with 95% UV protected shade cloth roof, with wooden hand railings on three sides, with nylon cargo net, with 3,000mm glass fibre slide fixed to platform, with two tyre swings secured with suitable thickness galvanized chain and eye bolt system, with 3600mm long suspension bridge, installed complete by an approved manufacturer.

No

1

FENCING (PROVISIONAL)

SECURITY FENCING

Clearing of site:

- 7 Allow for clearing site for the width of 1,000 mm where fencing runs are to be erected including removing trees, shrubs etc. not exceeding 200mm girth, grubbing up roots and roughly levelling.

m

90

Galvanised posts:

- 8 60mm Diameter galvanised steel intermediate fencing post, 2100mm long fitted with a pressed steel mushroom cap, post fitted with 150 x 150 x 3mm flange plate welded to bottom and embedded in 300 x 300 x 600mm mass concrete (15 MPa) base.

No

30

- 9 100mm Ditto as straining or corner post, but fitted with two 60mm diameter galvanised steel raking stays.

No

2

- 10 100mm Ditto as end post, fitted with one 60mm diameter galvanised steel stay set raking and with top end flattened and twice bolted through post with M8 galvanised bolts, with post and stay both embedded in mass concrete (15 MPa) bases as last.

No

2

- 11 100mm Ditto as straining or corner post, but fitted with two 60mm diameter galvanised steel raking stays.

No

2

- 12 150mm Diameter ditto as gate post, but fitted with one 60mm diameter galvanised steel raking stay, with post and stay both embedded in 400 x 400 x 600mm mass concrete (15 MPa) bases (Provisional).

No

2

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External Work

Fencing:

13	Fencing formed of 50 x 100 x 2.5mm diameter galvanised weldmesh 1,500 m high with vertical wires facing outwards secured with "Howgring" clips or 1.6mm galvanised binding wire at 300 mm centres to top and bottom straining wires and 700 mm centres to four intermediate straining wires (straining wires elsewhere measured) including holes through posts.	m	90
14	Four strands of 4mm galvanised straining wires secured to fencing posts with doubled 2mm galvanised wire inserted through hole in post and turned a minimum of four turns around straining wire and attached to straining frame at one end with not less than four turns and the other end to straining bolts (elsewhere measured).	m	90

Sundries:

15	12 mm Diameter galvanised mild steel straining eye bolt with hook, threaded portion and two nuts and washers, including hole through post.	No	4
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Gates:

16	Gate 1478 x 1200mm high formed of 50mm diameter bore x 3.25mm wall thickness hot dip galvanised mild steel pipe framing all round with mitred and welded angles and cross braces mullion and transome, scribed and welded into angles at cross sections, with two 50mm diameter bore x 3.25mm wall thickness security post each 600mm long with one end welded to top rail of gate and closure plate to the other end, the gate covered with 50 x 50 x 3.15mm weldmesh with four straining wires as before described and with four 2,37mm four point core diameter single 'kampeon'wires with crimped droppers to security posts as before described. Fitted with three 24mm dia x 300mm long eyebolt hinges and stops including all holes, etc, welded or bolted to adjoining galvanised gate posts with and including 500mm long approved chain spot welded to gate and "Union" No 3122 padlock	No	1
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External Work

Bill No. 17

External Work

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Bill No. 17

External Work

Bill No	FINAL SUMMARY	Page No	Amount
	Preliminaries	38	
	Earthworks	42	
	Concrete, Formwork and Reinforcement	47	
	Masonry	52	
	Waterproofing	53	
	Roof Coverings Etc.	56	
	Carpentry and Joinery	63	
	Ceilings, Partitions and Access Flooring	64	
	Floor Coverings, Wall Linings, Etc.	65	
	Ironmongery	68	
	Metalwork	72	
	Plastering	75	
	Plumbing and Drainage	82	
	Electrical Installation	87	
	Glazing	88	
	Paintwork	91	
	External Work	95	
	Provisional Sums	96	
	Total for Volume II, Building Works:		R
	CONTINGENCIES		
	Allow 10% Contingency Amount for the unforeseen and the sum provided is under the sole control of the client and upon approval by the Principal Agent and deducted in whole or in part.	Item	
	Carried Forward		R

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