

BILLS OF QUANTITIES

FOR

**THEMBALESIZWE PRIMARY SCHOOL - SANITATION APPROPRIATE FOR
EDUCATION (SAFE) PROGRAMME - CACADU DISTRICT MUNICIPALITY**

FOR

The Mvula Trust

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SECTION NO. 1
PRELIMINARIES

Amount

SECTION NO. 1

PRELIMINARIES

BILL NO. 1

PRELIMINARIES

SECTION No. 1

PRELIMINARIES

2. The Preliminaries shall be JBCC Series 2000, May 2005 for use with the Principal Building Agreement as recommended by the Joint Building Contracts Committee and as amended by this Tender Enquiry shall be deemed to be incorporated herein.
3. Tenderers are referred to the abovementioned documents for the full intent and meaning of each clause thereof. These clauses are hereinafter referred to by clause number and heading only.
4. Where standard clauses or alternatives are not entirely applicable to this contract, such modifications, corrections or additions as are necessary, are given as far as possible under each relevant clause heading. Additional Preliminary clauses are contained in Section C hereof.
5. No claim whatsoever shall be entertained in respect of errors or omissions in pricing due to brevity of descriptions of items which are fully described when read in conjunction with the relevant clauses of the said Principal Building Agreement, Preliminaries and Preambles.
6. The Tenderers shall allow opposite each of the clauses whatever costs and charges he may consider necessary for the carrying out, complying with and due observance of the provisions, conditions and requirements set out herein. Only priced items will be considered in respect of any adjustment of this Section. Any items left unpriced will be understood to be provided free of charge and no claim for any extras arising out of the Tenderer's omission to price any item will be entertained.
7. Where modifications or amendments as described are made, such modifications and/or amendments shall supercede any conflicting provisions in the relevant clauses of the Standard Preliminaries or the Principal Building Agreement and the Tenderer shall make due allowance for whatever costs and charges he may consider necessary for the carrying out and observance of the provisions of the clauses as modified and/or amended.
8. Where any item is not relevant to this specific contract, such item is marked N/A.
9. If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries, each item priced is to be allocated to one or more of the three categories by insertion of "F", "V", "T" as the case may be against the price in the "rate" column immediately preceding the "amount" column, where "F" denotes a fixed amount (amount not to be varied), "V" denotes an amount variable in proportion to value, and "T" denotes an amount proportionate to time.

Carried to Collection

R

Section No. 1
Bill No. 1
Preliminaries

		Amount
<u>SECTION A: PRINCIPAL BUILDING AGREEMENT</u>		
<u>DEFINITIONS</u>		
Definitions and interpretation (Clause 1).		
1	F: V: T: F: V: T:	Item
<u>OBJECTIVE AND PREPARATION</u>		
Offer, acceptance and performance (Clause 2).		
2	F: V: T: F: V: T:	Item
Documents (Clause 3).		
Clause 3.1 is deleted and substituted with: 'This tender is for a Government Contract. No Payment Guarantee will be provided.'		
Clause 3.3 is deleted and substituted with:		
The principal agent shall complete the schedule and arrange for formal signing of the agreement once the priced bill of quantities/lump sum document, security, insurances and waiver of lien, where acceptable, have been provided and effected'.		
3	F: V: T: F: V: T:	Item
Design responsibility (Clause 4).		
4	F: V: T: F: V: T:	Item
Employer's agents (Clause 5).		
5	F: V: T: F: V: T:	Item
Site representative (Clause 6).		
6	F: V: T: F: V: T:	Item
Compliance with regulations (Clause 7).		
7	F: V: T: F: V: T:	Item
Works risk (Clause 8)		
8	F: V: T: F: V: T:	Item
Indemnities (Clause 9).		
Clause 9.1.1 is deleted and substituted with:		
Claims from other parties consequent upon death of bodily injury or illness of any person or physical loss or damage to any property, other than the works, arising out or due to the execution of the works or occupation of the site by the contractor or his sub contractors'.		
Carried to Collection		R
Section No. 1		
Bill No. 1		
Preliminaries		

		Amount	
9	F: V: T: F: V: T: Works insurances (Clause 10).	Item	
10	F: V: T: F: V: T: Liability insurances (Clause 11).	Item	
11	F: V: T: F: V: T: Effecting insurances (Clause 12).	Item	
12	F: V: T: F: V: T: State Provisions (Clause 13).	Item	
13	F: V: T: F: V: T: Security (Clause 14).	Item	
14	F: V: T: F: V: T: <u>EXECUTION</u> Preparation for and execution of the works (Clause 15).	Item	
15	F: V: T: F: V: T: Access to the works (Clause 16).	Item	
16	F: V: T: F: V: T: Contract instructions (Clause 17).	Item	
17	F: V: T: F: V: T: Setting out of the works (Clause 18.3). The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc., exist in order that the necessary arrangements may be made for the rectification of any such encroachments. Should incorrect information be given to the contractor in terms of 18.1 and 18.2, which causes the incorrect setting out of the works, the contractor shall not be liable for such incorrect setting out.	Item	
18	F: V: T: F: V: T: Assignment (Clause 19).	Item	
19	F: V: T: F: V: T:	Item	
Carried to Collection		R	
Section No. 1			
Bill No. 1			
Preliminaries			

		Amount
	Nominated subcontractors (Clause 20).	
20	F: V: T: F: V: T: Selected subcontractors (Clause 21).	Item
21	F: V: T: F: V: T: Employer's Direct contractors (Clause 22).	Item
22	F: V: T: F: V: T: Contractor's Domestic subcontractors (Clause 23).	Item
23	F: V: T: F: V: T: COMPLETION	Item
	Practical completion (Clause 24).	
24	F: V: T: F: V: T: Works completion (Clause 25).	Item
25	F: V: T: F: V: T: Final completion (Clause 26).	Item
	Latent defects liability period (Clause 27).	
	Clause 27.0 is amended by the addition of the following clauses:	
	27.3 Any water leakage into the building, whether in the roof, external wall or other element of the building susceptible to water leakage shall, unless proven to be a design defect, or as a result of obvious storm damage, be classified as a latent defect in terms of clause 1.0 Definitions and Interpretations.	
	27.4 The Contractor shall attend to defects during the Defects Liability Period on a progressive basis, to the satisfaction of the Principal Agent and will not be permitted to wait until the end of the Defect Liability Period or until the amount of defects accumulates in order to attend to a comprehensive list of defects	
26	F: V: T: F: V: T: Sectional completion (Clause 28).	Item
27	F: V: T: F: V: T: Revision of date for practical completion (Clause 29).	Item
28	F: V: T: F: V: T:	Item
	Carried to Collection	R
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		Amount
29	Penalty for non-completion (Clause 30). F: V: T: F: V: T: <u>PAYMENT</u> Interim payment to the contractor (Clause 31). The inclusion of materials and goods stored off site in the amount authorised for payment in terms of clause 31.3 shall be at the sole discretion of the principal agent and such inclusion shall only be considered upon the provision, by the contractor, of an approved guarantee issued by a registered commercial bank. Where prices are submitted by the contractor or nominated/selected sub contractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of the contract and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the final certificate, it will be in writing. Adjustment to the contract value (Clause 32).	Item
30	F: V: T: F: V: T: Recovery of expense and loss (Clause 33).	Item
31	F: V: T: F: V: T: Final account and final payment (Clause 34).	Item
32	F: V: T: F: V: T: Payment to other parties (Clause 35).	Item
33	F: V: T: F: V: T: <u>CANCELLATION</u> Cancellation by Employer - Contractor's default (Clause 36).	Item
34	F: V: T: F: V: T: Cancellation by Employer - Loss and damage (Clause 37).	Item
35	F: V: T: F: V: T: Cancellation by Contractor - Employer's default (Clause 38).	Item
36	F: V: T: F: V: T: Cancellation - Cessation of the works (Clause 39).	Item
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		Amount
37	F: V: T: F: V: T: <u>DISPUTE</u> Dispute Settlement (Clause 40)	Item
38	F: V: T: F: V: T: <u>SUBSTITUTE PROVISIONS</u> State Clauses (Clause 41)	Item
39	F: V: T: F: V: T: <u>CONTRACT VARIABLES</u> The Schedule: Pre-Tender information (Clause 42).	Item
40	F: V: T: F: V: T: <u>CONTRACTING AND OTHER PARTIES (Clause 42.1)</u> Employer: The Mvula Trust Postal Address: 67 Devereux Avenue, Vincent, East London Telephone: 043 726 2255 Facsimile: 043 726 5967 Physical address: 67 Devereux Avenue, Vincent, East London Principal Agent: The Mvula Trust Postal Address: 67 Devereux Avenue, Vincent, East London Telephone: 043 726 2255 Facsimile: 043 726 5967 Physical address: 67 Devereux Avenue, Vincent, East London <u>CONTRACT DETAILS (Clause 42.2)</u> Clause 42.2.1 Works Description: Construction of new ablution facilities. Clause 42.2.2 Site Description: The site is the existing school. Clause 42.2.3 Work or Installations by Others: NIL Clause 42.2.4 This Agreement is for a State Contract :- Yes Payment will be made for materials and goods:- Yes Dispute resolution :- Mediation (in terms of clause 40) followed by litigation.	Item
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Arbitration rules as recommended by the Association of Arbitrators (SA) :-
N/A

Clause 42.2.5

Date on which possession of the site is intended to be given on :-

To be advised.

Clause 42.2.6

Period for the commencement of the works after the contractor takes possession of the site :- 5 Working days.

Completion in Sections are required : NO

Clause 42.2.7

Intended date of practical completion and the penalty per calendar day for the works as a whole :-

To be advised.

Penalty amount will be R2000 per calendar day to a maximum of 10% of Contract Value

Clause 42.2.8

Intended dates of practical completion and the penalties per calendar day for the works in sections :

N/A

Clause 42.2.9

The law applicable to this agreement shall be that of - Republic of South Africa.

INSURANCES (Clause 42.3)

Clause 42.3.1

Contract works insurance to be effected by Contractor for the sum of:
Contract Sum plus 10%

With a deductible of : Not exceeding 5% of Insured Amount.

Clause 42.3.2

Supplementary insurance is required : Yes

SASRIA insurance required to be effected by the Contractor for the amount of: Contract Sum plus 20% (with a deductible to be determined by the Insurance company issuing the policy).

Clause 42.3.3

Public liability insurance to be effected by Contractor

For the amount of: R 5million

With a deductible of: Not exceeding 5% of Insured Amount.

DOCUMENTS (Clause 42.4)

Clause 42.4.1

Carried to Collection

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Section No. 1

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Preliminaries

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Waiver of the contractor's lien is required :- YES		
Clause 42.4.2		
Number of construction document copies to be supplied to the Contractor free of charge :- 1		
Clause 42.4.3		
Bills of Quantities drawn up in accordance with :-		
Standard System of Measuring Building Work - Seventh Edition including all amendments		
Clause 42.4.4		
Number of days for submission of priced documents : 5 working days from the Letter of Appointment.		
Clause 42.4.5		
JBCC Engineering General Conditions are to be included in the documents :- No		
Clause 42.4.6		
The contract value is to be adjusted using CPAP:- NO		
<u>SECTION B: PRELIMINARIES</u>		
<u>DEFINITIONS AND INTERPRETATION (B1)</u>		
Definitions and Interpretation (B1)		
41	F: V: T: F: V: T:	Item
<u>DOCUMENTS (B2)</u>		
Checking of documents (B2.1)		
Notwithstanding the issue of the tender drawings, it will remain the responsibility of the Tenderer to study all available drawings at the offices of the Principal Agent during normal working hours in order to acquaint himself with all the cost implications of the design, programming, phasing, etc.		
42	F: V: T: F: V: T:	Item
Provisional Bills of Quantities (B2.2) YES		
Prime Cost Amounts, Budgetary Allowances, Provisional Amounts, etc., contained herein may be omitted or reduced at the Principal Agent's sole discretion and the Contractor shall not be entitled to claim for any loss by way of reduction or omission of any discount, or percentage relating to Prime Cost Amounts, Budgetary Allowances, Provisional Amounts, Provisional Quantities, etc., or loss of profit related thereto.		
43	F: V: T: F: V: T:	Item
Availability of construction documentation (B2.3)		
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44	F: V: T: F: V: T: Interests of Agents (B2.4)	Item	
45	F: V: T: F: V: T: Priced documents (B2.5)	Item	
46	F: V: T: F: V: T: Tender submission (B2.6) Notwithstanding anything contained in this clause, Tenders shall be valid for a period of 20 (Twenty) weeks from the closing date of tenders.	Item	
47	F: V: T: F: V: T: <u>THE SITE (B3)</u> Defined works area (B3.1) The area of the works to be occupied by the contractor, any restriction on the area and the limit of access or exit will be pointed out to the contractor by the principal agent on handing over of the site. Workmen employed on the site are to be restricted to the immediate area of the site and access thereto. The Tenderer shall make all necessary provision in all rates to take into account these requirements as no claims for extras arising from these matters will be subsequently entertained or admitted.	Item	
48	F: V: T: F: V: T: Geotechnical investigation (B3.2) A desktop geotechnical report is available upon request.	Item	
49	F: V: T: F: V: T: Inspection of the Site (B3.3)	Item	
50	F: V: T: F: V: T: Existing premises occupied (B3.4)	Item	
51	F: V: T: F: V: T: Previous work - dimensional accuracy (B3.5)	Item	
52	F: V: T: F: V: T: Previous work - defects (B3.6)	Item	
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53	F: V: T: F: V: T: Services - known (B3.7)	Item		
54	F: V: T: F: V: T: Services - unknown (B3.8)	Item		
55	F: V: T: F: V: T: Protection of trees (B3.9)	Item		
56	F: V: T: F: V: T: Articles of value (B3.10)	Item		
57	F: V: T: F: V: T: Inspection of adjoining properties (B3.11)	Item		
58	F: V: T: F: V: T: <u>MANAGEMENT OF CONTRACT (B4)</u> Management of the Works (B4.1)	Item		
59	F: V: T: F: V: T: Programme for the Works (B4.2)	Item		
60	F: V: T: F: V: T: Progress meetings (B4.3)	Item		
61	F: V: T: F: V: T: Technical meetings (B4.4)	Item		
62	F: V: T: F: V: T: <u>SAMPLES AND SHOP DRAWINGS (B5)</u> Samples of materials (B5.1)	Item		
63	F: V: T: F: V: T: Workmanship samples (B5.2)	Item		
64	F: V: T: F: V: T: Shop drawings (B5.3)	Item		
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		Amount
65	F: V: T: F: V: T: TEMPORARY WORKS AND PLANT (B6) Deposits and fees (B6.1)	Item
66	F: V: T: F: V: T: Enclosure of the works (B6.2) The contractor shall erect, maintain and remove at completion, hoardings, safety screens, barriers, access gates, covered gangways and the like as necessary for the enclosure of the works and elements thereof all for the protection of the public and others.	Item
67	F: V: T: F: V: T: Advertising (B6.3)	Item
68	F: V: T: F: V: T: Plant and equipment (B6.4)	Item
69	F: V: T: F: V: T: Main notice board (B6.5) One notice board shall be provided by the Contractor	Item
70	F: V: T: F: V: T: Subcontractors notice board (B6.6) (N/A)	Item
71	F: V: T: F: V: T: TEMPORARY SERVICES (B7) Location (B7.1)	Item
72	F: V: T: F: V: T: Water (B7.2) The contractor shall provide water for the works in accordance with: Alternative A (i.e. to be provided for by the Contractor).	Item
73	F: V: T: F: V: T: Electricity (B7.3) The contractor shall provide electricity for the works in accordance with: Alternative A (i.e. to be provided for by the Contractor).	Item
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74	F: V: T: F: V: T: Telecommunication equipment (B7.4) The contractor shall provide telephones on site for the works in accordance with: Alternative A (i.e. to be provided for by the Contractor).	Item	
75	F: V: T: F: V: T: Ablution facilities (B7.5) The contractor shall provide toilet facilities on site for the works in accordance with: Alternative A (i.e. to be provided for by the Contractor).	Item	
76	F: V: T: F: V: T: <u>PRIME COST AMOUNTS (B8)</u> Responsibility for prime cost amounts (B8.1)	Item	
77	F: V: T: F: V: T: <u>ATTENDANCE ON N/S SUBCONTRACTORS (B9)</u> General Attendance (B9.1)	Item	
78	F: V: T: F: V: T: Special Attendance (B9.2)	Item	
79	F: V: T: F: V: T: Commissioning - fuel, water and power (B9.3)	Item	
80	F: V: T: F: V: T: <u>FINANCIAL ASPECTS (B10)</u> Statutory taxes, duties and levies (B10.1) Provision is made in the Final Summary of these Bills of Quantities for the inclusion of Value Added Tax (VAT).	Item	
81	F: V: T: F: V: T: Payment of Preliminaries (B10.2)	Item	
82	F: V: T: F: V: T: Adjustment of Preliminaries (B10.3)	Item	
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83	F: V: T: F: V: T: Payment certificate cash flow (B10.4)	Item	
84	F: V: T: F: V: T: Contractor information supply (B10.5)	Item	
85	F: V: T: F: V: T: <u>GENERAL (B11)</u> Protection of the Works (B11.1)	Item	
86	F: V: T: F: V: T: Protection/isolation of existing/sectionally occupied works (B11.2)	Item	
87	F: V: T: F: V: T: Site security (B11.3)	Item	
88	F: V: T: F: V: T: Notice before covering work (B11.4)	Item	
89	F: V: T: F: V: T: Disturbance (B11.5)	Item	
90	F: V: T: F: V: T: Works cleaning and clearing (B11.6)	Item	
91	F: V: T: F: V: T: Vermin (B11.7)	Item	
92	F: V: T: F: V: T: Overhand work (B11.8)	Item	
93	F: V: T: F: V: T: <u>SECTION C: SPECIFIC PRELIMINARIES</u> <u>Section C: Specific Preliminaries:</u> C1. Proprietary branded products	Item	
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94	The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturer's instructions after consultation with the manufacturer's authorised representative. F: V: T: F: V: T: C2. Trade Names, etc. All materials, fittings, finishings, etc., specified hereinafter under a trade name, catalogue number or reference, must be exactly as described. The Architect's approval in writing must be obtained for the use of any alternative to the specification before the submission of tenders otherwise the specified materials, fittings, finishings, etc., will be assumed to have been allowed for in the tender. The Contractor must take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturer's instructions after consultation with the manufacturer's authorised representative.	Item
95	F: V: T: F: V: T: C3. Contractors responsibility The Employer, the Principal Agent and the other professional consultants shall not be responsible for any act or omission on the part of the Contractor which may result in any patent or latent defects, in materials or workmanship, breach or neglect of any local regulations. The Contractor shall at all times be responsible for any such neglect, deviation or wrong act, whether the same is discovered before or after the final certificate, or any other Certificate, has been approved.	Item
96	F: V: T: F: V: T: C4. Overtime Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorised in writing, prior to the execution thereof, that costs for such overtime are to be borne by the employer.	Item
97	F: V: T: F: V: T: C5. As built drawings The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the principal agent and the structural engineer for their records. Three full sets of as-built drawings shall be submitted to the Principal Agent no later than fourteen days after practical completion.	Item
98	F: V: T: F: V: T:	Item
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		Amount
99	C6. Construction Instructions	
	Contract instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the Contractor. The Contractor shall supply and have available at the site of the works at all times, the following site books:	
	a) Construction Instruction Book:	
100	Receiving and recording instructions in a suitable A4 size triplicate book kept on site. Instructions issued shall be recorded by the Architect or other Employer's Agents to whom the Architect has delegated authority to in the book.	
	Only instructions issued in such book shall be recognised.	
	b) Daily Record Book:	
101	The Contractor shall record in triplicate in a suitable A4 size triplicate book kept at the site, a daily record of work done, all site visits by the Principal Agent and other professional personnel and all events affecting the Works, such as progress, issue of plans, breakdown of machinery, etc. The labour, plant and material on site shall be recorded as well as work performed. Entries must be made by the Contractor and must be signed and forwarded to the Principal Agent for his counter-signature on a daily basis. Copies of these records shall be for the Architect, Quantity Surveyor and Contractor.	
	F: V: T:	
	F: V: T:	
102	C7. Labour record	
	At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day.	
	F: V: T:	
103	C8. Plant record	
	At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works.	
	F: V: T:	
104	C9. Encroachment	
	During the course of the building operations, the Contractor shall be held entirely responsible for any encroachment onto any adjoining properties, buildings, etc., or servitudes and the cost of any remedial measures as required by the Principal Agent shall be borne by the Contractor.	
	F: V: T:	
105	C10. Method Statement	
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		Amount
103	The Tenderer shall produce, when required to do so by the Principal Agent, a Method Statement outlining the methods of construction and labour and plant resources that he proposes to use in the execution of the Works. Any approval given or observation made by the Principal Agent shall not relieve the Contractor of his sole responsibility to adopt the methods of construction and to provide the labour and plant resources necessary for the due and proper timeous execution of the Works. F: V: T: F: V: T: C11. Unauthorised Persons/Workmen on Premises The Contractor shall at all times strictly exclude all unauthorised persons from the Works and the site and shall set up notice boards to that effect. No workmen or labourers (except security guards) are to be allowed under any circumstances to sleep or deposit any kit on the premises. The Contractor must provide any necessary independent shelter or shed required for any labour or watchmen on site, to the approval of the Employer.	Item
104	F: V: T: F: V: T: C12. Mode of Procedure Notwithstanding anything to the contrary contained herein the Principal Agent at all times reserves the right to direct the order in which the various parts of the Contract are to be executed. The Contractor shall give priority to any individual section or portion of the Works that, in the opinion of the Principal Agent, requires to be expedited. Should it appear, in the Principal Agent's opinion, that work in any area is not being executed in accordance with the requirements of the Contract Programme, the Contractor shall provide additional manpower and resources and shall work additional overtime and do everything else required to bring the work back to programme to the satisfaction of the Principal Agent and to the Contractor's cost.	Item
105	F: V: T: F: V: T: C13. Location of Temporary Buildings and Temporary Services The Contractor shall provide all necessary temporary works, including temporary roads, tracks, crossings, hardstanding and services, hoardings, dust screens, tunnelling, etc., required for his own and sub-contractors use during the construction and maintenance period. There is no guarantee given or implied that Site conditions will be such that the Contractor will be able to erect such temporary works, roads, hardhats, offices, stores and temporary accommodation within the site boundaries and it shall be the Contractor's responsibility to adopt whatever measures he deems necessary in this regard and to obtain all necessary permission and pay all costs in connection therewith.	Item
106	F: V: T: F: V: T:	Item
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		Amount
107	C14. Office accommodation The contractor shall provide, maintain and remove on practical completion air conditioned office accommodation with suitable tables and chairs for meetings to be held on the site. Such offices shall be kept clean and fit for use at all times [12.2.18] F: V: T: F: V: T: C15. Storage Facilities The Contractor shall provide a Container for storage of materials.	Item
108	F: V: T: F: V: T: C16. Removal and Making Good of Temporary Works, etc, on Completion The Contractor shall remove (except where specifically stated otherwise) all temporary works, roads, services and the like used for this contract and shall make good to the entire satisfaction of the Principal Agent any damage resulting therefrom.	Item
109	F: V: T: F: V: T: SUB - TOTAL: FIXED ITEMS SUB - TOTAL: VALUE - RELATED ITEMS SUB - TOTAL: TIME - RELATED ITEMS <u>BILL No.1</u> 1. The Principal Building Agreement shall be the JBCC Series Edition 4.1, March 2005 as recommended by the Joint Building Contract Committee and as amended by this Tender Enquiry.	Item
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Preliminaries

	Unit	Quantity	Rate	Amount
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<u>PRELIMINARIES</u>				
<u>BILL NO. 2</u>				
<u>HEALTH AND SAFETY</u>				
<u>SECTION 1</u>				
<u>BILL No. 2</u>				
<u>HEALTH AND SAFETY</u>				
<u>MODEL PREAMBLES</u>				
The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.				
<u>SUPPLEMENTARY PREAMBLES</u>				
Supplementary preambles and/or specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the General Preambles.				
The contractor's prices for all items throughout these bills of quantities shall take account of and include where applicable for all of the obligations, requirements and specifications given in the General Preambles and in any supplementary preambles and/or specifications.				
Prior to pricing the principal contractor must familiarizehim/herself with the Occupational Health and Safety ActNo. 85 Of 1993, Construction Regulations 2014, otherrelevant Regulations and Standards as well as projectspecific Health & Safety specifications.				
The items in this Bill do not contain quantities hence the Contractor must insert his own quantities based on his individual requirements to comply with the Health and Safety obligations and demands of the Occupational Health and Safety Act No. 85 of 1993, Construction Regulations 2014, other relevant Regulations and Standards as well as project specific Health & Safety Specifications.				
The costs included herein must incorporate Community Liaison Officer (CLO).				
<u>OCCUPATIONAL HEALTH AND SAFETY</u>				
<u>General:</u>				
1 Preparation of Contractor's site specific Health and Safety Plan.	Item			
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Section No. 1 Bill No. 2 Health And Safety				

		Unit	Quantity	Rate	Amount
2	Submission of the Health and Safety File.	Item			
3	Principal Contractor's initial obligations in respect of the OHS Act and Construction Regulations.	Item			
4	Principal Contractor's time related obligations in respect of the OHS Act and Construction Regulations for the entire construction period.	Item			
5	Provision of full time Health and Safety Officer for the entire construction period.	Item			
6	Induction training of personnel.	Item			
7	Provision of first aid boxes.	Item			
8	SANS approved weld mesh type temporary barrier fencing 1,8m high covered with a net fixed to and including 100mm diameter gum poles set securely min 300mm deep in ground at max 3m spacing including excavation, backfilling, etc	Item			
9	Extra over mesh fence for pedestrian gate size 1.8 x 1,8m high.	Item			
	<u>Provision for Personal Protective Equipment and Protective Clothing:</u>				
10	Reflective vests.	Item			
11	Hard hats.	Item			
12	Protective foot wear.	Item			
13	Ear Plugs.	Item			
14	Dust Masks.	Item			
	<u>Cost of Medical Certificates and Medical Surveillance:</u>				
15	Initial (baseline) medical examinations.	Item			
16	Exit Examinations.	Item			
	<u>Noise Monitoring:</u>				
17	Establishment of noise zones.	Item			
18	Audiograms.	Item			
	<u>C16. Covid-19 Compliance Measures:</u>				
19	The Contractor is required to price for Covid 19 compliance and the pricing thereof shall be deemed to include all the mandatory requirements.	Item			
	Carried to Collection				
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SECTION NO. 2
ALTERATIONS (PROVISIONAL)

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 2</u> <u>ALTERATIONS (PROVISIONAL)</u> <u>BILL NO. 1</u> <u>ALTERATIONS (PROVISIONAL)</u> <u>MODEL PREAMBLES</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates <u>SUPPLEMENTARY PREAMBLES</u> NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill. Tenderers are advised to study the Department of Public Works - Construction Works: General Specification (PW371-A) and Construction Works: Particular Specification (PW371-B) before pricing this bill. <u>Supplementary Preambles:</u> Prices are to include for carting away from site all materials not specifically mentioned as being stored on site for re-use or handed over to the Employer and all rubbish, debris, etc., arising from the alterations, etc., and for making good all work damaged or disturbed to the approval of the Principal Agent. If angle grinders are used, a method of containing the dust must be utilised. Should the dust produced by the use of angle grinders, be deemed to be a nuisance by the Employer, their use will be prohibited. For purpose of this contract, and to avoid misunderstanding in terms of carrying out the works and pricing thereof, phrases stated hereunder have been defined and the Contractor is advised to study them carefully as no claim will be entertained as a result of him not doing so: a) "Making Good" shall include making good of the brick, concrete and timber surfaces onto which the finishes are applied, where necessary. b) "Forming New Openings" shall include all labour and materials forming opening, cut toothings and bonding for and plumbing and flushing up reveals, cutting for and forming precast concrete, or reinforced brick lintel over including necessary turning pieces, reinforcement, etc.				
Carried to Collection			R	
Section No. 2 Bill No. 1 Alterations (provisional)				

	Unit	Quantity	Rate	Amount
c) All existing material described as "carefully take out, set aside for re-use and later refix in new position" are to be carefully removed, stored and protected from injury, made good as required and if broken or damaged through taking out, removing, storage, etc, are to be replaced by the Contractor at his own expense. Tenderers are advised to inspect these materials to ascertain their condition and allow accordingly for this in their pricing. d) The term "take out" includes all work taken out, taken up, taken down, taken off, etc ; the term "break up" includes all work broken up, broken down, broken off, etc and the term "hack off" includes all work hacked off, hacked up, hacked down, etc. e) The terms "take out and remove door", "take out and remove window", "carefully take out, set aside for re-use and later refix window in new position", etc are to include all materials connected with such door or window such as doors, windows, fanlights, frames, ironmongery, glass, architraves, beads, fillets, cramps, dowels, door stops, cabin hooks, etc. f) Doors, windows, fanlights, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and re-hanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and easing, oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given separately. Making good floor and wall finishes to match existing. g) Where door and window openings, etc, are specified to be filled in, or where jambs, sills, etc are specified to be built up, brickwork shall be of hard burnt clay stock bricks in 5.1 cement mortar unless otherwise specified, cut, toothed and bonded into existing brickwork and pinned up as required with slates or other hard materials. Brickwork built to fair face or in facings is to be of bricks and pointed to match existing. Plaster is to be 5.1 cement plaster unless otherwise specified. h) where lintels are specified as precast concrete the prices are to include for breaking out brickwork over for inserting precast prestressed cement concrete (30Mpa) lintel with 230mm bearing on each end size 108 x 75mm deep for each half brick thickness of wall.				
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Alterations (provisional)				

	Unit	Quantity	Rate	Amount
i) Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectively stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the Principal Agent. j) The terms propping, strutting, shoring, etc, is not specifically mentioned in each item, however these shall be deemed to be included in the descriptions. k) No explosive whatsoever may be used for demolition purposes unless otherwise stated or prior approval by the Principal Agent. <u>REMOVAL OF EXISTING WORK</u>				
1 Allow for protecting all existing work liable to suffer damage (i.e. Walls, finishes, floors, windows, joinery fittings, etc.) from damage during the building operations, alterations, etc., and make good all work damaged with new material to match existing to the approval of the Principal Agent.	No	2		
2 Allow for watering the works by spraying to prevent any nuisance from dust, etc., and supply, erect and remove on completion all temporary dust screens, etc. required.	No	2		
<u>Taking out and removing doors, windows, etc., including thresholds, sills, etc. (building up openings and making good finishes elsewhere)</u>				
3 900 x 2125mm High Timber single door and ironmongery	No	8		
4 900 x 2125mm High Timber single door, frame and ironmongery	No	32		
<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc.</u>				
5 Remove asbestos gutters (By certified asbestos removal specialist)	m	96		
6 Remove asbestos downpipes (By certified asbestos removal specialist)	m	24		
7 Remove fibre cement fascia and barge boards	m	144		
8 Remove fibre cement ceilings	m ²	88		
9 Remove rhinoboard ceilings	m ²	120		
Carried to Collection			R	
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Bill No. 1
Alterations (provisional)

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 2</u> <u>ALTERATIONS (PROVISIONAL)</u> <u>BILL NO. 2</u> <u>WATERPROOFING</u> <u>MODEL PREAMBLES</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates <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>Waterproofing</u> Complete pit sealing/waterproofing from seepage due to underground water ingress as result of high water table, perched water tables etc Contractor to provide water proofing product that will be 100% resistant to extreme hydrostatic pressure at depth of 2m, from the positive (water from inside) of substrate. Resistant to aggressive chemicals i.e oil, salt water, sewage, weak acids and aggressive sulphate soils. The product must be able to withstand backfilling without protection and must not be subject to deterioration. The product must be able to ensure that the pit structure is fully sealed (100% free from water ingress from outside and it will not penetrate the pit). The product and its methodology for application must be approved by Principal Agent before it is used. It is a mandatory requirement for the Contractor to attend training to be provided by Supplier. Proof of attendance will be required prior to application of the approved waterproofing product. Contractor must prepare a 1m x 1m sample in the presence of the Principal Agent or Engineer. In this case, the Contractor must give at least 48 hours notice prior to the date when the application of the waterproofing product is intended to be done. Contractor to provide a Letter of Compliance confirming that waterproofing has been applied as per Manufacturer's instructions and data sheet.				
Carried to Collection			R	
Section No. 2				
Bill No. 2				
Waterproofing				

	Unit	Quantity	Rate	Amount
<u>JOINT SEALANTS ETC</u>				
<u>Clear Neutral silicone sealant:</u>				
1 In joint sealing and pointing all round external window and door frames.	m	215		
Carried to Collection			R	
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Waterproofing

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<u>SECTION NO. 2</u>				
<u>ALTERATIONS (PROVISIONAL)</u>				
<u>BILL NO. 3</u>				
<u>CARPENTRY AND JOINERY</u>				
<u>MODEL PREAMBLES</u>				
The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates				
<u>SUPPLEMENTARY PREAMBLES</u>				
<u>FIXING</u>				
All nailing of timber roof rafters, purlins, etc shall be done with galvanised nails. In coastal areas, copper, aluminium or stainless steel nails shall be used.				
<u>EAVES, VERGES, ETC</u>				
<u>Everite Nutec or equal approved fibre cement</u>				
1	m	96		
12 x 225mm Fascia board drilled and brass screwed to rafter feet including galvanised steel H-profile jointing strips, etc.				
2	m	48		
85 x 275 x 6mm Barge board drilled and brass screwed to purlin ends including galvanised steel H-profile jointing strips, screws, holes, etc.				
<u>DOORS ETC</u>				
<u>SANS Approved meranti:</u>				
3	No	8		
44mm Framed, ledged, and battened single door with flush ply panel internally size 813 x 2032mm high comprising 44 x 110mm top rail and stiles, 44 x 220mm bottom rail, 44 x 150mm lock rail and 22 x 70mm vertical "v" jointed boards (D1).				
4	No	32		
44mm Framed, ledged, and battened purpose made single door with flush ply panel internally size 813 x 1832mm high comprising 44 x 110mm stiles, 44 x 220mm bottom rail, 44 x 150mm lock rail and 22 x 70mm vertical "v" jointed boards (D4).				
<u>FRAMED FRAMES, ETC</u>				
<u>Meranti Frames bolted to wall with expanding masonry bolts - four per style including quadrant beads on both sides:</u>				
5	m	119		
70 x 108mm rebated meranti frame .				
Carried To Section Summary			R	
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Bill No. 3				
Carpentry And Joinery				

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 2</u>				
<u>ALTERATIONS (PROVISIONAL)</u>				
<u>BILL NO. 4</u>				
<u>CEILINGS PARTITIONS AND ACCESS FLOORING</u>				
<u>MODEL PREAMBLES</u>				
The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates				
<u>NAILED UP AND SCREW UP CEILINGS</u>				
<u>6mm Fibre-cement plain ceiling boards with H-profile galvanised steel jointing strips:</u>				
1 Ceilings including 38 x 38mm sawn softwood brandering at 450mm centres with cross brandering at 450mm centres and at joints, ends of sheets and at light fittings, etc.	m ²	156		
2 Extra over ceiling for 600 x 600mm hinged trap door of wrought softwood rebated framing with one sawn softwood cross brander covered with ceiling board and fitted flush in opening, including necessary trimmers all around.	No	4		
3 125mm Coved cornice.	m	64		
<u>INSULATION</u>				
<u>Non-combustible lightweight fibreglass insulation blanket:</u>				
4 100mm Insulation closely fitted between tie beams and laid loose on top of brandering.	m ²	120		
Carried To Section Summary			R	
Section No. 2				
Bill No. 4				
Ceilings Partitions And Access Flooring				

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 2</u>				
<u>ALTERATIONS (PROVISIONAL)</u>				
<u>BILL NO. 5</u>				
<u>IRONMONGERY</u>				
<u>MODEL PREAMBLES</u>				
The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates				
<u>SUPPLEMENTARY PREAMBLES</u>				
<u>Keys/Locks</u>				
Each lock is to be distinctly numbered with consecutive numbers and each key is to be stamped with the corresponding number to the lock that it controls. All locks are to have two keys				
<u>Trade Names</u>				
Where trade names are specified other ironmongery approved by the Principal Agent may be used				
<u>Fixing</u>				
Fixing of ironmongery is deemed to be fixed to timber unless otherwise described				
<u>HINGES:</u>				
1 75 x 100mm Brass Medium duty ball bearing HMP butt hinges.	Pairs	44		
<u>LOCKS</u>				
2 UNION 2277-78SS or equal approved three lever sash mortice lockset.	No	8		
3 UNION w/c indicator bolt satin chrome - Code CZ80941SC	No	32		
<u>HANDLES</u>				
4 Dorma DPH301B or equal approved Stainless Steel Straight Tubular Pull handle flange fixing.	No	64		
<u>Sundries:</u>				
5 Stainless Steel Hat and coat hook, code DHC - SS-030-A or equal approved.	No	40		
6 38mm Diameter black rubber door stop plugged and screwed to wall.	No	40		
Carried to Collection			R	
Section No. 2				
Bill No. 5				
Ironmongery				

	Unit	Quantity	Rate	Amount
<u>SIGN PLATES:</u>				
<u>All sign plates are to be with engraved blue perspex all in accordance with the standard sign plates for Schools.</u>				
7 Sign plate plugged and screwed to walls with chromium plated dome headed screws.	No	8		
<u>SUNDRIES</u>				
<u>Halcast or equal approved"</u>				
8 Thiefproof toilet roll holder plugged.	No	32		
<u>Satin Grey Plastics or equal approved</u>				
9 Satin plastic N-SBIN-12-SA SHE Bin size 463 x 140 x 480mm, floor standing loose.	No	20		
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Ironmongery				

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Ironmongery

		Unit	Quantity	Rate	Amount
<u>SECTION NO. 2</u> <u>ALTERATIONS (PROVISIONAL)</u> <u>BILL NO. 6</u> <u>PLASTERING</u> <u>MODEL PREAMBLES</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates <u>SCREEDS</u> <u>Untinted granolithic, on concrete:</u>					
1	30mm Thick on floors and landings.	m ²	240		
Carried To Section Summary					R
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Bill No. 6					
Plastering					

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 2</u> <u>ALTERATIONS (PROVISIONAL)</u> <u>BILL NO. 7</u> <u>TILING</u> <u>MODEL PREAMBLES</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates <u>WALL TILING</u> <u>152 x 152 x 5mm Thick white glazed tiles fixed to plaster (elsewhere measured) with and approved tile adhesive to and pointed with white cement to:</u>				
1 Walls in splashbacks.	m ²	8		
Carried To Section Summary				R
Section No. 2				
Bill No. 7				
Tiling				

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 2</u>				
<u>ALTERATIONS (PROVISIONAL)</u>				
<u>BILL NO. 8</u>				
<u>PLUMBING AND DRAINAGE</u>				
<u>MODEL PREAMBLES</u>				
The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates				
<u>RAINWATER DISPOSAL:</u>				
<u>Watertite or equal approved Aluminium Gutters and Downpipes:</u>				
1	m	96		
125 x 85 x 0.6mm Ogee domestic gutters including gutter brackets at 600mm centres.				
2	No	8		
Extra over eaves gutter for stopped end.				
3	No	6		
Extra over eaves gutter for outlet for 100 x 75mm aluminium downpipe.				
4	m	24		
100 x 75 x 0.6mm rectangular fluted downpipes fixed to wall with and including proprietary holderbats to 5000L rainwater tanks (elsewhere measured).				
5	No	12		
Extra over rainwater downpipe for bends.				
<u>TAPS, VALVES, ETC</u>				
<u>Solid Cast brass taps, valves, etc:</u>				
6	No	28		
Cobra KM2-200or other approved 15mm chrome plated metered bib tap with non-hold open feature and flow controller.				
7	No	28		
15mm Ball-o-stop valve.				
8	No	28		
22mm Non Return valve.				
<u>WASTE UNIONS ETC</u>				
<u>Outlets, traps, etc:</u>				
9	No	28		
40mm 342/50 CP bottle trap.				
10	No	28		
40mm Code 316 chrome plated unslotted waste outlet.				
11	No	28		
40mm Rubber "P" or "S" trap				
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Bill No. 8				
Plumbing And Drainage				

		Unit	Quantity	Rate	Amount
<u>SANITARY FITTINGS</u>					
<u>Vaal or equal approved:</u>					
12	Lavatera White Vitreous china wall mounted bowl urinal with top inlet [code: 704001] 610x385mm, supplied with 38mm chromium plated domical grating [code: 8787], chromium plated spreader [code: 8543], and two hanger brackets [code: 8127]	No	2		
13	Hibiscus White Vitreous china 510 x 405mm rounded basin [code: 7050] with one tap hole on left hand side, including integrated overflow, bolted to wall with two 8mm bolts [code 8448Z0], to manufacturer's specification.	No	28		
14	Orchid back inlet white vitreous china wall hung pan [code 439016] with floor bracket [code 8082Z0] fitted as per manufacturer's specifications and combined with: GEBERIT Kombifix UP172 for wall hung WC, [G110.150.00.1], front actuated with Delta21 dual flush actuator [G115.125.46.1] in matt finish, including flushpipe and Pan connector, water supply connection with angle stop valve, Netting for direct plastering, protection cover for service opening and protection cover for flushpipe, fixed with included fastening materials inside a single solid wall [80mm]	No	22		
15	Junior vitreous china low level suite colour White (Code: 751358), comprising 104° outlet washdown pan (Code: 751301) with matching 6 litre front single flush cistern (Code: 712034) including lid, fitments and flushpipe and Junior double flap wooden seat (Code: 8518Z0).	No	10		
<u>Franke Model TU101 or equal approved flush valve/cistern flat back wall mounted urinal:</u>					
16	SS-TU101-1830R Flat back stainless steel school trough urinal wall and floor mounted. manufactured from Grade 304 (18/10) Stainless Steel, 0,9 mm gauge. Urinal to be supplied with a concealed sparge pipe and a 22 mm inlet with chrome plated conex fitting for connecting to water inlet (Connection fitting not supplied). Urinal to include a tiling key to sides and rear walls. The back to be fully sound deadened with vermin proof bitumastic material. Outlet to be situated on the left or right of the urinal with a recess for 40 mm chrome plated waste outlet.	No	2		
17	9 Litre flash cistern to match existing	No	32		
<u>SANITARY PLUMBING</u>					
<u>PVC waste or vent pipes and fittings:</u>					
18	50mm Waste pipe.	m	60		
Carried to Collection				R	
Section No. 2					
Bill No. 8					
Plumbing And Drainage					

		Unit	Quantity	Rate	Amount
	<u>uPVC gulleys</u>				
19	200mm Precast concrete gully dish and uPVC lowback assembly complete with 110mm P trap gulley (code UGB 40) including 190mm diameter head (code UGA 40) and grate (code UGG 40), not exceeding 750mm deep, jointed to 110mm drain pipe, including excavations for and encasing in concrete (15MPa crushing strength after 28 days) worked up to form kerb, finished smooth on top in 1:3 cement mortar.	No	4		
	<u>Extra for:</u>				
20	50mm Bend.	No	2		
21	50mm Access bend.	No	4		
22	100mm Access bend.	No	4		
	<u>WATER SUPPLIES</u>				
	<u>Polycop pipes:</u>				
	Pipes shall be class 10.				
	<u>Fixing of pipes</u>				
	Unless specifically otherwise stated, descriptions of pipes shall be deemed to include for fixing to walls etc. casting in, building in or suspending not exceeding 1m below suspension level				
	<u>Polycop pipes chased in walls:</u>				
	Where pipes have been chased in walls, the price for making good of plaster and paint etc shall be deemed to be included in the description of pipe chased in walls.				
	<u>Reducing fittings:</u>				
	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.				
	<u>Class 10 Polycop pipes:</u>				
23	15mm Pipe chased into brick walls.	m	120		
24	22mm Pipe chased into brick walls.	m	84		
	<u>Extra over polycop pipes for compression fittings:</u>				
25	15mm Fittings.	No	42		
	Carried to Collection			R	
	Section No. 2				
	Bill No. 8				
	Plumbing And Drainage				

		Unit	Quantity	Rate	Amount
26	22mm Fittings.	No	34		
	<u>Connection of water supply from Waste Water Treatment System (WWTS)</u>				
27	Allow for connecting water supply from waste water treatment system.	Item			
	<u>Testing</u>				
28	Testing water pipe system	Item			
Carried to Collection					R
Section No. 2					
Bill No. 8					
Plumbing And Drainage					

Amount

BILL NO. 8

PLUMBING AND DRAINAGE

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Bill No. 8

Plumbing And Drainage

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 2</u> <u>ALTERATIONS (PROVISIONAL)</u> <u>BILL NO. 9</u> <u>GLAZING</u> <u>TRADE PREAMBLES</u> <u>Trade Preambles</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates <u>SUPPLEMENTARY PREAMBLES</u> <u>Proprietary items or materials:</u> Proprietary items or materials where specified are to be of the brand specified - or other approved - by the Principal Agent. <u>GLAZING TO STEEL WITH PUTTY</u> <u>6,38mm Clear laminated safety glass:</u>				
1	m ²	6		
Carried To Section Summary				R
Section No. 2				
Bill No. 9				
Glazing				

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 2</u> <u>ALTERATIONS (PROVISIONAL)</u> <u>BILL NO. 10</u> <u>PAINTWORK</u> <u>MODEL PREAMBLES</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates <u>SUPPLEMENTARY PREAMBLES</u> <u>Trade Names</u> Where trade names are specified it will read "or equal approved" <u>Epoxy paint</u> The product and its methodology for application must be approved by Principal Agent before it is used. Contractor must prepare a 1m x 1m sample in the presence of the Principal Agent. In this case, the Contractor must give at least 48 hours notice prior to the date when the application of the epoxy paint is intended to be done. Contractor to provide a Letter of Compliance confirming that epoxy paint has been applied as per Manufacturer's instructions and data sheet. Proof of payment for the epoxy paint must be provided to the Principal Agent once approval has been granted. <u>PAINTWORK ETC TO NEW WORK</u> <u>ON GRANOLITHIC SCREED</u> <u>Prepare surfaces and remove all loose material, apply "ABE Construction Chemicals Pale Grey G62 ABEFLO HPU" Polyurethane self levelling epoxy floor coating in strict accordance with the manufacturers instructions, to be installed by an approved specialist applicator:</u>				
1	On floors.	m ²	302	
2	On skirtings not exceeding 300mm girth.	m	63	
Carried to Collection				R
Section No. 2				
Bill No. 10				
Paintwork				

	Unit	Quantity	Rate	Amount
<u>ON WOOD</u>				
<u>Stop, sand down and prepare wood surfaces and apply one coat wood primer, one undercoat and two coats eggshell enamel paint as per Plascon or equal approved:</u>				
3	On doors	m ²	134	
4	On door frames	m	119	
<u>ON FIBRE-CEMENT</u>				
<u>Prepare and apply two coats pure acrylic roof paint on:</u>				
5	On fascias and barge boards.	m ²	86	
<u>Prepare and apply one coat plaster primer and two coats Super Universal Enamel paint:</u>				
6	On general surfaces of ceilings.	m ²	328	
<u>PAINTWORK ETC TO EXISTING WORK</u>				
<u>ON FLOATED PLASTER SURFACES</u>				
<u>Prepare surfaces and remove all loose material, apply one coat plaster primer and two coats Super Acrylic Polvin paint:</u>				
7	On internal walls.	m ²	176	
<u>Prepare and apply one coat plaster primer and two coats Wall and All paint:</u>				
8	On external walls.	m ²	216	
<u>ON BRICKWORK</u>				
<u>Prepare and wash all grease and stains from surfaces and remove all loose material, apply one coat bonding liquid and two coats "Brixseal":</u>				
9	On internal facebrick walls	m ²	672	
10	On external facebrick walls	m ²	304	
<u>ON WOOD</u>				
<u>Stop, sand down and prepare wood surfaces and apply one coat wood primer, one undercoat and two coats eggshell enamel paint as per Plascon or equal approved:</u>				
11	On door frames	m ²	10	
<u>Prepare and apply two coats carbolenium on:</u>				
12	On exposed timbers.	m ²	30	
			R	
Carried to Collection				
Section No. 2 Bill No. 10 Paintwork				

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PAINTWORK
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Bill No. 10
Paintwork

			Amount
<u>SECTION NO. 2</u>			
<u>ALTERATIONS (PROVISIONAL)</u>			
<u>SECTION SUMMARY</u>			
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5	IRONMONGERY	37	
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7	TILING	39	
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9	GLAZING	45	
10	PAINTWORK	49	
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SECTION NO. 3

NEW WORKS

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>NEW WORKS</u> <u>BILL NO. 1</u> <u>EARTHWORKS</u> <u>Quantity Split:</u> Note that the total quantity per each item is split into the various buildings and appears below each description as follows: AG - DWG 08 - Grade R Ablutions				
<u>MODEL PREAMBLES</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates				
<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>Nature of material to be excavated:</u> The material to be excavated is assumed to be predominantly of a composition that will allow excavation in "earth" as specified, but including a percentage of excavation in "soft rock" and "hard rock".				
<u>Carting away of excavated material:</u> Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations, or alternatively, from stock piles situated on the building site.				
<u>Dewatering of excavations:</u> The Contractor shall allow for removing seepage and other water from subterranean sources from the excavations by pumping, baling or otherwise. Accurate records of all such dewatering shall be kept to determine the total volume of water so removed and a clear distinction shall be made between water from subterranean sources and other water				
Carried to Collection			R	
Section No. 3 Bill No. 1 Earthworks				

	Unit	Quantity	Rate	Amount
<u>Density testing on filling:</u>				
Rates for filling, etc. shall include for all density and soil type testing to prove that the specified compaction is achieved. When additional testing is done on instruction of the Principal Agent and these tests are successful, they will be paid for additionally.				
<u>Imported fill:</u>				
Filling and bedding to trenches etc. to be in compliance with SABS 1200 DB and LB respectively				
<u>Classification of excavated material</u>				
Hard rock' shall mean granite, quartzitic sandstone or other rock of similar hardness, the removal of which requires drilling, wedging and splitting or the use of explosives. Soft rock" shall mean hard material, the removal of which warrants the use of pneumatic tools and includes hard shale, ferricite, compact ouklip and material of similar hardness. "Earth" shall mean all ground other than that classified as "hard rock" or "soft rock" and shall include made-up ground and any loose stones or pieces of concrete not exceeding 0,03m ³ in volume.				
<u>EXCAVATION OTHER THAN BULK</u>				
<u>Excavation in earth not exceeding 2m deep:</u>				
1 Trenches.	m ³	6		
2 Reducing levels and depositing excavated material in prescribed stock piles on site.	m ³	13		
<u>Extra over trench and hole excavations in earth for excavation in:</u>				
3 Soft rock.	m ³	2		
4 Hard rock.	m ³	1		
<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.	m ³	19		
<u>Risk of collapse of excavations:</u>				
6 Sides of trench and hole excavations not exceeding 1,5m deep.	m ²	30		
<u>Keeping excavations free of water:</u>				
7 Keeping excavations free from mud and all water including subterranean sources.	Item			
Carried to Collection			R	
Section No. 3				
Bill No. 1				
Earthworks				

		Unit	Quantity	Rate	Amount
<u>EARTH FILLING, ETC.</u>					
<u>Earth filling obtained from the excavations and / or prescribed stock piles on site (minimum G7 tested material) compacted to 93% Mod. AASHTO density:</u>					
8	Under floors, etc.	m ³	5		
<u>Imported G5 filling, selected and supplied by the Contractor, including depositing in layers not exceeding 150mm thick and compacting to 98% modified AASHTO dry density to trenches, holes, etc.</u>					
9	Under floors, etc.	m ³	5		
<u>Imported G7 filling, selected and supplied by the Contractor, including depositing in layers not exceeding 150mm thick and compacting to 98% modified AASHTO dry density to holes, trenches etc.</u>					
10	Under floors, etc.	m ³	14		
<u>Coarse river sand filling supplied by the contractor:</u>					
11	Under floors etc.	m ³	2		
<u>Compaction of surfaces:</u>					
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density.	m ²	31		
<u>Prescribed density tests on filling:</u>					
13	Allow for compaction tests by an approved laboratory to determine density of filling material.	No	3		
<u>SOIL POISONING</u>					
<u>Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:</u>					
14	Under floors, etc., including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming.	m ²	31		
Carried to Collection				R	
Section No. 3					
Bill No. 1					
Earthworks					

BILL NO. 1
EARTHWORKS
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Section No. 3
Bill No. 1
Earthworks

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>NEW WORKS</u> <u>BILL NO. 2</u> <u>CONCRETE, FORMWORK AND REINFORCEMENT</u> <u>Quantity Split:</u> Note that the total quantity per each item is split into the various buildings and appears below each description as follows: AG - DWG 08 - Grade R Ablutions <u>MODEL PREAMBLES</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates <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>Cost of tests:</u> The costs of making, storing and testing of concrete test cubes as required under clause 7 'Tests' of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Architect. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Architect. (Test cubes are measured separately). <u>Formwork:</u> 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. 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.				
Carried to Collection			R	
Section No. 3				
Bill No. 2				
Concrete, Formwork And Reinforcement				

	Unit	Quantity	Rate	Amount
Formwork to soffits of solid slabs etc., shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described. Formwork to 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. <u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u> <u>15Mpa/19mm Concrete</u>				
1	m ³	2		
Surface blinding under footings and bases. <u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u> <u>30MPa/20mm concrete:</u>				
2	m ³	8		
<u>TEST BLOCKS</u> <u>Test blocks:</u>				
3	No	6		
Making and testing of 150x150x150mm concrete strength test cubes (Provisional). <u>FINISHING TOP SURFACE OF CONCRETE</u> <u>Finishing top surfaces of concrete smooth with a wood float:</u>				
4	m ²	31		
Surface beds, suspended slabs, ground slabs, etc. <u>ROUGH FORMWORK (DEGREE OF ACCURACY III)</u> <u>Rough Formwork to Sides:</u>				
5	m	25		
Edges, risers, ends and reveals not exceeding 300mm high or wide. <u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u> <u>Smooth Formwork to Sides:</u>				
6	m	13		
Edges, risers, ends and reveals not exceeding 300mm high or wide.				
Carried to Collection				R
Section No. 3				
Bill No. 2				
Concrete, Formwork And Reinforcement				

		Unit	Quantity	Rate	Amount
<u>MOVEMENT JOINTS ETC</u>					
<u>Two layers of 375 micron damp proof course in slip joints between horizontal concrete and brick surfaces including cement mortar bed (Provisional)</u>					
7	Not exceeding 300mm wide.	m	39		
<u>Saw cut joints:</u>					
8	6 x 40mm Saw cut joints in top of concrete (Provisional).	m	20		
<u>REINFORCEMENT (PROVISIONAL)</u>					
9	High tensile steel reinforcement bars to structural concrete work.	Tonnes	0.82		
<u>Fabric reinforcement:</u>					
10	REF. 617 fabric reinforcement in concrete footings, walls, base slabs etc.	m ²	31		
Carried to Collection				R	
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Concrete, Formwork And Reinforcement					

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CONCRETE, FORMWORK AND REINFORCEMENT
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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>NEW WORKS</u> <u>BILL NO. 3</u> <u>MASONRY</u> <u>Quantity Split:</u> Note that the total quantity per each item is split into the various buildings and appears below each description as follows: AG - DWG 06 - Grade R AblutionsA6				
<u>MODEL PREAMBLES</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates All references to SABS shall be deemed to be the relevant SANS specification				
<u>SUPPLEMENTARY PREAMBLES</u> <u>BRICKWORK</u> <u>Sizes in descriptions</u> Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
<u>Hollow walls etc</u> Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole. Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixal" bitumen emulsion waterproofing coating.				
<u>Face bricks</u> Bricks shall be ordered timeously to obtain uniformity in size and colour				
<u>Pointing</u> Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
Carried to Collection			R	
Section No. 3 Bill No. 3 Masonry				

		Unit	Quantity	Rate	Amount
<u>Samples</u>					
Samples of all masonry building units, except those of walls described as "loadbearing", shall consist of a minimum of 6 units. Samples of building units to be used in walls described as "loadbearing" shall consist of 30 units from every 30 000 units delivered to site					
<u>Trade names</u>					
Where trade names are specified it will read "or equal approved"					
<u>BRICKWORK AND BLOCKWORK SUNDRIES</u>					
<u>Galvanized brickwork reinforcement</u>					
1	115mm Wide reinforcement built in horizontally	m	88		
2	230mm Wide reinforcement built in horizontally.	m	305		
<u>Cramps, ties, etc:</u>					
3	30 x 2mm Galvanized roof tie 1500mm long with one end fixed to timber and other built into brickwork or concrete.	No	26		
<u>Air bricks etc:</u>					
4	229 x 152mm terracotta clay vermin proof air brick	No	12		
<u>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:</u>					
5	To walls (Provisional).	m ²	80		
<u>Samples</u>					
6	Prepare and construct for approval L-Shaped one brickwall faced and pointed both sides as per given specification, size: 1000x1000x1000mm high. same position to be paved as per given specifications.	Item			
<u>Turning pieces to lintels etc</u>					
7	230mm Wide turning pieces	m	13		
Carried to Collection				R	
Section No. 3					
Bill No. 3					
Masonry					

		Unit	Quantity	Rate	Amount
<u>FACE BRICK</u>					
<u>Rustgold FBS/Qunu Travertine clay face brick or equal approved, size 222 x 106 x 73mm, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-2 (Cement to be 42.5N all-purpose cement):</u>					
8	Half brick wall in beam filling pointed one side including cutting and fitting around roof timbers and bedding roofing solid on top in cement mortar.	m ²	7		
9	One brickwall pointed on both sides.	m ²	94		
10	Half brickwall pointed on both sides.	m ²	27		
11	Fair raking cutting.	m	9		
<u>Face brick copings, lintels, sills, etc, of "Rustgold FBS/Qunu Travertine" or equal approved face bricks pointed with recessed joints on all exposed faces, 220mm wide sill set sloping and slightly projecting:</u>					
12	220mm Brick on edge sill bedded sloping and jointed in cement mortar and pointed on top, edge and projecting soffit including cutting and fitting between reveals and splay cutting brickwork under.	m	7		
13	220mm Wide header course to top of one brick wall bedded and jointed in cement mortar and pointed on both sides.	m	7		
Carried to Collection				R	
Section No. 3					
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Masonry

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>NEW WORKS</u> <u>BILL NO. 4</u> <u>WATERPROOFING</u> <u>Quantity Split:</u> Note that the total quantity per each item is split into the various buildings and appears below each description as follows: AG - DWG 08 - Grade R Ablutions				
<u>MODEL PREAMBLES</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates				
<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>Waterproofing</u> Complete pit sealing/waterproofing from seepage due to underground water ingress as result of high water table, perched water tables etc Contractor to provide water proofing product that will be 100% resistant to extreme hydrostatic pressure at depth of 2m, from the positive (water from inside) of substrate. Resistant to aggressive chemicals i.e oil, salt water, sewage, weak acids and aggressive sulphate soils. The product must be able to withstand backfilling without protection and must not be subject to deterioration. The product must be able to ensure that the pit structure is fully sealed (100% free from water ingress from outside and it will not penetrate the pit). The product and its methodology for application must be approved by Principal Agent before it is used. It is a mandatory requirement for the Contractor to attend training to be provided by Supplier. Proof of attendance will be required prior to application of the approved waterproofing product.				
Carried to Collection			R	
Section No. 3 Bill No. 4 Waterproofing				

	Unit	Quantity	Rate	Amount
Contractor must prepare a 1m x 1m sample in the presence of the Principal Agent or Engineer. In this case, the Contractor must give at least 48 hours notice prior to the date when the application of the waterproofing product is intended to be done. Contractor to provide a Letter of Compliance confirming that waterproofing has been applied as per Manufacturer's instructions and data sheet. <u>DAMPPROOFING OF WALLS AND FLOORS</u> <u>One layer of 250 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':</u>				
1 Under surface beds, bases, etc.	m ²	31		
<u>One layer of 350 micron embossed dampcourse waterproof sheeting below walls, sills, etc:</u>				
2 Below walls, sills, etc.	m ²	3		
<u>JOINT SEALANTS ETC</u> <u>Clear Neutral silicone sealant:</u>				
3 In joint sealing and pointing all round external window and door frames.	m	59		
<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>				
4 10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary (Provisional).	m	20		
Carried to Collection				R
Section No. 3				
Bill No. 4				
Waterproofing				

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Section No. 3
Bill No. 4
Waterproofing

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>NEW WORKS</u> <u>BILL NO. 5</u> <u>ROOF COVERINGS</u> <u>Quantity Split:</u> Note that the total quantity per each item is split into the various buildings and appears below each description as follows: AG - DWG 08 - Grade R Ablutions				
<u>MODEL PREAMBLES</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates				
<u>SUPPLEMENTARY PREAMBLES</u> <u>Flashings</u> Flashings shall be approved by roof sheeting manufacturer and fixed to the sheeting with S10 clips to obviate any direct fixing perforations. Prior to flashings being fixed, all troughs at the apex shall be stop-ended to the full depth of the sheet in order to prevent any penetration of wind driven water. The trough shall be lipped at the eaves end to form a drip. Flashing flanges shall be notched to the sheet profile where necessary. All these operations must be performed with special tools available from the manufacturer. Care shall be taken to ensure that no sheeting or flashing will be cut with abrasive disc on roof surface in order to prevent steel splatter from penetrating colour coated areas. The flashings shall be supplied with a paint finish consisting of a full top coat silicon modified polyester Colour : White to one side				
<u>Quality Assurance</u> The manufacturer shall be assessed and certified as complying with ISO 9001: 2008 Quality Management System				
<u>Guarantee</u> Z200 Galvanized Metal or equal approved sheeting shall be laid in strict accordance with manufacturer's specifications by an approved contractor. The employer shall be provided with a ten year written guarantee on materials by the manufacturer.				
Carried to Collection			R	
Section No. 3 Bill No. 5 Roof Coverings				

	Unit	Quantity	Rate	Amount
Safety The contractor shall exercise special care when handling long length sheeting, particularly in windy conditions. Should work be interrupted for any reason, all loose sheeting and incomplete sections must be adequately secured against possible movement by wind and gravity Handling and Storage The contractor shall ensure that all materials used on site for cladding, etc are transported, handled and stored in accordance with the manufacturer's recommendations. Material damaged shall be rejected and replaced with undamaged material at the contractor's expense. Repair of damaged material will not generally be permitted. Rates are to include for preventing damage and protecting sheets through all stages of construction Inspection Prior to Installation or Erection Before commencing with installation, the contractor shall verify that the following items have been checked and accepted: a. The entire structure or the portion thereof to be sheeted has been correctly aligned, levelled and grouted b. Purlins and sheeting rails are at the correct spacing and are within the specified tolerances c. The corners of the roof are square and the wall framework is perpendicular or as specified d. No protrusions such as bolt heads, splice plates, cleats, etc. appear on the face of the framework e. All members to which roofing and cladding are to be fixed in aesthetically sensitive areas are true and square f. Paint and any other materials that may be incompatible with the sheeting, have been painted over or so dealt with that direct contact with the sheeting is avoided g. The contact faces between the purlins or the girts and the cladding are in the same plane. Should the alignment be inadequate, the contractor shall request instructions from the engineer before proceeding with the fixing of the cladding Protrusion through Sheeted Surfaces Protrusions such as pipes, ducts and the like, shall be adequately flashed where they pass through the sheeting surface. Where ribs have to be cut away to permit penetration, additional framing is to be installed as required to support the sheeting. Depending on the position of the penetration through the roof, special attention shall be given to back flashing the sheeting to the ridge or point of water entry. In all cases, all cutting and flashings shall be so arranged that adequate provision is made for the drainage of all troughs and corrugation				
Carried to Collection			R	
Section No. 3 Bill No. 5 Roof Coverings				

	Unit	Quantity	Rate	Amount
<u>Cleaning of Roofs, etc</u>				
All debris, etc arising from the fixing of the cladding shall be removed from the sheetin as the fixing progresses. In addition, off-cuts of insulation, surplus fastners and sealants, mandrels from pop rivets, off-cuts of flashings and sheeting, surplus flashing, food packaging, cartons, bottles, cans, etc shall not be left on the roof or in the gutters. Care shall be taken to ensure that no such material enters, blocks or partially impedes the flow of water into the outlets, downpipes, etc				
<u>ROOF COVERINGS</u>				
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>				
<u>0,58mm Thick Z200 "IBR Profile" galvanised metal roof sheeting, in single sheet lengths, with "Chromadek" finish to external face and standard backing coat to internal face :</u>				
1 Roof sheeting laid to a mono-pitch.	m ²	43		
<u>0.58mm Flashings pre-painted to match roof sheeting and fixed in strict accordance with manufacturer's instructions:</u>				
2 Mono pitched ridge capping with 225mm lapping secured onto the roof.	m	10		
<u>ROOF AND WALL INSULATION</u>				
<u>Sisalation Grade FR430 or equal approved heavy industrial insulation</u>				
3 Insulation laid taut over roof trusses (at approximately 1 100mm centres) and fixed concurrent with SA Pine purlins at 900mm centres, etc including galvanised steel straining wires	m ²	43		
Carried to Collection			R	
Section No. 3				
Bill No. 5				
Roof Coverings				

Amount

BILL NO. 5
ROOF COVERINGS
COLLECTION

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Carried To Section Summary

R

Section No. 3
Bill No. 5
Roof Coverings

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u>				
<u>NEW WORKS</u>				
<u>BILL NO. 6</u>				
<u>CARPENTRY AND JOINERY</u>				
<u>Quantity Split:</u>				
Note that the total quantity per each item is split into the various buildings and appears below each description as follows:				
AG - DWG 08 - Grade R Ablutions				
<u>MODEL PREAMBLES</u>				
The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates				
<u>SUPPLEMENTARY PREAMBLES</u>				
<u>FIXING</u>				
All nailing of timber roof rafters, purlins, etc shall be done with galvanised nails. In coastal areas, copper, aluminium or stainless steel nails shall be used.				
<u>CARPENTRY</u>				
<u>Sawn softwood:</u>				
1	m	19		
2	m	78		
3	m	12		
4	m	44		
<u>Sundries:</u>				
5	No	40		
<u>EAVES, VERGES, ETC</u>				
<u>Everite Nutec or equal approved fibre cement</u>				
6	m	19		
7	m	9		
Carried to Collection			R	
Section No. 3				
Bill No. 6				
Carpentry And Joinery				

		Unit	Quantity	Rate	Amount
<u>DOORS ETC</u>					
<u>SANS Approved meranti:</u>					
8	44mm Framed, ledged, and battened single door with flush ply panel internally size 813 x 2032mm high comprising 44 x 110mm top rail and stiles, 44 x 220mm bottom rail, 44 x 150mm lock rail and 22 x 70mm vertical "v" jointed boards (D1).	No	1		
9	44mm Framed, ledged, and battened single door with flush ply panel internally size 950 x 2032mm high comprising 44 x 110mm top rail and stiles, 44 x 220mm bottom rail, 44 x 150mm lock rail and 22 x 70mm vertical "v" jointed boards (D2).	No	1		
10	44mm Braced and ledged door size 862 x 1000mm Type (D3).	No	5		
11	44mm Framed, ledged, and battened purpose made single door with flush ply panel internally size 813 x 1832mm high comprising 44 x 110mm stiles, 44 x 220mm bottom rail, 44 x 150mm lock rail and 22 x 70mm vertical "v" jointed boards (D4).	No	1		
<u>FRAMED FRAMES, ETC</u>					
<u>Meranti Frames bolted to wall with expanding masonry bolts - four per style including quadrant beads on both sides:</u>					
12	70 x 108mm rebated meranti frame .	m	27		
<u>Meranti Frames fixed against brickwall using galvanised steel lugs bolted with expanding masonry bolts - four per style including quadrant beads on both sides:</u>					
13	70 x 108mm rebated meranti frame .	m	5		
Carried to Collection				R	
Section No. 3					
Bill No. 6					
Carpentry And Joinery					

Amount

BILL NO. 6

CARPENTRY AND JOINERY

COLLECTION

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Section No. 3

Bill No. 6

Carpentry And Joinery

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>NEW WORKS</u> <u>BILL NO. 7</u> <u>IRONMONGERY</u> <u>Quantity Split:</u> Note that the total quantity per each item is split into the various buildings and appears below each description as follows: AG - DWG 08 - Grade R Ablutions <u>MODEL PREAMBLES</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates <u>SUPPLEMENTARY PREAMBLES</u> <u>Keys/Locks</u> Each lock is to be distinctly numbered with consecutive numbers and each key is to be stamped with the corresponding number to the lock that it controls. All locks are to have two keys <u>Trade Names</u> Where trade names are specified other ironmongery approved by the Principal Agent may be used <u>Fixing</u> Fixing of ironmongery is deemed to be fixed to timber unless otherwise described <u>HINGES:</u> 1 75 x 100mm Brass Medium duty ball bearing HMP butt hinges. Pairs 7 <u>LOCKS</u> 2 UNION 2277-78SS or equal approved three lever sash mortice lockset. No 2 3 UNION w/c indicator bolt satin chrome - Code CZ80941SC No 5 <u>HANDLES</u> 4 Dorma DPH301B or equal approved Stainless Steel Straight Tubular Pull handle flange fixing. No 7 Carried to Collection R				
Section No. 3 Bill No. 7 Ironmongery				

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Amount

BILL NO. 7
IRONMONGERY
COLLECTION

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Section No. 3
Bill No. 7
Ironmongery

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>NEW WORKS</u> <u>BILL NO. 8</u> <u>METALWORK</u> <u>Quantity Split:</u> Note that the total quantity per each item is split into the various buildings and appears below each description as follows: AG - DWG 08 - Grade R Ablutions <u>MODEL PREAMBLES</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates <u>SUPPLEMENTARY PREAMBLES</u> The Contractor is to check and verify on site that the item specified in the BoQ matches existing prior to placing orders. Additional costs will not be borne by the client for items that do not match existing and are not approved by the Principal Agent <u>ALUMINIUM WINDOWS</u> All aluminium windows are to be manufactured by manufacturers who are members of AAAMSA. All aluminium systems to be approved by AAAMSA. All aluminium work is to be protected by covering with plastic sheeting fixed with low tack adhesive prior to leaving the factory. Plastic sheeting is to remain in place during construction. All glazing shall be in accordance with SABS 0400 - 1990, SABS 1263 - 1. All safety glazing materials (individual panes) shall be permanently marked. Such marking shall be visible after glazing process. If it is not marked, it is not safety glass. <u>Natural anodised aluminium windows glazed with 6.38mm safety laminated glass and plugged to brickwork:</u>				
1	No	11		
Window Size 600 x 600mm high complete, including ironmongery etc, all as per Window Type W01.				
Carried to Collection				R
Section No. 3				
Bill No. 8				
Metalwork				

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BILL NO. 8
METALWORK
COLLECTION

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Section No. 3
Bill No. 8
Metalwork

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u>				
<u>NEW WORKS</u>				
<u>BILL NO. 9</u>				
<u>PLASTERING</u>				
<u>Quantity Split:</u>				
Note that the total quantity per each item is split into the various buildings and appears below each description as follows:				
AG - DWG 08 - Grade R Ablutions				
<u>MODEL PREAMBLES</u>				
The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates				
<u>SCREEDS</u>				
<u>Untinted granolithic, on concrete:</u>				
1	m ²	31		
<u>Skirtings</u>				
2	m	34		
Carried To Section Summary			R	
Section No. 3				
Bill No. 9				
Plastering				

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u>				
<u>NEW WORKS</u>				
<u>BILL NO. 10</u>				
<u>PLUMBING AND DRAINAGE</u>				
<u>Quantity Split:</u>				
Note that the total quantity per each item is split into the various buildings and appears below each description as follows:				
AG - DWG 08 - Grade R Ablutions				
<u>MODEL PREAMBLES</u>				
The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates				
<u>RAINWATER DISPOSAL:</u>				
<u>Watertite or equal approved Aluminium Gutters and Downpipes:</u>				
1 125 x 85 x 0.6mm Ogee domestic gutters including gutter brackets at 600mm centres.	m	10		
2 Extra over eaves gutter for stopped end.	No	2		
3 Extra over eaves gutter for outlet for 100 x 75mm aluminium downpipe.	No	2		
4 100 x 75 x 0.6mm rectangular fluted downpipes fixed to wall with and including proprietary holderbats to 5000L rainwater tanks (elsewhere measured).	m	9		
5 Extra over rainwater downpipe for bends.	No	3		
<u>TAPS, VALVES, ETC</u>				
<u>Solid Cast brass taps, valves, etc:</u>				
6 Cobra KM2-200or other approved 15mm chrome plated metered bib tap with non-hold open feature and flow controller.	No	4		
7 15mm Ball-o-stop valve.	No	4		
8 22mm Non Return valve.	No	16		
<u>WASTE UNIONS ETC</u>				
<u>Outlets, traps, etc:</u>				
9 40mm 342/50 CP bottle trap.	No	1		
Carried to Collection			R	
Section No. 3				
Bill No. 10				
Plumbing And Drainage				

		Unit	Quantity	Rate	Amount
10	40mm Code 316 chrome plated unslotted waste outlet.	No	4		
11	40mm Rubber "P" or "S" trap	No	4		
<u>SANITARY FITTINGS</u>					
<u>Vaal or equal approved:</u>					
12	Lavatera White Vitreous china wall mounted bowl urinal with top inlet [code: 704001] 610x385mm, supplied with 38mm chromium plated domical grating [code: 8787], chromium plated spreader [code: 8543], and two hanger brackets [code: 8127]	No	1		
13	Hibiscus White Vitreous china 510 x 405mm rounded basin [code: 7050] with one tap hole on left hand side, including integrated overflow, bolted to wall with two 8mm bolts [code 8448Z0], to manufacturer's specification.	No	4		
14	Orchid back inlet white vitreous china wall hung pan [code 439016] with floor bracket [code 8082Z0] fitted as per manufacturer's specifications and combined with: GEBERIT Kombifix UP172 for wall hung WC, [G110.150.00.1], front actuated with Delta21 dual flush actuator [G115.125.46.1] in matt finish, including flushpipe and Pan connector, water supply connection with angle stop valve, Netting for direct plastering, protection cover for service opening and protection cover for flushpipe, fixed with included fastening materials inside a single solid wall [80mm]	No	1		
15	Junior vitreous china low level suite colour White (Code: 751358), comprising 104° outlet washdown pan (Code: 751301) with matching 6 litre front single flush cistern (Code: 712034) including lid, fitments and flushpipe and Junior double flap wooden seat (Code: 8518Z0).	No	5		
<u>Franke Model TU101 or equal approved flush valve/cistern flat back wall mounted urinal:</u>					
16	SS-TU101-1830R Flat back stainless steel school trough urinal wall and floor mounted. manufactured from Grade 304 (18/10) Stainless Steel, 0,9 mm gauge. Urinal to be supplied with a concealed sparge pipe and a 22 mm inlet with chrome plated conex fitting for connecting to water inlet (Connection fitting not supplied). Urinal to include a tiling key to sides and rear walls. The back to be fully sound deadened with vermin proof bitumastic material. Outlet to be situated on the left or right of the urinal with a recess for 40 mm chrome plated waste outlet.	No	2		
Carried to Collection				R	
Section No. 3					
Bill No. 10					
Plumbing And Drainage					

		Unit	Quantity	Rate	Amount
<u>SANITARY PLUMBING</u>					
<u>PVC waste or vent pipes and fittings:</u>					
17	50mm Waste pipe.	m	30		
18	110mm Pipe.	m	6		
19	110mm Pipe and laying in ground or filling not exceeding 2m deep including excavation, filling in and ramming.	m	21		
<u>uPVC gulleys</u>					
20	200mm Precast concrete gully dish and uPVC lowback assembly complete with 110mm P trap gully (code UGB 40) including 190mm diameter head (code UGA 40) and grate (code UGG 40), not exceeding 750mm deep, jointed to 110mm drain pipe, including excavations for and encasing in concrete (15MPa crushing strength after 28 days) worked up to form kerb, finished smooth on top in 1:3 cement mortar.	No	1		
<u>Extra for:</u>					
21	50mm Bend.	No	2		
22	50mm Access bend.	No	2		
23	100mm Access bend.	No	6		
<u>WATER SUPPLIES</u>					
<u>Polycop pipes:</u>					
Pipes shall be class 10.					
<u>Fixing of pipes</u>					
Unless specifically otherwise stated, descriptions of pipes shall be deemed to include for fixing to walls etc. casting in, building in or suspending not exceeding 1m below suspension level					
<u>Polycop pipes chased in walls:</u>					
Where pipes have been chased in walls, the price for making good of plaster and paint etc shall be deemed to be included in the description of pipe chased in walls.					
<u>Reducing fittings:</u>					
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.					
Carried to Collection				R	
Section No. 3					
Bill No. 10					
Plumbing And Drainage					

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BILL NO. 10
PLUMBING AND DRAINAGE
COLLECTION

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Section No. 3
Bill No. 10
Plumbing And Drainage

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>NEW WORKS</u> <u>BILL NO. 11</u> <u>PAINTWORK</u> <u>Quantity Split:</u> Note that the total quantity per each item is split into the various buildings and appears below each description as follows: AG - DWG 08 - Grade R Ablutions <u>MODEL PREAMBLES</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates <u>SUPPLEMENTARY PREAMBLES</u> <u>Trade Names</u> Where trade names are specified it will read "or equal approved" <u>Epoxy paint</u> The product and its methodology for application must be approved by Principal Agent before it is used. Contractor must prepare a 1m x 1m sample in the presence of the Principal Agent. In this case, the Contractor must give at least 48 hours notice prior to the date when the application of the epoxy paint is intended to be done. Contractor to provide a Letter of Compliance confirming that epoxy paint has been applied as per Manufacturer's instructions and data sheet. Proof of payment for the epoxy paint must be provided to the Principal Agent once approval has been granted. <u>PAINTWORK ETC TO NEW WORK</u> <u>ON WOOD</u> <u>Stop, sand down and prepare wood surfaces and apply one coat wood primer, one undercoat and two coats eggshell enamel paint as per Plascon or equal approved:</u>				
1	m ²	24		
2	m ²	7		
Carried to Collection			R	
Section No. 3 Bill No. 11 Paintwork				

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BILL NO. 11
PAINTWORK
COLLECTION

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Section No. 3
Bill No. 11
Paintwork

		Amount	
<u>SECTION NO. 3</u>			
<u>NEW WORKS</u>			
<u>SECTION SUMMARY</u>			
Bill No.		Page	
1	EARTHWORKS	55	
2	CONCRETE, FORMWORK AND REINFORCEMENT	59	
3	MASONRY	63	
4	WATERPROOFING	66	
5	ROOF COVERINGS	70	
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7	IRONMONGERY	76	
8	METALWORK	79	
9	PLASTERING	80	
10	PLUMBING AND DRAINAGE	85	
11	PAINTWORK	88	
Carried to Final Summary		R	
Section No. 3 SECTION SUMMARY			

SECTION NO. 4
EXTERNAL WORKS (PROVISIONAL)

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 4</u>				
<u>EXTERNAL WORKS (PROVISIONAL)</u>				
<u>BILL NO. 1</u>				
<u>EXTERNAL WORKS</u>				
<u>MODEL PREAMBLES</u>				
The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates				
<u>THE FOLLOWING IN PLATFORMS, ETC.</u>				
<u>Site Clearance, ETC</u>				
1				
Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, trees with trunks not exceeding 200mm girth, debris, etc., including grubbing up all roots, scoffing up as required and cart away all vegetation and debris.	m ²	150		
2				
Stripping average 200mm thick layer of topsoil and stockpiling on site.	m ²	150		
<u>Open face excavation not exceeding 2m deep:</u>				
3				
Excavate to cut in open face, not exceeding 2m deep to reduce levels and grade to fill and compact to 93% mod AASHTO density at optimum moisture content.	m ³	108		
<u>Extra over all excavations for carting away:</u>				
4				
Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m ³	70		
<u>Earth filling from excavated material</u>				
5				
Dig, load and remove filling selected from spoil heaps on site and deposit as filling in platforms including spreading and compacting to cambers and falls in layers not exceeding 150 mm thick to a minimum of 95% Modified AASHTO dry density.	m ³	38		
<u>Filling supplied by the contractor to form platforms</u>				
6				
Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.	m ³	70		
Carried to Collection			R	
Section No. 4				
Bill No. 1				
External Works				

		Unit	Quantity	Rate	Amount
<u>Surface Preparation:</u>					
7	Trim and level off surface of ground (excavated or filled under this Contract) including excavating or filling, ripping and scarifying as necessary and compacting the whole area for a depth of 300mm to a density of at least 90% Mod. AASHTO maximum density, part to falls.	m ²	150		
<u>Prescribed density tests on filling:</u>					
8	Modified AASHTO Density test.	No	18		
<u>WATER RETICULATION</u>					
<u>WATER SUPPLY IN GROUND</u>					
<u>HDPE 100PN 12.5 pressure pipes:</u>					
9	32mm pipes laid in depths not exceeding 1m including excavation, bedding, backfilling, compaction and disposal of surplus material.	m	142		
10	40mm Pipes laid in depths not exceeding 1m including excavation, bedding, backfilling, compaction and disposal of surplus material.	m	86		
<u>Extra over (PN12.5) HDPE piping for fittings:</u>					
11	32mm Bend.	No	5		
12	32mm Adaptor.	No	4		
13	32mm Tee.	No	2		
14	40mm Bend.	No	2		
15	40mm Tee.	No	1		
<u>WATER SUPPLY FROM WASTE WATER TREATMENT SYSTEM</u>					
<u>HDPE 100PN 12.5 pressure pipes:</u>					
16	32mm pipes laid in depths not exceeding 1m including excavation, bedding, backfilling, compaction and disposal of surplus material.	m	280		
<u>Extra over (PN12.5) HDPE piping for fittings:</u>					
17	32mm Bend.	No	16		
18	32mm Adaptor.	No	12		
19	32mm Tee.	No	22		
				R	
Carried to Collection					
Section No. 4 Bill No. 1 External Works					

		Unit	Quantity	Rate	Amount
<u>TAPS, VALVES, ETC</u>					
20	32mm "Cobra" Ball Valve complete with adaptors for HDPE pipe.	No	2		
21	32mm Non-return valve.	No	2		
<u>Municipal connection</u>					
<u>Sundries:</u>					
22	Allow for amount of R20 000.00 (Twenty Thousand Rand) for municipal water connection to be used at the discretion of the Principal Agent and deducted in whole or in part if not required.	Item			20 000 00
23	Allow for profit if required.	Item			
<u>SEWER RETICULATION</u>					
<u>MODEL PREAMBLES</u>					
The tenderer is referred to the "Model Preambles for Trades 2008" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates					
<u>SUPPLEMENTARY PREAMBLES</u>					
<u>uPVC pipes and fittings</u>					
Soil, waste and vent pipes and fittings shall be solvent weld jointed.					
Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings.					
<u>Excavations:</u>					
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.					
<u>Laying, backfilling, bedding, etc of pipes:</u>					
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					
				R	
Carried to Collection					
Section No. 4					
Bill No. 1					
External Works					

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	Unit	Quantity	Rate	Amount
LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB: Earthworks (Pipe trenches) Clause 5.7.2 will only be applicable if authorised by the Engineer in writing. <u>Descriptions of pipes laid in trenches:</u> Descriptions of pipes laid in and including trenches and of inspection chambers, catch pits, etc shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 95% Mod AASHTO density and disposal of surplus material on site <u>Descriptions of catchpits, junction boxes, manholes, etc:</u> Descriptions of catchpits, junction boxes, manholes, etc, shall be deemed to include for compaction, disposal of surplus excavated material to a dumping site located by the contractor, risk of collapse and keeping excavations free from water. <u>Density testing on filling:</u> Rates for filling, etc. shall include for all density and soil type testing to prove that the specified compaction is achieved. When additional testing is done on instruction of the Principal Agent and these tests are successful, they will be paid for additionally. <u>BULK SEWER RETICULATION</u> <u>Heavy duty (Class 34) PVC-U sewer and drain pipes</u>				
24	m	40		
25	m	56		
<u>Extra over heavy duty (Class 34) PVC-U sewer and drain pipes for fittings</u>				
26	No	8		
27	No	6		
28	No	8		
29	No	4		
<u>PRE-CAST CONCRETE MANHOLES</u> <u>Pre-cast concrete circular inspection chambers including pre-cast concrete cover slabs, covers and channels in benching</u>				
30	No	4		
Carried to Collection			R	
Section No. 4 Bill No. 1 External Works				

		Unit	Quantity	Rate	Amount
31	Manhole 1000mm diameter exceeding 1m and not exceeding 2m deep.	No	6		
	SUNDRIES				
	<u>Earthworks</u>				
32	Selected granular filling Class 'B' supplied by the Contractor in bedding under pipes.	m ³	29		
33	Selected 19mm stone supplied by the Contractor in bedding under pipes.	m ³	14		
34	300 x 300 x 75mm Pre-cast concrete inspection eye marker slab set in ground.	No	10		
	<u>Manhole covers</u>				
35	620mm dia Type 2A Heavy duty cast iron manhole to SABS 558	No	10		
	<u>Connection</u>				
36	Allow for connecting to Waste Water Treatment System (WWTS).	Item			
	<u>Testing:</u>				
37	Testing drainage system.	Item			
	<u>THE FOLLOWING IN WALKWAYS</u>				
	<u>Excavation not exceeding 2m deep</u>				
38	Reducing levels and depositing excavated material in prescribed stock piles on site.	m ³	38		
	<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>				
39	Off site to a dumping site to be found by the Contractor.	m ³	38		
	<u>Filling supplied by the contractor under walkways</u>				
40	G7 Base course material compacted to 98% Mod AASHTO density	m ³	13		
41	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.	m ³	26		
	<u>Rip and Re - compact insitu material on site compacted to 93% Mod. AASHTO density:</u>				
42	Under floors,etc.	m ²	85		
	Carried to Collection			R	
	Section No. 4				
	Bill No. 1				
	External Works				

		Unit	Quantity	Rate	Amount
	<u>Prescribed density tests on filling:</u>				
43	In-situ dry density test.	No	10		
	<u>Approved brand of anti-termite soil poison applied by a Registered Pest Control Company and guaranteed against termite infestation for ten years:</u>				
44	Treat filling under paving with 'Chlordane Heptachlor Aldrin' or equal approved.	m ²	85		
	<u>Concrete Paving Blocks</u>				
	<u>Paving of 50mm thick 200x100mm 25MPa Bevel Bond paver blocks grey in colour in herringbone pattern on and including 20mm thick sand bed with dry filler sand swept and vibrated into joints all laid on subgrade (elsewhere measured) conforming to SABS 1200D degree of accuracy I:</u>				
45	Paving to walkway areas, etc laid to falls.	m ²	85		
46	Extra over ordinary paving for 200mm wide block-on-flat header course edging on 100mm thick mortar bed including unreinforced concrete haunching along outside edge.	m	113		
47	Ditto but circular on plan.	m	11		
	<u>Kerbing</u>				
	<u>Precast or in situ mass concrete (25 MPa - 19 mm stone) kerbs cast in convenient lengths with exposed faces finished smooth from the mould and all salient angles rounded, jointed and pointed in 1:3 cement mortar, including excavations, formwork, etc.</u>				
48	Figure 8B (300 x 275 x 175mm) semi mountable kerb laid in lengths not exceeding 1000mm on a well rammed earth bottom or base course.	m	113		
49	Ditto but circular on plan.	m	11		
50	Fig. 12 kerb size 75 x 150mm high overall, laid in lengths not exceeding 1000mm on a well rammed earth bottom or base course.	m	12		
51	Ditto but circular on plan.	m	3		
	<u>THE FOLLOWING IN DISABLED ACCESS</u>				
	<u>SCREEN WALL</u>				
	<u>Excavation in earth not exceeding 2m deep:</u>				
52	Trenches.	m ³	2		
	Carried to Collection			R	
	Section No. 4				
	Bill No. 1				
	External Works				

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		Unit	Quantity	Rate	Amount
	<u>Brickwork reinforcement:</u>				
63	230mm Wide reinforcement built in horizontally.	m	28		
64	Ditto but in foundations.	m	16		
	<u>FACE BRICK</u>				
	<u>Rustgold FBS/Qunu Travertine clay face brick or equal approved, size 222 x 106 x 73mm, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-2 (Cement to be 42.5N all-purpose cement):</u>				
65	One brickwall faced on both sides.	m ²	16		
	<u>Brick-on-edge header course copings, sills, etc, of "Rustgold FBS/Qunu Travertine" or equal approved face bricks pointed with recessed joints on all exposed faces, 220mm wide sill set sloping and slightly projecting:</u>				
66	230mm wide header course to top of one brick wall bedded and jointed in cement mortar and pointed on top and both sides as described.	m	4		
	<u>ACCESS RAMPS</u>				
	<u>Excavation not exceeding 2m deep</u>				
67	Reducing levels and depositing excavated material in prescribed stock piles on site.	m ³	1		
	<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>				
68	Off site to a dumping site to be found by the Contractor.	m ³	1		
	<u>Filling supplied by the contractor under floors, aprons, etc</u>				
69	G7 Base course material compacted to 98% Mod AASHTO density	m ³	1		
70	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.	m ³	1		
	<u>Coarse river sand filling supplied by the contractor:</u>				
71	Under floors etc.	m ³	1		
	Carried to Collection			R	
	Section No. 4				
	Bill No. 1				
	External Works				

		Unit	Quantity	Rate	Amount
	<u>Compaction of surfaces:</u>				
72	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density.	m ²	4		
	<u>Prescribed density tests on filling:</u>				
73	In-situ dry density test.	No	2		
	<u>Reinforced 25Mpa/19mm Concrete:</u>				
74	Ramps, Landings, etc.	m ³	1		
	<u>Finishing top surfaces of concrete smooth with a wood float:</u>				
75	Surface beds, slabs, etc to falls and currents.	m ²	4		
	<u>Test blocks:</u>				
76	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	2		
	<u>Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:</u>				
77	12mm Joints not exceeding 300mm high.	m	3		
	<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>				
78	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	3		
	<u>Fabric reinforcement:</u>				
79	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m ²	4		
	<u>Waterproofing under Surface beds</u>				
80	350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured).	m ²	4		
	<u>THE FOLLOWING IN STORMWATER DRAINAGE, APRONS ETC.</u>				
	<u>STORMWATER APRONS</u>				
	<u>Excavation not exceeding 2m deep</u>				
81	Reducing levels and depositing excavated material in prescribed stock piles on site.	m ³	13		
	Carried to Collection			R	
	Section No. 4				
	Bill No. 1				
	External Works				

		Unit	Quantity	Rate	Amount
	<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>				
82	Off site to a dumping site to be found by the Contractor.	m ³	13		
	<u>Filling supplied by the contractor under floors, aprons, etc</u>				
83	G7 Base course material compacted to 98% Mod AASHTO density	m ³	6		
84	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.	m ³	4		
	<u>Coarse river sand filling supplied by the contractor:</u>				
85	Under floors etc.	m ³	1		
	<u>Compaction of surfaces:</u>				
86	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density.	m ²	82		
	<u>Prescribed density tests on filling:</u>				
87	In-situ dry density test.	No	8		
	<u>Reinforced 25Mpa/19mm Concrete:</u>				
88	Surface beds cast in panels on waterproofing.	m ³	5		
89	Edge thickening	m ³	3		
	<u>Finishing top surfaces of concrete smooth with a wood float:</u>				
90	Surface beds, slabs, etc to falls and currents.	m ²	42		
	<u>Test blocks:</u>				
91	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	3		
	<u>Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:</u>				
92	12mm Joints not exceeding 300mm high.	m	12		
	Carried to Collection			R	
	Section No. 4				
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	External Works				

		Unit	Quantity	Rate	Amount
	<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>				
93	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	12		
	<u>Fabric reinforcement:</u>				
94	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m ²	42		
	<u>Waterproofing under Surface beds</u>				
95	350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured).	m ²	42		
	<u>STORMWATER CHANNELS</u>				
96	Excavation not exceeding 2m deep	m ³	6		
97	Reducing levels and depositing excavated material in prescribed stock piles on site.	m ³	3		
	<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>				
98	Off site to a dumping site to be found by the Contractor.	m ³	6		
	<u>Filling supplied by the contractor under channels</u>				
99	G7 Base course material compacted to 98% Mod AASHTO density	m ³	3		
100	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.	m ³	3		
	<u>Cast in-situ Ref 395 mesh reinforced concrete (25MPa) open stormwater channels having V-shaped waterway formed in top, finished smooth on all exposed surfaces in 3:1 cement plaster trowelled smooth and with angles rounded, cast in suitable lengths not exceeding 2m, including all formwork, moulds, shallow excavation, filling and ramming, laying to falls, bedding and pointing in 3:1 cement mortar. Concrete apron to be tinted, colour to be specified by the Engineer.</u>				
101	700 x 80mm thick V' channel 150mm deep in centre laid in position in ground not exceeding 2000mm sections including all formwork, reinforcement, expansion joints, smooth finishing to top of concrete surface etc.	m	30		
	Carried to Collection			R	
	Section No. 4				
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	External Works				

		Unit	Quantity	Rate	Amount
102	Extra for 700mm angle	No	6		
103	Extra for forming 200mm thick 700mm wide spreader with 200mm high edges fanning out to 1 960mm width at furthest end with hard burnt bricks pitching cast in ass diffusers including working off concrete to a smooth finish and draining onto natural ground with 150 - 200mm diameter loose stones.	No	2		
	<u>Sundries:</u>				
104	Create earth berm for stormwater control with in situ material 1,5m wide at base x 500mm high	m	55		
105	Construct shaped earth V-drain 2m wide with grass runners	m	35		
	<u>THE FOLLOWING IN STORMWATER DISH DRAIN, ETC.</u>				
	<u>Excavation not exceeding 2m deep</u>				
106	Reducing levels and depositing excavated material in prescribed stock piles on site.	m³	12		
	<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>				
107	Off site to a dumping site to be found by the Contractor.	m³	6		
	<u>Filling supplied by the contractor under floors, aprons, channels etc</u>				
108	G7 Base course material compacted to 98% Mod AASHTO density	m³	3		
109	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.	m³	3		
	<u>Coarse river sand filling supplied by the contractor:</u>				
110	Under floors etc.	m³	1		
	<u>Compaction of surfaces:</u>				
111	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density.	m²	19		
	<u>Prescribed density tests on filling:</u>				
112	In-situ dry density test.	No	4		
	Carried to Collection			R	
	Section No. 4				
	Bill No. 1				
	External Works				

		Unit	Quantity	Rate	Amount
	<u>Reinforced 25Mpa/19mm Concrete:</u>				
113	Surface beds cast in panels on waterproofing.	m ³	3		
	<u>Finishing top surfaces of concrete smooth with a wood float:</u>				
114	Surface beds, slabs, etc to falls and currents.	m ²	19		
	<u>Test blocks:</u>				
115	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	3		
	<u>Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:</u>				
116	12mm Joints not exceeding 300mm high.	m	10		
	<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>				
117	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	10		
	<u>Fabric reinforcement:</u>				
118	REF. 617 fabric reinforcement in concrete surface beds, slabs, etc.	m ²	19		
	<u>THE FOLLOWING IN RAINWATER TANKS AND STANDS</u>				
	<u>Excavation in earth not exceeding 2m deep:</u>				
119	Trenches.	m ³	10		
	<u>Extra over all excavations for carting away:</u>				
120	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m ³	7		
	<u>Risk of collapse of excavations:</u>				
121	Sides of trench and hole excavations not exceeding 1,5m deep.	m ²	40		
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% MOD AASHTO density:</u>				
122	Backfilling to trenches, holes, etc.	m ³	4		
	<u>Earth filling (G7 material) supplied by the contractor in layers not exceeding 150mm thick and compacted to 98% Mod AASHTO density:</u>				
123	Under footings.	m ³	9		
	Carried to Collection			R	
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		Unit	Quantity	Rate	Amount
	<u>Compaction of surfaces</u>				
124	Compaction of ground surface under floors, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density.	m ²	20		
	<u>25 Mpa/19mm Concrete</u>				
125	Strip footings.	m ³	4		
	<u>25 MPa/19mm Concrete:</u>				
126	Tank concrete slab.	m ³	3		
	<u>Test blocks:</u>				
127	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	6		
	<u>Finishing top surfaces of concrete smooth with a steel trowel including adding additional cement while concrete is still green to attain a smooth, hard surface:</u>				
128	Surface beds, slabs, etc.	m ²	20		
	<u>Rough Formwork to Sides:</u>				
129	Edges, risers, ends and reveals not exceeding 300mm high.	m	40		
	<u>Allens Meshco Square Mesh Fabric reinforcement:</u>				
130	Type 617 fabric reinforcement in concrete slabs.	m ²	20		
	<u>BRICKWORK IN FOUNDATIONS.</u>				
	<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar (Cement to be 42.5N all-purpose cement):</u>				
131	One brick walls.	m ²	18		
	<u>BRICKWORK IN SUPERSTRUCTURE</u>				
	<u>Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar (Cement to be 42.5N all-purpose cement):</u>				
132	One brick walls.	m ²	20		
	<u>Brickwork reinforcement:</u>				
133	230mm Wide reinforcement built in horizontally.	m	160		
134	Ditto but in foundations.	m	160		
	Carried to Collection			R	
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		Unit	Quantity	Rate	Amount
	<u>FACE BRICK</u>				
	<u>Rustgold FBS/Qunu Travertine clay face brick or equal approved, size 222 x 106 x 73mm, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-2(Cement to be 42.5N all-purpose cement):</u>				
135	Extra over brickwork for face brickwork externally.	m ²	20		
	<u>Brick-on-edge header course copings, sills, etc. of "Rustgold FBS/Qunu Travertine" or equal approved face bricks pointed with recessed joints on all exposed faces, 220mm wide sill set sloping and slightly projecting:</u>				
136	230mm wide header course to top of one brick wall bedded and jointed in cement mortar and pointed on top and both sides as described.	m	40		
	<u>Plastic water tanks etc:</u>				
137	5000 Litre roto molded or equal approved plastic tank complete with lid, 15mm brass bibtap with handle suitable for locking and 4 No. galvanised stay wires 2.5m each long connected to tank, with and including 4 No. eye bolts cast into concrete.	No	5		
138	Hole top of tank for 100mm pipe.	No	5		
	<u>THE FOLLOWING IN SECURITY FENCING, ETC</u>				
	<u>Site clearance</u>				
139	Allow for clearing site for the width of 1 000 mm where fencing is to be erected including removing trees, shrubs etc. not exceeding 200 mm girth, grubbing up roots and roughly levelling.	m ²	96		
	<u>Straining wires, fencing and razor wire:</u>				
140	Four strands of 4mm Class'A' galvanised straining wires secured to fencing posts with doubled 2 mm 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 at the other end to straining bolts (elsewhere measured).	m	96		
141	3 Strands of galvanised barbed wire tied to standards, posts and eye bolts	m	96		
	Carried to Collection			R	
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	External Works				

		Unit	Quantity	Rate	Amount
142	Fencing formed of 50 x 50 x 2.0mm diameter galvanised fencing 1 800mm high and fixed to each straining wire with 8 guage binding wire at 500mm centres including Y12 pegs at 900mm c/c between posts (straining wires elsewhere measured).	m	96		
	<u>Posts for 1 800mm high security fence:</u>				
143	60mm Diameter galvanised steel intermediate fencing post 1800mm long fitted with a pressed steel mushroom cap one end and 150 x 150 x 5 mm baseplate at bottom and embedded in and including 350 x 350 x 600 mm mass concrete (15 MPa) base.	No	33		
144	100mm Ditto as corner post, fitted with two 50mm diameter galvanised steel stay set raking and with top end flattened and bolted through post, with post and stay both embedded in mass concrete (15 MPa) bases as last.	No	6		
145	150mm Ditto as gate post 1 800mm long, fitted with two 50mm diameter galvanised steel stay set raking and with top end flattened and bolted through post, with post and stay both embedded in mass concrete (15 MPa) bases as last.	No	4		
146	12mm Diameter galvanised mild steel straining eye bolt with hook, threaded portion and two nuts and washers.	No	60		
147	Form 12mm diameter hole through fence post.	No	234		
	<u>Gates:</u>				
148	Security fence single gate, size 1 000 mm wide x 1 800 mm high, formed of 50 mm diameter nominal bore x 3,25 mm 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 and at cross intersections, with two 50 mm diameter nominal bore x 3,25 mm wall thickness security posts each 600 mm long with one end welded to top rail of gate and closure plate to other end, the gate covered with 100 x 50 x 2,5 mm weld mesh with four straining wires as before described and with four 2,37 mm four point core diameter single "kampeon" wires with crimped droppers to security posts as before described; including three strands flat wrap razor barbed tape wire fixed as before described, leaf fitted with three 24 mm diameter x 300 mm long eyebolt hinges and stops including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including 500 mm long approved chain spot welded to gate	No	1		
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EXTERNAL WORKS
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SECTION NO. 4

EXTERNAL WORKS (PROVISIONAL)

SECTION SUMMARY

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EXTERNAL WORKS

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SECTION NO. 5
PROVISIONAL SUMS

SECTION NO. 5

PROVISIONAL SUMS

SUPPLEMENTARY PREAMBLES

Tenderers are advised that no claim in respect of loss of profit or Preliminary charges based on the omission of these amounts will be considered and the said amounts will be omitted strictly without any financial compensation payable to the Contractor.

Provisional sums and Budgetary allowances contained herein may be omitted or reduced at the Employer's discretion and the Contractor shall not be entitled to claim for any loss by way of reductions or omission of any discount, or percentage relating to Provisional amounts and Budgetary sums or any loss of profit related thereto.

BUDGETARY ALLOWANCES

The following budgetary allowances are for work to be executed at rates in the bills of quantities or to be agreed by the Principal agent:

- 1 Provide the sum of R58 500.00 for the employment of a Community Liaison Officer to be employed by the Main Contractor and be paid an allowance of R6 500.00 a month for the duration (9 months)

Item 58 500 00

- 2 Add: Mark-up

Item

ALLOWANCES

WASTE WATER TREATMENT SYSTEM

- 3 Provide the sum of R 2 500 000.00 (Two Million Five Hundred Thousand Rand) for design and construction of on-site waste water treatment system as per specification provided.

Item 2 500 000 00

- 4 Profit on above item.

Item

- 5 Attendance on ditto.

Item

ELECTRICAL INSTALLATION

- 6 Provide the sum of R 150 000.00 (One Hundred and Fifty Thousand Rand) for Electrical installation.

Item 150 000 00

- 7 Profit on above item.

Item

- 8 Attendance on ditto.

Item

TEMPORARY ABLUTIONS

- 9 Provide the sum of R250 000.00 (Two Hundred and Fifty Thousand Rand) for the Supply, Servicing and maintenance of temporary ablutions for the duration of the project and Removal thereof on completion.

Item 250 000 00

- 10 Add: Profit on above item

Item

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Section No. 5

Bill No. 1

Provisional Sums

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Amount

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PROVISIONAL SUMS

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Section No. 5

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330 000	00
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ADD VAT @ 15%:

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