Item No		Quantity	Rate	Amount
	SECTION 1			
	BILL No.1			
	PRELIMINARIES			
	The Principal Building Agreement shall be the JBCC Series Edition 6.2, May 2018 as recommended by the Joint Building Contract Committee and as amended by this Tender Enquiry.			
	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.			
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries ABAKALI GROUP			

<ul> <li>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.</li> <li>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.</li> <li>8. Where any item is not relevant to this specific contract, such item is marked N/A.</li> <li>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.</li> </ul>		
Carried to Collection  Section 1  Bill No. 1  Preliminaries  ABAKALI GROUP	R	

	SECTION A: PRINCIPAL BUILDING AGREEMENT			
	DEFINITIONS			
	Definitions and interpretation (Clause 1).			
1	F: V: T:	Item		
	OBJECTIVE AND PREPARATION			
	Offer, acceptance and performance (Clause 2).			
2	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:	Item		
	Design responsibility (Clause 4).			
4	F: V: T:	Item		
	Employer's agents (Clause 5).			
5	F: V: T:	Item		
	Site representative (Clause 6).			
6	F: V: T:	Item		
	Compliance with regulations (Clause 7).			
7	F: V: T:	Item		
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries ABAKALI GROUP			

	Works risk (Clause 8)				
8	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'.				
9	F: V: T:	Item			
	Works insurances (Clause 10).				
10	F: V: T:	Item			
	Liability insurances (Clause 11).				
11	F: V: T:	Item			
	Effecting insurances (Clause 12).				
12	F: V: T:	Item			
	State Provisions (Clause 13).				
13	F: V: T:	Item			
	Security (Clause 14).				
14	F: V: T:	Item			
	EXECUTION				
	Preparation for and execution of the works (Clause 15).				
15	F: V: T:	Item			
	Access to the works (Clause 16).				
16	F: V: T:	Item			
	Section 1 Bill No. 1 Preliminaries ABAKALI GROUP		R		
		ı	1	il '	1

	Contract instructions (Clause 17).			
17	F: V: T:	Item		
	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.			
18	F: V: T:	Item		
	Assignment (Clause 19).			
19	F: V: T:	Item		
	Nominated subcontractors (Clause 20).			
20	F: V: T:	ltem		
	Selected subcontractors (Clause 21).			
21	F: V: T:	ltem		
	Employer's Direct contractors (Clause 22).			
22	F: V: T:	ltem		
	Contractor's Domestic subcontractors (Clause 23).			
23	F: V: T:	Item		
	COMPLETION			
	Practical completion (Clause 24).			
24	F: V: T:	Item		
	Works completion (Clause 25).			
	Carried to Collection Section 1		R	_
	Bill No. 1 Preliminaries ABAKALI GROUP			
				ĺ

25	F: V: T:	Item		
	Final completion (Clause 26).			
	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 accummulates in order to attend to a comprehensive list of defects"			
26	F: V: T:	Item		
	Sectional completion (Clause 28).			
27	F: V: T:	Item		
	Revision of date for practical completion (Clause 29).			
28	F: V: T:	ltem		
	Penalty for non-completion (Clause 30).			
29	F: V: T:	Item		
	PAYMENT			
	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.			
	Section 1		R	
	Bill No. 1 Preliminaries			
	ABAKALI GROUP			
		I	ı	 ı

	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).			
30	F: V: T:	Item		
	Recovery of expense and loss (Clause 33).			
31	F: V: T:	Item		
	Final account and final payment (Clause 34).			
32	F: V: T:	Item		
	Payment to other parties (Clause 35).			
33	F: V: T:	Item		
	CANCELLATION			
	Cancellation by Employer - Contractor's default (Clause 36).			
34	F: V: T:	Item		
	Cancellation by Employer - Loss and damage (Clause 37).			
35	F: V: T:	Item		
	Cancellation by Contractor - Employer's default (Clause 38).			
36	F: V: T:	Item		
	Cancellation - Cessation of the works (Clause 39).			
37	F: V: T:	Item		
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries ABAKALI GROUP			

	DISPUTE			
	Dispute Settlement (Clause 40)			
38	F: V: T:	ltem		
	SUBSTITUTE PROVISIONS			
	State Clauses (Clause 41)			
39	F: V: T:	Item		
	CONTRACT VARIABLES			
	The Schedule: Pre-Tender information (Clause 42).			
40	F: V: T:	Item		
	CONTRACTING AND OTHER PARTIES (Clause 42.1)			
	Employer: The Mvula Trust			
	Postal Address: Suite 43, Post net Private Bag x20004, Empangeni			
	Telephone: 035 772 2552			
	Facsimile:			
	Physical address:			
	Principal Agent: Abakali Group (Pty) Ltd			
	Postal Address: P.O Box 1273, Westville, Durban			
	Telephone: 031 279 3400			
	Facsimile:			
	Physical address:			
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries ABAKALI GROUP		K	

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.		
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 :-		
	_	
Section 1 Bill No. 1 Preliminaries	R	

To be advised.		
Penalty amount will be R 2000 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 : 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 5 000 000.00		
With a deductible of: 5% of Insured Amount		
DOCUMENTS (Clause 42.4)		
Clause 42.4.1		
Carried to Collection	R	
Section 1 Bill No. 1 Preliminaries ABAKALI GROUP		
ADAIMEI GIOOF		

		ı	1	
	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			
	SECTION B: PRELIMINARIES			
	DEFINITIONS AND INTERPRETATION (B1)			
	Definitions and Interpretation (B1)			
41	F: V: T:	Item		
	DOCUMENTS (B2)			
	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.			
	Carried to Collection		R	
	Section 1			
	Bill No. 1 Preliminaries			
	ABAKALI GROUP			

42	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:	Item		
	Availability of construction documentation (B2.3)			
44	F: V: T:	ltem		
	Interests of Agents (B2.4)			
45	F: V: T:	Item		
	Priced documents (B2.5)			
46	F: V: T:	Item		
	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.			
47	F: V: T:	Item		
	THE SITE (B3)			
	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.			
	Campia d An Calla Atlan		R	
	Section 1		K	
	Bill No. 1 Preliminaries			
	ABAKALI GROUP			

	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.			
48	F: V: T:	Item		
	Geotechnical investigation (B3.2)			
	A desktop geotechnical report is available upon request.			
49	F: V: T:	Item		
	Inspection of the Site (B3.3)			
50	F: V: T:	Item		
	Existing premises occupied (B3.4)			
51	F: V: T:	Item		
	Previous work - dimensional accuracy (B3.5)			
52	F: V: T:	Item		
	Previous work - defects (B3.6)			
53	F: V: T:	Item		
	Services - known (B3.7)			
54	F: V: T:	Item		
	Services - unknown (B3.8)			
55	F: V: T:	Item		
	Protection of trees (B3.9)			
56	F: V: T:	Item		
	Articles of value (B3.10)			
57	F: V: T:	Item		
	Inspection of adjoining properties (B3.11)			
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries ABAKALI GROUP			

58	F: V: T:	ltem		
	MANAGEMENT OF CONTRACT (B4)			
	Management of the Works (B4.1)			
59	F: V: T:	Item		
	Programme for the Works (B4.2)			
60	F: V: T:	Item		
	Progress meetings (B4.3)			
61	F: V: T:	Item		
	Technical meetings (B4.4)			
62	F: V: T:	Item		
	SAMPLES AND SHOP DRAWINGS (B5)			
	Samples of materials (B5.1)			
63	F: V: T:	Item		
	Workmanship samples (B5.2)			
64	F: V: T:	Item		
	Shop drawings (B5.3)			
65	F: V: T:	Item		
	TEMPORARY WORKS AND PLANT (B6)			
	Deposits and fees (B6.1)			
66	F: V: T:	Item		
	Enclosure of the works (B6.2)			
	Carried to Collection		R	
	Section 1		K	<u> </u>
	Bill No. 1 Preliminaries			
	ABAKALI GROUP			

	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.			
67	F: V: T:	Item		
	Advertising (B6.3)			
68	F: V: T:	Item		
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries ABAKALI GROUP			

	Plant and equipment (B6.4)			
69	F: V: T:	Item		
	Main notice board (B6.5)			
	One notice board shall be provided by the Contractor			
70	F: V: T:	Item		
	Subcontractors notice board (B6.6) (N/A)			
71	F: V: T:	Item		
	TEMPORARY SERVICES (B7)			
	Location (B7.1)			
72	F: V: T:	Item		
	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).			
73	F: V: T:	ltem		
	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).			
74	F: V: T:	Item		
	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).			
75	F: V: T:	Item		
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries ABAKALI GROUP		K	

	Ablution facilities (B7.5)			
	The contractor shall provide toilet facilties on site for the works in accordance with:			
	Alternative A (i.e. to be provided for by the Contractor).			
76	F: V: T:	ltem		
	PRIME COST AMOUNTS (B8)			
	Responsibility for prime cost amounts (B8.1)			
77	F: V: T:	Item		
	ATTENDANCE ON N/S SUBCONTRACTORS (B9)			
	General Attendance (B9.1)			
78	F: V: T:	Item		
	Special Attendance (B9.2)			
79	F: V: T:	Item		
	Commissioning - fuel, water and power (B9.3)			
80	F: V: T:	ltem		
	FINANCIAL ASPECTS (B10)			
	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).			
81	F: V: T:	Item		
	Payment of Preliminaries (B10.2)			
82	F: V: T:	Item		
	Adjustment of Preliminaries (B10.3)			
83	F: V: T:	Item		
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries ABAKALI GROUP			
				l

	Payment certificate cash flow (B10.4)			
84	F: V: T:	Item		
	Contractor information supply (B10.5)			
85	F: V: T:	Item		
	GENERAL (B11)			
	Protection of the Works (B11.1)			
86	F: V: T:	Item		
	Protection/isolation of existing/sectionally occupied works (B11.2)			
87	F: V: T:	Item		
	Site security (B11.3)			
88	F: V: T:	Item		
	Notice before covering work (B11.4)			
89	F: V: T:	Item		
	Disturbance (B11.5)			
90	F: V: T:	Item		
	Works cleaning and clearing (B11.6)			
91	F: V: T:	Item		
	Vermin (B11.7)			
92	F: V: T:	Item		
	Overhand work (B11.8)			
93	F: V: T:	Item		
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries ABAKALI GROUP			

	SECTION C: SPECIFIC PRELIMINARIES			
	Section C: Specific Preliminaries:			
	C1. Proprietary branded products			
	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.			
94	F: V: T:	Item		
	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.			
95	F: V: T:	Item		
	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.			
96	F: V: T:	Item		
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries ABAKALI GROUP			

1		i	1	1 1	
	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.				
97	F: V: T:	Item			
	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.				
98	F: V: T:	Item			
	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:				
	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:				
	Carried to Collection		R		
	Section 1 Bill No. 1 Preliminaries ABAKALI GROUP				

	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 countersignature on a daily basis. Copies of these records shall be for the Architect, Quantity Surveyor and Contractor.			
99	F: V: T:	Item		
	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.			
100	F: V: T:	Item		
	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.			
101	F: V: T:	Item		
	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.			
102	F: V: T:	ltem		
	C10. Method Statement			
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries ABAKALI GROUP			

	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.			
103	F: V: T:	Item		
	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.			
104	F: V: T:	Item		
	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.			
105	F: V: T:	Item		
	Carried to Collection		R	
	Section 1		K	_
	Bill No. 1 Preliminaries ABAKALI GROUP			

	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.			
106	F: V: T:	Item		
	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]			
107	F: V: T:	Item		
	C15. Storage Facilities			
108	The Contractor shall provide a Container for storage of materials.	Item		
109	F: V: T:	Item		
	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.			
110	F: V: T:	Item		
	Carried to Collection		R	
	Section 1 Bill No. 1			
	Preliminaries  ABAKALI GROUP			

111	SUB - TOTAL: FIXED ITEMS	Item		
112	SUB - TOTAL: VALUE - RELATED ITEMS	Item		
113	SUB - TOTAL: TIME - RELATED ITEMS	ltem		
	Carried to Collection Section 1		R	
	Bill No. 1 Preliminaries ABAKALI GROUP			

Section 1				
Bill No. 1				
Preliminaries				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	1			
	2			
	3			
	4			
	5			
	6			
	7			
	8			 
	9			 
	10			
	11			
	12			
	13			
	14			
	15			
	16			
	17			
	18			
	19			
	20			
Carried Forward Section 1		R		
Bill No. 1 Preliminaries ABAKALI GROUP				

Section 1				
Bill No. 1				
Preliminaries				
COLLECTION				
Brought Forward	Page No	R	Amount	
Total Brought Forward from Page No.	21			
	22			
	23			
	24			
Carried Forward to Summary of Section No. 1 Section 1		R		
Bill No. 1 Preliminaries				
ABAKALI GROUP				

Item No		Quantity	Rate	Amount
	BILL No. 2			
	HEALTH AND SAFETY			
	MODEL PREAMBLES			
	The tenderer is referred to the "General 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.			
	SUPPLEMENTARY PREAMBLES			
	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 familiarize him/herself with 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 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).			
	Carried to Collection		R	
	Section 1 Bill No. 2 Health and Safety ABAKALI GROUP			

	OCCUPATIONAL HEALTH AND SAFETY				
	General:				
1	Preparation of Contractor's site specific Health and Safety Plan.		Item		
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.	No			
7	Provision of first aid boxes.	No			
	Provision for Personal Protective Equipment and Protective Clothing:				
8	Reflective vests.	No			
9	Hard hats.	No			
10	Protective foot wear.	No			
11	Ear Plugs.	No			
12	Dust Masks.	No			
	Costs of Medical Certificates and Medical Surveillance:				
13	Initial (baseline) medical examinations.	No			
14	Exit Examinations.	No			
	Noise Monitoring:				
15	Establishment of noise zones.	No			
	Carried to Collection			R	
	Section 1 Bill No. 2 Health and Safety ABAKALI GROUP				

16	Audiograms.	No			
	C16. Covid-19 Compliance Measures				
17	The Contractor is required to price for Covid 19 compliance and the pricing thereof shall be deemed to include all the mandatory requirements.		ltem		
					_
	Section 1			R	_
	Bill No. 2 Health and Safety ABAKALI GROUP				

Section 1				
Bill No. 2				
Health and Safety				
COLLECTION				
Total Brought Forward from Page No.	Page No 27 28 29		Amount	
Carried Forward to Summary of Section No. 1		R		
Bill No. 2 Health and Safety ABAKALI GROUP				

Section 1 **SECTION SUMMARY - PRELIMINARIES** Page **Amount** No Preliminaries 26 Health and Safety 30 **Carried to Final Summary** R Section 1 **ABAKALI GROUP** 

Bill

Nο

Item No		Quantity	Rate	Amount	
	SECTION 2				
	BILL No. 1				
	<u>DEMOLITIONS</u>				
	MODEL PREAMBLES				
	The tenderer is referred to the "General 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.				
	SUPPLEMENTARY PREAMBLES				
	<u>View site</u>				
	Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained				
	<u>Explosives</u>				
	No explosives whatsoever may be used for demolition purposes unless otherwise stated.				
	<u>General</u>				
	Water supply pipes and other piping in ground that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings to the satisfaction of the principal agent.				
	Unless otherwise described all materials are to become the property of the contractor and are to be removed from the site.				
					_
	Carried to Collection Section 2 Bill No. 1 Demolitions ABAKALI GROUP		R		=

	Removal of asbestos material			
	All preparatory work, alterations, etc., to existing asbestos cement roof sheeting, gutters, rainwater pipes, etc., is to be carried out strictly by an approved and certified specialist company and in accordance with statutory requirements (Occupational Health and Safety Act, 1993 - Asbestos Regulations 2001) and all necessary precautions must be taken when working with and disposing of asbestos cement products and the disposal of waste water resulting from cleaning operations, etc.			
	The following shall apply in respect of asbestos removal			
	The removal of asbestos shall be carries out by a certified entity, registered in accordance with the Occupational Health and Safety Act. 1993 and the Asbestos Regulations 2001			
	Asbestos in all forms/building elements that is to be removed, shall be carried out in strict accordance with aforementioned regulation and a certificate issued by the entity as contemplated in the above, shall be provided per block for the removal thereof, where the term block shall in this context refer to any single, free standing building structure, regardless of size or purpose			
	Corresponding disposal certificates shall be issued by the facility at which the asbestos is disposed off, with said facility to, prior to the disposal of any asbestos material provide satisfactory proof that the facility is duly registered and fully compliant in terms of the act, to receive the asbestos material			
	Under no circumstances is the Contractor nor any of his duly authorised representatives to sell and/or give away asbestos material to any member/s of the school community, the community in general or the public at large. Should this be found to be occuring, the Contractor will be held responsible contractually and may further be prosecuted ciminally			
	The cost for complying with the above, and all requirements of regulation as reflected above is to be priced for in terms for removal of asbestos material. No further claims in this regard will therefore be entertained			
	Carried to Collection		R	_
	Section 2 Bill No. 1 Demolitions ABAKALI GROUP			
1		İ	1	

	TEMPORARY BARRIERS, SCREENS, ETC					
	Temporary barriers, screens, etc including removal					
1	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	m	120			
2	Extra over mesh fence for double leaf gate size 5.5 x 1,8m high.	No	2			
	DEMOLISHING AND REMOVING					
3	Single ablution block with flat roof and 20m² on plan and 3786mm extreme high at eave comprising concrete surface bed, one-brick external walls, half-brick internal walls and corrugated iron roof coverings on timber rafters.	No	1			
4	Cart away rubble from demolitions and dispose off site.		Item			
	SEPTIC TANKS, PITLATRINES					
	Existing septic tank, pitlatrines, etc.:					
5	Remove sludge, dispose to a dumping area to be located by the specialist Contractor for the Truck capacity of 3000 - 7000 Litre.		ltem		30 000.	00
6	Extra over de-sludging for breaking up reinforced concrete cover slab, filling up with granular and sealing off the pit, including carting away debris.		ltem		30 000.	00
	Carried to Collection			R		
	Section 2 Bill No. 1 Demolitions ABAKALI GROUP					

Section 2				
Bill No. 1				
Demolitions				
COLLECTION				
Total Brought Forward from Page No.	Page No 32 33 34		Amount	
Carried to Final Summary Section 2 Bill No. 1 Demolitions ABAKALI GROUP		R		

Item No		Quantity	Rate	Amount
	SECTION 3			
	BILL No. 1			
	EARTHWORKS (PROVISIONAL)			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - DWG 35 - Female Ablutions			
	MODEL PREAMBLES			
	The tenderer is referred to the "General 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.			
	SUPPLEMENTARY PREAMBLES			
	Proprietary products in descriptions:			
	Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.			
	Nature of material to be excavated:			
	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".			
	Carting away of excavated material:			
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations, or alternatively, from stock piles situated on the building site.			
	Carried to Collection		R	
	Section 3 Bill No. 1 Earthworks (Provisional) ABAKALI GROUP			

Dewatering of excavations:		
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		
Density testing on filling:		
Rates for filling, etc. shall include for all density and soil type testing to prove that the specified compaction is achieved. When additional testing is done on instruction of the Principal Agent and these tests are successful, they will be paid for additionally.		
Imported fill:		
"Filling and bedding to trenches etc. to be in compliance with SABS 1200 DB and LB respectively"		
Classification of excavated material		
"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 <sup>3</sup> in volume.		
Section 3	R	
Bill No. 1 Earthworks (Provisional) ABAKALI GROUP		

	<b>EXCAVATION OTHER THAN BULK</b>				
	Excavation in earth not exceeding 2m deep:				
1	Trenches. A0:23 A1:20 A6:19 AD:19	m3	81		
2	Holes.	m3	167		
	A0:50 A1:39 A6:23 AD:55				
3	Reduced levels under floors.  A0:8 A1:6 A6:6 AD:8	m3	28		
	Back excavation of vertical sides of excavation in earth for working space including backfilling compacted to 98% Mod. AASHTO density at 2% OMC				
4	Not exceeding 500mm deep for placing and removing formwork to walls, etc. against excavated face  A0:35 A1:0 A6:0 AD:0	m2	35		
5	Exceeding 500mm and not exceeding 1.5m deep for placing and removing formwork to walls, etc. against excavated face  A0:15  A1:0  A6:0  AD:0	m2	15		
	Extra over trench and hole excavations in earth for excavation in:				
6	Soft rock. A0:30 A1:0 A6:0 AD:0	m3	30		
7	Hard rock. A0:148 A1:0 A6:0 AD:0	m3	148		
	Extra over back excavation in earth for working space for excavation in soft rock				
8	Not exceeding 500mm deep for placing and removing formwork to walls, etc. against excavated face  A0:100 A1:0 A6:0 AD:0	m2	100		
9	Exceeding 500mm and not exceeding 1.5m deep for placing and removing formwork to walls, etc. against excavated face	m2	50		
	A0:50 A1:0 A6:0 AD:0				
				_	
	Section 3 Bill No. 1 Earthworks (Provisional) ABAKALI GROUP	on		R	

	Extra over back excavation in earth for working space for excavation in hard rock			
10	Not exceeding 500mm deep for placing and removing formwork to walls, etc. against excavated face n  A0:40 A1:0 A6:0 AD:0	12 4	o	
11	Exceeding 500mm and not exceeding 1.5m deep for placing and removing formwork to walls, etc. against excavated face  A0:25 A1:0 A6:0 AD:0	2	5	
	Extra over all excavations for carting away:			
12	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.  A0:75  A1:59  A6:42  AD:76	3 25	1	
	Risk of collapse of excavations:			
13	,, <u>200</u> p.	23	2	
14	A0: 67 A1: 57 A6: 55 AD: 53  Ditto, but from ground level to exceeding 1,5m.  A0: 46 A1: 39 A6: 29 AD: 48	16	2	
	Keeping excavations free of water:			
15	Keeping excavations free from mud and all water including subterranean sources.	Iter	n	
	EARTH FILLING, ETC.			
	Earth filling obtained from the excavations and / or prescribed stock piles on site (minimum G7 tested material) compacted to 93% Mod. AASHTO density:			
16	Backfilling to trenches, holes, etc.  A0:1 A1:1 A6:0 AD:1	3	3	
17	Under floors, steps, pavings, trenches, etc.  A0:5 A1:4 A6:3 AD:5	1	6	
	Carried to Collection		R	
	Section 3 Bill No. 1 Earthworks (Provisional) ABAKALI GROUP			

	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.			
18	Under floors, steps, pavings, trenches, etc. m3 A0:22 A1:17 A6:14 AD:21	74		
	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.			
19	Under floors, steps, pavings, trenches, etc. m3  A0:11 A1:9 A6:7 AD:10	37		
20	Backfilling to holes, trenches, etc. m3  A0:13 A1:11 A6:10 AD:11	47		
	Coarse river sand filling supplied by the contractor:			
21	Under floors etc. m3 A0:3 A1:2 A6:2 AD:3	10		
	Compaction of surfaces:			
22	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density.  A0:52 A1:41 A6:32 AD:54	179		
	Prescribed density tests on filling:			
23	Allow for compaction tests by an approved laboratory to determine density of filling material.  No  A0:8 A1:10 A6:8 AD:11	37		
	Carried to Collection		R	
	Section 3 Bill No. 1 Earthworks (Provisional) ABAKALI GROUP			

	SOIL POISONING  Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:				
24	Under floors, etc., including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming.  A0:31 A1:24 A6:22 AD:30	m2	107		
25	To bottoms and sides of trenches, holes, etc.  A0:154 A1:130 A6:110 AD:140	m2	534		
	Carried to Collection	ı		R	
	Section 3 Bill No. 1 Earthworks (Provisional) ABAKALI GROUP				

### Bill No. 1   Earthworks (Provisional)   COLLECTION	Section 3					
Carried Forward to Summary of Section No. 3   R   Section 3   Bill No. 1   Carried Forward to Summary of Section No. 3   R   R   Carried Forward to Summary of Section No. 3   R   R   Carried Forward to Summary of Section No. 3   R   Carried Forward to Summary of Section No. 3   R   Carried Forward to Summary of Section No. 3   R   Carried Forward to Summary of Section No. 3   R   Carried Forward to Summary of Section No. 3   R   Carried Forward to Summary of Section No. 3   R   Carried Forward to Summary of Section No. 3   R   Carried Forward to Summary of Section No. 3   R   Carried Forward to Summary of Section No. 3   R   Carried Forward to Summary of Section No. 3   R   Carried Forward to Summary of Section No. 3   R   Carried Forward to Summary of Section No. 3   R   Carried Forward to Summary of Section No. 3   Carried Forward to	Bill No. 1					
Page No   Amount	Earthworks (Provisional)					
Total Brought Forward from Page No.   36   37   38   39   40   41   41   41   41   41   41   41	COLLECTION					
Carried Forward to Summary of Section No. 3  Section 3 Bill No. 1			Page No		Amount	
Carried Forward to Summary of Section No. 3 Section 3 Bill No. 1	Total Brought Forward from Page	e No.	36			
Carried Forward to Summary of Section No. 3 Section 3 Bill No. 1			37			ļ
Carried Forward to Summary of Section No. 3 Section 3 Bill No. 1			38			
Carried Forward to Summary of Section No. 3 Section 3 Bill No. 1			39			
Carried Forward to Summary of Section No. 3 Section 3 Bill No. 1						ļ
Section 3 Bill No. 1			41			
Section 3 Bill No. 1						
Section 3 Bill No. 1						
Section 3 Bill No. 1						
Section 3 Bill No. 1						
Section 3 Bill No. 1						
Section 3 Bill No. 1						
Section 3 Bill No. 1						
Section 3 Bill No. 1						
Section 3 Bill No. 1						
Section 3 Bill No. 1						
Section 3 Bill No. 1						
Section 3 Bill No. 1						
Section 3 Bill No. 1						
Section 3 Bill No. 1						
Section 3 Bill No. 1	Commind Command to C	mamany of Sastian No. 2				
	Section 3	ummary of Section No. 3				_
Earthworks (Provisional)	Earthworks (Provisional)					
ABAKALI GROUP	ABAKALI GROUP					

Item No		Quantity	Rate	Amount
	BILL No. 2			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - DWG 35 - Female Ablutions			
	MODEL PREAMBLES			
	The tenderer is referred to the "General 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.			
	SUPPLEMENTARY PREAMBLES			
	Proprietary products in descriptions:			
	Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.			
	Cost of tests:			
	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).			
	Carried to Collection		R	
	Section 3 Bill No. 2 Concrete, Formwork and Reinforcement ABAKALI GROUP			

Formwork:		
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 reuse.		
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.		
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.		
Carried to Collection	R	
Section 3 Bill No. 2 Concrete, Formwork and Reinforcement ABAKALI GROUP		

	UNREINFORCED CONCEXCAVATED SURFACE		ST AGAINST				
	15Mpa/19mm Concrete						
1	Surface blinding under foot			m3	3		
	A0 : 1 A1 : 1	A6 : 1	AD : 1				
	REINFORCED CONCRE		<u>AGAINST</u>				
	30MPa/20mm concrete:						
2	Strip footings to walls.			m3	14		
		A6 : 3	AD:3				
	REINFORCED CONCRE	<u>TE</u>					
	30MPa/20mm concrete:						
3	Surface beds on waterproo	fing.		m3	18		
	A0:5 A1:4	A6 : 4	AD : 5				
4	Suspended Slabs.			m3	15		
	A0 : 3 A1 : 4	A6 : 3	AD : 5				
5	Ground base slabs.  A0 : 4 A1 : 3	A6 : 2	AD : 5	m3	14		
6	Cavity walls.			m3	17		
	A0 : 5 A1 : 4	A6 : 3	AD : 5				
	TEST BLOCKS						
	Test blocks:						
7	Making and testing of 150x strength test cubes (Provisi		n concrete	No	24		
	A0 : 6 A1 : 6	A6 : 3	AD : 9				
		Ca	rried to Collectic	on		R	
	Section 3						
	Bill No. 2 Concrete, Formwork and R	einforcemer	nt				
	ABAKALI GROUP						

	FINISHING TOP SURFACE OF CONCRETE				
	Finishing top surfaces of concrete smooth with a wood float:				
3	Surface beds, suspended slabs, ground slabs, etc.  A0:83  A1:65  A6:54  AD:84	m2	286		
	Finishing top surfaces of concrete smooth with a steel float:				
9	Surface beds, suspended slabs, etc.  A0:13 A1:17 A6:16 AD:25	m2	70		
	Charmfers at corners				
	19 x 19mm triangular fillet at corners formed of unreinforced concrete steel trowelled.	m	71		
	A0:15 A1:17 A6:17 AD:23				
	ROUGH FORMWORK (DEGREE OF ACCURACY III)				
	Rough Formwork to Sides:				
	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	69		
	A0:19 A1:17 A6:13 AD:21				
	Permanent Formwork:				
:	Soffit of slab over pit.	m2	70		
	A0:13 A1:17 A6:16 AD:25				
	Extra on permanent formwork for boxing or blocking in or boxing out to form:				
3	835mm diameter circular opening through 370mm thick slab.  A0:2 A1:2 A6:2 AD:2	No	8		
	450mm Diameter opening through 255mm thick slab.  A0:4 A1:1 A6:0 AD:0	No	5		
,	200mm Diameter opening through 255mm thick slab.  A0:0 A1:0 A6:2 AD:6	No	8		
i	150mm Diameter opening through 255mm thick slab.	No	3		
	A0:0 A1:3 A6:0 AD:0				
	Carried to Collection			R	
	Section 3 Bill No. 2 Concrete, Formwork and Reinforcement				
	ABAKALI GROUP				

A0 : 18	A1 : 0	A6:0	AD:0			
					ll l	
		Cai	rried to Collection		R	
Section 3						
Bill No. 2	ا ا≕داء عاسمین	.lmfa:	4			
Concrete, Form ABAKALI GRO	work and Re	emorcemen	IL .			
ADANALI GRU	<b>U</b> 1					

	SMOOTH FORMWORK (DEGREE OF ACCURACY I)				
	Smooth Formwork to Sides:				
18	Edges, risers, ends and reveals not exceeding 300mm high or wide.  A0:11 A1:6 A6:4 AD:8	m	<b>2</b> 9		
	MOVEMENT JOINTS ETC				
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:				
19	12mm Joints not exceeding 300mm high (Provisional).  A0: 28 A1: 24 A6: 23 AD: 22	m	97		
	Saw cut joints:				İ
20	6 x 40mm Saw cut joints in top of concrete (Provisional).  A0:42 A1:36 A6:35 AD:33	m	145		
	REINFORCEMENT (PROVISIONAL)				
21	High tensile steel reinforcement bars to structural concrete work.  A0:0.65 A1:0.59 A6:0.51 AD:2.68	t	4.43		
	Fabric reinforcement:				
22	REF. 888 fabric reinforcement in concrete footings, walls, base slabs etc.  A0:121 A1:103 A6:78 AD:138	m2	441		
	AU.121 A1.103 AU.70 AD.130				
	Carried to Collection			R	
	Section 3 Bill No. 2				
	Concrete, Formwork and Reinforcement  ABAKALI GROUP				

Section 3				
Bill No. 2				
Concrete, Formwork and Reinforcement				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	43			
	44			
	45			
	46			
	47			
	48			
Carried Forward to Summary of Section No. 3 Section 3		R		
Bill No. 2 Concrete, Formwork and Reinforcement				
ABAKALI GROUP				
		1	I	ı

Item No		Quantity	Rate	Amount	
	BILL No. 3				
	MASONRY				
	Quantity Split:				
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:				
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - DWG 35 - Female Ablutions				
	MODEL PREAMBLES				
	The tenderer is referred to the "General 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				
	SUPPLEMENTARY PREAMBLES				
	BRICKWORK				
	<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				
	Hollow walls etc				
	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 "Brixeal" bitumen emulsion waterproofing coating.				
					_
	Carried to Collection		R		_
	Section 3 Bill No. 3 Masonry ABAKALI GROUP				

Face bricks		
Bricks shall be ordered timeously to obtain uniformity in size and colour		
Pointing		
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc		
<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"		
Carried to Collection	R	
Section 3		
Bill No. 3 Masonry		
ABAKALI GROUP		

	BRICKWORK IN FOUNDATIONS (PROVISIONAL)  Brickwork consisting of solid bricks with 10.5 MPa minimum nominal compressive strength in Class I mortar with Coprox masonry waterproofing or equal approved waterproof cement additive. Add 2.5kg Coprox waterproof cement additive for every 50kg of cement used in mortar mix (Cement to be 42.5N all-purpose cement):				
1	One brick walls.	m2	103		
2	A0:30 A1:25 A6:24 AD:23  345mm thick cavity brick walls made of two leafs of 110mm wall with 135mm concrete fill (concrete elsewhere measured).  A0:34 A1:29 A6:21 AD:37	m2	120		
	BRICKWORK AND BLOCKWORK SUNDRIES				
	Galvanized brickwork reinforcement				
3	115mm Wide reinforcement built in horizontally A0:153 A1:152 A6:89 AD:214	m	609		
4	230mm Wide reinforcement built in horizontally.  A0: 352 A1: 249 A6: 253 AD: 260	m	1 114		
5	Ditto, but in foundations (Provisional).  A0:202 A1:173 A6:167 AD:159	m	701		
	Cramps, ties, etc:				
6	30 x 2mm Galvanized roof tie 1500mm long with one end fixed to timber and other built into brickwork or concrete.  A0:25 A1:23 A6:20 AD:26	No	94		
	Air bricks etc:				
7	229 x 152mm terracotta clay vermin proof air brick A0:4 A1:4 A6:4 AD:4	No	16		
	Carried to Collection Section 3 Bill No. 3 Masonry ABAKALI GROUP			R	_

	Bagging and sealing the outer face of the inner skin of walls with 1:3 cement and sand mixture and seal with two coats "Brixeal" bitumen emulsion waterproofing coating:				
8	To walls (Provisional).  A0 : 73	m2	268		
	<u>Samples</u>				
9	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.		ltem		
	FACE BRICK				
	"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):				
10	Extra over brickwork for face brickwork externally.	m2	16		
	A0:5 A1:4 A6:2 AD:5				
11	Extra over for face brick in foundations (Provisional).  A0:30 A1:25 A6:24 AD:23	m2	103		
12	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.	m2	23		
	A0:6 A1:5 A6:5 AD:6				
13	One brickwall pointed on both sides.	m2	340		
	A0:107 A1:76 A6:78 AD:79				
14	Half brickwall pointed on both sides.	m2	59		
	A0:11 A1:16 A6:5 AD:27				
15	Fair raking cutting. A0 : 9 A1 : 9 A6 : 9 AD : 9	m	36		
	Carried to Collection Section 3 Bill No. 3 Masonry ABAKALI GROUP			R =	

"Rustgold face bricks	BS/Qunu Trav pointed with r ces, 220mm wi	<u>vertine" or «</u> ecessed jo					
cement mor soffit includi		on top, edg itting betwe	ng and jointed in e and projecting en reveals and	m	23		
A0 :	A1:5	A6:4	AD : 7				
	e header course jointed in ceme	ent mortar a		m	27		
A0 :	3 A1:6	A6 : 5	AD : 8				
		•					
Section 3		Ca	rried to Collection			R	
Bill No. 3 Masonry							
ABAKÁLI G	ROUP						

Location 0		I	II	ı
Section 3				
Bill No. 3				
Masonry				
COLLECTION				
	Page		Amount	
Total Brought Forward from Page No.	<b>No</b> 50			
	51			
	52			
	53			
	54			
	O I			
Carried Forward to Summary of Section No. 3		R		
Section 3 Bill No. 3				
Masonry ABAKALI GROUP				

Item No		Quantity	Rate	Amount
	BILL No. 4			
	WATERPROOFING			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - DWG 35 - Female Ablutions			
	MODEL PREAMBLES			
	The tenderer is referred to the "General 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.			
	SUPPLEMENTARY PREAMBLES			
	Proprietary products in descriptions:			
	Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.			
	Waterproofing			
	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).			
	Carried to Collection		R	
	Section 3 Bill No. 4 Waterproofing ABAKALI GROUP			

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 Section 3	R	<u> </u>
Bill No. 4 Waterproofing ABAKALI GROUP		

	DAMPPROOFING OF WALLS AND FLOORS				
	One layer of 250 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':				
1	Under surface beds, bases, etc.  A0:52 A1:41 A6:32 AD:54	m2	179		
	One layer of 350 micron embossed dampcourse waterproof sheeting below walls, sills, etc:				
2	Below walls, sills, etc.  A0:3 A1:2 A6:2 AD:3	m2	11		
	JOINT SEALANTS ETC				
	Clear Neutral silicone sealant:				
3	In joint sealing and pointing all round external window and door frames.	m	188		
	A0:55 A1:43 A6:31 AD:61  Two-part grey polysulphide sealing compound				
	including backing cord, bond breaker, primer, etc				
4	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary (Provisional).	m	242		
	A0:70 A1:60 A6:58 AD:55				
	WATERPROOFING TO PIT WALLS				
	Coprox waterproofing / ABE dura slurry or similar approved product to plastered walls, subject to approval by the Principal Agent prior to application.				
5	On plastered wall surfaces including 100mm overlap at the base slab	m2	126		
	A0:36 A1:30 A6:22 AD:38				
	Carried to Collection			R	
	Section 3 Bill No. 4				
	Waterproofing ABAKALI GROUP				

Section 3		I	II	ı
Bill No. 4				
Waterproofing				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	56			
	57			
	58			
Carried Forward to Summary of Section No. 3		R		
Section 3 Bill No. 4				
Waterproofing ABAKALI GROUP				

Item No		Quantity	Rate	Amount
	BILL No. 5			
	ROOF COVERINGS			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - DWG 35 - Female Ablutions			
	MODEL PREAMBLES			
	The tenderer is referred to the "General 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.			
	SUPPLEMENTARY PREAMBLES			
	<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 drived 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			
	Quality Assurance			
	The manufacturer shall be assessed and certifed as complying with ISO 9001: 2008 Quality Management System			
	Carried to Collection		R	
	Section 3 Bill No. 5 Roof Coverings Etc. ABAKALI GROUP			

Guarantee		
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.		
<u>Safety</u>		
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		
		]
Carried to Collection	R	
Section 3 Bill No. 5 Roof Coverings Etc. ABAKALI GROUP		

## 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 q. 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 Cleaning of Roofs, etc 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 **Carried to Collection** R Section 3 Bill No. 5 Roof Coverings Etc. **ABAKALI GROUP**

		<u></u>
Carried to Collection  Section 3  Bill No. 5  Roof Coverings Etc.	R	<del></del>
Roof Coverings Etc.  ABAKALI GROUP		

	ROOF COVERINGS			
	PROFILED METAL SHEETING AND			
	ACCESSORIES			
	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 :			
1	Roof sheeting laid to a mono-pitch. m2	149		
	A0:42 A1:34 A6:31 AD:42			
	0.58mm Flashings pre-painted to match roof			
	sheeting and fixed in strict accordance with manufacturer's instructions:			
2	Mono pitched ridge capping with 225mm lapping secured onto the roof.	34		
	A0:10 A1:8 A6:7 AD:9	54		
	ROOF AND WALL INSULATION			
	"Sisalation Grade FR430" or equal approved heavy industrial insulation			
	industrial insulation			
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 m2	149		
	A0:42 A1:34 A6:31 AD:42			
	Carried to Collection		R	
	Section 3			
	Bill No. 5 Roof Coverings Etc.			
	ABAKALI GROUP			

		1	II .	
Section 3				
Bill No. 5				
Roof Coverings Etc.				
COLLECTION				
	Page		Amount	
Total Brought Forward from Page No.	<b>No</b> 60			
	61			
	62			
	63			
	64			
Carried Forward to Summary of Section No. 3		R		
Section 3 Bill No. 5				
Roof Coverings Etc.  ABAKALI GROUP				
ADARALI GROUP				

Item No		Quantity	Rate	Amount
	BILL No. 6			
	CARPENTRY & JOINERY			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - DWG 35 - Female Ablutions			
	MODEL PREAMBLES			
	The tenderer is referred to the "General 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.			
	SUPPLEMENTARY PREAMBLES			
	FIXING			
	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.			
	Carried to Collection		R	
	Section 3 Bill No. 6 Carpentry and Joinery ABAKALI GROUP			

	CARPENTRY							
	Sawn softwood:							
1	38 x 152mm Wall	plate.			m	67		
	<b>A</b> 0 : 19	A1 : 15	<b>A</b> 6 : 14	AD : 19				
2	50 x 76mm Purlin	S.			m	269		
	A0 : 76	A1:62	A6:56	AD : 75				
3	50 x 76mm Bracir	_			m	48		
	A0 : 12	A1 : 12	A6:12	AD : 12				
4	38 x 152mm Raft				m	186		
	A0 : 44	A1:44	A6 : 44	AD : 53				
	Sundries:							
5	TRI FIX or equal a				No	185		
	A0 : 45	A1:45	A6:40	AD : 55				
	EAVES, VERGE	ES, ETC						
	"Everite Nutec"	or equal a	approved f	ibre cement				
6	12 x 225mm Fasc rafter feet includir strips, etc.				m	34		
_				-				
7	85 x 275 x 6mm E to purlin ends incl jointing strips, scr	luding gal	vanised ste		m	36		
	A0:9	A1:9	A6:9	AD: 9				
	DOORS ETC							
	SANS Approved	meranti:						
8	44mm Framed, le flush ply panel int comprising 44 x 1 bottom rail, 44 x 1 vertical "v" jointed A0: 2	ernally siz 10mm top 150mm lo	ze 813 x 20 o rail and si ck rail and :	32mm high tiles, 44 x 220mm	No	5		
	Section 3 Bill No. 6		Ca	arried to Collection			R	

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	3		
10	44mm Braced and ledged door size 862 x 1000mm (D3).	No	3		
	A0:0 A1:3 A6:0 AD:0				
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	14		
	FRAMED FRAMES, ETC				
	Meranti Frames bolted to wall with expanding masonry bolts - four per style including quadrant beads on both sides:				
12	70 x 108mm rebated meranti frame .	m	87		
	A0:23 A1:18 A6:14 AD:32				
	Meranti Frames fixed against brickwall using galvanised steel lugs bolted with expanding masonry bolts - four per style including quadrant beads on both sides:				
13	70 x 108mm rebated meranti frame .	m	16		
	A0:5 A1:11 A6:0 AD:0  Carried to Collection Section 3			R	
	Bill No. 6				
	Carpentry and Joinery ABAKALI GROUP				

Section 3				1
Bill No. 6				
Carpentry and Joinery				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	66			
	67			[
	68			
Coming Engaged to Community of Continue No. 0				
Carried Forward to Summary of Section No. 3 Section 3		R		_
Bill No. 6 Carpentry and Joinery				
ABAKALI GROUP				

Item No		Quantity	Rate	Amount	
	BILL No. 7				
	IRONMONGERY				
	Quantity Split:				
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:				
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - DWG 35 - Female Ablutions				
	MODEL PREAMBLES				
	The tenderer is referred to the "General 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.				
	SUPPLEMENTARY PREAMBLES				
	Keys/Locks				
	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				
					_
	Carried to Collection Section 3		R		_
	Bill No. 7 Ironmongery ABAKALI GROUP				

	HINGES:				
1	75 x 100mm Brass Medium duty ball bearing HMP butt hinges.  A0:6.0 A1:8.0 A6:3.0 AD:7.0	Pairs	24.0		
	LOCKS				
2	"UNION 2277-78SS" or equal approved three lever sash mortice lockset.	No	7		
	A0:3 A1:2 A6:1 AD:1				
3	"UNION w/c indicator bolt satin chrome - Code CZ80941SC	No	17		
	A0:3 A1:6 A6:2 AD:6				
4	E1511 Erebus H/D Adjustable roller catch - SC	No	3		
	A0:0 A1:3 A6:0 AD:0				
	HANDLES				
5	"Dorma DPH301B" or equal approved Stainless Steel Straight Tubular Pull handle flange fixing.	No	21		
	A0:6 A1:5 A6:3 AD:7				
6	Pull handle D 152 x 19mm striaght BT	No	3		
	A0:0 A1:3 A6:0 AD:0				
	"Union" or equally approved				
7	CZ682-24SC Radius lever furniture  A0: 3.0	Sets	7.0		
	Sundries:				
8	Stainless Steel Hat and coat hook, code DHC - SS-030-A or equal approved.	No	14		
	A0:3 A1:3 A6:2 AD:6				
9	38mm Diameter black rubber door stop plugged and screwed to wall.	No	24		
	A0:6 A1:8 A6:3 AD:7				
	SIGN PLATES:				
	Carried to Collection			R	
	Section 3				
	Bill No. 7 Ironmongery				
	ABAKALI GROUP				

all in accordar Schools.	ce with the	standard s	sign plates for				
	ed and screv	wed to wal	ls with chromium				
plated dome he	aded screws			No	7		
A0 : 3	A1 : 2	A6:1	AD : 1				
Continue 2		Ca	rried to Collection			R	
Section 3 Bill No. 7							
ronmongery ABAKALI GRO	UP						

	SUNDRIES			
	Halcast or equal approved"			
11	Thiefproof toilet roll holder plugged. No A0:8 A1:8 A6:7 AD:14	37		
	Grade 304 stainless steel ware:			
12	32mm outside diameter x 1,6mm thick tubular wall mounted side stainless steel grab rail 1,06m girth with two 45 degree and two 90 degree formed bends and each end fitted with 80mm diameter x 5mm thick flange welded on and four times countersunk holed for and plugged and screwed to wall with stainless steel crews.  No  A0:1  A1:1  A6:0  AD:0	2		
13	32mm outside diameter x 1,6mm thick tubular wall mounted around cistern back stainless steel grab rail 1,23m girth with two 90 degree formed bends and each end fitted with 80mm diameter x 5mm thick flange welded on and four times countersunk holed for and plugged and screwed to wall with stainless steel crews.	2		
	A0:1 A1:1 A6:0 AD:0			
	Satin Grey Plastics or equal approved			
14	"Satin plastic N-SBIN-12-SA SHE Bin size 463 x 140 x 480mm, floor standing loose.  A0:2 A1:2 A6:2 AD:2	8		
	Carried to Collection Section 3		R	_
	Bill No. 7 Ironmongery ABAKALI GROUP			

Section 3				
Bill No. 7				
Ironmongery				
COLLECTION				
COLLECTION  Total Brought Forward from Page No.	Page No 70 71 72 73		Amount	
Carried Forward to Summary of Section No. 3 Section 3 Bill No. 7 Ironmongery ABAKALI GROUP		R		

Item No		Quantity	Rate	Amount	
	BILL No. 8				
	METALWORK				
	Quantity Split:				
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:				
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - DWG 35 - Female Ablutions				
	MODEL PREAMBLES				
	The tenderer is referred to the "General 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.				
	SUPPLEMENTARY PREAMBLES				
	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				
	ALUMINIUM WINDOWS				
	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.				
					_
	Section 3 Bill No. 8 Metalwork ABAKALI GROUP		R		=

	Natural anodised aluminium windows glazed with 6.38mm safety laminated glass and plugged to brickwork:				
1	Window Size 600 x 600mm high complete, including ironmongery etc, all as per Window Type W01.  A0:11 A1:8 A6:7 AD:12	No	38		
	HOT DIP GALVANIZED STEEL GATES				
	Note: The contractor is to check on site measurements before placing of order.				
	Security Gate consisting of 25 x 25 x 2mm galvanised mild steel frame with 12mm galvanised mild steel square bars infill placed at 109mm centres, hung with one pair of galvanised mild steel hinges including locks, handles, ironmongery complete and fixed to brickwork:				
2	Security gate size 900 x 2050mm high (G1).  A0: 2 A1: 1 A6: 1 AD: 1	No	5		
3	Security double gate size 1800 x 2050mm high.	No	1		
	A0:1 A1:0 A6:0 AD:0				
	LOCKABLE MANHOLE COVERS				
4	600mm diameter lockable circular type M4A product or similar approved manhole SANS 1882 medium duty Dough Moulding compound 4A hinged lid and frame cast into concrete upstand.	No	9		
	A0:2 A1:2 A6:2 AD:3				
	Carried to Collectio	n		R	
	Section 3 Bill No. 8				
	Metalwork				
	ABAKALI GROUP				

Section 3				
Bill No. 8				
Metalwork				
COLLECTION				
COLLECTION  Total Brought Forward from Page No.	Page No 75 76		Amount	
Carried Forward to Summary of Section No. 3 Section 3 Bill No. 8 Metalwork ABAKALI GROUP		R		

		Quantity	Rate	Amount
BILL No. 9				
PLASTERING				
Quantity Split:				
Note that the total quantity per each item is split into the various buildings and appears below each description as follows:				
A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - DWG 35 - Female Ablutions				
MODEL PREAMBLES				
The tenderer is referred to the "General 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.				
SCREEDS				
Untinted granolithic, on concrete:				
30mm Thick on floors and landings.  A0:60 A1:55 A6:50 AD:67	m2	232		
Skirtings				
75mm High coved granolithic skirting. A0:89 A1:80 A6:74 AD:86	m	329		
INTERNAL PLASTER (PIT WALLS)				
15mm thick of 1:4 sand cement plaster with Coprox masonry waterproofing or equal approved waterproof cement additive. Add 2.5kg Coprox waterproof cement additive for every 50kg of cement used in plaster mix				
On walls. A0:34 A1:29 A6:21 AD:37	m2	120		
Carried Forward to Summary of Section No. 3 Section 3 Bill No. 9 Plastering ABAKALI GROUP			R	
	PLASTERING Quantity Split:  Note that the total quantity per each item is split into the various buildings and appears below each description as follows:  A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions A0 - DWG 35 - Female Ablutions MODEL PREAMBLES  The tenderer is referred to the "General 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.  SCREEDS  Untinted granolithic, on concrete:  30mm Thick on floors and landings. A0:80 A1:55 A6:50 AD:67  Skirtings  75mm High coved granolithic skirting. A0:89 A1:80 A6:74 AD:86  INTERNAL PLASTER (PIT WALLS)  15mm thick of 1:4 sand cement plaster with Coprox masonry waterproofing or equal approved waterproof cement additive. Add 2.5kg Coprox waterproof cement additive for every 50kg of cement used in plaster mix  On walls.  A0:34 A1:29 A6:21 AD:37  Carried Forward to Summary of Section No. 3  Section 3  Bill No. 9  Plastering	PLASTERING Quantity Split:  Note that the total quantity per each item is split into the various buildings and appears below each description as follows:  A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - DWG 35 - Female Ablutions  MODEL PREAMBLES  The tenderer is referred to the "General 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.  SCREEDS  Untinted granolithic, on concrete:  30mm Thick on floors and landings.  A0: 80 A1: 55 A6: 50 AD: 67  Skirtings  75mm High coved granolithic skirting.  A0: 89 A1: 80 A6: 74 AD: 86  INTERNAL PLASTER (PIT WALLS)  15mm thick of 1:4 sand cement plaster with Coprox masonry waterproofing or equal approved waterproof cement additive. Add 2.5kg Coprox wa	BILL No. 9 PLASTERING Quantity Split:  Note that the total quantity per each item is split into the various buildings and appears below each description as follows:  A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - DWG 35 - Female Ablutions MODEL PREAMBLES  The tenderer is referred to the "General 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.  SCREEDS  Untinted granolithic, on concrete:  30mm Thick on floors and landings.  A0 : 80 A1 : 85 A6 : 50 AD : 87  Skirtings  75mm High coved granolithic skirting.  A0 : 89 A1 : 80 A6 : 74 AD : 86  INTERNAL PLASTER (PIT WALLS)  15mm thick of 1:4 sand cement plaster with Coprox masonry waterproofing or equal approved waterproof cement additive. Add 2.5kg Coprox waterproof cement additive for every 50kg of cement used in plaster mix  On walls.  A0 : 34 A1 : 29 A6 : 21 AD : 37  Carried Forward to Summary of Section No. 3  Section 3  Bill No. 9 Plastering	BILL No. 9 PLASTERING Quantity Split:  Note that the total quantity per each item is split into the various buildings and appears below each description as follows:  A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A2 - DWG 35 - Female Ablutions A3 - DWG 35 - Female Ablutions A4 - DWG 35 - Female Ablutions MODEL PREAMBLES  The tenderer is referred to the "General 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.  SCREEDS  Untinted granolithic, on concrete:  30mm Thick on floors and landings. A0:80 A1:55 A3:50 AD:67  Skirtings  75mm High coved granolithic skirting. A0:89 A1:80 A6:74 AD:86  INTERNAL PLASTER (PIT WALLS)  15mm thick of 1:4 sand cement plaster with Coprox masonry waterproof cement additive. Add 2.5kg Coprox waterproof cement additive for every 50kg of cement used in plaster mix  On walls.  Carried Forward to Summary of Section No. 3  Section 3  Bill No. 9 Plastering

Item No						Quantity	Rate	Amount
	BILL No. 10							
	PLUMBING A		INAGE					
	Quantity Split:							
	Note that the total various buildings follows:			m is split into the ach description as				
	A0 - DWG 04 - S A1 - DWG 06 - G A6 - DWG 14 - N AD - DWG 35 - F	Brade R Abl Male Ablutio	utions ns					
	MODEL PREA	MBLES						
	The tenderer is r Trades 2017" for expansion of des which shall be de relevant rates.	supplemer scriptions, a	ntary and co	omprehensive provision for				
	RAINWATER DISPOSAL:							
	Watertite or equ	ial approve	ed Aluminiı	um Gutters and				
1	125 x 85 x 0.6mr gutter brackets a			ers including	m	34		
	A0 : 10	A1 : 8	A6:7	AD : 9				
2	Extra over eaves	gutter for s A1:2	stopped end A6 : 2	d. AD:2	No	8		
3	Extra over eaves	gutter for o			No	8		
	A0 : 2	Α1 : 2	A6:2	AD : 2	NO	0		
4	100 x 75 x 0.6mr wall with and inc rainwater tanks (	luding propi	rietary holde measured).		m	32		
	A0 : 8	A1 : 8	A6:8	AD:8				
5	Extra over rainwa				No	16		
	A0 : 4	A1 : 4	A6:4	AD : 4				
	Section 3		Car	ried to Collection			R	
	Bill No. 10							
	Plumbing and Dr  ABAKALI GROU		visional)					
	I				ļ			II I

Carried to Collection Section 3	R	
Bill No. 10 Plumbing and Drainage (Provisional)  ABAKALI GROUP		
ADALALI GILOGI		

	TAPS, VALVES, ETC				
	Solid Cast brass taps, valves, etc:				
6	"Cobra KM2-200"or other approved 15mm chrome plated metered bib tap with non-hold open feature and flow controller.  A0:8 A1:6 A6:4 AD:8	No	26		
7	15mm Ball-o-stop valve.	No	14		
,	A0:4 A1:4 A6:2 AD:4		' '		
8	22mm Non Return valve.	No	16		
	A0:2 A1:4 A6:4 AD:6				
	WASTE UNIONS ETC				
	Outlets, traps, etc:				
9	40mm 342/50 CP bottle trap.	No	1		
	A0:0 A1:1 A6:0 AD:0				
10	40mm Code 316 chrome plated unslotted waste outlet.	No	13		
	A0:4 A1:3 A6:2 AD:4				
11	40mm Rubber "P" or "S" trap  A0:4 A1:3 A6:2 AD:4	No	13		
	SANITARY FITTINGS  Bust and correction registant UV registant				
	Rust and corrosion resistant, UV-resistant  polyethylene pedestals, urinals, basins, etc. Product and colour to Principal Agent's approval:				
12	VIP 450 Pit pedestal complete with integral flap four times plugged to floor with and including 6 x 75mm masonry anchors.	No	5		
	A0:4 A1:1 A6:0 AD:0				
13	VIP 200 Pit pedestal complete with integral flap four times plugged to floor with and including 6 x 75mm masonry anchors.	No	8		
	A0:0 A1:0 A6:2 AD:6				
14	Bambi Longdrop VIP Pit pedestal for children complete with C/W flap. size: 282 x 360 x 300mm.	No	3		
	A0:0 A1:3 A6:0 AD:0				
	Carried to Collection			R	
	Section 3			\	<del></del>
	Bill No. 10 Plumbing and Drainage (Provisional) ABAKALI GROUP				

I		1	1	l	 
	Vaal or equal approved:				
15	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]  A0:0 A1:1 A6:0 AD:0	No	1		
16	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.  A0:4 A1:3 A6:2 AD:4	No	13		
	Franke Model TU101 or equal approved flush valve/cistern flat back wall mounted urinal:				
17	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.  A0:0 A1:0 A6:2 AD:0	No	2		
	SANITARY PLUMBING				
	PVC waste or vent pipes and fittings:				
18	50mm Waste pipe. A0: 25 A1: 35 A6: 25 AD: 40	m	125		
19	110mm Pipe and laying in ground or filling not exceeding 2m deep including excavation, filling in and ramming.  A0:8 A1:12 A6:10 AD:15	m	45		
20	110mm Vent pipe fixed to wall with proprietary brackets at not exceeding 500mm centres.  A0: 24 A1: 16 A6: 8 AD: 24	m	72		
	Carried to Collection			R	
	Section 3 Bill No. 10 Plumbing and Drainage (Provisional) ABAKALI GROUP				

	uPVC gulleys							
21	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.					4		
	A0 : 1	A1 : 1	A6 : 1	AD : 1				
	Extra for:							
22	50mm Bend.				No	37		
	A0 : 8	A1:9	A6:8	AD : 12				
23	50mm Access be	en <b>d</b> .			No	16		
	A0 : 3	A1:3	A6:3	AD:7				
24	Black Whirlybird 110mm vent pipe	e.		_	on No	18		
	A0 : 6	A1 : 4	A6 : 2	AD:6				
	WATER SUPP	LIES						
	Polycop pipes:							
	Pipes shall be cl	ass 10.						
	Fixing of pipes							
	Unless specifica pipes shall be de casting in, building below suspension	xing to walls etc						
	Polycop pipes	chased in v	walls:					
	Where pipes have making good of place included in the	plaster and	paint etc s	hall be deemed	to			
	Section 3 Bill No. 10 Plumbing and Dr ABAKALI GROU			rried to Collect	tion		R	

	Reducing fittings:				
	Where fittings have reducing ends or branches they are described as 'reducing'. In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the Contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained.				
	Class 10 Polycop pipes:				
25	15mm Pipe chased into brick walls.  A0: 22 A1: 35 A6: 32 AD: 28	m	117		
26	22mm Pipe chased into brick walls.  A0:11 A1:13 A6:15 AD:11	m	50		
	Extra over polycop pipes for compression fittings:				
27	15mm Fittings. A0:17 A1:24 A6:26 AD:19	No	86		
28	22mm Fittings. A0:10 A1:15 A6:18 AD:10	No	53		
	Carried to Collection	1		R	
	Section 3 Bill No. 10 Plumbing and Drainage (Provisional) ABAKALI GROUP				

Section 3				
Bill No. 10				
Plumbing and Drainage (Provisional)				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	79			
	80			
	81			
	82			
	83			
	84			
Carried Forward to Summary of Section No. 3		R		
Section 3 Bill No. 10				
Plumbing and Drainage (Provisional)  ABAKALI GROUP				

ltem No		Quantity	Rate	Amount
	BILL No. 11			
	<u>PAINTWORK</u>			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - DWG 35 - Female Ablutions			
	MODEL PREAMBLES			
	The tenderer is referred to the "General 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.			
	SUPPLEMENTARY PREAMBLES			
	<u>Trade Names</u>			
	Where trade names are specified it will read "or equal approved"			
	Carried to Collection		R	
	Section 3 Bill No. 11 Paintwork ABAKALI GROUP		•	

	PAINTWORK ETC TO NEW WORK				
	ON WOOD				
	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:				
1	On doors A0:21 A1:27 A6:10 AD:23	m2	80		
2	On door frames	m2	24		
	A0:6 A1:7 A6:3 AD:7				
	Prepare and apply two coats carbolenium on:				
3	On exposed timbers.	m2	26		
	A0:7 A1:6 A6:6 AD:7				
	ON FIBRE-CEMENT				
	Prepare and apply two coats pure acrylic roof paint on:				
4	On fascias and barge boards.  A0:5 A1:4 A6:4 AD:5	m2	18		
	ON PVC VENT PIPE				
	Prepare and apply two coats black PVA paint:				
5	Vent Pipes A0: 23 A1: 15 A6: 8 AD: 23	m2	68		
	NO. 25 NO. 10 NO. 25				
	Carried to Collection			R	
	Section 3 Bill No. 11				
	Paintwork				
	ABAKALI GROUP				
					i

Section 3				
Bill No. 11				
Paintwork				
COLLECTION				
Total Brought Forward from Page No.	Page No 86		Amount	
	87			
Carried Forward to Summary of Section No. 3		R		
Section 3 Bill No. 11 Paintwork ABAKALI GROUP				
				1

Section 3 **SECTION SUMMARY - BUILDING WORKS** Page Amount No Earthworks (Provisional) 42 Concrete, Formwork and Reinforcement 49 Masonry 55 Waterproofing 59 Roof Coverings Etc. 65 Carpentry and Joinery 69 Ironmongery 74 Metalwork 77 Plastering 78 Plumbing and Drainage (Provisional) 85 **Paintwork** 88 **Carried to Final Summary** R Section 3 **ABAKALI GROUP** 

Bill

Nο

Item No			Quantity	Rate	Amount
	SECTION No. 4				
	BILL No. 1				
	EXTERNAL WORKS (PROVISIONAL)				
	MODEL PREAMBLES				
	The tenderer is referred to the "General 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.				
	THE FOLLOWING IN PLATFORMS, ETC.				
	Site Clearance, ETC				
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, scoffling up as required and cart away all vegetation and debris.	m2	992		
2	Stripping average 200mm thick layer of topsoil and stockpiling on site.	m2	992		
	Open face excavation not exceeding 2m deep:				
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.	m3	50		
	Extra over all excavations for carting away:				
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	130		
	Carried to Collection Section 4 Bill No. 1 External Works ABAKALI GROUP			R	

ĺ	Earth filling from excavated material	1			
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%	m3	100		
	Modified AASHTO dry density.	1113	100		
	Filling supplied by the contractor to form platforms				
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.	m3	30		
	Surface Preparation:				
7					
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.	m2	620		
	Prescribed density tests on filling:				
8	Modified AASHTO Density test.	No	6		
	WATER RETICULATION				
	WATER SUPPLY IN GROUND				
	HDPE 100PN 12.5 pressure pipes:				
9	32mm pipes laid in depths not exceeding 1m including excavation, bedding, backfilling, compaction and				
	disposal of surplus material.	m	60		
10	40mm Pipes laid in depths not exceeding 1m including				
	excavation, bedding, backfilling, compaction and disposal of surplus material.	m	50		
	Extra over (PN12.5) HDPE piping for fittings:				
11	32mm Bend.	No	20		
12	32mm Adaptor.	No	15		
12	January Adaptor.		10		
	Section 4			R	
	Bill No. 1				
	External Works ABAKALI GROUP				

13	40mm Bend.	No	25			
14	32mm Tee.	No	20			
15	40mm Tee.	No	15			
	WATER SUPPLY FROM WASTE WATER TREATMENT SYSTEM					
	HDPE 100PN 12.5 pressure pipes:					
16	32mm pipes laid in depths not exceeding 1m including excavation, bedding, backfilling, compaction and disposal of surplus material.	m	85			
	Extra over (PN12.5) HDPE piping for fittings:					
17	32mm Bend.	No	25			
18	32mm Adaptor.	No	15			
19	32mm Tee.	No	20			
	TAPS, VALVES, ETC					
20	32mm "Cobra" Ball Valve complete with adaptors for HDPE pipe.	No	6			
21	32mm Non-return valve.	No	6			
	Municipal connection					
	Sundries:					
22	Allow for amount of R15 000.00 (Fifteen 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.		ltem			
23	Allow for profit if required.			%		
	Testing:					
24	Testing water pipe system.		ltem			
	SEWER RETICULATION					
	Carried to Collection			R		
	Section 4 Bill No. 1 External Works ABAKALI GROUP					
			l	l	I	1

MODEL PREAMBLES		
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		
SUPPLEMENTARY PREAMBLES		
uPVC pipes and fittings		
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.		
Excavations:		
No claim for rock excavation will be entertained unless the Contractor has timeously notified the quantity surveyor thereof prior to backfilling.		
Soft rock and hard rock shall be as defined in Earthworks.		
Laying, backfilling, bedding, etc of pipes:		
Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions.		
Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L:		
Descriptions of pipes laid in trenches:		
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		
Descriptions of catchpits, junction boxes, manholes, etc:		
Section 4	R	
Bill No. 1 External Works ABAKALI GROUP		
ADARALI GROUP		

	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.  Density testing on filling:  Rates for filling, etc. shall include for all density and soil type testing to prove that the specified compaction is achieved. When additional testing is done on instruction of the Principal Agent and these tests are successful, they will be paid for additionally.  BULK SEWER RETICULATION				
	Heavy duty (Class 34) PVC-U sewer and drain pipes				
25	110mm Pipes laid in and including trenches not exceeding 1m deep	m	70		
<b>2</b> 6	110mm Pipes laid in and including trenches exceeding 1m but not exceeding 2m deep	m	75		
	Extra over heavy duty (Class 34) PVC-U sewer and drain pipes for fittings				
27	110mm Bend	No	15		
28	160mm Bend	No	10		
29	110mm Rodding eye	No	3		
30	160 x 110mm Reducing junction	No	3		
	PRE-CAST CONCRETE MANHOLES				
	Pre-cast concrete circular inspection chambers including pre-cast concrete cover slabs, covers and channels in benching				
31	Manhole 1000mm diameter not exceeding 1m deep.	No	2		
<b>3</b> 2	Manhole 1000mm diameter exceeding 1m and not exceeding 2m deep.	No	2		
	Carried to Collection Section 4 Bill No. 1 External Works ABAKALI GROUP			R	_

	SUNDRIES				
	<u>Earthworks</u>				
33	Selected granular filling Class 'B' supplied by the Contractor in bedding under pipes.	m3	6		
34	Selected 19mm stone supplied by the Contractor in bedding under pipes.	m3	10		
35	300 x 300 x 75mm Pre-cast concrete inspection eye marker slab set in ground.	No	4		
	Manhole covers				
36	620mm dia Type 2A Heavy duty cast iron manhole to SABS 558	No	4		
	Connection				
37	Allow for connecting to Waste Water Treatment System (WWTS).		ltem		
	Testing:				
38	Testing drainage system.		Item		
	THE FOLLOWING IN WALKWAYS				
	Excavation not exceeding 2m deep				
39	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	175		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
40	Off site to a dumping site to be found by the Contractor.	m3	175		
	Filling supplied by the contractor under walkways				
41	G7 Base course material compacted to 98% Mod AASHTO density	m3	60		
	Carried to Collection Section 4 Bill No. 1 External Works ABAKALI GROUP			R	

42	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	60		
	Rip and Re - compact insitu material on site compacted to 93% Mod. AASHTO density:				
43	Under floors,etc.	m2	390		
	Prescribed density tests on filling:				
44	In-situ dry density test.	No	5		
	Approved brand of anti-termite soil poison applied by a Registered Pest Control Company and guaranteed against termite infestation for ten years:				
45	Treat filling under paving with 'Chlordane Heptachlor Aldrin' or equal approved.	m2	390		
	Concrete Paving Blocks				
	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:				
46	Paving to walkway areas, etc laid to falls.	m2	390		
47	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	180		
48	Ditto but circular on plan.	m	50		
	<u>Kerbing</u>				
	Carried to Collection			R	
	Section 4			I.	+
	Bill No. 1 External Works				
	ABAKALI GROUP				

	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.				
49	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	65		
50	Ditto but circular on plan.	m	7		
51	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	65		
52	Ditto but circular on plan.	m	7		
	Carried to Collection Section 4 Bill No. 1 External Works ABAKALI GROUP			R	_ =

	THE FOLLOWING IN ONE BRICK WALL				
	(GARDEN WALL)				
	Excavation in earth not exceeding 2m deep:				
53	Trenches.	m3	40		
	Extra over all excavations for carting away:				
54	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m3	21		
	Risk of collapse of excavations:				
55	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	105		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% MOD AASHTO density:				
56	Backfilling to trenches, holes, etc.	m3	20		
	Earth filling (G7 material) supplied by the contractor in layers not exceeding 150mm thick and compacted to 98% Mod AASHTO density:				
57	Under footings.	m3	10		
58	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	10		
	Compaction of surfaces				
59	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	55		
	25 Mpa/19mm Concrete				
60	Strip footings.	m3	12		
	Carried to Collection Section 4 Bill No. 1 External Works			R	
	ABAKALI GROUP				

	Test blocks:				
61	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	8		
	Reinforcement (Provisional)				
62	High tensile steel reinforcement bars to structural concrete work.	t	1.22		
	BRICKWORK IN FOUNDATIONS.				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar (Cement to be 42.5N all-purpose cement):				
63	One brick walls.	m2	40		
	BRICKWORK IN SUPERSTRUCTURE				
	Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar (Cement to be 42.5N all-purpose cement):				
64	One brick walls.	m2	63		
	Brickwork reinforcement:				
65	230mm Wide reinforcement built in horizontally.	m	202		
66	Ditto but in foundations.	m	76		
	FACE BRICK				
	"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):				
67	One brickwall faced on both sides.	m2	40		
	Carried to Collection			R	+
	Section 4 Bill No. 1 External Works ABAKALI GROUP				†

	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:			
68	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.	75		
	Carried to Collection  Section 4  Bill No. 1  External Works  ABAKALI GROUP		R	_

	STORMWATER CHANNELS				
	Excavation not exceeding 2m deep				
69	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	25		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
70	Off site to a dumping site to be found by the Contractor.	m3	25		
	Filling supplied by the contractor under channels				
71	G7 Base course material compacted to 98% Mod AASHTO density	m3	10		
72	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	10		
	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.				
73	700 x 80mm thick V' channel 150mm deep in centre laid in position in ground in 2000mm sections including all formwork, reinforcement, expansion joints, smooth finishing to top of concrete surface etc.	m	70		
74	Extra for 700mm angle	No	5		
75	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	5		
	Carried to Collection Section 4 Bill No. 1 External Works ABAKALI GROUP			R	
	External Works				

	Sundries:				
76	Create earth berm for stormwater control with in situ material 1,5m wide at base x 500mm high	m	70		
77	Construct shaped earth V-drain 2m wide with grass runners	m	70		
	THE FOLLOWING IN DISABLED ACCESS				
	SCREEN WALL				
	Excavation in earth not exceeding 2m deep:				
78	Trenches.	m3	7		
	Extra over all excavations for carting away:				
79	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m3	7		
	Risk of collapse of excavations:				
80	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	17		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% MOD AASHTO density:				
81	Backfilling to trenches, holes, etc.	m3	6		
	Earth filling (G7 material) supplied by the contractor in layers not exceeding 150mm thick and compacted to 98% Mod AASHTO density:				
82	Under footings.	m3	2		
83	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	2		
	Carried to Collection Section 4 Bill No. 1 External Works ABAKALI GROUP			R	

	Compaction of surfaces				
84	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	8		
	25 Mpa/19mm Concrete				
85	Strip footings.	m3	2		
	Test blocks:				
86	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	8		
	Reinforcement (Provisional)				
87	High tensile steel reinforcement bars to structural concrete work.	t	0.19		
	BRICKWORK IN FOUNDATIONS.				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar (Cement to be 42.5N all-purpose cement):				
88	One brick walls.	m2	6		
	Brickwork reinforcement:				
89	230mm Wide reinforcement built in horizontally.	m	22		
90	Ditto but in foundations.	m	43		
	BRICKWORK IN SUPERSTRUCTURE				
	Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar (Cement to be 42.5N all-purpose cement):				
91	One brick walls.	m2	10		
	Brickwork reinforcement:				
92	230mm Wide reinforcement built in horizontally.	m	30		
	Section 4 Bill No. 1 External Works ABAKALI GROUP	1		R	

93	Ditto but in foundations.	m	50		
	FACE BRICK				
	"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):				
94	One brickwall faced on both sides.	m2	7		
	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:				
95	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	12		
	ACCESS RAMPS				
	Excavation not exceeding 2m deep				
96	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	7		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
97	Off site to a dumping site to be found by the Contractor.	m3	7		
	Filling supplied by the contractor under floors, aprons, etc				
98	G7 Base course material compacted to 98% Mod AASHTO density	m3	4		
99	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	4		
	Coarse river sand filling supplied by the contractor:				
100	Under floors etc.	m3	2		
	Carried to Collection Section 4 Bill No. 1 External Works ABAKALI GROUP			R	=

	Compaction of surfaces:				
101	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	12		
	Prescribed density tests on filling:				
102	In-situ dry density test.	No	4		
	Reinforced 25Mpa/19mm Concrete:				
103	Ramps, Landings, etc.	m3	12		
	Finishing top surfaces of concrete smooth with a wood float:				
104	Surface beds, slabs, etc to falls and currents.	m2	12		
	Test blocks:				
105	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	8		
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:				
106	12mm Joints not exceeding 300mm high.	m	12		
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
107	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	12		
	Fabric reinforcement:				
108	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m2	12		
	Waterproofing under Surface beds				
109	350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured).	m2	12		
	Section 4			R	
	Bill No. 1 External Works ABAKALI GROUP				
					I

Section 4 Bill No. 1 External Works ABAKALI GROUP	Carried to Collection	R	_

	THE FOLLOWING IN ACCESS DRIVEWAY, ETC.				
	Excavation not exceeding 2m deep				
110	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	190		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
111	Off site to a dumping site to be found by the Contractor.	m3	190		
	Filling supplied by the contractor under driveways				
112	G7 Base course material compacted to 98% Mod AASHTO density	m3	65		
113	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	65		
	Rip and Re - compact insitu material on site compacted to 93% Mod. AASHTO density:				
114	Under floors,etc.	m2	416		
	Prescribed density tests on filling:				
115	In-situ dry density test.	No	5		
	Approved brand of anti-termite soil poison applied by a Registered Pest Control Company and guaranteed against termite infestation for ten years:				
116	Treat filling under paving with 'Chlordane Heptachlor Aldrin' or equal approved.	m2	416		
	150-175mm diameter bollards				
117	2100mm long tanalith treated gum pole planted 800mm deep including excavations, cartaways, concrete base etc.	No	26		
	Carried to Collection			R	
	Section 4 Bill No. 1 External Works ABAKALI GROUP				

	THE FOLLOWING IN RETAINING WALLS, ETC.				
	Excavation in earth not exceeding 2m deep				
118	Trenches.	m3	16		
	Risk of collapse of excavations:				
119	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	45		
	Keeping excavations free of water:				
120	Keeping excavations free of all water other than subterranean water.		Item		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
121	Off site to a dumping site to be found by the Contractor.	m3	16		
	Filling with approved clean, hard, dry decomposed dolerite filling supplied and carted onto site by the Contractor, compacted to a density of at least 95% Mod. AASHTO maximum density:				
122	Behind walls with selected backfilling supplied by the Contractor compacted to 98% Mod ASSHTO density	m3	6		
	Compaction of surfaces				
123	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	16		
	15Mpa/19mm Concrete				
124	Surface blinding under footings and bases	m3	2		
	30Mpa/19mm Concrete				
125	Strip footings.	m3	5		
	Section 4 Bill No. 1			R	
	External Works ABAKALI GROUP				

126	Cavity walls.	m3	3		
	Test blocks:				
127	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	5		
	Fabric reinforcement:				
128	REF. 395 fabric reinforcement in concrete infill, strip footings.	m2	25		
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar (Cement to be 42.5N all-purpose cement):				
<b>12</b> 9	330mm thick cavity brick Walls made of two leafs of 110mm wall with 110mm mesh reinforced concrete fill (concrete and reinforcement elsewhere measured).	m2	15		
	Brickwork reinforcement:				
130	230mm Wide reinforcement built in horizontally.	m	86		
	"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):				
131	Extra over brickwork for face brickwork externally.	m2	15		
400	Brick-on-edge header course copings, sills, etc, of "Rustgold FBS/Qunu Travertine" or equal Architect approved clay face brick size 222 x 106 x 73mm, pointed with recessed joints on all exposed faces:				
132	220mm 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	25		
		""	23		
133	Openings in Walls etc.	No	32		
133	Leave or form 32mm weephole through one brick wall	INO	32		
	Carried to Collection Section 4			R	
	Bill No. 1 External Works ABAKALI GROUP				

	<u>Membranes</u>				
134	"Geofabric filter blanket wrapped around stone with 150mm side and 300mm end laps, including stitching.	m2	4		
	Earth filling 300 x 300mm section of 19mm thick stone material surrounding 110mm uPVC pipe, supplied by the contractor compacted to 98% Mod AASHTO density:				
135	19mm Stone.	m3	4		
	THE FOLLOWING IN STORMWATER DRAINAGE, APRONS ETC.				
	STORMWATER APRONS				
	Excavation not exceeding 2m deep				
136	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	20		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
137	Off site to a dumping site to be found by the Contractor.	m3	20		
	Filling supplied by the contractor under floors, aprons, etc				
138	G7 Base course material compacted to 98% Mod AASHTO density	m3	6		
139	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	6		
	Coarse river sand filling supplied by the contractor:				
140	Under floors etc.	m3	8		
	Carried to Collection			R	
	Section 4 Bill No. 1				
	External Works				
	ABAKALI GROUP				

	Compaction of surfaces:				
141	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	32		
	Prescribed density tests on filling:				
142	In-situ dry density test.	No	5		
	Reinforced 25Mpa/19mm Concrete:				
143	Surface beds cast in panels on waterproofing.	m3	5		
144	Edge thickening	m3	3		
	Finishing top surfaces of concrete smooth with a wood float:				
145	Surface beds, slabs, etc to falls and currents.	m2	30		
	Test blocks:				
146	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	8		
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:				
147	12mm Joints not exceeding 300mm high.	m	20		
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
148	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	20		
	Fabric reinforcement:				
149	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m2	30		
	Carried to Collection Section 4 Bill No. 1 External Works ABAKALI GROUP			R	

Waterproofing under Surface beds				
350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured).	m2	40		
Carried to Collection Section 4			R	
Bill No. 1 External Works				
ABAKALI GROUP				

	STORMWATER CHANNELS				
	Excavation not exceeding 2m deep				
151	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	80		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
152	Off site to a dumping site to be found by the Contractor.	m3	80		
	Filling supplied by the contractor under channels				
153	G7 Base course material compacted to 98% Mod AASHTO density	m3	30		
154	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	30		
	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.				
155	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	240		
156	Extra for 700mm angle	No	4		
157	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	4		
	Carried to Collection			R	_
	Section 4 Bill No. 1 External Works ABAKALI GROUP				

	Sundries:				
158	Create earth berm for stormwater control with in situ material 1,5m wide at base x 500mm high	m	60		
159	Construct shaped earth V-drain 2m wide with grass runners	m	60		
	THE FOLLOWING IN STORMWATER DISH DRAIN, ETC.				
	Excavation not exceeding 2m deep				
160	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	60		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
161	Off site to a dumping site to be found by the Contractor.	m3	60		
	Filling supplied by the contractor under floors, aprons, channels etc				
162	G7 Base course material compacted to 98% Mod AASHTO density	m3	20		
163	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	20		
	Coarse river sand filling supplied by the contractor:				
164	Under floors etc.	m3	8		
	Compaction of surfaces:				
165	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	125		
					$\perp$
	Carried to Collection			R	
	Section 4 Bill No. 1 External Works ABAKALI GROUP				

	Prescribed density tests on filling:				
166	In-situ dry density test.	No	5		
	Reinforced 25Mpa/19mm Concrete:				
167	Surface beds cast in panels on waterproofing.	m3	20		
	Finishing top surfaces of concrete smooth with a wood float:				
168	Surface beds, slabs, etc to falls and currents.	m2	125		
	Test blocks:				
169	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	8		
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:				
170	12mm Joints not exceeding 300mm high.	m	65		
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
171	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	65		
	Fabric reinforcement:				
172	REF. 617 fabric reinforcement in concrete surface beds, slabs, etc.	m2	125		
	THE FOLLOWING IN SUB-SOIL DRAINAGE, ETC.				
	Site Clearance, ETC				
173	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	65		
	Excavation in earth not exceeding 2m deep:				
174	Trenches.	m3	12		
					+
	Carried to Collection			R	
	Section 4 Bill No. 1 External Works ABAKALI GROUP				

	Extra over all excavations for carting away:				
175	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m3	12		
	Risk of collapse of excavations:				
176	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	40		
177	Ditto, but from ground level to exceeding 1,5m.	m2	32		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% MOD AASHTO density:				
178	Backfilling to trenches, holes, etc.	m3	6		
	Earth filling 300 x 300mm section of 19mm thick stone material surrounding 110mm uPVC pipe, supplied by the contractor compacted to 98% Mod AASHTO density:				
179	19mm Stone.	m3	4		
	<u>Membrane</u>				
180	""Geofabric filter blanket wrapped around stone with 150mm side and 300mm end laps, including stitching.	m2	40		
	Keeping excavations free of water:				
181	Keeping excavations free from mud and all water including subterranean sources.		ltem		
	Compaction of surfaces				
182	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	20		
	Carried to Collection Section 4			R	
	Bill No. 1 External Works ABAKALI GROUP				

	SOIL DRAINAGE				
	110mm Diameter perforated uPVC pipe surrounded with 300 x 300mm section of 20mm stone wrapped in A3 geotextile material.				
183	110mm uPVC pipe.	m	35		
	Extra for:				
184	110mm Tee.	No	5		
185	110mm Y junction.	No	3		
	THE FOLLOWING IN SOAKAWAY				
	Site Clearance, Etc				
186	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	10		
	Excavation in earth not exceeding 2m deep:				
187	Holes	m3	6		
	Extra over all excavations for carting away				
188	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor within 5km from the building site	m3	6		
	Risk of collapse of excavations				
189	Sides of trench and hole excavations exceeding 1,5m deep but not exceeding 3,0m deep	m2	18		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 90% Mod AASHTO density				
190	Backfilling to holes	m3	4		
	Carried to Collection Section 4 Bill No. 1 External Works ABAKALI GROUP			R	_

					_	
	Earth filling with stone material supplied by the contractor:					
191	Stone (>53mm).	m2	4			
	<u>Membranes</u>					
192	"BidimGeotextile or equal approved, lined on all sides including the top and bottom faces.	m2	6			
	Keeping excavations free of water					
193	Keeping excavations free of all water other than subterranean water		Item			
	THE FOLLOWING IN CULVERTS					
	Class 50D concrete pipes:					
194	450mm Diameter Concrete pipe laid in trenches not exceeding 1m deep including excavation, backfill, bedding, cart away and compaction.	m	12			
	Manholes:					
195	Manhole size 600 x 600mm not exceeding 1m deep internally to invert level formed of hard burnt half brick sides in 1:3 cement mortar on and including 100mm thick mass concrete (25 MPa at 28 days in 19 mm stone) bottom reinforced withY10 bars at 200c/c both directions and projecting 150mm beyond sides,cast on 50mm thick concrete Blinding (15Mpa) and mass concrete (15 MPa at 28 days in 12 mm stone) benching, rendered internally in 1:3 cement plaster with with C.I step irons staggered at 300c/c with 150mm thick grade 25 reinforced precast concrete manhole cover rebated for and fitted with and including cast iron double seal cover and frame type 14B in accordance with SABS 558, bedded in 1:3 cement mortar and sealed in to allow including all necessary vitrified clay channels and fittings, excavations, formwork, holes through sides for pipes, etc	No	7			
	THE FOLLOWING IN HEADWALLS					
196	Excavation not exceeding 2m deep.	m3	4			
197	Risk of collapse not exceeding 1,5m deep	m2	2			
	Carried to Collection Section 4 Bill No. 1 External Works ABAKALI GROUP			R		

198	Keeping excavations free from water		Item		
199	Carting away surplus excavated material	m3	2		
200			-		
200	150mm layer of G7 material compacted to 95% MOD AASHTO under concrete slab.	m3	2		
201	150mm layer of G5 material compacted to 95% MOD AASHTO under concrete slab.	m3	2		
202	25Mpa/19mm Reinforced concrete in bottom slabs and footings.	m3	2		
203	Formwork to edges, risers, ends and reveals not exceeding 300mm wide or high.	m	22		
204	Weld Mesh Ref 193 in Concrete bottom slab.	m2	9		
205	One brick wall of 14 MPa NFX bricks.	m2	6		
206	230mm Wide reinforcement built in horizontally.	m	19		
207	Extra over brickwork for "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 face brickwork externally.	m2	8		
208	220mm Wide header course to top of one brick wall bedded and jointed in cement mortar and pointed on both sides.	m	8		
209	Plaster on brick walls.	m2	6		
210	Gabion mattress comprising of 20 to 30mm stones wrapped in A3 geotextile with voids filled with 1:3 cement/sand mortar.	m2	6		
	THE FOLLOWING IN RAINWATER TANKS AND STANDS				
	Excavation in earth not exceeding 2m deep:				
211	Trenches.	m3	25		
	Carried to Collection Section 4 Bill No. 1 External Works ABAKALI GROUP			R	

	Extra over all excavations for carting away:					
212	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m3	25			
	Risk of collapse of excavations:					
213	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	9			
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% MOD AASHTO density:					
214	Backfilling to trenches, holes, etc.	m3	9			
	Earth filling (G7 material) supplied by the contractor in layers not exceeding 150mm thick and compacted to 98% Mod AASHTO density:					
215	Under footings.	m3	9			
216	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	9			
	Compaction of surfaces					
21 <b>7</b>	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	25			
	25 Mpa/19mm Concrete					
218	Strip footings.	m3	9			
	25 MPa/19mm Concrete:					
219	Tank concrete slab.	m3	9			
	Test blocks:					
220	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	9			
	Carried to Collection Section 4 Bill No. 1 External Works			R		_
	ABAKALI GROUP					
	·	'	'	ii	Į.	

	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:				
221	Surface beds, slabs, etc.	m2	22		
	Rough Formwork to Sides:				
222	Edges, risers, ends and reveals not exceeding 300mm high.	m	43		
	Allens Meshco Square Mesh Fabric reinforcement:				
223	Type 617 fabric reinforcement in concrete slabs.	m2	23		
	BRICKWORK IN FOUNDATIONS.				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar (Cement to be 42.5N all-purpose cement):				
224	One brick walls.	m2	26		
	BRICKWORK IN SUPERSTRUCTURE				
	Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar (Cement to be 42.5N all-purpose cement):				
225	One brick walls.	m2	30		
	Brickwork reinforcement:				
226	230mm Wide reinforcement built in horizontally.	m	116		
227	Ditto but in foundations.	m	126		
	FACE BRICK				
	"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):				
228	Extra over brickwork for face brickwork externally.	m2	26		
	Carried to Collection Section 4 Bill No. 1 External Works ABAKALI GROUP			R	+

<b>22</b> 9	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:  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.  Plastic water tanks etc:  5000 Litre roto molded or equal approved plastic tank	m	43		
230	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	7		
231	Hole top of tank for 100mm pipe.	No	7		
	Carried to Collection Section 4 Bill No. 1 External Works ABAKALI GROUP	1		R	_

	THE FOLLOWING IN SECURITY FENCING, ETC				
	Site clearance				
232	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.	m2	460		
	Straining wires, fencing and razor wire:				
233	3 Strands of galvanised barbed wire tied to standards, posts and eye bolts	m	73		
234	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	73		
235	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	73		
	Posts for 1 800mm high security fence:				
236	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	36		
237	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	10		
238	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		
	Section 4 Bill No. 1 External Works ABAKALI GROUP			R	

1		ĺ		]	I	I
239	12mm Diameter galvanised mild steel straining eye bolt with hook, threaded portion and two nuts and washers.	No	8			
	with hook, threated portion and two hots and washers.	110	J			
240	Form 12mm diameter hole through fence post.	No	10			
	Gates:					
241	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	2			
	PADLOCKS					
242	Supply 50 mm "Viro" Padlocks and Keys (or equal approved )	No	2			
	Section 4			R		_
	Bill No. 1 External Works ABAKALI GROUP					

Section 4				
Bill No. 1				
External Works				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	90			
	91			· <b></b>
	92			
	93			
	94			
	95			
	96			
	97			
	98			
	99			
	100			
	101			
	102			
	103			
	104			
	105			
	106			
	107			
	108			
	109			
Carried Forward		R		
Section 4 Bill No. 1 External Works				
ABAKALI GROUP				

Section 4					
Bill No. 1					
External Works					
COLLECTION					
Drought Form	.a.ud	Page No	R	Amount	
Brought Forw	aru				
Total Brought Forward from Page No.		110			
		111			
		112			
		113			
		114			
		115			
		116			
		117			
		118			
		119			
		120			
		121			
		122			
		123			
		124			
Carried to Final Summ	arv		R		
Section 4	·· <b>y</b>				
Bill No. 1 External Works					
ABAKALI GROUP					

Item No		Quantity	Rate	Amount
	SECTION 5			
	BILL No. 1			
	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 therto.			
	PROVISIONAL AMOUNTS FOR NOMINATED / SELECTED SUB-CONTRACTS			
1	Electrical Installation:  Provide the amount of R150 000.00 (One Hundred and Fifty Thousand Rand) for Electrical Installation, to be executed complete.	ltem		150 000.00
2	Profit.		%	
3	Allow for general attendance.		%	
	BUDGETARY ALLOWANCES			
	Carried to Collection  Section 5 Bill No. 1 Provisional Sums ABAKALI GROUP		R	

be executed at rates in be agreed by the Princ	y allowances are for work to the bills of quantities or to ipal agent:			
Community Liaison Office	000.00 for the employment of a er to be employed by the Main an allowance of R6 500.00 a ct duration.	ltem		39 000.0
Add: Mark-up			%	
Temporary ablutions:				
Provide the amount of R Thousand Rand) for tem executed complete.	100 000.00 (One Hundred porary ablutions, to be	Item		100 000.0
	Carried to Collection		R	
Section 5 Bill No. 1 Provisional Sums ABAKALI GROUP				

Section 5				
Bill No. 1				
Provisional Sums				
COLLECTION				
Total Brought Forward from Page No.	Page No 127 128		Amount	
Carried to Final Summary		R		
Section 5 Bill No. 1 Provisional Sums ABAKALI GROUP				

	FINAL SUMMARY			
Section No		Page No		Amount
1	PRELIMINARIES	31		
2	DEMOLITIONS (PROVISIONAL)	35		
3	BUILDING WORKS	89		
4	EXTERNAL WORKS (PROVISIONAL)	126		
5	PROVISIONAL SUMS	129		
	SUB-TOTAL		R	
	CONTINGENCIES			
	Allow five per cent (5%) of the above sub-total for contingencies to be used as directed and deducted in whole or in part if not required.		R	
	SUB-TOTAL		R	
	Add Value Added Tax at the rate of 15%		R	
	Carried to Form of Offer and Acceptance		R	
	ABAKALI GROUP			