	Quantity	Rate	Amount
SECTION NO.1			
<u>BILL NO. 1</u>			
PRELIMINARIES			
NOTES			
1. The Principal Building Agreement shall be the JBCC Series Edition 4.1, March 2005 as recommended by the Joint Building Contract Committee and as amended by this Tender Enquiry.			
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 above mentioned 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.			
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 6. The Tenderers shall allow opposite each of the clauses whatever costs and charges he may consider necessary for the carrying out, complying with and due observance of the provisions, conditions and requirements set out herein. Only priced items will be considered in respect of any adjustment of this Section. Any items left unpriced will be understood to be provided free of charge and no claim for any extras arising out of the Tenderer's omission to price any item will be entertained. 7. Where modifications or amendments as described are made, such modifications and/or amendments shall 			
supercede any conflicting provisions in the relevant clauses of the Standard Preliminaries or the Principal Building Agreement and the Tenderer shall make due allowance for whatever costs and charges he may consider necessary for the carrying out and observance of the provisions of the clauses as modified and/or amended.			
8. Where any item is not relevant to this specific contract, such item is marked N/A.			
9. If Alternative A as set out in clause 10.2 & 3 hereinafter is to be used for the adjustment of the preliminaries, 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 the tendered amount for the Preliminaries must be allocated to one or more of the following three categories 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.			
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	SECTION A: PRINCIPAL BUILDING AGREEMENT			
	<u>Definitions</u>			
1	Definitions and interpretation (Clause 1).			
	F: T:	Item		
	Objective and Preparation			
2	Offer and acceptance and performance (Clause 2).			
	F: T:	ltem		
3	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'.			
	F: T:	ltem		
4	Design responsibility (Clause 4).			
	F: T:	ltem		
5	Employer's agents (Clause 5).			
	F: T:	ltem		
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6	Site representative (Clause 6).			
	Prior to the award of the contract, tenderers shall submit, upon request,the names of the proposed senior management personnel to be responsible for the supervision and administration of the works.			
	Prior to the date of commencement of the works the contractor shall nominate senior site personnel to whom instructions may be issued.			
	F: T:	ltem		
7	Compliance with regulation (Clause 7).			
	A Health and Safety Specification is attached for pricing of Health and Safety Bills of Quantities.			
	F: T:	Itom		
		Item		
8	Works risk (Clause 8).			
		Item		
9	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'.			
	F:	Item		
10	Works insurances (Clause 10).			
	F: T:			
		Item		
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11	Liability insurances (Clause 11).		
	F: T:		
		Item	
12	Effecting insurances (Clause 12).		
	F: T:	Item	
13	No Clause (Clause 13).		
	F: T:	Item	
14	Security (Clause 14).		
	F: T:	Item	
		nem	
	Execution		
15	Preparation for and execution of the works (Clause	15).	
	F: T:		
		Item	
16	Access to the works (Clause 16).		
	F: T:		
		Item	
17	Contract instructions (Clause 17).		
	F: T:		
		Item	
			+
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18	Setting out of the works (Clause 18).			
	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.			
	F: T:			
		Item		
19	Assignment (Clause 19).			
	F: T:	Item		
20	Nominated subcontractors (Clause 20).			
	F: T:	Item		
21	Selected subcontractors (Clause 21).			
	F: T:	Item		
22	Employer's direct contractors (Clause 22).			
	F: T:	Item		
23	Contractor's domestic subcontractors (Clause 23).			
	F: T:	Item		
	Completion			
24	Practical completion (Clause 24).			
	F: T:			
		Item		
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25	Works completion (Clause 25).				
	F: T:				
		Item			
26	Final completion (Clause 26).				
	F: T:				
		Item			
27	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 accummulate in order to attend to a comprehensive list of defects"				
	F: T:	Item			
28	Sectional completion (Clause 28).				
	F: T:				
		Item			
29	Revision for date of practical completion (Clause 29).				
	F: T:	Item			
		liem			
30	Penalty for non-completion (Clause 30).				
	F: T:	Item			
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	Payment				
31	Interim payment to the contractor (Clause 31).				
	The inclusion of materials and goods stored off site in the amount authorised for payment in terms of clause 31.3 shall be at the sole discretion of the principal agent and such inclusion shall only be considered upon the provision, by the contractor, of an approved guarantee issued by a registered commercial bank.				
	Where prices are submitted by the contractor or nominated/selected sub contractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of the contract and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the final certificate, it will be in writing.				
	F: T:				
		ltem			
32	Adjustment to the contract value (Clause 32).				
	F: T:	ltem			
33	Recovery of expense and loss (Clause 33).				
	F: T:				
		Item			
34	Final account and final payment (Clause 34).				
	F: T:	ltem			
35	Payment to other parties (Clause 35).				
	F: T:	Item			
					-
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	<u>Cancellation</u>			
36	Cancellation by Employer - Contractor's default (Clause 36).			
	F: T:	Item		
37	Cancellation by Employer - Loss and damage (Clause 37).			
	F: T:	Item		
38	Cancellation by Contractor - Employer's default (Clause 38).			
	F: T:	Item		
39	Cancellation - Cessation of the works (Clause 39).			
	F: T:	Item		
	Dispute (A40)			
40	Dispute settlement (Clause 40).			
	F: T:	ltem		
	State Provisions (A41)			
41	State Substitutions (Clause 41).			
	F: T:	ltem		
	Schedule (A42)			
42	Pre-Tender information (Clause 42).			
	F: T:	Item		
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42.1.1 Employer:	The Mvula Trust, Eastern Cape Province		
Contact Person:	Mr. Takudzwa Kanda		
Postal Address:	67 Devereux Avenue, Vincent, East London, 5201		
Telephone:	043 726 2255.		
e-mail:	takudzwa@themvulatrust.org.za		
Domicilium:	67 Devereux Avenue, Vincent, East London, 5201		
42.1.2 Agent's Servi	ce: Project Manager		
Agent (1):	Mr. Takudzwa Kanda		
Postal Address:	67 Devereux Avenue, Vincent, East London, 5201		
Telephone:	043 726 2255.		
e-mail:	takudzwa@themvulatrust.org.za		
Domicilium:	67 Devereux Avenue, Vincent, East London, 5201		
42.2 CONTRACT	DETAILS		
42.2.1 Works Descri	ption:		
	nwater Drainage, and Sub-soil ting ablutions and walkways, Grade R ablutions.		
42.2.2 Site Descripti	on :		
The site is situated a	at the existing school premises.		
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42.2.3	Work or I (None)	Installation by Direct Contractors:			
42.2.4	This Agre	eement is for a State Contract : (Yes)			
	Payment on site: (will be made for materials and goods Yes)			
of cla		e resolution method (Mediation (in terms lowed by litigation)			
42.2.5	Contract	period: 4 Calendar months.			
42.2.6		r the commencement of the works after actor takes possession of the site: 5 lays.			
42.2.7	Completi	ons in sections are required: No			
42.2.8		date of practical completion and the er calendar day for the works as a			
		4 Calendar months after contract commencement including builders holidays			
	Penalty:	R 1 000.00 per Calendar Day.			
	section co	dates of practical completion where ompletion is required and the penalty dar day for the works in sections: N/A			
42.2.9	Law appl	icable: Republic of South Africa			
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42.3 INSURANCES		
42.3.1 Contract works insurance to be effected by the :		
CONTRACTOR		
For the amount of: CONTRACT SUM + 10%		
With a deductible of: 5% of Insured amount.		
42.3.2 Supplementary insurance 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		
42.3.3 Public liability insurance to be effected by the		
CONTRACTOR		
For the amount of: R 10 000 000.00		
With a deductible of: 5% of Insured amount.		
42.4 DOCUMENTS		
42.4.1 Waiver of the contractor's lien or right of continuing possession is required: (Yes)		
42.4.2 Number of construction document copies to be supplied free of charge: 1 (ONE)		
 42.4.3 This document is drawn up in accordance with the ASAQS Standard System of Measuring Building Work: (YES) Seventh Edition, revised in 2015. 		
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42.4.4	Number of days for submission of priced documents: 5 working days from the Letter of Appointment.			
	Priced bills of quantities to be submitted with tender form of acceptance.			l
	The tender document should be filled in throughout strictly with a black-inked pen.			
42.4.5	JBCC Engineering General Conditions are to be included in the documents: (No)			
42.4.6	The contract value to be adjusted using CPAP: (NO)			l
42.4.7	Details of changes made to the provisions of JBCC standard documentation: (As stated)			
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	SECTION B: PRELIMINARIES			
	Definitions (B1):			
43	Definitions and interpretation (B1)			
	F: T:	ltem		
	Documents (B2):			
44	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.			
	These Bills of Quantities contain pages and annexures as indexed.			
	The items in these Bills of Quantities are to be read and priced in conjunction with, and the descriptions regarded as amplified by the Model Preambles for Trades as recommended and published by the Association of South African Quantity Surveyors, 2008 edition, and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained.			
	F: T:	ltem		
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45	Provisional Bills of Quantities (B2.2)			
	The Quantities are Provisional (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.			
	F: T:	Item		
46	Availability of construction documentation (B2.3)			
	F: T:	Item		
47	Interests of Agents (B2.4)			
	F: T:	Item		
48	Priced documents (B2.5)			
	F: T:	Item		
49	Tender submission (B2.6)			
	Notwithstanding anything contained in this clause tenders shall be valid for a period of 12 weeks from the closing date of tenders.			
	F: T:	Item		
		lien		
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	The Site (B3)			
50	Defined works area (B3.1)			
	The area of the works to be occupied by the contractor, any restriction on the area and the limit of access or exit will be pointed out to the contractor by the principal agent on handing over of the site.			
	Workmen employed on the site are to be restricted to the immediate area of the site and access thereto.			
	The Tenderer shall make all necessary provision in all rates to take into account these requirements as no claims for extras arising from these matters will be subsequently entertained or admitted.			
	F: T:			
		Item		
51	Geotechnical investigation (B3.2)			
	(Please see attached Geotechnical Investigation Report Annexure B).			
	F: T:	Item		
52	Inspection of the Site (B3.3)			
	No claims for extras arising from the contractor having failed to comply with this clause will be entertained.			
	A compulsory, site clarification meeting will be held at the proposed site in line with the tender advert.			
	F: T:	Item		
50		lien		
53	Existing premises occupied (B3.4) (Yes)	lt		
	F: T:	ltem		
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54	Previous work - dimensional accuracy (B3.5)	
	F: T	Ite	m
55	Previous work - defects (B3.6)		
	F: T	: Ite	m
56	Services - known (B3.7) Existing services and points of connect and will be pointed out on site by the P	on are known incipal Agent.	
	F: T	: Ite	m
57	Services - known (B3.8)		
	F: T	: Ite	m
58	Protection of trees (B3.9)		
	F: T		
		Ite	m l
59	Articles of value (B3.10)		
	F: T	: Ite	m
60	Inspection of adjoining properties (B3.1	1)	
	F: T	: Ite	m
	Management of contract (B4)		
61	Management of the Works (B4.1)		
	F: T	: Ite	m
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62	Programme for the Works (B4.2)			
	Added to the provisions in (B4.2), the contractor shall ensure that he/she has suitable staff to programme the works using suitable and recognised programming software and the programme for the work is to be developed in sufficient detail indicating an activity network with early and late start dates, early and late finish dates and duration for each activity, further each activity is to be linked and the critical path indicated. Furthermore, the programming of the works shall include detailed documentation and information required schedule which indicates latest dates by which information is required in order to achieve programme dates.			
	F: T:	Item		
63	Progress meetings (B4.3)			
	F: T:	Item		
64	Technical meetings (B4.4)			
	F: T:	Item		
65	Labour and plant records (B4.5)			
	F: T:	Item		
	Samples and shop drawings (B5)			
66	Samples of materials (B5.1)			
	F: T:	Item		
67	Workmanship samples (B5.2)			
	F: T:	Item		
68	Shop drawings (B5.3)			
	F: T:	Item		
69	Compliance with manufacturer's instructions (B5.4)	Item		
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	Temporary works and plant (B6)			Γ
70	Deposits and fees (B6.1)			
	F:	Item		
71				
11	Enclosure of the works (B6.2)			
	No access to public shall be allowed on site at all times and strict access control shall be maintained during the construction period.			
	The contractor shall fully enclose the works by providing a 2m high diamond mesh fence or suitably similar and approved including access gates, posts. The fence shall be maintained throughout the contract and removed on completion of the contract.			
	F:	Item		
72	Advertising (B6.3)			
	F: T:	Item		
73	Plant, equipment, sheds and offices (B6.4)			
	F: T:	Item		
74	Office accommodation for meetings held on the site which shall be kept clean and fit for use at all times (B6.4.3).			
	F: T:	Item		
75	Main notice board (B6.5).			
	One notice board shall be provided by the Contractor			
	F: T:	Item		
76	Subcontractors notice board (B6.6).			
	F: T:	Item		
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	Temporary Services (B7)		
7	Location (B7.1).		
	F: T:	Item	
8	Water (B7.2)		
	Alternative chosen: A		
	F: T:	Item	
'9	Electricity (B7.3)		
	Alternative chosen: A		
	F: T:	Item	
0	Telecommunication equipment (B7.4)		
	F: T:	Item	
1	Ablution facilities (B7.5)		
	Alternative chosen: A		
	F: T:	Item	
	Prime cost amounts (B8)		
2	Responsibility for prime cost amounts (B8.1)		
	F: T:	Item	
	Attendence on Newinsted/Calested Cubecutinesters	nem	
	Attendance on Nominated/Selected Subcontractors (B9		
3	General Attendance (B9.1)		
	F: T:	Item	
4	Special Attendance (B9.2)		
	F: T:	Item	
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0.5				
85	Commissioning - fuel, water and por			
	F:V:	T:	Item	
	Financial Aspects (B10)			
86	Statutory taxes, duties and levies (B	10.1)		
	F:V:	T:	Item	
87	Payment of Preliminaries (B10.2)			
	F:V:	T:	Item	
88	Adjustment of Preliminaries (B10.3)			
	F:V:	T:	Item	
89	Payment certificate cash flow (B10.4	4)		
	F:V:		Item	
	General (B11)			
00				
90	Protection of the Works (B11.1) F:V:	т.		
	F:V:		Itom	
			Item	
91	Protection/isolation of existing/section works (B11.2)	onally occupied		
	F:V:	T:	Item	
92	Site security (B11.3)			
	F:V:	T:		
			Item	
93	Notice before covering work (B11.4)			
	F:V:			
	· · · · · · · · · · · · · · · · · · ·		Item	
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94	Disturbance (B11.5)			
	F: T:	Item		
95	Environmental disturbance (B11.6)			
	F: T:	Item		
96	Works cleaning and clearing (B11.7)			
	F: T:	Item		
07) (lien		
97	Vermin (B11.8)	ltere		
	F: T:	Item		
98	Overhand work (B11.9)			
	F: T:	Item		
	SECTION C: SPECIFIC PRELIMINARIES			
	Section C: Specific Preliminaries:			
99	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.			
	F: T:	Item		
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100	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.			
	F: T:	Item		
101	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.			
	F: T:	ltem		
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102	Overtime				
	Tenderers will be allowed to work two shifts in order to meet the completion date. Any costs associated with this requirement will be priced under this item				
	Should overtime be required to be worked for any other 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.				
	F: T:	ltem			
103	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.				
	F: T:	ltem			
40.4		item			
104	Site 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.				
	F: T:	Item			
105	Non Cession of Monies				
	The Contractor shall NOT cede nor assign his rights or claims to any monies due or to become due under this contract.				
	F: T:	ltem			
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106	Labour record			
	At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day.			
	F: T:	ltem		
107	Plant record			
	At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works.			
	F: T:	ltem		
108	Encroachment			
	During the course of the building operations, the Contractor shall be held entirely responsible for any encroachment onto any adjoining properties, buildings, etc., or servitudes and the cost of any remedial measures as required by the Principal Agent shall be borne by the Contractor.			
	F: T:	Item		
109	Method Statement			
	The Tenderer shall produce, when required to do so by the Principal Agent, a Method Statement outlining the methods of construction and labour and plant resources that he proposes to use in the execution of the Works. Any approval given or observation made by the Principal Agent shall not relieve the Contractor of his sole responsibility to adopt the methods of construction and to provide the labour and plant resources necessary for the due and proper timeous execution of the Works.			
	F: T:	Item		
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110	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.				
	F: T:	ltem			
111	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				
	F: T:	Item			
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112	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.		
	F: T:	Item	
113	Office accommodation		
	The contractor shall provide, maintain and remove on practical completion air-conditioned office accommodation with suitable tables and chairs for meetings to be held on the site. Such offices shall be kept clean and fit for use at all times [12.2.18].		
	F: T:	Item	
114	Storage Facilities		
	The Contractor shall provide a Container for storage of materials.		
	F: T:	Item	
115	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 there from.		
	F: T:	Item	
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em O			Quantity	Rate	Amount
	SECTION NO.2				
	BUILDING WORK				
	BILL NO.1				
	IRONMONGERY				
	PREAMBLES				
	The Model Preambles for Trades (2008 edition), as published by the Association of South African Quantity Surveyors, shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items, fully described in the said Model Preambles, will be entertained				
	BATHROOM FITTINGS				
	Stainless steel bathroom fittings:				
1	Free standing She Bin; manufactured from Grade 304 1,2/1,5mm Stainless Steel, satin finished with surface treatment. The container to have an approximately 20litre capacity.1750	No	2		
	Carried Forward to Summary of Section No. 2			R	
	Section No. 2 Bill No. 1 Ironmongery				
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ltem No		Quantity	Rate	Amount
	SECTION NO.2			
	BUILDING WORK			
	BILL NO.2			
	PLUMBING AND DRAINAGE			
	PREAMBLES			
	The Model Preambles for Trades (2008 edition), as published by the Association of South African Quantity Surveyors, shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items, fully described in the said Model Preambles, will be entertained			
	SANITARY FITTINGS			
	Rust and corrosion resistant, UV-resistant polyethylene pedestals, urinals, basins, etc. Product and colour to Principal Agent's approval:			
1	VIP 450 Pit pedestal complete with integral flap four times plugged to floor with and including 6 x 75mm masonry anchors. No	3		
	Corried Ferward to Summary of Section No. 2		Б	
	Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 2 Plumbing and Drainage (Provisional) Quantum Built & Environment Consultants		R	

	SECTION SUMMARY - Building Works				
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EX	TERNAL WORKS			
BIL	<u>LL NO.1</u>			
<u>so</u>	DIL DRAINAGE (PROVISIONAL)			
<u>PR</u>	EAMBLES			
pub Sur bills des	e Model Preambles for Trades (2008 edition), as blished by the Association of South African Quantity rveyors, shall be deemed to be incorporated in these s of quantities and no claims arising from brevity of scription of items, fully described in the said Model eambles, will be entertained			
EA	RTHWORKS			
Car	rting away of excavated material:			
be of truc	scriptions of carting away of excavated material shall deemed to include loading excavated material onto cks directly from the excavations or alternatively, from ck piles situated on the building site.			
	Carried to Collection		R	
Bill Soil	ction No. 3 No. 1 I Drainage (Provisional) antum Built & Environment Consultants		K	

Excavations, Filling , etc:		
The Contractor shall notify the Principal Agent as soon as the excavations are ready to receive foundations and no building work may be started until the Principal Agent has approved the excavations.		
Over excavations taken beyond the levels and sizes shown or required to obtain a solid foundation shall be filled by the contractor, at his own expense, with 15MPa concrete.		
Should the Contractor consider that any of the excavations are more difficult in nature than excavations in "earth" he shall immediately notify the Quantity Surveyor in writing. Failing such notification the excavations shall be deemed to be in "earth" and shall be measured and valued accordingly.		
The Contractor may use any method he chooses to excavate any class of material, but his chosen method of excavations shall not determine the classification of the material excavated.		
Blasting:		
No blasting will be allowed without the written permission of the Principal Agent.		
Should blasting be necessary, the Contractor shall take every precaution to protect the Works and persons, animals and property in the vicinity of the Works. The Contractor will be held responsible for any injury or damage caused by any blasting operations and shall make good such damage at his own expense.		
Testing:		
Prices for filling are to include for all necessary density tests in accordance with SANS 1200D.		
	_	
Carried to Collection Section No. 3	R	
Bill No. 1 Soil Drainage (Provisional) Quantum Built & Environment Consultants		
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	Prescribed density tests:	1			
	Prescribed density tests: NOTE: The Contractor is specifically referred to the SANS 1200 clause regarding the number of density tests required on the layer work, filling, etc. The tests as prescribed are deemed to be included in the appropriate rates for the layer work, filling, etc. and will not be paid for separately. The following density tests measured are over and above those normally required by SANS 1200 and is for the use of the Engineer only and will only be paid for if instructed in writing and approved as acceptable by the Engineer.				
	Site Clearance				
1	Allow for clearing the site of all shrubs and trees not exceeding 200mm girth, rubbish, debris, vegetation, drains, etc, that may be encountered and roughly level site.	m2	358		
	Excavation in earth not exceeding 2m deep:				
2	Trenches.	m3	84		
	Extra over trench and hole excavations in earth for excavation in:				
3	Soft rock.	m3	8		
4	Hard rock.	m3	4		
	Back excavation of vertical sides of excavation in all materials other than rock for working space including backfilling compacted to 93% Mod. AASHTO maximum density:				
5	Exceeding 500mm and not exceeding 1500mm deep for erection and removal of formwork to strip footing, bases, ground beams, etc.	m2	236		
6	Exceeding 1500mm and not exceeding 3000mm deep for erection and removal of formwork to strip footing, bases, ground beams, etc.	m2	101		
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	Risk of collapse of excavations:				
7	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	126		
8	Sides of trench and hole excavations exceeding 1,5m deep.	m2	295		
	Extra over all excavations for carting away:				
9	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	17		
	Keeping excavations free of water:				
10	Keeping excavations free of all water other than subterranean water.		Item		
	SOIL DRAINAGE				
	SUPPLEMENTARY PREAMBLES				
	uPVC pipes and fittings				
	Soil, waste and vent pipes and fittings shall be solvent weld jointed				
	Fixing of pipes				
	Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level				
	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"				
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	Laying, backfilling, bedding, etc. of pipes				
	Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions				
	Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding				
	SUBSOIL DRAINAGE				
11	Backfilling to drain trenches compacted to 90% Mod AASHTO density.	m3	67		
12	19mm Crushed stone encasing to pipes.	m3	17		
13	Geofabric filter blanket wrapped around stone encasing with 150mm side and 300mm end laps including stitching.	m2	169		
14	110mm Slotted uPVC agricultural pipes laid in stone encasing (Stone elsewhere).	m	105		
15	Extra for 110mm capped end.	No	5		
16	Extra for 110mm bend.	No	4		
17	Extra for 110mm junction.	No	4		
18	20mm Mesh galvanised wire netting stopper in end of 110mm pipe.	No	2		
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ı		G	uantity	Rate	Amount
	SECTION NO.3				
	EXTERNAL WORKS				
	BILL NO.2				
	STORMWATER, ACCESS & PARKING (PROVISIONAL)				
	PREAMBLES				
	The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said				
	Model Preambles DEMOLITIONS ETC				
	Breaking up and removing reinforced concrete including cutting off and removing reinforcement:				
1	100mm Thick surface bed.	m2	3		
	EARTHWORKS				
	Site Clearance:				
2	Allow for clearing the site of all shrubs and trees not exceeding 200mm girth, rubbish, debris, vegetation, drains, etc, that may be encountered and roughly level site.	m2	915		
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3	Stripping average 150mm thick layer of top soil and stockpiling on site.	m2	82		
	Excavation in earth not exceeding 2m deep:				
4	Reduced levels under floors.	m3	6		
5	Trenches.	m3	68		
6	Trenches and holes for thickening under surface beds etc.	m3	1		
	Extra over trench and hole excavations in earth for excavation in:				
7	Soft rock.	m3	8		
8	Hard rock.	m3	4		
	Risk of collapse of excavations:				
9	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	258		
	Extra over all excavations for carting away:				
10	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	66		
	Keeping excavations free of water:				
11	Keeping excavations free of all water other than subterranean water.		Item		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 98% Mod AASHTO density:				
12	Backfilling to trenches, holes, etc.	m3	8		
	Carried to Collection Section No. 3 Bill No. 2 Stormwater Drainage (Provisional) Quantum Built & Environment Consultants			R	

Earth filling selected and supplied by the contractor, deposited in layers not exceeding 150mm thick, watered and consolidated:					
Over site of G7 material in accordance with SABS 1200 DM compacted to 98% Mod AASHTO density.	m3	26			
Over site of G5 material in accordance with SABS 1200 DM compacted to 98% Mod AASHTO density.	m3	2			
Coarse river sand filling supplied by the contractor:					
Under floors etc.	m3	9			
Compaction of surfaces:					
Rip and scarify top surface of existing formation to a depth of 150mm and compact to not less than 100% of Modified AASHTO density.	m2	180			
Prescribed density tests on filling:					
"Modified AASHTO Density" test.	No	38			
STONE PITCHING					
Stone pitching of approximately 150 to 200mm diameter river stones tightly packed including preparation of ground surface under:					
400mm Thick against sloping banks.	m2	3			
SOIL POISONING.					
Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:					
Under floors etc. including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming (Provisional).	m2	180			
To bottoms and sides of trenches etc.	m2	337			
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	Contractor. deposited in layers not exceeding 150mm thick, watered and consolidated: Over site of G7 material in accordance with SABS 1200 DM compacted to 98% Mod AASHTO density. Coarse river sand filling supplied by the contractor: Under floors etc. Compaction of surfaces: Rip and scarify top surface of existing formation to a depth of 150mm and compact to not less than 100% of Modified AASHTO density. Prescribed density tests on filling: "Modified AASHTO Density" test. STONE PITCHING Stone pitching of approximately 150 to 200mm diameter river stones tightly packed including preparation of ground surface under: 400mm Thick against sloping banks. SOIL POISONING. Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years: Under floors etc. including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming (Provisional). To bottoms and sides of trenches etc.	contractor, deposited in layers not exceeding 150mm thick, watered and consolidated:Over site of G7 material in accordance with SABS 1200 DM compacted to 98% Mod AASHTO density.m3Over site of G5 material in accordance with SABS 1200 DM compacted to 98% Mod AASHTO density.m3Coarse river sand filling supplied by the contractor:m3Under floors etc.m3Compaction of surfaces:m3Rip and scarify top surface of existing formation to a depth of 150mm and compact to not less than 100% of Modified AASHTO density.m2Prescribed density tests on filling:m2"Modified AASHTO Density" test.NoSTONE PITCHINGm2Stone pitching of approximately 150 to 200mm diameter river stones tightly packed including preparation of ground surface under:m2400mm Thick against sloping banks.m2SOIL POISONING.m2Under floors etc. including forming and poisoning shallow furrows against foundation walls etc., filling in furrows and ramming (Provisional).m2To bottoms and sides of trenches etc.m2Scarried to Collection Section No. 3 Bill No. 2SStormwater Drainage (Provisional).m2	contractor. deposited in layers not exceeding 150mm thick, watered and consolidated:m326Over site of G7 material in accordance with SABS 1200 DM compacted to 98% Mod AASHTO density.m326Over site of G5 material in accordance with SABS 1200 DM compacted to 98% Mod AASHTO density.m32Coarse river sand filling supplied by the contractor:m39Under floors etc.m39Compaction of surfaces:m2180Rip and scarify top surface of existing formation to a depth of 150mm and compact to not less than 100% of Modified AASHTO density.m2180Prescribed density tests on filling:m2180YModified AASHTO Density" test.No38STONE PITCHING33Stone pitching of approximately 150 to 200mm diameter river stones tightly packed including preparation of ground surface under:3400mm Thick against sloping banks.m23SOIL POISONING.180Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite foundation walls etc. filling in turrows and ramming (Provisional).m2To bottoms and sides of trenches etc.m2337Carried to CollectionS337Section No. 3 Bill No. 23Shorw water Drainage (Provisional).5	contractor, deposited in layers not exceeding 150mm thick, watered and consolidated: Over site of G7 material in accordance with SABS 1200 m3 26 Ower site of G5 material in accordance with SABS 1200 m3 2 DM compacted to 98% Mod AASHTO density. m3 2 Coarse river sand filling supplied by the contractor: m3 9 Under floors etc. m3 9 Compaction of surfaces: m3 9 Rip and scarify top surface of existing formation to a depth of 150mm and compact to not less than 100% of Modified AASHTO density. m2 180 Prescribed density tests on filling: m2 180 Prescribed density tests on filling: m4 *Modified AASHTO Density* test. No 38 STONE PITCHING 3 3 Stone pitching of approximately 150 to 200mm diameter river stones tightly packed including preparation of ground surface under: 400mm Thick against stoping banks. m2 3 SOIL POISONING. Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years: 180 Under floors etc. including forming and poisoning shallow furrows against foundation walls etc, filling in turows and ramming (Provisional). m2<	contractor. deposited in layers not exceeding Image: Consolidated: Stomm thick, watered and consolidated: m3 26 Dver sile of G7 material in accordance with SABS 1200 m3 26 Over sile of G5 material in accordance with SABS 1200 m3 26 DM compacted to 98% Mod AASHTO density. m3 26 Coarse river sand filling supplied by the contractor: Image: Coarse river sand filling supplied by the contractor: Image: Coarse river sand filling supplied by the contractor: Under floors etc. m3 9 Image: Coarse river sand filling: Image: Coarse river sand compact to not less than 100% of Modified AASHTO density. m2 180 Prescribed density tests on filling: Image: Coarse tight tests on filling: Image: Coarse tight tests on filling: Image: Coarse tight tests on filling: "Modified AASHTO Density" test. No 38 Image: Coarse tight tests on filling: Image: Coarse test on test test on

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CONCRETE, FORMWORK AND REINFORCEMENT

SUPPLEMENTARY PREAMBLES

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)

Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated

Formwork

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

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

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	Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" <u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
	25MPa/19mm concrete				
21	Strip footings.	m3	16		
	REINFORCED CONCRETE				
	20MPa/19mm concrete				
22	Stormwater outlet slab including beams and inverted beams.	m3	1		
23	Aprons cast in panels on waterproofing.	m3	9		
	25MPa/19mm concrete				
24	Slabs including beams and inverted beams.	m3	0.1		
25	V-channels cast in panels on waterproofing.	m3	7		
26	Ditched channel.	m3	2		
	Test blocks:				
27	Set of three concrete test cubes size 150 x 150 x 150 x 150mm overall including testing (Provisional).	Sets	5		
	Concrete Sundries:				
	Finishing top surfaces of concrete smooth with a wood float:				
28	Surface beds, slabs, etc. to falls and currents.	m2	182		
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	SMOOTH FORMWORK (DEGREE OF ACCURACY I)				
	Smooth formwork to sides:				
29	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	227		
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to soffits:				
30	Slabs not exceeding 250mm thick, propped up not exceeding 1.5m high.	m2	1		
	Movement Joints, Etc.:				
31	Expansion joint not exceeding 300mm high or wide formed of one layer 10mm thick bitumen impregnated softboard joint filler set between vertical concrete or brick surfaces.	m	26		
	JOINT SEALANTS ETC.				
	Two part grey_polysulphide sealing compound including backing cord, bond breaker, primer, etc including raking out expansion joint filler if necessary:				
32	In 10 x 10mm expansion joints vertically between bricks skins not exceeding 300mm deep.	m	52		
	REINFORCEMENT				
	Fabric reinforcement:				
33	Type S245 fabric reinforcement in concrete surface beds, slabs, etc.	m2	189		
34	Type 517 fabric reinforcement in concrete surface beds, slabs, etc.	m2	10		
	MASONRY				
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	SUPPLEMENTARY PREAMBLES				
	BRICKWORK				
	Sizes in descriptions				
	Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick.				
	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.				
	All pointing to be approved by the Architect via sample panel which is to be built on site.				
	Sample panels				
35	The contractor to build a sample panel size 1.5 x 1m high detailing quality of facebrick work to the approval of Architect at contractors cost.		Item		
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar:				
36	Half brick walls.	m2	1		
37	One brick walls.	m2	130		
38	220 x 110 x 75mm Thick Hard burnt brick with half of its thickness bedded in concrete in stormwater outlet (Concrete elsewhere).	No	22		
	BRICKWORK SUNDRIES				
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	Brickwork reinforcement:				
)	75mm Wide reinforcement built in horizontally.	m	4		
	150mm Wide reinforcement built in horizontally.	m	1 532		
	FACE BRICKWORK				
	Facebricks Prime Cost Of R 6 500.00 Per Thousand Excluding VAT Delivered To The Site Pointed With Square Recessed Horizontal And Vertical Joints:				
	Extra over brickwork for face brickwork.	m2	150		
	Brick-on-edge header course copings, sills, etc of face bricks, pointed with flush joints on all exposed faces:				
	Extra over brickwork for brick-on-edge header course band.	m	221		
	WATERPROOFING				
	DAMPPROOFING OF WALLS AND FLOORS				
	One layer of 250 micron Consol Plastics Gunplas USB Green waterproof sheeting sealed at laps with Gunplas Pressure Sensitive Tape:				
	Under surface beds.	m2	167		
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em No			Quantity	Rate	Amount
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	FENCING, ETC				
	PREAMBLES				
	The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained The following				
	DEMOLITIONS				
	Taking down and removing:				
1	Approximately 1800mm high Wire mesh fencing with and including timber posts bedded on concrete bases, including removal of steel gates and prepare surface for new fence (New fence elsewhere).	m	72		
	STORMWATER DRAINAGE				
	EARTHWORKS				
	Site Clearance:				
2	Allow for clearing the site of all shrubs and trees not exceeding 200mm girth, rubbish, debris, vegetation, drains, etc, that may be encountered and roughly level site.	m2	224		
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	Bill No. 3 Fencing and Railing				
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	EXCAVATION OTHER THAN BULK.					
	Excavation in all materials other than rock not exceeding 2m deep:					
3	Holes.	m3	9			
	Risk of collapse of excavations other than bulk:					
4	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	52			
	CARTING AWAY					
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):					
5	Off site to a dumping site to be found by the Contractor.	m3	9			
	KEEPING EXCAVATIONS FREE OF WATER					
	Keeping excavations free of water:					
6	Keeping excavations free of all water other than subterranean water.		Item			
	CONCRETE, FORMWORK AND REINFORCEMENT					
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES					
	15 Mpa/19mm Mass Concrete:					
7	Bases.	m3	9			
	TEST BLOCKS					
	Test blocks:					
8	Making and testing sets of three 150 x 150 x 150 mm concrete strength test cubes (Provisional).	Sets	2			
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	FENCING				\top
	GALVANISED STEEL SECURITY FENCING				
	Hot dipped galvanised posts, stays, bolts, etc., and				
	Aperture type welded mesh security fencing:				
9	1800mm High Security fence, Type 50 x 50mm Aperture welded mesh, comprising of 2mm diameter galvanised welded vertical and horizontal wires, with vertical wires secured with hogring clips applied with hogring pliers at 600mm centres on straining wires (straining wires elsewhere measured) including drilling holes through posts.	m	75		
10	4mm Diameter galvanised straining wires secured to fencing posts with doubled 2mm galvanised wire inserted through hole in post and turned a minimum of four turns around straining wire and attached to straining frame at one end with not less than four turns and the other end to straining bolts (elsewhere measured). (4No.)	m	299		
11	500mm Diameter flat wrap comprising of galvanised razor barbed tape wire fixed vertically to and including two rows of double stranded barb wire to top of security fence and secured to barbed and straining wire (straining wire elsewhere) with and including 2.5mm diameter galvanised binding wire at 300mm centres.	m	75		
12	125mm Diameter x 3mm post, 2700mm long, with top end welded on flat cap and bottom end welded on 150 x 150 x 5mm base plate, cast 650mm deep in concrete base (Concrete base elsewhere).	No	12		
13	100mm Diameter x 3mm raking strut, 2750mm long, with top end welded on flange, bolted to steel and bottom end welded on 150 x 150 x 5mm base plate, cast 450mm deep in concrete base (Concrete base elsewhere).	No	25		
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14	75mm Diameter x 3mm thick dropper post, 2400mm long, with top end welded on flat cap, including necessary excavation, backfilling, cartaway, etc., complete.	No	25		
15	M16 Carriage bolt.	No	25		
	Hot Dipped Galvanised Gates, including bolts, hinges, etc.:				
16	Single gate size 900mm wide x 1800mm high, comprising of 50mm diameter x 2,2mm wall thickness hollow section frame (frame comprising of frame suround and one horrizontal intermidiate rail), including infill of 50 x 50mm Aperture type meshwire of 2mm diameter galvanised welded vertical and horizontal wires.	No	1		
17	20mm x 300mm Long Barrel bolt.	No	1		
18	M24 Eye bolt, 300mm long.	No	2		
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ltem No			Quantity	Rate	Amount
-	SECTION NO.3				
	EXTERNAL WORKS				
	BILL NO.4				
	RETAINING WALL				
	PREAMBLES				
	The Model Preambles for Trades (2008 edition), as published by the Association of South African Quantity Surveyors, shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items, fully described in the said Model Preambles, will be entertained				
	EARTHWORKS				
	Site Clearance:				
1	Allow for clearing the site of all shrubs and trees not exceeding 200mm girth, rubbish, debris, vegetation, drains, etc, that may be encountered and roughly level site.	m2	99		
	Excavation in earth not exceeding 2m deep:				
2	Trenches.	m3	13		
	Extra over trench and hole excavations in earth for excavation in:				
3	Soft rock.	m3	1		
4	Hard rock.	m3	1		
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	Back excavation of vertical sides of excavation in all materials other than rock for working space including backfilling compacted to 93% Mod. AASHTO maximum density:					
5	Exceeding 500mm and not exceeding 1500mm deep for erection and removal of formwork to strip footing, bases, ground beams, etc.	m2	28			
	Risk of collapse of excavations:					
6	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	28			
	Extra over all excavations for carting away:					
7	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	8			
	Keeping excavations free of water:					
8	Keeping excavations free of all water other than subterranean water.		ltem			
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 98% Mod AASHTO density:					
9	Backfilling to trenches, holes, etc.	m3	5			
	<u>CONCRETE, FORMWORK AND</u> <u>REINFORCEMENT</u>					
	SUPPLEMENTARY PREAMBLES					
	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)					
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	Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated					
	Formwork					
	Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use					
	Formworks to soffits of solid etc shall be deemed to be 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"					
	REINFORCED CONCRETE					
	25MPa/19mm concrete:					
10	Strip footings.	m3	6			
	Test blocks:					
11	Set of three concrete test cubes size 150 x 150 x 150 x 150mm overall including testing (Provisional).	Sets	1			
	ROUGH FORMWORK (DEGREE OF ACCURACY II)					
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	Rough formwork to sides:					
12	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	50			
	Movement Joints, etc.:					
13	10mm Joints exceeding 300mm high.	m2	1			
14	Expansion joint not exceeding 300mm high or wide formed of one layer 10mm thick bitumen impregnated softboard joint filler set between vertical concrete or brick surfaces.	m	8			
	JOINT SEALANTS, ETC.					
	Two part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc including raking out expansion joint filler if necessary:					
15	In 10 x 10mm expansion joints vertically between bricks skins not exceeding 300mm deep.	m	17			
	REINFORCEMENT					
	Mild steel reinforcement to structural concrete work:					
16	Mild steel bars of varying diameter.	t	0.36			
	High tensile steel reinforcement to structural concrete work:					
17	High tensile steel bars of varying diameter.	t	0.24			
	MASONRY					
	SUPPLEMENTARY PREAMBLES					
	BRICKWORK					
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	Sizes in descriptions				
	Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick.				
	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.				
	All pointing to be approved by the Architect via sample panel which is to be built on site.				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar:				
18	One brick walls.	m2	38		
19	One and half brick walls.	m2	23		
	BRICKWORK SUNDRIES				
	Brickwork reinforcement:				
20	150mm Wide reinforcement built in horizontally.	m	444		
21	230mm Wide reinforcement built in horizontally.	m	266		
	FACE BRICKWORK				
	Facebricks Prime Cost Of R 6 500.00 Per Thousand Excluding VAT Delivered To The Site Pointed With Square Recessed Horizontal And Vertical Joints:				
22	Extra over brickwork for face brickwork.	m2	60		
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	Brick-on-edge header course copings, sills, etc of face bricks, pointed with flush joints on all exposed faces:				
23	Extra over brickwork for brick-on-edge header course band.	m	25		
	SOIL DRAINAGE (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	uPVC pipes and fittings				
	Soil, waste and vent pipes and fittings shall be solvent weld jointed				
	Fixing of pipes				
	Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level.				
	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.				
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	Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding.				
	SUBSOIL DRAINAGE				
24	Backfilling to drain trenches compacted to 90% Mod AASHTO density.	m3	13		
25	19mm Crushed stone encasing to pipes	m3	2		
26	Geofabric filter blanket wrapped around stone encasing with 150mm side and 300mm end laps including stitching.	m2	30		
27	110mm Slotted uPVC agricultural pipes laid in stone encasing (Stone elsewhere).	m	25		
28	Extra for 110mm capped end.	No	1		
29	Extra for 110mm bend.	No	1		
30	Extra for 110mm junction.	No	1		
31	20mm Mesh galvanised wire netting stopper in end of 110mm pipe.	No	1		
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	BILL NO. 1				
	OCCUPATIONAL HEALTH AND SAFETY				
	HEALTH AND SAFETY REQUIREMENTS				
	Occupational Health and Safety Act 85 of 1993 , other applicable legislation including the Construction Regulations, 2014:				
1	Prepare and Compile Health and Safety plan as per Site Health and Safety Specifications. (<i>Once-off</i>)		ltem		
2	Allow for the preparation of site specific health and safety file. (<i>Once-off</i>)		Item		
3	Personal protective clothing and equipment (PPE). (<i>Per employee</i>)	No	15		
4	Health and Safety training. (Once-off training)	No	5		
5	Pre-employment, annual and exit medical examination of fitness. (<i>Annually</i>)	No	15		
6	Signage, information display and barricading excavations and storage areas. (<i>Once-off</i>)	No	30		
7	First aid boxes. (<i>Once-off</i>)	No	2		
8	Provision of a full time safety officer (Fully registered with SACPCMP as a CHSO). (<i>Per month</i>)	No	4		
9	Waste Management and rubble removal. (Per month)	No	4		
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BILL No.1			
PROVISIONAL SUMS ETC			
PREAMBLES			
The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and to the Supplementary Preambles which are incorporated in this Bill.			
SUPPLEMENTARY PREAMBLES			
Work executed by Selected Sub-contractors			
Work listed under the heading "SELECTED SUB- CONTRACTORS WORK" will commence during the execution of this contract and the contractor shall allow free access to the site for these selected contractors. The contractor shall prepare a programme in conjunction with these selected sub-contractors in order to complete the work successfully. Payment will not be made to them via the contractor. The estimated values of these contracts are listed to enable the contractor to determine profit and attendances, if required.			
<u>General:</u>			
All prime cost amounts and provisional sums are for further amplification for delivery to site of all articles concerned.			
<u>Preliminaries</u>			
The contractor is referred to the Preliminaries for further amplification of "Prime Cost Amounts and Provisional Sums"			
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DESLUDGING TO EXISTING PIT ABLUTION Provide the sum of R120 000.00 (One Hundred and			
Twenty Thousand Rand) for the desludging of pit toilets.	Item		120 000.00
Profit on above item.	Item		
Attendance on Ditto.	Item		
COMMUNITY LIAISION OFFICER			
Provide the sum of R30 000.00 (Thirty Thousand Rand) for the employment of a Community Liaison Officer to be employed by the Main Contractor and be paid an allowance of R7 500.00 a month for the duration of the project (4 months)	Item		30 000.00
Profit on above item.	Item		
Attendance on Ditto.	Item		
BOLLARDS			
Provide the sum of R25 000.00 (Twenty Five Thousand Rand) for bollards.	Item		25 000.00
Profit on above item.	Item		
Attendance on Ditto.	Item		
BUDGETARY ALLOWANCES			
The following budgetary allowances are for work to be executed at rates in the bills of quantities or to be agreed by the Principal agent			
Budgetary allowance of R50 000.00 (Fifty Thousand Rand) for additional alterations and/or demolition work to be used strictly as directed by the Principal Agent.	Item		50 000.00
Budgetory allowance of R50 000.00 (Fifty Thousand Rand) for landscaping to be used for ground shaping where necessary as directed by the Principal Agent.	Item		50 000.00
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	COMMUNITY LIAISION OFFICER Provide the sum of R30 000.00 (Thirty Thousand Rand) for the employment of a Community Liaison Officer to be employed by the Main Contractor and be paid an allowance of R7 500.00 a month for the duration of the project (4 months) Profit on above item. Attendance on Ditto. BOLLARDS Provide the sum of R25 000.00 (Twenty Five Thousand Rand) for bollards. Profit on above item. Attendance on Ditto. BUDGETARY ALLOWANCES The following budgetary allowances are for work to be executed at rates in the bills of quantities or to be agreed by the Principal agent Budgetary allowance of R50 000.00 (Fifty Thousand Rand) for landscaping to be used for ground shaping where necessary as directed by the Principal Agent. Budgetory allowance of R50 000.00 (Fifty Thousand Rand) for landscaping to be used for ground shaping where necessary as directed by the Principal Agent. Carried to Collection Section No. 5 Bill No. 1 Provisional Sums	COMMUNITY LIAISION OFFICER Provide the sum of R30 000.00 (Thirty Thousand Rand) for the employment of a Community Liaison Officer to be employed by the Main Contractor and be paid an allowance of R7 500.00 a month for the duration of the project (4 months) Item Profit on above item. Attendance on Ditto. BOLLARDS Provide the sum of R25 000.00 (Twenty Five Thousand Rand) for bollards. Profit on above item. Attendance on Ditto. BUDGETARY ALLOWANCES The following budgetary allowances are for work to be executed at rates in the bills of quantities or to be agreed by the Principal agent Budgetary allowance of R50 000.00 (Fifty Thousand Rand) for landscaping to be used for ground shaping where necessary as directed by the Principal Agent. Item Budgetory allowance of R50 000.00 (Fifty Thousand Rand) for landscaping to be used for ground shaping where necessary as directed by the Principal Agent.	COMMUNITY LIAISION OFFICER Provide the sum of R30 000.00 (Thirty Thousand Rand) for the employment of a Community Liaison Officer to be employed by the Main Contractor and be paid an allowance of R7 500.00 a month for the duration of the project (4 months) Profit on above item. Attendance on Ditto. BOLLARDS Provide the sum of R25 000.00 (Twenty Five Thousand Rand) for bollards. Provide the sum of R25 000.00 (Twenty Five Thousand Rand) for bollards. Profit on above item. Attendance on Ditto. BUDGETARY ALLOWANCES The following budgetary allowances are for work to be agreed by the Principal agent Budgetary allowance of R50 000.00 (Fifty Thousand Rand) for additional alterations and/or demolition work to be used strictly as directed by the Principal Agent. Budgetory allowance of R50 000.00 (Fifty Thousand Rand) for alditonal alterations and/or demolition work to be used strictly as directed by the Principal Agent. Budgetory allowance of R50 000.00 (Fifty Thousand Rand) for landscaping to be used for ground shaping where necessary as directed by the Principal Agent. Remit No. 1 Principal Agent. Provisional Sums Item

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