	SUMMARY		TOTAL TO	DATE
1	Preliminaries	Page	R	-
2	Earthworks (provisional)	Page	R	-
3	Concrete, formwork and reinforcement	Page	R	-
4	Masonry	Page	R	-
5	Waterproofing	Page	R	-
6	Roof coverings, claddings, etc	Page	R	-
7	Carpentry and joinery	Page	R	-
8	Ceilings, partitions and access flooring	Page	R	-
9	Ironmongery	Page	R	-
10	Metalwork	Page	R	-
11	Plastering	Page	R	-
12	Tiling	Page	R	-
13	Plumbing and drainage	Page	R	-
14	Paintwork	Page	R	-
15	External work	Page	R	-
	Sub total Excluding Vat		R	
	Add Contingency		"	R300,000
	Sub total 2 Excluding Vat			11300,000
	Value added tax at 15%			
	Subtotal Carried to Form of Offer			

Item No Quantity Amount BILL NO 1 <u>PRELIMINARIES</u> **BUILDING AGREEMENT AND PRELIMINARIES** Disclaimer While the ASAQS aims to ensure that its publications represent best practice, the ASAQS does not accept or assume any liability or responsibility for any events or consequences thereof that derive from the use of the Preliminaries Master Bill. Such Master Bill is not exhaustive and is therefore only intended to provide general guidance to those who wish to make use of it. This publication is provided "as is" without warranty of any kind, either expressed or implied including but without limitation to warranties of merchantability, fitness for a particular purpose and noninfringement The JBCC Series 2000 Principal Building Agreement (July 2007 edition 5.0 reprint 1) prepared by the Joint Building Contract Committee shall be the applicable building agreement, amended as hereinafter described The JBCC Principal Building Agreement Contract Data EC and the JBCC Principal Building Agreement Contract Data CE form an integral part of this agreement. The ASAQS Preliminaries (November 2007 edition) published by the Association of South African Quantity Surveyors for use with the said JBCC Principal Building Agreement shall be deemed to be incorporated in these provisional bills of quantities

Contractors are referred to the abovementioned documents for the full

intent and meaning of each clause thereof

Item No

These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this agreement such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the abovementioned documents

Where any item is not relevant to this specific agreement such item is marked N/A, signifying "not applicable"

PREAMBLES FOR TRADES

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 **provisional bills of quantities** and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained

Supplementary preambles are incorporated in these **provisional bills of quantities** to satisfy the requirements of this project. Such supplementary preambles shall take precedence over the provisions of the said Model Preambles

The **contractor's** prices for all items throughout these **provisional bills of quantities** must take account of and include for all of the obligations, requirements and specifications given in the said Model Preambles and in any supplementary preambles

PRICING OF PRELIMINARIES

Should the contractor select Option A in terms of sub clause 3.2.1 in the Contract Data - Contractor to Employer (CE) for the purpose of adjustment of these preliminaries, the amount entered into the amount column in these preliminaries is to be divided into one or more of the three categories provided namely Fixed (F), Value Related (V) and Time Related (T)

SECTION A - PRINCIPAL BUILDING AGREEMENT

Quantity | Amount

Item No		Quantity	Amount
item ito		Quantity	, anounc
	Definitions (A1)		
	<u>Definitions (A1)</u>		
	Clause 1.0 - Definitions and interpretation The measuring system used for		
1	the preparation of the provisional bills of quantities is the Standard		
	System of Measuring Building Work (sixth edition, revised 1999) published		
	by the Association of South African Quantity Surveyors [1.1]		
		Item	
	Objective and preparations (A2 - A14)		
2	Clause 2.0 - Offer acceptance and performance obligations		
	F: V: V: T:	Item	
	Carried Forward	R	
	Brought Forward	R	
	brought rorward	11	
2	Clause 3.0 - Documents		
3	Clause 5.0 - Documents		
	The contract drawings are as listed in Part C 3.3. Scope Of Works.		
	Provision is made in the summary page of these provisional bills of		
	quantities for the inclusion of Value Added Tax (VAT) [3.5]		
	The principal agent shall decide which portion of the priced document		
	may be used as a specification of materials and goods or methods, if any		
	[3.9]		
	F: V: V: T:	Item	
4	Clause 4.0 - Design responsibility		
•	F: V: T: T:	Item	
	- · · · · · · · · · · · · · · · · · · ·	100111	
_	Clause F.O. Employer's agents		
5	Clause 5.0 - Employer's agents F: T: V:	l# a .a -	
	F:	Item	

		0	
Item No		Quantity	Amount
6	Clause 6.0 - Contractor's site representative	Item	
		item	
7	Clause 7.0 - Compliance with laws and regulations		
	Without limiting the generality of the provisions of clause 7.0, the		
	contractor's attention is drawn to the provisions of the Construction		
	Regulations, 2003 issued in terms of the Occupational Health and Safety		
	Act, 1993. It is specifically stated that the employer shall prepare a		
	documented health and safety specification for the works (refer to		
	Annexure 5.1 for a copy of the relevant specification) and that the		
	employer shall ensure that the contractor has made provision for the cost		
	of health and safety measures during the execution of the works. The		
	contractor shall price opposite this item (refer to Annexure 5.1 for a copy		
	of the relevant Bills of Quantities for pricing) for compliance with the act		
	and the regulations and the provisions of the aforementioned health and		
	safety specification [7.1]	14	
	F: V: T: T:	Item	
8	Clause 8.0 - Works risk		
	F: V: T: T:	Item	
	* · · · · · · · · · · · · · · · · · · ·	iceiii	
9	Clause 9.0 - Indemnities		
	F: V: V: T: T:	Item	
10	Clause 10.0 - General insurances		
	F: T: V:	Item	
11	Clause 11.0 - Special insurances		
	F: V: V: T:	Item	
12	Clause 12.0 - Effecting insurances		
12	F: V: T: T:	Item	
		iteiii	
	Carried Forward	R	
	Brought Forward	R	
•	•	=	

Item No		Quantity	Amount
		,	
13	Clause 13.0 - Assignment		
	F: V: T: T:	Item	
14	Clause 14.0 - Security		
	F: V: T:	Item	
	<u>Execution (A15 - A23)</u>		
15	Clause 15.0 - Preparation for and execution of the works F: T:	ltom	
	F V V I	Item	
16	Clause 16.0 - Site and access		
	A geotechnical investigation has been done and will be available for		
	viewing at the offices of the Principal Agent. [16.4]		
	The contractor will have full use of the site. Refer to Site Information item		
	C.4.1.		
	There are no current structures or services such as water, sewerage and		
	electricity on site and connections will have to be made to main supply		
	lines. Services will be pointed out to the tenderers at the site inspection		
	meeting. Refer to Scope Of Works item C.3.4. (Refer to clause 16.7)		
	F: V: V: T:	Item	
17	Clause 17.0 - Contract instructions		
17	F: V: T: T:	Item	
		100111	
18	Clause 18.0 - Setting out of the works		
	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 [18.1].		
	F: V: T:	Item	
19	Clause 19.0 - Temporary works and plant		

The contractor shall price opposite this item for compliance with all the requirements. Refer to item C.3.6.4. and C.4.1.3. Scope Of Works for details relating to enclosure and protection of the works and item 3.6.1. for office accommodation. F:	Item No		Quantity	Amount
details relating to enclosure and protection of the works and item 3.6.1. for office accommodation. F:		The contractor shall price opposite this item for compliance with all the		
for office accommodation. F:		requirements. Refer to item C.3.6.4. and C.4.1.3. Scope Of Works for		
F:		details relating to enclosure and protection of the works and item 3.6.1.		
Clause 20.0 - Nominated subcontractors Refer to the provisions on general attendance hereinafter F:				
Refer to the provisions on general attendance hereinafter F:		F: V: T: T:	Item	
F:	20	Clause 20.0 - Nominated subcontractors		
Clause 21.0 - Selected subcontractors General attendance of n/s subcontractors for pricing by the contractor shall be in accordance with the n/s agreement. Notwithstanding this provision, general attendance shall be deemed to include for the contractor to provide free of charge to any n/s subcontractor such scaffolding as may reasonably be required by such n/s subcontractor for the execution of the relevant subcontract work F:		Refer to the provisions on general attendance hereinafter		
General attendance of n/s subcontractors for pricing by the contractor shall be in accordance with the n/s agreement. Notwithstanding this provision, general attendance shall be deemed to include for the contractor to provide free of charge to any n/s subcontractor such scaffolding as may reasonably be required by such n/s subcontractor for the execution of the relevant subcontract work F:			Item	
shall be in accordance with the n/s agreement. Notwithstanding this provision, general attendance shall be deemed to include for the contractor to provide free of charge to any n/s subcontractor such scaffolding as may reasonably be required by such n/s subcontractor for the execution of the relevant subcontract work F:	21	Clause 21.0 - Selected subcontractors		
22 Clause 22.0 - Employer's direct contractors F:		shall be in accordance with the n/s agreement. Notwithstanding this provision, general attendance shall be deemed to include for the contractor to provide free of charge to any n/s subcontractor such scaffolding as may reasonably be required by such n/s subcontractor for		
F:		F: V: V:	Item	
F:	22	Clause 22 0 - Employer's direct contractors		
Clause 23.0 - Contractor's domestic subcontractors F:	22		ltem	
F:				
Completion (A24 - A30) 24 Clause 24.0 - Practical completion F:	23	Clause 23.0 - Contractor's domestic subcontractors		
24 Clause 24.0 - Practical completion Item F:		F: V: V: T:	Item	
F:		Completion (A24 - A30)		
F:	24	Clause 24.0 - Practical completion		
25 Clause 25.0 - Works completion F:	24	·	ltem	
F:				
26 Clause 26.0 - Final completion	25	Clause 25.0 - Works completion		
		F: V: V: T:	Item	
	26	Clause 26.0 - Final completion		
		·	Item	
Carried Forward R -		Carried Forward	R	R -

Brought Forward Clause 27.0 - Latent defects liability period F:	Item No		Quantity	Amount	
F:		Brought Forward	R	R -	
F:					
Clause 28.0 - Sectional completion No sectional completion is anticipated. F:	27	Clause 27.0 - Latent defects liability period			
No sectional completion is anticipated. F:		F: V: T:	Item		
No sectional completion is anticipated. F:					
F:		·			
29 Clause 29.0 - Revision of date for practical completion The removal and replacement of materials and/or workmanship which do not conform to specification or the contract drawings shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value (Clause 29.3) F:					
The removal and replacement of materials and/or workmanship which do not conform to specification or the contract drawings shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value (Clause 29.3) F:		F: V: T: T:	Item		
The removal and replacement of materials and/or workmanship which do not conform to specification or the contract drawings shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value (Clause 29.3) F:	20	Clause 20.0 - Pevision of date for practical completion	D		
not conform to specification or the contract drawings shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value (Clause 29.3) F:	29	·	IX.		
grounds for the extension of the construction period nor for the adjustment of the contract value (Clause 29.3) F:		·			
adjustment of the contract value (Clause 29.3) F:		-			
F:					
Clause 30.0 - Penalty for late or non-completion F:		·	ltem		
Payment (A31 - A35) Clause 31.0 - Interim payment The inclusion of materials and goods stored off site in the amount authorised for payment in terms of clause 31.4 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. Clause 31.6.5 is			item.		
Payment (A31 - A35) Clause 31.0 - Interim payment The inclusion of materials and goods stored off site in the amount authorised for payment in terms of clause 31.4 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. Clause 31.6.5 is	30	Clause 30.0 - Penalty for late or non-completion			
Clause 31.0 - Interim payment The inclusion of materials and goods stored off site in the amount authorised for payment in terms of clause 31.4 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. Clause 31.6.5 is		F: T: V:	Item		
Clause 31.0 - Interim payment The inclusion of materials and goods stored off site in the amount authorised for payment in terms of clause 31.4 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. Clause 31.6.5 is					
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authorised for payment in terms of clause 31.4 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. Clause 31.6.5 is	31	Clause 31.0 - Interim payment			
authorised for payment in terms of clause 31.4 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. Clause 31.6.5 is		The inclusion of materials and goods stored off site in the amount			
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considered upon the provision, by the contractor, of an approved guarantee issued by a registered commercial bank. Clause 31.6.5 is		• •			
guarantee issued by a registered commercial bank. Clause 31.6.5 is		,			
		,			
32 Clause 32.0 - Adjustment to the contract value	32	Clause 32.0 - Adjustment to the contract value			
The contract value shall be adjusted according to CPAP using information		The contract value shall be adjusted according to CPAP using information			
stated in the Contract Data [32.13]. Fluctuations in costs in the rate of		stated in the Contract Data [32.13]. Fluctuations in costs in the rate of			
Value Added Tax shall be deemed incorporated into the contract.		Value Added Tax shall be deemed incorporated into the contract.			

Item No		Quantity	Amount
	Where prices are submitted by the contractor or n/s subcontractor 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 certificate of final completion , it shall be in writing.		
	The contractor shall not receive any mark-up for overheads and profit on any omission of tenant installation work or tenant installation work by others. Claims for loss or profit shall not be entertained [32.2]		
	F: V: T:	Item	
33	Clause 33.0 - Recovery of expense and loss F: T:	ltem	
34	Clause 34.0 - Final account and final payment F:	Item	
35	Clause 35.0 - Payment to other parties F:	Item	
36	Clause 36.0 - Termination by employer - contractor's default F:	Item	
37	Clause 37.0 - Termination by employer - loss and damage F: T:	ltem	
38	Clause 38.0 - Termination by contractor - employer's default F: T:	ltem	
39	Clause 39.0 - Termination - cessation of the works F:	ltem	

Item No		Quantity	Amount
	Carried Forward	R	R -
	Brought Forward	R	R -
	Dispute (A40)		
40	Clause 40.0 - Settlement of disputes		
	F: V: T:	Item	
	Contract variables (A41 - A42)		
41	Clause 41.0 - Post tender provisions		
	The contractor is to complete before submission of his tender the JBCC Principal Building Agreement Contract Data CE		
	F: T: T:	Item	
42	Clause 42.0 - Contractual agreement		
	The required information of the contracting parties and the amount of the		
	accepted contract sum shall be inserted in the agreement for signature of		
	the agreement by the parties		
	F: V: T:	Item	
	SECTION B - PRELIMINARIES		
	Definitions and interpretation (B1)		
43	Clause 1.0 - Definitions and interpretation		
	F: V: T: T:	Item	
	Documents (B2)		
44	Clause 2.1 - Checking of documents		
	F: V: T:	Item	
45	Clause 2.2 - Provisional bills of quantities		
	These bills of quantities are in multiple procurement format ie the "wet trades" - earthworks, concrete, formwork and reinforcement, precast concrete, masonry, waterproofing and sub-surface drainage - are provisionally measured and the subsequent trades are budgetary allowances and/or selected subcontract amounts.		
	F: V: T:	Item	

Item No		Quantity	Amount
46	B1.4 PROVISIONAL BILLS OF QUANTITIES		
	F: V: T:	Item	
	Where reference is made in the documents to bills of quantities it shall be taken as referring to these Provisional Bills of Quantities. All quantities are provisional, are an indication of the extent and type of work to be executed and have been inserted in order to obtain competitive tenders. All work carried out under this contract shall be re measured and valued at schedule rates and in accordance with the Conditions of Contract		
47	Clause 2.3 - Availability of construction documentation The budgetary allowances and selected subcontract amounts allocated for subsequent trades included in this agreement will be separately procured, based on multiple procurement of selected subcontractors during the construction period		
	Previous work and adjoining properties (B3)	Item	
48	Clause 3.1 - Previous work - dimensional accuracy F: T:	Item	
49	Clause 3.2 - Previous work - defects F: T:	Item	
50	Clause 3.3 - Inspection of adjoining properties F: T:	Item	
	Samples, shop drawings and manufacturer's instructions (B4)		
51	Clause 4.1 - Samples of materials F: T:	ltem	
	Carried Forward Brought Forward	R R	R - R -

Item No		Quantity	Amount
52	Clause 4.2 - Workmanship samples F: T:	ltem	
53	Clause 4.3 - Shop drawings F: V: T:	ltem	
54	Clause 4.4 - Compliance with manufacturer's instructions F: T:	ltem	
	Deposits and fees (B5)		
55	Clause 5.1 - Deposits and fees F: T: T:	ltem	
F.C.	Temporary services (B6)		
56	Clause 6.1 - Water F: T: T:	ltem	
57	Clause 6.2 - Electricity F: T: T:	ltem	
58	Clause 6.3 - Two Name Boards (2) F: T:	ltem	
59	Clause 6.4 - Ablution facilities F: T:	ltem	
CO	Clause 6.5 - Site Offices, Meeting, Storage & Engineer's Office	ltem	
60	Clause 6.6 - Community Liaison Officer (8) Months F: T:	Item	
61	Clause 8.1 - Special attendance		
	F: V: T:	Item	

Item No		Quantity	Amount
	General (B9)		
62	Clause 9.1 - Protection of the works		
0Z	The contractor shall price opposite this item for compliance with all the		
	requirements. Refer to Scope Of Works item C.4.1.3. for details relating to		
	protection of the works		
	F: V: T: T:	ltem	
		iteiii	
63	Clause 0.2. Protection/isolation of existing/sectional accurring works		
	Clause 9.2 - Protection/isolation of existing/sectional occupied works	ltom	
	F: V: V:	ltem	
<i>C</i> 4			
64	Clause 9.3 - Security of the works		
	The contractor shall price opposite this item for compliance with all the		
	requirements. Refer to Scope Of Works item C.4.1.3. for details relating to		
	security of the works	14	
	F: V: T:	ltem	
CE	Clause 0.4 Notice before covering work		
65	Clause 9.4 - Notice before covering work F: T:	Item	
	F	item	
66	Clause 9.5 - Disturbance		
00	The contractor shall price opposite this item for compliance with all the		
	requirements. Refer to Scope Of Works item C.4.1.5. for details relating to		
	disturbance.		
	F: V: V:	ltem	
		Itterri	
67	Clause 9.6 - Environmental disturbance		
07	The contractor shall price opposite this item for compliance with all the		
	requirements. Refer to Scope Of Works item C.4.1.6. for details relating to		
	lenvironmental disturbance.		
	F: V: V:	ltem	
		iteiii	
	Carried Forward	R	
	Brought Forward		
68	Clause 9.7 - Works cleaning and clearing		
	F: V: T: T:	ltem	

Item No		Quantity	Amount
	Brought Forward	R	
69	Clause 9.8 - Vermin F: T: V:	Item	
70	Clause 9.9 - Overhand work F: T:	ltem	
	Schedule of variables (B10)		
	Information necessary for elections and completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder. Where no information is given it shall mean that no specific requirements are expected or that the clause is not relevant to this specific contract		
	10.1 - Provisional bills of quantities [clause 2.2]. The quantities are provisional - Applicable		
	10.2 - Availability of construction documentation [clause 2.3] Provisional construction documentation is complete - Yes		
	Construction documentation will be completed and available at the date the site is handed over to the successful contractor. The Principal Agent and Contractor shall work together and shall agree dates that are reasonable by when the contractor is to Be provided with each outstanding item of the anticipated construction documentation.		
	10.3 - Previous work - dimensional accuracy [clause 3.1]		
	10.4 - Previous work - defects [clause 3.2]		
	10.5 - Inspection of adjoining properties [clause 3.3]		
	10.6 - Water [clause 6.1.] Option A (by contractor) - Yes Option B (by employer - free of charge) - No Option C (by employer - metered) - No		

			Г
Item No	The contractor shall install a water meter to the existing water supply at approved points and provide the Principle Agent with regular readings of water consumption at a date to be advised. 10.7 - Electricity [clause 6.2.] Option A (by contractor) - Yes	Quantity	Amount
	Option B (by employer - free of charge) - No Option C (by employer - metered) - No		
	The contractor shall install an electrical meter to the existing electricity supply at approved points and provide the Principle Agent with regular readings of electrical consumption at a date to be advised.		
	10.8 - Telecommunications [clause 6.3.] Telephone - Yes		
	Facsimile - No E-mail - No		
	10.9 - Ablution facilities [clause 6.4.] Option A (by contractor) - Yes Option B (by employer) - No		
	10.10 - Protection of the works [clause 9.1] The contractor shall refer to Scope of Works item C.4.1.3. For the protection of works.		
	10.11 - Protection/isolation of existing/sectional occupied works [clause 9.2] Protection/isolation is required - No		
	Carried Forward Brought Forward	R R	R - R -
	10.12 - Disturbance [clause 9.5]		
	The contractor shall refer to Scope of Works item C.4.1.5. for disturbance.		

		<u> </u>	T
Item No		Quantity	Amount
	10.13 - Environmental disturbance [clause 9.6]		
	The contractor shall refer to Scope Of Works item C.4.1.6. for		
	environmental disturbance		
	SECTION C - SPECIFIC PRELIMINARIES		
71	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: V: T: T:	Item	
72	Warranties for material and workmanship		
	Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the firm supplying the materials and/or doing the work and shall deliver same to the principal agent on the final completion of the contract. The warranty shall state that workmanship, materials and installation are warranted for a specified period from the date of final completion and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work,upon written notice to do so. The warranty will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the contractor		
	F: V: T:	Item	
73	Co-operation of contractor for cost management		

Item No		Quantity	Amount
	It is specifically agreed that the contractor accepts the obligation of assisting the principal agent in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The principal agent undertakes to make available to the contractor all budgetary allowances and cost assessments/reports to enable the proper procedure to be implemented and the contractor shall attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures, as necessary, to all subcontractors		
	F: V: T:	Item	
74	Propping of floors below		
	The contractor is advised that propping of floors below may be required if he wishes to use any areas of completed suspended reinforced concrete slabs for vehicle access, storage of materials and goods and location of plant, scaffolding, etc. The location of these areas and any necessary propping shall be approved by the principal agent and the cost thereof shall be borne by the contractor		
	F: V: T:	Item	
75	Testing of windows for water tightness		
	Each window shall be tested for water tightness with water sprayed on using adequate pressure. If in the opinion of the principal agent , the pressure proves to be inadequate, then the pressure shall be boosted by means of compressed air or other approved means		
	F: V: T:	Item	

Item No		O	l -
		Quantity	Amount
	Carried Forward Brought Forward	R R	R -
76	Testing of roof waterproofing for water tightness		
	Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent , flooded with water and kept "ponded" for at least 36 hours as a test to ensure the water tightness of the waterproofing and before any further construction work is carried out above the waterproofing F:	ltem	
	Carried to Final Summary	D	

		Te	nder
	Quantity	Rate	Amount
EARTHWORKS (PROVISIONAL)			
Nature of ground			
The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"			
The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"			
The nature of the ground is assumed to be silty clay with loose river boulders varying in size up to approximately 450mm diameter, all of which will be deemed as "earth", but possibly interspersed with "hard rock"			
Trial holes indicate that the nature of the ground is silty clay to a depth of approximately 500mm with fine to medium loose sandy material below, therefore "earth"			
A soils investigation has been carried out on the site by the engineer and the report is annexed to these bills of quantities. The soils report indicates that the ground varies between silty sand, reworked soil of mixed origin and residual shale, all of which will be deemed as "earth". All very hard unweathered shale, ironstone, etc, the removal of which necessitates the use of explosives or heavy duty hydraulic percussion hammers (peckers), will be classified as "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			
Filling and layer work materials			
References such as "G1", "G2", etc and "C1", "C2", etc in descriptions of filling and layer work materials refer to corresponding references in the document "Guidelines for Road Construction Materials. TRH 14: 1985" compiled by the Committee of State Road Authorities and the properties set out therein for each kind shall be applicable to the respective materials described hereinafter Testing			
Prices for filling are to include for all necessary density and other tests			
SITE CLEARANCE			

				Tende	r
Item No			Quantity	Rate	Amount
	<u>Site clearance</u>				
1	1.1. Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m2	390		
	1.2. Demolition (Demolition and Clearing all existing structures as per the Engineer's Instruction		sum		
	EXCAVATIONS ETC				
	Digging up topsoil				
	Digging up topsoil to an average depth of ?mm and preserving for use of filling	m2	390		
	Excavation in earth not exceeding 2m deep				
3	Trenches	m3	200		
	FILLING ETC				
	Filling of natural gravel material (G7) supplied by the contractor, compacted to 93% Mod AASHTO density				
4	Over site to make up levels	m3	80		
5	Backfilling to trenches, holes, etc	m3	250		
	Carried to final summary	,			

			Ten	der
		Quantity	Rate	Amount
CONCRETE, FORMWORK AND REINFORCEMENT				
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 for approval. The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (test cubes are measured separately)				
<u>Formwork</u>				
Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use				
The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself				
Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described				
Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high 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 CAST ON/IN FORMWORK				
REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
25MPa/19mm concrete				
Strip footings	m3	60		
Surface beds on waterproofing	m3	33		

	TEST CUBES				
57	Making and testing $150 \times 150 \times 150$ mm concrete strength test cube (Provisional)	No	17		
	REINFORCEMENT				
	REINFORCEMENT (PROVISIONAL)				
	Mild steel reinforcement to structural concrete work				
327	8 mm Diameter bars	t	8.6		
	High tensile steel reinforcement to structural concrete work				
327	10 mm Diameter bars	t	3.6		
	<u>Fabric reinforcement</u>				
334	Type 193 fabric reinforcement in concrete surface beds etc	m2	373		
	Carried to final sumr	mary		R	-

BILL NO 3 MASONRY

			Tender		
em No			Quantity	Rate	Amount
	BRICKWORK				
	SUPERSTRUCTURE				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar				
	Half brick walls	m2	385		
2	One brick walls	m2	840		
	BRICKWORK SUNDRIES				
<u>.</u>	2,5mm Galvanised brick reinforcement				
3	75mm Wide reinforcement built in horizontally	m	900		
4	150mm Wide reinforcement built in horizontally	m	2000		
	Prestressed fabricated concrete lintels including necessary temporary supports				
	110mm Lintels in lengths not exceeding 3m	m	345		

Carried to final summary

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			Tender		
Item No	DAMPPROOFING OF WALLS AND FLOORS		Quantity	Rate	Amount
	One layer 375 micron embossed polyethylene dampproof course (SANS 952- 1985 type B)				
	In walls	m	345		
	One layer 250 micron green polyethylene waterproof sheeting (SANS 952-1985 type C) sealed at laps with PVC self-adhesive tape				
2	Under surface beds	m2	400		

BILL NO 5 WATERPROOFING	UPGRADING OF DELARAYVILLE SPORTS COMPLE					

Carried to final summary

BILL NO 5 WATERPROOFING

		Tender		
em No		Quantity	Rate	Amount
	PROFILED METAL SHEETING AND ACCESSORIES			
	0.58mm "Cliplok" or similar approived roof sheeting fixed to timberpurlins			
1	Roof covering with pitches not exceeding 25 degrees - Pavilion m2	310		
2	Roof covering with pitches not exceeding 25 degrees - Hall m2	260		

BILL NO 6	UPGRADING OF DELARAYVILLE SPORT FACI
ROOF COVERINGS	

Carried to final summary

			Tender		
ltem No			Quantity	Rate	Amount
	STRUCTURAL TIMBERWORK ETC				
1	Supply and install roof truss system, including roof rixing purlines (sheeting measured elsewhere) for Multi-Purpose Building as per 18007-0002				
	measured eisewhere) for Multi-Furpose Building as per 18007-0002	Sum	1		
2	Supply and install roof truss system, including roof rixing purlines (sheeting				
_	measured elsewhere) for Gatehouse as per 18007-0003	Sum	1		
	FLOORS AND SKIRTINGS				
	<u>SKIRTINGS</u>				
	Wrought meranti				
3	75 x 12mm Skirtings	m	200		
4	20 x 20mm Skirtings including ?mm quadrant bead, nailed	m	200		
	TIMBER DOORS, WINDOWS, ETC				
	DOORS ETC				
	Hollow core flush doors with commercial veneer, hung to steel frames				
5	40mm Door 2100 x 850mm high	No	30		
6	40mm Double door 2100 x 1500mm high with rebated (flush?) meeting edges				
		No	6		
	CUPBOARDS TO KITCHENS, BEDROOMS, ETC				
7	Kitchen Cupboards for Multi-Purpose Building	Sum	2		
/	Mitchell Cuppoalus for Multi-rui pose bullullig	Juili	2		
8	Carpentry for changes rooms Carried to final summary	Sum	2		
	Carried to final sufficiency				

BILL NO 7
CARPENTRY AND JOINERY

UPGRADING OF DELARAYVILLE SPORTS CO

		Tender		
Item No	NAILED-UP CEILINGS	Quantity	Rate	Amount
	6,4mm Gypsum plasterboard with H-profile galvanised steel jointing strips			
	Ceilings including standard steel brandering at 500mm centres in one direction onlY m2	385		
	Gypsum plasterboard cornices			
2	75mm Coved cornices m	250		

BILL NO 8	CEILINGS.	PARTITIONS,	ETC
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UPGRADING OF DELARAYVILLE SPORTS FACILTY

Carried to final summary		

ITEM	
NO	

	Quantity	Rate	Amount
STRUCTURAL STEELWORK			
<u>User note</u>			
Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions			
Take note that these Model Bills of Quantities utilise abbreviated descriptions			
The Model Preambles for Trades 2008 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated bills			
of quantities descriptions by inter alia referring to SANS construction standards. Where such model preambles are not applicable (eg			
where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for			
insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system,			
represents the full description by extending the abbreviated bills of quantities descriptions and/or by			
inserting appropriate preambles Consider inserting the preambles hereunder when using the abovementioned Model			
Preambles for Trades 2008			

Consideration is to be given in specific applications (e.g. where "heavy" steel structures such as in industrial plants, towers for mine shafts, etc are dominant) to implement the principles laid down by the "Measurement for Structural Steelwork" as prepared and recommended by the South African Institute of Steel Construction or any other appropriate principles This bill is, however, based on the building work measuring system

Finishing-off painting is to be included in this trade only when the structural steel contractor is required to execute the work

Descriptions

Descriptions of bolts shall be deemed to include nuts and washers

Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete
Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete

STEEL COLUMNS AND BEAMS

STEEL COLUMNS AND BEAMS

<u>User note</u>

	In the event of there being only a limited number of different heights or lengths of columns or beams, the specific heights or lengths may be given separately or may be suitably grouped together				
	Welded columns in single lengths with flat base, cap, bearer and connection plates, bolted to concrete				
1	246X147mm x 37kg/m I-section	t	10.8	R	-
	STEEL TRUSSES				
	STEEL TRUSSES				
	Welded roof trusses of angle rafters, tie beams, rails, struts, braces, cleats, etc and flat bearer, gusset and connection plates, bolted to steel				
36	Truss 2 (No 12)	t	2.4	R	-
37	<u>Truss 3 (No 2)</u>	t	0.4	R	-
	STEEL PURLINS, GIRTS, BRACING, ETC				
	Purlins and girts, bolted to steel				
42	125 x 65 x 20 x 2,5mm Thick cold- formed lipped channel purlins	t	1.5	R	-
	Welded bracing, anti-sag rails, etc with flat connection plates, bolted to steel				
45	Angle bracing	t	0.8	R	-
	Carried to final summary			R	-

			Tender		
Item No	<u>LOCKS</u>	Quantity	Rate	Amount	
	<u>Keys</u>				
	Unless otherwise described locks shall have two keys each				
	EN-SUITE LOCKS				
	The following locks are to be suitable for master and grand master key operation				
1	Three-lever rebated lockset No	35			
2	Master key No	5			
	FIRE SIGNAGE				
	Signage to SANS standrards for all fire requirements.				
3	Supply, delivery and installation of a wall mounted single sided 150mm module Green Photo Luminescent E3 Fire Escape sign No	4			
4	Supply, delivery and installation of a wall mounted single sided 150mm module Red Photo Luminescent F4 Fire Extinguisher sign	12			
5	Supply, delivery and installation of a wall mounted single sided 150mm module Red Photo Luminescent F13 Fire Hose Reel Extinguisher sign No	3			
	Carried to final summary				