

CONSTRUCTION OF JERUSALEMA COMMUNITY HALL, GUARD HOUSE AND ASSOCIATED EXTERNAL WORKS					
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	SECTION NO. 1				
	BILL NO. 1				
	PRELIMINARIES				
	BUILDING AGREEMENT AND PRELIMINARIES				
	The JBCC Series 2000 Principal Building Agreement (July 2007 edition 5.0 - reprint 1) prepared by the Joint Building Contracts 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 bills of quantities				
	Contractors are referred to the abovementioned documents for the intent and meaning of each clause thereof				
	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 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 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 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 subclause 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				
	Definitions (A1)				
	Clause 1.0 - Definitions and interpretation The measuring system used for the preparation of the 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] F:.....				
1	V:..... T:.....	Item	1,00		-
	Objective and preparation (A2 - A14)				-
	Clause 2.0 - Offer acceptance and performance obligations F:.....				-
2	V:..... T:.....	Item			-
	Clause 3.0 - Documents Refer to Annexure A for a list of the contract drawings Provision is made in the summary page of these 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:.....				
3	V:..... T:.....	Item			-
					-
4	Clause 4.0 - Design responsibility F:..... V:..... T:.....	Item			-

					-
5	Clause 5.0 - Employer's agents F:..... V:..... T:.....	Item			-
	Clause 6.0 - Contractor's site representative F:..... V:..... T:.....	Item			-
	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 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 for compliance with the act and the regulations and the reasonable provisions of the aforementioned health and safety specification [7.1] F:..... V:..... T:.....	Item			-
7					-
8	Clause 8.0 - Works risk F:..... V:..... T:.....	Item			-
9	Clause 9.0 - Indemnities F:..... V:..... T:.....	Item			-
					-
10	Clause 10.0 - General insurances F:..... V:..... T:.....	Item			-
					-
11	Clause 11.0 - Special insurances F:..... V:..... T:.....	Item			-
					-
12	Clause 12.0 - Effecting insurances F:..... V:..... T:.....	Item			-
					-
13	Clause 13.0 - Assignment F:..... V:..... T:.....	Item			-
					-
14	Clause 14.0 - Security F:..... V:..... T:.....	Item			-
	Execution (A15 - A23)				-
	Clause 15.0 - Preparation for and execution of the works F:..... V:..... T:.....	Item			-
	Clause 16.0 - Site and access Certain areas will be occupied during the construction period and the contractor must execute the works with as little noise and disturbance as possible to the occupants. [16.6] F:..... V:..... T:.....	Item			-
16					-
					-
17	Clause 17.0 - Contract instructions F:..... V:..... T:.....	Item			-
	Clause 18.0-Setting out of the works The contractor shall notify the principal agent if any encroachment 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			-
18					-
	Clause 19.0 - Temporary works and plant Clause 19.1.1 - Enclosure of the works F:..... V:..... T:.....	Item			-
19					-
	Clause 19.1.2 - Office accommodation - provide suitable office accomodation for site meetings with tables and chairs for ten people F:..... V:..... T:.....	Item			-
20					-
	Clause 20.0 - Nominated subcontractors Refer to the provisions on general attendance hereinafter F:..... V:..... T:.....	Item			-
21					-
	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:..... V:..... T:.....	Item			-
22					-
	Clause 22.0 - Employer's direct contractors F:..... V:..... T:.....	Item			-
23					-
	Clause 23.0 - Contractor's domestic subcontractors F:..... V:..... T:.....	Item			-
24					-
	Completion (A24 - A30)	H3			-
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25	Clause 24.0 - Practical completion F:..... V:..... T:.....	Item				-
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26	Clause 25.0 - Works completion F:..... V:..... T:.....	Item	-	-
27	Clause 26.0 - Final completion F:..... V:..... T:.....	Item	-	-
28	Clause 27.0 - Latent defects liability period F:..... V:..... T:.....	Item	-	-
29	Clause 28.0 - Sectional completion F:..... V:..... T:.....	Item	-	-
30	Clause 29.0 - Revision of date for practical completion The removal and replacement of materials and/or workmanship which do not conform to the 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:..... V:..... T:.....	Item	-	-
31	Clause 30.0 - Penalty for late or non-completion: 0.05% of the Contract Amount inclusive of Value Added Tax per Calendar day F:..... V:..... T:.....	Item	-	-
	Payment (A31 - A35)		-	-
32	Clause 31.0 - Interim payment Materials and goods stored off site shall not be included in the amount authorised for payment [31.6.5] F:..... V:..... T:.....	Item	-	-
33	Clause 32.0 - Adjustment to the contract value - NOT APPLICABLEAll fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor [32.13]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 agreement 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 writingThe 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 of profit shall not be entertained [32.2] F:..... V:..... T:.....	N/A	-	-
34	Clause 33.0 - Recovery of expense and loss F:..... V:..... T:.....	Item	-	-
35	Clause 34.0 - Final account and final payment F:..... V:..... T:.....	Item	-	-
36	Clause 35.0 - Payment to other parties F:..... V:..... T:.....	Item	-	-
	Termination (A36 - A39)		-	-
37	Clause 36.0 - Termination by employer - contractor's default F:..... V:..... T:.....	Item	-	-
38	Clause 37.0 - Termination by employer - loss and damage F:..... V:..... T:.....	Item	-	-
39	Clause 38.0 - Termination by contractor - employer's default F:..... V:..... T:.....	Item	-	-
40	Clause 39.0 - Termination - cessation of the works F:..... V:..... T:.....	Item	-	-
	Dispute (A40)		-	-
41	Clause 40.0 - Settlement of disputes F:..... V:..... T:.....	Item	-	-
	Contract variables (A41 - A42)		-	-
42	Clause 41.0 - Post tender provisions The contractor is to complete and submit with his tender the JBCC Principal Building Agreement Contract Data CE F:..... V:..... T:.....	Item	-	-
43	Clause 42.0 - Contractual agreement The required information of the parties and the amount of the 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)					-
	Clause 1.0 - Definitions and interpretation F:..... V:.....					-
44	T:.....	Item				-
	Documents (B2)					-
						-
45	Clause 2.1 - Checking of documents F:..... V:..... T:.....	Item				-
	Clause 2.2 - Provisional bills of quantities F:..... V:.....					-
46	T:.....	Item				-
	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 F:..... V:..... T:.....					-
47		Item				-
	Previous work and adjoining properties (B3)					-
	Clause 3.1 - Previous work - dimensional accuracy F:..... V:.....					-
48	T:.....	Item				-
	Clause 3.2 - Previous work - defects F:..... V:..... T:.....					-
49		Item				-
	Clause 3.3 - Inspection of adjoining properties F:..... V:.....					-
50	T:.....	Item				-
	Samples, shop drawings and manufacturer's instructions (B4)					-
						-
51	Clause 4.1 - Samples of materials F:..... V:..... T:.....	Item				-
	Clause 4.2 - Workmanship samples F:..... V:..... T:.....					-
52		Item				-
53	Clause 4.3 - Shop drawings F:..... V:..... T:.....	Item				-
	Clause 4.4 - Compliance with manufacturer's instructions F:..... V:.....					-
54	T:.....	Item				-
	Deposits and fees (B5)					-
						-
55	Clause 5.1 - Deposits and fees F:..... V:..... T:.....	Item				-
	Temporary services (B6)					-
						-
56	Clause 6.1 - Water F:..... V:..... T:.....	Item				-
57	Clause 6.2 - Electricity F:..... V:..... T:.....	Item				-
	Clause 6.3 - Telecommunication facilities F:..... V:.....					-
58	T:.....	Item				-
59	Clause 6.4 - Ablution facilities F:..... V:..... T:.....	Item				-
	Prime cost amounts (B7)					-
	Clause 7.1 - Responsibility for prime cost amounts F:..... V:.....					-
60	T:.....	Item				-
	Special attendance on n/s subcontractors (B8)					-
						-
61	Clause 8.1 - Special attendance F:..... V:..... T:.....	Item				-
	General (B9)					-
						-
62	Clause 9.1 - Protection of the works F:..... V:..... T:.....	Item				-
	Clause 9.2 - Protection/isolation of existing/ occupied works Certain areas of the sitewill be occupied during the construction period (see item 4 page 14) F:.....					-
63	V:..... T:.....	Item				-

64	Clause 9.3 - Security of the works F:..... V:..... T:.....	Item				-
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	Clause 9.4 - Notice before covering work F:..... V:..... T:.....	Item				-
65						-
66	Clause 9.5 - Disturbance F:..... V:..... T:.....	Item				-
	Clause 9.6 - Environmental disturbance F:..... V:..... T:.....	Item				-
67						-
68	Clause 9.7 - Works cleaning and clearing F:..... V:..... T:.....	Item				-
69	Clause 9.8 - Vermin F:..... V:..... T:.....	Item				-
70	Caluse 9.9 - Overhand work F:..... V:..... T:.....	Item				-
	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 [2.2] The quantities are provisional					-
	10.2 - Availability of construction documentation [2.3] Construction documentation is complete					-
	10.3 - Previous work - dimensional accuracy [3.1]					-
	10.4 - Previous work - defects [3.2]					-
	10.5 - Inspection of adjoining properties [3.3]					-
	10.6 - Water [7.2] Option A (by contractor)					-
	10.7 - Electricity [7.3] Option A (by contractor)					-
	10.8 - Telecommunications [7.4] Telephone					-
	10.9 - Ablution facilities [7.5] Option A (by contractor)					-
	10.10 - Protection of the works [9.1]					-
	10.11 - Protection/isolation of existing/sectionally occupied					-
	10.12 - Disturbance [9.5]					-
	10.13 - Environmental disturbance [9.6]					-
	SECTION C: SPECIFIC PRELIMINARIES					-
	Any special items to meet the particular circumstances of a specific project are embodied in this section. Where required for an aspect of the works to be executed according to a design by a consulting engineer, a recital of the headings to the individual clauses of the JBCC Engineering General Conditions are included					-
71	Black economic empowerment and training F:..... V:..... T:.....	Item				-
72	Proprietary branded products F:..... V:..... T:.....	Item				-
	The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instructions after consultation with the manufacturer's authorised representative					-
73	Contract instructions F:..... V:..... T:.....	Item				-
	Contract instructions issued on site are to be recorded in triplicate in a contract instruction book which is to be supplied and maintained on site by the contractor					-
74	Labour record F:..... V:..... T:.....	Item				-
	At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and descriptions of tradesmen and labourers employed by him and all subcontractors on the works each day of that week					-
75	Plant record F:..... V:..... T:.....	Item				-

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	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 used on the works each day of that week					-
76	Guarantees F:..... V:..... T:..... Where guarantees are called for, the contractor shall obtain a written guarantee, 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 certified completion of the contract. The guarantee shall state that workmanship, materials and installation are guaranteed for a specified period from the date of certified completion of the contract, 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 from the principal agent to do so. This guarantee 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. The principal agent shall be the sole judge of the cause responsible for defects in the work and his decision shall be final and binding in terms of clause 40.2 of the agreement	Item				- - -
77	Overtime F:..... V:..... T:..... Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorised, in writing, prior to execution thereof, that costs for such overtime are to be borne by the employer	Item				- - -
78	Co-operation of contractor for cost management F:..... V:..... T:..... It is specifically agreed that the contractor accepts the obligation of assisting the professional consultants 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 quantity surveyor undertakes to make available to the contractor all budgetary allowances and cost assessments/reports to enable the proper procedures to be implemented and the contractor will attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures in regard to all subcontractors	Item				- - -
79	Occupational Health and Safety Specification F:..... V:..... T:..... The contractor shall comply with all the requirements set out in the Construction Regulations 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993). It is required of the contractor to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document. The contractor must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including extension of time or interest, due to such delay of payment. Provisions for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained.	Item				- - -
80	Allow for the compulsory equipment and clothing, ie hats, safety shoes, safety clothing, safety glasses, safety masks, harnesses, etc F:..... V:..... T:.....	Item				- -
81	Allow for all compulsory health and safety posters, boards, etc F:..... V:..... T:.....	Item				- -
82	Allow for all compulsory health and safety workshops, meetings, lectures, demonstrations, etc F:..... V:..... T:.....	Item				- -
83	Allow for all compulsory health and safety pamphlets, cards, paperwork, etc to each worker, consultant, public individual, etc coming onto the site F:..... V:..... T:.....	Item				- -
84	Allow for compulsory health and safety files that must be completed daily and must be handed to the employer on completion of the contract F:..... V:..... T:.....	Item				- -
85	Scope of Application as per Act No 85 of 1993 F:..... V:..... T:.....	Item				-

86	Notification of Construction Work as per Act No 85 of 1993 F:..... V:..... T:.....	Item					-	
							-	

	Employer's responsibilities as per Act No 85 of 1993 F:..... V:.....					-
87	T:.....	Item				-
	Principal Contractor's responsibility as per Act No 85 of 1993 F:.....					-
88	V:..... T:.....	Item				-
	Supervision of construction work as per Act No 85 of 1993 F:.....					-
89	V:..... T:.....	Item				-
	Risk assessment as per Act No 85 of 1993 F:..... V:.....					-
90	T:.....	Item				-
	Fall protection as per Act No 85 of 1993 F:..... V:.....					-
91	T:.....	Item				-
	Structures Formwork and Support as per Act No 85 of 1993 F:.....					-
92	V:..... T:.....	Item				-
	Excavation as per Act No 85 of 1993 F:..... V:..... T:.....	Item				-
	Demolition work as per Act No 85 of 1993 F:..... V:.....					-
94	T:.....	Item				-
	Tunnelling as per Act No 85 of 1993 F:..... V:..... T:.....	Item				-
	Scaffolding as per Act No 85 of 1993 F:..... V:..... T:.....	Item				-
	Suspended platforms as per Act No 85 of 1993 F:..... V:.....					-
97	T:.....	Item				-
	Botswains chairs as per Act No 85 of 1993 F:..... V:.....					-
98	T:.....	Item				-
	Materials hoists as per Act No 85 of 1993 F:..... V:.....					-
99	T:.....	Item				-
	Batch plant as per Act No 85 of 1993 F:..... V:..... T:.....	Item				-
	Explosive powered tools as per Act No 85 of 1993 F:..... V:.....					-
101	T:.....	Item				-
	Cranes as per Act No 85 of 1993 F:..... V:..... T:.....	Item				-
	Construction vehicles and mobile plant as per Act No 85 of 1993 F:.....					-
103	V:..... T:.....	Item				-
	Electrical installations and machinery on construction sites as per Act No 85 of 1993					-
104	F:..... V:..... T:.....	Item				-
	Use and temporary storage of flammable liquids on construction sites as per Act No 85 of 1993					-
105	F:..... V:..... T:.....	Item				-
	Water environments as per Act No 85 of 1993 F:..... V:.....					-
106	T:.....	Item				-
	Housekeeping on construction sites as per Act No 85 of 1993 F:.....					-
107	V:..... T:.....	Item				-
	Stacking and storage on construction sites as per Act No 85 of 1993 F:.....					-
108	V:..... T:.....	Item				-
	Fire precautions as per Act No 85 of 1993 F:..... V:.....					-
109	T:.....	Item				-
	Construction welfare as per Act No 85 of 1993 F:..... V:.....					-
110	T:.....	Item				-
	Approved inspection Authorities as per Act No 85 of 1993 F:..... V:.....					-
111	T:.....	Item				-
	Offences and penalties as per Act No 85 of 1993 F:..... V:.....					-
112	T:.....	Item				-

113	Repeal of regulations as per Act No 85 of 1993 F:..... V:..... T:.....	Item				-
114	Short title as per Act No 85 of 1993 F:..... V:..... T:.....	Item				-
115	Obligatory Sub-contracting and Training F:..... V:..... T:.....	Item				-
	The Contractor shall sub-contract 40% of the work to Domestic Sub-contractors as listed in the Schedule of Sub-Contractors in the Returnable Schedules The Principal Agent and the Contractor shall at all times make sure that the work complies with the relevant specifications, standards and norms as contained in this tender. The Principal Agent and the Contractor shall provide for the necessary skills transfer and assistance to complete the sub-contracted section of the works. The Principal Agent and the Contractor shall provide the necessary documentation to the Domestic Sub-Contractor for upgrading of the rating by CIDB. BEE Sub-Contractors must be 100% black owned and have offices in Mpumalanga Province					-
116	Expanded Public Works Programme F:..... V:..... T:.....	Item				-
	The Contractor shall study the guidelines for the implementation of labour-intensive infrastructure projects under the Expanded Public Works Programme (EPWP) attached to this document. The Contractor shall take note of the requirements and inform all selected and or other sub-contractors, as no claim afterwards will be entertained					-
117	C11.1 Local and targeted labour F:..... V:..... T:.....	Item				-
118	Allow for regular submission of proof of employment of local skilled and unskilled labour to Employer's representative F:..... V:..... T:.....	Item				-
119	Training allowance paid to targeted labour in respect of formal training. F:..... V:..... T:.....	Item				-
120	Extra over for the administration of payment of training allowances to targeted labour F:..... V:..... T:.....	Item				-
121	Transport and accommodation of workers for training where it is not possible to undertake the training in close proximity to the site F:..... V:..... T:.....	Item				-
122	C12. Contract drawings F:..... V:..... T:.....	Item				-
	The drawings issued with the tender documents do not comprise the complete set but serve as a guide only for tendering purposes and for indicating the scope of the work to enable the tenderer to acquaint himself with the nature and extent of the works and the manner in which they are to be executed Should any part of the drawings not be clearly understood by the tenderer he shall, before submitting his tender, obtain clarification in writing from the principal agent					-
123	C13. General preambles F:..... V:..... T:.....	Item				-
124	C14. Trade names F:..... V:..... T:.....	Item				-
	Wherever a trade name form any product has been described in the bills of quantities / lump sum document, the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the principal agent being obtained prior to the closing date for submission of tenders If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for					-
125	C15. Community Liaison Officer F:..... V:..... T:.....	Item				-
126	Allow for a Community Liaison Officer (CLO) to be appointed F:..... V:..... T:.....	Item				-
127	Allow for net extra cost involved in the employment of a Community Liaison Officer (CLO) in respect of the site office. F:..... V:..... T:.....	Item				-
128	Allow for net extra cost involved in the employment of a Community Liaison Officer (CLO) in respect of the toilets. F:..... V:..... T:.....	Item				-

129	Allow for net extra cost involved in the employment of a Community Liaison Officer (CLO) in respect of the sheds. F:..... V:..... T:.....	Item			-
130	C16: SANS 1921-6: HIV/AIDS Awareness read in conjunction with the Associated Specification Data F:..... V:..... T:.....	Item			-
131	General requirements (Clause 4.1) F:..... V:..... T:.....	Item			
132	HIV/AIDS awareness programme (Clause 4.2) F:..... V:..... T:.....	Item			
133	Reporting (Clause 4.3) F:..... V:..... T:.....	Item			
SUMMARY OF CATEGORIES					
Category : Fixed R..... Category : Value R..... Category : Time R.....					

	TOTAL CARRIED TO FINAL SUMMARY				
	SECTION NO. 2				
	BILL NO. 1				
	EARTHWORKS (PROVISIONAL)				
	(CPAP WORK GROUP 104 UNLESS OTHERWISE STATED)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Model Preambles for Trades"				
	NOTE:				
	Tenderers are advised to study the Standard Preambles to all trades and Supplementry Preambles before pricing this bill				
	Nature of ground				
	The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft 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.				
	EXCAVATION OTHER THAN BULK				
	Excavation in earth not exceeding 2m deep				
1	Trenches	m3	837		
2	Holes	m3	20		
	EXCAVATIONS IN STRATA OF A MORE DIFFICULT CHARACTER				
	Extra over trench and hole excavations in earth for excavation in				
3	Soft rock	m3	86		
4	Hard rock	m3	43		
	Extra over all excavations for carting away				
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	321		
	Risk of collapse of excavations				
6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	1947		
	Keeping excavations free of water				
7	Keeping excavations free of all water other than subterranean water	Item	1		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density				
8	Trenches, holes, etc	m3	537		
9	Under floors, steps, pavings, etc	m3	194		

	Approved clean earth or gravel without clay or organic matter obtained from commercial source compacted to 90% Mod AASHTO density:				
10	Under floors. Coarse river sand filling supplied by the contractor	m3	194		
11	Under floors etc Compaction of surfaces:	m3	65		
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking adding decomposed dolerite material where necessary. Prescribed density tests on filling:	m2	1290		
13	Modified AASHTO Density test SOIL POISONING Soil insecticide	No	20		
14	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	1290		
15	To bottoms and sides of trenches, holes, etc	m2	2517		

	TOTAL CARRIED TO SECTION SUMMARY				-
	SECTION NO. 2				
	BILL NO. 2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	(CPAP WORK GROUP 110 UNLESS OTHERWISE STATED)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Model Preambles for Trades"				
	NOTE:				
	Tenderers are advised to study the Standard Preambles to all trades and Supplementary Preambles before pricing this bill				
	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).				
	Formwork Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before 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 sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	15MPa/20mm concrete				
1	Surface blinding under footing and bases (Provisional)	m3	29		-
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	20Mpa/19mm concrete				
2	Strip footings	m3	167		-
3	Bases	m3	4		-
4	Columns in foundations	m3	1		-
	REINFORCED CONCRETE CAST AGAINST FORMWORK				
	25MPa/19mm concrete				
5	150mm Surface bed slab	m3	104		-
6	85mm Surface bed slab	m3	51		-
7	Ramps	m3	7		-
8	Isolated beams	m3	38		-
9	Stairs including landings, beams and inverted beams	m3	4		-
10	Slabs including beams and inverted beams	m3	22		-
	TEST BLOCKS				
11	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	20		-

	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete to a Class U2 wood float finish				
12	Surface beds, slabs, etc to falls	m2	1290		
	30MPa non-shrink grout				
13	Bedding approximately 25mm thick under 350 x 420mm base plate including chamfered edges all round	No	16		
	FORMWORK (CPAP Work Group 111 UNLESS OTHERWISE STATED)				
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides				
14	Edges, risers, ends, reveals,etc. not exceeding 300mm high	m	347		
15	Rectangular columns in foundations	m2	27		
16	Bases	m2	17		
	Smooth formwork to soffits				
17	Slabs propped up exceeding 1.5m high and not exceeding 3.5m high	m2	116		
18	Landings	m2	3		
19	Stairs with sloping soffits	m2	6		
	Smooth formwork to sides and soffits				
20	Beams propped up exceeding 1.5m high and not exceeding 3.5m high	m2	13		
21	Beams propped up exceeding 1.5m high and not exceeding 3.5m high	m2	250		
	MOVEMENT JOINTS, ETC				
	Slip joint formed of two layers 375micron embossed damp proof courses between horizontal concrete and brick surfaces including cement mortar bed				
22	Not exceeding 300mm wide	m	96		
	Expansion joints with closed cell expanded polystyrene joint filler between vertical concrete and/or brick surfaces				
23	10mm Joints not exceeding 300mm high	m	96		
	Saw cut joints				
24	5 x 40mm Saw cut joints in two operations in top of concret	m	448		
	REINFORCEMENT (PROVISIONAL)				
	Mild steel reinforcement				
25	8mm Diameter bars	t	2,7		
	High tensile steel reinforcement:				
26	10mm Diameter bars	t	2,81		
27	12mm Diameter bars	t	2,58		
28	16mm Diameter bars	t	2,36		
29	20mm Diameter bars	t	2,17		
30	25mm Diameter bars	t	0,78		
	Fabric reinforcement				
31	Type 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	1290		

	TOTAL CARRIED TO SECTION SUMMARY				-
	SECTION NO. 2				
	BILL NO. 3				
	MASONRY				
	(CPAP WORK GROUP 116 UNLESS OTHERWISE STATED)				
	SUPPLEMENTARY PREAMBLES				
	NOTE:				
	Tenderers are advised to study the Standard Preambles to all trades and Supplementary Preambles before pricing this bill				
	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.				
	FOUNDATIONS (PROVISIONAL)				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class 1 mortar including galvanised crimp wire wall ties (7 per m2 laid staggered)				
1	Half brick walls	m2	227		
2	One brick walls	m2	517		
	SUPERSTRUCTURE				
	Brickwork of NFP bricks in class II mortar including galvanised crimp wire wall ties (7 per m2 laid staggered)				
3	Brick Pier	m3	59		
4	Half brick wall	m2	351		
5	Half brick walls in beamfilling	m2	45		
6	One brick walls	m2	1231		
	BRICKWORK SUNDRIES				
	Brickwork reinforcement				
7	75mm Wide reinforcement built in horizontally	m	7753		
8	150mm Wide reinforcement built in horizontally	m	10909		
	Prestressed fabricated lintels				
9	110 x 75mm Lintels in lengths not exceeding 3m	m	101		
10	110 x 75mm Lintels in lengths exceeding 4.5m and exceeding 6m	m	31		
	Turning pieces				
11	115mm Wide turning piece to lintels etc	m	10		
	Galvanised hoop iron cramps, ties, etc				
12	25 x 1,2mm Wall tie 800mm long with one end shot pinned to concrete and other end built into brickwork	No	2150		
13	2 30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork	No	21		

	FACE BRICKWORK				
	Corobrik® Midrand 27-35MPa Roan Imperial FBX clay face brick, size 222 x 106 x 73mm, manufactured in accordance with 227:2007, bedded and jointed in Class I mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-4. or similar approved				
14	Extra over brickwork for face brickwork	m2	790		
15	Fair cutting at squint quoin or birdsmouth angle	m	21		
	NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS				
	Natural grey sills in single lengths bedded in class I mortar including metal fixing lugs etc				
16	15 x 150mm Wide sills set flat and slightly projecting	m	66		
17	15 x 175mm Wide window sills set sloping and slightly projected	m	14		
	TOTAL CARRIED TO SECTION SUMMARY				-
	SECTION NO. 2				
	BILL NO. 4				
	WATERPROOFING				
	(CPAP WORK GROUP 120 UNLESS OTHERWISE STATED)				
	SUPPLEMENTARY PREAMBLES				
	NOTE:				
	Tenderers are advised to study the Standard Preambles to all trades and Supplementry Preambles before pricing this bill				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course				
1	In walls	m2	122		
	One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
2	Under surface beds	m2	1290		
	JOINT SEALANTS, ETC				
	Denbraven LM15 polysulphide sealing compound including backing cord, bond breaker, primer, etc				
3	5 x 40mm In saw cut joints in floors	m	448		

	TOTAL CARRIED TO SECTION SUMMARY				-
	<p>SECTION NO. 2</p> <p>BILL NO. 5</p> <p>ROOF COVERINGS ETC</p> <p>(CPAP WORK GROUP 124 UNLESS OTHERWISE STATED)</p> <p>SUPPLEMENTARY PREAMBLES</p> <p>NOTE:</p> <p>Tenderers are advised to study the Standard Preambles to all trades and Supplementry Preambles before pricing this bill</p> <p>NOTE: 1) The installation of Roof Coverings is to comply with SABS Code of Practice 0237 as applicable2) All roof sheeting shall be laid under a 5 year written guarantee for site workmanship and water tightness3) All roof sheeting to be fixed strictly in accordance with the manufacturer's instructions including fasteners, stop endings, etc.4) Allowance shall be made in the rates for mastic sealant to all side laps</p> <p>PROFILED METAL SHEETING AND ACCESSORIES</p> <p>Global Roofing SolutionsGlobal Roofing Solutions 0.53mm thick 686mm cover IBR 686 profile Clean Colorbond® ThermaTech™ AZ150 spelter G550 Volcanic Grey finish top coat and Shadow Grey backing coat roof sheeting, fixed to steel intermediate purlins at MAX 2100mm centres and eaves and ridge purlins at MAX 1800mm centres using Hex Flange Head + EPDM Seal self drilling No. 3 drill point, No. 12-14 x 68mm long fasteners. Purlin fixed to second, fourth and sixth crest of each sheet and at all crests at sheet ends, all in accordance with the manufacturer's specifications. • Brand: BlueScope • Climatic Condition: inland - C1/C2 Low Corrosion Risk. and Translucent SheetingModek Polycarbonate IBR 1.4 Kg Gelcoat Surface roof Sheeting: Colour: Grey. Fixing according to Manufactured requirement/Instruction</p>				
1	Roof coverings with pitches not exceeding 25 degrees1	m2	1500		
2	Ridge capping 462mm girth	m	65		
3	Head wall flashings 308mm girth	m	32		
4	Sidewall flashing 308mm girth	m	29		
5	Cover flashing 154mm girth	m	21		
	ROOF AND WALL INSULATION				
	Sisalation 420 heavy industrial grade aluminium foil based insulation				
6	Insulation laid taut over purlins (at approximately 1 200mm centres) and fixed concurrent with roof covering including galvanised steel straining wires	m2	1500		
	Sisalation 410 housing grade glass fibre reinforced aluminium foil bonded insulation				
7	Insulation laid taut over rafters (at approximately 1 200mm centres) and fixed concurrent with battens, purlins, etc	m2	158		
	SHEET METAL FLASHINGS, LININGS, COPINGS, ETC				
	0,6mm Galvanised sheet iron with "globalcoat" finish on one side				
8	Linings to valleys with riveted and soldered joints	m2	17		

	TOTAL CARRIED TO SECTION SUMMARY				-
	<p>SECTION NO. 2</p> <p>BILL NO. 6</p> <p>CARPENTRY AND JOINERY</p> <p>(CPAP WORK GROUP 126 UNLESS OTHERWISE STATED)</p> <p>SUPPLEMENTARY PREAMBLES</p> <p>NOTE:</p> <p>Tenderers are advised to study the Standard Preambles to all trades and Supplementry Preambles before pricing this bill</p> <p>NOTE: Tenderers are advised to study the Standard Preambles to all trades and Supplementry Preambles before pricing this bill</p> <p>Particle board:</p> <p>Particle board shall comply with the following specifications: a) SABS 1300 Particle board: exterior and flooring type b) SABS 1301 Particle board: interior type</p> <p>Joinery:</p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p>Fixing</p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p>Decorative laminate finish:</p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p>ROOFS, ETC</p> <p>Plate nailed timber roof truss construction</p> <p>The following is applicable in respect of roof trusses:Trusses are at maximum 1,10m centresRoof covering is galvanised "IBR" roof sheeting with "Globalcoat" finish on one side on 50 x 75mm purlins at 1,1m maximum centres.Ceilings are generally 6,4mm gypsum plasterboard on 38 x 38mm brandering.All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245.Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish.All joints to be close fitted butt joints.Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation. The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabricaton commences.Tenderers must study the roof plan and sections as attached to the back of these bills of quantities (refer drawing No.'s ADMIN 001 to 004) and must obtain prices from a qualified and registered roof truss supplier as no claims in this regard will be entertained.</p> <p>Sawn softwood</p>				
1	38 x 114mm Wall plates	m	115		
2	Design, manufacture and deliver on site, plate nailed roof truss construction, overall floor area of 565m2 on plan with 500mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing (wall plates elsewhere)	Item	1		
3	<p>Sundries</p> <p>Two coats creosote on sawn timbers (Provisional)</p> <p>EAVES , VERGES , ETC</p> <p>Everite FC77 pressed fibre-cement</p> <p>Everite medium density plain ungrooved Nutec fascia boards, size 225 x 12mm thick, fixed to timber rafters twice screwed with 12 x 40mm countersunk brass screws with Chromaprep H-profile fascia joiner between boards</p>	<p>m2</p> <p>m</p>	<p>40</p> <p>232</p>		

	SKIRTINGS				
	Wrought meranti				
5	19 x 76mm Skirting including 19mm quadrant bead nailed	m	344		
6	19 x 76mm Skirting including 19mm quadrant bead stepped over treads and risers nailed	m	12		
	DOORS ETC				
	Solid core doors with masonite finish hardwood edging all round hung to steel frames				
7	44mm Door 813 x 2 032mm high (D04)	No	16		
	Solid core doors with masonite finish hardwood edging (to provide cut for aluminium louvre) hung to steel frames				
8	44mm Door 877 x 2 032mm high (D03)	No	18		
9	44mm Door 1626 x 2032mm high (D02)	No	12		
	FITTINGS				
	Fittings to Hall				
10	Timber seating bench 788 x 300 x 480mm high with slats, frame, bolts and steel hangers complete as per detail and varnished	No	8		
11	Timber seating bench 2 297 x 500 x 480mm high with slats, frame, bolts and steel hangers complete as per detail and varnished	No	2		
12	Timber seating bench 3 145 x 500 x 480mm high with slats, frame, bolts and steel hangers complete as per detail and varnished	No	2		
13	Timber seating bench 6 860 x 300 x 480mm high with slats, frame, bolts and steel hangers complete as per detail and varnished	No	2		
14	Vanity slab 3 537 x 560 x 350mm high with 5 wash hand basins cut in from 32mm supawood with wilsonart graphite nebula (code 4623) laminated 0,7mm thick with bullnose front edge and fascia complete as per detail	No	2		
15	Vanity slab 4976 x 560 x 350mm high with 3 wash hand basins cut in from 32mm supawood with wilsonart graphite nebula (code 4623) laminated 0,7mm thick with bullnose front edge and fascia complete as per detail	No	2		
16	Vanity slab 2350 x 560 x 350mm high with 1 wash hand basins cut in from 32mm supawood with wilsonart graphite nebula (code 4623) laminated 0,7mm thick with bullnose front edge and fascia complete as per detail	No	2		

	TOTAL CARRIED TO SECTION SUMMARY				-
	SECTION NO. 2				
	BILL NO. 7				
	CEILINGS, PARTITIONS AND ACCESS FLOORING				
	Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes.				
	SUPPLEMENTARY PREAMBLES				
	Descriptions				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete.				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere.				
	CEILINGS ETC				
	Aerolite insulation				
1	75mm Insulation closely fitted and laid on top of branderling between roof timbers etc	m2	595		
	Bubble Foil insulation				
2	4mm Insulation closely fitted and laid on top of branderling between steel trusses	m2	695		
	NAILED UP CEILINGS				
	6mm thick fibre cement ceiling board on 38x38mm branderling at 400mm centers in one direction and for end fixing in the other direction, complete with galvanized H-profile jointing strips. Apply one coat of asbestos primer and two coats of Super Acrylic PVA, Colour to Architect Approval				
3	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	565		
4	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening (Provisional)	No	3		
	Rhino gypsum plasterboard cornices				
5	75mm Coved cornices	m	356		
	1200 x 600mm x 40mm Thick acoustic ceiling tiles laid on H3 0 and including lay in exposed tee suspension ceiling system including galvanised main tees, cross tees, hold-down clips, wedges, etc., all suspended with galvanised hangers at centres not exceeding 1200mm.				
6	Horizontal ceilings suspended not exceeding 1m below steel trusses	m2	695		
7	Extra over ceilings for opening for 150mm diameter downlighter (Provisional)	No	18		
8	Extra over ceilings for opening for 1200 x 600mm light fitting (Provisional)	No	18		
	Donn cornices to suspended ceilings				
9	SM25 pre-painted cornices, nailed to walls	m	94		
10	SM25 pre-painted cornices, fixed at junction of suspended ceiling panels and vertical bulkheads	m	27		

	TOTAL CARRIED TO SECTION SUMMARY				-
	<p>SECTION NO. 2</p> <p>BILL NO. 8</p> <p>FLOOR COVERINGS, PLASTIC LININGS, ETC</p> <p>(CPAP WORK GROUP 130 UNLESS OTHERWISE STATED)</p> <p>SUPPLEMENTARY PREAMBLES</p> <p>NOTE:</p> <p>Tenderers are advised to study the Standard Preambles to all trades and Supplementary Preambles before pricing this bill</p> <p>NOTE: Tenderers are advised to study the Standard Preambles to all trades and Supplementary Preambles before pricing this bill</p> <p>FLOOR COVERINGS</p> <p>VINYL SHEETING (SEATING AREA)</p> <p>Polyflor 2,0mm thick XL PU Homogeneous vinyl floor sheeting colour Flint (Colour code: 3720), laid in acrylic adhesive spread with a notched trowel on suitably prepared cement screed floors with a hygrometer reading showing a moisture content of less than 70%, with joints welded with a fully flexible coloured Polyflor welding rod to provide a smooth, hygienic sealed finish and rolled with 68kg articulated floor roller, all in accordance with manufacturer's recommendations or similar approved product</p>				
1	On floors	m2	695		
2	<p>2 200mm Border with turn-up over coves (measured elsewhere) and with 200mm high skirting against walls total girth 400mm</p> <p>VINYL SHEETING (ENTRANCE FOYER)</p>	m	468		
3	<p>On entrance foyer</p> <p>Polyflor 2,0mm thick XL PU Homogeneous vinyl floor sheeting colour Flint (Colour code: 3720), laid in acrylic adhesive spread with a notched trowel on suitably prepared cement screed floors with a hygrometer reading showing a moisture content of less than 70%, with joints welded with a fully flexible coloured Polyflor welding rod to provide a smooth, hygienic sealed finish and rolled with 68kg articulated floor roller, all in accordance with manufacturer's recommendations or similar approved product</p> <p>VINYL SHEETING (STORAGE 03)</p> <p>Polyflor 2,0mm thick XL PU Homogeneous vinyl floor sheeting colour Flint (Colour code: 3720), laid in acrylic adhesive spread with a notched trowel on suitably prepared cement screed floors with a hygrometer reading showing a moisture content of less than 70%, with joints welded with a fully flexible coloured Polyflor welding rod to provide a smooth, hygienic sealed finish and rolled with 68kg articulated floor roller, all in accordance with manufacturer's recommendations or similar approved product</p>	m2	59		
4	<p>On floors</p> <p>VINYL SHEETING (WALK PATH)</p> <p>Polyflor 2,0mm thick XL PU Homogeneous vinyl floor sheeting colour Dark Sapphire (Colour code: 3820), laid in acrylic adhesive spread with a notched trowel on suitably prepared cement screed floors with a hygrometer reading showing a moisture content of less than 70%, with joints welded with a fully flexible coloured Polyflor welding rod to provide a smooth, hygienic sealed finish and rolled with 68kg articulated floor roller, all in accordance with manufacturer's recommendations. OR Similar approved product/Supplier/Manufacture</p>	m2	11		
5	<p>On walk path</p> <p>VINYL SHEETING (STAGE AND BACK STAGE)</p>	m2	18		

6	<p>Polyflor Noppe Stud synthetic rubber floor tiles colour Deep Blue (Colour code: 140) size 500 x 500 x 3,0mm thick, laid in an approved adhesive spread with a notched trowel on suitably prepared cement screed with a hygrometer reading showing a moisture content of less than 70% and rolled with 68kg articulated floor roller, all in accordance with manufacturer's recommendations. OR Similar approved product/Supplier/Manufacturer</p> <p>SKIRTINGS, NOSINGS, ETC</p> <p>Polyflor vinyl edge capping strips, coved formers etc.</p>	m2	113		
7	PC 20 poly cove cove former	m	469		
8	Extra over "PC20 Poly cove" former for tapered cut end	No	122		
9	CS48 Polycap capping strip	m	469		
	POLISH, SEALERS, ETC				
	Two coats wax polish				
10	On vinyl floors	m2	896		
	EXPANSION JOINT COVERS (PROVISIONAL)				
11	50 x 2mm Thick "Polyflor EJC50 Polyspan " PVC joint cover with a 20mm expandable strip in centre over expansion joint, welded both sides to sheeting	m	448		

	TOTAL CARRIED TO SECTION SUMMARY				-
	SECTION NO. 2				
	BILL NO. 9				
	IRONMONGERY				
	SUPPLEMENTARY PREAMBLES				
	Finishes to ironmongery				
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD SandedNP Nickle plated				
	LOCKS				
	Union:				
	The following locks are to be suitable for master key operation.				
1	21313-76CH four lever upright deadlock case, with standard chrome forend.	No	35		
2	2 x AL6W63-24AS " Waterbok" lever furniture on 150 x 75mm plate, for lever locks	No	35		
	VERTICAL BLINDS, SCREENS, ETC				
	Vertical blinds with anodized aluminium headrail 45 mm wide x 25 mm high.All runners to be wheeled and fitted with individual clutch mechanisms. Allrunners to be connected by stainless steel spacerlinks. Tilt mechanism to beoperated by a nylon ball chain through a reduction gear inside a fully enclosed endcap. Slats to be 90 mm wide and fabric slats to be ultrasonically sealed.Slats may not be glued. Colour to Architect.				
3	Window code ND54S, size 1 511 x 2 125mm high , Ref W01	No	3		
4	Window code ND57S, size 1 022 x 2 125mm high, Ref. W02	No	9		
5	Window code NCT2S, size 1 022 x 2 125mm high, Ref. W03	No	2		
6	Window code NCT1S, size 533 x 2 125mm high, Ref. W04	No	27		
	SUNDRIES				
	Union:				
7	19mm Diameter chromium plated towel rail 300mm long including end brackets	No	28		
8	CZ8731SC Cast zinc satin chrome doorknob, floor mounted	No	49		
9	AL8253AS Aluminium anodised silver hat and coat hook, with rubber buffer, fixed to door	No	28		
	PUSH PLATES AND KICKING PLATES				
	Solid:				
10	300mm high x 1.2mm thick x 900mm long grade 304 satin finished stainless steel kicking plate.	No	35		
	DOOR CLOSERS				
	Union:				
11	EN2 door closer 400 series (402) with regular arm, hold open type.	No	19		
12	2 x 755 double action floor spring, hold open type, size EN3.	No	19		
	SLIDING GEAR				
	Hillaldam				
	Top hung sliding gear set for single door with track 3150mm long, suitable to carry door maximum mass 90kg, size P10, complete with side mounted rail, recessed brass channel in bottom of door and 33mm nylon guides, screwed to floor and two 46L heavy duty wall mounted doorstops, etc.	No	17		
13	LETTERS, NAMEPLATES, ETC				-

	Solid:				
14	300 x 50 x 5mm Thick perspex plate with 30mm high engraved letters to read "FEMALE ABLUTION"	No	12		-
15	300 x 50 x 5mm Thick perspex plate with 30mm high engraved letters to read "MALE ABLUTION"	No	12		-
16	AL5022 pictogram engraved anodised aluminium plate with paraplegic symbol.	No	3		-
	BATHROOM FITTINGS				
	Approved "Lowveld Shelving"				
	STORAGE DIRECT o.e.a TOILET ROLL HOLDERS				
17	Three Roll Lockable Toilet Roll Dispenser (Storage Direct toll free number: 0800 110 468 Also Available from Lowveld Shelving tel: 013 751 2888/ 013 751 1762) (Code : TR3)	No	17		-
18	Three Roll Lockable Toilet Roll Dispenser (Storage Direct toll free number: 0800 110 468 Also Available from Lowveld Shelving tel: 013 751 2888/ 013 751 1762) (Code : TR2)	No	17		-
	STORAGE DIRECT o.e.a SOAP DISPENSER				
19	1.2 l Lockable Stainless Steel Hand Soap Dispenser (Storage Direct toll free number: 0800 110 468 Also Available from Lowveld Shelving tel: 013 751 2888/ 013 751 1762) (Code : HSOAP5)	No	17		-
	HANDPAPER TOWEL DISPENSER				
20	Storage Direct o.e.a ABS Plastic Hand Paper Towel Dispenser. Supply with Towels (Storage Direct toll free number: 0800 110 468 Also Available from Lowveld Shelving tel: 013 751 2888/ 013 751 1762)	No	17		
	TOILET ROLL DISPENSER				
21	Standard CP toilet roll holder & hook for spare toilet roll holder mounted on wall. Install centre of roll at 700mm from F.F.L.	No	17		
	Chairman Industries				
	User note: GRAB RAILS GRAB RAILS: to comply with DPW -PW350				
	All fittings to be fixed in strict accordance with the manufacturer's specification (Supplied by 'CHAIRMAN INDUSTRIES' o.e.a. Tel: (011) 624 1222)				
22	32mm Diameter SR1 stainless steel cistern back grab rail, plugged	No	4		
23	32mm Diameter DL2 stainless steel cistern side grab rail, plugged	No	4		
24	32mm stainless steel vertical grab handle on inside face of door, 200mm away from hinge side, top of bar at 1000mm from F.F.L.	No	4		
	Approved "Lowveld Shelving"				
	STORAGE DIRECT o.e.a SANITARY BIN				
25	Mini Sani Pedal Sanitary Bin (Storage Direct toll free number: 0800 110 468 Also Available from Lowveld Shelving tel: 013 751 2888/ 013 751 1762)	No	17		
	WALL BIN				
26	Plastic Wall Bin o.e.a, fixed to wall.	No	17		
	CORNER PROTECTORS, COVER AND SEALING STRIPS, ETC.				
	Clipstrip or similar and approved				
27	50 x 50 x 3mm Thick anodised aluminium corner protector fixed to walls.	m	92		

	TOTAL CARRIED TO SECTION SUMMARY				-
	SECTION NO. 2				
	BILL NO. 10				
	STRUCTURAL STEEL (PROVISIONAL)				
	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				
	Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete. Where anchor bolts are described as embedded in sides or soffits of concrete it shall be deemed to include holes through formwork.				
	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				
	Welded columns and beams, etc in framing with flat section base, top, bearer and connection plates bolted to concrete				
1	254 x 146mm x 31kg/m I-section beams in lengths 20m	t	1,8		-
	Bolts to columns, beams, etc				
2	450mm Long M16 anchor bolt 16mm girth embedded in top of concrete	No	8		-
3	70mm M16 expansion bolt	No	8		-
	STEEL TRUSSES ETC				
	Welded roof trusses of angle section rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete				
4	Eight mono pitched trusses spanning 16982 x 1 700m high	t	18,91		-
	Bolts to trusses etc				
5	200mm M16 expansion bolt	No	64		-
	PURLINS, GIRTS, BRACING, ETC				
	Purlins and girts bolted to steel				
6	125 x 65 x 20 x 3.0mm Lipped channel section purlins	t	4,72		-
	Welded bracing etc with flat section connection plates bolted to steel				
7	Angle section bracing	t	0,72		-
	TOTAL CARRIED TO SECTION SUMMARY				-

	SECTION NO. 2				
	BILL NO. 11				
	METALWORK				
	(CPAP WORK GROUP 136 UNLESS OTHERWISE STATED)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Model Preambles for Trades"				
	NOTE:				
	Tenderers are advised to study the Standard Preambles to all trades and Supplementary Preambles before pricing this bill				
	Descriptions				
	Descriptions of bolts shall be deemed to include nuts and washers				
	Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete				
	Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described				
	SUNDRY STEELWORK				
	Welded metal clad frame to stage, etc				
1	50 x 50 x 2,5mm Square hollow section continuous columns welded to top and bottom beams (measured elsewhere)	m	48		-
2	50 x 50 x 5mm Angle section bracing welded to columns and beams (measured elsewhere)	m	106		-
3	100 x 50 x 3mm C-channel continuous rails welded to square hollow sections (measured elsewhere)	m	78		-
	PRESSED STEEL DOOR FRAMES				
	1.2mm Double rebated frames suitable for 230mm wall to accommodate 813x2032mmx2 door leaf. 1x zinc chromate primer coat and 2x enamel paint coat				
4	Frame for door size 813 x 2032mm high	No	10		-
5	Frame for door size 1200 x 2032mm high	No	19		-
	1.2mm Double rebated frames suitable for 115mm wall to accommodate 813x2032mmx2 door leaf. 1x zinc chromate primer coat and 2x enamel paint coat				
6	Frame for door size 813 x 2032mm high	No	24		-
7	Frame for door size 1200 x 2032mm high	No	1		-
	STEEL ROLLER SHUTTERS ETC				
	Roller Style Epoxy powder coated roller shutters fixed to brickwork or concrete				
8	Manual push-up roller shutter for 2400 x 2100mm high	No	1		-
	ALUMINIUM WINDOWS, DOORS, ETC.				
	SUPPLEMENTARY PREAMBLES				
	Scope				
	This section specifies material, construction, finishes, hardware, fastenings, installation and performance standard for aluminium windows and doors. The abbreviation AAAMSA used herein shall mean the Association of Architectural Aluminium Manufacturers of South Africa.				

Materials

Extruded aluminium members shall be fabricated from alloy 6063 or 6061 in Temper T5 or T6 all in accordance with the latest addition of BS EN 755. Ancillary members such as sills, flashings, infill panels and the like which may be formed from flat sheet material having an appropriate alloy selected from alloy designations - 1200 or 3004, or 5251, of a temper suitable for the method of forming and composition suitable for anodising or painting as required. Alloys shall comply with BS EN 573.

Finishings

All anodising shall be executed in strict adherence to SANS 999. A certificate is to be supplied which meet with SANS 999 in all respects. All powder coating shall be in strict accordance with SANS 1796. The powder applied shall be in strict accordance with SANS 1578. The powder manufacturer shall issue a powder guarantee of a minimum of 15 years. The specific conditions contained in this guarantee shall form part of the powder coating "process" and may only be applied by an approved powder applicator.

Construction

Construction shall comply with the minimum recommended performance requirements as contained in AAAMSA's General Specification for Architectural Aluminium and Glass Products. Selection of appropriate class designation (A0, A1, A2 and A3) shall be made in strict accordance with the table below, which complied in all respects with SANS 10160 - The Code of Practice for the General Procedures and Loading to be adopted in the design of buildings. TERRAIN CATEGORY AS

Manufacture

Joints in frames and sashes shall be made by mechanical means and are to be sealed to prevent water penetration. The windows, doors, etc shall be free from all sharp edges, burring and the like. Hardware and fittings shall be removable without removing the aluminium frames from the structure and must be compatible with the aluminium framing. Sliding members shall be constructed so that no direct contact between metal occurs but shall be separated by a durable, compatible material.

Fittings

Weather sealing shall be of materials that are compatible with aluminium and shall be such that any degradation, shrinking, warping or adherence to sliding or closing surfaces does not impair the performance of the installation. Glazing beads, gaskets and glazing compounds shall be of materials that are compatible with the aluminium finishes, the glass and any other glazing materials. Putty glazing is not permitted. Hardware, bearing devices and fittings in general shall be made of materials resistant to atmospheric corrosion and shall be of a design so as to be accessible for adjustment, repair and replacement after the window, etc have been installed. Fastenings shall be of material which is compatible with aluminium and aluminium finishes.

Glazing

All glass and glazing shall be executed in strict accordance with the National Building Regulations Part N, SANS 10137, SANS 10400 and SANS 1263. All safety glazing materials (individual panes) shall be permanently marked. Such marking to be visible after installation (glazing). The successful Tenderer shall submit the AAAMSA Glass & Glazing Certificate confirming that glazing has been installed in accordance with SANS 10137 and 10400 ensuring that Safety Glazing Materials have been installed and individually marked in the mandatory areas. Any pane of glass within 500mm of finished floor level shall be made of safety glazing materials. All glazing within 2 100mm of finished floor level to shopfronts, (including display windows) and entrances (doors and sidelights), in both external and internal applications, shall be executed in safety glazing materials. A warranty is to be provided, prior to installation on site, by the manufacturer of the laminated glass, which warrants the product against delamination and colour degradation for a period of not less than 5 (five) years.

PRICES

Fixings, etc

Prices for all items shall include for all coupling members and fixing to steel, concrete or brickwork, including all lugs, cramps, shims, bolts, mortices, grouting, etc as required for a complete installation and for perimeter pointing with polysulphide sealant or similar compound.

	<p>Glazing</p> <p>Prices for all items shall include for glazing with glass as specified in the description, including all necessary glazing beads, gaskets, etc.</p> <p>Protection of frames</p> <p>All exposed aluminium work shall be protected by means of low tack adhesive tape against mortar droppings and other non-mechanical damage during installation which shall only be removed when directed by the Architect.</p> <p>Size of opening</p> <p>Tenderers shall check sizes of openings on site prior to any manufacturing being put in hand.</p> <p>Note:</p> <p>Tenderers are referred to the Architect's window and door schedules bound to the back of these bills of quantities for tender purposes.</p> <p>PURPOSE MADE ALUMINIUM WINDOWS</p> <p>Provide the sum of R 200 000.00 (Two Hundred Thousand) for the manufacture, supply and installation of aluminium windows later to Architect's details</p>				
9		Item	1	200000	200 000,00
10	Profit	%			
11	Allow for general attendance	%			
	<p>PURPOSE MADE ALUMINIUM DOORS</p> <p>Natural anodised aluminium shopfront glazed with 6,38mm thick clear laminated safety glass and plugged to brickwork or concrete</p> <p>Double door and frame 1725 x 2 100mm high overall with two fixed panel overall including one and a half pair 100mm steel hinges, one pair "Union Cedar AL6C20-05AS" pull handles on 150 x 45mm backplates, "Union L2109-785S" euro-profile cylinder dead lock, "Union 2x18SC euro profile" double cylinder, "Union AL5375-05AS" escutcheons and "Dorma DDS-SS-017" door stop (D01)</p>				
12		No	8		-
TOTAL CARRIED TO SECTION SUMMARY					
	<p>SECTION NO. 2</p> <p>BILL NO. 12</p> <p>PLASTERING</p> <p>SCREEDS</p> <p>Screed on concrete</p>				
1	25mm Thick on floors and landings	m2	1290		-
2	25mm Thick on sloping floors	m2	14		-
3	25mm Thick on treads and risers of stairs	m2	35		-
4	Average 45mm thick on floors to falls and currents	m2	4		-
	<p>19 mm Thick rounded (1:4 cement mix) grano with "V" joints 75 mm above finished floor level. Skirting to project 6 mm from finished wall fall witharris top edge.</p> <p>SELF-LEVELLING SCREED</p> <p>Apply "Poly Levelmaster" self-levelling screed strictly according to manufacturers instructions on dry sub surface (moisture tests must be done) on and including primer in sufficient thickness (minimum 3mm), to obtain level surface and providing quality base for vinyl flooring</p>				
5	On concrete surfaces	m2	896		-
	<p>GRANOLITHIC</p> <p>Untinted granolithic on concrete</p>				
6	35mm Thick on floors and landings	m2	14		-

	INTERNAL PLASTER				
	Apply one coat plaster to surface, leave to stiffen, and strike off with a striker board, wood float to an even surface with thickness 10 - 15mm, apply Rhino finish coat 3-5mm thick				
7	On walls	m2	1380		-
8	On narrow widths (Provisional)	m2	7		-
	Cement plaster on concrete				
9	On projecting and isolated columns	m2	92		-
10	On projecting and isolated beams	m2	226		-
11	On stepped outer edge of stairs, etc	m2	1		-
	EXTERNAL PLASTER				
	Cement plaster on brickwork				
12	On walls	m2	188		-
	CORNER PROTECTORS, DIVIDING STRIPS, ETC				
13	3 x 32mm Flat section brass dividing strips between different floor finishes	m	9		-

TOTAL CARRIED TO SECTION SUMMARY					-
	SECTION NO. 2 BILL NO. 13 TILING SUPPLEMENTARY PREAMBLES Descriptions Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding WALL TILING Union Tiles porcelain tiles (Code: UNM135600), size 600 x 600mm, fixed to internal walls with TAL tile adhesive (elsewhere specified) mixed with TAL Bond® in lieu of water with joints continuous in both directions and grouted with TAL tile grout (elsewhere specified), excess grout on the surface to be cleaned with water as work proceeds or Similar approved by Achitects				
1	On walls	m2	115		-
2	On narrow widths	m2	14		-
3	Fair exposed cutting and fitting around pipe not exceeding 110mm internal diameter	No	41		-
	FLOOR TILING porcelain tiles (Code: UNM135600), size 600 x 600mm, fixed to internal floor screed with TAL tile adhesive (elsewhere specified) mixed with TAL Bond® in lieu of water with joints continuous in both directions and grouted with TAL tile grout (elsewhere specified), excess grout on the surface to be cleaned with water as work proceeds or Similar approved by Achitects				
4	On floors and landings	m2	424		-
TOTAL CARRIED TO SECTION SUMMARY					-
	SECTION NO. 2 BILL NO. 14 PLUMBING AND DRAINAGE (PROVISIONAL) SUPPLEMENTARY PREAMBLES uPVC pipes and fittings: Soil, waste and vent pipes and fittings shall be solvent weld jointed uPVC pressure pipes and fittings: Pipes for water supply shall be of the class stated Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints Copper pipes: Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground Fixing of pipes				

	<p>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</p> <p>Reducing fittings</p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p>Exposed concrete surfaces</p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gully tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p>Excavations</p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>Soft rock and "hard rock" shall be as defined in "Earthworks"</p> <p>Laying, backfilling, bedding, etc. of pipes</p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>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</p> <p>Flush pans</p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p>Stainless steel basins, sinks, wash troughs, urinals, etc.</p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p>Waste unions</p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p>SANITARY FITTINGS</p> <p>NOTE: All fittings butting up against wall or floor finishes or fitting into preformed openings in timber tops are to be sealed with an approved all purpose silicone sealant Prices for sinks described as drop in are to include for preparing the worktop to receive the fitting and securely fixing sinks to worktops using clips provided. The contractor is to provide worktop manufacturers with details of cut outs to ensure that the cut openings are sufficiently accurate to provide proper engagement for these clips Note: Stainless steel for urinals, basins, sinks, etc, shall be type 304 (18/8)</p> <p>Vaal</p> <p>VAAL SANITARYWARE o.e.a - WC</p> <p>Hibiscus Close Coupled suite. Vaal Sanitaryware vitreous china "Hibiscus" close coupled 90° outlet open rim top dual flush suite. (Code: 772656)</p> <p>TOILET SEAT</p>				
1	Heavy Duty Plastic toilet seat, Embassy White	No	17	-	
	VAAL SANITARYWARE o.e.a - PARAPLEGIC WC				
2	<p>Vaal Sanitaryware o.e.a vitreous china "PROTEA PARAPLEGIC" 90° outlet pan (code 750200) and matching 9 liter cistern (code 710631) complete with lid, fittings, and purpose made C.P. side-flush lever. Install strictly to manufacturer's specifications.</p>	No	4	-	

	Vaal Sanitaryware o.e.a - Lavatera Wall Hung Urinal				
3	Vaal Sanitaryware vitreous china wall hung "Lavatera" urinal with top inlet (code 705426. Overall size 600 x 385 x 380 mm. With top inlet fittings (code 705421) including a 38 mm c.p. domical grating, a spreader (with a 20 mm diameter thread), and two hanger brackets. Install according to Manufacturer's specifications. (Code: 705426)	No	5		-
	VAALSAN o.e.a WHB				
4	Vaal Sanitaryware vitreous china 455 x 290mm "Bantam" basin with Left Hand Side punched taphole, integrated overflow and chainstay hole. Fix to wall by using two 10mm bolts - CODE 8448Z0 Supply with waste, plug and chain.(Code: 7030)	No	23		-
	Shower				
5	Glazing - 6mm obscure toughened glass infill to white powder coated or silver polished anodized out of true wall adjustment system. Pivot hung door including a self-closing action, full length magnetic sealing and nondrip design. AGI aluminium pivot show Grating - 75mm diameter chrome plated screwed male waste outlet CP #323. Trap - 40mm brass shower P - trap Taps / Mixers - Shower set #3328ST 15mm CP. Comprising undertile stoptaps (No. 128), overhead shower arm (No. 026) and shower rose (No. 065) with aerator.	No	8		-
	TAPS, VALVES, ETC				
	Cobra				
	COBRA o.e.a TAPS				
6	Pushbutton Demand, Chrome Plated Pillar tap with flanged backnut. G1/2" MI Inlet. SANS 1808-66, JASWIC Listed. Install according to Manufacturer's specifications. (Code: KM2.102)	No	23		-
	ELECTRIC WATER HEATERS				
	Kwikot				
7	Kwikot o.e.a 7.5ℓ Instant Boiling Water Dispenser supplied with Electrical Cord with 230V 15Amp plug, mounting bracket and safety valve. Dimensions: 320 x 448 x 195mm. Install according to manufacturer's specifications. (Code: KWIK BOIL- 7.5)	No	2		-
	TESTING				
8	Testing water pipe system	Item	1		-
	FIRE APPLIANCES ETC				
	Chubb				
9	Everyway hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	2		-
10	4,5kg Dry chemical powder fire extinguisher, including standard hard wood backing plugged and backing finished with one coat dark stain and two coats clear suede polyurethane varnish - New	No	6		-
	WASTE UNIONS ETC				
	Cobra Watertech				
11	Cobra Watertech 32mm chrome plated slotted basin waste union (no chain or stay) (Code: 303) - New	No	23		-
	TRAPS ETC				
	Marley				
12	32mm Deep seal "P" or "S" trap	No	23		-
	Cobra Watertech				
	COBRA o.e.a BOTTLE TRAP				
13	Chrome Plated Bottle Trap, with 75mm deep seal and adjustable telescopic pipe with 1 x ¼ " x 40mm Ø outlet for PVC tube. (Code: 345/40P)	No	3		-

	RAINWATER DISPOSAL				
	Mild Steel Gutter: 300 x 100 x 10mm Taper Flange Channel				
14	Mild Steel Gutter: 300 x 100 x 10mm Taper Flange Channel. Close of ends of Gutter and weld to bracket, fixed to wall. (See Drawings) Paint inside of gutter with bitumen paint	m	105		-
	Extra over eaves gutter for:				
15	Outlet with 300 mm diameter nozzle and domical galvanized iron grating.	No	16		-
16	Corner piece	No	16		-
	Mild Steel Downpipe: 100 x 100 x 4mm square tubing downpipe:				
17	Mild Steel Downpipe: 100 x 100 x 4mm square tubing downpipe, welded to opening of gutter, Paint inside of gutter with bitumen paint. Downpipe to discharge into JoJo tank.	m	96		-
18	Shoe	No	16		-
19	100 mm Projecting eaves offset	No	16		-
	PLUMBING AND WATER SUPPLY PIPES,FITTINGS, ETC				
20	Allow the sum of R 30 000.00 for plumbing, water supply pipes, fittings, etc to be measured and priced using market rates	Item	1	30000	30 000,00
	TOTALCARRIED TO SECTION SUMMARY				

	SECTION NO. 2				
	BILL NO. 15				
	GLAZING				
	GLAZING TO STEEL WITH PUTTY				
	6mm Clear toughened safety glass				
1	Panes not exceeding 0,1m2	m2	12		-
	Laminated safety glass on D1				-
	Laminated glass to have poly vinyl butyral (PVB) interlayers(s)				-
2	D1 Size 1 575 x 305	No	4		-
3	D1 Size 1 020 x 705	No	2		-
4	D1 Size 500 x 500	No	2		-
	TOPS, SHELVES, DOORS, MIRRORS, ETC				-
	6mm Silvered float glass copper backed mirrors with H3 0 polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete				-
5	Mirror 600 x 900mm high with four screws	No	7		-
TOTAL CARRIED TO SECTION SUMMARY					-
	SECTION NO. 2				
	BILL NO. 16				
	PAINTWORK				
	(CPAP WORK GROUP 152 UNLESS OTHERWISE STATED)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Model Preambles for Trades"				
	NOTE:				
	Tenderers are advised to study the Standard Preambles to all trades and Supplementry Preambles before pricing this bill				
	PAINTWORK				
	PAINTWORK, ETC TO NEW WORK ON				
	ON FLOATED PLASTER				
	Plascon Double Velvet to interior new cement plaster (NW 200).Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Double Velvet (VEL) with 2 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.				
1	Internal walls	m2	1265		-
2	On narrow widths (Provisional)	m2	138		-
	Plascon Wall & All to exterior new cement plaster (NW 100).Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Wall & All (WAA) with 2 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.				
3	On external walls	m2	188		-

	ON FIBRE-CEMENT				
	Plascon Polvin Super Acrylic to interior new fibre cement.Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats Polvin Super Acrylic (EPL) with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment				
4	On ceilings and cornices	m2	595		-
	Prepare and apply one universal undercoat and two coats gloss enamel paint				
5	On window sills not exceeding 300mm girth	m	66		-
	Prepare surfaces, apply Earthcote Alkali resisting primer diluted 20% with turpentine. Apply two coats Peinture, applied at 3m2 per litre per coat all as per manufacturer's specifications and application instructions				
6	On fascia and barge boards	m2	109		-
	ON METAL				
	1x zink chromate primer coat and 2x enamel paint coat				
7	On door frames	m2	79		-
8	On columns and beams	m2	108		-
9	On members of roof trusses	m2	827		-
10	On roller doors	m2	10		-
	ON WOOD				
	Plascon Velvagio Satin to interior new wood.Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1A5) < 14% or less. Prime with one coat Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.				
11	On doors	m2	171		-
12	On skirtings, rails, etc not exceeding 300mm girth	m	356		-
TOTAL CARRIED TO SECTION SUMMARY					-
<u>SECTION NO. 2: COMMUNITY HALL</u>					
1	Earthworks (Provisional)	Page	35		-
2	Concrete, Formwork and Reinforcement	Page	40		-
3	Masonry	Page	43		-
4	Waterproofing	Page	44		-
5	Roof Coverings, etc	Page	47		-
6	Carpentry and Joinery	Page	52		-
7	Ceiling, partitions and Access Flooring	Page	54		-
8	Floor Coverings, Wall Linings, etc	Page	58		-
9	Ironmongery	Page	63		-
10	Structural Steelwork (Provisional)	Page	65		-
11	Metalwork	Page	72		-
12	Plastering	Page	74		-
14	Plumbing and Drainage (Provisional)	Page	83		-
15	Glazing	Page	84		-
16	Paintwork	Page	87		-

TOTAL CARRIED TO FINAL SUMMARY	
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	SECTION NO. 3			
	BILL NO. 1			
	EARTHWORKS (PROVISIONAL)			
	(CPAP WORK GROUP 104 UNLESS OTHERWISE STATED)			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Model Preambles for Trades"			
	NOTE:			
	Tenderers are advised to study the Standard Preambles to all trades and Supplementary Preambles before pricing this bill			
	Nature of ground			
	The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft 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.			
	EXCAVATION OTHER THAN BULK			
	Excavation in earth not exceeding 2m deep			
1	Trenches	m3	13	-
	EXCAVATIONS IN STRATA OF A MORE DIFFICULT CHARACTER			
	Extra over trench and hole excavations in earth for excavation in			
2	Soft rock	m3	1	-
3	Hard rock	m3	0,5	-
	Extra over all excavations for carting away			
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	10	-
	Risk of collapse of excavations			
5	Sides of trench and hole excavations not exceeding 1,5m deep	m2	37	-
	Keeping excavations free of water			
6	Keeping excavations free of all water other than subterranean water	Item	1	-
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density			
7	Backfilling to trenches and holes, etc	m3	9	-
8	Under floors, steps, pavings, etc	m3	4	-
	Approved clean earth or gravel without clay or organic matter obtained from commercial source compacted to 90% Mod AASHTO density:			
9	Under trenches and holes, etc	m3	9	-
10	Under floors.	m3	4	-
	Coarse river sand filling supplied by the contractor			
11	Under floors etc	m3	1	-
	Compaction of surfaces:			
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking adding decomposed dolerite material where necessary.	m2	21	-
	Prescribed density tests on filling:			

13	Modified AASHTO Density test	No	4		-
	SOIL POISONING				
	Soil insecticide				
14	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	21		-
15	To bottoms and sides of trenches	m2	51		-
TOTAL CARRIED TO SECTION SUMMARY					-

	SECTION NO. 3				
	BILL NO. 2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	(CPAP WORK GROUP 110 UNLESS OTHERWISE STATED)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Model Preambles for Trades"				
	NOTE:				
	Tenderers are advised to study the Standard Preambles to all trades and Supplementry Preambles before pricing this bill				
	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).				
	Formwork Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before 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 sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	20Mpa/19mm concrete				
1	Strip footings	m3	4		-
	REINFORCED CONCRETE CAST AGAINST FORMWORK				
	25MPa/19mm concrete				
2	Surface bed slab	m3	2		-
	TEST BLOCKS				
3	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	3		-
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete to a Class U2 wood float finish				
4	Surface beds, slabs, etc to falls	m2	21		-
	MOVEMENT JOINTS, ETC				
	Slip joint formed of two layers 375micron embossed damp proof courses between horizontal concrete and brick surfaces including cement mortar bed				
5	Not exceeding 300mm wide	m	18		-
	Saw cut joints				
6	5 x 40mm Saw cut joints in two operations in top of concret	m	18		-
	REINFORCEMENT (PROVISIONAL)				
	Fabric reinforcement				
7	Type 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	21		-
	TOTAL CARRIED TO SECTION SUMMARY				-

	SECTION NO. 3				
	BILL NO. 3				
	MASONRY				
	(CPAP WORK GROUP 116 UNLESS OTHERWISE STATED)				
	SUPPLEMENTARY PREAMBLES				
	NOTE:				
	Tenderers are advised to study the Standard Preambles to all trades and Supplementary Preambles before pricing this bill				
	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.				
	FOUNDATIONS (PROVISIONAL)				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class 1 mortar including galvanised crimp wire wall ties (7 per m2 laid staggered)				
1	One brick walls	m2	18		-
	SUPERSTRUCTURE				
	Brickwork of NFP bricks in class II mortar including galvanised crimp wire wall ties (7 per m2 laid staggered)				
2	One brick walls	m2	39		-
3	Half brick walls in beamfilling	m2	3		-
	BRICKWORK SUNDRIES				
	Brickwork reinforcement				
4	150mm Wide reinforcement built in horizontally	m	365		-
	Prestressed fabricated lintels				
5	110 x 75mm Lintels in lengths not exceeding 3m	m	9		-
	Turning pieces				
6	230 mm Wide turning pieces to lintels etc8	m	13		-
	FACE BRICKWORK				
	Corobrik® Midrand 27-35MPa Roan Imperial FBX clay face brick, size 222 x 106 x 73mm, manufactured in accordance with 227:2007, bedded and jointed in Class I mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-4. or similar approved				
7	Extra over brickwork for face brickwork	m2	24		-
	Brick-on-edge header course copings, sills, etc of clay face brick,Corobrik® Midrand 27-35MPa Roan Imperial FBX clay face brick, size 222 x 106 x 73mm, manufactured in accordance with 227:2007, bedded and jointed in Class I mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-4. or similar approved				
8	Extra over brickwork for brick-on-edge header course lintel with 115mm projecting	m	2		-

	Brick-on-edge header course copings, sills, etc of clay face brick, Corobrik® Midrand 27-35MPa Roan Imperial FBX clay face brick, size 222 x 106 x 73mm, manufactured in accordance with 227:2007, bedded and jointed in Class I mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-4. or similar approved				
9	220mm wide sill set level and slightly projecting NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS 150 mm x wide 10 mm thick FC 77 pressed fibre cement internal window cill fixed to wall in bedded 1:3 cement mortar. Apply one coat universal undercoat and two coats low gloss Acrylic Enamel. Colour to match walls. 150 mm x wide 10 mm thick FC 77 pressed fibre cement internal window cill fixed to wall in bedded 1:3 cement mortar. Apply one coat universal undercoat and two coats low gloss Acrylic Enamel. Colour to match walls.	m	4		-
10		m	4		-
TOTAL CARRIED TO SECTION SUMMARY					-
	SECTION NO. 3 BILL NO. 4 WATERPROOFING (CPAP WORK GROUP 120 UNLESS OTHERWISE STATED) SUPPLEMENTARY PREAMBLES NOTE: Tenderers are advised to study the Standard Preambles to all trades and Supplementry Preambles before pricing this bill DAMP-PROOFING OF WALLS AND FLOORS One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course				
1	In walls	m2	5		-
2	In walls - Underside of windows3 One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"	m2	1		-
3	Under surface beds JOINT SEALANTS, ETC Denbraven LM15 polysulphide sealing compound including backing cord, bond breaker, primer, etc	m2	21		-
4	5 x 40mm In saw cut joints in floors	m	18		-
TOTAL CARRIED TO SECTION SUMMARY					-
	SECTION NO. 3 BILL NO. 5 ROOF COVERINGS ETC (CPAP WORK GROUP 124 UNLESS OTHERWISE STATED) SUPPLEMENTARY PREAMBLES NOTE: Tenderers are advised to study the Standard Preambles to all trades and Supplementry Preambles before pricing this bill NOTE: 1) The installation of Roof Coverings is to comply with SABS Code of Practice 0237 as applicable2) All roof sheeting shall be laid under a 5 year written guarantee for site workmanship and water tightness3) All roof sheeting to be fixed strictly in accordance with the manufacturer's instructions including fasteners, stop endings, etc.4) Allowance shall be made in the rates for mastic sealant to all side laps				

	<p>PROFILED METAL SHEETING AND ACCESSORIES</p> <p>Global Roofing SolutionsGlobal Roofing Solutions 0.53mm thick 686mm cover IBR 686 profile Clean Colorbond® ThermoTech™ AZ150 spelter G550 Volcanic Grey finish top coat and Shadow Grey backing coat roof sheeting, fixed to steel intermediate purlins at MAX 2100mm centres and eaves and ridge purlins at MAX 1800mm centres using Hex Flange Head + EPDM Seal self drilling No. 3 drill point, No. 12-14 x 68mm long fasteners. Purlin fixed to second, fourth and sixth crest of each sheet and at all crests at sheet ends, all in accordance with the manufacturer's specifications. • Brand: BlueScope • Climatic Condition: inland - C1/C2 Low Corrosion Risk. and Translucent SheetingModak Polycarbonate IBR 1.4 Kg Gelcoat Surface roof Sheeting: Colour: Grey. Fixing according to Manufactured requirement/Instruction</p>				
1	<p>Roof coverings with pitches not exceeding 25 degrees1</p> <p>Clotan Steel Craft-Lock profile 0,58mm thick ISQ300 Chromadek roof sheeting and accessories with Chromadek finish fixed to timber purlins or rails at 1200mm centres.</p>	m2	34		-
2	<p>Clotan Steel 0,58mm Chromadek Headwall flashing 305mm girth, two times bent along girth.</p> <p>ROOF AND WALL INSULATION</p> <p>40mm Fiberglass with a foil faced backing underside of roof sheeting</p>	m	18		-
3	<p>40mm Fiberglass with a foil faced backing underside of roof sheeting</p>	m2	34		-
	TOTAL CARRIED TO SECTION SUMMARY				-

	SECTION NO. 3				
	BILL NO. 6				
	CARPENTRY AND JOINERY				
	(CPAP WORK GROUP 126 UNLESS OTHERWISE STATED)				
	SUPPLEMENTARY PREAMBLES				
	NOTE:				
	Tenderers are advised to study the Standard Preambles to all trades and Supplementary Preambles before pricing this bill				
	NOTE: Tenderers are advised to study the Standard Preambles to all trades and Supplementary Preambles before pricing this bill				
	Particle board:				
	Particle board shall comply with the following specifications: a) SABS 1300 Particle board: exterior and flooring type b) SABS 1301 Particle board: interior type				
	Joinery:				
	Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc				
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes				
	Fixing				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete				
	Decorative laminate finish:				
	Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish				
	ROOFS, ETC				
	Plate nailed timber roof truss construction				
	The following is applicable in respect of roof trusses:Trusses are at maximum 1 200m centres.Roof covering is "Klip-Lok" roof sheeting on 50 x 75mm purlins at 1 200mm maximum centres.Ceilings are generally 1200 x 600mm suspended ceilings.All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245.Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish.All joints to be close fitted butt joints.Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation. The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabricaton commences.				
	Sawn softwood				
1	38 x 114mm Wall plates	m	10		-
2	Design, manufacture and deliver to site, plate nailed roof truss construction to Gate House, size 5 040 x 4 205mm overall on plan with 600mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing (wall plates elsewhere)	No	1		-
	Sundries				
3	Two coats creosote on sawn timbers (Provisional)	m2	21		-
	EAVES , VERGES , ETC				
	Everite FC77 pressed fibre-cement				
4	Everite medium density plain ungrooved Nutec fascia boards, size 225 x 12mm thick, fixed to timber rafters twice screwed with 12 x 40mm countersunk brass screws with Chromaprep H-profile fascia joiner between boards	m	18		-

	DOORS ETC				
	Wrought hardwood flushback doors with sapele veneer hung to steel frames				
5	Door size 813 x 2032mm high (D1)	No	1		-
	Solid flush doors with sapele veneer on both sides hung to steel frames				
6	Door size 813 x 2032mm high (D2)	No	1		-
	FITTINGS				
	Joinery Fittings, etc				
7	Joinery Fittings Complete installed to Guard house (PC Amount R 7 500-00 Vat excl. supplied, delivered and installed to site by Specialists)	Item	1		-
TOTAL CARRIED TO SECTION SUMMARY					
	SECTION NO. 3				
	BILL NO. 7				
	CEILINGS, PARTITIONS AND ACCESS FLOORING				
	NOTE: Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes.				
	SUPPLEMENTARY PREAMBLES				
	Descriptions				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete.				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere.				
	CEILINGS ETC				
	Insulation				
1	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	18		-
	NAILED UP CEILINGS				
	6mm thick fibre cement ceiling board on 38x38mm brandering at 400mm centers in one direction and for end fixing in the other direction, complete with galvanized H-profile jointing strips. Apply one coat of asbestos primer and two coats of Super Acrylic PVA, Colour to Architect Approval				
2	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	18		-
	CORNICE				
	70x20mm Saligna hardwood nailed to wall with 63mm cut steel nails at maximum 500mm C/C spacings. See detail regarding shadowline on ceiling drawings. Finish off by stop, sand down and prepare wood surfaces. Apply one coat oil based wood primer, one coat universal undercoat and two coats gloss enamel. Colour to Architect				
3	Cornice to walls	m	25		-
TOTAL CARRIED TO SECTION SUMMARY					-
	SECTION NO. 3				
	BILL NO. 8				
	IRONMONGERY				
	SUPPLEMENTARY PREAMBLES				
	Finishes to ironmongery				

	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD SandedNP Nickle plated				
	LOCKS				
	Union:				
	The following locks are to be suitable for master key operation.				
1	21313-76CH four lever upright deadlock case, with standard chrome forend.	No	2		-
2	2 x AL6W63-24AS " Waterbok" lever furniture on 150 x 75mm plate, for lever locks	No	2		-
	VERTICAL BLINDS, SCREENS, ETC				
	Vertical blinds with anodized aluminium headrail 45 mm wide x 25 mm high.All runners to be wheeled and fitted with individual clutch mechanisms. Allrunners to be connected by stainless steel spacerlinks. Tilt mechanism to beoperated by a nylon ball chain through a reduction gear inside a fully enclosed endcap. Slats to be 90 mm wide and fabric slats to be ultrasonically sealed.Slats may not be glued. Colour to Architect.				
3	Window code ND10S, size 1 511 x 2 125mm high, Ref. W05	No	2		-
	SUNDRIES				
	Union:				
4	19mm Diameter chromium plated towel rail 300mm long including end brackets	No	1		-
5	CZ8731SC Cast zinc satin chrome doorstop, floor mounted	No	1		-
6	AL8253AS Aluminium anodised silver hat and coat hook, with rubber buffer, fixed to door	No	1		-
	PUSH PLATES AND KICKING PLATES				
	Solid:				
7	300mm high x 1.2mm thick x 900mm long grade 304 satin finished stainless steel kicking plate.	No	4		-
	DOOR CLOSERS				
	Union:				
8	EN2 door closer 400 series (402) with regular arm, hold open type.	No	2		-
9	2 x 755 double action floor spring, hold open type, size EN3.	No	2		-
	SLIDING GEAR				
	Hillaldam				
10	Top hung sliding gear set for single door with track 3150mm long, suitable to carry door maximum mass 90kg, size P10, complete with side mounted rail, recessed brass channel in bottom of door and 33mm nylon guides, screwed to floor and two 46L heavy duty wall mounted doorstops, etc.	No	2		-
	BATHROOM FITTINGS				
	Approved "Lowveld Shelving"				
	STORAGE DIRECT o.e.a TOILET ROLL HOLDERS				
11	Three Roll Lockable Toilet Roll Dispenser (Storage Direct toll free number: 0800 110 468 Also Available from Lowveld Shelving tel: 013 751 2888/ 013 751 1762) (Code : TR2)	No	1		-
	STORAGE DIRECT o.e.a SOAP DISPENSER				
12	Three Roll Lockable Toilet Roll Dispenser (Storage Direct toll free number: 0800 110 468 Also Available from Lowveld Shelving tel: 013 751 2888/ 013 751 1762) (Code : TR2)	No	1		-
	STORAGE DIRECT o.e.a SOAP DISPENSER				
13	1.2 & Lockable Stainless Steel Hand Soap Dispenser (Storage Direct toll free number: 0800 110 468 Also Available from Lowveld Shelving tel: 013 751 2888/ 013 751 1762) (Code : HSOAP5)	No	1		-

	HANDPAPER TOWEL DISPENSER				
14	Storage Direct o.e.a ABS Plastic Hand Paper Towel Dispenser. Supply with Towels (Storage Direct toll free number: 0800 110 468 Also Available from Lowveld Shelving tel: 013 751 2888/ 013 751 1762)	No	1		-
	TOILET ROLL DISPENSER				
15	Standard CP toilet roll holder & hook for spare toilet roll holder mounted on wall. Install centre of roll at 700mm from F.F.L.	No	1		-
	Approved "Lowveld Shelving"				
	STORAGE DIRECT o.e.a SANITARY BIN				
16	Mini Sani Pedal Sanitary Bin (Storage Direct toll free number: 0800 110 468 Also Available from Low	No	1		-
	WALL BIN				
17	VDK & Associates Plastic Wall Bin o.e.a, fixed to wall. (VDK & Associates : 011 869 0571/011 907 4746) (Code : VDK261P)	No	1		-
	CORNER PROTECTORS, COVER AND SEALING STRIPS, ETC.				
	Clipstrip or similar and approved				
18	50 x 50 x 3mm Thick anodised aluminium corner protecor fixed to walls.	m	8		-
TOTAL CARRIED TO SECTION SUMMARY					-

	<p>SECTION NO. 3</p> <p>BILL NO. 9</p> <p>METALWORK</p> <p>(CPAP WORK GROUP 136 UNLESS OTHERWISE STATED)</p> <p>SUPPLEMENTARY PREAMBLES</p> <p>For preambles see "Model Preambles for Trades"</p> <p>NOTE:</p> <p>Tenderers are advised to study the Standard Preambles to all trades and Supplementary Preambles before pricing this bill</p> <p>Descriptions</p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>PRESSED STEEL DOOR FRAMES</p> <p>1.2mm Double rebated frames suitable for 230mm wall to accommodate 813x2032mmx2 door leaf. 1x zinc chromate primer coat and 2x enamel paint coat</p>				
1	<p>Frame for door size 813 x 2032mm high (D1 & D2)</p> <p>STEEL WINDOWS, DOORS, ETC</p> <p>Standard residential windows with burglar bars to all sashes - The frames must be degreased as per sabs. Remove all foreign matter from the frames. Prime the frames with Red oxide steel primer. All windows to be delivered to site after they have been galvanized and primed. Paint With an sabs approved 2 coat satin polyurethane enamel paint in accordance with the paint manufacturers Specifications. all window surface preparation to be as per the paint manufacturers specifications. Polished brass spring catch pulley with pull ring, screwed to the opening section while the spring Catch plate is screwed to the window frame. Install corrosion prevention barriers between different Materials. mild steel hinges to be installed as per the manufacturers specifications. Standard pivot mechanism & chromium plated window stays and handle Burglar bars : on all opening window sections. powder coated electro-galvanised steel Nonretractable burglar bars to manufacturers specification Window glazing: all glass panes to be safety glass as per sabs 10400 part n. 6mm clear toughened safety glass as per Manufacturers specifications. steel window putty to be used to fix glass into position. Hold the putty knife at an angle and pull it smoothly across the putty. Apply according to the manufacturers specifications Residential type steel sections , suitable for fixing to brickwork, concrete or steelwork. window frames to be constructed of 25 x 2.5mm mild steel sections to comply with sabs. silicone seal all round window frame at junction between frame and brickwork/concrete. frames to be built into the brickwork with g.m.s lugs .</p>	No	2		-
2	Window code ND54S, size 1 511 x 2 125mm high, Ref. W01	No	2		-
3	Window code NCT1S, size 533 x 2 125mm high , Ref. W05	No	1		-
	TOTAL CARRIED TO SECTION SUMMARY				-
	<p>SECTION NO. 3</p> <p>BILL NO. 10</p> <p>PLASTERING</p> <p>SCREEDS</p> <p>Granolithic screed (1:4 mix) and final floor finish to a total thickness of 30 mm. with steel trowel finished to be prepared to receive ABE-coat sf 366 two solvent free high chemical resistant epoxy coating according to manufacturer spec. Laying: lay granolithic finish according to SABS 0109.</p>				
1	25mm Thick on floors and landings	m2	21		-

	INTERNAL PLASTER				
	Apply one coat plaster to surface, leave to stiffen, and strike off with a striker board, wood float to an even surface with thickness 10 - 15mm, apply Rhino finish coat 3-5mm thick				
2	On walls	m2	40		-
3	On narrow widths	m2	4		-
TOTAL CARRIED TO SECTION SUMMARY					-
	SECTION NO. 3				
	BILL NO. 11				
	TILING				
	SUPPLEMENTARY PREAMBLES				
	Descriptions				
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding				
	WALL TILING				
	Union Tiles porcelain tiles (Code: UNM135600), size 600 x 600mm, fixed to internal walls with TAL tile adhesive (elsewhere specified) mixed with TAL Bond® in lieu of water with joints continuous in both directions and grouted with TAL tile grout (elsewhere specified), excess grout on the surface to be cleaned with water as work proceeds or Similar approved by Architects				
1	On walls	m2	24		-
2	On narrow widths	m2	1		-
	FLOOR TILING				
	Union Tiles porcelain tiles (Code: UNM135600), size 600 x 600mm, fixed to internal floor screed with TAL tile adhesive (elsewhere specified) mixed with TAL Bond® in lieu of water with joints continuous in both directions and grouted with TAL tile grout (elsewhere specified), excess grout on the surface to be cleaned with water as work proceeds or Similar approved by Architects				
3	On floors and landings	m2	18		-
4	Skirting of 400 x 100mm high cut tile	m	22		-
TOTAL CARRIED TO SECTION SUMMARY					-
	SECTION NO. 3				
	BILL NO. 12				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	uPVC pipes and fittings:				
	Soil, waste and vent pipes and fittings shall be solvent weld jointed				
	uPVC pressure pipes and fittings:				
	Pipes for water supply shall be of the class stated				
	Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings				
	Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push in type joints				

Copper pipes:

Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground

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

Reducing fittings

Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained

Exposed concrete surfaces

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gully tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster

Excavations

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

Soft rock and "hard rock" shall be as defined in "Earthworks"

Laying, backfilling, bedding, etc. of pipes

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

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with 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

Flush pans

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary

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

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

Waste unions

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

SANITARY FITTINGS

NOTE: All fittings butting up against wall or floor finishes or fitting into preformed openings in timber tops are to be sealed with an approved all purpose silicone sealant Prices for sinks described as drop in are to include for preparing the worktop to receive the fitting and securely fixing sinks to worktops using clips provided. The contractor is to provide worktop manufacturers with details of cut outs to ensure that the cut openings are sufficiently accurate to provide proper engagement for these clips Note: Stainless steel for urinals, basins, sinks, etc, shall be type 304 (18/8)

'Franke'

	FRANKE o.e.a WHB				
1	Wall Mounted Franke Luna Wash Hand Basin manufactured from Miranit resin-bonded mineral material. Mounting material included. Supply with waste and plug. (Code: ANMW199) (Franke: Tel. 011 357 3342 Fax. 011 357 3301)	No	1		-
	Vaal				
	VAAL SANITARYWARE o.e.a - WC				
	Hibiscus Close Coupled suite. Vaal Sanitaryware vitreous china "Hibiscus" close coupled 90° outlet open rim top dual flush suite. (Code: 772656)				
	TOILET SEAT				
2	Heavy Duty Plastic toilet seat, Embassy White; Laeveld Bouhandelaars o.e.a (Laeveld Bouhandelaars: 013 753 5300)	No	1		-
	TAPS, VALVES, ETC				
	Cobra				
	COBRA o.e.a TAPS				
3	Pushbutton Demand, Chrome Plated Pillar tap with flanged backnut. G1/2" MI Inlet. SANS 1808-66, JASWIC Listed. Install according to Manufacturer's specifications. (Code: KM2.102)	No	1		-
	ELECTRIC WATER HEATERS				
	Kwikot				
4	Kwikot o.e.a 7.5ℓ Instant Boiling Water Dispenser supplied with Electrical Cord with 230V 15Amp plug, mounting bracket and safety valve. Dimensions: 320 x 448 x 195mm. Install according to manufacturer's specifications. (Code: KWIK BOIL- 7.5)	No	1		-
	TESTING				
5	Testing water pipe system	Item	1		-
	FIRE APPLIANCES ETC				
	Chubb				
6	Everyway hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	1		-
7	4,5kg Dry chemical powder fire extinguisher, including standard hard wood backing plugged and backing finished with one coat dark stain and two coats clear suede polyurethane varnish - New	No	1		-
	WASTE UNIONS ETC				
	Cobra Watertech				
8	Cobra Watertech 32mm chrome plated slotted basin waste union (no chain or stay) (Code: 303)	No	1		-
9	Cobra Watertech 32mm chrome plated anti-theft plug with spindle (Code: 309-32).	No	1		-
	TRAPS ETC				
	Marley				
10	40mm Deep seal "P" or "S" trap	No	1		-

	COBRA o.e.a BOTTLE TRAP				
11	Chrome Plated Bottle Trap, with 75mm deep seal and adjustable telescopic pipe with 1 x ¼ " x 40mm Ø outlet for PVC tube. (Code: 345/40P)	No	1		-
	COBRA TAPS o.e.a - HWB TAP				
12	Cobra Raised nose elbow action pillar tap with blue indicator. G ½" MI Inlet Chrome Plated SANS 226 Type 2 (BS 5412), JASWIC Listed.. (Code: 503-21B)	No	1		-
	SANITARY PLUMBING				
	uPVC pipes				
13	50mm Pipes	m	6		-
14	110mm Pipes	m	6		-
15	50mm Pipes chased into brickwork	m	4		-
16	110mm Pipes chased into brickwork	m	4		-
	Extra over uPVC pipes for fittings				
17	50mm Bend	No	2		-
18	110mm Bend	No	2		-
19	110mm Junction	No	2		-
20	50mm Junction	No	1		-
21	110mm Pan connector	No	1		-
22	50mm Access bend	No	1		-
23	110mm Access bend	No	2		-
24	50mm BSP adaptor	No	2		-
25	110mm Eccentric reducer	No	2		-
26	110mm Access Junction	No	2		-
27	110mm Access bend with anti-syphon horn	No	1		-
28	110mm uPVC "ABC" cleaning eye end of pipe	No	1		-
29	110 x 110 x 50mm Access reducing junction	No	2		-
30	110 x 50 x 50mm Double reducing access junction	No	2		-
31	110 x 50 x 50mm Double reducing junction	No	2		-
32	110mm Access double junction	No	1		-
33	110mm Air vent cowl	No	1		-
34	110mm GI vent valve	No	1		-
35	457 x 457 x 50mm Precast concrete inspection eye marker slab set in ground	No	2		-
	Sundries				
36	Testing waste pipe system	Item	1		-
	WATER SUPPLIES				
	Class 0 copper pipes				
37	15mm Pipes	m	6		-
38	15mm Pipes chased into brick walls	m	12		-
39	22mm Pipes	m	6		-
40	22mm Pipes chased into brick walls	m	12		-
	Extra over class 0 copper pipes for capillary fittings				
41	15mm Fittings	No	4		-

42	22mm Fittings Copper overflow and service pipes	No	4		-
43	15mm Service pipe 500mm girth	No	2		-
TOTAL CARRIED TO SECTION SUMMARY					-
SECTION NO. 3 BILL NO. 13 GLAZING GLAZING TO STEEL WITH PUTTY 6mm Clear toughened safety glass					
1	Panes not exceeding 0,1m2 TOPS, SHELVES, DOORS, MIRRORS, ETC Franke Franke M600HD 8mm mirrors (Code: 2120104), size 600 x 500mm high, concealed thief resistant fixings, plugged and screwed to the wall with stainless steel screws. Screws with top of mirror at 1 800 height above all basins.	m2	6		-
2		No	1		-
TOTAL CARRIED TO SECTION SUMMARY					-
SECTION NO. 3 BILL NO. 14 PAINTWORK (CPAP WORK GROUP 152 UNLESS OTHERWISE STATED) SUPPLEMENTARY PREAMBLES For preambles see "Model Preambles for Trades" NOTE: Tenderers are advised to study the Standard Preambles to all trades and Supplementary Preambles before pricing this bill PAINTWORK PAINTWORK, ETC TO NEW WORK ON ON FLOATED PLASTER Plascon Double Velvet to interior new cement plaster (NW 200).Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Double Velvet (VEL) with 2 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.					
1	Internal walls	m2	40		-
2	On narrow widths	m2	2		-
ON FIBRE-CEMENT Plascon Polvin Super Acrylic to interior new fibre cement.Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats Polvin Super Acrylic (EPL) with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment					
3	On ceilings and cornices Prepare and apply one universal undercoat and two coats gloss enamel paint	m2	18		-
4	On window sills not exceeding 300mm girth	m	4		-

	Prepare surfaces, apply Earthcote Alkali resisting primer diluted 20% with turpentine. Apply two coats Peinture, applied at 3m2 per litre per coat all as per manufacturer's specifications and application instructions				
5	On fascia and barge boards ON METAL 1x zink chromate primer coat and 2x enamel paint coat	m	18		-
6	On door frames	m2	4		-
7	On window frames ON WOOD Plascon Velvagio Satin to interior new wood.Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1A5) < 14% or less. Prime with one coat Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.	m2	13		-
8		m2	8		-
TOTAL CARRIED TO SECTION SUMMARY					-
<u>SECTION NO. 3: GUARD HOUSE</u>					
1	Earthworks (Provisional)	Page	91		-
2	Concrete, Formwork and Reinforcement	Page	94		-
3	Masonry	Page	97		-
4	Waterproofing	Page	98		-
5	Roof Coverings, etc	Page	100		-
6	Carpentry and Joinery	Page	103		-
7	Ceiling, partitions and Access Flooring	Page	105		-
8	Ironmongery	Page	109		-
9	Metalwork	Page	111		-
10	Plastering	Page	112		-
11	Tiling	Page	114		-
12	Plumbing and Drainage (Provisional)	Page	122		-
13	Glazing	Page	123		-
14	Paintwork	Page	126		-
TOTAL CARRIED TO FINAL SUMMARY					-
SECTION NO. 4					
BILL NO. 1					
GENERAL SITE WORKS					
NOTETenderers are advised to study the document "Specification of Materials and Methods to be used" (PW371) as published by the National Department of Public Works before pricing this bill					
Unless otherwise stated all items in this bill shall be deemed to fall into Work Group No. 104 for JBCC CPAP purposes					

<p>All excavations are measured as being in "earth" and/or filling compacted to 93% modified AASHTO density. Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in spoil heaps for use as filling or for depositing within 150m of the perimeter of the excavations and spreading and roughly levelling as directed, as well as for increase in bulk and multiple handling of excavated material caused by the Contractor's method of operation. 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 and for bulking _____</p>				
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	EARTHWORKS				
	Site clearance				
1	Clear area of the site to be built upon including digging up and removing rubbish, debris, vegetation, hedges, boulders, shrubs and trees with trunk not exceeding 200mm girth	m2	7296		-
2	Take out and remove tree with trunk exceeding 200mm and not exceeding 500mm girth including grubbing up roots and filling in holes with clean dry earth filling	No	10		-
3	Take out and remove tree with trunk exceeding 500mm and not exceeding 1000mm girth including grubbing up roots and filling in holes with clean dry earth filling	No	5		-
4	Take out and remove tree with trunk exceeding 1000mm and not exceeding 1500mm girth including grubbing up roots and filling in holes with clean dry earth filling	No	5		-
	Excavations				
5	Open face excavation in earth to reduce levels	m3	1095		-
6	Extra over all excavations for carting away surplus material from excavations and/or from stockpiles on site to a dumping site to be located by the Contractor	m3	1095		-
7	Extra over open face excavations in earth for excavations in soft rock	m3	110		-
8	Extra over open face excavations in earth for excavations in hard rock	m3	55		-
9	Allow for keeping excavations free of all water other than subterranean water	Item	1		-
	Filling, etc.				
10	Earth filling from the excavations to make up levels around buildings compacted to 93% modified AASHTO density	m3	1095		-
11	Imported earth filling supplied by the Contractor and brought onto site to make up levels around buildings compacted to 93% modified AASHTO density	m3	1095		-
12	Grade and trim in-situ ground surface to falls	m2	7296		-
13	Prepare ground surface by scarifying top 150mm layer of ground and re-compact to 93% modified AASHTO density	m2	7296		-
	Tests				
14	Tests to determine the degree of compaction, etc. of ground or filling	No	20		-
	TOTAL CARRIED TO SECTION SUMMARY				-

	SECTION NO. 4				
	BILL NO. 2				
	WATER SUPPLY				
	Class 12 black HDPE high density polyethylene pipes with and including "Plasson" compression fittings				
1	50mm Pipes laid in and including trenches not exceeding 1m deep	m	51		-
2	75mm Pipes laid in and including trenches not exceeding 1m deep	m	8		-
	Extra over HDPE pressure pipes for fittings with solvent welded joints				
3	110 x 75mm Reducer	No	1		-
4	75 x 50mm Tee	No	1		-
5	50mm Elbow	No	4		-
6	50mm Tee	No	1		-
	Valves				
	Line valve assemblies to SABS 664 for supplying, installing, bedding and testing line valve assemblies in uPVC mains as per the drawings complete. Cutting of pipes and couplings included.				
7	Flywheel valve for 75mm HDPE pipe	No	1		-
8	Float valve in Water storage tank	No	2		-
	Water Storage Tanks etc.				
9	Supply and install SABS approved 10 000L Jojo tank complete with all necessary fittings	No	2		-
10	Supply and install complete 5m high steel tank stand for 10 000L Jojo tank (elsewhere)	No	2		-
	Fire Hydrant Assemblies				
	Extra-over item 7.1 for supplying, installing, bedding and testing fire hydrant assemblies in UPVC mains complete. hydrants tee, male/female reducers where required, cutting of pipes and coplinngs included.				
11	a. On 75mm dia main	No	1		-
TOTAL CARRIED TO SECTION SUMMARY					-
	SECTION NO. 4				
	BILL NO. 3				
	STORMWATER DRAINAGE (PROVISIONAL)				
	STANDARD PREAMBLES				
	Mass concrete with a coarse aggregate of 19mm and a minimum compressive strength of 15MPa at 28 days				
	V-shaped Concrete channel 500m wide x 100mm thick average 500 deep with rounded salient edges and finished on exposed surfaces with (2:1) cement mortar, laid to falls in panels not exceeding 1800mm long with 12mm bitumen impregnated softboard movement joints with exposed edges raked out for a depth of 10mm and filled with bituminous compound including all necessary excavation and formwork	m	100		-
1					
2	Extra over channel for angles, intersections, ends, etc.	No	10		-
	Triangular shaped concrete spill basin size 1080mm at head, 2440mm at base end and 1209mm along the sides, formed of 200mm thick concrete base with concrete upstand size 200 x 200mm high along two sides and 200 x 200mm footing along base end including all necessary excavation, formwork and backfilling, the top of the base inlaid with eleven hard burnt clay bricks protruding 55mm above the surface of the concrete and loose stones of 150 to 200mm diameter placed at the base of the spill basin for a width of 500mm	No	10		-
3					

	Movement joints				
4	Movement joint not exceeding 300mm high formed of 12mm bitumen impregnated softboard placed vertically in position between concrete stormwater channel and brick walls or concrete aprons, etc. including raking out top section 10mm deep and filling with bituminous compound	m	100		-
	HOT-DIPPED GALVANISED MILD STEEL				
	NOTE The following are to be hot-dipped galvanised after fabrication of complete units				
5	Channel covers of 50mm wide banded panels with 25 x 4,5mm bearer bars and 40 x 40mm openings and in suitable lengths laid loose on channels	m2	125		-
6	Supply and lay 600mm dia Type 100D Concrete pipe culvert including excavation, carting away excavated material etc	m	100		-
TOTAL CARRIED TO SECTION SUMMARY					-
	SECTION NO. 4				
	BILL NO. 4				
	SEWERS (PROVISIONAL)				
	STANDARD PREAMBLES				
	The contractor is referred to the Model Preambles for Trades (2008 edition) as issued the Association of South African Quantity Surveyors before pricing this bill				
	EXCAVATION, FILLING, ETC				
	Excavation in earth				
1	Excavate in all types of materials for trench, backfill for sub-soil drain pipe	m	100		-
	SOIL DRAINAGE				
	uPVC class 34 socketed pipework including short lengths and couplings (no excavation)				
2	Supply and lay 160mm diameter perforated pipes	m	100		-
	CRUSHED STONE				
3	Supply and place 19mm crushed stone	m3	25		-
4	Supply and place grade U14 KAYTECH or similar	m2	200		-
	INSPECTION CHAMBERS				
	Brick inspection chamber including precast concrete cover slabs (covers elsewhere) and channels in benching				
5	1830 x 1830mm Inspection chamber not exceeding 1000mm deep internally	No	10		-
	Precast concrete gulleys				
6	Precast concrete gully with 100mm outlet	No	10		-
	SEPTIC TANK SYSTEM				
7	Allow the amount of R 130 000.00 (One Hundred and thirty Thousand) for septic tank and french drain	Item	1		-
	TESTING DRAINAGE SYSTEM				
8	Testing drainage pipe system	Item	1		-
TOTAL CARRIED TO SECTIONS SUMMARY					-
	SECTION NO. 4				
	BILL NO. 5				
	PAVING (PROVISIONAL)				
	STANDARD PREAMBLES				
	The contractor is referred to the Model Preambles for Trades (2008 edition) as issued the Association of South African Quantity Surveyors before pricing this bill				

	<p>SUPPLEMENTARY PREAMBLES</p> <p>The following Standardized Specifications form part of this Bill</p> <p>SABS 1200B - (Bedding pipes, etc) SABS 1200C - (Site clearance SABS 1200DA - (Earthworks (small works) SABS 1200DM - (Earthworks (roads, sub grade) SABS 1200GA - (Concrete (small works) SABS 1200M - (Roads (general) SABS 1200MK - (Kerbstones and channels) SABS 1200MM - (Ancillary road works)</p> <p>Measurement and payment</p> <p>All measurement and payment clauses as prescribed in the above Standardized Specifications shall not apply to the work as set out in this Bill.</p> <p>General</p> <p>These Specifications were drawn up to cover all activities normally encountered on any of the above mentioned civil engineering work and details may therefore be encountered which will not apply to this Contract.</p> <p>These specifications are not issued with this document but are obtainable from the South African Bureau of Standards, Private Bag X191, Pretoria 0001.</p> <p>Attached Specifications at the back of these bills of quantities</p> <p>PA10 PA12</p> <p>DESCRIPTIONS</p> <p>The Tenderer is referred to the previous Section and the previous and successive Bills in this Section for preambles and full descriptions of materials and items described in this Bill, which will apply equally to the work in this Bill unless otherwise described</p> <p>LAYERS FOR PLATFORMS</p> <p>Construct gravel layer with G5 material from the borrow pit, 150mm thick compacted to 95% Mod AASHTO density. CBR > 45</p> <p>SEGMENTED PAVING</p> <p>Construction of paving (Zig-Zag interlocking pavers) complete. The rate shall cover the units that needs to be cut to fit to the edge restraints, sand bed of 25mm to be placed below paving blocks. (SABS pre-cast concrete paving blocks or similar approved):</p> <p>Autumn blocks (220 x 110 x 60mm)</p> <p>Grey blocks (220 x 110 x 60mm)</p> <p>Construction of paving (Bevelled paving blocks/pavers) complete. The rate shall cover the units that needs to be cut to fit to the edge restraints, sand bed of 25mm to be placed below paving blocks (SABS pre-cast concrete paving blocks or similar approved)</p> <p>Tan colour blocks (200 x 99 x 60mm)</p> <p>Slate colour blocks (200 x 99 x 60mm)</p> <p>Terracotta colour blocks (200 x 99 x 60mm)</p>				
1		m3	61		-
2		m2	4150		-
3		m2	200		-
4		m2	50		-
5		m2	50		-
6		m2	50		-
TOTAL CARRIED TO SECTION SUMMARY					-
	<p>SECTION NO. 4</p> <p>BILL NO. 6</p> <p>CONCRETE PALISADE FENCE (PROVISIONAL)</p> <p>STANDARD PREAMBLES</p> <p>The contractor is referred to the Model Preambles for Trades (2008 edition) as issued the Association of South African Quantity Surveyors before pricing this bill</p> <p>DESCRIPTIONS</p> <p>The Tenderer is referred to the previous Section and the previous and successive Bills in this Section for preambles and full descriptions of materials and items described in this Bill, which will apply equally to the work in this Bill unless otherwise described</p> <p>FENCING</p>				

	Concrete Palisade Fence				
1	Palisade fencing 2400mm high formed of 140mm tapering to 80 x 225 x 3200mm long precast concrete intermediate posts at 2000mm centres cast into concrete bases (elsewhere); with 80 x 150 x 1980mm long precast concrete top and bottom horizontal rails with ends grouted into mortices in intermediate or end posts and 100mm tapered to 80 x 80 x 2370mm long precast concrete vertical pales spaced at 200mm centres and bolted to horizontal rails at each intersection with and including all bolts, washers and epoxy grouting	m	348		-
	Gates etc.				
2	Electrically operated sliding gate 6000 x 2 440mm high overall, the outer frame of 75 x 50 x 2.5mm square tubing and 50 x 50 x 2.5mm welded mesh welded to frame work, complete with industrial type roller wheels rolling on ground track and mechanical operating mechanism and padbolt	No	1		-
TOTAL CARRIED TO SECTION SUMMARY					-
<u>SECTION NO. 4: EXTERNAL WORKS (ALL PROVISIONAL)</u>					
1	General Site works (All Provisional)	Page	130		-
2	Water Supply	Page	132		-
3	Stormwater Drainage	Page	134		-
4	Sewers (Provisional)	Page	136		-
5	Paving (Provisional)	Page	139		-
6	Concrete Palisade Fence (Provisional)	Page	141		-
TOTAL CARRIED T FINAL SUMMARY					-

	SECTION NO. 5				
	BILL NO. 1				
	PROVISIONAL SUMS				
	The Contractor's attention is drawn specifically to the Principal Building Agreement Clause 20.0 (Nominated Sub-Contractors), Clause 21.0 (Selected Sub-Contractors) and Clause 22 (Work by Others) and to the related Clauses in Section 1, Bill No. 1 - Preliminaries				
	The Contractor's attention is drawn also to the definition of attendance on Nominated or Selected Sub-Contractors and of fuel, power and water for commissioning of mechanical and other specialised installations given in the JBCC Preliminaries				
	Where special attendance includes the provision of hoisting facilities for a Sub-Contractor then the Contractor shall:-				
	PROVISIONAL SUMS FOR NOMINATED/SELECTED SUB-CONTRACTS				
	Electrical installations				
1	Provide the amount of R 400 000.00 (Four hundred thousand) for Electrical installations supplied and installed complete	Item	1	400000	400 000,00
2	Profit	%			
3	Allow for general attendance	%			
	Mechanical installations				
4	Provide the amount of R 300 000.00 (Three Hundred Thousand) for mechanical installation supplied and installed complete	Item	1	300000	300 000,00
6	Allow for general attendance	%			
	Signage and Artwork				
7	Provide the amount of R 100 000.00 for installation of signage and artwork	Item	1	100000	100 000,00
9	Allow for general attendance	%			
	Landscaping				
10	Provide the amount of R 100 000.00 for landscaping supplied and installed complete	Item	1	100000	100 000,00
12	Allow for general attendance	%			
	Covid-19 Compliance				
13	Provide the amount of R 450 000.00 for Covid-19 Compliance officer	Item	1	450000	450 000,00
15	Allow for general attendance	%			
	Environmental Compliance Officer				
19	Provide the amount of 300 000 for the appointment Environmental Compliance Officer	Item	1	300000	300 000,00
24	Profit Allow for general attendance	%			
	Training				
25	Provide the amount of R 150 000.00 (One Hundred and Fifty Thousand) for training	Item	1	150000	150 000,00
27	Allow for general attendance	%			
	Geotechnical Engineer				
31	Provide the amount of R150 000. for the appointment of an indipepended Geotech Engineer by Engineer	Item	1	150000	150 000,00
	Occupational Health And Safety Consultant				

34	Provide the amount of R550 000 for the appointment of OHS Consultant	Item	1	450000	450 000,00
TOTAL CARRIED TO FINAL SUMMARY					
<u>FINAL SUMMARY</u>					
1	PRELIMINARIES	Page	32		-
2	COMMUNITY HALL	Page	88		-
3	GUARD HOUSE	Page	127		-
4	EXTERNAL WORKS (ALL PROVISIONAL)	Page	142		-
5	PROVISIONAL SUMS	Page	145		-
	SUB TOTAL (A)	ST			-
	CONTINGENCIES				
	Allow 10.00% for contingencies of sub-total (A) to be used as directed by the Engineer and deducted in whole or in part if not required	%	10,0%	-	-
	SUB TOTAL (B)	ST			-
	COMMUNITY LIASON OFFICER				
	Provide the amount of R 101160.00 (@ R 8430.00/Month x 12 Months) for the appointment of community liaison officer	Item	1	101160	101 160,00
	SUB TOTAL (C)	ST			101 160,00
	Add: Value Added Tax @ 15.0%	TAX			15 174,00
TOTAL CARRIED TO FORM OF OFFER					