ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMUONT
	SECTION 1				
	BILL NO. 1				
	PRELIMINARIES				
	MEANING OF TERMS "TENDER / TENDERER"				
	Any reference to the words "Tender" or "Tenderer" herein and/or in any other documentation shall be construed to have the same meaning as the words "Bid" or "Bidder"				
	PRELIMINARIES				
	The JBCC Preliminaries Code 2103, May 2005 edition for use with the JBCC Principal Building Agreement Edition 4.1 Code 2101, March 2005 is taken to be incorporated herein. The tenderer is deemed to have referred to these documents for the full intent and meaning of each clause. These clauses are referred to by number and heading only. Where standard clauses or options are not applicable to the contract such modifications or corrections as are necessary are given under each relevant clause. Where an item is not relevant to this specific contract such item is marked "N/A" signifying "Not Applicable"				
	PRICING OF PRELIMINARIES				
	Should Option A, as set out in clause B10.3.1 hereinafter be used for the adjustment of preliminaries then each item priced is to be allocated to one or more of the three categories Fixed, Value Related or Time Related and the respective amounts entered in the spaces provided under each item				
	Items not priced in these Preliminaries shall be deemed to be included elsewhere in these Bills of Quantities				
	SECTION A: JBCC PRINCIPAL BUILDING AGREEMENT				
	DEFINITIONS				
	No clause Fixed:_____ Value related:_____ Time related:_____	Item			
	OBJECTIVE AND PREPARATION				
1	**A2.0 OFFER, ACCEPTANCE AND PERFORMANCE**				
	Clause 2.0				
	Fixed:_____ Value related:_____ Time related:_____	Item			
2	**A3.0 DOCUMENTS**				
	Clause 3.0				
	Clause 3.2.1 is amended by replacing"14.1" with "14.0"				
	Clause 3.7 is amended by the addition of the following:				
	The contractor shall supply and keep a copy of the JBCC Series 2000 Principal Building Agreement and Preliminaries applicable to this contract on the site, to which the employer, principal agent and agents shall have access at all times				
	Carried Forward				

	Brought Forward				
	Clause 3.10 is amended by replacing the second reference to "principal agent" with the word "employer" No clause Fixed:_____ Value related:_____ Time related:_____	Item			
3	**A4.0 DESIGN RESPONSIBILITY** Clause 4.0 Clause 4.3 is amended by replacing it with the following: No clause No clause Fixed:_____ Value related:_____ Time related:_____	Item			
4	**A5.0 EMPLOYER'S AGENTS** Clause 5.0 Clause 5.1.2 is amended to include clauses 32.6.3, 34.3, 34.4 and 38.5.8 Fixed:_____ Value related:_____ Time related:_____	Item			
5	**A6.0 SITE REPRESENTATIVE** Clause 6.0 Fixed:_____ Value related:_____ Time related:_____	Item			
6	**A7.0 COMPLIANCE WITH REGULATIONS** Clause 7.0 Note: A separate clause has been included in Section C : Specific Preliminaries of the bills of quantities / lump sum document for the contractor to have the opportunity to price for all the requirements of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification Fixed:_____ Value related:_____ Time related:_____	Item			
7	**A8.0 WORKS RISK** Clause 8.0 Fixed:_____ Value related:_____ Time related:_____	Item			
	Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

	Brought Forward				
8	**A9.0 INDEMNITIES**				
	Clause 9.0				
	Fixed:_____ Value related:_____ Time related:_____	Item			
	10.7.4 The employer shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the contractor's default of his obligations as set out in 10.7.1; 10.7.2 and 10.7.3. Such losses or damages may be recovered from the contractor or by deducting the same from any amounts still due under this contract or under any other contract presently or hereafter existing between the employer and the contractor and for this purpose all these contracts shall be considered one indivisible whole				
	Fixed:_____ Value related:_____ Time related:_____	Item			
9	**A11.0 LIABILITY INSURANCES**				
	Clause 11.0				
	Fixed:_____ Value related:_____ Time related:_____	Item			
10	**A12.0 EFFECTING INSURANCES**				
	Clause 12.0				
	Fixed:_____ Value related:_____ Time related:_____	Item			
11	A13.0 No clause				
	14.9 Should the contractor fail to furnish the security in terms of 14.2, the employer, in his sole discretion and without notification to the contractor, is entitled to change the contractor's selected form of security to that of a ten per cent (10%) payment reduction of the value certified in the payment certificate (excluding VAT), whereafter 14.7 shall be applicable				
	Fixed:_____ Value related:_____ Time related:_____	Item			
	<u>EXECUTION</u>				
	Give the contractor possession of the site within ten (10) working days of the contractor complying with the terms of 15.1.4				
	Fixed:_____ Value related:_____ Time related:_____	Item			
12	**A16.0 ACCESS TO THE WORKS**				
	Clause 16.0				
	Fixed:_____ Value related:_____ Time related:_____	Item			
	Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

	Brought Forward				
13	**A17.0 CONTRACT INSTRUCTIONS** Clause 17.0 Clause 17.1.11 is amended by deleting the words "and the appointment of nominated and selected subcontractors" Fixed:_____ Value related:_____ Time related:_____	Item			
14	**A18.0 SETTING OUT OF THE WORKS** Clause 18.0 Fixed:_____ Value related:_____ Time related:_____	Item			
15	**A19.0 ASSIGNMENT** Clause 19.0 Fixed:_____ Value related:_____ Time related:_____	Item			
16	**A20.0 NOMINATED SUBCONTRACTORS** Clause 20.0 Clause 20.1.3 is amended by replacing it with the following: No clause Note: See item B9.1 hereinafter for adjustment of attendance on nominated subcontractors executing work allowed for under provisional sums Fixed:_____ Value related:_____ Time related:_____	Item			
17	**A21.0 SELECTED SUBCONTRACTORS** Clause 21.0 Clause 21 is amended by replacing it with: No clause Fixed:_____ Value related:_____ Time related:_____	Item			
18	**A22.0 EMPLOYER'S DIRECT CONTRACTORS** Clause 22.0 Fixed:_____ Value related:_____ Time related:_____	Item			
19	**A23.0 CONTRACTOR'S DOMESTIC SUBCONTRACTORS** Clause 23.0 Fixed:_____ Value related:_____ Time related:_____	Item			
	Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

	Brought Forward				
	COMPLETION				
20	**A24.0 PRACTICAL COMPLETION**				
	Clause 24.0				
	Fixed:_____ Value related:_____ Time related:_____	Item			
21	**A25.0 WORKS COMPLETION**				
	Clause 25.0				
	Fixed:_____ Value related:_____ Time related:_____	Item			
22	**A26.0 FINAL COMPLETION**				
	Clause 26.0				
	Clause 26.1.2 is amended by inserting "#" next to 26.1.2				
	Fixed:_____ Value related:_____ Time related:_____	Item			
23	**A27.0 LATENT DEFECTS LIABILITY PERIOD**				
	Clause 27.0				
	Fixed:_____ Value related:_____ Time related:_____	Item			
24	**A28.0 SECTIONAL COMPLETION**				
	Clause 28.0				
	Fixed:_____ Value related:_____ Time related:_____	Item			
25	**A29.0 REVISION OF DATE FOR PRACTICAL COMPLETION**				
	Clause 29.0				
	Clause 29.2.5 is amended by replacing it with:				
	No clause				
	Fixed:_____ Value related:_____ Time related:_____	Item			
26	**A30.0 PENALTY FOR NON-COMPLETION**				
	Clause 30.0				
	Fixed:_____ Value related:_____ Time related:_____	Item			
	PAYMENT				
	Payment shall be subject to the employer giving the contractor a tax invoice for the amount due				
	Fixed:_____ Value related:_____ Time related:_____	Item			
	Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

	Brought Forward				
27	**A32.0 ADJUSTMENT TO THE CONTRACT VALUE** Clause 32.0 Clauses 32.5.1, 32.5.4 and 32.5.7 are amended by the addition of the following at the end of the sentence: due to no fault of the contractor Fixed:_____ Value related:_____ Time related:_____	Item			
28	**A33.0 RECOVERY OF EXPENSE AND LOSS** Clause 33.0 Fixed:_____ Value related:_____ Time related:_____	Item			
29	**A34.0 FINAL ACCOUNT AND FINAL PAYMENT** Clause 34.0 Clause 34.1 is amended by removing "#" next to 34.1 Clause 34.2 is amended by inserting "#" next to 34.2 Clause 34.8 is amended by deleting the words "where security as a fixed construction guarantee in terms of 14.4 has been selected or where payment reduction has been applied in terms of 14.7.1" Clause 34.13 is amended by replacing "seven (7) calendar days" with "twenty-one (21) calendar days" and deleting the words "subject to the employer giving the contractor a tax invoice for the amount due" Fixed:_____ Value related:_____ Time related:_____	Item			
30	**A35.0 PAYMENT TO OTHER PARTIES** Clause 35.0 Fixed:_____ Value related:_____ Time related:_____	Item			
	<u>CANCELLATION</u>				
31	**A36.0 CANCELLATION BY EMPLOYER - CONTRACTOR'S DEFAULT** Clause 36.0 Clause 36.1 is amended by the addition of the following clauses: 36.1.3 refuses or neglects to comply strictly with any of the conditions of contract 36.1.4 estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa 36.1.5 in the judgement of the employer, has engaged in corrupt or fraudulent practices in competing for or in executing the contract Clause 36.3 is amended by removing the reference to "No clause" and replacing the words "principal agent" with "employer"				
	Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

Brought Forward

36.7 Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the contractor; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site. The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever

Clause 37.0 is amended by the addition of the following clause: 37.5 Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the contractor; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site. The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever

Fixed:_____ Value related:_____ Time related:_____ — Item

38.7 Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the contractor; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site. The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever

Fixed:_____ Value related:_____ Time related:_____ — Item

32 **A39.0 CANCELLATION - CESSATION OF THE WORKS**

Clause 39.0
Clause 39.3.5 is amended by the addition of the following at the end of the sentence:
within one hundred and twenty (120) working days of completion of such a report
Fixed:_____ Value related:_____ Time related:_____ — Item

DISPUTE

33 **A40.0 DISPUTE SETTLEMENT**

Clause 40.0

Clause 40.2.2 is amended by replacing "one (1) year" with "three (3) years"

Clause 40.6 is amended by removing the reference to:

No clause

Clause 40.7.1 is amended by replacing "(10)" with "(15)" and by the addition of the following:

Whether or not mediation resolves the dispute, the parties shall bear their own costs concerning the mediation and equally share the costs of the mediator and related costs

Fixed:_____ Value related:_____ Time related:_____ — Item

Carried Forward

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	Brought Forward				
	SUBSTITUTE PROVISIONS				
34	**A41.0 STATE CLAUSES**				
	Clause 41.0				
	Fixed:_____ Value related:_____ Time related:_____	Item			
	CONTRACT VARIABLES				
35	**A42.0 THE SCHEDULE (DPW-04EC)**				
	Clause 42.0 Tenderers are referred to the Contract Data DPW-04(EC) for variables pertaining to this contract				
	Fixed:_____ Value related:_____ Time related:_____	Item			
	SECTION B: JBCC PRELIMINARIES				
	B1.0 DEFINITIONS AND INTERPRETATION				
36	**B1.1 Definitions and interpretation**				
	See also clause A1.0 of Section A for additional and/or amended definitions which shall apply equally to this Section				
	Fixed:_____ Value related:_____ Time related:_____	Item			
	B2.0 DOCUMENTS				
37	**B2.1 Checking of documents**				
	Fixed:_____ Value related:_____ Time related:_____	Item			
38	**B2.2 Provisional bills of quantities**				
	Fixed:_____ Value related:_____ Time related:_____	Item			
39	**B2.3 Availability of construction documentation**				
	Fixed:_____ Value related:_____ Time related:_____	Item			
40	**B2.4 Interests of agents**				
	Fixed:_____ Value related:_____ Time related:_____	Item			
41	**B2.5 Priced documents**				
	Fixed:_____ Value related:_____ Time related:_____	Item			
42	**B2.6 Tender submission**				
	Clause 2.6 is amended by replacing "JBCC Form of Tender" with "Form of Offer and Acceptance DPW-07(EC)"				
	Fixed:_____ Value related:_____ Time related:_____	Item			
	Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

		Brought Forward				
	B3.0 THE SITE					
43	**B3.1 Defined works area**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
44	**B3.2 Geotechnical investigation**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
45	**B3.3 Inspection of the site**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
46	**B3.4 Existing premises**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
47	**B3.5 Previous work - dimensional accuracy**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
48	**B3.6 Previous work - defects**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
49	**B3.7 Services - known**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
50	**B3.8 Services - unknown**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
51	**B3.9 Protection of trees**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
52	**B3.10 Articles of value**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
53	**B3.11 Inspection of adjoining properties**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
	<u>B4.0 MANAGEMENT OF CONTRACT</u>					
54	**B4.1 Management of the works**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
		Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**					

	Brought Forward				
55	**B4.2 Programme for the works** Fixed:_____ Value related:_____ Time related:_____	Item			
56	**B4.3 Progress meetings** Fixed:_____ Value related:_____ Time related:_____	Item			
57	**B4.4 Technical meetings** Fixed:_____ Value related:_____ Time related:_____	Item			
58	**B4.5 Labour and plant records** Fixed:_____ Value related:_____ Time related:_____	Item			
	B5.0 SAMPLES, SHOP DRAWINGS AND MANUFACTURERS' INSTRUCTIONS				
59	**B5.1 Samples of materials** Fixed:_____ Value related:_____ Time related:_____	Item			
60	**B5.2 Workmanship samples** Fixed:_____ Value related:_____ Time related:_____	Item			
61	**B5.3 Shop drawings** Fixed:_____ Value related:_____ Time related:_____	Item			
62	**B5.4 Compliance with manufacturers' instructions** Fixed:_____ Value related:_____ Time related:_____	Item			
	B6.0 TEMPORARY WORKS AND PLANT				
63	**B6.1 Deposits and fees** Fixed:_____ Value related:_____ Time related:_____	Item			
64	**B6.2 Advertising** Fixed:_____ Value related:_____ Time related:_____	Item			
65	**B6.3 Advertising** Fixed:_____ Value related:_____ Time related:_____	Item			
66	**B6.4 Plant, equipment, sheds and offices** Fixed:_____ Value related:_____ Time related:_____	Item			
	Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

		Brought Forward				
67	**B6.5 Main notice board**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
68	**B6.6 Subcontractors' notice board**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
	B7.0 TEMPORARY SERVICES					
69	**B7.1 Location**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
70	**B7.2 Water**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
71	**B7.3 Electricity**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
72	**B7.4 Telecommunication facilities**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
73	**B7.5 Ablution facilities**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
	B8.0 PRIME COST AMOUNTS					
74	**B8.1 Responsibility for prime cost amounts**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
	B9.0 ATTENDANCE ON N/S SUBCONTRACTORS					
75	**B9.1 General attendance**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
76	**B9.2 Special attendance**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
77	**B9.3 Commissioning - fuel, water and electricity**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
	B10.0 FINANCIAL ASPECTS					
78	**B10.1 Statutory taxes, duties and levies**					
	Fixed:_____ Value related:_____ Time related:_____		Item			
		Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**					

	Brought Forward				
79	**B10.2 Payment for preliminaries** Fixed:_____ Value related:_____ Time related:_____	Item			
80	**B10.3 Adjustment of preliminaries** Fixed:_____ Value related:_____ Time related:_____	Item			
81	**B10.4 Payment certificate cash flow** Fixed:_____ Value related:_____ Time related:_____	Item			
	B11.0 GENERAL				
82	**B11.1 Protection of the works** Fixed:_____ Value related:_____ Time related:_____	Item			
83	**B11.2 Protection / isolation of existing / sectionally occupied works** Fixed:_____ Value related:_____ Time related:_____	Item			
84	**B11.3 Security of the works** Fixed:_____ Value related:_____ Time related:_____	Item			
85	**B11.4 Notice before covering work** Fixed:_____ Value related:_____ Time related:_____	Item			
86	**B11.5 Disturbance** Fixed:_____ Value related:_____ Time related:_____	Item			
87	**B11.6 Environmental disturbance** Fixed:_____ Value related:_____ Time related:_____	Item			
88	**B11.7 Works cleaning and clearing** Fixed:_____ Value related:_____ Time related:_____	Item			
89	**B11.8 Vermin** Fixed:_____ Value related:_____ Time related:_____	Item			
90	**B11.9 Overhand work** Fixed:_____ Value related:_____ Time related:_____	Item			
91	**B11.10 Instruction manuals and guarantees** Fixed:_____ Value related:_____ Time related:_____	Item			
	Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

	Brought Forward				
92	**B11.11 As built information**				
	Fixed:_____ Value related:_____ Time related:_____	Item			
93	**B11.12 Tenant installations**				
	Fixed:_____ Value related:_____ Time related:_____	Item			
	B12.0 SCHEDULE OF VARIABLES				
94	**B12.1 Schedule of variables**				
	Fixed:_____ Value related:_____ Time related:_____	Item			
	SECTION C: SPECIFIC PRELIMINARIES				
	Section C contains specific preliminary items which apply to this contract except where N/A (Not Applicable) appears against an item				
95	**C1.0 CONTRACT DRAWINGS**				
	* Select relevant paragraph and delete whichever is not applicable depending on whether the contract is based on a bills of quantities or lump sum document				
	* 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				
	* A full set of drawings is issued with the tender documents indicating the full 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				
	Fixed: _____ Value related:_____ Time related:_____	Item			
96	**C2.0 GENERAL PREAMBLES**				
	The document "Specification of Materials and Methods to be used (PW371)" is obtainable on the Department's website (http://www.publicworks.gov.za/ under "Consultants Guidelines"), and shall be read in conjunction with the bills of quantities / lump sum document and be referred to for the full descriptions of work to be done and materials to be used				
	Fixed: _____ Value related:_____ Time related:_____	Item			
97	**C3.0 TRADE NAMES**				
	Wherever a trade name for 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				
	Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

	Brought Forward				
	If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for				
	Fixed: _____ Value related:_____ Time related:_____	Item			
98	**C4.0 IMPORTED MATERIALS AND EQUIPMENT**				
	Where imported items are listed in the tender documents, the tenderer shall provide all the information called for, failing which the price of any such item, materials or equipment shall be excluded from currency fluctuations. (refer to Schedule of Imported Materials and Equipment DPW-23(EC) to be completed by tenderer)				
	Notwithstanding any provisions elsewhere regarding the adjustment of contract prices, the price of any item, material or equipment listed in terms of this clause shall be excluded from the Contract Price Adjustment Provisions (if applicable)				
	Fixed: _____ Value related:_____ Time related:_____	Item			
99	**C5.0 VIEWING THE SITE IN SECURITY AREAS**				
	The site is situated in a security area and the tenderer must arrange with the unit commander or other responsible officer to obtain permission to enter the site for tendering purposes				
	Fixed: _____ Value related:_____ Time related:_____	Item			
100	**C6.0 COMMENCEMENT OF WORKS IN SECURITY AREAS**				
	As the works falls within a security area the contractor must give the unit commander or other responsible officer notice before commencement of the works. Should the contractor fail to make such arrangements, admission to the site may be refused and any additional costs will be for the contractor's account				
	Fixed: _____ Value related:_____ Time related:_____	Item			
101	**C7.0 ENTRANCE PERMITS TO SECURITY AREAS**				
	As the works falls within a security area the contractor shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which may be issued from time to time regarding the protection of persons and property under the control of the Defence Force, Police or chief security officer				
	Fixed: _____ Value related:_____ Time related:_____	Item			
102	**C8.0 SECURITY CHECK OF PERSONNEL**				
	The principal agent may require the contractor to have his personnel and workmen, or a certain number of them, security classified				
	In the event of the principal agent requesting the removal of a person or persons from the works for security reasons, the contractor shall do so forthwith and shall thereafter ensure that such person or persons are denied access to the works and the site and/or to any document or information relating to the works				
	Fixed:_____ Value related:_____ Time related:_____	Item			
	Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

	Brought Forward				
103	**C9.0 PROHIBITION ON TAKING OF PHOTOGRAPHS** In terms of article 119 of the Defence Act, 44 of 1957, it is prohibited to sketch or to take photographs of any military site or installation or any building or civil works thereon or to be in possession of a camera or other apparatus used for taking of photographs except when authorized thereto by or on behalf of the Minister The same prohibition is also applicable to all correctional institutions in terms of article 44.1(e) of the Correctional Services Act 8 of 1959 Fixed:_____ Value related:_____ Time related:_____	Item			
	C10.1 AWARENESS CHAMPION Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification Fixed:_____ Value related:_____ Time related:_____	Item			
	C10.2 AWARENESS WORKSHOPS Selection and appointment of a competent Service Provider approved by the principal agent, provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification Fixed:_____ Value related:_____ Time related:_____	Item			
	C10.3 POSTERS, BOOKLETS, VIDEOS, ETC. Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the construction period, all in accordance with the HIV/AIDS Specification Fixed:_____ Value related:_____ Time related:_____	Item			
	C10.4 ACCESS TO CONDOMS Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the construction period, all in accordance with the HIV/AIDS Specification Fixed:_____ Value related:_____ Time related:_____	Item			
	Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

	Brought Forward				
	C10.5 MONITORING Monitoring HIV/AIDS awareness of workers, providing the principal agent with access to information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the construction period and close out, all in accordance with the HIV/AIDS Specification Fixed:_____ Value related:_____ Time related:_____	Item			
104	**C11.0 OCCUPATIONAL HEALTH AND SAFETY ACT** 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 interest, due to such delay of payment Provision 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 Fixed:_____ Value related:_____ Time related:_____	Item			
105	**C11.1 NOTIFICATION OF CONSTRUCTION WORK (Construction Regulation 3)** The Contractor shall, before commencing work, notify the Department of Labour of the intended construction work in terms of Regulation 3. The Contractor shall submit the notification in writing, on the appropriate form, prior to commencement of work Fixed:_____ Value related:_____ Time related:_____	Item			
106	**C11.2 HEALTH AND SAFETY PLAN (Construction Regulation 5.4)** The Contractor shall provide and demonstrate to the Principal Agent a suitable and sufficiently documented health and safety plan based on the Act, Construction Regulations and the health and safety specification, which shall be applied from the date of commencement of and for the duration of the construction work. The Contractor shall ensure that a copy of the health and safety plan is available on request to an employee, inspector, sub contractor or principal agent all in terms of Regulation 5 Fixed:_____ Value related:_____ Time related:_____	Item			
	Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

	Brought Forward				
107	**C11.3 REGISTRATION WITH THE COMPENSATION FUND (Construction Regulation 5.3 f)** The Contractor shall provide proof of his registration and good standing with the Compensation Fund or a licensed compensation insurer prior to the commencement of work Fixed:_____ Value related:_____ Time related:_____	Item			
108	**C11.4 HEALTH AND SAFETY FILE (Construction Regulation 5.7)** The Contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the health and safety specification, the Act and the Construction Regulations, is opened and kept on site and made available to the Principal Agent or Inspector upon request. Upon completion of the works, the Contractor shall hand over a consolidated health and safety file to the principal agent Fixed:_____ Value related:_____ Time related:_____	Item			
109	**C11.5 SUPERVISION OF CONSTRUCTION WORK (SAFETY OFFICER) (Construction Regulation 6)** The Contractor shall appoint a full-time competent employee in writing as the construction supervisor, with the duty of supervising the construction work. The Contractor shall appoint a full-time or part-time construction safety officer in writing to assist in the control of all safety related aspects on the site. Such appointments are required to ensure that at all times the requirements of the Act and Construction Regulations are adhered to. Refer to Regulation 6 Fixed:_____ Value related:_____ Time related:_____	Item			
110	**C11.6 RISK ASSESSMENT AND SAFETY POLICY (Construction Regulation 7)** Before commencing work the Contractor shall cause a risk assessment to be performed by a competent person appointed in writing and the risk assessment shall form part of the health and safety plan. A copy of the risk assessment shall be available on site at all times for inspection. The Contractor shall at all time carry out the works in a manner to avoid the risk of bodily harm to persons or risk of damage to any property. He shall take all precautions regarding training of employees in any hazards and the related work procedures, health and safety induction training of employees, visitors or any other persons entering the site and provide personal protective equipment to all employees and visitors to site which are necessary and adequate to eliminate any conditions which contribute to the risk of injury to persons or damage to property in terms of Regulation 7 Fixed:_____ Value related:_____ Time related:_____	Item			
111	**C11.7 SIGNIFICANT HAZARDA IDENTIFICATION RISK ASSESSMENT PREPARED BY THE DESIGN CONSULTANTS** The contractor shall allow for additional financial provision, if any, to take the necessary precautions regarding the significant hazards and risks identified and assessed by the design consultants Fixed:_____ Value related:_____ Time related:_____	Item			
	Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

	Brought Forward				
112	**C11.8 ADDITIONAL FINANCIAL PROVISION** The Contractor shall allow for additional financial provision, if any, to comply with the requirements of the Occupational Health and Safety Act (Act No 85 of 1993) and the Construction Regulations issued there under which have not been specifically elsewhere provided Fixed:_____ Value related:_____ Time related:_____	Item			
113	**C11.9 FALL PROTECTION PLAN (Construction Regulation 8)** The contractor shall, before commencing any construction work submit a fall protection plan identified all steps to be taken in order to ensure the continued adherence to the fall protection plan and shall include a risk assessment of all work carried out from an relevant position. The fall protection plan shall form part of the health and safety plan and file F ixed:_____ Value related:_____ Time related:_____	Item			
114	**C11.10 PHYSICAL AND PSYCHOLOGICAL FITNESS (Construction Regulation 8.2(b))** The contractor and sub-contractors shall before commencing any construction work submit proof of his employees that shall carried out work from an elevated position their physical and psychological fitness. And shall be recorded in the health and safety file Fixed:_____ Value related:_____ Time related:_____	Item			
115	**C11.11 CONSTRUCTION VEHICLES AND MOBILE PLANT (Construction Regulation 21)** The contractor and sub-contractors shall ensure that all operated workers received training and been certified competent to operate such vehicle, and are physical and psychological fit to operate such construction vehicles and mobile plants. And shall be recorded in the health and safety file Fixed:_____ Value related:_____ Time related:_____	Item			
116	**C11.12 TRAINING (Construction Regulation 8 (c))** The contractor and sub-contractors shall, before commencing any construction work, submit his training program of all his employees. This program shall from part of the health and safety plan Fixed:_____ Value related:_____ Time related:_____	Item			
117	**C11.13 DEMOLITION WORK (Construction Regulation 12)** The contractor shall, before any demolition work shall carried out, submit all method of demolition to be used. This method shall form part of the health and safety plan and file. Fixed:_____ Value related:_____ Time related:_____	Item			
	Carried Forward				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

	Brought Forward				
118	**C11.14 REMOVAL AND DISPOSAL OF ASBESTOS MATERIAL (Asbestos Regulation)** The principle contractor shall appoint a contractor that is registered with the Department of Labour as an AIA. The contractor must allow for; NOTIFICATION OF ASBESTOS PROCESSINGPERSONAL PROTECTIVE EQUIPMENTPACKAGING AND TRANSPORT AND STORAGE TO DISPOSAL SITEDEMOLITION WORK OF SHEETSLABELLING AND INFORMATION Fixed:_____ Value related:_____ Time related:_____	Item			
	Carried Forward to Summary of Section No. 1				
	Section No. 1 **SECTION 1 - PRELIMINARY AND GENERAL** **Bill No. 1** **Preliminaries**				

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SECTION NO. 2
BILL NO. 1

OCCUPATIONAL HEALTH & SAFETY AND ENVIRONMENTAL MANAGEMENT

Failure, by the Tenderer, to price the items indicated below individually or per item will result in the Tender being deemed non-responsive. The legal requirements contemplated in the Construction Regulations as stated below:

(CR) 5(1)(g) "A Client must ensure that potential principal contractors submitting tenders, have made adequate provision for the cost of health and safety measures"

CR 5(1)(h) "A client must ensure that principal contractor to be appointed has the necessary competencies and resources to carry out the construction work safely"

Shall apply and will be used to motivate the disqualification of the Tender. The contractor's attention is further drawn to Section 41 of the Occupational Health and Safety Act No. 85 Of 1993: This Act not affected by agreements

Subject to the provisions of sections 10 (4) and 37 (2), a provision of this Act or a condition specified in any notice or direction issued there under or subject to which exemption was granted to any person under section 40, shall not be affected by any condition of any agreement, whether such agreement was entered into before or after the commencement of this Act or before or after the imposition of any such condition, as the case may be.

Note to Principal Contractor

Prior to pricing the principal contractor must familiarize him/herself with the Occupational Health and Safety Act No. 85 Of 1993, Construction Regulations 2014, other relevant Regulations and Standards as well as project specific Health &Safety specifications.

After pricing of the health and safety bill of quantities, the Principal Contractor must sign the Certificate of Acquaintance as evidence that he is au fait regarding the contents, obligations and demands of the Occupational Health and Safety Act No. 85 of 1993, Construction Regulations 2014, other relevant Regulations and Standards as well as project specific Health &Safety specifications. Failure, by the Tenderer, to sign the Certificate of Acquaintance may result in the Tender being deemed non-responsive.

1	Notify the provincial director in writing of the commencement of construction work with and including submission of a letter of receipt and acknowledgement of the aforementioned notice by the director of his/her representative	Item	1		
2	Allow for the preparation and approval of project-specific H&S Plan & File [CR 7(1)(a)]	Item	1		
3	Allow for the implementation and maintenance of project-specific H&S Plan & File. [CR 7]	Months	3		
4	Principal Contractor's time related obligations in respect of the OHS Act and Construction Regulations for the entire construction period.	Months	3		
5	Provision of full time Health and Safety Officer for the entire construction period.	Months	3		
	Carried Forward				

Section No. 2
SECTION 2 - OHS AND ENVIROMENTAL MANAGEMENT
Bill No. 1
OHS and Environmental Management

	Brought Forward				
	Provide, supply and maintenance for each worker the following SANS approved personal protective equipment & clothing as per the site-specific risk assessments:				
7	Hard hats (high density polyethylene & 6-point lining)	No	20		
8	Vests	No	10		
9	Safety boots / shoes (steel-toe)	No	10		
10	Safety gloves	No	10		
11	Ear plugs/ muffs	No	10		
12	Dust mask(at least FF2 type)	No	5		
13	Respirators	No	1		
14	Cloth Masks	No	1		
15	Face shields	No	1		
16	FFP1 surgical masks	No	25		
17	Safety goggles	No	5		
18	Temporary warning signs and symbols	No	5		
19	Allow for pre-employment medical examinations	Item	1		
20	Allow for exit medical examinations	Item	1		
21	SANS approved weld mesh type temporary barrier fencing 1,8m high covered with a net fixed to and including 100mm diameter gum poles set securely min 300mm deep in ground at max 3m spacing including excavation, backfilling, etc	Item	1		
	Carried Forward to Summary of Section No. 2				
	Section No. 2 **SECTION 2 - OHS AND ENVIROMENTAL MANAGEMENT** **Bill No. 1** **OHS and Environmental Management**				

	SECTION NO. 2				
	BILL NO. 2				
	HEALTH & SAFETY EDUCATION AND ENVIRONMENTAL MANAGEMENT				
1	Allow for all COVID-19 awareness training	Months	3		
	COVID-19 HEALTH AND SAFETY WORK PRACTICES				
2	Symptom screening of all site visitors upon arrival	Months	3		
	Carried Forward to Summary of Section No. 2				
	Section No. 2 **SECTION 2 - OHS AND ENVIROMENTAL MANAGEMENT** **Bill No. 2** **Health & Safety Education and Environmental Management**				

	SECTION SUMMARY - SECTION 2 - OHS AND ENVIROMENTAL MANAGEMENT	**Page No**			
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	Carried to Final Summary				
	Section No. 2 **SECTION 2 - OHS AND ENVIROMENTAL MANAGEMENT**				

SECTION NO. 3

BILL NO. 1

DEMOLITION OF NON COMPLIANT ACCESS RAMPS

View site

Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained

General

Water supply pipes and other piping in ground that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings to the satisfaction of the principal agent

Unless otherwise described all materials are to become the property of the contractor and are to be removed from the site

	Breaking up and removing				
1	Ramps	m2	5		
2	Steps	m2	2		
3	Slabs/walkways	m2	23		
	Taking down and removing				
4	Non compliant existing fence	m	50		
	Demolishing and removing				
5	One brick boundary or yard walls n.e 1,5m high	m	50		
6	Excavation in earth not exceeding 2m deep to remove foundations	m3	25		
	Extra over bulk excavations in earth for breaking up and removing				
7	Extra over for removal of brickwork	m3	25		
8	Extra over for removal of unreinforced concrete	m3	18		
9	Extra over for removal of reinforced concrete	m3	18		
	Extra over all excavations for carting away				
10	Surplus material from demolitions and/or stock piles of rubble on site, to a dumping site to be located by the contractor	m3	25		
11	Clean out pit latrine by desludging including removal of all debris and waste including soild waste as per Health and Safety requirements and make good on completion including disposing of all debris and waste at an authorised municipal waste disposal facility. Contractor to price per seat	item	1		
	Carried Forward to Summary of Section No. 3				

Section No. 3
SECTION 3 - DEMOLITIONS & ALTERATIONS
Bill No. 1
Demolitions

SECTION NO. 3

BILL NO. 2

ALTERATIONS

View site
Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials salvageable from the alterations. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained

Explosives
No explosives whatsoever may be used for alteration purposes unless otherwise stated

General

The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to tenants in the building and to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent

Fttings, frames, linings, which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehanging, cramping up, re-wedging as required and making good cramps, dowels,, and oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given separately

With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, shall be levelled and prepared for raising of brickwork

Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary

The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings)

REMOVAL OF EXISTING WORK

Taking out and removing piping, sanitary fittings, including disconnecting piping from fittings and making good floor and wall finishes (making good tiling and paintwork elsewhere)

1	50mm Waste pipe.	m	3		
2	Remove VIP 200 Pit pedestal and prepare surface to receive new VIP 450 pedestal (VIP 450 pedestal elsewhere).	No	3		
	NEW SANITARY FITTINGS				
	Rust and corrosion resistant, UV-resistant polyethylene pedestals, urinals, basins. Product and colour to Principal Agent's approval:				
3	VIP 450 Pit pedestal complete with integral flap four times plugged to floor with and including 6 x 75mm masonry anchors	No	3		
	Carried Forward				

	Brought Forward				
4	Remove and replace Urinal with new	No	5		
	NEW SANITARY PLUMBING				
	PVC waste or vent pipes and fittings:				
5	50mm Waste pipe	No	3		
	Extra for:				
6	50mm Bend.	No	2		
7	50mm Access bend.	No	1		
	NEW BATHROOM FITTINGS				
	Satin Grey Plastics or equal approved				
7	"Satin plastic N-SBIN-12-SA SHE Bin size 463 x 140 x 480mm, floor standing loose.	No	8		
	BOLTS:				
8	50mm Alu/Metal holder bat to hold vent pipes against brick wall	No	57		
	ALLOWANCE FOR TEMPORARY TOILETS				
9	Allow for temporary toilets for use during construction	Item	1		
	METALWAORK				
	STEEL BALUSTRADING				
	GALVANISED STEEL BALUSTRADING				
	Welded balustrading to walkways				
10	Allow for Raking balustrading 1000mm high, complete with 50mm diameter handrail, fixed to detail	m	15		
	ON METAL SURFACES				
	One coat alkyd based zinc phosphate primer and two coats premium quality polyurethane enamel paint, on steel				
11	To steel balustrades (both sides measured)	m^2	70		
	Carried Forward to Summary of Section No. 3				
	Section No. 3 **SECTION 3 - DEMOLITIONS & ALTERATIONS** **Bill No. 2** **Alterations**				

	SECTION SUMMARY - SECTION 3 - DEMOLITIONS & ALTERATIONS	Page No
1	Demolitions	25
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Carried to Final Summary

Section No. 3
SECTION 3 - DEMOLITIONS & ALTERATIONS

SECTION NO. 4

BILL NO. 1

EARTHWORKS

SUPPLEMENTARY PREAMBLES

General

The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.

Nature of ground

The required bulk earthworks and levelling have been measured under Section 2 (Bulk Earthworks) of these Bills of Quantities and would be complete at the time these foundation works are executed. The nature of the ground is thus compacted fill (as per latest Engineer's drawing) and where foundation excavations are deeper the nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "soft rock" or "hard rock".

Subterranean water

No subterranean water is expected

Carting away of excavated material

Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site.

Filling

Notwithstanding the reference to prescribed multiple handling in clause 2 page 10 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any necessary multiple handling of material.

Testing

Prices for filling are to include for all necessary density tests in accordance with SABS 1200D and as prescribed by the Engineer and/or Principal Agent.

SITE CLEARANCE

Site clearance

1	Stripping average 170mm thick layer of top soil and stockpiling on site	m2	50		

EXCAVATION, FILLING

EXCAVATIONS

Excavation in compacted earth not exceeding 2m deep

2	Trenches	m3	14		
	Carried Forward				

	Brought Forward				
	Back excavation of vertical sides of excavations in earth for working space including backfilling compacted to 95% Mod AASHTO density				
3	Exceeding 1m and not exceeding 2m deep for building retaining walls,	m3	22		
4	Extra over for excavation in soft rock	m3	2		
5	Extra over for excavation in hard rock	m3	1		
	Extra over all excavations for carting away				
6	Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m3	8		
	Risk of collapse of excavations				
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	48		
	Keeping excavations free of water				
8	Keeping excavations free of all water other than subterranean water	Item	1		
	De-watering of seepage water and water from other subterranean sources in excavations				
9	Provide pump with including maintenance and removal as per Principal Agents Approval	No	2		
	Compaction of ground surfaces				
10	Compaction of natural or excavated ground surface under floors, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	26		
	FILLING				
	Earth filling (G7 material) supplied by the contractor in layers not exceeding 125mm thick and compacted to 98% Mod AASHTO density:				
11	Backfilling to trenches	m3	8		
	Selected earth filling obtained from the excavations and/or prescribed stock piles on site, including haulage approximately 5km from the perimeter of the excavations or stock piles, compacted to 95% Mod AASHTO density				
12	Backfilling behind retaining walls	m3	22		
13	Over site to make up levels	m3	9		
	Earth filling supplied by the contractor compacted to 90% Mod AASHTO density				
14	Landscape mounds, berms,	m3	9		
	Filling of 150mm Gravel Wearing Course Compacted To 95% Mod AASHTO				
15	Over site to make up levels	m3	5		
	Prescribed density tests on filling				
16	Modified AASHTO Density test	No	8		
	Carried Forward				
	Section No. 4 **SECTION 4 - BUILDING WORKS (EXTERNAL)** **Bill No. 1** **Building works**				

	Brought Forward				
	SUBSOIL DRAINAGE				
	Slotted PVC-U flexible drainage pipes				
	Earth filling 300 x 300mm section of 20mm thick stone material surrounding 110mm uPVC pipe, supplied by the contractor compacted to 98% Mod AASHTO density:				
17	20mm Stone.	m3	2		
	Membrane				
18	Geofabric filter blanket wrapped around stone with 150mm side and 300mm end laps, including stitching.	m2	40		
	110mm Diameter perforated uPVC pipe surrounded with 300 x 300mm section of 20mm stone wrapped in A3 geotextile material.				
19	110mm uPVC pipe.	m	52		
	Extra over fittings				
20	110mm Tee.	No	11		
21	110mm Y junction.	No	11		
	SOIL POISONING				
	Soil insecticide in accordance with SANS 5859				
22	Under floors including forming and poisoning shallow furrows against foundation walls, filling in furrows and ramming	m2	98		
23	To bottoms and sides of trenches	m2	48		
	CONCRETE, FORMWORK AND REINFORCEMENT				
	SUPPLEMENTARY PREAMBLES				
	General				
	The Concrete works shall be in accordance with the Engineer's specifications as per Annexures "Part D.9 - Concrete Specifications" and "Part D.10 - Industrial Floor Specifications" appended hereto. The Contractor is to notify the Principal Agent immediately if a conflict between the Engineer's Specification, Architectural Drawings and/or these Bills of Quantities are found.				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	Components cast against excavated surfaces have not been measured or described separately and the Contractor is to ensure adequate allowance for casting against exacated surfaces are made within the relevant items.				
	Concrete				
	All exposed sharp corners to be chamfered 25 x 25mm unless otherwise indicated				
	Carried Forward				

Section No. 4
SECTION 4 - BUILDING WORKS (EXTERNAL)
Bill No. 1
Building works

	Brought Forward				
	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 principal agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the principal agent. (Test cubes are measured provisionally and separately)				
	Descriptions of form work 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				
	Finishing				
	Finishing the surfaces of surface beds and slabs level and smooth to receive screed, grano or any other finish are deemed to be included in the rate for the surface bed or slab.				
	Mesh reinforcement				
	Mesh reinforcement is measured net, contractor to take condideration of lapping				
	UNREINFORCED CONCRETE CAST ON/IN FORMWORK				
	15MPa/20mm concrete in:				
24	Surface blinding under footings and bases	m3	1		
	REINFORCED CONCRETE				
	25MPa/19mm concrete				
25	Stripfootings	m3	8		
	TEST CUBES				
26	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	2		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a power float with high quality "ABC Plate" floor hardener applied at a rate of 7kg/m² in accordance with the Engineer's guidelines				
27	Surface beds and ramps	m2	5		
	Carried Forward				
	Section No. 4 **SECTION 4 - BUILDING WORKS (EXTERNAL)** **Bill No. 1** **Building works**				

	Brought Forward				
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides				
28	Strip footing and ramps (Provisional)	m2	4		
	MOVEMENT JOINTS				
	Isolation joints formed of 20 x 12mm deep silicone sealant, backing rope and closed cell polyurethane joint former				
29	Between concrete surface bed and/or raft foundation and brick walls.	m	48		
	Saw-cut joints				
30	3 x 50mm deep Saw-cut joints in top of concrete filled with an approved semi-rigid sealer	m	25		
	REINFORCEMENT				
	Provision for high tensile steel reinforcement				
31	Varying diameters in bases and structural concrete work	t	1		
	MASONRY				
	SUPPLEMENTARY PREAMBLES				
	BRICKWORK				
	General				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	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				
	Carried Forward				

Section No. 4
SECTION 4 - BUILDING WORKS (EXTERNAL)
Bill No. 1
Building works

	Brought Forward				
	BRICKWORK				
	FOUNDATIONS (PROVISIONAL)				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar (Cement to be 42.5N allpurpose cement):				
32	One brick walls	m2	8		
	SUPERSTRUCTURE				
	Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar (Cement to be 42.5N allpurpose cement). Open perp. @ 1540 centres parallel with drainage pipe				
33	One brick walls	m2	53		
	FACE BRICKWORK				
	Rustgold FBS/Qunu Travertine clay face brick or equal approved, size 222 x 106 x 73mm, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-2 (Cement to be 42.5N all-purpose cement)				
34	One brickwall faced on both sides.	m2	121		
	Brick-on-edge header course copings of "Rustgold FBS/Qunu Travertine" or equal approved face bricks pointed with recessed joints on all exposed faces, 220mm wide sill set sloping and slightly projecting:				
35	230mm wide header course to top of one brick wall bedded and jointed in cement mortar and pointed on top and both sides as described.	m	48		
	BRICKWORK SUNDRIES				
	Brickwork reinforcement				
36	150mm Wide reinforcement built in horizontally every second course	m	355		
	Carried to Final Summary				
	Section No. 4 **SECTION 4 - BUILDING WORKS (EXTERNAL)** **Bill No. 1** **Building works**				

	SECTION NO. 5				
	BILL NO. 1				
	STORMWATER				
	SUPPLEMENTARY PREAMBLES				
	General				
	These quantities are measured in accordance with SANS 1200 Specifications.				
	The Contractor is to notify the Principal Agent immediately if a conflict between the Engineer's Specification, Architectural Drawings and/or these Bills of Quantities are found.				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	The total amount for the works should be included in the Tender amount.				
	CONCRETE STORMWATER DISH DRAIN				
	EXCAVATIONS				
	Excavation in compacted earth not exceeding 2m deep				
1	Excavation in earth not exceeding 2m deep for trenches	m3	36		
	Extra over all excavations for carting away				
2	Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m3	11		
	Risk of collapse of excavations				
3	Risk of collapse of sides of excavations not exceeding 1,5m deep	m2	30		
	Compaction of ground surfaces				
4	Compaction of natural or excavated ground surface under floors, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	72		
	FILLING				
	Earth filling (G7 material) supplied by the contractor in layers not exceeding 125mm thick and compacted to 98% Mod AASHTO density:				
5	Backfilling to trenches	m3	11		
	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.				
6	Backfilling to Trenches	m3	11		
	Filling of 150mm Gravel Wearing Course Compacted To 95% Mod AASHTO				
	Carried Forward				

	Brought Forward				
7	Over site to make up levels	m3	5		
	Prescribed density tests on filling				
8	Modified AASHTO Density test	No	5		
	REINFORCED CONCRETE				
	25MPa/19mm concrete				
9	25MPa/19mm reinforced concrete in bottoms and sides	m3	11		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a power float with high quality "ABC Plate" floor hardener applied at a rate of 7kg/m² in accordance with the Engineer's guidelines				
10	Finishing concrete bottoms smooth with a steel trowel to falls	m2	72		
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides				
11	Formwork to edges, risers, ends and reveals not exceeding 300mm wide or high	m2	30		
12	Smooth formwork to sides above sloping bottoms	m2	30		
	MOVEMENT JOINTS				
	Isolation joints formed of 10 x 12mm deep silicone sealant, backing rope and closed cell polyurethane joint former				
13	Expansion joints with soft board through concrete bottoms not exceeding 300mm high	m	30		
14	Expansion joints with soft board through concrete sides of channels not exceeding 300mm wide	m	30		
	REINFORCEMENT				
15	Type 617 fabric reinforcement in concrete placed 40mm from the Top	m2	72		
16	Angle section galvanised steel bearers with flat section bent lugs each welded, including embedding in concrete	kg	90		
17	Extra over for mitred and welded L-intersection	No	5		
	CONCRETE STORMWATER V DRAIN				
	EXCAVATIONS				
	Excavation in compacted earth not exceeding 2m deep				
18	Excavation in earth not exceeding 2m deep for trenches	m3	6		
	Risk of collapse of excavations				
19	Risk of collapse of sides of excavations not exceeding 1,5m deep	m2	10		
	Compaction of ground surfaces				
20	Compaction of natural or excavated ground surface under floors, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	11		
	Carried Forward				
	Section No. 5 **SECTION 5 - EXTERNAL WORKS** **Bill No. 1** **Stormwater**				

	Brought Forward				
	FILLING				
	Earth filling (G7 material) supplied by the contractor in layers not exceeding 125mm thick and compacted to 98% Mod AASHTO density:				
21	Backfilling under floors	m3	2		
	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.				
22	under floors	m3	2		
	Prescribed density tests on filling				
23	Modified AASHTO Density test	No	1		
	REINFORCED CONCRETE				
	Cast in-situ Ref 395 mesh reinforced concrete (25MPa) open stormwater channels having V-shaped waterway formed in top, finished smooth on all exposed surfaces in 3:1 cement plaster trowelled smooth and with angles rounded, cast in suitable lengths not exceeding 2m, including all formwork, moulds, shallow excavation, filling and ramming, laying to falls, bedding and pointing in 3:1 cement mortar. Concrete apron to be tinted, colour to be specified by the Engineer				
24	700 x 80mm thick V' channel 150mm deep in centre laid in position in ground not exceeding 2000mm sections including all formwork, reinforcement, expansion joints, smooth finishing to top of concrete surface	m	13		
25	Extra for 700mm angle	m	3		
26	Extra for forming 200mm thick 700mm wide spreader with 200mm high edges fanning out to 1 960mm width at furthest end with hard burnt bricks pitching cast in ass diffusers including working off concrete to a smooth finish and draining onto natural ground with 150 - 200mm diameter loose stones.	No	1		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a power float with high quality "ABC Plate" floor hardener applied at a rate of 7kg/m² in accordance with the Engineer's guidelines				
27	Finishing concrete bottoms smooth with a steel trowel to falls	m2	11		
	TEST CUBES				
28	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	6		
	Carried Forward				
	Section No. 5 **SECTION 5 - EXTERNAL WORKS** **Bill No. 1** **Stormwater**				

	Brought Forward				
	CULVERTS				
	Supply and Lay Concrete Pipe Culverts on class B bedding:				
	Class 50-D-load pipes with U joints:				
29	450mm Diameter Concrete pipe laid in trenches not exceeding 1m deep including excavation, backfill, bedding, cart away and compaction.	m	2		
	HEADWALLS				
	EXCAVATIONS				
	Excavation in compacted earth not exceeding 2m deep				
	Excavation in earth not exceeding 2m deep for trenches	m3	3		
30	Risk of collapse of excavations				
	Risk of collapse of sides of excavations not exceeding 1,5m deep	m2	2		
31	Extra over all excavations for carting away				
	Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m3	1		
32	Keeping excavations free of water				
	Keeping excavations free of all water other than subterranean water	Item	1		
33	Compaction of ground surfaces				
	Compaction of natural or excavated ground surface under floors, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	4		
34	**FILLING**				
	Earth filling (G7 material) supplied by the contractor in layers not exceeding 125mm thick and compacted to 98% Mod AASHTO density:				
	Backfilling to trenches	m3	1		
35	Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.				
	Under floors	m3	1		
36	Prescribed density tests on filling				
	Modified AASHTO Density test	No	1		
37	**REINFORCED CONCRETE**				
	25MPa/19mm concrete				
	25Mpa/19mm Reinforced concrete in bottom slabs and footings	m3	1		
38	**CONCRETE SUNDRIES**				
	Finishing top surfaces of concrete smooth with a power float with high quality "ABC Plate" floor hardener applied at a rate of 7kg/m² in accordance with the Engineer's guidelines				
	Finishing concrete bottoms smooth with wood float	m2	2		
	Carried Forward				
	Section No. 5				
	SECTION 5 - EXTERNAL WORKS				
	Bill No. 1				
	Stormwater				

	Brought Forward				
39	**ROUGH FORMWORK (DEGREE OF ACCURACY II)**				
	Rough formwork to sides				
	Formwork to edges, risers, ends and reveals not exceeding 300mm wide or high	m2	5		
40	Rough formwork to sides				
	REINFORCEMENT				
	Weld Mesh Ref 193 in Concrete bottom slab	m2	5		
41	**MASONRY**				
	SUPPLEMENTARY PREAMBLES				
	SUPERSTRUCTURE				
	Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar (Cement to be 42.5N allpurpose cement). Open perp. @ 1540 centres parallel with drainage pipe				
42	One brick walls	m2	2		
	BRICKWORK SUNDRIES				
	Brickwork reinforcement				
43	150mm Wide reinforcement built in horizontally every second course	m	12		
	PLASTERING				
	EXTERNAL PLASTER				
	Cement plaster wood floated, on brickwork				
44	On walls	m2	2		
	Gabion Mattress				
45	Gabion mattress comprising of 20 to 30mm stones wrapped in A3 geotextile with voids filled with 1:3 cement/sand mortar.	m2	2		
	Manholes				
46	Manholes to engineers specification	No	5		
	Carried Forward to Summary of Section No. 5				
	Section No. 5 **SECTION 5 - EXTERNAL WORKS** **Bill No. 1** **Stormwater**				

SECTION NO. 5

BILL NO. 2

APRONS

SUPPLEMENTARY PREAMBLES

General
These quantities are measured in accordance with SANS 1200 Specifications.

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The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.

The total amount for the works should be included in the Tender amount.

CONCRETE APRONS

EXCAVATIONS

Excavation in compacted earth not exceeding 2m deep

1	Excavation in earth not exceeding 2m deep for trenches	m3	3		
	Extra over all excavations for carting away				
2	Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m3	1		
	Risk of collapse of excavations				
3	Risk of collapse of sides of excavations not exceeding 1,5m deep	m2	6		
	Compaction of ground surfaces				
4	Compaction of natural or excavated ground surface under floors, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	10		
	FILLING				
	Earth filling (G7 material) supplied by the contractor in layers not exceeding 125mm thick and compacted to 98% Mod AASHTO density:				
5	Under floors	m3	2		
	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.				
6	Under floors	m3	2		
	Coarse river sand filling supplied by the contractor:				
7	Under floors	m3	1		
	Carried Forward				

	Brought Forward				
	Prescribed density tests on filling				
8	Modified AASHTO Density test	No	1		
	REINFORCED CONCRETE				
	25MPa/19mm concrete				
9	Surface beds cast in panels on waterproofing	m3	1		
10	Edge thickening	m3	1		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a power float with high quality "ABC Plate" floor hardener applied at a rate of 7kg/m² in accordance with the Engineer's guidelines				
11	Finishing concrete bottoms smooth with a steel trowel to falls	m2	10		
	TEST CUBES				
12	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	1		
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides				
13	Formwork to edges, risers, ends and reveals not exceeding 300mm wide or high	m2	2		
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:				
14	12mm Joints not exceeding 300mm high	m	10		
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
15	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	7		
	REINFORCEMENT				
16	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m2	10		
	WATERPROOFING				
17	350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured). .	m2	11		
	SOAKAWAY				
	EXCAVATIONS				
	Excavation in compacted earth not exceeding 2m deep				
18	Excavation in earth not exceeding 2m deep for holes	m3	16		
	Risk of collapse of excavations				
19	Risk of collapse of sides of excavations not exceeding 1,5m deep	m2	16		
	Compaction of ground surfaces				
20	Thoroughly compact backfilling materials	m2	16		
	Carried Forward				
	Section No. 5 **SECTION 5 - EXTERNAL WORKS** **Bill No. 2** **Aprons**				

	Brought Forward				
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 90% Mod AASHTO density				
21	Backfilling to holes	m3	8		
	Earth filling with stone material supplied by the contractor:				
22	Under floors	m3	8		
	Coarse river sand filling supplied by the contractor:				
23	Stone (>63mm)	m3	8		
	Membranes				
24	Bidim Geotextile or equal approved, lined on all sides including the top and bottom faces. .	m2	48		
	Tests				
25	Percolation tests	Item	1		
	Carried Forward to Summary of Section No. 5				
	Section No. 5 **SECTION 5 - EXTERNAL WORKS** **Bill No. 2** **Aprons**				

	SECTION NO. 5				
	BILL NO. 3				
	WALKWAYS				
	SUPPLEMENTARY PREAMBLES				
	General				
	These quantities are measured in accordance with SANS 1200 Specifications.				
	The Contractor is to notify the Principal Agent immediately if a conflict between the Engineer's Specification, Architectural Drawings and/or these Bills of Quantities are found.				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	The total amount for the works should be included in the Tender amount.				
	CONCRETE WALKWAY				
	EXCAVATIONS				
	Excavation in compacted earth not exceeding 2m deep				
1	Excavation in earth not exceeding 2m deep for trenches	m3	10		
	Extra over all excavations for carting away				
2	Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m3	6		
	Risk of collapse of excavations				
3	Risk of collapse of sides of excavations not exceeding 1,5m deep	m2	16		
	Rip and Re - compact insitu material on site compacted to 93% Mod. AASHTO density:				
4	Under floors	m2	23		
	FILLING				
	Earth filling (G7 material) supplied by the contractor in layers not exceeding 125mm thick and compacted to 98% Mod AASHTO density:				
5	Under floors	m3	3		
	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.				
6	Under floors	m3	7		
	Coarse river sand filling supplied by the contractor:				
7	Under floors	m3	1		
	Carried Forward				
	Section No. 5 **SECTION 5 - EXTERNAL WORKS** **Walkways** **Bill No. 3**				

	Brought Forward				
	Prescribed density tests on filling				
8	Modified AASHTO Density test	No	2		
	SOIL POISONING				
	Approved brand of anti-termite soil poison applied by a Registered Pest Control Company and guaranteed against termite infestation for ten years:				
9	Treat filling under paving with 'Chlordane Heptachlor Aldrin' or equal approved.	m2	39		
	150-175mm Tanalith Treated Gum Pole. poles not allowed to be cut post treatment				
10	2100mm long tanalith treated gum pole planted 800mm deep including excavations, cartaways, concrete base etc. .	No	9		
	CONCRETE TO WALKWAYS				
	Construction of paving complete				
	25MPa/19mm concrete				
11	Walkways	m3	4		
	Reinforcement (Provisional)				
12	REF. 395 fabric reinforcement in concrete infill, strip footings.	m²	23		
	Test blocks:				
13	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	4		
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:				
14	12mm Joints not exceeding 300mm high.	m	20		
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
15	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	20		
	Waterproofing under Surface beds				
16	350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured).	m²	23		
	Carried Forward				
	Section No. 5 **SECTION 5 - EXTERNAL WORKS** **Walkways** **Bill No. 3**				

	Brought Forward				
	Carried Forward to Summary of Section No. 5				
	Section No. 5 **SECTION 5 - EXTERNAL WORKS** **Walkways** **Bill No. 3**				

	SECTION NO. 5				
	BILL NO. 4				
	RAMPS				
	Compaction of ground surfaces				
1	Compaction of natural or excavated ground surface under floors, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	5		
	FILLING				
	Earth filling (G7 material) supplied by the contractor in layers not exceeding 125mm thick and compacted to 98% Mod AASHTO density:				
2	Under floors	m3	1		
	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.				
3	Under floors	m3	1		
	Prescribed density tests on filling				
6	Modified AASHTO Density test	No	1		
	REINFORCED CONCRETE				
	25MPa/19mm concrete				
7	Ramps, Landings	m3	3		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a wood float:				
8	Surface beds, slabs to falls and currents	m2	5		
	TEST CUBES				
9	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	1		
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides				
10	Formwork to edges, risers, ends and reveals not exceeding 300mm wide or high	m2	4		
	MOVEMENT JOINTS				
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:				
11	12mm Joints not exceeding 300mm high	m	3		
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
12	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	3		
	Carried Forward				

	Brought Forward				
	REINFORCEMENT				
13	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m2	5		
	WATERPROOFING				
14	350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured). .	m2	5		
	Carried Forward to Summary of Section No. 5				
	Section No. 5 **SECTION 5 - EXTERNAL WORKS** **Ramps** **Bill No. 4**				

SECTION NO. 5

BILL NO. 5

FENCING

SUPPLEMENTARY PREAMBLES

General

These quantities are measured in accordance with SANS 1200 Specifications.

The Contractor is to notify the Principal Agent immediately if a conflict between the Engineer's Specification, Architectural Drawings and/or these Bills of Quantities are found.

The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.

The total amount for the works should be included in the Tender amount.

FENCING

Site clearance

1	Allow for clearing site for the width of 1 000 mm where fencing is to be erected including removing trees, shrubs etc. not exceeding 200 mm girth, grubbing up roots and roughly levelling.	m2	63	
	Straining wires, fencing and razor wire:			
2	Four strands of 4mm Class'A' galvanised straining wires secured to fencing posts with doubled 2 mm galvanised wire inserted through hole in post and turned a minimum of four turns around straining wire and attached to straining frame at one end with not less than four turns at the other end to straining bolts (elsewhere measured)	m	252	
3	3 Strands of galvanised barbed wire tied to standards, posts and eye bolts	m	189	
4	Fencing formed of 50 x 50 x 2.0mm diameter galvanised fencing 1 800mm high and fixed to each straining wire with 8 guage binding wire at 500mm centres including Y12 pegs at 900mm c/c between posts (straining wires elsewhere measured)	m	63	
	Posts for 1 800mm high security fence			
5	60mm Diameter galvanised steel intermediate fencing post 2400mm long fitted with a pressed steel mushroom cap one end and 150 x 150 x 5 mm baseplate at bottom and embedded in and including 350 x 350 x 600 mm mass concrete (15 MPa) base	m	25	
6	100mm Ditto as corner post, fitted with two 50mm diameter galvanised steel stay set raking and with top end flattened and bolted through post, with post and stay both embedded in mass concrete (15 MPa) bases as last.	No	2	
	Carried Forward			

	Brought Forward				
7	75mm Ditto as intermediate post - 1 dropper every 3000mm between standard posts	No	46		
8	150mm Ditto as gate post 2 400mm long, fitted with two 50mm diameter galvanised steel stay set raking and with top end flattened and bolted through post, with post and stay both embedded in mass concrete (15 MPa) bases as last.	No	2		
9	12mm Diameter galvanised mild steel straining eye bolt with hook, threaded portion and two nuts and washers	No	8		
10	Form 12mm diameter hole through fence post	No	8		
	Gates				
11	Two leafed vehicular swing gate. Size 5500mm x 1800mm high.	No	2		
12	Security fence single gate, size 1 000 mm wide x 1 800 mm high, formed of 50 mm diameter nominal bore x 3,25 mm wall thickness hot dip galvanised mild steel pipe framing all round with mitred and welded angles and cross braces mullion and transome, scribed and welded into angles and at cross intersections, with two 50 mm diameter nominal bore x 3,25 mm wall thickness security posts each 600 mm long with one end welded to top rail of gate and closure plate to other end, the gate covered with 100 x 50 x 2,5 mm weld mesh with four straining wires as before described and with four 2,37 mm four point core diameter single "kampeon" wires with crimped droppers to security posts as before described; including three strands flat wrap razor barbed tape wire fixed as before described, leaf fitted with three 24 mm diameter x 300 mm long eyebolt hinges and stops including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including 500 mm long approved chain spot welded to gate	m	1		
	PADLOCKS				
13	Supply 50 mm "Viro" Padlocks and Keys (or equal approved	m	1		
	ACCESS DRIVEWAY, ETC.				
	Excavation not exceeding 2m deep				
14	Reducing levels and depositing excavated material in prescribed stock piles on site.	m^3	35		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
15	Off site to a dumping site to be found by the Contractor.	m^3	18		
	Filling supplied by the contractor under driveways				
16	G7 Base course material compacted to 98% Mod AASHTO density	m^3	6		
	Rip and Re - compact insitu material on site compacted to 93% Mod. AASHTO density:				
17	Under floors,etc.	m^2	40		
	Approved brand of anti-termite soil poison applied by a Registered Pest Control Company and guaranteed against termite infestation for ten years:				
18	Treat filling under paving with 'Chlordane Heptachlor Aldrin' or equal approved.	m^2	40		
	Supply and installation of gates to match fencing specifications (measured elsewhere) to be fixed flush by specialist according to manufacturer's instruction; including all necessary ironmongery and locking mechanisms				
19	Vehicular entrance gate 6000mm wide complete with motor.	No	1		
	Carried Forward to Summary of Section No. 5				
	Section No. 5 **SECTION 5 - EXTERNAL WORKS** **Bill No.5** **Fencing**				

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	Carried to Final Summary				
	Section No. 5 **SECTION 5 - EXTERNAL WORKS**				

TT	**SECTION NO. 6**				
	BILL NO. 1				
	SITE PERSONNEL				
	COMMUNITY LIAISON OFFICER				
1	Provide the sum of R22 500.00 for the employment of a Community Liaison Officer to be employed by the Main Contractor and be paid an allowance of R7 500.00 a month for the duration (3 months)	Item	1		
2	Allow for Profit on above two items	%IT			
	Carried to Final Summary				
	Section No. 6 **SECTION 6 - SOCIO ECONOMC DEVELOPMENT** **Bill No. 1** **Site Personnel**				

SECTION NO. 7

BILL NO. 1

PROVISIONAL SUMS

SUPPLEMENTARY PREAMBLES

General

The following Provisional Amounts are for work to be done by firms of specialists and will, unless expressly stated otherwise, be regarded as Selected Sub-contractors to the Contractor. The Contractor must assist in obtaining tenders and/or quotations from approved firms and submit them to the Agent/Representative for his approval.The tenderer's attention is drawn to Section 1: Preliminaries for further amplification of Provisional- and Prime Cost Amounts.

Note: All provisional sums are "NETT".

The profit and attendance on Nominated/Selected Subcontract allowances will be adjusted to take the of actual Final Account values of the respective Subcontracts into account. The adjustment factor will be the percentages calculated with reference to the BoQ allowances.

Profit

Where listed the contractor may allow for profit if required. The profit will be adjusted in the same ratio as the adjusted value of the subcontract.

Attendance

Without in any way limiting the meaning and interpretation, "general attendance" on sub-contractors shall include free of charge to the sub-contractor the following services for the purpose of the relative sub-contract works:

1) access to the site and to the places where the work is to be carried out, including the use of any temporary personnel hoists erected by the Contractor for his own use;

2) the provision of water and lighting and of single and/or three phase electric power to a position within 50 metres of the place where work is to be carried out, but excluding water, fuel and power for commissioning of the installation for which the Contractor shall be responsible;

3) the provision of an area for office accommodation, temporary workshops and for the storage of plant and materials;

4) the use of erected scaffolding belonging to the Contractor, in common with others having the like right whilst it so remains erected upon the site;

5) the use of messrooms, latrine, health and welfare facilities, and the like, where provided;

6) the use of the site telephone (if provided) subject to the payment by the sub-contractor for all his outgoing calls;

7) temporary casing and/or other protection of the work;

8) site security measures;

Carried Forward

	Brought Forward				
	9) hoisting of the sub-contractor's material in loads not exceeding the available hoisting loads of cranes of the contractor;				
	10) repairs and making good in all trades and final cleaning down on completion.				
	Fuel, power and water for commissioning plant				
	The cost of fuel, power and water for the commissioning of plant shall be borne by the sub-contractor appointed for the relevant sub-contract works in terms of the conditions under which they have/are contracted for the specialist work involved. The contractor shall allow opposite this item or under the relevant attendance items for the recovery of such costs via the installation of the necessary meters				
	Work executed by direct contractors				
	Work listed under the heading "Work executed by direct contractors" shall be executed before and during this contract and the tenderer must allow free access to the site for such other contractors. These contractors shall be directly paid by the client and the tenderer must allow for programming in conjunction with them to complete the project successfully within the contract period. The estimated values of these contracts are listed to enable the tenderer to determine the extent of the attendance if required. Profit on these contracts shall not be allowed.				
	Budgetary allowances				
	Budgetary allowances shall be re-measured and valued on the same pricing structure as the rest of the contract or shall be omitted in full if so required.				

	Landscaping and Irrigation				
1	Provide the sum of R50 000. 00 for landscaping to be used as directed by the Principal Agent and deducted in whole or in part if not required.	Item	1		
2	Allow for Profit if required	%IT			
	Carried to Final Summary				
	Section No. 7 **SECTION 7 - PRIME COST AND PROVISIONAL SUMS** **Bill No. 1** **Provisional Sums**				

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2	SECTION 2 - OHS AND ENVIROMENTAL MANAGEMENT	24			
3	SECTION 3 - DEMOLITIONS & ALTERATIONS	28			
4	SECTION 4 - BUILDING WORKS (EXTERNAL)	34			
5	SECTION 5 - EXTERNAL WORKS	50			
6	SECTION 6 - SOCIO ECONOMC DEVELOPMENT	51			
7	SECTION 7 - PRIME COST AND PROVISIONAL SUMS	53			
	Subtotal				
	CONTINGENCIES				
	Provide 5% for Construction Contingencies to be used at the discretion of the Principal Agent or deducted in whole or in part if not required				
	Sub-Total				
	Value Added Tax				
	ADD: Value added Tax at 15%				
	TOTAL				
	Carried to Form of Tender				