EM IO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	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				
	No clause Fixed: Value related: Time related:	ltem			
	OBJECTIVE AND PREPARATION				
1	A2.0 OFFER, ACCEPTANCE AND PERFORMANCE				
	Clause 2.0				
	Fixed: Value related: Time related: Time	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				
	Section No. 1 SECTION 1 - PRELIMINARY AND GENERAL Bill No. 1 Preliminaries				

	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	ltem
3	related: 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:	ltem
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:	ltem
5	A6.0 SITE REPRESENTATIVE	
	Clause 6.0	
	Fixed: Value related: Time related:	ltem
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:	ltem
7	A8.0 WORKS RISK	
	Clause 8.0	
	Fixed:Value related:Time related:	ltem
	Telateu	
	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:	ltem
	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:	ltem
9	A11.0 LIABILITY INSURANCES	
	Clause 11.0	
	Fixed: Value related: Time related:	ltem
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
	EXECUTION	
	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:	ltem
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:	ltem		
14	A18.0 SETTING OUT OF THE WORKS			
	Clause 18.0			
	Fixed: Value related: Time related: Time	ltem		
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:	ltem		
17	A21.0 SELECTED SUBCONTRACTORS			
	Clause 21.0			
	Clause 21 is amended by replacing it with:			
	No clause			
	Fixed: Value related: Time related: Time	ltem		
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			
<u>COMPLETION</u>					
A24.0 PRACTICAL CO	MPLETION				
Clause 24.0					
Fixed: related:	Value related:	_ Time	Item		
A25.0 WORKS COM	PLETION				
Clause 25.0					
Fixed: related:	Value related:	_ Time	Item		
A26.0 FINAL COMPL	ETION				
Clause 26.0					
Clause 26.1.2 is ame	nded by inserting "#" next to	26.1.2			
Fixed: related:	Value related:	Time	Item		
A27.0 LATENT DEFE	CTS LIABILITY PERIOD				
Clause 27.0					
Fixed: related:	Value related:	Time	ltem		
A28.0 SECTIONAL CO	OMPLETION				
Clause 28.0					
Fixed: related:	Value related:	Time	Item		
A29.0 REVISION OF	DATE FOR PRACTICAL COMPL	ETION			
Clause 29.0					
	nded by replacing it with:				
No clause					
Fixed: related:	Value related:	_ i ime	ltem		
A30.0 PENALTY FOR	NON-COMPLETION				
Clause 30.0					
Fixed: related:	_Value related:	_Time	Item		
<u>PAYMENT</u>					
Payment shall be sul for the amount due	bject to the employer giving t	he contractor a tax invoice			
Fixed: related:	Value related:	Time	ltem		
		Carried Forward			
Section No. 1 SECTION 1 - PRELIM Bill No. 1 Preliminaries	INARY AND GENERAL				

	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:	ltem
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:	ltem
	CANCELLATION	
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: 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	Item	
	Fixed: Value related: Time related:	ltem	
	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	
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:	ltem	
	Carried Forward Section No. 1 SECTION 1 - PRELIMINARY AND GENERAL		
	Bill No. 1 Preliminaries		

	Brought Forward SUBSTITUTE PROVISIONS		
84	A41.0 STATE CLAUSES		
	Clause 41.0		
	Fixed: Value related: Time related:	Item	
	CONTRACT VARIABLES		
5	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:	ltem	
	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:	ltem	
39	B2.3 Availability of construction documentation		
	Fixed: Value related: Time related:	Item	
10	B2.4 Interests of agents		
	Fixed: Value related: Time related:	ltem	
11	B2.5 Priced documents		
	Fixed: Value related: Time related:	Item	
12	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	Item	
	related:		
	Carried Forward Section No. 1 SECTION 1 - PRELIMINARY AND GENERAL		
	Bill No. 1		

	B3.0 THE SITE	Brought Forward	
13	B3.1 Defined works area		
	Fixed: Value related: Time related:		ltem
44	B3.2 Geotechnical investigation		
	Fixed: Value related: Time related:		ltem
45	B3.3 Inspection of the site		
	Fixed: Value related: Time related:		ltem
46	B3.4 Existing premises		
	Fixed: Value related: Time related:		Item
47	B3.5 Previous work - dimensional accuracy		
	Fixed: Value related: Time		Item
	related:		
	B3.6 Previous work - defects		ltor-
	Fixed: Value related: Time related:		Item
49	B3.7 Services - known		
	Fixed: Value related: Time		Item
	related:		
	B3.8 Services - unknown		
	Fixed: Value related: Time related:		
51	B3.9 Protection of trees		Item
	Fixed: Value related: Time		Item
	related:		
	B3.10 Articles of value		ltom
	Fixed: Value related: Time related:		Item
53	B3.11 Inspection of adjoining properties		
	Fixed: Value related: Time related:		Item
	RELATED STATES AND A STREET AND A ST		
	B4.1 Management of the works		
	Fixed: Value related: Time		ltem
	related: value related fille		item
		Carried Forward	
	Section No. 1	Carrieu rurward	
	SECTION 1 - PRELIMINARY AND GENERAL Bill No. 1		
I	Preliminaries		

				Brought Forward		
55	B4.2 Programme for	the works				
	Fixed: related:	Value related:	Time		ltem	
56	B4.3 Progress meetir	ngs				
	Fixed: related:	Value related:	Time		ltem	
57	B4.4 Technical meeti	ngs				
	Fixed: related:	Value related:	Time		ltem	
58	B4.5 Labour and plan	t records				
	Fixed: related:	Value related:	Time		ltem	
	B5.0 SAMPLES, SHOP	P DRAWINGS AND MAN	UFACTURERS'	INSTRUCTIONS		
59	B5.1 Samples of mat	erials				
	Fixed: related:	_ Value related:	Time		ltem	
60	B5.2 Workmanship s	amples				
	Fixed: related:	_Value related:	Time		ltem	
51	B5.3 Shop drawings					
	Fixed: related:	_ Value related:	Time		ltem	
62	B5.4 Compliance wit	h manufacturers' instruc	ctions			
	Fixed: related:	_ Value related:	Time		ltem	
	B6.0 TEMPORARY W	ORKS AND PLANT				
63	B6.1 Deposits and fe	es				
	Fixed: related:	_Value related:	Time		ltem	
64	B6.2 Advertising					
	Fixed: related:	_Value related:	Time		ltem	
65	B6.3 Advertising					
	Fixed: related:	_Value related:	Time		ltem	
66	B6.4 Plant, equipmer	nt, sheds and offices				
	Fixed: related:	_Value related:	Time		ltem	
				Carried Forward		
	Section No. 1 SECTION 1 - PRELIMI Bill No. 1	NARY AND GENERAL				
	Preliminaries					

		Brought Forward	
67	B6.5 Main notice board		
	Fixed:Value related:Time related:		Item
	B6.6 Subcontractors' notice board		
00			14
	Fixed: Value related: Time related:		ltem
	B7.0 TEMPORARY SERVICES		
69	B7.1 Location		
	Fixed: Value related: Time related:		Item
70	B7.2 Water		
	Fixed: Value related: Time		ltem
	related:		
71	B7.3 Electricity		
	Fixed:Value related:Time related:		Item
	B7.4 Telecommunication facilities		
	Fixed: Value related: Time		ltem
	related: Value related fille		
73	B7.5 Ablution facilities		
	Fixed: Value related: Time		Item
	related:		
	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		
	B9.1 General attendance		
			ltem
	Fixed: Value related: Time related:		item
76	B9.2 Special attendance		
	Fixed: Value related: Time		Item
	related:		
77	B9.3 Commissioning - fuel, water and electricity		
	Fixed: Value related: Time related:		ltem
	B10.0 FINANCIAL ASPECTS		
	B10.1 Statutory taxes, duties and levies		
. 3	Fixed: Value related: Time		ltem
	related: Value related fille	Constant Frances 1	iteili
	Section No. 1	Carried Forward	
	SECTION 1 - PRELIMINARY AND GENERAL Bill No. 1		
	Preliminaries	I	

9	B10.2 Payment for pr	reliminaries	Bro	ught Forward	
5					
	Fixed: related:	Value related:	Time	Item	
30	B10.3 Adjustment of	preliminaries			
	Fixed: related:	Value related:	Time	ltem	
31	B10.4 Payment certif	ficate cash flow			
	Fixed: related:	Value related:	Time	ltem	
	B11.0 GENERAL				
2	B11.1 Protection of th	he works			
	Fixed: related:	Value related:	Time	ltem	
33	B11.2 Protection / isc	plation of existing / sec	ctionally occupied wo	orks	
	Fixed: related:	Value related:	Time	ltem	
34	B11.3 Security of the	works			
	Fixed: related:	Value related:	Time	Item	
35	B11.4 Notice before o	covering work			
	Fixed: related:	Value related:	Time	ltem	
86	B11.5 Disturbance				
	Fixed: related:	Value related:	Time	ltem	
37	B11.6 Environmental	disturbance			
	Fixed: related:	Value related:	Time	ltem	
8	B11.7 Works cleaning	g and clearing			
	Fixed: related:	Value related:	Time	ltem	
9	B11.8 Vermin				
	Fixed: related:	Value related:	Time	ltem	
0	B11.9 Overhand work	k			
	Fixed: related:	Value related:	Time	Item	
1	B11.10 Instruction ma	anuals and guarantees			
	Fixed: related:	Value related:	Time	ltem	
			Car	ried Forward	
	Section No. 1 SECTION 1 - PRELIMII Bill No. 1	NARY AND GENERAL			
	Preliminaries				

	Brought Forward			
92	B11.11 As built information			
	Fixed: Value related: Time	Item		
	related:			
93	B11.12 Tenant installations			
	Fixed: Value related: Time related:	Item		
	B12.0 SCHEDULE OF VARIABLES			
94	B12.1 Schedule of variables			
5.				
	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			
05	C1.0 CONTRACT DRAWINGS			
95	CLU 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	ltem		
	Fixed: Value related: Time related:			
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	ļ		I

Brought For	vard	
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 item, materials or equipment shall be excluded from currency fluctuation (refer to Schedule of Imported Materials and Equipment DPW-23(EC) to completed by tenderer)	such s.	
Notwithstanding any provisions elsewhere regarding the adjustment of contract prices, the price of any item, material or equipment listed in ter of this clause shall be excluded from the Contract Price Adjustment Provisions (if applicable)	ns	
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 unit commander or other responsible officer to obtain permission to enter the site for tendering purposes		
Fixed: Value related: Time related:	Item	
00 C6.0 COMMENCEMENT OF WORKS IN SECURITY AREAS		
As the works falls within a security area the contractor must give the un commander or other responsible officer notice before commencement o works. Should the contractor fail to make such arrangements, admission the site may be refused and any additional costs will be for the contractor account	the to	
Fixed: Value related: Time related:	Item	
01 C7.0 ENTRANCE PERMITS TO SECURITY AREAS		
As the works falls within a security area the contractor shall obtain entr permits for his personnel and workmen entering the area and shall comp with all regulations and instructions which may be issued from time to ti regarding the protection of persons and property under the control of the Defence Force, Police or chief security officer	ly	
Fixed: Value related: Time related: Time	Item	
2 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 det access to the works and the site and/or to any document or information relating to the works	ied	
Fixed: Value related: Time related:	Item	
Carried For Section No. 1 SECTION 1 - PRELIMINARY AND GENERAL Bill No. 1 Preliminaries	vard	

Brought Forward			
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:	ltem		
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:	ltem		
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			J

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:	
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:	
related:	
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	
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	
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	
and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the principal	
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 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 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 Item	
Carried Forward	
Section No. 1 SECTION 1 - PRELIMINARY AND GENERAL Bill No. 1 Preliminaries	

Brought Forward		
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	
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:	ltem	
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	
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:	ltem	
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:Time related:	Item	
Carried Forward Section No. 1 SECTION 1 - PRELIMINARY AND GENERAL Bill No. 1 Preliminaries		

Brought Forward			
12 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:	ltem		
13 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:	ltem		
14 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:	ltem		
15 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: Time	ltem		
16 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:	ltem		
17 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:	ltem		
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	Item			
	related:				
	Carried Forward to Summary of Section No. 1				
	Section No. 1				
	SECTION 1 - PRELIMINARY AND GENERAL Bill No. 1				
	Preliminaries		ļ		

SECTION SUMMARY - SECTION 1 - PRELIMINARY AND GENERAL	Page No		
1 Preliminaries	19		
Carried to Final Summary			

<u>SECTION NO. 2</u> 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.			
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.			
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	ltem	1	
Allow for the preparation and approval of project-specific H&S Plan & File [CR 7(1)(a)]	ltem	1	
Allow for the implementation and maintenance of project-specific H&S Plan & File. [CR 7]	Months	3	
Principal Contractor's time related obligations in respect of the OHS Act and Construction Regulations for the entire construction period.	Months	3	
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	
	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	Item	1	
	in ground at max 3m spacing including excavation, backfilling, etc			
	Carried Forward to Summary of Section No. 2			
	Section No. 2 SECTION 2 - OHS AND ENVIROMENTAL MANAGEMENT			
	Bill No. 1 OHS and Environmental Management			

	1	I		
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		
OHS and Environmental Management	22		
Health & Safety	23		
Carried to Final Summa	iry		
Section No. 2 SECTION 2 - OHS AND ENVIROMENTAL MANAGEMENT			

	SECTION NO. 3		
	<u>BILL NO. 1</u>		
	DEMOLITION OF NON COMPLIANT ACCESS RAMPS		
	<u>View site</u>		
	Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained		
	<u>General</u>		
	Water supply pipes and other piping in ground that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings to the satisfaction of the principal agent		
	Unless otherwise described all materials are to become the property of the contractor and are to be removed from the site		
	Breaking up and removing		
1	Ramps	m2	5
2	Steps	m2	2
3	Slabs/walkways	m2	178
	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		
	Surplus material from demolitions and/or stock piles of rubble on site, to a dumping site to be located by the contractor	m3	25
	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		

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SECTION NO. 3				
BILL NO. 2				
ALTERATIONS				
<u>View site</u> Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials 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)				
50mm Waste pipe.	m	3		
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:				
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				
Section No. 3 SECTION 3 - DEMOLITIONS & ALTERATIONS Bill No. 2 Alterations				

	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	
	<u>ON METAL SURFACES</u>			
	One coat alkyd based zinc phosphate primer and two coats premium quality polyurethane enamel paint, on steel			
11	To steel balustrades (both sides measured)	m²	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		
2	Alterations	27		
	Carried to Final Summary			
	Section No. 3 SECTION 3 - DEMOLITIONS & ALTERATIONS			
	SECTION 5 - DEMOLITIONS & ALTERATIONS	I		1

		20201110	 NDART SCHOOL
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 Carried Forward	m3	44	
Section No. 4 SECTION 4 - BUILDING WORKS (EXTERNAL) Bill No. 1 Building works			

	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	20	
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			
	Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m3	26	
	Risk of collapse of excavations			
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	168	
	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			
	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	86	
	FILLING			
	Earth filling (G7 material) supplied by the contractor in layers not exceeding 125mm thick and compacted to 98% Mod AASHTO density:			
.1	Backfilling to trenches	m3	27	
	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	20	
.3	Over site to make up levels	m3	8	
	Earth filling supplied by the contractor compacted to 90% Mod AASHTO density			
14	Landscape mounds, berms,	m3	8	
	Filling of 150mm Gravel Wearing Course Compacted To 95% Mod AASHTO			
5	Over site to make up levels	m3	2	
	Prescribed density tests on filling			
6	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	36
	<u>110mm Diameter perforated uPVC pipe surrounded with 300 x 300mm</u> section of 20mm stone wrapped in A3 geotextile material.		
19	110mm uPVC pipe.	m	50
	Extra over fittings		
20	110mm Tee.	No	10
21	110mm Y junction.	No	10
	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	218
23	To bottoms and sides of trenches	m2	168
	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:			
Surface blinding under footings and bases	m3	4	
REINFORCED CONCRETE			
25MPa/19mm concrete			
Stripfootings	m3	26	
TEST CUBES			
Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	5	
CONCRETE SUNDRIES			
Einishing top surfaces of concrete smooth with a power float with high. quality "ABC Plate" floor hardener applied at a rate of 7kg/m ² in accordance with the Engineer's guidelines			
Surface beds and ramps	m2	5	
Carried Forward Section No. 4			
SECTION 4 - BUILDING WORKS (EXTERNAL) Bill No. 1			
Building works			

Brought Forward			1
ROUGH FORMWORK (DEGREE OF ACCURACY II)			
Rough formwork to sides			
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			
Between concrete surface bed and/or raft foundation and brick walls.	m	168	
Saw-cut joints			
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			
Varying diameters in bases and structural concrete work	t	2	
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			
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	27	
	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	110	
	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	137	
	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:			
	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	168	
	BRICKWORK SUNDRIES			
	Brickwork reinforcement			
6	150mm Wide reinforcement built in horizontally every second course	m	807	
	Carried to Final Summary Section No. 4 SECTION 4 - BUILDING WORKS (EXTERNAL) Bill No. 1 Building works			

		1	1	1
SECTION NO. 5				
BILL NO. 1				
<u>STORMWATER</u>				
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				
Excavation in earth not exceeding 2m deep for trenches	m3	18		
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	5		
Risk of collapse of excavations				
Risk of collapse of sides of excavations not exceeding 1,5m deep	m2	15		
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	36		
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	5		
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.				
Backfilling to Trenches	m3	5		
Filling of 150mm Gravel Wearing Course Compacted To 95% Mod AASHTO				
Carried Forward Section No. 5 SECTION 5 - EXTERNAL WORKS				
Bill No. 1 Stormwater				

Brought Forward Over site to make up levels	m3	2	
Prescribed density tests on filling			
Modified AASHTO Density test	No	2	
REINFORCED CONCRETE			
25MPa/19mm concrete			
25MPa/19mm reinforced concrete in bottoms and sides	m3	5	
CONCRETE SUNDRIES			
Finishing top surfaces of concrete smooth with a power float with high guality "ABC Plate" floor hardener applied at a rate of 7kg/m ² in accordance with the Engineer's guidelines			
Finishing concrete bottoms smooth with a steel trowel to falls	m2	36	
ROUGH FORMWORK (DEGREE OF ACCURACY II)			
Rough formwork to sides			
Formwork to edges, risers, ends and reveals not exceeding 300mm wide or high	m2	15	
2 Smooth formwork to sides above sloping bottoms	m2	15	
MOVEMENT JOINTS			
Isolation joints formed of 10 x 12mm deep silicone sealant, backing rope and closed cell polyurethane joint former			
Expansion joints with soft board through concrete bottoms not exceeding 300mm high	m	15	
Expansion joints with soft board through concrete sides of channels not exceeding 300mm wide	m	15	
REINFORCEMENT			
Type 617 fabric reinforcement in concrete placed 40mm from the Top	m2	36	
Angle section galvanised steel bearers with flat section bent lugs each welded, including embedding in concrete	kg	45	
Extra over for mitred and welded L-intersection	No	2	
CONCRETE STORMWATER V DRAIN			
EXCAVATIONS			
Excavation in compacted earth not exceeding 2m deep			
Excavation in earth not exceeding 2m deep for trenches	m3	63	
Risk of collapse of excavations			
Risk of collapse of sides of excavations not exceeding 1,5m deep	m2	118	
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	126	
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	19
	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	19
	Prescribed density tests on filling		
23	Modified AASHTO Density test	No	8
	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		
	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	148
25	Extra for 700mm angle	m	25
	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	3
	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/m ² in accordance with the Engineer's guidelines		
27	Finishing concrete bottoms smooth with a steel trowel to falls	m2	126
	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		

	CULVERTS Brought Forward			
	Supply and Lay Concrete Pipe Culverts on class B bedding:			
	Class 50-D-load pipes with U joints:			
	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/m ² in accordance. with the Engineer's guidelines			
	Finishing concrete bottoms smooth with wood float Carried Forward	m2	2	
	Section No. 5 SECTION 5 - EXTERNAL WORKS Bill No. 1 Stormwater			

	Brought Forward			
,	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			
	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			

		I	I	1
SECTION NO. 5				
BILL NO. 2				
APRONS				
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 APRONS				
EXCAVATIONS				
Excavation in compacted earth not exceeding 2m deep				
Excavation in earth not exceeding 2m deep for trenches	m3	9		
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	3		
Risk of collapse of excavations				
Risk of collapse of sides of excavations not exceeding 1,5m deep	m2	18		
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	30		
FILLING				
Earth filling (G7 material) supplied by the contractor in layers not exceeding 125mm thick and compacted to 98% Mod AASHTO density:				
Under floors	m3	5		
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.				
Under floors	m3	5		
Coarse river sand filling supplied by the contractor:				
Under floors	m3	1		
Carried Forward Section No. 5 SECTION 5 - EXTERNAL WORKS Bill No. 2 Aprons				

	Brought Forward			
	Prescribed density tests on filling			
3	Modified AASHTO Density test	No	2	
	REINFORCED CONCRETE			
	25MPa/19mm concrete			
9	Surface beds cast in panels on waterproofing	m3	3	
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/m ² in accordance with the Engineer's guidelines			
11	Finishing concrete bottoms smooth with a steel trowel to falls	m2	30	
	TEST CUBES			
	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			
	Formwork to edges, risers, ends and reveals not exceeding 300mm wide or high	m2	5	
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:			
14	12mm Joints not exceeding 300mm high	m	30	
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc			
	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	20	
	REINFORCEMENT			
16	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m2	30	
	WATERPROOFING			
	350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured)	m2	33	
	SOAKAWAY			
	EXCAVATIONS			
	Excavation in compacted earth not exceeding 2m deep			
18	Excavation in earth not exceeding 2m deep for holes	m3	9	
	Risk of collapse of excavations			
19	Risk of collapse of sides of excavations not exceeding 1,5m deep	m2	12	
	Compaction of ground surfaces			
20	Thoroughly compact backfilling materials Carried Forward	m2	9	
	Section No. 5 SECTION 5 - EXTERNAL WORKS Bill No. 2 Aprons			

Brou	ught Forward		
Earth filling obtained from the excavations and/or prescribed sto site compacted to 90% Mod AASHTO density	<u>ck piles on</u>		
Backfilling to holes	m3	5	
Earth filling with stone material supplied by the contractor:			
Under floors	m3	5	
Coarse river sand filling supplied by the contractor:			
Stone (>63mm)	m3	5	
Membranes	115	5	
Bidim Geotextile or equal approved, lined on all sides including t bottom faces	he top and m2	30	
Tests			
Percolation tests	ltem	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			
<u>General</u>			
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			
Excavation in earth not exceeding 2m deep for trenches	m3	75	
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	44	
Risk of collapse of excavations			
Risk of collapse of sides of excavations not exceeding 1,5m deep	m2	148	
Rip and Re - compact insitu material on site compacted to 93% Mod. AASHTO density:			
Under floors	m2	178	
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	22	
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.			
5 Under floors	m3	53	
Coarse river sand filling supplied by the contractor:			
/ Under floors	m3	4	
Carried Forward Section No. 5 SECTION 5 - EXTERNAL WORKS Walkways Bill No. 3			

	Brought Forward				I
	Prescribed density tests on filling				
8	Modified AASHTO Density test	No	12		
	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	326		
	<u>150-175mm Tanalith Treated Gum Pole. poles not allowed to be cut post</u> treatment				
0	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				
.1	Walkways	m3	27		
	Reinforcement (Provisional)				ļ
.2	REF. 395 fabric reinforcement in concrete infill, strip footings.	m²	178		ļ
	Test blocks:				Ŵ
3	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	4		
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:				
4	12mm Joints not exceeding 300mm high.	m	148		İ
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				ĺ
5	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	148		ļ
	Waterproofing under Surface beds				Û
6	350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured).	m²	178		
	Carried Forward				
	Section No. 5 SECTION 5 - EXTERNAL WORKS Walkways				
	Bill No. 3	I		l	I

Brought Forward			
arried Forward to Summary of Section No. 5			

Section No. 5 SECTION 5 - EXTERNAL WORKS Walkways Bill No. 3

ļ	<u>BILL NO. 4</u>			
1	RAMPS			
(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	5	
1	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	
l	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	
ļ	Prescribed density tests on filling			
6	Modified AASHTO Density test	No	1	
ļ	REINFORCED CONCRETE			
	25MPa/19mm concrete			
7	Ramps, Landings	m3	3	
9	CONCRETE SUNDRIES			
,	Finishing top surfaces of concrete smooth with a wood float:			
8	Surface beds, slabs to falls and currents	m2	5	
-	TEST CUBES			
	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	1	
ļ	ROUGH FORMWORK (DEGREE OF ACCURACY II)			
ļ	Rough formwork to sides			ĺ
	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:			
1	12mm Joints not exceeding 300mm high	m	3	
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc			
	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary. Carried Forward	m	3	
5	Section No. 5 SECTION 5 - EXTERNAL WORKS Ramps			

	Brought Forward			
	REINFORCEMENT			
13	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc. WATERPROOFING	m2	5	
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			

I	I			I
5	ECTION NO. 5			
E	<u>SILL NO. 5</u>			
F	ENCING			
5	UPPLEMENTARY PREAMBLES			
C	Seneral			
٦	hese quantities are measured in accordance with SANS 1200 Specifications.			
k	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.			
t r c E	The quantities are provisional and will be re-measured upon completion of he works. The Contractor shall not use these quantities for ordering of naterials. The Contractor must immediately notify the Quantity Surveyor if liscrepancies are found between the quantities and/or descriptions in these stills of Quantities and the Contractor's quantities measured from construction drawings and specifications.			
٦	he total amount for the works should be included in the Tender amount.			
Ē	ENCING			
ç	ite clearance			
e	Not the second state of the width of 1 000 mm where fencing is to be prected including removing trees, shrubs etc. not exceeding 200 mm girth, prubbing up roots and roughly levelling.	m2	63	
0	training wires, fencing and razor wire:			
r t	our strands of 4mm Class'A' galvanised straining wires secured to fencing oosts with doubled 2 mm galvanised wire inserted through hole in post and urned a minimum of four turns around straining wire and attached to training frame at one end with not less than four turns at the other end to training bolts (elsewhere measured)	m	252	
3 3	Strands of galvanised barbed wire tied to standards, posts and eye bolts	m	189	
ł	encing 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 entres including Y12 pegs at 900mm c/c between posts (straining wires elsewhere measured)	m	63	
F	Posts for 1 800mm high security fence			
f	60mm Diameter galvanised steel intermediate fencing post 2400mm long itted with a pressed steel mushroom cap one end and 150 x 150 x 5 mm paseplate at bottom and embedded in and including 350 x 350 x 600 mm nass concrete (15 MPa) base	m	25	
5	.00mm Ditto as corner post, fitted with two 50mm diameter galvanised teel 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			
S	Section No. 5 SECTION 5 - EXTERNAL WORKS Sill No.5 Sencing			

Brought Forward 7 75mm Ditto as intermediate post - 1 dropper every 3000mm between	No	46	
standard posts			
3 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	
12mm Diameter galvanised mild steel straining eye bolt with hook, threaded portion and two nuts and washers	No	8	
Form 12mm diameter hole through fence post	No	8	
Gates			
Two leafed vehicular swing gate. Size 5500mm x 1800mm high.	No	2	
2 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			
Supply 50 mm "Viro" Padlocks and Keys (or equal approved	m	1	
ACCESS DRIVEWAY, ETC.			
Excavation not exceeding 2m deep			
4 Reducing levels and depositing excavated material in prescribed stock piles on site.	m³	35	
Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):			
Off site to a dumping site to be found by the Contractor.	m³	18	
Filling supplied by the contractor under driveways			
G7 Base course material compacted to 98% Mod AASHTO density	m³	6	
Rip and Re - compact insitu material on site compacted to 93% Mod. AASHTO density:			
Under floors,etc.	m²	40	
Approved brand of anti-termite soil poison applied by a Registered Pest Control Company and guaranteed against termite infestation for ten years:			
Treat filling under paving with 'Chlordane Heptachlor Aldrin' or equal approved.	m²	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			
Vehicular entrance gate 6000mm wide complete with motor. Carried Forward to Summary of Section No. 5	No	1	
Section No. 5 SECTION 5 - EXTERNAL WORKS Bill No.5			
Bill No.5 Fencing			

	SECTION SUMMARY - SECTION 5 - EXTERNAL WORKS	Page No		
1	Stormwater	39		
2	Aprons	42		
	Walkways	45		
	Ramps	47		
	Fencing	49		
-				
	Carried to Final Summary			
	Section No. 5 SECTION 5 - EXTERNAL WORKS			

1	I	l		
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)	ltem	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	I	l		_

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.

<u>Profit</u>

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:

 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;

 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;

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

 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;

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

 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

Section No. 7 SECTION 7 - PRIME COST AND PROVISIONAL SUMS Bill No. 1 Provisional Sums

av 10) hoisting of the sub-contractor's material in loads not exceeding the vailable hoisting loads of cranes of the contractor;			
	repairs and making good in all trades and final cleaning down on ompletion.			
Fu	uel, power and water for commissioning plant			
bo te sp ur	he cost of fuel, power and water for the commissioning of plant shall be orne by the sub-contractor appointed for the relevant sub-contract works in erms of the conditions under which they have/are contracted for the pecialist work involved. The contractor shall allow opposite this item or nder the relevant attendance items for the recovery of such costs via the isstallation of the necessary meters			
w	/ork executed by direct contractors			
ex ac di cc cc th	Vork listed under the heading "Work executed by direct contractors" shall be xecuted before and during this contract and the tenderer must allow free ccess to the site for such other contractors. These contractors shall be irectly paid by the client and the tenderer must allow for programming in onjunction with them to complete the project successfully within the pontract period. The estimated values of these contracts are listed to enable tenderer to determine the extent of the attendance if required. Profit on these contracts shall not be allowed.			
B	udgetary allowances			
	udgetary allowances shall be re-measured and valued on the same pricing tructure as the rest of the contract or shall be omitted in full if so required.			
La	andscaping and Irrigation			
	rovide the sum of R50 000. 00 for landscaping to be used as directed by the rincipal Agent and deducted in whole or in part if not required.	ltem	1	
2 A	llow for Profit if required	%IT		
	Carried to Final Summary			
	ection No. 7 ECTION 7 - PRIME COST AND PROVISIONAL SUMS			
Bi	ill No. 1 rovisional Sums			

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	FINAL SUMMARY	Page No		
1	SECTION 1 - PRELIMINARY AND GENERAL	20	 	
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			