	Quantity	Rate	Amount
SECTION 1			
BILL No.1			
PRELIMINARIES			
The Principal Building Agreement shall be the JBCC Series Edition 4.1, March 2005 as recommended by the Joint Building Contract Committee and as amended by this Tender Enquiry.			
2. The Preliminaries shall be JBCC Series 2000, May 2005 for use with the Principal Building Agreement as recommended by the Joint Building Contracts Committee and as amended by this Tender Enquiry shall be deemed to be incorporated herein.			
3. Tenderers are referred to the abovementioned documents for the full intent and meaning of each clause thereof. These clauses are hereinafter referred to by clause number and heading only.			
4. Where standard clauses or alternatives are not entirely applicable to this contract, such modifications, corrections or additions as are necessary, are given as far as possible under each relevant clause heading. Additional Preliminary clauses are contained in Section C hereof.			
5. No claim whatsoever shall be entertained in respect of errors or omissions in pricing due to brevity of descriptions of items which are fully described when read in conjunction with the relevant clauses of the said Principal Building Agreement, Preliminaries and Preambles.			
6. The Tenderers shall allow opposite each of the clauses whatever costs and charges he may consider necessary for the carrying out, complying with and due observance of the provisions, conditions and requirements set out herein. Only priced items will be considered in respect of any adjustment of this Section. Any items left unpriced will be understood to be provided free of charge and no claim for any extras arising out of the Tenderer's omission to price any item will be entertained.			
Carried to Collection Section 1		R	
Bill No. 1 Preliminaries			

7. Where modifications or amendments as described are made, such modifications and/or amendments shall supercede any conflicting provisions in the relevant clauses of the Standard Preliminaries or the Principal Building Agreement and the Tenderer shall make due allowance for whatever costs and charges he may consider necessary for the carrying out and observance of the provisions of the clauses as modified and/or amended.		
8. Where any item is not relevant to this specific contract, such item is marked N/A.		
9. If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries, each item priced is to be allocated to one or more of the three categories by insertion of "F","V","T" as the case may be against the price in the "rate" column immediately preceding the "amount" column, where "F" denotes a fixed amount (amount not to be varied), "V" denotes an amount variable in proportion to value, and "T" denotes an amount proportionate to time.		
Carried to Collection	R	
Section 1 Bill No. 1 Preliminaries		

	SECTION A: PRINCIPAL BUILDING AGREEMENT			
	DEFINITIONS			
	Definitions and interpretation (Clause 1).			
1	F: V: T:	Item		1
	OBJECTIVE AND PREPARATION			
	Offer, acceptance and performance (Clause 2).			
2	F: V: T:	Item		1
	Documents (Clause 3).			
	Clause 3.1 is deleted and substituted with: 'This tender is for a Government Contract. No Payment Guarantee will be provided.'			
	Clause 3.3 is deleted and substituted with:			
	The principal agent shall complete the schedule and arrange for formal signing of the agreement once the priced bill of quantities/lump sum document, security, insurances and waiver of lien, where acceptable, have been provided and effected'.			
3	F: V: T:	Item		
	Design responsibility (Clause 4).			
4	F: V: T:	Item		
	Employer's agents (Clause 5).			
5	F: V: T:	Item		
	Site representative (Clause 6).			
6	F: V: T:	Item		
	Compliance with regulations (Clause 7).			
7	F: V: T:	Item		
				<u> </u>
	Carried to Collection		R	<u> </u>
	Section 1 Bill No. 1 Preliminaries			

	Works risk (Clause 8)			
8	F: V: T:	Item		
	Indemnities (Clause 9).			
	Clause 9.1.1 is deleted and substituted with:			
	Claims from other parties consequent upon death of bodily injury or illness of any person or physical loss or damage to any property, other than the works, arising out or due to the execution of the works or occupation of the site by the contractor or his sub contractors'.			
9	F: V: T:	Item		
	Works insurances (Clause 10).			
10	F: V: T:	Item		
	Liability insurances (Clause 11).			
11	F: V: T:	Item		
	Effecting insurances (Clause 12).			
12	F: V: T:	Item		
	State Provisions (Clause 13).			
13	F: V: T:	Item		
	Security (Clause 14).			
14	F: V: T:	Item		
	EXECUTION			
	Preparation for and execution of the works (Clause 15).			
15	F: V: T:	Item		
	Access to the works (Clause 16).			
16	F: V: T:	Item		
	Contract instructions (Clause 17).			
	Carried to Collection Section 1		R	_
	Bill No. 1 Preliminaries			
	i ienimialies			

17	F: V: T:	Item		
	Setting out of the works (Clause 18.3).			
	The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc., exist in order that the necessary arrangements may be made for the rectification of any such encroachments. Should incorrect information be given to the contractor in terms of 18.1 and 18.2, which causes the incorrect setting out of the works, the contractor shall not be liable for such incorrect setting out.			
18	F: V: T:	Item		
	Assignment (Clause 19).			
19	F: V: T:	Item		
	Nominated subcontractors (Clause 20).			
20	F: V: T:	Item		
	Selected subcontractors (Clause 21).			
21	F: V: T:	Item		
	Employer's Direct contractors (Clause 22).			
22	F: V: T:	Item		
	Contractor's Domestic subcontractors (Clause 23).			
23	F: V: T:	Item		
	COMPLETION			
	Practical completion (Clause 24).			
24	F: V: T:	Item		
	Works completion (Clause 25).			
25	F: V: T:	Item		
	Final completion (Clause 26).			
	Carried to Collection		R	ı
	Section 1 Bill No. 1 Preliminaries			

1		I	1 1	I	1
	Latent defects liability period (Clause 27).				
	Clause 27.0 is amended by the addition of the following clauses:				
	"27.3 Any water leakage into the building, whether in the roof, external wall or other element of the building susceptible to water leakage shall, unless proven to be a design defect, or as a result of obvious storm damage, be classified as a latent defect in terms of clause 1.0 Definitions and Interpretations".				
	"27.4 The Contractor shall attend to defects during the Defects Liability Period on a progressive basis, to the satisfaction of the Principal Agent and will not be permitted to wait until the end of the Defect Liability Period or until the amount of defects accummulates in order to attend to a comprehensive list of defects"				
26	F: V: T:	Item			
	Sectional completion (Clause 28).				
27	F: V: T:	Item			
	Revision of date for practical completion (Clause 29).				
28	F: V: T:	Item			
	Penalty for non-completion (Clause 30).				
29	F: V: T:	Item			
	PAYMENT				
	Interim payment to the contractor (Clause 31).				
	The inclusion of materials and goods stored off site in the amount authorised for payment in terms of clause 31.3 shall be at the sole discretion of the principal agent and such inclusion shall only be considered upon the provision, by the contractor, of an approved guarantee issued by a registered commercial bank.				
	Carried to Collection		R		
	Section 1				F
	Bill No. 1 Preliminaries				

	Where prices are submitted by the contractor or nominated/selected sub contractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of the contract and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the final certificate, it will be in writing.			
	Adjustment to the contract value (Clause 32).			
30	F: V: T:	Item		
	Recovery of expense and loss (Clause 33).			
31	F: V: T:	Item		
	Final account and final payment (Clause 34).			
32	F: V: T:	Item		
	Payment to other parties (Clause 35).			
33	F: V: T:	Item		
	CANCELLATION			
	Cancellation by Employer - Contractor's default (Clause 36).			
34	F: V: T:	Item		
	Cancellation by Employer - Loss and damage (Clause 37).			
35	F: V: T:	Item		
	Cancellation by Contractor - Employer's default (Clause 38).			
36	F: V: T:	Item		
	Cancellation - Cessation of the works (Clause 39).			
37	F: V: T:	Item		
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries			

	DISPUTE			
	Dispute Settlement (Clause 40)			
38	F: V: T:	Item		
	SUBSTITUTE PROVISIONS			
	State Clauses (Clause 41)			
39	F: V: T:	Item		
	CONTRACT VARIABLES			
	The Schedule: Pre-Tender information (Clause 42).			
40	F: V: T:	Item		
	CONTRACTING AND OTHER PARTIES (Clause 42.1)			
	Employer: The Mvula Trust			
	Postal Address: 67 Devereux Avenue, Vincent, East London			
	Telephone: 043 726 2255			
	Facsimile: 043 726 5967			
	Physical address: 67 Devereux Avenue, Vincent, East London			
	Principal Agent: The Mvula Trust			
	Postal Address: 67 Devereux Avenue, Vincent, East London			
	Telephone: 043 726 2255			
	Facsimile: 043 726 5967			
	Physical address: 67 Devereux Avenue, Vincent, East London			
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries			

Clause 42.2.1  Works Description: Construction of new ablution facilities.  Clause 42.2.2  Site Description: The site is the existing school.  Clause 42.2.3  Work or Installations by Others: NIL  Clause 42.2.4  This Agreement is for a State Contract:- Yes  Payment will be made for materials and goods:- Yes  Dispute resolution: Mediation (in terms of clause 40) followed by litigation.  Arbitration rules as recommended by the Association of Arbitrators (SA):- N/A  Clause 42.2.5  Date on which possession of the site is intended to be given on:-  To be advised.  Clause 42.2.6  Period for the commencement of the works after the contractor takes possession of the site:- 5 Working days.  Completion in Sections are required::NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole:-  To be advised.	01 4004		
Clause 42.2.2  Site Description: The site is the existing school.  Clause 42.2.3  Work or Installations by Others: NIL  Clause 42.2.4  This Agreement is for a State Contract: Yes  Payment will be made for materials and goods:- Yes  Dispute resolution: Mediation (in terms of clause 40) followed by litigation.  Arbitration rules as recommended by the Association of Arbitrators (SA):- N/A  Clause 42.2.5  Date on which possession of the site is intended to be given on:-  To be advised.  Clause 42.2.6  Period for the commencement of the works after the contractor takes possession of the site:- 5 Working days.  Completion in Sections are required: NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole:-  To be advised.	Clause 42.2.1		
Site Description: The site is the existing school.  Clause 42.2.3  Work or Installations by Others: NIL  Clause 42.2.4  This Agreement is for a State Contract :- Yes  Payment will be made for materials and goods:- Yes  Dispute resolution :- Mediation (in terms of clause 40) followed by litigation.  Arbitration rules as recommended by the Association of Arbitrators (SA) :- NIA  Clause 42.2.5  Date on which possession of the site is intended to be given on :-  To be advised.  Clause 42.2.6  Period for the commencement of the works after the contractor takes possession of the site :- 5 Working days.  Completion in Sections are required : NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole :-  To be advised.	·		
Clause 42.2.3  Work or Installations by Others: NIL  Clause 42.2.4  This Agreement is for a State Contract: Yes  Payment will be made for materials and goods: Yes  Dispute resolution: Mediation (in terms of clause 40) followed by litigation.  Arbitration rules as recommended by the Association of Arbitrators (SA): N/A  Clause 42.2.5  Date on which possession of the site is intended to be given on:  To be advised.  Clause 42.2.6  Period for the commencement of the works after the contractor takes possession of the site: 5 Working days.  Completion in Sections are required: NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole: To be advised.	Clause 42.2.2		
Work or Installations by Others: NIL  Clause 42.2.4  This Agreement is for a State Contract: - Yes  Payment will be made for materials and goods: - Yes  Dispute resolution: - Mediation (in terms of clause 40) followed by litigation.  Arbitration rules as recommended by the Association of Arbitrators (SA): - N/A  Clause 42.2.5  Date on which possession of the site is intended to be given on: -  To be advised.  Clause 42.2.6  Period for the commencement of the works after the contractor takes possession of the site: - 5 Working days.  Completion in Sections are required: NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole: -  To be advised.	Site Description: The site is the existing school.		
Clause 42.2.4  This Agreement is for a State Contract :- Yes  Payment will be made for materials and goods:- Yes  Dispute resolution :- Mediation (in terms of clause 40) followed by litigation.  Arbitration rules as recommended by the Association of Arbitrators (SA) :- N/A  Clause 42.2.5  Date on which possession of the site is intended to be given on :-  To be advised.  Clause 42.2.6  Period for the commencement of the works after the contractor takes possession of the site :- 5 Working days.  Completion in Sections are required : NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole :-  To be advised.	Clause 42.2.3		
This Agreement is for a State Contract :- Yes  Payment will be made for materials and goods:- Yes  Dispute resolution :- Mediation (in terms of clause 40) followed by litigation.  Arbitration rules as recommended by the Association of Arbitrators (SA) :- N/A  Clause 42.2.5  Date on which possession of the site is intended to be given on :-  To be advised.  Clause 42.2.6  Period for the commencement of the works after the contractor takes possession of the site :- 5 Working days.  Completion in Sections are required : NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole :-  To be advised.	Work or Installations by Others: NIL		
Payment will be made for materials and goods:- Yes  Dispute resolution :- Mediation (in terms of clause 40) followed by litigation.  Arbitration rules as recommended by the Association of Arbitrators (SA) :- N/A  Clause 42.2.5  Date on which possession of the site is intended to be given on :-  To be advised.  Clause 42.2.6  Period for the commencement of the works after the contractor takes possession of the site :- 5 Working days.  Completion in Sections are required : NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole :-  To be advised.	Clause 42.2.4		
Dispute resolution: Mediation (in terms of clause 40) followed by litigation.  Arbitration rules as recommended by the Association of Arbitrators (SA): N/A  Clause 42.2.5  Date on which possession of the site is intended to be given on:-  To be advised.  Clause 42.2.6  Period for the commencement of the works after the contractor takes possession of the site:- 5 Working days.  Completion in Sections are required: NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole:-  To be advised.	This Agreement is for a State Contract :- Yes		
followed by litigation.  Arbitration rules as recommended by the Association of Arbitrators (SA):- N/A  Clause 42.2.5  Date on which possession of the site is intended to be given on:-  To be advised.  Clause 42.2.6  Period for the commencement of the works after the contractor takes possession of the site:- 5 Working days.  Completion in Sections are required: NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole:-  To be advised.	Payment will be made for materials and goods:- Yes		
Arbitrators (SA):- N/A  Clause 42.2.5  Date on which possession of the site is intended to be given on:-  To be advised.  Clause 42.2.6  Period for the commencement of the works after the contractor takes possession of the site:- 5 Working days.  Completion in Sections are required: NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole:-  To be advised.			
Date on which possession of the site is intended to be given on :-  To be advised.  Clause 42.2.6  Period for the commencement of the works after the contractor takes possession of the site :- 5 Working days.  Completion in Sections are required : NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole :-  To be advised.  Carried to Collection  R  Section 1			
given on :-  To be advised.  Clause 42.2.6  Period for the commencement of the works after the contractor takes possession of the site :- 5 Working days.  Completion in Sections are required : NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole :-  To be advised.  Carried to Collection  R  Section 1	Clause 42.2.5		
Clause 42.2.6  Period for the commencement of the works after the contractor takes possession of the site :- 5 Working days.  Completion in Sections are required : NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole :-  To be advised.  Carried to Collection  R  Section 1			
Period for the commencement of the works after the contractor takes possession of the site :- 5 Working days.  Completion in Sections are required : NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole :-  To be advised.  Carried to Collection  R  Section 1	To be advised.		
contractor takes possession of the site :- 5 Working days.  Completion in Sections are required : NO  Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole :-  To be advised.  Carried to Collection  R  Section 1	Clause 42.2.6		
Clause 42.2.7  Intended date of practical completion and the penalty per calendar day for the works as a whole :-  To be advised.  Carried to Collection  R  Section 1	contractor takes possession of the site :- 5 Working		
Intended date of practical completion and the penalty per calendar day for the works as a whole :-  To be advised.  Carried to Collection  R  Section 1	Completion in Sections are required : NO		
To be advised.  Carried to Collection  R  Section 1	Clause 42.2.7		
Carried to Collection R Section 1			
Section 1	To be advised.		
Section 1			
Section 1			
		R	

	_	_	
Penalty amount will be R 2000.00 per Calendar day to a maximum of 10% of Contract Value.			
Clause 42.2.8			
Intended dates of practical completion and the penalties per calendar day for the works in sections :			
N/A			
Clause 42.2.9			
The law applicable to this agreement shall be that of - Republic of South Africa.			
INSURANCES (Clause 42.3)			
Clause 42.3.1			
Contract works insurance to be effected by Contractor for the sum of: Contract Sum plus 10%			
With a deductible of : 5% of insured amount			
Clause 42.3.2			
Supplementary insurance is required : Yes			
SASRIA insurance required to be effected by the Contractor for the amount of: Contract Sum plus 20% (with a deductible to be determined by the Insurance company issuing the policy).			
Clause 42.3.3			
Public liability insurance to be effected by Contractor			
For the amount of: R 5million			
With a deductible of: 5% of insured amount			
DOCUMENTS (Clause 42.4)			
Clause 42.4.1			
Waiver of the contractor's lien is required :- YES			
Clause 42.4.2			
Carried to Collection Section 1		R	<u> </u>
Bill No. 1			
Preliminaries			

	Number of construction document copies to be supplied to the Contractor free of charge :- 1			
	Clause 42.4.3			
	Bills of Quantities drawn up in accordance with :-			
	Standard System of Measuring Building Work - Seventh Edition including all amendments			
	Clause 42.4.4			
	Number of days for submission of priced documents : 5 working days from the Letter of Appointment.			
	Clause 42.4.5			
	JBCC Engineering General Conditions are to be included in the documents :- No			
	Clause 42.4.6			
	The contract value is to be adjusted using CPAP:- NO			
	SECTION B: PRELIMINARIES			
	DEFINITIONS AND INTERPRETATION (B1)			
	Definitions and Interpretation (B1)			
41	F: V: T:	Item		
	DOCUMENTS (B2)			
	Checking of documents (B2.1)			
	Notwithstanding the issue of the tender drawings, it will remain the responsibility of the Tenderer to study all available drawings at the offices of the Principal Agent during normal working hours in order to acquaint himself with all the cost implications of the design, programming, phasing, etc.			
42	F: V: T:	Item		
	Provisional Bills of Quantities (B2.2) YES			
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries			

	Prime Cost Amounts, Budgetary Allowances, Provisional Amounts, etc., contained herein may be omitted or reduced at the Principal Agent's sole discretion and the Contractor shall not be entitled to claim for any loss by way of reduction or omission of any discount, or percentage relating to Prime Cost Amounts, Budgetary Allowances, Provisional Amounts, Provisional Quantities, etc., or loss of profit related thereto.			
43	F: V: T:	Item		
	Availability of construction documentation (B2.3)			
44	F: V: T:	Item		
	Interests of Agents (B2.4)			
45	F: V: T:	Item		
	Priced documents (B2.5)			
46	F: V: T:	Item		
	Tender submission (B2.6)			
	Notwithstanding anything contained in this clause, Tenders shall be valid for a period of 20 (Twenty) weeks from the closing date of tenders.			
47	F: V: T:	Item		
	THE SITE (B3)			
	Defined works area (B3.1)			
	The area of the works to be occupied by the contractor, any restriction on the area and the limit of access or exit will be pointed out to the contractor by the principal agent on handing over of the site.			
	Workmen employed on the site are to be restricted to the immediate area of the site and access thereto.			
	The Tenderer shall make all necessary provision in all rates to take into account these requirements as no claims for extras arising from these matters will be subsequently entertained or admitted.			
48	F: V: T:	Item		
	Commind to Callegation			
	Carried to Collection Section 1		R	=
	Bill No. 1 Preliminaries			

	Geotechnical investigation (B3.2)			
	A desktop geotechnical report is available upon request.			
49	F: V: T:	Item		
	Inspection of the Site (B3.3)			
50	F: V: T:	Item		
	Existing premises occupied (B3.4)			
51	F: V: T:	Item		
	Previous work - dimensional accuracy (B3.5)			
52	F: V: T:	Item		
	Previous work - defects (B3.6)			
53	F: V: T:	Item		
	Services - known (B3.7)			
54	F: V: T:	Item		
	Services - unknown (B3.8)			
55	F: V: T:	Item		
	Protection of trees (B3.9)			
56	F: V: T:	Item		
	Articles of value (B3.10)			
57	F: V: T:	Item		
	Inspection of adjoining properties (B3.11)			
58	F: V: T:	Item		
	MANAGEMENT OF CONTRACT (B4)			
	Management of the Works (B4.1)			
59	F: V: T:	Item		
	Carried to Collection Section 1		R	
	Bill No. 1 Preliminaries			

	Programme for the Works (B4.2)			
60	F: V: T:	Item		
	Progress meetings (B4.3)			
61	F: V: T:	Item		
	Technical meetings (B4.4)			
62	F: V: T:	Item		
	SAMPLES AND SHOP DRAWINGS (B5)			
	Samples of materials (B5.1)			
63	F: V: T:	Item		
	Workmanship samples (B5.2)			
64	F: V: T:	Item		
	Shop drawings (B5.3)			
65	F: V: T:	Item		
	TEMPORARY WORKS AND PLANT (B6)			
	Deposits and fees (B6.1)			
66	F: V: T:	Item		
	Enclosure of the works (B6.2)			
	The contractor shall erect, maintain and remove at completion, hoardings, safety screens, barriers, access gates, covered gangways and the like as necessary for the enclosure of the works and elements thereof all for the protection of the public and others.			
67	F: V: T:	Item		
	Advertising (B6.3)			
68	F: V: T:	Item		
				<u> </u>
	Carried to Collection		R	<u> </u>
	Section 1 Bill No. 1 Preliminaries			- <del></del>

	Plant and equipment (B6.4)			
69	F: V: T:	Item		
	Main notice board (B6.5)			
	One notice board shall be provided by the Contractor			
70	F: V: T:	Item		
	Subcontractors notice board (B6.6) (N/A)			
71	F: V: T:	Item		
	TEMPORARY SERVICES (B7)			
	Location (B7.1)			
72	F: V: T:	Item		
	Water (B7.2)			
	The contractor shall provide water for the works in accordance with:			
	Alternative A (i.e. to be provided for by the Contractor).			
73	F: V: T:	Item		
	Electricity (B7.3)			
	The contractor shall provide electricity for the works in accordance with:			
	Alternative A (i.e. to be provided for by the Contractor).			
74	F: V: T:	Item		
	Telecommunication equipment (B7.4)			
	The contractor shall provide telephones on site for the works in accordance with:			
	Alternative A (i.e. to be provided for by the Contractor).			
75	F: V: T:	Item		
				_
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries			

	Ablution facilities (B7.5)			
	The contractor shall provide toilet facilties on site for the works in accordance with:			
	Alternative A (i.e. to be provided for by the Contractor).			
76	F: V: T:	Item		
	PRIME COST AMOUNTS (B8)			
	Responsibility for prime cost amounts (B8.1)			
77	F: V: T:	Item		
	ATTENDANCE ON N/S SUBCONTRACTORS (B9)			
	General Attendance (B9.1)			
78	F: V: T:	Item		
	Special Attendance (B9.2)			
79	F: V: T:	Item		
	Commissioning - fuel, water and power (B9.3)			
80	F: V: T:	Item		
	FINANCIAL ASPECTS (B10)			
	Statutory taxes, duties and levies (B10.1)			
	Provision is made in the Final Summary of these Bills of Quantities for the inclusion of Value Added Tax (VAT).			
81	F: V: T:	Item		
	Payment of Preliminaries (B10.2)			
82	F: V: T:	Item		
	Adjustment of Preliminaries (B10.3)			
83	F: V: T:	Item		
	Payment certificate cash flow (B10.4)			
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries			

84	F: V: T:	Item		
	Contractor information supply (B10.5)			
85	F: V: T:	Item		
	GENERAL (B11)			
	Protection of the Works (B11.1)			
86	F: V: T:	Item		
	Protection/isolation of existing/sectionally occupied works (B11.2)			
87	F: V: T:	Item		
	Site security (B11.3)			
88	F: V: T:	Item		
	Notice before covering work (B11.4)			
89	F: V: T:	Item		
	Disturbance (B11.5)			
90	F: V: T:	Item		
	Works cleaning and clearing (B11.6)			
91	F: V: T:	Item		
	Vermin (B11.7)			
92	F: V: T:	Item		
	Overhand work (B11.8)			
93	F: V: T:	Item		
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries			

	SECTION C: SPECIFIC PRELIMINARIES			
	Section C: Specific Preliminaries:			
	C1. Proprietary branded products			
	The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturer's instructions after consultation with the manufacturer's authorised representative.			
94	F: V: T:	Item		
	C2. Trade Names, etc.			
	All materials, fittings, finishings, etc., specified hereinafter under a trade name, catalogue number or reference, must be exactly as described. The Architect's approval in writing must be obtained for the use of any alternative to the specification before the submission of tenders otherwise the specified materials, fittings, finishings, etc., will be assumed to have been allowed for in the tender.			
	The Contractor must take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturer's instructions after consultation with the manufacturer's authorised representative.			
95	F: V: T:	Item		
	C3. Contractors responsibility			
	The Employer, the Principal Agent and the other professional consultants shall not be responsible for any act or omission on the part of the Contractor which may result in any patent or latent defects, in materials or workmanship, breach or neglect of any local regulations. The Contractor shall at all times be responsible for any such neglect, deviation or wrong act, whether the same is discovered before or after the final certificate, or any other Certificate, has been approved.			
96	F: V: T:	Item		
	C4. Overtime			
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries			

	Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorised in writing, prior to the execution thereof, that costs for such overtime are to be borne by the employer.			
97	F: V: T:	Item		
	C5. As built drawings			
	The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the principal agent and the structural engineer for their records.			
	Three full sets of as-built drawings shall be submitted to the Principal Agent no later than fourteen days after practical completion.			
98	F: V: T:	Item		
	C6. Construction Instructions			
	Contract instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the Contractor. The Contractor shall supply and have available at the site of the works at all times, the following site books:			
	a) Construction Instruction Book:			
	Receiving and recording instructions in a suitable A4 size triplicate book kept on site. Instructions issued shall be recorded by the Architect or other Employer's Agents to whom the Architect has delegated authority to in the book.  Only instructions issued in such book shall be			
	recognised.			
	b) Daily Record Book:			
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries			

	The Contractor shall record in triplicate in a suitable A4 size triplicate book kept at the site, a daily record of work done, all site visits by the Principal Agent and other professional personnel and all events affecting the Works, such as progress, issue of plans, breakdown of machinery, etc. The labour, plant and material on site shall be recorded as well as work performed. Entries must be made by the Contractor and must be signed and forwarded to the Principal Agent for his countersignature on a daily basis. Copies of these records shall be for the Architect, Quantity Surveyor and Contractor.			
99	F: V: T:	Item		
	At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day.			
100	F: V: T:	Item		
	C8. Plant record			
	At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works.			
101	F: V: T:	Item		
	C9. Encroachment			
	During the course of the building operations, the Contractor shall be held entirely responsible for any encroachment onto any adjoining properties, buildings, etc., or servitudes and the cost of any remedial measures as required by the Principal Agent shall be borne by the Contractor.			
102	F: V: T:	Item		
	C10. Method Statement			
	Carried to Collection		R	
	Section 1 Bill No. 1 Preliminaries			<del></del>

	The Tenderer shall produce, when required to do so by the Principal Agent, a Method Statement outlining the methods of construction and labour and plant resources that he proposes to use in the execution of the Works. Any approval given or observation made by the Principal Agent shall not relieve the Contractor of his sole responsibility to adopt the methods of construction and to provide the labour and plant resources necessary for the due and proper timeous execution of the Works.			
103	F: V: T:	Item		
	C11. Unauthorised Persons/Workmen on Premises			
	The Contractor shall at all times strictly exclude all unauthorised persons from the Works and the site and shall set up notice boards to that effect.			
	No workmen or labourers (except security guards) are to be allowed under any circumstances to sleep or deposit any kit on the premises. The Contractor must provide any necessary independent shelter or shed required for any labour or watchmen on site, to the approval of the Employer.			
104	F: V: T:	Item		
	C12. Mode of Procedure			
	Notwithstanding anything to the contrary contained herein the Principal Agent at all times reserves the right to direct the order in which the various parts of the Contract are to be executed. The Contractor shall give priority to any individual section or portion of the Works that, in the opinion of the Principal Agent, requires to be expedited.			
	Should it appear, in the Principal Agent's opinion, that work in any area is not being executed in accordance with the requirements of the Contract Programme, the Contractor shall provide additional manpower and resources and shall work additional overtime and do everything else required to bring the work back to programme to the satisfaction of the Principal Agent and to the Contractor's cost.			
105	F: V: T:	Item		
	Carried to Collection		R	<u>_</u>
	Section 1 Bill No. 1 Preliminaries			

	C13. Location of Temporary Buildings and Temporary Services				
	The Contractor shall provide all necessary temporary works, including temporary roads, tracks, crossings, hardstanding and services, hoardings, dust screens, tunnelling, etc., required for his own and sub-contractors use during the construction and maintenance period.				
	There is no guarantee given or implied that Site conditions will be such that the Contractor will be able to erect such temporary works, roads, hardhats, offices, stores and temporary accommodation within the site boundaries and it shall be the Contractor's responsibility to adopt whatever measures he deems necessary in this regard and to obtain all necessary permission and pay all costs in connection therewith.				
106	F: V: T:	Item			ĺ
	C14. Office accommodation				ı
	The contractor shall provide, maintain and remove on practical completion air conditioned office accommodation with suitable tables and chairs for meetings to be held on the site. Such offices shall be kept clean and fit for use at all times [12.2.18]				
107	F: V: T:	Item			ĺ
	C15. Storage Facilities				ı
108	The Contractor shall provide a Container for storage of materials.	Item			
109	F: V: T:	Item			ı
	C16. Removal and Making Good of Temporary Works, etc, on Completion				
	The Contractor shall remove (except where specifically stated otherwise) all temporary works, roads, services and the like used for this contract and shall make good to the entire satisfaction of the Principal Agent any damage resulting therefrom.				
110	F: V: T:	Item			ı
	Carried to Collection		R		
	Section 1 Bill No. 1				
	Preliminaries				ı
			1	/ L	

111	SUB - TOTAL: FIXED ITEMS	Item		
112	SUB - TOTAL: VALUE - RELATED ITEMS	Item		
113	SUB - TOTAL: TIME - RELATED ITEMS	Item		
	Carried to Collection Section 1 Bill No. 1		R	
	Preliminaries			

Section 1				
Bill No. 1				
Preliminaries				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	1			
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			
	10			
	11			
	12			
	13			
	14			
	15			
	16			
	17			
	18			
	19			
	20			
	21			
Carried Forward		R		
Section 1				
Bill No. 1 Preliminaries				

Section 1				
Bill No. 1				
Preliminaries				
COLLECTION				
	Brought Forward	Page No	R	Amount
Total Brought Forward from Page No.		22 23		
Carried Forward to Summa	ry of Section No. 1		R	
Section 1 Bill No. 1 Preliminaries	•			

Item No		Quantity	Rate	Amount
	SECTION 1			
	BILL No. 2			
	HEALTH AND SAFETY			
	MODEL PREAMBLES			
	The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.			
	SUPPLEMENTARY PREAMBLES			
	Supplementary preambles and/or specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the General Preambles.			
	The contractor's prices for all items throughout these bills of quantities shall take account of and include where applicable for all of the obligations, requirements and specifications given in the General Preambles and in any supplementary preambles and/or specifications.			
	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.			
	The items in this Bill do not contain quantities hence the Contractor must insert his own quantities based on his individual requirements to comply with the Health and Safety 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.			
	The costs included herein must incorporate Community Liaison Officer (CLO).			
	Carried to Collection Section 1		R	
	Bill No. 2 Health and Safety			

	OCCUPATIONAL HEALTH AND SAFETY			
	General:			
1	Preparation of Contractor's site specific Health and Safety Plan.		Item	
2	Submission of the Health and Safety File.		Item	
3	Principal Contractor's initial obligations in respect of the OHS Act and Construction Regulations.		Item	
4	Principal Contractor's time related obligations in respect of the OHS Act and Construction Regulations for the entire construction period.		Item	
5	Provision of full time Health and Safety Officer for the entire construction period.		Item	
6	Induction training of personnel.	No		
7	Provision of first aid boxes.	No		
	Provision for Personal Protective Equipment and Protective Clothing:			
8	Reflective vests.	No		
9	Hard hats.	No		
10	Protective foot wear.	No		
11	Ear Plugs.	No		
12	Dust Masks.	No		
	Costs of Medical Certificates and Medical Surveillance:			
13	Initial (baseline) medical examinations.	No		
14	Exit Examinations.	No		
	Noise Monitoring:			
15	Establishment of noise zones.	No		
16	Audiograms.	No		
	Carried to Collection			R
	Section 1 Bill No. 2 Health and Safety			K

	C16. Covid-19 Compliance Measures			
17	The Contractor is required to price for Covid 19 compliance and the pricing thereof shall be deemed to include all the mandatory requirements.	Item		
	Carried to Collection		R	
	Section 1 Bill No. 2 Health and Safety			

Section 1				
Bill No. 2				
Health and Safety				
COLLECTION				
COLLECTION  Total Brought Forward from Page No.	Page No 26 27 28		Amount	
Carried Forward to Summary of Section No. 1 Section 1 Bill No. 2 Health and Safety		R		

Section 1 **SECTION SUMMARY - PRELIMINARIES** Page **A**mount No Preliminaries 25 Health and Safety 29 **Carried to Final Summary** R Section 1

Bill

No

Item No		Quantity	Rate	Amount
	SECTION 2			
	BILL No. 1			
	ALTERATIONS (PROVISIONAL)			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - Existing Toilets			
	Note:			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).			
	Carried to Collection		R	
	Section 2 Bill No. 1 Alterations (Provisional)			
		l		

	TEMPORARY BARRIERS, SCREENS, ETC				
	Temporary barriers, screens, etc including removal				
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 in ground at max 3m spacing including excavation, backfilling, etc  A0:0 A1:0 A6:0 AD:0  G:300	m	300		
2	Extra over mesh fence for double leaf gate size 5.5 x 1,8m high.  A0:0 A1:0 A6:0 AD:0  G:1	No	1		
	DESLUDGING EXISTING TOILETS				
3	Clean out pit latrine by desludging including removal of all debris and waste including solid 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	No	12		
4	Issue of Certificate of Waste Disposal.		Item		
	DEMOLISHING AND REMOVING				
5	Demolish pit latrine structure comprising of brick work with asbestos roof sheeting, approximate size 8 x 5m wide with 3,5m high top structure and 2,0m deep pit including 9m x 3m high facebrick screenwall. Demolition is to only commence once the latrine has been completely emptied (elsewhere measured).  A0:0 A1:0 A6:0 AD:0  G:1	No	1		
6	Demolish pit latrine structure comprising of brick work with asbestos roof sheeting, approximate size 7 x 5m wide with 3,5m high top structure and 2,0m deep pit including 9m x 3m high facebrick screenwall. Demolition is to only commence once the latrine has been completely emptied (elsewhere measured). $ A0:0 \qquad A1:0 \qquad A6:0 \qquad AD:0 $ $ G:1 $	No	1		
7	Cart away rubble from demolitions and dispose off site.		Item		
	Carried to Collection			R	
	Section 2 Bill No. 1 Alterations (Provisional)				

8	Backfill existing hole with G7 fill material in max. 150mm layers and compact to 95% MOD AASHTO density.  A0:0 A1:0 A6:0 AD:0	m3	104		
	G:104				
9	Allow for compaction tests by an approved laboratory to determine density of filling material.  A0:0 A1:0 A6:0 AD:0	No	20		
	G: 20				
10	Provision of a certificate of safe disposal for asbestos.		Item		
	REMOVAL OF EXISTING WORK				
	MAKING GOOD OF FINISHES ETC				
	Making good internal and external cement plaster				
11	25 x 0.9mm galvanised chicken mesh wall plaster in patches.	m2	247		
	A0:0 A1:0 A6:0 AD:247 G:0				
	Repairs to structural cracks, etc				
12	Rake out existing minor structural crack in blockwork, remove all debris/loose material including four times shot fixing 32 x 1,6mm thick strap x 500mm long at 500mm centres and plaster over.	m	33		
	A0:0 A1:0 A6:0 AD:33				
	G:0				
	<u>Timber doors and frames</u>				
13	Take out from one brick wall and cart away single timber door and frame size 900mm wide x 2100mm high including preparing reveals to receive new frame (elsewhere).	No	12		
	A0:0 A1:0 A6:0 AD:12 G:0				
	G:0				
	Comicel to Callegation			D	
	Section 2			R	H
	Bill No. 1 Alterations (Provisional)				
	Allorations (Frovisional)				

	PLUMBING AN	D DRAINA	<u>GE</u>					
	<u>Externally</u>							
14	Take down and accessories.	cart away a	aluminium (	gutter including	m	20		
	A0 : 0 G : 0	A1:0	A6 : 0	AD : 20				
15	Take down and including access		ascia and	Barge boards	m	42		
	A0 : 0 G : 0	A1 : 0	A6 : 0	AD : 42				
	Piping, fittings, e	etc.						
16	Take off from wa copper/polycrop of various diame supply where ne	water supp eters includi	ly piping, f	ittings, valves, et	c. m	33		
	A0 : 0 G : 0	A1:0	A6:0	AD : 33				
17	Take off from wa				m	20		
	A0 : 0 G : 0	A1:0	A6 : 0	AD : 20				
	<u>Sanitaryware</u>							
18	Demolish and ca				No	12		
	A0 : 0 G : 0	A1 : 0	A6 : 0	AD : 12				
19	Demolish and ca washtrough inclu				No	6		
	A0 : 0 G : 0	A1:0	A6 : 0	AD : 6				
20	Demolish and ca 5000mm long in high, including s	cluding ma	ss concrete	e step, 175mm	No	1		
	A0 : 0	A1 : 0	A6:0	AD : 1				
	G:0							
			Ca	arried to Collecti	ion		R	
	Section 2 Bill No. 1 Alterations (Prov	/isional)						

	Sundries				
21	Take down and cart away toilet roll holders.  A0:0 A1:0 A6:0 AD:12	No	12		
	G:0				
	PLASTERING				
	Walls				
22	Hack off plaster from brick wall and cart away including preparing to receive new plaster (elsewhere).  A0:0 A1:0 A6:0 AD:148  G:0	m2	148		
	CEILINGS				
	Nailed up ceilings				
23	Gypsum plasterboard ceilings including cornices, timber brandering, etc  A0:0 A1:0 A6:0 AD:65	m2	65		
	G:0				
	GLAZING				
24	Take out 4mm thick glass from galvanised steel window including preparing frame to receive new glass (elsewhere).	m2	3		
	A0:0 A1:0 A6:0 AD:3				
	G:0				
	REFURBISHMENT, PREPARATORY WORKS, ETC.				
	Sundry brickwork refurbishment				
25	Replace broken brick in existing face brick wall with matching brick bedded, jointed and pointed in cement mortar to match existing.	No	200		
	A0:0 A1:0 A6:0 AD:200 G:0				
	General repair work				
26					
20	Hack plaster from brickwork for a width of 100mm either side of crack, nail galvanised stretch plate over crack with steel nails at 200mm centres to receive plaster (elsewhere).	m	25		
	A0:0 A1:0 A6:0 AD:25 G:0				
	Carried to Collection			R	
	Section 2 Bill No. 1 Alterations (Provisional)				

1	METAL MODIZ	1	I		1
	METAL WORK				
	Servicing of windows, doors, etc.				
27	Service window, size approximately 600 x 600mm high with top hung opening out light including ensuring smooth opening and closing and replacement of missing stays, catches, etc. as necessary to match existing.	No	8		
28	Service and adjust existing external single security gate and frame, including oiling and easing hinges, preparing to receive new lock, touching up and making good.  A0:0 A1:0 A6:0 AD:4 G:0  Refurbishment by cleaning	No	4		
	<del>-</del>				
	Roof covering, walls, concrete columns, tiling, etc.				
29	High pressure clean external face brick facade to remove dirt, lichen, moss, etc. complete including recess pointing and jointing in cement mortar, where necessary, to match existing.  A0:0 A1:0 A6:0 AD:99	m2	99		
	G:0				
30	High pressure cleaning corrugated metal roof sheeting, etc. including sealing leaks with approved waterproof agent.	m2	112		
	A0:0 A1:0 A6:0 AD:112				
	Carried to Collection Section 2 Bill No. 1			R	
	Alterations (Provisional)				
			l		

Section 2				
Bill No. 1				
Alterations (Provisional)				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	31			
	32			
	33			
	34			
	35			
	36			
Carried Forward to Summary of Section No. 2		R		
Section 2				F
Bill No. 1 Alterations (Provisional)				
				l

Item No		Quantity	Rate	Amount
	BILL No. 2			
	EARTHWORKS (PROVISIONAL)			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - Existing Toilets			
	Note:			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).			
	Carried to Collection		R	
	Section 2 Bill No. 2 Earthworks (Provisional)		K	

	EXCAVATION OTHER THAN BULK			
	Excavation in earth not exceeding 2m deep:			
1	Trenches. m3 A0:15 A1:13 A6:12 AD:0 G:0	39		
2	Reducing levels and depositing excavated material in prescribed stock piles on site.  M3: 12	31		
	G:0			
	Extra over trench and hole excavations in earth for excavation in:			
3	Soft rock. m3 A0:1 A1:1 A6:1 AD:0 G:0	4		
4	Hard rock. m3 A0:1 A1:1 A6:1 AD:0 G:0	2		
	Extra over all excavations for carting away:			
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	42		
	A0:16 A1:13 A6:12 AD:0 G:0			
	Risk of collapse of excavations:			
6	Sides of trench and hole excavations not exceeding 1,5m deep. m2  A0:42 A1:36 A6:35 AD:0	113		
	G:0			
	Keeping excavations free of water:			
7	Keeping excavations free from mud and all water including subterranean sources.	Item		
	Carried to Collection		R	
	Section 2 Bill No. 2 Earthworks (Provisional)			

	EARTH FILLING, ETC.				
	Earth filling obtained from the excavations and / or prescribed stock piles on site (minimum G7 tested material) compacted to 93% Mod. AASHTO density:				
8	Backfilling to trenches, holes, etc.  A0: 15 A1: 13 A6: 12 AD: 0  G: 0	13	40		
	Imported G7 filling, selected and supplied by the Contractor, including depositing in layers not exceeding 150mm thick and compacting to 98% modified AASHTO dry density to holes, trenches etc.				
9	Under floors, etc.  A0:17	13	43		
	Coarse river sand filling supplied by the contractor:				
10	Under floors etc.  A0:2 A1:1 A6:2 AD:0 G:0	13	4		
	Compaction of surfaces:				
11	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density.	n2	77		
	A0:31 A1:24 A6:22 AD:0				
	G:0				
	Prescribed density tests on filling:				
12	Allow for compaction tests by an approved laboratory to determine density of filling material.  A0:8 A1:8 A6:8 AD:11 G:0	lo	35		
	Carried to Collection			R	
	Section 2 Bill No. 2 Earthworks (Provisional)			·	

	SOIL POISONING			
	Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:			
13	Under floors, etc., including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming.	77		
	A0:31 A1:24 A6:22 AD:0 G:0			
14	To bottoms and sides of trenches, holes, etc. m2  A0:62 A1:55 A6:52 AD:0  G:0  M2  A0:62 A1:55 A6:52 AD:0	169		
	Carried to Collection		R	
	Section 2 Bill No. 2 Earthworks (Provisional)			

Section 2				
Bill No. 2				
Earthworks (Provisional)				
COLLECTION				
COLLECTION  Total Brought Forward from Page No.	Page No 38 39 40 41		Amount	
Carried Forward to Summary of Section No. 2 Section 2 Bill No. 2 Earthworks (Provisional)		R		

		Amour
BILL No. 3		
CONCRETE, FORMWORK AND REINFORCEMENT		
Quantity Split:		
Note that the total quantity per each item is split into the various buildings and appears below each description as follows:		
A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - Existing Toilets		
Note:		
For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).		
Carried to Collection	R	
Section 2 Bill No. 3		
Concrete, Formwork and Reinforcement		

	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	15Mpa/19mm Concrete				
1	Surface blinding under footings and bases.  A0:3 A1:2 A6:2 AD:0  G:0	n3	7		
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	30MPa/20mm concrete:				
2	Strip footing to walls.  A0:4	n3	11		
3	Surface beds on waterproofing.  A0:3 A1:2 A6:2 AD:0 G:0	n3	8		
	TEST BLOCKS Test blocks:				
4	Making and testing of 150x150x150mm concrete	No	24		
	FINISHING TOP SURFACE OF CONCRETE				
	Finishing top surfaces of concrete smooth with a wood float:				
5	Surface beds, suspended slabs, ground slabs, etc.  A0:31 A1:24 A6:22 AD:0  G:0	n2	77		
	ROUGH FORMWORK (DEGREE OF ACCURACY III)				
	Rough Formwork to Sides:				
6	Edges, risers, ends and reveals not exceeding 300mm high or wide.  A0:25 A1:21 A6:20 AD:0  G:0	m	66		
	Carried to Collection			R	
	Section 2 Bill No. 3 Concrete, Formwork and Reinforcement				

7	SMOOTH FORMWORK (DEGREE OF ACCURACY I)  Smooth Formwork to Sides:  Edges, risers, ends and reveals not exceeding 300mm high or wide.  A0: 12 A1: 11 A6: 10 AD: 0 G: 0  MOVEMENT JOINTS ETC  Two layers of 375 micron damp proof course in slip joints between horizontal concrete and brick	m2	33		
8	Surfaces including cement mortar bed (Provisional)  Not exceeding 300mm wide.  A0:39 A1:31 A6:27 AD:0  G:0	m	97		
9	Saw cut joints:  6 x 40mm Saw cut joints in top of concrete (Provisional).  A0: 20 A1: 20 A6: 20 AD: 0  G: 0	m	61		
10	REINFORCEMENT (PROVISIONAL)  High tensile steel reinforcement bars to structural concrete work.  A0:0.68 A1:0.58 A6:0.55 AD:2.00  G:0.00	t	3.81		
11	Fabric reinforcement:  REF. 617 fabric reinforcement in concrete surface beds, raft slabs etc.  A0:31 A1:24 A6:22 AD:0  G:0	m2	77		
				_	
	Section 2 Bill No. 3 Concrete, Formwork and Reinforcement			R	

Section 2				]
Bill No. 3				
Concrete, Formwork and Reinforcement				
COLLECTION				
	Page		Amount	
Total Brought Forward from Page No.	<b>No</b> 43			
	44			 
	45			
Carried Forward to Summary of Section No. 2		R		
Section 2 Bill No. 3				
Concrete, Formwork and Reinforcement				

Item No		Quantity	Rate	Amount
"	BILL No. 4			
	MASONRY			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - Existing Toilets			
	Note:			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).			
	Carried to Collection		R	
	Section 2 Bill No. 4 Masonry			
	Mason y			

	BRICKWORK IN FOUNDATIONS (PROVISIONAL)  Brickwork consisting of solid bricks with 10.5 MPa minimum nominal compressive strength in Class I mortar with Coprox masonry waterproofing or equal approved waterproof cement additive. Add 2.5kg Coprox waterproof cement additive for every 50kg of cement used in mortar mix (Cement to be 42.5N all-purpose cement):				
1	One brick walls.  A0:21	m2	56		
	BRICKWORK AND BLOCKWORK SUNDRIES				
	Galvanized brickwork reinforcement				
2	115mm Wide reinforcement built in horizontally  A0:35 A1:53 A6:18 AD:0  G:0	m	106		
3	230mm Wide reinforcement built in horizontally.  A0:358 A1:262 A6:262 AD:0  G:0	m	881		
4	Ditto, but in foundations (Provisional).  A0:69 A1:61 A6:58 AD:0  G:0	m	188		
	Cramps, ties, etc:				
5	30 x 2mm Galvanized roof tie 1500mm long with one end fixed to timber and other built into brickwork or concrete.  A0:26 A1:26 A6:26 AD:0  G:0	No	78		
	Air bricks etc:				
6	229 x 152mm terracotta clay vermin proof air brick A0:12 A1:12 A6:12 AD:0 G:0	No	36		
	Carried to Collection	n		R	
	Section 2 Bill No. 4 Masonry				

	Bagging and sealing the outer face of the inner skin of walls with 1:3 cement and sand mixture and seal with two coats "Brixeal" bitumen emulsion waterproofing coating:				
7	To walls (Provisional).  A0:77	m2	209		
8	Prepare and construct for approval L-Shaped one brickwall faced and pointed both sides as per given specification, size: 1000x1000x1000mm high. same area (1000x1000mm) to be paved as per given specifications.		Item		
	Turning pieces to lintels etc				
9	230mm Wide turning pieces  A0: 13	m	31		
	"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):				
10	Extra over brickwork for face brickwork externally.  A0:13 A1:11 A6:10 AD:0  G:0	m2	34		
11	Half brick wall in beam filling pointed one side including cutting and fitting around roof timbers and bedding roofing solid on top in cement mortar.  A0:6 A1:5 A6:5 AD:0	m2	16		
	G:0				
12	One brickwall pointed on both sides.  A0:110 A1:80 A6:80 AD:0  G:0	m2	270		
13	Half brickwall pointed on both sides.  A0:11 A1:16 A6:5 AD:0  G:0	m2	32		
	Carried to Collection			R	
	Section 2 Bill No. 4 Masonry				

14	Fair raking cutting.			m	27			
	A0:9 A1:9	A6:9	AD: 0					
	G:0							
	Face brick copings, lin	tels sills etc	of "Rustgold					
	FBS/Qunu Travertine"	or equal appr	oved face bricks					
	pointed with recessed	joints on all e	xposed faces:					
15	220mm Brick on edge sil cement mortar and point soffit including cutting an splay cutting brickwork u	ed on top, edg d fitting betwe	e and projecting	m	16			
	A0:7 A1:5	A6 : 4	AD : 0	'''	10			
	G:0	A0 . 4	AD . 0					
	G.0							
16	220mm Wide header coubedded and jointed in ceboth sides.			m	18			
	A0:8 A1:5	A6 : 5	AD : 0					
	G:0							
		Ca	rried to Collectio	n		R		
	Section 2							
	Bill No. 4							
	Masonry							
							i l	

Section 2				
Bill No. 4				
Masonry				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	47			
	48			
	49			
	50			
				_
Carried Forward to Summary of Section No. 2 Section 2		R		<u>_</u>
Bill No. 4 Masonry				
Widoon y				

Item No		Quantity	Rate	Amount	
	BILL No. 5				
	WATERPROOFING				
	Quantity Split:				
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:				
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - Existing Toilets				
	Note:				
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).				
					_
	Carried to Collection		R		
	Section 2 Bill No. 5 Waterproofing				=

	DAMPPROOFING OF WALLS AND FLOORS				
	One layer of 250 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':				
1	Under surface beds, bases, etc.  A0:31 A1:24 A6:22 AD:0  G:0	m2	77		
	One layer of 350 micron embossed dampcourse waterproof sheeting below walls, sills, etc:				
2	Below walls, sills, etc.  A0:3 A1:2 A6:2 AD:0  G:0	m2	7		
	JOINT SEALANTS ETC				
	Clear Neutral silicone sealant:				
3	In joint sealing and pointing all round external window and door frames.  A0:55 A1:43 A6:31 AD:0	m	128		
	G:0				
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
4	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary (Provisional).  A0: 20 A1: 20 A6: 20 AD: 0	m	61		
	G:0				
	Carried to Collection			R	
	Section 2 Bill No. 5 Waterproofing				

Section 2			
Bill No. 5			
Waterproofing			
COLLECTION			
COLLECTION  Total Brought Forward from Page No.	<b>Page No</b> 52 53		Amount
Carried Forward to Summary of Section No. 2 Section 2 Bill No. 5 Waterproofing		R	

Item No		Quantity	Rate	Amount
Ï	BILL No. 6			
	ROOF COVERINGS			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - Existing Toilets			
	Note:			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).			
			_	
	Carried to Collection Section 2		R	
	Bill No. 6 Roof Coverings Etc.			

	ROOF COVERINGS				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0.53mm Zinc alum broad flute IBR finish chromadek pre - coated roof sheeting (charcoal) laid at 18 degrees pitch on 75 x 50mm purlins at +/- 1200mm centres max. on Sisalation RSA 420 underlay under purlins on straining tape on timber trusses laid as per manufacturers specification.				
1	Roof sheeting laid to a mono-pitch.  A0: 42 A1: 34 A6: 31 AD: 0  G: 0	m2	108		
	0.53mm Flashings pre-painted to match roof sheeting and fixed in strict accordance with manufacturer's instructions:				
2	Mono pitched ridge capping with 225mm lapping secured onto the roof.  A0:10 A1:8 A6:7 AD:0	m	24		
	G:0  ROOF AND WALL INSULATION  "Sisalation Grade FR430" or equal approved heavy				
3	industrial insulation  Insulation laid taut over roof trusses (at approximately 1				
J	100mm centres) and fixed concurrent with SA Pine purlins at 900mm centres, etc including galvanised steel straining wires  A0:42  A1:34  A6:31  AD:0	m2	108		
	G:0				
					<u>_</u>
	Carried to Collection			R	
	Section 2 Bill No. 6 Roof Coverings Etc.				<del></del>

Section 2			
Bill No. 6			
Roof Coverings Etc.			
COLLECTION			
Total Brought Forward from Page No.	<b>Page No</b> 55 56		Amount
Carried Forward to Summary of Section No. 2 Section 2 Bill No. 6 Roof Coverings Etc.		R	

Item No		Quantity	Rate	Amount
	BILL No. 7			
	CARPENTRY & JOINERY			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - Existing Toilets			
	Note:			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).			
	Section 2 Bill No. 7 Carpentry and Joinery		R	

	CARPENTRY							
	Sawn softwood	<u>:</u>						
1	38 x 114mm Wa A0 : 19 G : 0	II plate. A1 : 15	A6 : 14	AD:0	m	48		
2	50 x 76mm Purlii A0 : 76 G : 0	ns. A1 : 62	A6 : 56	AD : 0	m	194		
3	50 x 76mm Brac A0 : 12 G : 0	ing. A1 : 12	A6 : 12	AD : 0	m	36		
4	38 x 152mm Raf A0 : 44 G : 0	fters. A1 : 44	A6 : 44	AD:0	m	133		
	Sundries:							
5	TRI FIX or equal x 32mm galvanis A0 : 45 G : 0			clip fixed using 10 onal).  AD: 55	No	185		
	EAVES, VERG	ES. ETC						
	"Everite Nutec"		approved f	ibre cement				
6	12 x 225mm Fas rafter feet includi strips, etc.			brass screwed to -profile jointing	m	48		
	G:0	A1.10	A0.14	AD . 0				
7	85 x 275 x 6mm to purlin ends ind jointing strips, so A0:9	cluding gal	vanised ste	nd brass screwed el H-profile AD:0	m	27		
	G:0							
								_
			Ca	arried to Collection	n		R	
	Section 2 Bill No. 7 Carpentry and Jo	oinery						

	DOORS ETC				
	SANS Approved meranti:				
8	44mm Framed, ledged, and battened single door with flush ply panel internally size 813 x 2032mm high comprising 44 x 110mm top rail and stiles, 44 x 220mm bottom rail, 44 x 150mm lock rail and 22 x 70mm vertical "v" jointed boards (D1).  A0:2  A1:0  A6:1  AD:0	No	3		
	G:0				
9	44mm Framed, ledged, and battened single door with flush ply panel internally size 950 x 2032mm high comprising 44 x 110mm top rail and stiles, 44 x 220mm bottom rail, 44 x 150mm lock rail and 22 x 70mm vertical "v" jointed boards (D2).	No	3		
	A0:1 A1:2 A6:0 AD:0 G:0				
10	44mm Framed, ledged, and battened purpose made single door with flush ply panel internally size 813 x 1832mm high comprising 44 x 110mm stiles, 44 x 220mm bottom rail, 44 x 150mm lock rail and 22 x 70mm vertical "v" jointed boards (D4).	No	5		
	A0:3 A1:0 A6:2 AD:0 G:0				
11	44mm Braced and ledged door size 862 x 1000mm Type (D3).  A0:0 A1:3 A6:0 AD:0	No	3		
	G:0				
	FRAMED FRAMES, ETC  Meranti Frames bolted to wall with expanding masonry bolts - four per style including quadrant beads on both sides:				
12	70 x 108mm rebated meranti frame .  A0:23	m	50		
	Carried to Collection			R	
	Section 2			K	
	Bill No. 7 Carpentry and Joinery				

Section 2				
Bill No. 7				
Carpentry and Joinery				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	58			
	59			
	60			
	61			
Carried Forward to Summary of Section No. 2		R		
Section 2 Bill No. 7				
Carpentry and Joinery				

Item No		Quantity	Rate	Amount
	BILL No. 8			
	CEILINGS, PARTITIONS AND ACCESS FLOORING			
	Note:			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).			
	INTERNAL NAILED UP CEILINGS			
	4mm Thick fibre-cement boards with and including 6 x 32mm wrought meranti coverstrips over joints:			
1	Ceilings including 38 x 50mm sawn softwood brandering at 400mm centres with cross brandering at joints, ends of sheets and at light fittings, etc.	65		
	A0:0 A1:0 A6:0 AD:65			
	G:0			
	<u>Trap doors</u>			
2	Extra over 4mm thick fibre cement board ceiling for forming trap door, size 630 x 630mm in clear, formed with 38 x 50mm sawn S.A. pine framing covered with ceiling boarding and set in 38 x 76mm wrought S.A. pine rebated kerb, including all necessary additional supports, trimmers, etc.	1		
	A0:0 A1:0 A6:0 AD:1			
	G:0			
	<u>Cornices</u>			
	Paper covered gypsum cornice with skimmed joints plugged to walls including mitres, etc.:			
3	75mm Coved cornice. m A0:0 A1:0 A6:0 AD:83 G:0	83		
	Carried Forward to Summary of Section No. 2		R	
	Section 2			+
	Bill No. 8 CEILINGS, PARTITIONS AND ACCESS FLOORING			

Item No		Quantity	Rate	Amount
	BILL No. 9			
	IRONMONGERY			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - Existing Toilets			
	Note:			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).			
	Section 2 Bill No. 9 Ironmongery		R	
				ı l

	HINGES:							1
1	75 x 100mm Br hinges.	ass Mediun	n duty ball	bearing HMP butt	Pairs	29.0		
	A0 : 6.0	A1 : 5.0	A6:3.0	AD: 15.0				
	G : 0.0							
	LOCKS							
2	"UNION 2277-7 mortice lockset		ual approv	ed three lever sas	h No	21		
	A0 : 3 G : 0	A1 : 2	A6 : 1	AD : 15				
3	"UNION w/c inc	licator bolt s	satin chron	ne - Code	No	20		
	A0 : 3	A1 : 3	A6 : 2	AD : 12				
	G:0							
	<u>HANDLES</u>							
4	"Dorma DPH30 Straight Tubula	r Pull handl	e flange fix	l Stainless Steel ing.	No	26		
	A0 : 6	A1 : 5	A6 : 3	AD : 12				
	G:0							
	Sundries:							
5	A or equal appr	oved.		de DHC - SS-030	- No	20		
	A0 : 3	A1 : 3	A6 : 2	AD : 12				
•	G:0							
6	38mm Diamete screwed to wall		er door sto	p plugged and	No	26		
	A0 : 6	A1 : 5	A6 : 3	AD : 12				
	G:0							
	SIGN PLATES	<u>S:</u>						
	All sign plates	are to be v	with engra	ved blue persper	<u>«</u>			
	all in accordar Schools.	ice with the	e standard	sign plates for				
7	plated dome he	aded screw	/S.	alls with chromium	n No	10		
	A0:3 G:0	A1 : 2	A6 : 1	AD : 4				
	G:0							
			_	arried to Collecti	on		R	
	Section 2		C	arrieu lo Collecti	OII		×	
	Bill No. 9							
	Ironmongery							

	SUNDRIES				
	Halcast or equal approved"				
8	Thiefproof toilet roll holder plugged.  A0:4 A1:4 A6:2 AD:12  G:0	No	22		
	Grade 304 stainless steel ware:				
9	32mm outside diameter x 1,6mm thick tubular wall mounted side stainless steel grab rail 1,06m girth with two 45 degree and two 90 degree formed bends and each end fitted with 80mm diameter x 5mm thick flange welded on and four times countersunk holed for and plugged and screwed to wall with stainless steel crews.  A0:1 A1:2 A6:0 AD:2 G:0	No	5		
10	32mm outside diameter x 1,6mm thick tubular wall mounted around cistern back stainless steel grab rail 1,23m girth with two 90 degree formed bends and each end fitted with 80mm diameter x 5mm thick flange welded on and four times countersunk holed for and plugged and screwed to wall with stainless steel crews.	No	5		
	A0:1 A1:2 A6:0 AD:2				
	G:0				
	Satin Grey Plastics or equal approved				
11	"Satin plastic N-SBIN-12-SA SHE Bin size 463 x 140 x 480mm, floor standing loose.  A0:6 A1:6 A6:4 AD:12	No	28		
	G:0				
	Carried to Collection			R	
	Section 2			I N	H
	Bill No. 9 Ironmongery				

Section 2				
Bill No. 9				
Ironmongery				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	64			
	65			
	66			
Carried Forward to Summary of Section No. 2		R		
Section 2 Bill No. 9				
Ironmongery				

Item No		Quantity	Rate	Amount
	SECTION 2			
	BILL No. 10			
	METALWORK			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - Existing Toilets			
	Note:			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).			
	ALUMINIUM WINDOWS			
	All aluminium windows are to be manufactured by manufacturers who are members of AAAMSA. All aluminium systems to be approved by AAAMSA.			
	All aluminium work is to be protected by covering with plastic sheeting fixed with low tack adhesive prior to leaving the factory. Plastic sheeting is to remain in place during construction.			
	All glazing shall be in accordance with SABS 0400 - 1990, SABS 1263 - 1. All safety glazing materials (individual panes) shall be permanently marked. Such marking shall be visible after glazing process. If it is not marked, it is not safety glass.			
	Natural anodised aluminium windows glazed with 6.38mm safety laminated glass and plugged to brickwork:			
1	Window Size 600 x 600mm high complete, including ironmongery etc, all as per Window Type W01. No  A0:11 A1:8 A6:7 AD:0	26		
	G:0			
	Carried to Collection Section 2		R	
	Bill No. 10 Metalwork			

	HOT DIP GALVANIZED STEEL GATES			
	Note: The contractor is to check on site measurements before placing of order.			
	Security Gate consisting of 25 x 25 x 2mm galvanised mild steel frame with 12mm galvanised mild steel square bars infill placed at 109mm centres, hung with one pair of galvanised mild steel hinges including locks, handles, ironmongery complete and fixed to brickwork:			
2	Security gate size 900 x 2050mm high (G1). No  A0:1	7		
3	Security double gate size 1800 x 2050mm high.  A0:1 A1:0 A6:0 AD:0	1		
	G:0			
	Carried to Collection		R	_
	Section 2 Bill No. 10 Metalwork			

Section 2				
Bill No. 10				
Metalwork				
COLLECTION				
	Page		Amount	
Total Brought Forward from Page No.	<b>No</b> 68			
	69			
Carried Forward to Summary of Section No. 2		R		
Section 2 Bill No. 10				F
Metalwork				
		I	I	1

Item No		Quantity	Rate	Amount
	BILL No. 11			
	<u>PLASTERING</u>			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - Existing Toilets			
	Note:			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).			
	<u>SCREEDS</u>			
	Untinted granolithic, on concrete:			
1	30mm Thick on floors and landings. m2 A0:31	77		
	INTERNAL PLASTER			
	Cement plaster on superstructure brickwork:			
2	On walls. m2 A0:0 A1:0 A6:0 AD:148 G:0	148		
	Carried Forward to Summary of Section No. 2		R	
	Section 2 Bill No. 11 Plastering			

Item No		Quantity	Rate	Amount
	BILL No. 12			
	TILING			
	Quantity Split:			
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:			
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - Existing Toilets			
	Note:			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).			
	CERAMIC FLOOR TILES			
	300 x 300mm Selected Ceramic tiles (allow Prime Cost amount R200.00 per square metre for material ONLY), with 6mm straight joints fixed with tile adhesive and tile grout as per Manufacturer's recommendations:			
1	Floor tiles m2	142		
	A0:31 A1:24 A6:22 AD:65			
2	G:0  Ceramic floor tile cut to form 150mm high skirting to match existing m	211		
	A0:53 A1:41 A6:34 AD:83			
	G:0			
	Carried to Collection Section 2		R	
	Bill No. 12			
	Tiling			

as per Manufac	turer's rec	<u>ommendat</u>	with grouting ion:				
On walls in plas A0 : 2 G : 0	nbacks. A1 : 1	A6:1	AD:6	m2	10		
Section 2		Ca	rried to Collectio	n		R	

Section 2				
Bill No. 12				
Tiling				
COLLECTION				
Total Brought Forward from Page No.	Page No 72		Amount	
	73			ļ 
Carried Forward to Summary of Section No. 2 Section 2		R		
Bill No. 12 Tiling				

Item No			Quantity	Rate	Amount
	BILL No. 13				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	Quantity Split:				
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:				
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - Existing Toilets				
	Note:				
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).				
	RAINWATER DISPOSAL:				
	Watertite or equal approved Aluminium Gutters and Downpipes:				
1	125 x 85 x 0.6mm Ogee domestic gutters including gutter brackets at 600mm centres.	m	44		
	A0:10 A1:8 A6:7 AD:20 G:0				
2	Extra over eaves gutter for stopped end.	No	10		
	A0:2 A1:2 A6:2 AD:4				
	G:0				
3	Extra over eaves gutter for outlet for 100 x 75mm aluminium downpipe.	No	10		
	A0:2 A1:2 A6:2 AD:4				
	G:0				
4	100 x 75 x 0.6mm rectangular fluted downpipes fixed to wall with and including proprietary holderbats to 5000L rainwater tanks (elsewhere measured).	m	39		
	A0:9 A1:9 A6:9 AD:12				
	G:0				
	Carried to Collection			R	
	Section 2 Bill No. 13				
	Plumbing and Drainage (Provisional)				

5	Extra over rainwa	ter downpip	e for bend	ls.	No	13		
	A0 : 3	A1:3	A6:3	AD : 4				
	G : 0							
	TAPS, VALVES	, ETC						
	Solid Cast brass	taps, valv	es, etc:					
6	"Cobra KM2-200" plated metered bil flow controller.				No	17		
	A0 : 4 G : 0	A1:3	A6 : 2	AD : 8				
7	15mm Ball-o-stop	valve.			No	18		
	A0 : 5 G : 0	A1 : 3	A6 : 2	AD : 8				
8	22mm Non Return	n valve.			No	23		
	A0 : 5 G : 0	A1 : 5	A6 : 5	AD : 8				
	WASTE UNION	S ETC						
	Outlets, traps, et	:c:						
9	40mm 342/50 CP	bottle trap.			No	3		
	A0 : 1 G : 0	A1:0	A6:0	AD : 2				
10	40mm Code 316	chrome pla	ted unslott	ed waste outlet.	No	13		
	A0 : 4	A1 : 3	A6 : 2	AD : 4				
	G:0					40		
11	40mm Rubber "P' A0 : 4	" or "S" trap A1 : 3	) A6 : 2	AD : 4	No	13		
	G:0	71.70	7.0.2					
	SANITARY FITT	<u> </u>						
	Vaal or equal ap	proved:						
12	Lavatera White Vi with top inlet [code 38mm chromium   chromium plated s brackets [code: 87	e: 704001] plated dom spreader [c 127]	610x385m ical grating ode: 8543]	nm, supplied with g [code: 8787], l, and two hanger	No	1		
	A0 : 1 G : 0	A1:0	A6:0	AD : 0				
			Cai	rried to Collection			R	
	Section 2 Bill No. 13 Plumbing and Dra	iinage (Prov						

				, ,	
13	Hibiscus White Vitreous china 510 x 405mm rounded basin [code: 7050] with one tap hole on left hand side, including integrated overflow, bolted to wall with two 8mm bolts [code 8448Z0], to manufacturer's specification.  A0:4 A1:3 A6:2 AD:8  G:0	No	17		
14	Orchid back inlet white vitreous china wall hung pan [code 439016] with floor bracket [code 8082Z0] fitted as per manufacturer's specifications and combined with: GEBERIT Kombifix UP172 for wall hung WC, [G110.150.00.1], front actuated with Delta21 dual flush actuator [G115.125.46.1] in matt finish, including flushpipe and Pan connector, water supply connection with angle stop valve, Netting for direct plastering, protection cover for service opening and protection cover for flushpipe, fixed with included fastening materials inside a single solid wall [80mm]  A0:4 A1:1 A6:2 AD:12  G:0	No	19		
15	Junior vitreous china low level suite colour White (Code: 751358), comprising 104° outlet washdown pan (Code: 751301) with matching 6 litre front single flush cistern (Code: 712034) including lid, fitments and flushpipe and Junior double flap wooden seat (Code: 8518Z0).  A0:0 A1:3 A6:0 AD:2	No	5		
16	Franke Model TU101 or equal approved flush valve/cistern flat back wall mounted urinal:  SS-TU101-1830R Flat back stainless steel school trough urinal wall and floor mounted. manufactured from Grade 304 (18/10) Stainless Steel, 0,9 mm gauge.  Urinal to be supplied with a concealed sparge pipe and a 22 mm inlet with chrome plated conex fitting for connecting to water inlet (Connection fitting not supplied). Urinal to include a tiling key to sides and rear walls. The back to be fully sound deadened with vermin proof bitumastic material. Outlet to be situated on the left or right of the urinal with a recess for 40 mm chrome plated waste outlet.  A0:0 A1:0 A6:2 AD:1  G:0  SANITARY PLUMBING	No	3		
	Carried to Collection			R	
	Section 2 Bill No. 13 Plumbing and Drainage (Provisional)				

	PVC waste or vent pipes and fittings:				
17	50mm Waste pipe.  A0: 28	m	119		
18	110mm Pipe.  A0:4 A1:4 A6:2 AD:12  G:0	m	22		
19	110mm Pipe and laying in ground or filling not exceeding 2m deep including excavation, filling in and ramming.  A0: 25 A1: 25 A6: 25 AD: 36 G: 0	m	111		
	uPVC gulleys				
20	200mm Precast concrete gully dish and uPVC lowback assembly complete with 110mm P trap gulley (code UGB 40) including 190mm diameter head (code UGA 40) and grate (code UGG 40), not exceeding 750mm deep, jointed to 110mm drain pipe, including excavations for and encasing in concrete (15MPa crushing strength after 28 days) worked up to form kerb, finished smooth on top in 1:3 cement mortar.  A0:1 A1:1 A6:1 AD:1	No	4		
	G:0				
	Extra for:				
21	50mm Bend.  A0:10 A1:12 A6:10 AD:12  G:0	No	44		
22	50mm Access bend.  A0:4 A1:3 A6:3 AD:7  G:0	No	17		
23	100mm Access bend.  A0:4 A1:4 A6:2 AD:4  G:0	No	14		
	WATER SUPPLIES				
	Polycop pipes:				
	Pipes shall be class 10.				
	Carried to Collection			R	
	Section 2 Bill No. 13 Plumbing and Drainage (Provisional)			K	

	Fixing of pipes				
	Unless specifically otherwise stated, descriptions of pipes shall be deemed to include for fixing to walls etc. casting in, building in or suspending not exceeding 1m below suspension level				
	Polycop pipes chased in walls:				
	Where pipes have been chased in walls, the price for making good of plaster and paint etc shall be deemed to be included in the description of pipe chased in walls.				
	Reducing fittings:				
	Where fittings have reducing ends or branches they are described as 'reducing'. In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the Contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained.				
	Class 10 Polycop pipes:				
24	15mm Pipe chased into brick walls.  A0: 32	m	128		
25	22mm Pipe chased into brick walls.	m	84		
	A0:19 A1:20 A6:20 AD:25 G:0				
	Extra over polycop pipes for compression fittings:				
26	15mm Fittings.  A0: 28	No	98		
27	22mm Fittings.  A0: 25	No	89		
	Connection to existing water supply				
28	Allow for connection to existing water supply.		Item		
	Testing				
29	Testing water pipe system		Item		
	Carried to Collectic Section 2 Bill No. 13 Plumbing and Drainage (Provisional)	on		R	

Section 2				
Bill No. 13				
Plumbing and Drainage (Provisional)				
COLLECTION				
	Page		Amount	
Total Brought Forward from Page No.	<b>No</b> 75			
	76			 
	77			
	78			
	79			- <b>-</b> -
				·
Coming Formand to Common of Continue No. C				
Carried Forward to Summary of Section No. 2 Section 2		R		
Bill No. 13 Plumbing and Drainage (Provisional)				
				ı

Item No		Quantity	Rate	Amount	
	BILL No. 14				
	<u>PAINTWORK</u>				
	Quantity Split:				
	Note that the total quantity per each item is split into the various buildings and appears below each description as follows:				
	A0 - DWG 04 - Staff Ablutions A1 - DWG 06 - Grade R Ablutions A6 - DWG 14 - Male Ablutions AD - Existing Toilets				
	Note:				
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).				
					_
	Carried to Collection		R		
	Section 2 Bill No. 14				=
	Paintwork				

	PAINTWORK ETC TO NEW Y	<u>WORK</u>			
	Stop, sand down and prepare of apply one coat wood primer, of coats eggshell enamel paint as approved:	ne undercoat and two			
1	On doors  A0:21 A1:18 A6  G:0	:10 AD:42	m2	90	
2	On door frames	::3 AD::13	m2	28	
	Two coats superior quality clessmooth sanded down surfaces				
3	On doors  A0:21 A1:18 A6  G:0	_	m2	90	
4	On door frames	i:3 AD:13	m2	28	
	Prepare and apply two coats c	arbolenium on:			
5	On exposed timbers.  A0: 14	11 AD : 7	m2	44	
	ON FIBRE-CEMENT  Prepare and apply two coats p	ure acrylic roof paint			
6	on: On fascias and barge boards. A0:10 A1:8 A6 G:0	i:8 AD:19	m2	45	
		Carried to Collection			R
	Section 2 Bill No. 14 Paintwork				

Section 2				
Bill No. 14				
Paintwork				
COLLECTION				
Total Brought Forward from Page No.	Page No 81 82		Amount	
Carried Forward to Summary of Section No. 2 Section 2 Bill No. 14 Paintwork		R		

Section 2 **SECTION SUMMARY - BUILDING WORKS** Page Amount No Alterations (Provisional) 37 Earthworks (Provisional) 42 Concrete, Formwork and Reinforcement 46 Masonry 51 Waterproofing 54 Roof Coverings Etc. 57 Carpentry and Joinery 62 CEILINGS, PARTITIONS AND ACCESS FLOORING 63 Ironmongery 67 Metalwork 70 Plastering 71 Tiling 74 Plumbing and Drainage (Provisional) 80 Paintwork 83 **Carried to Final Summary** R Section 2

Bill

No

Item No		Quantity	Rate	Amount
	SECTION No. 3			
	BILL No. 1			
	Note:			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).			
	THE FOLLOWING IN PLATFORMS, ETC.			
	Site Clearance, ETC			
1	Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, trees with trunks not exceeding 200mm girth, debris, etc., including grubbing up all roots, scoffling up as required and cart away all vegetation and debris.	280		
2	Stripping average 200mm thick layer of topsoil and stockpiling on site.	280		
	Open face excavation not exceeding 2m deep:			
3	Excavate to cut in open face, not exceeding 2m deep to reduce levels and grade to fill and compact to 93% mod AASHTO density at optimum moisture content.	410		
	Extra over all excavations for carting away:			
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	246		
	Earth filling from excavated material			
5	Dig, load and remove filling selected from spoil heaps on site and deposit as filling in platforms including spreading and compacting to cambers and falls in layers not exceeding 150 mm thick to a minimum of 95% Modified AASHTO dry density.	82		
	Carried to Collection		R	
	Section 3 Bill No. 1 External Works			

	Filling supplied by the contractor to form platforms				
6	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.	m3	164		
	Surface Preparation:				
7	Trim and level off surface of ground (excavated or filled under this Contract) including excavating or filling, ripping and scarifying as necessary and compacting the whole area for a depth of 300mm to a density of at least 90% Mod. AASHTO maximum density, part to falls.	m2	358		
	Prescribed density tests on filling:				
8	Modified AASHTO Density test.	No	15		
	THE FOLLOWING IN DISABLED ACCESS				
	SCREEN WALL				
	Excavation in earth not exceeding 2m deep:				
9	Trenches.	m3	34		
	Extra over all excavations for carting away:				
10	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m3	10		
	Risk of collapse of excavations:				
11	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	97		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% MOD AASHTO density:				
12	Backfilling to trenches, holes, etc.	m3	24		
	Filling supplied by the contractor under strip footing				
13	G7 Base course material compacted to 98% Mod AASHTO density	m3	4		
	Carried to Collection			R	
	Section 3				$\dagger$
	Bill No. 1 External Works				

	Compaction of surfaces					1	
14	Compaction of ground surface under floors, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density.	m2	97				
	25 Mpa/19mm Concrete						
15	Strip footings.	m3	10				
	Test blocks:						
16	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	3				
	Reinforcement (Provisional)						
17	High tensile steel reinforcement bars to structural concrete work.	t	1.22				
	BRICKWORK IN FOUNDATIONS.						
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar (Cement to be 42.5N all-purpose cement):						
18	One brick walls.	m2	48				
	BRICKWORK IN SUPERSTRUCTURE						
	Brickwork reinforcement:						
19	230mm Wide reinforcement built in horizontally.	m	113				
20	Ditto but in foundations.	m	97				
	FACE BRICK						
	"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):						
21	One brickwall faced on both sides.	m2	34				
	Carried to Collection Section 3 Bill No. 1 External Works			F	2		

	Brick-on-edge header course copings, sills, etc, 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:				
22	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		
	ACCESS RAMPS				
	Excavation not exceeding 2m deep				
23	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	19		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
24	Off site to a dumping site to be found by the Contractor.	m3	13		
	Filling supplied by the contractor under floors, aprons, etc				
25	G7 Base course material compacted to 98% Mod AASHTO density	m3	9		
26	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.	m3	9		
	•				
07	Coarse river sand filling supplied by the contractor:	0	0		
27	Under floors etc.	m3	3		
	Compaction of surfaces:				
28	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where				
	necessary and compacting to 90% Mod AASHTO density.	m2	63		
	Prescribed density tests on filling:				
29	In-situ dry density test.	No	8		
	Carried to Collection			R	
	Section 3			K	+
	Bill No. 1 External Works				

	Reinforced 25Mpa/19mm Concrete:				
30	Ramps, Landings, etc.	m3	6		
	Finishing top surfaces of concrete smooth with a wood float:				
31	Surface beds, slabs, etc to falls and currents.	m2	63		
	Test blocks:				
32	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	3		
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:				
33	12mm Joints not exceeding 300mm high.	m	97		
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
34	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	97		
	Fabric reinforcement:				
35	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m2	63		
	Waterproofing under Surface beds				
36	350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured).	m2	63		
	THE FOLLOWING IN WALKWAYS				
	<u>EARTHWORKS</u>				
	Excavate in earth not exceeding 2m deep including trimming sides, levelling and ramming bottoms and deposit in spoil heaps for later re-use or cart away				
37	Reduced levels between buildings, retaining walls, etc.	m3	64		
	Carried to Collection			R	
	Section 3			IX	+
	Bill No. 1 External Works				

					n	1
	Carting away of excavated material					
38	Extra over all excavations for loading surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor.	m3	64			
	Base Courses					
39	G7 Base course material, selected and supplied by the Contractor, deposited in layers not exceeding 150mm thick, watered and consolidated to 98% modified AASHTO density under pavings.	m3	48			
	Sundries					
40	Rip reduced platform level and recompact to 93% Mod. A.A.S.H.T.O. density.	m2	160			
	Prescribed Testing					
41	Provide and have filling compaction checked, tested by a Consulting Engineer's Laboratory and deliver the results to the Architect within 24 hours of the tests being completed.	No	7			
	Weedkillers, insecticides, etc.					
	Soil insecticide in accordance with SANS 5859					
42	Under paving, etc.	m2	160			
	Pre-cast concrete Pavers					
	Grey interlocking precast concrete pavers type S-A laid in herringbone pattern with header course perimeter margin					
43	50mm Thick laid on and including 25mm sand bed treated with weed killer and cement/sand mixture swept into joints on completion.	m2	160			
	Sundries					
44	Circular cutting on 50mm thick non bevelled concrete pavers.	m	10			
	Channelling, kerbing, edging, etc.					
						-
	Carried to Collection			R		<u> </u>
	Section 3 Bill No. 1 External Works					

		1	1	1	II	1
	Precast concrete kerbing					
45	Precast semi-mountable concrete Fig 8B edge kerb size 300 x 175mm high cast in lengths not exceeding 1m and with expansion joints at not exceeding 10m centres finished smooth off the mould on all exposed surfaces bedded on and including minimum 50mm thick mass concrete 15 MPa base and backing including all					
	necessary excavation, formwork, expansion joints, etc.	m	160			
46	Ditto, but circular on plan to not exceeding 4m radius.	m	5			
	THE FOLLOWING IN BULK WATER RETICULATION					
	ALTERATIONS TO EXISTING					
47	Locate, cut into and temporarily stop off 40mm diameter water pipe for insertion of stop end (elsewhere).	No	2			
48	Locate, cut into and temporarily stop off 54mm diameter water pipe for insertion of Tee Junction (elsewhere).	No	1			
	HDPE 100PN 12.5 pressure pipes:					
49	32mm pipes laid in depths not exceeding 1m including excavation, bedding, backfilling, compaction and disposal of surplus material.	m	40			
50	40mm Pipes laid in depths not exceeding 1m including excavation, bedding, backfilling, compaction and disposal of surplus material.	m	70			
	Extra over (PN12.5) HDPE piping for fittings:					
51	32mm Bend.	No	12			
52	32mm Adaptor.	No	25			
53	40mm Bend.	No	7			
54	32mm Tee.	No	3			
55	40mm Tee.	No	2			
	TAPS, VALVES, ETC					
56	32mm "Cobra" Ball Valve complete with adaptors for HDPE pipe.	No	1			
						$\vdash$
	Carried to Collection Section 3			R		$\vdash$
	Bill No. 1					
	External Works					
						1

57	32mm Non-return valve.	No	1		
	Water supply valve or meter chambers				
58	Excavate for and build valve chamber size 460 x 460 x not exceeding 1000mm deep internally, formed of 300mm thick layer of well backfilling , 200mm high half brick corbelled sides with 75mm brickforce between each course including Type 3A cast iron valve cover and frame size 100 x 230 x 300 encased in a 300mm thick 25mpa mass concrete base.	No	1		
	Sundries:				
	Municipal connection				
59	Allow for amount of R20 000.00 (Twenty Thousand Rand) for municipal water connection to be used at the discretion of the Principal Agent and deducted in whole or in part if not required.		Item		20 000.00
60	Allow for profit if required.			%	
	Testing:				
61	Testing water pipe system.		Item		
	THE FOLLOWING IN STORMWATER DRAINAGE, APRONS ETC.				
	STORMWATER APRONS				
	Excavation not exceeding 2m deep				
62	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	29		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
63	Off site to a dumping site to be found by the Contractor.	m3	29		
	Filling supplied by the contractor under floors, aprons, etc				
64	G7 Base course material compacted to 98% Mod AASHTO density	m3	11		
	Carried to Collection Section 3	1		R	
	Bill No. 1 External Works				
	External Works				

65	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.	m3	11		
	Coarse river sand filling supplied by the contractor:				
66	Under floors etc.	m3	4		
	Compaction of surfaces:				
67	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density.	m2	74		
	Prescribed density tests on filling:				
68	In-situ dry density test.	No	7		
	Reinforced 25Mpa/19mm Concrete:				
69	Surface beds cast in panels on waterproofing.	m3	11		
	Finishing top surfaces of concrete smooth with a wood float:				
70	Surface beds, slabs, etc to falls and currents.	m2	74		
	Test blocks:				
71	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	4		
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:				
72	12mm Joints not exceeding 300mm high.	m	59		
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
73	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	20		
	Fabric reinforcement:				
74	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m2	74		
					<u></u>
	Carried to Collection			R	
	Section 3 Bill No. 1 External Works				

	Waterproofing under Surface beds				
75	350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured).	m2	74		
	Carried to Collection			R	
	Section 3 Bill No. 1 External Works				

ļ	STORMWATER CHANNELS				
	Excavation not exceeding 2m deep				
76	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	64		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
77	Off site to a dumping site to be found by the Contractor.	m3	64		
	Filling supplied by the contractor under channels				
78	G7 Base course material compacted to 98% Mod AASHTO density	m3	32		
79	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.	m3	32		
	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.				
80	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 etc.	m	214		
81	Extra for 700mm angle	No	8		
82	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	8		
	Carried to Collection Section 3			R	$\vdash$
	Bill No. 1 External Works				

	BULK SEWER RETICULATION				
	Heavy duty (Class 34) PVC-U sewer and drain pipes				
83	110mm Pipes laid in and including trenches not exceeding 1m deep	m	80		
84	110mm Pipes laid in and including trenches exceeding 1m but not exceeding 2m deep	m	20		
	Extra over heavy duty (Class 34) PVC-U sewer and drain pipes for fittings				
85	110mm Bend	No	8		
86	110mm Rodding eye	No	2		
87	160 x 110mm Reducing junction	No	1		
	PRE-CAST CONCRETE MANHOLES				
	Pre-cast concrete circular inspection chambers including pre-cast concrete cover slabs, covers and channels in benching				
88	Manhole 1000mm diameter not exceeding 1m deep.	No	4		
89	Manhole 1000mm diameter exceeding 1m and not exceeding 2m deep.	No	2		
	SUNDRIES				
	<u>Earthworks</u>				
90	Selected granular filling Class 'B' supplied by the Contractor in bedding under pipes.	m3	30		
91	Selected 19mm stone supplied by the Contractor in bedding under pipes.	m3	15		
92	300 x 300 x 75mm Pre-cast concrete inspection eye marker slab set in ground.	No	1		
	Manhole covers				
93	620mm dia Type 2A Heavy duty cast iron manhole to SABS 558	No	6		
	Carried to Collection Section 3			R	
	Bill No. 1 External Works				

	Connection	1			
94	Allow for connecting to sewer drainage system		Item		
	Testing:				
95	Testing drainage system.		Item		
	THE FOLLOWING IN RAINWATER TANKS AND STANDS				
	Excavation in earth not exceeding 2m deep:				
96	Trenches.	m3	6		
	Extra over trench and hole excavations in earth for excavation:				
97	Soft rock.	m3	0.3		
98	Hard rock.	m3	0.2		
	Extra over all excavations for carting away:				
99	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m3	4		
	Risk of collapse of excavations:				
100	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	19		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93%:				
101	Backfilling to trenches, holes, etc.	m3	2		
	Earth filling supplied by the Contractor compacted to 95% MOD AASHTO:				
102	Under floors, steps, pavings, etc.	m3	5		
	Compaction of surfaces				
103	Compaction of ground surface under floors, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density.	m2	10		
	Carried to Collection			R	
	Section 3 Bill No. 1 External Works				

	25Mpa/19mm Un-reinforced Concrete					
104	Strip footings.	m3	2			
	25 MPa/19mm Concrete:					
105	Tank concrete slab.	m3	2			
100		1110	2			
	Finishing top surfaces of concrete smooth with a steel trowel including adding additional cement while concrete is still green to attain a smooth, hard surface:					
106	Surface beds, slabs, etc.	m2	14			
	Rough Formwork to Sides (Degree of Accuracy III):					
107	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	21			
	Allens Meshco Square Mesh Fabric reinforcement:					
108	Type 193 fabric reinforcement in concrete surface beds, slabs, etc.	m2	14			
	Foundation brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:					
109	One brick walls.	m2	6			
	Super Structure brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar:					
110	One brick walls.	m2	10			
	Brickwork reinforcement:					
111	230mm Wide reinforcement built in horizontally.	m	39			
112	Ditto, but in foundations (Provisional).	m	24			
	"Corobrik Firelight Satin FBX" 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:					
113	Extra over brickwork for face brickwork externally.	m2	10			
	Carried to Collection			R		<u> </u>
	Section 3 Bill No. 1					
	External Works					
		ı		ı	II.	1

	Plastic water tanks etc:				
114	5000 Litre light duty cylindrical tank complete with lid, 15mm brass bibtap with handle suitable for locking and 4 No. galvanised stay wires 2.5m each long connected to tank, with and including 4 No. eye bolts cast into concrete.	No	2		
115	Hole top of tank for 100mm pipe.	No	2		
	THE FOLLOWING IN GROUND STORAGE TANKS				
	EXCAVATIONS, FILLING, ETC.				
	Excavate in earth not exceeding 2m deep including trimming sides, levelling and ramming bottoms and deposit in spoil heaps for later re-use or cart away				
116	Reduced levels under solid floors.	m3	4		
	Excavations in earth of more difficult character				
117	Extra over excavations in earth for excavation in soft rock.	m3	0.4		
	Carting away of excavated material				
118	Load surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor.	m3	3		
	Risk of collapse of excavations				
119	Allow for risk of collapse to sides of excavations not exceeding 1.5m deep including all necessary timber shoring, etc.	m2	7		
	Keeping excavations free of water				
120	Allow for keeping the excavations free from water.		Item		
	Foundation courses				
121	Imported G7 filling, selected and supplied by the Contractor, including depositing in layers not exceeding 150mm thick and compacting to 95% modified AASHTO dry density under solid floors.	m3	1		
	Carried to Collection			R	
	Section 3 Bill No. 1 External Works				

122	Imported G5 filling, selected and supplied by the Contractor, including depositing in layers not exceeding 150mm thick and compacting to 98% modified AASHTO dry density under solid floors.	m3	1		
	Compaction of surfaces				
123	Scarify in-situ material to a depth of 150mm and compact to 93% Mod AASHTO density.	m2	9		
	<u>Tests</u>				
124	Allow for Mod AASHTO density tests on filling.	No	1.20		
	CONCRETE (Labour intensive)				
	Reinforced concrete 30MPa (19mm stone) in:				
125	Rafter slabs cast against excavated surfaces.	m3	3		
	<u>Testing</u>				
126	Allow for preparing and curing a set of three test cubes, each size 150mm x 150mm x 150mm and pay all transport and testing costs undertaken by an approved independent laboratory. (Provisional)	Sets	1		
	Surface treatment				
127	Float surface of concrete to a wood float finish.	m2	9		
					_
	Carried to Collection			R	
	Section 3 Bill No. 1 External Works				

	<u>FORMWORK</u>				
	Edges, risers, ends and reveals				
128	Edge, riser, etc exceeding 300mm high.	m2	4		
	Projections, grooves, etc.				
129	Labour and material in forming 25 x 25mm chamfer to exposed top edge of concrete.	m	12		
	REINFORCEMENT (PROVISIONAL)				
	High tensile welded steel mesh reinforcement:				
130	Ref: 395 cast into concrete surfaces.	m2	9		
	PLUMBING AND DRAINAGE				
	ALTERATIONS TO EXISTING				
131	Locate, cut into and temporarily stop off 63mm diameter water pipe for insertion of reducing fitting (elsewhere).	No	6		
	Pipes, pipe fittings, etc.				
	Class 12 uPVC water supply pipe with bedding and filling in accordance with SABS 1200				
132	40mm Pipe.	m	30		
133	50mm Pipe.	m	35		
134	40mm Pipe and laying in ground not exceeding 1000mm deep.	m	45		
	Extra over uPVC pipes for the following fittings				
135	40mm Bend.	No	2		
136	50mm Bend.	No	2		
137	40mm Tee junction.	No	3		
138	63 x 40mm Straight reducer	No	3		
	Carried to Collection			R	
	Section 3			K	+
	Bill No. 1 External Works				

	Taps, valves, etc.				
139	40mm float valve kit fitted inside of tank.	No	1		
140	40mm In-line strainer.	No	1		
141	40mm Brass gate valve.	No	2		
142	40mm Brass non return valve.	No	2		
143	40mm Flanged resilient seal gate valve with cap top.	No	2		
144	40mm Flanged pressure reducing valve.	No	2		
	<u>Switch</u>				
145	Float switch fitted inside of tank.	No	1		
	Connections				
	Connection of new to existing pipes				
146	Connection of 40mm diameter HDPE to 40mm diameter galvanised pipes including all necessary reducers, saddles, etc.	No	3		
147	Connection of 40mm diameter HDPE to 0.75kw water pump including all necessary reducers, saddles, etc.	No	3		
148	Connection of 63mm diameter HDPE to 40mm diameter galvanised pipes including all necessary reducers, saddles, etc.	No	3		
	Rainwater tanks:				
149	20 000 Litre polyethylene rotomoulded vertical water storage tank provided complete with lid and overflow outlet, fitted with suitable adaptor and setting in position on concrete tankstand (elsewhere measured). (The tanks are to be filled with water for the Practical Completion inspection)	No	1		
150	Hole through side of tank for 40mm diameter pipe including adaptor.	No	1		
	Carried to Collection			R	
	Section 3 Bill No. 1 External Works				

	<u>Ties, cramps, etc.</u>				
151	38 x 1,6mm Galvanised hoop iron strap around tank, both ends fitted with once holed 30 x 30 x 3mm thick galvanised flat plate and bolted together with and including M10 bolt and nut.	No	1		
152	38 x 1,6mm Galvanised hoop iron tie down, 2500mm long, one end wrapped around tank strap and twice bolted, the other end folded over and bolted to top of concrete with and including 8 x 60mm masonry anchor.	No	4		
	Water supply valve or meter chambers				
153	Excavate for and build valve chamber size 565 x 665 x 550mm deep overall formed of precast concrete valve chamber units 1, 2, 3 and 4 with valve box lid-V and 19mm thick layer of 19mm stone in bottom including filling in and ramming.	No	1		
	Pump and Pumphouse				
154	Allow the Budgetary Allowance of R 20 000,00 (Twenty Thousand Rand) for the installation of a 0.75kw water pump including housing, etc.		ltem		20 000.00
	ELECTRICAL CONNECTION				
	Electrical Works				
155	Allow the Budgetary Allowance of R 30 000,00 (Thirty Thousand Rand) for the electrical supply to the water pumps, float switches, ect.		Item		30 000.00
	THE FOLLOWING IN SECURITY FENCING, ETC				
	SECURITY FENCING				
	The Contractor is to allow in his rates for any site clearance, preparation of ground, etc. in order to carry out the work successfully.				
	"Clearvu" or equally approved fencing products to be executed in strict accordance with the Manufacturer's instructions				
	Carried to Collection	ı		R	
	Section 3 Bill No. 1 External Works				

encing					
ligh security galvanised, marine fusion bond coated, nesh fencing panel, size 3350 x 1800mm high fixed to osts (elsewhere).	m	40			
<u>Posts</u>					
ntermediate locking taper post, marine fusion bond oated, 2400mm long, with UV stabilised polymer cap ocluding embedding in 400 x 400 x 600mm (25Mpa) oncrete base including all necessary excavations, ackfilling, etc.	No	8			
and or corner square post, marine fusion bond coated, 400mm long, with UV stabilised polymer cap including mbedding in 400 x 400 x 600mm (25Mpa) concrete ase including all necessary excavations, backfilling, tc.	No	4			
Equare gate post, marine fusion bond coated, 2400mm ong, with UV stabilised polymer cap and gate mooring racket including embedding in 400 x 400 x 600mm 25Mpa) concrete base including all necessary xcavations, backfilling, etc.	No	2			
<u>Sates</u>					
single gate, size 1000 x 1800mm high overall formed of quare section perimeter framing, rails, etc. and the gate overed with high security galvanised, marine fusion ond coated, mesh including locking mechanism, inges, drop bolts, etc. as per manufacturer's pecifications.	No	1			
<u>accessories</u>					
00mm High, marine fusion bond coated, steel shark pikes in 1500mm lengths pre-drilled and bolted to top f fencing panels (elsewhere).	m	40			
Union 3122" or other approved 51mm brass padlock vith stainless steel shackle.	No	1			
<u>Sundries</u>					
extra over excavations in earth (concrete bases) for xcavation in soft rock.	m3	1			
Carried to Collection			R		
ection 3 ill No. 1 xternal Works					
line of mende induced with a contract contract of the contract	igh security galvanised, marine fusion bond coated, esh fencing panel, size 3350 x 1800mm high fixed to bets (elsewhere).  coessories  bets (elsewhere).  coestis (elsewhere).	igh security galvanised, marine fusion bond coated, esh fencing panel, size 3350 x 1800mm high fixed to bots (elsewhere).  Dists  termediate locking taper post, marine fusion bond vated, 2400mm long, with UV stabilised polymer cap cluding embedding in 400 x 400 x 600mm (25Mpa) concrete base including all necessary excavations, ackfilling, etc.  Ind or corner square post, marine fusion bond coated, 400mm long, with UV stabilised polymer cap including mbedding in 400 x 400 x 600mm (25Mpa) concrete ase including all necessary excavations, backfilling, c.  Indicate the control of the cont	gh security galvanised, marine fusion bond coated, esh fencing panel, size 3350 x 1800mm high fixed to sits (elsewhere).  m 40  sits (elsewhere).  n 40  sits (elsewhere).  m 40  sits (elsewhere).  m 40  sits (elsewhere).  alter (elsewhere).  n 40  sits (elsewhere).  alter (elsewhere).  m 40  sits (elsewhere).  alter (elsewhere).  m 40  sits (elsewhere).  alter (elsewhe	igh security galvanised, marine fusion bond coated, esh fencing panel, size 3350 x 1800mm high fixed to sats (elsewhere).  m 40  asts (elsewhere).  m 40  asts (elsewhere).  m 40  asts (elsewhere).  m 40  asted, 2400mm long, with UV stabilised polymer cap cluding embedding in 400 x 400 x 600mm (25Mpa) morete base including all necessary excavations, ackfilling, etc.  nd or corner square post, marine fusion bond coated, 400mm long, with UV stabilised polymer cap including mbedding in 400 x 400 x 600mm (25Mpa) concrete asse including all necessary excavations, backfilling, etc.  quare gate post, marine fusion bond coated, 2400mm ng, with UV stabilised polymer cap and gate mooring acket including embedding in 400 x 400 x 600mm (25Mpa) concrete base including all necessary excavations, backfilling, etc.  quare gate post, marine fusion bond coated, 2400mm ng, with UV stabilised polymer cap and gate mooring acket including embedding in 400 x 400 x 600mm (25Mpa) concrete base including all necessary excavations, backfilling, etc.  ates including embedding in 400 x 400 x 600mm (25Mpa) concrete base including all necessary excavations, backfilling, etc.  ates including embedding in 400 x 400 x 600mm (25Mpa) concrete base including all necessary excavations, backfilling, etc.  ates including embedding in 400 x 400 x 600mm (25Mpa) excavations in each date and botted to top fencing panels (elsewhere).  nond coated, mesh including locking mechanism, nges, drop botts, etc. as per manufacturer's excited including patents.  nond coated, mesh including locking mechanism, nges, drop botts, etc. as per manufacturer's excited including all necessary excavations in earth (concrete bases) for excavations in earth (concrete bases) for excavation in soft rock.  Carried to Collection  R extra over excavations in earth (concrete bases) for excavation in soft rock.	gh security galvanised, marine fusion bond coated, esh fencing panel, size 3350 x 1800mm high fixed to osts (elsewhere).  2015  1025

164	Extra over excavations in earth (concrete bases) for excavation in hard rock.	1		
	Carried to Collection		R	_
	Section 3 Bill No. 1 External Works			

Section 3			
Bill No. 1			
External Works			
COLLECTION			
	Page No		Amount
Total Brought Forward from Page No.	85		
	86		
	87		
	88		
	89		
	90		
	91		
	92		
	93		
	94		
	95		
	96		
	97		
	98		
	99		
	100		
	101		
	102		
	103		
	104		
	105		
			<b>*</b>
Carried to Final Summary		R	
Section 3 Bill No. 1 External Works		K	

Item No		Quantity	Rate	Amount
	SECTION 4			
	BILL No. 1			
	PROVISIONAL SUMS			
	Note:			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition 2.1 July 2014).			
	BUDGETARY ALLOWANCES			
	The following budgetary allowances are for work to be executed at rates in the bills of quantities or to be agreed by the Principal agent:			
	COMMUNITY LIAISON OFFICER			
1	Allow for the employment of a Community Liaison Officer by the Main Contractor, to be paid an allowance of R6 500.00 per month.	Item		39 000.00
2	Add: Mark-up		%	
	ELECTRICAL INSTALLATION			
3	Provide the sum of R 200 000.00 ( Two Hundred Thousand Rand ) for Electrical installation.	Item		200 000.00
4	Add: Profit		%	
5	Add: Attendance		%	
	Carried to Final Summary		R	
	Section 4 Bill No. 1 Provisional Sums			

	FINAL SUMMARY				
Section No		Page No		Amount	
1	PRELIMINARIES	30			ļ.,
2	BUILDING WORKS	84			
3	EXTERNAL WORKS (PROVISIONAL)	106			
4	PROVISIONAL SUMS	107			
	SUB-TOTAL		R		
	CONTINGENCIES				
	Allow five per cent (5%) of the above sub-total for contingencies to be used as directed and deducted in whole or in part if not required.		R		
	SUB-TOTAL		R		
	Add Value Added Tax at the rate of 15%		R		
	Carried to Form of Offer and Acceptance		R		